

5. Equipment

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The first part of this chapter will deal with the basic rules for handling equipment. The following sections contain plug-in subsystems that are useful for specific genres or settings, and which provide additional levels of detail for groups that are comfortable with extra variables and bookkeeping. Most of them are for use in conjunction with one or more advanced subsystems, such as Advanced Combat or Vehicular Combat.

General Equipment Rules

These rules apply to both the core rules and the advanced subsystems.

Currency

All prices are in currency units called credits (cr.), a generic currency unit equal to the minimum needed to sustain a person for one day in an urban environment. This is roughly equivalent to 10 EUR or 10 USD.

Other coinages may exist, but they are unique to game settings. For each setting that uses currency, the equivalence between the cr. and the currency used in that setting should be in the equipment chapter specific to the setting.

Value

Value is an item attribute that represents its usefulness in game and how difficult it is to obtain. Usually, once you know the Value of an item, you are also able to determine its monetary cost in games where you keep track of the adventurers' "cash on hand".

Value is relative to an item's Wealth Level. It measures the difficulty to find the item for sale in a social environment that is of equal or lower wealth (in a rural area, you will usually find pick-ups and SUVs, but no limos), the ability to persuade the item provider to sell or rent the item to a person of your Status or Wealth, and the difficulty of somehow obtaining credit if you do not have the money to purchase it. In general, you can state that an item belongs to a Wealth Level if a person of that level, or of an equivalent Status in an environment where wealth is not everything, is supposed to have it available at least for a limited period of his or her life. This does not mean that a character of a lower level cannot have the item, just that he is not supposed to. In this case the purchase is not granted, and a Conflict against the item Value is required.

Finally, keep in mind that the Value of an item is supposed to be something that you face as enemy Resolution Points in a Conflict when needed, so its rating should never exceed 20 points when used in game. Higher Value ratings usually mean that the item Wealth level should be raised.

Evaluating Value and Cost

Assuming you cannot or will not assess all the attributes that may contribute to an item Value, there are two ways to assign it a numeric score. The first one is that of hand-waiving Wealth Level and Value. Although we have tried to provide as many guidelines as possible to aid his or her judgement, there will be times when the Narrator has to make a decision on the fly. Be fair and be consistent.

However, you might also use an equipment list from other sources (for instance other RPGs, Wikipedia or online stores). When doing so, first determine the Wealth level for the item, and then apply the conversion factors from the following table to the cost listed by your source. Remember that one credit is about €10, so round the price to the nearest 10 increment in USD, GBP or EUR before converting. If the Value rating is very low, or if it goes beyond the 15-18 limit, then you should reconsider the Wealth level you assigned to the item.

Example: A Piaggio scooter like the one Gregory Peck rides in Roman Holidays costs between 2000 and 3000 EUR including VAT. By dividing by ten, we determine that the cost in credits for such a scooter is 200-300 cr. We imagine that such an item is of Average level, as almost anyone in a modern society can afford a scooter, and the item is made of expensive materials, so its Value is its cost divided by twenty. This leaves us with an item with a Value between 10 and 15; a

person with an Average wealth level will be able to get one without difficulty, as the official Piaggio retailer will look at his paycheck and grant him credit, while a Poor character will have to face a Conflict, looking for a used one and probably a loan.

Assume we want to buy a small boat instead. By looking at specialised sites we learn that you can find a small sail boat for \$20.000 or less (2000 cr.). Such boats are usually regarded as rich people stuff, so we check the Rich row of the table, and they are made of wood; the final result is that the boat's Value is 1/200th of its cost, or 10. Only a Rich person can buy such an item without thinking, but an Affluent character can still acquire one with an acceptable effort.

Cost to Value conversion table

Cost in cr. (cheap materials, like wood)	Cost in cr. (expensive materials, like metal)	Wealth level	Value (expensive materials, like metal)	Value (cheap materials, like wood)
Value x2	Value x5	Poor	1/5 th of cost in cr	½ of cost in cr
Value x10	Value x20	Average	1/20 th of cost in cr	1/10 th of cost in cr
Value x50	Value x100	Affluent	1/100 th of cost in cr	1/50 th of cost in cr
Value x200	Value x500	Rich	1/500 th of cost in cr	1/200 th of cost in cr
Value x2000	Value x5000	Beyond	1/5000 th of cost in cr	1/2000 th of cost in cr

The "Beyond" column is for items that are not generally available for sales (such as fortresses or operational military vehicles) but really rich people could still reasonably hope to purchase.

Obtaining Equipment

Before getting involved in dangerous adventures, Player Characters may want to acquire useful equipment. There are several ways to determine whether they can find a specific piece of equipment or not, usually handled in Downtime before adventures. One simple way could be adopting the classic "shopping list" approach; let the characters choose the items they want from a list of goods available in the setting and pay the listed price. However, this requires keeping track of the money the Player Characters have available, which is something you may be willing to avoid in favour of a more abstract approach. The rest of this section will then deal with how to manage procurement without keeping track of the exact amount of money the Player Characters have available.

For everyday equipment that is within the Wealth/Status level of the purchaser, assume that the character can find enough resources to replace any lost items like clothing, tools, weapons and means of transportation. Mounts and personal vehicles are not exactly cheap, but in societies where they are commonly available, your character, unless bankrupt or cut off from his or her resources, will probably find a way to purchase one. He or she needs a Status or Wealth Trait of the appropriate level. No Poor character can afford a mount or a motorcycle, and you usually need to be Rich to purchase a motorboat or a helicopter.

Obtaining a special item or an item of a Wealth level different from the character's standard Status is something that might be worth a roll, or better a Conflict. The Narrator might request a Conflict even for an item of your Wealth level, if you are not in a social environment where your Status is recognized. Obtaining items two levels higher than your Status is normally not possible. Your character must use the Communication skill with the Status Trait the Narrator requires, and beat the Value rating of the equipment. Having Commerce or Bargain grants a stable Bonus to all rolls. If you lack these traits, a friend can use them to provide a Support Bonus.

Selling Equipment

Treasure gained from an adventure or other material or non-material rewards can be "cashed in" in the appropriate context to gain reputation or financial resources. Sometimes finding a purchaser is not automatic, and may require a Conflict. You need the appropriate Status level even to sell an item. If you do not, you are essentially marketing it to a fence, with all the related problems. This is particularly true of information; you need the right contacts to sell it, and you will probably lack them if they are of a Status level below yours. Without the appropriate Status Trait, you must roll on your raw Communication skill. Mercantile Traits will always provide a permanent Bonus.

Here is a typical table of difficulties and wealth levels required to sell items. The opposition becomes stronger when you sell more of the same item because you are basically creating an inflation of the goods you offer, or making people suspicious of their origin. If no modifier is listed for quantity, then you can offer only one item at a time.

Item	RP	Modifiers to RP	Challenge Rating	Wealth/Status
Looted enemy armour/equipment	9	+1 per item	50%	Average
Cattle	7	+1 per head	50%	Poor / Average
Trade goods	7	+1 per crate or barrel of items	50%	Average
Special or magical item	10		80%	Poor to Rich
Jewellery, rare goods	12	+1 per gem or crate of items	50%	Rich
Intelligence	10		80%	Affluent to Rich
Secrets	12		80%	Poor to Rich, depending on the secret

The outcome of the Conflict may be that the selling character gains the equivalent of half of the item value in cash, or that he or she barter it with useful items of the same value. A Quick Exit is only good enough for a barter. However, if you prefer not to track cash, you may want to assign Positive Consequences to a victorious Player Character. Unless you have a more appropriate idea, you can treat these Consequences as “Status raised to X”, where X is the Status of the item or information you were trying to sell. Such Consequences are never Recurrent, even if they are Permanent, as they represent wealth or reputation that you will use up in a subsequent Conflict to bribe or impress someone or to purchase something. Remember also that acquiring a Status of Average or even Poor may be useful, too, when you are in an alien location where you would normally have no Status at all.

Carrying Equipment

Another problem that can arise is how to manage what the adventurers carry with them on a mission. In some settings, having or not having a specific item can make a difference, but if the item is not exactly concealable or light, the player should specify that the character is carrying the item, and take its presence into account when the item should provide a hindrance.

