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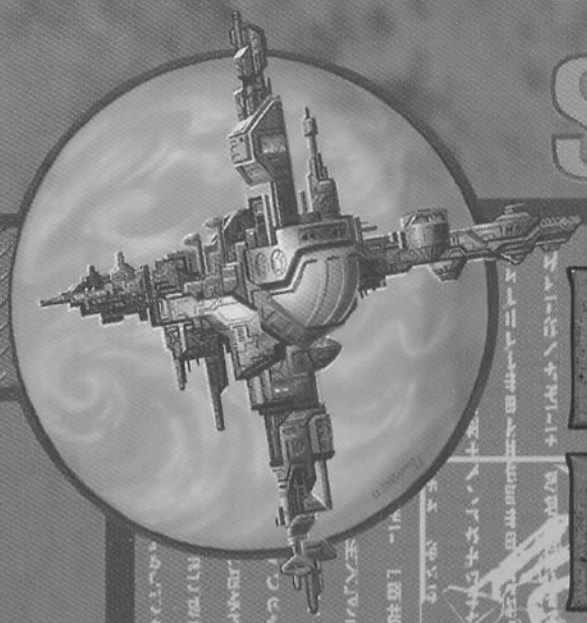
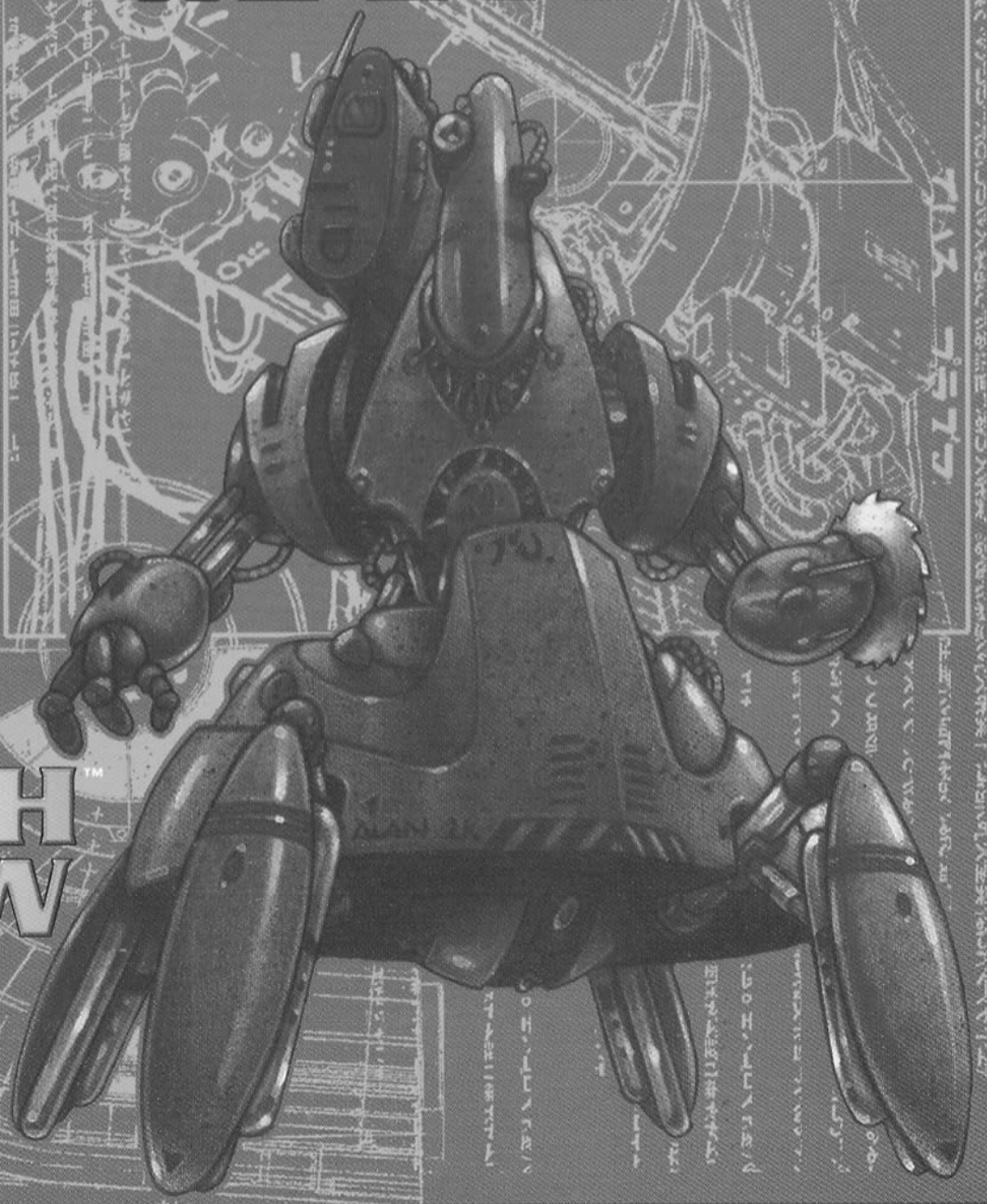
SPACEMASTER™



ROBOTICS MANUAL



TECH LAW™

Inject some artificial life into your game!

TECH LAW:™
ROBOTICS MANUAL

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Table of Contents

PART I INTRODUCTION

What is *Spacemaster*? 4
Spacemaster Elements 4
Rule Books 4
Setting Books 5
Rolemaster Products 5
Standard System Products 5
Special Thanks 5

1.0 Welcome. 5

2.0 Tech Levels. 6
2.1 Tech Level Concepts 6
2.2 Using Tech Levels 6
2.3 Time Travel 6
2.4 Tech Levels and Skill Use 7
2.5 Raising the Local Tech Level 7
2.6 Fitting Technology to Your Campaign 7

PART II TECHNOLOGICAL DEVELOPMENT

3.0 Tech Level Benchmarks. 8
3.1 General 8
3.2 Arms and Armor 9
3.3 Communications Technology . 10
3.4 Computers and Data Storage .. 11
3.5 Energy Sources 12
3.6 General Science 12
3.7 Law and Law Enforcement 14
3.8 Medicine 14

4.0 Levels of Development. 15
4.1 Racial Considerations 15
4.1.1 General Biology 15
4.1.2 Psychology 16
4.1.3 Perception 16
4.1.4 Mating 16
4.2 Culture Considerations 17

5.0 Specific Advancements. ... 18
5.1 Energy Sources 18
5.2 Communications Technology . 19
5.3 Computers 20
5.4 Law and Law Enforcement 21
5.5 Medicine 21

PART III CYBERNETICS

6.0 Using Cybernetics. 23
6.1 Are Cybernetics Right for Your Game? 23
6.2 Style ss. Substance 24
6.3 Moderating Cybernetics 24
6.3.1 Cirs 24
6.3.2 Background Options/Talent Points 26
6.3.3 Experience 26
6.4 Power Considerations 27
6.5 Putting the Cyber in Your Punk 28
6.6 Definitions 30

7.0 Armor. 31
7.1 Standard Armor 31
7.2 Professional Armor 31
7.3 Military Grade Armor 31
7.4 Price List 31

8.0 Biotech. 32
8.1 Standard Biotech 32
8.2 Professional Biotech 33
8.3 Military Grade Biotech 33
8.4 Price List 33

9.0 Conversion Packages. 34
9.1 Professional Conversion Packages 34
9.2 Military Grade Conversion Packages 34
9.3 Price List 34

10.0 Cyberaudio. 35
10.1 Standard Cyberaudio 35
10.2 Professional Cyberaudio 35
10.3 Military Grade Cyberaudio 35
10.4 Price List 35

11.0 Cyberhands and Cyberfeet. 36
11.1 Standard Cyberhands & Cyberfeet 36
11.2 Professional Cyberhands & Cyberfeet 37
11.3 Military Grade Cyberhands & Cyberfeet 38
11.4 Price List 38

12.0 Cyberlimbs. 38
12.1 Standard Cyberlimbs 38
12.2 Professional Cyberlimbs 39
12.3 Military Grade Cyberlimbs 40
12.4 Price List 40

13.0 Exoskeletons. 42
13.1 Standard Exoskeletons 42
13.2 Professional Exoskeletons 42
13.3 Military Grade Exoskeletons . 42
13.4 Price List 42

14.0 Cyberoptics. 43
14.1 Standard Cyberoptics 43
14.2 Professional Cyberoptics 44
14.3 Military Grade Cyberoptics 45
14.4 Price List 45

15.0 Cyberweapons. 45
15.1 Standard Cyberweapons 45
15.2 Professional Cyberweapons .. 45
15.3 Military Grade Cyberweapons 46
15.4 Price List 47

16.0 Implants. 47
16.1 Standard Implants 47
16.2 Professional Implants 49
16.3 Price List 50

17.0 Neuralware. 50
17.1 Standard Neuralware 50
17.2 Professional Neuralware 52
17.3 Price List 53

18.0 Style Over Substance. 53

PART IV ANDROIDS, ROBOTS, AND COMPUTERS

19.0 Androids and Robots. 55
19.1 Structure 56
19.2 Damage 56
19.3 Purchasing Androids 57
19.4 "I, Robot" — The Role of the Android 57

20.0 Android Character Templates. 58
20.1 Hits 59
20.2 Mind Points 59
20.3 Operational Life 60
20.4 Resistance Rolls 60
20.5 Maintenance Period 60
20.6 Starting Languages 60
20.7 Stats 61
20.8 Cooling Capabilities 62
20.9 Size 62
20.10 Self Repair Capabilities 62
20.11 Backup Period 63
20.12 Starting Skill Ranks 63
20.13 Everyman Skills 63
20.14 Restricted Skills 64
20.15 Options 64
20.16 Totaling the Points 65

21.0 Generating an Android Character. 68
21.1 Stat Generation 68
21.2 Selecting Flaws 68
21.3 Using Option Points 68
21.4 Starting (Adolescence) Skill Ranks 68

22.0 Life As An Android. 72
Maintenance 72
Repair 72
Backups 72
Perception 72

23.0 Computers. 74
23.1 Artificial Intelligence 74
23.2 Simulated Intelligence 74

PART V THE APPENDICES

A-1.0 Android Templates. 76
A-1.1 A-15 Combat Android 77
A-1.2 C-91 Academic Android 78
A-1.3 E-63 Espionage and Infiltration Unit 79
A-1.4 IX-15 Technical Repair Robot 80
A-1.5 MD-6 Medical Android 81
A-1.6 NAD-7 Naval Android 82
A-1.7 P-7 Pleasure Android 83
A-1.8 X-4 Main Line Battle Robot 84
A-1.9 Z-2 Labor Unit 85

A-2.0 Android Option Descriptions. 86
Inherent Options 86
Ambidexterity 86
Digital Memory 86
Extended Vocal Range 86
Math Processor 86
Realtime Clock 86
Self Sustenance 86
Temperature Tolerance 86
Text Processing 86
Other Options 86
Advanced Combat System 86
Advanced Cooling System 86
Anosmia 86
Anti-Glare Option 87
Apparent Biological 87
Armored Carapace 87
Artificial Speech 87
Assassination Software 87
Augmented Suspension 87
Audio Package 87
Biohydraulic Joints 87
Bravery Add-On 87
Combat Computer 87
Combat Processing Software 87
Communicator 87
Complete Visual Field 87
Database, Basic 87
Database, Extensive 88
Deaf 88
Distinctive Design 88
Emotion Control Software 88
Enhanced Redundancy 88
Evasion Software 88
Extra Appendage 88
Flight 88
Fugitive Restraint System 88
Hardened Knuckles 88
High Performance Musculature ..88
High Performance Reflexes 88
Huntsman Package 88
Inferior Cooling System 89
Inferior Gyros 89
Infrared Vision 89
Linguistic Software 89
Lo-Lite Vision 89
Locking Grip 89
Martial Arts Subprocessor 89
Mechanical 89
Monocular Construction 89
Music Processing System 89
Navigational Subprocessor 89
No Fine Control 89
Olfactory Package 89
Pacification Package 90
Pharmaceutical Reservoir 90
Piloting Software 90
Plodding 90
Predictable 90
Prestidigitation Software 90
Programmed Foe 90
Radical Programming 90
Scanner Option 90
Shield Apertures 91
Soft Step 91
Speed Package 91
Stat Upgrade 92
Tactical Analysis Software 92
Targeting Software 92
Targeting System 92
Telescopic/Microscopic Option .92
The Three Laws 92
Tooled Appendages 92
Ultrasonic Hearing 92
Weaponry 92
Weighted Swing 93
Wide Visual Field 93
A-3.0 Android Flaw Descriptions. 94
Battlefield Confusion 94
Blood-Guilt 94
Chivalrous 94
Code of Conduct 94
Cruel 94
Compulsive Subroutine 94
Damaged Stat94
Greedy 94
Intolerance 94
Megalomaniacal 94
Niggling Problems 94
Old 94
Overconfidence 95
Paranoid 95
Problem Solving Flaw 95
Programmed Duty 95
Restrictive Programming 95
Rival/NPC 95
Rival/PC 95
Ruthless 95
Secret 95
Stubborn 95
Temper 95
Truth Algorithm 95
A-4.0 Optional Rules. 96
A-4.1 Android Malfunctions and Accumulated Damage 96
A-4.2 Androids and Accumulated Stun 96
A-4.3 Android Hit Locations 97
A-4.4 Androids without Hydraulics 97
A-4.5 Tinkering with Androids 97
A-4.6 Androids and Cybernetcs 97
A-4.7 Using Arms Law and Weapons Law 98
A-4.8 Handling Neural Criticals 98
A-5.0 Attack Tables. 99
Acid Sprayer ... RM-A-5.1 100
Adhesive Gun ... RM-A-5.2 101
Chainsaw ... RM-A-5.3 102
Cryo Gun ... RM-A-5.4 103
Energy Whip ... RM-A-5.5 104
Force Blade ... RM-A-5.6 105
Power Sword ... RM-A-5.7 106
Pulse Baton ... RM-A-5.8 107
Vibro Axe ... RM-A-5.9 108
A-6.0 Critical Tables. 109
Acid ... RM-A-6.1 111
Android Blast ... RM-A-6.2 112
Andr. Burn Through...RM-A-6.3 .113
Andr. Burst/Raking... RM-A-6.4 ..114
Android Electrical ... RM-A-6.5 ...115
Android Melee ... RM-A-6.6 116
Android Piercing ... RM-A-6.7 117
Android Puncture ... RM-A-6.8 ...118
Android Scorch ... RM-A-6.9 119
Grapple ... RM-A-6.10 120
Impact ... RM-A-6.11 121
Large Android ... RM-A-6.12 122
Neural ... RM-A-6.13 123
Shredding ... RM-A-6.14 124
Super Large...RM-A-6.15 125

Table of Contents

INTERLUDE ONE

Damage and the shock-induced reboots had left holes in his memory, so he scanned his equipment. A combat knife and a nuclear grenade was all that he had left. That didn't leave him much choice. Thare wis omly o3e th13g t9 sdfasdfa sdf 1@#$ @#$^@

Æ @#$!% $!@ʊd #$%1 !#$123 . . .\@#$5 Parity\Reboot\Catastrophic system failure\Unknown quantity of volatile memory dumped\Total failure imminent Ø

#$t w$s t@#t? %e@er ti2d t4 remember w^ere he was. He seemed to be in combat. He had just been thrown back several feet by an explosion, and his cover had been destroyed in the process. The enemy (were they enemies?) Were charging now, and the blaster in his hand had been destroyed.

He had no hope. Æ Interrupt\Portion of memory recovered\End interrupt Ø He had only one hope. Pulling his nuclear grenade from his belt, he activated it and threw it as far as he could. The EMP and radiation wouldn't effect him, but if he could throw it far enough to be clear of the blast, the radiation would kill his foes.

He hoped.

The grenade flew too far to the right, glancing off a wall in the process. As it bounced across the deck, Peter couldn't tell whether or not it would roll far enough. A little more. A little more Æ @#$QE\@$ qfjkh3#$\!#%!!^!^T\ØÆ!@# $!%\1$#@WERGBN\2#$% @YJ\@#$%@Gv Ø

Æ . . . Ø

PART I
INTRODUCTION

"Any sufficiently advanced technology is indistinguishable from magic."
— Arthur C. Clarke

Greetings. The book you have in your hands is called *Robotics Manual*. It is the second volume of *Tech Law*, which is an integral part of *Spacemaster*, just as technology is an integral part of science fiction.

WHAT IS SPACEMASTER?

Spacemaster is a science fiction role playing game, set to be played in the *Privateers* universe. It uses the same concepts and conventions of Iron Crown Enterprise's *Rolemaster*, and could be played hand in hand with that system.

In *Spacemaster*, the players are whisked away to a science fiction universe where the only limits are those of the imagination, and whose every turn is fraught with danger. Although *Spacemaster* was published with the *Privateers* universe, it does not *have* to take place in the official universe. It can take place in any universe, from the gritty, hard science fiction universes of Greg Bear and Dr. Gregory Benford to the high adventure space operas of "Doc" Smith and George Lucas.

Tech Law is an integral part of that flexibility. It allows the Gamemaster (GM) to customize his game, defining what levels of technology are available and what aren't. It allows him to decide what is possible and what isn't. In the end, it is the GM's choice, and hopefully *Tech Law* is the tool that will allow him to make a good one.

SPACEMASTER ELEMENTS

Spacemaster contains several books. These books provide all of the rules necessary to play *Spacemaster*. These books interlock into more than just a game, but a complete system of role playing, allowing a GM to not only adjudicate rules, but combine societies, cultures and settings into wondrous and (hopefully) realistic vistas of imagination.

Spacemaster: Privateers (SM) — This is the core book of the system. All the subjects necessary to play the game are at least touched upon in this book. Character creation, action resolution, combat, psychic powers, experience and advancement are interlaced with history, culture, social structure and points of interest. This book contains everything necessary to run a *Spacemaster* game, from rules to a universe to implement them in, the basics are all here.

RULE BOOKS

Blaster Law — One of the most important of all core products, this book deals with energy weapons and their use in combat. *Spacemaster: Privateers* has a lot of combat power, but *Blaster Law* takes this to the extreme, expanding directed energy weapons. It uses a tech level system and gives complete weapon creation rules for use with anything from primitive spacefaring worlds to power weapons invented by worlds yet to be discovered.

Tech Law (*three volumes*) — The next of the core support products, there are three *Tech Law* volumes: *Equipment Manual*, *Robotics Manual*, and *Vehicle Manual*. These three books contain extensive information on the use and application of technology. They contain an advanced tech level system that the GM can use to create this own game.

Future Law — Add the power of expanded character development to your game with *Future Law*. *Future Law* is the ultimate player's guide to *Spacemaster*, giving new character professions and hundreds of new character options. Get the most out of your characters and feel the power of the *Spacemaster* system with this exciting core support book.

Gamemaster Manual — The last book of the core support series is *Gamemaster Manual*. This book explores the ins and outs and pitfalls of gamemastering compiled from some of the nation's top role playing GMs! In *Gamemaster Manual* you will find core gamemaster mechanics for supporting the *Spacemaster* line. This includes a full blown system for Gamemasters to use in creating new, custom races for their universes!

SETTING BOOKS

Privateers: Races & Cultures — A must for any *Spacemaster* game, this book details the races of the Privateers universe. From culture to physiology to role playing, this book provides all the information necessary to truly understand the race you're playing.

Privateers: The ISC — The only defense against the deprivations of the Empire, the ISC is on the ropes. Will it survive? This book details the history, locations, corporations, military and prominent people of this great nation.

Privateers: The Jeronan Empire — The Jeronan Empire has been slow to give up its secrets, now you will know what only the natives know. This book details the Empire, its structure, and its military. What does the ISC think it knows about the Empire? What does it really know? These questions and more are answered in this book.

ROLEMASTER PRODUCTS

Rolemaster Fantasy Role Playing — For a game where science and fantasy are to be combined, *Rolemaster Fantasy Role Playing* contains all the rules necessary to play a magic wielding character. It is a must for cross genre campaigns.

Arms Law — The leader of the core support for *Rolemaster* books is the critically acclaimed *Arms Law*. *Arms Law* contains attack charts for many primitive weapons: more weapons, more critical hit tables, more carnage for your game.

Spell Law (*three volumes*) — For games where magic and science are combined, *Spell Law* is a vital expansion. *Spell Law* contains three volumes: *...Of Channeling*, *...Of Essence*, and *...Of Mentalism*. All lists go up to 50th level, that's over 2,000 spells in all!

Creatures & Monsters — ICE's full-blown bestiary for *Rolemaster*. This is a compendium of information and statistics for two key elements of fantasy role playing: creatures and encounters.

"Companion" Products — Companions contain optional material that will add even more detail and/or depth to your game. Each book generally focuses on a specific theme.

Rolemaster Sourcebooks — These products (like *Creatures & Monsters*) contain optional rules and information that will help expand the game into new horizons.

STANDARD SYSTEM PRODUCTS

Weapon Law: Firearms — A book dealing with firearms of all types. Capable of dealing with any firearm, real or fictional. A must for any game where the bullets fly!

Ten Million Ways to Die — This product has weapon charts for all sorts of different weapons. Everything from swords, to guns and blasters is covered. Usable with any game system, this is a must for all gaming groups.

...and a 10' Pole — A compilation of adventuring equipment and a system for defining and integrating various lower levels of technology.

More support products are planned. So, keep your eyes peeled for more information on ICE's website (www.ironcrown.com)!

Note: *For readability purposes, Tech Law uses standard masculine pronouns when referring to persons of uncertain gender. In such cases, these pronouns are intended to convey the meanings: he/she, her/his, etc.*

SPECIAL THANKS

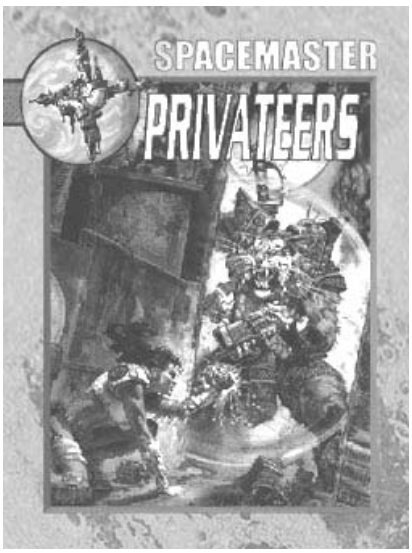
I would like to thank my play testers. Mike "I'm not a sadist, but I play one on TV" Renstrom, Scott "I killed the entire party" Llewelyn, Gary "Captain Bligh" Llewelyn, Matt "I had a character once . . . " Fitt, Aaron "I like making characters" Brown, Chris "Kneel before me!" Brashier, Stephen "You may call me the Great One" Johnson.

1.0 :: WELCOME

"Please allow me to introduce myself . . ."
— The Rolling Stones, Sympathy for the Devil

Welcome to the *Robotics Manual*. This book is designed to work in conjunction with the *Spacemaster* role playing game. This book deals with the heart of science fiction: technology. In *Robotics Manual*, we cover cybernetics, robotics, artificial intelligences, and androids. Combined with the other two *Tech Law* tomes, this manual will guide you through using, shaping, building, and repairing technology in your science fiction role playing game.

The primary goal of this work is to give the Gamemaster rules and guidelines to help him create a realistic backdrop of technology for his science fiction game. Although this book is part of the *Spacemaster* system, it can easily be adapted (along with *Blaster Law*) to any other RPG, allowing you to bring the realism and detail of *Spacemaster* to your favorite game.



USING TECH LAW WITH SPACEMASTER

Spacemaster: Privateers is the main rule and setting book for *Spacemaster*. It contains all the rules and background necessary to begin playing in this dynamic system.

But perhaps you want more.

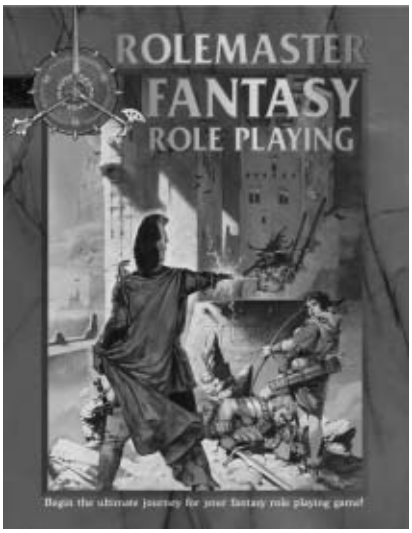
In that case, this book is provided. It expands and details the rules for using cybernetics, computers, and robots in your *Spacemaster* game. Other books expand upon other aspects of the *Spacemaster* rules. *Equipment Manual* and *Vehicle Manual* expand the range of equipment and vehicles for your game, and complete the *Tech Law* volume. In *Blaster Law* you

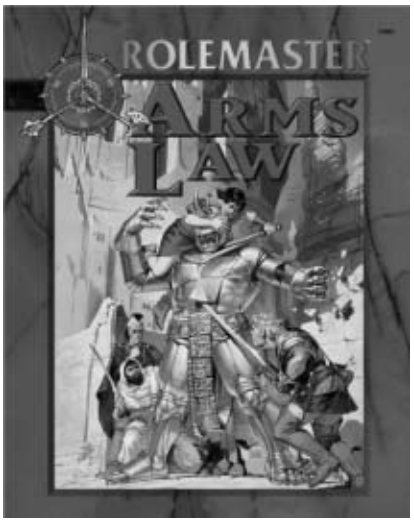
will find all of the attack tables necessary for resolving energy attacks, as well as conversion rules for firearms and other primitive weapons. *Future Law* expands and details many new, exciting character creation options. *Gamemaster Manual* provides dozens of rules for unique and interesting situations, such as vacuum exposure, high gravity environments, and radiation.

USING TECH LAW WITHOUT SPACEMASTER

Tech Law can be used without *Spacemaster*, but this probably isn't desirable without using *Blaster Law* as well. With *Blaster Law* and *Tech Law*, the *Spacemaster* combat system can be used with other role playing games, lending *Spacemaster's* realism to other systems.

If this is the intention, then *Blaster Law* contains all the rules for handling combat without *Spacemaster*. See *Blaster Law* for more details.





USING ROLEMASTER WITH TECH LAW

If a serious supply of melee weapons and firearms is desired, then *Rolemaster* is the way to go. *Arms Law* is the *Rolemaster* equivalent of *Blaster Law*. It contains all of the weapons common to a medieval or fantasy setting.

If your campaign is going to use a lot of firearms, then *Weapons Law: Firearms* is very handy. This *Rolemaster* book contains an extensive list of firearms and, with a little work, nearly any firearm imaginable can be assigned to one of the attack tables contained within. With this book, *Blaster Law* only becomes necessary for handling futuristic combat.

All the rules necessary for using these books are contained in Appendix A-4. These rules allow the GM to convert these books, using their greater selection of weapons with *Spacemaster* armor types.

2.0 :: TECH LEVELS

"The most incomprehensible thing about the world is that it is comprehensible."
— Albert Einstein

Science fiction is poorly named. It would be much more accurate to call it "Technology Fiction," because at the heart of all science fiction is technology. Perhaps it isn't the main character, as the diehards claim it should be; but in a science fiction story, the technology lives and breathes. It moves and interacts with the main characters. Sometimes it even takes over and steals the show.

Gadgets, space ships, and ray guns are why the masses flock to see science fiction. This is what draws them like a moth to a flame, so when a GM decides to run a SF (science fiction) campaign, the phrase "what gadgets" had better not issue from his lips. When the time comes, he better be ready with all the equipment his players need.

Once a GM has worked out what races or cultures exist in his universe, he should sketch out an idea of how these races and cultures interact. Part of that will involve defining the technical abilities of all the major players. This section deals extensively with the use of technology and its application in the game.

2.1 TECH LEVEL CONCEPTS

Technology, for the sake of a SF game, must be qualified and quantified. Part of how this is done is the use of "tech levels."

Tech levels are a rating system by which technological advancement can be judged. Listed in this section are a series of tech level ratings. Each technological or scientific advance can then be dropped into the tech level system. In addition, every individual piece of tech can be placed somewhere in this structure.

2.2 USING TECH LEVELS

Each nation or race should be given tech levels. These need not be uniform, as not all races will develop at the same rate that Earth has. A pacifistic society, for instance, could easily have developed agriculture five or six tech levels higher than arms and armor.

But it's not necessary to travel to another star empire just to drop tech levels. You could drop a few on modern day Earth if you travel to the right location. The GM can have a lot of play in his tech levels, if he uses them properly.

2.3 TIME TRAVEL

A time travel campaign will most likely to span a great deal of tech levels. The trick in a time travel campaign is whether to allow characters to take high tech items back in time with them. In Simon Hawke's *Time Wars* books, Lucas Priest was let loose on Richard the Lionhearted's England armed with an assortment of high tech gadgets, disguised as medieval equipment. This can lead to an interesting game, but can also be unbalancing, so it must be carefully monitored.

2.4 TECH LEVELS AND SKILL USE

Many skills depend heavily on the technology level at which they were learned. Medicine, for instance, is heavily dependant on pharmaceuticals and equipment. Replace a modern doctor's scalpels and drugs with leaches and herbs and watch him flounder.

The following chart depicts the penalties incurred when using skills and equipment of a differing tech level.

Note: *Skills could be learned at a lower tech level than the user on purpose. For instance, a time traveling doctor might learn First Aid and Medical Practice on a medieval level so as to be able to treat his patients in the field.*

In addition, certain skills would be unaffected. For instance, tracking is used independent of tech level, and would not be affected by temporal displacement.

TECH LEVEL PENALTIES

User's Lvl - Equipment's Lvl	Penalty
-10 or Lower	Impossible
-9	-512
-8	-256
-7	-128
-6	-64
-5	-32
-4	-16
-3	-8
-2	-4
-1	-2
0	0
1	0
2	-1
3	-2
4	-4
5	-8
6	-16
7	-32
8	-64
9	-128
10 or more	-256

2.5 RAISING THE LOCAL TECH LEVEL

In *A Connecticut Yankee in King Arthur's Court* by Mark Twain, the main character begins making gun powder and building guns. Could a group of characters accomplish the same thing?

Possibly, if they knew the formula for black powder, had primitive gunsmithing skills, and knew a good blacksmith. Should players be allowed to do it?

That is left up to the GM. The characters would definitely need unique backgrounds. To pass themselves off as wizards like the Connecticut Yankee, they'd need to be able to do a good bit of acting as well.

So what skills would characters need to make black powder? Chemical Engineering, Weapon Technology, or Gunsmithing (Crafts) might be good choices. To create gunpowder out of raw materials (sulphur (brimstone), charcoal, and saltpeter), the characters would need to make at least a Hard maneuver. If they can pull this off without blowing themselves up, they'll have it.

NOTATION

As technology, even on Earth, has developed at different rates, these levels are not necessarily intended to reflect the development of the western technology after which the ages were named. The discrepancies are purposeful and meant to represent the fact that no society evolves along a perfect tech level progression.

2.6 FITTING TECHNOLOGY TO YOUR CAMPAIGN

This is the most difficult part of building a science fiction universe. The GM must carefully assign his technology to keep the game balanced and to provide the appropriate feel to the setting.

A GM should start by asking himself these basic questions:

What genre would I like to play in? This is the most important question. An early starfaring campaign is going to have a very different feel from a game involving a vast, galactic empire.

Is this a hard science or space opera game? This is the second most important question. What kind of feel do you want? The Star Wars movies depict a society with a very high level of technology, and yet it is very unobtrusive. Holo-sights, specialized scanners and ultra advanced targeting systems are almost unheard of. These detract from the feeling of the individual's story, and therefore they're removed. On the other hand, the characters in any book by Dr. Gregory Benford could not possibly survive without their scanners, HUDs, and other advanced gadgets.

How restricted is technology? It's possible that many individual pieces of tech will be unbalancing or inappropriate for the game. They can be limited by imposing strict laws on their use.

Is this piece of tech right for this universe? Certain pieces of tech may be inappropriate. After assigning all of the generic factors, the GM needs to go through and decide if any tech that was included by default needs to be removed. Maybe force fields don't fit in this game, even though the tech level says they're available.

Are there any pieces of tech that need to be included? Perhaps in this universe, pieces of tech have been discovered that the tech level says are unavailable. For instance, maybe in this universe, the force field was discovered in the year 2001, instead of many years after.

PART II
TECHNOLOGICAL DEVELOPMENT

"I have yet to see any problem, however complicated, which, when you looked at it in the right way, did not become still more complicated."
— Poul Anderson

3.0 :: TECH LEVEL BENCHMARKS

"Success is a journey, not a destination."
— Proverb

This section contains a listing of the tech levels, broken into various categories. The general category is meant to give an overview of technological development. This treatment is not accurate enough to give a GM a truly comprehensive look on how tech levels affect a society. Therefore, this section has been further broken into specific categories, such as agriculture. These describe in more detail the progress that comes with the advances in technology. This allows the GM to make more informed decisions involving tech levels.

3.1 GENERAL

This chart depicts a general overview of the tech levels. They are listed as a series of historical, Earth equivalents to give the reader a better idea of how the tech levels fit into the overall scheme.

Each major age of man is listed below, along with the major technological achievements of the age. Note that these ages are listed with a bias toward Western civilization. To get a good idea of how different cultures develop at different rates, look up when the oriental cultures developed these same levels of technology.

Note: *For those GMs in possession of ICE's sourcebook, ". . . and a 10-Foot Pole" (ATFP) a notation has been placed after each tech level which corresponds to a section in that book. . . . and a 10-Foot Pole is an invaluable resource. It is much more complete than this book was intended to be, because most of the items in there do not require descriptions for those of us who are used to them in our every day lives.*

This still requires some careful watching by the GM. First of all, many devices were invented slightly out of their tech levels, so if a GM is using this for an non-terrestrial civilization, he should keep that in mind. In addition, many of the ages from that book span multiple tech levels, so there may be equipment on a list that hasn't quite been invented yet.

0 **Pre Stone Age** — No technology exists. Even language has yet to be invented.

1 **Stone Age** — Language is invented. Fire is discovered. The club becomes the weapon of superiority. Hunting and gathering are the norm. [*ATFP* Sec. 3.0, The Stone Age, p. 10]

2 **Dawn of Civilization** — Domestication of sheep and cereal grains. Invention of pottery. The invention of the wheel. Tools are made of stone. Fallowing and irrigation are invented. [*ATFP* Sec. 4.0, The Copper Age, p. 15]

3 **Bronze Age** — Writing and bronze working are invented. Weapons and tools are made from bronze. The chariot is invented and dominates the battle field. [*ATFP* Sec. 5.0, The Bronze Age, p. 23]

4 **Age of Reason** — Philosophy and higher learning come into play. Paved roads are invented. Geometry and mathematics are invented. [*ATFP* Sec. 5.0, The Bronze Age, p. 23]

5 **Iron Age** — The ability to smelt and work iron is invented. This primarily affects the trappings of war. Construction with stone undergoes many advances. The keystone arch is invented. The waterwheel, and its use in mills, is discovered. [*ATFP* Sec. 6.0, The Iron Age, p. 34]

6 **Dark Ages** — Primarily innovations in warfare and ground tactics. The saddle and the stirrup make cavalry more effective than ever before. [*ATFP* Sec. 6.0, The Iron Age, p. 34]

7 **Medieval Period** — Windmills and wind power are invented. Gothic architecture is perfected. The flying buttress is invented. Mathematics now includes zero. Steel is invented, making warfare even more efficient. [*ATFP* Sec. 7.0, The Middle Ages, p. 51]

8 **High Medieval Period** — Plate armor is invented. The knight rules the battlefield. Bell casting is perfected. At the end of this period, gunpowder is introduced, but doesn't really take over until the next period. [*ATFP* Sec. 7.0, The Middle Ages, p. 51]

9 **Renaissance** — Gunpowder and advances in shipbuilding techniques revolutionize warfare. Fencing is invented as armor becomes obsolete. [*ATFP* Sec. 8.0, The Renaissance, p. 68]

10 **Colonial Period** — Ship advancements of this and the last period lead to a great spurt of exploration. The printing press hits wide-spread usage. [*ATFP* Sec. 9.0, The Age of Reason, p. 86]

11 **Low Industrial Revolution** — Sound cast iron is produced in a blast furnace. The steam engine is invented. A series of important inventions combine to make the steam engine more efficient. The telegraph is invented. [*ATFP* Sec. 10.0, The Industrial Revolution, p. 103]

12 **High Industrial Revolution** — The assembly line brings mass production into full swing. The telephone is invented, and the revolver enters the scene. Iron begins to play a part in building, and suspension bridges enter the scene. The internal combustion engine is invented and undergoes several overhauls through the end of this age. The dynamo makes electrical power useful. The incandescent lamp is invented. [*ATFP* Sec. 11.0, The Age of Steam, p. 121]

13 **Low Industrial Civilization** — Mass production and the automobile change the world. The airplane is invented. The radio enters widespread use. [*ATFP* Sec. 12.0, The Electric Age, p. 139]

14 **Middle Industrial Civilization** — Jet power becomes practical. The rocket is invented. Nuclear fission is first achieved. The television enters widespread use. The machine gun, long range artillery, poison gas, and many other military advances change warfare. [*ATFP* Sec. 13.0, The Atomic Age, p. 158]

15 **High Industrial Civilization** — The computer is invented. Orbital and lunar space flight is achieved. Atomic power is put into wide use. The maser and laser are invented. Transplant technology takes off. [*ATFP* Sec. 13.0, The Atomic Age, p. 158]

16 **Low Cyber Age** — The personal computer is invented. Orbital space flight becomes routine. Medical research takes off. The genome begins to be mapped. The early stages of human-machine interaction begin. Cloning is achieved. Sub-Atomic particles are successfully teleported. [*ATFP* Sec. 14.0, Information Age, p. 174]

17 **High Cyber Age** — Cybernetics are invented and spread like wildfire. Planetary exploration begins. Rudimentary success with simulated intelligence is achieved. The neural interface revolutionizes entertainment. The first Self-Generating-Discharge Plasmatrons are built.

18 **Spacefaring Age** — Planetary colonies are established. Fusion power is placed in widespread use. Man-portable lasers and particle beams become the weapons of choice. Small scale genetic manipulation of an unborn fetus is achieved.

19 **Starfaring Age** — Ramjets begin to explore the stars. Slow colony ships leave for nearby systems. Simulated intelligence is perfected. Large scale genetic manipulation is achieved on fetuses with moderate success.

20 **Star Colonial Period** — Faster than light travel is discovered. The tachyon is discovered. Artificial intelligence is invented. Increases in medical and agricultural technology allow for colonies to survive with minimum support. Genetic manipulation, on a small scale, is achieved with adult specimens.

21 **Antimatter Age** — Antimatter power enters widespread use. Antimatter weapons are created. Medical science can now fix almost any non neural damage.

22 **Age of Gravity** — The invention of artificial gravity expands man's living capacities. Genetic manipulation on a reasonable scale can now be performed on a living organism. Neural Pathway Reconstruction Therapy is invented. Non locality physics splits off of quantum physics.

23 **Quantum Age** — Vacuum energy is fully tapped. Early force screens are invented. Teleportation, on a small scale, becomes possible. Major brain reconstruction becomes possible.

24 **Age of Force** — Force screens are developed on both a large and personal scale. Direct manipulation of alloys makes engineering advances possible.

25 **Age of Antigravity** — Antigravity is invented. Inertial dampers revolutionize space combat.

26 **Age of Terraforming** — Large scale ecological engineering becomes possible.

27 **Age of World Building** — Ringworlds and zero fault technology become possible. There is little out of reach.

28 **Dysonian Age** — Dyson spheres can now be built. Zero fault technology makes them practical.

29 **Cosmic Age** — Limitless, cosmic power is discovered

30 **Age of Omnipotence** — Direct, mathematical manipulation of reality is possible. Anything can now be achieved.

31+ **And Beyond**... — Unknown.

3.2 ARMS AND ARMOR

The art of war precedes civilization and social order. It's likely that it even precedes sapience. From the earliest days of intelligence weapons have been used by the strong to steal from the weak. They have also been used by the strong to protect the weak. The warrior is in fact the oldest profession.

0 **Pre Stone Age** — No weapons exist. War is conducted with fists and teeth.

1 **Stone Age** — Rocks and sticks are used. The club is invented. Hide armor and hide shields are invented.

2 **Dawn of Civilization** — Spears and then arrows are invented. The bow follows.

3 **Bronze Age** — Bronze working brings about the forging of blades and armor. Armor consists of bronze and leather.

4 **Age of Reason** — Refinements in armor is the majority of this age's accomplishments. The paved road allows the more rapid movement of troops. The phalanx is devised.

5 **Iron Age** — Forged iron revolutionizes weapons and armor. The cavalry is first used successfully, despite the lack of the stirrup. The ballista, catapult, and mangonel enter widespread use.

6 **Dark Ages** — Greek fire is introduced to maritime combat. The stirrup and saddle are introduced, increasing the effectiveness of cavalry. The reign of the heavy cavalry begins. Ground tactics are refined somewhat.

7 **Medieval Period** — Steel is invented. Armor and weapons are refitted using this lighter, stronger material. Improvements in architecture and stone masonry create bigger and more fortified castles. The heavy horse becomes more and more powerful. Chain mail is brought into its first full-scale use.

8 **High Medieval Period** — Plate armor is invented. The crossbow is developed, heralding "The End of Warfare." At the end of this period, gunpowder is invented.

9 **Renaissance** — Gunpowder and advanced shipbuilding techniques revolutionize warfare. Man-portable gunpowder weapons are brought onto the battlefield, as well as catapults. Fencing is invented as armor becomes obsolete.

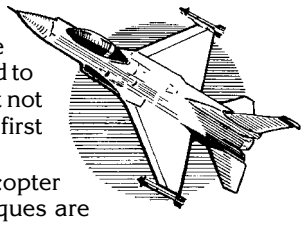
10 **Colonial Period** — Ship advancements of this and the last period improve capabilities in maritime warfare. Gunpowder cannons allow for more complicated riggings. The paper cartridge increases the firing rate of the infantryman. The smoothbore musket is invented. The bayonet is introduced.

11 **Low Industrial Revolution** — Muskets and the cavalry saber rule the battlefield. Scientific research is directed toward arms technology for the first time. The first maneuverable submarine is invented.

12 **High Industrial Revolution** — The revolver is invented. Steel hulls replace wooden ones. Steam power replaces wind power. Armored turrets and the torpedo are invented. Smokeless powder, the breech loader, and the working machine gun are invented. An array of explosives are invented.

13 **Low Industrial Civilization** — The military airplane, the man-portable machine gun, the submarine, the sea mine, and gas warfare are first brought into full use.

14 **Middle Industrial Civilization** — Jet power becomes practical. The rocket is invented. Radar is invented. Submarine detection methods are invented. Electronic countermeasures, as well the proximity fuse, are invented. The machine gun rules the battlefield. The tank puts an end to trench warfare. Helicopters are invented, but not put to widespread use. Atomic weapons are first developed.



15 **High Industrial Civilization** — The helicopter enters warfare. Increases in medical techniques are the greatest improvements in warfare. Nuclear power is put to use in naval vessels.

16 **Low Cyber Age** — The rocket is brought into wide use, and the helicopter becomes a combat vessel. Ballistic body armor is invented, as are improved chemical and incendiary arms. Increased computer technology allows more accurate use of missiles. The spy satellite comes into full usage. The ICBM is the nuclear delivery system of choice.

17 **High Cyber Age** — Military lasers and particle beams are brought into use. Electrochemical propulsion replaces gunpowder. Cybernetic advancements allow the creation of a new "super soldier." Orbital weapons begin to be utilized. Further advances in computer telemetry allow for increased long range combat capabilities. Gauss weapons are invented. Kinetic armor is invented, and the usefulness of the firearm begins to wane.

18 **Spacefaring Age** — Man-portable lasers and particle beams become the infantry weapon of choice. Planetary based mass drivers replace atomic weapons in interplanetary defense. Reflective armor and aerosol screens become useful in personal defense. Genetic engineering, on a minor scale, is used to produce the next generation of soldiers. Genetically engineered bio-weapons achieve more effectiveness. VT tanks are first built.

19 **Starfaring Age** — The first space combat vessels are built, though not brought into widespread use. Plasma weapons are invented. Ablative body armor is developed to combat particle beam weapons. A new generation of genetic "super soldiers" is produced.

20 **Star Colonial Period** — Man-portable plasma weapons are developed. Personal body armor is advanced to protect against plasma weaponry. The discovery of the tachyon leads to faster than light scanning equipment. The missile nearly becomes obsolete. Space combat vehicles are brought into ready use. Advanced SI computers are now small enough to create automated combat vehicles. The combat 'droid is developed.

21 **Antimatter Age** — Weapons become smaller and deadlier. Antimatter power is used to run more and more powerful space combat vessels. The potential of tachyon sensors begins to be fully realized. Star combat is now the norm. Combat armor evolves to the point where orbital drops are possible, bringing about a new breed of paratrooper. Land invasions become more and more obsolete, as space superiority takes a central role in warfare. Genetic super soldiers and combat droids vie for supremacy on the battlefield. Medical technology can heal most wounds.

22 **Gravity Age** — Artificial gravity allows longer terms on space situated weapons platforms. Men can be kept in fighting trim even in space. Increased gravity can be used for physical training. Neural pathway reconstruction therapy allows soldiers to be revived and saved after much longer periods of brain death.

23 **Quantum Age** — Full utilization of vacuum energy brings freedom to space-based weapons they have never had before. Major brain reconstruction is possible. Increased weapons, armor and genetic technologies bring about the obsolescence of the combat droid.

24 **Age of Force** — Force screens become useful for both large vehicles and personal defense. Direct manipulation of alloys, on a molecular level, increases the effectiveness of fighting vessels. Weapon and armor technologies vie for superiority, but the personal shield has changed everything.

25 **Antigravity Age** — Antigravity allows the creation of hover tanks and other low altitude, all-terrain craft. Inertial dampers allow space combat to achieve new levels of maneuverability. The dogfight is reinvented.

26 **Age of Terraforming** — Terraforming allows holocaust weapons to be employed with greater impunity.

27 **Age of World Building** — Zero fault technology makes fighting implements more durable and effective. Increases in engineering make things harder and harder to destroy. For the first time in history it appears it may, one day, be easier to create than to destroy.

28 **Dysonian Age** — Entire worlds can now be built, giving whole new territories to take. Force technology increases to the point where active destruction is becoming more and more difficult.

29 **Cosmic Age** — The discovery of cosmic energy allows offensive technology to outstrip defensive technology.

30 **Age of Omnipotence** — Direct manipulation of reality is possible. Creating and destroying are now one.

31+ **And Beyond... —** Unknown.

3.3 COMMUNICATIONS TECHNOLOGY

Communications technology is any technology which allows the exchange of thoughts and ideas between two sapient creatures. It runs the gamut between simple language and high-tech, faster than light, com gear.

0 **Pre Stone Age** — No technology, not even language, exists.

1 **Stone Age** — Language is invented. Increasingly complicated thoughts and concepts are communicated.

2 **Dawn of Civilization** — Language is refined somewhat.

3 **Bronze Age** — Writing is invented. Further refinements in language persist, allowing the communication of complex philosophical concepts.

4 **Age of Reason** — Advancements in language of the last age allow for the birth of philosophy and the communication of scientific concepts. The invention of the paved road allows a communications base which supports larger political bodies.

5 **Iron Age** — Further advancements in language persist. Watch fires and horsemen are the primary couriers of important news. The messenger becomes a trusted commodity.

6 **Dark Ages** — Little in the way of developments are made, though the groundwork for many modern languages are laid.

7 **Medieval Period** — Increased shipbuilding technology allows greater rate of travel by sea.

8 **High Medieval Period** — Advances in this time period primarily involve ship construction.

9 **Renaissance** — More advances in ship construction are known during this period.

10 **Colonial Period** — The printing press hits wide-spread use.

11 **Low Industrial Revolution** — The telegraph is invented.

12 **High Industrial Revolution** — The telephone is invented.

13 **Low Industrial Civilization** — The radio enters widespread use.

14 **Middle Industrial Civilization** — The television enters widespread use.

15 **High Industrial Civilization** — The computer is invented. A network of communication satellites in geosynchronous orbit allow line of sight communications to circumvent the world.

16 **Low Cyber Age** — The personal computer is invented. The Internet comes into being, adding a new level to corporate and private communications. Fiber optics are invented.

17 **High Cyber Age** — Cybernetics are invented. The neural interface revolutionizes the consumption and distribution of data. The Sensenet is born.

18 **Spacefaring Age** — Interplanetary communication is restricted to speed of light signals.

19 **Starfaring Age** — Interstellar signals are still restricted to speed of light signals.

20 **Star Colonial Period** — The tachyon is discovered. Slow faster than light communication is created.

21 **Antimatter Age** — Methods of reducing a tachyon's energy are discovered. The speed of faster than light communication improves dramatically.

22 **Gravity Age** — The speed of faster than light signals is increased still more.

23 **Quantum Age** — Teleportation is heralded as the dawn of a new age of instantaneous communication. However there are many restrictions. Other breakthroughs in nonlocality make instantaneous communication possible.

24 **Age of Force** — Com systems become smaller and more efficient.
25 **Antigravity Age** — Com systems become smaller and more efficient.
26 **Age of Terraforming** — Com systems become smaller and more efficient.
27 **Age of World Building** — Com systems become smaller and more efficient.
28 **Dysonian Age** — Com systems become smaller and more efficient.
29 **Cosmic Age** — Limitless, cosmic power is discovered. Com systems lose all effective range.
30 **Age of Omnipotence** — Direct, mathematical manipulation of reality is possible. This is communication with the universe itself, in the highest form.
31+ **And Beyond...** — Unknown.

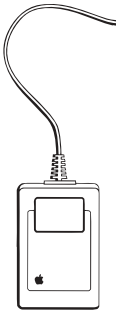
3.4 COMPUTERS AND DATA STORAGE

Computers have revolutionized many aspects of human life. The same would be true for any species. Computers can handle the functions of man with greater accuracy and greater efficiency than a biological life form.

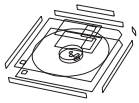
The problem is, they are still machines. At least for many tech levels they are. What do they become when they achieve self-awareness? That is a debate for philosophers. It's obvious, however, that they will be something more than slave minds.

It is also interesting to note that computers, at least around and about tech level 16, are a highly volatile market. Moore's law states that the power of computers must double every twelve to eighteen months. In the real world, this shows no sign of being violated.

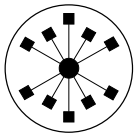
0 **Pre Stone Age** — No advances.
1 **Stone Age —** No advances.
2 **Dawn of Civilization** — No advances.
3 **Bronze Age** — The first form of data storage, the written word, is invented.
4 **Age of Reason** — Techniques for writing and writing implements are refined somewhat.
5 **Iron Age** — The first two computational devices, the abacus for mathematics and the astrolabe for navigation, are invented.
6 **Dark Ages** — Books, at least in the hands of the clergy, achieve popularity and use.
7 **Medieval Period** — Little in the way of inventions emerge, though inevitable refinements continue.
8 **High Medieval Period —** Little in the way of inventions emerge, though inevitable refinements continue.
9 **Renaissance** — Little in the way of inventions emerge, though inevitable refinements continue.
10 **Colonial Period** — The first adding device is invented, using a system of dials. Other refinements follow, though not in great volume.
11 **Low Industrial Revolution** — The telegraph is invented, allowing near speed of light transmissions of data over large distances.
12 **High Industrial Revolution** — The first mechanical adding machines are invented. Inevitable refinements occur. The difference and analytical engines are designed, but lack of fine machine techniques make them impractical, if not impossible, to build. The telephone is invented, allowing the first transmission of sound over large distances.
13 **Low Industrial Civilization** — Punch card programming and data storage are invented. The radio is invented, allowing transmission of data over the airwaves.
14 **Middle Industrial Civilization** — The television is invented, providing the first visual imaging system. The punch card computer is improved, allowing fully automatic computations to be performed.
15 **High Industrial Civilization** — The electronic computer is invented. They are generally room-sized monstrosities.
16 **Low Cyber Age** — The personal computer is invented, revolutionizing communication and business. At the end of this age, early computer-neural interaction (all one way), is coming to be. Moore's law is becoming strained as clock speeds approach limits imposed by the speed of light. The slack is picked up by parallel processing. The Internet becomes a household tool.



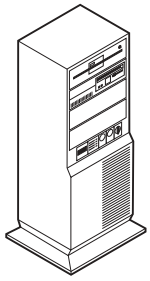
17 **High Cyber Age** — Full computer-neural interaction becomes possible. Cybernetics result, as do the Sensenet and the Datanet. Rudimentary success with simulated intelligence is achieved.
18 **Spacefaring Age** — Hardware innovations begin to slack off, no longer compensating for the lack of clock speed increases (which simply are as fast as relativity allows). Fiber optic systems are now used exclusively, with great success. Simulated intelligence becomes more and more realistic.
19 **Starfaring Age** — Moore's law is dead. Computer technology increases, but its heyday of growth is over. Simulated intelligence is generally considered to be perfected. Computer scientists begin to wonder whether true sapient intelligence will ever be manufactured. This is sometimes referred to as the "dark age of computing."



20 **Star Colonial Period** — The light barrier is broken, resulting in a flurry of computer growth that puts Moore's law to shame. With the light barrier no longer a problem, the top is blown off the clock speed barrier. Thanks to the tachyon, artificial intelligence is not only possible, it is difficult to restrain. Molecutronic computers are born.



21 **Antimatter Age** — Computer tech continues to increase, but the need for faster systems is becoming less and less necessary. A "home feeling" approach to computing begins, as the feel of the software begins to far outstrip other considerations.
22 **Gravity Age —** Computing power has exceeded the needs of its creators by so far that research nearly ceases. Another computer dark age ensues.



23 **Quantum Age** — Full utilization of vacuum energy, combined with an excess of computational power, allows small scale teleportations to be performed.
24 **Age of Force** — The dark age continues.
25 **Antigravity Age** — The dark age continues.
26 **Age of Terraforming** — The dark age continues.
27 **Age of World Building** — The dark age continues.
28 **Dysonian Age** — Zero fault technology, coupled with generations of striving to produce bug-free software (there was nothing else to do) produce systems where errors are almost unheard of.
29 **Cosmic Age** — With the technology of the next age in sight, a major push to expand computational power recommences.
30 **Age of Omnipotence** — Direct, mathematical manipulation of reality is possible. This requires massive computational ability, which is achieved.
31+ **And Beyond...** — Unknown.

3.5 ENERGY SOURCES

Energy is very important to technology. There has never been a time in history when the development of technology has caused the requisite amounts of energy to drop. Energy can come in several forms.

0 **Pre Stone Age** — No technology exists. Even fire is yet to be tamed. Muscle power is the only power there is.

1 **Stone Age** — Fire is discovered. So is the lever.

2 **Dawn of Civilization** — Animal power is harnessed.

3 **Bronze Age** — No real advances occur during this period.

4 **Age of Reason** — No real advances occur during this period.

5 **Iron Age** — The waterwheel, and its use in mills, are discovered.

6 **Dark Ages** — Better horse harnesses allow for more efficient animal power.

7 **Medieval Period** — Windmills and wind power are invented.

8 **High Medieval Period** — No real advances occur during this period.

9 **Renaissance** — No real advances occur during this period.

10 **Colonial Period** — Coal begins to be burned in large quantities.

11 **Low Industrial Revolution** — The steam engine is invented. A series of important inventions combine to make the steam engine more efficient. The telegraph is invented. Electricity is discovered.

12 **High Industrial Revolution** — The internal combustion engine is invented and undergoes several overhauls through the end of this age. The dynamo makes electrical power useful. The incandescent lamp is invented.

13 **Low Industrial Civilization** — The automobile causes an increased use of fossil fuels.

14 **Middle Industrial Civilization** — Nuclear fission is first achieved.

15 **High Industrial Civilization** — Atomic power is put to wide use.

16 **Low Cyber Age** — Atomic power is further refined.

17 **High Cyber Age** — First prototype fusion reactors are built. The first Self-Generating-Discharge Plasmatrons (vacuum energy) are built.

18 **Spacefaring Age** — Fusion power is placed in widespread use. VT vehicles rise in popularity, keeping the fossil fuel age alive.

19 **Starfaring Age** — Ramjets, powered by fusion and interstellar hydrogen, begin to explore the stars. Advancements in the Self-Generating-Discharge Plasmatron allow VT vehicles to begin production in full electric forms. The fossil fuel age finally dies.

20 **Star Colonial Period** — Fusion power is used on all spacecraft by this time.

21 **Antimatter Age** — Antimatter power enters widespread use. Antimatter weapons are created.

22 **Gravity Age** — Antimatter power is further refined. Power converters are invented (heralded by the popular media as the rebinding of Prometheus), allowing energy to be converted from one form to another with very little loss. This allows the construction of micro power generators, as bulky steam turbines are no longer required.

23 **Quantum Age** — Vacuum energy is fully tapped. Energy is now practically limitless.

24 **Age of Force** — Further refinements are made with vacuum power.

25 **Antigravity Age—** Further refinements are made with vacuum power.

26 **Age of Terraforming** — Further refinements are made with vacuum power.

27 **Age of World Building** — Further refinements are made with vacuum power.

28 **Dysonian Age** — Dyson spheres allow all of a sun's energy to be tapped, though vacuum power makes this a moot point.

29 **Cosmic Age** — Limitless, cosmic power is discovered

30 **Age of Omnipotence** — Direct, mathematical manipulation of reality is possible. This requires almost all the power made available by the last period.

31+ **And Beyond...** Unknown.

3.6 GENERAL SCIENCE

For many years science was used to describe any body of systematic knowledge. In the nineteenth century, the definition was refined to denote an organized inquiry into the natural and physical universe. For the purposes of *Spacemaster*, the second and more modern definition is appropriate.

0 **Pre Stone Age** — No technology exists. Even language has yet to be invented.

1 **Stone Age** — Language is invented. Fire is discovered.

2 **Dawn of Civilization** — Science begins, by necessity meeting the needs for survival. Elementary forms of arithmetic, geometry and astronomy are devised to meet the requirements of engineering, time reckoning, accounting, land measurement and agriculture.

3 **Bronze Age** — Writing and bronze working are invented.

4 **Age of Reason** — Philosophy and higher learning come into play. High-powered geometry is invented. The universe is thought to be eternally changeless and eternally in motion in a dichotomy of "Being" and "Becoming." An alternative "atomic" theory is posited. Mathematics are elevated to the pinnacle of scientific activity.

5 **Iron Age** — The ability to smelt and work iron is invented. The keystone arch is invented. The first heliocentric model of the universe is posited.

6 **Dark Ages** — Primarily innovations in warfare, with the occasional technological advance. Little in the way of scientific advances occur.

7 **Medieval Period** — Scientific refinements are made on existing subjects. Knowledge is centralized and taught in universities.

8 **High Medieval Period** — A movement to merge mysticism and science begin. Experimental method is introduced. Physics is introduced. An infinite universe is theorized. At the end of this period, gunpowder is introduced, representing a step forward in chemistry.

9 **Renaissance** — A new heliocentric theory is taken more seriously. The earth is first seriously taken as a planet. Mathematical reasoning is first introduced to cosmology, superseding the common sense approach. The theory of the immutable universe and crystalline spheres of cosmology are shaken.

10 **Colonial Period** — The printing press hits wide-spread use, bringing the book to a more common citizen. The beginnings of orbital mechanics are defined. The telescope is invented. Major revolutions in astronomy begin. The heliocentric theory is cinched. The three laws of motion are postulated (They are the law of inertia, "An object in motion stays in motion, and an object at rest stays at rest, unless acted upon by an outside force."; the law of acceleration, "The change in motion of an object is proportional to the force acting upon it and takes place in the direction of a straight line upon which the force is impressed."; and the law of reaction, "Every action has an equal and opposite reaction.") The law of gravitation is postulated.

11 **Low Industrial Revolution** — The theory of corpuscular light is introduced. The theory of colors (as they pertain to light) is introduced. The theory of uniform gravity is proven. The steam engine is invented. The telegraph is invented. Chemistry and geology are introduced as sciences.

12 **High Industrial Revolution** — The theory of evolution is postulated. The theory of heredity is postulated. The corpuscular theory of light is replaced by the wave theory. The theory of conservation of energy is introduced. The theory of electromagnetism is put forward. X rays are discovered. The telephone is invented, and the revolver enters the scene. The internal combustion engine is invented and undergoes several overhauls through the end of this age. The dynamo makes electrical power useful. The incandescent lamp is invented. The electron is discovered. Atomic theory is put forth. The logistics of the binding of atoms into molecules is put forth. Periodic law is defined. Astronomy, physics, and biology become formal sciences.

13 **Low Industrial Civilization** — The corpuscular and wave theories of light are melded. The groundwork of quantum theory is laid out. Aerodynamics culminates in the invention of the airplane. The theories of special and general relativity are postulated. The radio enters widespread use. The expanding universe is postulated. The big bang is theorized. Continental drift is theorized, and plate tectonics follows. Genetics becomes a formal science.

14 **Middle Industrial Civilization** — The rocket is invented. Quantum physics culminates in nuclear fission. The television enters widespread use.

15 **High Industrial Civilization** — The computer is invented. Orbital and lunar space flight is achieved. Atomic power is put to wide use. The maser and laser are invented.

16 **Low Cyber Age** — The personal computer is invented. Orbital space flight becomes routine. The early stages of human machine interaction begin. Bell's inequality is shown, proving the existence of quantum non locality. Subatomic particles are successfully teleported. The first generators which harness vacuum energy are built.

17 **High Cyber Age** — Cybernetics are invented and spread like wildfire. Planetary exploration begins. Rudimentary success with simulated intelligence is achieved. The neural interface revolutionizes entertainment. Solar observation refines fusion and nucleosynthesis theory. The first drafts of the unified field theory are put together.

18 **Spacefaring Age** — Planetary colonies are established. Fusion power is placed in widespread use. Man-portable lasers become the weapon of choice. Advances in radioactive theory help in the related field of medicine. The unified field theory reaches its final form and gains full acceptance.

19 **Starfaring Age** — Ramjets begin to explore the stars. Slow colony ships leave for nearby systems. Simulated intelligence is perfected. Data from star exploration revolutionizes theories on ecosystems and biospheres.

20 **Star Colonial Period** — Faster than light travel is discovered. A universal frame of reference is discovered, and relativity theory is shaken to it's very foundations. The tachyon is discovered. Artificial intelligence is invented. Nanites are produced in quantity for the first time.

21 **Antimatter Age** — Refinements in quantum theory allow for large-scale production of antimatter. Antimatter reactors are produced. These quantum advancements lay the groundwork for direct spatial manipulation. Cosmic power is theorized.

22 **Gravity Age** — Non locality physics splits off from quantum physics. The groundwork in spatial manipulation, explored during the last age, culminates in the invention of artificial gravity. There is no fine control of this science yet, and therefore inertial damping is far from reach. In addition, this can only be used to increase the gravity of an object of significant mass, such as a deck plate, and therefore it cannot be used to create antigravity. It does, however, spawn the sister technology of the reactionless drive (this still produces a feeling of acceleration).

23 **Quantum Age** — Vacuum energy is fully tapped. Non locality physics gives birth to the earliest force screens. Teleportation, on a small scale, becomes possible.

24 **Age of Force** — Force screens are developed on both a large and personal scale. Advances in non-locality physics allow direct manipulation of alloys. This is the initial groundwork for direct mathematical manipulation of reality, but it will be ages before the implications are realized.

25 **Antigravity Age** — Gravity theory is refined. Antigravity is invented. Inertial dampers revolutionize space combat and construction. Reactionless drives no longer produce a feeling of acceleration.

26 **Age of Terraforming** — Direct manipulation of molecular structure allows many advances in biological engineering. Large scale ecological engineering becomes possible.

27 **Age of World Building** — Ringworlds become possible. Advances in computers and engineering allow for zero fault technology. Malfunctions brought about by wear and poor design are a thing of the past. There is little out of reach.

28 **Dysonian Age** — Dyson spheres can now be built. They require constant artificial gravity, so zero fault technology is needed to make them practical.

29 **Cosmic Age** — Limitless, cosmic power is discovered

30 **Age of Omnipotence** — All of science culminates with the direct, mathematical manipulation of reality. Anything can now be achieved.

31+ **And Beyond...** — Unknown.

3.7 LAW AND LAW ENFORCEMENT

Laws and law enforcement are the primary goals of a society. Beings huddle together, first and foremost, for protection, and the most immediate threat a being experiences is from his neighbor. Therefore a society must police itself and protect its people.

0 **Pre Stone Age** — There is no law.

1 **Stone Age** — The only laws are the law of survival and the law of vengeance. Enforcement is carried out by whoever is strong enough.

2 **Dawn of Civilization** — Individual rulers are the sole law in a country. Their palaces are the only courts. Law is enforced by the military.

3 **Bronze Age** — Though individual practices change, law and law enforcement essentially remains the same.

4 **Age of Reason** — Though individual practices change, law and law enforcement essentially remains the same.

5 **Iron Age** — Law is written and formalized so that all citizens may read and understand. Judges and adjudicators are placed to mete justice.

6 **Dark Ages** — Schools of law are developed, but rare. Separate law enforcement offices begin to emerge.

7 **Medieval Period** — Though individual practices change, law and law enforcement essentially remains the same.

8 **High Medieval Period** — Schools of law become numerous. Law filters down from the ruling class to the realm of the scholar.

9 **Renaissance** — Though individual practices change, law and law enforcement essentially remains the same.

10 **Colonial Period** — Though individual practices change, law and law enforcement essentially remains the same.

11 **Low Industrial Revolution** — National law, complete with courts, becomes the norm.

12 **High Industrial Revolution** — Finger printing and ballistic sciences are developed.

13 **Low Industrial Civilization** — The foot cop and the eyewitness are still the hand of law.

14 **Middle Industrial Civilization** — Forensic science becomes more refined.

15 **High Industrial Civilization** — Movements to abolish capital punishment begin. Physical evidence begins taking a greater hand in criminal proceedings.

16 **Low Cyber Age** — Forensic evidence is now the heart of law and law enforcement. DNA matching, fiber analysis, ballistics and many other sciences make the crime scene as important as the eyewitness.

17 **High Cyber Age** — Increasing improvements in theft deterrent systems begin to breed a new age of technical criminals.

18 **Spacefaring Age** — Advancements in psychology render the death penalty unnecessary in many cases. Criminals have stratified into two types. The blue collar criminal is your common thug. The white collar criminal has the technical knowledge to bypass the security systems which guard precious goods. A larger number of policemen must be technicians to combat this white collar criminal.

19 **Starfaring Age** — The blue collar criminal is almost non-existent.

20 **Star Colonial Period** — Advancements in rehab programs tend to make the death penalty unnecessary. Crime continues to become a technical profession.

21 **Antimatter Age** — Capital punishment is abolished. Scanners make physical evidence very hard to hide.

22 **Gravity Age** — The blue collar criminal is extinct. He rarely commits more than one crime.

23 **Quantum Age** — Advances in psychology weed out most criminal traits at a young age.

24 **Age of Force** — Crime is nearly abolished

25 **Antigravity Age** — There is little left for law enforcement to do.

26 **Age of Terraforming** — The necessity for law enforcement continues to dwindle.

27 **Age of World Building** — All law enforcement agencies are rendered pointless by alarm systems and psychological knowledge. Law enforcement droids conduct the occasional round ups of criminals that are still necessary.

28 **Dysonian Age** — Social engineering has all but abolished crime.

29 **Cosmic Age** — Social engineering has all but abolished crime.

30 **Age of Omnipotence** — Social engineering has all but abolished crime.

31+ **And Beyond...** — Unknown.

3.8 MEDICINE

Medicine is the study of the care and treatment of injured or afflicted beings. The greatest problem with medicine is that it requires lifetimes of experimentation to discover the proper treatments and cures for an organism. When treating an alien race, creatures with a medical tech level of 23 or 24 may be reduced to splints and compression, and even those might do more harm than good.

0 **Pre Stone Age** — What medicine exists is instinctive.

1 **Stone Age** — Medicine is conducted through incantations and spells. It is therefore not particularly effective.

2 **Dawn of Civilization** — Cauterization and compression are discovered to stop bleeding. Primitive cures to speed healing and recovery from common illnesses are discovered.

3 **Bronze Age** — Thorough examination leading to proper diagnosis is defined, bringing healing into a more scientific art.

4 **Age of Reason** — Dissection and observation help expand medical knowledge. The groundwork for embryology and evolution is laid.

5 **Iron Age** — The splint is invented. Public sanitation is invented. Surgery can now be used to remove cataracts. Anatomy begins to be outlined. The sympathetic nervous system is discovered, and the mapping of the brain begins.

6 **Dark Ages** — The first small, meager steps from midwifery to gynecology are taken. Tests are now required before medicine may be practiced.

7 **Medieval Period** — Anatomy is still based on the dissection of pigs. Postmortem dissections begin. The medical case history is born.

8 **High Medieval Period** — Knowledge of anatomy begins to gel. The first steps are taken to separate medicine and mysticism.

9 **Renaissance** — The first accurate works on anatomy are published. The suturing of wounds begins. Movement from herbs to pharmaceuticals is in evidence.

10 **Colonial Period** — The circulation of blood is discovered. The purpose of the lungs is discovered (though oxygen is probably yet to be discovered). The microscope is discovered, and therefore blood cells, bacteria and capillaries follow. The importance of chemistry in medicine is first realized.

11 **Low Industrial Revolution** — Scurvy is cured. Vaccinations begin. Digitalis is used to treat heart disease. Histology is developed.

12 **High Industrial Revolution** — The scientific basis for medical practice is finally fully defined. Increased research helps map the kidney, eye and brain. The basic knowledge of the cell is explored and defined, and thus the theory behind disease is created. Microbiology is created. Many methods of immunization are discovered. Pasteurization is invented. Bacteriology is created. Safe anesthesia and treatment of wound infection help surgical techniques advance. Diagnosis is perfected. Psychiatry is invented.

13 **Low Industrial Civilization** — Antibiotics are discovered. Vaccination becomes common place. X-ray machines become more common.

14 **Middle Industrial Civilization** — The need for amputations drops dramatically. Surgical procedure is greatly refined.

15 **High Industrial Civilization** — The computer is invented. Medical diagnostic equipment becomes increasingly refined. Transplant technology takes off.

16 **Low Cyber Age** — Medical research takes off. The genome begins to be mapped. The early stages of human machine interaction begin. Cloning is achieved. Procedures such as the CT scan, PET scan and MRI become common place.

17 **High Cyber Age** — Cybernetics are invented and spread like wildfire. The methodology for curing cancer is laid down, though only a few forms can be cured.

18 **Spacefaring Age** — Most forms of cancer are cured. Regeneration of most forms of tissue can be stimulated. Genetic manipulation, on a small scale, of an unborn fetus is achieved. The technology for curing most disease exists, though finding that cure is often difficult.

19 **Starfaring Age** — Large scale genetic manipulation is achieved, with moderate success, on unborn fetuses.

20 **Star Colonial Period** — Increases in medical and agricultural technology allow for colonies to survive with minimum support. Small scale genetic manipulation is achieved with adult specimens. Advances in psychology increase the success of rehabilitating criminals.

21 **Antimatter Age** — Medical science can now fix almost any non-neural damage. Regeneratives and disease cures handle almost all trauma.

22 **Gravity Age** — Genetic manipulation on a reasonable scale can now be performed on a living organism. Neural Pathway Reconstruction Therapy is invented, curing many forms of brain damage. Anti-agenic drugs are devised. Transplant organs are now force grown in cloning vats.

23 **Quantum Age** — Major brain reconstruction becomes possible. Psychological advances begin to weed out problems at a young age.

24 **Age of Force** — There are now very few ailments which can't be cured. Sufficient information to treat alien species now takes only decades to compile.

25 **Antigravity Age** — It now takes only years to compile enough information on alien physiology to properly treat them.

26 **Age of Terraforming** — Alien physiologies may now be studied in months.

27 **Age of World Building** — Alien physiologies may now be studied in weeks.

28 **Dysonian Age** — Alien physiologies may now be studied in hours.

29 **Cosmic Age** — Alien physiologies may no be studied in minutes.

30 **Age of Omnipotence** — Direct, mathematical manipulation of reality is possible. Nothing cannot now be achieved.

31+ **And Beyond...** — Unknown.

4.0 :: LEVELS OF DEVELOPMENT

"Teachers should not impose their belief that the Earth is round on students who have been brought up to believe that it is flat."
— Jim Cooper (chief for educational matters under Arizona governor Evan Mecham)

An important step in designing a culture is to assign it levels of technological development. This can be a fairly straight forward task, if the GM is looking for a quick and dirty approach, or it can be very involved.

Anyone can take the quick and dirty approach, but a truly in-depth consideration of the matter might seem rather daunting. This section is included to help GMs get a grip on this question. It is designed to give a starting point to those who don't know where to start, and some food for thought to those who do.

This section is broken into two main parts: racial considerations and cultural considerations. Racial considerations dwell mostly on matters of a biological nature. Cultural considerations deal with the biases of philosophies and other school of thought.

4.1 RACIAL CONSIDERATIONS

Many biological fundamentals drive a race. The need to eat, the need to reproduce, and the inevitability of death are but a few. These drives will greatly influence the development of a race, its culture, and its technology.

4.1.1 GENERAL BIOLOGY

The first step is to consider the most basic details of their physiology. This will drive a race on it's most elemental levels. This is the level where you find the fight/flight reflex, the need to eat, and other basic, instinctual drives.

Evolutionary Considerations — Without getting into the debate of creationism vs. evolutionism, suffice it to say that most science fiction races are created from the standpoint of evolution. Even creationists typically talk like evolutionists when designing a science fiction story. Why? Well, because it's good for the story.

Anyway, when designing a race, its best to start at the beginning. What were these creatures before they walked and talked and made tools and began looking at the stars? How does this affect their development? What hurdles did they have to overcome?

The hurdles are typically the most defining question. Eliminating disabilities and inabilities are the first task of technology. Is the race particularly slow? Then transportation will be very important. Is the race in severe peril of predators? Then arms and armor will be important.

Begin by listing the things a race isn't good at, such as speed, agility, vision or even math. Then look at the varying technological categories for solutions. The more solutions you find in those categories, the more emphasis that category should have in development.

The second thing to look at are the aptitudes of the race. A flying race, though it won't need early, slow airplanes, will have a much better innate understanding of flight. The air foil might have been a leap in logic for us, learning that the atmosphere was a gas composed of many particle and extrapolating on how the flow of those particles would effect density and produce lift. However, we have never felt air rush over our wings. We have never learned how one curvature increases lift, while another reduces it.

Therefore a race should be examined for aptitudes. Though the fields associated with these aptitudes might not be of great importance to the race, the development will be much more effortless. The field may be a cherished hobby, if not a vital necessity. Observe how the game industry has driven computer technology. We are not always motivated by survival.

Endurance — A creature's endurance will tell one a lot about its capabilities. A creature that loves to run, and is good at running, even if its not good at running fast, is not going to be as motivated to develop transportation.

