TRAVELLER

Supplement 5-6:
The Vehicle Handbook

Transportation fluctuation

TRAVELLER
VEHICLE HANDBOOK

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INTRODUCTION

Welcome to the Vehicle Handbook. This book replaces *Supplement 5: Civilian Vehicles* and *Supplement 6: Military Vehicles* in the *Traveller* range, to provide you with one core reference to create your own vehicles and quickly access your own designs.

The new vehicle design system was created to be quick. With practice, you will be able to create small, basic vehicles in just a few minutes, allowing you to create vehicles, almost on the fly, during a game. Even a large, multi-turreted super-heavy battle tank will not take much longer than five minutes' work.

The key to this is that the design system focuses on *effect* rather than *components*. You will not find complicated charts of different engines, reactors and other power systems – in terms of effect, we really do not care *how* a vehicle is propelled, we just need to know how fast it goes and what it can carry.

At the same time, you will find the system to be very elegant, taking into account changing Tech Levels that bring new forms of propulsion, new materials that are lighter and stronger and new control systems that require less crew. All of this is factored into the very simple system.

After the basic design of a vehicle has been created, you then have the ability to load it up with a variety of modifications that will serve to bring it into the role you envisage. After all, building a fast submarine is all well and good but building a fast submarine with a supercavitating drive is always better.

The worlds of science fiction are filled with vehicles ranging from the mundane to the exotic. A starport on a world far across the frontier may see a mix of pedal-powered rickshaws, horse-drawn wagons and anti-grav skimmers. All of these and many more, can be created with this system.

Ultimately, this system is designed to create vehicles that characters can interact with on a meaningful level, such as cars, planes and small ships. This system is not intended to produce huge vehicles like supertankers or aircraft carriers as they should really be considered more along the lines of background scenery, props and setting.

Designers note: This is now **Your** vehicle design system, If something doesn't seem right to you, or you have a better method or even think there are not enough things to choose from then feel free to change that. You won't break the book. This book is a stepping stone for your imagination not the final word. If you have any ideas on how to better the system or come up with something new and different then let us know! We will put the best ideas on our web site for the everyone to share.

CRASH COURSE IN VEHICLE DESIGN

The core of the design system is divided into several sections, each representing a basic chassis type, such as ground vehicle, hover vehicle, grav vehicle and so on. This chapter introduces you to the basics of designing a vehicle and the steps you must go through to accomplish this.

Vehicles are designed by selecting a Chassis type, to indicate its form and then the number of internal Spaces it has to define its size. These Spaces are large enough to accommodate a single human being and are the basis of the design system.

VEHICLE DESIGN SYSTEM

Each vehicle is designed by selecting Tech Level, Chassis type and number of Spaces. Each Space is roughly the interior volume needed to accommodate one person comfortably. Many modifications and internal components require Space. The next step is to add modifications and options. Within each Chassis type, maximum speed and range are modified by Tech Level.

Ground, hover and grav vehicles may be designated as Armoured Fighting Vehicles (AFVs), which modifies the vehicle's base characteristics and cost, as described in each section. Only Heavy Vehicles may be designed as AFVs.

Each vehicle section contains modifications that are specific to each particular Chassis type. The modifications at the end of the vehicle design section can be applied to all Chassis types.

SPACES

Spaces indicate the usable internal volume of a vehicle. Items like engines, transmission and fuel are part of the chassis. For this reason, vehicles do not necessarily equate across chassis types. A 20 Space boat, for instance, at TL 4, has a speed of 40 kilometres per hour and a range of 200 kilometres. A 20 Space ship at the same Tech Level has a speed of 20 kilometres per hour but a range of 1,000 kilometres.

THE DESIGN CHECKLIST
Follow these steps to create a new vehicle.

Step 1: Choose a Chassis Type
Select a Chassis type from the next few pages as the basis of your vehicle, then use the Performance table to give Tech Level-based performance values. Most of these can be changed in the Modifications step.

Once a Chassis type and size is chosen, calculate all the other chassis-based values, like Hull and Structure and note the performance numbers for that hull at that Tech Level. These are the base values for that Chassis.

Step 2: Chassis Modifications
Apply Chassis-based modifications. Each Chassis section provides specific modifications. Any of these should be applied now. Whether or not a vehicle is an Armoured Fighting Vehicle (AFV) should be determined at this time.

Once this is complete, you can now calculate the vehicle's Base Cost.

Step 3: Add Armour
Add any additional armour to the vehicle. Note that all vehicles start with a Base Armour Rating according to their Tech Level. See p31.

Step 4: Weapons and Weapon Mounts
If the vehicle is to be armed, choose your weapons at this point. See p33.

Step 5: Add Modifications
Note that the Base Cost for this step is what was determined at the end of Step 2. Weapon and Armour cost is *not* part of the Base Cost.

Step 6
Fill in a vehicle roster and get ready for play!

New Vehicle Rules

This chapter introduces a few new rules to be used in conjunction with the new design system. In all cases, unless superseded here, all the vehicle rules provided in the *Traveller Core Rulebook* are used as normal.

The Vehicle Roster
Vehicles created with this book's design system are presented in the following format.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost	Shipping Size

Armour

Location	Armour
Front	—
Right	—
Left	—
Rear	—
Top	—
Bottom	—
Turret Front	—
Turret Side/Rear	—

Weapon	Location	Damage	Range	Auto	Ammo
—	—	—	—	—	—

Other Equipment/Modifications:

Not all vehicles will need every entry filled (many civilian vehicles have the same armour all round their chassis, for example). Each entry is explained here;

Vehicle: The name of the vehicle.
TL: The Tech Level the vehicle was built under.
Skill: This is the skill required to operate the vehicle.
Speed: The Movement rate of the vehicle.
Range: How far a vehicle can, under normal circumstances, travel before needing to refuel.
Crew/Passengers: How many crew are required to operate the vehicle, followed by how many passengers can be carried on board.
Cargo: How much space is left over to carry cargo (metric tons).
Open?: Whether the crew and passengers are open to the elements or enclosed.
Hull: As the normal *Traveller* rules.
Structure: As the normal *Traveller* rules.
Agility: As the normal *Traveller* rules.
Shipping Size: The amount of cargo space carrying this vehicle would consume on board a starship.

New Skill Specialities
It is possible to create a huge range of vehicles with this book and so a few new specialities for the Drive and Flyer skills will be useful. They may be selected any time a character receives the Drive skill as normal.

Drive (hovercraft): This is the skill of operating hovercraft, which behave much differently than conventional vehicles on most surfaces.

Drive (walker): Although usually computer-controlled, walking vehicles require a different set of skills to any other land vehicle. This covers the use of two, four or even eight-legged walkers.

Flyer (airship): This is the skill of piloting balloons and airships, of any sort.

Structure and Hull
Structure and Hull scores are derived from the number of Spaces the vehicle has and its Chassis type.

When calculating Structure and Hull Values, always round Structure up and Hull down.

So, for example, a 14 Space grav vehicle, which has one point of Structure and Hull per three Spaces, would have a Structure of 5, (14/3 = 4.667, round up) and a Hull of 4 (14/3 = 4.667, round down).

Crew Sizes
Non-powered vehicles have crew requirements based on Str, along with a few other factors (see the opposite table).

Wagon/Rickshaw
Any wagon or rickshaw requires a crew of 1.

Sailboats
Sailboats require a fairly large crew. Subtract the Tech Level of the sailboat from 10 (minimum 1). Ships with less than 10 Spaces require half this amount. Ships with 10 or more Spaces require this amount for every 20 Spaces or part of.

So, for example, a Tech Level 3, 100 Space sailboat requires (10 – TL 3 = 7) 7 crew for every 20 Spaces of Hull or 35 crew. In contrast, a Tech Level 15 sailboat requires (10 – TL 15 but with a minimum of 1) 1 crew per 20 Spaces. This 100 Space sailboat requires a crew of 5.

Powered Vehicles
Light vehicles never require more than a crew of one, although military vehicles may carry more.

Heavy vehicles require crew based on type and function. A heavy ground vehicle only requires a crew of one. A heavy ground AFV, however, may require a driver, a gunner and up to two or three more crew, usually depending on weaponry installed.

Vehicle Movement
The listed Movement rate for any ground vehicle is its on-road Movement.

If a ground vehicle goes off-road, it suffers a –2 DM to Agility, Movement rate is reduced to 25% of normal and rough terrain cannot be crossed.

A vehicle that is off-road capable does not suffer the –2 DM to Agility and the Movement rate is not reduced. It can cross rough terrain with a –2 DM to Agility.

Rough terrain comprises heavy forest, very broken ground, rock faces with between 20% to 50% slopes and similar terrain.

Speed
The Speed score of vehicles created with this book will denote the maximum speed at which the vehicle can normally travel.

Powered Vehicles

Chassis Type	Civilian Crew	Military Crew
Light Ground	1	1
Heavy Ground	1	2 + 1 per main weapon
Light Hover	1	1
Heavy Hover	3	2 + 1 per main weapon
Light Grav	1	1
Heavy Grav	1	2 + 1 per main weapon
Airship	3	4
Light Helicopter	1	1
Heavy Helicopter	2	2 + 1 per main weapon
Light Airplane	1	1
Heavy Airplane	2	2 + 1 per main weapon
Light Aerodyne	1	1
Heavy Aerodyne	2	2 + 1 per main weapon
Light Jet	1	1
Heavy Jet	2	2 + 1 per main weapon
Boat	1	2
Light Ship	5	20 + 5 per main weapon
Heavy Ship	20	40 + 5 per main weapon
Train (any)	2	4 + 1 per weapon

Range will show the distance they can travel while at this maximum speed.

However, most vehicles will not travel permanently at this speed and will instead cruise to maintain a better balance of speed and endurance. The cruising speed of a vehicle is assumed to be 75% of the vehicle's Speed and if it maintains this rate of Movement, its Range will increase by 50%.

Animal-powered Vehicles
An animal-powered vehicle requires an amount of Strength (Str) per Space, as detailed in the relevant Chassis section, to move at the animal's base walking speed. The Str requirement is lower at higher Tech Levels as lighter but stronger materials are used.

However, the vehicle cannot go faster than the maximum speed of the animals pulling it. The listed End value for each animal is how long, in minutes, it can run at the maximum speed.

Common Animals

Animal	Str	Speed Walk/Run (kilometres per hour)	End	Notes
Horse	10 (20)	7 / 28	12	Common in Solomani Space, less so elsewhere
Mule	11 (22)	6 / 24	14	Same as above
Ox	18 (54)	5 / 20	18	Widespread on primitive worlds Rimward
Poni	20 (60)	10 / 40	20	Common in former Vilani space
Miniphant	25 (50)	5 /20	12	Common throughout the Solomani Rim and neighbouring sectors
Elephant	30 (120)	4 / 16	20	Rare in Solomani space, virtually unheard of elsewhere
Bandersnatch	35 (140)	6 / 24	30	Rare in the Core sectors, unheard of anywhere else

Gait	Speed Modifier	Range
Walk	Walk x 1	Endurance x 30 minutes
Trot	Walk x 2	Endurance x 15 minutes
Canter	Walk x 3	Endurance x 2 minutes
Run	Walk x 4	Endurance x 1 Minutes

Larger animals modify their Str rating based on their size. A horse or miniphant doubles its effective Str for the purposes of powering a vehicle, while an ox or poni triples it and a full-sized elephant or bandersnatch would quadruple its effective Str rating.

For each point of Str less than what is required, Speed and Range decrease by 10%. There is no lower limit and Speed can be reduced to 0 so the vehicle cannot move at all.

So, for example, a TL 3 10-space wagon requires a total of 60 points of Str to move at the animals' base speed. This would require a team of three horses (60/20, = 3) to walk at 7 kilometres per hour. Alternatively, one poni could be used just as effectively and would walk at 10 kilometres per hour. That same team of three horses could move at 14 kilometres per hour for 3 ½ hours or up to 28 kilometres per hour for 12 minutes.

Wind-powered Vehicles

Wind-powered vehicles have a maximum Speed set as a percentage of the current wind speed, modified by Tech Level, vehicle size and sailing medium (ground, air, sea). Sailboats are limited by their hull size, with bigger ships able to go faster. Wave skimmers and planning hulls are capable of going faster yet again and this is assumed to be present in higher Tech Level designs.

TL	Speed (Small vehicles)	Speed(Large Vehicles)
0–1	20% of wind	30% of wind
2–3	25% of wind	35% of wind
4–5	30% of wind	40% of wind
6–7	35% of wind	45% of wind
8–9	45% of wind	55% of wind
10–11	55% of wind	65% of wind
12+	65% of wind	75% of wind

The Speed listed is for the default sailing medium – water (or similar fluids).

Ground-based sailing vehicles use this Speed for small vehicles but reduce it by 15% for large vehicles. Air-based sailing vehicles increase the Speed of small vehicles by +15% and large vehicles by +10%.

When adding the Increased Speed modification (see Page 35), each 10% of Speed increase adds +10% to the scores on this table.

Aircraft

All aircraft are designed for a specific atmosphere and planetary gravity. In game terms, this means that aircraft can only work properly for world size and atmosphere type UWP codes within 1 of their homeworld.

For example, an aircraft designed on a world with UWP of C772777-9 could function properly on a world with atmosphere codes of 6–8 and size codes of 6–8.

It is possible to build an aircraft with a wider operational range, (see page 35) but it will be more expensive and less manoeuvrable.

Aircraft operating outside of their design codes suffer a –1 to Agility if they are within 1 of their home UWP codes for atmosphere and/or size and cannot fly at all if they are operating beyond this, unless they are designed with a wider operation range.

In any case, all aircraft require a minimum atmosphere code of 1 in order to function. Aircraft descriptions should include the world size and atmosphere codes.

Mounted Weapons

Vehicular weapons have ranges vastly longer than man-portable weapons and these increased range bands reflect that fact.

Range Band	Distance
Distant	501–5,000 metres
Very Distant	5,001–25,000 metres
Extreme	25,001–50,000 metres
Continental	50–500 kilometres
Orbital	501+ kilometres

The ability of a vehicle-mounted weapon to hit a target is dependent on range, movement, stabilisation and fire control. Stabilisation and Fire Control are dealt with on a Tech Level-based Weapon Range Chart. This DM is in addition to any gained from the actual weapon or circumstances.

Sensors, Stealth and Electronic Warfare

Sensors have a listed range, much like weapons. This is the maximum effective range of the sensor system. Use the DMs from the Vehicle-Mounted Weapons table, to determine range-based DMs for spotting a target using the Sensors skill. Like weapons, this is Tech Level dependent.

There are additional DMs for the target size, as noted in the following table.

Size vs. Sensors

Hull Rating	Size DM
1–10	+0
11–25	+1
25–50	+2
51–150	+3
151+	+4

Sensors, stealth and electronic warfare, more than any other system, are defined by Tech Level. The difference in Tech Level between vehicles is used as a negative or positive DM for Sensors checks and rolls related to electronic warfare.

For example, a Tech Level 11 aircraft with +3 Stealth is trying to infiltrate a rebel landing zone. The rebels are Tech Level 14 and are using Good (+1) Sensors. The Tech Level difference of 3 gives the rebels another +3 DM on their Sensors check, completely negating the bonus from the aircraft's Stealth. The rebels thus have a +1 DM to detect the invading aircraft.

Vehicle Size and Layout

All vehicles created by the rules in this book have a Shipping Size score, which is the amount of space they take up on a starship. This is not their actual size but an approximation of the room they require, taking into account factors such as wings, rotors and waste space around hulls. Think of it as an invisible box drawn around the vehicle.

If deck plans of vehicles are desired, there are a couple of things to keep in mind. Spaces in a vehicle represent the inhabited and/or optional parts of a vehicle. They do not include room for the engine, fuel or transmission.

For vehicles other than heavy ships and heavy submarines, these parts are roughly one quarter of the volume of the remainder of the vehicle. For heavy ships and heavy submarines, this volume is approximately one half to three quarters of the volume of the inhabited parts of the ship. So a 200 Space heavy ship would have engine and fuel requirements in the region of an additional 100 to 150 Spaces.

For the purpose of making deck plans, one Space is very roughly equal to one and a half metre squared. Note that the deck-to-deck height would be closer to two metres or even less, as opposed to the three metres of a typical starship deck plan.

Vehicle Hit Locations
When using the armour allocation rule (see page 30), there is a need to determine where on a vehicle a successful hit will strike.

Non-turreted vehicles
For vehicles with a turret, incoming fire hits the targeted side.

Turreted vehicles
If a vehicle has small turrets, incoming fire will hit the targeted side on a roll of 1–5 and the turret on a 6.

If a vehicle has large turrets, incoming fire will hit the targeted side on a roll of 1–4 and the turret on a 5–6.

Ring Mounts and Pintle Mounts
If a vehicle has ring and/or pintle mounts with gun shields, treat them as small turrets.

Vehicle-Mounted Weapons

TL	Personal	Close	Short	Medium	Long	Very Long	Distant	V. Distant	Extreme	Continental	Orbital
4 or less	Not Possible	–2	0	0	–2	–4	–6	Out of Range	Out of Range	Out of Range	Out of Range
5–6	Not Possible	–2	0	0	0	–2	–4	–6	Out of Range	Out of Range	Out of Range
7–8	Not Possible	–2	0	0	0	0	–2	–4	–6	Out of Range	Out of Range
9–10	Not Possible	–2	0	0	0	0	0	–2	–4	–6	Out of Range
11–12	Not Possible	–2	0	0	0	0	0	0	–2	–4	–6
13–14	Not Possible	–2	0	0	0	0	0	0	0	–2	-4
15 or more	Not Possible	–2	0	0	0	0	0	0	0	0	-2

Vehicle Mass

This design system does not deal with mass. Mass is effectively built-in to the system as it relates to vehicle performance. However, there may be some situations where the mass of a vehicle is important. In such cases, use the following rule of thumb.

A Hull score of 1 is roughly equal to 500 kilograms, so a vehicle with Hull 4 would mass 2,000 kilograms. AFVs double this value. Balloons and airships instead use a value of 50 kilograms per Hull number. Ships use a value of 2,000 kilograms per Hull point, while submersible use a value of up to 4,000 kilograms per Hull point.

Open Vehicles weigh half this amount and those with the Open Frame modification only 10% of this amount.

Armour will add another 200-500 kilograms per point, depending on Tech Level; 500 kilograms at TL 2, 450 kilograms at TL 4, 400 kilograms at TL 6, 350 kilograms at TL 8, 300 kilograms at TL10, 250 kilograms at TL 12 and 200 kilograms at TL 14.

Weapons mass around 100 kilograms per Space.

Each passenger adds another 100 kilograms.

So, for example, a G-Carrier, with Hull 10, masses a base 5 tons. This is doubled because it is an AFV, to 10 tons. 40 points of armour at TL 14 adds another 8 tons and 4 Spaces of weapons adds another 400 kilograms. A total of 10 passengers and crew adds 800 kilograms. The G-Carrier's total mass is therefore 19.2 tons.

However, these are just guidelines and can be adjusted as needed to achieve the effect desired.

Modifications

When applying modifications to a vehicle, you will be asked to use prices based upon the Base Cost. Note that the Base Cost itself *never* changes, even if you have added a modification!

For example, a large tracked AFV with 100 Spaces would have a Base Cost of Cr. 300,000.

100% of this Base Cost is added for being an AFV (so, another Cr. 300,000 for a total of Cr. 600,000).

We then want to make it tracked, which adds 100% of the Base Cost – this will be 100% of the original Cr. 300,000, not the current total of Cr. 600,000.

So, tracks will cost another Cr. 300,000, for a grand total of Cr. 900,000.

Note that Modifications that decrease the cost of a vehicle cannot lower it below 25% of the Base Cost.

CHASSIS TYPES

CHASSIS TYPE: BICYCLE, RICKSHAW, WAGON AND CART

These vehicles are either animal (or human!) powered, although some rare or unusual types can be wind-powered instead. Use the rules on page 5 to calculate the Speed of these vehicles, whether they use animals or wind for propulsion.

The maximum possible Speed listed by Tech Level can be increased using the normal modification rules but the *actual* speed depends on the animals doing the pulling. Going over the maximum Speed for the vehicle will result in damage to the vehicle, at the rate of one Structure Point per minute.

Bicycles and Rickshaws

At base Str, the Speed of a bicycle or a rickshaw is equal to twice the walking speed of the character peddling the machine. Athletics (co-ordination) can be used to go faster, travelling at twice the Speed a character would move when sprinting (see page 52 of the *Traveller Core Rulebook*).

Str Required

Tech Level	Str/Space	Maximum Speed (kilometres per hour)
5	6	20
6–8	5	50
9–11	4	100
12+	3	150

Bicycle & Rickshaw Construction

Skill	Drive (wheeled)
Number of Spaces	1–5
Cost per Space	200
Structure	1 per 5 Spaces
Hull	1 per 4 Spaces
Agility	–1
Tech Level	1
Shipping Size	1/10 ton per Space

Wagons and Carts

Carts (1–4 spaces), typically have two wheels, while larger wagons will have four. The Speed of a cart or wagon is calculated using the rules on page 5.

Str Required

Tech Level	Str/Space	Maximum Speed
1–3	6	10
4–6	5	20
7+	4	30

Wagon & Cart Construction

Skill	Animals (riding)
Number of Spaces	1–20
Cost per Space	200
Structure	1 per 5 Spaces
Hull	1 per 4 Spaces
Agility	–1
Tech Level	1
Shipping Size	1/2 ton per Space

Rail Wheels (TL3)

Human and animal-powered vehicles can also be designed to run on rails rather than roads. This reduces the Str requirement for the vehicle by 50%, although the cost remains the same. A vehicle designed for use on rails cannot be used on roads and vice versa.

See page 16 for the cost of constructing rails.

CHASSIS TYPE: NON-POWERED BOAT AND SHIP

Boats and ships ply the waves of most oceans and provide lower tech worlds with the means to travel great distances using man or windpower.

Boats

These include small non-powered boats such as rowboats and canoes.

Str Required (rowing only)

Tech Level	Str/Space
0–1	5
2–4	5
5–7	4
8–11	4
12+	3

Boat Construction

Skill	Seafarer (sail)
Number of Spaces	1–10
Cost per Space	200
Structure	1 per 6 Spaces
Hull	1 per 6 Spaces
Agility	–1
Tech Level	0
Shipping Size	½ ton per Space

Modifications

The following modifications are available for boats.

Outboard Motor (TL 3)

At higher Tech Levels, more advanced propulsion can be added, in the form of small outboard motors. These have a speed of 10 kilometres per hour, a range of 100 kilometres and cost Cr. 100 per space.

Ships

This is usually a sailing ship, capable of making long ocean voyages. At early Tech Levels, however, they usually stay in sight land.

Examples: Viking long boat, medieval carrack, modern sailing yacht.

Str Required (rowing only)

Tech Level	Str/Space
1–2	5
3–4	5
5–6	4
7–8	4
9–10	3
11+	3

Ship Construction

Skill	Seafarer (sail)
Number of Spaces	10–500
Cost per Space	5,000
Structure	1 per 5 Spaces
Hull	1 per 4 Spaces
Agility	–2
Tech Level	1
Shipping Size	1/2 ton per Space

Ship Design Example

The inhabitants of the primitive water world of Finnegan's Folly regularly raid each other for food and other resources. They use the trunks of kelp trees to manufacture their ships and their floating towns.

Folly has a Tech Level of 2. A typical raider has 200 Spaces, which will require a combined Str of 1,000 to row it at a base speed of five kilometres per hour. The men and women who crew these ships have a minimum Str of 8, having been tested in a series of competitions that decide who will have the honour of taking part in each raiding season.

The required Str of 1,000 and average crew Str of 8, means the raider will require (1,000 / 8) 125 crew.

125 crew take up 125 Spaces, leaving 75 Spaces for cargo (loot), weapons and supplies for their journey.

The 200 Space TL 2 hull will have a base Armour of 1 (see page 29), a Hull of (200 / 4) 50 and Structure of (200 / 5) 40. Rowing Speed is 5 kilometres per hour, while Speed under sail would be equal to 35% of the prevailing wind. Cost is Mcr. 2.

CHASSIS TYPE: BALLOON

Like a sailing ship, the speed of a balloon is dependent on wind speed. Unlike a ship, although, they have no ability to tack against the wind or really do much at all to alter their course.

Balloon Construction

Skill	Flyer (airship)
Number of Spaces	1–6
Cost per Space	200
Structure	1 per 5 Spaces
Hull	1 per 5 Spaces
Structure (Envelope)	1 per Space
Agility	–2
Tech Level	3
Shipping Size	1/10 ton per Space

Speed

Tech Level	Speed as % of wind speed
3–5	30%
6–8	50%
9+	80%

Duration

Hydrogen and helium ballons can stay aloft almost indefinitely. Hot-air balloons have a duration equal to their Tech Level x 2 hours.

Balloon Envelopes

Envelope Structure measures the amount of damage the lift envelope can sustain before losing integrity. All non-explosive weapons inflict just one point of damage to the envelope for each hit. Automatic weapons inflict damage equal to their Auto Rating.

Envelope Size

The lift envelope of a balloon is enormous. Envelope size is a function of world size, world atmosphere and number of Spaces of the airship.

Multiply world size by number of Spaces and then multiply by 200 for Very Thin atmospheres, 50 for Thin atmospheres, 20 for Standard atmospheres and 10 for Dense atmospheres. This is the size of the lift envelope in displacement tons. Hot air balloons must multiply this size by 2.

For example, a 4 Space hot air balloon on a Size 8 world with a Standard atmosphere would require an envelope of (4 x 8 x 20 x 2) 1,280 displacement tons. The lift envelope is approximately 16 m across

In order to transport an airship, the envelope can be drained and deflated. This reduces its size to only 1% of the inflated size. The envelope in the example above would be 160 tons deflated.

Envelope Size: The envelope of a balloon is calculated in much the same way as the volume of an airship envelope.

CHASSIS TYPE: LIGHT GROUND VEHICLE

Light ground vehicles are commonly found in individual transportation roles, like family cars. They are extremely common on most industrialised worlds until inexpensive grav vehicles render them obsolete.

Examples: Motorcycles, cars, personal ATVs, pickup trucks.

Light Ground Vehicle Construction

Skill	Drive (wheeled)
Number of Spaces	1–20
Cost per Space	1,200
Structure	1 per 2 Spaces
Hull	1 per 2 Spaces
Agility	0
Tech Level	4
Shipping Size	½ ton per Space

Speed and Range

Tech Level	Speed	Range
4	50	100
5–6	100	200
7–8	160	400
9–10	200	500
11+	250	600

A basic TL 5 ground car would have 5 Spaces: 1 Driver, 3 passengers, 1 remaining Space for cargo.

Base Cost is then Cr. 6,000, with a top speed of 100 kilometres per hour, a range of 200 kilometres, Armour 2, Structure 3 Hull 2 and Agility 0. It would displace 2.5 tons on a starship. All further options would be based off of these starting scores.

Motorcycles

Motorcycles have 1–3 Spaces and two or three wheels. Cost per space is doubled and Agility is +1. Speed is increased by 50%. Motorcycles are Open Frame vehicles with Armour 0, although they can be enclosed at a cost of 25% of the Base Cost. An enclosed motorcycle can be armoured to twice its Base Armour Rating (see page 29).

A basic TL 8 two-person motorcycle would be 2 Spaces and cost Cr. 4,800. It would have Hull 1, Structure 1, Speed 180 kilometres per hour, Agility 1, with a Range of 300 kilometres.

Monowheel (TL 9)

A monowheel would cost four times normal, with a maximum of two spaces. Speed is doubled and Agility is +2 on roads. Off-road Agility is –2. Monowheels are always Open Frame and cannot be enclosed.

Modifications

The following modifications are available for light ground vehicles.

Wheels

Unless otherwise specified, all ground vehicles start with four wheels. Additional wheels are required for larger vehicles and can also be added to improve cross-country mobility. Each additional pair of wheels costs 25% of the vehicle's Base Cost. Each set of additional wheel after the minimum reduces any terrain-based Agility penalties by one. This cannot be used to provide a bonus, only negate a penalty.

Hull	Minimum Number of Wheels
1	2 (1 at TL 9)
2–30	4

Tracks

Any ground vehicle with at least two wheels can be equipped with tracks instead. This increases cross-country mobility at the expense of road speed, cost and complexity. Adding tracks costs 100% of the vehicle's Base Cost, halves Speed and changes the required skill to Drive (tracked). Tracks grant a +3 DM for Drive checks when off-road.

Off-road Capability

Any ground vehicle can be purpose designed for off-road use. This modification costs 50% of the Base Cost and Speed is lowered by 10%.

Towing Limits

All ground vehicles can be equipped for towing. Towing reduces Agility by Two for light ground vehicles. It is possible to take this modification more than once. A light ground vehicle has a penalty of –25% to its Speed every time it is taken.

Towing Capacity	Spaces *
1,000 kilograms	5

* This is the Spaces available in the trailer being towed, not how many Spaces are used in the vehicle.

Railed

Ground vehicles can be designed to run on rails, either as an addition to their normal road movement or instead of it. As a modification, the ability to perform rail travel takes 1 Space and costs 50% of the Base Cost. This allows rail travel at 75% of the vehicle's Speed. If the vehicle is designed to run on rails only, it take no Spaces and costs 25% of the Base Cost. A rail-only vehicle adds 50% to its Speed.

So, for example, a ground car that can normally do 200 kilometres per hour, if designed as a rail-only vehicle, can instead travel at 300 kilometres per hour.

They can also be designed to operate on air film tracks, which requires 1 Space and costs 100% of the Base Cost. This doubles the vehicle's Speed.

A maglev version would require 2 Spaces and costs 200% of the Base Cost. This triples the vehicle's Speed.

Finally, the vehicle can be designed to ride a grav rail. This requires 3 Spaces and costs 300% of the Base Cost. This multiples the vehicle's Speed by four.

Airfilm, maglev and grav rail systems have to be the only propulsion system on a Light Ground Vehicle and cannot be used as add-ons.
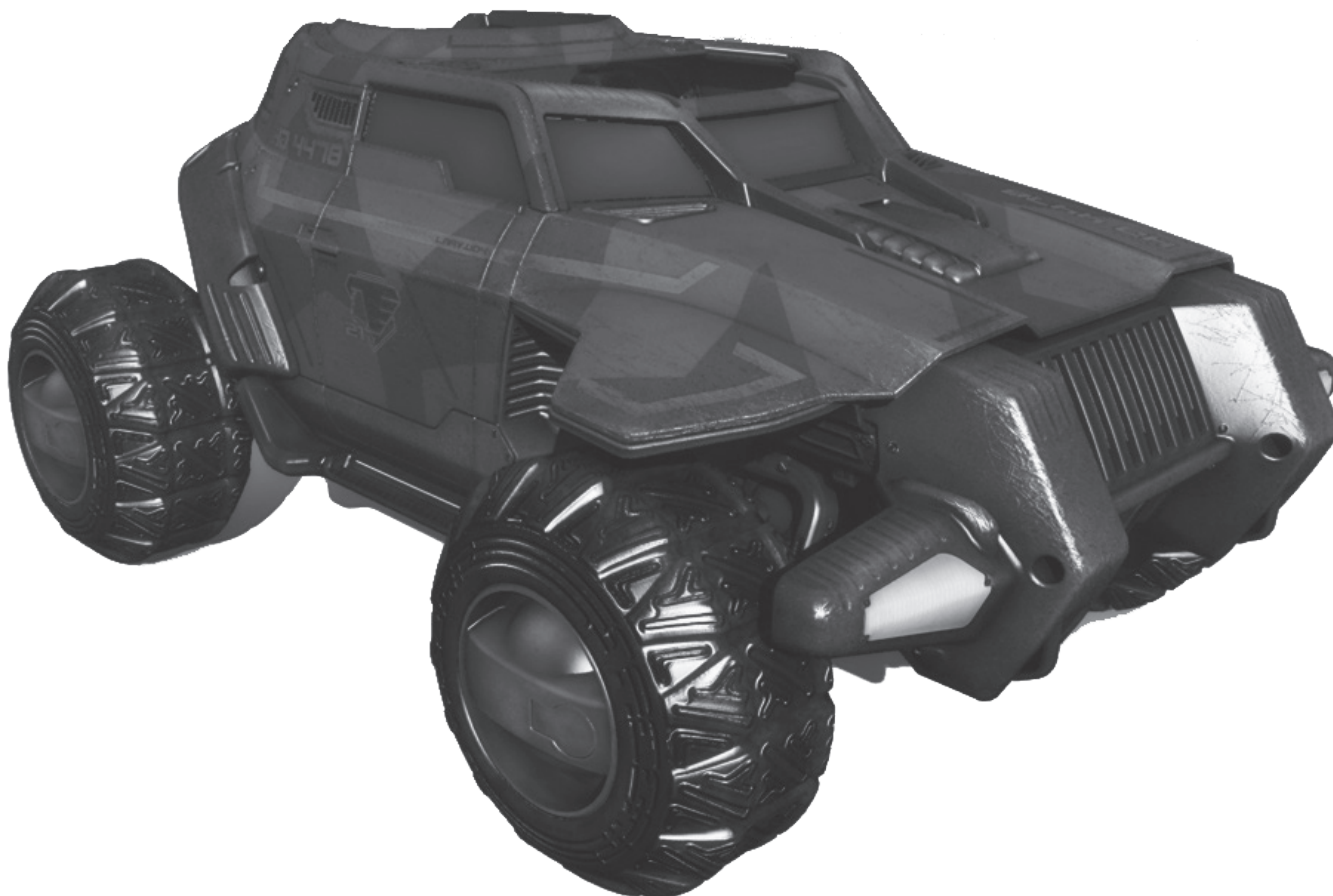
CHASSIS TYPE: HEAVY GROUND VEHICLE

Heavy ground vehicles are a common sight in mid-Tech Level regions, where they fill the role of both short- and long-range heavy transportation. Most large vehicles have four wheels but six or even eight wheeled designs are common as the size of the vehicle increases.

Examples: Trucks, Earthmovers, APCs, Tanks.

Heavy Ground Vehicle Construction

Skill	Drive (wheeled)
Number of Spaces	20–200
Cost per Space	3,000
Structure	1 per 2 Spaces
Hull	1 per 2 Spaces
Agility	–1
Tech Level	4
Shipping Size	½ ton per Space

Speed and Range

Tech Level	Speed	Range
4	50	200
5–6	100	300
7–8	125	400
9–10	150	500
11+	175	600

Modifications

The following modifications are available for heavy ground vehicles.

Wheels

Unless otherwise specified, all ground vehicles start with four wheels. Additional wheels are required for larger vehicles and can also be added to improve cross-country mobility. Each additional pair of wheels costs 25% of the vehicle's Base Cost. Each set of additional wheel after the minimum reduces any terrain-based Agility penalties by one. This cannot be used to provide a bonus, only negate a penalty.

Hull	Minimum Number of Wheels
1	2 (1 at TL 9)
2–30	4
31–50	6
51+	8

So, for example, an 80 Space vehicle (Hull 40) with a Base Cost of Cr. 240,000, would require a minimum of six wheels. This would add another Cr. 60,000, bringing the total cost to Cr. 300,000.

Tracks

Any ground vehicle with at least two wheels can be equipped with tracks instead. This increases cross-country mobility at the expense of road speed, cost and complexity. Adding tracks costs 100% of the vehicle's Base Cost, halves Speed and changes the required skill to Drive (tracked). Tracks grant a +3 DM for Drive checks when off-road.

AFV (Armoured Fighting Vehicle)

A heavy ground vehicle may be designated an AFV. This costs 100% of the Base Cost and reduces the vehicle's Spaces by 10% (round up). AFVs use modified rules for armour (see page 29). In addition, an AFV automatically has the Off-road Capability modification.

So, for example, a large tracked AFV with 100 Spaces would have a Base Cost of Cr. 300,000, adding 100% of this for being an AFV and another 100% for being tracked, giving a base cost of Cr. 900,000. It would have a Speed of 50 kilometres per hour, lose 10 Spaces for being an AFV and have a range of 300 kilometres.

Off-road Capability

Any ground vehicle can be purpose designed for off-road use. This modification costs 50% of the Base Cost and Speed is lowered by 10%.

Towing Limits

All ground vehicles can be equipped for towing. Towing reduces Agility by 1 for heavy ground vehicles. It is possible to take this modification more than once. A heavy vehicle has a penalty of –10% to its Speed every time it is taken, to a maximum of –70%. Each additional selection of the towing option doubles the towing capacity, including the approximate number of Space in the trailer and increases the Base Price of the vehicle by 10%. Note that the Towing modification used no Spaces; the Spaces noted below is approximately how much the vehicle can tow.

All ground vehicles can be equipped for towing. Towing reduces Agility by one for heavy ground vehicles. It is possible to take this modification more than once. A light ground vehicle has a penalty of –10% to its Speed every time it is taken, to a maximum of –70%. Each additional selection of the towing option after the first doubles the Towing Capacity, including the approximate number of Spaces in the trailer and costs 10% of the Base Cost.

Towing Capacity	Spaces *
2,000 kilograms	10

* This is the Spaces available in the trailer being towed, not how many Spaces are used in the vehicle.

For example, a heavy vehicle has a base towing capacity of 2,000kg. Selecting the towing option once doubles this to 4,000 kilograms and 20 Spaces and costs 10% of the Base Cost. Selecting it again doubles it again, to 8,000kg and 40 Spaces, costing 20% of the Base Cost. A third selection of the towing option will double that total again, to 16,000kg and 80 Spaces and cost 30% of the Base Cost.

Tunnelling Machines
Any heavy tracked vehicle can be made a tunnelling machine. This costs Cr. 25,000 per Space of vehicle and changes the skill required to Drive (mole). It allows movement through solid earth of TL x 10 metres per hour. Speed through dense rock is only TL x 1 metres per hour.

Railed

Ground vehicles can be designed to run on rails, either as an addition to their normal road movement or instead of it. As a modification, the ability to perform rail travel takes 2 Spaces and costs 50% of the Base Cost. This allows rail travel at 75% of the vehicle's Speed. If the vehicle is designed to run on rails only, it take no Spaces and costs 25% of the Base Cost. A rail-only vehicle adds 25% to its Speed.

So, for example, a truck that can normally do 100 kilometres per hour, if designed as a rail-only vehicle, can instead travel at 125 kilometres per hour.

They can also be designed to operate on air film tracks, which requires 3 Spaces and costs 100% of the Base Cost. This doubles the vehicle's Speed.

A maglev version would require 4 Spaces and costs 200% of the Base Cost. This triples the vehicle's Speed.

Finally, the vehicle can be designed to ride a grav rail. This requires 5 Spaces and costs 300% of the Base Cost. This multiples the vehicle's Speed by four.

Airfilm, maglev and grav rail systems have to be the only propulsion system on a Heavy Ground Vehicle and cannot be used as add-ons.

CHASSIS TYPE: TRAIN

Running along fixed tracks, trains have little freedom of movement but are capable of carrying great loads over long distances at fast speeds. In societies where personal transport is rare, they can be a lifeline but even more advanced civilisations have need for a rail network.

Trains are rated by the number of Spaces they can pull behind them, typically in multiple cars. The locomotive itself is mostly engine and transmission and so only has a few internal Spaces.

A normal locomotive typically has four internal Spaces to accommodate its crew but that number can be increased. Only a small part of a locomotive is available internal space. The remainder is taken up with the enormous engines, transmissions and other equipment.

These rules are intended to create heavy locomotives, yard engines and similar type vehicles. They are not intended for smaller tram cars or Light Rail systems where every car is powered. These are more appropriately designed using the Ground Vehicle system, with the Rail Option and the External Power Universal Option.

The number of Spaces that can be pulled by a single engine is limited by Tech Level and so many trains will also have more than one locomotive. When designing the train, allocate Spaces to the locomotive as desired, although four is standard.

Locomotive Construction

Skill	Drive (wheeled)
Number of Spaces	34-4,500
Cost per Space	Cr4000 per Space Pulled
Structure	1 per 10 Spaces Pulled
Hull	1 per 10 Spaces Pulled
Agility	–4
Tech Level	3
Shipping Size	1 ton per 10 Spaces Pulled

The engine itself can have up to 30 Spaces, which is taken from the total being pulled.
Engines can have any applicable vehicle modification.

Speed and Range

Tech Level	Speed	Range	Max. Spaces
3	40	200	600
4–5	80	400	1,200
6–7	120	600	2,400
8–9	140	800	3,600
10+	160	1,000	4,500

Range Increases
Increased range for trains usually comes in the form of extra fuel, which can be stored in towed rail cars. Each doubling of range requires an extra 30 Spaces dedicated to fuel storage. Fuel cars cost the same as train cars, below.

Train Cars
Train cars can be any size but are usually between 20 and 40 Spaces. Cars cost Cr2,000 per space. Any applicable vehicle modification can be added to train cars, like life support, hostile environment protection, armour and weapons. Cargo cars can be designed with Open Cargo Beds.

Airfilm Train (TL 9)
First available at TL 9, the airfilm train uses a high-pressure cushion of air to achieve very high loads on its monorail track. It is unable to handle steep gradients, however. Power is obtained from a turbine or compact fusion plant on the locomotive, which feeds high pressure air to the attached cars. Airfilm cars have to be enclosed.

Airfilm trains are faster than conventional trains but pull fewer cars. Double Speed and halve the number of Spaces. Cost is 50% higher for the locomotive and 100% higher for the cars.

MagLev Train (TL 8)
The maglev train uses electromagnets to support the train above its monorail track. Power is provided by induction via the track and so range is effectively unlimited. Due to the speed of a maglev, the cars have to be enclosed.

Maglev trains are faster than conventional trains and they triple Speed. Range, however, is unlimited so long as the monorail can continue to supply power. Cost is 100% higher for the locomotive and 100% higher for the cars.

Grav Rail Train (TL 13)
Grav rail uses weak grav modules to support the train at high speed along the power and guide rail. At high Tech Levels, the grav train floats clear of the rail, supported and guided by repulsors along its length. The front and rear cars, generally labelled 'the locomotives' have both gravitic lift and thrust, while the intervening cars have only lift modules. Power is supplied via the rail for effectively unlimited range.