In general, we do not recommend keeping track of carried weight. If the players start carrying around more items than the Narrator is willing to handle, he or she should enforce Negative Consequences for Encumbrance in the appropriate Conflicts (see page Chapter 3). The Encumbrance rules follow the typical Revolution principle that “anything that affects a Player Character should come from a roleplayed event”, and thus require only that unwieldy or socially inappropriate items inconvenience him or her by being an active element in Conflicts where it makes sense narratively. The Narrator should be particularly careful with armour and with items labelled as “Hand Carried”, as they the ones most likely to generate trouble. Otherwise, what the Player Characters are carrying is fine, and its weight is a factor that will not provide any relevant effect in play.

The only other situation when equipment is relevant is during emergencies, specifically during Combat Time. The character can use items kept in hand, on a belt or in pouches with a simple Ready Item or Use Item action. The remaining items are still available to the character, but he or she must be in Adventure Time to use them freely, or spend an adequate amount of time to search his or her backpack.

Hand-Carried Items

An adventurer cannot carry some long weapons or other pieces of equipment at the belt or strap them to his or her back. These items are simply too long or awkward for this, and must be hand-carried or shouldered with a strap. Examples of this are spears, polearms, crossbows, and vintage rifles. Note also that these are typically full war instruments, not personal defence weapons like swords, daggers and pistols. These items are designed to be readied before a field battle, not to be kept ready at all times.

Bows and military rifles are an intermediate case, and even when very long, they can be carried and readied with relative ease, so they need not be listed as hand-carried. Crossbows, on the contrary, need be shouldered when carried.

Carrying more than one of these weapons is strictly forbidden. If a character is carrying one of them, it must be noted in the Hand-carried box on the character sheet. In addition to this, the weapon is not always ready, and a Ready Item must be used to prepare it for use when the wielder is surprised while not expecting combat. The weapon is assumed to be shouldered during travel. If bound on the back, the weapon becomes unavailable in combat.

Belt Items

Items listed in the belt box are immediately available to the character with a Ready action if a weapon or ammunition clip, or directly with a Use Item action, if they are usable items (drugs, bandages, etc.). As a rule of thumb, a character can have items at the belt equal to his or her DEX. Some items may be on a sash rather than a belt. This is generally the case with ammunition clips or drug vials. Specialised military outfits may have many pockets and extra sashes, allowing dozens of items to be carried in a combat ready fashion. The number of spaces is specified in the combat outfit description.

Arrows in a quiver do not count as Belt items. You can have as many of them as your quiver will hold, and some archers carry two quivers.

In general, a character can only carry two medium-sized weapons at the belt, plus a short one like a dagger or a handgun. A shield and a bow can be strapped on the character's shoulder.

Concealed Items

As a rule of thumb, a character can have a concealed item or weapon available for quick, immediate use only if he or she has the Conceal or Sleight Trait. If the character has both, the number of concealed items available becomes two, and increases by one (or more) for each Stunt related to concealing items or weapons the character has.

Worn Items

When your character is wearing only his or her clothes, there is usually little or no reason to remark this fact in game. However, there are many other situations in which your adventurer will want to wear protective gear, and this fact must be recorded and managed in game.

Whether designed to stop hand weapon blows, bullets or other forms of hazards, protective suits will be generically categorised as light and heavy armour. Light armour is any protective suit that can easily be removed and placed into your backpack. It provides moderate protection, and is not terribly unwieldy. Heavy armour is any protective suit that you cannot carry, just wear. It is designed for troops on a military campaign, not as personal protection against hazards in any other situation. On the other hand, it provides very good protection, and is usually able to stop the effect of light and medium weapons, leaving you vulnerable only to those weapons that are equally unwieldy and designed for use on the battlefield only.

Other Items

Items stored in a backpack are not available to your character during Combat Time, unless he or she spends three rounds to search the backpack where they are stored. Once the Time Scale switches back to Adventure Time they are freely available.

Damaging equipment

Apart from their weight, items are defined by a Toughness value like characters in Advanced Combat. When an item takes damage, subtract its Toughness from damage and apply any remaining damage to the item. No Combat effects can be applied to bypass the item's Toughness. Once the item has taken damage equal to its Toughness, it is broken or unusable. For larger items like doors or wall sections, a hole of the size of a Medium creature has appeared.

In order to damage an inanimate object, a weapon must be capable of applying the Slash or Stun/Crush effect. In general, an item of superior quality can damage an item of inferior quality, but not the opposite, at least during combat or an adventuring Conflict. Item quality depends on the materials it is made of (see below).

Materials and Energies

Equipment quality is not a numeric attribute but just a means of comparing the material durability of items. Two pieces of equipment are usually defined as being of equal quality or not, with one being defined as being of superior quality. Quality has nothing to do with craftsmanship and Value, although a piece of equipment of a superior quality will probably cost more than a standard piece.

An item made of superior quality materials can easily damage one of inferior quality, while the inferior quality one cannot harm the superior one. Items of equal quality can damage each other but generally not in a short time (i.e. in Combat Time).

A generic Quality table for real-world or fantasy equipment follows.

Lowest					Highest
Flesh and other living tissue	Stone, Wood, Chitin, Horn	Bronze, Lead, Gold	Iron	Tempered Steel	Special alloys (Titanium, etc.)

Elemental/Energy Damage

Elemental and energy Attacks work differently than standard kinetic Attacks, as they lack the basic weapon damage. However, where normal kinetic Attacks do +1d2 damage per Might, elemental Attacks often deal a bigger die of damage per Might point. The Attack type determines the exact die size, although typical values are given per each type of energy.

In some cases, the elemental damage may appear as damage dealt on top of normal weapon damage. For instance, a flaming arrow with Might 1 will do 1d6 fire damage on top of its normal 1d6+1d2. A flamethrower or dragon breath of Might 4 will deal a straight 4d6.

Elemental/Energy Damage Table

Attack type	Typical damage per Might
Kinetic	1d2
Heat*, cold*, plasma	1d6
Electricity*	1d6
Radiation	1d4
Light/Laser	1d8
Particle beams	1d10 or more
Acid*	1d4

[*] This kind of damage may appear in addition to normal weapon damage.

Armour and energy damage

When an armour type has effect on an elemental Attack, it may either provide protection with its full APs or half of them (round up), or provide an Absorb effect (see the Power description in Chapter 6) that decreases the Might of the elemental Attack. When the Attack deals pure elemental damage and the armour provides only an Absorb effect, then the Absorb value is subtracted from the Might of the Attack before rolling damage, and no APs are applied. If protection is AP-based, or the elemental Attack provides additional damage on top of normal weapon damage, then normal weapon damage is rolled, any residual Might of elemental damage after the Absorb effect is rolled and added, and then the adjusted AP value is subtracted.

Armour vs. energy table

	Leather, Cloth, Skin, Furs, other organic materials	Metal*	Modern (ceramic, Kevlar), heavy natural scales
Kinetic	As per normal armour rules	As per normal armour rules	As per normal armour rules
Heat, cold, plasma	Absorb Heat/Cold 1	No effect	Absorb Heat/Cold 2
Electricity	Absorb Electricity 1	No effect	Absorb Electricity 1
Radiation	No effect	Absorb Radiation 1	Absorb Radiation 1
Light/Laser	Half AP	Half AP	Half AP
Particle beams	Half AP	Half AP	Half AP
Acid	Normal, but APs are consumed	Half AP, and APs are consumed	Normal, but APs are consumed

[*] Rules for specific metals Might apply.

Creating equipment

Player Characters will often want to create items on their own, either because the item is not available for sale at that particular moment, too expensive for them to acquire, or because they want to bestow enhancements on the item.

To be able to craft an item, the character must have the specific Trait required. While the Narrator may accept creative use of unrelated Traits when you repair something, making a new item requires a specific know-how. Moreover, the appropriate tools and location must be available. In order to create the item, the Player Character initiates a Conflict in Downtime. Only some small, consumable items like ammunition can be crafted in Narrative Time. The rest of what you can craft usually requires days if not weeks.