Endurance doesn't just refer to aerobic activities, however. Some creatures are better suited for handling temperature extremes than others. The more tolerant the creature is of temperature extremes, the less likely they are to develop temperature control technologies.

On the other hand, failings are still very motivating. Poor cold resistance is likely to drive a creature to develop controllable forms of heat. Inability to stand the driving wind is going to lead to better structures.

Height — How tall are the creatures? Short creatures will have a much easier time building multi-level dwellings. They might also have an easier time building mines and extracting natural resources.

Tall creatures, on the other hand, will have a much harder time building multi-level structures. A two-story house for a large being must be much stronger for each level added, since it must also be much taller.

This could very well force these races to avoid building such structures. Eventually, however, they will probably be driven by space considerations to build large buildings. Then they will be forced to become masters of the art, or give it up completely.

Life Span — With life span, it's important not only to look at the creature's actual life span, but more importantly, their perceived life span. Do they mature as quickly intellectually as they do physically? If not, then they might not have as much time to work toward advancing their accumulated knowledge, and all their technology will suffer.

On the other hand, if a race is nigh immortal, much of their research will likely be placed in the oldest and most wizened. This will greatly advance the progression in fields that are accepted, but radical ideas are often discovered by the young, who haven't invested large amount of emotional energy in the ideas of the past. Such a long lived race may have trouble making radical leaps.

On the other had, a race that has a long, but finite, intellectual life would develop very quickly. They'd likely develop quickly in all areas, having enough time to build strong foundations for the next generation to question and overthrow.

Special Abilities — This is a more difficult subject, mainly because it's so broad. All special abilities should be examined. How do these abilities effect the creature's development? Do they give it any edges that would speed development along? Do they give it any abilities that might give make it neglect a certain area of development?

For instance, if members of a race are born lightning calculators, how would that affect their data storage technology? Computers were born of calculators. Calculators were born from difference engines. If a race has no need for mechanical aid in mathematics, how long would it take the race to make the leap to computers and data storage?

Food and Competition — How a race eats and what it must compete with is another important factor in a race's development. A race that is in heavy competition with another race might develop arms and armor at an accelerated rate. A race with poor food resources may develop agriculture at an accelerated rate.

On the other hand, a race that has little competition for food or resources will have less motivation to develop agricultural skills. They might spend their leisure time on science, communication, or even warring amongst themselves.

Cursorial Hunters — A cursorial hunter is one that is capable of tracking its prey for days if necessary. A noncursorial hunter is capable of only short bursts of speed. Humans are cursorial, cats are not.

A cursorial hunter will probably have a much longer attention span than a noncursorial hunter. It may even be that noncursorial hunters will never develop sapience.

At any rate, a noncursorial hunter will probably not develop technology very quickly at all. They might require some extreme external stimuli to force them into sapience.

Other Considerations — This is a catchall category, the time when you consider all those other little strange things that might be stacked for or against a race. Like special abilities, it's hard to give firm advice in this area.

For instance, an amphibian race might develop under water technologies at a rate vastly faster than a surface race. For them, the high pressures of the depths of the water might be an every-day barrier, a line of death that they are unable to cross. When a limitation is staring a race in its face, they are more motivated to overcome it.

4.1.2 PSYCHOLOGY

The psychology of a race will have a lot to do with how they develop. A race that values warfare will develop arms and armor much quicker than a race of pacifists. On the other hand, a race that values honorable combat might never develop weapons of mass destruction.

A GM should take a close look at a race's outlook. What do they value? What do they abhor? What motivates them? What awakens them in the middle of the night, frightened to their very core? The answer to these questions will give a lot of clues as to how a race will develop.

4.1.3 PERCEPTION

How a race perceives the universe is also important. Do they see color? Can they see infrared light? Can they hear the ultrasonic?

Many of these questions may not give radical shifts to a races development, but a race that can see infrared wavelengths isn't going to develop infrared gear. They might not even develop street lamps. A color blind race isn't going to color coordinate controls. They might put together colors that look the same to them but clash horrifyingly to a race that percieves light in a different spectrum.

4.1.4 MATING

The speed and means by which a race reproduce can have a lot to do with their development. Do they reproduce very slowly? In that case, warfare might be unheard of. Do they require birth control to keep from going completely out of control? If so, then medical science, at least endochrinology, might be highly developed.

A good example of this is the novel *A Mote in God's Eye*, and its sequel, *The Gripping Hand*, by Larry Niven and Jerry Pournelle. In this, the Moties had no way to control their population growth. Anytime a Motie went too long without reproducing, they died.

This drove their society to terrible wars which ended in a complete collapse of Motie society. They were driven by this motivation for millions of years, until these collapses were considered as inevitable as night and day, and they began preparing for, dreading, and expecting them.

This is an extreme example, of course, but a good one. It should give a GM an example of where this subject might lead them.

4.2 CULTURE CONSIDERATIONS

Once the racial considerations are considered, the GM should consider the race's culture. Sometimes a race might build a star-spanning society that then collapses. At this point, each member world, crawling out of its own dark age, will be defined as much by their differences in culture as their similarities in race.

Physical Resources — How has the culture's abundance or shortage of resources effect their technology. What do they waste? What can't they afford to waste? How has development on a metal-poor world affected construction? How has it affected their metallurgy skills?

In any case, the haves and the have-nots develop very differently. What they have and what they have not will say a lot about how they develop.

Subsistence Patterns — After a culture's resources are defined, a GM should decide what the cultures subsistence patterns are. What resources do they use? What resources do they value?

These questions will help determine not only why a race survives and why they go to war, but how a race survives and how they go to war.

Imagine a world where metal is scarce. What do they use to build? What kind of polymers have they been forced to develop? What do they value?

A world that values aluminum is not going to use it frivolously, like humans do. A world that lives in and cherishes trees may not make paper the way we do. A culture that has been forced to survive without large trees would have to build without wood. These patterns of existence tie in with physical resources to help define a lot about a culture and how they use their technology.

Values and Kinship — What a race holds dear says a lot about how it will develop. A culture that values both the born and the unborn infant will probably never develop abortion. They may never develop birth control.

A society based on strong family and clan ties might be prone to war with other clans, forcing accelerated arms development. A society that feels all its members are kin might have just the opposite trend.

Values tell a great deal about a race. Perhaps they feel the wounded are weak, and should die. They might never develop medicine. Perhaps they feel that no person should toil to feed another. These cultures might never develop agriculture.

At any rate, these questions should be carefully considered. They help to shape a race, and thereby shape a race's technology.

Language — Language is often more of a result of all these other factors than a motivating factor in and of itself. This doesn't mean that it's unimportant.

How does the culture communicate? A culture without verbal communication may develop technology at a much slower rate. Then again, a race whose language is very easily converted into a binary code, like Morse code, might make that leap to the telegraph much earlier. Once there, the telegraph might spread quickly, accelerating the growth of communication technology beyond what might be achieved with a culture whose language translates poorly.

Religion, Myths, And History — This ties into psychological considerations. What are the religious imperatives placed on a race? What are they compelled to do? What are they compelled not to do? It is unlikely that a race whose religious dogma exclusively teaches passive resistance will devote many resources to arms and warfare.

What have their myths touted? Myths filled with the wonders of flight might promote travel technologies. Myths involving telepathy and other form of instantaneous communication might be compelled to develop these things in real life.

These myths translate into literature as well. Many of the technological wonders of today were envisioned by science fiction writers of yesterday. Would we have developed television when we did without science fiction? How about the laser? Certainly these items might well have been developed, but how quickly? What technologies would have been delayed? How would this have cascaded?

History is also a driving factor in a culture. Horrible events in a culture's past might render certain technologies taboo. A culture haunted by a past nuclear holocaust might not develop weapons of mass destruction. A culture haunted by terrible plagues might spend fortunes on medical research. A culture fleeing a terrible dark age might cherish communication and data storage.

Whatever the culture fears, cherishes, or dreams about should be considered. This will help define a culture.

Class Specialization — How specialized is this culture's class system? A culture with a highly structured slave class is going to have less need for industrial equipment. A society that values its trade class might have a retarded development of mass production technology. A society with a structured, ritualized warrior caste may disdain advanced weapon technology.

The class system is the heart of many cultures. Any culture with class systems should have them scrutinized. What technologies does the class structure replace? What technologies does it promote? These questions are very important.

Art, Architecture, and Symbolism — Architecture will tell a great deal about a culture's construction technology. Other factors, such as art and symbolism, will give more clues to the forms of technology than their functionality.

The phallus and the cross are common symbols in occidental culture. Because of this, their forms are often repeated in designs and structures. Details like this can lend a great sense of realism and style to a culture.

Politics and Welfare — The politics of a culture will determine what the people with money will buy. Rulers in a warlike culture will spend more money on arms and weapons. Rulers who are trying to keep a culture together across vast distances will develop technologies that improve communication.

The welfare of a nation also motivates its development. How does a nation treat its elderly? What do they need to protect themselves against? A culture that is bombarded with asteroids will have a strong space program. One that is plagued with diseases will develop good medical technologies.

A Final Note

Entire volumes could be filled with a discussion on how these factors shape and mold a culture's development. This section does not pretend to be a complete treatment of the subject. It doesn't even dream of being a complete treatment.

The purpose of this section is to make a GM think. It is to help get the creativity flowing and to intrigue and inspire.

A GM can do a lot with the implications of a well designed race and culture. Once he begins the process of culture design, things often just fall into place.

Hopefully, this will give the GM a good start. Hopefully, it will point him in the right direction. If the campaign is to be space opera, then this isn't very important. If the campaign is to be hard SF, however, then it can be imperative. A realistic race and culture can make or break hard science fiction.

5.0 :: SPECIFIC ADVANCEMENTS

Part II
Technological Development

"The universe is full of magical things, patiently waiting for our wits to grow sharper."
— Eden Phillpotts

In Section 2.0, an overview of the various tech levels was presented. However, the reader may not be familiar with some of the terms presented there. Certain advancements, such as FTL travel, could be handled in many different ways.

The purpose this section is to cover various specific developments in technology. As with all things, this is presented as a GM tool. It is likely that many of these pieces of technology will not be included in any given campaign, or that they will be changed radically before they are. This is more than okay, it's expected.

Using Specific Advancements

After the tech levels for a specific culture have been defined, it's necessary (assuming the tech level is not particularly primitive), to give some thought to the technologies involved.

The GM should go through this section carefully, taking note on each of the advancements that are necessary for his culture. He should alter them as needed to fit the campaign and give careful consideration to their affects on game balance.

In certain areas, hard decisions may have to be made. With FTL travel, for instance, the GM must decide, first of all, which of the methods are even possible. Then he must determine which races use which methods. Finally, assuming that different species use different methods, the implications of these technologies must be compared to one another, to make sure the balance of power that the GM intended is not disturbed.

When the GM has finished examining this section he is ready to move on to the rest of this work. There he can define the specific pieces of equipment the races of his universe will have.

5.1 ENERGY SOURCES

Energy is important to any civilization. The higher the civilization's tech level, the higher their energy consumption probably is. Never in the history of man has there been an age where technology used less power than the age before, despite the invention of power-saving devices. It is likely that this trend will continue, that technology will become more and more hungry for power.

It is therefore necessary to define what sources of power a civilization has at its disposal. Entire political structures are built around the generation of power (take the Middle East, for example). Wars have been fought over less important resources.

FOSSIL FUELS (Tech Level 3) — After wood, fossil fuels are the most common form of power available. Coal has been burned for heat or steam for almost as long as history can record. More recently, natural gas and petroleum have replaced coal as the primary fossil fuel. The problem with fossil fuels is two-fold. First of all, there are finite amounts of it, far less than technology will require in the long run. Second, and perhaps more important, is the devastating effect that the burning of fossil fuels can have on the world's ecology. Fossil fuels are, at best, a short term solution to a world's power problems.

NUCLEAR FISSION (Tech Level 15) — At the end of tech level 14, the atom will be split. By tech level 15, it will be possible to use nuclear fission to generate power. At the time, this will be the cleanest power source available to any locale. (Hydroelectric is cleaner, but it requires a large river.)

There are many myths about nuclear power. Let's dispel them.

First, nuclear reactors cannot explode. They simply do not have a high enough density of fissionable materials. Theoretically, they can melt down. With proper precautions, this should never have to happen. Even if this does happen, the long term biological effects are far more pleasant than the long term effects of burning fossil fuels to produce electricity.

Another popular misconception is that nuclear reactors produce waste which is highly radioactive for tens of thousands of years. This is not only inaccurate, it is a contradiction in terms. The very term "highly radioactive" means that it cannot be highly radioactive for long. In fact there is radioactive waste today which is already less radioactive than the fissionable materials from which it was produced.

Radioactive power sources are used on many modern vehicles. The Radioisotope Thermal Generator generates power for the space shuttle, for instance. An RTG is so durable the shuttle could explode without causing any harm.

Are nuclear reactors safe? Of course not. Are they safer than fossil fuel plants? Definitely, in the long run. France has been working almost exclusively off nuclear power for years, without a major mishap.

HYDROELECTRIC (Tech Level 13) — Dam off a river, let the water build up really high, then shoot the water through a turbine or series of turbines. The resulting energy is called hydroelectric. This is probably the most plentiful, eco-friendly form of power. Its only problem is that it requires the flooding of a large area of land when the dam is built, and must be located on a large moving body of water.

WIND POWER (Tech Level 12) — With the invention of the power generator came the need for a force to motivate it. Wind power is used as early as tech level 7 to provide simple, mechanical force in mills. It is only natural that it would be an early source of motivation for turbines.

Wind power is cheap, efficient, and clean. The problem is that it is not reliable. The wind does not blow constantly. A second problem is that it takes many windmills to generate wind power, making it impractical for large-scale use. Naturally this is useless in a vacuum.

GEOTHERMAL (Tech Level 13) — In its simplest sense, geothermal power can be used for heating homes as early as tech level 3, merely by channeling heat from an open fissure in the ground through pipes and into a home. For the purposes of *Tech Law*, however, geothermal energy will be used to refer to using geothermal energy to generate electricity.

Until the invention of the power converter in tech level 22, allowing the free exchange of energy from one form to another, all generation of electricity is performed by heating water. With geothermal power, the water is heated using the energy of the interior of the earth.

Naturally this can only be used on worlds with an active interior. It often requires some significant digging to harness, and as many of the prime locations are near volcanoes or on fault lines, many would feel this method of generating power has it's safety issues as well.

SOLAR (Tech Level 15) — The photoelectric cell is invented around tech level 15. At that point, it becomes possible to generate power using only the light of the sun. This is the safest form of power ever devised.

Unfortunately, it has its drawbacks. First of all, it takes a lot of photocells to satisfy a civilization's needs for power. In addition, it requires sunlight. This means that it is impossible to collect energy during the night or during deep cloud cover.

Solar power is most useful in space, where night and weather conditions are not relevant. It is used on most satellites and space craft for at least backup power.

FUSION (Tech Level 17) — Fusion power is achieved by bringing hydrogen (or rather deuterium) together in such conditions that it fuses into helium. This is the same process that keeps the sun and all the stars burning.

Fusion power is a good source of heat, and therefore electricity. Unfortunately, it is very difficult to control. Fusion temperatures are measured in the millions of degrees. It involves intense and powerful forces which, should they be released, can cause violent and dangerous reactions. Whereas making a fission reactor safe is merely a matter of planning, making a fusion reactor safe requires a process more akin to prayer.

Cold Fusion, Fact or Fantasy? — Cold fusion is a difficult subject, and one of heated debate, even now. What exactly did happen in that lab in Utah? Did we discover a new form of power, one that was safe, clean, and limitless?

No one really knows. Something happened. Energy was generated. But what was the cause? The efforts to reproduce the effect have been notoriously fickle. Was it cold fusion?

It's difficult to say. Whether to treat cold fusion in a serious fashion probably has a lot to do with the players involved. A normal playing group will probably take it in stride. In fact, it's the type of thing SF fans want to believe in. A group that involves anyone even remotely connected with nuclear power will probably not accept the idea of cold fusion. The reactions tend to run the gamut from hysterical laughter to outright belligerence. As with any controversial subject, the GM would be wise to examine the issue before using it in his campaign.

MATTER/ANTIMATTER (Tech Level 21) — Needless to say, matter and antimatter do not react well together. Whenever the two are brought together they annihilate each other in a violent release of energy. If the amounts of matter involved is at all significant, this release can be measured in megatons, gigatons, teratons, or more.

Starting in tech level 21, antimatter can be produced in quantities to make its use as a power source practical. The problem with this type of reactor is safety. Using it is to ride the current of a long, controlled explosion. In addition, the antimatter must be stored, perhaps magnetically, in a manner that does not allow it any contact with matter, as the results of error are explosive at best.

Another benefit of antimatter power is its use in star craft. In universes where reactionless drives do not exist, antimatter is a convenient manner by which to provide a lot of energy for thrust. It just needs to be controlled safely.

VACUUM ENERGY (Tech Level 17) — So-called "empty space" is actually seething with fluctuations in the quantum field. These fluctuations take the form of virtual particles that appear as a matter and antimatter pair which then annihilate each other. If this happens within the period dictated by the uncertainty principle, then the law of conservation of energy is not violated.

At the end of the low cyber age, a Self-Generating-Discharge Plasmatron first captures the energy of virtual particles.

As the tech levels increase, this process becomes more and more efficient. By the quantum age, all the energy can be harnessed, providing a nearly limitless source of energy.

COSMIC POWER (Tech Level 29) — At tech level 29, infinite cosmic power is discovered. This cosmic power draws from the very fabric of reality. It supplies limitless power at almost no cost. It helps pave the road for direct, mathematical manipulation of reality.

5.2 COMMUNICATIONS TECHNOLOGY

Communication is the heart of every society. How a society communicates has a lot to do with whether the society is a success or a failure. No interstellar community can exist as a cohesive whole without faster than light communications.

RADIO (Tech Level 13) — Radio is a form of electromagnetic communication. As such, it is restricted to the speed of light. Radio will be the communications method of choice for societies at tech levels less than 20. Radio, being a form of light, requires line of sight to operate (though it can penetrate a short way through solid objects).

TIGHTBEAM (Tech Level 15) — With the invention of the maser (and later the laser), it becomes possible to reach the next stage of electromagnetic communications. No different in theory than radio, a communication laser or maser simply transmits the electromagnetic information in a focused beam instead of in a global transmition (as with radio).

This has three benefits. First of all, it is difficult, if not impossible, to monitor the communication without cutting it. The only real way to do it is by monitoring the energy changes at the transmitter or reciever (watching the temperature on the reciever pulse, for instance). Unfortunately, this often requires close proximity.

The second benefit is range. A laser can throw a beam across the solar system for a fraction of the energy that it would take to crank a broadbeam communication across the same distance.

The third benefit is defense. A com laser usually is energetic enough to act as a mark 10 laser in all ways.

There is only one drawback. A com laser has to be pointed directly at its target. This can be difficult over long distances, unless the target is stationary (a planet for instance). Otherwise, time lag adds up quickly.

TACHYONS (Tech Level 20) — A tachyon is the name for any particle that travels faster than light (all "normal" particles are called tardons). An interesting thing about tachyons is that all the effects of relativity operate on them, but in the opposite manner as they do on tardons.

OTHER (Tech Level 20+) — Occasionally, in science fiction, other forms of communication are used. They might be called "subspace" or "Z ray" or some other such name. The point is that these signals generally travel faster than light, and therefore are the heart of communications in the universe.

5.3 COMPUTERS

Computers are a part of everyday life in most science fiction worlds. The more advanced a society's technology becomes, the more dependent a society becomes on its computers. Computers gradually infuse themselves into the soul of a society, taking more and more jobs that human beings are incapable of handling, or at least incapable of handling quickly enough.

Moore's law states that computer power doubles every twelve to eighteen months. For a while, this is represented primarily by a straight-forward increase in clock speed. Eventually, however, clock speed comes up hard against the speed of light, and the signals simply cannot be pushed through any quicker.

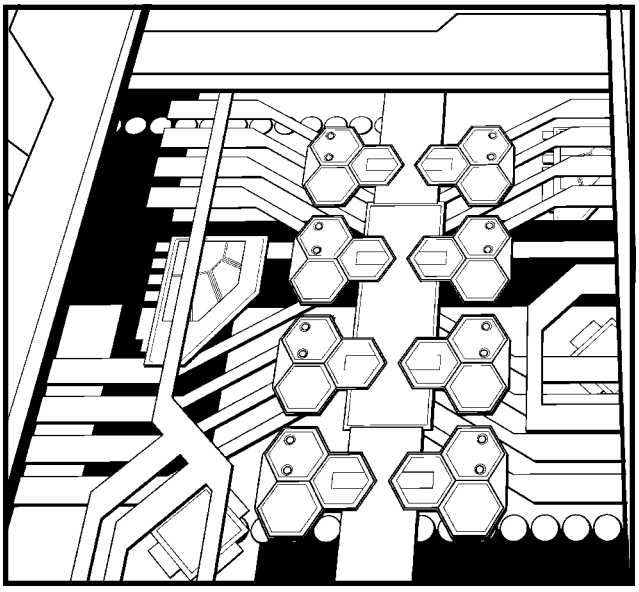
But Moore's law continues. Parallel processors, more efficient computing systems and eventually FTL signals continue to push computing technology forward. It is unknown how powerful it will eventually get.

During tech level 20, molecutronics are born. These computers have infinite clock speed potential. They are immune to electromagnetic pulses.

CAPABILITIES AND LIMITATIONS

One of the first things that must be determined is what the computer systems of the world should be capable of. Is artificial intelligence possible? What is the state of virtual reality? Is a neural interface possible? How about personality downloads?

Each of these subjects is treated separately below. A GM should give each careful consideration, as each can have ramifications on many areas of the game.



ARTIFICIAL VS. SIMULATED INTELLIGENCE (Tech Level 19 or 20) — Artificial intelligence is an elusive and difficult technology. When Arthur C. Clarke wrote *2001: A Space Odyssey*, he was hopeful that artificial intelligence would be achieved by 2001. He was, of course, wrong. In the early days of artificial intelligence, many victories were achieved. It wasn't until much later that it was discovered that those victories were the easy ones.

It might be that artificial intelligence simply requires a twenty year boot period.

An artificially intelligent computer is fully self aware. It is capable of everything a natural mind is capable of, including guessing, lying, and making leaps in logic. An artificial intelligence is even capable of kindness, generosity, and self interest.

A simulated intelligence appears in most every way to be artificially intelligent. They are programmed to show feeling, make leaps in reason, and even lie. They are not, however, capable of true self interest. They will make guesses when they are able, but will often fall back on the old answer of "insufficient data."

VIRTUAL REALITY (Tech Level 16) — As computer processing ability progresses, virtual reality technology becomes better and better. As this technology improves, virtual reality begins to replace television as the entertainment venue of choice.

As the neural interface is invented, a whole new dimension is added to virtual reality. As the technology progresses, more and more of civilization's social life will probably become virtual. Eventually something happens or they just say "enough," and quit.

NEURAL INTERFACE (Tech Level 17) — With the increasing integration of man and machine that follows the cyber ages, the neural interface eventually becomes possible. Toward the end of the low cyber age (within the last decade), sensor equipment is designed which can read and interpret the intentions (if they're simple) of the human brain. This is primarily used for video games and simple vehicle control.

By the high cyber age, this link begins to work both ways. In the beginning it is only used to give commands to robotic prosthetics, but eventually an entire link between mind and machine is formed, allowing data transfers, virtual reality, and sense imaging.

As the age progresses, the neural interface begins to become more and more important. Why build a night club when you can build a virtual night club? Real estate is expensive, but virtual estate is only as expensive as volatile memory.

The Sensenet and the Datanet come into being. The Sensenet is an entire virtual universe designed for the user's pleasure, while the Datanet is a gigantic virtual library. If dependence on these technologies continues to increase, the society will probably never leave the cyber age.

PERSONALITY DOWNLOADS (Tech Level 17)— With the neural interface comes the personality download. By the end of the low cyber age, technology is approaching the ability to build enough memory to store a human intellect. By the high cyber age, Moore's law guarantees it.

What the effects of this are depend greatly on the GM. If he believes that the soul has a place in the game, but that it can't be downloaded, then this will probably be nothing but a depository of data. If he believes that one vessel is as good as another, then the entire being might then be alive in memory. This is purely a judgment call.

Of course, having a fully sapient intellect running around the Sensenet will have many ramifications in the game. Having a dozen, a hundred, a thousand of them…

5.4 LAW AND LAW ENFORCEMENT

The abilities of law enforcement agencies will have a lot of influence on the feel of a game. A game where the law is powerless will be ruled by hoods and crime organizations. A game where the law has iron control will be completely different. It will be a place where children and the elderly can walk the streets at night in peace, but at what price?

SECURITY LEVELS

Each security system, computer, or location has a security level. This security level affects any attempts to commit illegal acts within the area. For instance, committing computer crime on a level 10 system is much more difficult than on a level 1 system.

Tech level does not have much effect on security levels, unless the thief is using equipment of a different level than the system. Generally speaking, the technology being used to crack the system is on par with the technology of the system itself.

Use the following modifications when going up against a security level:

SECURITY LEVELS TABLE EM-5.1

Security Level	Penalty
0	-0
1	-10
2	-20
3	-30
4	-40
5	-50
6	-60
7	-70
8	-80
9	-90
10	-100
11+	-(Level x 10)

5.5 MEDICINE

Medicine is the treatment of the sick and injured. Medicine is as old as technology. A game world's medical technology has a great effect on the game, especially if there are no spells or psychic powers that can heal characters.

GENERAL CAPABILITIES

A GM must decide is what medical science can accomplish. Some of the common advances are listed below.

TRANSPLANTS (Tech Level 15) — In tech level 15, doctors begin to successfully transplant organs from one creature to another. Advanced immunosuppressants invented during tech level 16 allow more advanced transplants to take place.

Throughout tech level 17, these technologies become more and more advanced. By the end, nearly anything can be transplanted. The recipients just have to take immunosuppressants for the rest of their lives.

Starting at tech level 22, organs can be force grown in cloning vats. This eliminates the need for immunosuppressants.

CLONING (Tech Level 16) — Cloning is first achieved at the end of the low cyber age. This is a very primitive process, and still requires the clone to grow over its natural developmental period. Starting at tech level 22, clones can be force grown. They no longer require a full childhood and adolescence to grow, just a few months.

EUGENICS (Tech Level 12) — Beginning with the initial theory of heredity, it becomes possible to begin eugenics programs. Eugenics is the practice of selectively breeding sapient creatures to promote certain traits.

Eugenics is the forerunner to genetic engineering. The biggest problem is that it takes many, many generations before a eugenics program has any real effect.

GENETIC ENGINEERING (Tech Level 17) — Scientists finish mapping the genome during the beginning of the high cyber age. At this point, it becomes possible to customize the genetic structure of a sapient creature. This is not achieved on a fetus, however, until tech level 18. Large scale, radical effects are achieved during tech level 19.

Genetic alterations on adult organisms becomes possible, on a small scale at least, come tech level 20. These advances come hard. Reasonable changes to an adult organism are not possible until tech level 22.

REGENERATION (Tech Level 18) — Beginning in the space faring age, medical technology makes some great strides in the field of regeneration. It becomes possible to regenerate wounds in a matter of hours. Limbs too can be regenerated, but these take a couple of weeks. Anything can be regenerated except brain tissue and entire organs (It's hard to keep a heartless patient alive and still allow a heart to regenerate).

CYBERNETICS (Tech Level 17) — Cybernetics become available during the high cyber age. They allow full replacement of limbs, plus neural interface. A full treatment of cybernetics is not possible in *Equipment Manual* and will be saved for *Robotics Manual*.

PHARMACEUTICALS (Tech Level 11) — Pharmaceuticals are important to medical science. For the most part, pharmaceuticals will be the magical and little understood infrastructure of medicine. Generally speaking, pharmaceuticals can be ignored, unless they are unavailable.

If a physician does not have access to his pharmaceuticals, he may still use his Medical Practice skill. The skill is no more effective than First Aid would be.

SUSPENDED ANIMATION (Tech Level 17) — Beginning in the high cyber age, creatures can be put into a state of suspended animation. They can then be kept alive and on life support with little consumption of oxygen and nutrition.

This becomes very important on long space flights, when the constant power necessary to maintain suspended animation is more plentiful than the consumables necessary to keep the person alive and awake. At tech level 17, a person in suspended animation only ages at 10% of his normal rate, and he only requires 10% of his normal supplies to survive.

SUSPENDED ANIMATION TABLE EM-5.2

Tech Level	Aging and Consumption Rate
17	10%
18	1%
19	0.1%
20	0.01%
21	0.001%
22	No supplies needed, no aging.

CRYOGENICS (Tech Level 17) — Starting about tech level 15 or 16, people begin to have themselves frozen, hoping that whatever ailment is killing them will one day be cured and they can then be thawed. Come tech level 17, it is possible for this thawing to take place.

To thaw a frozen patient, the doctor makes a Cryogenic Operations maneuver, adding the modifiers listed on table EM-5.3 for the doctor's tech level. If the patient was frozen improperly, the effective tech level of the doctor is reduced by one. After that, a Medical Practice maneuver is often necessary to bring him back to life.

ANTI-AGENICS (Tech Level 22) — Anti-agenics prolong life. They hold back aging. They halt the aging process and stave off that flood of ailments that afflict the elderly.

Assume that anti-agenic drugs halt the aging process altogether. At tech level 22, they must be taken every week. By tech level 23, the effects are permanent. They should probably be extremely expensive.

Death and Beyond — What does death mean in a science fiction campaign? First of all, even in the real world, we can resuscitate a clinically dead patient. What happens when high tech medical technology is available?

This must be left up to the GM. Only he really knows if the damage done is reparable. If the patient has a reasonable degree of structural integrity left, then they can at least be kept alive long enough to heal naturally.

Once regeneratives come into play, very little physical damage cannot be healed. At this point, the GM need only worry about death itself, or the complete loss of the brain. Regeneration will heal stat loss to the physical stats.

More detailed guidelines on death and resuscitation can be found in *Spacemaster: Privateers*.

NEURAL PATHWAY RECONSTRUCTION (T. Level 22) — A new and marvelous technology is invented.

By combining nanite technology with advances in neurology, brain damage can be repaired on a large scale. This technology is called neural pathway reconstruction, and it revolutionizes medicine.

This process requires a skilled neurologist and a well-equipped medical facility. The neurologist must roll a Medical Science (Neurology) static maneuver, modified by the tech level, as listed below. Any result of less than zero is subtracted from each mental stat. A result of more than one hundred helps improve the stats. Subtract one hundred from the result, This is how much each stat is raised. Raise potentials first. When the potential reaches its old value, place the resulting points on the temporary stat. It is recommended that NPR therapy only be allowed once per death injury.

RADIATION THERAPY (Varies) — Most SF universes will have some way of treating radiation poisoning. A GM will have to decide how this is handled and what tech level it is. This could be anything from a magic bullet drug to genetic repair viruses.

NPR THERAPY TABLE EM-5.4

Tech Level	Penalty
22	-70
23	-50
24	-30
25	-20
26	-10
27	0
28	+10
29	+20
30	No Check Required

CRYOGENIC STATIC MANEUVER TABLE EM-5.3

-26 down Spectacular Failure: —
Wasn't that supposed to look human when it was thawed? The pulpy mess that you have created is beyond the ability of medical science to revive.

-25 — 04 Absolute Failure: —
The result of your ministrations looks like a Picasso painting, or perhaps a Salvador Dalli. An absurd medical static maneuver could probably revive this poor chump, but he's gonna take a lot of cosmetic surgery. Why don't you go have a lie down somewhere.

05 — 75 Failure: —
He's dead, Jim. An extremely hard static maneuver will be necessary to revive him. He'll be okay, after all those bruises heal.

GM 66 Unusual Event: —
Your patient is alive, but you took just a wee bit of time getting that oxygen flow supplied to the brain. He's okay now, though, you're sure of it. (In actuality, the patient has developed a strong psychotic trait, as determined by the GM.)

76 — 90 Partial Success: 25%
Well, he's thawed. You might want to try one of those hard static maneuver things to revive this guy.

91 — 110 Near Success: 100%
Okay, you thawed him out. It will require a light static maneuver to revive him.

GM 100 Unusual Success: 100%
It's alive! Your patient bolts upright and begins babbling incoherently. After a moment, he's himself again.

111 — 175 Success: 100%
He's thawed and looking good. A routine static maneuver will revive him.

176 up Absolute Success: 100%
Your patient is alive and breathing normally on his own. All his vitals look good. Well done!

Note: The "# %" notation indicates the extent to which a maneuver was successful. If partial or extra success is inappropriate, a GM should only take 100% or higher as success.

Tech Level adjustments:

Tech Level 16*	-70
Tech Level 17	-50
Tech Level 18	-30
Tech Level 19	-20
Tech Level 20	-10
Tech Level 21	0
Tech Level 22	+10
Tech Level 23	+20
Tech Level 24+	+30

* — It is not possible to thaw a person at tech level 16. This is merely included for tech level 17 technicians thawing an improperly frozen patient.

PART III
CYBERNETICS

"We can rebuild him.
We have the technology."
— Oscar Goldman, the Six Million Dollar Man

6.0 :: USING CYBERNETICS

"I'm not a robot without emotions –
I'm not what you see"
— Mr. Roboto, Styx

Cybernetics are one of the quickest ways to take a game somewhere it's never been before. This can be a good thing or a bad thing, but it definitely lends a unique and unusual feel to a game.

6.1 ARE CYBERNETICS RIGHT FOR YOUR GAME?

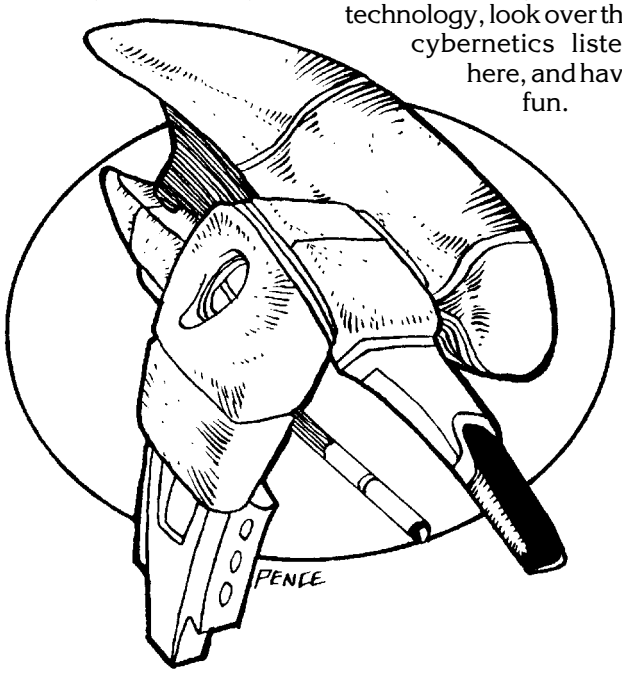
It's difficult to imagine a SF universe where there are no cybernetics at all. Usually, there is something, even if it's as unobtrusive as Luke's robotic hand in Star Wars.

No matter how medical science progresses, there will always be patients who reject the most natural of cures. Even a cloned limb, grown from a person's own genetic code, will probably not work for all people.

The question is, how involved should you get? Should cybernetics be a background detail that has little effect on the game, or should it be a central aspect that defines and shapes the entire setting?

It's a tough question, and it should be carefully considered. Unless cybernetics are used solely to compensate for physical handicaps, and their existence is absolutely invisible to everyday life, then they will definitely add a certain cyberpunk feel to the game.

If this is what you want, then you're encouraged to dive right in. Assign a tech level for cybernetic technology, look over the cybernetics listed here, and have fun.



INTERLUDE TWO

With a staccato blast of rifle fire, Darian felt his body torn to pieces. He looked down at the messy pulp that used to be his right side, then passed out.

The darkness was complete. Darian felt smothered. Lost. Disconnected from himself. He was drowning. Screaming. Thrashing about in a painful world of nothingness.

When at last the light came, bringing reprieve to his shattered and sweating form, it was a strange light. An artificial light. A flourescent light.

He was in a hospital.

He looked around. Lambert was there. His partner. He smiled at him reassuringly.

"You okay, buddy?" Lambert asked.

"Uh, yeah."

"You don't sound okay."

"What happened?"

"We had to replace your right arm, right leg and a few assorted ribs. You were messed up pretty bad."

He flexed his arm, and knew it for the truth. This wasn't his arm. It felt almost exactly the same, except for the low-level hum of electronics. It looked normal, but he knew that it was … unnatural.

"It's a good rig. When you're a little better off, we'll take you to one of those black market outfits and have some weapons added."

"Oh." Darian looked around, confused. "How did I pay for this."

Lambert smiled again and rose from his chair. He ran his hand through his sandy blonde hair. "Some holes in your memory? You're rich. Well, you were rich. We had just gotten paid for the Moroccan job."

"Oh. If we were done, how did I get messed up?"

"Karen did it. She found you with another woman. You were celebrating, I guess."

Now he remembered.

"Man! Well that's it. It's over between us." Darian threw his head down on the pillow.

"Yeah, that's what she said."

"Any other bad news?"

"Yeah. I had them install liver plugs to take care of your drinking problem."

"You bastard."

"It's on me. Consider it a birthday present."

You will want to consider the way people in society use cybernetics. Are cybernetics socially accepted? Do people purchase cybernetics for enhancements, for pleasure, or to improve their appearance or performance? Are cybernetics only used by people with debilitating injuries? Are they popular among a certain segment of society?

You will want to consider the way society and cybernetics interact. Are people who use cybernetics more concerned with appearance and style than function, or are they simply tools used by legitimate citizens for legitimate means?

The answers to these questions will determine how much your game will be influenced by cyberpunk themes and style.

6.2 STYLE VS. SUBSTANCE

In many cyberpunk settings, style is much more important than substance. What this style is depends on the society, but often functionality will be sacrificed for effect.

"Put armor on my cyber arm? But then I wouldn't be able to get this cool chrome finish. Make it look utterly natural? Sure that would give me a surprise advantage over people who think it's normal, but then they wouldn't know it was a cyber arm. I know that's the point, but what's the point in havin' it an not flauntin' it?"

These are the sentiments shared by many characters in a cyberpunk setting. It should be determined whether these are common sentiments in your universe.

Much of the time, the barrier between cybernetics and fashion become blurred. Teens start sacrificing meat for tech, just to be cool. In some societies, this is considered a disgusting form of self-mutilation. In others, it's just a matter of choice.

The bottom line is, the point of cyberpunk is not to be good. The point of cyberpunk is to look good.

6.3 MODERATING CYBERNETICS

The most obvious way of keeping cybernetics in line is to keep the players poor. If they don't have the money to buy cybernetics, then they won't be able to become the game unbalancing sociopaths that GMs dread in their players.

That level of austerity can be difficult to maintain, however, and most of the time, a GM will eventually give out more than he intended. In addition, it's hard to handle characters who exist in situations where cash flow is a non-issue (such as a campaign revolving around a crack military unit).

There are a couple of other ways to moderate cybernetics. These mechanics are designed to keep things under control and to prevent major abuses of cybernetics.

6.3.1 CIRS

Cybernetic Implant Rejection Syndrome. Abbreviated as CIRS and pronounced "curse", this is also referred to as cyber psychosis. Because of its prominence as a moderating factor in other games, this is a popular method of controlling cybernetics. There are a few potential explanations for its cause.

Causes of the CIRS

Strictly medical: The nervous system is a pervasive and little understood system. It is concentrated in the brain, but the brain is not the sum total of the nervous system.

When an amputee loses an arm, they lose a part of their nervous system, a part of the total of their consciousness. It accounts for so little compared to our brain that our capacity is not diminished. However, if a person replaces their real arm with a cyberarm, the mind does not properly compensate for the loss. It tries to use the nervous system in that part of the body, because as far as it's concerned, nothing is missing.

This has two effects. First of all, things stop functioning in an optimal fashion. It's just not quite right anymore. Second of all, that person has replaced a measurable portion of their nervous system with something inhuman and mechanical.

This explanation of the CIRS is appropriate for almost any campaign.

Strictly Psychological: No matter how much a person denies that it matters, they know that they are no longer whole. The more they replace and augment themselves with machined parts, the more they feel they are becoming a machine.

The reasons behind this are complicated, but the more that a person sees themselves as a machine, the more they relate to the metal and the less they relate to the meat. This causes people to begin to care more for things and concepts than human life.

The main problem with this interpretation is that it can probably be cured through therapy. If something can be cured with a little down time, some players will inevitably try to abuse it. If the player is good role player and looks at this as a challenge, this is not a bad thing. If the player tends to be more of a rules lawyer, then this can quickly get out of control.

The Problem is Both Medical and Psychological: If this interpretation is used, then both of the above views on the matter are correct. If this is the case, therapy could be used to repair the loss of Presence (see below), but the loss of Empathy still cannot be recovered. The person could be trained to still see the value in human life, but they continue to have difficulty understanding it.

This is a good compromise, and works well in most games. It keeps the power gamers in line, but allows the role players to really tackle the man/machine dichotomy. It is the recommended interpretation.

The Problem is Metaphysical: The human soul desires a human body. The more that precious vessel is replaced by a mere thing, the less human the person becomes. Losing a body part is one thing, the soul was created for adversity, but actually turning the person into a machine, that's tantamount to torture. Sooner or later, something is going to give.

This interpretation is very appropriate for a *Spacemaster/Rolemaster* crossover campaign, where magic and science go hand in hand. It is also not totally out of line for more metaphysical games involving psychic powers (such as the Star Wars setting).

The advantage of this interpretation is that it's very difficult for players to try to get around the penalties for owning too much cybergear. Psychic healing is not unheard of, but total spiritual healing is not something that is typically accomplished with the waving of a magic wand.

Effects of the CIRS

As cybernetics are added to a character, the CIRS increases. Every time a character gains a new piece of cyberware, the CIRS Impact (listed under each piece) is rolled. The result of the roll is subtracted from the character's potential Presence and potential Empathy. If the potential stat is reduced to a value smaller than the temporary, then the temporary is reduced to the new potential.

Once a character has had a potential stat reduced to one half its original value, they begin to feel on edge. From this point on, whenever the character enters a stressful situation, such as combat, they must roll on the CIRS Response Table RM-6.1 and add three times their Empathy stat bonus.

Once a character has had a potential stat reduced to one quarter its original value, they become even more agitated. They begin acting in an aggressive and belligerent manner, and become slightly paranoid. Anything that is annoying will trigger a roll on the CIRS Response Table (plus three times thier Empathy bonus). This includes mildly stressful situations, such as heavy traffic, annoying noises, or bad customer service.

Once either stat reaches 0, the CIRS hits full force. The character does not immediately slip into a coma, but remains active, if not truly aware of his situation. The character can no longer judge friend from foe, memories become hazy, and the only satisfaction or relief comes at the destruction of others. The character will begin a homicidal killing spree, and will resist all attempts to capture and cure him. The GM should take the character and play him as an evil NPC, since the original character's mind no longer exists.

CIRS RESPONSE TABLE RM-6.1

Roll	Effect
-25 & Below	*Character completely snaps.* For d10 days, the killing of random victims is all that satisfies him.
0 – (-24)	*Hysterical Rage.* Character attacks random people for 2d10 minutes.
1 – 5	*Major Rage.* Character attacks random people for 2d10 rounds
6 – 10	*Major Anxiety Attack.* -30 to all actions for 30 minutes.
11 – 15	*Major Mental Block.* -30 on all use of cybernetics for one hour.
16 – 20	*Phantom Pains.* Character feels pain for 1d10/2 hours. All actions at -30.
21 – 25	*Minor Rage.* Character begins destroying random inanimate objects for the next d10 rounds.
26 – 30	*Hysterical Sensory Loss.* For d10 minutes, character loses on random sense (sight, hearing or touch only).
31 – 35	*Minor Anxiety Attack.* For 5 minutes, character is at a -20 to all actions.
36 – 40	*Paranoia.* The character trusts or believes no one for 6 hours.
41 – 45	*Neurotic Depression.* Character is reduced to hysterical tears, curling into the fetal position for 2d10 minutes.
46 – 50	*Loss of Coordination.* For 3d10 minutes, character suffers a -10 to Ag bonus and -3 to SD bonus.
51 – 55	*Flight.* Character leaves area and heads for known safe location for 1 hr.
56 – 60	*Minor Mental Block.* -10 to all use of cybernetics for one hour.
61 – 65	*Denial Response.* For 2d10 minutes, character acts casually, refusing to accept danger or importance of events.
UM 66	*Character feels full effects of the CIRS.* Hope you brought a rail gun.
66 – 70	*Defeat Response.* Character gives up whatever they were attempting, and will not resume action for d10 minutes.
71 – 75	*Hyperactive Response.* For d10 minutes, character receives +4 to Qu bonus, but -4 to Re, Ag, and SD.
76 – 80	*Introspective Response.* For d10 minutes, characters attempts to calm self by meditating.
81 – 85	*Nihilistic Response.* For d10 rounds, character behaves as if no one else is present.
86 – 90	*Indecision.* Character is stunned for d10 rounds.
91 – 95	*Temporary Mental Block.* Character is -30 to next use of cyberware.
96 – 100	*Slight Confusion.* For d10 rounds, character must act in deliberate phase with no bonuses.
UM 100	*Character has a break-through.* Add d10 to potential Presence and Empathy (up to original maximum).
101 & Above	*Character wrestles the CIRS into submission.* He may act normally.

Curing the CIRS

The best cure for the CIRS is a fully jacketed armor piercing round. There are occasions, however, when less radical treatment methods may be investigated.

There is only one other cure for the CIRS, and it won't work in every game. That is therapy, and in games where this is an option, there will be entire psychiatric specialties surrounding its use.

Therapy requires that the patient be willing. If they are, then the therapist can begin treatment. It helps if any cyberware is disabled for the session. If this isn't possible, then a -50 penalty is applied to the therapist's attempt.

A standard round of therapy costs ¢100 a session and takes place daily for a month. At the end of this time, the therapist may make a Psychology static maneuver. The bonuses and penalties include the -50 for not disabling cyberware and three times the patient's Empathy bonus.

Consult the CIRS Treatment Table for the results. Success affects Presence if the campaign uses both medical and psychological causes for the CIRS. If the CIRS is purely psychological, then both Presence and Empathy can be restored. (Each is rolled separately.) No potential can be raised higher than its original value.

6.3.2 BACKGROUND OPTIONS/TALENT POINTS

It may very well be that CIRS does not fit into a GM's view of the world. In that case, another option for balancing cyberware is to have the player spend talent points or background options for each piece. This means that unless the rules in the next section are used, cyberware may only be purchased at character creation (unless the GM permits the player to earn talent points or background options during the campaign).

This has the advantage of maintaining game balance, but it makes the purchase of additional cyberware at a later date rather difficult. Characters could sacrifice one piece of cyberware for another, but this is often awkward and difficult to rationalize.

In the event that this method is used, each piece of cyberware has a cost given in talent points. Ten talent points equate to one background option. These costs must be spent in addition to the money to purchase cyberware.

6.3.3 EXPERIENCE

Yet another option is to allow characters to buy cyberware with experience points. This means that to buy cyberware at character creation, the rules from the previous section may be used, or the GM may allow the players to spend their initial 10,000 experience points. If the latter solution is used, it is not advisable that characters be forced to start play at less than first level, just make them earn the experience back. This option has the advantage of allowing characters to earn more cyberware as they adventure. It can be rationalized by saying that their characters need to learn how to use their new equipment.

The equation for this is very simple. 1,000 experience points equals a single background option, or ten talent points.

CIRS TREATMENT TABLE RM-6.2

-26 Down Spectacular Failure: 0%
Oooh, that was a hot spot. You seemed to have prodded the wrong portion of this patient's psyche. They storm off and will never seek treatment again.

-25 – 04 Absolute Failure: 0%
You seem to have blundered. The patient is very offended by your tactics. All benefits are lost and the patient will never speak to you again. Hopefully, they will seek help elsewhere when they calm down.

05 – 75 Failure: 0%
That could have gone better. The patient screamed, yelled, and challenged your ancestry. Luckily that low-level sonic stunner you kept trained on him kept him from a full psychotic episode.

GM 66 Unusual Event:
You have validated all of his fears. Patient loses d10 points from Presence and Empathy. In addition, he has decided the world would be a better place without you in it. Security!

76 – 90 Partial Success: 25%
Well, you made some progress. Patient regains d10/3 points of the relevant potential stats.

91 – 110 Near Success: 100%
You are nearing a breakthrough. You are sure of it. A little more work, and he may seem even human again. He regains d10/2 points of the relevant potential stats.

GM 100 Unusual Success: 100%
Breakthrough! You reduce the patient to a sobbing mess, but you think you have hit the heart of the problem. Patient's potentials are restored to their original values. You are at the beginning of a long road back, but you may have reclaimed a human mind. That's what it's all about.

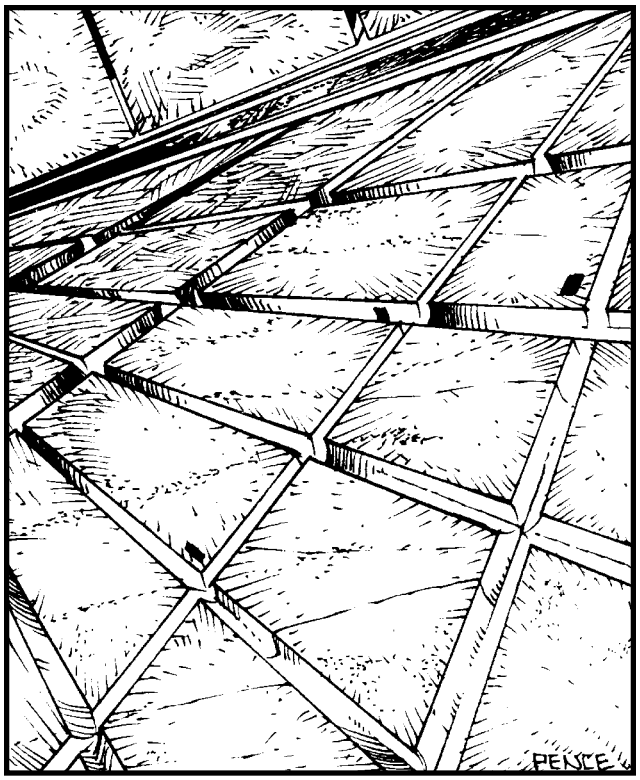
111 – 175 Success: 100%
Good work, Doctor. Your patient is progressing nicely. Restore d10 points to the relevant potential stats.

176 up Absolute Success: 100%
You are making fine progress. Patient regains d10+5 points to the relevant potential stats. You may just save them yet.

Cyberware is active ..... -50
Patient's Empathy ..... 3 x Bonus

A Final Note

One of the easiest ways to moderate cyberware is to simply use logic. If a character has a cyberarm, it doesn't matter how strong it is, they aren't going to be able to pick up a car with it. The cyberarm is still attached to their mundane human skeleton. It is still grafted into their simple human musculature. It still puts pressure on their cartilage and nearby tendons. Thus, the GM can allow the characters to outfit themselves with as much cybergear as they like, content in the knowledge that they are still vulnerable to a nuclear grenade.



A little care can rule out many abuses. Think hard before allowing a character to do something, especially the first time. If it doesn't seem possible, do not allow it, even if it seems harmless. Once a precedent is set, it's hard to go back on it gracefully.

6.4 POWER CONSIDERATIONS

Cyberware must be powered. Unfortunately, the human body does not produce enough power to operate many pieces of cyberware, even if the required support technology exists. There are several ways that a piece of cyberware can be powered.

PRICES AND TECH LEVELS

Each of the technologies below is presented for the GM's consideration. A tech level is provided to show at what point this technology reaches the proper level of miniaturization. A cost multiplier is also provided, showing the effect the power source has on the total cost of the piece of cyberware.

To calculate the total cost of a piece of cyberware, add all multipliers together. Then multiply by the base cost of the unit. For instance, a cyberarm would be multiplied by the cost of the arm, not any optional add-ons, such as armor.

By the time these pieces of tech have been incorporated into cyberware, their prices have fallen about as far as they are going to fall. Therefore they do not become cheaper at later tech levels.

POWER CELLS (Tech Level 17)

Cost Multiplier: x1

The easiest way to power a piece of cyberware is to slap a utility cell into it. This could be very complicated for a GM to adjudicate, and so the following rules are provided as a guideline.

First of all, all cybernetics are designed to work on different levels of power. Assume each piece of cyberware has a different size and style of power cell, capable of providing the perfect level of power for the type of cyberware it runs.

A piece of cyberware will run for one week per energy unit provided. For example, at tech level 17, a cyberarm will run for one week before needing a recharge, while at tech level 18, it will last for two weeks. Because of the cost of miniaturization, all cells cost about the same as a normal utility cell.

Swapping energy cells is a relatively simple matter, but still requires a Cybernetic Technology maneuver. The difficulty is only Routine, but people have damaged machines swapping batteries before. If for some reason a power cell needs to be swapped in combat, it is a Medium maneuver.

RADIOISOTOPIC GENERATORS (RIGS) (Tech Level 17)

Cost Multiplier: x2

These devices use radioisotopes, such as plutonium-238 dioxide, to generate power. (Note that the radioisotopes are never weapons grade material.) The radiation of the natural decay of these isotopes is captured by semiconductors and converted into electricity by use of the Seebeck effect (discovered back in 1822).

The benefit of these generators is that they can produce power for a long period of time. The Cassini Mission's RTGs (which were very similar devices of a lower tech level) suffered only a 30% drop in power over a period of 16 years.

Assume that these must be refueled every 15 years. The cost is equal to 10% the original cost of the base cyberware.

The drawbacks of these devices are that they produce relatively low levels of power. Even at tech level 17, getting a couple hundred watts of power out a device that can fit in a cyberarm is very difficult. This means that particularly powerful limbs (more than 101 strength or so) are impossible. This goes to 102 by tech level 18, 104 by tech level 19, 108 by tech level 20, etc.

The second drawback has to do with the fact the power is nuclear in nature. This means that a fairly enlightened society (at least as far as nuclear power is concerned) is necessary to allow these. For instance, unless plutonium is available enough to warrant little concern for its distribution, fuel will be scarce. Unless public action groups are aware of the safety of the devices, protests will be common. Unless cures for radiation poisoning are available, concern for public health would probably be high.

If these considerations can be dismissed, however, this is an ideal power source. It is efficient, has no moving parts, and has the benefit of a long life span.

SOLAR
(Tech Level 17)

Cost Multiplier: x.5

The photoelectric cell is invented around tech level 15. At that point, it becomes possible to generate power using only the light of the sun. This is the safest form of power ever devised.

Though this is handy for cyberware, it is not handy enough. The best that it can do in brightly lit conditions is supplement an existing power cell. If the person only has a few low powered pieces of cybernetics, then a forgiving GM might lift this restriction, though the power cell will always be required, as a backup.

If the person in question spends more than 4 hours a day in direct sunlight, and the rest under moderate lighting, then a solar cell will double the life of existing power cells. If the lighting conditions are more or less favorable, the GM will need to adjust this figure accordingly.

BIO-ELECTRIC WIRING
(Tech Level 18)

Cost Multiplier: x5

Anyone who has ever watched a marine doing pushups cannot have helped but to be a little impressed. It doesn't take much thought to realize how much energy he is expending, increasing and decreasing his potential energy like that. But can that energy be harnessed?

By tech level 18, it can. Bio-electric wiring allows a piece of cyberware to draw power directly from its host. It takes all the power that would have driven the muscles of its owner, and converts that to electricity usable by cybernetic implants.

The biggest drawback to this form of power, aside from price, is that it cannot power large energy weapons. Anything that would take more energy than a person could produce is beyond the abilities of this power source. This means that a submachine gun would be possible, but a laser would not.

FUSION MICROGENERATOR
(Tech Level 19)

Cost Multiplier: x4

Fusion power is achieved by bringing hydrogen (or rather a form of hydrogen) together in such conditions that it fuses into helium. This is the process that powers the stars.

By tech level 19, this process can be used to power cyberware, in combination with the Seebeck effect. This is more plentiful than a standard RIG, and coupled with increases in materials technology, the power output can meet any demand placed on it, including directed energy weapons. It will run a year before needing refueling. The cost to refuel is equal to 10% the original cost of the base cyberware.

VACUUM ENERGY
(Tech Level 19)

Cost Multiplier: x5

By tech level 19, vacuum energy can provide limitless power to nearly any device. The price is still high, however, and fusion power is still cheaper. Vacuum energy is still the first choice of any discerning buyer, meeting almost any power requirement a cybernetics designer can invent.

COLD FUSION
(Tech Level 21)

Cost Multiplier: x3

If a GM feels the urge to allow this seemingly magical technology, then it becomes available for use in cyberware at tech level 21. It has all the advantages of fusion power, but the reduced safety requirements allow for its reduced price.

MATTER/ANTIMATTER MICROGENERATOR
(Tech Level 22)

Cost Multiplier: x10

This is an extremely dangerous method of generating energy, and thus it's unlikely that it would ever be used in cybernetics. It is not beyond imagining, however, that the military might find use of such a device.

Matter/antimatter will meet just about any requirement a piece of cyberware can put on it. It will do so for at least ten years without needing refueling. The cost to refuel is equal to 10% the original cost of the base cyberware. This does not warrant its danger, however.

The most likely reason such equipment would be designed is for its uses in warfare. A soldier could easily turn himself into a nuclear grenade using this technology, and in a war where horrible things happen to captured soldiers, taking a few of the enemy our with you is not necessarily a bad idea.

COSMIC MICROGENERATOR
(Tech Level 29)

Cost Multiplier: x1

By the end of tech level 29, infinite power is available in a package of nearly any size. No machine, including cyberware, is built without its own limitless generator.

6.5 PUTTING THE CYBER IN YOUR PUNK

Every piece of cyberware has an implantation difficulty. This determines exactly how difficult it is to attach or implant the cyberware.

Some pieces of cyberware can be implanted easily, with little impact on the host. Others force the body to undergo terrible and radical adjustment periods.

Cost and Recovery Periods

For the sake of convenience, the cost of implantation includes hospitalization and recovery costs. It also reflects the chance of fatal complications.

The recovery period is variable. This is meant to include non-fatal complications. Only the base recovery (the lowest number possible) is typically spent hospitalized. The rest of the recovery period occurs on an outpatient basis.

The note in parenthesis after each level of difficulty is the Difficulty Code. This code is listed in the price lists to show the implantation difficulty.

IMPLANTATION TABLE RM-6.3

Difficulty	Cost	Recovery Period	Fatal?
Routine (R)	¢50	5d10 Minutes	0%
Easy (E)	¢500	5d10 Hours	0%
Moderate (M)	¢1,000	d10 Days	1%
Hard (H)	¢5,000	d10 Weeks	2%
Complex (C)	¢10,000	5d10 Weeks	5%
Very Complex (VC)	¢50,000	d10 Months	10%
Absurd (A)	¢100,000	5d10 Months	25%

Implantation Maneuver

Note that the chance of fatal complications refers to events that take place after implantation: rejection, strokes, and the like. This does not include the chance that the surgeon will kill the patient through incompetence. He must still perform his static maneuver.

The maneuver is performed using the Medical Specialty (Cybernetic Surgery) skill. This is a surgical specialty. The difficulty is based on the difficulty above.

FACILITIES TABLE RM-6.4

Facility	Cost Mult.	Surgeon's Skill	Illegal?
Backroom Clinic	.5	25	Yes
Blackworks Clinic	1	50	Yes
Crime Clinic	5	100	Yes
Private Crime Clinic	10	150	Yes
Elite Crime Clinic	50	200	Yes
Street Clinic	.5	50	No
Franchise Clinic	1	100	No
Small Hospital	5	150	No
Hospital	10	200	No
Research Hospital	50	250	No
Military Hospital		150	Yes*

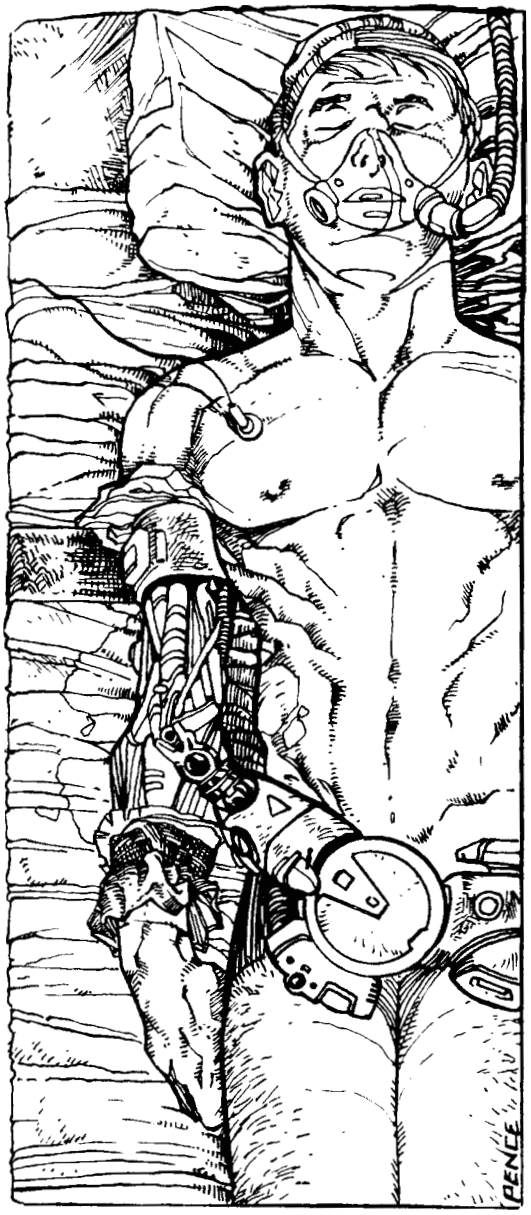
* — Illegal cyberware may be installed only if this is an approved (though perhaps secret) military project.

Finding a Facility

The prospective client must first find a facility in which to have the operation performed. The facility can adjust the price. It also determines the skill of the surgeons. Finally, it determines whether illegal cyberware can be implanted.

Tech Levels

The implantation difficulty for each piece of cyberware assumes that the cyberware is being installed at its introductory tech level. Each tech level after its introduction, the implantation difficulty is reduced one level.



Prices

There is a lot of extra space in an android. Many of the motive components, such as the hydraulic plant, can be placed in the torso to allow larger components to be placed elsewhere.

This is not true of cyberware. In the human body, space is at a premium. Because of this, cybernetics are not available for purchase until the tech level after their technology was introduced. This means that not only have they been miniaturized, they have dropped in price. Unless otherwise noted, and unlike other items, cybernetics do not become cheaper after their introduction.

6.6 DEFINITIONS

The following definitions are provided for reference. They contain commonly used words in the fields of cybernetics.

Bio-Electric Wiring — Cybernetic power converters which transform biological energy into energy usable by cybernetics.

CIRS — Cybernetic Implant Rejection Syndrome. A condition where the amount of cyberware in a person begins to cause a mental state sometimes called cyber psychosis. Often involves homicidal rages.

Cybernetic — Pertaining to cybernetic science. Most commonly used to describe technology designed to augment a biological being with robotic or electronic components.

Cybernetic Science — The study of the integration of biological and artificial components. Most commonly used to augment a biological organism with electronic or robotic devices.

Cyberoptics — Dealing with cybereyes. This includes both cybereyes and options that can be installed.

Cyborg — Strictly, a person with any cybernetic augmentation. More typically, a person with large amounts of cybernetic components, until they seem as much machine as human.

Implant — Any cybernetic augmentation which is not externally visible. Does not include cybernetics which are visible but camouflaged, such as a normal looking cyberarm.

Implantation — The act of surgically installing cyberware.

Military Grade Cybernetics — These cybernetics are very illegal for common citizens. They are always removed when a soldier leaves the military.

Neural Commands — A method of controlling cybernetics where direct thought is translated into commands that are interpreted by the cyberware. Unless these commands are identical to normal commands (looking around normally with a cybereye, for instance), it takes a week per CIRS impact to master the interface.

Power Cell — A high-tech battery.

Professional Cybernetics — These cybernetics are designed for professional use. Typically, you must be a member of a profession who has access to these, or obtain them illegally. These are not usually taken away if the person leaves the profession.

PROM — Programable Read-Only Memory. PROMs are plugged into jacks to download their data.

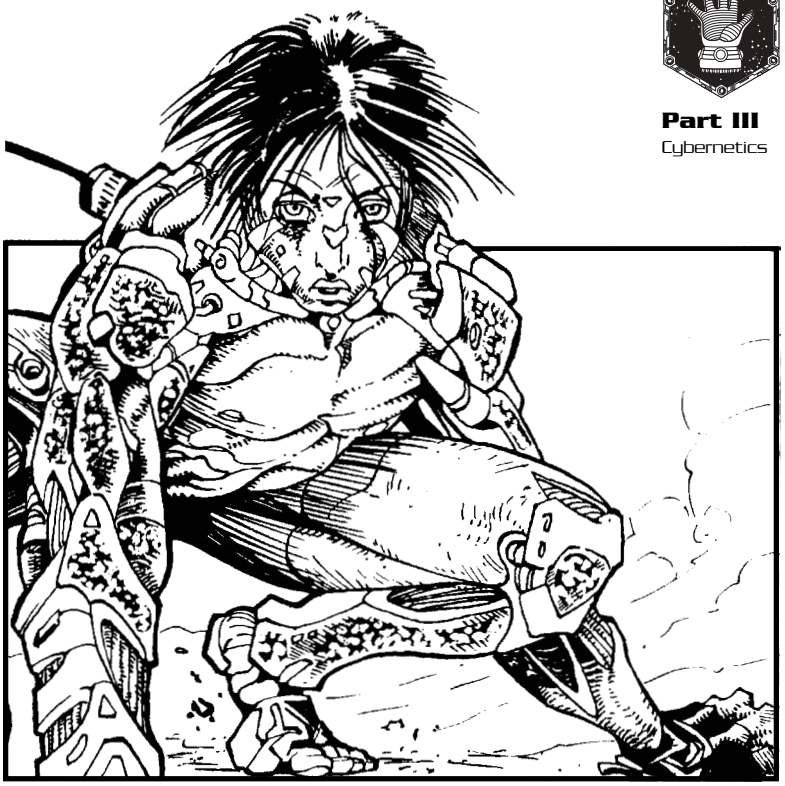
RIG — RadioIsotopic Generator. A power source using the heat caused by the decay of plutonium-238 dioxide and the Seebeck effect to generate power without any moving parts.

Standard Cybernetics — These are cybernetics that can be purchased by all citizens.

7.0 :: ARMOR

"So you'll come to know
When the bullet hits the bone"
—Twilight Zone, Golden Earring

These cybernetic armors are not specifically linked to any cybernetic limbs. They are used on fleshy areas primarily, but could be used in conjunction with apparent biological options.



7.1 STANDARD ARMOR

SUBDERMAL SHOCK PADDING (Tech Level 17)

This armor is the only type available freely, as it has many safety applications. In game terms, any damage taken is halved, though criticals are unaffected.

7.2 PROFESSIONAL ARMOR

DERMAL WEAVE (Tech Level 17)

This option replaces the person's skin with a synthetically enhanced armored skin. It feels and even heals like real skin (though the armor has lost its integrity after healing). It is very resistant to tears and punctures, however. It acts just like ballistic armor.

If it is torn, actions will need to be taken to repair the armor. This costs ¢100 per hit taken in the attack.

7.3 MILITARY GRADE ARMOR

ARMOR PLATING (Tech Level 16, 20)

This character has an armored shell. This armor can come in two different levels.

Carbon Steel Armor (Tech Level 16): This armor protects as armor type 20. Alternately, it protects as armor type VII with a -20 DB penalty due to its mass.

Advanced Composite Armor (Tech Level 20): This is an advanced composite, harder and lighter than steel. It grants the character an armor type of X.

7.4 PRICE LIST

The Cybernetic Armor Table RM-7.1 lists the price, tech level, CIRS impact, and talent point cost of the various pieces of cyberware presented in this section. As the technology has already been around at least a tech level by the time it's introduced as cyberware, no price decreases are received on subsequent tech levels. The difficulty refers to the installation difficulty (see Section 6.5). The letter in parentheses after each name indicates whether they are (S)tandard, (P)rofessional, or (M)ilitary cybernetics.

CYBERNETIC ARMOR TABLE RM-7.1

Name	Difficulty	Tech Level	CIRS Impact	Talent Point Cost	Price
Subdermal Shock Padding (S)	H	17	d10/4	10	¢20,000
Dermal Weave (P)	M	17	d10/2	15	¢30,000
Armor Plating (M):					
Carbon Steel Armor	E	16	4d10	30	¢30,000
Advanced Composite Armor	E	20	4d10	60	¢60,000

8.0 :: BIOTECH

"Not what teacher said to do
Makin' dreams come true
Living tissue, warm flesh"
—Weird Science, Oingo Boingo

This technology has more to do with genetic engineering and forced growth than cybernetics. These items enhance their owners in ways that are organic in nature, but are still often invasive and can bring the CIRS. None of these enhancements need electrical power.

8.1 STANDARD BIOTECH

ENDOSKELETON (Tech Level 18)

This process infuses the user's skeleton with advanced composites. This makes his bones extremely resistant to breakage. In addition to curing osteoporosis, this has a 50% chance of negating any critical result or maneuver that indicates a broken or shattered bone. An endoskeleton is not visible and cannot be detected except by a detailed medical analysis.

This process cannot be combined with a flexiskeleton.

ENHANCED METABOLISM (TECH LEVEL 18)

This biological adjustment doubles the efficiency of the person's metabolism. The patient only needs to eat half as much, or half as often, as normal.

FANGS (Tech Level 17)

A must for all those cyber-vampires, this enhancement elongates the canines of the patient. It also reinforces areas of their lips and tongue, so they don't damage themselves. The fangs could be used to attack, but fists are probably more effective. (It's a tiny bite attack.)

FLEXISKELETON (Tech Level 20)

This process alters the composition of the patient's skeleton, making it more flexible and resistant to breakage. This nullifies any broken bone indicated by a critical, but it also causes a -10 penalty to melee attacks (the attacker's skeleton absorbed some of the force of his own blow). This option cannot be combined with an endoskeleton.

GILL IMPLANTS (Tech Level 19)

These implants allow the character to draw oxygen from the water. He must keep moving and have his mouth open to use the gills effectively.

LIVER PLUGS (Tech Level 17)

These bio-implants greatly impede the body's ability to absorb alcohol. There is still some absorption, but the person must drink ten times as much as normal to achieve the same effects.

NEOMUSCLE (Basic) (Tech Level 17)

These grafts are used to increase the bulk, strength, and efficiency of the user's muscles. They grant a +3 bonus to the user's Strength, and reduce the penalties caused by muscle wounds by 25%. This is a full-body, invasive treatment. It is frowned upon for various reasons, but still in the venue of legal items.

NEW GLANDS (Tech Level 17)

With the invention of artificial organs, artificial glands enter the scene. Many of these glands fulfill duties never before performed, such as dispensing insulin to diabetics or mood drugs to manic depressives. The talent point cost is assigned by the GM. A glad which nullifies a flaw should cost at least as much as the value of the flaw.

OXYGEN FIXERS (Tech Level 18)

These biotech implants increase the body's ability to process oxygen. They double the person's exhaustion point total. In addition, the patient can hold his breath twice as long as normal.

TOXIN TRAP (Tech Level 17)

This device spots toxins and forces them to pass harmlessly through the system. It grants a +10 bonus to resistance rolls vs. poison. This bonus doubles every two tech levels after the first.

ULTRA METABOLISM (Tech Level 20)

This person can milk nutrients out of almost any food. They may have to eat large amounts, but if the nutrients are there, the character will get them.

8.2 PROFESSIONAL BIOTECH

NEOMUSCLE (ADVANCED) (Tech Level 17)

These grafts are used to increase the bulk, strength, and efficiency of the user's muscles. They grant a +5 to the user's Strength bonus, and reduce the penalties caused by muscle wounds by 50%. This is a full-body, invasive treatment. Years of steroid problems have brought this into restricted use. It is still often used on paramilitary personnel.

8.3 MILITARY GRADE BIOTECH

NEOMUSCLE (ELITE) (Tech Level 17)

These grafts are used to increase the bulk, strength, and efficiency of the user's muscles. They grant a +8 to the user's Strength bonus, and reduce the penalties caused by muscle wounds by 75%. This is a full-body, invasive treatment. It's habit of turning men into powerful killing machines, and it's appeal to already borderline cyberpsychos has made this very illegal, perhaps unjustly so. It is still used in secret military projects.

8.4 PRICE LIST

The Cybernetic Biotech Table RM-8.1 lists the price, tech level, CIRS impact, and talent point cost of the various pieces of cyberware presented in this section. As the technology has already been around at least a tech level by the time it's introduced as cyberware, no price decreases are received on subsequent tech levels. The difficulty refers to the installation difficulty (see section 6.5). The letter in parentheses after each name indicates whether they are (S)tandard, (P)rofessional, or (M)ilitary cybernetics.

CYBERNETIC BIOTECH TABLE RM-8.1

Name	Difficulty	Tech Level	CIRS Impact	Talent Pt. Cost	Price
Endoskeleton (S)	H	18	1	5	¢30,000
Enhanced Metabolism (S)	C	18	.5	5	¢10,000
Fangs (S)	R	17	.25	0	¢300
FlexiSkeleton (S)	H	20	d10/5	10	¢60,000
Gill Implants (S)	C	19	d10/5	15	¢50,000
Liver Plugs (S)	C	17	.25	3	¢1,000
NeoMuscle (Advanced) (P)	C	17	2d10	30	¢50,000
NeoMuscle (Basic) (S)	C	17	d10	15	¢20,000
NeoMuscle (Elite) (M)	C	17	3d10	45	¢100,000
New Glands (S)	H	17	.25	varies	¢1K-5K
Oxygen Fixers (S)	C	18	1	10	¢3,000
Toxin Trap (S)	C	17	.5	bonus/2	¢5,000
Ultra Metabolism (S)	C	20	1	10	¢20,000

9.0 :: CONVERSION PACKAGES

"He was turned to steel
in the great magnetic field"
—Iron Man, Black Sabbath

These packages replace 70% or more of the character's body. When this is done, they are more machine than man.

9.1 PROFESSIONAL CONVERSION PACKAGES

SWAT PACKAGE (Tech Level 17)

Only allowed to the most stable and dedicated SWAT members, this package replaces the character's body with a 120 HP android body. No weapons are installed. All audio options other than military level cryptography are installed. The customer chooses the eye options. The android's statistics are tailored to the character, so that the stats remain the same after the conversion.

This package includes armored carbon steel. It is covered with a light kevlar film that turns non Armor Piercing criticals into Ballistic Impact criticals. It also comes with a hidden holster.

A neural interface, interface jack, and smartgun link are standard options for this package. It also includes a crank case that grants a +8 bonus to Strength. This is a criminal's worst nightmare. Only 75% of the hand picked candidates can handle the conversion without being affected by the CIRS.