Grav rail trains are faster than any other train type and can pull as many cars as a conventional engine. Multiply Speed by five. Range is unlimited so long as the monorail can continue to supply power. Cost is three times higher for the locomotive and double the price for the cars.

Track Costs

Conventional train track costs Cr. 100,000 per kilometre on flat, open land. In heavy, mountainous terrain it can rise up to MCr. 1 per kilometre.

Airfilm track is twice this cost.

Maglev and Grav Rail track is three times this cost.

Light Duty Rails (TL 2)

These rails are designed to support the relatively light loading common in muscle-powered rail systems. That cannot support the weight of conventional powered locomotives and rail cars. They can also support Light Ground Vehicles but not Heavy vehicles. These rails cost Cr. 5,000 per 100 metres.

Modifications

The following modifications are available for trains.

Additional Spaces

Locomotives can add space, at a cost of 10% of the Base Cost per added Space. Up to 4 Spaces can be added this way.

Subways

Subways are simply conventional trains operating underground. Track cost is MCr. 1 extra per kilometre.

Tube Trains

Tube trains are airfilm, maglev or grav rail trains that travel underground in excavated tunnels. The trains and cars must have the Vacuum Environment Protection and Life Support modifications. The tunnels cost MCr. 10 extra per kilometre and are only available at TL 12 and higher. Speed is multiplied by 10, however.

CHASSIS TYPE: LIGHT HOVERCRAFT

Hovercraft generate a cushion of air, which allows the vehicle to move easily over most terrain.

Examples: Hover Bike, Hover jeep.

Light Hovercraft Construction

Skill	Drive (hover)
Number of Spaces	1–10
Cost per Space	20,000
Structure	1 per 4 Spaces
Hull	1 per 4 Spaces
Agility	+1
Tech Level	5
Shipping Size	1/2 ton per Space

Range and Speed

Tech Level	Speed	Range
5	100	300
6–7	150	400
8–9	200	500
10–11	250	600
12+	300	700

Modifications

The following modifications are available for light hovercraft.

Jump Jets

Hovercraft can be equipped with jump jets, which adds a boost to the lift fans, greatly increasing lift at the expense of fuel consumption and range. Jump jets are used for crossing
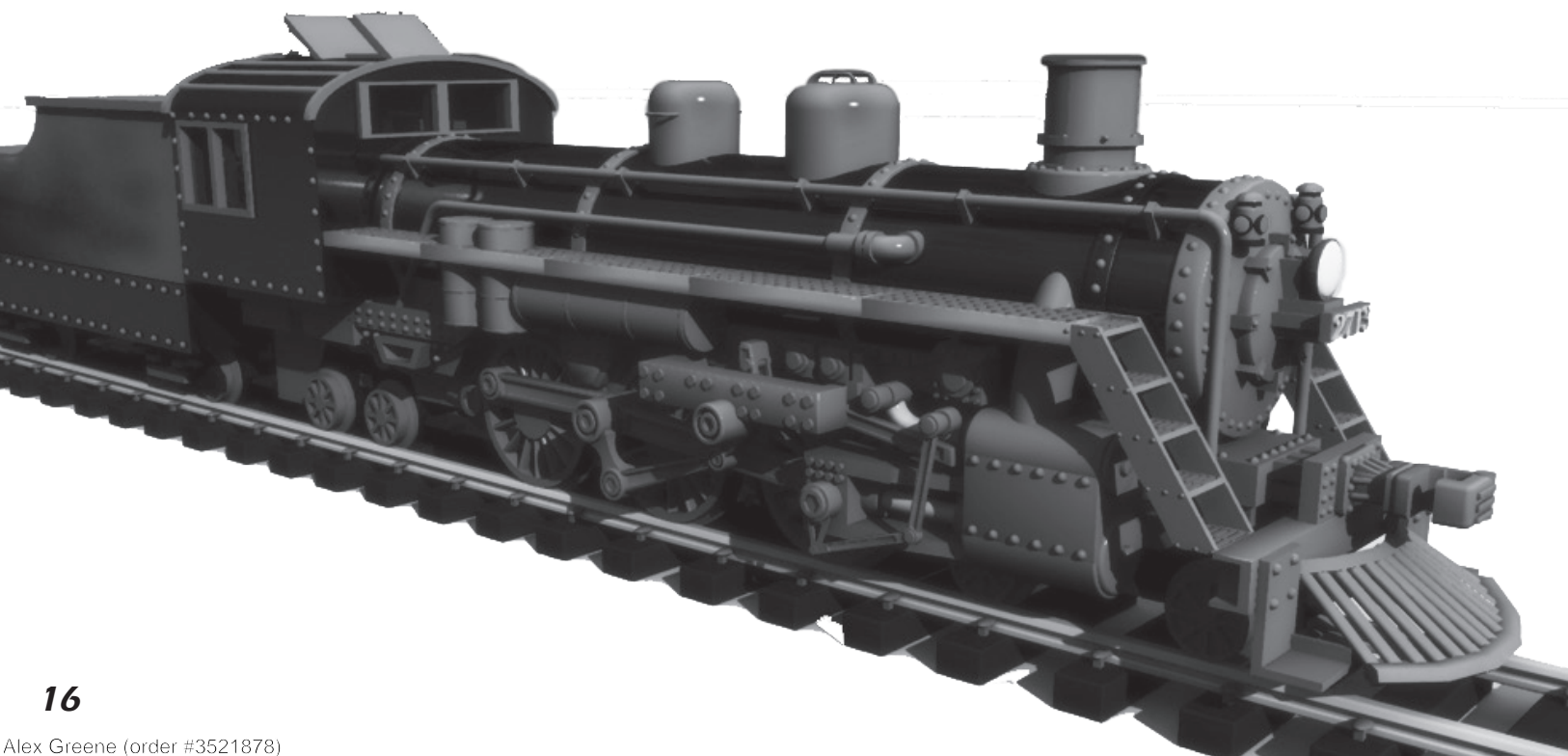
obstacles but can be used to allow the hovercraft to fly, albeit no higher than 100 metres. Operating the hovercraft in this way would require Flyer (aerodyne), rather than Drive (hovercraft). Just using it to cross small obstacles, less than five metres tall, only requires the Drive (hovercraft) skill. Jump jets cost 50% of the Base Cost and each 100 metres travelled in jump jet mode uses 500 metres (0.5 kilometres) of range, with Speed reduced to 25% of normal.

CHASSIS TYPE: HEAVY HOVERCRAFT

Hovercraft generate a cushion of air, which allows the vehicle to move easily over most terrain. These larger designs are capable of carrying large loads over both water and land.

Examples: Marine hovercraft, military hovercraft, hover tank.

Heavy Hovercraft Construction

Skill	Drive (hover)
Number of Spaces	10–400
Cost per Space	40,000
Structure	1 per 3 Spaces
Hull	1 per 3 Spaces
Agility	+1
Tech Level	5
Shipping Size	½ ton per Space

Range and Speed

Tech Level	Speed	Range
5	100	600
6–7	150	800
8–9	200	1,000
10–11	250	1,200
12+	300	1,400

Modifications

The following modifications are available for heavy hovercraft.

AFV (Armoured Fighting Vehicle)
Large hover vehicles may be designated as AFVs at time of construction. This doubles the Base Cost and complexity and takes up 10% (round up) of the vehicle's Spaces. Range and Speed are reduced by 25%. AFVs use modified rules for armour (see page 29).

Jump Jets
Hovercraft can be equipped with jump jets, which adds a boost to the lift fans, greatly increasing lift at the expense of fuel consumption and range. Jump jets are used for crossing

CHASSIS TYPE: LIGHT GRAV VEHICLE

Once grav technology becomes widely available, societies rapidly replace their original ground-based vehicles. Grav vehicles are superior in just about every way, being faster, smoother and safer.

Light grav vehicles are closed constructions. An Open Frame grav vehicle would be something like a grav bike.

Examples: Air/raft, grav car.

Light Grav Vehicle Construction

Skill	Flyer (grav)
Number of Spaces	1–10
Cost per Space	50,000
Structure	1 per 2 Spaces
Hull	1 per 2 Spaces
Agility	+1
Tech Level	8
Shipping Size	½ ton per Space

Speed and Range

Tech Level	Speed	Range
8	300	1,000
9–10	400	2,000
11–12	500	3,000
13–14	600	4,000
15+	700	5,000

For example, a TL 8 Air/raft would be 4 Spaces (driver, 3 passengers), costing Cr. 300,000. With a 10% discount for being Open Topped (see page 35), Cr. 270,000.

It would have Speed 300 kilometres per hour, Range 1,000 km, 2 Structure, 2 Hull, Armour 5. It would displace 2 tons on a starship.

Streamlined

Any closed grav vehicle can be designed with a high-speed Streamlined hull. This costs 300% of the Base Cost, loses 10% of the vehicle's Spaces and multiplies Speed by five.

CHASSIS TYPE: HEAVY GRAV VEHICLE

Heavy grav vehicles use ultra-heavy duty grav modules to support the vehicle and provide forward thrust.

Example: G-Carrier, grav tank, grav transport.

Heavy Grav Vehicle Construction

Skill	Flyer (grav)
Number of Spaces	10–100
Cost per Space	100,000
Structure	1 per 2 Spaces
Hull	1 per 2 Spaces
Agility	+1
Tech Level	8
Shipping Size	½ ton per Space

Speed and Range

Tech Level	Speed	Range
8	300	1,000
9–10	350	2,000
11–12	400	3,000
13–14	500	4,000
15+	600	5,000

AFV (Armoured Fighting Vehicle)

A heavy grav vehicle may be designated an AFV at time of construction. This costs 100% of the Base Cost and takes up 10% (round up) of a vehicle's Spaces. It also decreases the grav vehicle's Range by 50%. AFVs use modified rules for armour (see page 29).

Streamlined

Any closed grav vehicle can be designed with a high-speed Streamlined hull. This costs 300% of the Base Cost, loses 10% of the vehicle's Spaces and multiplies Speed by five.

CHASSIS TYPE: LIGHT HELICOPTER

Helicopters use large-diameter rotors, either singly or in pairs, to provide lift and forward thrust. Helicopters usually start to be phased out in most areas by early TL 9, due to the introduction of grav vehicles.

Due to inherent issues in rotary wing aircraft, helicopters have a maximum speed limited by Tech Level that cannot be exceeded.

Examples: Scout helicopter, small passenger helicopter, traffic helicopter.

Light Helicopter Construction

Skill	Flyer (rotor)
Number of Spaces	1–10
Cost per Space	25,000
Structure	1 per 4 Spaces
Hull	1 per 4 Spaces
Agility	+1
Tech Level	5
Shipping Size	1 ton per Space

Take-off Radius is the minimum safe clear space for a helicopter to take-off and land. The listed Maximum Speed can never be exceeded.

Speed and Range

Tech Level	Speed	Max Speed	Range	Take-off Radius
5–6	100	300	1,000	30m
7–8	150	400	2,000	26m
9–10	200	500	3,000	22m
11–12	250	600	4,000	20m
13+	300	700	5,000	18m

Modifications

The following modifications are available for light helicopters.

Extended Operational Environment Range

It is possible to design aircraft with a wider operational environment range. This costs 100% of the Base Cost of the aircraft but allows it to be used within two digits of the UPP size and atmosphere values instead of just one. These aircraft also suffer a –1 to Agility in all environments.

Water Landing Ability

This allows the aircraft the ability to land and take-off from water, usually by adding floats or pontoons. This is a removable option and can be added at any time. It costs 10% of the Base Cost, reduces Speed by 10% and reduces Agility by one.

Folding Wings/Rotors
Aircraft can be designed with folding wings and/or rotors to allow them to be stored more efficiently. Cost is 25% of the Base Cost. The Shipping Size of the aircraft is reduced by 25%.

CHASSIS TYPE: HEAVY HELICOPTER

These aircraft can be massive, straining the limits of their rotors.

Examples: Transport helicopter, search and rescue, gunship.

Heavy Helicopter Construction

Skill	Flyer (rotor)
Number of Spaces	11–80
Cost per Space	50,000
Structure	1 per 3 Spaces
Hull	1 per 3 Spaces
Agility	–1
Tech Level	6
Shipping Size	2 tons per Space

Take-off Radius is the minimum safe clear space for a helicopter to take-off and land. The listed Maximum Speed can never be exceeded.

Speed and Range

Tech Level	Speed	Max Speed	Range	Take-off Radius
6	80	300	1,000	80m
7–8	120	400	2,000	70m
9–10	160	500	3,000	60m
11+	200	600	4,000	50m

Modifications

The following modifications are available for heavy helicopters.

Extended Operational Environment Range
It is possible to design aircraft with a wider operational environment range. This costs 100% of the Base Cost of the aircraft but allows it to be used within two digits of the UPP size and atmosphere values instead of just one. These aircraft also suffer a –1 to Agility in all environments.

Water Landing Ability
This allows the aircraft the ability to land and take-off from water, usually by adding floats or pontoons. This is a removable option and can be added at any time. It costs 10% of the Base Cost, reduces Speed by 10% and reduces Agility by one.

Folding Wings/Rotors
Aircraft can be designed with folding wings and/or rotors to allow them to be stored more efficiently. Cost is 25% of the Base Cost. The Shipping Size of the aircraft is reduced by 25%.

CHASSIS TYPE: AIRSHIP

Utilising a lift envelope containing a huge volume of lighter-than-air gas, such as hydrogen or helium, the airship is most common on medium-technology worlds or cultures that have not developed anti-gravity.

Airship Construction

Skill	Flyer (airship)
Number of Spaces	10–1,000
Cost per Space	20,000
Structure (Gondola)	1 per 5 Spaces
Hull	1 per 5 Spaces
Structure (Envelope)	1 per Space
Agility	–4
Tech Level	4
Shipping Size	1/2 ton per Space + Envelope

Speed and Range

Tech Level	Speed	Range
3	80	2,000
4–5	100	4,000
6–7	120	6,000
8–9	140	8,000
10-11	160	10,000
12+	180	12,000

Airship Envelopes

Envelope Structure measures the amount of damage the lift envelope can sustain before losing integrity. All non-explosive weapons inflict only one point of damage to the envelope for each hit. Automatic weapons inflict damage equal to their Auto Rating.

Envelope Size

The lift envelope of an airship is enormous. The working part of the vehicle, like crew quarters, cockpit, passenger space and cargo, is often partly within the volume of the envelope.

Envelope size is a function of world size, world atmosphere and number of Spaces of the airship.

Multiply world size by number of Spaces and then multiply by 200 for Very Thin atmospheres, 50 for Thin atmospheres, 20 for Standard atmospheres and 10 for Dense atmospheres. This is the size of the lift envelope in displacement tons.

For example, a 100 Space airship on a Size 8 world with a Standard atmosphere would require an envelope of (100 x 8 x 20) 16,000 displacement tons. This is approximately the same size as the ill-fated Hindenburg.

In order to transport an airship, the envelope can be drained and deflated. This reduces its size to only 1% of the inflated size. The envelope in the example above would be 160 tons deflated.

Weathervaning

In high winds, conventional airships are subject to weathervaning, caused by differential pressure on the forward and aft sections of the lift envelope. This can result in a loss of stability and may even damage the airship.

Avoiding drifting and possible damage will require a Flyer (airship) check. Failure causes Structural damage to the envelope, as shown in the following table.

Wind Speed km/h	Agility Penalty	Skill Check/Damage
20–40	–1	—
41–60	–2	Routine, 2
61–80	–3	Hard, 4
81–100	–4	Difficult, 8
101+	–5	Impossible, 16

There is a bonus of +1 per 2 Tech Levels above TL 3 on the check to avoid damage. So +1 at TL 5, +2 at TL 7, +3 at TL 9 and +4 at TL 11

Modifications

The following modifications are available for airships.

Lifting Body Hull

The semi-rigid Lifting Body Hull is a type of hybrid aircraft, using the volume of gas contained to fully offset the weight of the aircraft, with some to spare. The lifting-body shape of the hull provides extra lift. Fully loaded, the lifting body requires an extremely short take-off and landing run and can carry a huge amount of cargo.

This modification costs 300% of Base Cost and doubles Speed. Lifting body designs need twice their internal Spaces (in metres) to take-off and land when fully-loaded. Lifting body designs reduce Weathervaning Agility penalties by two (minimum zero) and add +2 DM to the Flyer (airship) check to avoid damage.

Magnus Effect

A Magnus Effect airship is a sphere, with a gondola hanging underneath. The sphere rotates backwards as the airship moves forward, generating lift. It is a compact design not subject to weathervaning like large, cigar-shaped airships. Magnus Effect airships cost and additional 50% of the Base Cost, have Agility +2 and add 30 kilometres per hour to their Speed.

Cyclo-crane

The Cyclo-crane is designed to carry all of its cargo externally and is little more than a rigid envelope, a cruciform set of airfoils midship and lines extending down from the nose and stern to the slung cargo below. Like the lifting body, the Cyclo-crane's envelope can support the entire weight of the crane. The spinning airfoils provide additional lift to hoist cargo. A Cyclo-crane design can lift an additional 5 Spaces of external cargo (500 kilograms) per internal design Space not used for crew, amenities or internal cargo. Cyclo-cranes cost 50% of the Base Cost and reduce Speed by 90%.

For example, a 10 Space Cyclo-crane, with 2 Spaces used for crew, would be able to lift 40 Spaces (20 tons).

Vacustat (TL 12)

The lift envelope can be replaced with a much smaller rigid shell, which is constructed of a very light-weight but extremely strong, material like a fullerene. Instead of being filled with a gas, the shell contains pockets of pure vacuum, held by the super-strong material of the shell. This virtually eliminates the envelope. The vacustat is only possible at TL 12 and higher. Vacustats are much smaller and faster than other airships. A vacustat costs 400% of the Base Cost, doubles its Speed and the shell size, in displacement tons, is equal to the number of internal Spaces. Unlike other airships, although, the rigid shell of a vacustat is not collapsible for transport.

CHASSIS TYPE: LIGHT AEROPLANE

Light aeroplanes are used for short-range transportation in pre-gravitic societies. They can go places where large aircraft typically cannot and are far cheaper to operate and maintain than helicopters.

Aeroplanes are propeller-driven aircraft, which limits their top speed to a maximum speed of 900 kilometres per hour in a standard atmosphere. In a Thin Atmosphere the top speed is 1,100 kilometres per hour while in a Dense Atmosphere, top speed is limited to 700 kilometres per hour.

At lower Tech Levels power comes from fossil-fuel piston engines and then later gas turbines. More advanced versions see the use of light-weight fuel cells and superdense batteries driving high-torque electric motors. In societies that do not develop grav technology but do develop compact fusion cells, they become the most common source of power for propeller-driven aircraft.

Example: Small Passenger Plane, Early fighter aircraft.

Light Aeroplane Construction

Skill	Flyer (wing)
Number of Spaces	1–10
Cost per Space	20,000
Structure	1 per 4 Spaces
Hull	1 per 4 Spaces
Agility	+1
Tech Level	4
Shipping Size	1 ton per Space

Speed and Range

Tech Level	Speed	Range	Take-off/Landing
4	150	300	400m/500m
5–6	250	600	300m/500m
7–8	350	1,200	300m/400m
9–10	450	2,400	200m/400m
11+	550	4,800	200m/300m

Modifications

The following modifications are available for light aeroplanes.

Tilt Rotor

When the Tilt Rotor modification is added to an aircraft, it gains the ability to takeoff vertically and hover like a helicopter. Once the rotors rotate forward to become propellers, the aircraft flies normally. As the technology becomes more advanced, the prop sizes become smaller, transitioning to ducted fans.

TL	Take-off Radius	Cost	Agility
8–9	32m	+300%	+0
10–11	26m	+300%	+1
12–13	15m	+200%	+2
14+	9m	+200%	+3

STOL

STOL (Short Take-Off and Landing) can be added to any aeroplane or jet and allows the aircraft to take off and land in only 50% of the normal distance. STOL costs 50% of Base Cost.

Extended Operational Environment Range

It is possible to design aircraft with a wider operational environment range. This costs 100% of the Base Cost of the aircraft but allows it to be used within two digits of the UPP size and atmosphere values instead of just one. These aircraft also suffer a –1 to Agility in all environments.

Water Landing Ability

This allows the aircraft the ability to land and take-off from water, usually by adding floats or pontoons. This is a removable option and can be added at any time. It costs 10% of the Base Cost, reduces Speed by 10% and reduces Agility by one.

Folding Wings/Rotors

Aircraft can be designed with folding wings and/or rotors to allow them to be stored more efficiently. Cost is 25% of the Base Cost. The Shipping Size of the aircraft is reduced by 25%.

CHASSIS TYPE: HEAVY AEROPLANE

Heavy aircraft are found in workhorse roles all over known space and at early Tech Levels are used as military bombers and heavy fighters. Even at higher Tech Levels they see a great deal of use due to their low costs and maintenance, although their military life is limited.

Examples: Cargo plane, passenger aircraft.

Heavy Aeroplane Construction

Skill	Flyer (wing)
Number of Spaces	10–200
Cost per Space	30,000
Structure	1 per 3 Spaces
Hull	1 per 3 Spaces
Agility	–1
Tech Level	4
Shipping Size	2 tons per Space

Speed and Range

Tech Level	Speed	Range	Take-off/Landing
4	100	1,000	3,000/1,500
5–6	200	2,000	2,500/1,250
7–8	300	3,000	2,000/1,000
9–10	400	4,000	1,500/750
11+	600	5,000	1,000/500

Modifications

The following modifications are available for heavy aeroplanes.

Tilt Rotor

When the Tilt Rotor modification is added to an aircraft, it gains the ability to takeoff vertically and hover like a helicopter. Once the rotors rotate forward to become propellers, the aircraft flies normally. As the technology becomes more advanced, the prop sizes become smaller, transitioning to ducted fans.

TL	Take-off Radius	Cost	Agility
8–9	88m	+300%	+0
10–11	60m	+300%	+1
12–13	33m	+200%	+2
14+	20m	+200%	+3

STOL

STOL (Short Take-Off and Landing) can be added to any aeroplane or jet and allows the aircraft to take off and land in only 50% of the normal distance. STOL costs 50% of Base Cost .

Extended Operational Environment Range

It is possible to design aircraft with a wider operational environment range. This costs 100% of the Base Cost of the aircraft but allows it to be used within two digits of the UPP size and atmosphere values instead of just one. These aircraft also suffer a –1 to Agility in all environments.

Water Landing Ability

This allows the aircraft the ability to land and take-off from water, usually by adding floats or pontoons. This is a removable option and can be added at any time. It costs 10% of the Base Cost, reduces Speed by 10% and reduces Agility by one.

Folding Wings/Rotors

Aircraft can be designed with folding wings and/or rotors to allow them to be stored more efficiently. Cost is 25% of the Base Cost. The Shipping Size of the aircraft is reduced by 25%.

CHASSIS TYPE: LIGHT JET

Jet aircraft are distinct from other aircraft in the use of a jet engine as propulsion. At lower speeds this may be something like a turbojet or high-bypass turbofan, while higher speeds require something like hydrogen-fuelled waveriders.

Light jets are small and fast and within the budget of wealthy individuals and small corporations to own them.

Examples: Business jet, light fighter jet.

Light Jet Construction

Skill	Flyer (wing)
Number of Spaces	2–20
Cost per Space	100,000
Structure	1 per 4 Spaces
Hull	1 per 4 Spaces
Agility	+1
Tech Level	5
Shipping Size	1 ton per Space

Speed and Range

Tech Level	Speed	Range	Take-off/Landing
5	300	1,000	3,000/1,500
6–8	500	2,000	2,500/1,250
9–11	700	4,000	2,000/1,000
12+	900	7,000	1,500/750

Modifications

The following modifications are available for light jets.

Supersonic

Jets can be designed as supersonic aircraft. This multiples Speed by 4 and costs 300% of the Base Cost.

Tilt Jet

When the Tilt Jet modification is added to an aircraft, it gains the ability to takeoff vertically and hover like a helicopter. Once the jets rotate forward the aircraft flies normally. Tilt-jets are much more compact than tilt-rotors

This is distinct from VTOL aircraft, which are jet aircraft with variable thrust nozzles to achieve VTOL and forward flight.

TL	Cost	Agility
8–9	+300%	+0
10–11	+300%	+1
12–13	+200%	+2
14+	+200%	+3

Take-off Radius is based on that of a helicopter in the same size category (light or heavy) as the aircraft.

VTOL

VTOL (Vertical Take-Off and Landing) is a modification to a jet aircraft to enable vertical take-off and landing by vectored thrust. The use of vectored thrust also makes these aircraft very manoeuvrable. However, VTOL aircraft have a decreased Range when compared to a similar non-VTOL aircraft and are more complex and expensive

VTOL

TL	Cost	Agility	Range
6	+100%	+1	–50%
7–8	+100%	+2	–40%
9–10	+100%	+3	–30%
11–12	+100%	+4	–20%
13+	+100%	+5	–10%

STOL

STOL (Short Take-Off and Landing) can be added to any aeroplane or jet and allows the aircraft to take off and land in only 50% of the normal distance. STOL costs 50% of Base Cost .

Extended Operational Environment Range

It is possible to design aircraft with a wider operational environment range. This costs 100% of the Base Cost of the aircraft but allows it to be used within two digits of the UPP size and atmosphere values instead of just one. These aircraft also suffer a –1 to Agility in all environments.

Water Landing Ability

This allows the aircraft the ability to land and take-off from water, usually by adding floats or pontoons. This is a removable option and can be added at any time. It costs 10% of the Base Cost, reduces Speed by 10% and reduces Agility by one.

Folding Wings/Rotors

Aircraft can be designed with folding wings and/or rotors to allow them to be stored more efficiently. Cost is 25% of the Base Cost. The Shipping Size of the aircraft is reduced by 25%.

CHASSIS TYPE: HEAVY JET

Heavy jets are a very common sight in pre-gravitic societies and dominate the skies in cultures that never develop gravitic technology.

Examples: Heavy attack fighter, cargo aircraft, jumbo jet, super-sonic passenger plane.

Skill	Flyer (wing)
Number of Spaces	20–800
Cost per Space	200,000
Structure	3 per 4 Spaces
Hull	3 per 4 Spaces
Agility	–1
Tech Level	5
Shipping Size	2 ton per Space

Tech Level	Speed	Range	Take-off/Landing
5	300	1,000	5,000/4,000
6–8	400	4,000	4,500/3,500
9–11	600	7,000	4,000/3,000
12+	800	10,000	3,500/2,000

Modifications

The following modifications are available for heavy jets.

Supersonic

Jets can be designed as supersonic aircraft. This multiples Speed by 4 and costs 300% of the Base Cost.

Tilt Jet

When the Tilt Jet modification is added to an aircraft, it gains the ability to takeoff vertically and hover like a helicopter. Once the jets rotate forward the aircraft flies normally. Tilt-jets are much more compact than tilt-rotors.

This is distinct from VTOL aircraft, which are jet aircraft with variable thrust nozzles to achieve VTOL and forward flight.

TL	Cost	Agility
8–9	+300%	+0
10–11	+300%	+1
12–13	+200%	+2
14+	+200%	+3

VTOL

VTOL (Vertical Take-Off and Landing) is a modification to a jet aircraft to enable vertical take-off and landing by vectored thrust. The use of vectored thrust also makes these aircraft very manoeuvrable. However, VTOL aircraft have a decreased Range when compared to a similar non-VTOL aircraft and are more complex and expensive.

TL	Cost	Agility	Range
6	+100%	+1	–50%
7–8	+100%	+2	–40%
9–10	+100%	+3	–30%
11–12	+100%	+4	–20%
13+	+100%	+5	–10%

Jet Engines

Jet engines evolve as the technology behind them changes and the following is a good guide as to what is possible.

TL	Engine Type
5	Turbojet, Ramjet
6	High Bypass Turbofan
7	Scramjet
8	Air-Breathing Rocket
9	Waverider
10	MHD Electrojet

STOL

STOL (Short Take-Off and Landing) can be added to any aeroplane or jet and allows the aircraft to take off and land in only 50% of the normal distance. STOL costs 50% of Base Cost .

Extended Operational Environment Range

It is possible to design aircraft with a wider operational environment range. This costs 100% of the Base Cost of the aircraft but allows it to be used within two digits of the UPP size and atmosphere values instead of just one. These aircraft also suffer a –1 to Agility in all environments.

Water Landing Ability

This allows the aircraft the ability to land and take-off from water, usually by adding floats or pontoons. This is a removable option and can be added at any time. It costs 10% of the Base Cost, reduces Speed by 10% and reduces Agility by one.

Folding Wings/Rotors

Aircraft can be designed with folding wings and/or rotors to allow them to be stored more efficiently. Cost is 25% of the Base Cost. The Shipping Size of the aircraft is reduced by 25%.

CHASSIS TYPE: LIGHT AERODYNE

An aerodyne is a type of wingless VTOL jet aircraft, which stays aloft solely through the power of its engine(s). In societies that develop gravitic technologies, it sees very little use. They have no aerodynamic surfaces at all, with all lift and control through the array of vectored thrust nozzles around the aircraft.

Examples: Urban police vehicle, taxi, light attack aircraft.

Light Aerodyne Construction

Skill	Flyer (rotor)
Number of Spaces	2–10
Cost per Space	30,000
Structure	1 per 4 Spaces
Hull	1 per 4 Spaces
Agility	+2
Tech Level	7
Shipping Size	1 ton per Space

Speed and Range

Tech Level	Speed	Range
7	200	300
8–9	300	450
10–11	400	600
12+	500	750

Modifications

The following modifications are available for light aerodynes.

Extended Operational Environment Range

It is possible to design aircraft with a wider operational environment range. For aerodynes this costs 200% of the Base Cost of the aircraft but allows it to be used within two digits of the UPP size and atmosphere values instead of just one. Aerodynes do not suffer Agility penalties for the Extended Operational Range Modification.

CHASSIS TYPE: HEAVY AERODYNE

Heavy aerodynes are comparatively rare but the largest make for an impressive sight as the come in to land. Like their smaller cousins, they keep aloft solely through the power of their engines and have no aerodynamic lift or control surfaces.

Examples: Search and rescue, military transport, research aircraft.

Heavy Aerodyne Construction

Skill	Flyer (aerodyne)
Number of Spaces	10–50
Cost per Space	60,000
Structure	1 per 3 Space
Hull	1 per 3 Space
Agility	+1
Tech Level	7
Shipping Size	1 ton per Space

Speed and Range

Tech Level	Speed	Range
7	200	400
8–9	300	600
10–11	400	800
12+	500	1,000

Modifications

The following modifications are available for heavy aerodynes.

Extended Operational Environment Range

It is possible to design aircraft with a wider operational environment range. For aerodynes this costs 200% of the Base Cost of the aircraft but allows it to be used within two digits of the UPP size and atmosphere values instead of just one. Aerodynes do not suffer Agility penalties for the Extended Operational Range Modification.

CHASSIS TYPE: LIGHT WALKER

Walking vehicles use computer-controlled legs to negotiate rough or uneven terrain. While not controlled with an exoskeleton (as with powered armour), a walking vehicle can be fitted with an exocontrol system or even a neural link system to provide finer control and greater Agility. Exo systems can only be used with two-legged walkers while a neural link can be used with any number of legs.

Examples: Industrial load lifter, scout walker.

Light Walker Construction

Skill	Drive (walker)
Number of Spaces	2–10
Cost per Space	10,000
Structure	1 per 4 Spaces
Hull	1 per 4 Spaces
Agility	+1
Tech Level	8
Shipping Size	1 ton per Space

Speed and Range

Tech Level	Speed	Range
8	50	150
9–10	100	300
11–12	150	450
13–14	200	600
15+	250	750

Legs

All walkers are assumed to have two legs. The addition of extra legs improves their cross-country mobility and stability, at greater cost. A walker can have up to eight legs, although four to six is more common. Legs have to be added in pairs.

Each extra pair of legs costs 50% of the Base Cost of the vehicle and consumes 10% of available Spaces (minimum of 1 Space). Each set of additional legs add a +1 DM for manoeuvres on Rough or Uneven ground. Having four of more legs also grants a +1 DM on To Hit rolls conducted by that vehicles weapons.

Walker Height

Two-legged walkers are one and a half metres tall per point of Hull. So a 10 Space walker, with 3 points of Hull, is four and a half metres tall. Each additional set of legs subtracts 1 metre from that height, with a minimum height equal to the Hull Rating.

CHASSIS TYPE: HEAVY WALKER

Heavy walkers are often built as technological experiments and tend to be rare, as a very specific purpose is usually required to prefer a walker of this size over another vehicle.

Examples: WarMek, All terrain attack transports, gladiatorial bot.

Heavy Walker Construction

Skill	Drive (walker)
Number of Spaces	10–50
Cost per Space	20,000
Structure	1 per 3 Spaces
Hull	1 per 3 Spaces
Agility	–1
Tech Level	10
Shipping Size	1.5 tons per Space

Speed and Range

Tech Level	Speed	Range
8	50	150
9–10	100	300
11–12	150	450
13–14	200	600
15+	250	750

Legs

All walkers are assumed to have two legs. The addition of extra legs improves their cross-country mobility and stability, at greater cost. A walker can have up to eight legs, although four to six is more common. Legs have to be added in pairs.

Each extra pair of legs costs 50% of the Base Cost of the vehicle and consumes 10% of available Spaces (minimum of 1 Space)

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Walker Height
Two-legged walkers are one and a half metres tall per point of Hull. So a 10 Space walker, with 3 points of Hull, is four and a half metres tall. Each additional set of legs subtracts 1 metre from that height, with a minimum height equal to the Hull Rating.

A 50 Space Walker, for example, with 17 Hull, would be 25.5 metres tall.

CHASSIS TYPE: BOAT
A common sight on rivers and in harbours on any civilised world, small boats form a lifeline for many communities and make up the livelihoods of those who live on shores.

Examples: Small yacht, fishing boat, speed boat.

Skill	Seafarer (motorboats)
Number of Spaces	1–20
Cost per Space	2,000
Structure	1 per 3 Spaces
Hull	1 per 3 Spaces
Agility	0
Tech Level	4
Shipping Size	½ ton per Space

Tech Level	Speed	Range
4–5	40	200
6–8	60	400
9–11	90	800
12+	120	1,200

Modifications
The following modifications are available for boats. Only one of these may be chosen for a boat.

Hydrofoil
Adding Hydrofoils to a surface vessel triples its Speed. The Hydrofoil will rise up out of the water on its foils at the vehicle's normal top Speed and can then go up to three times faster. Cost is 300% of Base Cost.

Wave-piercing Hull
The Wave-piercing Hull puts the payload on streamlined pillars above the water that connect to power/fuel modules that run underwater. Interface friction is much reduced, allowing the Wave-piercing Hull to be much more efficient and stable. This increases its Speed by 10% and Range by 50%. It uses 5% of a vehicle's Spaces (round up) and costs 200% of the Base Cost.

Multi-hull
A catamaran or trimaran hull increases speed and stability. The cost is 50% of the Base Cost. Multi-hull vessels grant a +1 DM to checks made to land aircraft and other vehicles upon them. They also negate up to a –2 penalty to weapon fire due to Speed and/or rough seas.

CHASSIS TYPE: SMALL SHIP
Tiny specs on the surface of immense oceans, small ships are nonetheless extremely hardy and can cross the distance between continents with ease.

Example: Private yacht, deep-sea trawler, landing craft.

Small Ship Construction

Skill	Seafarer (ocean ships)
Number of Spaces	20–200
Cost per Space	4,000
Structure	1 per 2 Spaces
Hull	1 per 2 Spaces
Agility	–3
Tech Level	3
Shipping Size	½ ton per Space

Speed and Range

Tech Level	Speed	Range
3–4	20	1,000
5–6	40	2,000
7–8	60	3,000
9–10	80	4,000
11–12	100	5,000

Modifications
The following modifications are available for small ships. Only one of these may be chosen for a ship.

Hydrofoil
Adding Hydrofoils to a surface vessel triples its Speed. The Hydrofoil will rise up out of the water on its foils at the vehicle's normal top Speed and can then go up to three times faster. Cost is 300% of Base Cost.

Wave-piercing Hull
The Wave-piercing Hull puts the payload on streamlined pillars above the water that connect to power/fuel modules that run underwater. Interface friction is much reduced, allowing the Wave-piercing Hull to be much more efficient and stable. This increases its Speed by 10% and Range by 50%. It uses 5% of a vehicle's Spaces (round up) and costs 200% of the Base Cost.

Multi-hull

A catamaran or trimaran hull increases speed and stability. The cost is 50% of the Base Cost. Multi-hull vessels grant a +1 DM to checks made to land aircraft and other vehicles upon them. They also negate up to a –2 penalty to weapon fire due to Speed and/or rough seas.

CHASSIS TYPE: LARGE SHIP

Large Ships are among the biggest types of vehicle to be commonly encountered planetside and are responsible for hauling goods across the sea lanes and providing military assistance form the water.

Examples: Naval frigate, destroyer, assault ship, cargo ship.

Large Ship Construction

Skill	Seafarer (ocean ships)
Number of Spaces	200–1,000
Cost per Space	8,000
Structure	1 per 2 Spaces
Hull	1 per 2 Spaces
Agility	–6
Tech Level	3
Shipping Size	1 ton per Space

Speed and Range

Tech Level	Speed	Range
3–4	20	2,000
5–6	40	4,000
7–8	60	6,000
9–10	80	8,000
11–12	100	10,000

Modifications

The following modifications are available for large ships. Only one of these may be chosen for a ship.

Hydrofoil

Adding Hydrofoils to a surface vessel triples its Speed. The Hydrofoil will rise up out of the water on its foils at the vehicle's normal top Speed and can then go up to three times faster. Cost is 300% of Base Cost.

Wave-piercing Hull

The Wave-piercing Hull puts the payload on streamlined pillars above the water that connect to power/fuel modules that run underwater. Interface friction is much reduced, allowing the Wave-piercing Hull to be much more efficient and stable. This increases its Speed by 10% and Range by 50%. It uses 5% of a vehicle's Spaces (round up) and costs 200% of the Base Cost.

Multi-hull

A catamaran or trimaran hull increases speed and stability. The cost is 50% of the Base Cost. Multi-hull vessels grant a +1 DM to checks made to land aircraft and other vehicles upon them. They also negate up to a –2 penalty to weapon fire due to Speed and/or rough seas.

CHASSIS TYPE: LIGHT SUBMERSIBLE

Commonly used for recreation and research, small submersibles can be expensive and slow but fulfil obvious functions that other water-going craft cannot.

Examples: Sport submersible, research submersible, smuggler's submersible.

Skill	Seafarer (submarine)
Number of Spaces	1–10
Cost per Space	50,000
Structure	1 per 2 Spaces
Hull	1 per 2 Spaces
Agility	–2
Tech Level	4
Shipping Size	2 tons per Space

Tech Level	Speed	Range	Safe Dive Depth	Crush Depth	Life Support
4–5	15	50	50	150	50
6–8	25	100	200	600	100
9–11	60	150	600	1,800	200
12–14	80	200	2,000	6,000	400
15+	120	250	4,000	12,000	Indefinite

In addition to the information used by other vehicles, submersibles are rated by their Safe Dive Depth and Crush Depth, which are listed in metres and derived from Tech Level. Submersible Safe Dive and Crush Depth scores are calculated for a size 8 world, like Earth. For each point of size difference, up or down, add or subtract (respectively) 10% from the Safe Dive and Crush Depth scores.

Life Support lists the number of days a submersible can support its crew without resurfacing for air.

An Open light submersible is a vehicle like a dive sled, un-pressurised, with a place for divers and air connections for long-distance travel.

Modifications
The following modifications are available for light submersibles.

SUPERCAVITATING DRIVE
The Supercavitating Drive consists of a blower to surround the submersible with a bubble of atmosphere and a rocket to propel it. Supercavitating Drives can power a submersible to up to 1,000 kilometres per hour under water, depending on Tech Level.

Increased Safe Depth/Crush Depth
Each 50% increase in both Safe Depth/Crush Depth costs 100% of the Base Cost of the submersible.

All submersibles already have the Life Support and Hostile Environment Protection options. Extended or Advanced Life Support must be purchased separately.

CHASSIS TYPE: HEAVY SUBMERSIBLE
Larger submersibles are sometimes used to carry cargo across seas that are too dangerous on the surface but usually have military applications, where their stealth and inaccessibility becomes their main defence.

Examples: Attack submersible, transport submersible, missile submersible

Skill	Seafarer (submarine)
Number of Spaces	11–500
Cost per Space	100,000
Structure	1 per Space
Hull	1 per Space
Agility	–4
Tech Level	4
Shipping Size	3 tons per Space

Tech Level	Speed	Range	Safe Dive Depth	Crush Depth	Life Support
4–5	10	500	50	150	50
6–8	20	1,000	200	600	200
9–11	50	1,500	600	1,800	500
12–14	70	2,000	2,000	6,000	1,200
15+	100	2,500	4,000	12,000	Indefinite

In addition to the information used by other vehicles, submersibles are rated by their Safe Dive Depth and Crush Depth, which are derived from Tech Level. Submersible Safe Dive and Crush Depth scores are calculated for a size 8 world, like Earth. For each point of size difference, up or down, add or subtract (respectively) 10% from the Safe Dive and Crush Depth scores.

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Increased Safe Depth/Crush Depth
Each 50% increase in both Safe Depth/Crush Depth costs 100% of the Base Cost of the submersible.

All submersibles already have the Life Support and Hostile Environment Protection options. Extended or Advanced Life Support must be purchased separately.

Supercaviting Drive

TL	% of Spaces Used	Min # of Spaces	Speed	Range	Cost
8–9	40%	10	700	700	800% of Base
10–11	30%	7	800	1,600	600% of Base
12–13	20%	5	900	1,800	400% of Base
14+	10%	2	1,000	2,000	200% of Base

ADDING ARMOUR AND WEAPONS

Once you have created your vehicle and added a few chassis-specific modifications, it is time to tool up your new creation! All vehicles have a small amount of armour, due to their construction but more can be added and then weapons mounted if desired.