Value to beat

The first and most important thing to determine is the Resolution Pool of the opposition that the crafter is to face. This is usually the Value rating of the item to create or adapt. Although the Conflicts used to craft items are run as generic Conflicts, the attributes that make up the Value rating are often relevant only in Advanced Combat or other optional subsystems.

Some items have two or more ratings that must be beaten in a Conflict in order to create them. One of these ratings is Value, while the others are ratings that may be used as the base Resolution Point pool in a Conflict that involves using the item (the Fortification score of a castle, the Manoeuvrability of a plane, the Seaworthiness of a ship, etc.). The manufacturing Conflict may be against the sum of all ratings, or, with Narrator approval, two or more characters or teams may run different Conflicts against the different ratings.

Crafting procedure

In order to create an item, the crafter initiates a generic Downtime or Narrative Time Conflict based on his or her INT and Craft skill. The Narrator should limit Support Bonuses to those that actually make sense.

The Challenge Rating for the Opposition is usually 50%, but the Narrator should modify this value if the crafter is attempting to create something that is of a different Wealth level than his or her own. We recommend to apply one Penalty for each Wealth level the item is lower than the crafter, and one Bonus for each Wealth level the item is above the crafter.

Consequences of Equipment Creation

Once a crafting Conflict ends with a victory for the crafter, the desired item is created. However, the character might have suffered some Resolution Point loss, which would make him or her liable to Consequences. As Consequences coming from a Downtime Conflict, they are Permanent. It does not make much sense, though, to attribute Permanent Consequences to the character. These Consequences translate into flaws in the item itself.

Calculate the number of minuses you would normally assign as Consequences, then add or subtract these values from the attributes of the equipment in order to make it harder or less convenient to use. The Narrator can split the flaws among as many attributes as desired. Whenever a numeric Penalty can be applied in two or more ways to an attribute, the numeric value for the flaw must be split or applied in one way only. For instance, if a weapon has an enhanced SR cost, it must either apply to Attack or Parry only, or the Penalty must be split between the two.

Non-quantifiable flaws can also be added. Typical examples of non-quantifiable flaws are the inability to use the item for a known Stunt or the absence of an effect normally possessed by the item, like a flail that can still do damage, but is too weak to Entangle.

What flaws can be assigned to items is left to the Narrator, with the recommendation of being creative, and consistent. The subsystems that describe each specific type of items (weaponry, enchanted items, scientific or steampunk devices, alchemical concoctions, etc.) will have example lists of flaws appropriate to the item type, but the Narrator is not limited to the official lists, nor to picking effects from one list only. If it sounds plausible, it can be used. The only restriction is that a flaw can neither negate an enhanced attribute that was assigned to the item, nor make the item unfit for the main purpose devised by the crafter, as this would negate the character's victory.

Example: Frida the Barbarian is a blacksmith. She wants to forge a longsword she can use with her STR of 11 instead of the standard 13. She faces a difficulty of 12 (10 base for the longsword, and 2 more for the two points of STR bonus) with her INT of 15. Frida wins the Conflict, but loses 10 points of Resolution in the process, so the sword is now easier to wield but has a flaw. The Narrator initially rules that the weapon costs 1 SR more to Attack with, but Frida's player objects that this would make the weapon ineffective in combat, thus negating her victory. The Narrator agrees that this is not in the spirit of the rules and goes for another flaw: the weapon is harder to thrust with, so it loses its Impale attribute. Normally the effect should be downgraded, but as a longsword can already impale only on an advantage roll, it loses the effect completely.

However, there may be cases when the Consequences of a crafting Conflict should apply to the character and not to the item, like financial losses. Buying, renting or building an item of a Wealth level above one's own Status may leave you in want of cash. An "Indebted" or "Broke" Consequence may be appropriate in this case if the player mismanaged the acquisition process. As the player is the winner of any successful Crafting Conflict, it is up to the Narrator, as the loser, to decide when to apply this kind of Consequence or go for an item flaw.

Repairing or Adapting Equipment

Repairing something broken or adapting it to a different use is normally easier than creating it from scratch. A repair can thus be performed, assuming you have all the necessary equipment, on a Time Scale that is one step lower than the one required to create the item.

The opposition to beat is the Value of the item, plus one for any Consequence to remove, or point of Toughness lost. The Challenge Rating of the opposition faced is just 20%, with the usual modifications for different Wealth levels or circumstances. If the repair is performed in adverse conditions, apply a Penalty to the crafter's roll.

Adapting an item to a use that is not exactly what it was intended for is a procedure similar to repairing it. Add the appropriate numeric values that represent the extra features to add to the item Value rating. For weapons see the Modifications Table. The required Time Scale is one level lower than the one required to create the item. The Challenge Rating is 50%.

Any Negative Consequences from the repair process will apply to the item, as flaws and minor malfunctions due to the temporary nature of the works. In some cases, depletion of important resources may also be appropriate.

Blueprints

Technological equipment and scientific gadgets are not as easy to build as a spear or a helmet. A complex item like a fighter aircraft cannot be constructed from scratch without blueprints, assuming the crafter has a workshop equipped for aircraft assembly. Even repairing such an item without blueprints will be a problem.

For a realistic treatment of equipment, the crafter need have an actual blueprint in paper or electronic format. The Narrator can make some exceptions for equipment the crafter has assembled or repaired often during his or her career. When the weird gadgets of Weird Science, or the eidetic memories of some alien races, are concerned, the crafter may know the blueprints by heart. More details are in the Weird Science chapter.

In general, firearms are the most complex thing you can repair or adapt without having a blueprint. Anything more complex will bestow a Penalty to your skill if you do not have a blueprint. This is cumulative with lack of an applicable Trait. Repairing something that requires a blueprint without having a related Trait means you have a Double Penalty. Good luck!

Creating Blueprints

Of course, the most exciting part of playing a character with repair or craft abilities in a hi-tech environment is that of inventing new gadgets or models of equipment. In order to do so, the character must create a blueprint. This is a task that you can normally perform only in Downtime, and is identical to the creation process except that the designer need not have any materials available other than paper or a computer. The basic opposition score to beat to create a blueprint is 80%, as the crafter is attempting something completely new.

Once the blueprint is ready, any crafter can use it to create the item once the necessary materials are available. Any Consequences of the blueprint creation process are inherent faults of the design, that will be present in all item pieces subsequently created until the blueprint itself is redesigned, using the equivalent of a “repair” of the blueprint itself. The high Challenge Rating of the design process implies that most initial versions of blueprints will contain flaws.

Crafting summary

Action attempted	Time Scale	Opposed RP pool	CR	Quick Exit
Creating a blueprint	Downtime always	Value	80%	No
Creating an item	Usually downtime	Value	50%	No
Repairing an item	One level lower than crafting	Value plus Toughness lost plus Consequences	20%	Yes, but the repairs will work only once
Adapting an item	One level lower than crafting	Value, including new features	50%	Yes, but the modification will work only once

General Items

Here we provide a generic item list for historical, rural or fantasy environments. If your setting includes its own list, it has the priority on this one.