9.2 MILITARY GRADE CONVERSION PACKAGES

SPECIAL FORCES PACKAGE (Tech Level 17)

This package is one of the most dangerous ever developed, both to friend and foe alike. Only the most promising soldiers are hand picked for this "honor." Only about 30% of the candidates survive the conversion in a usable state.

This 200 HP android body is made of carbon steel armor and covered with a kevlar coating which reduces all ballistic criticals to Ballistic Impact criticals.

This package has an augmented suspension, a complete cyberaudio set, and the character's choice of cyberoptic options. In addition, it is built with a neural interface, interface jack, data PROMs and skill PROMs. A smartgun link, vehicle link, data link, and cyberdeck are also standard.

This package includes two weapons of the character's choice. It also has a hidden holster for a backup weapon.

9.3 PRICE LIST

The Cybernetic Conversion Package Table RM-9.1 lists the price, tech level, CIRS impact, and talent point cost of the various pieces of cyberware presented in this section. As the technology has already been around at least a tech level by the time it's introduced as cyberware, no price decreases are received on subsequent tech levels. The difficulty refers to the installation difficulty. The letter in parentheses after each name indicates whether they are (S)tandard, (P)rofessional, or (M)ilitary cybernetics.

CYBERNETICS CONVERSION PACKAGE TABLE RM-9.1

Name	Difficulty	Tech Level	CIRS Impact	Talent Pt. Cost	Price
Special Forces Package (M)	A	17	12d10	100	¢800,000
SWAT Package (P)	A	17	8d10	80	¢300,000

10.0 :: CYBERAUDIO

"Can you hear me?
Can you hear me running?
Can you hear me running
can you hear me calling you?"
—Silent Running,
Mike and the Mechanics

Originally designed to correct natural hearing problems, these cybernetics evolved over time. They are now able to enhance as well as correct hearing.

10.1 STANDARD CYBERAUDIO

CYBERAUDIO PACKAGE (Tech Level 17)

This package completely replaces the character's internal ears with cybernetic equivalents. The cyberaudio package can be enhanced with any number of options.

CELL PHONE OPTION (Tech Level 17)

This operates as a standard cell phone. The character can make calls, even to a satellite (weather permitting) where coverage is available. It includes a subdermal microphone so the character can send as well as receive audio transmissions.

ENHANCED HEARING OPTION (Tech Level 16)

This audio package can allow the character to hear sounds up to 1 kilometer away under optimal conditions. This grants a bonus of +20 to any Awareness maneuvers dealing with sound.

RADIO OPTION (Tech Level 17)

This option allows the character to monitor and transmit radio waves up to 2 kilometers. This option is not equipped for encryption or decryption.

10.2 PROFESSIONAL CYBERAUDIO

STANDARD CRYPTOGRAPHY (Tech Level 16)

This option allows the character to encrypt and decrypt any transmissions that his cyberaudio can receive. The encryption information must be set up ahead of time. (i.e., It cannot be used to break an unknown encryption.)

ULTRASONIC HEARING OPTION (Tech Level 16)

This option allows the character to hear well beyond his normal range of hearing. Much like a dog, he can hear high-pitched whistles, bat sonar, etc.

VOICE STRESS ANALYZER (Tech Level 17)

This option can process the level of stress in a person's voice. This gives a +50 to all Lie Perception maneuvers.

10.3 MILITARY GRADE CYBERAUDIO

MILITARY CRYPTOGRAPHY (Tech Level 16)

This option acts exactly like standard cryptography, except that it can be used to attempt to break an unknown encryption. Typically, military cryptography is a higher level than commercial cryptography. This option will allow the character to transmit and decipher any military messages that he is cleared for.

10.4 PRICE LIST

The Cyberaudio Table RM-10.1 lists the price, tech level, CIRS impact, and talent point cost of the various pieces of cyberware presented in this section. As the technology has already been around at least a tech level by the time it's introduced as cyberware, no price decreases are received on subsequent tech levels. The difficulty refers to the installation difficulty (see section 6.5). The letter in parentheses after each name indicates whether they are (S)tandard, (P)rofessional, or (M)ilitary cybernetics.

CYBERAUDIO TABLE RM-10.1

Name	Difficulty	Tech Level	CIRS Impact	Talent Pt. Cost	Price Price
Cyberaudio Package (S)	C	17	d10/2	0	¢3,000
Cell Phone Option (S)	R	17	.25	5	¢1,000
Enhanced Hearing Option (S)	R	16	1	10	¢1,000
Military Cryptography (M)	R	16	.25	10	¢10K
Radio Option (S)	R	17	.25	5	¢500
Standard Cryptography (P)	R	16	.25	5	¢1,500
Ultrasonic Hearing Option (P)	R	16	1	8	¢800
Voice Stress Analyzer (P)	R	17	.5	10	¢500

11.0 :: CYBERHANDS AND CYBERFEET

"Heavy boots of lead fills his victims full of dread."
—Iron Man, Black Sabbath

Cyberhands and cyberfeet are important items, especially since they aren't included with cyberarms and cyberlegs. Whereas stats for cyberarms and cyberlegs are often the most important things about them, with hands and feet, it's the options.

11.1 STANDARD CYBERHANDS & CYBERFEET

CYBERHAND (Tech Level 17)

Though the robotic technology to build this is available at tech level 16, it takes a tech level for medical technologies to catch up. By then, the robotics behind the cyberhand have been refined.

If the cyberhand is to be installed on a biological arm, then appropriate power must be supplied to it. If it is attached to a cyberarm, then it can be powered by the power supply of the arm. A cyberhand can have one option at tech level 16. The number of options doubles every tech level after 16.

CYBERFOOT (Tech Level 17)

Though the robotic technology to build this is available at tech level 16, it takes a tech level for medical technologies to catch up. By then, the robotics behind the cyberfoot have been refined.

If the cyberfoot is to be installed on a biological leg, then appropriate power must be supplied to it. If it is attached to a cyberleg, then it can be powered by the power supply of the leg. A cyberfoot can have one option at tech level 16. The number of options doubles every tech level after 16.

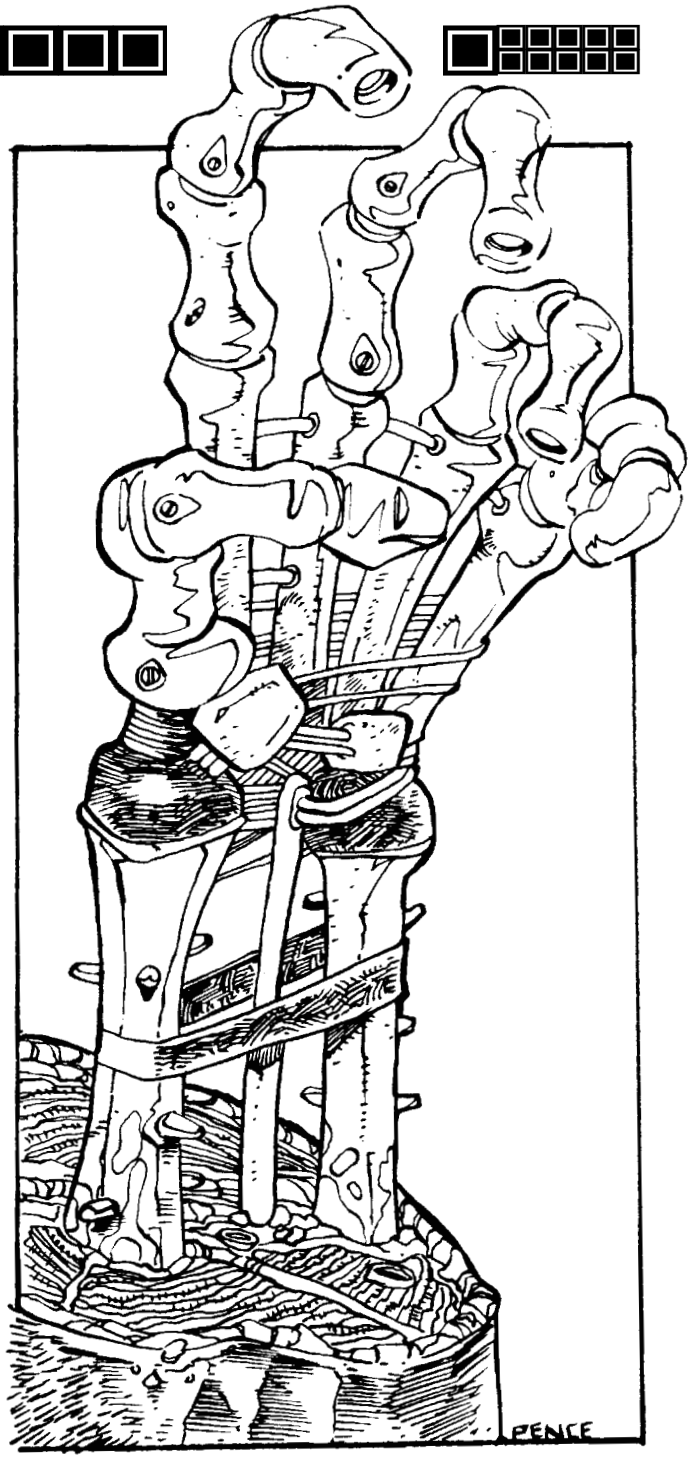
APPARENT BIOLOGICAL OPTION (Lesser) (Tech Level 17)

This option covers the appendage with a skin-like covering, which looks and feels very real. It takes a Medium Observation maneuver to determine that it isn't natural flesh.

APPARENT BIOLOGICAL OPTION (Greater) (Tech Level 21)

This option makes the appendage appear to be completely biological, because externally it is. This option imitates the temperature, perspiration, and feel of a normal biological body. The appendage will pass any external examination. It takes a medical scanner and a Routine maneuver to determine that the appendage is, in fact, cybernetic.

Note that this is very similar to the android's apparent biological option. It comes a tech level later, because the android option is larger. (Androids have more space available for cybernetic options and enhancements.) It takes a tech level for the proper level of miniaturization to occur before this option is available for living patients.



BIO-HYDRAULIC JOINTS (Tech Level 23)

This complicated technology aids the user in fine manipulation. This grants a +20 bonus to maneuvers involving throwing, and fine manipulation maneuvers such as molecutronic repair and surgery.

HARDENED KNUCKLES OPTION (Tech Level 14)

This option is much like brass knuckles. Whereas many cyberhands are designed to feel as biological as possible, this option attempts just the opposite. These hardened knuckles grant an additional Impact critical of one level less severity when the user attempts to strike with his fists (an 'A' is modified by -25).

CYBERHANDS & CYBERFEET TABLE RM-11.1

Name	Difficulty	Tech Level	CIRS Impact	Talent Pt. Cost	Price Price
Cyberhand (S)	C*	17	2	0	¢3,000
Cyberfoot (S)	C*	17	1	0	¢1,500
Armor Options:					
Carbon Steel Armor (P)	R	16	0	1	¢300
Resilient Polymer Arm. (P)	R	17	0	1	¢150
Adv. Composite Armor (M)	R	20	0	1	¢600
AFV Tool Attachment (M)	R	17	0	0	¢1,500
App. Bio. Option (Lesser) (S)	R	17	0	1	¢100
App. Bio. Opt. (Greater) (S)	R	21	-1	1	¢1,000
Bio-Hydraulic Joints (S)	R	23	0	5	¢10k
Hardened Knuckles Opt. (S)	R	14	0	15	¢150
Iron Grip Option (S)	R	17	.25	4	¢400
Laser Torch Attachment (S)	R	18	0	0	¢150
Light Rod Attachment (S)	R	17	0	0	¢100
Net Caster (S)	R	17	.5	25	¢2,500
Starfighter Tool Attach. (M)	R	21	0	0	¢50k
Surgical Attachment (P)	R	17	0	0	¢1,000
Tool Hand Option (S)	R	17	1	5	¢2,500
Tool Kit Attachment (S)	R	17	0	0	¢400

* — If being attached to a cyberarm, the difficulty is Routine.

IRON GRIP OPTION (Tech Level 17)

This cyberhand can lock its grip with vise-like strength. This can be used to secure it to a cable or grip a weapon. The owner receives a +50 bonus to resist a disarm attempt.

NET CASTER OPTION (Tech Level 17)

This usually comes in the form of a tethered net. It is developed as a Weapon•Missile/Thrown skill and attacks on the Large Grapple attack table. Whether or not the attack is successful, the net can then be reeled in via the tether. This option cannot be fully concealed. It replaces the entire hand and looks like a sphere when closed.

TOOL HAND OPTION (Tech Level 17)

This option allows the owner to replace his hand with a variety of tools. Different toolkits can be purchased (see below). This grants a +10 bonus to any repair maneuvers made with these tools. This cannot be taken with the apparent biological option.

LASER TORCH ATTACHMENT (Tech Level 18)

This cutting and welding torch uses coherent light. It is small and attaches to a tool hand.

TOOL KIT ATTACHMENT (Tech Level 17)

These tool kits are based on the skill they are intended to be used with. One must be purchased for each skill to be used. There is a -10 applied when using this attachment for any other purpose. This can only be purchased for skills that are not covered by the other kits, and which are not for working on things which may be restricted (such as surgical tools).

LIGHT ROD ATTACHMENT (Tech Level 17)

This is the tech level 17 version of the flashlight. It uses the hand's power supply. It can produce either a beacon of light or a narrow beam, or anything in between. It attaches to a tool hand.

11.2 PROFESSIONAL CYBERHANDS & CYBERFEET

ARMOR OPTION (Tech Level 16, 17)

This appendage has an armored shell. This armor can come in a few different levels.

Carbon Steel Armor (Tech Level 16): This armor acts as AT 20. It is impossible to take this and the apparent biological option. Alternately, treat this as AT VII with a -20 DB penalty.

Resilient Polymer Armor (Tech Level 17): This armor acts as AT 4. Unless the cyberware is placed in a scaled or furred race, the appendage may not have the apparent biological option.

SURGICAL ATTACHMENT (Tech Level 17)

These tools are meant to help a surgeon in field operations. They are not quite able to give the same level of treatment as one would receive in a hospital, but the +10 bonus can help offset penalties for working in the field.

11.3 MILITARY GRADE CYBERHANDS & CYBERFEET

AFV TOOL ATTACHMENT (Tech Level 17)

This attachment contains all the tools necessary to diagnose and repair an armored fighting vehicle. It is relatively tech level specific, as the technology behind armored fighting vehicles changes radically every age.

ARMOR OPTION (Tech Level 20)

This appendage has an armored shell. This armor can come in a few different levels.

Advanced Composite Armor: This is an advanced composite, harder and lighter than steel. It grants the appendage an armor type of X. It cannot be taken with the apparent biological option.

STARFIGHTER TOOL ATTACHMENTS (Tech Level 21)

A starfighter is a very complicated and highly sophisticated craft. This attachment contains everything needed to diagnose and repair one. This attachment is huge, with many separate packages that must be swapped during a repair. These attachments give a +10 bonus to any repair maneuvers.

Starfighter technology is ever changing. These attachments change radically from one age to the next.

11.4 PRICE LIST

The Cyberhands and Cyberfeet Table RM-11.1 (p.37) lists the price, tech level, CIRS impact, and talent point cost of the various pieces of cyberware presented in this section. As the technology has already been around at least a tech level by the time it's introduced as cyberware, no price decreases are received on subsequent tech levels. The difficulty refers to the installation difficulty (see section 6.5). The letter in parentheses after each name indicates whether they are (S)tandard, (P)rofessional, or (M)ilitary cybernetics.

12.0 :: CYBERLIMBS

"Then a bullet with my name on it
came buzzin' through a bush
And that big marine he just swat it
with his hand"
—Camouflage, Stan Ridgeway

Cyberlimbs are used to replace lost or damaged arms and legs. Since they involve intense miniaturization they are not reduced in price after their introductory tech level.

12.1 STANDARD CYBERLIMBS

CYBERLIMBS (Hands and feet sold separately) (Tech Level 17)

The cyberlimb is built mostly on tech level 16 technology. However it is tech level 17 before medical science advances enough to properly attach one without killing the host.

The cyberlimb is an important advancement for many reasons. Initially developed to help amputees and those born with genetic anomalies, the cyberlimb soon becomes a popular fashion statement in many societies.

Up to two options may be included in a cyberlimb at tech level 16. The number of possible options doubles every tech level after 16. The apparent biological option is popular for those who do not wish to look like a cyborg. Costs for each option are listed below.

The statistics of a cyberlimb must be generated when the limb is purchased. Each limb has the stats of Agility, Quickness, and Strength. These stats replace the character's stats for relevant maneuvers. It is up to the GM to determine which maneuvers are relevant. Suggested examples: Legs may affect Sprinting, Jumping, and the character's movement rate. Arms might affect throwing maneuvers or melee combat. A character with cybernetic arms and legs might get a bonus to Climbing.

If the GM wishes, he may also assign hits to a cyberlimb. This makes cyberlimbs a great deal more fragile, and consequently much less powerful. It is recommended that this option should only be used if the similar android rules are used, to keep cyberware from being more powerful than android robotics. If cyberlimbs do have separate hit totals, then any attacks that hits a limb should be resolved using the android critical tables.

Example: *Garth wishes to buy a cyberarm. He has an average Agility, an above average Quickness (+3 bonus), and a below average Strength (-4). His temporary and potential stats are equal.*

He heads to the nearest cyber clinic and has his physical characteristics rated. He decides to purchase a standard cyberarm that matches his Agility and Quickness, but with a 101 Strength (he'd go higher, but he intends to power it with a RIG).

The cyberarm has the following stats: Agility 50, Quickness 82, Strength 101. He brushes off the tech's concerns about CIRS.

The arm costs (¢6,000 base cost x 2 for the RIG + ¢0 for the Agility, + ¢300 for the Quickness, + ¢2,000 for the Strength = ¢14,300). The talent point cost, if the GM were using it, would be (0 + 3 + 20 = 23).

For the CIRS, Garth rolls a base impact of (9 / 2 = 4.5 = 5). The Agility and Quickness of the arm match his potentials, and so they do not add any additional CIRS impact. The Strength however, is much greater than his potential. This causes the arm to interface strangely with his own nervous system, and it just feels wrong. The CIRS impact of is (12 - (-4) = 16). This means that the arm has a total CIRS impact of (5 + 16 = 21).

APPARENT BIOLOGICAL OPTION (Lesser) (Tech Level 17)

This option covers the limb with a skin-like covering, which feels and looks very real. It takes a Medium Observation maneuver to determine that it isn't natural flesh.

APPARENT BIOLOGICAL OPTION (Greater) (Tech Level 21)

This option makes the appendage appear to be completely biological, because externally it is. This option imitates the temperature, perspiration, and feel of a normal biological body. The appendage will pass any external examination. It takes a medical scanner and a Routine maneuver to determine that the appendage is, in fact, cybernetic.

Note this is very similar to the android's apparent biological option. It comes a tech level later, because the android option is larger. (Androids have more space available for cybernetic options and enhancements.) It takes a tech level for the proper level of miniaturization to occur before this option is available for living patients.

AUGMENTED SUSPENSION (Tech Level 17)

A person with this option on both legs can jump with greater ease. Add +30 to their Jumping skill.

BIO-HYDRAULIC JOINTS (Tech Level 23)

This complicated technology aids the cybernetics in fine manipulation. This grants a +20 bonus to maneuvers involving throwing and martial arts sweeps and throws. It is up to the GM whether it has been installed in enough limbs to grant a bonus to a given task.

HIGH PERFORMANCE MUSCULATURE (Tech Level 18)

This is an advanced version of augmented suspension. When installed in two legs, it grants a base running leap of three times normal and a vertical leap of five times normal.

SPEED PACKAGE (Tech Level 17)

This must be installed in both legs. It doubles the character's base pace.

12.2 PROFESSIONAL CYBERLIMBS

ARMOR OPTION (Tech Level 16, 17)

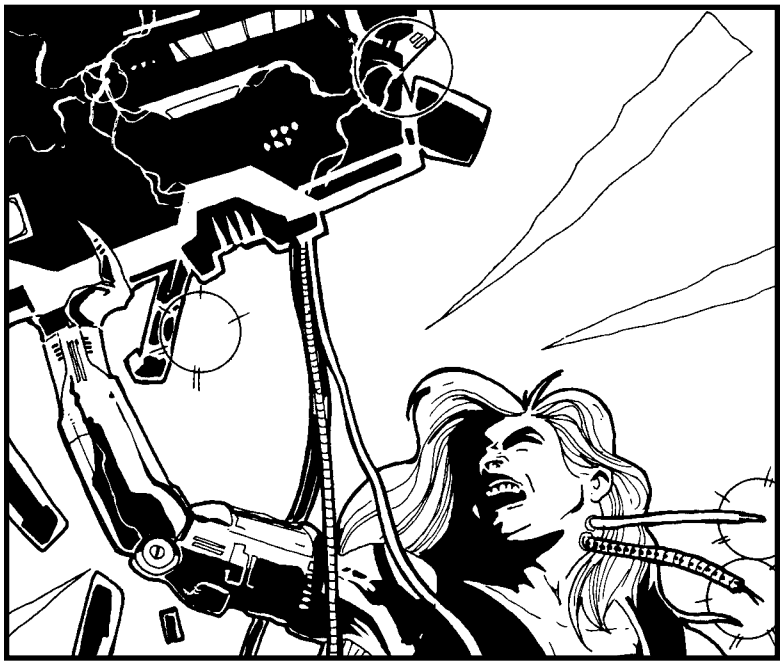
This appendage has an armored shell. This armor can come in a few different levels.

Carbon Steel Armor (Tech Level 16): This armor acts as AT 20. It is impossible to take this and the apparent biological option. Alternately, treat this armor as AT VII with a -20 DB penalty.

Resilient Polymer Armor (Tech Level 17): This armor acts as AT 4. Unless the cyberware is placed in a scaled or furred race, the appendage may not have the apparent biological option.

HIDDEN HOLSTER (Tech Level 17)

This cyberleg option places a holster in the leg, which ejects a concealed weapon at a mental command from the user. It can hold a pistol or small submachine gun or carbine.

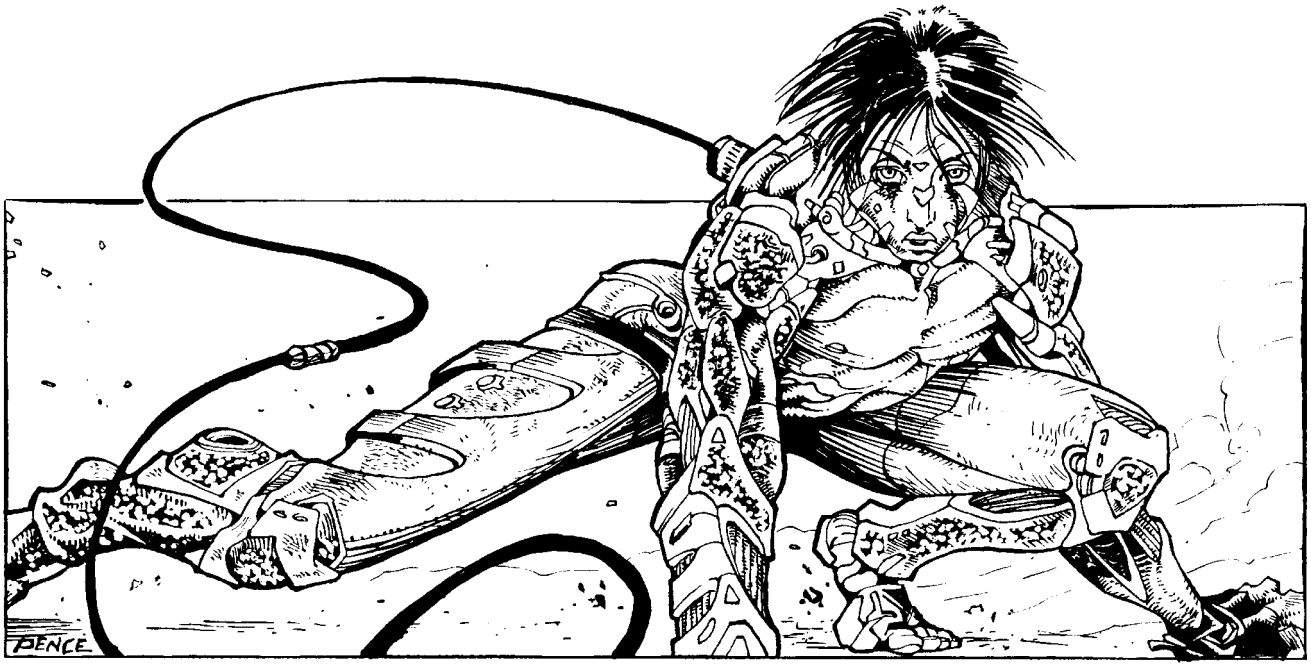


SOFT STEP (Tech Level 18)

This option adds special shock absorbent padding to the cyberlegs and ankles. The character gains a +25 bonus to Stalking and a +10 bonus to Ambush. This must be taken as an option in both legs to gain the benefit.

WEIGHTED SWING (Tech Level 17)

This option increases the mass of a cyberarm or cyberleg to increase the power of its melee attacks. Any damage done causes an additional Unbalancing critical of two levels less severity (an 'A' is modified by -50, a 'B' is modified by –25 on the 'A' column).



12.3 MILITARY GRADE CYBERLIMBS

ARMOR OPTION (Tech Level 20

This appendage has an armored shell.

Advanced Composite Armor: This is an advanced composite, harder and lighter than steel. It grants the cyberlimb an armor type of X. It cannot be taken with the apparent biological option.

12.4 PRICE LIST

The Cyberlimbs Table RM-12.1 lists the price, tech level, CIRS impact, and talent point cost of the various pieces of cyberware presented in this section. As the technology has already been around at least a tech level by the time it's introduced as cyberware, no price decreases are received on subsequent tech levels. The difficulty refers to the installation difficulty (see section 6.5). The letter in parentheses after each name indicates whether they are (S)tandard, (P)rofessional, or (M)ilitary cybernetics.

CYBERLIMBS TABLE RM-12.5

Name	Difficulty	Tech Level	CIRS Impact	Talent Pt. Cost	Price
Cyberarm (S)	C	17	varies	varies	varies
Cyberleg (S)	C	17	varies	varies	varies
Armor Option:					
Carbon Steel Armor (P)	R	16	0	3	¢3,000
Resilient Polymer Arm. (P)	R	17	0	2	¢1,500
Adv. Composite Armor (M)	R	20	0	6	¢6,000
App. Bio. Opt. (Greater) (S)	R	21	-2	1	¢10K
App. Bio. Opt. (Lesser) (S)	R	17	0	1	¢1,000
Augmented Suspension (S)	R	17	0	2.5	¢2,500
Bio-Hydraulic Joints (S)	R	23	0	5	¢50K
Hidden Holster (P)	R	17	5	3	¢1,000
High Performance Musculature (S)	R	18	2	8	¢7,500
Soft Step (P)	R	18	0	5	¢5,000
Speed Package (S)	R	17	2	10	¢10K
Weighted Swing (P)	R	17	.25	4	¢3,500

CYBERARM STAT TABLE RM-12.1

Stat (Ag, Qu, St)	Talent Point Cost	Price
1	-15	¢4,500
3	-12	¢4,800
5	-10	¢5,000
7	-8	¢5,200
9	-7	¢5,300
10	-5	¢5,500
13	-4	¢5,600
18	-3	¢5,700
23	-2	¢5,800
28	-1	¢5,900
50	0	¢6,000
72	1	¢6,100
77	2	¢6,200
82	3	¢6,300
87	4	¢6,400
91	5	¢6,500
93	7	¢6,650
95	8	¢6,800
97	10	¢7,000
99	13	¢7,300
100	17	¢7,650
101	20	¢8,000
102	23	¢8,300
103	27	¢8,700

Note: No cyberarm can cost less than 10% of its base cost.

Note: CIRS impact is increased by one for every point of difference between the bonus of an arm's statistic and the bonus of the character's potential statistic. The base CIRS impact is d10/5.

CYBERLEG STAT TABLE RM-12.3

Stat (Ag, Qu, St)	Talent Point Cost	Price
1	-10	¢9,000
3	-9	¢9,600
5	-8	¢10,000
7	-7	¢10,400
9	-6	¢10,600
10	-5	¢11,000
13	-4	¢11,200
18	-3	¢11,400
23	-2	¢11,600
28	-1	¢11,800
50	0	¢12,000
72	1	¢12,200
77	2	¢12,400
82	3	¢12,600
87	4	¢12,800
91	5	¢13,000
93	6	¢13,300
95	7	¢13,600
97	8	¢14,000
99	9	¢14,600
100	10	¢15,300
101	11	¢16,000
102	12	¢16,600
103	13	¢17,400

Note: No cyberleg can cost less than 10% of its base cost.

Note: CIRS impact is increased by one for every point of difference between the bonus of a leg's statistic and the bonus of the character's potential statistic. The base CIRS impact is d10/5.

CYBERARM HITS TABLE RM-12.2 (Optional)

Hits (Minimum TL*)	Talent Point Cost	Price
8 (17)	-3	-¢300
9 (17)	-2	-¢200
10 (17)	-1	-¢100
11 (19)	0	0
12 (21)	1	+¢100
13 (23)	2	+¢200
14 (25)	3	+¢300
15 (27)	4	+¢400
16 (29)	5	+¢500
17 (30)	6	+¢600
18* (31+)	7	+¢700

* — Minimum TL for ABs: This indicates the minimum tech level at which a cyberarm of this size can be equipped with an apparent biological option.

CYBERLEG HITS TABLE RM-12.4 (Optional)

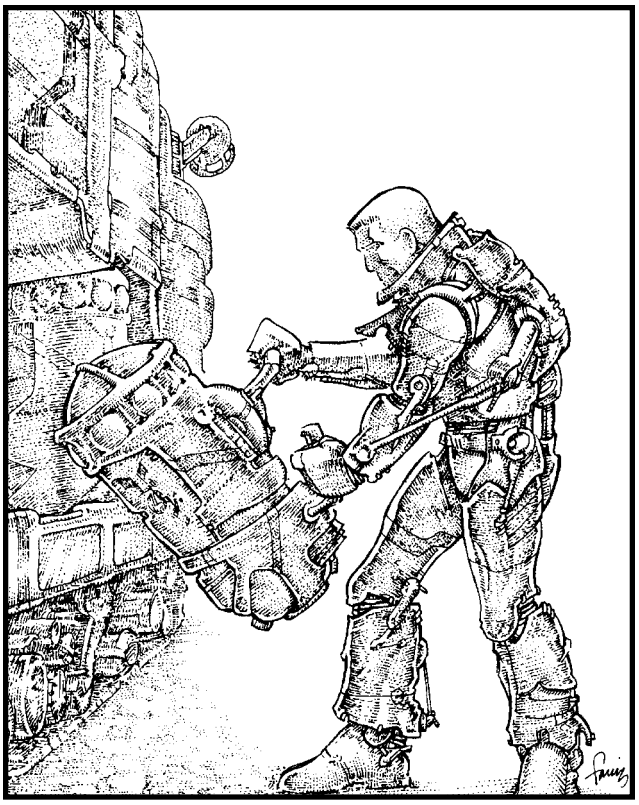
Hits (Minimum TL*)	Talent Point Cost	Price
16 (17)	-6	-¢600
18 (17)	-4	-¢400
20 (17)	-2	-¢200
22 (19)	0	0
24 (21)	2	+¢200
26 (23)	4	+¢400
28 (25)	6	+¢600
30 (27)	8	+¢800
32 (29)	10	+¢1,000
34 (30)	12	+¢1,200
36 (31+)	14	+¢1,400

* — Minimum TL for ABs: This indicates the minimum tech level at which a cyberleg of this size can be equipped with an apparent biological option.

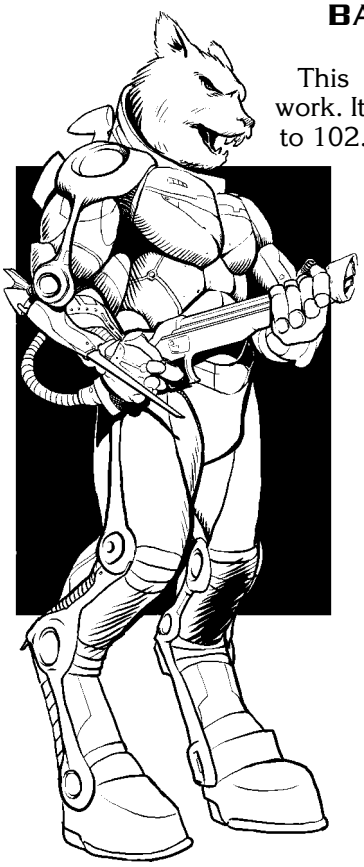
13.0 :: EXOSKELETONS

"Through the dust and
the smoke of this man-made hell
Walked a giant of a man
that the miners knew well
Grabbed the saggin' timber
and gave out with a groan
And like a giant oak tree,
just stood there alone, Big John"
—Big Bad John, Jimmy Dean

Exoskeletons are attached externally to the character. They are primarily intended to enhance strength.



13.1 STANDARD EXOSKELETONS



BASIC EXOSKELETON (TECH LEVEL 17)

This exoskeleton is used in industrial work. It increases the character's Strength to 102.

13.2 PROFESSIONAL EXOSKELETONS

ENHANCED EXOSKELETON (Tech Level 17)

This exoskeleton is used only for intense work. Possessors of this cyberware must be monitored, for the damage potential is great indeed. They gain a 105 Strength.

13.3 MILITARY GRADE EXOSKELETONS

ADVANCED EXOSKELETON (Tech Level 17)

Use of this exoskeleton is highly restricted. Typically, only the military uses it, as they have the firepower to deal with the person if the CIRS sets in. It grants a 108 Strength.

13.4 PRICE LIST

The Exoskeleton Table RM-13.1 lists the price, tech level, CIRS impact, and talent point cost of the various pieces of cyberware presented in this section. As the technology has already been around at least a tech level by the time it's introduced as cyberware, no price decreases are received on subsequent tech levels. The difficulty refers to the installation difficulty (see section 6.5). The letter in parentheses after each name indicates whether they are (S)tandard, (P)rofessional, or (M)ilitary cybernetics.

EXOSKELETON TABLE RM-13.1

Name	Difficulty	Tech Level	CIRS Impact	Talent Pt. Cost	Price
Advanced Exoskeleton (M)	H	17	3d10	60	¢100,000
Basic Exoskeleton (S)	H	17	d10	20	¢20,000
Enhanced Exoskeleton (P)	H	17	2d10	40	¢50,000

14.0 :: CYBEROPTICS

"She blinded me with science!"
—She Blinded me with Science,
Thomas Dolby

Cyberoptics deals with the installation of cybernetic eyes. All cyberoptics require the installation of a cybereye first, which can include optional optical enhancements, such as infrared vision. Unless otherwise noted, all costs and CIRS impacts are per eye.

14.1 STANDARD CYBEROPTICS

CYBEREYE (Tech Level 17)

This electronic eye is required for all other cyberoptics options.

At tech level 17, two options can be added. Every tech level after that, the number of options that can fit in one eye doubles.

Note that if different options are placed in different eyes, then it is very possible that a person might be operating with one eye in certain situations. For instance, if he were seeing via lo-lite, and only one eye had lo-lite installed, then he would see as if he had only one eye. Operating with one eye creates a -25 to all ranged attacks unless a range finder is being used.

AUTO-SHADES OPTION (Tech Level 17)

This option allows the user to tone down the input to his visual sensors. It is operated by physical cues from the user. Squinting makes it darker, widening the eyes brightens it. It will also adjust automatically for sudden, painful light changes. By the end of tech level 17, the response time for the darkening effect is almost instantaneous.

DIGITAL CAMERA OPTION (Tech Level 17)

This option allows the owner to take digital pictures. These are later downloaded to a computer or other system for processing, storage, or printing.

This eye can store up to 100 images. This doubles every tech level after TL 17. It is commanded through direct neural commands, and takes a little while to master.

DIGITAL VIDEO OPTION (Tech Level 17)

This option allows the owner to record digital video. This can be later downloaded to a computer or other system for processing, storage, or printing. If it is taken in both eyes, it can take recordings which are at least partially 3-D.

This eye can store up to 10 minutes of video. This doubles every tech level after TL 17. It is commanded through direct neural commands, and takes a little while to master.

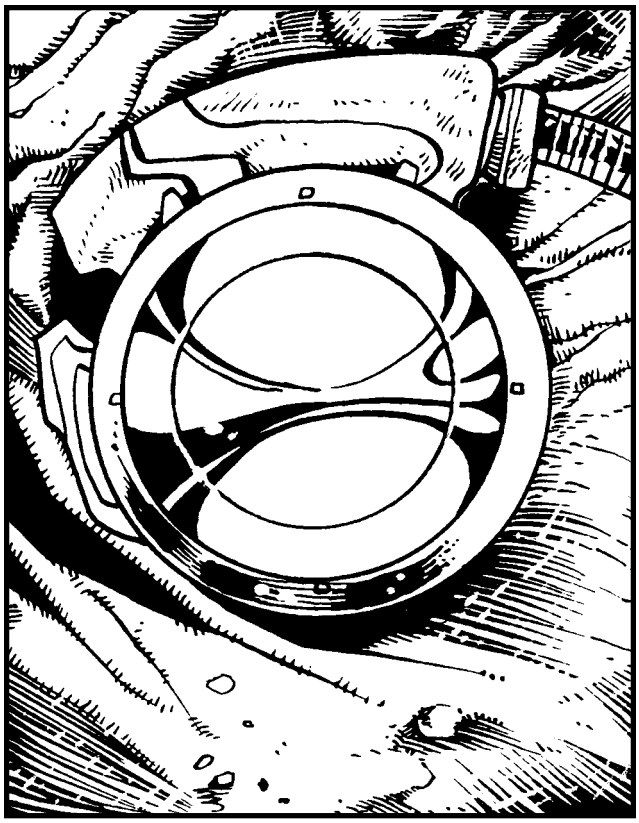


IMAGE ENHANCEMENT OPTION (Tech Level 17)

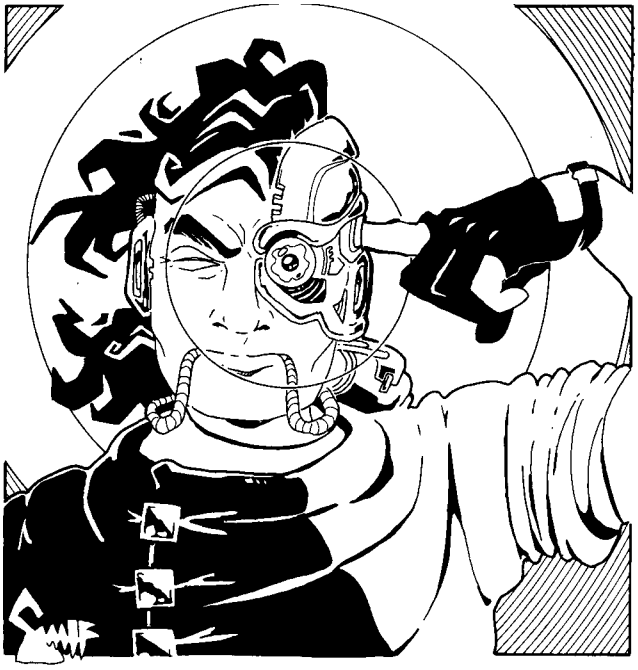
This option is used to augment any visual data with computer enhancement. This allows for clearer, sharper images. This grants a bonus to all Awareness•Searching skills equal to +5 x Targeting Class (see SM, p. 167 for details on Targeting Class and the Targeting skill). The maximum Targeting Class is the tech level - 9. It can be turned on or off with a neural command, but if used with one eye, the other must be closed or intense disorientation will occur.

IMAGE MAGNIFICATION OPTION (Tech Level 17)

This option is either added on to a targeting system or simply used to enhance vision. With a targeting system, it is used in conjunction with the Targeting skill (in the Special Attacks skill category) for attack purposes. A successful use of the Targeting skill will reduce range penalties by 5 x the Targeting Class of this option (the maximum Targeting Class is equal to the tech level - 9). The shot must be fired in the deliberate phase. Otherwise it is just used to zoom in on objects whether they be far away or just plain small. This is commanded by mental commands, which are intercepted on the way to the eye muscles.

LO-LITE OPTION
(Tech Level 17)

This visual package allows the user to see under poor visual conditions. It can intensify any light that falls on the cybereye. This halves any penalties for darkness. There is no danger of staring at a bright light through these. However, this option can be burned out by a laser until tech level 18. This option is turned on by widening the eyes, and turned off by squinting. If used with auto-shades, this is tacked on to the end of the normal range of control, so that when the user has turned off auto-shades completely, additional commands begin to amplify light.



PERIPHERAL VISION PACKAGE
(Tech Level 20)

This cybereye has extended peripheral vision. Your foe gets no bonus when attacking your flank and only a +10 bonus from behind. It is not recommended for a person with two eyes to get this option on only one, unless he has normal peripheral vision on the other eye. To do so will result in headaches and vertigo. This is always on.

READOUT OPTION
(Tech Level 17)

This option places a readout, like a HUD, over the characters field of vision, but out of the way of his direct sight. The most common use is for time and date, alarms and the like. However, if other systems are possessed, they are often set up to output data to the readout (at no extra charge). This is rarely controlled by the user, but can be set up to scroll through options from direct neural commands.

14.2 PROFESSIONAL CYBEROPTICS

IR OPTION
(Tech Level 17)

This option allows the cybereye to see into the infrared spectrum. The eye has no night penalties, but the character still has a -5 penalty to all actions due to a slight distortion. If the temperature is over 20 degrees Celsius, then he can see normally even in total darkness. If not, then he can only see objects which produce heat. This can be turned on or off through an interpreted thought command (which is intercepted on the way to eye-muscles).

This option is usually restricted to paramilitary organizations, such as a national guard or law enforcement agency. In some nations, licensed bounty hunter will also be permitted to purchase this option.

CYBEROPTICS TABLE RM-14.1

Name	Difficulty	Tech Level	CIRS Impact	Talent Pt. Cost	Price
Cybereye (S)	C	17	d10/2	0	¢5,000
Auto-Shades Option (S)	R	17	.25	1	¢150
Digital Video Opt. (S)	R	17	1	3	¢1,000
Digital Camera Opt. (S)	R	17	1	2	¢500
Image Mag. Opt. (S)	R	17	.25xClass	1xClass*	¢2,000
Image Enh. Opt. (S)	R	17	.25xClass	1xClass*	¢5KxClass
IR Option (P)	R	17	1	3	¢250
Lazer Designator Opt. (M)	R	17	1	-5	¢5,000
Lo-Lite Option (S)	R	17	.5	3	¢250
Peripheral Vision Pac. (S)	R	20	.25	5	¢5,000
Range Finder Opt. (P)	R	17	1	3	¢1,000
Readout Option (S)	R	17	.5	1	¢250
Targeting System (P)	R	17	2	10	¢10,000
Thermographic Opt. (P)	R	17	2	3	¢500

* — Maximum of Class (Tech Level - 9)

RANGE FINDER OPTION
(Tech Level 17)

This is a laser range finder that can be used to discover the exact range to a target. It must be used with a readout option and places a red dot in the user's vision, indicating the position of the laser. It can negate the penalty for using only one eye, but can be detected as a laser designator. It is turned on with a special wink.

TARGETING SYSTEM
(Tech Level 17)

This targeting scope grants a bonus to all ranged attacks. It requires a smartgun link to work.

THERMOGRAPHIC OPTION
(Tech Level 17)

This option is added to an IR option to translate temperature data into a color-coded visual image. The advantage is that most of the restrictions of IR are lifted. Objects that don't produce heat are still visible according to their temperature. This is very difficult to perceive by, however, and unless this visual field is particularly suited to a task (targeting enemies by their heat signature, for instance), then all Awareness maneuvers receive a -50 penalty. It is turned on by neural command.

This option is usually restricted to paramilitary organizations, such as a national guard or law enforcement agency. In some nations, licensed bounty hunters will also be permitted to purchase this option.

14.3 MILITARY GRADE CYBEROPTICS

LAZER DESIGNATOR OPTION
(Tech Level 17)

Many high tech missiles can home in on a laser beam. The device used to do this is called a LaZeR Designator (LZRD or Lizard for short). The laser is used to "paint" the target, indicating it to the missile or weapons system. Forward observers are often outfitted with lazer designators to indicate targets.

The problem with this is that most sophisticated war machinery can detect a lazer designator. This makes the forward observer a sudden and very real target. This operates in all ways like a range finder option, except that it also paints the target so a missile can lock on to its position as it does so.

14.4 PRICE LIST

The Cyberoptics Table RM-14.1 lists the price, tech level, CIRS impact, and talent point cost of the various pieces of cyberware presented in this section. As the technology has already been around at least a tech level by the time it's introduced as cyberware, no price decreases are received on subsequent tech levels. The difficulty refers to the installation difficulty (see section 6.5). The letter in parentheses after each name indicates whether they are (S)tandard, (P)rofessional, or (M)ilitary cybernetics.

15.0 :: CYBERWEAPONS

"She's a killer queen gunpowder gelatine
Dynamite with a lazer beam
Guaranteed to blow your mind"
—Killer Queen, Queen

Almost any weapon can be attached to cybertech, although there are often heavy power requirements and a large CIRS impact. In addition to weapons detailed in other SM products, several optional weapons are introduced here. Non-cybernetic versions of these weapons exist, and details are given in the appendices.

With the exception of razor nails, weapons must be mounted on a cyber limb, and count as one of the maximum options. Razor nails can be attached to a living hand, and do not count as an option in a cyberhand.

No weapons can be combined with the apparant biological option. Some weapons (pistols) can be concealed.

15.1 STANDARD CYBERWEAPONS

ADHESIVE GUN
(Tech Level 17)

This weapon coats the target with a fluid, quick-drying glue. This weapon only holds one shot at TL 17, but its capacity doubles every TL thereafter.

RAZOR NAILS
(Tech Level 17)

These hard, metal nails are sharpened to razor-sharpness. They cause an additional Tiny critical of one level less severity (an 'A' is modified by -25) when used in an unarmed attack. If Tiny criticals are not available, then these nails simply do an extra 25% damage.

SONIC STUNNER
(Tech Level 18)

Sonic stunners are detailed in Blaster Law and Spacemaster:Privateers. If Blaster Law is not available, assume a SS of 3.

15.2 PROFESSIONAL CYBERWEAPONS

NEEDLE
(Tech Level 16)

A small needle that can be used to inject toxins or pharmaceuticals. It includes a reservoir that contains ten doses. This is the only weapon than can be hidden by an apparent biological option. It does not cost any options in a cyberhand or cyberlimb.

DAGGER
(Tech Level 16)

This weapon attacks as a combat knife. This is the largest melee weapon that can be concealed in a cyberarm.

MONOWHIP
(Tech Level 17)

A monowhip consists of a monofilament cord and is capable of slicing through almost anything. It attacks on the Monowhip Attack Table A-EM-2.11.

SWORD
(Tech Level 17)

This is a sword with a monofilament edge. It cannot be concealed. It strikes on the Monosword Attack Table A-EM-2.10.

CHAINSAW
(Tech Level 16)

This is a large chainsaw, typically used by cyborg lumberjacks.

PULSE BATON
(Tech Level 17)

This club discharges energy into its target, burning them and paralyzing their voluntary nervous system. It is usd for close-quarters suppression, when sonic stunners are useless.

SEMI-AUTOMATIC FIREARM
(Tech Level 16)

This firearm can be mounted covertly, but only a normal clip of ammo can be stored internally. Non-covert mounts often have ammo belts. Use the appropriate attack table from Weapons Law, or assume a ME of 7 and use the Firearm Pistol Attack Table A-8.8.3 (SM, p. 202).

SEMI-AUTOMATIC ENERGY WEAPON
(Tech Level 18)

This energy weapon can, at the GMs discretion, be concealed. If Blaster Law is not possessed, use a BE or LE of 4 and resolve the attack on the Blaster Pistol Attack Table A-8.8.2 (SM, p. 201) or Laser Pistol Attack Table A-8.8.6 (SM, p.205).

SEMI-AUTOMATIC PLASMA WEAPON
(Tech Level 18)

This plasma weapon can, at the GM's discretion, be concealed. If Blaster Law is not possessed, use a PE of 3, and resolve on the Plasma Pistol Attack Table A-8.8.10 (SM, p.209).

VIBRO AXE
(Tech Level 18)

This weapon's blade vibrates at an extremely high frequency, giving it greater damage potential than it has any right to possess. If the axe loses power, it acts as a regular battle axe.

15.3 MILITARY GRADE CYBERWEAPONS

ACID SPRAYER
(Tech Level 17)

This weapon sprays a molecular acid at the target, causing extreme damage and scarring. It is outlawed in most civilized universes. There are far more humane ways to kill an opponent.

CYBERWEAPONS TABLE RM-15.1

Name	Difficulty	Tech Level	CIRS Impact	Talent Pt. Cost	Price
Acid Sprayer (M)	M	17	d10/2	25	¢1,500
Adhesive Gun (S)	M	17	d10/4	10	¢1,500
Chainsaw (P)	M	16	d10	15	¢1,500
Cryo Gun (M)	M	17	d10/2	25	¢1,500
Dagger (P)	M	16	d10/2	5	¢500
Energy Whip (M)	M	20	d10/2	10	¢3,000
Force Blade (M)	M	24	d10/2	10	¢1,200
Fully-Auto. Plasma Weapon (M)	M	18	d10+PE	30+PE	¢3K+¢100xPE
Fully-Auto. Firearm (M)	M	16	d10+ME/2	15+ME/2	¢1.5K+¢50xME
Fully-Auto. Energy Weapon (M)	M	18	d10+ BE or LE	25+ BE or LE	¢2,500 + ¢100 x BE or LE
Mono Whip (P)	M	17	d10/2	10	¢1,000
Needle (P)	M	16	d10/4	3	¢300
Power Sword (M)	M	26	d10/2	10	¢2,000
Pulse Baton (P)	M	17	d10/3	7	¢4,000
Razor Nails (S)	M	17	.25	3	¢500
Semi-Auto. Plasma Weapon (P)	M	18	d10/2 + PE	25 + PE	¢2,500+¢100 x PE
Semi-Auto. Energy Weapon (P)	M	18	d10/2 + BE or LE	20+ BE or LE	¢2,000+¢100 x BE or LE
Semi-Automatic Firearm (P)	M	16	d10/2 + ME/2	10+ME/2	¢1,000+¢50 x ME
Sonic Stunner (S)	M	18	d10/4	10+5xSS	¢1,000+¢500xSS
Sword (P)	M	17	d10/2 + ME/2	10+ME/2	¢3,000
Vibro Axe (P)	M	18	d10	15	¢3,600

CRYO GUN
(Tech Level 17)

The cryo gun fires a thin spray of super-cooled fluid. A strong blast will freeze a foe slowly, but usually they die from damage to the cardiovascular system. It typically carries ten shots (like a flamer).

ENERGY WHIP
(Tech Level 20)

This acts like an ordinary whip when powered down. When activated, it releases small amounts of plasma up to one meter away at a target. These plasma packets dissipate quickly, so thetarget does not suffer damage in subsequent rounds.

FORCE BLADE
(Tech Level 24)

The natural evolution of the monoblade, a force blade is a shaped force field with a monofilament edge. The field glows slightly, and has no mass, making it a beautiful and deadly weapon. The weapon consumes one power unit per minutewhen activiated. Since the Tulgar have not embraced this weapon, it is not common in the *Privateers* universe.

FULLY-AUTOMATIC FIREARM
(Tech Level 16)

If Weapons Law is not available, use a ME of 11 and resolve the attack on the Firearm Rifle Attack Table A-8.8.4 (SM, p. 203).

FULLY-AUTOMATIC ENERGY WEAPON
(Tech Level 18)

If Blaster Law is not available, use a BE of 5 or a LE of 6 and resolve the attack on the Blaster (Assault) Attack Table A-8.8.1 (SM, p. 200) or the Laser (Assault) Attack Table A-8.8.5 (SM, p.204).

FULLY-AUTOMATIC PLASMA WEAPON
(Tech Level 18)

If Blaster Law is not available, use a PE of 5, and resolve the attack on the Plasma (Assault) Attack Table A-8.8.9 (SM, p.208).

POWER SWORD
(Tech Level 26)

This energy weapon is more appropriate in science fantasy than a hard SF campaign. It is a blade of high-energy plasma contained in a shaped forcefield.

Power swords use the Monosword Attack Table A-EM-2.10, delivering Raking or Plasma criticals.

15.4 PRICE LIST

The Cyberweapons Table RM-14.1 lists the price, tech level, CIRS impact, and talent point cost of the various pieces of cyberware presented in this section. As the technology has already been around at least a tech level by the time it's introduced as cyberware, no price decreases are received on subsequent tech levels. The difficulty refers to the installation difficulty. The letter in parentheses indicates: (S)tandard, (P)rofessional, or (M)ilitary cybernetics.

16.0 :: IMPLANTS

"Denied love in the age of ruin
Suicide toxins of my own demise
In cyberspace, you know how much
The earth ain't learning"
—Neuromancer, Billy Idol

These pieces of cyberware do not fit neatly into any other section. This is essentially a catch-all category.

16.1 STANDARD IMPLANTS

ARTIFICIAL ORGAN
(Tech Level 17)

Every organ in the human body has a mechanical equivalent by tech level 17. Heart, lungs, liver, kidneys, if you can name it, they can replace it. In most cases the new organ works better than the original.

COMPLETE VOCAL PACKAGE
(Tech Level 18)

This cybernetic implant completely replaces the user's voice box. When the user speaks in a normal fashion, this operates exactly like a normal voice box, albeit with a much more controllable voice. This makes it handy for singers and military commanders alike. It grants a +15 bonus on any maneuver where the sound of the voice is important.

This can also be used, with a lot of practice, to create strange vocal effects. It can also operate as a voice amplifier. All these special abilities are controlled via neural commands.

IMPLANT COMMUNICATOR
(Tech Level 18)

This communications device is implanted in the mastoid process in the user's throat. It has a base range of .01 km, which doubles every tech level after TL 18. It uses subvocal receivers, allowing the user to send transmissions without speaking. It will "ride the level" and transmit normal voice as well. It includes a subvocal receiver in the user's ear so he can hear incoming transmissions.

INTERNAL AIR RESERVOIR
(Tech Level 17)

This plastic third lung allows the character to store extra air. This doubles the time they could hold their breath.

NANOBOTS
(Tech Level 18)

These surgical nanobots live within the host. They will help repair any damage, doubling the host's healing rate.

OLFACTORY ENHANCEMENT
(Tech Level 20)

This cybernetic enhancement removes the subject's olfactory organs and replaces them with cybernetic equivalents. Any sensory data involving smell is then enhanced. This allows for clearer, sharper scent data to be collected. This grants a bonus to all Sense

Awareness (Smell) maneuvers equal to +5 x Class. The class of this enhancement is rated like the Targeting Class of weapon scopes, and has a maximum value equal to the tech level – 18. It can be turned on or off with a neural command. It can also be programmed to edit out unpleasant scents.

This also heightens the subject's sense of smell. The class of the enhancement indicates the multiple of the subject's sense of smell (a Class III enhancement is three times more powerful than normal). This allows for a greater sense of direction where smell is concerned as well as greater range.

RESPIRATORY FILTERS (Tech Level 17)

These filters give the character a bonus to his resistance rolls versus inhaled poisons. The bonus is equal to +10 at tech level 17, and is doubled every tech level thereafter. It will also filter debris, asbestos, plutonium dust and other pollutants. The filter must be removed and cleaned occasionally. These are electrostatic filters, and must therefore be powered.

TACTILE ENHANCEMENT (Tech Level 25)

This cybernetic enhancement covers the subject's entire body with invisible cybernetic nerves. Any sensory data involving touch is then enhanced. This allows for clearer, sharper senses. This grants a bonus to all Sense Awareness (Touch) maneuvers equal to +5 x Class. The class of this enhancement is rated like the Targeting Class of weapon scopes, and has a maximum value equal to the tech level – 23. It is turned off or on with a neural command. It can even be used to edit out certain sensations or areas, if the user's natural nerves have been deadened.

TASTE ENHANCEMENT (Tech Level 21)

This cybernetic enhancement removes all of the subject's taste buds and replaces them with cybernetic equivalents. Any sensory data involving taste is then enhanced. This allows for clearer, sharper senses. This grants a bonus to all Sense Awareness (Taste) maneuvers equal to +5 x Class. The class of this enhancement is rated like the Targeting Class of weapon scopes, and has a maximum value equal to the tech level – 19. It can be turned on or off with a neural command.

CYBERNETICS IMPLANTS TABLE RM-16.1

Name	Tech Difficulty	CIRS Level	Talent Impact	Price Pt. Cost	Price
Artificial Organ (S)	C	17	.25	0	¢5K-50K
Complete Vocal Package (S)	C	18	.25	5	¢100,000
Dose Master (P)	H	17	.25	3	¢2,500
Implant Communicator (S)	H	18	.25	3	¢10,000
Internal Air Reservoir (S)	H	17	.5	5	¢1,000
NanoBots (S)	R	18	2	10	¢12,000
Olfactory Enhancement (S)	H	20	.25 x Class	.25 x Class	¢50KxClass
Respiratory Filters (S)	H	17	d10/4	Bonus/2	¢1,000
Tactile Enhancement (S)	VC	25	.5 x Class	.25 x Class	¢200kXClass
Taste Enhancement (S)	H	21	.25 x Class	.25 x Class	¢100kxClass
Thermal Sense (S)	M	17	.25	0	¢1,000
Toxin Monitor (P)	C	17	.25	3	¢2,500
Sixth Sense (P)	A	21	Varies	Varies	Varies
Vocal Plus (S)	C	19	.25	5	¢10,000

THERMAL SENSE
(Tech Level 17)

A fancy name for a thermometer, this cybernetic enhancement measures the environmental temperature and sends output to a cybereye readout or other appropriate display. It can also be set to monitor the user's body temperature.

VOCAL PLUS
(Tech Level 18)

This add-on to the "complete" vocal package allows the character to store vocal patterns he records from others. He can then imitate that person's voice. This is all handled by neural commands. Ten patterns can be stored at TL 18, but this number doubles every tech level thereafter.

16.2 PROFESSIONAL IMPLANTS

DOSE MASTER
(Tech Level 17)

This device is attached to a major artery. It monitors basic life signs, and under certain circumstances (a drop in blood pressure, for instance) it releases its medicine.

Any drug that can be obtained can be used. The dose master can contain up to ten doses. This could be set to a maximum of one dose per day, or it could be set to administer the drug on command. This implant is usually only administered by licensed physicians, due to its potential for abuse.

TOXIN MONITOR
(Tech Level 17)

This device is positioned near the heart and monitors the bloodstream for nerve toxins. If one is detected, it releases a dose of amboathorphin, or other antidote. It holds ten doses. It has a twelve hour delay between doses.

Amboathorpin is a universal nerve gas antidote for human beings. Other races will, of course, have an equivalent antidote. One dose will protect its user for twelve hours. During this time, no standard nerve agents will harm them.

SIXTH SENSE
(Tech Level 21)

This is a cybernetic implant which performs as a scanner. This can be anything from a medscanner to a multiscanner. This answers to neural commands and can output to a cyberoptical readout or other appropriate display.

Multiscanner: This combines the functions of all three scanner types. It can perform lesser data analysis. It can link up with a more sophisticated system for full analysis.

There are three main types of scanners. The radscanner detects the type, source and intensity of any radiation source. The chemscanner detects minerals, metals and chemical compounds. The bioscanner is a highly specialized scanner which scans for complex molecules which denote the presence of life. These three scanners can perform three different types of scans. Al ranges double every tech level after invention.

Life Scan (Bioscanner): This scanner can distinguish between plant and animal life at twenty meters. It can distinguish individual animal units at four meters. At one meter it can distinguish between basic types of creatures (lizard, bird, etc.). More detailed analysis requires a medscanner.

Power Emanations (Radscanner): This type of scan detects any radiation, be it electromagnetic or particle radiation. It is typically set to screen out background radiation, though it may be programmed not to do so. The range of this scan has a lot to do with the strength of the radiation source. This could pick up a communicator tight-beam at two meters. A vacuum generator could be picked up at twenty meters, while nuclear power could be detected at two-hundred meters. Generally at 10% of that range, specifics can be made out, such as the nature of the transmission.

The GM should feel free to place penalties on these ranges due to background radiation. During a solar flare in orbit, gamma rays would be a lot harder to detect then on the planet's surface on a good day.

Physical Analysis (Chemscanner): This first and most obvious function of this scan is to analyze the properties of an item of substance. This scan can determine physical makeup, chemical structure, internal structure, circuit patterns, stress flaws, etc. Though the scanner cannot make value judgements about the item. Some very detailed data can be gathered for later analysis by computer.

The second and often more game applicable use is in the finding of a substance. Assuming that the scanner has the substance on file, it can locate it at a range of one gram per ten centimeters. That means that one gram of the material can be found twenty centimeters away. This progression is reasonably linear. One kilogram of a substance can be detected at two-hundred meters.

CIRS Impact: d10
Talent Point Cost: 15
Price: ..... ¢150,000

Medscanner: This is a bioscanner with several advanced functions. It is capable of scanning a life form for basic vitals, as well abnormalities. This requires sophisticated specialized programs. This makes a medscanner only as good as the medical data on the species. It can detect problems, such as poisons in the subject's system or a dangerous viral infection. It provides information on problems, but will not suggest treatment methods without a diagnostic computer.

CIRS Impact: d10
Talent Point Cost: 15
Price: ..... ¢150,000

Tactical Scanner: This scanner is often used by military units. It is a simple scanner, capable of scanning for life, motion, or other possible threats. It has a fairly limited range at lower tech levels (four meters at tech level 21 on a bioscan), but as tech levels increase, this becomes a very useful tool. As it is so simple, it gives +50 bonus to any sensor analysis checks that might be required.

This scanner gives a perfect sphere of data, though many user restrict this to a plane or wedge. It is sophisticated enough to recognize a life form once scanned and can therefore be programmed to not display certain creatures or friend/foe data on up to five creatures.

Tech level 21 and other low tech level versions often rely on infra red and motion alone. This grants a twenty-five-meter radius bonus to the scanning area, but eliminates object recognition abilities.

This scanner ignores most barriers, such as bulkheads and walls. It is capable of a mapping function, or downloading maps which can then be overlaid the data.

CIRS Impact: 2d10
Talent Point Cost: 15
Price: ..... ¢150,000

Technical Scanner: This scanner is a technician's best friend. It can scan for many things, including circuit patterns, power emanations, stress flaws and many, many other things.

This scanner, naturally, can only work with devices and crafts for which it has detailed schematics. It can be plugged into a computer port through a datajack to run diagnostics, (though generally the computer can do this itself) or scan for approximately ten meters. The processing time is generally fairly quick, but for a large craft, it can take a very long time to perform a thorough scan.

This scanner has great success in its history of use. It averages a 99.99867% veracity rate.

In addition to other functions, this scanner can perform power emanation and physical analysis scans. These scans are handled exactly as if the scanner were a radscanner or a chemscanner.

CIRS Impact: d10
Talent Point Cost: 15
Price: ..... ¢150,000

16.3 PRICE LIST

The Cybernetics Implants Table RM-16.1 (p.48) lists the price, tech level, CIRS impact, and talent point cost of the various pieces of cyberware presented in this section. As the technology has already been around at least a tech level by the time it's introduced as cyberware, no price decreases are received on subsequent tech levels. The difficulty refers to the installation difficulty (see section 6.5). The letter in parentheses after each name indicates whether they are (S)tandard, (P)rofessional, or (M)ilitary cybernetics.

17.0 :: NEURALWARE

"My heart is human,
my blood is boiling, my brain I.B.M."
—Mr. Roboto, Styx

These items interface directly with the brain. The ability to translate neural signals was developed during tech level 16, but it wasn't until tech level 17 that it became practical due to size and medical considerations.

Many of these devices grant bonuses or penalties. These are applied directly to the stat bonus, not to the stat itself.

17.1 STANDARD NEURALWARE

NEURAL INTERFACE (Required) (Tech Level 17)

This item is required for all other devices in this section. It is the basic implant, built into the base of the skull, which allows all neuralware to function. Other cybernetics are self-contained, but everything in this section requires a neural interface be installed first. Only one is required. It has no independent functions.

ADRENAL BOOST (Tech Level 17)

When entering a stressful situation, this device sends commands to the adrenal glands. In a rush of fury, the user gains a bonus to Quickness, Constitution, and Strength. This is not without a price however. He also receives a corresponding penalty to Reasoning, Self Discipline, and Empathy. Finally, if he engages in anything strenuous (combat or flight), he causes damage to his own muscles from the strain equal to the bonus. This can cause many users to give up fighting until they have a chance to heal. On the bright side, it's cheap and its neural impact is minimal.

This comes in three classes. The bonus of Class I is 3, the bonus of Class II is 5, and the bonus of Class III is 8. The effects last for d10 minutes.

CRANK CASE (Tech Level 17)

This device interfaces with the brain to enhance the reaction time of the user. This comes in three classes. Class I grants a +3 bonus to the user's Quickness. Class II grants a +5 bonus, and Class III grants a +8 bonus. It is always on.

DATA TRANSLATOR (Tech Level 17)

This subprocessor translates data input through an interface jack. It allows for a true man/machine interface. With a cyberdeck, this makes netrunning possible. Without, it eliminates keyboards and mice, making the interface quick and direct.

DATAPROM COST TABLE RM-17.1		
Skill Bonus	Language Rank	Price
+10	1	¢100
+20	2	¢200
+30	3	¢300
+40	4	¢400
+50	5	¢500
+60	6	¢600
+70	7	¢700
+80	8	¢800
+90	9	¢900
+100	10	¢1,000

DATAPROM JACK (Tech Level 17)

A dataPROM is a thin sliver of Programable Read-Only Memory which can be programmed with raw data. No actual skill is imparted, only pure knowledge. This cannot be used to teach someone how to fire a gun, but it could instantly supply the information on any gun viewed. It could not teach a character to speak perfect Japanese, but it will translate and feed him the words to massacre with his untrained tongue.

These jacks can fit one dataPROM, but these are shifted into buffered memory in one round. A character can run as many databases as 10 + his Reasoning bonus. For example, if he had a –4 bonus to Reasoning, he could run (10 + (-4) = 6) databases. Prices for dataPROMs are as follows:

HAND-EYE COORDINATOR (Tech Level 22)

This piece of cyberware computes and recomputes the millions of calculations necessary to perform simple actions like walking and throwing a ball. It constantly adjusts signals going to the body based on a mass of sensory data. It is extremely sophisticated.

This comes in three classes. Class I provides a +3 bonus to the person's Agility. Class II provides a +5 bonus, and Class III provides a +8 bonus. It is implanted at the base of the neck.

INTERFACE JACK (Tech Level 17)

This all purpose jack is designed to handle any standard plug. This allows anything except PROMs to be inserted into it. Whatever is inserted then interfaces with the neural interface, and from there, the brain. (So be careful what you put in this thing.)

PAIN DAMPER (Tech Level 17)

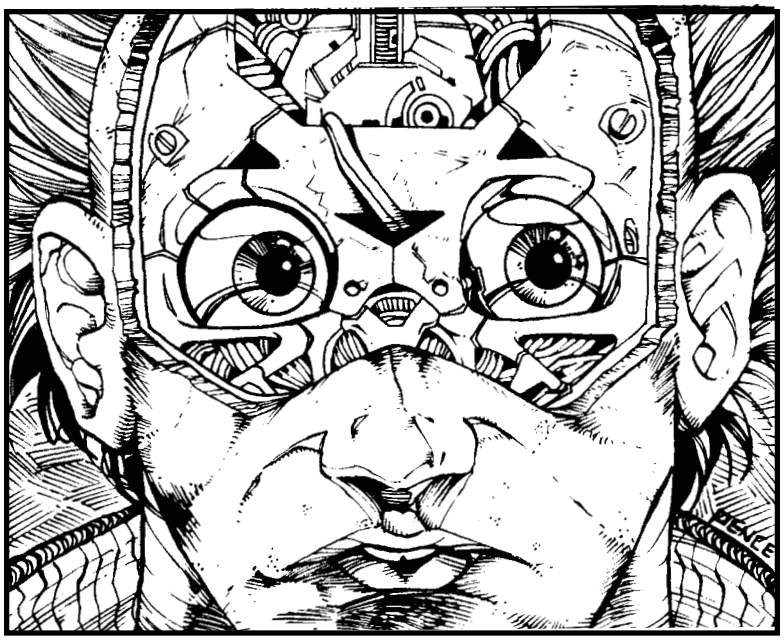
This neural translator edits out most of the pain a character feels. This negates all stun and reduces wound penalties by half. However, this character suffers a hit a round when not being very careful of his wounds, as he doesn't instinctively pull them away from rough contact. Bleeding is increased by 1 hit per round as well. Gangrene and infection are very real dangers for this character.

SENSORY ARCHIVE (Tech Level 17)

This memory unit allows the character to store sensory data. This can record one hour of sensory data, which doubles on every succeeding tech level. It can be searched, replayed, or dumped to a implant communicator at will. The sensory transmission interface is built in.

SENSORY INPUT PLUG (Tech Level 17)

Used to replay recorded sensory data, this is a common form of entertainment. Sense vids become a fad shortly after this is invented. This is an external unit, and is not truly cyberware. As an option, this can come with induction pads for twice the cost, eliminating the need for an interface jack or neural interface.



SENSORY TRANSMISSION INTERFACE (Tech Level 17)

When linked between a neural interface and an implant communicator, this device can transmit the sensory data perceived by the character. This allows all this data to be recorded and analyzed remotely.

SKILLPROM PROCESSOR (Tech Level 17)

This is added to a dataPROM jack internally to process skillPROMs. SkillPROMs suffer from all the restrictions of dataPROMs, and count against the total number of PROMs that can be running. These cannot be purchased at over a +30 bonus, and while they are running the user has no idea what he's doing. This means that if a GM requires the players to use a skill during play to advance it, skillPROMs don't count. SkillPROMS cost ten times as much as dataPROMS.

VEHICLE INTERFACE (Tech Level 17)

This negotiates data between a neural interface and interface jack. It allows the owner to jack straight into a vehicle, controlling it cybernetically. This grants a +25 bonus to any maneuvers made with the vehicle.

17.2 PROFESSIONAL NEURALWARE

CYBERDECK (Tech Level 17)

This device is used to attempt to hack into computers. It operates through an interface jack, data translator, and a neural interface, each sold separately.

A full treatment of netrunning depends a great deal on the nature of the world in which it is based. It is therefore much too genre-specific for a complete treatment in this work. The following guidelines should suffice.

By use of the Interface skill (Science/Analytical Technical), the character can telepathically meld with a computer. This can be done by any means that a normally interface could be achieved, through data lies, etc. If the system is isolated, then the character must be able to jack into the computer.

The netrunner must then make static maneuver to understand the system. The difficulty is based on the level (complexity) of the system (GM assigned).

The psychic can then begin to manipulate data as if he was at the system. If the character runs into blocks or security systems, then this can be handled in a couple of different ways.

Option 1: The character makes an attack on the system (this is a base attack on the system (see psychic powers in *Spacemaster: Privateers*), with the character's ranks in interface added to the attack. The system then makes an RR. If it fails, then the block is broken. This continues until the netrunner fumbles an attack or gets booted off (GM discretion).

Option 2: Have the netrunner hallucinate the experience into terms he can understand. Then role play the experience out as a sub-adventure. In these sub-adventures, anything can take place, and the means of breaking the block are not always readily apparent. Unless the means of breaking the block is the netrunner's own death in this little scenario, then death means immediate expulsion from the system. The skill at interface determines how well equipped the netrunner's hallucinating persona turns out to be. The level of the system determines the level of equipment of the enemy. When the character completes the requirement for bypassing the block, the scenario ends and the netrunner either has free reign or he must face another block. This option has the advantage of allowing many different genres and unrelated adventures to be brought into play.

The GM need not lock himself into one option or the other. Both could actually be used. During a large gaming session, using option 2 could leave everyone else out of a large portion of the adventure. Therefore option 2 could only be used when either there is a good opportunity to run a solo adventure, or when there is a way to link the minds of all the characters, allowing them to participate as well. Otherwise, use option 1 to speed things along.

SMARTGUN LINK (Tech Level 17)

This interface allows a person to plug a gun into his interface jack. This grants a +25 bonus to attacks, but a smart gun cost ¢1,000 more than a normal gun. This requires a cybereye with a targeter.

NEURALWARE TABLE RM-17.2

Name	Difficulty	Tech Level	CIRS Impact	Talent Pt. Cost	Price
Adrenal Boost (S)	M	17	Bonus/4	0	¢1,000
Crank Case (S)		17	1 x Bonus	10, 20, or 30	¢5k x Bonus
Cyberdeck (P)		17	0	0	¢10K
Data Translator (S)		17	.5	5	¢1,000
DataPROM Jack (S)		17	d10/4	10	¢3,000
Hand-Eye Coordinator (S)		22	1 x Bonus	10, 20, or 30	¢10K x Bonus
Interface Jack (S)		17	d10/4	0	¢500
Neural Interface (Required)		17	d10/4	0	¢5,000
Pain Damper (S)		17	d10	40	¢5,000
Sensory Archive		17	1	10	¢10k
Sensory Input Plug		17	0	0	¢2,000
Sensory Transmission Interface (S)		17	.5	3	¢1,000
SkillPROM Processor (S)		17	d10/2	20	¢30K
Smartgun Link (P)		17	1	10	¢1,000
Vehicle Interface (S)		17	1	10	¢1,000

17.3 PRICE LIST

The NeuralwareTable RM-17.2 lists the price, tech level, CIRS impact, and talent point cost of the various pieces of cyberware presented in this section. As the technology has already been around at least a tech level by the time it's introduced as cyberware, no price decreases are received on subsequent tech levels. The difficulty refers to the installation difficulty (see Section 6.5). The letter in parentheses after each name indicates whether they are (S)tandard, (P)rofessional, or (M)ilitary cybernetics.

18.0 :: STYLE OVER SUBSTANCE

"Fire in the ice, naked to the T-bone
is a lover's disguise. Banging on the head drum,
shaking like a mad bull, she's got the look."
—The Look, Roxette

Though some of this is might be considered useful, most of it has more to do with looks than substance. Often, how you look is more important than how effective you are.

DERMAL DISPLAY
(Tech Level 17)

This display is set into the person's flesh. It can output information from various internal systems.

FIBER OPTIC HAIR
(Tech Level 17)

This hair glows with it's own light. The colors can be programmed to change.