BASE ARMOUR RATINGS

All vehicles have a Base Armour Rating based on their Tech Level. This is the Armour the vehicle comes with as standard, as part of its construction.

While the exact material used for the armour is not important for the purposes of this design system, some options are given for descriptive purposes.

Adding Armour to Vehicles

It costs 10% of the Base Cost of a vehicle to increase its Armour by an amount equal to its Base Armour Rating.

The maximum Armour score for a vehicle is five times its Base Armour Rating.

For every increase in Armour equal to the Base Armour Rating, the Speed of the vehicle is reduced by 10 kilometres per hour for ground and sea vehicles, 25 kilometres per hour for hover craft and grav vehicles and 100 kilometres per hour for all aircraft, including helicopters and aerodynes. For sailing vehicles, speed is reduced by 10% for every increase.

For example, a TL 12, 10 Space light grav vehicle costs Cr. 500,000 and its Base Armour Rating is 5. By paying 10% of the Base Cost (Cr. 50,000), the Armour is increased to 10. Speed would be reduced by 25 kilometres per hour

A Tech Level 2 sailing ship, however, has a Base Armour Rating of 2. To increase that Armour to 10 (2 x 5), would cost 40% (10% x 4) of the Base Cost. Speed is likewise decreased by 40%.

Retro-fitting Armour

If Armour is added after construction, each increase in Armour equal to the Base Armour Rating for the Tech Level of the world doing the retrofitting costs an additional 100% of the Base Cost.

Each increase in armour equal to the Base Armour Rating, the Speed of the vehicle is reduced by 20 kilometres per hour for ground and sea vehicles, 50 kilometres per hour for hover craft and grav vehicles and 200 kilometres per hour for all aircraft, including helicopters and aerodynes. Agility is also decreased by one for each increase equal to the base armour rating.

The maximum Armour added in this way can be no more than three times the Base Armour Rating.

Armoured Fighting Vehicles

AFVs (Armoured Fighting Vehicles) are designed a little differently. As they are designed for combat, their chassis incorporates composite armours, cavity armour, sloped hulls and whatever else is appropriate for their Tech Level.

The Base Armour Rating for AFVs is doubled and they can have a maximum amount of Armour equal to 15 times their Base Armour Rating. AFVs reduce their top speed by five kilometres per hour per increase for ground vehicles, 15 kilometres per hour per increase for hover craft and 20 kilometres per hour per increase for grav vehicles.

For example, the Base Armour Rating for a TL14 vehicle is 5. If it is designed instead as an AFV, then the Armour becomes 10. Doubling the Armour to 20 costs 10% of the Base Cost. If it is not designed as an AFV, then the Base Armour Rating remains at 5 and doubling it to 10 likewise costs 10% of the Base Cost. Increasing a non-AFV to 20 points of Armour would instead cost 30% of the Base Cost.

Tech Level	Base Armour Rating	Typical Material	Alternative Material
0–2	1	Wood	—
3–5	2	Iron	Steel
6–8	3	Steel	Composites
9–11	4	Crystaliron Steel	Synthetics, fullerenes
12–14	5	Superdense	Advanced Composites, cast diamond
15–17	6	Bonded Superdense	Cerametals, spun diamond
18+	7	Coherent Superdense	—

Armour Allocation (Optional Rule)

This rule is applied in the *Hammer's Slammers* and *2300AD* settings but is optional in others.

AFVs can allocate Armour to separate locations. There are six separate locations: Front, Rear, Right, Left, Top and Bottom.

Vehicles with turrets have additional faces of Turret Front and Turret Side/Rear.

Armour can be reallocated from one location to another, with the only caveat that Right and Left Armour have to be equal. Any location can have its Armour changed by no more than +/– 50% So, a hovertank created with 100 Armour could increase the Front Armour to 150 by reducing the rear Armour to 75 and Bottom Armour to 75.

Turrets will either have the Base Armour Rating for both locations or else the Turret Front will equal the Front Armour and Turret Side/Rear will equal the Side Armour scores.

The TL maximum for Base Armour Ratings does not apply to Armour allocated in this way.

Weapon Mounts

Weapons cannot just be plastered all over a vehicle. Each must have a specific mounting point.

A variety of weapons commonly used on vehicles across all Tech Levels is given at the end of this chapter for your convenience.

However, the *Central Supply Catalogue* is a rich source of weapons that could be mounted on a vehicle and many more appear in other *Traveller* supplements. To use other weaponry with this design system, simply divide a weapon's Mass by 250 and round up to determine the number of Spaces it requires.

Fixed Mount

A fixed mount has no cost and must simply be noted at time of construction. The weapon cannot traverse in this mount and will always fire in a straight line from its mounting point. Normally this is straight ahead but fixed mounts can also be created for weapons to fire to the rear, sides, up or down.

A fixed mount can be made to be modular, allowing a suitably equipped garage or hangar to change weapons according to mission profiles. A modular fixed mount will cost Cr. 5,000 per Space of the largest weapon that can be mounted upon it.

Pintle Mount and Ring Mount

A pintle mount is a simple post with a weapon fixed upon it, often mounted in what would otherwise be a cargo area. Ring mounts are rings around hatches that can hold a weapon and pivot around.

Ring mounts and Pintle mounts can both hold weapons up to half a Space in size. Neither type is stabilised or offers any sort of fire control.

Both pintle and ring mounts can be equipped with gun shields, which provide protection equal to 2 x the Tech Level of the vehicle, in the direction the weapon is facing. So a TL 12 vehicle would have an Armour 24 gunshield

Weapon mounts do not add any Spaces to a vehicle. Weapons in a mount still count against the available Spaces in a vehicle. A weapon mount itself doesn't take up any extra space, although there has to be Space for the crewmember at the mount.

A vehicle can have one Ring or Pintle mount per 5 points of Hull Value, with minimum of one.

Pintle mounts cost Cr. 500, while ring mounts are Cr. 750. Gunshields for both cost Cr. 200 per point of armour.

Powered Pintle Mount and Ring Mount (TL7)

Pintle and ring mounts are also available in powered versions at TL7, which can hold up to one Space worth of weapons and are stabilised so that there is no penalty to fire while moving.

Powered versions cost Cr. 1,500 for the pintle mount and Cr. 2,150 for the ring mount. A Gunshield can be added to either as normal.

Gun Ports

Gun ports are mounts for small arms. Gun ports cost Cr. 250 each and require no Spaces. Gun Ports are used at Personal Weapon Ranges only and do not benefit from stabilisation or fire control.

Missile Bay/Bomb Bay/Torpedo Bay

Bays are internal structures designed to hold and release missiles, torpedoes and deadfall ordnance. In most vehicles, a missile bay is dedicated to a specific weapon and cannot be used for anything else. On aircraft and grav vehicles, the bay is more generic, able to hold whatever types of weapons desired up to the available Space.

Dedicated bays that carry just one type of weapon cost Cr. 5,000 per Space of weapon that they are designed to hold. Rate-of-fire is equal to the number of weapons in the bay and bays can be reloaded. So, for example, an attack submersible with a six tube torpedo bay could fire up to six torpedoes in one round.

General purpose bays able to hold different types of weapon cost Cr. 10,000 per Space of weapon they are designed to hold. They can launch one missile or torpedo per round or drop up to half their Space capacity in bombs.

Hard Points

Hard points are external mounting racks for bombs, missiles and other weapons (such as guns mounted in pods). Weapons on hard points are not protected by armour and diminish the effectiveness of the vehicle's Stealth.

The maximum amount of external ordnance that can be carried is equal to half of the vehicle's Spaces. The number of hard points and capacity per hard point has to be declared at time of construction. Weapons on external hard points lower the vehicle's Stealth by one class (Class I goes to no Stealth, class II goes to class I).

Hard points cost Cr. 5,000 per Space of weapon that can be mounted.

Turrets

Turrets are pods that can traverse through 360°, giving them a free angle of fire at any attacker.

A small turret is only big enough to fit the weapons installed within it and is remotely controlled. Large turrets hold their installed weapons along with one or two operators.

Small turrets cost Cr. 25,000 per Space of installed weaponry, plus the cost of the actual weapon. Small turrets can only hold up to five Spaces worth of weapons at TL 5, 6 Spaces at TL 7 and 7 Spaces at TL 9. At TI 10 and higher they can hold 10 Spaces of weapons. A small turret takes up one additional Space itself.

Large Turrets cost Cr. 50,000 per Space of installed weaponry, plus Cr. 20,000 per crew member. They take up 4 Spaces plus the number of Spaces used by weapons, along with 2 Spaces for every crew member.

All turrets can be made into pop-up turrets. This doubles their cost and Space requirements and gives a –2 penalty to any Recon or Investigate checks to determine if a vehicle is armed.

Pop-up Turrets

A turret can be concealed within a vehicle until required. A pop-up turret can be small or large, requires a number of Spaces equal to the size of the turret and costs Cr. 10,000 per Space, in addition to the price of the turret.

Increased Ammunition

A vehicle can carry extra ammunition for its weapons.

The extra ammunition itself must be purchased separately but the vehicle itself need only set aside one Space for every *extra* 'magazine/clip' of ammunition.

Improved Fire Control

Improved Fire Control can represent anything from gyro-stabilisation to laser-rangefinders and enhanced targeting sensors. Improved Fire Control provides a DM to hit when attacking with the weapon.

Fire Control DM	Cost	Minimum TL
+1	Cr. 10,000	6
+2	Cr. 25,000	8
+3	Cr. 50,000	10
+4	Cr. 100,000	12

Weapons

Weapon	TL	Cost	Damage	Auto	Spaces	Range	Ammo /Space
120mm Cannon	8	Cr. 400,000	10d6 Super-AP	No	10	Distant	30
12mm Light Gauss Cannon	12	MCr. 3	10d6 Mega-AP	No	4	Very Distant	300
22mm Heavy Gauss Cannon	12	MCr. 10	14d6 Mega-AP	No	18	Very Distant	100
35mm Rail Gun	9	Cr. 100,000	12d6 Super-AP	No	28	Very Distant	200
60mm Antitank Gun	6	Cr. 56,000	7d6 Super-AP	No	4	Distant	80
70mm Strafing Rocket Pod (7pack)	6	Cr. 4,000	8d6	14	1.5	Very Long	7
75mm Cannon	7	Cr. 160,000	8d6 Super-AP	No	6	Distant	40
9lb Cannon	3	Cr. 2,600	9d6	No	2	Very Long	60
Advanced Flamethrower	8	Cr. 2,500	3d6+6 Flame	N/A	½	Medium	20
Advanced Light Autocannon	10	Cr. 10,000	6d6+4 SAP	8	1	Very Long	5,000
Advanced Support Weapon	10	Cr. 2,750	4d6SAP	4	½	Rifle	10,000

Artillery Rocket Pod	5	Cr. 52,000	16d6	12	1.5	Distant	12
Blue-green Laser Cannon	10	MCr. 1.2	7d6	No	1	Very Long	N/A
Disposable MLR Pod	10	Cr. 15,000	16d6	6	1	Distant	6
Fusion Z Gun	14	MCr. 8	28d6	No	16	Distant	N/A
Gatling Laser	8	Cr. 750,000	6d6	2	8	Distant	N/A
Gatling Laser	12	MCr. 1.25	6d6	6	12	Distant	N/A
Heavy Autocannon	6	Cr. 95,000	8d6 SAP	No	3	Distant	3,000
Heavy Bomb	5	Cr. 4,000	14d6 AP	No	½	Very Distant	
Heavy Hypervelocity Cannon	13	MCr. 26	18d6 Ultimate AP	No	72	Very Distant	100
Heavy Machinegun	5	Cr. 10,000	5d6 AP	6	1	Rifle	7,000
Heavy Rotary Machinegun	8	Cr. 25,000	5d6 AP	10	1.5	Very Long	7,000
Heavy Torpedo	6	Cr. 2,200	14d6	No	8	Very Distant	N/A
Hypervelocity Orbital Defence	14	MCr. 40	20d6 Ultimate AP	No	140	Orbital	50
Improved Flamethrower	6	Cr. 1,400	4d6 Flame	N/A	½	Medium	20
Laser Cannon	9	MCr. 1	8d6	No	24	Distant	N/A
Light Autocannon	6	Cr. 7,500	6d6 SAP	6	1	Very Long	5,000
Light Hypervelocity Gun	13	MCr. 14	16d6 Ultimate AP	No	40	Very Distant	200
Light Machinegun	5	Cr. 3,000	3d6 SAP	6	½	Rifle	12,000
Light Rotary Autocannon	7	Cr. 65,000	6d6 SAP	10	1	Very Long	5,000
Light Tac Missile (Anti-Air)	9	Cr. 3,000	9d6	No	½	Extreme	
Light Tac Missile (Anti-Armour)	9	Cr. 4,000	9d6 Super AP	No	½	Very Distant	
Light Tac Missile (Anti-Personnel)	9	Cr. 1,800	9d6	No	½	Very Distant	
Medium Bomb	4	Cr. 1,200	12d6	No	½	Very Distant	
Medium Machinegun	6	Cr. 2,500	3d6+3 SAP	6	½	Rifle	10,000
Medium Missile	7	Cr. 2,000	8d6+4 AP	No	1	Extreme	
Medium Mortar	5	Cr. 5,000	4d6	No	½	Distant	10
Medium Rotary Machinegun	6	Cr. 5,000	3d6	10	½	Rifle	10,000
Meson Accelerator	14	MCr. 20	18d6	No	240	Very Distant	N/A
Plasma A Gun	10	MCr. 1	14d6 Destructive	No	16	Very Long	N/A
Plasma Missile	12	Cr. 3,200	8d6 Mega-AP	No	½	Extreme	
RF Plasma B Gun	12	MCr. 1.5	14d6 Ultra Destructive	4	16	Distant	N/A
Smart Torpedo	8	Cr. 2,800	12d6	No	5	Very Distant	N/A
Sonic Cannon	10	Cr. 20,000	Stun	No	5	Long	N/A
Super Heavy Bomb	6	Cr. 10,000	16d6 Super-AP	No	6	Very Distant	
VRF Gauss Gun	12	Cr. 200,000	5d6 AP	12	4	Distant	20,000

120mm cannon: A large-calibre gun that arms many mid-tech heavy tanks and armoured vehicles.

35mm Rail Gun: A powerful vehicle-mounted cannon using relatively crude electromagnetic propulsion to fling a projectile in a flat trajectory.

60mm Anti-tank Gun: A towed antitank gun intended for the direct-fire role, it can be found mounted in light tank hunters of early Tech Levels.

75mm cannon: A light vehicle-mounted direct-fire weapon, often used in light armoured vehicles and scouts. At TL9 a rapid-fire version is available for double the price, with an Auto score of 2.

9 lb. Cannon: A simple smoothbore black-powder cannon capable of delivering solid ball shot out to a distance of a kilometre without any real degree of accuracy.

Advanced Flamethrower: Light and efficient, this is the most advanced hydrocarbon-spraying flame weapon available. It uses jellied hydrocarbon fuel as ammunition, loaded with flakes of white phosphorous and other flammable metals.

Advanced Machineguns: Firing the same 7mm ammunition as an ACR, the AMG is a more refined representative of a medium machinegun.

Artillery Rocket Pod: This pod contains 12 large rockets with high-explosive warheads. Alternative warheads are sometimes used, including incendiaries and chemical weapons. Rockets can be fired one at a time or 'rippled' off in a rolling salvo.

Blue-Green Laser Cannon: A laser cannon specifically tuned to reduce 'blooming' underwater. When fired out of water, it has the listed range. When fired in water, range is reduced to Long.

Bombs: Deadfall ordnance is normally unpowered and unguided, although at higher Tech Levels (TL 8+) it can be guided. Guided bombs are twice the price and have a +2 DM to hit.

Fusion Z Gun: One of the most powerful weapons ever made, the fusion Z gun can blast through just about any armour or material. Aside from its more limited range, it is fully the equal of any starship weapon. Damage is full in a 10 metre radius, halved within 20 metres.

Gatling Laser: At early Tech Levels this multi-barrelled weapon cycles through the various barrels simply to avoid over-heating. At higher Tech Levels, it becomes a high-rate-of-fire automatic weapon.

Gauss Cannons: These are advanced coilguns that accelerate a dart of dense metal to extremely high speeds.

Heavy Autocannon: A heavy (50–60mm) rapid-fire belt- or cassette-fed weapon capable of engaging light armoured vehicles and aircraft.

Heavy Machinegun: These heavy machineguns are just shy of being light cannons and are usually found in calibres from 12mm–15mm.

Heavy Rotary Machinegun: These three barrelled guns fire heavy rounds at a Very high rate of fire. Although large and bulky, they are often used in aircraft and in anti-aircraft roles.

Heavy Torpedo: Large and deadly, heavy torpedoes carry Very large warheads.

Hypervelocity Guns: Using an even more advanced version of the electromagnetic coilgun, the hypervelocity cannon accelerates dense cobalt-tungsten darts to astronomical velocities.

Improved Flamethrower: More efficient than earlier flame weapons but still hazardous to use. It sprays a stream of jellied hydrocarbon fuel that sticks and burns to practically everything. It will not stick to vehicles or battle dress with an Insidious Atmosphere Hull.

Laser Cannon: A single barrel laser main gun for a vehicle mount, the laser cannon is the first really effective vehicle energy weapon.

Light Autocannon: This covers 20–25mm single-barrelled conventional autocannons.

Light Machinegun: A typical light machinegun in 5mm–6mm calibre.

Medium Machinegun: One of the more common infantry support weapons, the medium machinegun is usually found in 7mm–9mm calibre rounds.

Medium Mortar: This is a man-portable or vehicle-mounted mortar of 70–90mm calibre. In a vehicle it requires a crew of two and is capable of delivering a HE/fragmentation bomb or similar Very light artillery payload out to about three kilometres, although without a great degree of accuracy. Burst radius is nine metres.

Medium Rotary Machinegun: This machinegun fires medium calibre rounds from six rotating barrels at an extremely high rate of fire. Often used in aircraft for ground attack roles.

Medium Rotary Machineguns: A multi-barrelled machinegun firing ammunition in the 7mm–9mm range.

Meson Gun: A battlefield meson gun accelerates particles that do not interact with matter until they decay, allowing the weapon to effectively shoot through any obstruction so long as the target's location is known. A meson gun delivers 18D6 damage in a 10 metre radius and 9d6 damage in a 20 metre radius. All armour the target may have is ignored since a 'hit' implies that the accelerator's particles have decayed within the target.

Missiles and Tac Missiles: Tac (for 'tactical') missiles are relatively small weapons designed to be carried by infantry and light vehicles. They are cheap, easy to carry and use and Very common. They are homing weapons and can be thrown off by countermeasures or simply shot down by an anti-missile system. All missiles have a +2 DM to hit.

Multiple Launch Rocket Pod, Disposable: A lightweight pod containing six 240mm inertial-guided bombardment rockets. Pods of this sort are designed to be placed by engineers or airdropped across a potential combat zone, to be called upon where necessary.

Plasma A Gun: First introduced at TL 10, the plasma A gun is the first practical battlefield high energy weapon. At TL 10, a vehicle mounting a plasma A gun cannot move and fire in the same round and grav vehicles must land before firing. At TL 11 it becomes a rapid-fire weapon that no longer has energy constraints, so a TL 11 vehicle with a plasma A gun can move and fire. Full damage is delivered to all targets within a two and a half metre radius, with half damage to targets within five metres.

Plasma B Gun: More powerful than the plasma A gun. At TL 11, vehicles equipped with the plasma B gun cannot move and fire in the same round and grav vehicles must land. At TL 12 it becomes a rapid-fire weapon that no longer has the energy constraints, so a TL 12 vehicle with a plasma B gun can move and fire. Damage is full within a four metre radius, with half damage to targets within eight metres.

Smart Torpedo: The smart torpedo is an active-homing weapon that contains its own sonar array. It receives a +2 DM to hit.

Sonic Cannon: A large-barrelled stunner weapon designed for crowd control. It is also an effective military weapon against unprotected opponents. Functions as a stunner with the listed Auto score and an area of effect of four square metres.

Strafing Rocket Pod: A small pod containing seven small rockets with high-explosive warheads. They can be fired singly or 'rippled-fired' all at once. A common weapon for ground-support aircraft.

VRF Gauss Gun: Although firing the same 5.5mm needle round as other heavy gauss weapons, the VRF gauss gun has an extremely high muzzle velocity combined with a rate of fire considerably higher than any rotary cannon. It is the ultimate slug-throwing machinegun.

Anti-Armour Effects

As with small arms, some artillery weapons perform better against armour than others. Area effects such as fragmentation from a shell burst usually have no intrinsic armour-piercing capability. Anti-Armour munitions can have several possible effects:

Semi Armour-Piercing (SAP) – This effect is uncommon with artillery weapons. The round ignores a number of points of armour equal to half the number of dice it rolls for damage, rounding down. Example: a weapon doing 9d6 SAP damage ignores 4 points of armour. If the target has less armour than this value, the excess is wasted.

Armour-Piercing (Full-AP or AP) – The round ignores a number of points of armour equal to the number of dice it rolls for damage. Example: a weapon doing 9d6 AP damage ignores 9 points of armour. If the target has less armour than this value, the excess is wasted.

Super Armour-Piercing (Super-AP) – The round ignores a number of points of armour equal to twice the number of dice it rolls for damage. Example: a weapon doing 9d6 AP damage ignores 18 points of armour. If the target has less armour than this value, the excess is wasted.

Ultra Armour-Piercing (Ultra-AP) – The round ignores a number of points of armour equal to three times the number of dice it rolls for damage. Example: a weapon doing 9d6 AP damage ignores 27 points of armour. If the target has less armour than this value, the excess is wasted.

Mega Armour-Piercing (Mega-AP) – The round ignores a number of points of armour equal to four times the number of dice it rolls for damage. Example: a weapon doing 9d6 AP damage ignores 36 points of armour. If the target has less armour than this value, the excess is wasted.

Ultimate Armour-Piercing (Ultimate-AP) – The round ignores a number of points of armour equal to five times the number of dice it rolls for damage. Example: a weapon doing 9d6 AP damage ignores 45 points of armour. If the target has less armour than this value, the excess is wasted.

UNIVERSAL MODIFICATIONS

While many chassis types have their own unique modifications that can only be applied to themselves, this chapter features universal modifications – those that can be applied to any vehicle for the listed cost.

Universal Chassis Modifications

Increased Speed
Each 10% increase in a vehicle's Speed costs 10% of the Base Cost and uses 1 Space. The maximum Speed increase possible is 200% and requires 20 Spaces.

Decreased Speed
Each 10% decrease in a vehicle's Speed reduces the cost of the vehicle by 10% of its Base Cost and adds 1 Space to the design. The maximum Speed decrease is 30% for aeroplanes and jets and 50% for everything else.

Increased Agility
Each +1 to Agility costs 50% of the Base Cost. The maximum increase to a vehicle's Agility is +3.

Decreased Agility
Vehicles can also be built with lowered Agility, normally done for reasons of cost. Each reduction of –1 Agility reduces the final cost of the vehicle by 25% of its Base Cost. The maximum decrease to a vehicle's Agility is –2.

Increased Structure
This involves reinforcing the vehicle's structure with roll cages and strengthened beams. Each additional point of structure costs 20% of the Base Cost, with a maximum increase possible of 10% of the vehicle's Structure.

Decreased Structure
This represents cheaper materials or poorer construction. Each point of Structure removed reduces the final cost of the vehicle by 10%.

Increased Hull
This involves reinforcing the vehicle's outer skin through stronger materials and superior design. Each additional point of Hull costs 20% of the Base Cost, with a maximum increase possible of 3 points.

Decreased Hull
This represents cheaper materials or poorer construction. Each point of Hull removed reduces the final vehicle cost by 10%. The maximum decrease possible is 3 points, with a minimum of one.

Increased Range
There are two methods of increasing vehicle range. One is to simply carry more fuel, while the other is to make the vehicle more fuel-efficient.
*   **Greater Fuel Capacity:** Every 33% added to a vehicle's original Range subtracts 10% of original spaces with a minimum of one.
*   **More Fuel Efficient:** Every 10% added to a vehicle's original Range costs 20% of the Base Cost.

Decreased Range
Reducing fuel capacity of efficiency can make for a cheaper vehicle or one with more space for cargo and equipment.
*   **Lower Fuel Capacity:** Smaller fuel tanks will free up Space at the cost of Range. Each 10% reduction in a vehicle's original Range frees up half a Space.
*   **Reduced Fuel Efficiency:** Reduced fuel efficiency, from lower technology or less efficient engines, reduces the final cost of the vehicle. Each 25% reduction in a vehicle's original Range lowers the vehicle's cost by 10%.

Open Top
This is an open passenger area, which reduces the final cost by 10% of the Base Cost. Aeroplanes and jets cannot have an Open Top.

Open Cargo Bed
Reduces the final cost by 20% of the Base Cost. Aeroplanes and jets cannot have Open Cargo Beds.

Open Top and Open Cargo Bed combined reduce the base price by 25%.

Open Frame
Selecting Open Frame means that no Armour can be fitted aside from sheets of cloth armour (Armour 1). However, this reduces the final cost by 50% of the Base Cost.

Note that boats and balloons may both be designed as Open Frame, which represents a light-weight framework covered with animal skin, cloth or other light-weight material.

Universal Control Modifications

Primitive Controls (TL 2)
Primitive controls give a –1 penalty to Agility. Primitive controls subtract 20% from the base cost of the vehicle. Vehicles with primitive controls can go no faster then 50 kilometres per hour.

Basic Controls (TL 4)
This is the default control set-up, with no modifiers.

Advanced Controls (TL 8)
This is usually advanced drive-by-wire systems with heads-up displays. Costs Cr. 10,000 plus 10% of Base Cost. Adds +1 to Agility.

Exo-skeleton Linkage (TL 10)
The exo-link is a system for translating body movements into vehicle actions. Exo-controls cost Cr. 100,000, plus 50% of the Base Cost. Exo-rigs add +1 to Agility and +1 DM to Initiative checks.

Neural Link (TL 12)
The neural link is a true mind-machine linkage and allows an operator to control the vehicle with their mind alone. This gives a +2 DM to Initiative and a +2 bonus to Agility. A Neural Link costs Cr. 50,000, plus 100% of the Base Cost.

Autopilot
Autopilots are available for aircraft and sea vessels starting at TL 5 and other vehicles at TL 9. Autopilot systems are at skill level 0 at their Tech Level of introduction and increase their skill level by 1 for every two Tech Levels thereafter, to a maximum of 3. Autopilots cost Cr. 2,000 + Cr. 5,000 per skill level.

POWER MODIFICATIONS
Most vehicles come with their own power and motive source but this can still be enhanced or even replaced for specific design requirements.

Stacking Modifications

When designing vehicles, you may begin to wonder whether various bonuses and penalties stack. For example, can you Decrease the Agility of a vehicle and then cancel the penalty out with Advanced Controls?

The answer is… it is up to you! In general, we would not suggest allowing everything to stack but there may be very good reasons to do so. In the example above, you might have created a grav skimmer used in racing that is notoriously hard to control because of its exterior design (which is mandated by the rules of the racing championship). The advanced controls might be the only way a normal human might have of controlling it without crashing during a race!

So, our advice is be careful of stacking modifications but don't be afraid to allow it if it is justified by the type of vehicle you are trying to create.

Additional Drive System Modifications
This adds a secondary drive system or an alternate environment capability to the vehicle. Improvements can be made to secondary drive systems as normal although Speed can only be doubled and Agility can only be increased by +1 maximum. Cost multiples for performance improvements are based on the Base Cost as normal.

Aquatic Drive: This includes such things as a water-tight hull, props or water-jets for propulsion and a snorkel. This modification can be added to ground vehicles, helicopters, grav vehicles, airships, aircraft and jet aircraft. It cannot be used with tilt-jet, VTOL jet or aerodyne aircraft, hovercraft or vehicles that can already traverse water. It costs 100% of the Base Cost.

A vehicle with Aquatic Drive has the base same movement as an equivalent sea vehicle (Boat, Light Ship or Heavy Ship) of the same TL. Agility has an additional –1 penalty and Range in Aquatic mode is 10% of the equivalent sea vehicle.

Ground Drive: This is more than just a set of wheels for operating at an airport. It is a modification that makes an aerial vehicle properly road-worthy. At higher Tech Levels this includes an interface to local traffic control systems. It can be added to any Light Aeroplane, Light Helicopter, Light Grav Vehicle or Light Aerodyne. It costs 50% of the Base Cost.

A vehicle with Ground Drive has the base same movement as an equivalent Ground Vehicle (Light or Heavy) of the same TL. Agility has an additional –1 penalty and range in Ground Drive mode is half that of the equivalent ground vehicle.

Wind Power: Any vehicle can also be designed to use wind power. This costs 10% of the Base Cost and lowers the Agility by –1 for Light vehicles and –2 for Heavy vehicles. While under sail, the vehicle uses the rules for wind-powered vehicles on page 5.

Grav Drive: Any vehicle can have a secondary grav drive added to it. This costs 150% of the Base Cost.

A vehicle with Grav Drive has the same movement as an equivalent Grav Vehicle (Light or Heavy) of the same TL. Agility has an additional –1 penalty and range in Grav Drive mode is half that of an equivalent grav vehicle.

External Power
The External Power modification provides power to a vehicle from an external source, like a third rail in a train, overhead wires for trams, buried induction plates for cars and trucks and beamed microwaves for aircraft.

External power provides virtually unlimited range, although the vehicle in question either has to remain along the powered road or track or within line-of-sight of the transmitter.

Vehicle Type	TL	Spaces	Cost (Cr.)
Trains, Ground Vehicles on Rails	4	1 per 10 hull	5,000 per Hull
Ground Vehicles	8	1 per 10 hull	2,000 per Hull
Light Aircraft and Light Helicopters	9	1 per 5 Hull	10,000 per Hull
Light Grav Vehicles	11	1 per 5 Hull	10,000 per Hull

External power is already included in maglev and grav rail vehicles.

Fission Plants (TL 6)
The triumph of nuclear power, in an almost safe, self-contained form, a small Fission Plant can allow a vehicle to run for greatly extended periods of time.

A Fission Plant uses ½ of a vehicle's Spaces, with a minimum requirement of 10 Spaces. It costs Cr. 100,000 per space. A vehicle fitted with a Fission Plant requires no fuel for a year, has unlimited Range but also requires the Hostile Environment Protection modification.

Fusion Plants (TL 9)
A development of the Fission Plant, the Fusion Plant can allow a vehicle to run for greatly extended periods of time with none of the drawbacks.

A Fusion Plant uses ¼ of a vehicle's Spaces, with a minimum requirement of 10 Spaces. It costs Cr. 125,000 per space. A vehicle fitted with a Fusion Plant requires no fuel for a year and has unlimited Range.

Armour and Defensive Modifications
Explosive Reactive Armour (ERA)
Reactive armour is a set of explosive charges that detonate in opposition to shaped-charge warheads and high energy weapons. It has no effect on lasers or heavy kinetic weapons like mass drivers and railguns. ERA adds Armour to each face of the vehicle. When the vehicle is hit by HEAP, plasma or fusion gun fire, the ERA will completely absorb the hit on a 2D roll of 2+. Every time the ERA system detonates to protect the vehicle, a cumulative DM of –1 is applied to subsequent checks. Replacing expended charges costs Cr. 5,000 for every –1 DM applied to the ERA check.

ERA Type	Tech Level	Armour	Cost (Cr.)
I	7	+7	50,000
II	9	+9	75,000
III	11	+11	100,000
IV	13	+13	125,000

Electrostatic Armour (TL 9)
Electrostatic armour protects a vehicle or aircraft with a low-power static field linked to a fully charged high-energy capacitor. When an object enters the field, the system discharges, in theory vaporising the object.

In practice, the system only provides its full defence against low-mass projectiles, like HEAP rounds or plasma and fusion weapons. It does provide some protection against other kinetic weapons but none against other energy weapons.

Note that a person or animal entering the field will likewise trigger a discharge from the armour, suffering 6d6 damage.

Power Plants
This design system does not go into specifics of Power plants. However, this is information that some people like to have and it can flesh out vehicle descriptions.

At TL 3–5, engines are fossil-fuel powered steam engines, either pistons or towards the end of the period, steam-driven turbine.

With TL 5–6, Power plants are generally fossil-fuel or alcohol-powered internal combustion engines, either piston or gas turbine, although fuel cells are available towards the end of the period.

From TL 7–9, Power plants are improved internal combustion engines and high-efficiency gas turbines, with fuel cells and high-density batteries coming into common use in the latter days of the time period.

AT TL 9–12, fuel cells are very common but at TL 10 they start becoming supplanted in larger vehicles by fusion Power plants.

After TL 12, fusion power is ubiquitous, although ultra-dense batteries are also found in many places.

By TL 16, anti-matter is in experimental use on the largest of vehicles.

In settings where compact fusion power is not developed, fuel cells, high-density batteries and MHD turbines are the most common high-tech powerplants, typically hydrogen-fuelled.

This system provides additional Armour equal to twice the vehicle's TL against HEAP rounds and high energy weapons and Armour equal to the vehicle's TL versus other kinetic rounds.

Electrostatic Armour can be overwhelmed. They will protect against two attacks every round at TL 9 and one additional attack per TL thereafter. So, a TL 14 system can protect against seven attacks per round.

ESA systems consume one Space per 10 Hull points of the vehicle and cost Cr. 10,000 per Space.

Nuclear Damper (TL 12)
The nuclear damper projects a wave that modifies the strong nuclear force and can thus either prevent nuclear weapons from operating or else detonate them prematurely. They cannot detonate weapons stored in damper boxes, however. It takes up 12 Spaces and costs Cr. 500,000.

Anti-missile Systems
Missiles, rockets and launched grenades are a significant threat to combat vehicles, being capable of taking out the most heavily-protected vehicles.

To combat this threat, a variety of anti-missile systems have been developed. They are often used in concert.

These systems will negate an incoming missile, rocket, launched grenade or mortar round on the roll of 8+. Some systems have Target DMs that modify this and every system will suffer a –1 DM for every additional target it is forced to engage in each round.

Explosive Belt (TL 8)
An Explosive Belt system is an array of explosive mine blocks attached to the exterior of the vehicle. They require no Spaces. This system uses the vehicle's sensor system to detect incoming warheads. They detonate an outward-facing charge loaded with hundreds of small steel and ceramic buck shot. The explosive belt can also be detonated manually, often for defence against infantry in close quarters. In such cases, the Explosive Belt causes 4D damage up to Short Range and is treated like a giant shotgun. The belt can target any threat fired from Short Range or longer. Each facing has enough mines to defend against 10 attacks each.

The Explosive Belt costs Cr. 15,000 and reloads cost Cr. 800 per shot.

Damage	Shots	Target DM
4D	10/facing	+0

Laser Anti-Missile System (TL10)
Laser-based anti-missile systems come in two varieties, based on Tech Level. The first, available at TL 10, uses a relatively low-powered laser to damage or destroy the seeker heads of missiles, sending them off-course. It is only effective against guided weapons and smart weapons. The second is available at TL 13 and uses a high-powered laser to damage or destroy missiles in flight. It cannot engage anything fired from Short Range or closer. The Laser Anti-Missile System takes up 4 Spaces and costs Cr. 250,000.

Weapon	DAM	DM
TL10	—	+1
TL13	2D	+2

Projectile-Anti-Missile System (TL8)
This system uses a small-calibre, very high rate of fire minigun to intercept and destroy incoming projectiles. It is first available at TL 8, with a gauss version available at TL 11. These systems cannot target anything fired from Short Range or closer. This system takes up 3 Spaces and costs Cr. 200,000.

Weapon	TL	DAM	Shots	DM
Minigun	8	1D	10	+0
VRF gauss	11	4D	15	+1

Decoy Systems
Each decoy system takes up half a Space and has six uses.

Smoke Dischargers (TL 3)
Smoke Dischargers render the vehicle difficult to see, giving a –2 DM all to hit rolls. At TL 7, radar-based targeting renders smoke dischargers largely ineffective. They remain effective against laser weapons, reducing damage by 3d6.

Flares (TL 6)
These blind thermal-seeking weapons with intensely-hot flares, giving a –2 DM on to hit rolls for TL 6-9 missiles.

Chaff Dispensers (TL 4)
These use dozens of reflective strips to confuse radar-seeking weapons, giving a –2 DM on to hit rolls for all radar-guided missiles.

Prismatic Aerosols (TL 9)
Prismatic Aerosols use hundreds of fine crystal spheres, finer than sand, to refract and deflect laser light. They have the effect of attenuating laser fire to a certain amount, reducing damage by 2D.

Decoys (TL 7)

This is an acoustic/optical decoy that is designed to confuse smart weapons that home in on silhouettes or shapes or, for underwater weapons, acoustic signatures.

Environmental Modifications

Life Support, Short Term (TL 4)

Life Support supplies a breathable atmosphere no matter the exterior conditions. Short Term Life Support is good for one day. Maximum duration is four days before the system needs new air and filters.

Life Support uses one Space for every 20 people on the Vehicle. The system costs Cr. 10,000 per Space.

Life Support, Long Term (TL 7)

Advanced life Support provides comfortable life support for an extended period of time.

Long Term Life Support requires one Space per five people on the vehicle, round up and costs Cr. 50,000 per Space used. Long Term Life Support is good for 90 days.

Air Lock (TL 6)

An Air Lock uses two Spaces and costs Cr. 2,000.

Hostile Environment Protection (TL 7)

Hostile Environment Protection will safeguard the vehicle and its crew in dangerous but still marginally-habitable, environments. This includes protection against very hot or very cold environments, radiation, poisons and bacteriological threats. Hostile Environment Protection costs Cr5000 x Spaces and uses one Space.

Corrosive Environment Protection (TL 9)

This includes the use of ceramic and other corrosion-resistant materials integrated into the hull and control systems of the vehicle. Some form of Life Support must be purchased separately, although this modification includes the benefits of Hostile Environment Protection. This costs Cr. 10,000 x Hull Rating and uses two Spaces.

Insidious Environment Protection (TL 11)

Insidious atmospheres will eventually find their way through any protection. The Insidious Environment Protection provides time; the vehicle and its occupants will be kept safe for a number of days equal to the TL of the vehicle, minus six, plus the Hull Value of the vehicle. After this has elapsed, the vehicle will start taking Hull and then Structure damage at the rate of one point per day. Some form of Life Support must be purchased separately, although this modification includes the benefits of Hostile Environment Protection. This costs Cr 50,000 x Hull Rating and uses two Spaces.

Vacuum Environment Protection (TL 6)

Vacuum Environment Protection provides complete protection against vacuum conditions. It requires some sort of Life Support Modification and includes the benefits of Hostile Environment protection. Vacuum Protection costs Cr. 10,000 x Spaces..

Electronic Modifications

Computers

Computers use the rules from page 92 of the *Traveller Core Rulebook*. Double costs for vehicular use but they take no Spaces.

Navigation

Navigation equipment helps a vehicle's occupants find their way around. Lack of navigation equipment simply means they have to make do with hand held equipment and maps.

Headlights are included within the chassis cost and all appropriate vehicles above TL 3 are assumed to have them.

There are three different categories of navigation systems: Basic, Standard and Advanced.

Type	TL	Navigation	Cost (Cr.)
Basic	5	+1 DM	2,000
Standard	9	+2 DM	10,000
Advanced	13	+3 DM	50,000

Communications

Most communications use electromagnetic radiation, whether in the form of radio, lasers or masers. At high Tech Levels, meson communicators are also available.

Communicators are first available at TL 4, with a maximum range of Distant. Range increases by one range band per two Tech Levels. Additional features are also available at higher Tech Levels.

Decoy Systems

Decoy System	Spaces	Cost (Cr.)	Reload Cost	Effect
Smoke	½	1,000	100	–2 DM vs. visual attacks
Flares	½	1,200	150	–2 DM vs. thermal-guided attacks
Chaff	½	2,000	200	–2 DM vs. radar-guided attacks
Prismatic Aerosol	½	4,000	500	–2 DM vs. laser-guided attacks
Decoy	2	8,000	1,000	–2 DM vs. smart missile attacks

Tech Level	Base Range	Base Cost (Cr.)	Spaces	Features
4	Distant	500	0	Boosted range
6	V. Distant	1,000	0	Satellite uplink
8	Extreme	2,000	0.5	Tight beam
10	Continental	4,000	1.0	Encryption

Meson Communicators (TL 10)

Beyond conventional EM communication, the meson comm system uses the same technology found in meson weapons to create a virtually unstoppable communications system. While a meson screen can stop a meson comm, the odds of being able to erect one in exactly the right location to block a communication is unlikely in the extreme. Meson communicators can support boosted range, satellite uplink and encryption.

Meson comms require two Spaces for a system with a range of Distant and a cost of Cr. 50,000. Each range band increase adds an additional Space and doubles the base cost.

Boosted Range

Each additional range band doubles the cost of the communicator.

Tightbeam

Tightbeam uses a laser or maser instead of a radio to precisely aim the signal so it cannot be intercepted.

Satellite Uplink

This allows a communications system to communicate with a satellite or ship in orbit. It includes the necessary tracking equipment to stay locked on and is often combined with a tight-beam system.

Encrypted

At the same Tech Level, Encrypted Communications are almost impossible to crack, requiring an Formidable penalty on all Comms checks to try. A Tech Level difference between broadcaster and interceptor represents a bonus or penalty.

So, for example, if invading TL 15 marines intercept a TL 12 encrypted communiqué from insurgent forces, they gain a DM of +3 to decode it. If those insurgents managed to intercept an encrypted TL 15 transmission, they would have a –3 DM on their roll to decode it.