General Item List

Item	Weight	Wealth	Value	Cost	
Backpack	1	Poor	1	5 cr	Holds about 20kg of equipment.
Bedroll	1	-	-	1 cr	
Belt	1	-	-	2 cr	Holds up to 5 kg of items hooked.
Craft tools	3	Average	5 to 10	50 cr to 200 cr	Tools for various crafts that must be kept in a backpack.
Crowbar	1	Average	3	30 cr	Used to gain a Support Bonus to Brawn.
First aid kit	—	Average	2	30 cr	Bandages that you can carry in a pouch at your belt.
Flint & tinder	—	-	-	1 cr	
Grappling hook	1	Average	1	20 cr	Can support a weight of about 100 kilograms (Medium Size Class).
Healer’s kit	1	Average	8	150 cr	Necessary for advanced healing or surgery. Must be kept in a backpack.
Lantern	1	Poor	2	10 cr	It will burn for two hours on a flask of oil. Radius 3m
Lock picks	—	Average	8	75 cr	
Oil, flask	1	-	-	1 cr	
Pole, 3m	1	-	-	1 cr	Hand carried only

Pouch	-	-	-	1 cr	Holds up to five zero-weight items at the belt.
Quiver	1	Average	1	10 cr	Quivers can hold up to 20 arrows or 10 crossbow bolts.
Rope, 10m	2	Poor	5	10 cr	Can support a weight of about 100 kilograms (Medium Size Class).
Sash	1	Average	2	20 cr	Holds up to five zero-weight items, ammunition clips or small throwable weapons for quick use.
Torch	1	-	-	1cr	Burns for one hour. Radius 10m
Vial	-	Average	1	20 cr	Contains a drug, potion, antidote etc. Price and availability are relative to a low-tech environment.
Waterskin	1	-	-	1 cr	

Whenever an item has a numeric value attached, each +20% increase to that numeric value doubles its Value and cost. For instance, a grappling hook able to sustain 120 kg has a Value of 2, a sash holding 7 items has a Value of 8, and so on.

Armour

The basic effect of armour in Revolution D100 is that of negating part of the damage a character or item receives.

Armour Elements

In Basic Combat, armour is always handled as a full suit. In a game using Advanced Combat but not Localised Damage, your characters will wear full suits of armour, too. When using Localised Damage, you will keep track of armour pieces that cover one or more locations, and each location will have its own armour attributes. We will talk about *armour elements* to include both full armour suits protecting their wearer's whole body and armour pieces which cover one or more locations.

Armour Points and Coverage

The most important value for armour are its Armour Points (AP), which represent how much damage the armour stops. Armour Points are always a fixed value, although some kinds of Attacks will halve or negate the AP value of an armour element (see the Energies section).

The second factor for armour is its Coverage, which is a range of numbers and not a fixed value. A hit with a Coverage Roll outside this range has landed outside the protected area, so the Armour Points of that particular armour element do not count. The Coverage Roll of a blow is equal to the unit die of the Attack roll, although some situations detailed in Chapter 4 yield a modifier to this roll.

Overlapping armour elements

In general, fighters wear harder armour elements (plating) on top of thinner ones used as padding; a mail hauberk over a gambeson, a helm over a mail coif, etc. In many cases the main armour and its padding do not overlap completely, and important portions of the combatant's body are protected by the padding alone. However, padding is always present where plating is worn, so the AP value for the main armour already takes into account the effects of padding. Whenever a Coverage Roll is in the range of more than one armour layer, always use the most effective armour corresponding to that roll. In no case are the APs of two overlapping armour layers added up; a blow always hits either one armour element or another.

Armour tables

These tables include the most popular armour types. Specific settings will have more detailed armour tables.

Fantasy Armour Table

Element	AP/ Cov era ge	Enc um bra nce	Location(s)	Wealth	V a l u e	Cost	Notes
Cloak	1/2+	1	Torso 1/0+, Limbs 1/3+	Poor	4	8	With hood, total value 1/1+ and Head 1/1+
Gambeson	2/1+*	3	Torso 0+, Legs 3+, Arms 2+	Average	8	80	Open helm that should be purchased separately (encumbrance does not change). Add it to a stronger armour for +1 Encumbrance and +50 cost.
Nomadic leather scale armour	4/5+ 8/9+	3	Torso 4/4+, Legs 4/7+, Arms 4/6+, Head 8/6+	Affluent	6	300	Open helm included. This is just one of the variants worn by steppe nomads.
Mail hauberk	5/2+*	3	Torso 5/0+, Limbs 5/3+	Affluent	5	480	This is a very crude version with minimal padding and no helm.
Scale cuirass	6/7+ 8/9+	4	Torso 6/4+, Head 8/6+	Affluent	6	520	Includes open helm and padding for uncovered areas. Add the protection/Coverage of a mail hauberk.
Brigandine	7/6+ 8/9+	5	Torso 7/4+, Head 8/3+, Arms 7/5+	Affluent	9	820	Includes full helm and padding for uncovered areas. Add the protection/Coverage of a mail hauberk.
Mail suit	5/0+ 8/9+	6	All 5/0+, Head 5/1+, 8/2+	Affluent	12	1200	Includes a full helm. If worn with a gothic helm head is 5/0+, Enc is +1 and cost is +120.
Lorica segmentata	8/6+	3	Torso 8/4+, Head 8/5+, Arms 8/6+	Affluent	7	650	The Romans wore padding only underneath the lorica, but you can add a gambeson in a fantasy environment.
Hoplite armour	8/3+	7	Torso 8/2+, Head 8/3+, Arms 8/4+, Legs 8/5+	Affluent	10	1200	Heavy. The Greek wore padding only underneath the plates, but you can add a gambeson in a fantasy environment
Gothic armour	8/0+	12	All 8/0+	Rich	10	5000	Heavy, Penalty to Perception.
<i>The following armour pieces can complement suits with an equal or lower AP value.</i>							
Helm, open	8/9+	+0,5	Head 8/6+	Average	8	80	
Helm, full	8/9+	+0.5	Head 8/3+	Average	14	140	Penalty to Perception.
Helm, gothic	8/9+	+1	Head 8/1+	Affluent	5	240	Penalty to Perception. Use these stats for a gothic helm worn over inferior armour. Lack of neck articulation leaves a weak spot covered by padding only.

[*] - this Coverage number is only valid if a helm or coif is worn, otherwise increase it by 1;

Hi-tech Armour Table

Element	AP/Coverage	Encumbrance	Location(s)	Wealth	Value	Cost	Notes
Leather jerkin	1/7+	0.5	Torso 1/0+, Arms 1/1+	Average	2	40	
Cuirass	8/6+*	2.5	Torso 8/2+	Average	13	250	
Kevlar vest	10/6+*	2	Torso 10/2+	Average	15	300	Cloth 1/0+ on rest of torso.
Military body armour	10/3+*	4.5	Torso 10/3+, Legs 10/6+, Arms 10/5+	Affluent	7	700	Cloth 1/0+ on rest of body.
Polymer suit	3/2+*	1.5	Torso 3/0+, Legs 3/3+, Arms 3/2+	Affluent	4	370	Also silk armour for planetary romance
Space soldier armour	6/0+	5	All 3/0+	Rich	5	2400	Heavy, Absorb Laser 2
Force field	5/0+	-	All 3/0+	Affluent	16	1600	Absorb 3 against kinetic energy plus one other energy
<i>The following armour pieces can complement suits with an equal or lower AP value. They decrease the Coverage number of an equivalent or inferior suit by one if the standard suit lacks protection on that location.</i>							
Cuirassier helmet	8/9+	+0.5	Head 3+	Average	14	140	Renaissance tech level.
Colonial helmet	6/9+	+0.5	Head 4+	Average	10	100	
Soldier helmet	12/9+	+0.5	Head 4+	Average	6	60	
Pilot helmet	6/9+	-	Head 3+	Poor	10	20	

[*] - this Coverage number is only valid if appropriate headgear is worn, otherwise increase it by 1.

Armour Points: The damage the armour will stop.

Coverage: The rolls of the unit die for which the Armour Point value is in effect. This is the value in effect when you do not use Localised Damage. The value that applies to individual locations is provided in the Location(s) section.

Encumbrance: The encumbrance imposed by wearing this armour. This value is cumulative for all armour worn.

Location(s): For armour pieces, the hit locations covered. If the piece covers more than one location, the Coverage value is different for each location.

Cost: The cost of the armour element for Medium humanoid creatures. The cost decreases by 20% for each Size Class lower than Medium, and increases by 50% for each Size Class bigger.

Wealth level: The wealth level at which this kind of armour element becomes reasonably available.

Value: The value that an adventurer should beat in an attempt to get hold of that armour if availability is not automatic.

Close Combat Weapons

Each close combat weapon does a base damage depending on the weapon plus a number of d2s equal to the wielder's Might, including bonuses for the specific weapon and for two-handed use. The resulting Might value may be negative.

Weapon categories

Weapons are grouped into three categories with regard to how you can wield them.