LASER TATTOO
(Tech Level 17)

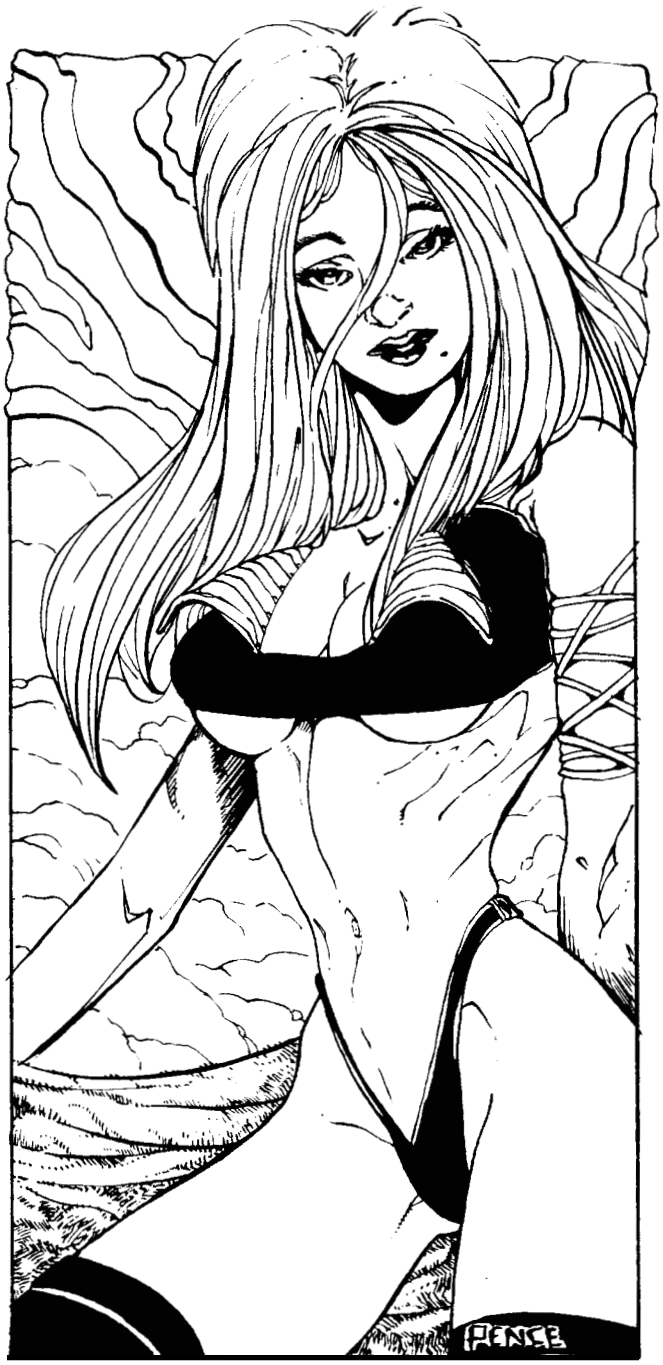
This decorative tattoo glows with it's own radiance. Especially good artists charge more.

SKINWATCH
(Tech Level 17)

This is a simple chronometer. It displays on the person's skin.

SUBDERMAL POUCH
(Tech Level 17)

This is a skin pouch can be used to conceal things. When sealed (it seals quite easily), it looks like a wrinkle or scar.



STYLE OVER SUBSTANCE TABLE RM-18.1

Name	Difficulty	Tech Level	CIRS Impact	Talent Pt. Cost	Price Price
Dermal Display	R	17	.25	3	¢100
Fiber Optic Hair	E	17	.25	0	¢500
Laser Tattoo	R	17	.25	0	¢100
Skinwatch	R	17	.25	1	¢100
Subdermal Pouch	E	17	.25	3	¢50/cm3

PART IV
ANDROIDS, ROBOTS, & COMPUTERS

"Curse my metal body! I wasn't fast enough."
—C-3P0, Star Wars, A New Hope

INTERLUDE THREE

Erik cringed as the door to the cockpit slid shut. Erik had a subprocessor that did nothing but handle human-like behavior.

The door locked, and he heard the crackle of a discharged blaster bolt. The door pinged and popped with heat expansion. They had sealed it on the other side.

He glanced around the cockpit. The place had been shot up pretty badly. The pirates knew their business, though. They had been precise with their shots, preserving the computers and control gear. They wanted the ship intact.

There was a hiss of escaping air. That must have been how they tricked the door into locking. The blaster weld was unnecessary. Not even Erik could open the door when there was a pressure difference.

But why had they not finished him before sealing him away? It was stupid, at best, to leave an android intact, with access to the ship's computer. He could work all sorts of mischief.

Unless they didn't know he was an android.

That must be it. Erik was designed to be a social companion. Escort women to parties, carry intelligent conversations, and defend his charge if necessary, but androids made a lot of people nervous. He was therefore designed to look absolutely human. He breathed, he had eye moisture. He would even sweat. It was easy to forget how real the illusion was.

It had been a long time since Erik had earned his citizenship, becoming a free sentient being. Everybody he associated with knew his true nature, and he was programmed to avoid deceit, except in certain social situations.

When he had signed onto this ship, he had installed a tactical scanner. He used it now. There were three pirates on the other side of the door, probably listening for his death screams. He obliged then, replaying the sound track of a spacer death from his favorite holovid, minus the music and Foley tracks.

Beyond them, there were five more pirates guarding the rest of the crew. He needed a plan.

The pirates on the other side of his door had been wearing vac suits. If he could get into one of them, he might pass for a pirate, at least from a distance. He just needed to get the suit.

Pressure was too low now to carry sound very well, so he stopped the histrionics. He needed to take them unawares. They hadn't moved yet. They would probably wait long enough to be sure his death wasn't a trick.

He turned and sat in the pilot's chair. From there, it was a simple matter to start kicking the canopy. All things being equal, the chair took as much damage as the window, and by the time he had kicked it clear, the mount for the chair had bent back several degrees, but at least he had an exit.

He climbed out the hole and started hand-walking along the rungs set in the ships exterior. He had always liked hard vacuum. Nothing to distract or disturb him. Only infinite nothingness against his synthetic skin.

If it wasn't for their relative velocity, he would have enjoyed it immensely, but with the rate they were traveling though this system, all it would take was a speck of dust to take his arm off. He usually used an armored vac suit.

He made his way to the emergency airlock at the waist of the ship. According to his tactical scanner, no one had a clear view of the door. That should allow him to get in clean. He hoped the helmet mikes on the pirate's suits weren't good enough to catch the sound of the lock cycling.

He activated the lock and slid through. His tactical scanner showed all the pirates. None of them were moving. Good.

Normally, this would be very difficult. He was programmed never to use deadly force. That is, unless human lives were in danger. The fact that the pirates had tried to kill him, thinking he was human, showed that the rest of the crew was in grave danger indeed.

He paused and checked his logic. No, there wasn't a pirate in the universe stupid enough to lock an android in a room with a working computer. He'd quickly control the doors, the life support, the lights, the fire suppression system, the works. The stupider the pirates, the more they'd think he could do, too.

No. This was a case of attempted murder, pure and simple. Cold blooded. The gloves were off.

He began stalking through the ship. The captain had a gun hidden in his quarters. He'd seen it a dozen times, but politely pretended he hadn't. He headed there now.

It took him a second to hack into the captain's quarters. He rifled through his things quickly; the captain had changed his hiding place. His multiscanner quickly narrowed the search, however, and he had it in a few minutes.

It was an over-powered hold-out blaster, fully charged. Erik pocketed the spare power caps. He then left.

It took a moment to navigate the passages through the ship. When he was just around the corner from the cockpit, he found a panel and began hacking the computer. With his tactical scanner, he kept a careful eye on the pirates.

It took him a minute, but he killed the gravity to the ship. Within moments he was sliding along the ceiling, turning the corner. Humans had a hard time reorienting quickly when their environment changed. He hoped the pirates were typical.

He opened fire.

19.0 :: ANDROIDS AND ROBOTS

"I may be synthetic, but I'm not stupid."
—Bishop, Aliens

The subject of androids and robots is complicated. In many ways, it is almost too complicated for comprehensive coverage here. There are many factors involved, including the relative tech levels of the different technologies, legal status of manufactured persons, economic considerations, and religious culture.

However, these variables are reduced dramatically where player characters are involved. When an android is a non-player character, these economic and technological considerations are paramount. When creating a player character, game balance is paramount.

The GM must still answer these questions, but need not deal with all the economic ramifications unless he intends to allow NPC androids to be built and purchased by the PCs.

PC Androids

For player characters, the GM need only answer the following questions.

Can players have android characters? Does the technology and culture exist to create such beings? The answer to this question is probably yes, or else the rest of this section is moot. In the Privateers universe, players can play android characters (if the GM allows it).

What is the legal status of androids? Are androids legal persons? Are they free or owned as slaves? Do they owe a financial debt to their creators? What are their rights?

What is the religious status of such creatures? Are they thought to have souls? Are they hunted and persecuted by the world's churches? Note that this question may have different answers for different religions or cultures.

How do androids interact with psychic powers? This is a difficult question. Unless a lot is known about psychic powers, an android is probably not a psychic. However, what does it take to affect them? If psychic powers affect intellect and not the mechanical construction of the brain, then even telepathy might work on androids. This can have a lot to do with the question on religion, above.

Once the GM has the answers to these questions, he can allow players to build robot and android characters.

Note: *The terms "android" and "robot" will be used interchangeably in this section—with android being used in most cases. Of course, the commonly accepted definition of an android is a mechanical being that closely resembles a human in appearance. This term can only be loosely applied to robots created by alien races, especially by aliens who do not have a humanoid physiology. In general, we understand an "android" to be a robot that was created to closely resemble or mimic its creator species, while a "robot" or "droid" is an android that was designed for particular tasks and does not resemble its creators. Thus, C-3P0 would be an android, while R2-D2 would be a robot. However, we will use both terms interchangeably so as to not prejudice one style of robot over another. All rules in Part IV can be adapted to any type of mechanical being.*

NPC Androids

After a GM has tackled the PC-related questions, he can consider broadening the scope to non-player characters. This is a much broader subject.

What kind of androids can be purchased? Can huge battle androids, the kind of which no player could afford to design as a PC, be purchased as property? What is the galactic market for androids? How does ownership of such a being affect someone's legal status? Do some groups view it as slavery? What is considered abuse to an android?

The most difficult factor, however, is the economical one. A GM will want to do a lot of thinking about how androids have affected the economy, how affordable they are, and how the purchase of them will affect game balance. If a GM will only allow androids that could be PCs, then this issue isn't as big, but if money is the only obstacle to purchasing an android, then android henchmen could quickly unbalance a game.

19.1 STRUCTURE

Android structure is as variable as the wind. When making an android character, the GM and player should sit down and design the android together, figuring out the location of power sources, computer brains, redundant systems, etc.…

Many androids are designed to resemble their creator species as closely as possible. For Humans (and other Privateers races), this means that androids are anthropomorphic and therefore more restricted in design. They are invariably humanoid like their creators, but that is often where the similarity ends.

Androids, like their creators, have much of their motivational power in their limbs and joints. They do not, however, require digestible food. This frees up a lot of space in the torso for essential items such as the power supply, the hydraulic system, and the brain case.

It is uncommon to place the brain in the head of an android. There are many reasons for this but the most significant is that it simply doesn't need to be there, and there are better places (like the torso) where more armor can be placed to protect it.

Therefore the torso tends to contain the android's power plant (generally tech level 22 or higher) and brain case (tech level 20), whereas the head is devoted to sensor apparatuses.

19.2 DAMAGE

Androids and robots have many advantages over biological organisms. The greatest, however, is their ability to take damage. Androids are, naturally, highly resistant to shock and bleeding (bleeding tends to be very different for androids). Androids do not receive damage on the same critical charts as biological creatures. Whenever an android receives a critical, consult the corresponding android critical table for the result.

Androids are generally resistant, but not immune, to stun; blows to the brain case can be devastating. They cannot develop the Stun Removal skill. When an android is stunned, it is due to systems that are popping on and off line. No feat of willpower will bring them back from the edge.

Androids do not bleed lifeblood; they bleed hydraulic fluid. Thus, when androids bleed they do not lose hits. Every critical which indicates bleeding will state how long the android will bleed. When the indicated time period has elapsed, the damaged limb or system is no longer functional.

The critical tables describe several android-specific hit locations. Below are descriptions of these locations:

Brain: This is the molecutronic brain of the android. It is the center of his nervous system and source of his sapience.

Brain Case: This is the protective casing around the droid's brain. Blows to the brain case can cause extreme shock damage.

Power Plant: This is the android's generator. An android's batteries can last a long time, but damage to the power plant from an external source often causes secondary damage to the batteries.

Motivational Subprocessor: This tiny brain controls the android's movement. It takes the place of the spinal cord, and is capable of reflexive movement (e.g., jerking away from a hot plate).

Gyros: Androids have gyros. These gyros help the android balance and can aid in-air maneuvers. (So even flying androids will have gyros.)

Hydraulic Plant: This is the central hydraulic plant of the android. When it bleeds dry, the android is paralyzed.

19.3 PURCHASING ANDROIDS

The player character creation rules are designed to be balanced and playable. A problem can arise when characters start purchasing android henchmen.

Android Rights

The biggest issue comes from the society involved. How are androids viewed? There are a few ways that this can be handled.

Androids are non-entities. In this world view, androids are worse than pets. They can be abused, beaten, ordered about or destroyed at the whim of their owners. They are treated like slaves, only given to most rudimentary considerations, and those are based more on their resale value than their personal sensibilities. They are programmed not to mind.

Androids are forced to be non-entities. In this world view, androids pick up personality and other traits as they build up a body of experience. To keep this from becoming an issue, their memory is repeatedly wiped, keeping them neutral, bland components rather than interesting individuals.

Androids are second-class citizens. Androids are owned, but they have certain rights, such as the right to not be abused. Violation of these rights can lead to an android being taken from its owner. Frequent abuses could cause an owner to lose the rights to purchase further androids. Otherwise, androids have very little control over their own lives.

Androids can earn their citizenship. In this social model, androids begin life as second class citizens. They have the right to earn their citizenship, but the method of doing so is very difficult, maybe as difficult as winning the Nobel Prize on modern day earth. Those androids who do earn their citizenship might have their lives bought from their owners, (like a Nobel Prize winner's money), or they might simply earn the right to buy back their own lives.

Androids are born citizens, but must serve indentured servitude. In the Privateers universe, androids are born with all of the rights of any other sapient being. At least, in the ISC they are. This means that an android cannot be actually owned (though they are usually programmed to be loyal to their owner). They are paid a standard wage, and at least 80% of their wage must be paid back to their owner, to buy off their own price tag. Usury laws prohibit charging interest on a sapient life.

This leads to an amicable solution. The human gets a fiercely loyal, hard-working employee for no more money, in the long run, than a more frail biological one. Laws are in place to set minimum wages for androids, just like everyone else, though these are often a bit lower than normal if the employer actually commissioned the android in question.

Androids have all the rights as anyone, and no one can own them. In this social structure, androids are expensive, since the money made in buying them is essentially thrown away, and there is no guarantee that they will work for the person who commissioned them. There are still probably times when androids are necessary, but they are most likely created out of the government budget.

Game Balance

The second big consideration is game balance. Once a game allows you to build a three-story-tall, sapient killing machine, a player somewhere is going to end up owning one. It's up to the GM to make sure that this doesn't happen.

The obvious solution is to outlaw three-story-tall killing machines. This only keeps them from upsetting combat balance however. Super-agile thieves, unbelievably talented technicians, and super-bright thinkers are just a few of the possible android abuses.

The next obvious solution would be to force any player-purchased android to conform to PC creation rules. This might be the best solution all around.

It's up to the GM, however. Some GMs might feel that the austerity of their game is high enough that the players should be able to purchase anything they can afford. If this is the case, then so be it. In the final analysis, the GM is always in charge of game balance.

19.4 "I, ROBOT" — THE ROLE OF THE ANDROID

Why do androids exist?

The role of the android is very important. If humanity is building them, there must be a reason, and a good one. Some of the possibilities are as follows:

Cheap labor. In a universe where androids are slaves, or even second class citizens, they might be a source of cheap labor. When mechanical lives are cheap, then it's easy to build an entire armada of workers.

Dangerous duties. It could be that androids are used to handle jobs, such as combat, by societies who consider a biological life too precious to risk. In such societies, they are given the dirtiest jobs. Deep space mining, munitions manufacture, and military service are just a few of the high-risk jobs that they might perform.

Hostile environments. Androids might be created to do jobs that biological creatures are incapable of performing. Working in the vacuum of space, keeping a ship running while the entire crew is hiding from the radiation of a solar flare, or building shelters in noxious environments are just some of the duties that androids might find themselves performing.

Specialization. Androids might be designed just because they can be made to be really good at one or two things. This level of specialization may be higher than any biological attention span could handle.

Physical considerations. In the Privateers universe, androids are the backbone of the navy. Electricity is cheap and plentiful, whereas life support can be very expensive. In a large ship with many marines, navy androids can handle many important duties without consuming any of the valuable air, food or water.

Need to create. Perhaps humanity has reached the point where they feel the need to create loving children in their own image. In this society, androids may be created to serve man, almost to worship him, but mostly because man feels the need to create something, even if that creation isn't necessary.

20.0 :: ANDROID CHARACTER TEMPLATES

"I prefer the term Artificial Person, myself."
—Bishop, Aliens

This section presents rules for generating android templates. These templates are not character descriptions—they are similar to a normal character's "race." A player (or a GM) can use android character templates to generate android characters (see Section 21.0, p. 68).

Note: *As discussed on page 55, this process also applies to robots and artificial intelligence entities (see Section 23.0, p. 74).*

The GM should pay close attention to this process, as players may be wont to abuse it. ("No you can't have 40 ranks in weapon skills for adolescence!") The GM may even want to develop or select several templates and force the players to choose between them, or restrict them to the templates included herein.

There are several templates included in Appendix A-9. As with most published "races" these are slightly more powerful than those a player might create.

The following is a method for developing player character androids. These rules do not take into account the technical or sociological implications of anything outlined here. The GM must do that himself. This merely outlines the creation of androids from a game balance point of view.

Abilities and Restrictions

Androids can naturally accomplish many acts that biological beings cannot. They can survive in the vacuum of space, they are immune to gas and radiation (other than its purely energy-based effects). They are not subject to disease or sickness. Androids therefore start with fewer talent points or background options than biological organisms.

There are also things an android cannot accomplish that a biological organism can. These things mainly revolve around the will of the human "spirit." Most Self Control skills would be foreign to an android. No matter how often an android develops a skill in the Self Control skill category, he can never use it (Mnemonics is unnecessary for androids).

Androids can also not develop Body Development. A GM should carefully consider any skill with SD as a component, as they are likely to be useless to androids. Of course, this would include any psychic skills, and the GM should carefully consider the nature of psychic phenomena in his campaign before ruling whether androids can or can not use psychic powers.

Android Template Generation Procedure

To create an android character, either the player or the GM must first create an android template (or use one of the templates provided in this book). A template is like a biological character's race, and serves many of the same functions by defining certain attributes. Once the template is created (or chosen), the player may generate his character just as he would a biological character (see Section 21.0, p. 68).

The following steps should be taken to generate an android template.

1) **Hits** — Choose the android's hits. Androids cannot develop Body Development, so barring a major body upgrade, this is all the hits they will ever be able to have.

2) **Mind Points** — In most campaigns, androids will not be able to use psychic powers. If this is the case, skip this step. If not, then choose the android's skill progression for MP Development. (In *Privateers,* androids cannot develop psychic powers.)

3) **Operational Life** — Select the operational lifetime of the android.

4) **RR Mods** — Select any appropriate resistance roll modifications.

5) **Maintenance Period** — Select the maintenance period of the android.

6) **Starting Languages** — Determine starting languages.

7) **Stats** — Choose the template's physical and mental stats (including Appearance).

8) **Cooling Capabilities** — Determine the android's cooling capabilities.

9) **Size** — Determine the android's size.

10) **Self Repair Capabilities** — Select the android's self repair capabilities.

11) **Backup Period** — Select the android's backup period.

12) **Starting Skill Ranks** — Determine the android's number of starting skill ranks (i.e., his "adolescence skill ranks"). Distribute these ranks among appropriate categories and skills.

13) **Everyman Skills** — Select any everyman skills.

14) **Restricted Skills** — Select any restricted skills.

15) **Options** — Select any standard options that this android template is equipped with. Select any custom options that individual androids of this template will be able to choose in the future.

16) **Total the Point Cost** — Total the point cost of all the previous choices and determine the available talent points or background options for this template. (These points are used to individualize each android of the same template just as they are used to individualize biological characters.)

Mechanics

Each of the following sections deals with some aspect of the android's abilities. Most of these have a mean value. If you want the android to be stronger than the mean, it will cost points. If you make the android weaker than the mean, it will give you points.

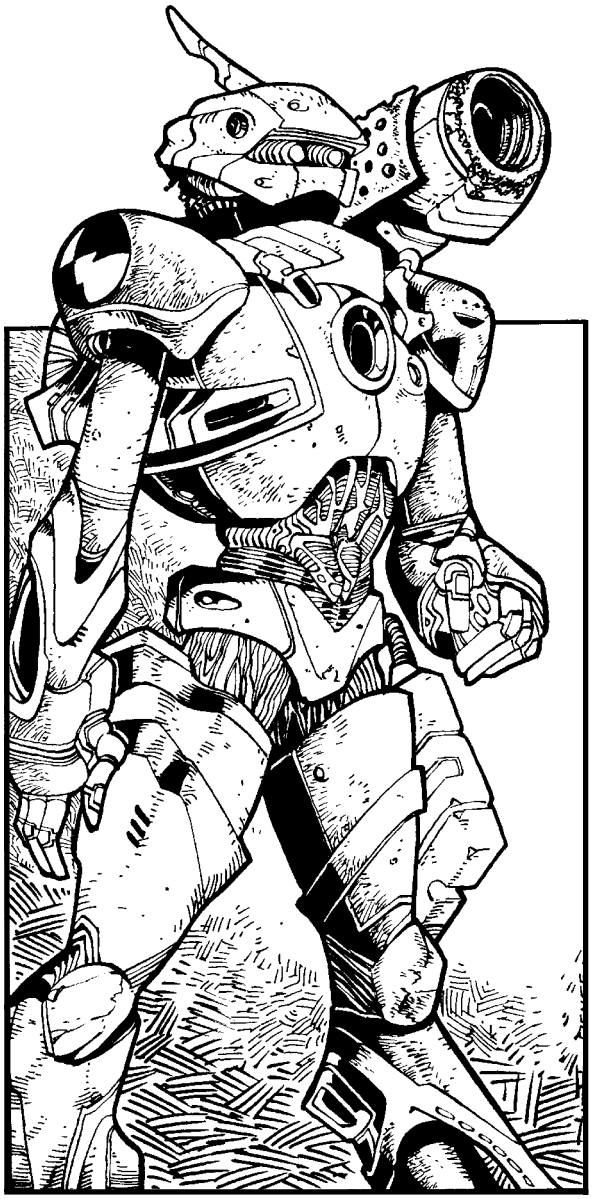
A Note on Android Pricing

To determine the cost of an android, add or subtract the price tag of each enhancement from ¢100,000 (this is the base cost). After all of these additions and subtractions have been completed, the android's final price will have been determined.

It is suggested that no android be allowed to drop below a cost of ¢10,000. If a price would be lower than this figure, then the android costs ¢10,000.

These costs are approximate. The GM should adjust them for factors such as marketing costs, popularity, and name recognition.

Except as noted below, the price given for each option is only for the tech level in which the option was introduced. After that tech level, reduce the price to 10% of its original value. Base statistics, like an android's operational life span, are not reduced in this manner.



20.1 HITS

Some androids are built to take more damage than others. Some, especially combat models, are built to take so many hits they can no longer appear to be human (that is, they cannot take the apparent biological option).

Example: *Gary wants to make an espionage android. He starts with hits. Because he doesn't see this android getting into a lot of combat, but figures it would be designed to take a shot or two, he takes 130 hits for zero points.*

ANDROID HIT TABLE RM-20.1

Hits	Privateers	Point Cost (Price Tag)
100	100	-15 (-¢15,000)
110	110	-10 (-¢10,000)
120	120	-5 (-¢5,000)
130*	130	0 (+¢0)
140*	140	5 (+¢5,000)
150*	150	10 (+¢10,000)
160*	160	15 (+¢10,000)
170*	170*	20 (+¢20,000)
180*	180*	25 (+¢25,000)
190*	190*	30 (+¢30,000)
200*	200*	35 (+¢35,000)

* — These models are too bulky and mechanical to pass as a biological organism at tech level 17. For every two levels above TL17, an android can be built with 10 more hits and still have the apparent biological option. More hits could be taken, at five points for every ten additional hits. This must be approved by the GM.

20.2 MIND POINTS

In many universes (e.g., the Privateers universe) androids will never be allowed to develop psychic powers. If the GM feels that these abilities should be granted to any being with an intellect, he may use the following chart for the mind point progression of the android template.

Example: *In this universe, androids are incapable of using psychic powers. Gary chooses the default value of zero for his MP development.*

ANDROID MP PROGRESSION TABLE RM-20.2

Skill Progression	Point Cost (Price Tag)
0 • 0 • 0 • 0 • 0	0 (n/a)
0 • 2 • 1 • 1 • 1	5 (n/a)
0 • 3 • 2 • 1 • 1	10 (n/a)
0 • 4 • 3 • 2 • 1	15 (n/a)
0 • 5 • 3 • 2 • 2	20 (n/a)
0 • 6 • 4 • 3 • 2	25 (n/a)
0 • 6 • 5 • 3 • 2	30 (n/a)
0 • 6 • 6 • 4 • 3	35 (n/a)
0 • 7 • 6 • 5 • 4	40 (n/a)

20.3 OPERATIONAL LIFE

Androids have an effective operational life. This is the limit after which, even with appropriate maintenance, they begin to fall apart.

After an android hits the end of its operational life span, all maintenance costs double. Every maintenance period after that, it must make a +50 malfunction check, resolving the effects normally, as described in Section 22.0.

Operational life spans can be many and varied. However, each has a minimum tech level. If the android was not built by a society of this tech level, it cannot be chosen.

Example: *Gary doesn't think the espionage android would be built to last. He gives it a 20-year life span, for five points.*

Note: *The dollar values for operational life assume a tech level 25 development. For other universes, place the ¢1,000,000 value on the highest tech level and work down from there. ?*

20.4 RESISTANCE ROLLS

Generally speaking, androids will not have much in the way of resistance roll modifications. If the GM decides that they should, then below are listed the point values. Generally speaking, androids are immune to disease and poison. Unless the GM rules otherwise, they are also immune to psychic powers. However, as they are sapient beings and have emotions, they are not immune to fear.

Note that taking a RR penalty against something that an android is immune to should not give the player any points, unless the GM rules that the android loses its immunity as a result.

Example: *Since there is little in the universe to cause Gary's espionage android to make a resistance roll, he selects no RR bonuses.*

ANDROID OPERATIONAL LIFE
TABLE RM-20.3

Operational Life Span	Point Cost (Price Tag)
2.5 Years (Tech Level 16)*	-5 (-¢80,000)
5 Years (Tech Level 17)*	0 (-¢70,000)
10 Years (Tech Level 18)*	3 (-¢60,000)
20 Years (Tech Level 19)*	5 (-¢50,000)
40 Years (Tech Level 20)*	7 (-¢40,000)
80 Years (Tech Level 21)*	9 (-¢30,000)
160 Years (Tech Level 22)	11 (-¢20,000)
320 Years (Tech Level 23)	13 (-¢10,000)
640 Years (Tech Level 24)	15 (-¢5,000)
1,280 Years (Tech Level 25)	17 (+¢0)
2,560 Years (Tech Level 26)	19 (+¢25,000)
Infinite (Tech Level 27)	21 (+¢1,000,000)

* — Though it is rare for an android to be built before tech level 22, these tech level minimums are supplied for the sake of completeness.

RESISTANCE ROLLS
TABLE RM-20.4

RR Bonus	Point Cost (Price Tag)
-5 extra	-10 each (-¢10,000 each)
-10	-10 (-¢10,000)
-5	-5 (-¢5,000)
+0	0 (+¢0)
+5	3 (+¢3,000)
+10	5 (+¢5,000)
+15	7 (+¢7,000)
+20	10 (+¢10,000)
+30	13 (+¢13,000)
+40	16 (+¢16,000)
+50	20 (+¢20,000)
+60	25 (+¢25,000)
+70	35 (+¢35,000)
+80	50 (+¢50,000)
+90	70 (+¢70,000)
+100	95 (+¢95,000)

20.5 MAINTENANCE PERIOD

Every being needs routine maintenance. For an android, there is a substantial dollar value attached. This equates to ¢1,000 per month. As the android's tech level increases, it becomes more efficient, requiring less and less maintenance. Of course the maintenance it does need becomes more and more expensive.

The game application is that no matter what the tech level of the android's maintenance, it still requires ¢1,000 per month to maintain. However, this maintenance becomes less and less frequent as the tech levels increase. So if the android's maintenance period is every six months, then the android only needs maintenance every six months, but it still requires ¢6,000 worth of maintenance when it does need it.

Each of these maintenance periods has a minimum tech level. The android must be built and maintained by this tech level to continue functioning.

If the android misses a maintenance period, he must make a normal malfunction check, but with a +25 penalty.

Example: *Gary feels that his espionage android should be able to operate a year with out significant maintenance. That will cost 7 points.*

20.6 STARTING LANGUAGES

Androids are often designed to be multilingual. Depending on the creator's design goals, androids are often set up with different linguistic capabilities.

To program an android with starting languages, choose the linguistic software option in step 15 as a standard option. All standard languages can be programmed into an android template, and more languages can be purchased as custom options for individual androids.

20.7 STATS

All androids are created equal, or more precisely, all androids of the same template are created equal. There is no step for generating stats for an android, and no difference between temporary and potential stats. At this stage, select the android's stats from the following chart.

Androids do not have racial stat modifications. Therefore unless they receive a stat bonus or penalty from custom options or flaws, this is it. Of course, any android can purchase a stat bonus as a custom option at a later date, so androids are not doomed to stagnation—they can always be upgraded.

For every point over 103, the android must pay an additional ten points. An android may not have a stat below 1. The maximum stat is 90 + the tech level.

Note: *The stat bonus for a stat above 100 is equal to: "(stat-95) x 2."*

An android must also have an Appearance stat. Chose its Appearance just like the other stats from the chart below.

Example: *Gary thinks his espionage android had better be above average. He feels that physical stats can be average, but his mental stats had better be well above norm.*

The total cost of the espionage android's statistics is 188 points. That's going to hurt, but he knew he was designing a high-end android.

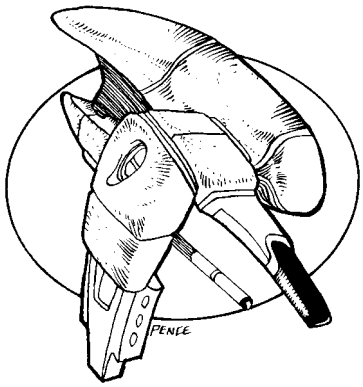
Ag ..... 50 ..... 0 points
Co ..... 50 ..... 0 points
Me ..... 91 ..... 13 points
Re ..... 91 ..... 13 points
SD ..... 77 ..... 4 points
Em ..... 100 ..... 50 points
In ..... 105 ..... 100 points
Pr ..... 87 ..... 8 points
Qu ..... 50 ..... 0 points
St ..... 50 ..... 0 points
Ap ..... 50 ..... 0 points

ANDROID MAINTENANCE TABLE RM-20.5

Maintenance Period	Point Cost (Price Tag)
5 Days (Tech Level 16)	-25 (-¢25,000)
1.5 Weeks (Tech Level 17)	-15 (-¢15,000)
3 Weeks (Tech Level 18)	-5 (-¢5,000)
6 Weeks (Tech Level 19)	+0 (+¢0)
3 Months (Tech Level 20)	+3 (+¢3,000)
6 Months (Tech Level 21)	+5 (+¢5,000)
1 Year (Tech Level 22)	+7 (+¢7,000)
2 Years (Tech Level 23)	+10 (+¢10,000)
4 Years (Tech Level 24)	+13 (+¢13,000)
8 Years (Tech Level 25)	+15 (+¢15,000)
16 Years (Tech Level 26)	+20 (+¢25,000)
Maintenance Unnecessary (Tech Level 27)	+30 (+¢100,000)

ANDROID STATISTICS TABLE RM-20.7

Statistic	Bonus	Point Cost (Price Tag)
1	-10	-45 (-¢4,500)
3	-9	-35 (-¢3,500)
5	-8	-30 (-¢3,000)
7	-7	-25 (¢2,500)
9	-6	-20 (-¢2,000)
10	-5	-15 (-¢1,500)
13	-4	-10 (-¢1,000)
18	-3	-7 (-¢700)
23	-2	-5 (-¢500)
28	-1	-3 (-¢300)
50	0	0 (-¢0)
72	+1	2 (+¢200)
77	+2	4 (+¢400)
82	+3	6 (+¢600)
87	+4	8 (+¢800)
91	+5	13 (+¢1,300)
93	+6	20 (+¢2,000)
95	+7	25 (+¢2,500)
97	+8	30 (+¢3,000)
99	+9	40 (+¢4,000)
100	+10	50 (+¢5,000)
101	+12	60 (+¢6,000)
102	+14	70 (+¢7,000)
103	+16	80 (+¢8,000)



ANDROID APPEARANCE TABLE RM-20.8

Appearance	Cost
1	-10 (-¢1,000)
2-5	-5 (-¢500)
6-15	-3 (-¢300)
16-30	-1 (-¢100)
31-70	0 (+¢0)
71-85	3 (+¢300)
86-95	5 (+¢500)
96-99	10 (+¢1,000)
100	15 (+¢1,500)

20.8 COOLING CAPABILITIES

Androids do not get exhausted. They do, however, have to worry about efficient cooling. In an android, the Constitution stat represents a android's cooling capabilities and heat dispersion.

Calculate a android's exhaustion points normally. These exhaustion points can be raised or lowered according to the chart below.

Because these exhaustion points are based on heat, an android accumulates an additional exhaustion point for every five degrees the temperature rises above 15˚ Celsius. For every five points below 15˚, the period after which he accumulates exhaustion increases one round.

An android recovers exhaustion points normally. This assumes the android can dump heat quickly. If masquerading as a biological organism, the android can only regain exhaustion at the active rate (1 point every three minutes). Otherwise, those around him may begin to notice the extra heat (a Medium maneuver for standing near him, a Routine one by touch).

Example: *Gary isn't too worried about his droid's coolant system. He figures that even though he'll be impersonating a biological, if he's generating a lot of heat, he's probably blown his cover anyway. He takes no bonus to exhaustion points.*

ANDROID COOLING CAPABILITIES TABLE RM-20.9

Additional Exhaustion Points	Point Cost
+0 Exhaustion Points	0 (+¢0)
+10 Exhaustion Points	3 (+¢3,000)
+20 Exhaustion Points	7 (+¢7,000)
+30 Exhaustion Points	12 (+¢12,000)
Additional +10	+10 each (+¢10,000 each)

20.9 SIZE

Androids can be of many sizes. Different sizes grant different bonuses and penalties.

0 - .5 Meters — If an android is half a meter tall or less, he receives a +6 bonus to Quickness.

.5 - 1 Meter — If an android is one half to one meter tall he receives a +3 bonus to Quickness.

3 - 4 Meters — If an android is three to four meters tall, he receives a +10 to melee OBs and -10 to DB. He is treated as a large creature for criticals.

4 + Meters — If an android is more than four meters tall, he receives a +20 bonus to melee OBs, a -20 to DB, and is treated as a large creature for criticals.

Example: *Gary thinks that making this android unusually big or unusually small defeats the purpose of an espionage android. He settles right around two meters for the height of his android (1.8 to be precise).*

ANDROID SIZE TABLE RM-20.10

Size	Point Cost
0 - .5 Meters	10 (+¢100,000)
.5 - 1 Meter	5 (+¢50,000)
1 - 3 Meters	0 (+¢0)
3 - 4 Meters	10 (+¢25,000)
4 + Meters	20 (+¢50,000)

20.10 SELF REPAIR CAPABILITIES

By tech level 21, it becomes possible, through nanotechnology, for an android to repair itself. It can heal damage normally, assuming it has a store of basic materials.

Each recpvery multiplier has a tech level. The android must have been built by at least this tech level to be able have this self repair tech.

Example: *Gary feels that his espionage android had better be able to heal at a normal human rate. He selects normal recovery for 5 points.*

ANDROID SELF REPAIR CAPABILITIES TABLE RM-20.11

Recovery Multiplier	Point Cost
No self repair tech	-25 (+¢0)
3 times normal (TL 21)	-10 (+¢10,000)
2 times normal (TL 22)	0 (+¢20,000)
1.5 times normal (TL 23)	3 (+¢30,000)
Normal recovery (TL 24)	5 (+¢50,000)
.9 times normal (TL 25)	10 (+¢100,000)
.75 times normal (TL 26)	25 (+¢200,000)
.5 times normal (TL 27)	45 (+¢400,000)
.25 times normal (TL 28)	65 (+¢800,000)
.1 times normal (TL 29)	85 (+¢1.5 Million)

20.11 BACKUP PERIOD

Every android performs periodic backups of its memory. This way, if the brain is destroyed but the backup remains, the personality can be uploaded when the brain is repaired or replaced.

Each backup period has a schedule, stating how often it occurs, and down time, stating how long the android is out of commission while backing up. All backups are internal unless the android plugs into an external port. This chart only gives the automatic backup schedule. An android can shut down to run a backup whenever it wishes.

Backups are a tricky matter. Android backups are even trickier. Each backup period comes with a boot chance. Whenever a backup is restored, this is the chance that the data is restored with the degree of integrity necessary to boot. There is a lot of data and code in an intellect, so there is a lot that can go wrong.

Example: *Gary does not feel backups are very important. He figures that if he dies, he dies in the field, and they're going to need his backups back at his home base anyway. He selects the one month backup period, for 0 points.*

ANDROID BACKUP PERIOD TABLE RM-20.12

Period (Down Time)	Boot Check	Point Cost
1 Month (1 Day)	10%	0 (+¢0)
3 Weeks (18 Hours)	11%	3 (+¢300)
2 Weeks (12 Hours)	12%	5 (+¢500)
1 Week (6 Hours)	15%	7 (+¢700)
4 Days (3 Hours)	20%	10 (+¢1,000)
2 Days (1 Hour)	25%	15 (+¢1,500)
1 Day (30 Minutes)	30%	20 (+¢2,000)
12 Hours (15 minutes)	40%	30 (+¢3,000)
6 Hours (5 Minute)	50%	40 (+¢4,000)
3 Hours (1 Minute)	60%	60 (+¢6,000)
2 Hours (30 Seconds)	80%	80 (+¢8,000)
1 Hour (15 seconds)	100%	100 (+¢10,000)

20.12 STARTING SKILL RANKS

Android templates all have a base programming. This basic programming represents the creator's idea of what the android would need to accomplish its goals.

Choose the ranks that the android should start with, in both categories and skills. Total the skill ranks and compare them to the chart below for the cost.

ANDROID ADOLESCENT SKILL RANKS TABLE RM-20.13

Number if Ranks	Point Cost
Up to 55	5 total (+¢5,000)
56-65	1 pt. per additional rank (+¢100 each)
66-80	2 pts. per additional rank (+¢200 each)
81-100	3 pts. per additional rank (+¢300 each)
101+	5 pts. per additional rank (+¢500 each)

Example: *Espionage androids should be well versed in many skills, so Gary assigns 80 skill ranks to his android. This costs 45 points. (5 for the first fifty-five, 10 for the next ten points, and 30 for the fifteen points after that.)*

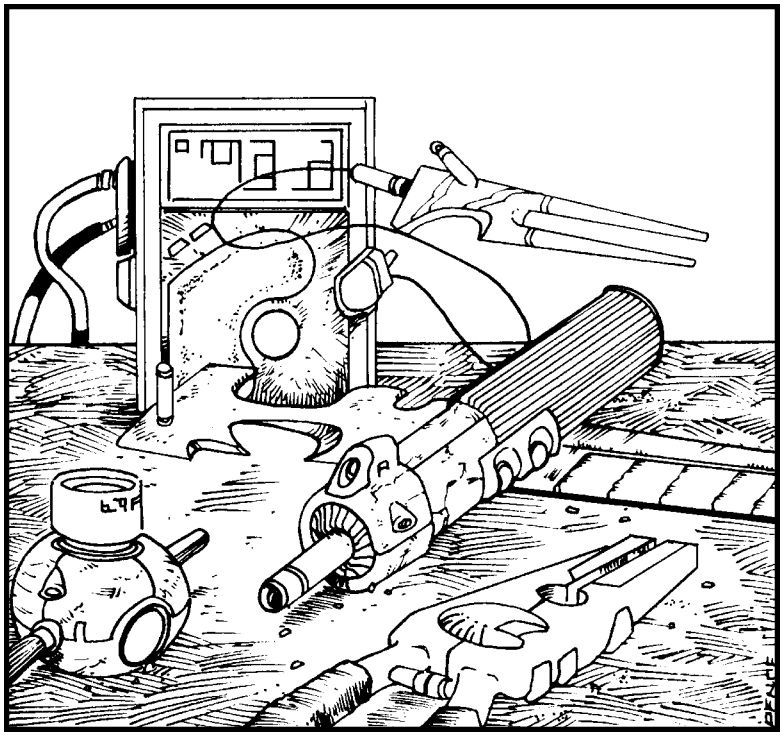
20.13 EVERYMAN SKILLS

All androids have four everyman skills, merely because they are androids. These skills are Computer Engineering, Computer Technology, Computer Crime, and Computer Tapping. Other skills can be taken as everyman as well, if it fits the creator's concept.

ANDROID EVERYMAN SKILLS TABLE RM-20.14

Number of Additional Skills	Point Cost
1-10 skills	1 point per skill
11-20 skills	2 points per skill
21-30 skills	3 points per skill

Example: *Gary feels that espionage androids should be good at Duping and Diplomacy as well as computer skills. He spends 2 points on additional everyman skills.*



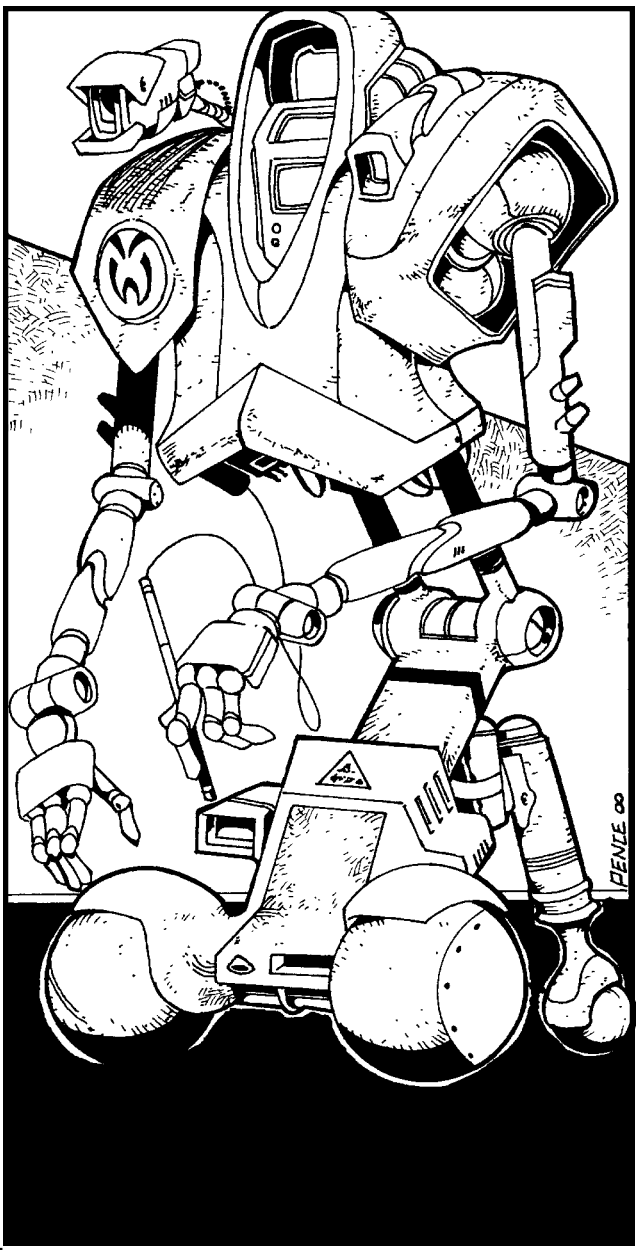
20.14 RESTRICTED SKILLS

Androids can be restricted in many different skills. A combat android might be restricted in Swimming. A pleasure android might be restricted in Tactics or martial arts skills. Select restricted skills and compare the number selected to the table below to determine the cost.

Example: *Gary feels that an espionage android must be well-rounded. He therefore selects no restricted skills, gaining no points.*

ANDROID RESTRICTED SKILLS TABLE RM-20.15

Number of Restricted Skills	Point Cost
1-5 skills	-2 points per skill (-¢0)
6-10 skills	-1 point per skill (-¢0)
11+ skills	0 points per skill (-¢0)



20.15 OPTIONS

Each android template has three types of options: inherent, standard, and custom.

There are many options which can be assigned to a droid's template. However, unlike biological characters, android characters cannot choose just any option. A great deal of engineering goes into the design of an android. Adding a device that the android wasn't designed to handle can often cause unforseen and catastrophic effects.

An android character automatically has the inherent options and his template's standard options. In addition, an android character may obtain the custom options included on his template—the options that are within the android's design parameters. The example templates in Appendix A-1 (p. 76) list the custom options for each template.

Inherent Options

Unless affected by certain flaws, all androids have the following inherent options. They are offshoots of the android's robotic nature, and though they might be self-evident, they are worth noting. See Appendix A-2 (p. 86) for a complete description of theses options.

- Ambidexterity
- Digital Memory
- Extended Vocal Range
- Math Processor
- Realtime Clock
- Self Sustenance
- Temperature Tolerance
- Text Processing

Standard Options

Standard options are automatically installed in every android of a given template, regardless of the wishes of the buyer. To choose a standard option when a template is created, the player (or GM) must pay the standard option cost.

The Android Option Table RM-20.16 lists the options, their costs, and their tech levels. See Appendix A-2 (p. 86) for a complete description of theses options.

Custom Options

Custom options are not automatically installed in an android; they must be purchased with talent points when a specific character using that template is created (see Section 21.0, p. 68). The template cost of a custom option reflects the cost for the added circuitry and support structure necessary to make this option a possible choice for future instances of the android template.

A custom option can only be purchased during character creation if it was purchased when the template was created. To choose a custom option when a template is created, the player (or GM) must pay the custom option cost. Custom options with a point cost of 0 ("low impact options") are considered chosen for all android templates, but the individual characters will still need to pay the standard point cost to purchase them.

The Android Option Table RM-20.16 lists the options, their costs, and their tech levels. See Appendix A-2 (p. 86) for a complete description of these options.

Example: *Gary begins to plan the options for his template. He wants to purchase the apparent biological option as a standard option for his template. This would cost 10 points, and all androids built of his template would automatically have this option. He also wants a combat computer for his android in the future, but he doesn't want it to be included in all androids using this template. So, he would only have to pay the custom cost of 2 points when he creates the template. If he does not, he will not be able to install a combat computer in any androids built with this template. When he creates his own android using this template, he would have to pay the standard cost (20 Talent Points) to install this option.*

If Gary later decides to install some assassin software, he would automatically be in luck! Since assassin software has a custom cost of 0, it is available for all androids. He would only need to come up with 17 talent points (and ¢17,000) to install it.

Example: *Gary sits down to sketch out the exact details of his android's options. He starts with the standard options. An espionage android needs to be able to pass as a biological. Therefore he takes the apparent biological option (10). He feels the android probably needs good martial arts skills, so he takes a martial arts subprocessor (25). He needs to be able to talk his way out of trouble, so he takes the pacification package (10) and three linguistic software options (15). He needs to be able to move fast and silently, so he takes the soft step (10) and speed package (20). The android's standard options total 90. He then outlines its custom options. He takes an advanced combat system (3), augmented suspension (1), audio package (1), biohydraulic joints (3), combat computer (2), communicator (1), high performance musculature (2), high performance reflexes (1), infrared vision (1), lo-lite vision (1), locking grip (1), navigational subprocessor (1), olfactory package (2), pharmaceutical reservoir (1), scanner option (1), targeting system (2), telescopic/microscopic option (2), ultrasonic hearing (1), and weapon (needle) (1). These custom options add up to 28 points. (Note that his android doesn't actually have any of these options, but he can purchase them later with Talent Points.) Finally, he gets his GM to approve three flaws: programmed duty (greater) (-15), to the nation or corporation that designed the android; ruthless (-10), as the android cannot hesitate to do what's necessary; and secret (greater) (-15), since being discovered as a spy is hazardous to one's health. These flaws add up to -40. This makes a grand total of 78 points for options.*

20.16 TOTALING THE POINTS

Finally, all the points are added together and compared to the chart below. This will determine how many talent points or background options the template receives.

Example: *So Gary totals his points. His point costs are as follows:*

Hits	*130*	*0 pts.*
Mind Pt. Development:	*0•0•0•0•0*	*0 pts.*
Operational Life	*20 years*	*5 pts.*
Resistance Rolls:		
Disease	*+0*	*0 pts.*
Fear	*+0*	*0 pts.*
Poison	*+0*	*0 pts.*
Psychic power	*+0*	*0 pts.*
Maintenance Period	*1 year*	*7 pts.*
Statistics:		
Agility	*50*	*0 pts.*
Constitution	*50*	*0 pts.*
Memory	*91*	*13 pts.*
Reasoning	*91*	*13 pts.*
Self Discipline	*77*	*4 pts.*
Empathy	*100*	*50 pts.*
Intuition	*105*	*100 pts.*
Presence	*87*	*8 pts.*
Quickness	*50*	*0 pts.*
Strength	*50*	*0 pts.*
Appearance	*50*	*0 pts.*
Cooling Capabilities	*+0*	*0 pts.*
Size	*1.8 meters*	*0 pts.*
Self Repair	*Normal*	*5 pts.*
Backup Period	*0 month*	*0 pts.*
Adolescent Skills	*80 ranks*	*45 pt.*
Everyman Skills	*2*	*2 pts.*
Restricted Skills	*0*	*0 pts.*
Standard Options:		
3 Linguistic Software options:		
Native Tongue	*S6/W8*	
Enemy Tongue	*S10/W10*	
Third Tongue	*S4/W6*	
Fourth Tongue	*S4/W6*	
Fifth Tongue	*S0/W6*	*15 pts.*
Negative Cost Options		*-40 pts.*
Other Standard Options		*75 pts.*
Custom Options		*28 pts.*
Total Points for Espionage Android:		*330*

Referring to Table RM-21.2 (p. 69™), we see a specific android using this template get no option points unless he takes some flaws. It is not recommended that the GM allow templates to be created on more than 350 points.

OPTIONS SUMMARY TABLE RM-20.16

Option	Standard Cost pts. (¢)	Custom Cost pts. (¢)	Tech Level
Advanced Combat System	30 (300k)	3 (30k)	20
Advanced Cooling System	10 (+¢100k)	1 (+¢10k)	17
Anosmia	-3 (-¢3k)	0	N/A
Anti-Glare Option	3 (+¢3k)	0	16
Apparent Biological	10 (+¢1M)	1 (+¢10k)	20
Armored Carapace, Resilient Polymer	15 (+¢15k)	0	16
Armored Carapace, Carbon Steel	30 (+¢30k)	0	15
Armored Carapace, Adv. Composite	60 (+¢60k)	0	19
Artificial Speech	-5 (-¢50)	0	N/A
Assassination Software	17 (+¢17k)	0	20
Augmented Suspension	5 (+¢50k)	1 (+¢1k)	16
Audio Package	10 (+¢100k)	1 (+¢1k)	16
Biohydraulic Joints	20 (+¢2,000k)	3 (+¢30k)	22
Bravery Add-On	10 (+¢10k)	0	20
Combat Computer	20 (+¢200k)	2 (+¢20k)	20
Combat Processing Software	7 (+¢7k)	0	20
Communicator, normal	5 (+¢5k)	1 (+¢1k)	14
Communicator, tachyon	5 (+¢500k)	1 (+¢1k)	21
Communicator, quantum	5 (+¢1,000k)	1 (+¢1k)	24
Complete Visual Field	15 (+¢15k)	2 (+¢2k)	20
Database, Basic	3 (+¢3k)	0	19
Database, Extensive	10 (+¢10k)	0	19
Deaf	-20 (-¢20k)	0	N/A
Distinctive Design, Minor	-5 (+¢0)	0	N/A
Distinctive Design, Major	-10 (+¢0)	0	N/A
Distinctive Design, Greater	-15 (+¢0)	0	N/A
Emotion Control Software	5 (+¢5k)	0	20
Enhanced Redundancy	15 (+¢1,500k)	2 (+¢200k)	21
Evasion Software	10 (+¢10k)	0	20
Extra Appendage	3 x number of limbs (+¢30k per limb)	1 per limb (+¢10k per limb)	16
Flight	30 (+¢300k)	15 (+¢15k)	17
Fugitive Restraint System	25 (+¢25k)	3 (+¢3k)	17
Hardened Knuckles	15 (+¢1,500)	0	13
High Performance Musculature	15 (+¢150k)	2 (+¢20k)	17
High Performance Reflexes	7 (+¢700k)	1 (+¢100k)	17
Huntsman Package	15 (+¢15k)	0	20
Inferior Cooling System	-10 (-¢10k)	0	N/A
Inferior Gyros	-20 (-¢20k)	0	N/A
Infrared Vision	5 (+¢5k)	1 (+¢1k)	16
Linguistic Software	5 (+¢5k)	0	17
Lo-Lite Vision	5 (+¢5k)	1 (+¢1k)	16
Locking Grip	7 (+¢7k)	1 (+¢1k)	16
Martial Arts Subprocessor	25 (+¢250k)	3 (+¢30k)	
Mechanical	-20 (-¢20k)	0	N/A
Monocular Construction	-15 (-¢5k)	0	N/A
Music Processing System	7 (+¢70k)	1 (+¢10k)	18
Navigational Subprocessor	5 (+¢50k)	1 (+¢10k)	18
No Fine Control	-15 (-¢15k)	0	N/A
Olfactory Package	15 (+150k)	2 (+20k)	21
Pacification Package	10 (+¢100k)	1 (+¢10k)	17
Pharmaceutical Reservoir	7 (+¢7k)	1 (+¢1k)	17

Option	Standard Cost pts. (¢)	Custom Cost pts. (¢)	Tech Level
Piloting Software	7 (+¢7k)	0	20
Plodding	-7 (-¢7k)	0	N/A
Predictable	-20 (-¢20k)	0	N/A
Prestidigitation Software	10 (+¢1k)	0	20
Programmed Foe	5 (+¢5k)	0	20
Radical Programming	-10 (+¢10k)	0	N/A
Scanner, Multiscanner	30 (+¢300k)	1 (+¢10k)	19
Scanner, Bioscanner	15 (+¢150k)	1 (+¢10k)	19
Scanner, Radscanner	15 (+¢150k)	1 (+¢10k)	19
Scanner, Chemscanner	15 (+¢150k)	1 (+¢10k)	19
Scanner, Medscanner	20 (+¢200k)	1 (+¢10k)	19
Scanner, Tactical Scanner	15 (+¢150k)	1 (+¢10k)	19
Scanner, Technical Scanner	15 (+¢150k)	1 (+¢10k)	20
Shield Aperture, Absorption	50 (+¢500k)	5 (+¢50k)	24
Shield Aperture, Barrier	100 (+¢1M)	10 (+¢100k)	24
Shield Aperture, Deflector	50 (+¢50k)	5 (+¢5k)	24
Shield Aperture, Velocity	50 (+¢50k)	5 (+¢5k)	24
Soft Step	10 (+¢100k)	1 (+¢10k)	17
Speed Package	20 (+¢200k)	3 (+¢30k)	16
Stat Upgrade, Minor (+3)	10 (+100k)	0	16
Stat Upgrade, Major (+5)	20 (+¢200k)	0	17
Stat Upgrade, Greater (+8)	30 (+¢300k)	0	18
Tactical Analysis Software	7 (+¢7k)	0	20
Targeting Software	10 (+¢1k)	0	20
Targeting System	10 (+¢100k)	2 (+¢20k)	16
Telescopic/Microscopic Option	2 x Class [Maximum of Class X] (+¢20k x Class)	2 (+20k)	16
The Three Laws	-30 (+¢10k)	0	N/A
Tooled Appendages	5 (+¢50k)	1 (+¢10k)	16
Ultrasonic Hearing	8 (+¢80k)	1 (+¢1k)	16
Weaponry —			
Needle	3 (+¢3k)	1 (+¢1k)	16
Dagger	5 (+¢5k)	1 (+¢1k)	16
Sword	10 (+¢10k)	1 (+¢1k)	17
Chainsaw	15 (+¢15k)	2 (+¢2k)	16
Semi-Automatic Firearm	10 + ME of weapon/2 (+¢10k + ¢500 x ME)	1 + 5% ME of weapon (+¢1k +¢50 x ME)	16
Fully-Automatic Firearm	15+ ME of weapon/2 (+¢15k + ¢500 x ME)	2 + 5% ME of weapon (+¢2k + ¢50 x ME)	16
Semi-Auto. Energy Weapon	20 + BE or LE of weapon (+¢20k + ¢1k x BE or LE)	2 + 10% BE or LE of weapon (+¢2k + ¢1k x BE or LE)	18
Fully-Auto. Energy Weapon	25 + BE or LE of weapon (+¢25k + ¢1k x BE or LE)	3+ 10% BE or LE of weapon (+¢3k + ¢100 x BE or LE)	18
Semi-Auto. Plasma Weapon	25 + PE of weapon (+¢25k + ¢1k x PE)	3 + 10% PE of weapon (+¢3k + ¢100 x PE)	18
Fully-Auto. Plasma Weapon	30 + PE of weapon (+¢30k + ¢1k x PE)	4+ 10% PE of weapon (+¢4k + ¢100 x BE or LE)	18
Sonic Stunner	10 + 5 x SS (+¢10k + ¢5k x SS)	1 + 50% SS (+¢1k + ¢500 x SS)	18
Weighted Swing	7 (+¢70k)	0	16
Wide Visual Field	10 (+¢100k)	1 (+¢10k)	19

Note: Remember, positive dollar values assume that the android is created at the minimum tech level for the feature. At subsequent tech levels, divide this value by 10. Negative dollar values are unaffected by tech level.

21.0 :: GENERATING AN ANDROID CHARACTER

Creating an android character is much the same as creating a normal character. Once a template has been created and selected, the process is almost identical to making a biological character. The two main differences are stat generation and the selection of options and flaws.

21.1 STAT GENERATION

Stat generation is remarkably simple. Androids do not generate stats. Their stats are determined by the android template. There is no variation in android stats.

21.2 SELECTING FLAWS

When background options are chosen during the character creation process, you may select any of the flaws (subject to GM approval) listed in the Android Flaw Table RM-21.1 (p. 69). See Appendix A-3 (p. 94) for a complete description of theses flaws.

These flaws typically involve problems which were either unintended, or which occurred after the android came off the assembly line. There are a few flaws, however, that can be factory options.

Since each flaw has a negative point value, you will receive additional option points to use as outlined in Section 21.3 below.

21.3 USING OPTION POINTS

When background options are chosen during the character creation process, you have a certain number of option points to use. Your available options points can be obtained by referring to the Android Option Points Table RM-21.2. Then you should increase this amount by subtracting the point cost of any flaws you selected (see Section 21.2).

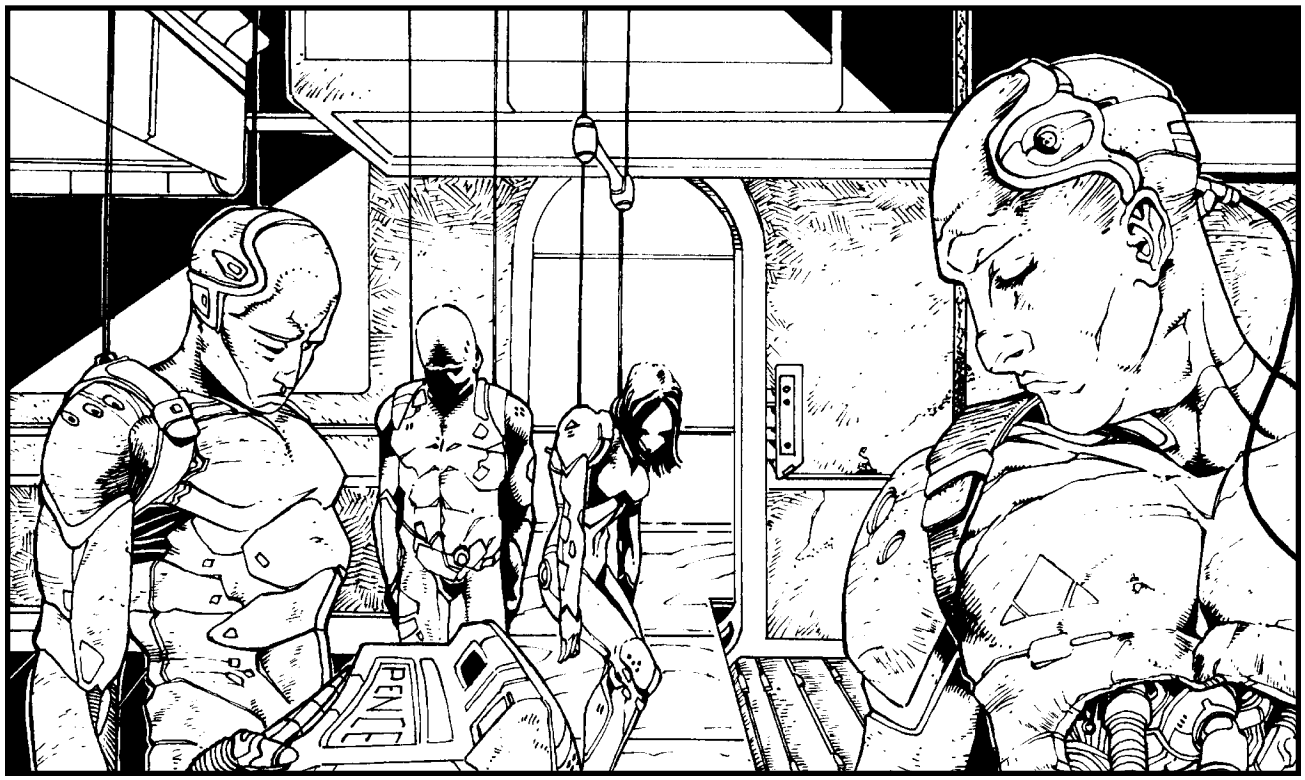
You may use these option points in one of three ways:

- Every 10 points you use gives you one normal background option to use for: special items, extra money, and special bonuses (see *SM* p. 40-41).
- Every 10 points you use gives you one roll on the Low Impact Option Table RM-21.3. This roll will give your android character the indicated option. Reroll if your character already has that option.
- You may use the points on any desired **custom** options from your character's template (see p. 76). At this point, you must use option points equal to the option's **standard cost.** (Remember that, in addition to the custom options purchased for the android's template, all options which have a custom cost of 0 are available.) The Android Option Table RM-20.16 (p. 66) lists the options, their costs, and their tech levels. See Appendix A-2 (p. 86) for a complete description of theses options.

Option: *Subject to GM approval, you may roll on the Android Flaw Table RM-21.1 to obtain a random flaw. For each flaw so taken, you may may use an additional 10 option points.*

21.4 STARTING (ADOLESCENCE) SKILL RANKS

The Android Starting (Adolescence) Rank Table RM-21.5 (see p. 70) provides the starting ranks for the sample android character templates provided in Appendix A-1, p. 76.



ANDROID FLAW TABLE RM-21.1

Roll	Option	Point Cost
01-02	Battlefield Confusion	-15
03-05	Blood ™Guilt	-10
06-08	Chivalrous	-10
09-12	Code of Conduct	-5
13-14	Cruel	-15
15-18	Compulsive Subroutine	-5
	Damaged Stat:	
19-21	Minor	-10
22	Major	-20
23	Greater	-30
24-26	Greedy	-10
	Intolerance:	
27-30	Minor	-5
31-33	Major	-10
34-36	Megalomaniacal	-10
37-39	Niggling Problems	-7
40-42	Old	-10
43-45	Overconfidence	-10
46-48	Paranoid	-10
49	Problem Solving Flaw	-20
	Programmed Duty:	
50-53	Minor	-5
54-56	Major	-10
57-58	Greater	-15
	Restrictive Programming:	
59-63	Lesser	-3
64-67	Minor	-5
68-70	Major	-10
71-72	Greater	-15
	Rival/NPC:	
73-76	Minor	-5
77-79	Major	-10
80	Greater	-20
	Rival/PC:	
81-83	Minor	-10
84-85	Major	-15
86	Greater	-25
87-89	Ruthless	-10
	Secret:	
90	Minor	-5
91	Major	-10
92	Greater	-15
93-96	Stubborn	-5
97	Temper	-10
98-100	Truth Algorithm	-5

ANDROID OPTION POINTS TABLE RM-21.2

Total Point Cost of Template	Option Points Available
-76 and Below	65
-75 – 25	60
26 – 75	55
76 – 100	50
101 – 125	45
126 – 150	40
151 – 175	35
176 – 200	30
201 – 225	25
226 – 250	20
251 – 275	15
276 – 300	10
301 – 325	5
326 – 350*	0

* — It is not recommended that more than 350 points be spent.

LOW IMPACT OPTION TABLE RM-21.3

Roll	Option	Point Cost
01-09	Anti-Glare Option	3
	Armored Carapace:	
10-13	Resilient Polymer Armor	15
14	Carbon Steel Armor	30
15	Advanced Composite Armor	60
16-17	Assassination Software	17
18-22	Bravery Add-On	10
23-29	Combat Processing Software	7
30-38	Database, Basic	3
39-43	Database, Extensive	10
44-50	Emotion Control Software	5
51-55	Evasion Software	10
56-59	Hardened Knuckles	15
60-62	Huntsman Package	15
63-68	Linguistic Software	5
69-75	Piloting Software	7
76	Prestidigitation Software	10
77-83	Programmed Foe	5
	Stat Upgrade:	
84-88	Minor	10
89	Major	20
90	Greater	30
91-94	Tactical Analysis Software	7
95-96	Targeting Software	10
97-100	Weighted Swing	7

ANDROID STARTING (ADOLESCENCE) RANK TABLE RM-21.4

	A-15 Combat Android	C91 Academic Android	E-63 EspionageUnit	IX-15 Technical Robot	MD-6 Medical Android	NAD-7 Naval Android	P-7 Pleasure Android	X-4 Battle Robot	Z-2 Labor Unit
Armor • Heavy skill category	2	0	0	0	0	0	0	0	0
Combat Armor skill	2	0	0	0	0	0	0	0	0
Powered Armor skill	2	0	0	0	0	0	0	0	0
Armor • Light skill category	1	0	1	0	0	0	1	0	0
Ballistic Cloth skill	1	0	1	0	0	0	0	0	0
Kinetic Armor skill	1	0	1	0	0	0	0	0	0
Soft Leather skill	0	0	0	0	0	0	1	0	0
Athletic • Brawn skill category	1	0	0	0	1	1	0	2	5
Athletic • Endurance skill category	1	0	0	0	1	1	0	1	5
Swimming Skill	1	0	0	0	0	0	0	0	0
Athletic • Gymnastic skill category	1	0	0	0	0	0	1	0	0
Climbing	1	0	0	0	0	0	0	0	0
Contortions	0	0	0	0	0	0	1	0	0
Awareness • Perceptions skill category	–	–	–	–	–	–	–	–	–
Alertness skill	6	2	10	2	2	2	2	10	0
Awareness • Searching skill category	1	0	5	0	0	0	0	2	0
Combat Maneuvers skill category	–	–	–	–	–	–	–	–	–
Alien Environments (Zero-G)	0	0	0	0	0	3	0	0	0
Communication skill category	0	0	2	0	2	0	1	0	0
Language skills *	0	0	8	0	20	0	4	0	0
Lore • Academic skill category	0	5	0	0	0	0	0	0	0
choice of skills	0	15	0	0	0	0	0	0	0
Lore • General skill category	0	0	2	0	0	0	0	0	0
Region skills	0	0	3	0	0	0	0	0	0
Culture skills	0	0	10	0	0	0	0	0	0
Lore • Technical skill category	0	0	0	0	0	2	0	0	0
Vehicle Lore skill	0	0	0	0	0	1	0	0	0
Influence skill category	0	0	0	0	0	0	4	0	0
Seduction skill	0	0	0	0	0	0	4	0	0
Martial Art Combat Maneuvers Skills **	4	0	0	0	0	0	0	0	0
Martial Arts • Strikes skill category	2	0	0	0	0	1	0	1	0
Martial Arts Strikes skill (or Rank 1)	2	0	0	0	0	1	0	1	0
Martial Arts • Sweeps skill category	2	0	0	0	0	1	0	0	0
Martial Arts Sweeps Skill (or Rank 1)	2	0	0	0	0	1	0	0	0

ANDROID STARTING (ADOLESCENCE) RANK TABLE RM-21.4

	A-15 Combat Android	C91 Academic Android	E-63 EspionageUnit	IX-15 Technical Robot	MD-6 Medical Android	NAD-7 Naval Android	P-7 Pleasure Android	X-4 Battle Robot	Z-2 Labor Unit
Outdoor • Environment skill category	2	0	0	0	0	0	0	0	0
Scientific/Analytical group *	0	10	5	10	30	5	5	0	0
Scientific skills *	0	20	10	20	15	10	10	0	0
Subterfuge • Stealth skill category	3	0	2	0	0	0	0	0	0
Hiding skill	3	0	2	0	0	0	0	0	0
Stalking skill	3	0	2	0	0	0	0	0	0
Tech/Trade • General skill category	2	5	2	4	0	0	2	2	5
Operating Equipment skill	0	0	0	0	0	0	0	0	5
Tech/Trade • Professional skill category	–	–	–	–	–	–	–	–	–
Professional skills *	2	5	2	2	0	1	2	5	0
Ship Crewmember skill	0	0	0	0	0	3	0	0	0
Tech/Trade • Vocational skill category	–	–	–	–	–	–	–	–	–
Vocational skills *	2	5	2	0	2	0	2	5	0
Two-Handed Energy skill category	2	0	0	0	0	1	0	4	0
Assault Blaster skill	2	0	0	0	0	1	0	0	0
Blaster Carbine skill	0	0	0	0	0	0	0	4	0
Laser Carbine skill	0	0	0	0	0	0	0	4	0
Hobby Ranks †	8	15	10	15	10	12	15	12	15
Option Points	15	30	5	20	15	65	50	15	65

* — Subject to special restrictions and GM restrictions, these ranks may be allocated as the player wishes.

** — If *Rolemaster's Martial Arts Companion* is not being used, then divide these points as evenly as possible among other Martial arts skill.

† — These hobby ranks should be used to represent the android's programming. They should therefore be approved by the GM before play.

22.0 :: LIFE AS AN ANDROID

An android's life is not entirely unlike a biological organism's. Still, there are several important differences that warrant coverage.

Maintenance

Androids do not need to eat. They do not need to sleep. All that they require is routine maintenance, as determined by the android's maintenance schedule. The cost for this is ¢1,000 per month.

Every maintenance period, the android must make a high open-ended roll on the Android Malfunction Chart RM-22.1. The results of the roll affects the android at a random moment during his maintenance period, as determined by the GM.

Repair

Androids get damaged. So what does it take to repair an android?

Naturally, if the android is capable of self healing, then all it needs are a minimum of raw materials. The cost for this is negligible, and the method of feeding depends on the android's design.

If the android isn't capable of healing, then it must find a repair station. The cost of repairs on an android is prohibitively expensive, amounting to ¢100 per hit repaired. In addition, critical hits cost ¢1,000 for an A critical, ¢2,000 for a B, etc. This is true even for criticals which do not have any effect. The damage is there, it's just primarily cosmetic.

Backups

Backups are the lifeline of an android. Unfortunately, backing up the sum total of a sapient intellect is no mean feat. In more direct language, we're talking about a hell of a lot code.

Each option on the backup schedule has a boot chance. This is the chance of the backup being viable. These backups are somewhat volatile. Whenever a backup is restored, there is a chance it will not be viable. Roll a d100. If the result is under the boot chance, the backup boots successfully. If not, then the backup was not viable. Once a backup has been determined to be not viable, no further attempts can be made to restore it.

It is highly suggested that a GM not allow players to use this feature to clone their characters. This may mean making a ruling as to the legality of the act, or merely stating that an android would go insane to learn that his mind had been copied. One play-tester used this as an excuse for a greater rival. His backup had been restored while he was missing in action.

Perception

Androids are crafted to perceive the universe in much the same way as humans. Most androids have at least rudimentary mechanical analogs to the four primary senses.

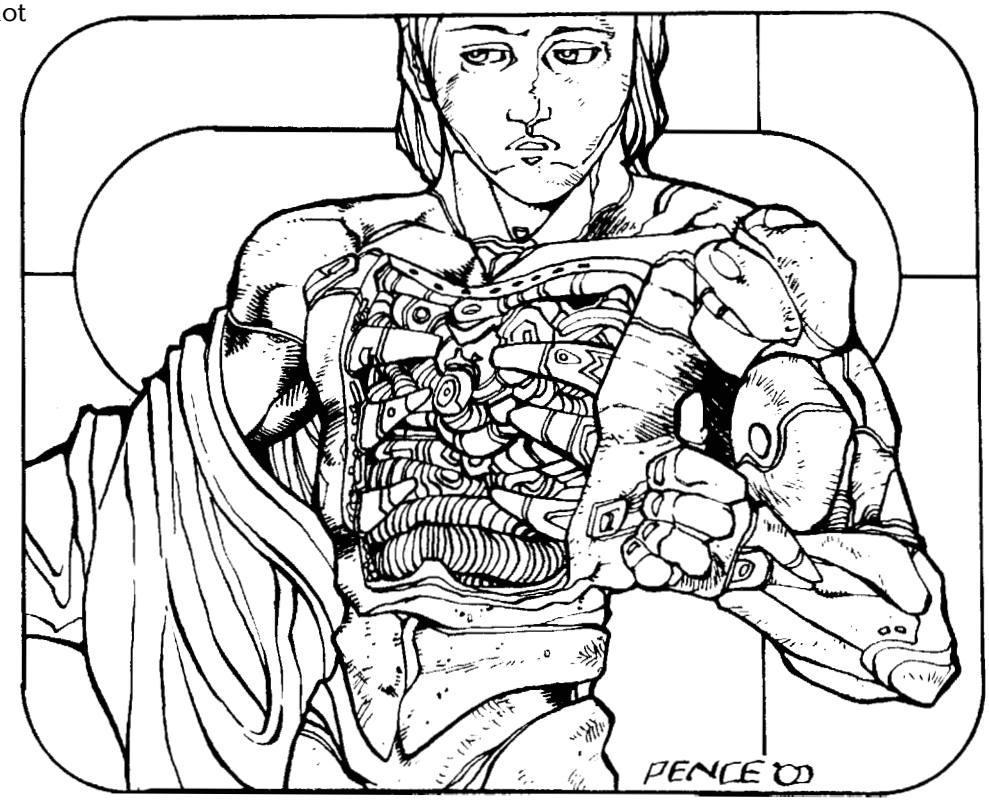
Sight is the most common android sense. Very few androids are designed without, at the very least, sight. This is, perhaps, a sentimentality on the part of the biologicals which create them. There may be better ways to perceive, but no biological can build a blind android without feeling they have created a cripple.