Electronic Countermeasures

Like most electronics and their counter-measures, relative Tech Levels are critically important. Basic communications and sensors are relatively easy to intercept and/or jam, while Standard and Advanced become increasingly more difficult. Tightbeam communications cannot be intercepted, save by pure luck but they can be jammed, with difficulty. The TL difference is a negative or positive DM in all attempts to intercept, decrypt or jam communications

Countermeasures Tasks

Type	TL	Range	Bonus	Cost (Cr.)
Basic	5	Distant	+1	10,000
Standard	8	Very Distant	+2	20,000
Advanced	11	Continental	+3	40,000

Sensor/Comm Class	Basic	Standard	Advanced
Task	Difficult	Hard	Formidable

Sensors

Class	Bonus	Space	Range	Cost (Cr.)
Basic	0	0	Very Long	5,000
Standard	+1	½	Distant	15,000
Advanced	+2	1	Very Distant	25,000

The base Tech Level for all sensors is TL 5. For every three levels beyond that, cost increases by 50%.

Sensors are rated within their Tech Level. The difference in Tech Levels is a negative or positive DM for Sensor rolls.

So, for example, a TL 7 Advanced Sensor is trying to get a lock on a TL 10 stealth grav vehicle. It has a +2 DM for having Advanced Sensors but a –3 DM for the difference in Tech Level and a further –2 for the Stealth II on the grav vehicle for a total DM of –3

Conversely, a TL 13 gunship with Basic Sensors (+0) is trying to locate a TL 9 stealth fighter. The fighter has Stealth II, for a –2 DM. The gunship is a higher Tech Level and the difference is 4, for a further +4 DM. Total DM then is (–2+4) for a total of +2.

Range Increase

Sensor range can be increased. Double the cost per extra range band and it uses half a Space per range band.

Communications Modifications

Modification	TL	Range	Spaces	Cost
Boosted Range	4	+1 range band		x2 per range band
Tightbeam	8	—	+1	x3
Uplink	6	Orbital	+1	x3
Encrypted	10	—	—	x2

Underwater Sensors

	Bonus	Space	Range	Cost (Cr.)
Basic	+1	1	Long	5,000
Standard	+2	1 ½	Very Long	15,000
Advanced	+3	2	Distant	25,000

The Tech Level for underwater sensors is also 5 and they have the same modifications as standard sensors. Surface sensors cannot be used underwater and vice versa.

Range Increase

Underwater Sensor range can be increased. Double the cost per extra range band and it uses one Space per range band.

Stealth Modifications

Stealth is the science of rendering a vehicle undetectable to sensors. Tech Level is critically important in the game between stealth and detection. The Tech Level difference between the stealth vehicle and the detector is a DM on detection rolls, positive if the detector is a higher Tech Level, negative if is lower Tech Level.

The listed bonus is applied as a DM against sensors of the same Tech Level. Cost is based on the Base Cost.

Stealth Class	Stealth Bonus	Cost (Cr.)
I	−1	50,000 x Hull
II	−2	100,000 x Hull
III	−3	200,000 x Hull

Stealth is first available at TL 7.

Camouflage

Camouflage is distinct from stealth. Stealth is all about hiding a vehicle electronically. Camouflage, however, is about hiding it visually. In this context, that includes its infrared signature. It is less dependent on Tech Level differences, although all the camouflage in the world will not help you if you can be spotted by radar.

Infrared Masking

IR Mask Class	TL	Bonus	Cost (Cr.)
I	7	+1	25,000 x Hull
II	9	+2	50,000 x Hull
III	11	+3	100,000 x Hull

Visual Camouflage

Stealth Class	TL	Stealth Bonus	Cost (Cr.)
I	7	+1	50,000 x Hull
II	11	+2	150,000 x Hull
III	15	+3	300,000 x Hull

Ejection Seat (TL 5)

The ejection seat takes up two Spaces and is designed to blast the occupant clear. At lower Tech Level this means a suitable height to open a parachute but at higher Tech Levels it is merely sufficient to get clear of the vehicle until a grav chute can deploy. This costs Cr. 5,000.

Ejection Cocoon (TL8)

The cocoon is a lightly-armoured shell that also provides a limited, pressurised environment. It is used in high-speed aircraft and grav vehicles, where ejection could be very dangerous. It is also used in hostile environment situations.

The cocoon takes up three Spaces and seats one (included within the Space requirement). It costs Cr. 30,000.

High Capacity Seating

The normal standard of one Space per passenger or crew allows some elbow-room and limited room to move about. High-capacity seating greatly increases the seating density but takes away from room to move. High-capacity seating can be either double or triple. High-capacity seating cannot be used for troop seating or for control areas. Frequent flyers will be well aware of what it entails. Double capacity costs Cr. 2,000 per Space of the vehicle, while triple capacity costs Cr. 5,000 per Space

Accommodation Modifications

Item	TL	Spaces	Cost (Cr.)
Ejection Seat	5	2	5,000
Ejection Cocoon	9	3	30,000
Double Capacity seating	2	—	2,000 per Space
Triple Capacity Seating	2	—	5,000 per Space
Bunks	3	1	200
Galley, mini	5	2	1,000
Galley, full	4	6+1/10 catered for	2,000+500/person
Fresher	4	2	1,500
GP Lab	7	2 per person	5,000 per Space
Lab Space	9	1 Space per level per person	10,000 per Space
Living Space	3	Varies	1,000 per space
Rappelling Gear	5	—	500

Bunks
Bunks can accommodate up to two people, take up one Space and cost Cr. 200.

Galley
A Mini-galley takes up two Spaces, serves up to five people and costs Cr. 1,000. A Full Galley take up six Spaces, plus one Space per 10 people served. It costs Cr. 2,000 + Cr. 500 per person served.

Fresher (TL 7)
A Fresher, complete with toilet, sink and shower, takes up two Spaces and costs Cr. 1,500.

General Purpose Lab (TL 7)
A General Purpose Lab provides no bonuses but allows tasks to be performed with no penalty for missing tools/equipment. General Purpose Labs consume two Spaces per researcher using the lab and cost Cr. 5,000 per Space.

Lab Space (TL 9)
Lab Space includes analytic equipment, computer workstations and equipment appropriate to the discipline it is focussed on, defined during construction. Lab Space grants a skill DM equal to +1, +2 or +3 and take up one Spaces per bonus per researcher using it. A +3 DM lab, used by three researchers, would take up 9 Spaces. Cost is Cr. 10,000 per Space used.

Types of lab include: Physics, chemistry, biology, psychology, structures and materials. Other types are possible.

Additional Equipment and Tools
Autodoc
The Autodoc is a whole-body automated treatment system. At TL 10, the Autodoc has Medic 1, which increases by 1 at TL 12 and TL 14. Its effective Edu for diagnostic purposes is 10, while Dex for surgical treatment is 8. The Autodoc takes up two Spaces and costs Cr. 10,000.

Operating Theatre
An Operating Theatre is a room equipped for use as an emergency medical clinic. Until TL 10, the vehicle must remain stationary in order for the Operating Theatre to be used. After that, the theatre can be built on a stabilised bed that allows it to be used while the vehicle is in motion.

TL	Spaces	Cost
7-10	4+3 per patient	Cr. 20,000 + Cr. 10,000 per patient capacity
11+	8+5 per patient	Cr. 50,000 + Cr. 20,000 per patient capacity

Low Berth (TL 10)
The Low Berth is a standard hibernation unit, common for steerage-class interstellar transport. In vehicles, they are often part of an emergency response system, where accident victims can be placed into hibernation to prevent their condition from getting even worse. A Low Berth takes 4 Spaces and costs Cr. 50,000.

Emergency Low Berth (TL 12)
A conventional Low Berth takes several minutes to induce hibernation and lower core temperature. The Emergency Low Berth can do a 'crash' induction, plunging a person into deep hibernation in a fraction of the time. It takes up 6 Spaces and costs Cr. 100,000.

Fire Extinguishers
Fire Extinguishers are designed to put out fires internal to the vehicle. They take up no space and cost Cr. 500.

Water Cannon
Water Cannon are used for fire suppression, riot control and dispersal of chemicals. A water cannon costs Cr. 2,000, takes up one Space and requires one Space per minute's firing duration of liquid carried. Water Cannon have a maximum range of Medium.

Survey Sampling Equipment
This covers several different types of equipment that act to sample atmosphere, ground and any water or other fluids.

Atmosphere Samplers
A system of collectors, pipes and filters for atmosphere sampling, including any particulates, taints and organic matter. It takes up 3 Spaces and costs Cr. 10,000.

Geology Samplers
An array of scooping devices for shallow ground testing along with a hollow-core drills capable of drilling down one kilometre. It takes up 15 Spaces and costs Cr. 100,000. Geology Samplers add a +1 DM to all geology-based checks at TL 10 and a +2 DM at TL 14.

Hydrology Sampler
This is a set of liquid sampling equipment, holding tanks and testing equipment. It costs Cr. 10,000 and takes up 5 Spaces. Hydrology Samplers add a +1 DM to all hydology-based checks at TL 10 and a +2 DM at TL 14.

Holding Tank (TL 8)
A holding tank is a sealed enclosure equipped with long-duration life support system. The holding tank can recreate many atmospheric mixes and can draw in, compress and store a local planetary atmospheric sample in order to sustain any lifeforms held in the tank.

Holding tanks can be built to any size, at the cost of Cr. 5,000 per Space.

Digging Equipment (TL 5)
External digging and scooping equipment, costing Cr. 25,000 and taking up 10 Spaces.

Cutting Equipment (TL 5)
External heavy duty saws, water knives or plasma cutters, depending on Tech Level. These cost Cr. 10,000 and take up 5 Spaces.

Manipulator Arms
Manipulator Arms are remote appendages with claws or hands. Manipulator arms vary in Strength and Dexterity. Arms have a Str of 2 and a Dex of 1, with a cost of Cr 10,000. Increasing Str or Dex costs Cr. 5,000 per point, to the maximum indicated in the table below.

TL	Max. Str	Max. Dex
5	6	4
8	12	8
11	18	12
14	24	16

Light Crane
Light Cranes can lift up to 400 kilograms and can be used as rescue equipment. Light cranes cost Cr. 2,500 and take up 1 Space.

Medium Crane
Medium Cranes can lift up to 2,000 kilograms. They cost Cr. 40,000 and take up four Spaces.

Heavy Crane
Heavy Cranes can lift up to 10,000 kilograms. They cost Cr. 100,000 and take up eight Spaces.

Cargo Arm
This is a heavy-duty manipulator arm used for lifting cargo in confined spaces. Cargo Arms have a base Str of 30 and a Dex of 0 and cost Cr. 50,000.

Internal Vehicle Bays
These take up a number of Spaces equal to the Shipping Size, multiplied by 10. This allows a small amount of room for maintenance purposes. Tighter stowage can be had for five Spaces per ton but the carried vehicles have to be removed by a crane or similar apparatus before use or maintenance.

Refrigeration (TL 5)
Takes up one space for every 10 Spaces that are to be refrigerated. This costs Cr. 1,500 per space.

Wet Bar (TL 2)
A basic wet bar, usually species-specific. It takes up half a Space and costs Cr. 2,000.

Entertainment System (TL 5)
Both audio and visual, this takes up no Space and costs at least Cr. 200. Players intending to impress may want to spend more. Much more.

Holo-suite (TL10)
This is advanced holographic projection suite. Often used on exploration vehicles as a large display unit, it has other, less wholesome, uses. It takes up 1 Space and costs Cr. 15,000.

Hot tub/pool (TL 6)
This takes up 1–3 Spaces per person capacity, depending on the luxury sought after and costs Cr. 3,000 per Space.

Refuelling Station (TL 9)
The refuelling station is designed to turn water into hydrogen fuel, using the sun as a power source. It requires a significant amount of space and access to both water and sun. At TL 9, it requires a vehicle's Hull value multiplied by three hours to crack sufficient fuel to completely refuel the vehicle. At TL 12 this is reduced to the vehicle's Hull score alone in hours. Refuelling stations require 4 Spaces plus 1 Space per 10 points of Hull (of the vehicle to be refuelled). They cost Cr. 15,000 per Space.

Aliens
Humans of all types require one Space per person, whether they are passenger or crew. Alien races, however, may require more.

Species	Space Required
Human	1
Aslan	1 ½
Vargr	1
K'kree	3
Hiver	2
Droyne	1

BATTLE DRESS

Representing the ultimate in individual protection, battle dress is an advanced and powered version of combat armour, although it is constructed very differently. Battle dress enhances the strength and senses of the wearer with variable feedback personal controls, servo-powered limbs and various kinds of electronic assistance.

Characteristics

Characters wearing battle dress are treated as having enhanced characteristics for the purposes of carrying and combat but not for taking damage. Battle dress protects against environmental hazards in the same way as a Hostile Environment Vacc Suit.

All battle dress provides effectively unlimited Endurance for purposes of determining fatigue. They are limited only by the duration of their power cells and their operators.

BATTLE DRESS DESIGN

Battle dress design follows a simple process, much like vehicle design

- Choose a chassis type and Tech Level
- Add Armour
- The cost of the chassis plus Armour is the Base Cost, used for all other modifications
- Add Modifications
- Add weapons
- Add utility packs

Each chassis has a table, showing performance by Tech Level.

Slots: Amount of space available in the suit for weapons and options. The increasing Slots per Tech Level more reflects miniaturisation and increased carrying capacity than actual space in the suit. A Slot represents an approximately pistol-sized piece of gear.

Str Modifier: This is the DM added to the user's Strength while wearing the suit.

Dex Modifier: This is a DM applied to Dex while wearing the suit, representing the speed and stability of the suit, especially when used as a firing platform.

Base Damage: The damage caused by unarmed attacks made by the battle dress, before being modified for Strength.

Max. Armour: This is the maximum Armour the suit can support, by Tech Level. The base Armour for any suit is 0.

Duration: Hours the suit can operate at full combat power.

Cost: Cost in Credits.

Speed: This is the walk and running speed, in metres per round.

Shipping Size: This is the volume, in starship tons, that one suit takes up as cargo.

ULTRA-LIGHT CHASSIS

The ultralight chassis is little more than a light-weight powered exoskeleton. It is primarily used at lower Tech Levels to provide mobility to paralysed and otherwise incapacitated people before the advent of nerve fusion. It is sometimes used by soldiers and hikers as a load-bearing system, allowing them to carry a large-than-normal allotment of gear for long periods of time.

	TL 9–10	TL 11–12	TL 13–14	TL 15–16
Slots	4	6	8	10
Str Modifier	+0	+1	+2	+3
Dex Modifier	+0	+2	+4	+6
Base Damage	1d6	1d6	1d6	1d6
Max. Armour	10	12	14	16
Duration	12 hours	24 hours	36 hours	48 hours
Cost (Cr.)	10,000	20,000	30,000	40,000
Speed (Walk/Run)	6/30	12/60	25/125	50/250
Shipping Size	0.05	0.05	0.05	0.05

LIGHT CHASSIS

Light battle dress is used in more specialised roles, often either fast recon units or protection for rear-echelon troops.

	TL 9–10	TL 11–12	TL 13–14	TL 15–16
Slots	8	10	12	14
Str Modifier	+1	+2	+3	+4
Dex Modifier	+0	+2	+4	+6
Base Damage	1d6+2	1d6+2	1d6+2	1d6+2
Max Armour	14	16	18	20
Cost (Cr.)	50,000	80,000	110,000	140,000
Speed (Walk/Run)	5/25	10/50	20/100	40/200
Duration	8 hours	16 hours	24 hours	32 hours
Shipping Size	0.07	0.07	0.07	0.07

MEDIUM CHASSIS

The medium chassis is the basis of standard Imperial Marine battle dress and is used for most frontline powered armours.

	TL 9–10	TL 11–12	TL 13–14	TL 15–16
Slots	12	14	16	18
Str Modifier	+2	+3	+4	+5
Dex Modifier	+0	+2	+4	+6
Base Damage	2d6	2d6	2d6	2d6
Max Armour	18	20	22	24
Cost (Cr.)	200,000	250,000	300,000	350,000
Speed (Walk/Run)	3/15	6/30	12/60	24/120
Duration	6 hours	12 hours	18 hours	24 hours
Shipping Size	0.1	0.1	0.1	0.1

HEAVY CHASSIS

Heavy suits are used in assault and support roles. Many are found spearheading attacks, often with mobility boosts, while similar-sized suits can be found toiling behind the lines, building entrenchments and loading heavy guns.

	TL 9–10	TL 11–12	TL 13–14	TL 15–16
Slots	16	18	20	22
Str Modifier	+3	+4	+5	+6
Dex Modifier	–2	0	+2	+4
Base Damage	3d6	3d6	3d6	3d6
Max Armour	22	24	26	28
Cost (Cr.)	500,000	600,000	700,000	800,000
Speed (Walk/Run)	2/10	4/20	8/40	16/80
Duration	3 hours	6 hours	12 hours	24 hours
Shipping Size	0.15	0.15	0.15	0.15

ULTRA-HEAVY

Ultra-heavy battle dress blurs the line between armour and walking vehicles. They are used in heavy support roles, where their ability to carry heavy battlepacks allows them to bring considerable firepower to bear.

	TL 9–10	TL 11–12	TL 13–14	TL 15–16
Slots	20	22	24	26
Str Modifier	+4	+5	+6	+7
Dex Modifier	–4	–2	0	+2
Base Damage	4D	4D	4D	4D
Max Armour	26	28	30	32
Cost (Cr.)	1,000,000	1,250,000	1,500,000	1,750,000
Speed (Walk/Run)	1/5	2/10	4/20	8/40
Duration	2 hours	4 hours	8 hours	16 hours
Shipping Size	0.25	0.25	0.25	0.25

Battle Dress in Vehicles

While based on the human frame, battle dress is bulkier than an un-armoured person.

Ultra-light exoskeletons, without Armour, can be used in double-capacity seating but not triple-capacity. With Armour, they require normal seating.

Light battle dress, whether a bare exoskeleton or an armoured suit, requires regular seating at one Space per suit. Any heavy weapons have to have cargo space allocated.

Medium battle dress is quite bulky and requires two Spaces per suit, plus space for heavy weapons.

Heavy battle dress requires three Spaces per suit.

Ultra-heavy battle dress requires four Spaces per suit.

Armour

Each point of Armour costs Cr. 50,000, up to the maximum supported by the chassis. This represents not just the armour itself but the systems required to support the armour.

Heavy Armour

It is possible for battle dress to have more Armour than the listed maximum for its chassis but it will be a heavy and ponderous piece of equipment.

For every additional –1 DM to Dex the battle dress is given, a further two points of Armour can be added. This may be done three times, for a maximum Dex DM of –3 and 6 extra points of Armour.

Base Cost

The total spent on the chassis and Armour is the Base Cost of battle dress, a figure used to calculate the cost of a lot of equipment and modifications that can now be added.

Slots

Equipment slots are available space for mounting modifications, equipment and small arms. Heavy weapons have to be either carried or on mount points.

MOUNT POINTS

In addition to Slots, battle dress may also mount heavy weapons in Mount Points. Mount Points are areas of a suit that can be locked and stabilised to withstand the recoil of a heavy weapon.

Mount Points allow vehicle-scale heavy weapons to be used with battle dress. Each Space of heavy weapons on a vehicle requires eight Slots on battle dress. A 1 Space weapon can be arm-mounted, taking up the entire arm. A 2 Space weapon can be shoulder mounted, while 3 Space weapons have to be back-mounted.

Battle dress up TL 12 and lower cannot move and fire Mount Point weapons in the same round. At TL13 gravitic stabilisation of the weapon becomes possible, allowing these armour to move and fire with these heavy weapons.

Carried Weapons

In addition to weapons in Slots or on Mount Points, battle dress can also carry weapons, much like a soldier carries an assault rifle. Conventionally-sized small arms can be used with no penalty by ultra-light and light chassis. Medium chassis can use rifles but cannot use pistols unless the weapons have been modified for use by the larger fingers of the suit. Heavy chassis have a –1 DM to their use, will ultra-heavy chassis have a –2 DM to their use. This only applies to rifles, as pistols and SMGs are simply too small to be used.

Weapons purpose-built for battle dress do not suffer these penalties. Heavy chassis can carry a one Space weapon, while ultra-heavy chassis can carry a two Space weapon.

Using other weapons on Battle Dress

An equipment slot is approximately the same size as a large pistol. Pistols take one Slot, SMGs and carbines 2 Slots and rifles 3 Slots.

Slot Mounts

Slot weapons are interchangeable but it requires the services of an armourer (with Mechanic1) to do the change. Normal weapons cannot be placed into a Slot without an extensive amount of work, typically costing up to twice the value of the weapon.

BATTLEDRESS WEAPONS

Hand carried	TL	Cost (Cr.)	Damage	Auto	STR	Range	Ammo
Heavy Machinegun	6	8,000	5d6 SAP	6	12	Rifle	100
Light Autocannon	7	9500	6d6 SAP	6	14	Rifle	50
PGMP-13	13	65,000	12d6	No	12	Rifle	10
FGMP-14	14	100,000	16d6	No	14	Rifle	12
Gauss Rifle	12	2,000	4d6	4	8	Rifle	100
RF Gauss Rifle	13	16,000	4d6 AP	8	9	Rifle	500
MagRail Rifle	13	2,500	4d6+2	4	10	Rifle	10
Gauss Shotgun	12	4,500	8d6	No	8	Shotgun	12
Gauss Flamer	13	10,000	6d6+6	No	9	Rifle	40

Slotted	TL	Cost (Cr.)	Damage	Auto	Slots	Range	Ammo
Gauss Pistol	12	500	3d6 AP	4	1	Rifle	40
Gauss SMG	13	1,200	3d6+1 AP	4	1	Rifle	500
Seeker Gun	13	1,200	4d6	No	1	Rifle	6
Hand Flamer	10	1,400	3d6+6	No	2	Pistol	6
Laser Carbine	11	3,200	4d6	No	2	Rifle	50

Mount Point Weapons	TL	Cost (Cr.)	Damage	Auto	Spaces	Range	Ammo
Plasma Bazooka	11	15,000	10d6	No	1	Rifle	5
Recoilless Rifle	5	8,000	10d6 AP	No	2	Rifle	3
Medium Autocannon	6	6,000	7d6 SAP	6	2	Dist	400
Rocket Pod	6	10,000	6d6	6	2	Dist	24
Heavy Plasma Gun	12	250,000	14d6	No	2	V. Long	12
Advanced Anti-Armour Gun	14	50,000	14d6 Super-AP		3	Dist	50
Heavy Fusion Gun	14	200,000	18d6 AP	No	3	V. Dist	10
Mass Driver Cannon	13	250,000	16d6 Super-Ap	2	3	V. Dist	20
Tac Missile Pack	10	22,000	Varies	0	3	Varies	4

MODIFICATIONS

The following items are modifications used with battle dress.

Strength Increase

Strength can be increased by +1, at a cost of 10% of the Base Cost. This may be done up to 10 times.

Extended Duration

This adds additional power cells to the suit. Every 50% increase in duration costs Cr. 10,000 and uses one Slot. This cannot be used on the same battle dress as Decreased Duration.

Decreased Duration

Decreased duration uses smaller or lower-powered power cells to save cost. Each 10% decrease in Duration reduces the Base Cost by Cr. 5,000. This cannot be used on the same battle dress as Extended Duration.

Increased Speed

Battle dress maximum speeds can be increased. For every 10% increase in Speed, increase the cost by 25% of Base Cost.

Decreased Speed

Speed can also be decreased. For each 33% decrease in Speed, decrease Base Cost by 25%.

Enhanced Manoeuvrability

Each point of Dex penalty can be removed at a cost of 50% of the Base Cost. This can reduce the Dex penalty but cannot add a bonus.

Lowered Manoeuvrability

Lowering manoeuvrability can either increase the Maximum Armour permitted (see page 40) or, as here, reduce the price of the battle dress. Each point of Dex penalty taken, to a maximum of -3, will reduce the Base Cost of the suit by 10%.

Stealth (TL9)

Stealth is the art of rendering a suit of armour undetectable to sensors. See page 46 for more details.

The listed bonus is applied against sensors of the same Tech Level. Cost is based on the Base Cost.

Stealth Class	Stealth Bonus	Cost
I	+1	200%
II	+2	400%
III	+3	600%

Extended Life Support

Extended Life Support provides complete life support, including food, water, waste collection and recycling for up to 72 hours. Extended Life Support uses two Slots and costs 10% of the Base Cost.

Corrosive Environment Protection

This coating provides effectively unlimited protection in a corrosive environment. It integral costs 25% of the Base Cost and requires no Spaces.

Insidious Environment Protection

Suits can be designed to be resistant to Insidious atmospheres. Insidious Environment Protection will provide protection for 72 hours before it starts to degrade, at the rate of one point of Armour per hour. Insidious Environment Protection costs 100% of the Base Cost of the suit, as every component has to be protected.

Medikit (TL9)

This internal medikit provides support and assistance to the wearer. It can diagnose medical emergencies as if it had Medic2 and can heal up to four points of damage instantly, although the effects only last for 1d6 hours. It takes up one Slot and costs Cr. 25,000.

Advanced Medikit (TL12)
This internal medikit is more effective than the standard model. It can repair up to six points of damage instantly, although the effects only last for 1d6 hours. It also has the equivalent of Medic3 for treatment and diagnostic purposes. It takes up one Slot and costs Cr. 50,000.

CAMOUFLAGE
Camouflage provides bonuses to Stealth rolls.

Basic Camo
Shatter-pattern paint scheme in colours designed to help blend into the local environment. This adds a +1 DM to Stealth checks and costs Cr. 500.

IR Camo (TL8)
IR camo selectively bleeds the suit's temperature to match background levels. It does not work in vacuum environments. This adds a +2 DM to Stealth checks vs. heat-seeking and IR sensors and costs Cr. 25,000.

Active Camo (TL10)
Active camo allows a choice of camo patterns and colours and instantly changes the suit's surface to match. This adds a +2 DM to Stealth checks and costs Cr. 50,000.

Looking Glass (TL15)
Looking Glass is an expensive system that uses quantum waveguides to bend light around the suit, resulting in near-invisibility from all angles. It uses one Slot, costs Cr. 200,000 and adds a +4 DM to Stealth checks.

Sonic Suppresser (TL10)
An active system that constantly monitors the sounds being made by the suit and broadcasts sound waves in direct opposition, in order to cancel them out. Takes up one Space. It costs Cr. 20,000 and adds a +2 DM to Stealth checks.

IR Camo and the Sonic Suppressor can be combined with either the Basic, Active or Looking Glass systems.

ELECTRONICS
Computer
All battle dress has a computer to run the suit itself. They can also be equipped with a computer to perform ancillary functions. The primary value of a computer is to interface with other systems on the suit and run applications to support and enhance these functions.

Computers use one Slot and use the rules from page 92 of the *Traveller Core Rulebook*.

Typical Expert System skills includes Sensors and Recon, to assist in spotting targets. At TL 12 and higher, an Expert system on an onboard computer can take control of the suit even if the operator is dead or incapacitated. It generally is not so well-known that such an Expert system can potentially also take control of the suit even if the operator is conscious and resisting.

Navigation
Enhanced tools for making your way through the world.

There are three different categories of navigation systems: Basic, Standard and Advanced.

Type	TL	Slots	Navigation DM	Cost (Cr.)
Basic	5	1	+1	2,000
Standard	9	2	+2	10,000
Advanced	13	4	+3	50,000

Communications
Most communications use electromagnetic radiation, whether in the form of radio, lasers or masers.

Basic communicators are first available at TL 4, have a range of Distant and cost Cr. 1,000. They can support Boosted Range.

Standard communicators are first available at TL7, have a range of Very Distant and cost Cr. 2,000. They can support Boosted Range, Satellite Uplink and Encryption.

Advanced communicators are first available at TL 10, have a range of Extreme and cost Cr. 4,000. They can support all options.

Type	TL	Range	Slots	Cost (Cr.)
Basic	4	Dist	1	1,000
Standard	7	V.Distant	2	2,000
Advanced	10	Continental	3	4,000

Communications modifications

Modification	TL	Range	Slots	Cost
Boosted Range	4	+1 Range band	+1	x2 per Range band
Tightbeam	9	—	+1	x3
Uplink	7	Orbital	+2	x3
Encrypted	9	—	—	x2

Boosted Range
Each additional range band desired doubles the cost of the communicator.

Tightbeam
Tightbeam uses a laser or maser to precisely aim the signal so it cannot be intercepted.

Satellite Uplink
This allows a communications system to communicate with a satellite or ship in orbit. It includes the necessary tracking equipment to stay locked on and is often combined with a tightbeam system.

Encrypted
At the same Tech Level, Encrypted communications are Formidable to crack. Tech Level difference represents a DM, depending on whether the reading equipment is from a higher or lower tech. So, if invading TL 15 Imperial marines intercept a TL12 encrypted communiqué from insurgent forces, they have a DM of +3 to decode it. If those insurgents managed to intercept an encrypted TL15 transmission, they would be at –3 on their roll to decode it.

Electronic Countermeasures
Like most electronics and their counter-measures, the relative Tech Levels are critically important. Basic communications and sensors are relatively easy to intercept and/or jam, while Standard and Advanced become increasingly more difficult. Tightbeam communications cannot be intercepted, save by pure luck but they can be jammed with difficulty. TL difference is a negative or positive DM in all attempts to jam communications.

Countermeasures Tasks

Type	TL	Range	Slots	Bonus	Cost (Cr.)
Basic	8	Long	1	+1	10,000
Standard	11	Distant	2	+2	20,000
Advanced	14	Very Distant	4	+3	40,000

Sensor/Comm Class	Basic	Standard	Advanced
Task	Difficult	Hard	Impossible

SENSORS
The base Tech Level for all sensors is TL8.

Sensors are rated within their Tech Level. The difference in TL is used as a positive or negative DM. This is in addition to any effects from Stealth (see page 44).

Class	Bonus	Slots	Range	Cost (Cr.)
Basic	+0	1	Long	10,000
Standard	+1	3	Very Long	20,000
Advanced	+1	5	Distant	35,000

Underwater Sensors

Class	Bonus	Slots	Range	Cost (Cr.)
Basic	+1	1	Long	5,000
Standard	+2	2	Very Long	15,000
Advanced	+3	4	Distant	25,000

The basic Tech Level for underwater sensors is also 8 and they have the same modifications as standard sensors. Surface sensors cannot be used underwater and vice versa.

Modifying Sensors
The following items can be used to modify sensors.

Range Increase
Sensor range can be increased at a cost of doubling the sensor's cost for every additional Range band desired.

Sensory Extensions
A boom mount for video and audio sensors, allowing the suit to peek around corners without exposing itself to fire. Uses one Slot, costs Cr. 1,000.

Enhanced Visual Sensors
These sensors add low-light, telescopic optics and thermal imaging to a suit's capabilities. They take up no Slots and cost Cr. 15,000.

Enhanced Audio Sensors
These sensors add high and low-frequency hearings, audio enhancement and, when required, audio dampening to a suit. They take up no Slots and cost Cr. 7,000.

DEFENCES
Static Armour (TL13)
Similar to the electrostatic armour found on vehicles, Static Armour can dissipate the energy of incoming plasma, fusion and HEAP weapons. Static Armour can also damage unprotected infantry forces if they attempt to move within Personal range of the battle dress. Unlike the more powerful systems on vehicles, Static Armour has no effect on kinetic weapons. Static Armour adds its TL to the battle dress Armour against fusion, plasma and HEAP warheads. It will causes 3D damage to infantry who get into Personal range.

Static Armour

Slots	Cost (Cr.)	Effect	Attacks per round
3	20,000	+TL vs. HEAP & high-energy	2, +1 per TL after 13

Anti-missile Systems

Missiles, rockets and launched grenades are a nightmare to battle dress. While the suits have enough armour to withstand small-arms attacks, the concentrated firepower of explosive weapons can often crack many suits, making them an effective equaliser.

To combat this threat, a variety of anti-missile systems have been developed. They are often used in concert.

These systems will negate an incoming missile, rocket, launched grenade or mortar round on a roll of 8+. Some systems have Target DMs that modify this and every system will suffer a –1 DM for every additional target it is forced to engage in each round.

Explosive Belt (TL 8)

An Explosive Belt system is an array of explosive mine blocks attached to the exterior of the battle dress. They require no Spaces. This system uses the battle dress' sensor system to detect incoming warheads. They detonate an outward-facing charge loaded with hundreds of small steel and ceramic buck shot. The explosive belt can also be detonated manually, often for defence against infantry in close quarters. In such cases, the Explosive Belt causes 4d6 damage up to Short Range and is treated like a giant shotgun. The belt can target any threat fired from Short Range or longer.

The Explosive Belt costs Cr. 5,000 and reloads cost Cr. 400 per shot. It uses 1 Slot.

Damage	Shots	Target DM
4D	5	+0

Laser Anti-Missile System (TL10)

Laser-based anti-missile systems come in two varieties, based on Tech Level. The first, available at TL 10, uses a relatively low-powered laser to damage or destroy the seeker heads of missiles, sending them off-course. It is only effective against guided weapons and smart weapons. The second is available at TL 13 and uses a high-powered laser to damage or destroy missiles in flight. It cannot engage anything fired from Short Range or closer. The Laser Anti-Missile System takes up 2 Slots and costs Cr. 150,000.

Weapon	DAM	DM
TL10	—	+1
TL13	2d6	+2

Projectile-Anti-Missile System (TL8)

This system uses a small-calibre, very high rate of fire minigun to intercept and destroy incoming projectiles. It is first available at TL 8, with a gauss version available at TL 11. These systems cannot target anything fired from Short Range or closer. This system takes up 1 Mount Point and costs Cr. 80,000.

Weapon	TL	DAM	Shots	DM
Minigun	8	1d6	10	+0
VRF gauss	11	4d6	15	+1

Swarm Hive (TL13)

This swarm is a cloud of insect-sized robots, used primarily for recon purposes, although they can also be used to attack unarmoured or lightly-armoured opponents. Swarms can survive for up to one hour outside of their battle dress.

A swarm can penetrate any unsealed vehicle or building. A swarm pack is TL 13, uses two Slots and costs Cr. 45,000.

In attack mode, a swarm can do 2d6 damage per round to opponents. As reconnaissance units, Swarms add a +2 DM to Recon skill checks.

MOBILITY OPTIONS

Powered Wheels

This is a set of pop-down powered wheels that give battle dress high mobility on smooth roadways. Powered wheels consume 2 Slots and cost Cr. 10,000. They double the suit's movement on roads but are unusable off-road.

Air Cushion System

The Air Cushion system uses a high-speed blower and a set of inflatable skirts on each foot to lift and propel the battle dress over the ground. The system can handle just about any terrain save for dense forest and undergrowth. The air cushion uses 2 Slots and costs Cr. 25,000. Maximum speed is 100km/h.

Flight Pack

The flight pack, available at TL 9, is a small jet engine and a set of wings and can only be used with ultra-light suits. It uses 4 Slots and costs Cr. 50,000. A suit in flight mode has a maximum speed of 300 kilometres per hour, with a maximum range of 200 kilometres.

Grav Pack (TL12)

This is the ultimate mobility enhancement for powered armour and allows free flight for any suit so equipped. The Grav Pack uses 2 Slots and costs Cr. 100,000. The Grav Pack gives the suit free flight with a maximum speed of 200 kilometres per hour and Agility +1. This increases to 400 kilometres per hour and Agility +2 at TL 14.

Parachute (TL4)
Available from TL4 on, the Parachute is a simple harness and deployment system for a large canopy capable of supporting the weight of a suit of battle dress. It takes 3 Slots. Cr. 4,000.

Grav Chute (TL9)
A Grav Chute uses a low-powered grav lifter and shielded power cell to give the suit limited flight abilities. The Grav Chute module usually supports the suit, in a manner similar to conventional parachutes, so that it can be cut away when the suit lands, sparing the extra weight and bulk. A Grav Chute uses 2 Slots and costs Cr. 10,000.

Swimmer System
The swimmer system allows battle dress to move around unrestricted under water, at speeds up to the suit's running speed. Life support must be purchased separately. The Swimmer System uses 2 Slots and costs Cr. 15,000.

Safe depth for battle dress is 100 metres, while crush depth is 250 metres. Safe and crush depths can be improved: Each 50% increase in Safe Depth/Crush Depth costs 100% of the Base Cost of the battle dress.

MISCELLANEOUS
Armoured Coveralls
Armoured coveralls provide some additional protection to the suit but their main role is to keep contaminants and debris out of the complex joints of a powered suit. Coveralls provide an additional two points of Armour (which can take the battle dress above its normal maximum Armour) and cost Cr. 10,000. They use no Slots.

Tool Kit
A set of basic mechanic tools, powered off the suit's own power supply. This includes screwdrivers, drill, wrench and saw. Uses 2 Slots and costs Cr. 1,800.

Med Pack
The med pack is an advanced 'smart' medical diagnostic and dispensary. It contains up to five doses of a variety of drugs and is equipped with an expert system that either gives a +1 DM on all Medic skill checks or else can operate on its own as if it had Medic1. It costs Cr. 5,000.

Smoke Discharger
This pack include three smoke dispensers, which can lay down a cloud of thermally-opaque smoke giving a –2 DM all to hit rolls. At TL 7, radar-based targeting renders smoke dischargers largely ineffective. They remain effective against laser weapons, reducing damage by 3D. They use 1 Slot and cost Cr. 500 per pack.

Prismatic Aerosol Dispenser
Similar to the smoke discharger, the prismatic aerosol dispenser fires a cloud of diamonoid dust, which refracts and breaks up laser fire, including laser designators for smart weapons. This provides a –2 DM for to hit rolls for all laser weapons, including designators. It uses 1 Slot and costs Cr. 1,000 per pack.

Chaff Dispenser
The Chaff dispenser fires a cloud of radar-reflective strips, which confuse active sensors systems and missile guidance systems, giving a –2 DM on to hit rolls for all radar-guided missiles. It uses 1 Slot and costs Cr. 1,000 per pack.

VEHICLE DESIGN EXAMPLES

GROUND CAR

A TL 10 Ground car, capable of holding five people, plus cargo. It should be faster and handle better than a stock car.

Five Spaces for crew and passengers, plus two Spaces for cargo, seven Spaces. At Cr. 1,200 per space, the base price of the Ground Car is Cr. 8,400. This is used as the basis for all other calculations.

Structure is equal to Spaces/2, rounded down. Hull is equal to Spaces/2, round up. So Structure is 3 (7/2, rounding down), while Hull is 4.

Base Agility is 0, while Base Speed and Range are 150 kilometres per hour and 400 km respectively.

We are going to boost both Speed and Agility.

Each 10% increase in Base Speed costs 10% of the Base Vehicle Cost and uses 1 Space. So we are going to boost Speed by 20%, which will costs us 20% of the Base Cost of Cr. 8,400. However the number of Spaces needs to be increased first to allow for the additional speed.

So we return to the start and opt for nine Spaces, costing Cr. 10,800 (Cr. 1,200 x9), with a Structure of 4(9/2, rounding down) and a Hull of 5 (9/2 rounding up).

Increasing speed twice now costs Cr. 2,120. A 20% increase in speed brings us an increase up to 220 kilometres per hour.

Each extra point of Agility increases the cost of the vehicle by 50%. 50% of Cr. 10,800 is Cr. 5,800.

A Basic Navigation system at Cr. 2,000 and an entertainment system at Cr. 200 round out the design.

Shipping size is the number of Spaces divided by two, in tons (1/2 ton per Space). 9 divided by 2 is 4.5 so it takes 4.5 tons to ship a Ground Car in a starship.

Total price is Cr. 18,720.

The Stat block looks like this:

Vehicle	TL	Skill	Agility	Speed	Range	Crew and Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Car	10	Drive (wheeled)	+1	220	500	1/4	0.5 tons	No	5	4	18,720	4.5

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment
Navigation (Basic), Entertainment System (Cr. 200)

THE G-CARRIER

The next example is a G-Carrier, which is designed as a Heavy Grav Vehicle. It is not a full combat vehicle, more of a light patrol and scout vehicle.

First step is to determine how many passengers, crew and weapons we want to carry. Eight passengers makes a decent light infantry squad and two people should be able to handle the vehicle and weapons. Primary weapon will be a VRF gauss gun, with two Light TAC missiles (anti-air) for added punch.

So far that is 10 Spaces for crew, five Spaces for weapons. Other systems will take up additional Spaces, so we will call the G-Carrier an even 20 Spaces.

A 20 Space TL 14 Heavy Grav vehicle costs MCr. 2, has 10 hull and 10 structure, Agility +1, a top speed of 500km/h and a range of 4,000 km. Base armour is 5.

Making it an AFV costs an additional 100%, doubling the price. New base price is now MCr. 5. Range is halved and base armour is doubled to 10. All other stats stay the same. This uses two Spaces (10% of total).

We are going to add 30 points of armour to the hull. That is three times the base armour value, which will cost 30% of the vehicle's base cost (an additional Cr. 300,000), it also reduces speed by 20 kilometres per hour. This gives us a total armour of 40. We can allocate 50% of the armour as we choose instead of simply raising every area. We will increase the front armour to 70 and decrease both sides and rear to 30. We will leave top and bottom at 40. The turret, when installed, will have armour 60 for the turret front and 20 for side/rear.

The G-carrier Carries a VRF gauss gun and two TAC missiles in a remote turret. These five Spaces of weapons cost Cr 125,000 for the turret (5 x 25,000), plus Cr 206,000 for the weapons. The Turret system itself takes an additional space.

Life support is one Space and Cr. 10,000.

Hostile Environment Protection is one space and Cr. 100,000 (Cr. 5,000 x spaces).

Standard Nav is Cr. 10,000.

A Tech Level 8 Com with extreme range with a tight beam feature costs Cr. 2,000 and requires ½ a space.

Standard Sensors are ½ space and Cr. 15,000.

Finally, the shipping size of the g-Carrier is ½ ton per Space, so the 20 Space vehicle takes up 10 tons on a starship.