Light

A light weapon is used in one hand. Weapon damage is always based on the user's Might plus any bonus from the weapon for Close Combat Attacks. Using two hands to wield a light weapon gives no bonus to Might, and for some weapons this is simply impossible. An unarmed strike is a light weapon.

Heavy

A heavy weapon can be used with either one or two hands. Use the wielder's Might for Close Combat Attacks with a heavy weapon if it is used one-handed. If a heavy weapon is wielded with two hands, use the character's Might plus one as for regular two-handed use.

Two-Handed

Two hands are required to use a two-handed weapon effectively. Apply the character's Might +1 to damage rolls for Close Combat Attacks with such a weapon.

The above categories apply to Medium sized creatures. For Small sized adventurers, all categories are shifted up by one step: Light weapons become Heavy; Heavy weapons become two handed; and two-handed weapons become unusable. Large sized creatures, on the contrary, treat Heavy weapons as Light. Creatures larger than that usually wield only specially constructed weapons.

Weapon tables

Here is the format for weapon entries (given as column headings on the Weapon Table). Note that some of them are only used in Advanced Combat.

Name: The weapon name

Trait: The Trait needed to wield the weapon.

SR: The SR bonus for the weapon. It corresponds to the weapon Reach.

A/D: The cost in SR to Attack/defend with the weapon.

Damage: The weapon base damage.

Parry: The base Parry value in number of dice blocked. This value is increased by the wielder's Might, including any two-handed bonus, but it cannot grow past twice the base value for this reason.

Toughness: The Toughness of the weapon. The value also indicates whether the weapon is made primarily of leather [l], wood [w] or metal [m]. This influences which weapons can damage other weapons. Hafted weapons marked as [mw] damage other weapons as if they were metal weapons, but take damage as if they were wooden weapons.

STR: The minimum Strength needed to wield a weapon. For heavy weapons, it is the value needed to wield the weapon two-handed; add four to use it with one hand. Using a weapon in the off-hand requires two more points of Strength. If the character does not have the appropriate score, all Actions with that weapon suffer a Penalty, and the cost in SR to Attack and Parry with it increases by 1 point per missing STR point.

Wealth/Value: This represents the weapon price level and its availability in a culture that normally employs it. In an environment where the weapon is not common, increase the Value by five, which might force you to raise the Wealth level, too.

Price: The weapon price in credits. The cost includes miscellaneous gear that goes with the weapon like a scabbard.

Weight: This column gives the weight in kilograms of the weapon. This attribute usually has no mechanic effect.

Notes: This includes the damage effects available for the weapon and other peculiarities. The following entries may appear:

- **Might +X:** the weapon provides a bonus to the wielder's Might, in addition to the standard +1 bonus for 2-handed use.

- **Penalty to Parry:** Parrying the weapon, or with the weapon, suffers one Penalty. A Stunt is usually required to inflict the Penalty when Attacking.
- **Block:** standard defence with the weapon is Block.
- **Coverage +X:** the weapon warrants a modifier to the Armour Coverage roll whenever the defender is actively facing the Attacker (see Chapter 4). This is in addition to normal modifiers for ranged Attacks, formation fighting and Taking Cover.
- **Combat Effect (auto, effect or advantage):** the weapon allows the application of the specified Combat Effect whenever the trigger in brackets applies. Some weapons (particularly swords) may require knowledge of a Stunt to apply an effect marked with an asterisk (see below).
- **Energy, Heat:** the weapon does elemental/energy damage of the suggested type.

Light weapon table

Weapon	Trait	SR	A/D	Da ma ge	P a r r y	Tou gh n e s s	S T R	W e i g h t	Wealt h	V a l u e	P r i c e	Notes
Fist	Brawl	-	3/2	1d2	1	-						
Knife	Dagger	2	3/2	1d2	1	8[m]	3	-	Poor	4	8	Impale (effect)
Dagger	Dagger	3	3/2	1d3	1	8[m]	4	-	Average	3	60	Impale (effect)
Hatchet	Axe	3	6/3	1d4	1	6[mw]	7	-	Average	3	60	Might +1, Slash (advantage)
Stick/Club	Mace	3	6/3	1d3	2	6[w]	4	-	Poor	3	6	Might +1
Cudgel	Mace	3	6/3	1d3	2	6[mw]	5	-	Average	6	120	Might +2
Hammer	Hammer	3	6/3	1d3	2	6[mw]	7	-	Average	8	160	Might +1, Impale (advantage)
Flail	Flail	4	6/4	1d4	2	6[mw]	6	1	Average	10	200	Might +2, Entangle (effect), Penalty to Parry
Javelin	Spear	8	8/4	1d6	2	6[w] / 6[m]	7	1	Poor	8	15/30	Impale (effect), Keep distance (auto)
Kukri	Sword	3	3/2	1d3	1	8[m]	4	-	Average	6	120	Impale (advantage), Slash (effect)
Gladius	Sword	4	4/2	1d4	2	8[m]	5	-	Average	10	200	Impale (effect), Slash (effect)
Scimitar	Sword	5	5/3	1d6	2	8[m]	7	1	Average	10	200	Slash (auto)
Broadsword	Sword	6	6/3	1d6	2	8[m]	7	2	Average	12	240	Impale (advantage) Slash (effect)
Sabre	Sword	7	7/4	1d8	2	8[m]	8	2	Average	14	280	Slash (auto)
Rapier	Sword	8	8/4	1d6	2	8[m]	8	2	Average	17	340	Impale (effect)*, Slash (advantage), Keep Distance (auto)*
Plasma blade	Sword	6	6/3	1d8	2	-	7	-	Affluent	6	600	Heat, Impale (effect)

Buckler	Shield	1	3/2	1d2	1	3[m]	3	2	Average	7	140	Block
Heater	Shield	2	4/2	1d2	2	6[w]	6	3	Average	4	40	Block, Coverage +1
Viking	Shield	3	6/3	1d3	3	9[w]	9	5	Average	6	60	Block, Coverage +2
Kite	Shield	3	6/3	1d3	3	9[m]	9	5	Average	6	120	Block, Coverage +2
Hoplite/ Legionary	Shield	4	8/4	1d4	4	12[m]	12	8	Average	8	160	Block, Coverage +3

Heavy weapon table

Weapon	Trait	SR	A/D	Da ma ge	P a r r y	Tou gh ness	S T R	W e i g h t	Wealt h	V a l u e	P r i c e	Notes
Wood axe	Axe	5	10/5	1d6	2	8[mw]	11	2	Average	5	100	Might +1, Slash (advantage)
Battleaxe	Axe	4	8/4	1d6	2	8[mw]	9	1	Average	8	160	Might +1, Slash (effect)
Warhammer#	Hammer	4	8/4	1d4	2	8[mw]	9	1	Average	10	200	Might +1, Impale (effect)
Mace#	Mace	4	8/4	1d4	2	8[m]	7	1	Average	8	160	Might +2
Morning Star	Mace	5	10/5	1d6	3	8[mw]	9	2	Average	10	200	Might +2
Ball & Chain#	Flail	6	9/6	1d4	2	8[mw]	9	2	Average	14	280	Might +2, Entangle (effect), Penalty to Parry
Short spear	Spear	10	10/5	1d6	2	8[w]	7	2	Poor	10	20	Impale (effect), Keep distance (auto)
Longsword	Sword	8	8/4	1d8	2	10[m]	9	2	Average	16	320	Impale (advantage), Slash (auto)
Beam Saber	Sword	8	8/4	1d10	2	-	7	-	Affluent	9	900	Energy, Impale (effect), Slash (auto)

[#] - historically, this weapon was seldom used two-handed

Two-handed weapon table

Weapon	Trait	SR	A/D	Da ma ge	P a r r y	Tou gh ness	S T R	W e i g h t	Wealt h	V a l u e	P r i c e	Notes
Poleaxe	Axe	6	12/6	2d6	2	10[mw]	13	2	Average	12	240	Might +1, Slash (auto)
Poleweapon/ halberd	Polearm or Spear	10	10/5	2d4/ 1d10	3	10[mw]	11	2	Average	10	200	Might +1, Slash (auto), Impale (effect)
War maul	Mace	6	12/6	2d4	3	10[mw]	11	2	Average	12	240	Might +2