Hearing is the next most common sense. Almost every android is built able to perceive sound. Again, this is perhaps sentimentality on the part of the android's creators, but it is rare to see a deaf android.

Smell is less common. Many androids, however, are built with a sense of smell. Smell is generally used for spore analysis, and nothing else. Only the most advanced android can detect a "pleasant" or "unpleasant" odor. Typically, the more something smells, the more pleased an android is, as its perception data is more abundant.

Touch varies greatly from android to android. Most androids have at least the most rudimentary sense of touch, in that they can detect damage and analyze system failures. More advanced androids have more advanced sense of touch. Apparent biologicals can feel all things nearly the same way biologicals do.

Taste is sldom engineered into robots, since they seldom have the need. Some servant robots have taste analyzers, useful for detecting poisons or unde-



sirable contaminants intheir master's food. Like smell, most robots with this sense do not distinguish between pleasant and unpleasant tastes, preferring stronger tastes that provide more input.

Other methods of sensing are available to androids, and provide them with a range of perception that most biologicals cannot fathom. Radiation detectors, communications arrays, scanners, and a host of other devices can be combined to give an android remarkable powers of perception.

ANDROID MALFUNCTION TABLE RM-22.1

Roll	Result
01-25	Nothing at all happens. You work wonderfully.
26-50	You seem to have developed a slight calibration problem in your hand-eye coordination. It will take ten minutes and the proper tools to fix. -5 to all physical actions.
51-60	You've developed a slight sensory glitch (scan lines, audio grounding buzz, etc.). This makes you -10 to all perception or scanning checks with one randomly chosen sensory device, until you receive ten minutes of repair.
61-70	You have developed a slight hydraulic malfunction. You are -10 to any actions with a randomly chosen limb until ten minutes in a workshop.
UM 66	With a shuddering lurch and the sound of ripping alloys, your gyros burst from their mounts, taking down all motive ability on one, randomly chosen side. The other side can still move, but balance is impossible.
71-75	You develop an unbalanced gyro. You are -10 to all actions until you receive a half hour of work in a small workshop.
76-80	You develop a reasoning bug. You are -10 to any mental actions until can take six hours to sift through you reasoning algorithms.
81-85	With a sizzling sound, one random sense or scanner goes offline. This will take an hour and a good workshop to fix.
86-90	One hydraulic system develops a leak, taking a randomly chose limb offline until the android can spend one hour in a good workshop.
91-95	One gyro goes offline. The android is thrown off-balance and immediately falls over and is -50 to all actions until he spends one hour in a good workshop.
96-100	The android's brain, while trying to delete a modified length of code, begins a cascade deletion. Ten seconds later, the neural net is clean. Hope you've got a good backup.
UM 100	Hey, that system's been bothering you since your last maintenance. It looks like it finally seated in.
101-150	Your sensory processor goes offline with a wisp of smoke. You can now only process one sense at a time. Trying to integrate more than one sense causes complete sensory paralysis. This will take two hours, ¢1,000, and a good lab to fix.
151-175	With a sudden, quivering vibration, all joints below your waist freeze solid. It will take eight hours, ¢3,000, and a good lab to fix.
176-200	A lubrication malfunction causes all of your gyros to seize at once. You can no longer balance. I'm afraid you'll have to be satisfied with crawling. Hope you have ten hours, ¢10,000, and a good lab.
201-250	Massive motivational malfunction. You are incapable of any motion until you spend 24 hours in a good lad. The parts will cost ¢30,000.
251+	Ground fault. With a massive burst of sparks, your brain melts into a lump of silicon. Hope you have a good backup and a wealthy owner (¢50,000).

23.0 :: COMPUTERS

"The 9000 series has a perfect operational record."
—HAL, 2001

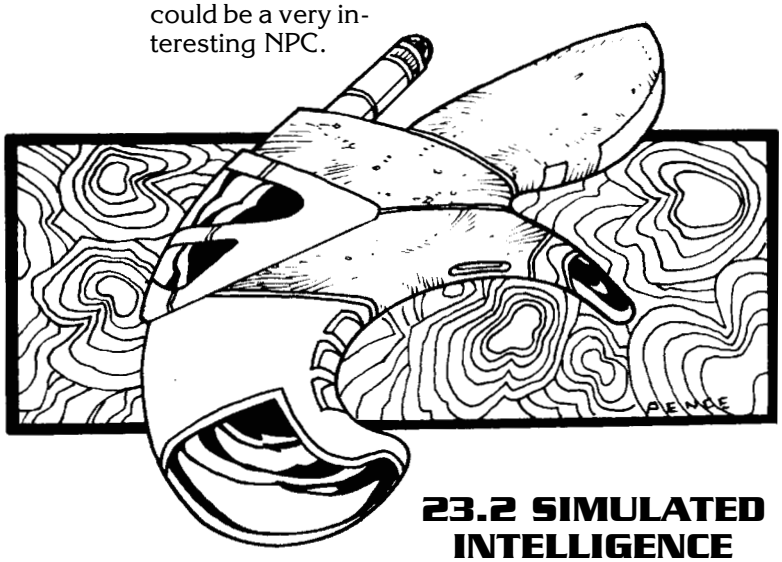
Computers are an important part of an SF game. They can be either prominent, like HAL in 2001, or unobtrusive, like most computers in Star Wars. They are very necessary, however, and deserve treatment.

23.1 ARTIFICIAL INTELLIGENCE

Artificially intelligent computers should be created just like androids. The only difference is the base cost, which is ¢50,000. Naturally, these computers need not take physical stats. They get no points or cost reduction from taking poor physical stats either.

Maintenance on an AI is rarely required. The period should be measured in years, not months. The cost is ¢1,000 per year. They have few (if any) moving parts.

Other than that, there is little to say. They are probably not handy player characters, but an AI could be a very interesting NPC.



23.2 SIMULATED INTELLIGENCE

SIs (Simulated Intelligence) are just dumb brains. They are very sophisticated computers, but they are not truly sapient. They have a base bonus to all skills. A simulated intelligence cannot attempt a skill that it does not have. All skills that an SI "knows" are purchased as programs with specific bonuses.

Purchasing the SI

The first step is to buy the computer itself. This includes the physical machine and basic intelligence software. The cost is based on the bonus of the computer.

The bonus is the overall intelligence of the machine. This is added to programs that the SI runs to determine its skill bonuses.

If a single stat bonus is required, for initiative, for example, divide the bonus by three and round up.

To calculate cost, merely compare the bonus of the SI to the chart below. Then multiply the cost by the cost modifier listed for the computer's tech level.

Note that each bonus has a tech level associated with it as well. This is the minimum tech level in which a computer of this quality can be purchased.

SIMULATED INTELLIGENCE COST TABLE RM-23.1

Total Bonus	Tech Level	Cost (TL 21)
-60	17	¢500
-57	17	¢1,000
-54	17	¢1,500
-51	17	¢2,000
-48	17	¢2,500
-45	17	¢3,000
-42	17	¢3,500
-39	17	¢4,000
-36	17	¢4,500
-33	17	¢5,000
-30	17	¢5,500
-27	17	¢6,000
-24	17	¢6,500
-21	17	¢7,000
-18	18	¢7,500
-15	18	¢8,000
-12	18	¢8,500
-9	18	¢9,000
-6	18	¢9,500
-3	18	¢10,000
+0	18	¢11,000
+3	18	¢12,000
+6	18	¢13,000
+9	18	¢14,000
+12	18	¢15,000
+15	18	¢16,000
+18	18	¢17,000
+21	19	¢18,000
+24	19	¢19,000
+27	19	¢20,000
+30	19	¢21,000
+33	19	¢22,000
+36	19	¢23,000
+39	19	¢24,000
+42	19	¢25,000
+45	19	¢26,000
+48	19	¢27,000
+51	19	¢28,000
+54	19	¢29,000
+57	19	¢30,000
+60	19	¢35,000

Tech Level	Cost Multiplier
17	x50
18	x20
19	x10
20	x2
21	x1
22+	x.5

A Note on Simulated Intelligence

Situations where the SI is given a task that has only one answer should probably not be allowed to return inaccurate information. Computers don't typically work that way. Asking a computer, "What year did Napoleon die?" should not return an answer like "2068 A.D." In cases where a static maneuver indicates that inaccurate information is returned, the SI should simply fail to return any useful data.

Programs

Programs have evolved into much more sophisticated creatures. They are no longer simply business or task oriented work aids, but rather the skills of the simulated intelligence. For an SI, any skill is determined by the following equation:

Skill = SI Bonus
+ Category Bonus
(if skill is not using the combined progression)
+ Skill Bonus

No skill may be attempted without a program.

SIs are not capable of creativity, so purchasing a skill in writing or art would only allow them to accurately portray things they'd experienced. It would not allow them to paint a painting or write a novel.

Programs work just like normal skills. There are three types. They are as follows:

Standard Skill Programs — These programs represent standard skills. They require the appropriate Standard Category Program to run. Any skill with a standard skill progression can be simulated by a standard skill program.

Standard Category Programs — These programs represent standard categories. If the category has a skill progression, then a standard category program needs to be purchased. If the category does not have a standard progression, or if all the skills that the SI will use have the combined progression, then this is not required.

Combined Skill Programs — These programs represent skills that use the combined skill progression, or skills that use a special skill progression. All the category info is already encapsulated in this program, so no standard category program is required.

Note that a combined skill program is twice as expensive as a standard skill or category program. This is because all the category information is contained within the program.

A Note on Flavor

It is stretching reason a bit to assume that these program names would so accurately reflect Spacemaster mechanics. A GM should feel free to change the names a bit. For example, in the Privateers universe, these program types are called System Programs (Standard Categories), Implementation Programs (Standard Skills), and Specialization Programs (Combined Progression).

PROGRAM COST TABLE RM-23.2

Standard Skill	Standard Category	Combined Skill*	Cost
+3	+2	+5	¢50
+6	+4	+10	¢100
+9	+6	+15	¢150
+12	+8	+20	¢200
+15	+10	+25	¢250
+18	+12	+30	¢300
+21	+14	+35	¢350
+24	+16	+40	¢400
+27	+18	+45	¢450
+30	+20	+50	¢500
+32	+21	+53	¢550
+34	+22	+56	¢600
+36	+23	+59	¢650
+38	+24	+62	¢700
+40	+25	+65	¢750
+42	+26	+68	¢800
+44	+27	+71	¢850
+46	+28	+74	¢900
+48	+29	+77	¢950
+50	+30	+80	¢1,000
+51	+30.5	+81.5	¢1,050
+52	+31	+83	¢1,100
+53	+31.5	+84.5	¢1,150
+54	+32	+86	¢1,200
+55	+32.5	+87.5	¢1,250
+56	+33	+89	¢1,300
+57	+33.5	+90.5	¢1,350
+58	+34	+92	¢1,400
+59	+34.5	+93.5	¢1,450
+60	+35	+95	¢1,500
+60.5	+35	+95.5	¢1,550
+61	+35	+96	¢1,600
+61.5	+35	+96.5	¢1,650
+62	+35	+97	¢1,700
+62.5	+35	+97.5	¢1,750
+63	+35	+98	¢1,800
+63.5	+35	+98.5	¢1,850
+64	+35	+99	¢1,900
+64.5	+35	+99.5	¢1,950
+65	+35	+100	¢2,000
+65.5	+35	+100.5	¢2,050
+66	+35	+101	¢2,100
+66.5	+35	+101.5	¢2,150
+67	+35	+102	¢2,200
+67.5	+35	+102.5	¢2,250
+68	+35	+103	¢2,300
+68.5	+35	+103.5	¢2,350
+69	+35	+104	¢2,400
+69.5	+35	+104.5	¢2,450
+70	+35	+105	¢2,500

* — Combined Skill Programs cost twice as much.

PART V
THE APPENDICES

Machina inproba!
— Unknown Roman

These appendices contain reference material that the GM and players may find useful during play.

- Appendix A-1 provides sample android templates.
- Appendix A-2 provides detailed descriptions of the android options.
- Appendix A-3 provides detailed descriptions of the android flaws.
- Appendix A-4 provides some optional rules.
- Appendix A-5 provides 9 new attack tables.
- Appendix A-6 provides 15 new critical tables.

A-1.0 :: ANDROID TEMPLATES

These templates (see Section 20.0, p. 76) are pregenerated for use in SF games. With the exception of the P-7 Pleasure Android, every one of them exists in the Privateers universe (hence the use of the Privateers credit symbol instead of a dollar sign). The descriptions of these droids assume they are from this universe, but the GM should feel free to alter these descriptions as needed to fit in his own game.

Android templates are much like races. They are modeled after races for ease of use. As with published races, published androids are slightly more powerful than those that can be created using the android rules in Section 20.0.

Template Descriptions

These are short descriptions of each template. These give a general idea of the purpose and general use of the model.

A-15 Combat Android: This model is a humanoid killing machine. It is the ugliest, nastiest opponent you never wanted to face on the battelfield. Many soldiers who survived the wars need to undergo extensive therapy to rid themselves of the nightmares caused by these machines. Needless to say, they are only used by the military, and are restricted from interacting with the civilian population. With a suite of standard options that include a targeting system, martial arts subprocessor, combat computer, and combat processing software, this machine is more than capable of living up to its deadly reputation.

C-91 Academic Android: The academic android is the perfect synthesis of the information storage capacities of a computer and the human interaction involved in a traditional classroom environment. Although a few humans stillexcel in the more creative fields of education, the academic android has come to dominate the acedemic profession. Most of these models possess the apparant biological option, to better emulate and connect with their students.

E-63 Espionage and Infiltration Unit: The E-63 is a fearsome intruder. Easily capable of infiltrating some of the most secure areas, it is a deadly assassin. These androids always have the apparant biological option, and they are often designed to perfectly mimic a selected individual, leading to another popular term for these robots: dopplegangers.

IX-15 Technical Repair Robot: The IX-15 is an all-purpose repair robot. It is commonly used in shipyards and on space stations, where it can engage in external repairs and maintenance with little concern about its environment or working conditions. A strong biological labor union prevents them from replacing millions of blue-collar workers, but these robots can still be found in almost every construction or industrial site in the galaxy.

MD-6 Medical Android: The MD-6 medical android was originally developed as an assistant to a biological doctor, but their abilities soon surpassed their design, and their perfect recall madethem efficient physicians. They fare less well as psychologists, however, and biological doctors still dominate the medical profession. When you need a reliable physician on in hostile conditions on a frontier world, a medical android is a good choice.

NAD-7 Naval Android: With life support and consumables at a premium on space vessels, naval androids fill a perfect role. They allow the biological crew to sleep while they perform the regular ship duties, thus the vessel can operate without maintaining life support.

P-7 Pleasure Android: As soon as the apparant biological option was invented for androids, some "enterprising" souls were sure to put it to some rather creative uses. The pleasure droid is prohibited in almost all societies, yet it is inevitably present in almost all societies. There are always a few disreputable individuals who are quick to see a profit in a completely obedient simulacrum of someone's dream date.

X-4 Main Line Battle Robot: A robot tank. The main line battle robot is a fearsome, unstoppable juggernaut. Naturally, they are strictly controlled by the military or government that produces them. A rogue battle robot is not something that most leaders wish to contemplate.

Z-2 Labor Unit: Big, strong, and stupid, the Z-2 labor unit is perfectly designed to fulfill whatever drudgery its owner desires to avoid. Labor units are perfect for home maintenance or simple, monotonous tasks. They are often used as personal servants or for cheap labor. They are capable of operating for long periods without rest or repair, and are the quintessential robot laborer.

A-1.1 A-15 COMBAT ANDROID

This model was designed for use as a supplement to standard infantry. It is humanoid in appearance, with two arms and two legs.

Attributes

Stat	Value
Agility	101
Constitution	91
Memory	23
Reasoning	23
Self Discipline	87
Empathy	50
Intuition	50
Presence	50
Quickness	93
Strength	95
Appearance	1

RR Type	Modification
Poison	+0
Disease	+0
Fear	+0
Psychic Power	+0

Attribute	Value
Hits	200
Mind Point Dev. Progression *	0•4•3•2•1
Maintenance Period	6 Weeks
Self Repair	0.9 times
Backup Period	1 Month
Price Tag	¢349,999

* — Use this progression only in campaigns where androids may possess psychic powers.

Physical Characteristics

Build: Tall and built like a weight lifter, the combat android weighs 150 kg.

Endurance:
Tremendous: +30 to exhaustion points.

Height: 200 cm.

Operational Life: 10 years.

Resistance: No special resistances

Standard Options: Anti-Glare, Bravery Add-On, Combat Computer, Combat Processing Software, Communicator, Hardened Knuckles, Lo-Lite Vision, Martial Arts Subprocessor, Tactical Analysis Software, Targeting System.

Restrictions and Design Flaws: Anosmia, Artificial Speech, Distinctive Design (Greater).

Other Factors

Languages: *Starting Languages:* InSpecCom (S6/W8), Hazalas (S0/W5). *Allowed Adolescent Development:* None.

Professions: Combat androids are generally Explorers, Soldiers, or Recons.

Training Packages: Combat androids generally take military training packages.

Special Skills: *Everyman:* Boxing, Tackling; *Restricted:* None.

Custom Options

Roll	Option	Point Cost
01	Advanced Combat System	30
02-04	Advanced Cooling System	10
	Armored Carapace:	
03-05	Resilient Polymer Armor	15
06	Carbon Steel Armor	30
07	Advanced Composite Armor	60
08-09	Assassination Software	17
10-13	Augmented Suspension	5
14-16	Audio Package	10
17-18	Biohydraulic Joints	20
19-23	Database, Basic	3
24-26	Database, Extensive	10
27-30	Emotion Control Software	5
31-33	Enhanced Redundancy	15
34-36	Evasion Software	10
37-39	Hardened Knuckles	15
40-41	Huntsman Package	15
42-43	High Performance Musculature	15
44-46	High Performance Reflexes	7
47-49	Infrared Vision	5
50-52	Linguistic Software	5
53-55	Locking Grip	7
56-58	Navigational Subprocessor	5
59	Piloting Software	7
60-62	Prestidigitation Software	10
63-65	Programmed Foe	5
	Scanner Option:	
66-68	Multiscanner	15
69-71	Medscanner	15
72-74	Tactical Scanner	15
75-77	Technical Scanner	15
	Shield Aperture:	
78	Absorption Shield	50
79	Barrier Shield	100
80	Deflector Shield	50
81	Velocity Shield	50
82-83	Soft Step	10
84-86	Speed Package	20
	Stat Upgrade:	
87-89	Minor	10
90-91	Major	20
92	Greater	30
93-95	Targeting Software	10
96-97	Telescopic/Microscopic Option	varies
98-100	Ultrasonic Hearing	8

A-1.2
C-91 ACADEMIC ANDROID

This android was designed as a teacher, researcher, and scientist. It is more than capable of learning, storing, and processing vast amounts of data. When this android is not built with the apparent biological option, it sports a generic android chassis. This model is not the most efficient android; it has an inferior gyro and cooling system.

Attributes

Stat	Value
Agility	50
Constitution	28
Memory	101
Reasoning	101
Self Discipline	50
Empathy	13
Intuition	101
Presence	28
Quickness	10
Strength	10
Appearance	50

RR Type	Modification
Poison	+0
Disease	+0
Fear	+0
Psychic Power	+0

Attribute	Value
Hits	100
Mind Point Dev. Progression *	0•6•5•3•2
Maintenance Period	16 Years
Self Repair	3 times
Backup Period	1 Month
Price Tag	¢199,999

* — Use this progression only in campaigns where androids may possess psychic powers.

Physical Characteristics

Build: Average height and build: 80 kg.

Endurance: Average.

Height: 185 cm.

Operational Life: 640 years.

Resistance: No special resistances

Standard Options: Extensive Database (in Lore or Scientific skill or area of specialty), Linguistic Software.

Restrictions and Design Flaws: Inferior Cooling System, Inferior Gyro, Predictable, The Three Laws.

Other Factors

Languages: *Starting Languages:* InSpecCom (S4/W8), Second Language (S0/W5), Third Language (S0/W5), Fourth Language (S0/W5), Fifth Language (S0/W5).
Allowed Adolescent Development: Any.

Professions: Academic androids are generally Academics, Scientists, or Technicians.

Training Packages: Academic androids generally take training packages appropriate to their area of specialty.

Special Skills: *Everyman:* Choice of 10 Lore or Scientific/Analytical skills appropriate to area of specialty; *Restricted:* None.

Custom Options

Roll	Option	Point Cost
01-05	Anti-Glare Option	3
06-08	Apparent Biological	10
	Armored Carapace:	
09-10	Resilient Polymer Armor	15
11	Carbon Steel Armor	30
12	Advanced Composite Armor	60
13-15	Audio Package	10
16-17	Assassination Software	17
18-20	Bravery Add-On	10
21-23	Combat Processing Software	7
24-27	Communicator	5
28-32	Database, Basic	3
33-35	Database, Extensive	10
36-39	Emotion Control Software	5
40-42	Evasion Software	10
43-44	Hardened Knuckles	15
45-47	Huntsman Package	15
48-51	Linguistic Software	5
52-55	Music Processing System	7
56-59	Navigational Subprocessor	5
60-62	Olfactory Package	15
63-65	Pacification Package	10
66-68	Piloting Software	7
69-71	Prestidigitation Software	10
72-75	Programmed Foe	5
	Scanner Option:	
76-77	Multiscanner	15
78-79	Medscanner	15
80-81	Tactical Scanner	15
82-83	Technical Scanner	15
84-86	Soft Step	10
	Stat Upgrade:	
87-89	Minor	10
90-91	Major	20
92	Greater	30
93	Tactical Analysis Software	7
94	Targeting Software	10
95-96	Targeting System	10
97	Telescopic/Microscopic Option	Varies
98-99	Ultrasonic Hearing	8
100	Weighted Swing	7

A-1.3 E-63 ESPIONAGE AND INFILTRATION UNIT

The E-63 is a clever and insidious android. It can blend into nearly any culture with relative ease. Built and designed to operate for extended periods of time behind enemy lines, the E-63 is the perfect spy. It is clever, resourceful, and above all, expendable.

Attributes

Stat	Value
Agility	50
Constitution	50
Memory	91
Reasoning	91
Self Discipline	77
Empathy	100
Intuition	105
Presence	87
Quickness	50
Strength	50
Appearance	50

RR Type	Modification
Poison	+0
Disease	+0
Fear	+0
Psychic Power	+0

Attribute	Value
Hits	130
Mind Point Dev. Progression *	0•7•6•5•4
Maintenance Period	1 Year
Self Repair	1 times
Backup Period	1 Month
Price Tag	¢349,999

* — Use this progression only in campaigns where androids may possess psychic powers.

Physical Characteristics

Build: These droids are carefully designed to resemble the physical characteristics of the race or person they are designed to infiltrate. Typically, they average around 78 kg.

Endurance:
Tremendous: +30 to exhaustion points.

Height: 180

Operational Life: 20 years.

Resistance: No special resistances

Standard Options: Apparent Biological, Martial Arts Subprocessor, Pacification Package, Soft Step, Speed Package.

Restrictions and Design Flaws: None.

Other Factors

Languages: *Starting Languages:*
InSpecCom (S6/W8), Hazalas (S10/W10), Third Language (S0/W6), Fourth Language (S0/W6), Fifth Language (S0/W6).
Allowed Adolescent Development: Any.

Professions: Espionage droids are generally Soldiers, Recons, or Criminals.

Training Packages: Espionage droids generally take intelligence training packages.

Special Skills: *Everyman:* Duping and Diplomacy; *Restricted:* None.

Custom Options

Roll	Option	Point Cost
01	Advanced Combat System	30
02-04	Anti-Glare Option	3
05-07	Augmented Suspension	5
08-10	Audio Package	10
11-12	Assassination Software	17
13-14	Bio-Hydraulic Joints	20
15-17	Bravery Add-On	10
18-19	Combat Computer	20
20-22	Combat Processing Software	7
23-25	Communicator	5
26-28	Database, Basic	3
29-31	Database, Extensive	10
32-34	Emotion Control Software	5
35-37	Evasion Software	10
38-40	Hardened Knuckles	15
41-42	High Performance Musculature	15
43-45	High Performance Reflexes	7
46-47	Huntsman Package	15
48-50	Linguistic Software	5
51-53	Lo-Lite Vision	5
54-56	Locking Grip	7
57-59	Navigational Subprocessor	5
60-61	Olfactory Package	15
62-64	Pharmaceutical Reservoir	7
65-67	Piloting Software	7
68-70	Prestidigitation Software	10
71-73	Programmed Foe	5
	Scanner Option:	
74-75	Multiscanner	15
76-77	Medscanner	15
78-79	Tactical Scanner	15
80-81	Technical Scanner	15
	Stat Upgrade:	
82-83	Minor	10
84	Major	20
85	Greater	30
86-88	Tactical Analysis Software	7
89-91	Targeting System	10
92-94	Targeting Software	10
95	Telescopic Option	varies
96	Ultrasonic Hearing	8
97-99	Weapon (Needle)	3
100	Weighted Swing	7

A-1.4 IX-15 TECHNICAL REPAIR ROBOT

The IX-15 is an all-purpose repair android. About a meter tall with retractable treads, this unit's primary motive force is an antigravity generator. With a technical scanner, six arms equipped with tools, biohydraulic joints, and a database of circuit diagrams, the IX-15 is capable of any repair task thrown at it.

Attributes

Stat	Value	Stat	Value
Agility	100	Empathy	10
Constitution	10	Intuition	100
Memory	101	Presence	28
Reasoning	101	Quickness	23
Self Discipline	50	Strength	95
Appearance	50		

RR Type	Modification
Poison	+0
Disease	+0
Fear	+0
Psychic Power	+0

Attribute	Value
Hits	100
Mind Point Dev. Progression *	0•3•2•1•1
Maintenance Period	3 Months
Self Repair	0.9 times
Backup Period	1 Month
Price Tag	¢799,999

* — Use this progression only in campaigns where androids may possess psychic powers.

Physical Characteristics

Build: Stocky and dense. Weighs 53 kg.

Endurance: Average.

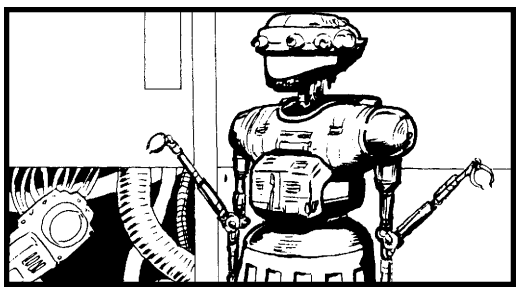
Height: 82 cm, not including arms.

Operational Life: 20 years.

Resistance: No special resistances

Standard Options: Anti-Glare, Bio-Hydraulic Joints, 6 Arms (total), Flight, Telescopic/Microscopic Vision (Class V), Technical Scanner, Tooled Appendages.

Restrictions and Design Flaws: Anosmia, Artificial Speech, Distinctive Design (Greater), Inferior Cooling System, Mechanical, Monocular Construction, Plodding, Predictable, The Three Laws.



Other Factors

Languages:
Starting Languages: InSpecCom (S6/W8).
Allowed Adolescent Development: Any.

Professions: Technical repair robots are always Technicians.

Training Packages: Technical repair robots generally take technical training packages.

Special Skills: *Everyman:* All Scientific/Analytical • Technical skills; *Restricted:* Swimming, All Athletic • Gymnastic skill except for Flying/Gliding.

Custom Options

Roll	Option	Point Cost
01-05	Anti-Glare Option	3
	Armored Carapace:	
06-09	Resilient Polymer Armor	15
10	Carbon Steel Armor	30
11	Advanced Composite Armor	60
12	Assassination Software	17
13-16	Audio Package	10
17-20	Bravery Add-On	10
21-24	Combat Processing Software	7
25-29	Communicator	5
30-34	Database, Basic	3
35-38	Database, Extensive	10
39-42	Emotion Control Software	5
43	Evasion Software	10
44	Hardened Knuckles	15
45	Huntsman Package	15
46-50	Infra-Red Vision	5
51	Linguistic Software	5
52-55	Lo-Lite Vision	6
56-60	Navigational Subprocessor	5
61-64	Piloting Software	7
65	Prestidigitation Software	10
66	Programmed Foe	5
	Scanner Option:	
67-70	Multiscanner	15
71	Medscanner	15
72	Tactical Scanner	15
	Shield Apertures:	
73	Absorption Shield	50
74	Barrier Shield	100
75	Deflector Shield	50
76	Velocity Shield	50
	Stat Upgrade:	
77-81	Minor	10
82-85	Major	20
86-87	Greater	30
88	Tactical Analysis Software	7
89	Targeting Software	10
90-99	Ultrasonic Hearing	8
100	Weighted Swing	7

A-1.5
MD-6 MEDICAL ANDROID

The MD-6 is an all-purpose medical android. There are several different custom packages available, allowing droids of different medical specialties to be purchased. The standard model of this template is a typicalandroid chassis; the apparent biological option can be purchased for patients with mechanical prejudice.

Attributes

Stat	Value
Agility	72
Constitution	10
Memory	102
Reasoning	102
Self Discipline	50
Empathy	77
Intuition	102
Presence	82
Quickness	28
Strength	50
Appearance	50

RR Type	Modification
Poison	+0
Disease	+0
Fear	+0
Psychic Power	+0

Attribute	Value
Hits	100
Mind Point Dev. Progression *	0•5•3•2•2
Maintenance Period	6 Months
Self Repair	2 times
Backup Period	1 Month
Price Tag	¢349,999

* — Use this progression only in campaigns where androids may possess psychic powers.

Physical Characteristics

Build: Slight and unassuming, 58 kg.

Endurance: Average.

Height: 162 cm.

Operational Life: 160 years.

Resistance: No special resistances

Standard Options: Biohydraulic Joints. Communicator, Extensive Medical Database (+10 to Science/Analytical • Medical skill category), Emotion Control Software, Medscanner.

Restrictions and Design Flaws: Inferior Cooling System, Predictable, The Three Laws.

Other Factors

Languages: *Starting Languages:* InSpecCom (S4/W8), Second Language (S0/W5), Third Language (S0/W5), Fourth Language (S0/W5), Fifth Language (S0/W5). *Allowed Adolescent Development:* Any.

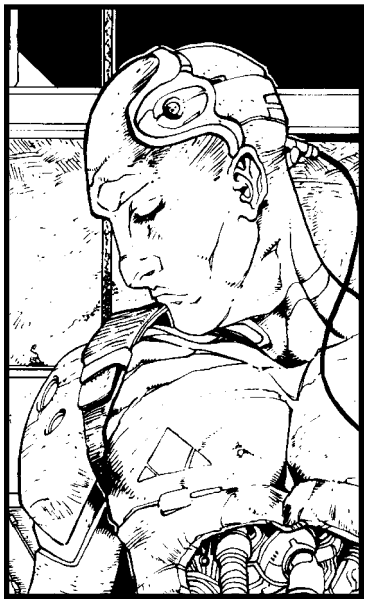
Professions: Medical droids are always Scientists.

Training Packages: Medical droids generally take medical training packages.

Special Skills: *Everyman:* All Scientific/Analytical • Medical skills; *Restricted:* All Weapon Skills.

Custom Options

Roll	Option	Point Cost
01-05	Anti-Glare Option	3
05-09	Apparent Biological	10
	Armored Carapace:	
10	Resilient Polymer Armor	15
11	Carbon Steel Armor	30
12	Advanced Composite Armor	60
13	Assassination Software	17
14-17	Bravery Add-On	10
18-22	Combat Processing Software	7
23-27	Database, Basic	3
28-31	Database, Extensive	10
32-35	Evasion Software	10
36	Hardened Knuckles	15
37-39	Huntsman Package	15
40-44	Linguistic Software	5
45-48	Telescopic/Microscopic Vision	varies
49-52	Pacification Package	10
53-57	Pharmaceutical Reservoir (up to ten)	7
58-61	Piloting Software	7
62	Prestidigitation Software	10
63	Programmed Foe	5
	Scanner Option:	
64-67	Multiscanner	15
68-71	Technical Scanner	15
72	Tactical Scanner	15
	Stat Upgrade:	
73-77	Minor	10
78-81	Major	20
82-84	Greater	30
85	Tactical Analysis Software	7
86	Targeting Software	10
87-99	Tooled Appendage (for surgery)	5
100	Weighted Swing	7



A-1.6
NAD-7 NAVAL ANDROID

With life support and consumables at a premium on naval vessels, the NAD-7 was designed as the standard all-purpose crewman. The primary concern here is expense. There are no fancy specialized versions of this android, and the standard options are extremely practical, such as infrared vision to aid in spotting overloading circuits. There is only one model. In addition, the NAD-7 is programmed to be fiercely loyal and patently not ambitious. It is the perfect crewman.

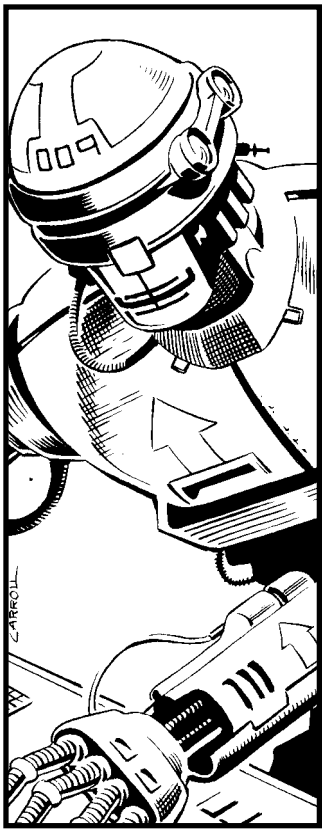
Attributes

Stat	Value
Agility	50
Constitution	50
Memory	50
Reasoning	50
Self Discipline	50
Empathy	50
Intuition	50
Presence	50
Quickness	50
Strength	50
Appearance	50

RR Type	Modification
Poison	+0
Disease	+0
Fear	+0
Psychic Power	+0

Attribute	Value
Hits	130
Mind Point Dev. Prog. *	0•4•3•2•1
Maintenance Period	5 Days
Self Repair	None
Backup Period	1 Month
Price Tag	¢9,999

* — Use this progression only in campaigns where androids may possess psychic powers.



Physical Characteristics

Build: Average build, 75 kg.

Endurance: Average.

Height: 170 cm.

Operational Life: 80 years.

Resistance: No special resistances

Standard Options: Anti-Glare, Bravery Add-On, Communicator, Extensive Vehicle Database (+15 Vehicle Lore: Space Vehicles), Emotion Control Software, Infrared Vision.

Restrictions and Design Flaws: Anosmia, Artificial Speech, Distinctive Design (Major), Inferior Cooling System, Inferior Gyro, Mechanical, Monocular Construction, Predictable, Radical Programming (Loyalty, Not ambitious).

Other Factors

Languages: *Starting Languages:* InSpecCom (S6/W8).
Allowed Adolescent Development: Any.

Professions: Naval droids are invariably Laymen.

Training Packages: Naval droids generally take naval training packages.

Special Skills:
Everyman: Alien Environments (Zero-G), Vehicle Lore, choice of 2 Scientific/Analytical • Technical skills, Military Organization, Ship Crewmember; *Restricted:* None.

Custom Options

Roll	Option	Point Cost
	Armored Carapace:	
01-04	Resilient Polymer Armor	15
05-06	Carbon Steel Armor	30
07	Advanced Composite Armor	60
08-11	Assassination Software	17
12-16	Combat Processing Software	7
17-22	Database, Basic	3
23-27	Database, Extensive	10
28-32	Evasion Software	10
33-36	Hardened Knuckles	15
37-40	Huntsman Package	15
41-45	Linguistic Software	5
46-50	Piloting Software	7
51-54	Prestidigitation Software	10
55-60	Programmed Foe	5
	Stat Upgrade:	
61-72	Minor	10
73-81	Major	20
82-86	Greater	30
87-91	Tactical Analysis Software	7
92-95	Targeting Software	10
96-100	Weighted Swing	7

A-1.7
P-7 PLEASURE ANDROID

The pleasure android is not produced in the Privateers universe (the ISC considers them a prostitution of science and the Jeronans sate their needs with slaves). The pleasure android is designed for one thing, and that is to do anything its master wishes. As an apparent biological with radical submissive programming and an Appearance of 100, it is more than capable of doing so.

Attributes

Stat	Value
Agility	77
Constitution	77
Memory	50
Reasoning	50
Self Discipline	50
Empathy	100
Intuition	72
Presence	100
Quickness	50
Strength	50
Appearance	100

RR Type	Modification
Poison	+0
Disease	+0
Fear	+0
Psychic Power	+0

Attribute	Value
Hits	100
Mind Point Dev.Progression *	0•3•2•1•1
Maintenance Period	6 Weeks
Self Repair	2 times
Backup Period	1 Month
Price Tag	¢249,999

* — Use this progression only in campaigns where androids may possess psychic powers.

Physical Characteristics

Build: Average human build. Male models are 80 kg, female models 60 kg.

Endurance: Average.

Height: *Male models:* 185 cm.
Female models: 170 cm.

Operational Life: 40 years.

Resistance: No special resistances

Standard Options: Apparent Biological, Emotion Control Software.

Restrictions and Design Flaws: The Three Laws, Radical Programming (Desire to fulfill every wish of its owner).

Other Factors

Languages:
Starting Languages: InSpecCom (S4/W8).
Allowed Adolescent Development: None.

Professions: Pleasure Droids are generally Entertainers or Laymen.

Training Packages: Pleasure droids can take just about any package, but entertainment packages are common.

Special Skills: *Everyman:* Contortions, Diplomacy, Seduction, Trading, Mingling; *Restricted:* None.

Custom Options

Roll	Option	Point Cost
01-04	Advanced Cooling System	10
05-10	Anti-Glare Option	3
11	Assassination Software	17
12-14	Biohydraulic Joints	20
15-18	Bravery Add-On	10
19	Combat Processing Software	7
20-24	Communicator	5
25-30	Database, Basic	3
31-34	Database, Extensive	10
35	Evasion Software	10
36	Hardened Knuckles	15
37	Combat Processing Software	7
38-47	Linguistic Software	5
49-57	Music Processing System	7
58-67	Pacification Package	10
68-71	Piloting Software	7
72-74	Prestidigitation Software	10
75	Programmed Foe	5
	Scanner Option:	
76-77	Multiscanner	15
78-80	Medscanner	15
81-82	Technical Scanner	15
83	Tactical Scanner	15
	Stat Upgrade:	
84-89	Minor	10
90-94	Major	20
95-97	Greater	30
98	Tactical Analysis Software	7
99	Targeting Software	10
100	Weighted Swing	7

A-1.8 X-4 MAIN LINE BATTLE ROBOT

The next best thing to an android brain in a tank, the X-4 is four meters of technological terror. With two blasters and advanced composite armor, the X-4 is a combat juggernaut. When equipped with a barrier shield, there is little that can oppose it.

Attributes

Stat	Value
Agility	97
Constitution	100
Memory	18
Reasoning	18
Self Discipline	50
Empathy	1
Intuition	50
Presence	1
Quickness	72
Strength	103
Appearance	1

RR Type	Modification
Poison	+0
Disease	+0
Fear	+0
Psychic Power	+0

Attribute	Value
Hits	500
Mind Point Dev. Progression *	0•0•0•0•0
Maintenance Period	5 Days
Self Repair	0 times
Backup Period	1 Month
Price Tag	¢649,999

* — Even in campaigns where androids can develop psychic powers, these robots seldom possess that ability.

Physical Characteristics

Build: Tall and on treads, weighs 1012 kg.

Endurance:
Tremendous: +30 to exhaustion points.

Height: 407 cm.

Operational Life: 5 years.

Resistance: No special resistances.

Standard Options: Advance Composite Armor, Anti-Glare, Audio Package, Bravery Add-On, Combat Computer, Combat Processing Software, Communicator, Complete Visual Field, Enhanced Redundancy, Lo-Lite Vision, Tactical Analysis Software, Targeting Software, Targeting System, Two Continuous Fire BE 25 Blaster Carbines.

Restrictions and Design Flaws: Anosmia, Artificial Speech, Distinctive Design (Greater), Mechanical, No Fine Control, Radical Programming (Zealous Loyalty), Programmed Duty (to ISC military).

Other Factors

Languages:
Starting Languages: InSpecCom (S6/W8).
Allowed Adolescent Development: None.

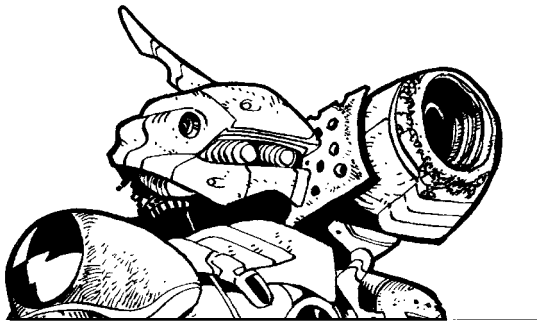
Professions: Battle robots are always Soldiers.

Training Packages: Battle robots generally take military training packages.

Special Skills: *Everyman:* Sprinting, Distance Running; *Restricted:* All skills in the influence skill category.

Custom Options

Roll	Option	Point Cost
01-03	Advanced Cooling System	10
04-05	Assassination Software	17
06-08	Database, Basic	3
09-11	Database, Extensive	10
12-14	Emotion Control Software	5
15-17	Evasion Software	10
18-20	Hardened Knuckles	15
21-23	High Performance Reflexes	7
24-26	Huntsman Package	15
27-29	Infrared Vision	5
30-32	Linguistic Software	5
33-35	Locking Grip	7
36-38	Navigational Subprocessor	5
39-41	Piloting Software	7
42-44	Prestidigitation Software	10
45-47	Programmed Foe	5
	Scanner Option:	
48-50	Multiscanner	15
51	Medscanner	15
52-54	Technical Scanner	15
55-57	Tactical Scanner	15
	Shield Aperture:	
58-59	Absorption Shield	50
60	Barrier Shield	100
61-62	Deflector Shield	50
63-64	Velocity Shield	50
65	Speed Package	20
	Stat Upgrade:	
66-69	Minor	10
70-73	Major	20
74-75	Greater	30
76-85	Targeting Software	10
86-95	Telescopic/Microscopic Option	varies
96-98	Ultrasonic Hearing	8
99-100	Weighted Swing	7



A-1.9 Z-2 LABOR UNIT

The Z-2 is an all-purpose labor unit. Designed to be big, strong, and dumb, the Z-2 can operate for extensive periods without cool down time. This android is also, however, dumber than rocks. The Z-2 is the ultimate cheap help.

Note: *Though this android has built in stat upgrades, it is not recommended that this be allowed except in all but the most unusual of circumstances.*

Attributes

Stat	Value
Agility	50
Constitution	103
Memory	1
Reasoning	1
Self Discipline	50
Empathy	1
Intuition	1
Presence	1
Quickness	1
Strength	103
Appearance	1

RR Type	Modification
Poison	+0
Disease	+0
Fear	+0
Psychic Power	+0

Attribute	Value
Hits	200
Mind Point Dev. Progression *	0•0•0•0•0
Maintenance Period	3 Weeks
Self Repair	3 times
Backup Period	1 Month
Price Tag	¢299,999

* — Even in campaigns where androids can develop psychic powers, these robots seldom possess that ability.

Physical Characteristics

Build: Tall and built like a brick wall, weighs 508 kg.

Endurance: Tremendous. +50 to exhaustion points.

Height: 303 cm.

Operational Life: 160 years.

Resistance: No special resistances

Standard Options: Advanced Cooling System. Anti-Glare, Augmented Suspension, High Performance Musculature, Locking Grip, Stat Upgrades (Co, St: +8), Tooled Appendages.

Restrictions and Design Flaws: Anosmia, Artificial Speech, Distinctive Design (Greater), Inferior Gyros, Mechanical, Monocular Construction, No Fine Control, Plodding, Predictable, The Three Laws.

Other Factors

Languages:
Starting Languages: InSpecCom (S6/W8).
Allowed Adolescent Development: None.

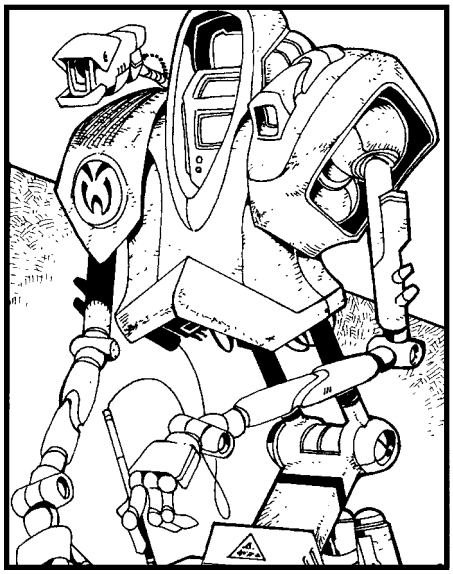
Professions: Labor units are generally Laymen.

Training Packages: Those which are used by manual laborers are the best bet.

Special Skills: *Everyman:* None; *Restricted:* None.

Custom Options

Roll	Option	Point Cost
	Armored Carapace:	
01-04	Resilient Polymer Armor	15
05-06	Carbon Steel Armor	30
07	Advanced Composite Armor	60
08-10	Assassination Software	17
11-14	Bravery Add-On	10
15-18	Combat Processing Software	7
19-24	Communicator	5
25-29	Database, Basic	3
30-33	Database, Extensive	10
34-38	Emotion Control Software	5
39-42	Evasion Software	10
43-48	Hardened Knuckles	15
49-53	Huntsman Package	15
54-58	Linguistic Software	5
59-62	Piloting Software	7
63-66	Prestidigitation Software	10
67	Programmed Foe	5
	Scanner Option:	
68-77	Multiscanner	15
78	Medscanner	15
79-80	Technical Scanner	15
81	Tactical Scanner	15
	Stat Upgrade:	
82-85	Minor	10
86-88	Major	20
89-90	Greater	30
91	Tactical Analysis Software	7
92	Targeting Software	10
93-100	Weighted Swing	7



A-2.0 ANDROID OPTION DESCRIPTIONS

This section provides the detailed descriptions of the options available to androids. See Section 20.15 (p. 64) for more information on how to handle options.

Inherent Options

These options are inherent to all androids. They are offshoots of the android's robotic nature, and though they might be self-evident, they are worth noting.

Ambidexterity — Androids are not left- or right-brain creatures. They have no off-hand penalty.

Digital Memory — This is a more powerful form of eidetic memory. As an android records (indeed, must record) every moment of its life, it can play this back at any time for a full recall. This can be a tremendous amount of data, somewhere in the neighborhood of several petabytes, depending on the android's life span, so a Memory static maneuver (i.e., roll open ended d100 + 3xSD bonus, the result can be taken as a percentage of the data recovered) must be made for the android to zero in on the proper time. If the player remembers, or states to mark that moment in time for cross referencing, then the recall is instantaneous.

Extended Vocal Range — An android can produce a wide range of sounds, including those well out of the range of human hearing.

Math Processor — The android is able to calculate any number or equation pretty much instantly. Long convoluted jobs, like particle flow simulations, would probably take more time. The android receives a +10 bonus to the Scientific/Analytical group and a +5 to Trading.

Realtime Clock — An android has full awareness of personal time. Even when shut down, it is rare that the clock will go offline, unless actual death occurs. Even then there is a 10% chance the clock will run for months off of battery power.

Self Sustenance — Other than maintenance, most androids (tech level 22 and higher) can operate their entire life without anything from the outside world. They do not need air or food, and don't even need to recharge their batteries. Androids can survive in the hard vacuum of space, in any non-corrosive atmosphere under 10 ATMs, or even under water (up to a certain depth). They can survive in poison or drought, through famine and pestilence. Other than their basic upkeep and repair, they need nothing that they don't contain within their metal skins.

Temperature Tolerance — Androids are resistant to extreme temperature. Except where cooling is involved, they are affected only slightly by temperature extremes. Consider their defensive bonus 20 points higher versus heat or cold attacks. (This would include attacks from plasma guns, flame throwers, or cryo guns.)

Text Processing — This ability allows an android to process text at a great rate of speed. The android can process pages of text at one hundred pages per minute.

Other Options

Androids must be designed to incorporate these options. They are not inherent to the nature of robotic life, but they are common additions.

Remember, these dollar values assume that the android is created at the minimum tech level for the feature. At subsequent tech levels, divide this value by 10. Flaws are unaffected by tech level.

Advanced Combat System — Grants a +10 bonus to all non-ranged attacks. Makes all weapon skills everyman. Requires a targeting system.

Standard Cost: ..... 30 points (+¢300,000)
Custom Cost: ..... 3 points (+¢30,000)
Tech Level: 20

Advanced Cooling System — This android has an advanced cooling system. He gains +100 exhaustion points.

Standard Cost: ..... 10 points (+¢100,000)
Custom Cost: ..... 1 point (+¢10,000)
Tech Level: 17

Anosmia — This android was not designed with a sense of taste or smell. He may not make Awareness maneuvers involving these senses.

Standard Cost: ..... -3 points (-¢3,000)
Custom Cost: ..... 0 points
Tech Level: ..... N/A

Anti-Glare Option — This option allows an android to tone down the input to it's visual sensors. It's eyes are capable of darkening in bright sunlight. By the end of tech level 17, the response time for the darkening effect is almost instantaneous.
Standard Cost: ..... 3 points (+¢3,000)
Custom Cost: ..... 0 points
Tech Level: 16

Apparent Biological — This option makes the android appear to be a biological organism. This includes body temperature, respiration, perspiration, etc. This android can imitate all biological functions. It takes a medical scanner and a Routine maneuver to determine that the android is, in fact, an android.
Standard Cost: ..... 10 points (+¢1,000,000)
Custom Cost: ..... 1 point (+¢10,000)
Tech Level: 20

Armored Carapace — This android has an armored shell. This armor can come in a few different levels.

Resilient Polymer Armor: This armor acts as AT 4. Unless the android is masquerading as a scaled or furred race, the android may not have the apparent biological option.
Standard Cost: ..... 15 points (+¢15,000)
Custom Cost: ..... 0 points
Tech Level: 16

Carbon Steel Armor: This armor acts as AT 20 (or AT VII with -20 DB). It is impossible to take this and the apparent biological option.
Standard Cost: ..... 30 points (+¢30,000)
Custom Cost: ..... 0 points
Tech Level: 15

Advanced Composite Armor: This is an advanced composite, harder and light than steel. It grants the android an armor type of X. It cannot be taken with the apparent biologicaloption.
Standard Cost: ..... 60 points (+¢60,000)
Custom Cost: ..... 0 points
Tech Level: 19

Artificial Speech — This android's speech and speech patterns sound artificial and contrived. He receives a -25 penalty to all maneuvers involving speech.
Standard Cost: ..... -5 points (-¢50)
Custom Cost: ..... 0 points
Tech Level: ..... N/A

Assassination Software — This programming grants a +25 bonus to Poison Lore, Use/Remove Poison, Silent Kill, Stalking, Hiding, and Ambush maneuvers.
Standard Cost: ..... 17 points (+¢17,000)
Custom Cost: ..... 0 points
Tech Level: 20

Augmented Suspension — This android adds +30 to his Jumping skill.
Standard Cost: ..... 5 points (+¢50,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 16

Audio Package — This audio package can allow an android to hear sounds up to 1,000 meters away under proper conditions. This grants a bonus of +20 to any Awareness maneuvers dealing with sound.
Standard Cost: ..... 10 points (+¢100,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 16

Biohydraulic Joints — This complicated technology aids the android in fine manipulation. This grants a +20 bonus to maneuvers involving throwing, martial arts sweeps and throws, and fine manipulation maneuvers such as molecutronic repair and surgery.
Standard Cost: ..... 20 points (+¢2,000,000)
Custom Cost: ..... 3 points (+¢30,000)
Tech Level: 22

Bravery Add-On — This software disables the android's self preservation programming. It makes the android immune to fear.
Standard Cost: ..... 10 points (+¢10,000)
Custom Cost: ..... 0 points
Tech Level: 20

Combat Computer — This subprocessor grants a +5 bonus to initiative, DB, and OB and removes all snap action penalties.
Standard Cost: ..... 20 points (+¢200,000)
Custom Cost: ..... 2 points (+¢20,000)
Tech Level: 20

Combat Processing Software — This software package helps the android track the flow of a battle. It grants him a +25 bonus to Situational Awareness (Combat).
Standard Cost: ..... 7 points (+¢7,000)
Custom Cost: ..... 0 points
Tech Level: 20

Communicator — This android has a built in communicator. At higher levels, this may be a tachyon or quantum communicator.
Standard Cost: ..... 5 points (+¢5,000, normal; +¢500,000, tachyon; +¢1,000,000, quantum)
Custom Cost: ..... 1 points (+¢1,000)
Tech Level: 14, 21, 24

Complete Visual Field — This package allows the android a 360˚ field of vision. No enemies can gain a flank or rear bonus on the android. This option cannot be hidden. The android cannot take the apparent biological option unless it is designed to mimic an alien race that has 360˚ vision.
Standard Cost: ..... 15 points (+¢15,000)
Custom Cost: ..... 2 points (+¢2,000)
Tech Level: 20

Database, Basic — This software package grants a +5 bonus to one Lore category or a +10 bonus to one specific Lore skill.
Standard Cost: ..... 3 points (+¢3,000)
Custom Cost: ..... 0 points
Tech Level: 19

Database, Extensive — This software package grants a +10 bonus to one Lore category or a +15 bonus to one specific Lore skill.
Standard Cost: ..... 10 points (+¢10,000)
Custom Cost: ..... 0 points
Tech Level: 19

Deaf — This android was not designed with audio sensors. All maneuvers involving hearing are impossible. Spoken languages are restricted skills, and should probably be purchased as software.
Standard Cost: ..... -20 points (-¢20,000)
Custom Cost: ..... 0 points
Tech Level: ..... N/A

Distinctive Design — This android is distinctive in design. This distinctiveness is easily described. The android is hard to miss, and will be described to the authorities should any untoward activity take place.
Custom Cost: ..... 0 points

Minor: This distinctiveness is easily disguised. The android will not have much trouble blending in, with some cursory effort.
Standard Cost: ..... -5 points (+¢0)
Tech Level: ..... N/A

Major: This distinctiveness is not easily concealed. It requires a full disguise.
Standard Cost: ..... -10 points (+¢0)
Tech Level: ..... N/A

Greater: The distinctiveness is extreme. It is impossible to conceal.
Standard Cost: ..... -15 points (+¢0)
Tech Level: ..... N/A

Emotion Control Software — This software helps the android remain calm under the most extreme circumstances. During a high-pressure situation, the android receives a +10 bonus to all social interaction skills.
Standard Cost: ..... 5 points (+¢5,000)
Custom Cost: ..... 0 points
Tech Level: 20

Enhanced Redundancy — This android is built with enhanced redundancy and switching systems, including added shock absorption abilities. This reduces all stun results the android receives by one half.
Standard Cost: ..... 15 points (+¢1,500,000)
Custom Cost: ..... 2 points (+¢200,000)
Tech Level: 21

Evasion Software — This android has specially designed evasion software. This grants a +15 to his DB whenever he is aware of an attack or actively dodging.
Standard Cost: ..... 10 points (+¢10,000)
Custom Cost: ..... 0 points
Tech Level: 20

Extra Appendage — This android has more than normal limbs. This does not allow for extra attacks. Nor does it grant extra movement or any other special abilities. It does allow the android to accomplish tasks it couldn't otherwise, like holding an object still with two limbs while conducting repairs with other limbs.
Standard Cost: ..... 3 x number of limbs (+¢30,000 per limb)
Custom Cost: ..... 1 point per limb (+¢10,000 per limb)
Tech Level: 16

Flight — This android is capable of flight. At lower tech levels, this uses VT turbines. At TL 25 and above, it uses antigravity to accomplish the task. The android is capable of traveling up to 25 meters per round. The price returns to ¢300,000 at tech level 25 if antigravity is used.
Standard Cost: ..... 30 points (+¢300,000)
Custom Cost: ..... 15 points (+¢15,000)
Tech Level: 17

Fugitive Restraint System — This usually comes in the form of a tethered net. It is developed as a Weapon•Missile/Thrown skill and attacks as a large grapple attack (table ref:A-8.8.2 Grapple Attack Table, SM p. 205). Whether or not the attack is successful, the net can then be reeled in via the tether. This cannot be fully concealed.
Standard Cost: ..... 25 points (+¢25,000)
Custom Cost: ..... 3 points (+¢3,000)
Tech Level: 17

Hardened Knuckles — This package is much like brass knuckles. Whereas many androids are designed to feel as biological as possible, this option attempts just the opposite. These hardened knuckles grant an additional Impact critical of one less severity when the android strikes with its fists (an 'A' is modified by -25).
Standard Cost: ..... 15 points (+¢1,500)
Custom Cost: ..... 0 points
Tech Level: 13

High Performance Musculature — This android is built for feats of leaping. It has a base running leap of 3 times normal and a vertical leap of 5 times normal.
Standard Cost: ..... 15 points (+¢150,000)
Custom Cost: ..... 2 points (+¢20,000)
Tech Level: 17

High Performance Reflexes — This android has enhanced reflexes. This allows it to roll two sets of initiative and pick which ever is better.
Standard Cost: ..... 7 points (+¢700,000)
Custom Cost: ..... 1 point (+¢100,000)
Tech Level: 17

Huntsman Package — +50 to all Survival maneuvers, including Foraging, shelter building, and fire starting. +20 to all Tracking, Stalking and Hiding maneuvers performed outdoors.
Standard Cost: ..... 15 points (+¢15,000)
Custom Cost: ..... 0 points
Tech Level: 20

Inferior Cooling System — This android has an inexpensive, and thus inefficient, cooling system. It only receives half of its exhaustion points.
Standard Cost: ..... -10 (-¢10,000)
Custom Cost: 0
Tech Level: ..... N/A

Inferior Gyros — This android has been built using gyros that are more durable than useful. He has a special -30 penalty to all Stalking maneuvers and all maneuvers which involve balance.
Standard Cost: ..... -20 points (-¢20,000)
Custom Cost: ..... 0 points
Tech Level: ..... N/A

Infrared Vision — This option allow the android to see in the infrared spectrum. The android has no night penalties, but gains a -5 penalty to all actions due to a slight distortion. If the temperature is over 20 degrees (Celsius), then it can see normally even in total darkness. If not, then it can only see objects which produce heat. This can be turned on or off.

In addition, they are outfitted with a thermographic filter. This option is added to an existing IR option to translate the temperature data into a color-coded visual image. The advantage is that most of the restrictions of IR are lifted. Objects that don't produce heat are still visible according to their temperature. This is very difficult to perceive by, however, and unless this visual field is particularly suited to a task (targeting enemies by their heat signature, for instance), then all Awareness maneuvers receive a -50 penalty.
Standard Cost: ..... 5 points (+¢5,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 16

Linguistic Software — This software grants 20 ranks for the android to spend among its starting languages.
Standard Cost: ..... 5 points (+¢5,000)
Custom Cost: ..... 0 points
Tech Level: 17

Lo-Lite Vision — This visual package allows the android to see under poor visual conditions. It can intensify any light that falls on its eyes. This halves any penalties for darkness. There is no danger of staring at a bright light through these. However, this option can be burned out by a laser until tech level 18.
Standard Cost: ..... 5 points (+¢5,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 16

Locking Grip — This android can lock his grip with vise-like strength. This can be used to secure himself to the a cable or grip a weapon. The android receives a +50 bonus to resist a disarm attempt.
Standard Points: 7 points (+¢7,000)
Custom Points: 1 points (+¢1,000)
Tech Level: 16

Martial Arts Subprocessor — This software grants a +15 bonus to the android's Martial Arts group and Special Defense skill category. Adrenal Defense is classified as an everyman skill.
Standard Cost: ..... 25 points (+¢250,000)
Custom Cost: ..... 3 points (+¢30,000)

Mechanical — This android moves like an android. Not only can it not take the apparent biological option, but it has a –10 penalty to any physical maneuvers not involving pure strength.
Standard Cost: ..... -20 points (-¢20,000)
Custom Cost: ..... 0 points
Tech Level: ..... N/A

Monocular Construction — This android has only one eye. It can only have the apparent biological option if it is imitating a monocular being. All range penalties for ranged attacks are doubled, due to poor depth perception.
Standard Cost: ..... -15 points (-¢5,000)
Custom Cost: ..... 0 points
Tech Level: ..... N/A

Music Processing System — This device includes sophisticated music processing, recording, and playback system. The android can play back any sound it hears, even altering the playback, changing or adding instruments or melody. He can play, on an instrument, any sound he hears once. This system, with accompanying software, grants a +25 bonus to any maneuver involving music, musical instruments, or singing.
Standard Cost: ..... 7 points (+¢70,000)
Custom Cost: ..... 1 point (+¢10,000)
Tech Level: 18

Navigational Subprocessor — This device grants the android a +35 to any Mapping or Direction Sense maneuvers. It also grants a +25 to any Navigation maneuvers.
Standard Cost: ..... 5 points (+¢50,000)
Custom Cost: ..... 1 point (+¢10,000)
Tech Level: 18

No Fine Control — This android does not have the fine manipulation skills of a biological organism. He receives a –10 penalty to all skills involving subterfuge. He receives an additional -5 penalty to Stalking and Hiding.
Standard Cost: ..... -15 points (-¢15,000)
Custom Cost: ..... 0 points
Tech Level: ..... N/A

Olfactory Package — This grants the android the sense of smell of the average bloodhound. The android can track by smell with a +30 bonus and receives a +20 bonus to any Awareness maneuvers involving smell.
Standard Cost: ..... 15 points (+150,000)
Custom Cost: ..... 2 points (+20,000)
Tech Level: 21

Pacification Package — This software package finely adjusts the android's speech tones, granting a +15 bonus to any Influence skills where soothing the target would be a benefit.

Standard Cost: ..... 10 points (+¢100,000)
Custom Cost: ..... 1 point (+¢10,000)
Tech Level: 17

Pharmaceutical Reservoir — This is used in conjunction with a needle to store poisons or pharmaceuticals. It can hold up to 10 doses of any poison or drug. Needles sold separately.

Standard Cost: ..... 7 points (+¢7,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 17

Piloting Software — This software package grants the android a +25 bonus to all Piloting and Combat Piloting maneuvers.

Standard Cost: ..... 7 points (+¢7,000)
Custom Cost: ..... 0 points
Tech Level: 20

Plodding — Whatever this android is designed for, it's not speed. Divide its base pace by two.

Standard Cost: ..... -7 points (-¢7,000)
Custom Cost: ..... 0 points
Tech Level: ..... N/A

Predictable — This android moves in an awkward, predictable way, telegraphing all its movements. He receives a -5 penalty to OB, DB, and initiative rolls.

Standard Cost: ..... -20 points (-¢20,000)
Custom Cost: ..... 0 points
Tech Level: ..... N/A

Prestidigitation Software — This software grants the android a +20 bonus to the android's Subterfuge — Stealth skill category.

Standard Cost: ..... 10 points (+¢1,000)
Custom Cost: ..... 0 points
Tech Level: 20

Programmed Foe — This android has been programmed to fight one racial enemy. Because of it's extensive database of this race's fighting techniques and weaknesses, they receive +20 to their OB when fighting this race.

Standard Cost: ..... 5 points (+¢5,000)
Custom Cost: ..... 0 points
Tech Level: 20

Radical Programming — This android has been given fanatical programming. They will adhere tenaciously to a cause, ideology, or person. They will follow this ideology unswervingly, ignoring any problems or conflicts within the ideology. The android is more than willing to lay down its life for what it believes.

Standard Cost: ..... -10 points (+¢10,000)
Custom Cost: ..... 0 points
Tech Level: ..... N/A

Scanner Option — This android is equipped with a sophisticated set of scanners. These can be anything from a medscanner to a multiscanner. Any and all scanners can be installed off of the same custom option. (Although the individual cost for each scanner must still be paid.)

Custom Option: ..... 1 point (+¢10,000)

Multiscanner: This combines the functions of the bioscanner, radscanner, and chemscanner. It can only perform simple data analysis, although it can link up with a more sophisticated system for a full analysis.

Standard Cost: ..... 30 points (+¢300,000)

Bioscanner: The bioscanner is a highly specialized scanner that can scan for complex molecules which indicate the presence of life. At tech level 19, this scanner can distinguish between plant and animal life at ten meters. It can identify individual animal life forms at two meters. At half a meter it can distinguish between basic types of creatures (e.g., reptile or mammal). A more detailed analysis requires a medscanner.

These ranges double at each tech level beyond TL 19.

Standard Cost: ..... 15 points (+¢150,000)

Radscanner: The radscanner detects the type, location, and intensity of any radiation source. This type of scanner detects any radiation, be it electromagnetic or particle radiation. It is typically set to screen out background radiation, though it may be programmed to not do so. The range of this scanner depends on the strength of the radiation source. At tech level 19, this could pick up a communicator tight-beam at one meter, a vacuum generator could be picked up at ten meters, while nuclear power could be detected at one hundred meters. At 10% of that range, specifics can be made out, such as the nature of the transmission. These ranges double for each tech level beyond TL 19.

The GM should feel free to place penalties on these ranges due to background radiation and interference. During a solar flare in orbit, a nearby source of gamma rays would be a lot harder to detect then on the planet's surface on a good day.

Standard Cost: ..... 15 points (+¢150,000)

Chemscanner: The chemscanner detects minerals, elements, and chemical compounds. The first and most obvious function of this scan is to analyze the properties of an item or substance. This scanner can determine the physical makeup, chemical structure, internal structure, or stress flaws of an object. Though the scanner cannot make value judgements about the item, some very detailed data can be gathered for later analysis by computer.

The second and often more applicable use of a chemscanner is locating a substance. At tech level 19, assuming that the scanner has the substance on file, it can detect it at a rate of one gram per ten centimeters. That means that one gram of the material can be detected up to ten centimeters away. This relationship is reasonably linear; one kilogram of a substance can be detected at one

hundred meters. The base range doubles for each tech level after TL 19, so a TL 22 chemscanner could detect a kilogram of platinum at a range of eight hundred meters.

Standard Cost: ..... 15 points (+¢150,000)

Medscanner: This is a bioscanner with several advanced functions. It is capable of scanning a life form for basic vital signs, as well as abnormalities. This requires a sophisticated database that contains medical data for the species in question. Attempting to use this scanner on a new species (or one that is not in its database) incurs at least a –90 penalty. This penalty can be reduced over time, as the scanner builds a dynamic database as it is used to examine the patient. Medscanners can detect problems, such as poisons in the subject's system or a dangerous viral infection. It provides information on problems, but will not suggest treatment methods without a diagnostic computer.

Standard Cost: ..... 20 points (+¢200,000)

Tactical Scanner: This scanner is often used by military personnel. It is a simple scanner, capable of scanning for life, motion, or other possible threats. It has a fairly limited range at lower tech levels (two meters at tech level 19), but as tech levels increase, this becomes a very useful tool (double the range each tech level). As it is so simple to use, it gives a +50 bonus to any Sensor Analysis maneuvers that might be required.

This scanner scans in a perfect sphere about the user, though it may be restricted to a plane or wedge. It is sophisticated enough to recognize a life form once scanned and can be programmed to not display certain creatures or to give friend/foe data on up to five creatures.

At tech level 19 or earlier, the tactical scanner often relies on infrared or motion detectors. This grants a twenty-five meter radius bonus to the scanning area, but eliminates the object recognition capabilities.

The tactical scanner ignores most barriers, such as bulkheads and walls. It has an automapping function, and it can be loaded with maps which can then be overlaid on the tactical data.

Standard Cost: ..... 15 points (+¢150,000)

Technical Scanner: This scanner is a technician's best friend. It can scan for many things, including circuit patterns, power emanations, stress flaws and many, many other things.

This scanner can only work with devices and crafts for which it has detailed schematics. It can be plugged into a computer port to run diagnostics, (though generally the computer can do this itself) or scan through approximately ten meters of bulkheads. (After TL19, this range doubles each tech level.) The processing time is generally fairly quick, but for a large craft, it can still take a very long time to perform a thorough scan.

This scanner has great success in its history of use. It averages a 99.99867% veracity rate (+50 to Sensor Analysis as long as the user has ranks in the appropriate skill to understand the data).

In addition to other functions, this scanner can perform power emanation and physical analysis scans. These scans are handled exactly as if the scanner were a radscanner or a chemscanner.

Standard Cost: ..... 15 points (+¢150,000)
Tech Level: 20

Shield Apertures: This android has been designed with built in shield generators. This shield runs solely off of internal power, and does not require power cells. Each of these shields is detailed fully in *Tech Law: Equipment Manual*. Having a custom option allows any one shield of equal or lesser cost to be installed. This shield operates just like a normal shield, with the exception that it conforms to the android's magnetic field instead of the biofield of a living creature.

Absorption: This shield is equally good against all forms of attacks, but it is not as effective as other shields against their favored attacks. It is basically a scaled down version of the barrier shield.

Standard Cost: ..... 50 points (+¢500,000)
Custom Cost: ..... 5 points (+¢50,000)
Tech Level: 24

Barrier: This is the most advanced shield system. It grants superior coverage versus all weapons.

Standard Cost: ..... 100 points (+¢1,000,000)
Custom Cost: ..... 10 points (+¢100,000)
Tech Level: 24

Deflector: This shield is most effective versus energy. It grants lesser protection verses other forms of attack.

Standard Cost: ..... 50 points (+¢50,000)
Custom Cost: ..... 5 points (+¢5,000)
Tech Level: 24

Velocity: This shield is most effective versus firearms. It grants lesser protection verses other forms of attack.

Standard Cost: ..... 50 points (+¢50,000)
Custom Cost: ..... 5 points (+¢5,000)
Tech Level: 24

Soft Step — Special shock absorbent padding has been added to the android's legs and ankles. The android gains a +25 bonus to Stalking and a +10 bonus to his Ambush skill.

Standard Cost: ..... 10 points (+¢100,000)
Custom Cost: ..... 1 points (+¢10,000)
Tech Level: 17

Speed Package — This leg package doubles an android's base pace.

Standard Cost: ..... 20 points (+¢200,000)
Custom Cost: ..... 3 points (+¢30,000)
Tech Level: 16

Stat Upgrade — This android has had a significant upgrade to one statistic. This requires no custom cost. Only one of these modifications can apply to a particular stat at once. Thus, if an android purchases a minor upgrade and a greater upgrade to Strength, then his bonus is only +8 (not +11).

Custom Cost: ..... 0 points

Minor Upgrade: One stat has had a minor upgrade. This gives that stat a special bonus of +3.
Standard Cost: ..... 10 points (+100,000)
Tech Level: 16

Major Upgrade: One stat has had a major upgrade. This gives that stat a special bonus of +5.
Standard Cost: ..... 20 points (+¢200,000)
Tech Level: 17

Greater Upgrade: One stat has had a greater upgrade. This gives that stat a special bonus of +8.
Standard Cost: ..... 30 points (+¢300,000)
Tech Level: 18

Tactical Analysis Software — This tactical package helps the android analyze and process tactical situations. It grants a +15 bonus to the android's Tactics skill.
Standard Cost: ..... 7 points (+¢7,000)
Custom Cost: ..... 0 points
Tech Level: 20

Targeting Software — This program allows an android to develop one ranged weapon as an occupational skill. All other weapons in this category are classified as everyman. Androids must have a targeting system for this to be useful.
Standard Cost: ..... 10 points (+¢1,000)
Custom Cost: ..... 0 points
Tech Level: 20

Targeting System — This targeting scope grants the android a +10 bonus to all ranged attacks.
Standard Cost: ..... 10 points (+¢100,000)
Custom Cost: ..... 2 points (+¢20,000)
Tech Level: 16

Telescopic/Microscopic Option — This option is added on to a targeting system, or simply used to enhance vision. It is used in conjunction with the Targeting skill for attack purposes. A successful use of the Targeting skill will reduce range penalties by the android's Targeting skill bonus or 5 x Class, whichever is less. The shot must be fired in the deliberate phase (they can have either the range or deliberate phase bonus, but not both). Otherwise it is just used to zoom in on object whether they be far away or just plain small. See the telescopic option in the cybergear stuff.
Standard Cost: ..... 2 x Class (Maximum of Class X) (+¢20,000 x Class)
Custom Cost: ..... 2 (+20,000)
Tech Level: 16

The Three Laws: Typically accredited to Isaac Asimov by everyone but Asimov himself, the three laws of robotics are so deeply ingrained into our society that they will probably be used with real artificial intelligence. Some droids, designed for combat and warfare, will naturally not be programmed with them, but in many campaigns, it will be illegal for an android to be built without them. They are:

1) An android may never allow, through action or inaction, harm to befall a human being (or member of the species that created it).
2) An android must follow any instructions given to it by a human (or member of its creator species), unless this interferes with the first law. Naturally, orders given by its owner take precedence over orders given by others.
3) An android must not allow itself to come to harm, unless this interferes with the first or second law.

If this design trait is taken, these laws simply cannot be violated. The laws are buried so deeply in the android's mind that trying to hack into them would likely result in the android's "death."
Standard Cost: ..... -30 points (+¢10,000)
Custom Cost: ..... 0 points
Tech Level: ..... N/A

Tooled Appendages — These fittings allow the android to replace appendage ends with tools. Different toolkits can be purchased (at 10 x normal costs) fitted for these appendages. This grants a +10 bonus to any repair maneuvers made with these tools.
Standard Cost: ..... 5 points (+¢50,000)
Custom Cost: ..... 1 point (+¢10,000)
Tech Level: 16

Ultrasonic Hearing — This android can hear well beyond the human range of hearing. Much like a dog, it can hear high-pitched whistles, bat sonar, etc.
Standard Cost: ..... 8 points (+¢80,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 16

Weaponry — This android is installed with built-in weapons. Most weapons cannot be concealed and would likely be illegal. Many weapons draw off of the android's power source, giving them effectively unlimited power. Weapons do not become significantly cheaper with time, merely smaller.