Vehicle	TL	Skill	Agility	Speed	Range	Crew and Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G-Carrier	14	Flyer (grav)	+1	440	2,000	2/8	No	No	10	10	4, 858, 000	10 tons

Location	Armour
Front Hull	70
Right Side	30
Left Side	30
Rear	30
Dorsal	40
Ventral	40
Turret Front	60
Turret side/rear	20

Weapon	Location	Damage	Range	Auto	Ammo
VRF Gauss	Top Turret	5d6 AP	Dist	12	20,000
Light Tac Missile (anti-air) x2	Top Turret	9d6	Extreme	No	

Other Equipment:
Standard Nav (+1), Standard Sensors (+1), Standard, Communications (TL 8), hostile environment protection, Short Term Life Support

CIVILIAN AEROPLANES

BI-PLANE

One of the earliest powered flight vehicles to be found on many worlds. Using a propeller engine to pull and funnel air back over two stacked pairs of wings.

Vehicle	TL	Skill	Agility	Speed	Range	Crew/Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Bi-Plane	4	Flyer (wing)	+1	150	300	1/1	0.27	No	1	2	60, 500	3 tons

Take-off/Landing: 400m/500m

Armour

Location	Armour
Front	2
Right	2
Left	2
Rear	2
Top	2
Bottom	2

Other Equipment/Modifications:

Communications (TL 4)

HEAVY PLANE

Designed to carry large quantities of cargo over long distances, these lumbering aircraft require four propellers to fly. Despite this immense power, the speed of this aircraft is much less then others of the Tech Level.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Heavy plane	6	Flyer (wing)	–1	200	2000	2/6	4.75 tons	No	9	10	868, 000	56 tons

Take-off/Landing: 2,500m/1,500m

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Navigation (basic), Sensors (advanced)

SKY CAR

The sky car is a small, personal aircraft roughly the size of standard road vehicles. Designed with four vectored propellers and two small wings, this VTOL aircraft is an excellent choice for those who wish to travel by air but without the inconveniences.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Sky Car	8	Flyer (wing)	+1	350	1, 200	1/1	—	No	1	1	168, 000	2

Take-off Radius: 32m

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Entertainment System Cr. 200, Navigation (basic), Sensors (basic)

SURVEY PLANE

The survey plane is a favoured vehicle for the exploration, mapping and surveillance of an area. Used by scientists and some law enforcement agencies, this aircraft comes fully equipped to monitor an area and process the information.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Survey Plane	8	Flyer (wing)	+1	360	3, 000	2/6	0.5 tons	No	10	10	1, 236, 500	60 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Computer/1 x2, Fresher, Increased Speed x2, Lab Space+2 (6 researchers, task undefined), Navigation (basic), Sensors (advanced), Short Term Life Support

CIVILIAN AIRSHIPS

DIRIGIBLE

Dirigibles or zeppelins use a large, reinforced balloon filled with lighter than air gas to lift. A series of propellers are then used to provide thrust and to turn the vehicle. The balloon making up the vast majority of the ship, a suspended gondola provides living space and houses the control systems. The size and nature of an airship make it an ideal exploration vessel for low tech worlds or a luxury means of transportation.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure Envelope	Structure Gondola	Cost (Cr.)	Shipping Size
Dirigible	6	Flyer (airship)	−4	120	6, 000	3/15	0.50 tons	No	6	4,800	6	600, 000	63 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Entertainment System Cr. 300 (communal), Fresher, Full Galley (serves 20), Navigation (basic), Sensors (basic)

REFUELING HUB

Some worlds are almost impossible to navigate without some form of air travel. In these cases such necessities as refuelling stations and brief lay-bys need to be easily accessible in the sky. These floating platforms can vary in size from simple fuel stops to small communities, providing services and merchandise to air born travellers.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure Envelope	Structure Gondola	Cost (Cr.)	Shipping Size
Hub	6	Flyer (airship)	−4	60	11, 660	10/20	75 tons	No	40	32,800	40	2, 172, 600	428 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Bunks x5, Communications (TL 6, boosted range x2), Decreased Speed x5, Entertainment System Cr. 600 (communal), Fresher x2, Full Galley (serves 40), Greater Fuel Capacity x3, Heavy Crane, Internal Vehicle Bay (8 tons) Light Crane x2, Navigation (basic), Sensors (basic), Short Term Life Support

CIVILIAN BICYCLES, RICKSHAW, WAGONS AND CARTS

LAND YACHT

An early wheeled vehicle which utilises wind power. Despite its reliance on constant wind it can reach a reasonable speed. A land Yacht often possesses one sail but designs do vary across cultures.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Land Yacht	1	Drive (wheeled)	–2	20%wind	—	1/–	0.27 tons	Frame	1	1	1,440	1

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Increased Agility x2, Wind Powered

WAGON

A basic wheeled vehicle found on most low-tech worlds, relying on muscle animals for power. A wagon is a useful method of moving cargo and passengers around. Some wagons function as domiciles as well for roaming travellers.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Wagon	1	Animals (riding)	–1	10	—	1/2	0.667 tons	No	1	1	1,000	2.5

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Horse x2

CIVILIAN GRAV VEHICLES

AIR/RAFT

An open-topped vehicle supported by anti-gravity technology. Air/rafts can even reach orbit but passengers at that altitude must wear vacc suits. They are ubiquitous, remarkably reliable and flexible vehicles.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Air/ Raft	8	Flyer (grav)	0	395	3, 200	1/3	—	Top	2	2	263, 464	4 tons

Armour

Location	Armour
Front	6
Right	6
Left	6
Rear	6
Top	6
Bottom	6

Other Equipment/Modifications:

Additional Armour, Autopilot (SL 1), Communications (TL 8), Computer /1, Database, Decreased Agility, Decreased Hull x2, Decreased Structure x2, Entertainment System, Fuel Efficient x3, Increased speed x4, Navigation (basic), Sensors (basic)

CARGO LOADER

A small, one-man grav vehicle designed for carrying, towing and pushing cargo. The cargo loader is often used in low gravity environments or when cargo lifters are not practical.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Cargo Loader	12	Flyer (grav)	+2	150	3, 000	1/–	1.1 tons	No	2	2	109, 000	2

Armour

Location	Armour
Front	5
Right	5
Left	5
Rear	5
Top	5
Bottom	5

Other Equipment/Modifications:

Advanced Controls, Communications (TL 10), Decreased Speed x7, Sensors (basic), Short Term Life Support

G/BIKE

The G/Bike is much like its ground based predecessors. With its speed and small size, it is a favourite of many space farers for travelling to and from spaceports. It is also the focus for many subcultures and gangs.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G/Bike	12	Flyer (grav)	+2	550	4, 500	1/1	—	Frame	1	1	275, 000	1.5 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Advanced Controls, Increased Speed, More Fuel Efficient x5

G-RACER

While technology changes, man's need for speed does not. With the advent of commercial grav cars comes the creation of grav racing, a highly competitive and popular sport. Easily out-striping the speed of their ground based predecessors, G-Racers add an element of danger that only increases the popularity of the pastime.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G-Racer	9	Flyer (grav)	+2	2, 000	2, 000	1/–	—	No	1	1	215, 000	0.5 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Advanced Controls, Streamlined

GRAV CAR

Common transportation on most advanced worlds, the grav car replaces the ground car in all functions. Several designs mimic earlier ground cars, while others abandon earlier conventions all together. Because of the risks of high altitude flying, most grav cars come with some form of life support.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Grav Car	12	Flyer (grav)	+2	500	3,000	1/4	0.27 tons	No	3	3	359,300	3 tons

Armour

Location	Armour
Front	5
Right	5
Left	5
Rear	5
Top	5
Bottom	5

Other Equipment/Modifications:

Advanced Controls, Double Capacity Seating, Entertainment System Cr. 300, Navigation (basic), Sensors (basic), Short Term Life Support

GRAV LINER

Replacing the airliner, the grav liners are designed to transport large numbers of passengers over long distances. The quality and conditions of the journey can vary depending upon the price.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Grav Liner	13	Flyer (grav)	0	1,000	4,000	6/270	—	No	77	78	14,333,000	80 tons

Armour

Location	Armour
Front	5
Right	5
Left	5
Rear	5
Top	5
Bottom	5

Other Equipment/Modifications:

Communications (TL 10), Decreased Agility, Decreased Hull x3, Decreased Structure x2, Double Capacity Seating x50 (business class), Increased Speed x10, Short Term Life Support, Sensors (advanced), Navigation (advanced), Full Galley (serves 20, first class), Triple Capacity Seating x50 (economy class), Entertainment System Cr. 600 x20 (first class), Entertainment System Cr. 300 x250 (business and economy), Fresher x4

GROUND EFFECT BIKE

The most basic of grav based personal transports, ground effect bikes come in a variety of styles with just as many modifications available to the enthusiast. Able to carry a single person, these are common place in scouting groups as a standard, long range personal transport.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Ground Effect Bike	8	Flyer (grav)	+1	300	1, 000	1/–	—	Frame	1	1	25, 000	0.5 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

G/RUNNER

The G/Runner is a smaller version of the grav car. It is a common alternative to the G/Bike being fully enclosed and capable of great speed.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G/ Runner	12	Flyer (grav)	+2	500	4, 500	1/1	0.25 tons	No	1	2	325, 300	1.5 tons

Armour

Location	Armour
Front	5
Right	5
Left	5
Rear	5
Top	5
Bottom	5

Other Equipment/Modifications:

Advanced Controls, Entertainment System Cr. 300, Increased Agility, More Fuel Efficient x5

GUV

The Grav Utility Vehicle (GUV) can seat up to eight people, including the driver. For those that can afford it, the GUV is an ideal vehicle for travellers and mercenary groups who need fast planetary transport.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
GUV	13	Flyer (grav)	+1	500	5,720	1/7	1.67 tons	No	3	3	422, 200	3 tons

Armour

Location	Armour
Front	5
Right	5
Left	5
Rear	5
Top	5
Bottom	5

Other Equipment/Modifications:

Double Occupancy Seating x3, Entertainment System Cr. 200, Fuel Efficiency, Greater Fuel Capacity, Short Term Life Support, Navigation (basic)

SEV

The very best survey and scouting vehicle. The Survey and Exploration Vehicle is a fully enclosed grav vehicle with a full sensor suit, long term life support and protection from hazardous environments.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
SEV	12	Flyer (grav)	+1	400	3,000	2/4	—	No	15	15	4, 659, 500	15 tons

Armour

Location	Armour
Front	5
Right	5
Left	5
Rear	5
Top	5
Bottom	5

Other Equipment/Modifications:

Airlock, Bunks x3, Communications (TL 10), Computer/3, Corrosive Environment Protection, Double Capacity Seating x2, Fresher, Fusion Plant, Insidious Environment Protection, Life Support (long term), Navigation (advanced), Sensors (advanced)

CIVILIAN GROUND VEHICLES

ARMOURED VAN

A heavily armoured version of a common, small scale cargo transporter. Similar vehicles are often fitted with seating and used for the movement of Enforcers or for removing criminal agents.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Armoured van	7	Drive (wheeled)	−1	105	400	2/−	1 ton	No	3	3	22, 800	3 tons

Armour

Location	Armour
Front	9
Right	9
Left	9
Rear	9
Top	9
Bottom	9

Other Equipment/Modifications:

Additional Armour x2, Communications (TL6), Entertainment System Cr. 200

CARGO TRANSPORT

A mass cargo vehicle utilising an internal combustion engine, normally possessed of six or eight wheels to counter the lose of control caused by a large, detachable container section. Functional in design, these vehicles offer little in terms of passenger transport and even less in comfort.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Cargo Transport	8	Drive (wheeled)	0	125	400	1/2	3.25 tons	No	4	8	60,200	8 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Entertainment System Cr. 200, Navigation Basic, Wheels x6

CARGO TRANSPORT (ARTICULATED)

The independent, control and drive section of a modular, articulated transport vehicle. Most commonly used for the mass transit of goods across continent sized distances. Long convoys of such vehicles can be seen carrying the supplies needed to support civilisation.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Cargo transport (cab)	7	Drive (wheeled)	0	150	706	2/–	—	No	5	5	20, 900	5 tons

Armour

Location	Armour
Front	6
Right	6
Left	6
Rear	6
Top	6
Bottom	6

Other Equipment/Modifications:

Additional Armour, Entertainment System Cr. 300, Greater Fuel Capacity x3, More Fuel Efficient, Navigation (basic), Towing Capacity x4, Wheels x6

CHASE CAR

A specialised variant of automobiles normally used by law enforcement officers. Its increased speed and handling makes it well suited for high speed pursuits. Equipped with surveillance sensors to aid in the chase and a method to call in assistance from other officers.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Chase Car	8	Drive (wheeled)	+2	192	400	1/4	—	No	4	4	25, 800	4 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Double Capacity Seating,), Increased Agility x2, Increased Speed x2 Navigation (basic), Sensors (basic)

DRILLER

A large scale tunnelling machine most commonly found on colony worlds and mining facilities. While lacking in any subtlety, there is no faster way of excavating a promising site. Equipped with digging tools, geology samplers and cutting equipment.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Driller	10	Drive (mole)	−1	55	800	2/−	4.5 tons	No	25	25	1,780,000	25

Armour

Location	Armour
Front	12
Right	12
Left	12
Rear	12
Top	12
Bottom	12

Other Equipment/Modifications:

Additional Armour x2, Digging Equipment, Cutting Equipment, Geology Sampler, Sensors (basic), Tracks, Tunnelling Machine, Navigation (advanced), Greater Fuel Capacity x2

DUNE BUGGY

A small, agile, quad wheeled vehicle. Its primary features are a rugged and durable frame, sparsely fitted with metal plating. With its fast speed and advantage over tough terrain the vehicle is a favourite of explorers and adventurers on worlds with little stable road surface.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Dune Buggy	7	Drive (wheeled)	0	150	400	1/1	—	Frame	1	1	2,900	1 ton

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Off Road Capability, Communications (TL 4)

EARLY GROUND CAR

A conventional wheeled automobile, found on many worlds towards the end of the industrial age. Based on the latest internal combustion engine the world can produce. A solid metal frame offers better protection then many latter designs which use fibreglass and plastics.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Ground Car	5	Drive (wheeled)	0	130	150	1/3	—	No	3	2	6, 720	4 tons

Armour

Location	Armour
Front	6
Right	6
Left	6
Rear	6
Top	6
Bottom	6

Other Equipment/Modifications:

Decreased Hull, Decreased Structure x2, Increased Armour, Increased Speed x4, Reduced Fuel Efficiency

ELECTRIC TRAIN

Trains are common place on most mid-Tech Level worlds, being a fast, reliable and efficient method of transporting cargo and passengers. Most trains are modular in nature, allowing for a variable number of cars to meet the needs of the time. Often long distance trains will have an improved service available for a higher price, such as wet bar and canteen.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Electric train (1 car)	7	Drive (wheeled)	−1	125	—	2/32	1.6 tons	No	13	13	126, 000	13 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Double Capacity Seating x16, External Power

JET CAR

The jet powered car is an odd sight. Mostly found on worlds without the widespread use of the internal combustion engine or as a form of extreme sports vehicle due to the much greater speed and acceleration. The Jet car's road speed is almost unmatched.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Jet car	7	Drive (wheeled)	0	340	320	1/1	0.5 tons	No	4	5	14, 500	7

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Decreased Hull x3, Decreased Structure x2, Entertainment Cr. 200, Increased Speed x 10, Lower Fuel Capacity x2

LIMOUSINE

There are few better expressions of wealth than owning as desirable a car as this. Limousines come in a variety of styles and with a number of luxuries aboard from bar compartments to outrageous hot tubs. While perhaps not the most practical of vehicles, everyone who sees it will know how rich you are.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Limousine	10	Drive (wheeled)	1	300	500	1/4	0.25 tons	No	6	7	38, 920	6.5 tons

Armour

Location	Armour
Front	8
Right	8
Left	8
Rear	8
Top	8
Bottom	8

Other Equipment/Modifications:

Additional Armour, Entertainment System Cr. 600, Increased Agility, Increased Speed x6, Navigation (basic), Wet Bar

MOTORCYCLE

A popular vehicle on many worlds. The motorcycle is small, manoeuvrable, fast and often has a social connotation. Every explorer should consider owning at least one as they are easier to store and travel with then larger vehicles.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Motorcycle	7	Drive (wheeled)	1	240	300	1/1	—	Frame	1	1	4, 800	1 ton

Armour

Location	Armour
Front	0
Right	0
Left	0
Rear	0
Top	0
Bottom	0

Other Equipment/Modifications:

Motorcycle

MOTORCYCLE WITH SIDECAR

A less common sight than a standard motorcycle. Sometimes the sidecar can be obtained separately and attached to a compatible bike, which will make it slower but also allows it to carry an additional passenger or cargo.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Bike with Sidecar	6	Drive (wheeled)	1	150	200	1/2	—	Frame	1	2	7, 200	1.5 tons

Armour

Location	Armour
Front	0
Right	0
Left	0
Rear	0
Top	0
Bottom	0

Other Equipment/Modifications:

Motorcycle

MPV

A Multi-Purpose Vehicle (MPV), is commonly seen on worlds without grav technology. With both on and off world capability, the MVP contains an extended seating area for up to six others which can easily be converted for cargo.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
MVP	7	Drive (wheeled)	0	144	400	1/7	—	No	2	3	20, 200	2.5 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Double Occupancy Seating x3, Entertainment System Cr. 200, Navigation (basic), Off-road Capability

OFF-ROAD TRUCK

Designed for off-road conditions, these vehicles are robust and reliable in nature. Possessing an open flatbed for cargo and equipment, it can carry up to seven passengers, although the bed can get rather uncomfortable over time.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Off-road Truck	7	Drive (wheeled)	0	160	440	1/2	1.5 tons	Top/ Cargo Bed	5	3	15, 520	3 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Double Occupancy Seating, Entertainment System Cr. 200, Fuel Efficiency, Increased Hull x2, Navigation (basic), Off-road Capability

OFF-ROADER

A robust, heavy vehicle designed difficult terrain. It has the distinct advantage over the truck variant is that it is fully enclosed. It is favoured by colonists on less developed worlds.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Off-roader	7	Drive (wheeled)	−1	160	440	1/3	0.5 tons	No	5	3	20, 720	3 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Entertainment System Cr. 200, Fuel Efficiency, Increased Agility, Increased Hull x2, Navigation (basic), Off-road Capability, Towing Capacity

OMNIBUS

A large, heavy passenger vehicle. An Omnibus is not the most agile of vehicles but provides cheap and reasonably comfortable transportation within a local area. Some go further afield, making cross continental journeys with overnight stops. There are a number of variations for fewer or more passengers such as articulated and double decked omnibuses.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Omni-bus	6	Drive (wheeled)	−1	100	280	1/28	0.25 tons	No	5	6	25, 520	8 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Decreased Agility, Decreased Hull x3, Decreased Structure x2, Double Occupancy Seating x14, More Fuel Efficient x2

PICK-UP TRUCK

A versatile road vehicle, with an enclosed cab for the driver and passenger. The flatbed can be used for cargo or for additional passengers, even if the ride is a little bumpy.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Pick-up Truck	6	Drive (wheeled)	0	100	200	1/2	1 ton	Top/ Cargo Bed	4	3	7, 072	3 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Double Occupancy Seating, Entertainment System Cr. 200, Increased Hull

QUAD BIKE

A favoured choice for adventurers who need transportation without taking too much room. A quad bike is open topped with enough room for one passenger or some cargo. It is not uncommon to see them in agricultural areas, towing carts of produce across difficult terrain.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Quad Bike	7	Drive (wheeled)	2	144	400	1/1	—	Frame	1	1	4, 800	1 ton

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Increased Agility x2, Off Road Capability, Towing Capacity

RIOT TANK

The riot tank is a vital machine for law enforcement in troubled areas. Protecting officers from harm with its sturdy armour and possessing a powerful water cannon to knock back rioters and disperse crowds.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Riot Tank	7	Drive (wheeled)	−1	95	400	2/12	—	No	8	8	51, 600	10 tons

Armour

Location	Armour
Front	12
Right	12
Left	12
Rear	12
Top	12
Bottom	12

Other Equipment/Modifications:

Additional Armour x3, Communications (TL6), Decreased Hull x2, Decreased Structure x2, Sensors (basic), Water Cannon (five minutes of firing)

SMALL FAMILY CAR

Personal transportation found on many mid-tech worlds. Utilising an internal combustion engine and a satellite based navigation system for driver assistance. Some cultures hold such vehicles to be signs of social status, causing the varieties and performance of individual vehicles to differ greatly depending upon cost, need and taste.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Family Car	8	Drive (wheeled)	0	160	400	1/4	—	No	2	2	6,000	2.5 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Entertainment system Cr. 200, Navigation basic

SNOW CAT

The snow cat is a tracked vehicle for use in extreme cold. Providing both life support and passenger space, this vehicle is essential for travel through frozen climates.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Snow Cat	7	Drive (Tracked)	0	80	400	1/6	—	No	3	3	45, 200	2.5 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL6), Double Capacity Seating x3, Hostile Environment Protection, Increased Hull

SNOWMOBILE

An open, tracked vehicle for rapid movement through frozen environments.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Snow mobile	7	Drive (tracked)	1	88	320	1/1	—	Frame	1	1	4, 800	1 ton

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Increased Agility x1, Increased Speed, Lower Fuel Capacity x2, Towing Capacity

SOLAR CAR

The solar car is often found on worlds with either an exceptionally high level of UV exposure or on worlds where the combustion engine (for whatever reason) is not viable. In many ways the solar car has the advantage, with unlimited range, no fuel costs and being environmentally friendly. The only disadvantage being the reliance on high light levels.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Solar car	8	Drive (wheeled)	0	112	—	1/4	—	No	2	3	16, 400	2.5 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Decreased Speed x2, Entertainment system Cr. 200, External Power (solar), Navigation (basic)

SPORTS CAR

Higher priced than other cars, sports cars are more a symbol of wealth than an effective vehicle. Often designed more for appearance and speed, these vehicles are used for racing and thrill seeking. On many worlds the social status attached to these cars makes them highly desirable to poorer social classes.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Sports car	8	Drive (wheeled)	2	224	320	1/1	—	Top	2	2	13,920	2 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Entertainment system Cr. 400, Increased Agility x2 Increased Speed x4, Lower Fuel Capacity x2, Navigation basic

STEAM CAR

Steam powered vehicles are most commonly found on early industrial worlds where the internal combustion engine is yet to be perfected. Such vehicles provide greater speed than animals and are often less expensive. The use of steam vehicles can often survive into the age of the internal combustion engine providing a variety of car designs.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Steam car	4	Drive (wheeled)	0	50	100	1/2	0.15 Tons	No	2	2	3, 600	2.5 tons

Armour

Location	Armour	Other Equipment/Modifications:
Front	2	
Right	2	
Left	2	
Rear	2	
Top	2	
Bottom	2	

SUV

The Sports Utility Vehicle (SUV) is a large wheeled drive car designed to seat eight people in comfort. This and its off road capability, make it a favoured choice of mercenaries and travellers alike.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
SUV	7	Drive (wheeled)	0	144	572	1/7	1.67 tons	No	3	3	19, 720	3 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Double Occupancy Seating x3, Entertainment System Cr. 200, Fuel Efficiency, Greater Fuel Capacity, Navigation (basic), Off-road Capability

TEV

The Tracked Exploration Vehicle is capable of housing eight people and the life support can maintain a comfortable environment indefinitely. Despite the cost, this vehicle is often the best choice for scouts and explorers who can travel great distance without the need for aerial support.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
TEV	9	Drive (tracked)	0	75	—	2/8	0.27 tons	No	15	15	2, 452, 300	15 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Airlock, Bunks x4, Communications (TL 8), Corrosive Environment Protection, Double Capacity Seating x4, Fresher, Fusion Plant, Improved Agility, Insidious Environment Protection, Life Support (long term), Navigation (standard), Sensors (standard)

VAN

A popular choice for traders and businesses. Allows for a reasonable amount of goods to be transported without sacrificing speed or manoeuvrability.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
van	7	Drive (wheeled)	0	160	400	2/–	1.1 tons	No	3	3	7, 400	3 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Entertainment System Cr. 200

CIVILIAN HELICOPTERS

BEHEMOTH HELICOPTER

Vast cargo carriers, Behemoth helicopters require two rotors to provide the necessary lift. It fulfils a much needed role, being able to land and take off vertically. Able to transport ground vehicles in its large cargo bay or carry passengers instead.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Behemoth Helicopter	8	Flyer (rotor)	–1	120/400	2,000	2/–	4.25 tons	No	13	13	1, 029, 000	60 tons

Take-off Radius: 70m

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 8), Navigation (basic), Sensors (advanced)

HELICOPTER

One of the most common designs of helicopter found on many worlds. This vehicle is capable of carrying up to six passengers along with its two crew. While slower than winged aircraft, the vertical takeoff and landing capability of a helicopter make it a more versatile vehicle.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Helicopter	6	Flyer (rotor)	+1	120/360	1,000	2/6	1 ton	No	2	3	318, 000	10 tons

Take-off Radius: 30m

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Increase Speed x2, Navigation (basic), Sensors (basic), Triple Capacity Seating x2,

POLICE HELICOPTER

Designed for pursuit and surveillance, these helicopters are favoured by many law enforcement agencies. Filling a supporting role in ground operations, these aircraft are used to locate and monitor targets as well as aid in coordinating ground forces.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Police Helicopter	7	Flyer (rotor)	+1	195/ 520	2,000	2/2	—	No	2	2	278, 000	8 tons

Take-off Radius: 26m

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Navigation (basic), Increase Speed x3, Sensors (standard)

UNICOPTER

A single rotary wing helicopter most commonly utilised for short-range aerial surveillance. This compact, lightweight vehicle can carry up to three people at a stretch and is fitted with a variety of compact sensors within its nose section.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Helicopter	8	Flyer (rotor)	+1	150/ 400	2,000	2/1	—	No	1	1	129, 000	4 tons

Take-off Radius: 26m

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 8), Navigation (basic), Sensors (Advanced),

CIVILIAN HOVERCRAFT

ATV HOVERCRAFT

An enclosed, pressurised all-terrain, hovercraft. The nature of this vehicle allows it to travel over difficult terrain and standing water with ease. With plenty of space for passengers, the self contained atmosphere and the all terrain abilities this vehicle is perfect for ground exploration.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
ATV	12	Drive (hover)	+1	137	1,400	1/15	—	No	3	3	277,000	5 Tons

Armour

Location	Armour
Front	10
Right	10
Left	10
Rear	10
Top	10
Bottom	10

Other Equipment/Modifications:

Additional Armour, Advanced Sensors, Communication Continental, Decreased Speed x5, Double Capacity Seating x4, Life Support (short term), Navigation Standard

SWAMP RACER

This small hovercraft is designed for speed and manoeuvrability above functionality. Used in flooded and swamp areas as a recreational vehicle, the Racer is one of the fastest methods of getting through an otherwise impassable marsh.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Swamp Racer	7	Drive (hover)	+2	180	484	1/2	0.25	Open Topped	2	2	216,200	3 Tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Double Capacity Seating, Entertainment System (Cr. 200), Greater Fuel Capacity, Increased Agility, Increased Speed x2, More Fuel Efficient

Civilian Jets

Airliner

Jet powered, air transport allowing reasonably rapid, atmospheric travel. Designed for the mass transit of passengers, these vehicles often prove uncomfortable over long periods of time, however higher grade seating is sometimes available at cost.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Airlinner	8	Flyer (wing)	−1	400	7, 999	2/496	—	No	75	75	60, 174, 800	600 tons

Takeoff and landing: 4,500m/3,500m

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Autopilot, Communications basic, Double Occupancy x70 (business class seating), Entertainment System Cr. 300 x496, Greater fuel Capacity x3, Life Support (short term) x25, Navigation (standard), Triple Occupancy x100 (economy class)

Private Jet

Small, jet propelled aircraft. On many worlds they are used both commercially and owned privately and so function as a status symbol as much as transportation. This private model provides rapid and comfortable transportation for any travelling group.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Jet Plane	7	Flyer (wing)	+1	700	2, 000	2/8	0.25 tons	No	4	5	2, 697, 500	19 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Autopilot, Communications (TL 6), Entertainment System Cr. 500 (communal), Fresher, Navigation (basic), Increase Speed x4, Sensors (standard), Short Term Life Support, Wet Bar

SUPERSONIC AIRLINER

Providing the fastest form of air travel for many worlds prior to the discovery of grav technology, the supersonic airliner is often reserved for high society. This is often reflected in the luxury passengers are provided with.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Supersonic Airliner	8	Flyer (wing)	+1	2,400	4, 000	4/100	0.75 tons	No	60	60	80, 151, 000	160 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Autopilot, Communications (TL 6), Double Capacity Seating x50, Entertainment System Cr. 300 x100, Fresher x2, Full Galley (serves 20), Increased Agility x2, Increased Speed x10, Navigation (basic), Sensors (advanced), Short Term Life Support, Supersonic

VERTICAL TAKE-OFF JET

Vertical Take-Off and Landing (VTOL) jets and planes are more costly than helicopters but can achieve much greater speeds.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
VTOL Jet	8	Flyer (wing)	+3	500	1,440	1/12	1 ton	No	5	5	3, 445, 000	20

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Autopilot, Communications (TL 6), Increased Speed x2, More Fuel Efficient x2 Navigation (basic), Sensors (advanced), Short Term Life Support

Civilian Ships and Boats

Air Boat

A small, flat-bottomed river craft, this boat uses a large propeller above the waterline to provide thrust. While not commonly seen, they are often used for swamplands, where debris and plant growth can entangle more conventional methods of propulsion.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Air Boat	6	Seafarer (motor)	0	60	800	1/2	—	Frame	1	1	6, 000	1.5 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Barge

A barge is a narrow, flat bottomed, boat primarily used in canals. Designed for passengers and cargo, barges are common sites on most worlds which utilise waterways. At earlier Tech Levels they are often drawn by muscle animals. In later ages the barge often looses its purpose as a cargo vessel and is instead used for recreation or for residence.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Barge	4	Seafarer (motor)	0	40	200	2/–	0.75	No	1	2	10, 000	2.5 tons

Armour

Location	Armour
Front	2
Right	2
Left	2
Rear	2
Top	2
Bottom	2

Other Equipment/Modifications:

FERRY

Large ships designed for transportation across vast bodies of water. Able to transport passengers and their personal vehicles. These vessels are normally fitted with various forms of entertainment for longer journeys. Small cabins are often issued for night journeys.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Ferry	7	Seafarer (ocean ships)	–6	60	6,000	10/220	10 tons	No	141	141	2, 274, 600	282

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Fresher x4, Navigation (basic), Sensors (basic), Internal Vehicle Bays, Full Galley (serves 20), Entertainment System Cr. 600,

HYDROFOIL

These boats are fitted with foils beneath the waterline. This works to raise the prow of the vehicle out of the water, reducing the drag against the boat but also reducing the vehicles manoeuvrability.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Hydrofoil	7	Seafarer (ocean ship)	–3	180	3,000	1/15	0.75	No	10	10	128, 000	10

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Fresher, Hydrofoil, Navigation (basic), Sensors (basic)

MOTOR BOAT

Propeller driven vessels with a small cabin and deck. These boats are common site on many worlds, used for both recreation and by fishermen.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Motor Boat	5	Seafarer (motorboat)	0	40	200	1/6	0.25 tons	Top	2	2	25, 800	4 tons

Armour

Location	Armour
Front	2
Right	2
Left	2
Rear	2
Top	2
Bottom	2

Other Equipment/Modifications:

Communications (TL4), Entertainment System Cr, 200, Navigation (basic), Sensors (basic)

LUXURY YACHT

The absolute symbol of opulence and wealth. Private yachts are seen as toys of the fabulously rich, used for recreation and entertaining friends and guests. Coming with every amenity that the owner could desire.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Luxury Yacht	8	Seafarer (ocean ship)	–3	60	9,300	10/10	28.5 tons	No	100	100	5, 097, 500	100 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Computer/1 x2, Entertainment System Cr. 1000, Fresher x2, Full Galley (serves 10) x2, General Purpose Lab, Greater Fuel Capacity x10, Hot Tub (2 person capacity), Internal Vehicle Bays, More Fuel Efficient x10, Navigation (basic), Refrigeration (10 spaces), Sensors (standard), Swimming Pool (5 person capacity), Wave-piercing Hull, Wet Bar x2

POLICE CUTTER

Designed for speed and manoeuvrability, police cutters are pursuit vehicles. These small boats come fully equipped with sensors to aid in any search or surveillance.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Motor Boat	7	Seafarer (motorboat)	+1	180	400	2/–	—	Top	2	2	62, 000	2 tons

Armour

Location	Armour
Front	2
Right	2
Left	2
Rear	2
Top	2
Bottom	2

Other Equipment/Modifications:

Communications (TL6), Hydrofoil, Increased Agility, Navigation (basic), Sensors (Advanced)

POWER BOAT

Powerboats are small, lightweight and open topped boats. Their designed entirely for speed making them well suited to recreational racing and smuggling.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Power Boat	7	Seafarer (motorboat)	−1	180	400	1/4	0.25	Top	2	3	42, 000	2.5 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL6), Hydrofoil, Navigation (basic)

RESEARCH SHIP

Research ships are used for a wide variety of scientific applications. Providing a full suit of research facilities, this ship is ideal for any scientific expedition.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Research Ship	7	Seafarer (ocean ships)	–3	60	3, 000	10/–	1 ton	No	20	20	225, 500	20 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Bunks x6, Communications (TL6), Computer/1 x2, Hydrology Sampler, Lab Space +2 (7 researchers), Mini-galley, Navigation (basic), Sensors (advanced), Underwater Sensors (advanced)

RUBBISH TRAMP

An unfortunate necessity in many industrialised societies. These relatively small, open decked ships are used to ferry refuse to dumping stations or reclamation plants.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Rubbish Tramp	5	Seafarer (ocean ships)	–3	40	2, 000	2/–	3 tons	Open Bed	7	8	53, 100	10 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 4), Decreased Hull x3, Decreased Structure x2, Entertainment System (CR. 200), Fresher, Medium Crane

STEAM SHIP

An early, powered ship. The Steam ship or Steamer as it is sometimes called, is used for a variety of tasks from ferrying passengers to carrying goods around the coast.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Steam Ship	4	Seafarer (ocean ships)	–3	20	1, 000	5/50	—	No	15	15	170, 000	15 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Double Capacity Seating x25

TENDER

Most large vessels will be accompanied by at least one tender. These small boats are used to transport people and cargo without the need for ships to go into port or perform complicated boarding actions.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Tender	5	Seafarer (motorboats)	0	40	100	1/9	1 ton	Top	3	3	19, 000	tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 8), Lower Fuel Capacity x5

CIVILIAN SUBMERSIBLES

DEEPWATER SUBMARINE

These high technology vessels are specially designed for deep sea exploration at such depths that other submersibles would be crushed by pressure. In some societies these vessels are used for transport and cargo from deep sea mining and research facilities.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Deepwater Sub	8	Seafarer (submarine)	–4	20	1,000	2/6	0.25 tons	No	15	15	4, 520, 100	45 tons

Safe dive Depth: 400
Safe Crush Depth: 1,200
Life Support: 200

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Bunks x3, Communications (TL 8), Fresher, Increased Crush Depth x2, Navigation (basic), Sensors (Standard)

RESEARCH SUB

Research subs are mostly concerned with the study of marine life and underwater features. Passenger facilities and environmental systems are provided for long journeys and studies. Fully equipped for any research project.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Research Sub	9	Seafarer (submarine)	–4	50	—	3/7	0.75 tons	No	50	50	5, 877, 000	150 tons

Safe Dive Depth: 600
Crush Depth: 1,800
Life Support: 500

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Bunks x5, Communications (TL6), Computer/1 x2, Fusion Plant, Hydrology Sampler, Lab Space +2 (7 researchers), Long Term Life Support, Mini-galley, Navigation (basic), Underwater Sensors (advanced)

SUBMARINE

Civilian submarines are most often used on ocean worlds for transporting passengers and goods between underwater, settlements but are also used for salvaging, exploring and maintenance of underwater facilities.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Submarine	8	Seafarer (submarine)	–2	20	—	2/4	3.5 tons	No	5	5	3, 123, 000	90 tons

Safe dive Depth: 400
Safe Crush Depth: 600
Life Support: 9 days

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Airlock, Bunks x3, Communications (TL 8), Fresher, Navigation (basic), Underwater Sensors (Standard), Long Term Life Support

SUBMERSIBLE

Submersibles are small, short range submarines normally carried by much larger vessels such as research ships.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Submersible	8	Seafarer (submarine)	–2	25	100	2/4	0.25 tons	No	5	5	519, 500	20 tons

Safe dive Depth: 400
Safe Crush Depth: 600
Life Support: 100

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Bunks x3, Communications (TL 8), Navigation (basic), Underwater Sensors (Standard)

Civilian Trains

Grav Train

Replacing earlier electric trains, the Grav train uses weak grav modules to support the cars and increase speed.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Grav Train	13	Flyer (grav)	−4	800	—	4/280	41.33 tons	No	36	36	2, 371, 200	36.6 tons

Armour

Location	Armour
Front	5
Right	5
Left	5
Rear	5
Top	5
Bottom	5

Other Equipment/Modifications:

Locomotives (front and rear):
Double Capacity Seating x20, Entertainment System Cr. 400, Fresher, Short Term Life Support

Freight Car:
Open Cargo Bed

Passenger Car:
Double Capacity Seating x100, Entertainment System, Freshener x2, Full Galley (serves 20), Short Term Life Support

Steam Train

The steam locomotive is a common design found on many low-tech worlds. It allows for the easy transportation of goods across vast distances and is often more comfortable than animal drawn vehicles, this along with the interchangeable carriages makes the steam train a vital part of many developing civilisations.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Steam Train	4	Drive (wheeled)	−4	80	800	3/120	13.77 tons	No	25	26	560, 000	26 tons

Armour

Location	Armour
Front	2
Right	2
Left	2
Rear	2
Top	2
Bottom	2

Other Equipment/Modifications:

Engine Cab:

Fuel Cart:
Increased Range

Freight Carriage:
Open Cargo Bed

Passenger Carriage:
Double Capacity Seating x50

Dinning and Cabin Carriage:
Full Galley (serves 100 passengers), Freshener x2, Bunks x10

Civilian
Unpowered Ships and Boats

Canoe

A small, narrow, water vehicle that relies on the water flow and the muscle power of the occupants. Primarily seen on primitive worlds, the canoe is most used for hunting and fishing. It can also be used for trade and transportation in environments where wheeled vehicles are ill suited.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Canoe	1	Seafarer (sail)	–1	Str	—	1/–	0.25 tons	Top	1	1	400	1 ton

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Caravel

Small, two masted, highly agile sailing ships. Caravels are often employed by low Tech Level worlds to explore vast stretches of ocean. Capable of transporting small quantities of goods or travellers and cartographers to new lands.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Caravel	1	Seafarer (sail)	–2	20% wind	—	8/18	2.5 tons	Top	9	8	164,000	18 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Bunks x14

SAIL YACHT

A symbol of opulance on higher tech worlds, these luxury vehicles are often owned by the wealthy who feel nostalgic for the age of sail crafts rather than the larger, powered sea vessels available.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Yacht	8	Seafarer (sail)	−1	55% wind	—	10/20	2.5 tons	No	25	20	530, 300	50 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Bunks x25, Communications (TL 6), Entertainment System (Cr. 800), Fire Extinguishers, Full Galley (serves 20), Fresher x4, Navigations (basic), Sensors (basic)

SLOOP

Small sailboats that are fitted with a for and aft sail on a single mast. Most commonly used for fishing or personal travel. On more advanced worlds they become more of a recreational vehicle.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Sloop	1	Seafarer (sail)	−1	20% wind	—	1/2	0.25 tons	Top	1	1	1, 000	2.5 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Civilian Walkers

Cargo Lifter

The cargo lifter is a common sight around starports and industrial centres. Standing over nine foot tall, the lifter allows the driver to move objects with the aid of two large pincers. Unlike most walkers, the cargo lifter is not fully enclosed. This allows for better visibility and communication.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Cargo Lifter	8	Drive (walker)	+1	50	150	1/–	—	Top	2	2	112,000	8 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Manipulator Arms: Str 4 Dex 2

Cargo Lifter (Sealed)

This variant of the Cargo Lifter is designed for use in either hostile or no atmosphere worlds.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Cargo Lifter	8	Drive (walker)	+2	50	150	1/–	—	Top	2	2	140,000	8 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Advanced Controls, Communications (TL 6), Life Support (short term)
Manipulator Arms: Str 4 Dex 2

CONSTRUCTION-WALKER

The Construction-Walker is a vital part of any large building firm. Coming with a variety of tools and with several competing versions available, these Walkers can carry perform tasks from heavy lifting to dextrous welding.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Construction Walker	10	Drive (walker)	+2	50	150	1/–	2.5 tons	No	5	5	421,000	22.5 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Communications (TL 6), Medium Crane, Sensors (basic)
Manipulator Arms: STR 10 DEX 4

EXPLORER

Designed for extended exposure to hostile and alien environments, the explorer type walker comes equipped with advanced life support and protective measures. With its sensors it is an ideal vehicle for the exploration of the unknown.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Explorer	8	Drive (walker)	+2	50	150	1/–	—	Top	2	2	211,600	8 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Communications (TL8, tightbeam), Hostile Environment Protection, Long Term Life Support, Navigation (standard), Sensors (advanced)

SUB-WALKER

A fully enclosed walker designed to enable engineers and technicians to work underwater. Modifiable for most tasks, this walker is a useful asset.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Sub-Walker	8	Drive (walker)	+2	50	150	1/–	—	Top	2	2	120,000	8 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Advanced Controls, Communications (TL 6), Life Support (short term)
Manipulator Arms: Str 2 Dex 1