Great hammer	Hammer	6	12/6	2d4	3	10[mw]	13	2	Affluent	4	400	Might +2, Impale (effect)
Large flail	Flail	10	15/10	2d4	4	10[mw]	15	4	Affluent	5	500	Might +2, Entangle (effect)
Long spear	Spear	12	12/6	1d8	3	10[w]	9	2	Average	4	40	Impale (effect), Keep distance (auto)
Staff	Staff	8	8/3	1d4	3	10[w]	7	2	Poor	4	8	Might +1
Greatsword	Sword	11	11/6	2d6	4	12[m]	13	4	Affluent	9	900	Slash (effect)
Beam staff	Staff	8	8/3	1d10	3	-	7	-	Affluent	9	900	Energy, Impale (effect), Slash (auto)

Special rules for swords

The sword is a weapon of mystery, a symbol of nobility and the focus of martial disciplines of the mind. We suggest that you make mastery of the sword more difficult to attain than for other weapons, thus marking the difference between “a powerful weapon for equipping the militia” and “the skilled warrior’s weapon”.

Here are some suggestions to portray the dedication that “the art of the sword” requires to master it in a fantasy/historical setting. Of course, your own settings can adopt a different approach, and future supplements will include more suggestions. damage, whichever is higher.

Sword attributes

While the standard attribute list for Daggers/Swords is Impale (advantage), Slash (effect), the weapons on the standard list have been all slightly modified with special features from the Modification Table to give them some unique features:

- Curved knives, Straight swords: Impale (advantage), Slash (effect)
- Daggers: Impale (effect), Slash (advantage), +1 Value;
- Curved swords: Slash (auto), +1 STR requirement;
- Thrusting swords: Impale (effect), Slash (effect), +1 STR requirement, +2 Value;
- 2H swords: Slash (effect), +1 STR, -2 Value

Many more variants exist, and if you prefer your swords to be more effective in terms of Combat Effects, you can decrease the trigger level of one of them by simply adding 2 to the Value factor for the standard piece. Tinkering with all these parameters by using the item creation rules presented in the next sub-chapter will let you appreciate the variety present in the world of swords.

Swords Stunts

In order to fully exploit the flexibility of the sword, you need to know the appropriate Stunts, without which you will not have access to the full abilities of your weapon. The only special attribute that anyone can use at full effectiveness is Slash, while Impale and Keep Distance often lose one level, with effect becoming advantage and auto becoming effect, if you do not have a related Stunt. Anyone can use an attribute with an advantage trigger, though.

Daggers (swords with a Reach of 3 or less) are exempt from this limitation. The Dagger Trait includes all possible techniques with the weapon, including Entangle with sword-catchers and such.

Ranged Weapons

As with close combat weapons, the damage inflicted by a ranged weapon has two components: weapon damage and Might. While Might is provided by the firing weapon (with some limitations imposed by the projectile type in some cases), weapon damage and Damage Effects depend on the projectile type.

Ranged Weapon Types

Thrown weapons are meleé weapons thrown against the enemy, and so the projectile fired is the weapon itself. It is the firer's STR that powers the weapon and shares his or her Might.

Projectile weapons provide their own intrinsic Might. While using the firer's Strength to power them like thrown weapons, slings and bows store it and release it upon shooting, so they have a fixed Might depending on the maximum energy they can store. However, for each Penalty imposed due to insufficient STR, they also lose one Might.

Fantasy/Historical Ranged Weapon Table

Weapon	SR to fire	Might	Ammo	Range#	STR	Wealth	Value	Price	Notes
Thrown	5	*	Itself	20 (C)	**				
Shuriken	5	*	Shuriken (1d3)	20 (C)	7	Average	2	40	Impale (advantage).
Dart	5	*	Dart (1d4)	20 (C)	9	Average	3	60	Impale (effect).
Javelin	5	*	Itself	50 (S)	11	Average	5	50	Impale (effect).
Sling	8	2	Pellet	80 (S)	9	Poor	3	30	
Bow, short	5	1	Arrow	100 (M)	9	Affluent	3	150	STR 11 to use from horseback
Bow, long	5	2	Arrow	300 (M)	12	Affluent	6	300	Not usable from horseback
Bow, nomad	5	2	Arrow	300 (M)	11	Affluent	5	250	STR 13 to use from horseback
Crossbow, Lt	3	3	Quarrel	200 (M)	9	Average	10	200	Hand-carried weapon, 2 Rounds to reload
Crossbow, Hv	3	4	Quarrel	350 (L)	13	Average	15	300	Hand-carried weapon, 3 Rounds to reload
Arquebus	4	5	Pellet	80 (S)	12	Affluent	10	500	1-shot, Hand-carried weapon, 5 Rounds to reload
Flintlock pistol	5	2	Bullet	50 (S)	7	Average	7	150	1-shot, 2 Rounds to reload
Musket	3	4	Bullet	150 (M)	9	Average	15	300	1-shot, Hand-carried weapon, 4 Rounds to reload

[#] Use the shortest between the weapon and the ammunition effective range.

[*] Thrower's Might bonus.

[**] Same STR needed to use 1-handed in meleé +2.

Hi-tech Ranged Weapon table

Weapon	SR to fire	Might	Ammo	Range#	STR	Wealth	Value	Price	Notes
M1917 S&W	4	1	Bullet (.45)	25 (C)	11	Average	4	80	6 rounds to reload
9mm Automatic	5	2	Bullet (9mm)	50 (S)	11	Average	12	250	Automatic
.45 revolver	5	2	Bullet (.45)	50 (S)	13	Average	10	250	6 rounds to reload
Shotgun	4	4	Shell	20(C)	7	Average	8	150	1 round to reload
Winchester 1873	3	3	Bullet (.44)	350 (L)	7	Average	6	120	Bolt-action (3 SR to reload), Hand-carried weapon
M1 Garand	4	4	Bullet (7.65mm)	500 (L)	9	Average	10	200	Automatic, Hand-carried weapon
Uzi SMG	4	2	Bullet (9mm)	200(M)	11	Average	10	200	Burst fire 3+
AK -47 Assault Rifle	4	3	Bullet (7.62mm)	300(M)	11	Average	16	320	Automatic or Burst fire 3+
Beam pistol	4	2*	Energy**	80 (S)	7	Average	6	120	Automatic
Beam rifle	3	3*	Energy**	300 (M)	7	Average	12	250	Automatic, or Burst fire 3+ if the ammo allows bursts
Heavy beam rifle	4	4*	Energy**	800 (L)	9	Affluent	10	1000	Automatic, Hand-carried weapon

[#] Use the shortest between the weapon and the ammunition effective range.

[*] Beam weapons in particular settings may have different values for Might. Feel free to adjust these scores to match your campaign needs.

[**] This is not an ammunition type but a specialization of beam weapons. Beam weapons can only fire one kind of beam and use one type of clip.

Burst fire 3+: The weapon can fire 3 or 10 rounds per burst. If the ammunition loaded is not labelled as burst, the recoil doubles the SR cost of firing.

Ammunition

Projectile weapons use ammunition: bows use arrows; crossbows use bolts; slings and arquebuses use pellets; firearms use bullets and shells; and energy weapons use clips. Projectiles provide the base damage, while the firing weapon provides Might. Energy weapons work slightly differently, as their base damage is rolled a number of times equal to the weapon Might.

Some types of ammunition in the same category allow a better range than others. In general, the effective range for a weapon/projectile combination is given by the shortest between the weapon and ammunition range. Special optics may increase the weapon effective range in order to match the ammunition range.

Fantasy/Historical Ammunition table

Projectile	Weapons	Damage	Range#	Price##	Notes
Stone pellet	Sling	1d4	50(S)	-	
Arrow, broad-head	Bow	1d6	200(M)	2	Impale (effect)
Arrow, mechanical	Bow	1d6	200(M)	1	Slash (effect)
Arrow, bodkin	Bow	1d4	300(M)	2	Impale (effect)
Quarrel	Crossbow	1d10	500(L)	2	Impale (effect)
Lead pellet	Sling, Arquebus	1d6	100(M)	1	Impale (advantage)
Historical bullet	Musket, Pistol	1d6	300(M)	1	Impale (effect)

[#] Use the shortest between the weapon and the ammunition effective range.