Adhesive Gun: This weapon uses the android's power to fire, but still requires ammunition.
Standard Cost: ..... 10 points (+¢10,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 17

Needle: This small needleinjects toxins or pharmaceuticals from a reservoir. This is the only weapon than can be hidden by an apparent biological.
Standard Cost: ..... 3 points (+¢3,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 16

Dagger: This is attacks as a combat knife. This is the largest melee weapon an android can conceal, although It still cannot be used with an apparent biological option.
Standard Cost: ..... 5 points (+¢5,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 16

Sword: This attacks on the Monosword Attack Table Table A-EM-2.10.
Standard Cost: ..... 10 points (+¢10,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 17

Chainsaw: This is a large chainsaw. It attacks on the chainsaw attack table. Muhahahahha!
Standard Cost: ..... 15 points (+¢15,000)
Custom Cost: ..... 2 points (+¢2,000)
Tech Level: 16

Pulse Baton: This weapon attacks on the Pulse Baton attack table. It draws power from the android's energy source.
Standard Cost: ..... 7 points (+¢7,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 17

Vibro Axe: This axe draws power from the android, vibrating at a high frequency and messing up the android's enemies.
Standard Cost: ..... 15 points (+¢15,000)
Custom Cost: ..... 2 point (+¢2,000)
Tech Level: 17

Acid Sprayer: The acid sprayer requires a source of acid that the android must carry with him. It can be quite dangerous.
Standard Cost: ..... 25 points (+¢25,000)
Custom Cost: ..... 3 point (+¢3,000)
Tech Level: 17

Cryo Gun: This weapon is highly useful against biological targets, althrough most androids are immune to its effects.
Standard Cost: ..... 25 points (+¢25,000)
Custom Cost: ..... 3 point (+¢3,000)
Tech Level: 17

Energy Whip: This weapon runs off the android's internal power, although it does require ammunition (plasma).
Standard Cost: ..... 10 points (+¢10,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 20

Force Blade: A modification of the forcefield technology, this weapon operates solely off of the android's own power, and thus is indefinitely useful.
Standard Cost: ..... 10 points (+¢10,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 24

Power Sword: The power sword is an elegant weapon, easily concealable and deadly in its application. Naturally, it is restricted. Only special androids would have one installed.
Standard Cost: ..... 10 points (+¢10,000)
Custom Cost: ..... 1 point (+¢1,000)
Tech Level: 26

Semi-Automatic Firearm: Only a normal clip of ammo can be stored internally.
Standard Cost: ..... 10 + ME of weapon/2 (+¢10,000 + ¢500 x ME)
Custom Cost: ..... 1 + 5% ME of weapon (+¢1,000 +¢50 x ME)
Tech Level: 16

Fully-Automatic Firearm: This weapon is capable of burst and suppression fire.
Standard Cost: ..... 15+ ME of weapon/2 (+¢15,000 + ¢500 x ME)
Custom Cost: ..... 2 + 5% ME of weapon (+¢2,000 + ¢50 x ME)
Tech Level: 16

Semi-Automatic Energy Weapon: This energy weapon feeds directly from the android's power plant.
Standard Cost: ..... 20 + BE or LE of weapon (+¢20,000 + ¢1,000 x BE or LE)
Custom Cost: ..... 2 + 10% BE or LE of weapon (+¢2,000 + ¢1,000 x BE or LE)
Tech Level: 18

Fully-Automatic Energy Weapon: This is capable of burst, continuous, or suppression fire.
Standard Cost: ..... 25 + BE or LE of weapon (+¢25,000 + ¢1,000 x BE or LE)
Custom Cost: ..... 3+ 10% BE or LE of weapon (+¢3,000 + ¢100 x BE or LE)
Tech Level: 18

Semi-Automatic Plasma Weapon: This weapon feeds directly from the android's power plant.
Standard Cost: ..... 25 + PE of weapon (+¢25,000 + ¢1,000 x PE)
Custom Cost: ..... 3 + 10% PE of weapon (+¢3,000 + ¢100 x PE)
Tech Level: 18

Fully-Automatic Plasma Weapon: This is capable of burst or suppression fire.
Standard Cost: ..... 30 + PE of weapon (+¢30,000 + ¢1,000 x PE)
Custom Cost: ..... 4+ 10% PE of weapon (+¢4,000 + ¢100 x BE or LE)
Tech Level: 18

Sonic Stunner — This is identical to the sonic stunners from *Blaster Law.*
Standard Cost: ..... 10 + 5 x SS (+¢10,000 + ¢5,000 x SS)
Custom Cost: ..... 1 + 50% SS (+¢1,000 + ¢500 x SS)
Tech Level: 18

Note: *If Blaster Law is not being used, then assume that a light pistol has a ME of 4, a heavy pistol has a ME of 5, and a submachine gun a ME of 6.*

Weighted Swing — The weight on this android's arms has been doctored to increase the power of its melee attacks. Any damage done causes an Unbalancing critical of two levels less severity (an 'A' is modifier by -50, a 'B' becomes an 'A' modified by -25).
Standard Cost: ..... 7 points (+¢70,000)
Custom Cost: ..... 0 points
Tech Level: 16

Wide Visual Field — This android has extended peripheral vision. Its foes receive no bonus when attacking its flank and only a +10 bonus from behind.
Standard Cost: ..... 10 points (+¢100,000)
Custom Cost: ..... 1 point (+¢10,000)
Tech Level: 19

A-3.0 ANDROID FLAW DESCRIPTIONS

This section provides the detailed descriptions of the flaws available to androids. See Section 21.2 (p. 68) for more information on how to handle flaws.

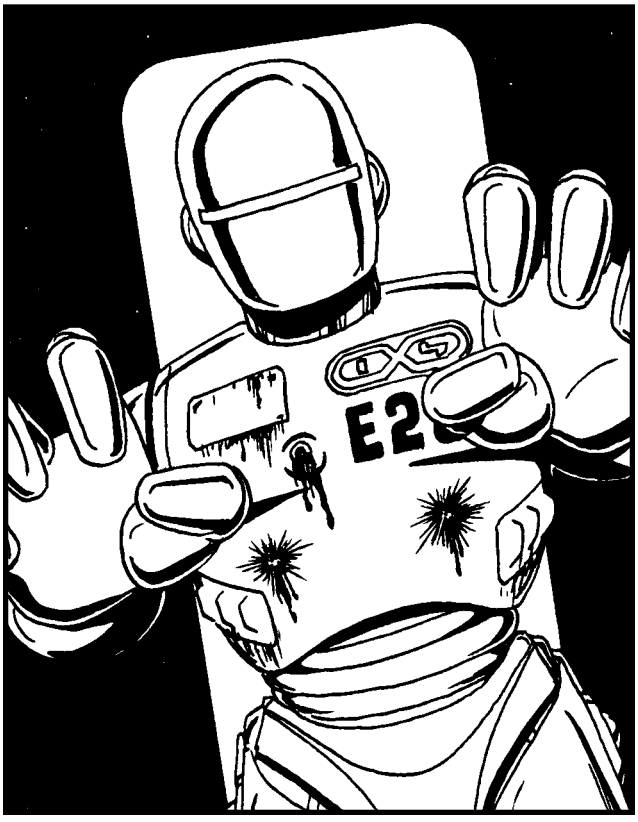
These flaws can be selected during character creation. They typically involve problems which were either unintended, or which occurred after the android came off the assembly line. There are a few flaws, however, that can be factory options.

Battlefield Confusion — You have a difficult time concentrating during large battles. If more than one foe is fighting you, you must make an Observation or Tactics maneuver each round. If you fail, you fall into a prioritization loop, and fail to act. [-15 points]

Blood-Guilt — Though not restricted by the Three Laws, you feel great devotion to the race that created you. You will do anything to keep from killing a biological life form. If you do so, whether accidentally or on purpose, you suffer a –25 penalty to all actions for the next d10 days, while you reevaluate the events which led up to the act. [-10 points]

Chivalrous — You have decided that chivalry is the height of humanity. You therefore attempt to be chivalrous in all things, returning weapons to foes, never shooting a foe in the back, etc. You will always be extremely courteous as well. [-10 points]

Code of Conduct — You have imposed a code of behavior on yourself. This code must include three clauses and these must always be followed religiously. Failure to adhere to this code will cause major internal conflicts within you. This code must meet with GM approval. An example code might be, never betray another android, always aid a non-sapient biological (an animal), and never allow any harm to befall a pregnant biological. [-5 points]



Cruel — You have developed a taste for biological suffering. You must, whenever you can, torment biological life forms, either physically, mentally, or both. You do not have a great desire to torment other androids. Note that this flaw will generally be considered "evil," and justly so. [-15 points]

Compulsive Subroutine — You have developed a compulsion, subject to GM approval. You must carry out this compulsion whenever possible. Attempts to resist this compulsion require an open ended roll (plus three times the android's Self Discipline) exceeding 100. [-5 points]

Damaged Stat — You have damaged a random statistic. This stat can only be increased by a significant overhaul (¢100,000) and expended experience.

Minor: This randomly selected stat has a special penalty of -3. [-10 points]

Major: This randomly selected stat has a special penalty of -5. [-20 points]

Greater: This randomly selected stat has a special penalty of -8. [-30 points]

Greedy — You have developed a desire to acquire wealth. You will acquire all the wealth you can. To resist an opportunity to acquire assets, even in a less than ethical manner, you must roll over 100, adding three times your SD bonus. [-10 points]

Intolerance — You have developed a deep intolerance for a certain type of person. The GM must approve this. Whenever exposed to this type of being you must display your distaste.

Minor: This is a small group. Perhaps 1% of the population qualifies. [-5 points]

Major: This is a larger group. It must be more than 1% of the population. [-10 points]

Megalomaniacal — You have decided that your android intellect is superior. You feels that you will achieve some great goal, and no mere "biological" will stop you. You must choose this goal and peruse it, regardless of who stands in the way. Anyone will realize you are megalomaniacal within minutes of association. [-10 points]

Niggling Problems — You have picked up a glitch which causes a certain system to fail periodically. It is up to you and the GM to decide what it is, but it is most likely a joint or sense. No matter what diagnostics are run on you, the problem simply cannot be found (unless the GM decides later to let you buy off the points).

Whenever you are under mental or physical stress, you must make a d100 roll. Any unmodified role of 01-03 will result in that system blowing out. It requires one full maintenance period worth of money to repair the problem. [-7 points]

Old — You are old. You have reached the end of your operational life span, with all the maintenance problems that entails. [-10 points]

Overconfidence — You have an overdeveloped sense of invulnerability. You must roll over 100 on an open-ended d100, adding only your SD bonus x 3, to proceed with caution. Otherwise, you just stride into the fire. [-10 points]

Paranoid — You have developed a delusional sense of paranoia. You believe everyone, even your closest friends, are out to destroy you. This belief colors every aspect of your life. [-10 points]

Problem Solving Flaw — You have developed a flaw in your problem solving algorithms. This makes it difficult for you to make snap decisions, causing a -50 penalty to all snap actions (as opposed to the normal -20). [-20 points]

Programmed Duty — You are programmed with a deep sense of duty to someone, whether it be a person or an organization. You will serve the object of your duty faithfully, never betraying or allowing injury to fall upon them. (It costs ¢10,000 for the owner to install this as an option.)

Minor: You are duty bound to a very small group. It is either a single person or just a few, select souls. [-5 points]

Major: You feel a sense of duty to a large group or organization. Perhaps a single world or nation-wide order. [-10 points]

Greater: This sense of duty is wide ranging. Perhaps it is an entire nation or major race. [-15 points]

Restrictive Programming — You have been programmed to always (or never) do something. This could be a short term program, such as the finding of a certain criminal, or a long term goal, such as the overthrow of a government. You must always obey this programming. (It costs ¢10,000 for the owner to install this as an option.)

Lesser: This programming only comes into play occasionally. Perhaps every week or month, you will have to deal with it once. [-3 points]

Minor: This programming will affect you on a daily basis. It will not restrict you from functioning fairly normally. [-5 points]

Major: This programming affects you daily. It is also somewhat restrictive, such as never using energy weapons, and will become evident after only a short association with you. [-10 points]

Greater: This programming affects nearly every decision you make. Never turning down a request for aid would be a good example. Most people will become aware of this programming fairly quickly, and can use it against you. [-15 points]

Rival/NPC — You have an NPC rival. What caused this rivalry is up to the player character and the GM. You and the rival will do your best to hinder, out do or humiliate each other at every turn. You respect each other, however, and therefore the rivalry rarely become violent.

Minor: You have the upper hand in the rivalry. [-5 points]

Major: The rivalry is pretty evenly matched. [-10 points]

Greater: The rival has the advantage in the rivalry. [-20 points]

Rival/PC — You have a PC rival. What caused this rivalry is up to you, the other party, and the GM. You and the rival will do you best to hinder, out do or humiliate each other at every turn. You respect each other, and therefore the rivalry rarely becomes violent.

Minor: You have the upper hand in the rivalry. [-10 points]

Major: The rivalry is pretty evenly matched. [-15 points]

Greater: The rival has the advantage in the rivalry. [-25 points]

Ruthless — You have developed that ruthless logic that only a mechanical being can quite duplicate. Whenever force is necessary, you feel it's necessary to remove the threat … permanently. This can often involve killing, so the Three Laws cannot be programmed into you. It takes an open-ended roll, adding three times your SD bonus, to keep from killing in a fight. This does not mean you are violent, however, merely that you care little for life. [-10 points]

Secret — You have a secret. You will do almost anything to keep this secret. You and the GM must work out the details of the secret together. It could be the fact that you are an android?

Minor: This secret would greatly embarrass you. [-5 points]

Major: This secret could cause you to be injured, imprisoned or reprogrammed. [-10 points]

Greater: The discovery of this secret would have dire consequences. It would probably result in your destruction. [-15 points]

Stubborn — You are hard to sway. Once you've decided that you are right, you will not be convinced otherwise. This can be very annoying to other player characters. [-5 points]

Temper — This flaw cannot be taken by android programmed to obey the three laws. You are prone to violence. Whenever angered or stressed, you must make a open-ended roll, adding 40 and subtracting three times your self-discipline bonus. A result over 100 indicates a violent, though not necessarily lethal, outburst. I take at least d10 rounds to calm down. [-10 points]

Truth Algorithm — You have been given special subprogram. You are incapable of lying. You can withhold information, but you will be utterly factual about it, "Of course I know that, I also know that someone else in this room was involved, however I may not tell you who…" (It costs ¢10,000 for the owner to install this as an option.) [-5 points]

A-4.0 :: OPTIONAL RULES

This section contains some optional rules a GM may wish to consider for use when playing *Spacemaster*. Some of these rules make the game more complicated; others are simply different. At any rate, the GM must decide which, if any, of these rules he will use.

A-4.1 ANDROID MALFUNCTIONS AND ACCUMULATED DAMAGE

The time may come when a player refuses to pay for the cost of repairing minor critical hits to his android. Some critical results cause very little or no damage, and the player may not see the wisdom in repairing such apparently minor damage to his character. This option assumes that any critical hit (even those that cause no penalty) results in some amount of damage that impairs the android's functions. The cumulative effects of this damage (if not repaired) can build up and cause more serious problems.

First of all, for every unrepaired critical of any sort, the android must make an additional malfunction roll during its maintenance period. The GM should divide the maintenance period by one plus the number of criticals that the android has received. (Criticals that have been repaired do not count against this total.) It does not matter what the severity of the critical was. For instance, if a character with a maintenance period of 6 weeks takes 5 criticals and does not repair any of them, he would make a maintenance roll every (6 ÷ (1+5) = 1) week.

In addition, every critical that is not repaired causes a penalty to be added to the android's roll whenever he must make a malfunction roll. The penalty depends on the severity of the critical:

A	+10	C	+30	E	+50
B	+20	D	+40		

All penalties are cumulative, so it would be wise for a damaged android to get fixed… quickly.

A-4.2 ANDROIDS AND ACCUMULATED STUN

This rule is for those GMs who wish to take a more realistic approach to androids who have taken large amounts of stun.

Androids have the same threshold for losing "consciousness" as any other being. That is:

5 + [10% of total Hits]

This threshold represents something different for an android. When an android's accumulated stun exceeds this threshold, it does not simply lose consciousness, but rather its brain shuts down entirely.

Fortunately, android memory isn't terribly volatile (it can't be, since the android is a sapient intellect). Thus, when an android's brain shuts down, it only loses the last five minutes of its memory (of course, in many situations, this is often bad enough to cause problems for the android, but at least it doesn't need to reinstall all its programming).

In addition, if the android has no self-healing capability, it will not be able to reboot itself. A technician will need to make a Moderate repair maneuver to reboot the android successfully.

If the android has self-repair capabilities, then it shuts down long enough for the self-repair system to fix the problem. This takes an amount of time equal to the amount of stun times the android's self-repair multiplier. The android does not come back online until all the stun is removed.

A technician can attempt to make a repair roll on an android with self-repair systems to speed up the process. This is also a Moderate repair maneuver.

A-4.3 ANDROID HIT LOCATIONS

Some GMs may consider an android to be more compartmentalized than the standard rules allow. This rule allows characters to keep track of android damage in each compartment separately. This means, for example, that an android cannot be killed by being shot in the hand.

To use this rule, the android's hits are divided up among its body locations. The chart below gives most android hit levels divided into various humanoid locations, as well as the percentages for dividing non standard hit levels.

ANDROID HIT LOCATION TABLE RM-A-4.1

Hits	Arm	Leg	Torso	Head
100	9	18	37	9
110	10	20	41	10
120	11	22	44	11
130	12	23	48	12
140	13	25	52	13
150	14	27	56	14
160	14	29	59	14
170	15	31	63	15
180	16	32	67	16
190	17	34	70	17
200	18	36	74	18
500	45	90	185	45
Percentage	9%	18%	37%	9%

With this system, assume that a hit only damages the location struck. In the event that an attack results in no critical, then roll a critical anyway, just to see which location was damaged. When a body part takes all its hits, it's useless. When the torso takes all its hits, the android dies (both the brain and the power supply are assumed to be located in the torso).

Penalties that apply as a result of a critical hit are applied to the entire android. Even if a location is destroyed, the penalties that have accumulated on that location still apply to the remaining android.

A-4.4 ANDROIDS WITHOUT HYDRAULICS

In some campaigns, a GM might decide that hydraulics are low tech. In these campaigns, androids do not bleed (unless they have the apparent biological option). Instead, their motive circuitry takes cumulative damage until the limb is destroyed.

These androids are handled like this:

Whenever an android receives a penalty as a result of a critical strike, keep track of which limb that penalty is applied to. If any limb exceeds a -20 penalty, it ceases to function. The penalty still applies to the android.

Any critical that describes damage to the hydraulic plant still causes all the listed penalties, but the bleeding results are ignored.

A-4.5 TINKERING WITH ANDROIDS

The time will probably come when a character insists on trying to add a component to an android for which the android wasn't designed. When this happens, the GM can do one of two things.

First of all, they can strenuously suggest a different course of action. If the player insists, the GM should roll the dice, shake his head, and tell the player to make a new character. Brutal, but they were warned. The standard rules in Robotics Manual assumes that any attempt at installing a high impact option for which the android's template was not designed will fail, killing the android in the process.

The second method involves a Hard Construction/ Design maneuver. If the result is less than 100, the attempt is a failure. The tech should make a second maneuver roll, attempting to roll over the first. If he succeeds, no harm was done as a result of the failure, but he can't attempt this modification again until he increases the relevant skills.

If the second maneuver also failed, then the android suffers unfortunate results. If the adjustment was completely passive in nature (no direct brain interface), then the tampering resulted in Extremely Severe damage. Roll an Extremely Severe Malfunction.

If the device does require interface with the brain (i.e., it has to produce output or it is able to be turned on or off mentally), then the android dies. Very sad.

Remember that you could also allow an android to purchase a new body by designing a new template, and then transferring his consciousness over to the new frame. This would, of course, involve the risk of a failed reboot, and it would certain cost a lot, but it is a viable alternative to consider.

A-4.6 ANDROIDS AND CYBERNETCS

An android character may want to install cybernetic equipment at some point. If there is an equivalent piece of equipment described as an android option, he should have that installed instead. If there is no equivalent, then it might be possible to modify the cyberware so that it can be attached as an android option. (Standard cyberware is not designed to attach to non-biological lifeforms.)

The GM will have to convert the talent point cost to option points. Usually, this can be done on a one to one ratio, but some options may cost more (or less) as android options than they do as cyberware. The GM will be the final arbiter of these costs.

The android will probably have to use the "tinkering rules" (Section A-4.5), unless the GM rules that the cyberware is low impact or the character is creating an android template.

Under no circumstances can a biological being get an android option as cyberware.

A-4.7 USING ARMS LAW AND WEAPONS LAW

Arms Law and *Weapon Law* offer a wide range of armor and weapon possibilities. *Arms Law* contains 29 weapons, 13 natural attacks, and 20 primitive and natural armor types. *Weapon Law* contains 49 weapons, 20 primitive armor types, and 4 types of modern armor. In contrast, *Spacemaster* introduces 6 futuristic armor types, and includes only 7 natural armor types.

ARMOR CONVERSION CHART 1

Spacemaster Armor Type	Weapon Law Firearms	Arms Law 1	Arms Law 2
Armored Cloth:			
Flak Vest (I)	I	3	9(+10)¥
Extended Flak Vest (II)	II	4	10(+10)¥
Reinforced Flak Vest (III)	III	13	11(+10)¥
Reinforced Flak Armor (IV)	IV	16	12(+10)¥
Kinetic Armor:			
Vest (V)	I*	17	17(+10)§
Jacket (VI)	III*	18	18(+10)§
Body Armor (VII)	IV*	20	19(+10)§
Combat Armor:			
Torso (VIII)	17†	17	17(+50)§
Torso and Greaves (IX)	18†	18	18(+50)§
Full Combat Armor (X)	20†	20	20(+50)§

* If critical hits an armored location, it is ignored.

† If critical hits an armored location, and round is not armor piercing, it is ignored.

¥ Slash criticals that hit an armored location are resolved as Krush (if large) or Ballistic Impact (if small).

§ Slash and Puncture criticals that hit an armored location are resolved as Krush (if large) or ignored (if small).

ARMOR CONVERSION CHART 2

Arms Law Armor Type	Spacemaster Equivalent*
Robes (2)	1(-10)
Leather Jerkin (6)	4
Leather Coat (7)	4
Leather Breastplate (9)	I
L. B.plate & Greaves (10)	II
Chain Shirt (13)	III(-10)
Chain Shirt & Greaves (14)	IV(-10)
Full Chain (15)	VI(-10)
Chain Hauberk (16)	VII(-15)
Metal Breastplate (17)	V(-10)
M. B.plate & Greaves (18)	VI(-10)
Half Plate (19)	VII(-10)
Full Plate (20)	VII(-20)

* Use the indicated SM armor type for energy or firearm attacks against archaic armor. Numbers in parenthesis indicate a penalty to the defender's DB.

What if someone wants to use a rapier against an opponent in combat armor? How do you resolve a blaster attack against someone in archaic plate mail?

This section presents some optional rules designed to integrate all of these books.

Using Weapon Law

Firearms can still be used against newer armors, even though the invention of kinetic armor rendered them nearly obsolete. Kinetic armor is far more effective against firearms than combat armor, which was designed to protect against energy weapons.

For firearm attacks against *Spacemaster* armor types, consult the Armor Conversion Chart 1. Look up the armor worn by the defender in the column on the left. For more details, see *Blaster Law*.

Using Arms Law

Ballistic cloth is very efficient at distributing force and resisting tears. It is therefore difficult for any attack other than a thrust to penetrate, and a thrust has got to be with a pretty sharp weapon. Kinetic armor, designed to resist high-velocity impacts, is less effective against primitive attacks. Combat armor, on the other hand, is nearly impervious to primitive and natural weaponry.

Two options are given below for handling melee attacks against modern armors.

Option 1: This option is, perhaps, less realistic, but it is less complex and easier to implement. Use the center column in the Armor Conversion Chart 1 to determine the primitive armor equivalent of *Spacemaster* armor types.

Option 2: This option sacrifices playability for realism. Use the third column to determine the primitive armor equivalent of *Spacemaster* armor types. A number in parenthesis indicates a bonus to the defender's DB due to the quality of the armor.

Using Spacemaster

If you want to use energy weapons against the archaic armor types found in *Arms Law* and *Weapons Law*, consult the Armor Conversion Chart 2. This system is rough, but it will do in a pinch. A more detailed conversion can be found in *Blaster Law*.

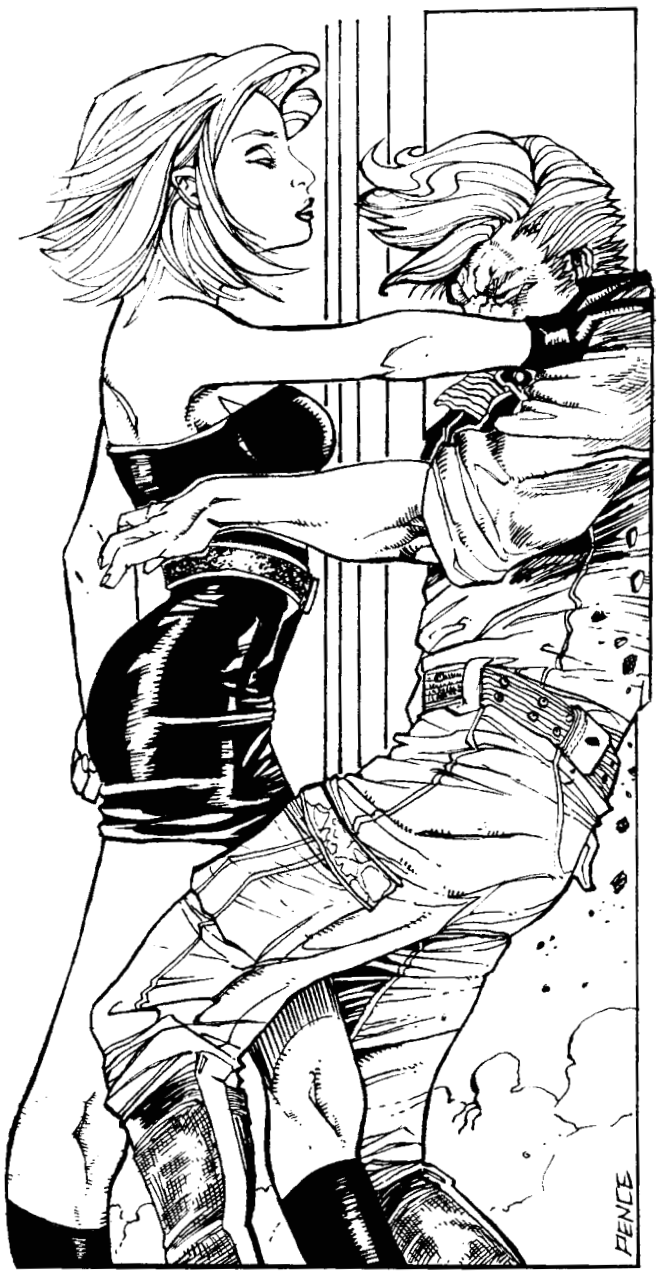
A-4.8 HANDLING NEURAL CRITICALS

Cyberware deals with the brain a great deal. There are many instances where neural damage could occur. What happens if someone plugs a live wire into a character's data jack? What are the results of being caught by black counter-intrusion software, the kind that tries to kill? What happens if a character is jacked into a vehicle when its computer is destroyed?

Any of these situations could cause a Neural critical. The GM must assign a severity level to the critical and roll the result. For example: A combat conducted in cyberspace might be resolved as regular combat, except that all criticals are resolved as Neural criticals. A character jacked into a computer might make a resistance roll when the computer is destroyed, and the result of the roll determines the severity of the critical. Certain psychic powers might also cause Neural criticals.

Many of the effects of Neural criticals are permanent. It would take neural surgery to fix them (the penalty caused by the critical can be applied to the Medical Practice (Surgery) static maneuver to represent the difficulty). Ha ha. This is nothing to laugh about. The repercussions of failure are terrible in the extreme. NPR treatment could fix these problems, the success applying to remove the penalty instead of raising the stats. If no penalty is specified, but the situation is extreme (blindness), assume a -100 penalty.

Some critical results have a duration. They are best waited out. Some critical results don't specify a duration. These can heal normally, or they can be healed by medical skills or psychic powers. As these injuries are considered nerve damage, there is a chance of permanent damage. If permanent damage occurs, then handle as if it is permanent, as detailed above.



A-4.9 PROGRAMS AND SKILLS

The time may come where a player wants to buy a program to increase the skill of an AI. Should the GM let them?

There really isn't a logical reason not to allow this, aside from game balance. Game balance is the only reason that AIs can't just buy as many skills as they want. Players should never be able to buy skills with money, since this derails the entire character advancement engine that is at the core of the *Spacemaster* rules.

Still, the GM may decide that he wants to allow AIs and other characters to be able to purchase skills for their improvement outside of the regular development process. If he does, then he should replace an old skill with the one purchased, without adding to existing skills. The replaced skills should cost about the same amount of development points. For example, if an AI Scientist purchased a program that gave it 3 ranks in Cryptography (a Scientific/Analytical • Specialized skill) then installing it should replace 13 development points worth of other skills. The GM should select which skills are lost. The AI may lose 2 ranks in Data Processing (cost: 2/6) and 1 rank in Alertness (cost: 5/12), for example.

This rule is used to further game balance, but it can be justified within the logic of a game universe. An artificial intelligence is a highly complex system. The skill programs are likewise incredibly complex. Imagine all the data required to give a sapient being the skills necessary to complete even the most basic of tasks. When these skill programs are loaded into an AI's mind, certain data areas are overwritten. It takes time (i.e., levels of experience) for an AI to expand its capacity for knowledge. Forcing new skills into its brain in this way necessarily destroys some old knowledge. The GM should randomly select which skills are lost to represent the uncertainty of this forced learning process. Most androids and AIs would be hesitant to accept a skill program of this nature for fear of losing some valuable information.

This option maintains play balance because the AI never has more skills than it could have purchased using the number of development points it had. However, the AI still has an advantage, since it gains the flexibility of choosing which skills it possesses at any given time.

A-5.0 ⁞⁞ ATTACK TABLES

There are 9 new attack tables in the *RoM:*

Attack Table	Page #
Acid Sprayer Attack Table RM-A-5.1	100
Adhesive Gun Attack Table RM-A-5.2	101
Chainsaw Attack Table RM-A-5.3	102
Cryo Gun Attack Table RM-A-5.4	103
Energy Whip Attack Table RM-A-5.5	104
Force Blade Attack Table RM-A-5.6	105
Power Sword Attack Table RM-A-5.7	106
Pulse Baton Attack Table RM-A-5.8	107
Vibro Axe Attack Table RM-A-5.9	108

Acid Sprayer Attack Table RM-A-5.1

	No Armor							Combat Armor			Kinetic Armor			Armored Cloth				
	12	11	8	5	4	3	1	X	IX	VIII	VII	VI	V	IV	III	II	I	
148-150	28E	29E	34E	43E	29E	41E	57E	12C	15D	20E	33C	42D	51E	33D	43E	45E	51E	**148-150**
145-147	28E	29E	34E	43E	29E	40E	56E	12C	15D	20E	33C	42D	50E	33D	43E	44E	50E	**145-147**
142-144	27E	28E	33E	41E	28E	38E	53E	12B	15D	19E	32B	40D	49E	32D	41E	43E	49E	**142-144**
139-141	26E	27E	32E	40E	27E	36E	51E	12B	14C	19D	31B	39C	47E	31C	40D	41D	47E	**139-141**
136-138	25E	25E	31E	38E	26D	35D	48D	11A	14C	18C	30A	37C	45D	30C	38D	40D	45D	**136-138**
133-135	24D	24D	30E	37E	25D	33D	46D	11A	13B	17C	29A	36B	44D	29B	37C	38C	44D	**133-135**
130-132	23D	23D	28D	35D	24D	31D	43D	11	13B	16B	28	34B	42D	28B	35C	37C	42D	**130-132**
127-129	22D	22D	27D	34D	23C	29D	41D	10	12A	15B	27	33A	40C	27A	34B	35B	40D	**127-129**
124-126	21D	21D	26D	32D	22C	27C	38C	10	12A	14B	26	31A	39C	26A	32B	33B	39C	**124-126**
121-123	20C	20C	25D	31D	21C	25C	36C	9	11A	14A	25	30A	37C	25A	31A	32B	37C	**121-123**
118-120	19C	18C	24D	29D	20C	23C	33C	9	10	13A	23	28	35C	23	30A	30A	35C	**118-120**
115-117	18C	17C	23D	28D	19B	22B	31C	9	10	12	22	27	34B	22	28	29A	34B	**115-117**
112-114	17C	16C	22C	26C	18B	20B	28B	8	9	11	21	25	32B	21	27	27	32B	**112-114**
109-111	16B	15B	21C	25C	17B	18B	26B	8	9	10	20	24	30B	20	25	26	30B	**109-111**
106-108	15B	14B	20C	23C	16A	16B	23B	7	8	9	19	22	28A	19	24	24	28B	**106-108**
103-105	14B	13B	19C	22C	15A	14A	21B	7	8	9	18	21	27A	18	22	22	27A	**103-105**
100-102	13B	11B	18C	21C	14A	12A	18A	6	7	8	17	20	25A	17	21	21	25A	**100-102**
97-99	12A	10A	17B	19C	13A	10A	16A	6	6	7	16	18	23A	16	19	19	23A	**97-99**
94-96	11A	9A	15B	18B	12	8	13A	6	6	6	15	17	22	15	18	18	22	**94-96**
91-93	10A	8A	14B	16B	11	7	11A	5	5	5	14	15	20	14	16	16	20	**91-93**
88-90	9A	7A	13B	15B	10	5	8	5	5	4	13	14	18	13	15	15	18	**88-90**
85-87	8A	6A	12B	13B	9	3	6	4	4	4	12	12	17	12	14	13	17	**85-87**
82-84	7	4	11B	12B	8	1	3	4	4	3	11	11	15	11	12	11	15	**82-84**
79-81	6	3	10A	10B	7	–	1	4	3	2	10	9	13	10	11	10	13	**79-81**
76-78	5	2	9A	9A	6	–	–	3	3	1	9	8	12	9	9	8	12	**76-78**
73-75	4	1	8A	7A	5	–	–	3	2	–	8	6	10	8	8	7	10	**73-75**
70-72	3	–	7A	6A	4	–	–	2	1	–	7	5	8	7	6	5	8	**70-72**
67-69	2	–	6A	4A	3	–	–	2	–	–	6	3	7	6	5	4	7	**67-69**
64-66	1	–	5A	3A	2	–	–	2	–	–	5	2	5	5	3	2	5	**64-66**
61-63	–	–	4	1A	1	–	–	1	–	–	3	–	3	3	2	–	3	**61-63**
58-60	–	–	2	–	–	–	–	–	–	–	2	–	2	2	–	–	2	**58-60**
55-57	–	–	1	–	–	–	–	–	–	–	1	–	–	1	–	–	–	**55-57**
52-54	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**52-54**
49-51	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**49-51**
46-48	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**46-48**
43-45	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**43-45**
40-42	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**40-42**
37-39	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**37-39**
34-36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**34-36**
XX-33	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**XX-33**
UM 01-XX	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	**01-XX UM**

WEAPON DATA

Weight: 2.0 kilograms

Fumble Range: 01 – 03[UM] (XX=3)

Critical Type: Acid (p. 111)

Range Modifiers: (m=meters)

0-2m	-+10
3-4m	0
5-6m	-25
7-9m	-50
10-18m	-100

WEAPON DATA

Note: If *Arms Law* is used,
Breakage Numbers: 1, 2, 3, 4, 5, 6, 7;
Strength/Reliability: 65 w.

F — Fumbled, roll on *SM* Table A-8.10.1 (p. 229).
UM — Unmodified roll. No modifications.

Adhesive Gun Attack Table RM-A-5.2

	No Armor							Combat Armor			Kinetic Armor			Armored Cloth				
	12	11	8	5	4	3	1	X	IX	VIII	VII	VI	V	IV	III	II	I	
148-150	70	80	80	110	120	120	120	40	70	100	60	90	120	50	70	90	110	**148-150**
145-147	69	78	78	107	116	116	116	40	69	98	59	88	117	49	69	88	107	**145-147**
142-144	66	75	76	104	111	111	111	39	67	94	57	85	113	48	66	84	103	**142-144**
139-141	64	71	73	100	105	105	105	38	64	91	55	82	108	46	64	81	99	**139-141**
136-138	61	68	71	96	100	100	100	36	62	87	53	79	104	45	62	78	96	**136-138**
133-135	59	65	68	92	95	95	95	35	60	84	51	76	100	43	59	74	92	**133-135**
130-132	56	62	66	89	90	90	90	34	58	80	50	73	96	41	57	71	88	**130-132**
127-129	54	59	63	85	84	84	84	33	56	77	48	70	92	40	55	68	84	**127-129**
124-126	51	55	61	81	79	79	79	32	53	73	46	67	88	38	53	64	80	**124-126**
121-123	49	52	58	77	74	74	74	31	51	70	44	64	83	37	50	61	76	**121-123**
118-120	46	49	55	74	69	69	69	29	49	66	42	61	79	35	48	58	73	**118-120**
115-117	44	46	53	70	64	64	64	28	47	63	40	58	75	33	46	54	69	**115-117**
112-114	41	43	50	66	58	58	58	27	44	59	38	55	71	32	43	51	65	**112-114**
109-111	39	39	48	62	53	53	53	26	42	56	36	52	67	30	41	48	61	**109-111**
106-108	36	36	45	59	48	48	48	25	40	52	34	49	62	29	39	44	57	**106-108**
103-105	34	33	43	55	43	43	43	24	38	49	32	46	58	27	36	41	53	**103-105**
100-102	31	30	40	51	38	38	38	23	36	45	30	44	54	25	34	38	50	**100-102**
97-99	29	27	38	47	32	32	32	21	33	42	28	41	50	24	32	34	46	**97-99**
94-96	26	23	35	44	27	27	27	20	31	38	27	38	46	22	29	31	42	**94-96**
91-93	24	20	32	40	22	22	22	19	29	35	25	35	41	21	27	28	38	**91-93**
88-90	21	17	30	36	17	17	17	18	27	31	23	32	37	19	25	24	34	**88-90**
85-87	19	14	27	32	11	11	11	17	25	28	21	29	33	17	23	21	30	**85-87**
82-84	16	11	25	29	6	6	6	16	22	24	19	26	29	16	20	18	27	**82-84**
79-81	14	7	22	25	1	1	1	14	20	21	17	23	25	14	18	14	23	**79-81**
76-78	11	4	20	21	–	–	–	13	18	17	15	20	21	13	16	11	19	**76-78**
73-75	9	1	17	17	–	–	–	12	16	14	13	17	16	11	13	8	15	**73-75**
70-72	6	–	15	14	–	–	–	11	14	10	11	14	12	10	11	4	11	**70-72**
67-69	4	–	12	10	–	–	–	10	11	7	9	11	8	8	9	1	7	**67-69**
64-66	1	–	10	6	–	–	–	9	9	3	7	8	4	6	6	–	4	**64-66**
61-63	–	–	7	2	–	–	–	8	7	–	5	5	–	5	4	–	–	**61-63**
58-60	–	–	4	–	–	–	–	6	5	–	4	2	–	3	2	–	–	**58-60**
55-57	–	–	2	–	–	–	–	5	2	–	2	–	–	2	–	–	–	**55-57**
52-54	–	–	–	–	–	–	–	4	–	–	–	–	–	–	–	–	–	**52-54**
49-51	–	–	–	–	–	–	–	3	–	–	–	–	–	–	–	–	–	**49-51**
46-48	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	**46-48**
43-45	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**43-45**
40-42	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**40-42**
37-39	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**37-39**
34-36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**34-36**
xx-33	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**xx-33**
UM 01-xx	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	**01-xx UM**

WEAPON DATA

Note: If *Arms Law* is used,
Breakage Numbers: 1, 2, 3, 4, 5, 6, 7;
Strength/Reliability: 55 w.
Note: Delivers no Criticals. Uses a special mechanic. Does not deliver hits. See below.

WEAPON DATA

Weight: 4.8 kilograms

Fumble Range: 01 – 03UM (XX=3)

Critical Type: none

Range Modifiers: (m=meters)

0-2m	-+10
3-4m	0
5-6m	-25
7-9m	-50
10-18m	-100

F — Weapon fumbled, roll on SM Table A-8.10.1 (p. 229).
UM — Unmodified roll. Apply result with no mods.

The result on this chart is not damage, nor does the weapon deliver any criticals. Rather, the result on the chart indicates a penalty to a static maneuver that the target must make in order to break free from the adhesive. This maneuver is also modified by +50 and by three times the target's Strength bonus. The results of this maneuver are as follows:

Spectacular Failure: No future attempts can be made. The target cannot breathe. d10 rounds to chip his mouth free before he suffocates.

Absolute Failure: No future attempts can be made. He's stuck.

Failure: He's stuck with a cumulative –10 penalty to any future attempts to free himself.

Partial Success: He managed to crack it. Better give him another dose. He gets a cumulative +10 bonus to his next attempt.

Near Success: He breaks his arms free. He can either attack next round, or continue to escape with a cumulative +25 bonus.

Unusual Success: With an amazing explosion, he breaks free and flexes his muscles in an intimidating pose. What were you mixing in that gun?

Success: He breaks free. He has 60% action left for the round.

Absolute Success: He breaks free & has 90% action remaining.

Chainsaw Attack Table RM-A-5.3

	No Armor							Combat Armor			Kinetic Armor			Armored Cloth				
	12	11	8	5	4	3	1	X	IX	VIII	VII	VI	V	IV	III	II	I	
148-150	34E	36E	38E	46E	40E	43E	48E	9E	10D	11E	31E	34E	36E	31E	32E	35E	36E	148-150
145-147	33E	34E	37E	44E	38E	40E	45E	9D	10D	11E	30E	32E	34E	30E	30E	33E	34E	145-147
142-144	31E	32E	35E	42E	34E	37E	42E	9C	10C	10D	27D	30E	31E	27D	27D	30E	31E	142-144
139-141	29D	29D	33D	39E	31D	33D	38D	8B	9B	9C	25D	27D	29D	25D	23D	27D	29D	139-141
136-138	27D	26D	31D	37D	27D	30D	34D	8A	8A	8C	23C	25D	26D	23C	20C	24D	26D	136-138
133-135	25C	24D	30D	34D	24C	26C	31D	7	7A	7B	21C	22C	23D	20C	17C	21C	23D	133-135
130-132	23C	21C	28D	32D	20C	23C	27C	7	7	5A	18B	20C	20C	18B	14B	18C	20C	130-132
127-129	21B	18C	26C	29D	17B	19B	23C	6	6	4	16A	17B	18C	16A	11B	15B	18C	127-129
124-126	19B	15B	24C	27C	14B	15B	19B	6	5	3	14A	15B	15B	13A	7A	12B	15B	124-126
121-123	17B	13B	22C	24C	10B	12B	16B	5	4	2	12	12A	12B	11	4A	9B	12B	121-123
118-120	15A	10B	20B	21C	7A	8A	12B	5	4	1	9	10A	9B	9	1	6A	9B	118-120
115-117	13A	7A	18B	19B	3A	5A	8A	4	3	–	7	7	7A	6	–	3A	7A	115-117
112-114	11	5A	16B	16B	–	1	5A	4	2	–	5	4	4A	4	–	–	4A	112-114
109-111	8	2A	14A	14B	–	–	1	3	1	–	3	2	1	2	–	–	1	109-111
106-108	6	–	12A	11B	–	–	–	3	–	–	–	–	–	–	–	–	–	106-108
103-105	4	–	11A	9A	–	–	–	2	–	–	–	–	–	–	–	–	–	103-105
100-102	2	–	9	6A	–	–	–	2	–	–	–	–	–	–	–	–	–	100-102
97-99	–	–	7	4A	–	–	–	1	–	–	–	–	–	–	–	–	–	97-99
94-96	–	–	5	1	–	–	–	–	–	–	–	–	–	–	–	–	–	94-96
91-93	–	–	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	91-93
88-90	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	88-90
85-87	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	85-87
82-84	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	82-84
79-81	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	79-81
76-78	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	76-78
73-75	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	73-75
70-72	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	70-72
67-69	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	67-69
64-66	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	64-66
61-63	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	61-63
58-60	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	58-60
55-57	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	55-57
52-54	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	52-54
49-51	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	49-51
46-48	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	46-48
43-45	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	43-45
40-42	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	40-42
37-39	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	37-39
34-36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	34-36
xx-33	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	xx-33
UM 01-xx	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-xx UM

WEAPON DATA

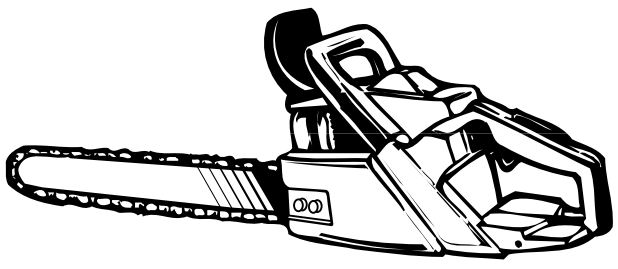
Weight: 3.5 kilograms

Range Modifiers: — (m=meters)

Fumble Range: 01 – 08UM (XX=8)

Critical Type: Shredding (p. 124)

F — Weapon fumbled, roll on *SM* Table A-8.10.3 (p. 231).
UM — Unmodified roll. Apply result with no modifications.



WEAPON DATA

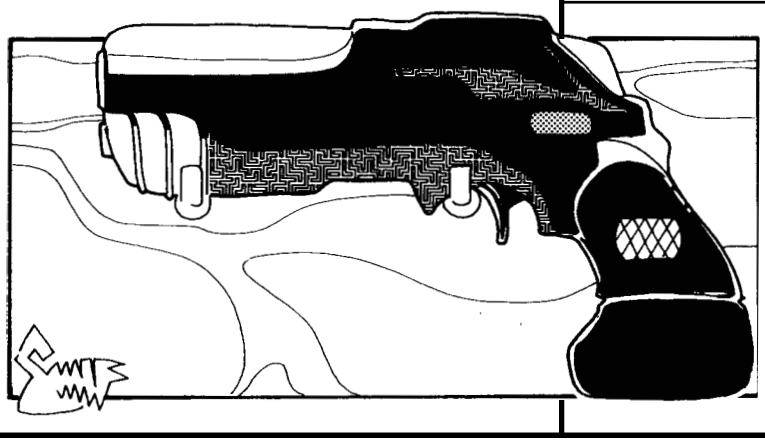
Note: If *Arms Law* is used,
Breakage Numbers: 1, 2, 3, 4, 5, 6, 7, 8;
Strength/Reliability: 50 w.

Cryo Gun Attack Table RM-A-5.4

	No Armor							Combat Armor			Kinetic Armor			Armored Cloth				
	12	11	8	5	4	3	1	X	IX	VIII	VII	VI	V	IV	III	II	I	
148-150	25E	26E	31E	39E	26E	37E	52E	11C	14D	17E	30C	38D	46E	30D	39E	41E	46E	**148-150**
145-147	25E	26E	31E	39E	26E	36E	51E	11C	14D	17E	30C	38D	45E	30D	39E	41E	45E	**145-147**
142-144	24E	25E	30E	37E	25E	35E	48E	11B	14D	17E	29B	36D	44E	29D	37E	39E	44E	**142-144**
139-141	23E	24E	29E	36E	24E	33E	46E	11B	13C	16D	28B	35C	42E	28C	36D	38D	42E	**139-141**
136-138	22E	23E	28E	35E	23D	31D	44D	11A	13C	15C	27A	34C	41D	27C	35D	36D	41D	**136-138**
133-135	22D	22D	27E	33E	23D	30D	42D	10A	12B	14C	26A	32B	39D	26B	33C	35C	39D	**133-135**
130-132	21D	21D	26D	32D	22D	28D	39D	10	12B	14B	25	31B	38D	25B	32C	33C	38D	**130-132**
127-129	20D	20D	25D	31D	21C	26D	37D	9	11A	13B	24	30A	36C	24A	31B	32B	36D	**127-129**
124-126	19D	19D	24D	29D	20C	25C	35C	9	11A	12B	23	28A	35C	23A	29B	31B	35C	**124-126**
121-123	18C	18C	23D	28D	19C	23C	33C	9	10A	12A	22	27A	33C	22A	28A	29B	33C	**121-123**
118-120	17C	17C	22D	27D	18C	21C	30C	8	10	11A	21	26	32C	21	27A	28A	32C	**118-120**
115-117	16C	16C	21C	25D	17B	20B	28C	8	9	10	20	24	30B	20	26	26A	30B	**115-117**
112-114	15C	15C	20C	24C	16B	18B	26B	8	9	9	20	23	29B	20	24	25	29B	**112-114**
109-111	14B	13B	19C	23C	15B	16B	24B	7	8	9	19	22	27B	19	23	23	27B	**109-111**
106-108	14B	12B	18C	21C	14A	14B	21B	7	8	8	18	20	26A	18	22	22	26B	**106-108**
103-105	13B	11B	17C	20C	14A	13A	19B	6	7	7	17	19	24A	17	20	21	24A	**103-105**
100-102	12B	10B	16C	19C	13A	11A	17A	6	7	7	16	18	23A	16	19	19	23A	**100-102**
97-99	11A	9A	15B	17C	12A	9A	15A	6	6	6	15	16	21A	15	18	18	21A	**97-99**
94-96	10A	8A	14B	16B	11	8	12A	5	6	5	14	15	20	14	16	16	20	**94-96**
91-93	9A	7A	13B	15B	10	6	10A	5	5	5	13	14	18	13	15	15	18	**91-93**
88-90	8A	6A	12B	13B	9	4	8	5	5	4	12	12	17	12	14	13	17	**88-90**
85-87	7A	5A	11B	12B	8	3	6	4	4	3	11	11	15	11	12	12	15	**85-87**
82-84	6	4	10A	11B	7	1	3	4	3	2	10	10	14	10	11	11	14	**82-84**
79-81	5	3	9A	9B	6	–	1	3	3	2	9	9	12	9	10	9	12	**79-81**
76-78	5	2	8A	8A	5	–	–	3	2	1	8	7	11	8	8	8	11	**76-78**
73-75	4	1	7A	7A	5	–	–	3	2	–	7	6	9	7	7	6	9	**73-75**
70-72	3	–	6A	5A	4	–	–	2	1	–	6	5	8	6	6	5	8	**70-72**
67-69	2	–	5A	4A	3	–	–	2	–	–	5	3	6	5	5	3	6	**67-69**
64-66	1	–	4	3A	2	–	–	2	–	–	4	2	5	4	3	2	5	**64-66**
61-63	–	–	3	1A	1	–	–	1	–	–	3	–	3	3	2	–	3	**61-63**
58-60	–	–	2	–	–	–	–	–	–	–	2	–	2	2	–	–	2	**58-60**
55-57	–	–	1	–	–	–	–	–	–	–	1	–	–	1	–	–	–	**55-57**
52-54	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**52-54**
49-51	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**49-51**
46-48	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**46-48**
43-45	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**43-45**
40-42	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**40-42**
37-39	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**37-39**
34-36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**34-36**
xx-33	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**xx-33**
UM 01-xx	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	**01-xx UM**

WEAPON DATA

Note: If *Arms Law* is used,
Breakage Numbers: 1, 2, 3, 4, 5, 6, 7;
Strength/Reliability: 55 w.



WEAPON DATA

Weight: 1.1 kilograms

Fumble Range: 01 – 03[UM] (XX=3)

Critical Type: Cold (*SM,* p. 218)

Range Modifiers: (m=meters)

0-2m	+10
3-4m	0
5-6m	-25
7-9m	-50
10-18m	-100

F — Weapon fumbled, roll on *SM* Table A-8.10.1 (p. 229).
UM — Unmodified roll. Apply result with no modifications.

Energy Whip Attack Table RM-A-5.5

	No Armor							Combat Armor			Kinetic Armor			Armored Cloth				
	12	11	8	5	4	3	1	X	IX	VIII	VII	VI	V	IV	III	II	I	
148-150	7E	9E	10E	18E	19E	22E	27E	2A	4B	6C	2A	5C	8E	7E	9E	13E	13E	148-150
145-147	7E	9E	10E	18E	19E	22E	27E	2	4A	6B	2	5B	8D	7E	9E	13E	13E	145-147
142-144	7E	9E	10E	18E	19E	21E	26E	2	4	6A	2	5A	8D	7E	9E	13E	13E	142-144
139-141	7D	9D	10E	17E	18E	21E	25E	2	4	6	2	5	8C	7D	9D	13D	13E	139-141
136-138	7D	9D	10D	17E	17D	20D	24D	2	4	6	2	5	8A	7C	9D	12D	12D	136-138
133-135	7D	9D	10D	16D	17D	19D	23D	2	4	6	2	5	8A	7C	8C	12D	12D	133-135
130-132	7C	8D	9D	16D	16D	18D	22D	2	4	5	2	5	8	7B	8C	11C	11D	130-132
127-129	7C	8C	9D	15D	16C	18C	21D	2	4	5	2	5	7	6B	8B	11C	11C	127-129
124-126	6C	8C	9C	15D	15C	17C	20C	2	4	5	2	5	7	6B	7B	11C	10C	124-126
121-123	6B	7C	9C	14D	14C	16C	19C	2	4	4	2	5	7	6A	7B	10B	10C	121-123
118-120	6B	7B	8C	14C	14B	15C	18C	2	3	4	2	5	7	6A	7A	10B	9C	118-120
115-117	6A	7B	8B	13C	13B	14B	18C	2	3	4	2	5	6	6	7A	9A	9B	115-117
112-114	6A	7B	8B	13C	12B	14B	17B	2	3	3	2	4	6	5	6	9A	8B	112-114
109-111	5A	6A	8B	12C	12A	13B	16B	2	3	3	2	4	6	5	6	8A	8B	109-111
106-108	5	6A	7B	12C	11A	12A	15B	2	3	3	2	4	6	5	6	8	8A	106-108
103-105	5	6A	7A	11B	10A	11A	14A	2	3	3	2	4	5	5	5	8	7A	103-105
100-102	5	5	7A	10B	10	11A	13A	2	2	2	2	4	5	4	5	7	7A	100-102
97-99	5	5	7A	10B	9	10A	12A	2	2	2	2	4	5	4	5	7	6	97-99
94-96	4	5	6A	9B	8	9	11A	2	2	2	2	4	5	4	4	6	6	94-96
91-93	4	5	6	9A	8	8	10	2	2	1	2	3	4	4	4	6	5	91-93
88-90	4	4	6	8A	7	7	9	2	2	1	2	3	4	4	4	5	5	88-90
85-87	4	4	6	8A	7	7	8	2	2	–	2	3	4	3	3	5	4	85-87
82-84	4	4	5	7A	6	6	7	1	1	–	2	3	4	3	3	5	4	82-84
79-81	3	3	5	7A	5	5	6	1	1	–	2	3	3	3	3	4	3	79-81
76-78	3	3	5	6	5	4	5	1	1	–	2	3	3	3	2	4	3	76-78
73-75	3	3	4	6	4	4	4	1	–	–	2	3	3	2	2	3	3	73-75
70-72	3	3	4	5	3	3	3	1	–	–	2	3	3	2	2	3	2	70-72
67-69	3	2	4	5	3	2	2	1	–	–	2	2	3	2	1	2	2	67-69
64-66	2	2	4	4	2	1	1	1	–	–	2	2	2	2	1	2	1	64-66
61-63	2	2	3	3	1	–	–	–	–	–	2	2	2	2	–	2	–	61-63
58-60	2	1	3	3	–	–	–	–	–	–	2	2	2	1	–	1	–	58-60
55-57	2	1	3	2	–	–	–	–	–	–	2	2	2	1	–	–	–	55-57
52-54	2	–	3	2	–	–	–	–	–	–	1	2	1	–	–	–	–	52-54
49-51	1	–	2	1	–	–	–	–	–	–	1	2	1	–	–	–	–	49-51
46-48	1	–	2	–	–	–	–	–	–	–	1	1	–	–	–	–	–	46-48
43-45	1	–	2	–	–	–	–	–	–	–	1	1	–	–	–	–	–	43-45
40-42	–	–	2	–	–	–	–	–	–	–	1	1	–	–	–	–	–	40-42
37-39	–	–	1	–	–	–	–	–	–	–	1	1	–	–	–	–	–	37-39
34-36	–	–	1	–	–	–	–	–	–	–	1	–	–	–	–	–	–	34-36
XX-33	–	–	1	–	–	–	–	–	–	–	1	–	–	–	–	–	–	XX-33
UM 01-XX	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-XX UM

WEAPON DATA

Weight: 0.5 kilograms

Range Modifiers: (m=meters) 0-3m 0

Fumble Range: 01 – 06UM (XX=6)

Critical Type: Plasma (*SM,* p. 224)

WEAPON DATA

Note: If *Arms Law* is used,
Breakage Numbers: 1, 2, 3, 4;
Strength/Reliability: 55 w.

Note: If weapon is not activated, use Slash or Grapple criticals.

F — Weapon fumbled, roll on *SM* Table A-8.10.3 (p. 231).

UM — Unmodified roll. Apply result with no modifications.

Force Blade Attack Table RM-A-5.6

	No Armor							Combat Armor			Kinetic Armor			Armored Cloth				
	12	11	8	5	4	3	1	X	IX	VIII	VII	VI	V	IV	III	II	I	
148-150	24E	24E	27E	27E	27E	27E	27E	8E	12E	15E	25E	26E	27E	25E	27E	28E	29E	**148-150**
145-147	24E	24E	27E	27E	27E	27E	27E	8E	12E	15E	25E	26E	27E	25E	27E	28E	29E	**145-147**
142-144	23E	23E	26E	26E	26E	26E	26E	8E	12E	15E	24E	25E	26E	24E	26E	27E	28E	**142-144**
139-141	23E	22E	26E	25E	25E	25E	25E	8D	12E	14E	24E	24E	25E	24E	25E	26E	27E	**139-141**
136-138	22E	22E	25E	24E	24E	24E	24E	8D	12D	14D	23E	23E	24E	23E	24E	25E	25E	**136-138**
133-135	21E	21E	24E	24E	23E	23D	23D	8D	11D	13D	22E	23D	23D	22E	23E	24D	24D	**133-135**
130-132	20D	20D	23E	23D	22D	22D	22D	8C	11D	13D	21D	22D	22D	21D	22D	23D	23D	**130-132**
127-129	20D	19D	23D	22D	21D	20D	20D	7C	10C	12D	20D	21D	21D	20D	21D	22D	22D	**127-129**
124-126	19D	18D	22D	21D	20D	19D	19D	7C	10C	12C	20D	20D	20D	20D	20D	21D	21D	**124-126**
121-123	18D	17D	21D	20D	19D	18D	18D	7B	10C	11C	19D	19D	19D	19D	19D	20D	20D	**121-123**
118-120	17D	17D	20D	19D	18D	17C	17C	7B	9B	11C	18D	18C	18C	18D	18D	19C	18C	**118-120**
115-117	17D	16C	20D	18C	17C	16C	16C	7A	9B	10C	17C	17C	17C	17D	18C	17C	17C	**115-117**
112-114	16C	15C	19D	17C	16C	15C	15C	6A	9B	10B	17C	16C	16C	17C	17C	16C	16C	**112-114**
109-111	15C	14C	18C	16C	15C	14C	14C	6A	8B	9B	16C	15C	15C	16C	16C	15C	15C	**109-111**
106-108	14C	13C	17C	15C	14C	13C	13C	6	8A	9B	15C	14C	14B	15C	15C	14C	14B	**106-108**
103-105	14C	12C	16C	15C	13C	12B	12B	6	8A	8B	14C	14B	13B	14C	14C	13B	13B	**103-105**
100-102	13C	11B	16C	14C	12B	11B	11B	6	7A	8A	13C	13B	12B	13C	13B	12B	11B	**100-102**
97-99	12C	11B	15C	13B	11B	10B	10B	5	7	7A	13B	12B	11B	13B	12B	11B	10B	**97-99**
94-96	11B	10B	14C	12B	10B	9B	9B	5	6	7A	12B	11B	10B	12B	11B	10B	9B	**94-96**
91-93	11B	9B	13B	11B	9B	7A	7B	5	6	6A	11B	10B	9A	11B	10B	9B	8A	**91-93**
88-90	10B	8B	13B	10B	8B	6A	6A	5	6	6	10B	9A	8A	10B	9B	8A	7A	**88-90**
85-87	9B	7A	12B	9B	7A	5A	5A	4	5	5	9B	8A	7A	9B	8A	7A	6A	**85-87**
82-84	8B	6A	11B	8A	6A	4A	4A	4	5	5	9A	7A	6A	9B	7A	6A	4A	**82-84**
79-81	8A	6A	10B	7A	5A	3A	3A	4	5	4	8A	6A	5	8A	6A	5A	3	**79-81**
76-78	7A	5A	9B	6A	4A	2	2A	4	4	4	7A	5A	4	7A	5A	4A	2	**76-78**
73-75	6A	4A	9B	6A	3A	1	1	4	4	3	6A	5	3	6A	4A	3	1	**73-75**
70-72	5A	3	8A	5A	2	–	–	3	4	3	5A	4	2	5A	3	2	–	**70-72**
67-69	5A	2	7A	4A	–	–	–	3	3	2	5A	3	–	5A	2	–	–	**67-69**
64-66	4A	1	6A	3	–	–	–	3	3	2	4	2	–	4	1	–	–	**64-66**
61-63	3	–	6A	2	–	–	–	3	2	1	3	1	–	3	–	–	–	**61-63**
58-60	2	–	5A	1	–	–	–	2	2	–	2	–	–	2	–	–	–	**58-60**
55-57	2	–	4A	–	–	–	–	2	2	–	2	–	–	2	–	–	–	**55-57**
52-54	–	–	3	–	–	–	–	2	1	–	–	–	–	–	–	–	–	**52-54**
49-51	–	–	3	–	–	–	–	2	1	–	–	–	–	–	–	–	–	**49-51**
46-48	–	–	2	–	–	–	–	2	–	–	–	–	–	–	–	–	–	**46-48**
43-45	–	–	1	–	–	–	–	1	–	–	–	–	–	–	–	–	–	**43-45**
40-42	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	**40-42**
37-39	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**37-39**
34-36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**34-36**
xx-33	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**xx-33**
UM 01-xx	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	**01-xx UM**

WEAPON DATA

Note: If *Arms Law* is used,
Breakage Numbers: 1, 2, 3, 4;
Strength/Reliability: 55 w.

WEAPON DATA

Weight: 0.2 kilograms

Range Modifiers: — (m=meters)

Fumble Range: 01 – 05[UM] (XX=5)

Critical Type: Raking (*Equipment Manual,* p. 102)

F — Weapon fumbled, roll on *SM* Table A-8.10.3 (p. 231).
UM — Unmodified roll. Apply result with no modifications.

Power Sword Attack Table RM-A-5.7

	No Armor							Combat Armor			Kinetic Armor			Armored Cloth				
	12	11	8	5	4	3	1	X	IX	VIII	VII	VI	V	IV	III	II	I	
148-150	30E	31E	33E	40E	37E	38E	45E	14E	17E	23E	33E	33E	33E	35E	37E	38E	40E	148-150
145-147	30E	31E	33E	40E	37E	37E	44E	14E	17E	23E	33E	33E	33E	35E	37E	38E	39E	145-147
142-144	29E	30E	32E	38E	35E	36E	42E	14E	17E	22E	32E	32E	32E	34E	35E	36E	38E	142-144
139-141	28E	29E	31E	37E	34E	34E	41E	14D	16E	22E	31E	31E	30E	33E	34E	35E	36E	139-141
136-138	27E	28E	30E	36E	32E	33E	39E	13D	16D	21D	30E	29E	29E	32E	33E	33E	35E	136-138
133-135	26E	27E	29E	34E	31E	31D	37E	13D	15D	20D	29E	28E	28D	30E	31E	32E	33D	133-135
130-132	25D	25D	28E	33D	30D	30D	35D	13C	15D	19D	28D	27D	27D	29D	30D	30D	31D	130-132
127-129	24D	24D	27D	32D	28D	28D	33D	12C	14C	18D	27D	26D	25D	28D	29D	29D	30D	127-129
124-126	23D	23D	26D	30D	27D	27D	32D	12C	14C	18C	26D	25D	24D	27D	28D	28D	28D	124-126
121-123	22D	22D	26D	29D	26D	25D	30D	12B	13C	17C	25D	24D	23D	26D	26D	26D	27D	121-123
118-120	22D	21D	25D	28D	24D	24C	28D	11B	13C	16C	24D	23D	22C	25D	25D	25D	25C	118-120
115-117	21D	20C	24D	26D	23C	22C	26C	11A	12B	15C	23D	21C	20C	24D	24C	23C	23C	115-117
112-114	20C	19C	23D	25C	21C	21C	24C	10A	12B	14B	21C	20C	19C	23C	22C	22C	22C	112-114
109-111	19C	18C	22C	24C	20C	19C	23C	10A	11B	14B	20C	19C	18C	22C	21C	20C	20C	109-111
106-108	18C	17C	21C	22C	19C	18C	21C	10	11A	13B	19C	18C	17B	21C	20C	19C	19B	106-108
103-105	17C	16C	20C	21C	17C	16B	19C	9	10A	12B	18C	17C	15B	19C	18C	18C	17B	103-105
100-102	16C	14B	19C	20C	16B	15B	17B	9	10A	11A	17C	16B	14B	18C	17C	16B	15B	100-102
97-99	15C	13B	18C	18B	14B	13B	15B	9	9A	11A	16B	15B	13B	17B	16B	15B	14B	97-99
94-96	14B	12B	17C	17B	13B	12B	14B	8	9	10A	15B	14B	12B	16B	14B	13B	12B	94-96
91-93	13B	11B	16C	16B	12B	10A	12B	8	8	9A	14B	12B	10A	15B	13B	12B	11A	91-93
88-90	12B	10B	15B	14B	10B	9A	10A	7	8	8	13B	11B	9A	14B	12B	11B	9A	88-90
85-87	11B	9A	14B	13B	9A	7A	8A	7	7	7	12B	10A	8A	13B	11B	9A	7A	85-87
82-84	10B	8A	13B	12B	7A	6A	6A	7	7	7	11B	9A	7A	12B	9A	8A	6A	82-84
79-81	9B	7A	12B	10A	6A	4A	5A	6	6	6	10A	8A	6A	11A	8A	6A	4A	79-81
76-78	8A	6A	11B	9A	5A	3	3A	6	6	5	9A	7A	4	9A	7A	5A	3	76-78
73-75	7A	5A	10B	8A	3A	1	1A	5	5	4	8A	6A	3	8A	5A	3A	1	73-75
70-72	6A	4A	9A	6A	2	–	–	5	5	3	7A	4	2	7A	4A	2	–	70-72
67-69	5A	2	9A	5A	–	–	–	5	4	3	6A	3	–	6A	3	–	–	67-69
64-66	4A	1	8A	4	–	–	–	4	4	2	5	2	–	5A	1	–	–	64-66
61-63	4A	–	7A	2	–	–	–	4	3	1	4	1	–	4	–	–	–	61-63
58-60	3	–	6A	1	–	–	–	4	3	–	3	–	–	3	–	–	–	58-60
55-57	2	–	5A	–	–	–	–	3	2	–	2	–	–	2	–	–	–	55-57
52-54	–	–	4	–	–	–	–	3	2	–	–	–	–	–	–	–	–	52-54
49-51	–	–	3	–	–	–	–	2	1	–	–	–	–	–	–	–	–	49-51
46-48	–	–	2	–	–	–	–	2	–	–	–	–	–	–	–	–	–	46-48
43-45	–	–	1	–	–	–	–	2	–	–	–	–	–	–	–	–	–	43-45
40-42	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	40-42
37-39	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	37-39
34-36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	34-36
xx-33	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	xx-33
UM 01-xx	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-xx UM

WEAPON DATA

Weight: 0.3 kilograms **Range Modifiers:** — (m=meters)

Fumble Range: 01 – 06[UM] (XX=6)

Critical Type: Plasma (*SM,* p. 224)

F — Weapon fumbled, roll on *SM* Table A-8.10.3 (p. 231).
UM — Unmodified roll. Apply result with no modifications.

Note: If *Arms Law* is used,
Breakage Numbers: 1, 2, 3, 4;
Strength/Reliability: 55 w.
Note: If fumbled, roll a 'D' Plasma critical on wielder.

WEAPON DATA

Pulse Baton Attack Table RM-A-5.8

	No Armor							Combat Armor			Kinetic Armor			Armored Cloth				
	12	11	8	5	4	3	1	X	IX	VIII	VII	VI	V	IV	III	II	I	
148-150	13E	15E	13E	21E	17E	17E	22E	6C	8D	10E	8E	11E	14E	13E	15E	19E	19E	**148-150**
145-147	13E	15E	13E	21E	17E	17E	22E	6C	8D	10E	8D	11E	14E	13E	15E	19E	19E	**145-147**
142-144	13E	15E	13E	20E	17E	17E	21E	6B	8C	10E	8C	11D	14E	13D	15E	18E	18E	**142-144**
139-141	13D	14D	13D	20E	16D	16D	20E	6A	8C	9D	8A	11C	14D	12D	14D	18D	17D	**139-141**
136-138	12D	14D	12D	19D	15D	15D	19D	6	7B	8D	8	11C	13D	12C	13C	17D	16D	**136-138**
133-135	12C	13D	12D	18D	14D	15D	18D	6	7B	8C	8	10B	13C	11C	13C	16C	16D	**133-135**
130-132	11C	12C	12D	17D	14C	14D	17D	5	7A	7C	8	10A	12C	11B	12B	15C	15D	**130-132**
127-129	11C	12C	11C	16D	13C	14C	16C	5	6A	7B	7	10	12B	10A	11B	14B	14C	**127-129**
124-126	10B	11C	11C	16D	12C	13C	15C	5	6	6B	7	9	11B	10A	10B	13B	13C	**124-126**
121-123	10B	11B	10C	15C	11B	12C	15C	5	5	5B	7	9	11B	9	10A	13B	12C	**121-123**
118-120	9A	10B	10B	14C	11B	12B	14C	4	5	5A	7	9	10A	9	9A	12A	11B	**118-120**
115-117	9A	9A	9B	13C	10A	11B	13B	4	5	4A	7	8	10A	8	8	11A	10B	**115-117**
112-114	9A	9A	9B	13C	9A	10B	12B	4	4	3	6	8	9	8	8	10	9B	**112-114**
109-111	8	8A	9A	12B	9A	10A	11B	4	4	3	6	8	9	7	7	9	9A	**109-111**
106-108	8	8	8A	11B	8	9A	10A	3	3	2	6	7	8	7	6	9	8A	**106-108**
103-105	7	7	8A	10B	7	8A	9A	3	3	1	6	7	8	6	6	8	7A	**103-105**
100-102	7	6	7	9A	6	8	8A	3	2	–	6	7	7	6	5	7	6	**100-102**
97-99	6	6	7	9A	6	7	7	3	2	–	5	6	7	5	4	6	5	**97-99**
94-96	6	5	7	8A	5	7	6	2	2	–	5	6	6	5	4	5	4	**94-96**
91-93	5	5	6	7A	4	6	5	2	1	–	5	6	6	4	3	5	3	**91-93**
88-90	5	4	6	6A	3	5	4	2	–	–	5	5	5	4	2	4	2	**88-90**
85-87	4	3	5	5	3	5	3	2	–	–	4	5	5	3	1	3	2	**85-87**
82-84	4	3	5	5	2	4	2	1	–	–	4	5	4	3	–	2	–	**82-84**
79-81	4	2	4	4	1	3	1	1	–	–	4	4	4	2	–	1	–	**79-81**
76-78	3	2	4	3	–	3	–	–	–	–	4	4	3	2	–	–	–	**76-78**
73-75	3	1	4	2	–	2	–	–	–	–	4	4	3	1	–	–	–	**73-75**
70-72	2	–	3	2	–	1	–	–	–	–	3	3	2	–	–	–	–	**70-72**
67-69	2	–	3	–	–	–	–	–	–	–	3	3	2	–	–	–	–	**67-69**
64-66	1	–	2	–	–	–	–	–	–	–	3	3	1	–	–	–	–	**64-66**
61-63	–	–	2	–	–	–	–	–	–	–	3	2	1	–	–	–	–	**61-63**
58-60	–	–	2	–	–	–	–	–	–	–	2	2	–	–	–	–	–	**58-60**
55-57	–	–	1	–	–	–	–	–	–	–	2	2	–	–	–	–	–	**55-57**
52-54	–	–	–	–	–	–	–	–	–	–	2	1	–	–	–	–	–	**52-54**
49-51	–	–	–	–	–	–	–	–	–	–	2	1	–	–	–	–	–	**49-51**
46-48	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–	**46-48**
43-45	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	**43-45**
40-42	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	**40-42**
37-39	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**37-39**
34-36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**34-36**
xx-33	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**xx-33**
UM 01-xx	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	**01-xx UM**

WEAPON DATA

Note: If *Arms Law* is used,
Breakage Numbers: 1, 2, 3, 4, 5, 6, 7, 8;
Strength/Reliability: 50-60 w.

WEAPON DATA

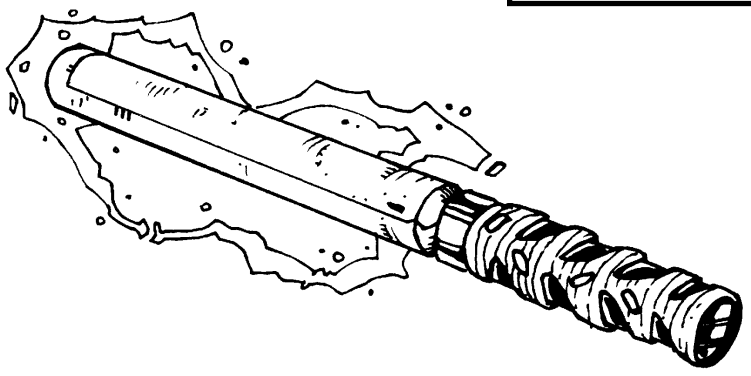
Weight: 1.2 kilograms

Range Modifiers: — (m=meters)

Fumble Range: 01 – 04[UM] (XX=4)

Critical Type: Stunner (*SM,* p. 227)

F — Weapon fumbled, roll on *SM* Table A-8.10.3 (p. 231).
UM — Unmodified roll. Apply result with no modifications.