TECH-WALKER

The Tech-Walker is fully enclosed and equipped with all the tools necessary to perform vital maintenance in a hostile environment. This walker is adjustable for different tasks, making it the logical choice for any mechanic working in harsh conditions.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Tech-Walker	8	Drive (walker)	+2	50	150	1/–	—	Top	2	2	175,000	8 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Communications (TL 8), Cutting Equipment, Hostile Environment Protection, Sensors (basic), Short Term Life Support
Manipulator Arms: STR 2 DEX 1

MILITARY AEROPLANES

DIVE BOMBER
Designed to give close support to ground troops or make precise attacks against fortified positions or navel vessels, the dive bomber makes itself felt in early mechanised warfare.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Dive Bomber	5	Flyer (wing)	+1	300	2,000	2/–	—	No	4	5	1, 912, 300	36

Take-off Radius/Landing: 2,500/1,250

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4
Turret Front	4
Turret Side/rear	4

Weapon	Location	Damage	Range	Auto	Ammo
Light Machinegun x2	Small Turret Top Rear	3d6 SAP	Very Long	6	12, 000
Medium Bomb x2	Dedicated Bomb Bay Left Wing	12d6	Very Distant	No	
Medium Bomb x2	Dedicated Bomb Bay Right Wing	12d6	Very Distant	No	
Heavy Bomb x2	Dedicated Bomb Bay Bottom	14d6 AP	Very Distant	No	

Other Equipment/Modifications:

Additional Armour, Communications (TL 4) , Increased Speed x10, Navigation (basic), Sensors (basic)

FIGHTER
Fighter craft are light, manoeuvrable and armed to tear apart enemy air support. These vehicles are the key to air superiority and many variations can be found to fulfil multiple roles in aerial combat.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Fighter	5	Flyer (wing)	+1	375	600	1/–	—	No	2	3	295, 500	9 tons

Take-off/Landing: 300m/500m

Armour

Location	Armour
Front	2
Right	2
Left	2
Rear	2
Top	2
Bottom	2

Weapon	Location	Damage	Range	Auto	Ammo
Light Machinegun x2	Fixed Mount Front	3d6 SAP	Very Long	6	12, 000
Light Machinegun x2	Fixed Mount Left Wing	3d6 SAP	Very Long	6	12, 000
Light Machinegun x2	Fixed Mount Right Wing	3d6 SAP	Very Long	6	12, 000

Other Equipment/Modifications:

Communications (TL 4) , Increased Speed x5, Navigation (basic), Sensors (basic)

LIGHT BOMBER

The light bomber is best employed to clear out enemy infantry positions. Despite their limited payload, a formation of bombers can decimate an opposing force.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Light Bomber	5	Flyer (wing)	+1	375	600	2/–	—	No	2	3	344, 500	10 tons

Take-off/Landing: 300m/500m

Armour

Location	Armour
Front	2
Right	2
Left	2
Rear	2
Top	2
Bottom	2
Turret Front	2
Turret Side/rear	2

Weapon	Location	Damage	Range	Auto	Ammo
Light Machinegun x2	Small Turret Top	3d6 SAP	Very Long	6	12, 000
Medium Bomb x6	Dedicated Bomb Bay Bottom	12d6	Very Distant	No	

Other Equipment/Modifications:

Communications (TL 4) , Increased Speed x5, Navigation (basic), Sensors (basic)

STRATEGIC BOMBER

Large, heavily armed bombers with turreted defences. While slower and bulkier, these flying fortresses have an advantage over fighter craft with their anti-air defences.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Strategic Bomber	8	Flyer (wing)	0	400	3,000	6/–	—	No	18	18	2, 416, 000	108

Take-off/Landing: 2, 000m/1, 000m

Armour

Location	Armour
Front	9
Right	9
Left	9
Rear	9
Top	9
Bottom	9
Front Turret Front	9
Front Turret Side/Rear	9
Rear Turret Front	9
Rear Turret Side/Rear	9
Top Turret Front	9
Top Turret Side/Rear	9
Bottom Turret Front	9
Bottom Turret Side/Rear	9

Weapon	Location	Damage	Range	Auto	Ammo
Light Autocannon	Front Turret	6d6 SAP	Very Long	6	5, 000
Light Autocannon	Rear Turret	6d6 SAP	Very Long	6	5, 000
Light Autocannon	Top Turret	6d6 SAP	Very Long	6	5, 000
Light Autocannon	Bottom Turret	6d6 SAP	Very Long	6	5, 000
Heavy Bomb x20	Dedicated Bomb Bay Bottom	14d6 AP	Very Distant	No	

Other Equipment/Modifications:

Large Turret: 1 Crew, Front
Large Turret: 1 Crew, Rear
Large Turret: 1 Crew, Top
Large Turret: 1 Crew, Bottom

Additional Armour x2, Advanced Controls, Communications (TL 8), Ejection Seats x6, Navigation (basic), Sensors (advanced), Improved Fire Control +2 (Heavy Bombs), Increased Speed x10

MILITARY AIRSHIPS

ARTILLERY PLATFORM

This air suspended gun emplacement bares a passing resemblance to the gun platforms of more advanced, grav using militaries. Using a body of lighter than air gas to suspend it inverted in the air, the guns of these vessels can rain a torrent of heavy weapons fire down on the landscape from high altitude, so long as fine aim is not required.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure Envelope	Structure Gondola	Cost (Cr.)	Shipping Size
Artillery Platform	5	Flyer (airship)	–4	100	4, 000	2/–	0.5 tons	No	2	1, 600	2	436, 000	21 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Weapon	Location	Damage	Range	Auto	Ammo
Artillery Rocket Pod x4	Bottom Fixed Weapon Mount	16d6	Distant	12	12

Other Equipment/Modifications:

Additional Armour, Communications (TL 4, extended range), Navigation (basic), Sensors (basic)

ZEPPELIN

An armed airship of vast proportions, zeppelins can be fitted with all number of armaments and heavier variants can function as floating bases for light aircraft. A zeppelin does suffer from a lack of manoeuvrability and the easily targeted envelope.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure Envelope	Structure Gondola	Cost (Cr.)	Shipping Size
Zeppelin	5	Flyer (airship)	–4	100	4, 000	6/–	0.5 tons	No	3	352	3	286, 500	32.5 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4
Right Turret Front	4
Right Turret Rear/Side	4
Left Turret Front	4
Left Turret Rear/Side	4

Weapon	Location	Damage	Range	Auto	Ammo
Light Machinegun x2	Left Turret	3d6 SAP	Rifle	6	12, 000
Light Machinegun x2	Right Turret	3d6 SAP	Rifle	6	12, 000
Heavy Bomb x6	Dedicated Bomb Bay Bottom	14d6 AP	Very Distant	No	

Other Equipment/Modifications:

Additional Armour, Communications (TL 4), Navigation (basic), Sensors (basic)

MILITARY BATTLEDRESS

BATTLE DRESS, BASIC

The ultimate personal armour, battle dress is a powered form of combat armour. The servomotors vastly increase the user's speed and strength.

Type	TL	Skill	Chassis	Str Modifier	Dex Modifier	Base Dmg	Armour	Duration	Speed	Cost (Cr.)	Shipping Size
Basic	14	Battledress	Medium	+4	+4	2d6	16	18 hours	12/60	1, 114, 350	0.1 tons

Other Equipment/Modifications:

Computer/2, Communications (advanced), Expert Tactics (Military/2)

BATTLE DRESS, CLOSE SUPPORT

Close Support Battle Dress is designed to operate with normally-equipped infantry. It is Equally mobile and well protected. With a built in support laser, two small artillery pieces and the ability to carry or mount additional armaments, this variant is a terrifying foe for infantry.

Type	TL	Skill	Chassis	Str Modifier	Dex Modifier	Base Dmg	Armour	Duration	Speed	Cost (Cr.)	Shipping Size
Close Support	14	Battledress	Medium	+4	+4	2d6	16	18 hours	12/60	1, 127, 350	0.1 tons

Weapon	Location	Damage	Range	Auto	Ammo
Laser Carbine	Slotted (left hand)	4d6	Rifle	No	50
Medium Mortar x2	Mounted (shoulders)	4d6	Distant	No	10

Other Equipment/Modifications:

Computer/2, Communications (advanced), Expert Tactics (Military/2)

BATTLE DRESS, COMBAT PIONEER

Combat Pioneer battle dress is slightly heavier than the standard model. Mounting no weapons but carrying a variety of advanced sensors and all the tools needed for a battlefield pioneer while offering the protection of a combat battledress.

Type	TL	Skill	Chassis	Str Modifier	Dex Modifier	Base Dmg	Armour	Duration	Speed	Cost (Cr.)	Shipping Size
Combat Pioneer	14	Battledress	Medium	+4	+4	2d6	19	18 hours	12/60	1, 296, 150	0.1 tons

Other Equipment/Modifications:

Computer/2, Communications (advanced), Expert (sensors/2) Sensors (advanced), Med Pack, Tool Kit

BATTLE DRESS, ELECTRONIC WARFARE

The Electronic Warfare variant uses advanced countermeasure systems and sensors to enable its bearer to jam enemy communications and systems, while also providing protection for other members of a battle dress team. While not carrying any built in weaponry, it does contain a host of decoy and defensive systems.

Type	TL	Skill	Chassis	Str Modifier	Dex Modifier	Base Dmg	Armour	Duration	Speed	Cost (Cr.)	Shipping Size
Electronic Warfare	14	Battledress	Medium	+4	+4	2d6	16	18 hours	12/60	1, 261, 350	0.1 tons

Other Equipment/Modifications:

Chaff Dispenser, Computer/2, Communications (advanced), Electronic Countermeasures (Advanced), Expert (sensors/2), Intrusion/3, Prismatic Aerosol Dispenser, Security/3, Sensors (advanced)

BATTLE DRESS, SCOUT

Normally used by reconnaissance units, artillery spotters and the like. Some officers and rapid assault units also favour it for its superior mobility. With a grav unit fitted as standard, this unit has much greater mobility.

Type	TL	Skill	Chassis	Str Modifier	Dex Modifier	Agility	Base Dmg	Armour	Duration	Speed	Cost (Cr.)	Shipping Size
Scout	14	Battledress	Light Chassis	+3	+4	+2	2d6+2	13	24 hours	20/400	879, 000	00.7 tons

Other Equipment/Modifications:

Active Camo, Computer/2, Communications (advanced), Expert (communications/2, sensors/2), Grav Pack, Sensors (advanced), Sonic Suppresser

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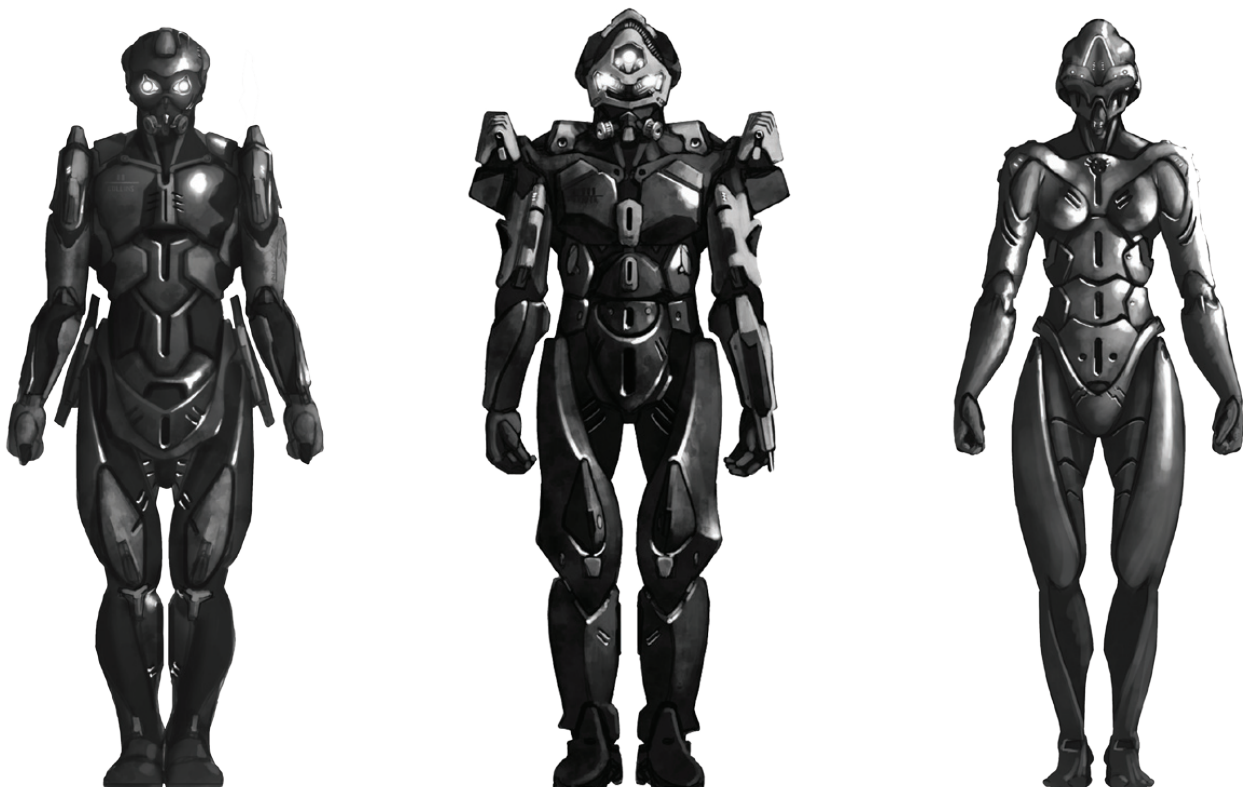
MILITARY GRAV VEHICLES

G/AV

The Grav Assault Vehicle is designed for rapid attacks and scouting. Lightly armoured, the G/AV is more suited to engaging infantry and convoys but its speed and armaments give it a fighting chance against heavier vehicles.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G/AV	12	Flyer (grav)	+2	1,600	3,000	2/–	—	No	7	7	5,961,000	7 tons

Location	Armour
Front	20
Right	20
Left	20
Rear	20
Top	20
Bottom	20
Turret Front	20
Turret Side/Rear	20

Weapon	Location	Damage	Range	Auto	Ammo
Advanced Light Autocannon	Modular Fixed Mount Forward Left	6d6 +4 SAP	Very Distant	8	5,000
Advanced Light Autocannon	Modular Fixed Mount Forward Right	6d6 +4 SAP	Very Distant	8	5,000
Light Tac Missile (Anti-Personnel) x2	Top Small Pop-up Turret	9d6	Very Distant	No	

Other Equipment/Modifications:

Small Turret: Improved Fire Control +2, Pop-up Turret

Additional Armour x3, Advanced Controls, Streamlined, Autopilot (skill-2), Communications (TL10 encrypted satellite uplink), Decreased Speed x2, Navigation (standard), Sensors (advanced, increased range x2), Short Term Life Support
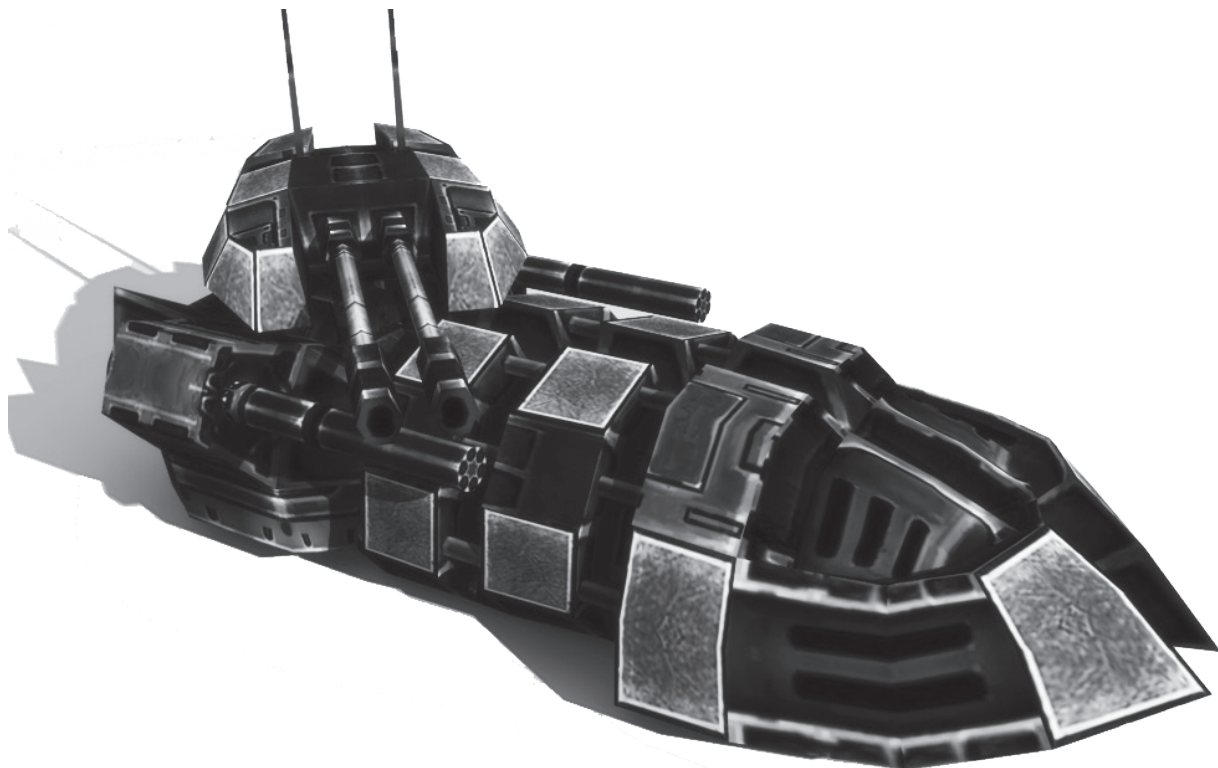
G/AT PLATFORM

The Grav Anti-Tank Platform serves a vital role in modern warfare. While not as versatile as other grav tanks, nor as well armoured, the range and camouflage abilities of the G/AT platform mean that those who can afford it will never have to worry about enemy armour units.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G/AT	13	Flyer (grav)	0	205	4,000	2/–	—	No	27	28	29, 673, 500	27.5 tons

Armour

Location	Armour
Front	20
Right	20
Left	20
Rear	20
Top	20
Bottom	20
Large Turret Front	20
Large Turret Side/Rear	20
Small Turret Front	20
Small Turret Side/Rear	20

Weapon	Location	Damage	Range	Auto	Ammo
Light Hypervelocity Gun	Large Turret Top	16d6 Ultimate AP	Very Distant	No	400
Advanced Support Weapon x2	Small Turret Top	4d6 SAP	Rifle	4	10,000

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +4, 1 Space for Ammunition
Small Turret: Improved Fire Control +1

Additional Armour , AFV, Autopilot (skill-2), Communications (TL10 encrypted satellite uplink), Decoy, Decreased Agility, Decreased Speed x5, Ejection Cocoon, Navigation (standard), Sensors (advanced, increased range x2), Short Term Life Support, Stealth II
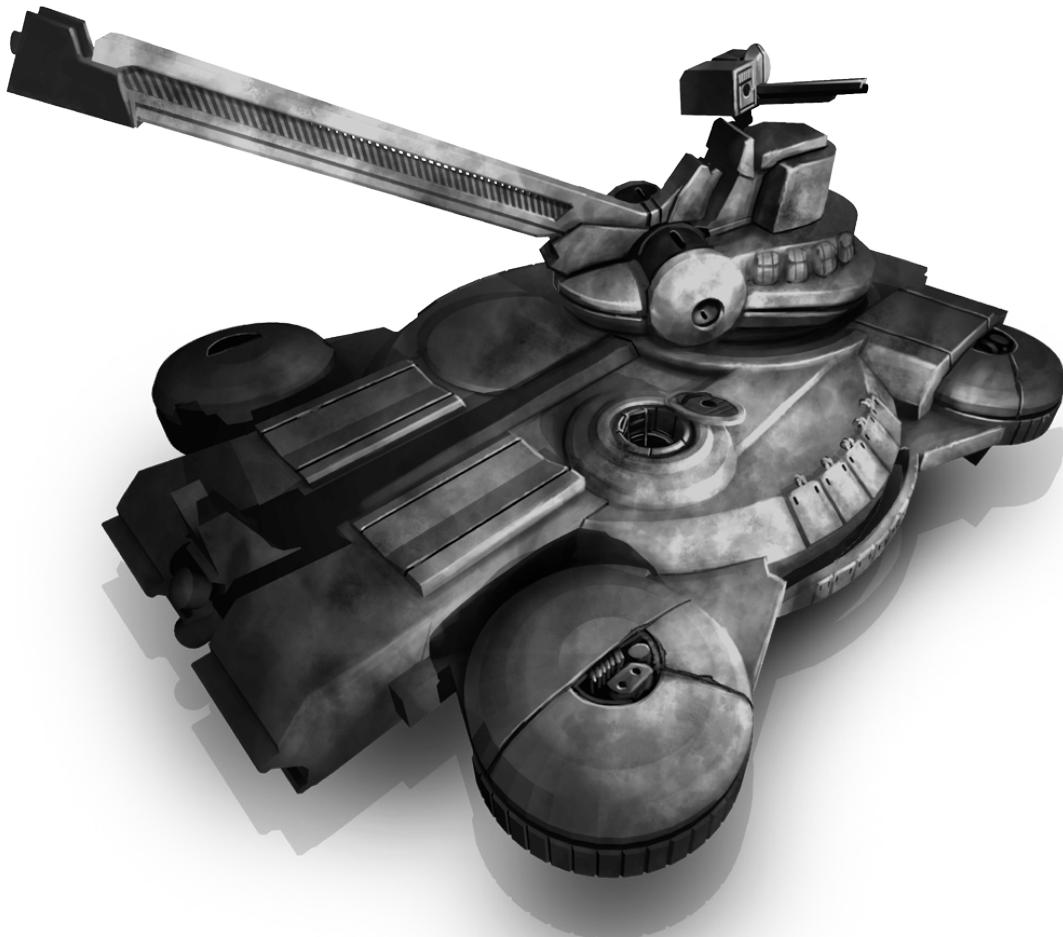
G/Bomber

Replacing the attack helicopter in ground assaults, this vehicle carries a substantial array of air-to-ground weapons capable of destroying most ground targets. The bomber also carries several air-to-air weapons to defend against against enemy aircraft.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G/Bomber	12	Flyer (grav)	0	1,950	3,000	1/–	—	No	6	7	3, 853, 000	6.5 tons

Location	Armour
Front	15
Right	15
Left	15
Rear	15
Top	14
Bottom	16

Weapon	Location	Damage	Range	Auto	Ammo
Light Tac Missile (Anti-Armour) x4	Dedicated Missile Bay Left External	9d6 Super AP	Very Distant	No	
Light Tac Missile (Anti-Armour) x4	Dedicated Missile Bay Right External	9d6 Super AP	Very Distant	No	
VRF Gauss Gun	Fixed Mount Front	5d6 AP	Distant	12	20, 000

Other Equipment/Modifications:

Additional Armour x2, Advanced Controls, Streamlined, Autopilot (skill-2), Communications (TL10 encrypted satellite uplink), Decreased Agility x2, Short Term Life Support, Navigation (standard), Sensors (advanced, increased range x2)

G/Carrier

A grav carrier is effectively a flying tank and is the standard deployment vehicle of many military forces across the Imperium. The turret-mounted fusion guns provide devastating ground support for a well sized fire team. Sporting a full suite of sensors and computer assisted systems. This vehicle is perfect for troop deployment in any conflict.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G/Carrier	15	Flyer (grav)	+1	640	2,500	2/14	0.25 tons	No	8	8	5,666, 500	8 tons

Location	Armour
Front	25
Right	25
Left	25
Rear	25
Top	25
Bottom	25
Turret Front	25
Turret Side/rear	25

Weapon	Location	Damage	Range	Auto	Ammo
Fusion Gun	Small Turret Top	16d6	Very Long	4	N/A

Other Equipment/Modifications:

Additional Armour, AFV, Autopilot (skill-3), Communications (meson, range continental, encrypted, satellite uplink), Computer/5 (intellect/2 security/3 gunner/2 pilot grav/2 intrusion/2 database), Double Capacity Seating x 7, Electronic Countermeasures (advanced), ERA (type IV), ESA, Hard Points x3, Increased Speed, Navigation (Advanced), Sensors (Advanced, Increased range)

G/CARRIER HEAVY VARIANT

This grav carrier variant sports a devastating arsenal to replace its diminished troop compliment. Designed for high tension conflicts, this vehicle is more tank than troop transporter and forms the backbone of an armoured column. Its relatively small internal size forces a difficult choice however, if not for its dual function as a carrier and battle tank, it has the capacity for a fusion plant to supplement its capabilities.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Heavy G/ Carrier	15	Flyer (grav)	+1	600	1,250	4/10	—	No	30	30	14,369,000	30 tons

Armour

Location	Armour
Front	25
Right	25
Left	25
Rear	25
Top	25
Bottom	25
Main Turret Front	25
Main Turret Side/Rear	25
Right Turret Front	25
Right Turret Side/Rear	25
Left Turret Front	25
Left Turret Side/Rear	25

Weapon	Location	Damage	Range	Auto	Ammo
RF Plasma B Gun	Large Turret Top	14d6 Ultra Destructive	Distant	No	N/A
VRF Gauss Gun	Small Turret Left side	5d6 AP	Distant	12	20,000
VRF Gauss Gun	Small Turret Right side	5d6 AP	Distant	12	20,000

Other Equipment/Modifications:

Large Turret: Top, 2 crew, Improved Fire Control 4+
Small Turret x2: Side mounted, Improved Fire Control 4+
Autopilot (skill-3), Chaf, Communications (meson, range continental, encrypted, satellite uplink), Computer/5 (intellect/2 security/3 gunner/2 pilot grav/2 intrusion/2 database), Decoys, ERA (type IV), ESA, Hard Points x3, Life Support (short term), Navigation (advanced), Sensors (advanced, increased range), Smoke

G/COPTER

Rapid troop transport with light fire support, the grav copter uses two small gravitic generators on either side of the passenger cabin to propel itself across the sky.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G/Copter	12	Flyer (grav)	+1	520	3,000	2/12	—	No	11	12	3,042,000	11.5 tons

Location	Armour
Front	10
Right	10
Left	10
Rear	10
Top	10
Bottom	10
Turret Front	10
Turret Side/Rear	10

Weapon	Location	Damage	Range	Auto	Ammo
Advanced Support Weapon x2	Left Side Small Turret	4d6 SAP	Rifle	4	10,000
Advanced Support Weapon x2	Right Side Small Turret	4d6 SAP	Rifle	4	10,000

Other Equipment/Modifications:

Additional Armour, Autopilot (skill-2), Communications (TL10 encrypted satellite uplink), Increased Speed x3, Navigation (standard), Sensors (advanced, increased range x2), Short Term Life Support

G/CYCLE

The gravitic version of the assault-cycle is much more versatile than its predecessor, boasting improved armaments, speed, manoeuvrability.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G/Cycle	12	Flyer (grav)	+2	12,500	4,500	1/1	—	Top	1	1	199,500	1 ton

Armour

Location	Armour
Front	15
Right	13
Left	13
Rear	5
Top	5
Bottom	9

Weapon	Location	Damage	Range	Auto	Ammo
Advanced Support Weapon x2	Fixed Mount Forward Facing	4d6 SAP	Rifle	4	10,000

Other Equipment/Modifications:

Additional Armour, Advanced Controls, Decreased Speed x5, Navigation (standard), Sensors (standard), Streamlined

G/FIGHTER

Grav fighters are the mainstay of any truly advanced airforce. Fast, agile and well armed, these vessels can fill a number of roles such as ground strafing, aerial escort and bomber interception.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G/Fighter	12	Flyer (grav)	+2	1,975	3,000	1/–	—	No	6	7	4,561,000	6.5 tons

Location	Armour
Front	10
Right	10
Left	10
Rear	10
Top	10
Bottom	10
Turret Front	10
Turret Side/Rear	10

Weapon	Location	Damage	Range	Auto	Ammo
Light Tac Missile (Anti-Air)	Dedicated Missile Bay Left External	9d6	Extreme	No	
Light Tac Missile (Anti-Armour)	Dedicated Missile Bay Left External	9d6 Super AP	Very Distant	No	
Light Tac Missile (Anti-Air)	Dedicated Missile Bay Right External	9d6	Extreme	No	
Light Tac Missile (Anti-Armour)	Dedicated Missile Bay Left External	9d6 Super AP	Very Distant	No	
VRF Gauss Gun	Small Turret Front	5d6 AP	Distant	12	20,000

Other Equipment/Modifications:

Additional Armour, Advanced Controls, Streamlined, Autopilot (skill-2), Communications (TL10 encrypted satellite uplink), Navigation (standard), Sensors (advanced, increased range x2), Short Term Life Support

G/STEALTH PLANE

The latest in espionage technology, grav stealth planes far surpass earlier technology with greater sensors, improved stealth technology. Combining these with its rapid speed, the grav Stealth Plane is the ultimate espionage vehicle.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G/Stealth	12	Flyer (grav)	+2	2,500	3,000	2/–	—	No	5	5	3, 681, 000	5 tons

Location	Armour
Front	5
Right	5
Left	5
Rear	5
Top	5
Bottom	5

Other Equipment/Modifications:

Advanced Controls, Autopilot (skill-2), Communications (TL10 encrypted, satellite uplink), Electronic Countermeasures (advanced), Infrared Masking II, Short Term Life Support, Navigation (standard), Sensors (advanced, increased range x2), Stealth II, Streamlined

G/TANK

Grav tanks are heavily armoured vehicles with devastating weaponry. They are much slower than other grav vehicles but still faster than their terrestrial counterparts. Heavily armed and armoured, the grav tank is a vital part of many military forces.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
G/Tank	12	Flyer (grav)	0	400	1,500	2/–	—	No	12	12	12, 351, 000	12 tons

Location	Armour
Front	80
Right	80
Left	80
Rear	80
Top	80
Bottom	80
Turret Front	80
Turret Side/Rear	80

Weapon	Location	Damage	Range	Auto	Ammo
12mm Light Gauss Cannon x2	Large Turret Top	10d6 Mega-AP	Very Distant	No	300

Other Equipment/Modifications:

Large Turret: Improved Fire Control +3

Additional Armour x8, AFV, Autopilot (skill-2), Communications (TL10 encrypted satellite uplink), Decreased Agility, Ejection Cocoon, Navigation (standard), Sensors (advanced), Improved Fuel Efficiency x2, Short Term Life Support

GUNSKIFF

A mobile gun platform which allows for the rapid deployment of heavy guns and troops. Passengers are free to fire from the vehicle as it is completely open. A favoured vehicle of the Aslan who also use them to deploy assault troops.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Gun Skiff	9	Flyer (grav)	+1	350	2,000	2/15	—	Frame	8	10	476,000	11.5 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1
Turret Front	1
Turret Side/Rear	1

Weapon	Location	Damage	Range	Auto	Ammo
Light Rotary Autocannon	Large Turret Top Front	6d6 SAP	Very Long	10	5,000

Other Equipment/Modifications:

Large Turret: 1 Crew

Decreased Hull x3, Decreased Structure x2

MILITARY GROUND VEHICLES

AFV

A heavily armoured ATV, known as an Armoured Fighting Vehicle. Armed with anti-personal weaponry, a thick hull and enough room for an armed fireteam, this vehicle is excellent for small scale operations.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
AFV	12	Drive (wheeled)	0	85	450	1/9	—	No	5	5	67, 400	6 tons

Location	Armour
Front	20
Right	20
Left	20
Rear	20
Top	20
Bottom	20

Weapon	Location	Damage	Range	Auto	Ammo
Medium Machinegun	Ring Mount	3d6+3 SAP	Rifle	6	10, 000

Other Equipment/Modifications:

Additional Armour, AFV, Decreased Speed x5, Decreased Structure, Reduced Fuel Efficiency, Ring Mount (medium machinegun), Wheels (6)

ALL TERRAIN ASSAULT VEHICLE

The All Terrain Assault Vehicle (ATAV) is an open topped, off road vehicle best used for scouting. Equipped with a pintle weapon mount and space for three passengers, a good choice for a small fireteam needing rapid transport with a punch.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
ATAV	7	Drive (wheeled)	0	140	400	1/4	—	Top	3	3	27, 020	6 tons

Armour

Location	Armour
Front	12
Right	12
Left	12
Rear	12
Top	12
Bottom	12
Gun Shield	24

Weapon	Location	Damage	Range	Auto	Ammo
Light Autocannon	Powered Pintle Mount	6d6 SAP	Very Long	6	5, 000

Other Equipment/Modifications:

Additional Armour, AFV, Communications (TL 6), Sensors (basic), Off-road Capability, Powered Pintle Mount

ALL TERRAIN FORTRESS

A mobile missile battery and heavy weapon station, the All Terrain Fortress is large and slow moving but a devastating war machine. Filling the role as armour support, it brings enough firepower to take on a light armour division.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
ATF	9	Drive (tracked)	−1	38	—	6/–	—	Top	41	41	5, 752, 100	41 tons

Armour

Location	Armour
Front	30
Right	24
Left	24
Rear	16
Top	16
Bottom	2
Main Turret Front	20
Main Turret Side/Rear	20
Left Turret Front	10
Left Turret Side/Rear	10
Right Turret Front	10
Right Turret Side/Rear	10

Weapon	Location	Damage	Range	Auto	Ammo
35mm Rail Gun	Large Turret Top	12d6 Super-AP	Very Distant	No	400
Heavy Autocannon	Large Turret Top	8d6 AP	Very Distant	No	6, 000
Light Tac Missile Anti-Air x4	Small Turret Top Left	9d6	Very Distant	No	
Light Tac Missile Anti-Armour x4	Small Turret Top Right	9d6 Super-AP	Very Distant	No	

Other Equipment/Modifications:		

Small Turret (top left): Pop-up Turret
Small Turret (top right): Pop-up Turret
Large Turret: 2 Crew, improved fire control +2

Additional Armour, AFV, Communications (TL 8), Computer/1, Fusion Plant, Hard Points x4 (2 space each), Navigation (basic), Sensors (advanced)

ALL TERRAIN GUN TRANSPORT

Essentially a tracked heavy weapon emplacement. Gun transports form a vital part of any large scale military conflict, being able to swiftly bring in heavy guns such as fusion guns and missile batteries.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
ATF	9	Drive (tracked)	0	90	500	2/–	—	Top	4	4	95, 160	2 tons

Armour

Location	Armour
Front	8
Right	8
Left	8
Rear	8
Top	8
Bottom	8
Main Turret	8
Left Top Turret	8
Right Top Turret	8

Weapon	Location	Damage	Range	Auto	Ammo
Light Tac Missile (Anti-Armour) x4	Modular Fixed Mount Top	9d6 Super AP	Very Distant	No	

Other Equipment/Modifications:

Additional Armour, Communications (TL 8), Improved Fire Control +2, Navigation (basic), Sensors (advanced)

ANTI-PERSONNEL TANK

Anti-Personnel Tanks are the bane of infantry units. A light tank equipped with a machinegun and flamethrowers, this vehicle is one of the surest methods of clearing out enemy trenches.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
APT	6	Drive (tracked)	0	45	200	4/–	1.0 tons	No	10	10	97, 750	10 tons

Armour

Location	Armour
Front	24
Right	20
Left	20
Rear	18
Top	18
Bottom	10
Gun Shield	12

Weapon	Location	Damage	Range	Auto	Ammo
Improved Flamethrower x2	Left Side Hardpoint	4d6 Flame	Medium	N/A	60
Improved Flamethrower x2	Right Side Hardpoint	4d6 Flame	Medium	N/A	60
Heavy Machinegun	Top Ring Mount	5d6 AP	Rifle	6	14, 000

Other Equipment/Modifications:

Additional Armour x2, AFV, Communications (TL 6), Increased speed, Ring Mount (gunshield)

ARMOURED CAR

An alternative to the light tank, the armoured car is often found on lower technologically developed worlds where the manufacture of tanks proves too costly.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Armoured car	6	Drive (wheeled)	0	90	200	2/–	0.25 tons	No	8	9	113, 500	8.5 tons

Armour

Location	Armour
Front	14
Right	14
Left	14
Rear	12
Top	10
Bottom	8
Turret Front	12
Turret Side/Rear	12

Weapon	Location	Damage	Range	Auto	Ammo
Heavy Machinegun	Top Large Turret	5d6 AP	Rifle	6	14, 000

Other Equipment/Modifications:

Large Turret: 1 crew

Additional Armour , AFV, Communications (TL 6), Sensors (basic), Wheels x6

ARMOURED PERSONNEL CARRIER

An essential part of any military engagement. The Armoured Personnel Carrier (APC) is designed to transport squads of soldiers while under heavy fire.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
APC	9	Drive (tracked)	0	90	565	2/10	0.25 tons	No	7	8	58, 600	7.5 tons

Armour

Location	Armour
Front	22
Right	20
Left	20
Rear	17
Top	17
Bottom	12

Other Equipment/Modifications:

Additional Armour x2, AFV, Communications (TL 8), Navigation (basic), Sensors (basic)

ASSAULT TANK

A formidable armoured vehicle, the assault tank spouts two heavy cannons with the express purpose of destroying enemy armour.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Assault tank	8	Drive (tracked)	0	47	400	3/–	—	No	16	16	2, 260, 200	16 tons

Armour

Location	Armour
Front	30
Right	27
Left	27
Rear	24
Top	24
Bottom	12
Turret Front	24
Turret Side/Rear	24

Weapon	Location	Damage	Range	Auto	Ammo
120mm Cannon x2	Top Large Turret	10d6 Super AP	Distant	No	30

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +2, Increased Ammunition x2

Additional Armour x4, AFV, Communications (TL 6), Increased speed x2, Navigation (basic), Sensors (basic)

ASSAULT CYCLE

A Semi-enclosed, one-man armoured motorcycle. Its high speed and armour are reason enough to employ it for rapid, personal transportation. The two light machineguns mounted to the front turn it from a mere conveyance to a serious threat.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Assault Cycle	7	Drive (wheeled)	+1	264	400	1/–	—	Top	1	2	20, 280	1.5

Armour

Location	Armour
Front	7
Right	3
Left	3
Rear	1
Top	3
Bottom	1

Weapon	Location	Damage	Range	Auto	Ammo
Light Machinegun x2	Fixed Forward Facing	3d6	Rifle	6	12, 000

Other Equipment/Modifications:

Motorcycle, Sensors (basic), Increased Speed, Communications (TL 6)

ATV

The All Terrain Vehicle is second only to grav vehicles in versatility for transports. A reinforced, tracked, amphibious vehicle, fully capable of handling waterways, rough terrain and any hostile environment.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
ATV Land	12	Drive (tracked)	0	115	600	1/15	0.5 tons	No	5	7	54, 310	10 tons

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
ATV Aquatic	12	Seafarer (motorboat)	−1	108	120	1/15	0.5 tons	No	5	7	54, 310	10 tons

Armour

Location	Armour
Front	10
Right	10
Left	10
Rear	10
Top	10
Bottom	10

Other Equipment/Modifications:

Additional Armour, Aquatic drive, Communications (TL 6), Decreased Hull x3, Decreased Structure x2, Short Term Life Support, Navigation (standard), Sensors (advanced)

BATTLE TANK

The battle tank is a heavy, two turreted anti-armour monster. With two separate heavy guns the Battle tank is able to track and destroy multiple targets in an instant.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Assault tank	8	Drive (tracked)	0	47	400	3/–	—	No	17	18	1, 615, 000	17.5 tons

Armour

Location	Armour
Front	30
Right	27
Left	27
Rear	24
Top	24
Bottom	12
Large Turret Front	24
Large Turret Side/Rear	24
Small Turret Front	20
Small Turret Side/Rear	20

Weapon	Location	Damage	Range	Auto	Ammo
120mm Cannon	Top Large Turret	10d6 Super AP	Distant	No	30
75mm Cannon	Top Small Turret	8d6 Super AP	Distant	No	40

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +2, Increased Ammunition
Small Turret: Improved Fire Control +2, Increased Ammunition

Additional Armour x4, AFV, Communications (TL 6), Increased speed x2, Navigation (basic), Sensors (basic)

LIGHT PATROL VEHICLE

The LPV was designed for use by militias and paramilitary police forces in counter insurgency and counter-terrorist operations. While ill-suited to long term operations or front line duties, the LPV serves admirable against irregular units and light infantry.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
LPV	9	Drive (wheeled)	0	150	400	2/–	0.25 tons	No	4	4	93, 280	4 tons

Armour

Location	Armour
Front	22
Right	17
Left	17
Rear	16
Top	16
Bottom	8
Turret Front	16
Turret Side/Rear	16

Weapon	Location	Damage	Range	Auto	Ammo
Light Autocannon	Top Large Turret	6d6 SAP	Very Long	6	5, 000

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +2

Additional Armour x3, Communications (TL 6), Off-road Capability, Sensors (basic)

MISSILE TANK

Employing a missile battery instead of cannons, the missile tank fills a supporting role in most military forces. Small and fast compared to other tanks, a group of missile tanks can provide a withering barrage of fire power in a difficult situation.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Missile tank	8	Drive (tracked)	0	97	400	3/–	—	No	4	4	94, 600	4

Armour

Location	Armour
Front	24
Right	19
Left	19
Rear	19
Top	19
Bottom	9

Weapon	Location	Damage	Range	Auto	Ammo
Medium Missile x4	Dedicated Top Missile Bay	8d6+4 SAP	Extreme	No	

Other Equipment/Modifications:

Additional Armour x3, AFV, Communications (TL 6), Improved Fire Control +2, Increased speed x2, Navigation (basic), Sensors (basic)

MOBILE COMMAND CENTRE

Functioning as both a super heavy tank and a mobile base of operations for coordinating the rest of the army. Able to monitor both friendly and hostile units, the mobile command centre lends a hefty advantage to the force which fields it.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
MCC	8	Drive (tracked)	0	32	400	6/–	—	No	25	25	2, 944, 000	25 tons