[##] Average wealth, price is per 10 projectiles or one clip

Hi-tech Ammunition table

Projectile	Weapons	Damage	Range#	Price##	Notes
5.56 NATO	Rifle	2d4	900 (XL)	1	Impale (effect), Burst
7.65 NATO	Rifle	2d6	700 (L)	1	Impale (effect), Burst
7.62 Soviet	Rifle	2d6	700 (L)	1	Impale (effect), Burst
9mm parabellum	Gun, Rifle	1d8	200 (M)	1	Impale (effect), Burst
9mm parabellum, Hollow point	Gun, Rifle	1d10	150 (M)	1	Burst
.45 bullet	Gun, Rifle	1d10	500 (L)	1	Impale (effect)
12 gauge shell	Shotgun	3d4	20 (C)	1	Lose 1d4 per 10m travelled
16 gauge shell	Shotgun	2d4	20 (C)	1	Lose 1d4 per 10m travelled
Energy Clip [Taser]###	Beam weapon	Electricity	50 (S)	1	1d6 per Might
Energy Clip [Radium]###	Beam weapon	Radiation	2000 (XXL)	10	1d8 per Might
Energy Clip [Laser]###	Beam weapon	Heat	500 (L)	5	1d8 per Might, Burst
Energy Clip [Particle]###	Beam weapon	Particle	800 (XL)	10	1d10 per Might, Burst

[#] Use the shortest between the weapon and the ammunition effective range.

[##] Price is per 10 projectiles, one bullet clip or one 20-Might energy clip.

[###] This is not strictly an ammunition type but a specialization of beam weapons. Beam weapons can only fire one kind of beam and use one type of clip.

Explosives

Some projectiles do not inflict damage only on the target, but explode and create a blast area in which everyone is hurt. If someone is hit by the explosive, it receives the full Might of the explosion, otherwise Might is reduced by the distance in metres from the explosion. Roll 1d10 for the distance if not using a map.

An explosion automatically uses the Stun Damage effect, that is the full Might of the explosion bypasses armour and is applied to Toughness. Armour protects only from shrapnel, if any.

Explosive launcher table

Weapon	SR to fire	Projectiles	Range	Notes
Thrown	5	Hand grenade	20(C)	Actual range is the thrower's STR + 10
Grenade launcher	5	40mm grenade	100(S)	Can be attached to an assault rifle.
Bazooka	10	Rocket	150(M)	
RPG launcher	10	Rocket	500(L)	

Explosive Ammunition table

Projectile	Might	Damage	Range*	Notes
Hand grenade	15	-		
Smoke grenade	-	-		Smoke only
Incendiary grenade	8	-		Fire (1d6 per Might)
40mm grenade	15	-		
40mm incendiary	8	-		Fire (1d6 per Might)
Rocket, HE	20	-		
Rocket, AT	10	3d10		Damage only on direct impact

Vehicles

Vehicle Attributes

Most attributes for vehicles are on a different scale than characters. The speeds at which they travel are superior, the range at which they can fire weapons longer, and the damage they can deal and withstand immense. For this reason, we recommend to keep rules for creatures and vehicles separate, with the only possible point of contact being a chase among slow vehicles and fast mounts.

Armour and Toughness

Vehicles have Toughness like inanimate objects. Their armour, as an ability to deduct some damage before it is deducted from their Toughness, is a separate value. Thus a truck could have Toughness three and zero armour, meaning that even one point of vehicular damage would damage it, and a total of five points of damage, in one or more blows, would render it useless. Note doing three points of vehicular damage means throwing the equivalent of an incendiary grenade at something.

Apart from scale and the two values for Armour and Toughness, damage to vehicles follows the same rules as other inanimate objects.

Speed

While it may be sometimes useful to record individual variations of vehicular speed with the same granularity used for creature speed, this is hardly useful in combat. The Move rate for vehicles is expressed in units that are roughly equivalent to a move of 10 on the individual scale. That is, a vehicle with a Move of 2 is the equivalent of a creature with a move of 20.

A vehicle's Move represents the number of zones it can move in one turn in combat. Each point of Move is thus the equivalent of 15 kilometres per hour (about 10 mph). Just to give you an idea, bipeds cannot go faster than Move 1, and a horse has Move 5 on the vehicle scale, reaching Move 6 when galloping. Your typical WW2 tank has a move between 2 and 3, and Mach 1 is Move 82.

Aerial Move	Ground Move	Maximum Speed	Examples
-	1	15 km/h	Average human walking, tractor
-	2	30 km/h	Olympic athlete running, slow WW2 tank
-	3	45 km/h	WW2 tank
	4	60 km/h	Modern tank
	5	75 km/h	Horse (galloping)
-	6	90 km/h	Wheeled AFV on road
-	7	105 km/h	Cheetah, Truck, Sportscar/Motorcycle on rough ground
	15	225 km/h	Sportscar/Motorcycle on dirt road
2	20	300 km/h	Helicopter
-	21	315 km/h	Sportscar/Motorcycle on paved road
4		600 km/h	Propeller plane
5		750 km/h	Airliner, Bomber
7		1050 km/h	Subsonic Jet Fighter
8	82	1224 km/h	Mach 1
16		2448 km/h	Mach 2
24		3672 km/h	Mach 3

Ground vehicles

Ground vehicles is a very broad category that ranges from motorcycles to Armoured Fighting Vehicles (AFV). The smallest vehicles have only one hit location, while tanks and other combat capable ground vehicles have several locations. Such ground vehicles often have areas that are more armoured than others.

While tracked vehicles have more or less the same speed everywhere, wheeled ones have their speed doubled on a road, and tripled on a paved and well kept road like a motorway. Unlike civilian vehicles, AFVs that use wheels instead of tracks have their Move increased by half again on a road, and doubled on a paved road.

Ground vehicles cannot withstand lots of damage and remain combat capable. Any non-explosive hit that penetrates armour will disable the location struck, even if the vehicle does not blow up. Tanks usually have very few hit points, at most 3 in the hull and 2 elsewhere. Their survivability is granted by their armour. Unarmoured vehicles have the opposite problem. They are usually doomed once hit by explosive weapons, and any such damage will disable them.

AFVs are usually equipped with a variety of weapons, including anti-personnel machineguns, cannons, autocannons and anti-tank rockets. Some may even mount anti-air autocannons and anti-air missiles. Machineguns mounted as anti-personnel weapons are useless against armoured vehicles, and are assumed to deal 1d2-1 damage on the vehicle scale.

Here is the standard hit location table for your typical tank/personnel carrier. Each location may have subsystems. The turret usually contains both the main ordnance and the sensors.

D8	Location	Toughness	Common Subsystems
01	R Side	-1	Track/Wheel [1]
02	L Side	-1	Track/Wheel [1]
3-5	Hull	-	Engine [1], Cargo/personnel bay [2], Various weapons
6	Turret	-1	Sensors [1], Main ordnance [2]

Aircraft

Aircraft are atmospheric vehicles that fly by lift and thrust of their wings and engines. A supersonic jet can reach Move 90 or more. Aircraft cannot usually leave the atmosphere. When a craft can operate in space, it is classified as a spacecraft. A typical aircraft has at most one point of kinetic armour, and no defence against energy Attacks. Its survival depends on not being hit.

Here is the standard hit location table for a jet aircraft. Each location may have subsystems. The cockpit often has two seats that can be hit separately, and engines usually have a rudder above them. If the aircraft has only one engine, both engine rolls will cause a hit in the same location.