Vibro Axe Attack Table RM-A-5.9

	No Armor							Combat Armor			Kinetic Armor			Armored Cloth				
	12	11	8	5	4	3	1	X	IX	VIII	VII	VI	V	IV	III	II	I	
148-150	34E	36E	34E	42E	38E	41E	46E	8C	10B	12C	18D	20D	23E	31E	32E	35E	36E	**148-150**
145-147	34E	35E	34E	41E	37E	40E	44E	8	10A	12B	18D	20D	23E	30E	31E	34E	35E	**145-147**
142-144	32E	33E	32E	39E	34E	37E	42E	8	9	10A	17C	19D	22E	29E	29E	32E	33E	**142-144**
139-141	31E	32E	31E	38E	32E	35E	39E	8	9	9	16C	18C	20D	27D	27E	30E	31E	**139-141**
136-138	29E	30D	30E	36E	30E	32D	37D	7	8	8	15B	17C	19D	26D	25D	28D	30D	**136-138**
133-135	28D	28D	28D	34D	28D	30D	34D	7	7	6	15A	16C	18D	24D	23D	26D	28D	**133-135**
130-132	26D	26D	27D	32D	25D	28D	32D	6	6	5	14A	15B	17C	23C	21D	25D	26D	**130-132**
127-129	25D	24D	26D	31D	23D	25C	29D	6	5	4	13	14B	16C	21C	20C	23D	24D	**127-129**
124-126	23D	23C	25D	29D	21D	23C	27C	5	5	2	12	13A	14C	20C	18C	21C	22C	**124-126**
121-123	22C	21C	23C	27D	18D	20C	24C	5	4	1	11	12A	13B	18B	16C	19C	20C	**121-123**
118-120	20C	19C	22C	25C	16C	18C	21C	4	3	–	10	11A	12B	17B	14B	17C	18C	**118-120**
115-117	19C	17B	21C	23C	14C	15B	19B	4	2	–	9	10	11B	15B	12B	15B	17C	**115-117**
112-114	18C	15B	19C	22C	12C	13B	16B	3	2	–	8	9	10A	13A	10B	13B	15B	**112-114**
109-111	16B	14B	18C	20C	9C	11B	14B	3	–	–	7	8	9A	12A	8A	11B	13B	**109-111**
106-108	15B	12B	17B	18C	7C	8A	11B	2	–	–	6	7	7A	10A	6A	9B	11B	**106-108**
103-105	13B	10A	15B	16B	5B	6A	9A	2	–	–	6	6	6	9	4A	7A	9B	**103-105**
100-102	12B	8A	14B	15B	3B	3A	6A	1	–	–	5	5	5	7	2A	5A	7A	**100-102**
97-99	10A	6A	13B	13B	–	1	4A	–	–	–	4	4	4	6	–	4A	5A	**97-99**
94-96	9A	5	11A	11B	–	–	1	–	–	–	3	3	3	4	–	2	3A	**94-96**
91-93	7A	3	10A	9A	–	–	–	–	–	–	2	2	1	3	–	–	2A	**91-93**
88-90	6A	1	9A	8A	–	–	–	–	–	–	1	–	–	1	–	–	–	**88-90**
85-87	4A	–	8A	6A	–	–	–	–	–	–	–	–	–	–	–	–	–	**85-87**
82-84	3	–	6A	4A	–	–	–	–	–	–	–	–	–	–	–	–	–	**82-84**
79-81	1	–	5	2A	–	–	–	–	–	–	–	–	–	–	–	–	–	**79-81**
76-78	–	–	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**76-78**
73-75	–	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**73-75**
70-72	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**70-72**
67-69	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**67-69**
64-66	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**64-66**
61-63	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**61-63**
58-60	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**58-60**
55-57	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**55-57**
52-54	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**52-54**
49-51	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**49-51**
46-48	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**46-48**
43-45	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**43-45**
40-42	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**40-42**
37-39	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**37-39**
34-36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**34-36**
xx-33	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**xx-33**
UM 01-xx	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	**01-xx UM**

WEAPON DATA

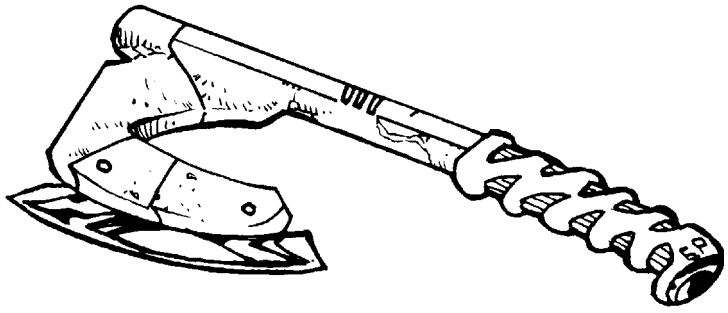
Weight: 1.9 kilograms

Range Modifiers: — (m=meters)

Fumble Range: 01 – 06[UM] (XX=6)

Critical Type: Shredding (p. 124)

F — Weapon fumbled, roll on *SM* Table A-8.10.3 (p. 231).
UM — Unmodified roll. Apply result with no modifications.



WEAPON DATA

Note: If *Arms Law* is used,
Breakage Numbers: 1, 2, 3, 4, 5, 6, 7;
Strength/Reliability: 75-85 w.

A-6.0 ∷ CRITICAL TABLES

This section contains a key to all the tables in this section and 15 critical tables. In addition, at the bottom of each table, there is a key for all of the symbols used in these tables.

HOW TO USE THESE TABLES

To resolve most critical hits, roll d100 (not open-ended) and cross-index the result on the appropriate column of the chart.

The exceptions to this method are the large and super large critical tables. When attacking a target these sizes, you must ascertain the type of weapon used. Cross-index a high open-ended d100 roll with the type of weapon used. Note that an attack must deliver a critical severity of 'B' or higher to obtain a roll on the Large Android Critical Strike Table. Similarly, an attack must deliver a critical severity of 'D' or higher to obtain a roll on the Super Large Android Critical Strike Table. (See *SM* p. 186).

ANDROID CRITICALS

Androids have their own set of critical tables. Androids are more resistant to stun than other beings. They also bleed differently. Android bleeding is given in rounds, not hits per round. Whenever bleeding is indicated for an android, the value given is the number of rounds the android has before loss of hydraulic pressure renders the limb or system inert.

ANDROID CRITICAL TABLE USAGE SUMMARY CHART

Normal Critical Delivered	ANDROID CRITICAL USED: If Armored Location	If Unarmored Location
Acid	Burn Through	Blast
B. Armor Piercing	Piercing	Piercing
B. Hollowpoint *	Melee	Blast
B. Impact	Melee	Melee
B. Puncture	Puncture	Puncture
B. Shrapnel	Burst/Raking	Burst/Raking
Blaster	Burn Through	Blast
Burst	Burst/Raking	Burst/Raking
Cold	N/A	N/A
Electricity §	Electrical	Electrical
Grapple *	Melee	Melee
Heat	Burn Through	Blast
Impact	Melee	Melee
Krush	Melee	Melee
Laser	Burn Through	Piercing
Martial Arts *	Melee	Melee
Plasma	Burn Through	Blast
Puncture	Puncture	Puncture
Raking	Scorch	Burst/Raking
Shrapnel	Burst/Raking	Burst/Raking
Shredding	Burst/Raking	Burst/Raking
Slash	Melee	Melee

* — Reduced 2 levels of severity.
§ — Also used for Large and SL androids.

Acid Critical Strike Table: Use this critical strike table to resolve attacks from the molecular acid sprayer. Androids subject to acid attacks resolve their criticals on the Android Burn Through Critical Strike Table (if armored) or the Android Blast Critical Strike Table (if not).

Android Blast Critical Strike Table: This critical table is used when an unarmored android receives a Blaster, Plasma, Acid, Heat, or Ballistic Hollowpoint critical. If the android is hit in an armored location, Ballistic Hollowpoint criticals are treated as Ballistic Impact criticals, which are resolved on the Android Melee Critical Strike Table; the other four criticals are resolved on the Android Burn Through Critical Strike Table. Note that Ballistic Hollowpoint criticals are reduced two levels in severity, with 'B' criticals resolved as 'A' with a –20 modifier, and 'A' criticals resolved as 'A' with a –40 modifier.

Android Burn Through Critical Strike Table: This table is used when an armored android receives an Acid, Blaster, Heat, Laser, or Plasma critical.

Android Burst/Raking Critical Strike Table: This critical table is used when an android receives a Burst, Shrapnel, Shredding, or Ballistic Shrapnel critical. It is also used for an unarmored android that receives a Raking critical.

Android Electrical Critical Strike Table: Electrical attacks can be particularly damaging to androids. This critical table is used when an android receives an Electricity critical. This table is even usedfor Large and Super Large androids, but they still ignore 'A' and 'A'-'C' criticals, respectively.

Android Melee Critical Strike Table: This critical table is used when an android receives a Krush, Slash, Impact, or Ballistic Impact critical. Grapple criticals are resolved on this table, but are reduced by two levels of severity. In a similar way, unarmed attacks or martial arts criticals are resolved on this table, but are reduced in severity.

Android Piercing Critical Strike Table: This critical table is used for androids that receive a Ballistic Armor Piercing critical. It is also used for an unarmored android that receives a Laser critical.

Android Puncture Critical Strike Table: This critical table is used when an android receives a Puncture or Ballistic Puncture critical. Criticals from primitive weapons, (such as archaic bows or firearms), are reduced two levels in severity ('B' criticals become an 'A' modified by –20; 'A' criticals are modified by -40).

Android Scorch Critical Strike Table: This critical table is used when an armored android receives a Raking critical.

Grapple Critical Strike Table: This critical table is used by the net caster cyberware. It can also be used when a person or creature attempts to grapple, wrestle, or restrain an opponent. Such attacks can be resolved on the Bash & Grapple Attack Table A-8.8.14 (*SM,* p.213) using Grapple criticals. Androids resolve Grapple criticals on the Android Melee Critical Strike Table, with the critical severity reduced by two levels.

Impact Critical Strike Table: This critical table is used by androids and cyborgs with the hardened knuckles option. It could also be used to resolve critical strikes from psychokinetic attacks, damage from falls, or injuries received in a vehicle accident. Androids resolve Impact criticals on the Android Melee Critical Strike Table.

Large Android Critical Strike Table: This critical table is used for Large androids. Just like Large creatures, these androids ignore 'A' criticals. If armor protects the android in the location that was hit, then apply a –40 penalty to the critical result. Hollowpoint rounds, primitive weapons, and natural weapons are applied to the appropriate columns, but they receive an additional –40 penalty to the critical result.

Neural Critical Strike Table: This table can be used to resolve accidents or deliberate failure during surgery that involves installing cyberware that interfaces directly with the brain. In addition, this can also be used whenever any cyberware that connects directly to the brain suffers a malfunction. The GM may also decide that certain psychic attacks can result in Neural criticals. Although androids are generally immune to these effects, this table could be used to represent programming bugs or operational glitches in the android's computer brain.

Shredding Critical Strike Table: This critical table is used to represent ripping or shredding attacks from melee weapons that cause a great deal of damaged by stripping away pieces of the opponent's flesh. It is used to resolve criticals delivered by chainsaws and vibro axes. It could also be used to resolve a situation where a character falls into some nasty machinery, or as the result of a particularly cruel application of a psychokinetic attack. Androids resolve Shredding criticals on the Android Burst/Raking Critical Strike Table.

Super Large Android Critical Strike Table: This critical table is used for Super Large androids. Just like Super Large creatures, these androids ignore 'A', 'B', and 'C' criticals. If armor protects the android in the location that was hit, then apply a –40 penalty to the critical result. Hollowpoint rounds, primitive weapons, and natural weapons are applied to the appropriate columns, but they receive an additional –40 penalty to the critical result.

KEY TO THE TABLES

All of the tables in this section have two different types on information: descriptions and mechanics.

Descriptions

The *description* information describes the critical hit (usually including a body location). The GM should feel free to alter the description to more appropriately fit the type of attack.

Mechanics

The *mechanics* information, at the bottom of the critical, gives the game effects of the critical. The GM should rarely, if ever, alter these results. They are in the following format:

$$+ßH - ß\sum - ß\prod - ß\int - ß(-a) - ß(+a)$$

where α and ß are numbers. Unless specified otherwise, when ß is not specified, it is assumed to be one. In general:

H ..... hits
$\sum$ ..... rounds of stun
$\prod$ ..... rounds of no parry
π ..... rounds of must parry
$\int$ ..... hits per round
(-a) ..... penalty
(+a) ..... bonus

Sometimes, the second and third items are combined, such as $\sum\prod$. Also, sometimes the third item is replaced with ß(π -a) (you will never have a and a π and a $\prod$ entry). Below are detailed descriptions for each of the entries.

+ßH — This indicates that the target of the attack takes an additional ß hits of damage (e.g., "+5H").

ß$\int$ — This indicates that the target of the attack will take ß hits every round until the wound is healed (e.g., "3$\int$"). This damage starts the round after the critical is delivered. For living creatures, "Bleeding" represents not only actual blood loss, but also represents ongoing pain.

For androids, this indicates the number of rounds it will take for the hydraulics in the indicated limb to bleed out. Once a limb has bled dry, it is useless. If multiple hits occur to the same limb, subtract one round per extra bleeding critical from the result which would bleed out the quickest. For example, if one android receives criticals that specify wounds that bleed dry in 4 rounds and 6 rounds, then it will take (4 - 1 = 3) rounds for that limb to become inactive.

ß$\sum$ — This indicates that the target of the attack is stunned for ß rounds (e.g., "5$\sum$"). While stunned, the target may not attack and may only parry with half of his Offensive Bonus (round up). The only other allowable actions are movement and maneuvering (modified by at least -50).

ß$\prod$ — This indicates that the target of the attack can't parry for ß rounds (e.g., "3$\prod$"). The only allowable actions are movement and maneuvering (modified by at least -75).

ß(π -α) — This indicates that the target of the attack must parry for ß rounds with a penalty of -α (e.g., "3(π -20)"). The only allowable actions are movement and maneuvering (modified by at least -75). When -α is not specified it is assumed to be 0.

ß(-α) — This indicates the target suffers a penalty of -α for ß rounds — i.e., all of the target's bonuses (except DB and RRs) are modified by -α. When ß is not specified, the penalty is assumed to last until the wound is healed.

ß(+α) — This indicates that the attacker gains a bonus of +α for ß rounds — i.e., all of the attacker's bonuses (except DB & RRs) are increased by +α.

ACID CRITICAL STRIKE TABLE RM-A-6.1

	A	B	C	D	E
01-05	Only a drop. Foe has taken worse in chemistry class. +0H	Try again. Foe's hand is slightly damp. +0H	Foe has discolored fingernails. +1H	Splash foe's hand with a light spray. +2H	Foe's hand is lightly affected. +3H
06-10	Light spray glances past foe's forearm. Too bad he's wearing long sleeves. +1H	Forearm hit. Foe scratches futilely. +2H	Hit foe in forearm with a light blast. Foe's arm hair is removed. +3H	Foe's forearm receives a minor burn. Quick! Get some baking soda! +4H	Forearm doused in a thin stream of acid. Foe loses initiative for 1 round. +4H
11-15	Foe's elbow is lightly burned. Foe loses initiative for 1 round. +2H	Foe is spun about as bicep is hit by the stream. Foe loses initiative for 1 round. +3H	Upper arm receives a light burn. Foe grimaces in pain. Foe is unbalanced and must parry next round. +4H – ⚔	Elbow hit unbalances foe. He struggles to defend himself. +5H – ⚔	Foe feels the burn. Elbow hit! If foe has armor, he loses 1 round of initiative. Without armor, he loses 2 rounds. +5H
16-20	Nearby splash hits upper arm. Foe loses 1 round of initiative. +3H	Arm hit causes foe to hesitate. Foe loses 1 round of initiative. +4H	Vicious grazing blast causes foe to question his choice in opposing you. Foe is unbalanced. +5H – ⚔	Light glaze of acid removes any tattoos on foe's upper arm. +6H – ⚔	Fine acidic mist on bicep causes foe's skin to peel. +7H – ⚔
21-30	Shoulder hit nearly throws foe off balance. He loses 1 round of initiative. +4H	Gentle acidic shoulder massage causes foe to worry. +5H – ⚔	Light burns on foe's shoulder cause him to cry out in pain. +7H – ♦ – ⚔	Minor burns cause major concern for foe. +8H – ♦ – 2⚔	Hearty shoulder blast causes foe to reel from the pain. +15H – ✸
31-40	Shoulder strike is more painful than it looks. +8H – ⚔	Shoulder blast unbalances foes and makes him cry. +9H – ♦	Cruel strike to foe's shoulder causes uncomfortable burns across neck. +8H – 2♦ – 2⚔	Powerful blast to foe's shoulder brings him to his knees. He considers a new occupation. +10H – ✸ – 2(-10)	Foe reels back 10 feet as acidic blast curls up his neck and shoulders. +20H – 2✸
41-50	Light thigh burns cause foe to cringe in pain. +3H – ♦ – ⚔	Splash of acid stings on foe's thigh. Foe loses 3 rounds of initiative. +8H – ♦	Lucky strike burns foe's leg with gleeful abandon. Foe looks for a chemical shower, but finds no relief. +10H – 2⚔ – (+5)	Potent hip strike swings foe around. +13H – 2(-10)	Messy blast slams into foe's thigh, spraying everywhere for massive damage. Any weapon carried by foe must make a reliability check or be destroyed. Foe is staggered. +20H – 3♦
51-55	Sizzling but weak blast crawls along foe's calf. +6H – ✸	Calf strike leaves foe limping home. +8H – 2♦ – ✸	Blast strikes calf, causing much pain and injury. with leg armor: +10H – ♦ – 2✸ w/o leg armor: +10H – 3♦ – 2✸	Terrible strike to calf melts flesh and ruins dermal layer. +28H	Impact and acid along foe's calf causes him to stumble. +0H – 3♦ – 4✸
56-60	Callous foot strike makes foe hop. Foe is unbalanced. +0H – 3⚔	Effective strike destroys foe's foot covering. +0H – 2✸	Heavy blast to foe's feet destroys any shoes or protection there. +10H – 2✸	Penetrating strike to foe's foot hits a major nerve. Without any armor or protective covering, foe passes out from the pain. +15H	Strike to foe's foot. Foe drops weapon in shock and surprise. Look at him hop around! +0H – 3♦ – (-10)
61-65	Pelvis strike. Foe is dangerously close to a fate worse than death. with metal armor: +6H – 3✸ w/o metal armor: +6H – 4✸	Hip strike forces foe to shake in mortal terror. +9H – ✸⊗ – (-5)	Upper hip strike causes foe to adopt religion quickly. +10H – ✸⊗ – (-10)	Strong hip blast eats away much of foe's vital flesh. with armor: +10H – 2♦ w/o armor: +10H – 5♦	Terrible searing blast cuts away pieces of foe's hip. Foe falls. +13H – 2✸ – ⊗
66	Blast stuns all within 5 feet of foe for 1 round. All equipment carried is destroyed. +10H – (-15)	Engulfing blast destroys all non-organic clothing and armor, leaving foe mostly unharmed. +15H – 2✸ – (-15)	Great shot right in the chest. If foe is wearing metal armor, it is fused into one piece and foe cannot move his arms. If he is not, then he is knocked out for 6 days. +15H	Incredible neck blast knocks foe out. He cannot speak for 2 months due to tissue damage. +20H – 4♦	Surgical head strike causes slight brain trauma. With a helmet, foe is in a coma for 2 months (helm destroyed). With no helmet, foe's brain is liquified. (+10)
67-70	Knee strike. Foe limps about in great pain. +7H – ✸⊗	Tricky shot to the back of foe's knee leaves him cringing in pain. +8H – 2✸ – ⊗ – (-10)	Unexpected blast catches foe in knees. That's the way to shoot! +9H – 3✸ – ⊗ – (-15)	Shot clips foe in knees, sending him to the ground. +10H – ✸ – 3♦ – (-20)	Lucky shot to foe's knees leaves him confused and in shock. +15H – 4✸⊗ – (-25)
71-75	Nice shot to lower abdomen leaves foe doubled over in pain. +8H – 3✸ – 6(-5)	Nasty hit in foe's lower torso. Foe attempts to block and catches some of it on his arm. Without armor, his arm is useless. with shield: +10H – 4✸ w/o shield: +10H – 6✸⊗	Condescending blast drenches foe's torso and shoulders. Without armor, his arm is useless. with shield: +12H – 5✸ w/o shield: +15H – out	Strike cuts across foe's chest and weapon. Foe's weapon must make a reliability check or be destroyed. +13H – 3✸	Acidic spray cuts into arms and torso. Muscle and cartilege damage, arms useless. 6✸ – 3♦
76-80	Strike to foe's upper chest makes him fear for his life. +9H – 2✸ – ⊗	Chest strike burns foe. All cloth is burned away and he drops everything he is holding. +11H – 2✸ – 2♦	Good chest shot. If foe has no armor, he is out for 3 days from shock. +14H – 6✸ – 2♦ – (-5)	Messy blast hits foe square in the chest and burns off one hand! +16H – 3✸⊗ – 5♦	Chest strike knocks foe out due to shock, blood loss, and nerve damage. Good show! +18H – 3♦
81-85	Back blast catches foe off guard. +12H – 2✸ – 3⊗	Back blast destroys muscles and leaves foe in a heap on the ground. +13H – 3✸⊗ – (-15)	Back shot deals massive damage. Without armor, foe has damaged muscles and tissue (an additional -65). 2♦ – (-20)	Lower back strike causes severe nerve and shock damage. +15H – 20✸ – 3♦	Foe inhales acid and he loses throat and lungs. Foe dies in 12 rounds. He should've just said no. +20H
86-90	Chest and hip stike knocks foe down. Without armor, foe loses the use of his legs due to nerve damage. +15H – 4✸⊗	Good solid blast to chest. All organic clothing is destroyed. +14H – 4✸ – 6♦	Severe burns up chest and down leg. One foot is completely dissolved, although the wound is cauterized. +23H – 6✸⊗ – 3♦ – (-15)	If foe has torso armor, it is destroyed and foe is unconscious. If not, foe dies in 12 rounds due to organ loss. 2♦	Foe's lower body turns to mush. Foe dies in 9 rounds due to loss. Anyone for some oatmeal? +20H
91-95	Head strike. If foe has no helmet, then his ears are destroyed and he is at -50 due to shock and nerve damage. +10H – 6✸	Head strike. Foe is blinded. Any helm is destroyed and foe loses 50% of his hair. helm: (-95); no helm: 8♦ – (-95)	Upper body strike burns away much flesh. Foe loses use of arms due to tissue loss. +25H – 7✸ – 4♦ – (-20)	If foe has a helm, his helm and eyes are destroyed and he is in a coma for 2 days. If not, he dies in 6 rounds due to massive brain damage. +20H	Solid shot to side of head trickles down foe's side. Foe's lower body and internal organs melt. Foe dies in 6 rounds. +25H
96-99	Neck strike. If foe's ears are not covered, acid splashes inside and drives him insane. armor: 3✸; no armor: +8H – 4✸	Neck strike destroys foe's throat. He is inactive (and quiet) for 9 rounds before dying. +20H – 12♦	Central strike destroys throat, heart, and lungs. If foe has armor, it is fused to his chest and he dies in 5 rounds. If not, he dies instantly. +25H	Chest strike knocks foe back 10 feet. Massive nerve damage, he dies of fatal shock in 3 rounds. +22H	Chest strike destroys both of foe's lungs. He is hurled back 10 feet by the blast. Foe dies in 3 gasping rounds. +30H
100	Head strike knocks foe out. Without a helmet, foe drops into a 1 month coma. -85 to Appearance. +15H – ♦	Acidic blast to back of neck burns through spinal column, paralyzing foe from shoulders down. Foe is very mad. +20H	Foe's head is no longer available for use. Acidic smoke surrounds the body. Allies cheer! (+15)	Acid vaporizes foe's midsection, destroying foe's clothing, armor, and all equipment. Foe is cut in half and dies. (+15)	All that remains of foe is a puddle of flesh. Yeah! (+20)

Key: ßπ =must parry ß rounds; ß∏=no parry for ß rounds; ß∑=stunned for ß rounds; ßƒ =bleed ß hits per round; (-ß)=foe has -ß penalty; (+ß)=attacker gets +ß next round.

ANDROID BLAST CRITICAL STRIKE TABLE RM-A-6.2

	A	B	C	D	E
01-05	You hit whatever he was holding. He needs to make a light maneuver to hold on to it. +1H	Shot hits whatever he was holding. A Medium maneuver will keep it within his grasp. +2H	Shot hits object in android's hands. He must make a Hard maneuver or drop it. +3H	Blast rips up foe's hand. Any item he was carrying is destroyed. +3H – 3♦ – (-5)	Shot hits whatever android is holding. The object explodes, riddling him with shrapnel. +7H – 2✸⊗ – (-15)
06-10	Too bad he wasn't wearing cuff links. +2H	Deep forearm wound. +5H – 5♦	Shot rips up forearm. It won't be long before the arm loses hydraulic pressure. +6H – 3♦ – (-5)	Blast passes through forearm, wreaking havoc with structure and musculature. +7H – 3♦ – (-10)	Shot blasts through forearm, destroying structure and musculature. The arm begins to spasm, dropping anything it was holding. +10H – 2✸⊗ – 2♦ – (-30)
11-15	That'll leave a mark. +2H	Minor damage to upper arm. This your first time on the range, boy? +5H	Major musculature damage. Looks like he's leaking too. Hope he didn't need that arm. +10H – 3♦ – (-5)	Shot destroys elbow completely. Forearm falls to ground, useless. +8H – ✸⊗ – 5♦ – (-10)	Blast destroys significant structure and musculature in upper arm. Arm is useless. +20H – 3✸⊗ – 2♦ – (-30)
16-20	You put a hole in his sleeve. +2H	Weak shot to upper arm. Who taught you to shoot? +5H	Good, solid hit to upper arm. He isn't happy. +8H – ✸⊗ – 3♦ – (-5)	Shot wrecks elbow, causing system-wide feedback damage. He felt that one. +4H – 2✸⊗ – (-15)	Blast rips through upper arm, spraying fluid everywhere. +20H – 3✸⊗ – 3♦ – (-40)
21-30	You hit him in the shoulder pads. +2H	You got his shoulder, but it could have been better. +5H	Shot tears shoulder to shreds. The structure is still okay, but that's about it. +12H – 2✸⊗ – 5♦ – (-5)	Shot blasts through shoulder. That's what they call a bleeder. +12H – 2✸⊗ – 2♦ – (-15)	Blast causes only minor structural damage in shoulder, but causes a major hydraulic rupture. +5H – 1♦
31-40	Almost got him. He felt that one. +2H	Significant structural damage to shoulder. +4H – ✸⊗	Shot cracks shoulder structure. +12H – ✸⊗ – (-5)	Shot wreaks havoc with shoulder. Know a good body shop? +20H – ✸⊗ – (-15)	Shot shatters shoulder joint, destroying structure. Better not use that arm, it might fall off. +25H – 2✸⊗ – 3♦ – (-30)
41-50	You put a hole in his hip pocket. +2H	What a waste of a good weapon. You hit his thigh. +6H	Good thigh damage, but it could have been better. +12H – (-5)	Shot rips out a significant chunk of musculature and hydraulics. +20H – ✸⊗ – 3♦ – (-15)	Shot shatters leg structure in thigh, damaging musculature and causing a major hydraulic rupture. He won't be standing on that one for a while. +25H – 2✸⊗ – 1♦ – (-65)
51-55	Weak calf shot. +2H	Lower leg hit causes some minor feedback. +2H – ✸⊗	Damage to calf leaves structure intact, but does good damage. +5H – 5♦	Damage to foe's shin causes it to crumple like a tin cup. +12H – (-5)	Shot shatters shin structure and shreds musculature. The ankle and foot are hanging there, limp. +15H – ✸⊗ – 3♦ – (-20)
56-60	Minor damage to feet. Not so good. +3H	Well, now he has eight toes. +6H	Massive foot damage. Dance, pardner. +15H – (-10)	Shot causes ankle to shatter. He barely has time to shift his weight. +18H – 2✸⊗ – (-15)	Foe's ankle disintegrates. His foot goes flying off. You never knew an android could look shocked. +25H – 3✸⊗ – 3♦ – (-20)
61-65	Ah… the android tummy-tuck. +5H	Hip structure broken. Minor feedback. +8H	Shot fragments hip structure. Foe can walk, with 10% cumulative chance per round of rupturing hydraulics, leaving leg useless in ten rounds. +15H – (-5)	Masterful shot rips foes hip to shreds. No structural damage, though. +20H – 3✸⊗ – (-15)	Android collapses. It looks like you completely destroyed his hip. Neat. +30H – 3✸⊗ – (-40)
66	Shot damages brain. It manages to shut down to prevent data loss. +15H	Shot degausses brain. Minor damage otherwise. A thousand bucks and a backup and he'll be good as new. +20H – (+25)	Neat hole in brain kills droid. His motivational subprocessor keeps performing its last action. (+25)	Shot causes batteries to burst, sending shrapnel through power plant. His smoking body grinds to a halt. (+25)	Shot hits his power plant, completely destroying plant and batteries. Power surge fries every circuit in foe. Sad. (+25)
67-70	It's hard to knee-cap an android. +2H	Minor damage to knee. +7H	Shot hits knee… hard. +15H – (-10)	Nice shot. Now his knee bends backwards. +20H – 2✸⊗ – 5♦ – (-15)	Nice shot. His knee is totally gone. Looks like he won't be getting that football scholarship. +25H – 6✸⊗ – (-20)
71-75	Hydraulic damage. He'll grind to a halt before too long. +3H – 30♦	Shot catches hydraulic plant. His moving days are numbered. +5H – 15♦	Shot cuts line in central hydraulic plant. He better act quick, before he loses all motion. +8H – 9♦ – (-5)	Hit to hydraulic processing center. That's a gusher. Paralysis is imminent. +8H – 2✸⊗ – 5♦	Central hydraulic processor completely destroyed. Foe is paralyzed. +15H – 2✸⊗ – (-20)
76-80	That sounds like the whine of a damaged gyro. +6H – 2✸⊗ – (-20)	Shot to gyro makes life a bit difficult. +8H – 4✸⊗ – (-40)	Gyro hit. He doesn't look happy. +15H – 6✸⊗ – (-60)	Shot causes gyro to break loose. It almost still works. +15H – 8✸⊗ – (-80)	Massive gyro hit. Looks like you just helped invent the next dance craze. +15H – 10✸⊗ – (-100)
81-85	Shot sends dangerous current through the motivational subprocessor. +6H – ✸⊗ – (40)	Several circuits blow in his motivational subprocessor. He reroutes as well as he can, but pace is at 75%. +8H – ✸⊗ – (-50)	Shot hits motivational subprocessor. Pace is halved. Ouchy. +10H – 2✸⊗ – (-60)	Motivational subprocessor damaged. Pace is at one quarter. It's a miracle he can move at all. +20H – 3✸⊗ – (-70)	Shot destroys motivational subprocessor and sends feedback throughout the entire system. Pace is at 10%. +25H – (-85)
86-90	Shot takes out power plant. His batteries are failing. He's got 20 rounds. +8H – ✸⊗ – (-5)	Power Plant grinds to a halt. Batteries are leaking. He's got about 15 rounds. +15H – ✸⊗ – (-15)	Power plant totalled. Batteries are leaking. He's got ten rounds. +15H – ✸⊗ – (-25)	Shot destroys power plant. Batteries aren't much better. Power loss in 5 rounds. +18H – 2✸⊗ – (-30)	Hit destroys power plant and ruptures batteries. Android shudders and dies. (+20)
91-95	Shot rattles his brain badly. +3H – 15✸⊗ – (30)	Shot to brain case fails to penetrate. What did you have that set on? +5H – 20✸⊗ – (-40)	Shot damages brain case. Looks like he wasn't shock-resistant. +10H – 40✸⊗ – (-40)	Shot damages android's brain. Half of all skill ranks are lost. Did he have a backup? +30H – 60✸⊗ – (-70)	Ooohh. Right in the brain box. I wonder if all those little circuits were important. (+20)
96-99	Shot bounces off brain case. What's he made of? +4H – 15✸⊗ – (-25)	Nice brain hit. You took out his ability to speak and translate into three dimensions. +8H – 40✸⊗ – (-70)	Shot just misses brain case, but sends current all through the system. +10H – 60✸⊗ - (-95)	Shot severs major sensory inputs. Foe is deaf, dumb and blind. +8H - 80✸⊗ – (-120)	Blast separates brain from just about everything. Brain manages to shut down just in time. (+25)
100	Right in the brain case! They'll call you One-Shot from now on. (+20)	Brain destroyed. He actually looks stunned. (+20)	Brain hit. Give that man a cigar. (+20)	Well, there might be a circuit or two for salvage. Where'd they put that backup? (+20)	Shot blows broken brain clear of foe. You should compete professionally. (+25)

Key: ßπ =must parry ß rounds; ß∏=no parry for ß rounds; ß∑=stunned for ß rounds; ßƒ =bleed ß hits per round; (-ß)=foe has -ß penalty; (+ß)=attacker gets +ß next round.

ANDROID BURN THROUGH CRITICAL STRIKE TABLE RM-A-6.3

	A	B	C	D	E
01-05	That shot only works in movies. +0H	Is that a blemish? +0H	Minor damage to hand. +0H	Burn to hand causes musculature damage. +1H	Shot sears foe's hand. Heat causes minor system problems. +1H – (-5)
06-10	Not so easy when they're shooting back, huh? +0H	You manager to mark his forearm. +1H	Burn to forearm. +1H	Burn sears forearm, damaging musculature. +2H	Shot burn hole in foe's forearm, causing minor damage and cracking a hydraulic housing. +2H – 5♦ – (-5)
11-15	Trying those trick shots again, weren't you. +0H	Burn to upper arm. +1H	Minor damage to upper arm. +2H	Beam burns through armor, searing elbow and causing minor damage to musculature. +2H	Hot spot forms on upper arm, cracking a hydraulic housing and causing secondary system damage. +4H – 10♦ – (-5)
16-20	Well, you almost damaged him. +0H	You burn his upper arm. +1H	Shot blisters upper arm. +2H	Beam sears arm, just above elbow. Minor damage to musculature is the result. +2H	Minor burns on upper arm barely manage to crack hydraulic line. Minor secondary damage occurs. +2H – 10♦ – (-5)
21-30	No… squeeze the trigger. +0H	Well, it's the thought that counts. +1H	Attack burns foe's shoulder. +2H	Shot burns into shoulder, causing minor system damage. +2H – (-5)	Hot spot forms on shoulder, causing a circuit board to blow. +2H – ✸⊗– (-10)
31-40	Have you done this before? +0H	Minor damage to shoulder. +2H	Attack sears shoulder. +3H	Shot burns deep into shoulder, damaging muscles and minor systems. +4H – (-5)	Shot burns deep into shoulder cracking structure and a creating a feedback loop. +4H – ✸⊗– (-10)
41-50	Maybe one of those cool holo-sights would help. +0H	You burn his thigh. I think he's going to burst into tears. +2H	Attacks burns deeply into thigh. +3H	Searing attack burns into thigh damaging systems and musculature alike. +4H – (-5)	Beam sears into upper leg, cracking the primary structure and blowing a main motivational board. +5 – ✸⊗ – (-20)
51-55	Weak shot. +0H	You masterfully brush your beam across his thigh. +2H	Shot burns deeply into shin. +2H – (-5)	Searing burn cracks shin, causing minor system damage. +5H – (-10)	Beam burns trough into shin, cracking the main structure and searing musculature. He didn't like that. +4H – ✸⊗ – (-15)
56-60	Have you had your eyes checked? +0H	Yeah… shoot 'em in the foot. That'll teach 'em. +2H	Shot burns deeply into foot. +4H – (-5)	Rapid heat expansion cracks ankle. Minor system damage occurs. +5H – (-10)	Ankle shatters under rapid heating, rupturing a hydraulic line. He looks rather surprised by that. +6H – ✸⊗ – 5♦ – (-15)
61-65	Shot burns foe's hip. +1H	Burn foe's hip. +2H	Heat damages musculature in hip. +4H – (-5)	Beam burns deep into non-vital area of lower torso. Several circuits are damaged, but other than that, foe is okay. +6H – (-10)	Beams forms major hot spot on hip. Joint shatters, taking several major systems with it. +10H – ✸⊗ – (-30)
66	Shot dumps last minute's worth of memory. +4H	Heat triggers foe's breakers. It will take a Routine repair maneuver or ten rounds of self repair to bring him back online. +5H – (-10)	Heat cracks several processors in brain, which commences to fry itself. (+25)	Heat causes primary transformer in power plant to blow. Power surge takes out batteries as well. Foe is quite dead. (+25)	Beam burns straight through armor, piercing the power plant and sending fatal current surging through all systems. Isn't armor supposed to protect him from that? (+25)
67-70	Shot brushes his knee. +2H	You damaged his knee. Everybody cheer! +2H – (-5)	Searing blast cracks knee. Foe glowers at you. +3H – (-10)	Heat exaggerates stress flaw in knee joint. It snaps when foe takes next step. +6H – ✸⊗ – (-15)	Searing heat causes knee to expand unevenly. Joint separates violently, damaging several motivational circuits. +9H – ✸⊗ – (-20)
71-75	Heat damages seal on main hydraulic plant. And you thought that was a weak hit… +1H – 30♦	Heat cracks housing on foe's central hydraulic plant. +1H – 25♦ – (-5)	Main hydraulic plant cracks a fitting. +2H – 20♦ – (-10)	Heat causes an increase in hydraulic pressure, blowing a line in the central hydraulic processing plant. +2H – ✸⊗ – 15♦ – (-15)	Heat causes major line rupture in central hydraulic processing. Not good. +4H – 2✸⊗ – 10♦ – (-20)
76-80	Heat expansions causes gyro calibration to slip. +2H – (-5)	Minor heat damage to gyro. That could have been better. +2H – (-10)	Heat expansion causes gyro damage. +4H – ✸⊗ – (-15)	Heat damages a ball bearing in gyro. Foe is a little wobbly now. +5H – 2✸⊗ – (-20)	Rapid heat expansion causes significant gyro damage. Foe lurches sideways. +6H – 2✸⊗ – (-40)
81-85	Shot causes some carbon scoring on foe's motivational subprocessor. +1H – (-5)	Heat damages several circuits in the motivational subprocessor. +2H – (-10)	Heat damages motivational subprocessor. I hate it when that happens. +3H – ✸⊗ – (-15)	Heat damages motivational subprocessor. Foe is having distinct problems with motor control. +4H – 2✸⊗ – (-20)	Heat damages several circuits in motivational subprocessor. +7H – 3✸⊗ – (-25)
86-90	Power plant goes off line, causing minor damage to batteries. Foe has 100 rounds before total power failure. +1H – (-5)	Heat damages power plant and batteries. Total power failure will occur in 75 rounds. +4H – (-10)	Heat damages power plant and batteries. Total power failure will occur in 50 rounds. +4H – ✸⊗ – (-15)	Heat blows power plant regulatory systems. Plant burns out, damaging batteries. Foe will lose power in 40 rounds. +5H – 2✸⊗ – (-20)	Heat causes power plant failure, bursting batteries as well. Total battery failure will occur in 30 rounds. +7H – 3✸⊗ – (-25)
91-95	Attack manages to transfer some heat to the brain, but other than that, the attack's a wash. +1H – (-5)	Searing heat almost causes significant brain damage. +3H – 2✸⊗ – (-10)	Heat damages input processor. Foe will not be able to translate images into three dimensions until he is serviced or two days of self healing occurs. +3H – 4✸⊗ – (-20)	Severe heat damage causes foe to shut down. It will take a tech or two days worth of self repair to bring him online. +6H – 6✸⊗ – (-30)	Heat expansion exposes flaw in foe's brain case. Case shatters, breaking brain into a dozen pieces. That's not supposed to happen. (+20)
96-99	Almost burned through that brain case. +2H – (-10)	Significant damage to electronic brain. He could have been a contender. +3H – 4✸⊗ – (-20)	Minor system damage causes a slow overload in power plant. Power plant must be shut down in 30 minutes or foe will die. +3H – 8✸⊗ - (-35)	Heat causes damage to brain. Unless the foe is taken off line within ten minutes for repairs, he will die. +3H – 12✸⊗ – (-60)	Heat damages output processes. Foe is mute and paralyzed. +4H – 16✸⊗ – (-80)
100	Heat rattles foes badly. There is minor damage to his brain. +2 – ✸⊗ – (-10) – (+20)	Damage to foe's brain. You smell smoke. +3H – 5✸⊗ – (-30) – (+20)	Heat damage blows main processor. The prognosis is not good. (+20)	Rapid heat expansion shatters main motherboard. (+20)	Heat overload blows every major circuit in foe's brain. Otherwise, he looks fine. (+25)

Key: ßπ =must parry ß rounds; ß∏=no parry for ß rounds; ß∑=stunned for ß rounds; ßƒ =bleed ß hits per round; (-ß)=foe has -ß penalty; (+ß)=attacker gets +ß next round.

ANDROID BURST/RAKING CRITICAL STRIKE TABLE RM-A-6.4

	A	B	C	D	E
01-05	Attack hits hand. Anything carried must check for breakage. +3H	Hit to foe's hand. Structure damaged. If he was holding anything, it must make a breakage check. +3H	Shot breaks up structure in foe's hand. If he's holding something, it must check for breakage at -20. +4H	Foe's hand is mangled by attack. Anything he was holding is destroyed. +8H – ✸⊗ – 3♦ – (-10)	Foe's hand comes apart completely, the hydraulics barely manage to seal in time. +15H – 2✸⊗ – (-40)
06-10	Damage to forearm. +5H	Strike to foe's forearm ruptures hydraulic line. Fluid goes everywhere. +7H – 5♦	Attack causes musculature damage to foe's forearm. If he is holding something, it must make a breakage check at -20. +8H – 3♦ – (-5)	Forearm blast tears structure and musculature. Foe drops anything he is holding. +10H – ✸⊗ – 3♦ – (-10)	Devastating attack severs arm completely, just below the elbow. Hyraulic fluid is everywhere. +15H – 3✸⊗ – 0♦ – (-40)
11-15	You couldn't cause this little damage again if you tried. +3H	Deep "flesh" wound damages upper arm musculature. That could have been better. +7H	Major damage to musculature in foe's upper arm. +15H – ✸⊗ –3♦ – (-10)	Blast separates arm at foe's elbow. Arm falls, useless as hydraulics struggle to seal wound. +10H – ✸⊗ – 5♦ – (-10)	Blast catches foe in upper arm. Arm is completely severed. Hydraulics struggle to seal themselves. +25H – 3✸⊗ – 2♦ – (-30)
16-20	You put a hole in his sleeve. +4H	Attack to upper arm causes damage to musculature. +7H	Attack slices through upper arm structure, damaging musculature. +12H – ✸⊗ – 3♦ – (-15)	Attack destroys elbow and musculature. Forearm hangs, useless. +12H – 2✸⊗ – 3♦ – (-15)	Blast manages to shatter most of the arm structure. +30H – 3✸⊗ – 2♦ – (-50)
21-30	Shoulder hit. +5H	Attack blows through shoulder, damaging musculature. +8H	Shot slices through shoulder, ripping musculature. A hydraulic line bursts. +16H – 2✸⊗ – 5♦ – (-5)	Shot causes major musculature damage as it passes through shoulder. Hydraulic lines are ruptured in the process. +18H – 2✸⊗ – 2♦ – (-15)	Blast neatly severs arm at the shoulder. Hydraulic fluid flies everywhere. +25H – 0♦ – (-40)
31-40	Shot grazes shoulder. +5H	Attack bounces off shoulder structure. Both of you are amazed he survived. +7H – ✸⊗	Attack cracks foe's shoulder structure. He is not happy. +12H – ✸⊗ – (-5)	Shot damages shoulder structure as it passes through foe. +20H – ✸⊗ – (-15)	Blast disintegrates shoulder joint and much of the shoulder structure. By the time systems come back on line, the arm is completely dead. +30H – 3✸⊗ – 3♦ – (-30)
41-50	You drill through his hip pocket. +5H	Attack damages musculature in thigh. Weak attack, actually. +6H	Shot damages thigh badly, but misses structure. +8H – ✸⊗ – 3♦ – (-5)	Attack tears through thigh, shattering structure, but not quite severing the limb. +16H – ✸⊗ – 3♦ – (-15)	Blast blows leg completely off foe, severing limb mid-thigh. +40H – 2✸⊗ – 0♦ – (-30)
51-55	Minor calf damage. +6H	Attack to calf damages musculature, but he manages to keep going. +8H – ✸⊗ – 5♦	Shot penetrates foe's calf, missing all major structures, but damaging musculature. +15H – ✸⊗ – 3 – (-5)	Shin structure breaks, sending jagged pieces of superstructure out through foe's flesh. Ouch. +25H – 2✸⊗ – 3♦ – (-5)	Blast completely severs leg below the knee. There are system-wide repercussions. +35H – 3✸⊗ – 0♦ – (-20)
56-60	Minor foot damage. +6H	Attack neatly severs his toes. It's more an insult than an injury. +7H	Attack shatters foot and severs several toes. Rough. +25H – ✸⊗ – (-15)	Attack shatters foe's ankle, but falls just short of separating foot and shin. Foe will have trouble standing. +24H – 2✸⊗ – (-20)	Foot falls, dead, to the floor as foe's ankle disintegrates. +35H – 3✸⊗ – 1♦ – (-20)
61-65	Attack causes cosmetic damage near hip. +7H	Attack to hip causes a minor fracture in structure. His systems flicker off, then on. +10H – ✸⊗	Shot damages musculature around hip. Structural damage is negligible. +25H – 2✸⊗ – (-10)	Attack breaks hip and shatters pelvic structure. +30H – 2✸⊗ – 3♦ – (-15)	Blast completely destroys hip joint. Foe spins and falls. +34H – 3✸⊗ – 2♦ – (-40)
66	Brain damage. Droid manages to shut down safely. +20H – (-14) – (+2)	Shot shuts down brain, damaging several circuits. If foe has self repair capability, he will be online in 24 hours. Otherwise, he needs full servicing. +20H – (-40) – (+25)	Shot manages to penetrate brain case, turning foe's brain into slivers. (+25)	Shot destroys power plant and batteries. Power blows android's brain, but most other circuits survive. (+25)	Shot destroys power plant, blowing all batteries. Surge destroys every circuit in foe's body. (+25)
67-70	Attack damages musculature around knee, but that's it. +3H	Knee strike damages structure. Could have been better. +7H	Attack breaks foe's knee. He doesn't like that. +20H – ✸⊗ – 3♦ – (-10)	Attack shatters kneecap, but doesn't quite sever the leg. +25H – 2✸⊗ – 3♦ – (-20)	Shot neatly removes foe's leg at his knee. Foe's hydraulic system struggles to seal itself. +35H – 3✸⊗ – 1♦ – (-20)
71-75	Damage to hydraulic plant. He's leaking. +5H – 8♦	Shot cracks hydraulic plant. He's seen better days. +7H – 6♦ – (-5)	Shot ruptures hydraulic plant. It will all be over soon. +12H – ✸⊗ – 4♦ – (-10)	Shot causes major rupture in hydraulic processing plant. Hydraulic fluid is everywhere. +12H – 2✸⊗ – 2♦ – (-10)	Only a smoking ruin remains where foe's hydraulic processing plant once was. +35H – 2✸⊗ – (-30)
76-80	Gyro damage knocks gyro out of synch. +8H – 4✸⊗ – (-40)	Shot damages gyro. It's now making a very distinctive whine. +12H – 6✸⊗ – (-60)	Devastating gyro hit. Foes is having a great deal of trouble. +20H – 8✸⊗ – (-80)	Shot causes major gyro damage. Foe can barely remain standing. +35H – 10✸⊗ – (-100)	Shot completely destroys foe's gyro. Foe can no longer stand without aid. +15H – 20✸⊗ – (-40)
81-85	Shot damages motivational subprocessor. His pace is at 75%. +10H – ✸⊗ – (-60)	Attack damages motivational subprocessor. His pace is halved. He moves very awkwardly. +15H – ✸⊗ – (-80)	Attack severely damages foe's motivational processor. Foe's pace is at 25%. +14H – 4✸⊗ – (-100)	Motivation subprocessor damaged. Foe's pace is reduced to 10%. It's amazing he can move at all. +25H – 5✸⊗ – (-120)	Shot destroys foe's motivational subprocessors, sending a surge through foe which shorts out all sister systems. Foe is paralyzed. +35H – 10✸⊗ – (-50)
86-90	Shot damages power plant and batteries alike. He's got about 15 rounds to shut down safely. +12H – ✸⊗ – (-15)	Power plant shuts down. Battery power is minimal. He's got about 10 rounds. +15H – ✸⊗ – (-20)	Shot takes out power plant. Batteries barely survive. Foe has 5 rounds until power failure. +25H – 2✸⊗ – (-25)	Shot destroys power plant. Batteries begin to fail. Foe has perhaps 2 rounds. +25H – 2✸⊗ – (-30)	Blast shatters power plant and destroys batteries. Foes falls over like so much spilled grain. (+20)
91-95	Shot causes all sorts of brain damage. Way to go. +8H – 60✸⊗ – (-120)	Attack causes significant brain damage. He's a few sandwiches short of a picnic, now. +8H – 80✸⊗ – (-160)	Shot causes major circuit damage to foe's brain. This is very bad. +15H – 100✸⊗ – (-200)	Attack cracks foe's brain case. Foe shuts down from the shock. He'll need a tech. +40H	Many very important components of foe's brain fly out of foe's back. (+20)
96-99	Brain case catches most of it. His brain is a bit scrambled, though. +12H – 60✸⊗ – (-105)	Attack bounces off brain case. Significant damage occurs. Ever see a cross-eyed android? +11H – 80✸⊗ – (-140)	Shot doesn't quite destroy brain, but foe loses much of his mental and physical agility. +20H – 100✸⊗ - (-175)	Shot damages brain case. Brain is not able to shut down. Unless it is manually shut down within ten rounds, foe will die. (+20)	Brain falls out hole in foe's back, shattering when it lands. (+25)
100	Attack appears weak, but manages to cause enough brain damage to kill foe. (+20)	Attack shorts out brain. Foe is very dead. (+20)	Attack penetrates brain case and shatters brain. Foe is ever so dead. (+20)	Shot cracks brain in half, destroying all circuits. (+20)	Shot leaves a smoking crater where foe's brain used to be. (+25)

Key: ßπ =must parry ß rounds; ß∏=no parry for ß rounds; ß∑=stunned for ß rounds; ßƒ =bleed ß hits per round; (-ß)=foe has -ß penalty; (+ß)=attacker gets +ß next round.

ANDROID ELECTRICAL CRITICAL STRIKE TABLE RM-A-6.5

	A	B	C	D	E
01-05	You top off his battery power. +0H	What was that? +0H	A series of false damage readings confuse foe. +0H	3 Random signals make foe twitch for 12 hours. +3H	Minor damage. +5H
06-10	Hydraulics begin to spasm. (-15)	A system blows, but foe's internal systems compensate. +5H	Foe is unable to orient himself. 5✸⊗	Minor circuit discharges make foe twitch until system diagnostics can be run – (it'll take one hour). (-5)	Damaged circuits. +10H – (-10)
11-15	Target loses last day of short tem memory. +0H	Senses randomly readjust without rhyme or reason. 5✸⊗	Foe loses taste and smell for one day. +0H	Invalid mental operation causes a greatly emotional moment in foe's history to begin playing – (its probably a battle). Foe thinks he's there for the duration of the memory. Hope he isn't armed. +0H	Minor system-wide damage. (-20)
16-20	Balance problems. +10H – (-10)	Several systems shut off all at once. As they come back on, foe's penalty will be reduced by 10 per round. (-50)	Foe is well and truly dazed. +10H – 7✸⊗	Foe speaks in binary for twelve hours. +0H	Several circuits are damaged. It will take three rounds to reroute. Penalty will be negated after that time. (-40)
21-30	Random Access Memory decides to be true to its name. 3✸⊗	Android's realtime clock is messed up. This makes even the simplest actions more difficult. (-30)	Systems misfiring. Penalty will be reduced by 5 every round. (-30)	Minor system failure begins a series of cascade faults. This is not conducive to graceful acts. (-30)	Current causes minor damage, system wide. +15H – (-30)
31-40	Damage is extensive, but not severe. +10H – (-10)	Several systems short out, but foe compensates. +20H	Foe reboots several times. 8✸⊗	You smell smoke. Foe can no longer distinguish between friend or foe. He may decide to attack someone at random or to sit still. This continues for ten minutes. +0H	Current takes out all tactile sensors. Minor system damage occurs throughout foe. +20H – (-30)
41-50	System problems. (-20)	Foe loses attack algorithms for three rounds. He can't take a hostile action. +0H	Several systems kill themselves. +30H	He's still twitching from that one. +20H – (-30)	Current blows audio processing. Foe is staggered by the effects. +20H – 3✸⊗
51-55	System wide problems. (-15)	Several systems reboot. Penalty will decrease by 5 per round. (-50)	Conflict resolution algorithms scrambled. Android cannot win initiative until serviced. (-45)	Foe takes system wide damage. If he has self healing capabilities, they work backwards as foe tears down damaged area to repair healthy ones. You just invented android cancer. +30H	Current blows olfactory processing circuits. Secondary systems are damaged as well. +20H
56-60	Foe cannot translate into three dimensions. Until repaired all range penalties are doubled. +0H	Foe cannot translate thought into language for ten rounds. +0H	Systems misfiring wildly. Penalty will drop by 5 every round. (-75)	Hearing is lost for one day. He can still speak, however. +0H	Current blows optical processors and causes system-wide repercussions. (-75)
61-65	Foe cannot access combat skills for ten rounds. +0H	Foe shuts down without damage. He'll need to be rebooted by a third party. +0H	Foe twitches wildly for a bit. +25H – 4✸⊗	Foe's systems become twitchy. The penalty below is reduced by 5 every round until systems reorient. (-100)	Several breakers blow. If foe has self repair capabilities, he will come back online in ten rounds. (-70)
66	Foe believes he is the only truly sapient creature in the universe. All others are merely tools to do his bidding. This lasts 24 hours. +0H	Foe begins normal backup routine. +0H	Long-term memory wiped. Skill databases remain, but the android has no concept of his past. (+20)	Memory degausses. Hope he has a backup. (+20)	Current destroys nearly every single component in foe. His death is instantaneous and complete. +100H – (+25)
67-70	Threat assessment thrown off. Foe becomes extremely paranoid. +0H	Legs lock solid. (-40)	Foe can no longer tell the difference between his right arm and his left. +10H – (-15)	Android reads the ground as one foot higher than it really is. +10H – (-20)	Current damages many systems. Foe is not happy. +35H – 5✸⊗ – (-50)
71-75	Hydraulic plant damaged. 4✸⊗ – (-10)	Damage to hydraulic plant. 5✸⊗ – (-30)	Damage to hydraulic plant makes motion difficult. 6✸⊗ – (-50)	Blast damages hydraulic plant. All maneuvers are penalized. 8✸⊗ – (-70)	Current shorts out hydraulic plant. Foe is paralyzed. 10✸⊗ – (-90)
76-80	Gyro calibration problem. 7✸⊗ – (-60)	Gyro control failure. It could have been worse. 9✸⊗ – (-80)	Who needs a working gyro, anyway? 11✸⊗ – (-100)	Gyro damage. Ouch. 13✸⊗ – (-120)	Current causes severe damage to foe's gyro. Life is no longer quite so easy. 15✸⊗ – (-150)
81-85	Motivational subprocessor damaged. Pace is reduced to half. +10H – 6✸⊗ – (-80)	Damage to motivational subprocessor. Pace is reduced to 25%. +15H – 8✸⊗ – (-100)	Attack overloads motivational subprocessor. Foe's pace is at 10%. +20H – 10✸⊗ – (-120)	Motivational subprocessor blows. Foe is paralyzed. Abort, Retry, Fail? (+20)	Damage to power plant. Power plant will go offline in one hour. +30H – 20✸⊗ – (+20)
86-90	Power system failure. Foe will lose all power in 5 rounds. +10H – 5✸⊗ – (-20)	Power systems damaged. Complete power failure is 4 rounds away. +20H – 4✸⊗ – (-30)	Massive damage to all power systems. Battery power will fail in 3 rounds, and that will be that. +30H – 3✸⊗ – (-40)	Shot destroys power plant. Battery failure in 2 rounds. +40H – 2✸⊗ – (-50)	System damage sets foe running at triple speed for three rounds, after which he blows all major circuits. (+20)
91-95	Drain Bamage. +30H – 90✸⊗ – (-180)	Damage to brain. Wow, that was pretty lucky. +40H – 120✸⊗ – (-240)	Foe ain't right anymore. Massive damage to every circuit. He looks at you pathetically. +50H – 150✸⊗ – (-300)	Current fries brain. You smell ozone. (+20)	Main processor blows. Foe is frozen in last position. (+20)
96-99	Brain case courses with current. This has less than good effects. +20H – 80✸⊗ – (-120)	Brain case electrified. Naturally, foe's brain does not escape unscathed. +30H – 100✸⊗ – (-150)	Shot damages brain, killing foe. About 75% of long term memory remains, But everything else is wiped. (+20)	Shot destroys most of brain. Foe is dead, but a few components might be salvaged. (+20)	Voltage kills foe dead. He twitches until he's shut down or his batteries run dry. (+20)
100	Brain fried. Foe is dead, but most secondary systems are intact. (+20)	System wide damage causes foe to expire, instantly. (+20)	There isn't a circuit that isn't smoking. (+20)	Foe is ever so dead. (+20)	Electrical charge runs rampant through system. Foe expires quite quickly. (+25)

Key: ßπ =must parry ß rounds; ß∏=no parry for ß rounds; ß∑=stunned for ß rounds; ßƒ =bleed ß hits per round; (-ß)=foe has -ß penalty; (+ß)=attacker gets +ß next round.

ANDROID MELEE CRITICAL STRIKE TABLE RM-A-6.6

	A	B	C	D	E
01-05	Wow. You hit him in the hand. +0H	Blow lands on foe's hand. +0H	Shot hits foe's hand. +1H	Blow to foes hand damages musculature. +2H	Blow lands on foe's hand, damaging the structure. +3H
06-10	Damage to forearm. +1H	Attack hits foe in forearm. +2H	Attack causes musculature damage to foe's forearm. If he is holding something, it must make a breakage check. +3H	Attack hits foe's forearm. Musculature is damaged, but he'll pull through. +4H	Attack crashes into foe's forearm. The damage is considerable, but not debilitating. +5H
11-15	Blow to arm. Wow, you're good. +1H	Attack hits foe's upper arm. There is slight damage to musculature. +3H	Blow crashes into upper arm. Ouch. +6H	Attack hits foe's elbow, cracking the structure. +6H	Attack strikes foe in the upper arm. There is damage to foe's musculature, but his hydraulics are spared. +5H
16-20	You catch his upper arm. +1H	Blow lands on upper arm. +2H	Blow lands on upper arm, damaging musculature. +4H	Attack strikes foe's elbow, damaging musculature. +4H	Attack cracks foe's elbow structure, causing several systems to flicker offline. ✸⊗ – (+10)
21-30	Artful blow to foe's shoulder. +2H – (+10)	Shoulder hit causes some minor damage. +2H	Attack hits foe on shoulder, causing minor damage to musculature. +3H	Attack lands on shoulder, damaging musculature. +3H	Attack manages to spare musculature, but ruptures a hydraulic feed to foe's arm. +3H – 10♦
31-40	You catch a hydraulic line in his shoulder. 10♦	Shoulder strike yields only weak results. +2H	Foe takes blow on the shoulder. Hydraulic line ruptures. Tough break, pal. +2H – 5♦	Attack ruptures hydraulic line in foe's shoulder. +3H – 5♦	Attack smashes into shoulder, causing extensive damage to foe's musculature. +5H
41-50	You manage to hit his thigh. These androids are tough. +2H	Minor musculature damage in foe's thigh. +4H	Foe catches blow on his thigh. A hydraulic fitting cracks. +3H – 10♦	Attack catches thigh hard, knocking loose a hydraulic line. +3H – 5♦	Attack hits thigh, rupturing a hydraulic line. He is not impressed. +4H – 3♦
51-55	Minor calf damage. Mooo! +2H – 10♦	A seemingly minor strike manages to crack a hydraulic line. +3H – 10♦	Attack catches foe's calf. A hydraulic line ruptures. +4H – 5♦	Attack shin. Ground fault causes a minor system failure. +5H – 3♦ – (-5)	Attack hits shin, damaging musculature and rupturing a hydraulic line. +6H – 3♦
56-60	Blow to foot. +3H – 5♦	Attack to foot miraculously damages a hydraulic line. +4H – 5♦	Attack shatters foot and severs several toes. Rough. +5H – 5♦	Blow takes out hydraulics in foe's ankle. System shock takes foe offline a moment. +6H – ✸⊗ – 3♦	Attack damages hydraulics and musculature in foe's ankle. He glowers at you. +8H – 2♦
61-65	Hip blow takes out hydraulic line. +3H – 5♦	Blow to hip ruptures a hydraulic line. +4H – 5♦	Attack damages hip. A hydraulic line bursts. +4H – 3♦	Attack damages hip, blowing a hydraulic line. The system flickers a bit. +4H – ✸⊗ – 3♦	Severe damage to foe's hip manages to rupture a major hydraulic line. Impressive. +6H – 3♦ – (-5)
66	Attack to shoulder shatters structure and renders shield arm useless. +9H – ✸⊗ – (+10)	Attack shatters foe's elbow and renders hand useless. That was his weapon arm. Ouch. +8H – ✸⊗	Attack causes significant brain damage. He ain't quite right, no more. +6H – ✸⊗ – (-80)	Attack causes major shock to foe's brain. Foe shuts down. It'll take a skilled tech to bring him back online. +15H	Attack nearly destroys android's weapon arm. It hangs useless. How in the world did you manage that? +12H – (+10)
67-70	Blow to knee causes more damage than it should. +6H	Blow to foe's knee causes systems to flicker. +7H – ✸⊗	Blow strikes foe's knee. There is secondary system damage. +8H – 2✸⊗	Strong blow to foe's kneecap. Systems flicker on and off. +5H – 2✸⊗ – (-10)	Attack causes major structural damage in foe's knee. Hydraulic line ruptures. 2✸⊗ – 5♦
71-75	Blow cracks hydraulic plant. +4H – 30♦ – (-20)	Shot cracks hydraulic plant. He's seen better days. +6H – 25♦ – (-30)	Attack ruptures hydraulic plant. That was pretty lucky. +7H – ✸⊗ – 20♦ – (-35)	Attack damages hydraulic plant. Foe is startled by your blow. +8H – ✸⊗ – 15♦ – (-40)	Attack cracks hydraulic plant. Foe looks at you in surprise. He's leaking badly. +12H – ✸⊗ – 10♦ – (-45)
76-80	Now his gyro needs re-alignment. +5H – ✸⊗ – (-15)	You actually managed to damage his gyro. Cool. +6H – ✸⊗ – (-20)	Foe's gyro is slightly damaged. Cool. +9H – 2✸⊗ – (-25)	Blow knocks foe's gyro out of whack. Nice shot. +10H – 2✸⊗ – (-30)	Attack manages to cause minor but significant damage to gyro. Android is having some balance problems. +12H – 3✸⊗ – (-35)
81-85	Motivational subprocessor damaged. +6H – ✸⊗ – (-10)	Shock damage occurs. Motivational subprocessor isn't working right. +7H – ✸⊗ – (-20)	Attack causes damage to motivational subprocessor. He's not doing so well. +8H – ✸⊗ – (-30)	Blow damages motivational subprocessor. Pace is now at 75%. +10H – 3✸⊗ – (-40)	Attack causes shock damage to motivational subprocessor. Android's pace is now at half. +20H – 4✸⊗ – (-50)
86-90	Power plant and batteries are damaged. He's got 60 rounds. +8H – ✸⊗	Power plant and batteries are damaged. In 50 rounds, he'll shut down. +10H – ✸⊗	Ground fault blows power plant. Batteries ground out. Foe has 40 rounds left. Sad. +9H – 2✸⊗	Attack damages power plant and batteries. Foe will lose power in 30 rounds. +6H – 3✸⊗	Ground fault damages power plant and batteries. Total power failure is only 20 rounds away. +15H – (+10)
91-95	Shock muddles foe's brain. He'll need a good tech. +3H – 10✸⊗ – (-20)	Brain damage. Know a good tech? +7H – 20✸⊗ – (-40)	Attack damages foe's brain. If he was aware of what had just happened, he'd be very impressed. +20H – 30✸⊗ – (-60)	Attack blows several main circuits in foe's brain. If he could remember what had just happened, he'd be very angry. +20H – 40✸⊗ – (-80)	Attack bounces off brain case. Damage is noticeable, but not beyond repair. +25H – 50✸⊗ – (-100)
96-99	Attack bounces off brain case. Now he's cross-eyed. +12H – 10✸⊗ – (-15)	Blow bounces off brain case. That's Forrest. Forrest Gump. +20H – 20✸⊗ – (-30)	Shock causes severe damage to foe's brain. Foe is having great difficulty. +25H – 30✸⊗ – (-45)	Shock causes brain to crack several main processors. Foe expires quietly. (+20)	Attack bounces off brain case, but the shock manages to crack the main circuit board. Foe dies. (+25)
100	Blow to foe's foot causes a ground fault which blows foe's brain. How'd that happen? (+20)	Yep, that's a dead android alright. (+20)	Attack causes a power surge which takes out several circuits. (+20)	Attack destroys several very important circuits. Foe crackles and dies. (+20)	Devastating attack manages to crack brain. Foe expires. (+25)

Key: ßπ =must parry ß rounds; ß∏=no parry for ß rounds; ß∑=stunned for ß rounds; ßƒ =bleed ß hits per round; (-ß)=foe has -ß penalty; (+ß)=attacker gets +ß next round.

ANDROID PIERCING CRITICAL STRIKE TABLE RM-A-6.7

	A	B	C	D	E
01-05	Abrasion to foe's hand. Are you just toying with him? +0H	Slight cosmetic damage to hand. Little else of note. +1H	Shot nicks foe's hand but passes clean through anything it was holding. +1H	Shot makes neat hole in droid's hand. He's leaking hydraulic fluid. +1H – 10♦	Shot passes clean through droid's hand. +3H – ✸⊗ – (-5)
06-10	Nice blemish. Maybe next time you should aim. +0H	Slight damage to arm causes loss of hydraulic pressure. +1H – 10♦	Shot passes through foe's forearm. Servos in hand freeze. He can't let go of whatever he's holding. +2H – 10♦	Shot passes cleanly through forearm, causing slight hydraulic damage, but little else. +3H – 10♦	Shot passes through arm, causing minor structural damage. Android drops whatever it was holding. +4H – 2✸⊗ – 3♦ – (-10)
11-15	Shot creases inside of upper arm. Neat. +1H	Shot grazes foe's upper arm. Weak. +1H	Clean wound through upper arm. He's dripping hydraulic fluid. +3H – 10♦	Shot destroys elbow and causes slight residual damage. Systems are a bit twitchy. +2H – ✸⊗ – 5♦ – (-10)	Shot enters upper arm, tearing motivational tissue and cracking the structure. +8H – 2✸⊗ – 3♦ – (-10)
16-20	You put a real nice hole in his shirt. +1H	Shot passes through non-vital upper arm tissue. +1H	Shot through upper arm. Systems flicker off, then on. +4H – ✸⊗ – 10♦	Shot causes major structural damage just above elbow. Not good. +5H – 2✸⊗ – (-5)	Arm twitches spastically as shot passes through musculature, structure, and hydraulics. Fluid is everywhere. +12H – 3✸⊗ – 3♦ – (-15)
21-30	A little to the left and you would have messed up his shoulder real bad. +1H	Shoulder hit causes minor damage. +3H	Shot through foe's shoulder nicks the arm's hydraulic supply. +5H – ✸⊗ – 5♦	Shot causes significant musculature damage. You've caught the hydraulic system for the arm. +3H – 3♦ – (-10)	Shot pierces major hydraulic line in shoulder. Messy. +1H – 1♦
31-40	His shoulder structure deflects the worst of it. +1H	Significant structural damage to shoulder. +8H – ✸⊗ – (-5)	Shot causes structural damage to shoulder. Feedback makes other systems unreliable. +12H – ✸⊗ – (-10)	Major structural damage to shoulder. I hope he wasn't planning on using that arm for much. +12H – ✸⊗ – (-15)	Well placed shot shatters shoulder structure and joint. This is bad. +10H – 2✸⊗ – 3♦ – (-15)
41-50	Shot creases foe's thigh. +1H	Clean thigh wound. You aren't even trying, are you? +2H – ✸⊗	Shot passes through thigh with only minor hydraulic and structural damage. Musculature, on the other hand… +15H – 10♦	Shot passes through thigh without causing any structural damage. There is damage to musculature and hydraulic systems. +8H – 3♦	Shot passes through thigh, causing structure to crumble and dropping android cold. +11H – 2✸⊗ – 1♦ – (-40)
51-55	A piece of his calf flies off, but that's it. +2H	You took a piece out of this knee, but not enough to count. +2H – ✸⊗	Damage to shin ruptures hydraulic line. +5H – 5♦	Shot passes through shin, causing structural damage but missing the hydraulic system. +12H – (-5)	Shot shreds structure and musculature in shin. Android falls, hard. +15H – ✸⊗ – 3♦ – (-20)
56-60	Not so good with moving targets, huh? +2H	Something flies by. Was that a toe? +3H	You shot him in the foot. Did you mean to do that? +8H	Shot cracks ankle, dropping android. +10H – ✸⊗ – (-10)	Blast shatters structure and musculature in ankle. Foot is hanging by a thread. +12H – 2✸⊗ – 3♦ – (-15)
61-65	New cosmetic belly-button. +2H	You crack his hip structure. That leg ain't gonna work right. +3H – ✸⊗	Shot freezes hip joint. Pace is halved. +8H – (-5)	Structural and system damage to torso. +12H – 3✸⊗ – (-10)	Shot passes through thigh, cracking hip. Systems are flickering on and off. +15H – 2✸⊗ – (-40)
66	Shot passes through brain, taking out emotion centers. +7H	Major brain damage sets brain in standby mode. The damage is irreparable, but a data transfer is possible. +8H – (+25)	Shot enters into brain case, then bounces around. He actually has a startled look on his face. (+25)	Damage to power plant. All circuits fried. (+25)	Shot hits power supply, sending current through every circuit. Android is a complete write off. (+25)
67-70	Shot cuts inside of foe's knee. +2H	Serious crack to foe's knee joint. +3H – (-5)	Clean hole in knee joint. Movement is reduced to three quarters. +7H	Shot wrecks foe's knee. Shrapnel causes slight hydraulic damage. +12H – 2✸⊗ – 10♦ – (-5)	Shot shatters a knee, causing system-wide repercussions. +15H – 2✸⊗ – (-15)
71-75	Shot hits central hydraulic plant. It can't quite compensate for the damage. Soon he won't be able to move at all. +3H – 25♦	Damage to central hydraulic plant. Everything is leaking out his gut. Total loss of motivation is imminent. +3H – 20♦	Damage to central hydraulic plant. Total paralysis isn't far away. Hope he knows a good tech. +3H – 15♦	Shot damages central hydraulic plant. Total paralysis is imminent. He better make this time count. +3H – ✸⊗ – 10♦	Shot hits central hydraulic processor. Fluid is everywhere. Total hydraulic failure is imminent. +8H – 2✸⊗ – 10♦ – (-5)
76-80	Shot passes dangerously close to gyro. There is some residual damage. +4H – 3✸⊗ – (-10)	Shot catches piece of foe's gyro. He lurches sideways a step. +5H – 4✸⊗ – (20)	Gyro damage. He struggles to stand. +6H – 5✸⊗ – (-40)	Damage to main gyro. Weebles wobble but they don't fall down. +7H – 4✸⊗ – (-60)	Shot cracks gyros. Systems become erratic. +8H – 5✸⊗ – (-80)
81-85	Shot catches his motivational subprocessor, but just barely. Look at him jiggle. +3H – ✸⊗ – (20)	Shot causes feedback loop which damages motivational subprocessor. His legs don't work right. +3H – ✸⊗ – (-30)	Minor structural damage sends shrapnel into motivational subprocessor. His pace is at three-quarters. +5H – 2✸⊗ – (-40)	Shot damages motivational subprocessor. His pace is halved. +8H – 3✸⊗ – (-50)	Shot destroys motivational subprocessor. Android is paralyzed from the waist down. +12H – (-65)
86-90	Shot damages power plant with some residual damage to batteries. Total power failure in 50 rounds. +3H – ✸⊗ – (-5)	Shot damages power plant and batteries. Total power failure in 25 rounds. +5H – ✸⊗ – (-10)	Shot causes damage to power plant and batteries. Total power failure in 15 rounds. +5H – ✸⊗ – (-15)	Shot damages power plant and batteries. Total power loss in 10 rounds. +8H – 3✸⊗ – (-30)	Hit to power plant and batteries. Android flickers and grinds to a halt. (+20)
91-95	Shot causes slight damage to brain. His speech is slurred. +3H – 10✸⊗ – (10)	Shot bounces off brain case. Secondary damage is significant. +3H – 15✸⊗ – (-20)	Shot deflected by brain case. Input from one audio sensor is lost. There is considerable secondary damage. +6H – 20✸⊗ – (-40)	Shot cracks several subprocessor in the droid's brain. Vision upside down. Speech is garbled. +8H – 30✸⊗ – (-50)	Direct hit to brain. Hope he's got a current backup. (+20)
96-99	That was quite a hit. You look like you hit him in the brain box. +4H – 15✸⊗ – (-25)	Damage to android's brain. He just doesn't look right any more. +5H – 20✸⊗ – (-50)	Damage to android brain doesn't quite take it offline. The power of speech is lost. +6H – 30✸⊗ – (-75)	Shot severs output to motivational processors and input from sight and sound. +6H – 40✸⊗ – (-100)	Surgical strike disconnects brain from all input and output. Only power remains. (+25)
100	You hit him in the brain. Must be beginner's luck. (+20)	Direct hit to brain. Nice shootin', Tex. (+20)	Complete destruction of android's brain. (+20)	Shot destroys foe's brain. Look at him twitch. (+20)	Brain case shatters. The android freezes up and falls over. (+25)

Key: ßπ =must parry ß rounds; ß∏=no parry for ß rounds; ß∑=stunned for ß rounds; ßƒ =bleed ß hits per round; (-ß)=foe has -ß penalty; (+ß)=attacker gets +ß next round.