Armour

Location	Armour
Front	35
Right	35
Left	35
Rear	30
Top	30
Bottom	15
Right Turret Front	30
Right Turret Side/Rear	30
Left Turret Front	30
Left Turret Side/Rear	30

Weapon	Location	Damage	Range	Auto	Ammo
120mm Cannon	Top Right Large Turret	10d6 Super AP	Distant	No	30
120mm Cannon	Top Left Large Turret	10d6 Super AP	Distant	No	30
Gatling Laser	Front Small Turret	6d6	Distant	8	-
Medium Missile x2	Top Dedicated Missile Bay	8d6+4 AP	Extreme	No	

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +2, Increased Ammunition
Large Turret: 1 Crew, Improved Fire Control +2, Increased Ammunition
Small Turret: Improved Fire Control +2

Additional Armour x4, AFV, Communications (TL 8), Computer /1 x2, Navigation (basic), Sensors (Advanced)

Military Helicopters

Attack Helicopter

The attack helicopter is primarily an anti-tank vehicle, however it serves equally well supporting ground units and can be fitted for anti-air duties. This versatility makes it an excellent choice for a support vehicle.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Attack Helicopter	7	Flyer (rotor)	–1	120/400	2,000	2/–	—	No	4	4	1, 077, 000	24 tons

Take-off Radius: 70m

Armour

Location	Armour
Front	12
Right	12
Left	12
Rear	12
Top	12
Bottom	12
Turret Front	12
Turret Side/rear	12

Weapon	Location	Damage	Range	Auto	Ammo
Light Autocannon x2	Small Turret Front	6d6 SAP	Very Long	6	5, 000
70mm Strafing Rocket Pack x4	Dedicated Missile Bay Left Wing	8d6	Very Long	14	7
70mm Strafing Rocket Pack x4	Dedicated Missile Bay Right Wing	8d6	Very Long	14	7

Other Equipment/Modifications:

AFV, Additional Armour, Chaff x2, Communications (TL 6), Navigation (basic), Sensors (advanced)

Scout Helicopter

With minimal armament, the scout helicopter is equipped with a full sensor suite to locate enemy units and alert the rest of the army. Due to their lack of heavy armour, they are often escorted by an attack helicopter.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Scout Helicopter	8	Flyer (rotor)	+1	150/400	2,000	2/–	—	No	1	2	203, 000	6 tons

Take-off Radius: 26m

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Weapon	Location	Damage	Range	Auto	Ammo
Light Autocannon x2	Fixed Mount Front	6d6 SAP	Very Long	6	5, 000

Other Equipment/Modifications:

Communications (TL 6), Navigation (basic), Sensors (advanced), Improved Fire Controls +1 (light autocannons)

MILITARY JETS

JET FIGHTER

The Natural Evolution of the fighter plane, jet fighters boast greater speed and fire power than their predecessors.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Jet Fighter	8	Flyer (wing)	+2	1, 900	2,000	1/–	—	No	2	2	3, 596, 000	8 tons

Take-off/Landing: 2,500m/1,250m

Armour

Location	Armour
Front	6
Right	6
Left	6
Rear	6
Top	6
Bottom	6

Weapon	Location	Damage	Range	Auto	Ammo
Light Autocannon x2	Fixed Mount Front	6d6 SAP	Very Long	6	5, 000
Medium Missile x2	General Missile Bay Left Wing	8d6+4 AP	Extreme	No	
Medium Missile x2	General Missile Bay Right Wing	8d6+4 AP	Extreme	No	

Other Equipment/Modifications:

Additional Armour, Advanced Controls, Communications (TL 6), Ejection Seat, Navigation (basic), Sensors (standard), Short Term Life Support, Super Sonic, Improved Fire Controls +1 (light autocannons), Improved Fire Controls +2 (medium missiles)

SPY JET

An extremely fast vehicle, even by the standards of jets. Spy jets are used for surveillance over enemy territory with their highly advanced sensors and stealth technology.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Spy Jet	8	Flyer (wing)	+2	2,500	3,000	2/–	—	No	4	5	10, 744, 000	17 tons

Take-off/Landing: 2,500m/1 250m

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Advanced Controls, Communications (TL 8), Increased Speed x10, Infrared Masking I, More Fuel Efficient x5, Navigation (basic), Sensors (advanced, range increase), Super Sonic, Short Term Life Support, Stealth II

STEALTH BOMBER

Strategic bombers that employ the latest in stealth technology to go undetected by enemy forces. Acting as a vanguard for more traditional bombers, these jets will target any threat to air forces before they can be deployed.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Stealth Bomber	8	Flyer (wing)	+2	1,800	2,000	2/–	—	No	3	3	5,501,000	12 tons

Take-off/Landing: 2,500m/1,250m

Armour

Location	Armour
Front	9
Right	9
Left	9
Rear	9
Top	9
Bottom	9

Weapon	Location	Damage	Range	Auto	Ammo
Medium Missile x4	Dedicated Missile Bay Front	8d6+4 AP	Extreme	No	
Heavy Bomb x6	Dedicated Bomb Bay Bottom	14d6 AP	Very Distant	No	

Other Equipment/Modifications:

Additional Armour x2, Advanced Controls, Communications (TL 8), Infrared Masking I, Navigation (basic), Sensors (advanced), Super Sonic, Short Term Life Support, Stealth II, Improved Fire Control +2 (Missiles and Bombs)

VTOL FIGHTER

The Vertical Take Off and Landing Fighter jet offers by far the greatest manoeuvrability of any fighter jet. While mostly filling the role of a helicopter, the VTOL also has the capabilities of a fighter jet.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Jet Fighter	8	Flyer (wing)	+4	1,900	1,200	2/–	—	No	2	3	6,790,000	8 tons

Take-off/Landing: 2,500m/1,250m

Armour

Location	Armour
Front	6
Right	6
Left	6
Rear	6
Top	6
Bottom	6

Weapon	Location	Damage	Range	Auto	Ammo
Light Autocannon x2	Fixed Mount Front	6d6 SAP	Very Long	6	5,000
Medium Missile x2	General Missile Bay Left Wing	8d6+4 AP	Extreme	No	
Medium Missile x2	General Missile Bay Right Wing	8d6+4 AP	Extreme	No	
Heavy Bomb x6	Dedicated Bomb Bay Bottom	14d6 AP	Very Distant	No	

Other Equipment/Modifications:

Additional Armour, Advanced Controls, Communications (TL 6), Ejection Seat x2, Navigation (basic), Sensors (standard), Short Term Life Support, Super Sonic, Improved Fire Controls +1 (light autocannons), Improved Fire Controls +2 (medium missiles), VTOL

MILITARY SHIPS AND BOATS

BATTLEFOIL

The battlefoil is an armed hydrofoil often employed for fast assaults and intercepting enemies. The additional speed form the hydrofoil makes them excellent rapid attack Transport.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Battle Sub	9	Seafarer (motorboats)	0	80/ 260	800	4/10	—	No	6	6	193, 300	9 tons

Armour

Location	Armour
Front	8
Right	8
Left	8
Rear	8
Top	8
Bottom	8
Right Gunshield	8
Left Gunshield	8

Weapon	Location	Damage	Range	Auto	Ammo
Light Autocannon	Right Powered Pintle Mount	6d6 SAP	Very Long	6	5, 000
Light Autocannon	Left Powered Pintle Mount	6d6 SAP	Very Long	6	5, 000
Medium Missile x2	Top Dedicated Missile Bay	8d6+4 AP	Extreme	No	

Other Equipment/Modifications:

Additional Armour , Communications (TL 6), Gunports x10, Hydrofoil, Navigation (basic), Sensors (basic)

CORVETTE

The smallest ocean going ship of war, corvettes often work in support of larger vessels. Despite their smaller size, an amassed force can pose a serious threat.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Corvette	9	Seafarer (ocean ships)	–3	60	4,000	60/–	—	No	87	87	1, 988, 400	87 tons

Armour

Location	Armour
Front	12
Right	12
Left	12
Rear	12
Top	12
Bottom	12
For Turret Front	12
For Turret Side/Rear	12
Aft Turret Front	12
Aft Turret Side/Rear	12

Weapon	Location	Damage	Range	Auto	Ammo
35mm Rail Gun	Top Large Turret	12d6 Super AP	Very Distant	No	200
35mm Rail Gun	Top Large Turret	12d6 Super AP	Very Distant	No	200
Light Tac Missile (anti-air) x2	Top Dedicated Missile Bay	9d6	Extreme	No	
Smart Torpedo x4	Bottom Dedicated Torpedo Bay	12d6	Very Distant	No	N/A

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +2
Large Turret: 1 Crew, Improved Fire Control +2

Additional Armour x2, Bunks x30, Communications (TL 6), Fresher x4, Full Galley (serves 20), Improved Fire Control +2 (torpedoes), Improved Fire Control +2, Improved Fire Control +2 (missiles), Navigation (basic), Sensors (basic)

FRIGATE

The main workhorse of most fleets. While smaller then other ships, frigates sport enough firepower to make them truly formidable fighting machines.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Frigate	9	Seafarer (ocean ships)	– 6	40	8,000	120/–	—	No	174	174	4, 552, 600	174 tons

Armour

Location	Armour
Front	24
Right	24
Left	24
Rear	24
Top	24
Bottom	24
For Turret Front	24
For Turret Side/Rear	24
Aft Turret Front	24
Aft Turret Side/Rear	24

Weapon	Location	Damage	Range	Auto	Ammo
35mm Rail Gun	Front Top Large Turret	12d6 Super AP	Very Distant	No	200
35mm Rail Gun	Rear Top Large Turret	12d6 Super AP	Very Distant	No	200
35mm Rail Gun x2	Top Large Turret	12d6 Super AP	Very Distant	No	200
Light Tac Missile (anti-air) x4	Top Dedicated Missile Bay	9d6	Extreme	No	
Light Tac Missile (anti-air) x4	Top Dedicated Missile Bay	9d6	Extreme	No	
Smart Torpedo x8	Bottom Dedicated Torpedo Bay	12d6	Very Distant	No	N/A

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +2
Large Turret: 1 Crew, Improved Fire Control +2
Large Turret: 1 Crew, Improved Fire Control +2

Additional Armour x4, Bunks x60, Communications (TL 6), Fresher x4, Full Galley (serves 40), Improved Fire Control +2 (torpedoes), Improved Fire Control +2, Improved Fire Control +2 (missiles), Navigation (basic), Sensors (basic)

IRONCLAD

These steam powered warships are heavily armoured vessels that sit low in the water. Ironclads are armed with heavy cannons capable of bombarding land targets as well as going ship to ship with other naval vessels.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Ironclad	4	Seafarer (ocean ships)	–3	20	1,000	10/–	1 ton	No	25	25	700, 800	25

Armour

Location	Armour
Front	10
Right	10
Left	10
Rear	10
Top	10
Bottom	10
Turret Front	10
Turret Rear/Side	10

Weapon	Location	Damage	Range	Auto	Ammo
9 lb Cannon x4	Right Fixed Mount	9d6	Very Long	No	60
9 lb Cannon x4	Left Fixed Mount	9d6	Very Long	No	60

Other Equipment/Modifications:

Additional Armour x4, Increased speed x20

MOTOR TORPEDO BOAT

Fast attack craft designed for lighting raids on larger vessels before escaping from retaliation.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Torpedo Boat	8	Seafarer (motorboats)	0	60	400	6/–	—	No	6	6	114, 000	9 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3
Turret Front	3
Turret Rear/Side	3

Weapon	Location	Damage	Range	Auto	Ammo
Smart Torpedo x2	Front Dedicated Torpedo Bay	12d6	Very Distant	No	N/A
Light Autocannon x2	Top Small Turret	6d6 SAP	Very Long	6	5,000

Other Equipment/Modifications:

Additional Armour , Communications (TL 6), Navigation (basic), Sensors (basic)

MILITARY SUBMARINES

BATTLE SUBMARINE

Battle submersibles are often deployed from larger vessels and underwater facilities. They perform short range attacks as the underwater equivalent of fighter squadrons. Providing fast support, they are an excellent choice to defend against sea attacks.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Battle Sub	9	Seafarer (submarine)	–2	50	1,500	2/–	—	No	14	14	1, 933, 600	42 tons

Safe dive Depth: 600
Safe Crush Depth: 1,800
Life Support: 500

Armour

Location	Armour
Front	8
Right	8
Left	8
Rear	8
Top	8
Bottom	8

Weapon	Location	Damage	Range	Auto	Ammo
Smart Torpedo x2	Dedicated Front Torpedo Bay	12d6	Very Distant	No	

Other Equipment/Modifications:

Additional Armour , Communications (TL 6), Improved Fire Control +2, Increased speed x2, Navigation (basic), Sensors (basic)

COASTAL SUBMARINE

The coastal submarine is often the first line of defence against an encroaching sea force. It's missile systems allowing it to take on threats on all fronts.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Coastal Sub	9	Seafarer (submarine)	–2	40	1,500	10/–	—	No	20	20	2, 561, 600	60 tons

Safe dive Depth: 600
Safe Crush Depth: 1,800
Life Support: 500

Armour

Location	Armour
Front	12
Right	12
Left	12
Rear	12
Top	12
Bottom	12

Weapon	Location	Damage	Range	Auto	Ammo
Smart Torpedo x2	Front Dedicated Torpedo Bay	12d6	Very Distant	No	
Light Tac Missile (Anti-Air) x4	Top Dedicated Missile Bay	9d6	Extreme	No	
Light Tac Missile (Anti-Armour) x4	Top Dedicated Missile Bay	9d6 Super AP	Very Distant	No	

Other Equipment/Modifications:

Additional Armour x2, Communications (TL 6), Improved Fire Control +2, Increased speed x2, Navigation (basic), Sensors (basic)

NUCLEAR SUBMARINE

Nuclear submarines are long range, heavily armed dreadnaughts. Often used as a deterrent against attacks, their costly nature means only the most powerful of military forces can support them.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Battle Sub	9	Seafarer (submarine)	–2	47	1,500	120/ –	—	No	470	470	124,907,000	60 tons

Safe dive Depth: 900   Safe Crush Depth: 2,700   Life Support: 500

Armour

Location	Armour
Front	24
Right	24
Left	24
Rear	24
Top	24
Bottom	24
Turret Front	24
Turret Side/Rear	24

Weapon	Location	Damage	Range	Auto	Ammo
Heavy Torpedo x4	Front Dedicated Torpedo Bay	14d6	Very Distant	No	N/A
Heavy Torpedo x4	Rear Dedicated Torpedo Bay	14d6	Very Distant	No	N/A
60mm Antitank Gun	Top Small Turret	7d6 Super AP	Distant	No	80
Light Tac Missile (Anti-Air) x4	Top Dedicated Missile Bay	9d6	Extreme	No	
Light Tac Missile (Anti-Armour) x4	Top Dedicated Missile Bay	9d6 Super AP	Very Distant	No	

Other Equipment/Modifications:

Small Turret: Improved Fire Control +2

Additional Armour x4, Bunks x120, Communications (TL 6), Fresher x6, Full Galley (serves 60) Fusion Plant, Improved Fire Control +2 (front torpedoes), Improved Fire Control +2 (rear torpedoes), Improved Fire Control +2 (missiles), Increased speed x5, Navigation (basic), Sensors (basic), Operating Theatre (10 patients)

Military Unpowered Ships and Boats

Frigate

Designed for speed and manueverability rather than firepower like other vessels of the age, frigates range from small and swift vessels two decks and two masts used to escort more vulnerable ships, to larger three decked vessels designed to support larger warships at the heart of the fighting.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Frigate	3	Seafarer (sail)	–2	35% Wind	—	124/–	9.25 tons	No	40	50	1, 398, 300	100 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Weapon	Location	Damage	Range	Auto	Ammo
9 lb Cannon x14	Right Fixed Mount	9d6	Very Long	No	60
9 lb Cannon x14	Left Fixed Mount	9d6	Very Long	No	60

Other Equipment/Modifications:

Additional Armour, Bunks x63, Full Galley (serves 40)

Galleon

The galleon is one of the earliest warships. These large vessels are multi-decked sailing ships with three to five masts. Cannons are situated down each side, creating a withering broadside of fire. The majority of warfare involving these ships consists of manoeuvring to present the best fire solution with only a few volleys needed to decide the battle.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Galleon	3	Seafarer (sail)	–2	35% Wind	—	287/–	75 tons	No	80	100	3, 637, 600	200 tons

Armour

Location	Armour
Front	8
Right	8
Left	8
Rear	8
Top	8
Bottom	8

Weapon	Location	Damage	Range	Auto	Ammo
9 lb Cannon x2	Top Forward Fixed Mount	9d6	Very Long	No	60
9 lb Cannon x50	Right Fixed Mount	9d6	Very Long	No	60
9 lb Cannon x50	Left Fixed Mount	9d6	Very Long	No	60
9 lb Cannon x4	Rear Fixed Mount	9d6	Very Long	No	60

Other Equipment/Modifications:

Additional Armour x3, Bunks x61

MILITARY WALKERS

CHAMELEON

The Chameleon is a small, light armoured walker designed for stealth and scouting. They can also be seen supporting larger mechanised walkers or operating in groups to perform high damage, hit and run assaults.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Chameleon	12	Drive (Walker)	+1	75	450	1/–	—	No	2	3	1, 437, 000	10 tons

Armour

Location	Armour
Front	5
Right	5
Left	5
Rear	5
Top	5
Bottom	5
Turret Front	5
Turret Side/Rear	5

Weapon	Location	Damage	Range	Auto	Ammo
Advanced Light Autocannon x2	Small Turret Bottom Front	6d6+4 SAP	Very Long	8	5,000

Other Equipment/Modifications:

Small Turret: Improved Fire Control +1

Communications (TL 10, uplink), Decreased Speed x5, Ejection Seat, Infrared Masking I, Navigation (standard), Prismatic Aerosols, Sensors (advanced), Stealth Class I, Short Term Life Support, Smoke Dischargers, Visual Camouflage II

CHIMERA

This medium sized walker is best known for its versatility. Equipped with both infantry and armour weapon systems, the Chimera can function in offensive and defensive situations with ease.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Chimera	12	Drive (Walker)	–1	60	450	2/–	—	No	12	12	2, 446, 200	54

Armour

Location	Armour
Front	30
Right	25
Left	25
Rear	20
Top	10
Bottom	10
Top Turret Front	20
Top Turret Side/Rear	20
Bottom Turret Front	20
Bottom Turret Side/Rear	20

Weapon	Location	Damage	Range	Auto	Ammo
Plasma A Gun	Large Turret Top	14d6 Destructive	Very Long	No	N/A
VRF Gauss Gun	Small Turret Bottom Front	5d6 AP	Distant	12	20, 000

Other Equipment/Modifications:

Large Top Turret: 1 Crew, Improved Fire Control +2
Small Under Turret: Improved Fire control +2

Additional Armour, AFV, Communications (TL 6), Decreased Speed x5, Ejection Seat, Navigation (standard), Prismatic Aerosols, Sensors (advanced), Short Term Life Support, Smoke Dischargers

DRAGON

A light, anti-personnel walker. The dragon is designed for trench and infantry clearance. Armed with a powerful flamethrower and lightly armoured to help avoid fire, it is an excellent choice for any prolonged engagements where an enemy may dig in.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Dragon	12	Drive (Walker)	+1	150	450	1/–	—	No	6	4	226,200	10

Armour

Location	Armour
Front	15
Right	13
Left	13
Rear	8
Top	8
Bottom	7
Turret front	10
Turret Rear/Side	8

Weapon	Location	Damage	Range	Auto	Ammo
Advanced Flamethrower x2	Small Turret Bottom Front	3d6+6	Medium	N/A	20

Other Equipment/Modifications:

Small Under Turret: Improved Fire control +1

AFV, Communications (TL 6), Decreased Speed x5, Ejection Seat, Navigation (standard), Increased Hull x3, Prismatic Aerosols, Sensors (advanced), Short Term Life Support, Smoke Dischargers

HYDRA

The hydra heavy support walker is a mobile missile bed. Loaded with enough fire power to devastate an armoured column or fixed emplacement, the hydra is an excellent method of providing artillery despite difficult terrain.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Hydra	12	Drive (Walker)	–1	70	600	1/–	—	No	10	10	624,500	45 tons

Armour

Location	Armour
Front	10
Right	10
Left	10
Rear	10
Top	10
Bottom	10

Weapon	Location	Damage	Range	Auto	Ammo
70mm Strafing Rocket Pod (7pack) x4	Dedicated Missile Bay Top	8d6	Very Long	14	
Light Tac Missile (Anti-Air) x6	Dedicated Missile Bay Top	9d6	Extreme	No	
Light Tac Missile (Anti-Armour) x6	Dedicated Missile Bay Top	9d6 Super AP	Very Distant	No	
Light Tac Missile (Anti-Personnel) x6	Dedicated Missile Bay Top	9d6	Very Distant	No	

Other Equipment/Modifications:

AFV, Communications (TL 6), Computer/1, Decreased Speed x5, Ejection Seat, Legs x4, Navigation (standard), Prismatic Aerosols, Sensors (advanced), Short Term Life Support, Smoke Dischargers

LEVIATHAN

This amphibious, heavy battle walker is well known for surprise attacks on coastal facilities and enemy sea units. Armed with missile systems, gauss cannons and lasers, this walker has earned its fearsome reputation.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Leviathan (land)	12	Drive (Walker)	–1	60	600	1	—	No	6	7	8, 694, 200	28.5 tons

Armour

Location	Armour
Front	30
Right	30
Left	30
Rear	30
Top	30
Bottom	30
Turret Front	30
Turret Side/Rear	30

Weapon	Location	Damage	Range	Auto	Ammo
12mm Light Gauss Cannon	Small Turret Bottom	10d6 Mega-AP	Distant	No	300
Blue-green Laser Cannon	Left "Arm" Hardpoint	7d6	Very Long	No	N/A
Blue-green Laser Cannon	Right "Arm" Hardpoint	7d6	Very Long	No	N/A
Light Tac Missile (Anti-Armour) x4	Dedicated Missile Bay Top	9d6 Super AP	Very Distant	No	

Other Equipment/Modifications:

Small Turret: Improved Fire Control +2

Additional Armour x2, AFV, Communications (TL 6), Decreased Speed x5, Ejection Seat, Navigation (standard), Prismatic Aerosols, Sensors (advanced), Short Term Life Support, Smoke Dischargers

SCORPION

The workhorse of the armoured walkers. The scorpion provides a cost effective method of deploying heavy weapons and can often be seen deployed with a variety of armaments across several vehicles.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Scorpion	12	Drive (Walker)	0	60	450	1/–	—	No	6	7	1, 375, 000	28.5 tons

Armour

Location	Armour
Front	30
Right	25
Left	25
Rear	20
Top	10
Bottom	10

Weapon	Location	Damage	Range	Auto	Ammo
Plasma A Gun	Top Modular Fixed Mount	14d6 Destructive	Very Long	No	N/A

Other Equipment/Modifications:

Advanced Controls, Additional Armour x2, AFV, Communications (TL 6), Decreased Speed x5, Ejection Seat, Improved Fire Control +2, Navigation (standard), Prismatic Aerosols, Sensors (advanced), Short Term Life Support, Smoke Dischargers

ASLAN

CLAWBIKE

The Clawbike is utilised by Aslan civilians and military alike. The wheels are equipped with long curved spikes which can be extended or retracted in resemblance to a cat's claws, enabling the Clawbike to grip and traverse rough terrain with little difficulty.

Driving a Clawbike requires considerable strength, as the vehicles are infamous for bucking or toppling if not properly controlled. A character with a negative strength modifier apply it to any Drive rolls while using a Clawbike.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Clawbike	10	Drive (wheeled)	+3	280	500	1/–	—	Frame	3	3	25, 200	3 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Increased Agility x3, Increased Speed x5, Off Road Capability

CRAWLER

Heavy tracked crawlers are multipurpose utility vehicles. The four track sections are individually powered, giving the vehicle considerable agility at the cost of power and added complexity. The body of the crawler is dome-shaped but adjustable due to its internal segmentation. This adjustability makes it well suited to a plethora or roles.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Crawler	10	Drive (tracked)	1	35	500	2/–	1.75 tons	No	12	13	282, 000	12.5 tons

Armour

Location	Armour
Front	25
Right	25
Left	25
Rear	25
Top	25
Bottom	25

Other Equipment/Modifications:

Additional Armour x4, Increased Agility x2, Sensors (standard), Short Term Life Support, Communications (TL 8)

Flypod

Often described as 'soap bubbles' by human observers, Flypods are one-man flying machines which fly through gravity manipulation. A flypod's hull is mostly transparent plastic and light-weight synthetics, this gives it a fragile appearance despite being able to survive a hurricane with little difficulty. Some pods can be linked together and slaved to one lead pod.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Flypod	12	Flyer (grav)	+2	100	3,000	1/–	0.25 tons	No	1	1	44, 000	1 tons

Armour

Location	Armour
Front	5
Right	5
Left	5
Rear	5
Top	5
Bottom	5

Other Equipment/Modifications:

Advanced Controls, Communications (TL 6), Decreased Speed x8, Navigation (basic)

Hitiwoyerlitoir, Aslan Battle Dress

Comparatively primitive to human battle dress. The Hitiwoyerlitoir may lack the computer systems of other suits but boasts a much greater strength and full protection from the harsh environments of Aslan space.

Type	TL	Skill	Chassis	Str Modifier	Dex Modifier	Base Dmg	Armour	Duration	Speed	Cost (Cr.)	Shipping Size
Hitiwoyerlitoir	14	Battledress	Medium	+6	+3	2d6	19	18 hours	12/60	2, 625, 000	0.1 tons

Other Equipment/Modifications:

Increased Strength x2, Insidious Environment Protection, Lowered Manoeuvrability

*T*ANK

The main battle tank of the Aslan military, this vehicle exemplifies the fighting techniques of its creators. The tank is heavier than its comparable human designs and has a crew of three – a male commander/gunner, a male driver and a female engineer/comms officer.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Aslan Tank	12	Flyer (grav)	0	360	—	3/–	—	No	37	38	34, 657, 000	37.5 tons

Location	Armour
Front	150
Right	150
Left	150
Rear	150
Top	150
Bottom	150
Turret Front	150
Turret Side/Rear	150

Weapon	Location	Damage	Range	Auto	Ammo
Plasma A Gun x2	Large Turret Top	14d6 Destructive	Very Long	No	N/A
VRF Gauss Gun	Right Hardpoint	5d6 AP	Distant	12	20, 000
VRF Gauss Gun	Left Hardpoint	5d6 AP	Distant	12	20, 000

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +3

Additional Armour x14, AFV, Communications (TL 10), Fusion Plant, Hard Points x2, Increased Speed x6, Navigation (standard), Sensors (advanced), Short Term Life Support

VARGR

DHOUZERSAN PLASMA TANK

The Dhouzersan Plasma Tank is a gravitic tank that has become the standard fighting vehicle of most Vargr army divisions. Armed with a variety of plasma-based weapons the Dhouzersan is effective against a wide range of enemy forces.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
PlasmaTank	12	Flyer (grav)	0	420	—	4/–	0.25 tons	No	22	22	14, 580, 400	20 tons

Location	Armour
Front	40
Right	40
Left	40
Rear	40
Top	40
Bottom	40
Turret Front	40
Turret Side/Rear	40

Weapon	Location	Damage	Range	Auto	Ammo
Plasma A Gun	Large Turret Top	14d6 Destructive	Very Long	No	N/A
Plasma Missile x2	Left Dedicated Missile Bay	8d6 Ultra Destructive	Extreme	No	

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +3

Additional Armour x3, AFV, Communications (TL 10), Decreased Agility, Fusion Plant, Hard Points x2, Increased Hull x2, Increased Structure x2, Increased Speed x4, Navigation (standard), Sensors (advanced), Short Term Life Support

GHOERRUEGH G/CARRIER

A favourite of both military and corsair raiders, the Ghoerruegh G-Carrier is a personnel carrier designed for stealth and speed. A perfect craft for swift planetary assaults and ground support missions.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Ghoerruegh	10	Flyer (grav)	+1	1, 575	—	2/12	0.5 tons	No	25	25	19, 750, 000	25 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4
Main Turret Front	4
Main Turret Side/Rear	4

Weapon	Location	Damage	Range	Auto	Ammo
Plasma A Gun	Large Turret Top	14d6 Destructive	Very Long	No	N/A

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +2

Streamlined, Communications (TL 10), Decreased Speed x5, Fusion Plant, Infrared Masking II, Navigation (advanced), Sensors (advanced), Short Term Life Support, Stealth II

GRAVITIC RACER

While Vargr may not share the same taste in design to humans, they do share their love of speed. Unlike human grav racers, Vargr designs incorporate a passenger or co-pilot seat; such as their need for companionship they like to share the racing experience with their brethren. Often the passenger serves as a navigator to increase participation.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Gravitic Racer	9	Flyer (grav)	0	1,800	500	1/1	—	No	1	1	113,750	0.5 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Decreased Agility, Decreased Speed x5, Reduced Fuel Efficiency x3, Streamlined

GRAVITIC SPEEDER

These Open-topped vehicles are the Vargr equivalent of the Air/Raft commonly found in Imperial space. However, the Vargr speeder is much smaller with space for one passenger but what it lacks in size it makes up for in speed.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Speeder	9	Flyer (grav)	0	480	2,000	1/1	0.5 tons	Open Topped	1	3	195,000	3 tons

Armour

Location	Armour
Front	5
Right	5
Left	5
Rear	5
Top	5
Bottom	5

Other Equipment/Modifications:

Decreased Agility, Decreased Hull x2, Increased Speed x2

KHERRTHAZEUGH GROUND CARRIER

The Kherrthazeugh Ground Carrier is a reasonably priced vehicle for travellers and explorers that is both sturdy and reliable. It is large enough to carry a small Vargr pack, with cargo, to and from their destination. The two rear passenger seats can be folded down to provide an additional room for cargo.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Ground Carrier	7	Drive (wheeled)	0	144	572	1/7	1.5 tons	No	3	3	19, 720	3 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Double Occupancy Seating x3, Entertainment System Cr. 200, Fuel Efficiency, Greater Fuel Capacity, Navigation (basic), Off-road Capability

TSUENOURR, VARGR BATTLE DRESS

Similar to the human tech, basic battle dress, the Tsuenourr offers by far the greatest protection for a suit of its class. While perhaps not as sophisticated as other suits, the added protection seems well worth the price.

Type	TL	Skill	Chassis	Str Modifier	Dex Modifier	Base Dmg	Armour	Duration	Speed	Cost (Cr.)	Shipping Size
Tsuenourr	14	Battledress	Medium	+4	+3	2d6	19	18 hours	12/60	1, 129, 350	0.1 tons

Other Equipment/Modifications:

Computer/2, Communications (advanced), Expert Tactics (Military/2), Lowered Manoeuvrability

DARRIANS

GRAV BIKE - CIVILIAN

The ubiquitous transport on Darrian worlds, grav bikes are fast and manoeuvrable. Fairings dynamically reshape to control aerodynamic flow and act as spoilers for slowing or rapid changes in direction. Unlike imperial designs, these vehicles incorporate life support systems to aid in high altitude flying.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Grav Bike	11	Flyer (grav)	+3	2, 500	4, 000	1/1	—	No	1	2	671, 500	1.5 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Advanced Controls, Increased Agility, Streamlined, Short Term Life Support

GRAV BIKE - MILITARY

Larger than its civilian counterpart, these rapid attack, light grav vehicle are built around a light autocannon normally only seen on heavier vehicles. When deployed in squadrons, these grav vehicles can fill many rolls from anti-infantry to even air support against enemy aircraft.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Grav Bike	15	Flyer (grav)	+4	3, 450	4, 000	1/1	—	No	2	2	1, 140, 000	2 tons

Armour

Location	Armour
Front	18
Right	18
Left	18
Rear	18
Top	18
Bottom	18

Weapon	Location	Damage	Range	Auto	Ammo
Advanced Light Autocannon	Fixed Mount Forward Facing	6d6+4 SAP	Very Long	8	5,000

Other Equipment/Modifications:

Additional Armour x2, Advanced Controls, Increased Agility x2, Streamlined, Short Term Life Support

MONOCYCLE

An odd looking form of transport, Darrian monocycles look like a circular disks standing on their edge, about two and a half metres in diameter with a central faring bubble where the driver sits. With gyroscopic balancing, the Monocycle is a perfectly stable vehicle despite its appearance. To further unnerve those who are unfamiliar, the monocycle is used as an off-road vehicle.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Monocycle	9	Drive (wheeled)	+2	360	500	1/–	0.25 tons	Frame	1	1	4, 800	1 ton

Armour

Location	Armour
Front	0
Right	0
Left	0
Rear	0
Top	0
Bottom	0

Other Equipment/Modifications:

Monowheel, Off-road Capability, Sensors (basic)

SPHERE TANK

An unusual design, most Confederation tanks use a spherical configuration six metres across, granting them a reasonably effective deflection surface from all directions. They conform to the Darrian military philosophy of stealth, speed, speed and agility over brute force. This lighter variant is often seen backing up planetary defence forces, where it engages in hit and run attacks to devastating effect.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Sphere Tank	13	Flyer (grav)	+3	580	4, 000	3/–	0.25 tons	No	12	13	15, 659, 000	12.5 tons

Location	Armour
Front	80
Right	80
Left	80
Rear	80
Top	80
Bottom	80
Top Turret Front	80
Top Turret Side/Rear	80
Right Turret Front	80
Right Turret Side/Rear	80
Left Turret Front	80
Left Turret Side/Rear	80

Weapon	Location	Damage	Range	Auto	Ammo
12mm Light Gauss Cannon	Small Turret Top	10d6 Mega-AP	Very Long	No	300
VRF Gauss Gun	Small Turret Right	5d6 AP	Distant	12	20, 000
VRF Gauss Gun	Small Turret Left	5d6 AP	Distant	12	20, 000

Other Equipment/Modifications:

Small Turrets: Improved Fire Control +3

Additional Armour x7, Advanced Controls, AFV, Communications (TL 10), Increased Agility, Increased Speed x2, Infrared Masking II, Navigation (standard), Sensors (advanced), Short Term Life Support, Smoke x2, Stealth III

SPHERE TANK - ADVANCED

This heavy grade variant of the sphere tank is a common sight in the Darrian military. Using a similar hull configuration, this high grade tank mounts heavier armour and weaponry. While not as fast as it's planetary defence variant, the additional range and improved stealth systems make it a far deadlier foe.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Sphere Tank Advanced	15	Flyer (grav)	+3	380	5,000	3/–	0.25 tons	No	47	47	82,570,400	47 tons

Location	Armour
Front	150
Right	150
Left	150
Rear	150
Top	150
Bottom	150
Top Turret Front	150
Top Turret Side/Rear	150
Right Turret Front	150
Right Turret Side/Rear	150
Left Turret Front	150
Left Turret Side/Rear	150

Weapon	Location	Damage	Range	Auto	Ammo
Heavy Hypervelocity Cannon	Large Turret Top	18d6 Ultimate AP	Very Distant	No	100
VRF Gauss Gun	Small Turret Right	5d6 AP	Distant	12	20,000
VRF Gauss Gun	Small Turret Left	5d6 AP	Distant	12	20,000

Other Equipment/Modifications:

Large Turrets: 1 Crew, Improved Fire Control +3
Small Turrets: Improved Fire Control +3

Additional Armour x14, Advanced Controls, AFV, Communications (TL 10), Increased Agility, Increased Speed, Infrared Masking III, Navigation (standard), Sensors (advanced), Short Term Life Support, Smoke x2, Stealth III

ZHODANI

ADRTLETLVRA ATTACK SPEEDER

The *Adrtletlvra* (Silent Grasp) Attack Speeder is visually similar to the Preblchienchiashav but is faster and has less armour. In addition, the Adrtletlvra mounts a fusion gun, making it for more suited to up-close, devastating strikes.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Adrtletlvra	14	Flyer (grav)	+2	960	—	2/–	—	No	22	23	27,036,000	22.5 tons

Armour

Location	Armour
Front	30
Right	30
Left	30
Rear	30
Top	30
Bottom	30

Weapon	Location	Damage	Range	Auto	Ammo
Fusion Z Gun	Top Forward Fixed Mount	28d6	Distant	No	N/A

Other Equipment/Modifications:

Additional Armour x2, Advanced Controls, AFV, Communications (TL 8), Flares x2, Fusion Plant, Increased Speed x9, Infrared Masking II, Navigation (standard), Sensors (Advanced), Short Term Life Support, Smoke x2, Stealth II

DIZITANATL GRAV ARMOURED FIGHTING VEHICLE

The standard Zhodani Army and Consular Guard infantry fighting vehicle, this sleek, turreted grav sled mounts a light gauss cannon and provides carrying capacity for a nine-man infantry squad. The Dizitanatl takes its name from the famous infantry commander from the Second Frontier War.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Dizitanatl	12	Flyer (grav)	+2	560	—	2/9	0.25 tons	No	15	15	12,043,000	15 tons

Armour

Location	Armour
Front	50
Right	50
Left	50
Rear	50
Top	50
Bottom	50
Turret Front	50
Turret Side/Rear	50

Weapon	Location	Damage	Range	Auto	Ammo
VRF Gauss Gun	Small Turret Top	5d6 AP	Distant	12	20,000

Other Equipment/Modifications:

Small Turret: Improved Fire Control +2, Pop-up

Additional Armour x4, Advanced Controls, AFV, Communications (TL 8), Fusion Plant, Increased Speed x6, Infrared Masking I, Short Term Life Support, Stealth I

BATTLE DRESS, GUARDS

Guards Battle dress is used by commando units and Noble officers on lift mechanised infantry units. With greater computer systems and protection than the standard, human model, the Guard Battle Dress is iconic as the Zhodani Scallop helms.