D8	Location	HP fraction	Common Subsystems
1	R Engine	-1	Engine [1], Rudder [2]
2	L Engine	-1	Engine [1], Rudder [2]
3	Right Wing	-3	Various weapon pylons
4	Left Wing	-3	Various weapon pylons
5	Fuselage	-	Fuel tank [1]
6	Cockpit	-2	Pilot Seat [1], Gatling gun [2], Sensors [3], Navigator Seat [4]

Helicopters

A typical helicopter will have one or two rotors, plus a big body holding the engine, and a variable amount of passengers and supplies. If the helicopter has a single rotor, it will have a tail that holds a small propeller used to keep it stable in flight. An Attack helicopter usually has two wings that are not used to sustain the vehicle but to host weapon pylons. As helicopters usually fly very close to the ground, they are limited to the ground scale of movement, although they can fly over any obstacle. Most helicopters fly at around Move 20.

Helicopters usually only engage land enemies, being too slow for aerial combat. Utility helicopters usually have no armour at all, while Attack helicopters have one or two points of kinetic armour. Transport helicopters have little or no equipment mounted on them, having at most a machine gun doing 1D2-1 damage on vehicle scale. A combat helicopter is usually equipped with a turret mounted gatling gun and several ordnance pylons on the wings, carrying weapons ranging from short range unguided rockets that are fired in volleys, to long range guided anti-tank missiles.

The following is the hit location table for an Attack helicopter. Other types of helicopters are seldom engaged in combat, or are so weak that it would be pointless to record their location hit points.

D8	Location	Toughness	Common Subsystems
1	Tail	-1	Secondary Propeller [1]
2-4	Hull	-	Fuel tank [1], Cargo hold [2]
5	Rotor(s)	-2	Main rotor [1]

6	Nose	-1	Cockpit [1], Gatling gun [2], Sensors [3]
7*	Right Wing	-2	Various weapon pylons
8*	Left Wing	-2	Various weapon pylons

[*] Optional for assault helicopters, roll 1d6 if the wings are missing

Hitting the fuel tanks triggers a blow-up roll, and hitting the secondary propeller bestows a Penalty to all Pilot rolls. Hitting a rotor takes the helicopter down.

Capital Ships

A capital ship is anything too big to be controlled by a dozen crew-members, be it a floating vessel or an air/spaceship. The two categories function in the same way, except that one has sails or propellers and the other has high-tech engines. Capital ships are piloted with the Pilot [Ship] or [Spaceship] Skill/Trait, and their weapons are fired using the Operate [artillery type] Skill/Trait. As each weapon is usually fired by a different officer, capital ships can fire multiple weapon systems per round. However, only one weapon system per round can be fired against the same target, unless the latter is at least as big as another capital ship.

Ancient and Renaissance ships are made of wood and propelled by sails and oars. They have no armour, but the biggest ones can have a considerable Toughness value.

The armour Coverage of modern capital ships is usually considerable, due to the thickness of the plates that cover the internal structure, and the hit point rate for each section is often high.

The following hit location table is particularly useful because it represents a spaceship modelled after a 20th Century battleship, so you can adapt it to many genres. To use the framework to represent a real world battleship, roll D10 for location.

D12	Location	Toughness	Common Subsystems
01-02	Bow	-1	Main Engine [1], Auxiliary Engine (x2) [2, 3], Rear Cannon Battery [4]
03-04	Starboard	-	Point Defence Turret (x4) [1, 2, 3, 4]
05-06	Port	-	Point Defence Turret (x4) [1, 2, 3, 4]
07	Main Deck	-2	Command Room [1], Sensors [2], Point Defence Turret (x2) [3, 4]
08-09	Weapon Deck	-1	Main Cannon Battery (x2) [1, 2]
10	Stern	-1	Motion Wave Cannon [1], Missile Launcher (x2) [2, 3]
11-12	Lower Deck	-1	Observatory [1], Spacecraft Launch Port [2]

Vehicle Weapons

Vintage weapons

These old siege engines and muzzle-loaded cannons are usually found only on wooden ships. They are almost ineffective against armoured targets, but can still sink a wooden ship or break fortress walls.

Vintage Ship Weapon Range and Damage		
Type	Damage	Range#
Arbalest	1d2	500 (L)
Catapult	2d2	400 (L)
Cannon, light	1d4	500 (L)
Bombard	1d6	250 (M)

Ballistic cannons

This weapon family represents the cannons used by 20th and 21st century tanks and battleships. A cannon can often fire both Armour Penetration (AP) rounds that do kinetic damage, which can obtain a Special Penetration in combat, and High Explosive (HE) rounds that have an explosive type of damage similar to missile fire.

The amount of damage dealt by each cannon depends on the gun barrel calibre, expressed in millimetres (mm). The Ballistic Weapon table lists the damage and the basic range for different gun calibres. Round the calibre down when determining damage capability. Any gun below 20mm in calibre is considered effectively useless against an armoured target, and doing 1D2-1 damage against unarmoured ones.

Ballistic weapon table				
<i>calibre</i>	<i>AP damage</i>	<i>HE damage</i>	<i>Range#</i>	<i>Example</i>
20mm	1d2	-	50m (S)	M61 Vulcan aircraft gun
30mm	1d3	1d3	250m (M)	WW2 AT Gun, GAU-8 Avenger aircraft gun (used by the A-10)
50mm	1d4	1d4	500m (L)	WW2 tank gun, Cold war era naval autocannon
100mm	1d6	1d6	1km (L)	WW2 mortar, Cold war era tank gun
120mm	1d8	1d8	1km (L)	Cold war era rapid fire naval gun or tank destroyer gun
150mm	1d10	2d4	2km (XL)	Howitzer, Cold war era naval gun
200mm	-	2d6	3km (XL)	Heavy howitzer
300mm	-	2d8	5km* (XXL)	Battleship gun
500mm	-	3d6	10km* (XXXL)	Fictional only

[#] multiply the range in metres by ten for aerial and naval range

Guns that have an asterisked range are very unlikely to be fired directly, and will usually require an Operate [Artillery] roll to hit.

Missiles

A missile launcher can be built into both ground vehicles and aircraft, and has a variable missile size that influences damage. Hand held launchers use the same table for range and damage.

Missile Range and Damage				
<i>Type</i>	<i>Equivalent</i>	<i>Damage</i>	<i>Range</i>	
Tiny	Stinger	1d4	1km (M)	
Small	Sidewinder	1d6	2,5km (M)	
Medium	Maverick	1d8	3km (M)	
Large	Harpoon	1d10	10km (L)	
Ship	Tomahawk	2d6	50km* (XL)	
Capital	ICBM	3d6-4D6	100km* (XXL)	

[#] this range is for aerial/naval; divide it by ten for ground vehicle range

Weapons with an asterisked range are usually used with indirect fire, which requires the appropriate specialization of the Operate skill. The range provided is valid only for anti-aircraft or anti-ship missiles. Missiles fired against ground vehicles are limited to 300 (M) range. Real-world long-range AA missiles may have a range of 300km (XXXL).

Laser

A laser cannon is the equivalent of ballistic cannons, but it fires a laser beam. When a target is hit by a laser weapon, only half of its physical armour, rounded down, is applied.

Laser Range and Damage		
<i>Type</i>	<i>Damage</i>	<i>Range#</i>
1 MW	1d2	80 (S)
2 MW	1d3	150 (M)
4 MW	1d4	200 (M)
8 MW	1d6	500 (L)

[#] multiply the range in metres by ten for aerial range

Particle cannon

A particle cannon is the energy equivalent of ballistic cannons, but it fires a flow of hyper-charged sub-atomic particles. When a target is hit by a particle weapon, only the target's Energy armour is counted against the damage dealt by the beam. If no energy armour rating is specified for a given target, half of its kinetic armour, rounded down, is applied.

Particle Cannon Range and Damage		
<i>Type</i>	<i>Damage</i>	<i>Range#</i>
0 MW	1d3	50 (S)
1 MW	1d4	100 (M)
2 MW	1d6	300 (M)
4 MW	1d8	1km (L)
6 MW	1d10	2km (L)
8 MW	2d6	5km (XL)
10 MW	2d8	10km (XXL)
12 MW	2d10	30km (XXXL)
Motion wave	kill	50km (XXXL)

[#] multiply the range in metres by ten for aerial range