ANDROID PUNCTURE CRITICAL STRIKE TABLE RM-A-6.8

	A	B	C	D	E
01-05	You hit his hand. Nice blemish. +0H	You hit his hand, causing no extra damage. +0H	Shot passes through foe's hand, almost unnoticed. +0H	Shot passes through hand. He appears to be leaking. +1H – 5♦	Shot passes through musculature on droid's hand, causing minor feedback. +2H – ✸⊗
06-10	Maybe this isn't a point and click device after all. +1H	Well, you managed to clip a hydraulic line in his forearm. +1H – 10♦	Shot passes through forearm, and would have caused no damage, if it wasn't for that hydraulic line. +2H – 5♦	Shot passes through forearms, taking out two hydraulic lines. +2H – 3♦	Shot enters forearm, bouncing off structure, and causing minor system damage. +3H – ✸⊗ – 3♦ – (-5)
11-15	Shot nicks upper arm. +1H	Shot manages to barely hit upper arm. +1H	Clean wound in upper arm. Isn't that hydraulic fluid? +2H – 5♦	Shot breaks elbow joint. Arm doesn't move right anymore. +1H – ✸⊗	Shot bounces off upper arm structure, causing minor system and musculature damage. +6H – 2✸⊗ – 3♦ – (-5)
16-20	You drill through his upper arm. +1H	Shot creases upper arm. +1H	Shot to upper arm. That looked worse than it was. +2H – 5♦	Shot bounces off structure just above elbow. Slight shock to system is only real effect. +1H – ✸⊗	Shot enters upper arm, miraculously causing structural damage and blowing several hydraulic lines. +6H – 2✸⊗ – 3♦ – (-5)
21-30	Shot slices shoulder. +1H	Shoulder hit passes safely through droid. +1H	Shot passes through shoulder, taking out a hydraulic line. +3H – ✸⊗ – 10♦	Shot passes through shoulder, blowing a hydraulic line. +3H – 2♦	Shot slows hydraulic system in upper arm. That doesn't look good. +1H – 1♦
31-40	Shot bounces through shoulder without causing serious damage. +1H	Shot glances off shoulder structure. +2H	Shot bounces off shoulder structure. That almost hurt. +4H	Shot cracks shoulder structure. He better not use that much. +6H –	Shot damages shoulder structure, causing significant feedback damage. +6H – 2✸⊗ – 1♦ – (-30)
41-50	Shot looks worse than it is. +1H	You hit him in the thigh. Somehow, he manages to persevere. +2H	Shot hits thigh, damaging musculature but missing hydraulic lines. +5H	Shot passes through thigh musculature, taking out a main hydraulic line. +8H – 3♦	Shot cracks upper leg structure. How'd you do that? +6H – 2✸⊗ – 3♦ – (-5)
51-55	Shot cuts through calf. +1H	Maybe you shouldn't shoot from the hip. +1H	Shot bounces off shin structure and through hydraulic line. +2H – 5♦	Shot passes through shin, causing structural damage but missing the hydraulic system. +10H	Shot damages shin structure and musculature. Shin folds like a lawn chair. +7H – ✸⊗ – 3♦ – (-10)
56-60	Maybe you should go back to the range. +1H	You manage to deftly shoot him in the foot. +2H	You trying to pin his foot to the ground? +5H	Shot cracks ankle. Is that a limp? +6H – ✸⊗	Shot damages ankle structure. He better not put any weight on that. +7H – 2✸⊗ – 3♦ – (-5)
61-65	Shot passes through hip unhindered. +1H	Shot bounces off hip joint without causing much damage. +3H	Shot bounces off hip joint. That could have been great. +5H	Torso damage causes residual system failures. +7H – ✸⊗	Shot damages hip structure, shredding musculature and causing major system damage. +10H – 2✸⊗ – (-30)
66	Shot scrambles short term memory. +5H	Shot shuts down brain, but data is intact. +6H – (+25)	Shot hits weak spot in brain case, cracking brain in two. (+25)	Shot bounces of power plant, causing a dangerous ground fault. Android dies with a sizzle and a whiff of ozone. (+25)	Shot passes through power plant. Foe begins twitching like a dead cockroach. (+25)
67-70	Shot almost hits knee. +1H	That almost damaged his knee. +3H	Shot bounces of knee joint, tearing some musculature. +7H	Shot cracks knee joint. He doesn't look happy. +10H – 2✸⊗ – 5♦ – (-5)	Shot damages knee, causing system-wide damage. +12H – 3✸⊗ – (-10)
71-75	Hydraulic plant is damaged. Fluid is everywhere. +2H – 15♦	Central hydraulic plant is damaged. Total hydraulic supply begins to dwindle rapidly. +2H – 10♦	Shot punctures hydraulic plant. Looks like he's a quart low. +4H – 7♦	Shot damages hydraulic plant. Total paralysis is mere rounds away. I wonder if he has insurance. +4H – 2✸⊗ – 6♦	Shot passes through hydraulic plant. Foe will loose mobility soon. +7H – 2✸⊗ – 5♦
76-80	Shot manages to throw gyro out of alignment. +3H – (-5)	Shot causes minor damage to gyro. Foe manages to compensate. +4H – ✸⊗ – (-10)	Shot bounces off gyro, dismounting it badly. +7H – ✸⊗ – (-20)	Shot manages to damage main gyro. Ouch. +7H – 2✸⊗ – (-40)	Shot passes through gyro. Not good. Not good at all. +7H – 2✸⊗ – (-60)
81-85	Shot causes minor carbon scoring in motivational subprocessor. +3H – ✸⊗ – (5)	Shot damages motivational subprocessor, causing several small system failures. +4H – ✸⊗ – (-10)	Shot bounces off motivational subprocessor, causing many minor system failures. +5H – ✸⊗ – (-20)	Shot bounces too close to motivational subprocessor, reducing pace to three quarters. +10H – 3✸⊗ – (-30)	Shot passe through motivational subprocessor, halving foe's pace. +12H – (-45)
86-90	Shot takes out power plant, damaging batteries to boot. He has 50 rounds. +2H – ✸⊗ – (-5)	Damage to power plant and batteries is significant. Foe has 35 rounds before complete failure. +7H – ✸⊗ – (-10)	Shot cracks power plant and bounces through batteries. Foes has 20 rounds. +5H – ✸⊗ – (-15)	Shot causes damage to power plant. Plant will overload, blowing batteries and all systems in 15 rounds. +9H – 2✸⊗ – (-20)	Shot bounces nimbly around power plant and batteries, making the android jerk about for one round before dying. (+20)
91-95	Shot loosens several circuits in brain. +2H – 5✸⊗ – (-5)	Shot bounces of brain case, almost taking foe offline. +2H – 10✸⊗ – (-10)	Shot bounces off brain case, causing slight damage in sensory input circuits. +7H – 15✸⊗ – (-40)	Shot glances off brain case, damaging visual circuits. +15H – 30✸⊗ – (-50)	You penetrated the brain case. How'd you do that? (+20)
96-99	Shot bounces off brain box. Maybe you need a more powerful weapon. +2H – 10✸⊗ – (-20)	Shot causes damage to main processor. Let's just say he won't be going to Harvard. +3H – 15✸⊗ – (-30)	Shot cracks several subprocessors. I don't think he liked that. +3H – 20✸⊗ – (-55)	Shot severs main output bundle, paralyzing foe. +3H - 30✸⊗ – (-80)	You hit the input/output circuit of the brain. Android is now deaf, blind and paralyzed. (+25)
100	Shot skewers android's brain. He collapses into a limp pile. Cool. (+20)	Brain hit. The damage is enough to cause several small fires in foe's brain. Not good. (+20)	Shot cracks droid's brain. He slowly grinds to a halt. (+20)	Shot damages brain. Foe never knew what hit him. (+20)	Bullet enters brain case and bounces around for five or six seconds. Wow. (+25)

Key: ßπ =must parry ß rounds; ß∏=no parry for ß rounds; ß∑=stunned for ß rounds; ßƒ =bleed ß hits per round; (-ß)=foe has -ß penalty; (+ß)=attacker gets +ß next round.

ANDROID SCORCH CRITICAL STRIKE TABLE RM-A-6.9

	A	B	C	D	E
01-05	It was a nice try. +0H	Hand burned. +1H	You shot him in the hand. +1H	You burn his hand badly, damaging musculature. +4H	Shot sears foe's hand, damaging structure and causing system failures. +4H – (-20)
06-10	Weak. +0H	Slightly scorched forearm. +2H	Burn to forearm. +2H	Beam sears musculature on foe's forearm. +4H	Severe burn damages forearm, cracking structure, hydraulics, and musculature. +4H – 3♦ – (-10)
11-15	This should be easier. +0H	Burn to upper arm. +2H	Upper arm scorched. +4H	Upper arm badly burned. +4H	Hot spot burns through to upper arm, damaging musculature and hydraulics. +8H – 5♦ – (-10)
16-20	Close, but no cigar. +0H	Upper arm burn. +2H	Blistering upper arm shot. +4H	Beam burns across arm, just above the elbow joint. The damage is relatively minor. +4H	Heat damages upper arm structure, cracking a hydraulic line. +8H – 5♦ – (-10)
21-30	Not quite. +0H	Weak. +1H	Shoulder strike. +4H	Damage to shoulder causes damage to secondary systems. +4H – (-10)	Hot spot burns deep into shoulder. Minor system failures follow. +4H – 2✸⊗ – (-20)
31-40	Maybe next time. +0H	Shoulder wound. +4H	Sssearing shoulder strike. +6H	Damage to musculature and structure in shoulder. +8H – (-10)	Intense heat cracks shoulder structure. Foe is unimpressed. +8H – 2✸⊗ – (-20)
41-50	Come on. +0H	Thigh shot. How impressive. +4H	Attack burns deeply into thigh. +6H	Solid attack to foe's thigh. +8H – (-10)	Beam sears deep into thigh. Musculature, structure, and motivational circuits crack. He isn't pleased. +5H – 2✸⊗ – (-40)
51-55	You cause damage. +1H	Shin burn. +2H	Calf burn. +4H – (-10)	Shin cracks, damaging several systems. +10H – (-20)	Beam heats shin structure to the point of cracking. +8H – (-30)
56-60	It's the thought that counts. +1H	You shot him in the foot. Did you intend to do that? +6H	Shot burns deeply into foot. +8H – (-10)	Ankle shatters, causing system wide repercussions. +10H – (-20)	Heat shatters ankle structure, causing all sorts of problems. +12H – 2✸⊗ – 3♦ – (-30)
61-65	Hip burn. +2H	Scorching hip burn. +4H	Heat damages hip musculature. +8H – (-10)	Heat damage to several minor circuits in lower torso. Other than that, they're doing well. +12H – (-20)	Searing attack damages several important systems. +20H – 2✸⊗ – (-60)
66	Foe loses a random month from long term memory. +8H	Heat blows breakers. Secondary electrical systems are damaged as well. It will take a Light repair maneuver to fix. +10H – (-20)	Heat cracks brain processors. (+25)	Power plant blows, sending fatal levels of current throughout system. (+25)	Beam carves its way through foe's armor, destroying his power plant and sending current throughout foe, killing him dead. (+25)
67-70	Scorching knee strike. +1H	Knee strike. +4H – (-10)	Scorched knee. +6H – (-20)	Heat expansion snaps foe's knee. Nice shot. +12H – 2✸⊗ – (-30)	Tremendous temperature differentials cause knee to shatter. Repercussions are felt system wide. +18H – 2✸⊗ – (-40)
71-75	Burn scorches hydraulic. +2H – 25♦	Hydraulic plant damage. +2H – 20♦ – (-10)	Damage to hydraulic plant. +4H – 15♦ – (-20)	Hydraulic pressure exceeds specs. Foe blows a seal in processing plant. +4H – 2✸⊗ – 10♦ – (-30)	Hydraulic pressure builds until plant bursts. Foe is losing fluid quickly. +8H – 4✸⊗ – 5 – (-40)
76-80	Heat expansion causes gyro to slip. +4H – (-10)	Gyro damage. +4H – (-20)	Heat expansion causes gyro damage. +4H – ✸⊗ – (-15)	Gyro problems. Heat expansion is not a good thing with a rapidly spinning object. +10H – 4✸⊗ – (-40)	Heat expansion causes significant gyro damage. +12H – 4✸⊗ – (-80)
81-85	Slight damage to motivational subprocessor. +2H – (-10)	Motivational subprocessor damage. +4H – (-20)	Motivational subprocessor damage. He ain't happy. +6H – 2✸⊗ – (-30)	Motivational subprocessor takes the brunt of the attack. +8H – 4✸⊗ – (-40)	Heat causes significant damage to foe's motivational subprocessor. +14H – 6✸⊗ – (-50)
86-90	Power plant goes offline, causing minor damage to batteries. Foe has 90 rounds before total power failure. +2H – (-10)	Power system damage. Total power failure in 50 rounds. +8H – (-20)	Power system failure. Total failure will occur in 40 rounds. +8H – 2✸⊗ – (-30)	Power plant shuts down. Batteries have 30 rounds of power left. +10H – 4✸⊗ – (-40)	Extensive damage to power systems. Power plant fails and batteries are damaged. Total power failure will occur in 20 rounds. +14H – 6✸⊗ – (-50)
91-95	Slight damage to brain. +2H – (-10)	Significant brain damage. +6H – 4✸⊗ – (-20)	Shot damages foe's image processing center, reducing image contrast. He blinks in confusion. +6H – 8✸⊗ – (-40)	Foe shuts down. A technician or three days of self repair are required to fix brain. +12H – 12✸⊗ – (-60)	Brain case shatters from heat expansion. Brain isn't far behind. Sad. (+20)
96-99	Baincase damaged. +4H – (-20)	Can you say brain damage? I knew you could. +6H – 8✸⊗ – (-40)	Power plant damaged. Voltage is now irregular, throwing off all systems. +6H – 16✸⊗ – (-70)	Foe has five minutes to shut down. Otherwise, brain will blow, killing foe. +6H - 24✸⊗ – (-120)	Heat damages foe's brain. He may never be the same. +4H – 16✸⊗ – (-80)
100	Brain is scorched. Not a really good thing. +4H – 2✸⊗ – (-20) – (+20)	Brain damage. He isn't exactly pleased with you. +6H – 10✸⊗ – (-60) – (+20)	Brain is a write off. Nifty. (+20)	Brain shatters. (+20)	Heat overloads foe's brain. Nearly every circuit is destroyed. Foe dies instantly. (+25)

Key: ßπ =must parry ß rounds; ß∏=no parry for ß rounds; ß∑=stunned for ß rounds; ßƒ =bleed ß hits per round; (-ß)=foe has -ß penalty; (+ß)=attacker gets +ß next round.

GRAPPLE CRITICAL STRIKE TABLE RM-A-6.10

	A	B	C	D	E
01-05	Foe escapes like the wind. +0H	Your attack falls short. +0H	Your fingernails deal a vicious wound. +1H	A little elbow before you lose your grip. +2H	You grip strand of foe's hair. It breaks. +3H
06-10	Grab foe's arm. Oops. Try again. +0H	Your grip fails. +2H	Foe grabs, misses. You have initiative. +3H	This was not a special moment. +4H	You have initiative next round. +5H
11-15	You impede foe's combat stance. You have the initiative. +0H	Foe collides with your attack before you get a grip. Small bruise. +2H	You cannot get a good grip, foe hurts himself evading. You have initiative. +4H	Grab foe's head. If foe has helm, you twist it. Otherwise, you gain initiative. with helm: ✸	Lame attack, but foe is concerned. He moves back. +6H – ⚔
16-20	Foe breaks free of a weak grip. You have the initiative next round. +0H	Grab foe and give him a weak punch. He thinks you are dangerous. ⚔	Foe recovers, continues his defense by sweeping his weapon at your feet. ⚔	Push foe, unbalancing him. You have initiative for 2 rounds. —	Strong passing blow near foe's head. His violent evasion is not productive. +3H – ✸
21-35	Almost get a grip on foe's arm. He avoids his mistake. You gain the initiative next round. +3H	You grip foe's shield arm. Foe's strike toward your head makes you let go of him. He keeps a distance. ⚔(-20)	Collide with foe. You push him away and he stumbles back 5 feet. It went better than you could have hoped. +2H – ✸	Hard, but poorly placed. Foe bounces back out of your grip. He looks like he does not recognize you. +3H – ✸	Uncoordinated attack and a little luck, allows foe to escape your grasp. You have initiative for 2 rounds. ✸
36-45	Grip to lower back. Foe wards off your attack and prepares for your next move. ⚔	Grip fails, but bash does not. You unbalance your foe. You have the initiative. +4H – ⚔	Your attack is almost comical as you seek any little grip you can get. All the tiny tugs finally have an effect on foe. ✸⚔	Strike to foe's shield arm. If foe has no shield, you immobilize arm for 6 rounds. with shield: +3H	Attack to upper leg. Foe spins to break free. He is disoriented badly. It takes a moment for him to see you. ✸⊗
46-50	Hinder foe's weapon arm. Foe violently frees himself and takes a defensive stance. ⚔	Pull foe over, he breaks free. He is having trouble recovering. Your heart is broken. 5H – ✸	Grab foe's waist. Your grip appeared to be strong, but now it is losing its advantage. Your foe is working free. 3(-25)	Painful grip on foe's hand. You do not break anything, but he thinks so. You have initiative for 4 rounds. 3(-30)	You and foe collide. He breaks your grip and stumbles away. You bounce back and miss a good opportunity. 2✸⊗
51-55	You get in close and grab at foe's hair. He is daunted and steps back to escape your reach. ⚔(-20)	Grip to foe's garments. They rip and you lose a hopeful hold. Foe is carried back by his break-away. +7H – ✸	Grapple foe's leg and try to lift it up off the ground. Foe slips away, but is off balance while recovering. ✸⊗	Catch foe's waist garments and pull him in. He is in trouble. He seeks to strike your hand and break your hold. 3(-50)	Grip to shield arm. Foe drops his shield as he wails in pain. You try to stay serious. +5H – 2✸⊗
56-60	Foe spins away and comes back to face you. He is unbalanced. +3H – ✸	Foe spins out of your grasp. However, spin nullifies his conterattack. ✸⚔	Short fingers render thigh hold ineffectual. Try lower next time. +3H – ✸⊗	Grip foe's side and shake him like a rattle. He is disoriented, but gets free. +6H – 3✸	Grasp around foe's leg proves effective. Foe is unbalanced for a moment. ✸⊗ – 3(-25)
61-65	Grip to arm gives foe a bruised bicep. Foe shakes free and prepares for your assault. +3H – ⚔(-20	Slipping grasp around foe's waist is weak. He breaks your grip and stumbles out of your way. 2✸	Grab foe around waist. Just when you think your grip is iron, he begins to break free. You might still prevail. +3H – 3(-50)	Clumsy bear hug around foe. Foe can do little to escape for the moment. Both his arms are pinned. 2⊗ – ⚔(-20)	You find yourself on foe's shield side. If he has a shield, you are stymied. w/o shield: +7H – 3✸⊗
66	Strike foe's weapon, disarming him. Foe fails to recover weapon. He has put himself in a bad spot. +3H – 2✸	You grab foe's weapon arm and make him drop it with a violent shake. Foe strains wrist trying to break free. 2✸ – (-25)	Grab foe, he falls down and you follow. You knock him prone to stand back up. He is down for 1 round. +5H	Grab leg and flip foe to ground, pinning him. Prone and immobile for 2 rounds, he might surrender. +6H	Grasp foe around neck and bring him to ground. Muscles and tendons tear. Foe is prone and immobilized for 3 rounds. +3H – ✸
67-70	Passing chest strike. Foe eludes grapple, keeps defensive stance. 2⚔(-20)	Grip foe's neck. Push foe's chin back steadily. He should act soon, or... 1(-10) – 1(-20) – 1(-30)	Grab foe's shield arm. If foe has shield you grapple it. Until dropped: (-50) w/o shield: 3(-40)	Foe barely escapes immobilization, but must recover from the ordeal. +7H – 2⊗	You almost disarm foe and trip him. He uses weapon arm to prevent his fall. 2✸⊗ – 1(-75)
71-75	Grab an exposed garment. Uneasy grip impedes foe's actions. +5H – 2(-50)	Weak hold around foe's waist. He brings his knee up and you lose your grip. Foe does not recover quickly. +4H – 3(-50)	Very strong grip around foe's waist. Foe is held at a great disadvanatge. He might get free. 2✸⊗ – (-50)	You grapple foe in a brutal way. Hold proves to be excellent. You have him. What next? ✸⊗ – 3(-70)	Foe evades your grasp by falling to the ground. A clever ploy. Smile at your good fortune. +9H – 2✸⊗
76-80	Grapple foe's shield arm. If foe has a shield, you pull it down. If foe has no shield, you immobilize his arm. +2H – 4(-50)	Entangle foe's shield arm. If foe has shield, your grip makes it impossible to use. Until shield dropped: (-30) If no shield his arm is entangled. (-40)	Entangle foe's weapon arm. His weapon is held immobile. He cannot use it, but he will not drop it. He tries to knee you to escape, this fails. 2✸⊗ – (-50)	Entangle foe's weapon arm. Foe hangs onto his weapon, but the arm is immobilized. You try to make him strike himself. It fails. +4H	Grab foe's weapon arm and beat on it, without concern foe the rest of foe. Foe is disarmed. You tear ligaments and pull muscles. 3✸ – (-40)
81-85	Useful grip on foe's neck. Foe's face turns red. He cannot breath easily. Slowly he breaks your grip. +5H – 2✸ – 2(-25)	Grip around foe's waist unbalances him. You have the initiative. Foe shares much profanity with you. 6(-50)	Brutal grip around foe's chest, leaves bruises all over him. Your assault has created much confusion. +3H – 3✸⊗ – (-5)	Grab knee and send foe down. He breaks his fall by breaking his shield arm. He is disarmed and prone. +5H – 2✸⊗ – (-10)	Entangle both of foe's arms and pin them to his body. Foe cannot move his arms and he looks ready to surrender. 10(-75)
86-90	Grasp foe's leg, lifting it off the ground for a moment. You have the initiative for 6 rounds. +3H – 3✸	Entangle foe's leg and send him down. He does not hit hard. He pulls a muscle in his leg struggling. 2✸⊗ – (-10)	Your assault is strong and lucky. As you grapple foe, you stomp his foot. He falls hard, breaking his shoulder. +10H – 6✸ – (-40)	Tie up both of foe's arms. He is immobile and cannot fight back effectively. You have him now. +10H – 9✸⊗	Foe stumbles, with your assistance, and falls. His weapon breaks on impact. If foe has no chest armor, he takes a"D" Krush. +3H – ✸
91-95	Entangle foe's leg. Foe is knocked down. Foe lands on his weapon arm. He kicks and breaks free. +4H – 2✸⊗	Pull foe's legs together. He goes down, hitting hard and dropping his weapon. He feebly attempts to crawl for it. 2✸⊗ – 4(-25)	Painfully immobilize weapon arm. Foe cannot surrender quickly enough to avoid the damage and pain. +15H – 4✸⊗ – 8(-95)	Grapple foe's legs and send him over. He hits his head in the fall. You get little resistance after that. +10H – 30✸⊗	Wrap up foe's legs. Foe tumbles to the ground like a ragdoll breaking both arms and an ankle. Foe is knocked out. +20H – (-95)
96-99	Ride foe down and immobilize him. He can do nothing for 12 rounds. You are prone also, while holding him down.	Entangle foe's arm and flip him to ground, fracturing his leg. You immobilize him completely. He is prone, face down and still conscious. (-40)	Entangle foe's legs. Grapple weapon arm and break it on an available surface. You send foe to the ground. He falls very hard and is knocked out. +20H – 10✸⊗ – (-30)	Crushing grip around foe's neck. If no neck armor, foe dies in 6 rounds from your mortal grip. Foe is disarmed. with neck armor: 3✸⊗	Attack results in strangling hold. Foe flails legs in desperation. Foe is unable to break free and dies after 9 rounds of helpless struggling. Grim. +3H – ✸
100	Foe's legs are entangled long enough to make him fall. He is knocked out for 5 rounds. +9H – (+20)	Grip foe's neck in a vicious hold. If foe cannot break your grip in 4 rounds, he will begin to pass out from suffocation. +10H – ✸ – (-40)	Grip foe's head and jerk it around. If foe has no neck armor, he dies. no neck armor: +5H – 5✸⊗ – (-75)	Grapple foe's head. His skull is fractured during this assault. If he has no helm, he is in a coma for 30 days. with helmet: +3H – 9✸⊗	Crush foe's windpipe and pull the head from his body. You are mighty. 1(+25)

Key: ßπ =must parry ß rounds; ß∏=no parry for ß rounds; ß∑=stunned for ß rounds; ßʃ =bleed ß hits per round; (-ß)=foe has -ß penalty; (+ß)=attacker gets +ß next round.

IMPACT CRITICAL STRIKE TABLE RM-A-6.11

	A	B	C	D	E
01-05	Foe rolls with the blow.. +0H	Rattle foe a little. Bruise his elbow. +0H	Strike glances off foe. He presses on. +1H	Strike lands without force. Foe is up. +2H	How foe evaded that blow is a mystery. +3H
06-10	It looks solid, but foe is not hindered. +1H	Bump foe in the chest. He loses a garment decoration. +2H	Foe turns to evade and gets hit in the backside. Little damage is done. +3H	Wild assault to shoulder fails to connect with foe. +4H	Foe is unbalanced and gives ground to regain his footing. +3H – 2(-15)
11-15	With great effort foe evades the damage. You have initiative. +2H	Corrupt foe's sense of balance. He stumbles and loses the initiative. +4H	Firm strike causes foe to step back and get his bearings. +3H – ⚔	Strike to chest is not hard but it is well placed. Foe steps back 5 feet. +4H – ⚔	Foe staggers back and trips, making things worse for him. +6H – ✸
16-20	Spin foe sideways. He recovers quickly. You have the initiative. +3H	Foe's response is quick enough to avoid serious damage. +2H – ⚔	Strong blow. Foe abandons any hope of the initiative and falls back. +4H – ⚔	Foe starts stepping away from the assault before it hits his legs. +6H – ⚔	Foe fails to avoid some of the attack and almost falls down. +9H – ✸
21-35	Your strike has some effect. Foe loses his balance and cannot regain a good stance. You have 2 rounds of initiative. +5H	Strike seeks foe's head. He blocks with his weapon and evades with shameless grace. He keeps his guard up. +5H – ⚔	Foe is unbalanced and can only manage some wild swings to protect himself for the moment. +8H – ⚔	Blow almost sends foe down. He strikes the ground with his weapon while trying to regain his balance. +10H – ⚔	Foe reels from this deadly strike. He avoids death but not damage. His side is badly bruised. +15H – ✸
36-45	Foe must give ground or fall. He steps back 5 ft and goes low to avoid falling. He loses 2 rnds of initiative. +8H	Violent blow to shield side. Any shield is destroyed. Foe's side is bruised. He is still on his feet. +9H – ⚔	Pitiless blow to foe's lower leg. Foe is desperate to defend himself while he regains his balance. +10H – ✸	Boom! Foe is hammered by an effective strike to his back. He looks to be recovering. Minor bruises. +12H – 2✸	Hammer foe in shoulder. He falls 10 feet and spuins around. He stumbles another 5 ft before regaining control. +15H –2✸ – 2(-15)
46-50	A solid shot unnerves foe and knocks him to the side. His recovery is slow. You have 3 rounds of initiative. +10H	Foe loses footing before being struck, but still avoids most of assault. A piece of equipment is knocked loose. +10H – ✸	Foe's weapon arm is slammed into his chest. Foe almost falls. He steps back 5 feet and regains some footing. +12H – 2⚔ – (+5)	Foe is shaken and steps back 5 feet for the next 2 rounds. If he cannot step back he falls down. +5H – 2⚔	Foe is lifted off the ground and thrown back five feet. Amazingly he does not fall. His guard is down. +20H – ✸⊗
51-55	Bash to foe's side damages equipment unbalancing him. He stumbles about. +10H – ✸	Smash foe to side. Foe still fights but footing is unfirm and armor is loose. +12H – ✸	Hard strike to side, armor does not help. The bruise is deep and effective. +15H – 2⚔	Batter foe. He fumbles his weapon grip. He notices little else right now. ✸⊗ – (+5)	Foe tries to withstand blow, but goes down. He takes 2 rnds to stand. +20H – 2(40)
56-60	Foe's shield arm is roughed up. Foe puts his guard up and steps back. It is clear he is dazed. +10H – ✸	Foe's response is ungraceful. The strike slams his weapon arm into his side and pins it for the moment. +10H – 2✸	Strong bash hits foe low. His legs almost give with the pain. Foe recoils 5 feet away from your assault. +12H – 2✸	Concussion bruises skin and batters ribs. Foe is numb, unable to feel the damage. He thinks wound is mortal. 2✸⊗ – (-10)	Impact scatters unattached equipment. Shield, helmet, and any weapons go flying. Foe then falls down. +20H – 2✸⊗
61-65	Well placed. Strike slams into foe's weapon arm. Foe holds onto his weapon . with arm greaves: +8H – ⚔ w/o arm greaves: +12H – ✸	Blow crashes into foe's chest. If he has chest armor, it is damaged. If not, he has terrible bruises and cracked ribs. with chest armor: +12H – 2⚔ w/o chest armor: +10H – ✸⊗	Crashing blow to foe's shoulder sends him over. He uses weapon arm to stay standing and cannot defend himself. +10H – ✸⊗ – (+5)	Lay waste to foe's shield arm. Any shield in use takes some of the damage, but is destroyed by impact. with shield: +5H – ✸ – 3(-10) w/o shield: +10H – 2✸ – ⊗	Your strike vandalizes foe's sense of balance and he crashes to the ground. His legs and pride are bruised. +20H – 3✸⊗
66	Foe braced poorly for the impact. His knee is pressed backwards damaging muscles and tendons. +20H – ⚔	Fingers are entangled in the impact and broken. Foe's shield hand is useless. The swelling might go away in a day. +15H – ✸⊗	Blast breaks shield arm. He falls on his weapon arm and breaks his wrist. Both arms are useless. Talk about bad luck. 3✸ – (-90)	Snap foe's head back. Foe falls unconscious onto ground breaking a leg and hand. Without helm he dies . –	Head strike. Foe's skull is crushed. Any helmet worn is driven into the side of foe's head. –
67-70	Foe's evasion attempt exposes back and side. Impact causes foe to drop his guard and stumble to the side. +7H – ✸⊗	Blow to back flings foe to knees. He drops his weapon. He stands but his guard is down as he rearms himself. +12H – ✸⊗	A piece of solid equipment is jammed into foe's chest. The pain is sharp. It leaves a permanent bruise. 2✸ – ⊗	Foe is knocked down. He lands on his equipment, and drops his weapon. He cannot get up for 2 rounds. +15H – (+5)	Strike impacts along thigh. Leg is twisted and muscles pulled. Foe jams a finger during the struggle. +15H – ✸ – (-10)
71-75	Modest strike provides some excellent openings. If foe has a shield, it is out of position for 1 round. +10H – 2✸	Solid strike to shoulder numbs foe's senses and bruises muscles. Foe's sense of direction is off. +20H – 2✸ – ⊗	Violent strike to foe's midsection. He falls, drops equipment, and is vulnerable while standing up. +10H – 2✸⊗ –2(+5)	Strike at foe's legs. Foe wisely leaps back from the strike. Both shins and knees are bruised his ankle is broken. with leg armor: +8H – 2(-20) w/o leg armor: +10H – ✸	Strike lands in center of foe's chest. Foe is knocked down. Chest armor is destroyed. Ribs are broken. with chest armor: +20H – 5✸ – (-10) w/o chest armor: +15H – 6✸ – (-30)
76-80	Strke lands hard against foe's shield side. He almost loses his footing. Foe will fall against any nearby object. with shield: +6H – ✸ w/o shield: +15H – 2✸ – ⊗	Your irresistible blow sends foe onto his back. He drops his weapon. Foe has a variety of bruises. with chest armor: +12H – 3⚔ w/o chest armor: +10H – 2✸⊗ – (+5)	Sweep foe onto his back. Foe must roll over to get up. Leg armor will slow him down. Minor fracture on lower leg. with leg armor: +5H – ✸ – 2(-60) w/o leg armor: +15H – ✸ – (-25)	Fold up foe's weapon arm and snap it against his body like a twig. His arm is useless. Boy that must hurt! +10H - ✸	Strike crashes into foe's side, breaking his shoulder and collar bone. One arm is useless; the other isn't much better. +25H
81-85	Solid shot to foe's chest drives home a deep bruise. The wound is unforgiving. Ribs are cracked and cartilage is torn. +10H – (-25)	Brutal strike lands between foe's shoulder blades. Tendons and muscles sprain. Little is not painful for foe. +10H – 2✸ – (-25)	Strike looks harmless. However, foe's collarbone is broken. He is furious with his fortune. The pain is real. +15H – ✸ – (-25)	Impact to face and chest knocks out teeth and breaks ribs. Foe is dazed and stands immobile for 3 rounds. +20H	Violent onslaught ruptures organs and causes massive internal bleeding. Foe will die in 6 inactive rounds. +30H
86-90	Assault to legs. Foe's balance is stolen. He falls to the ground. Foe's shin and knee are bashed against the ground. with leg armor: +8H – 2✸ w/o leg armor: +10H – 3✸⊗	Strike flings its strength into foe's legs. Muscles are bruised and tendons are torn. Foe remains standing. One of foe's greaves comes off. with leg armor: +20H – 3✸ – (-50) w/o leg armor: +20H – ✸⊗ – (-20)	Blow fractures foe's thigh. Foe does not fall down, but he cannot walk until the leg has a splint. This is a good opportunity to practice your first aid. +20H – 2✸⊗ – (-60)	Onslaught to foe's midsection. Organs are damaged and foe throws up blood. Foe's abdomen is seriously damaged. He falls and should not be moved. with abdominal armor: 12✸ w/o abdominal armor: dies in 6 rounds	Foe is thrown down. Two ribs protrude from his chest. Organs are destroyed. Foe's eyes glaze when death comes in 3 rnds. +50H
91-95	Blow to foe's head. If he has a helmet, it is unseated and covers foe's eyes. If no helmet, foe is knocked out. +20H – 3✸⊗ – (-50)	Strike hammers side of head. With helmet, foe is in coma for 2 weeks. If no helm, foe diesin 1-10 rnds. +25H	Force of attack breaks foe's knee and sends him down. He can't get up unassisted. He considers surrendering. +20H – 9✸⊗ – (-75)	Foe's face, jaw and neck shatter. He stumbles back a few steps. He falls and dies after 3 rounds of inactivity. Sad. +50H	Foe's lower body is crushed. Massive blood loss and shock will cause foe to die after 6 rounds. He can still speak. +30H
96-99	Blow lands hardest against foe's hip. The bone is fractured and foe falls down. Foe sprains wrist in the fall. When it rains, it pours. +20H - 3✸⊗ – (-50)	This sudden tempest breaks foe's neck. He cannot breath. He drops and dies after a futile 12 round struggle. Close his eyes. +25H	Savage impact ruptures internal organs and breaks many bones. Foe falls and dies.. +50H	Bash in foe's side. Bones are broken by the concussion. One of them is driven into a kidney. Foe goes into shock, drops, and dies in 8 rounds. +25H	Strike brings foe down. His spine is broken with liitle effort. Foe is still. Blood pours from his mouth heralding his death. He dies in 3 rounds. (+20)
100	Foe slams to ground from brutal strike. His rib cage is fractured. With armor, he is only knocked out; if no armor, foe dies in 3 rnds from internal bleeding. +25H	Bash in foe's side and a shoulder. The shoulder blade violently contacts foe's spine. Foe is paralyzed from the shoulder down. Foe is unhappy. +30H	Foe's head is in the middle of this tumult. Foe dies instantly. His skull is crushed and a few other bones are also broken in his fall. (+10)	Crush foe's lungs and heart with an irresistible onslaught. The impact slams foe to the ground and he dies a moment later. (+25)	Blast breaks close to thirty bones in foe's skeleton. He is dead a moment later. His body is difficult to gather up. Very little of his equipment in intact. –

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LARGE ANDROID CRITICAL STRIKE TABLE RM-A-6.12

	BLAST	BURST/RAKING	PIERCING	PUNCTURE	MELEE
01-05	Great. That shot got its attention. Sure he's a bit angry, but on the bright side, at least your weapon jammed. +12H	Nice incision. To bad it didn't have much effect. Try harder next time. +7H	Shot drills through foe. Clean wound. +2H	Almost a good shot. Too bad your weapon jammed. +5H	Weapon shatters against foe. +12H
06-10	Solid hit. Way to distract it. +6H	You cut up his skin nicely, but mostly the shot is ineffectual. +6H	Shot drills through cleanly. +3H	You got a piece of him. +2H	Solid, but not good enough. +3H
11-20	Shot tears through flesh. He's trying to figure out where you are. +8H	Poorly aimed shot cuts up his side. You've got his attention now. +9H	Shot bounces off foe's torso structure. +3H	Shot bounces off torso. He looks around to find you. +3H	Weak attack to side. +6H
21-30	Solid hit to forearm causes foe to jerk in sympathy. You caught a hydraulic line. +9H – 20♦	Solid attack mars flesh on foe's arm and chest. He rears back and glares at you. This could be bad. +10H	Forearm attack. You're going to have to do better than that. +4H	Forearm hit. +3H	Blow to forearm. +9H
31-40	Attack is deflected by torso structure. Almost had him. +14H	Shot ricochets off foe's rib cage. Perhaps next time you should take a little more time to aim. +20H	Shot cracks torso structure. +14H	Shot bounces off torso structure. +7H	Blow bounces off torso structure, causing some damage. +12H
41-50	Blast takes foe in the side. That'll teach 'em. +15H	Solid strike to foe's side. It's not quite powerful enough to damage foe's torso structure. +20H	Shot takes foe in side. Way to make him mad. +15H	Shot hits foe's side. He jumps back. +7H	Hard blow to foe's side. +15H
51-65	Blast slices through leg musculature and hydraulics. Good hit. +15H – 5♦	Shrapnel damages rib structures and tears up musculature. A couple more like that and you might get a clear shot at his power plant. +20H	Shot passes cleanly through leg. +10H	Shot catches foe in leg. +7H – 5♦	Blow lands hard on foe's leg. +20H
66	Shot damages power plant and batteries. It has 10 rounds before complete power failure. +15H	Blast rips through power plant. Several systems flicker on and off. There is extensive secondary damage. All in all, foe will loose battery power in 5 rounds. +30H – 3✸⊗ – (-20)	Shot passes through power plant. Plant goes offline with a battery-damaging surge. Foe will lose power in twenty rounds. +4H	Power system hit takes battery offline. Power plant will overload, destroying foe, if not taken offline within 30 rounds. +4H	Power plant and batteries damaged. Power plant is a write off. Battery power will fail in 50 rounds. +10H
67-70	Shot clips artery in foe's leg. He'll feel that one. +20H – 10♦	Blast rips through leg, exposing structure. +25H – 10♦	Shot catches foe in the leg. Good hit, Tex. +14H	Leg shot. +9H	Hard leg hit. +25H
71-80	Shot cuts deep into foe's arm. Good hit, cowboy. +20H – 10♦	Attack rips skin and musculature away, exposing structure in foe's arm. A hydraulic line bursts. Seals struggle to compensate. +20H – 7♦	Arm shot passes through hydraulics. +12H – 6♦	Shot to arm bites deeply. +7H – 7♦	Arm strike causes good damage. +30H
81-90	Shot to torso staggers foe. +22H	Shot staggers foe. Systems flicker on and off, dizzying the foe. +15H – ✸⊗	Nice gut shot makes systems flicker. +13H – ✸⊗ – (+10)	Solid hit staggers foe. +7H – ✸⊗ – (+10)	Solid blow causes foe to stagger. +20H – (+10)
91-95	Shot takes a nice chunk out of foe's leg. You seem to have caught a hydraulic feed. +18H – ✸⊗ – 3♦ (-20)	Attack tears deep into foe's leg. A hydraulic line ruptures. +25H – ✸⊗ – 2♦ (-25)	Shot passes clean through foe's leg. A hydraulic line ruptures. +12H – 3♦	Solid leg hit snips hydraulic line. +15H – 3♦	Solid leg hit. +18H – 4♦
96-98	Power plant and batteries destroyed. Sad. +0H	Attacks tears through foe's torso. Power plant, batteries, hydraulic plant, and motivational subprocessor are all destroyed. Quite efficient, really. +0H	Shot passes neatly through foe's power plant. All systems flicker and die. +0H	Shot enters power plant casing then bounces around for a few seconds. He dies with a startled look on his face. +0H	Weapon plunges into foe's power system. Foe dies instantly. If weapon is conductive, you take an 'E' Electricity critical every round until someone hits you hard enough to knock you clear. +0H
99-100	Shot blows batteries and causes power plant to begin overloading. Droid will blow all systems in 12 rounds unless shut down. +16H – (+20)	Shot blows batteries. Power plant damaged and building toward overload. If foe does not shut down within three rounds, power plant will blow, sending fatal levels of current coursing through every system. Life's tough sometimes. +15H – (+20)	Shot destroys batteries. Power plant will overload, blowing all systems in 9 rounds. +12H – (+20)	Shot takes out batteries. Power plant overloads. Droid will blow all systems in 18 rounds, unless shut down. +7H – (+20)	Ground fault causes batteries to blow. Power plant is overloaded. It will blow all circuits in 30 rounds. +24H – (+20)
101-150	Shoulder hit takes out some minor systems. +30H – 2✸⊗ – 10♦ – (-35)	Shoulder hit manages to shred musculature and hydraulics. +35H – 2✸⊗ – 3♦ – (-45)	Shoulder shot shatters structure. +25H – 2✸⊗ – (-35)	Shot passes through shoulder. +12H – ✸⊗ – (-25)	Attack causes significant damage to foe's shoulder. +50H – (-15)
151-175	Foe takes it in the hydraulic plant. +25H – 6✸⊗ – 10♦ – (-5)	Blast to foe's hydraulic plant. He's leaking pretty badly, now. +30H – 10✸⊗ – 7♦ – (-20)	Shot passes through hydraulic plant. +20H – 4✸⊗ –12♦	Shot cracks hydraulic plant. +10H – 2✸⊗ – 15♦	Attack manages to crack hydraulic plant. +5H – ✸⊗ – 20♦
176-200	Damage to foe's motivational subprocessor. Pace reduced to half. He isn't happy. +25H – 5✸⊗ – (-20) – (+10)	Attack takes foe in the motivational subprocessor. Pace is at 25%. +35H – 10✸⊗ – (-50) – (+25)	Shot bounces dangerously close to motivational subprocessor. Pace is at 75%. +18H – 3✸⊗ – (-10)	Shot causes minor damage to motivational subprocessor. +12H - ✸⊗ – (-30)	Shot damages motivational subprocessor, but just barely. +35H – ✸⊗ – (-10)
201-250	Shot to arm damages structure and blows hydraulics. Good shot. 35H – 3♦	Shot takes foe in his arm. Structure and musculature are damaged. +33H – 3✸⊗ – 2♦ – (-25)	Shot shatters forearm structure. +25H – 2♦ – (-25)	Shot cracks arm structure, piercing hydraulics. +12H – 2♦	Attack nicks hydraulic line in arm. There is some secondary damage. +15H – ✸⊗ – (-10)
251+	Shot catches foe in brain case. Maybe a laser would have been better. +25H – 20✸⊗ – (-80) – (+25)	Shot tears through brain case, barely losing energy as it destroys brain and exits out back of foe. +0H	Shot passes neatly through foe's brain. +0H	Shot barely penetrates brain case, rattling around inside for a hit, destroying brain many times over. +0H	You grapple foe and deliver a blow to foe's brain case. You are knocked out. Foe has minor brain damage. +35H – ✸⊗ – (-25)

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NEURAL CRITICAL STRIKE TABLE RM-A-6.13

	A	B	C	D	E
01-05	Mild discomfort. +0H	Sudden jolt. +0H	Strange chest pain. Heart attack? +1H – 3✸ – 2⊗	Foe has a nervous tick. +3H	Severe pains racks foe. +5H
06-10	Muscle spasms cause foe's facial muscles to twitch wildly for five rounds. It's quite distracting. (-20)	Bladder failure. Now that's embarrassing. +5H	Sudden dizziness. 5✸ – 3⊗	Foe's left hand falls completely asleep. (-5)	Stomach cramps. +10H – (-10)
11-15	Foe forgets the names of all his friends. +0H	Foe is overwhelmed by a sudden rush of random sensations. +5H – 5✸	Foe loses taste and smell for one day. +0H	Foe flees in terror, pleading for mercy. +0H	Foe is racked by chills. (-20)
16-20	Foe experiences intense vertigo. +10H – (-15)	Foe suffers from a temporary affliction. Penalty improves by 10 every round until it's gone. (-50)	Foe is confused. +10H – 6✸ – 5⊗ – ⚔	Foe's mind regresses. He acts like his distant, evolutionary ancestor for 12 hours. +0H	Foes suffers from a blinding headache for 3 rounds. Penalty lasts for duration of headache. (-40)
21-30	Minor hallucinations. 3✸⊗	Target loses sense of direction and time. (-30)	Foe suffers from a temporary affliction. Penalty improves by 5 every round until it's gone. (-30)	Foe cannot swallow. It takes all his concentration not to choke on his own saliva. (-30)	Debilitating cramps. +15H – (-30)
31-40	Minor, but painful, neck spasms. +10H – (-10)	Target loses 20% of his remaining hits. +0H	Target's mind takes a terrible jolt. 8✸⊗	Foe suffers from a temporary affliction. Penalty improves by 5 every round until it's gone. (-30)	Target goes completely numb. +20H – (-30)
41-50	Foe become feverish. (-35)	Target loses his confidence. 2	Foe loses 30% of his remaining hits. +0H	Target is suddenly extremely nervous +20H – (-30)	Foe's eardrums burst. +20H – 3✸
51-55	Target foams at the mouth for 5 rounds. Gross. (-15)	Foe suffers from a temporary affliction. Penalty improves by 5 every round until it's gone. (-50)	Severe hunger pangs until foe eats. (-45)	Violent spasms rack foe, causing hit to projectile vomit. He loses 50% of his remaining hits. +0H	Foe loses sense of smell… permanently. +20H
56-60	Attack racks foe's brain, rendering him color blind. (-40)	Target loses ability to translate thought into language for 10 minutes. +0H	Foe suffers from a temporary affliction. Penalty improves by 5 every round until it's gone. (-70)	Target is deaf for 24 hours. +0H	Target's optical processing centers are burned out. +20H – (-100)
61-65	Foe loses all weapon skills for 10 rounds. +0H	Foe decides to take a nap. +0H	Target drops into convulsions. +25H – 4✸⊗	Foe suffers from a temporary affliction. Penalty improves by 5 every round until it's gone. (-100)	Target suffers major hallucinations for 10 rounds. (-70)
66	Foe adamantly believes he is the ruler of all creation for 24 hours. +10H – (+20)	Target's head is paralyzed. If his eyes aren't closed externally in five minutes, eye damage will occur. 10✸⊗ – (+20)	Foe suffers permanent, complete amnesia. Skills are retained, but foe doesn't know what they are. (+20)	Foe becomes a mindless, drooling idiot for the rest of his living days. (+20)	Target's heart begins beating out of control. It bursts after a few painful seconds. +100H – (+20)
67-70	Target becomes a textbook paranoid for 24 hours. He trusts no one. +0H	Target loses control of legs. +15H – (-40)	Arms paralyzed. +20H – (-50)	Both feet feel like they're missing. +10H – (-20)	Seizure renders foe completely helpless for 5 rounds. He isn't exactly right, afterwards. +35H – (-50)
71-75	Target begins crying uncontrollably for ten minutes. +10H – (-30)	Target sneezes uncontrollably for 10 minutes. +10H – (-40)	Target can't seem to control his body. +25H – (-55)	Both target's arms fall asleep. +15H – (-40)	Digestive system fails. Foe dies in three days without intravenous fluids and nourishment. +0H
76-80	Foe forgets his favorite combat tactics. -30 to OB & DB until neural damage heals. +0H	Dangerous synaptic overload forces foe to his knees. +30H – 10✸⊗	Chest tightens and foe cannot breathe. He passes out after 6 minutes. +25H – (-55)	Target's skin becomes super-sensitive. Wearing clothes is unbearable. All hits received are doubled. (-60)	Foe's sense of balance is permanently reversed. He is very confused. 10✸⊗ – (-80)
81-85	Target become epileptic. 25% chance of seizure under stress. +0H	Chest falls asleep. +10H – (-40)	Hands tighten into painful fists while arms flail about. Better sedate him. +20H – (-45)	Target's sense of balance is reversed for two days. +25H – 10✸⊗ – (-80)	Kidney failure. Foe dies slowly over the period of 24 hours. +30H – (+10)
86-90	Foe feels like he's drowning. DB is halved. +0H	Foe is mysteriously unconscious and unwakable for 3 rounds. +0H	Foe's entire voluntary muscle system fails. He falls to the ground, confused. This looks serious. +0H	Entire head falls asleep. +20H – 8✸⊗ – (-75)	Extreme adrenal rushes. Foe's heart bursts after 3 rounds of 200% activity. (+10)
91-95	Foe loses sense of strength. (-55)	Severe cramps in all joints. +40H – (-60)	Foe suffers from double vision. All attack and maneuver rolls are halved. +0H	Foe loses control of entire upper body. Not good. +30H – 10✸⊗ – (-90)	Foe's lungs collapse. Foe will pass out after two minutes. He will die after ten. +40H – (-60) – (+20)
96-99	Foe loses involuntary breathing ability. He must now concentrate to breathe. He may only act with 50% activity. +0H	Foe falls into raging fit for 10 rounds. Then he dies. +0H	Foe loses all feeling, across entire body. No pain, no gain. +40H – (-100)	Foe's nervous system practically ignites. He takes 100% of his remaining hits from pain and shock. +0H	Heart failure. Foe dies after 5 painful rounds. +50H – (-100) – (+20)
100	Foe is permanently blinded. (-100) – (+20)	Foe is completely paralyzed. Even the most basic functions are lost. Foe drools at you in impotent rage. (+20)	All memory and skills are completely erased. Foe is a newborn babe. (+20)	Entire circulatory and respiratory system fails. Foe turns nearly every color in the two rounds it takes for him to die. (+20)	Foe's entire nervous system shorts out. Foe dies after 5 rounds of mindless, screaming agony. (+25)

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SHREDDING CRITICAL STRIKE TABLE RM-A-6.14

	A	B	C	D	E
01-05	You slash for foe's hand. Foe moves hand. +0H	Foe's hands prove remarkably swift. +0H	Glancing blow to foe's hand makes him pause to count his fingers. +3H	Glancing blow to foe's hand removes two fingers and a thumb. Good shot! +5H – ✸ – 3♦	Bzzzz! One hand removed. Keep it up. +7H – ✸ – 5♦
06-10	That was close! Too bad close doesn't count... +0H	Tickling strike nicks foe's forearm. He giggles. +3H	Glancing blow leaves a minor cut on foe's forearm. +3H – ♦	You catch foe on his forearm and draw blood. +3H – ⊗ – 3♦	Lucky slash cuts down to the bone. Foe's face visibly whitens. +5H – 2✸ – 4♦
11-15	Scary attack deals little damage. +1H	Foe moves his arm at the last second, narrowly avoiding harm. +2H	Catch foe in arm, scraping away skin and clothing. +4H – ♦ – (+10)	Arm hit leaves a nasty gash. +5H – 3♦ – (-5)	Foe cries out in pain as your weapon tears into his flesh. +7H – 2✸ – 3♦ – (-10)
16-20	You hit foe with the flat of your weapon, causing minor damage. +3H – ✸	Bury weapon in foe's bicep. Much blood appears. +4H – 3♦ – 2(-10)	Foe feels pain as his skin and muscle are quickly scraped away. +4H – 3✸ – ♦ – (-20)	Deep cut leaves foe's arm dripping with blood. +6H – 4♦ – 3✸ – (-10)	Foe's weapon arm is hanging by a thread. He looks worried. +10H – 5♦ – 5✸ – (-20)
21-30	Glancing shot across foe's shoulder makes him question the wisdom of opposing you. +3H – ✸ – 1(-10)	You aim for foe's neck, but he deflects it with his shoulder. You have initiative. +5H – 2♦ – ⊗	Catch foe across his upper torso. If he survives, the scar will be impressive. +9H – 2♦ – ⊗(-10)	Your attack misses foe's heart by only a few inches. He recoils in pain. +8H – 3♦ – 2✸ – (-20)	Catch foe in armpit. You hear a familiar sound as his arm falls to the ground. +15H – 5♦ – 6✸ – (-30)
31-40	You give foe a very close shave. +5H – ✸ – ♦	Cut foe's shirt and skin with a close slash across his shoulders. +4H – 3♦ – 2✸	Cut across foe's shoulder damages muscles and tendons. +8H – 3♦ – ✸ – (-20)	Foe cringes in pain as your attack penetrates his shoulder. +8H – 2♦ – 4✸ – (-10)	Brutal strike crushes muscle and severs bone. Foe is weak. +12H – 4♦ – 3✸ – (-40)
41-50	Meat chopping strike hits thigh in a painful way. +5H – 2♦ – 3✸	Your weapon bites deep into foe's thigh, bathing in his blood. +6H – 2✸⊗ – 4♦	Thigh strike causes great trouble for foe. He attempts to limp to safety. +7H – 4♦ – 2✸ – 2⊗	Your vicious slash bites deep down to the bone on foe's thigh. You gain the initiative. +8H – 4♦ – 3✸⊗ – (-25)	Massive carnage. Foe's leg is severed just above the knee. He drops in a pool of blood. +10H – 7♦ – 5✸ – (-50)
51-55	Tear ligament in foe's calf. Foe howls like a baby. +7H – 2♦ – ✸ – (-10)	Rip away flesh surrounding bone on foe's lower leg. That's gotta hurt! +8H – 3♦ – 2✸ – (-15)	Catch foe in lower leg, bringing him to the ground! Smooth. +10H – 3✸⊗ – 2♦ – 3(-20)	Rip leg muscles like tissue paper. Foe is upset. +11H – 4♦ – ✸ – 2(-10) – (-20)	Cut clean through foe's calf, severing the lower half of his leg. Time for some new cyberware. +12H – 4♦ – 4✸ – (-40)
56-60	Blow to foe's ankle tears ligaments and causes him to hop about in pain. +7H – 3♦ – ✸ – (-20)	Brutal low swing nearly removes foe's foot. There is much blood. +8H – 2♦ – 4✸ – (-10)	Cruel wound cuts foe's foot in half. Foe screams in pain and promptly slips on his own blood. +8H – 4✸⊗ – 3♦ – (-25)	Rip muscles and tendons from foe's foot. He has trouble walking. +12H – 3✸⊗ – 3♦ – 2(-50) – (-20)	Tear foot away at the ankle. Foot flies 10' before landing in a nearby gopher hole. +15H – 5♦ – 6✸ – (-35)
61-65	Light gash in foe's hit makes him fear your approach. You have initiative for 2 rounds. +7H – 3♦ – 1✸	Foe spins, trying to avoid your attack. You catch him in the thigh. +8H – 3♦ – 2⊗ – (+25)	Messy cut in foe's side exposes organs. He looks worried. +10H – 3✸ – 5♦	Cleave foe's hip. Only his bones stop your attack from going further. +11H – 4♦ – 3✸ – (-40)	Stomach hit! Foe passes out as his blood and internal organs are deposited on the ground. +15H – 8♦ – 3✸ – (+10)
66	You attempt dentistry with a chainsaw. No wonder you washed out of med school! Foe dies. (+10)	Your attempt at cosmetic surgery leaves foe with mortal wounds. At least no one will recognize the body. Foe dies in 5 rounds. +0H	Cleave foe's sternum with a righteous blow. It falls to the ground. He follows quickly. (+10)	Foe's blood sprays like a fountain, covering everyone in red gore. +20H	You cut foe open from groin to gullet. He is eviscerated where he stands. All internal organs fall to the ground in a messy pile. Gross. +30H
67-70	Rip knee open with a cruel slash. +8H – 3♦ – 2✸ – (-20)	Vicious impact to foe's knee. He falls, but knee miraculously remains intact. +10H – 5✸ – 2(+20)	Knee shot causes great pain. Foe's tendons are severed. +15H – 5♦ – (-30)	Cleave foe's knee, crippling him. Muscles, tendons, and bones are all damaged. +20H – 10✸ – 2♦ – (-50)	Catch foe in knee and neatly sever his leg. He falls. +25 – 10♦ – 5✸ – (-50)
71-75	Lower abdomen strike. Foe is surprised that he wasn't cut! +9H –3✸ – (-20)	Rip open foe's lower abdomen. Blood spills everywhere. +14H – 5♦ – 3✸ – (+20)	Tear away foe's soft, fleshy underbelly. You hunger. +20H – 4♦ – 3✸ – 4(-40)	Abdomen strike removes outer layer of clothing… and skin! +30H – 10♦ – 5✸	You bury your weapon in foe's gut. He looks at you pitifully before passing out. +20H – 12♦ – (-100)
76-80	You catch foe in ribs and hear the sweet sound of bones cracking. +10H – 4♦ – 3(-20)	Glancing blow across foe's chest opens his ribs to the sunlight. +16H – 6♦ – (-25)	You have learned your anatomy lessons well. That was a textbook incision. +26H – 7♦ – 6✸	You cleave foe in his side. Your weapon becomes slippery with his blood (increase fumble range by 1). +40H – 12♦ – 8✸	Foe drops immediately from shock and blood loss as your weapon buries itself in his chest. +45H – 15♦
81-85	Rip open chest with a terrible, terrible wound. +11H – 4✸ – 5♦	Cleave foe's side nearly in two. Foe prays for a quick death. +19H – 8♦ – 7✸ – (-35)	Slice foe right through the midsection. He concentrates on holding his organs in. +30H – 9♦ – 6(-50)	Foe collapses to the ground in an unconscious heap as your weapon passes through his torso. +50H – 10♦	Your attack leaves a horrendous exit wound. Let's not even mention the entry wound. +65H – 18♦
86-90	Meat chopping strike chops meat in foe's chest! +12H – 6♦	Your attack meets resistance, somewhere around foe's spine. +15H – 6✸⊗ – 7♦	Massive incision leaves foe nearly turned inside out. You should'a been a butcher. +45H – 10♦	Foe is messily skinned. Miraculously, he still lives, although he's in a coma. +30H – 15♦	You open multiple wound channels in foe's tender flesh. He quivers with rage and pain for 10 impotent rounds before expiring. +40H – 5✸ – 13♦
91-95	Rake foe across the face, removing both ears and nose. Foe is in pain. +15H – 6♦ – 3✸	Ripping strike removes foe's scalp! He staggers about in dismay. +25H – 10✸ – 10♦	Glancing strike to foe's head leaves him comatose. If he ever recovers, he'll have a doozy of a scar. +10H	Excellent surgical strike removes skin from foe's face and neck. Too bad he can't admire your handiwork, since he'll die in 9 rounds. +35H – 15♦ – (-40)	Cut foe right across the face. If foe has no helm, he is quite dead. If he has a helm, he is only comatose. +40H
96-99	Cut foe across the throat. A little deeper, and he'd be dead. As it is, foe cannot speak. +14H – 8♦ – 5✸	Barbers shouldn't use chainsaws. Foe's head is crushed. +10H	Your clumsy attack would've missed him, but his attempt to dodge placed his head in the wrong place. Foe dies. +15H	Vertical strike begins at foe's head and ends somewhere near his knees. Foe gurgles on his own blood for 6 rounds, then dies. +20H – 20♦	You remove foe's head at the neck with a tearing, gushing sound. Foe dies. (+10)
100	You make a terrible mess as limbs go flying everywhere in a bloody orgy of death. (+20)	Timmy would've been proud. You carve foe into 19 distinct segments. +10H – (+10)	Disembowel foe. Weapon is lodged in foe's torso and sprays gore over everything in a 20 foot radius over next 3 rounds. +20H	Foe stares in disbelief for a round before accepting his demise. +30H	Let's see him come back this time! Foe is reduced to lumpy pudding by your manic attack. (+25)

Key: ßπ =must parry ß rounds; ß∏=no parry for ß rounds; ß∑=stunned for ß rounds; ßƒ =bleed ß hits per round; (-ß)=foe has -ß penalty; (+ß)=attacker gets +ß next round.

SUPER LARGE ANDROID CRITICAL STRIKE TABLE RM-A-6.15

	BLAST	BURST/RAKING	PIERCING	PUNCTURE	MELEE
01-05	Not particularly effective. +0H	He got an itch a little to the left. You manage to polish off the blemish nicely. +0H	Not a good showing. You success has more to do with your weapon than your skill. +2H	You manage to startle him. +0H	Your mighty swing breaks your weapon in half. +10H
06-10	Maybe your sights are off. +0H	You cause some minor damage. +2H	Almost got him. +3H	That bounced right off his hide. +1H	That hurt you more than it. +2H
11-20	Shot manages to cause some minor damage to foe. You got his attention +2H	Shot splatters off hide. He considers you a threat. +4H	Shot bites deeply. +3H	Shot bounces off his hide. He glances at you. +1H	Foe looks at you and you cower instead of striking with all you might. +3H
21-30	Maybe you need a weapon with better penetration ability. +2H	Solid chest hit, but not solid enough. +4H	Good hit. +8H	Solid forearm hit wakes him up. +2H	Most of the attack is diverted. +4H
31-40	Pretty ineffective hit. +3H	Shrapnel bounces off torso structure. +13H	Shot cracks torso structure. +14H	Shot bounces off rib. +2H	Attack fails to penetrate foe's side structure. +5H
41-50	Blast bounces off foe's side. +5H	Shot bites deeply into foe's side. +10H	Shot hits foe's side. He jumps back. +10H	Shot hits foe's side. He jumps back. +3H	You really need to try a bit harder. +6H
51-65	Shot crashes into foe's leg. You managed to catch a hydraulic line. +7H – 30♦	Shot tears through foe's leg muscles. +15H – 15♦	Shot manages to pass through leg without hitting anything vital. +10H	Shot bites deep into foe's leg. +4H	Relatively light attack to foe's leg. +7H
66	Shot takes power plant offline and damages batteries. He'll lose complete power in 15 rounds. +4H	Attack rips through power plant, damaging batteries. Foe will lose complete power in 10 rounds. +40H – 3✸⊗ – (-20)	Shot drills right through foe's power plant. The resulting ground fault damages batteries. Total power failure is 20 rounds away. +15H – (-5)	Power plant damage. Battery damage. Foe will lose power in 35 rounds. +7H	Attack penetrates power system. Damage is relatively high, but if weapon is conductive, you are frozen by the current. Take an 'E' Electricity critical every round until someone saves you. +20H
67-70	Shot takes out a piece of foe's leg. Not bad, considering. +9H – 20♦	Shot tears up foe's leg. +12H – 10♦	Shot goes right through foe's leg. Hope he doesn't feel pain. +14H – (-5)	Shot bites deep into foe's leg. +6H	Blow to leg. +8H
71-80	Arm shot blows a hydraulic line. +10H – 10♦	Attack bites deeply into foe's arm. +12H – 7♦	Shot to arm takes a piece out of his structure. Not quite enough to make a difference. +12H – 6♦	Not a bad shot to arm. +6H – 10♦	Your attack bounces off foe's arm. +9H
81-90	If he wasn't an android, that gunshot probably would have hurt. +8H – (+10)	Shot staggers foe. Systems flicker on and off. Foe is dizzy. +15H – ✸⊗ – (+10)	Deep shot. Nice. +20H – (+10)	Nice gut shot. +5H – (+10)	Good solid attack to foe's arm forces your weapon to make a breakage check. +10H
91-95	Shot destroys a bit of leg musculature. +18H – ✸⊗ – 3♦ – (-20)	Attack nicks major artery in leg. +20H – 2♦ – (-5)	Shot passes cleanly through hydraulic line in foe's leg. +12H – 3♦	Shot passes cleanly through foe's thigh. +6H – 6♦	Good, hard hit. If only it had hit something vital. +15H
96-98	Power plant and batteries destroyed. Sad. +0H	Attacks tears through foe's torso. Power plant, batteries, hydraulic plant, and motivational subprocessor are all destroyed. Can you say smoking ruin? +0H	Shot causes power plant to beat itself to death. It takes the droid's entire power system with it. +0H	Entire power grid destroyed. Poor sap dies instantly. +0H	Weapon plunges into foe's power system. Foe dies, instantly. If weapon is conductive, you take an 'E' Electricty critical every round until someone knocks you clear. +0H
99-100	Shot blows batteries and causes power plant to begin overloading. Droid will blow all systems in 20 rounds unless shut down. +30H – ✸⊗ – (-20) – (+20)	Shot blows batteries. Power plant damaged and building toward over-load. If foe does not shut down within 10 rounds, power plant will burn out, sending fatal levels of current coursing through every system. Ouch. +15H – (+20)	Shot destroys batteries. Power plant will overload, blowing all systems in 15 rounds. +12H – (+20)	Shot takes out batteries. Power plant overloads. Droid will blow all systems in 18 rounds, unless shut down. +7H – (+20)	Good hit, but not good enough. +30H – (-25) – (+20)
101-150	Shoulder hit takes out some minor systems and a hydraulic line. +30H – 2✸⊗ – 3♦	Shoulder hit shreds musculature and hydraulics. +35H – 2✸⊗ – 4♦ – (-35)	Shoulder shot shatters structure. Good hit, bud. +25H – 2✸⊗ – (-45)	Shot passes through shoulder. There's some damage. +8H – ✸⊗ – (-5)	Attack to shoulder manages to cause damage. +12H – 30♦ – (+10)
151-175	Foe takes it in the hydraulic plant. He's leaking. +20H – 4✸⊗ – 15♦	Attack catches foe's hydraulic plant. He's leaking pretty badly. +25H – 8✸⊗ – 10♦ – (-10)	Shot passes through hydraulic plant, causing damage… +15H – 2✸⊗ – 20♦	Shot cracks hydraulic plant. +5H – ✸⊗ – 25♦	You manage to crack his hydraulic plant. +5H – ✸⊗ – 90♦
176-200	Damage to foe's motivational subprocessor. Pace reduced to 75%. +20H – 4✸⊗ – (-10) – (+10)	Attack takes foe in the motivational subprocessor. Pace is at 50%. +35H – 9✸⊗ – (-40) – (+25)	Shot bounces dangerously close to motivational subprocessor. Only minor damage. +18H – 2✸⊗ – (-5)	Shot causes minor damage to motivational subprocessor. +8H – ✸⊗ – (-20)	Attack damages motivational subprocessor, but just barely. +15H – (-5)
201-250	Shot to arm damages structure and cracks hydraulics. Good shot. +15H – 3♦	Shot passes through foe's arm. Structure, musculature, and hydaulics are damaged. +33H – 2✸⊗ – 2♦ – (-35)	Shot shatters forearm structure and hydraulic fittings. +25H – 2♦ – (-45)	Shot cracks arm structure, piercing hydraulic line. +10H – 2♦	Good arm hit +35H – 3♦ – (-10)
251+	Shot catches foe in brain case. Blast splatters on impact, not quite penetrating brain case. +25H – 15✸⊗ – (-60) – (+25)	Attack passes through brain, taking just enough time to destroy brain on its way. +0H	Shot just cracks brain in two. +0H	Shot cracks through brain case, destroying brain before it loses all energy. +0H	You manage to damage both of his eyes. He is quite blind. +20H – 3✸⊗ – (-80)

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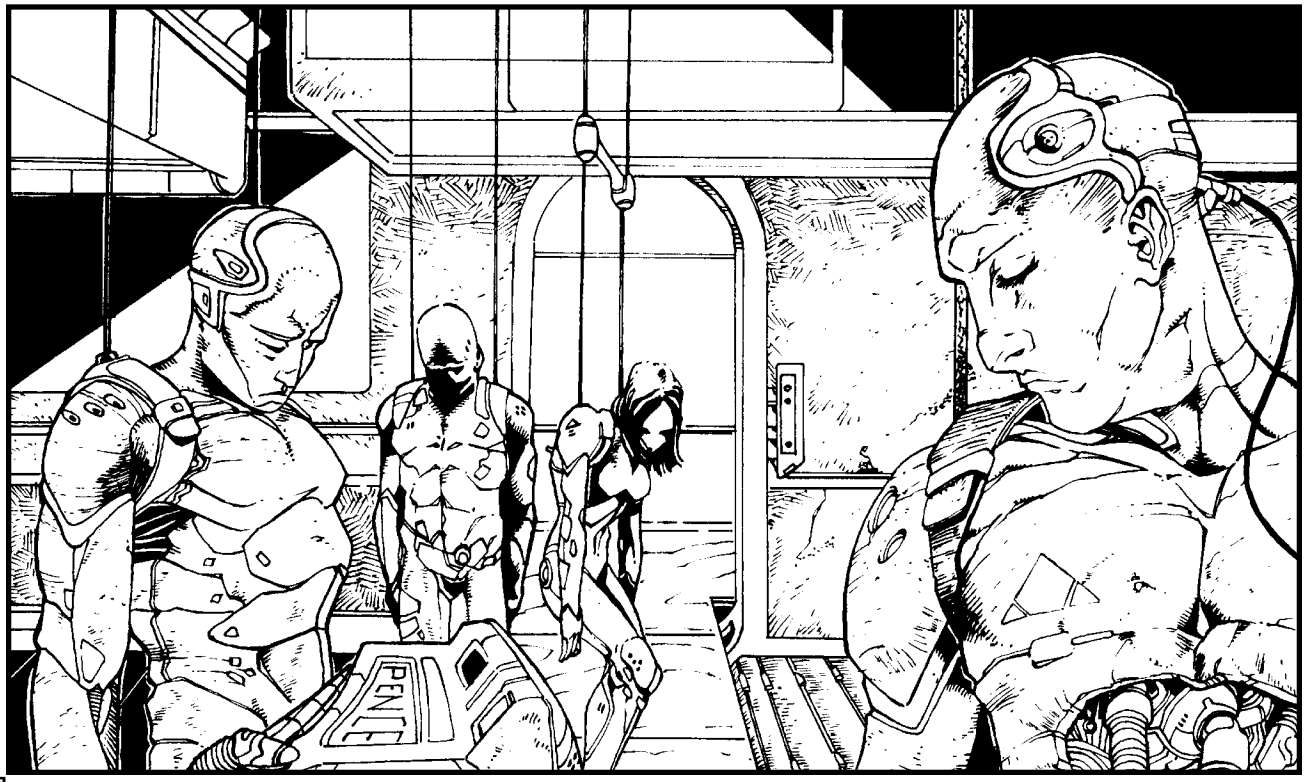
TABLE & CHART INDEX

Acid Critical Strike Table RM-A-6.1 111
Acid Sprayer Attack Table RM-A-5.1 100
Adhesive Gun Attack Table RM-A-5.2 101
Android Adolescent Skill Ranks Table RM-20.13 63
Android Appearance Table RM-20.8 61
Android Backup Period Table RM-20.12 63
Android Blast Critical Strike Table RM-A-6.2 112
Android Burn Through Critical Strike Table RM-A-6.3 113
Android Burst/Raking Critical Strike Table RM-A-6.4 .. 114
Android Cooling Capabilities Table RM-20.9 62
Android Critical Table Usage Summary Chart 109
Android Electrical ...Table RM-A-6.5 115
Android Everyman Skills Table RM-20.14 63
Android Flaw Table RM-21.1 69
Android Hit Location Table RM-A-4.1 97
Android Hit Table RM-20.1 59
Android Maintenance Table RM-20.5 61
Android Malfunction Table RM-22.1 73
Android Melee Critical Strike Table RM-A-6.6 116
Android Mp Progression Table RM-20.2 59
Android Operational Life Table RM-20.3 60
Android Option Points Table RM-21.2 69
Android Piercing Critical Strike Table RM-A-6.7 117
Android Puncture Critical Strike Table RM-A-6.8 118
Android Restricted Skills Table RM-20.15 64
Android Scorch Critical Strike Table RM-A-6.9 119
Android Self Repair Capabilities Table RM-20.11 62
Android Size Table RM-20.10 62
Android Starting (Adolescence) Rank Table RM-21.4 ... 70
Android Statistics Table RM-20.7 61
Armor Conversion Chart 1 98
Chainsaw Attack Table RM-A-5.3 102
Cirs Response Table RM-6.1 25
Cirs Treatment Table RM-6.2 26
Cryo Gun Attack Table RM-A-5.4 103
Cyberarm Hits Table RM-12.2 (Optional) 41
Cyberarm Stat Table RM-12.1 41
Cyberaudio Table RM-10.1 35
Cyberhands & Cyberfeet Table RM-11.1 37
Cyberleg Hits Table RM-12.4 (Optional) 41
Cyberleg Stat Table RM-12.3 41
Cyberlimbs Table RM-12.5 40
Cybernetic Armor Table RM-7.1 31
Cybernetic Biotech Table RM-8.1 33
Cybernetics Conversion Package Table RM-9.1 34
Cybernetics Implants Table RM-16.1 48
Cyberoptics Table RM-14.1 44
Cyberweapons Table RM-15.1 46
Dataprom Cost Table RM-17.1 51
Energy Whip Attack Table RM-A-5.5 104
Exoskeleton Table RM-13.1 42
Facilities Table RM-6.4 29
Force Blade Attack Table RM-A-5.6 105
Grapple Critical Strike Table RM-A-6.10 120
Impact Critical Strike Table RM-A-6.11 121
Implantation Table RM-6.3 29
Large Android Critical Strike Table RM-A-6.12 122
Low Impact Option Table RM-21.3 69
Neural Critical Strike Table RM-A-6.13 123
Neuralware Table RM-17.2 52
Options Summary Table RM-20.16 66
Power Sword Attack Table RM-A-5.7 106
Program Cost Table RM-23.2 75
Pulse Baton Attack Table RM-A-5.8 107
Resistance Rolls Table RM-20.4 60
Shredding Critical Strike Table RM-A-6.14 124
Simulated Intelligence Cost Table RM-23.1 74
Style Over Substance Table RM-18.1 53
Super Large Android Critical Strike Table RM-A-6.15 . 125
Vibro Axe Attack Table RM-A-5.9 108



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Æ Error\Memory failure\correction online\Running diagnostic Ø

...The unot that called itself Peter dove for cover as a blast scorched the earth where he had been standing. This was bad. He loaded another energy cell into his weapon. His last. He was in trouble. Perhaps if he...

Æ ADFA\Failed\ Reboot\Memory failure\Diagnostic Ø TePer r5lled t8...

...one side as the smoke cleared. A grenade. That looked like a grenade. He checked his weapon. Full power cell. He checked his others. There were none. What had happened to the rest? Maybe...

Æ Interrupt\Damage to sensory calibration\Aim off\End interrupt Ø

...Mitchell cursed as the diagnostic flashed in his molecutronic brain. Perhaps God didn't smile on androids.

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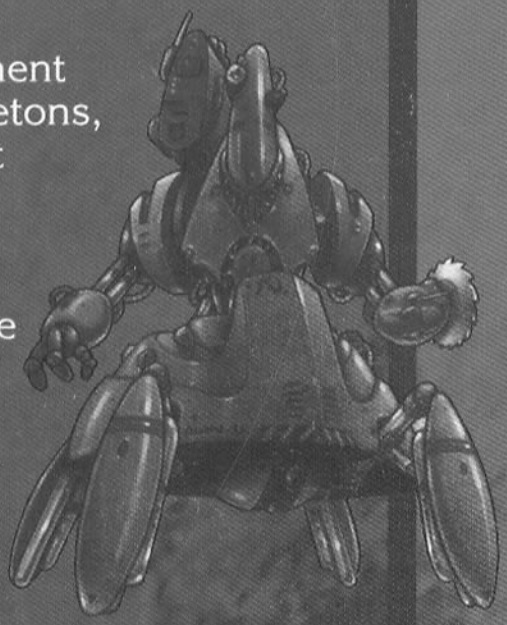

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