Type	TL	Skill	Chassis	Str Modifier	Dex Modifier	Base Dmg	Armour	Duration	Speed	Cost (Cr.)	Shipping Size
Guard	14	Battledress	Medium	+4	+4	2d6	16	18 hours	12/60	1, 245, 000	0.1 tons

Other Equipment/Modifications:

Computer/3, Communications (advanced), Expert Tactics (Comms/2, Intellect/1, Military/2)

IAVCHIEQL G-CARRIER

The Iavchieql G-carrier is a good example of Zhodani light vehicle design philosophy: weaponry is preferred over armour. Also, sensors are less powerful than those in equivalent Imperial craft – presumably because the Zhodani place more stock in psionics as a supplement to sensors.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Iavchieql	13	Flyer (grav)	+2	440	—	2/14	0.25 tons	No	14	14	17, 714, 000	14 tons

Armour

Location	Armour
Front	60
Right	40
Left	40
Rear	30
Top	40
Bottom	30
Main Turret Front	40
Main Turret Side/Rear	40

Weapon	Location	Damage	Range	Auto	Ammo
Fusion X Gun	Large Turret Top	20d6	Distant	No	N/A

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +2

Additional Armour x3, Advanced Controls, AFV, Communications (TL 10), Fusion Plant, Infrared Masking I, Navigation (advanced), Sensors (basic), Short Term Life Support, Stealth I

PREBLSHIENCHIASHAV ATTACK SPEEDER

The *Preblshienchiashav* (Princely Born) Attack Speeder made its debut during the Fourth Frontier War. The Speeder is a good example of Zhodani Military craft design philosophy: fast and deadly. In addition, the *Preblshienchiashav* has exceptional armour. This vehicle and its cousin the *Adrtletlvra* were responsible for more fear and panic than any other Zhodani war machine During the Fourth Frontier War.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Attack Speeder	14	Flyer (grav)	+2	650	—	2/–	—	No	35	36	29, 966, 000	35.5 tons

Armour

Location	Armour
Front	60
Right	60
Left	60
Rear	60
Top	60
Bottom	60

Weapon	Location	Damage	Range	Auto	Ammo
Aerospace Defence Laser	Top Forward Fixed Mount	16d6	Extreme	No	N/A

Other Equipment/Modifications:

Additional Armour x5, Advanced Controls, AFV, Communications (TL 8), Flares x2, Fusion Plant, Increased Speed x5, Infrared Masking II, Navigation (standard), Sensors (Advanced), Short Term Life Support, Smoke x2, Stealth II

QIKNAVRA GRAV TANK

The Qiknavra (named after the smaller of Zhdant's continents) is one of the Consulate's newest grav tank designs. Intended to provide an inexpensive, yet robust vehicle. To date the full details of this vehicle have been kept a tightly guarded secret against the Imperium.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Qiknavra	14	Flyer (grav)	+3	580	—	3/–	—	No	45	45	41, 549, 000	45 tons

Location	Armour
Front	125
Right	80
Left	80
Rear	70
Top	45
Bottom	35
Right Turret Front	70
Right Turret Side/Rear	60
Left Turret Front	70
Left Turret Side/Rear	60

Weapon	Location	Damage	Range	Auto	Ammo
Aerospace Defence Laser	Top Forward Fixed Mount	16d6	Extreme	No	N/A
VRF Gauss Gun	Right Small Turret	5d6 AP	Distant	12	20, 000
VRF Gauss Gun	Left Small Turret	5d6 AP	Distant	12	20, 000

Other Equipment/Modifications:

Additional Armour x6, Advanced Controls, AFV, Communications (TL 10), Fusion Plant, Increased Agility, Increased Speed x4, Long Term Life Support, Navigation (standard), Prismatic Aerosols x2, Sensors (advanced), Smoke x2

VLEZJAQ SCOUT SLED

A small, lightly armoured, high-speed military grav vehicle usually employed for scouting and armed reconnaissance. It is armed with a light gauss cannon. The *Vlezjaq* is named after a winged predator native to Zhdant's eastern desert that resembles a cross between a Terran bat and a scorpion.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Scout Sled	12	Flyer (grav)	+2	1, 075	3, 000	2/–	—	No	4	4	2, 950, 000	4 tons

Armour

Location	Armour
Front	60
Right	30
Left	30
Rear	30
Top	60
Bottom	30

Weapon	Location	Damage	Range	Auto	Ammo
VRF Gauss Gun	Top Forward Fixed Mount	5d6 AP	Distant	12	20, 000
Light Tac Missile (Anti-Armour) x2	Top Dedicated Missile Bay	9d6 Super AP	Very Distant	No	

Other Equipment/Modifications:

Additional Armour x7, Advanced Controls, Communications (TL 8), Decrease Speed x5, Navigation (standard), Prismatic Aerosol x2, Sensors (Advanced), Short Term Life Support, Smoke x2, Stealth II, Streamlined

YONCHOBO UTILITY GRAV SLED

This medium-weight 'grav truck' is used by many civilian concerns within Zhodani space, as well as by the Zhodani military. The Yonchobo grav sled is noted for its ruggedness and safety in a wide range of planetary conditions.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Grav Sled	12	Flyer (grav)	+2	340	3, 000	2/–	5 tons	No	14	14	3, 877, 000	12 tons

Armour

Location	Armour
Front	25
Right	25
Left	25
Rear	25
Top	25
Bottom	25

Other Equipment/Modifications:

Additional Armour x4, Advanced Controls, Increased Speed, Navigation (basic), Sensors (standard), Short Term Life Support

Sword Worlds

Frakt Cargo Truck

This medium cargo truck is capable of carrying a full ton of cargo for Sword Worlder civilisations who cannot afford the cost or complication of larger vehicles and grav transporters such as the Vinlander and the Milliphant.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Frakt Cargo Truck	9	Drive (wheeled)	0	120	500	1/5	1 ton	No	4	4	17, 960	4 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Decreased Speed x4, Entertainment System Cr. 200, Navigation (basic), Short Term Life Support

Hnaefir Air/Raft

The staple civilian aircraft in the sword worlds, the Hnaefir is a simple variant with two ideas in mind- cheap and sturdy. Lightly armoured, basic electronics and somewhat unforgiving controls, the Hnaefir model is hardly the most comfortable of rides.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Air/Raft	9	Flyer (grav)	+1	2, 000	2, 600	1/5	—	No	3	3	1, 341, 000	3 tons

Armour

Location	Armour
Front	8
Right	8
Left	8
Rear	8
Top	8
Bottom	8

Other Equipment/Modifications:

Communications (basic), Double Capacity Seating x2, Fuel Efficient x3, Increased Armour, Navigation (basic), Sensors (basic), Streamlined, Short Term Life Support

KRALLE GRAV TANK

A typical Sword World tank, the *Kralle* is not heavily armed or armoured enough to take on Imperial or Darrian armoured regiments but can easily handle enemy grav vehicles and armoured infantry. Bringing to bear impressive firepower, for its low production costs.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Kralle Grav Tank	9	Flyer (grav)	0	1,045	1,000	3/–	—	No	10	8	10,225,000	7 tons

Armour

Location	Armour
Front	48
Right	48
Left	48
Rear	48
Top	48
Bottom	48
Turret Front	48
Turret Side/Rear	48

Weapon	Location	Damage	Range	Auto	Ammo
7.7mm EMF Minigun	Large Top Turret	4d6-2	Medium	8	400
100mm Electromagnetic Cannon	Large Top Turret	6d6	Distant	No	N/A

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +1 (electromagnetic cannon)

Additional Armour x7, AFV, Streamlined, Communications (TL 8), Decreased Agility, Decreased Speed x3, Increased Hull x3, Increased Structure, Navigation (basic), Prismatic Aerosol x2, Sensors (Advanced), Smoke x2, Stealth Class II, Visual Camouflage 1

MILLIPHANT CARGO HAULER

The *Milliphant* is a gigantic, long-distance cargo mover used by Sword Worlders from all aspects of life. A common sight in all inhabited areas of the subsector, especially wherever large trains must keep moving between settlements.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Milliphant	9	Flyer (grav)	0	600	2,000	2/–	6 tons	No	13	12	1,118,500	16.5 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Communications (TL 6), Decreased Agility, Decreased Hull x3, Decreased Structure x5, Increased Speed x6, Navigation (basic), Sensors (basic), Short Term Life Support

MJOLNIR ARTILLERY PLATFORM

Built to overwhelm point-defence systems, the Mjolnir is packed to the brim with HEAT rocket rounds that it hurls in great numbers from its quad-array multiple rocket launchers. It can punch through the armour and defences of most main battle tanks and makes a ruin of lighter targets.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Mjolnir Artillery	9	Flyer (grav)	0	970	1,000	5/–	4 tons	No	11	10	4,097,625	14.5 tons

Armour

Location	Armour
Front	30
Right	30
Left	30
Rear	30
Top	30
Bottom	30
Turret Front	30
Turret Side/Rear	30

Weapon	Location	Damage	Range	Auto	Ammo
200mm Automatic Rocket Launchers x4	Front Dedicated Rocket Bay	5d6	Very Distant	6	
4mm Flechette Minigun	Small Top Turret	4d6	Short	12	10,000

Other Equipment/Modifications:

Small Turret: Improved Fire Control +1

Additional Armour x4, AFV, Streamlined, Communications (TL 8), Decreased Agility, Decreased Hull x3, Decreased Speed x4, Decreased Structure x5, Navigation (basic), Sensors (Advanced), Short Term Life Support, Smoke x2, Stealth Class II, Visual Camouflage I

SCRAMASAX GRAV TANK DESTROYER

The greatly feared *Scramasax* grav tank is fast and deceptively lethal when it gets to pick and choose its target. Its design is bent on moving quickly to a heavier targets flank, unleashing a brutal salvo and then move quickly out of the line of fire.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Scramasax	9	Flyer (grav)	0	1,490	1,000	3/–	3 tons	No	22	22	26,330,550	10 tons

Armour

Location	Armour
Front	72
Right	72
Left	72
Rear	72
Top	72
Bottom	72
Turret Front	72
Turret Side/Rear	72

Weapon	Location	Damage	Range	Auto	Ammo
7.7mm EMF Minigun x2	Front Fixed Mount	4d6-2	Medium	8	400
200mm Electromagnetic Cannon	Large Top Turret	8d6	Very Distant	No	N/A

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +1

Additional Armour x11, AFV, Streamlined, Communications (TL 8), Decreased Agility, Increased Hull x2, Increased Structure x2, Navigation (basic), Prismatic Aerosol x4, Sensors (Advanced), Smoke x2, Stealth Class II, Visual Camouflage I

SKOELD WHEELED ARMOURED PERSONNEL CARRIER

A medium sized cargo hauler that has been converted for troop transport for use in lower threat areas or non-critical deployments. The Skoeld (meaning shield in Sagamaal) is only one step up from being a civilian vehicle.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Skoeld APC	9	Drive (wheeled)	0	185	500	2/5	0.75 ton	No	7	8	207,000	7.5 tons

Armour

Location	Armour
Front	18
Right	18
Left	18
Rear	18
Top	18
Bottom	18
Turret Front	18
Turret Side/Rear	18

Weapon	Location	Damage	Range	Auto	Ammo
7.7 mm EMF Minigun	Top small Turret	4d6–2	Long	8	200

Other Equipment/Modifications:

Additional Armour x2, AFV, Communications (TL 6), Increased Speed x4, Navigation (basic), Sensors (basic), Short Term Life Support

SKRAALING ARMOURED PERSONEL CARRIER

Similar to the civilian *Vinlander*, the *Skraaling* is a practical and efficient troop transport when dealing with the hostile conditions of the Sword Worlds. While lacking in long term life support, the *Skraaling* boasts many variants to meet every situation.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Grav Van	9	Flyer (grav)	+1	1,165	1,000	2/12	1.5 tons	No	8	8	1,980,825	11.5 tons

Armour

Location	Armour
Front	36
Right	36
Left	36
Rear	36
Top	36
Bottom	36
Turret Front	36
Turret Side/Rear	36

Weapon	Location	Damage	Range	Auto	Ammo
7.7mm EMF Minigun	Small Turret Top	4d6–2	Medium	8	400

Other Equipment/Modifications:

Additional Armour x3, AFV, Streamlined, Communications (TL 8), Decreased Hull x3, Decreased Structure x4, Decreased Speed x3, Navigation (basic), Prismatic Aerosol x2, Sensors (Advanced)

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SLAETTLAND RANGE TRUCK

The Sports Utility Vehicle (SUV) is a large wheeled drive car designed to seat eight people in comfort. This ,and its off road capability, make it a favoured choice of mercenaries and travellers alike.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Range Truck	9	Drive (wheeled)	+1	180	500	1/4	0.25 tons	No	3	3	28, 600	3 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Double Occupancy Seating, Entertainment System Cr. 200, Increased Agility, Navigation (basic), Off-road Capability, Short Term Life Support

TUSENFOT TRACKED ALL-TERRAIN VEHICLE

Called the 'Thousand-Foot' ATV due to its multi-plated track construction, this vehicle is the chief hostile-environment people-mover in the Sword Worlds.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Tusenfot	9	Drive (tracked)	0	140	1, 500	2/10	10 tons	No	34	34	2, 296, 140	34 tons

Armour

Location	Armour
Front	20
Right	20
Left	20
Rear	20
Top	20
Bottom	20

Other Equipment/Modifications:

Additional Armour x4, Air Lock x2, Communications (TL 8), Corrosive Environment Protection, Double Capacity Seating x5, Fresher, Greater Fuel Capacity x6, Improved Agility, Increased Speed x7, Insidious Environment Protection, Life Support (long term), Navigation (standard), Sensors (standard)

VINLANDER GRAV VAN

The Vinlander is the standard civilian grav-based vehicle seen all over the Sword Worlds. Because of its sealed body compartment, simplistic frame construction and assorted Skraaling-compatible components, a skilled mechanic can easily modify the Vinlander into a light APC.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Grav Van	9	Flyer (grav)	0	520	2,000	2/12	1.25 tons	No	5	5	677,600	8 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Decreased Agility, Decreased Hull x3, Decreased Structure x3, Double Capacity Seating x6, Increased Speed x3, Navigation (basic)

VITTNE COMMAND CAR

A slightly militarised version of the common range truck, the command car is a good example as to how Sword Worlders make use of their peacetime assets.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Command Car	9	Drive (wheeled)	+1	160	500	1/4	—	No	3	3	43,700	3 tons

Armour

Location	Armour
Front	9
Right	9
Left	9
Rear	9
Top	9
Bottom	9

Weapon	Location	Damage	Range	Auto	Ammo
Thermal Smoke discharger x2	Top Fixed Mount	Clouds the visible spectrum and stops Lasers	Short	No	4

Other Equipment/Modifications:

Additional Armour x2, Double Occupancy Seating, Entertainment System Cr. 200, Navigation (basic), Off-road Capability, Sensors (basic), Short Term Life Support

PROJECT STEEL

AIR/RAFT LING STANDARD PRODUCTIONS

These specialist Air/Rafts are the product of Ling Standard Productions. Dubbed the 'Venturer 628 Rigger', this model proved popular on the frontiers where its robust nature and ease of maintenance enable it to remain in service without expensive overhauls.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Air/ Raft	14	Flyer (grav)	+1	550	5, 200	1/5	0.5 tons	Top	4	4	618, 464	4 tons

Armour

Location	Armour
Front	15
Right	15
Left	15
Rear	15
Top	15
Bottom	15

Other Equipment/Modifications:

Additional Armour x2, Autopilot (SL 3), Communications (TL 8), Computer /1, Fuel Efficient x3, Navigation (basic), Sensors (basic)

ATV LING STANDARD PRODUCTIONS

The Ling Standard Productions (LSP) All-Terrain Vehicle is a highly advanced ground vehicle for use on project Steel. With no frills or un-necessary comforts, the LSP variant contains only what is needed for getting the job done. With fusion power to give it almost unlimited range, living quarters, respectable armour and the ability to traverse almost any ground terrain, the LSP ATV is a well respected model.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
ATV Land	14	Drive (Wheeled)	0	175	—	1/7	1. 25 tons	No	17	18	1, 250, 000	17.5 tons
Vehicle	**TL**	**Skill**	**Agility**	**Speed**	**Range**	**Crew / Passengers**	**Cargo**	**Open?**	**Hull**	**Structure**	**Cost (Cr.)**	**Shipping Size**
ATV Aquatic	14	Seafarer (ocean ships)	–4	60	—	1/7	1. 25 tons	No	17	18	1, 250, 000	17.5 tons

Armour

Location	Armour
Front	20
Right	20
Left	20
Rear	20
Top	20
Bottom	20

Other Equipment/Modifications:

Additional Armour x3, Aquatic drive, Bunks x4, Communications (TL 10), Fusion Plant, General Purpose Lab (4 spaces), Short Term Life Support, Mini-galley x2, Navigation (standard), Sensors (advanced)

Banshee Pursuit Interceptor

The Banshee Interceptor is the pride of the Pursuit Squad and is the fastest land vehicle in Mega-City One. The skilled megway Pursuit Squad drivers use Banshee Interceptors to chase and apprehend illegal speedsters, hot-rodders and other criminals.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Banshee	11	Drive (wheeled)	+1	490	600	2/–	—	Open Top	8	9	110, 140	8.5 tons

Armour

Location	Armour
Front	8
Right	8
Left	8
Rear	8
Top	8
Bottom	8
Turret Front	8
Turret Side/Rear	8

Weapon	Location	Damage	Range	Auto	Ammo
Dead Key*	Top Turret	—	Rifle	No	N/A
Tractor Gun**	Top Turret	—	Special	No	N/A

* After target is hit, make an opposed Computers check to deactivate an opponents power plant
** Has 100m of cable

Other Equipment/Modifications:

Small Turret: Top

Additional Armour, Autopilot/3, Communications (TL 8), Computer/1 (Comms/0, Database/0, Drive/1, Navigation/1), Increased Agility, Increased Speed x10, Lower Fuel Capacity x2, Navigation (standard), Sensors (basic)

Claw Patrol Ship

The Claw Patrol Ship is a short range anti-gravity vehicle that is used for regular patrols within Mega-City One. Its small size allows it to land in many places where larger vehicles might be restricted. Lightly armoured but fast, allowing it to quickly deploy rapid response teams.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Claw Patrol Ship	11	Flyer (grav)	+1	2,500	3,000	2/5	—	No	7	8	7, 430, 800	7.5 tons

Armour

Location	Armour
Front	8
Right	8
Left	8
Rear	8
Top	8
Bottom	8
Right Turret Front	8
Right Turret Side/Rear	8
Left Turret Front	8
Left Turret Side/Rear	8

Weapon	Location	Damage	Range	Auto	Ammo
Heavy Laser Cannon x3	Fixed Weapon Mount Front	10d6	Rifle	4	50
Hi-Ex Missile Launcher	Dedicated Missile Bay Top	4d6+3	Distant	No	
Autogun	Small Turret Right	3d6+8	Rifle	6	100
Autogun	Small Turret left	3d6+8	Rifle	6	100

Other Equipment/Modifications:

Additional Armour, Autopilot/3, Communications (TL 8), Navigation (standard), Sensors (basic), Streamlined

GUNBIRD

A winged variant of the H-Wagon that sacrifices armour and speed for additional weaponry, serving as both a bomber and air assault vehicle. The laser cannons provide devastating fire-power that can make precise attacks against a variety of targets.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Gunbird	11	Flyer (grav)	+1	400	3,000	5/–	—	No	15	16	7, 179, 800	15.5 tons

Armour

Location	Armour
Front	12
Right	12
Left	12
Rear	12
Top	12
Bottom	12
Right Turret Front	12
Right Turret Side/Rear	12
Left Turret Front	12
Left Turret Side/Rear	12

Weapon	Location	Damage	Range	Auto	Ammo
Peterson High Intensity Laser Cannon x2	Right Turret	10d6+6	Rifle	3	60
Peterson High Intensity Laser Cannon x2	Left Turret	10d6+6	Rifle	3	60
Hi-Ex Missile Launcher x2	Dedicated Missile Bay Top	4d6+3	Distant	No	
Cluster Bombs	Dedicated Bomb Bay Bottom	5d6	Distant	No	
Urban Nuke	Dedicated Bomb Bay Bottom	Special (vaporises)	Distant	No	

Other Equipment/Modifications:

Small Turret Right: Improved Fire Control +3 (Peterson High Intensity Laser Cannon)
Small Turret Left: Improved Fire Control +3 (Peterson High Intensity Laser Cannon)

Additional Armour x2, Autopilot/3, Communications (TL 8), Improved Fire Control +3 (Urban Nuke), Navigation (standard), Sensors (basic)

GUNBOAT

The gunboat is used exclusively by the Atlantic Division. These fast water-going vessels are used by Ocean Patrol and the Harbour Squad to patrol the Mega-City One waters, ever vigilant for pirates and smugglers.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Gunboat	11	Seafarer (motorboats)	0	90	800	2/4	—	Open Topped	2	3	93, 300	4.5 tons

Armour

Location	Armour
Front	8
Right	8
Left	8
Rear	8
Top	8
Bottom	8

Weapon	Location	Damage	Range	Auto	Ammo
Hi-Ex Missile Launcher x2	Dedicated Missile Bay Top	4d6+3	Distant	No	

Other Equipment/Modifications:

Additional Armour, Autopilot/3, Communications (TL 8), Improved Fire Control +3 (Hi-Ex Missile Launcher), Navigation (standard), Sensors (basic)

H-WAGON

The H-Wagon is an eternal sight in the skies of Mega-City, monitoring all aerial traffic and responding to emergencies that require heavy firepower. Too large to patrol the streets themselves, the H-Wagon is a highly agile vehicle that can handle attacking hovercraft and the worst weather of the cursed earth.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
H-Wagon	11	Flyer (grav)	+1	1,900	3,000	3/12	—	No	13	13	11, 674, 500	13 tons

Armour

Location	Armour
Front	20
Right	20
Left	20
Rear	20
Top	20
Bottom	20
Right Turret Front	20
Right Turret Side/Rear	20
Left Turret Front	20
Left Turret Side/Rear	20

Weapon	Location	Damage	Range	Auto	Ammo
Hi-Ex Missile Launcher x2	Bottom Dedicated Missile Bay	4d6+3	Distant	No	
Heavy Laser	Right Turret	10d6	Rifle	4	100
Heavy Laser	Left Turret	10d6	Rifle	4	100

Other Equipment/Modifications:

Small Turret: 1 Space Additional Ammunition
Small Turret: 1 Space Additional Ammunition

Additional Armour x4, Streamlined, Autopilot/3, Communications (TL 8), Computer/1, Navigation (standard), Sensors (Advanced), Short Term Life Support

iCON-WAGON

The iCON-Wagon is another variant of the H-Wagon. This vehicle is designed to transport Justice Department personnel from Mega-City One to any world-wide location and back again without needing to refuel.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Icon-Wagon	11	Flyer (grav)	0	1,100	4,500	4/5	—	No	5	6	9, 201, 800	5.5 tons

Armour

Location	Armour
Front	20
Right	20
Left	20
Rear	20
Top	20
Bottom	20

Weapon	Location	Damage	Range	Auto	Ammo
Cyclops Laser Cannon x3	Front Fixed Mount	10d6+6	Rifle	3	60
Hi-Ex Missile Launcher x2	Dedicated Missile Bay Bottom	4d6+3	Distant	No	-
Stealth Missile Launcher x2	Dedicated Missile Bay Top	Vaporises everything within the blast	Unlimited	No	-

Other Equipment/Modifications:

Streamlined, Additional Armour x4, Autopilot/3, Communications (TL 8), Improved Fire Control +3 (Stealth Missile Launcher), More Fuel Efficiency x5, Navigation (standard), Sensors (basic)

LAWMASTER

The standard issue transport for any Judge, the Lawmaster is as iconic as a Judge's helmet or Lawbringer. With its Notron 4000cc V8 engine, heavy armour, built in computer and heavy armaments the Lawmaster strikes terror into any perp on the streets of Mega-City One.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Lawmaster	11	Drive (lawmaster)	+1	365	600	1/–	—	Open Top	1	2	52, 000	1.5 tons

Armour

Location	Armour
Front	12
Right	4
Left	4
Rear	12
Top	4
Bottom	12

Weapon	Location	Damage	Range	Auto	Ammo
Bike Cannon x2	Fixed Forward Facing	3d6+8	Rifle	6	200
Cyclops Laser	Fixed Forward Facing	5d6+8	Rifle	4	One burst per 10 rounds

Other Equipment/Modifications:

Additional Armour, Autopilot/3, Communications (TL 8), Computer/1, Enclosed, Motorcycle, Navigation (standard) , Sensors (basic)

LAWMASTER MK II, CURSED EARTH QUASAR

Developed for prolonged use in the Cursed Earth. The main feature of the MK II Lawmaster is the Hydra Laser Cannon, capable of rapid-fire with a faster recharge than its Cyclops predecessor.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
MK.II Lawmaster	11	Drive (lawmaster)	+1	365	600	1/–	—	Open Top	1	2	54, 000	1.5 tons

Armour

Location	Armour
Front	12
Right	4
Left	4
Rear	12
Top	4
Bottom	12

Weapon	Location	Damage	Range	Auto	Ammo
Bike Cannon x2	Fixed Forward Facing	3d6+8	Rifle	6	200
Cyclops Laser*	Fixed Forward Facing	5d6	Distant	6	One burst every two rounds.

*+1 DM to attack rolls.

Other Equipment/Modifications:

Additional Armour, Autopilot/3, Communications (TL 8), Computer/1, Enclosed, Motorcycle, Navigation (standard) , Sensors (basic)

MANTA PROWL TANK

The justice departments answer to growing crime rates. Often regarded as a mobile, flying fortress of anti-crime measures. This anti-grav tank comes fully armed with foam jets, twin-linked laser lances, Gas Grenade Launchers and a Petersen Heavy Laser to deal with heavy armour. With cells onboard for a small riots worth of perps, this tank is a true symbol of a Judge's absolute authority.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Manta Prowl Tank	11	Flyer (grav)	+1	350	1,500	8/20	—	No	50	50	22,177,000	50 tons

Armour

Location	Armour
Front	24
Right	24
Left	24
Rear	24
Top	24
Bottom	24
Top Turret Front	24
Top Turret Side/Rear	24

Weapon	Location	Damage	Range	Auto	Ammo
Laser Lance x2	Front Fixed Mount	6d6+3	Rifle	No	12
Peterson High Intensity Laser Cannon	Top Turret	10d6+6	Rifle	3	60
Foam Blaster x2	Top Turret	Strength Test 12+ or Incapacitated	Medium	N/A	40
Foam Blaster x3	Right Front Fixed Mount	Strength Test 12+ or Incapacitated	Medium	N/A	40
Foam Blaster x3	Left Front Fixed Mount	Strength Test 12+ or Incapacitated	Medium	N/A	40
Stumm Gas Grenade Launcher x4	Right Fixed Mount	Endurance Test 11+ or Incapacitated	Short	No	3
Stumm Gas Grenade Launcher x4	Left Fixed Mount	Endurance Test 11+ or Incapacitated	Short	No	3

Other Equipment/Modifications:

Top Turret: 1 Space Additional Ammunition

Additional Armour x2, AFV, Autopilot/3, Communications (TL 8), Computer/1, Navigation (standard), Sensors (advanced), Short Term Life Support, Internal Vehicle Bay (4.5 tons), Operating Theatre (2 patient capacity)

ROADLINER, MEAT WAGON

Of similar design to the Pat Wagon, a Meat Wagon is specifically equipped to haul away casualties from the scene of an incident. Equipped with life support facilities and a defensive cannon in case the incident hasn't drawn to a close.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Meat Wagon	11	Drive (wheeled)	−1	210	600	2/2	—	No	13	14	403, 630	13.5 tons

Armour

Location	Armour
Front	20
Right	20
Left	20
Rear	20
Top	20
Bottom	20
Turret Front	20
Turret Side/Rear	20

Weapon	Location	Damage	Range	Auto	Ammo
Street Cannon	Top Small Turret	3d6+8	Rifle	6	200

Other Equipment/Modifications:

Small Turret: 1 Space Additional Ammunition

Additional Armour x4, Communications (TL 8), Computer/1, Increased Speed x10, Low Berth x2, Navigation (standard), Sensors (basic)

ROADLINER, PAT WAGON – MK III

The Mk III Pat-Wagon is the most commonly sighted justice department vehicle, save perhaps the Lawmaster. Designed for flexibility, the Pat Wagon is respected by Judges for its ability to bring the law to rioting citizens and armoured perps alike. With enough room for a squad of judges and any perps who weren't smart enough to run.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Pat Wagon	11	Drive (wheeled)	−1	210	600	2/10	—	No	13	14	306, 150	13.5 tons

Armour

Location	Armour
Front	20
Right	20
Left	20
Rear	20
Top	20
Bottom	20
Turret Front	20
Turret Side/Rear	20

Weapon	Location	Damage	Range	Auto	Ammo
Street Cannon	Top Small Turret	3d6+8	Rifle	6	200
Foam Blaster	Top Small Turret	Strength Test 12+ or Incapacitated	Medium	N/A	40

Other Equipment/Modifications:

Small Turret: Additional Ammunition (1 space street cannon, 1 space foam blaster)

Additional Armour x4, Communications (TL 8), Computer/1, Increased Speed x10, Navigation (standard), Sensors (basic)

Riot Wagon

The Riot Wagon is a smaller variant of the H-Wagon and is used by Riot Squads to suppress large unruly crowds. Armed with Riot Foam and Stumm Gas Dispenser, the Riot Wagon is capable of controlling crowds over a much greater area than can be achieved by ground forces alone.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Riot Wagon	11	Flyer (grav)	+1	700	3,000	3/–	—	No	5	5	845.800	5 tons

Armour

Location	Armour
Front	12
Right	12
Left	12
Rear	12
Top	12
Bottom	12
Turret Front	12
Turret Side/Rear	12

Weapon	Location	Damage	Range	Auto	Ammo
Foam Blaster	Bottom Small Turret	Strength Test 12+ or Incapacitated	Medium	N/A	40
Stumm Gas Grenade Launcher	Bottom Small Turret	Endurance Test 11+ or Incapacitated	Short	No	3

Other Equipment/Modifications:

Additional Armour x2, Autopilot/3, Communications (TL 8), Computer/1, Increased Speed x4, Navigation (standard), Sensors (Advanced)

Sirocco Citi-Def Gunship

Heavily armed, highly manoeuvrable and capable of deploying small Judge squads right into the heart of a fire fight, the Sirocco Citi-Def Gunship is the perfect vehicle, save for its tendency to destroy the surrounding buildings along with the perps. While this unfortunate set back is causing the Sirocco to be phased out, many Citi-Def squads still cling to them.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Sirocco	11	Flyer (grav)	+1	400	3,000	3/8	0.50 tons	No	8	8	3,902,500	8 tons

Armour

Location	Armour
Front	24
Right	24
Left	24
Rear	24
Top	24
Bottom	24
Right Turret Front	24
Right Turret Side/Rear	24
Left Turret Front	24
Left Turret Side/Rear	24

Weapon	Location	Damage	Range	Auto	Ammo
Heavy Spitgun x2	Right Small Turret	3d6	Rifle	4	120
Heavy Spitgun x2	Left Small Turret	3d6	Rifle	4	120
Hi-Ex Missile Launcher x2	Bottom Dedicated Missile Bay	4d6+3	Distant	No	

Other Equipment/Modifications:

Small Turret: Improved Fire Control +2
Small Turret: Improved Fire Control +2

Additional Armour x2, Autopilot/3, AFV, Communications (TL 8), Computer/1, Increased Agility, Navigation (standard), Sensors (advanced)

S-Wagon

Also known as the 'Night Owl', the S-Wagon is a stealth surveillance craft used to monitor activities throughout Mega-City One where conventional technology is insufficient.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
S-Wagon	11	Flyer (grav)	+1	450	3,000	2/6	—	No	5	5	1,617,000	5 tons

Armour

Location	Armour
Front	8
Right	8
Left	8
Rear	8
Top	8
Bottom	8

Other Equipment/Modifications:

Additional Armour, Autopilot/3, Communications (TL 8), Computer/1, Infrared Masking III Navigation (standard), Sensors (Advanced), Short Term Life Support, Stealth Class II, Visual Camouflage II

Yo-Yo

These small hover-bikes might be slow and lack any armaments but their small size makes them ideal to transport on medium sized vehicles like the iCON-Wagon for short range reconnaissance.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Yo-Yo	12	Flyer (grav)	+1	500	3,000	1/–	—	Frame	0	1	50,000	0.5 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

JUDGE DREDD
CIVILIAN GRAV VEHICLES

HOVERBUS

A perpetual sight in the skies of Mega-City One, for those citizens unable to afford their own vehicle, the hoverbus often provides the most convenient way to move across a city sector.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Hoverbus	11	Drive (wheeled)	0	200	750	1/70	0.25 tons	No	14	17	382, 100	17.5 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Communications (TL 8), Computer/1, Decreased Hull x3, Decreased Speed x5, Decreased Structure x2, Double Capacity Seating x25 (seat spaces), Navigation (basic), Reduced Fuel Efficiency x3

HOVERCAR FOORD FALCON GIAH

Wealthier families often choose a hover car such as the Falcon, leaving the crowded streets far below and travelling at great speed to any destination in the city. Many critics have noted that the Falcon has a very basic and even 'cheep' feel to it compared to the credits needed to purchase one.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Foord Falcon	11	Flyer (grav)	0	400	750	1/4	0.25 tons	No	2	3	1, 125, 110	3

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Autopilot/1, Computer/1, Decreased Agility, Decreased Hull, Decreased Speed x2, Entertainment System Cr. 300, Navigation (basic), Reduced Fuel Efficiency x3

HOVERPOD MERCURY NINE-TEN

Often Regarded as a flying buggy, hoverpods meet with little of the same derision, no doubt to their expense. Although quite comfortable, the Nine-Ten is little more than an enclosed seat inside a bubble, strapped on to an anti-grav powerplant that all but strains to get a single occupant aloft.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Nine-Ten	11	Flyer (grav)	0	150	750	1/–	0.25 tons	No	1	1	12, 500	0.5 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Decreased Agility x1, Decreased Speed x5, Entertainment System Cr. 300, Reduced Fuel Efficiency x1

MERCHANT HOVERSHIP

Almost without exception, every hovership is owned by one of the large mercantile corporations that trades regularly between Brit-Cit and Mega-City One with occasional forays to other cities of the world. However the justice department is known to own a couple of refitted hoverships, as are several billionaires who use them for luxury yachts.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Hovership (sea)	11	Seafarer (ocean ships)	–2	100	—	50/50	172.5 tons	No	500	500	21, 081, 000	1, 000 tons
Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Hovership (grav)	11	Flyer (grav)	0	400	—	50/50	172.5 tons	No	500	500	21, 081, 000	1, 000 tons

Armour

Location	Armour
Front	12
Right	12
Left	12
Rear	12
Top	12
Bottom	12

Weapon	Location	Damage	Range	Auto	Ammo
Heavy Laser	Top Powered Pintle Mount	10d6	Rifle	4	-

Other Equipment/Modifications:

Additional Armour x2, Bunks x50, Computer/1 x2, Full Galley (serves 50), Entertainment System Cr.1, 000 (communal), Fresher x4, Fusion Plant

SKY TRUCK, MERCURY KARMACK

What better way to avoid the eternal traffic jams of the city then to fly over head. With faster delivery times, the Karmack is a welcome addition in any business. Those companies that can afford to replace their ground vehicles won't soon regret it.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Sky Truck	11	Flyer (grav)	0	400	3,000	1/2	6 tons	No	10	10	607, 800	13.5 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Decreased Agility, Decreased Hull x3, Decreased Structure x4, Entertainment System Cr. 300

Judge Dredd
Civilian Ground Vehicles

Block Buggy

The block buggy is a simple, two person vehicle with storage space for 100kg of goods. A necessity for navigating and traversing the streets of Mega-City One, the block buggy uses a rechargeable battery with enough power for up to 8 hours operation.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Block Buggy	11	Drive (wheeled)	+1	200	798	1/1	0.25 tons	Top	1	1	7, 320	1.5

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Communications (TL 6), Decreased Speed x2, Greater Fuel Capacity, Increased Agility, Navigation (standard)

Ground Car Foord Slabster

The Slabster is one of the most common vehicles found on the streets of Mega-City One and every family who cannot hope to afford the latest roadster or hovercar aspires to the freedom a ground car can give- for many the car gives the first opportunity to leave their city block.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Foord Slabster	11	Drive (wheeled)	0	250	600	1/4	0.25 tons	No	3	3	8, 800	3 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Computer/1, Entertainment System Cr. 300, Navigation (basic)

*G*round *C*ar *F*oord *S*trato

For many critics , Foord's entry into the roadster market was an expensive disaster but by just slightly altering the marketing of the Strato, the company managed to create a highly desirable ground car for the citizen who wanted the looks and performance of a hot rod but without the expense and prestige.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Foord Strato	11	Drive (wheeled)	0	350	600	1/1	0.25 tons	No	3	3	11, 200	3

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Computer/1, Entertainment System Cr. 300, Increased Speed x4, Navigation (basic)

*G*round *C*ar *O*ostin *M*acro

A common sight on the streets of Mega-City One (as are similar, two-seater micro cars) the Oostin Macro is a cheap, two-door ground car light on luxury but noted for its long lived reliability. The Macro has earned the distinction of being the car most young citizens aim to purchase as their first ground car due to its low selling price and growing fan-club.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Oostin Macro	11	Drive (wheeled)	0	250	150	1/1	0.25 tons	No	2	2	4, 320	2 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Computer/1, Entertainment System Cr. 300, Navigation (basic), Reduced Fuel Efficiency x3

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JUGGER JCD 939

Sometimes called the two-laner, the 939 is the workhorse of large corporations, ferrying raw materials and finished goods from sector to sector, forming the vital backbone of commerce in Mega-City One.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
JCD 939	11	Drive (wheeled)	–2	175	1,590	1/2	30 tons	No	72	72	135, 120	75 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Decreased Agility, Decreased Structure x3, Decreased Hull x3, Entertainment System Cr. 300, Greater Fuel Capacity x15

ROAD BUGGY, MERCURY TYPE 102

Considered a lethal contraption by all but its most devoted of fans, the Type 102 is still present on many of the roads of Mega-City One due to its inherent cheapness. The proud owner of this buggy enjoys few thrills as it lacks many basic features and is not even legal to travel on the megways and the Type 102 has been known to be crushed by larger vehicles without their owners even knowing the buggy was there.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Type 102	11	Drive (wheeled)	0	125	600	1/–	0.25 tons	Open Frame	1	1	600	1.5

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Decreased Speed x5

ROADLINER, ROADLINERS INC. 'FAT BOY'

Running alongside the much larger juggers, the Roadliner is a vehicle designed purely to transport great amounts of cargo from one part of the city to another, as quickly as possible.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Fat Boy	11	Drive (wheeled)	–1	210	600	1/2	10 tons	No	22	23	162,000	22.5 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Increased Speed x2

ROADSTER, NIRVANA BKJ3000 TYPE-Z

Every young Juve with but a passing interest in vehicles is likely to have the latest vid slug of a Type-Z being put through its paces on a crowded megway. This is *The* Car to own in Mega-City One. Although it gives a lot away in speed to the fastest hovercars, the adrenaline rush from dodging high speed traffic is the ultimate thrill.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Type-Z	11	Drive (wheeled)	0	500	600	1/–	0.25 tons	Open Top	6	6	25,100	6 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Entertainment Cr. 300, Increased Speed x 10

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STREET BIKE, KRAPSAKI TF-4

The dream of many young juves, the Krapasaki is known for being a cheap, no-frills bike designed only for thrilling speeds. Despite many Lightweight measures taken, the Krapsaki can't hope to match the raw output of the Otomo or Lawmaster.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Krapsaki	11	Drive (wheeled)	+1	375	600	1/1	—	Frame	1	1	4,800	1

Armour

Location	Armour
Front	0
Right	0
Left	0
Rear	0
Top	0
Bottom	0

Other Equipment/Modifications:

Motorcycle

Vehicles of The Cursed Earth

Ground Car 1920's Automobile

These old cars usually conjure images of old gangsters from the prohibition era of America. Although a few have survived from those times, latter day revivals of retro fashions led to a resurgence of the 1920s and 1930s style automobiles. Ironically, these vehicles are most often used by the modern day gangsters in places like Las Vegas where the mafia runs the town.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Ground Car	5	Drive (wheeled)	0	100	200	1/4	0.25 tons	No	3	3	9, 216	4 tons

Armour

Location	Armour
Front	6
Right	6
Left	6
Rear	6
Top	6
Bottom	6

Other Equipment/Modifications:

Additional Armour x2, Increased Speed x2, Decreased Hull, Decreased Structure

Humwee

These four-wheel drive military vehicles are typically scavenged from abandoned military bases save for a few civilian versions used as multipurpose off-road vehicles.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Humwee	7	Drive (wheeled)	0	160	572	1/4	1.5 tons	No	3	3	19, 680	3 tons

Armour

Location	Armour
Front	15
Right	15
Left	15
Rear	15
Top	15
Bottom	15

Other Equipment/Modifications:

Additional Armour x3, Fuel Efficiency, Greater Fuel Capacity, Off-road Capability

LA-SAW MOBILE

The LA-Saw mobile is a saucer shaped hover vehicle with laser saws that spin around its diameter. A single pilot sits on the top in a domed plastiglass cabin. These vehicles were developed during the 21st century and were most notably used to carve President Carter's face in the Mount Rushmore National Memorial.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
LA-Saw	8	Flyer (grav)	+1	300	1,000	1/–	0.25 tons	Closed	2	2	124,000	1.5 ton

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Weapon	Location	Damage	Range	Auto	Ammo
La-saw	Surround, Front, Right, Left, Rear	6d6	Melee	N/A	N/A

Other Equipment/Modifications:

Increased Hull

PICK-UP TRUCK

These 20th Century pickup trucks have a small cab and an open-topped rear bed for storing cargo or additional passengers. With four-wheel drive making off-road travel easy , these vehicles are popular with gangs and town militia alike.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Pick-up Truck	6	Drive (wheeled)	0	100	200	1/2	1 ton	Cargo Bed	4	3	9,200	3 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Double Occupancy Seating, Increased Hull

SCHOOL BUS

A surprising number of these iconic yellow buses have survived and been repaired for use today. Many have been converted and the seats removed, making them perfect vehicles for merchants to transport their wares.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
School bus	6	Drive (wheeled)	0	140	200	1/10	2.75 tons	No	7	8	29, 120	10 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Decreased Hull x3, Decreased Structure x2, Double Occupancy Seating x5, Increased Speed x4,

SCHOOL BUS (MERCHANT VERSION)

A surprising number of these iconic yellow buses have survived and been repaired for use today. Many have been converted and the seats removed, making them perfect vehicles for merchants to transport their wares.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
School bus	6	Drive (wheeled)	0	140	200	1/2	3.75 tons	No	7	8	29, 120	10 tons

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Decreased Hull x3, Decreased Structure x2, Double Occupancy Seating, Increased Speed x4,

ATV Quad Bike

Another frontier vehicle, this rugged off-road quad bike is designed as a single-person all terrain vehicle with enough power to tackle the nastiest of surface conditions and extremely steep inclines with relative ease.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
ATV Quad Bike	10	Drive (wheeled)	–1	220	500	1/–	—	Frame	2	2	4, 560	2 ton

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Decreased Agility, Increased Speed x2, Off Road Capability, Towing Capacity

City Grav-Sedan

A common form of grav vehicle found in cities across Earth and the terraformed worlds across the galaxy. The grav-sedan is sleek, with clean lines and capable of transporting the average family in comfort.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Grav-Sedan	10	Flyer (grav)	0	400	2, 000	1/4	0.5 tons	No	3	3	228, 225	3 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Decreased Agility, Double Capacity Seating x1, Entertainment System Cr. 300, Navigation (basic)

FLOATER

A floater is a single-person, sled-like grav vehicle that is essentially a weapon's platform. The occupant lies, face down, on the floater, controlling its height and speed with a combination of arm and knee movements on the pressure controls of the main board.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Floater	10	Flyer (grav)	+2	400	2, 000	1/–	—	Frame	1	1	120, 000	1 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Weapon	Location	Damage	Range	Auto	Ammo
—	—	—	—	—	—

Other Equipment/Modifications:

Advanced Controls, One space Unspecified weaponry

GRAV SPORTSTER

A two person sports vehicle, the grav sportster is good at making a fashion or status statement, a speedy getaway or simply cruising around with the top down.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Sportster	10	Flyer (grav)	0	480	2, 000	1/1	0.5 tons	Open Topped	3	3	255, 300	3 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Decreased Agility, Entertainment System Cr. 300, Increased Speed x2

GUGGY

The grav buggy (or Guggy as it's often known) is a four person, open grav-sled for sedate travel over short distances. The seating configuration may confuse at first with the first two passengers facing forwards and that the rear two facing backwards. Both sets of seats have controls to pilot the vehicle, allowing it to be driven in either direction (as long as the rear passenger knows how to drive a grav car).

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Guggy	10	Flyer (grav)	+1	400	2, 000	1/4	0.25 tons	Frame	1	1	78, 077	1 ton

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Decreased Speed x3, Entertainment System Cr. 300

HOPPER

A frontier and colony world grav vehicle, hoppers are high-capacity (cargo and passengers) workhorses that are a frequent sight on the far flung worlds of the galaxy. The internal space is easily converted between cargo and passenger space.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Hopper	10	Flyer (grav)	−1	350	2, 000	1/50	2 tons	No	14	14	700, 120	17 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Decreased Agility x2, Decreased Hull x3, Decreased Structure x3, Double Occupancy Seating x25, Entertainment System Cr. 200, Navigation (basic)

HOPPER (CARGO CARRIER)

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Hopper	10	Flyer (grav)	−1	350	2, 000	1/50	8.25 tons	No	14	14	650, 120	17 tons

Armour

Location	Armour
Front	4
Right	4
Left	4
Rear	4
Top	4
Bottom	4

Other Equipment/Modifications:

Decreased Agility x2, Decreased Hull x3, Decreased Structure x3, Entertainment System Cr. 200, Navigation (basic)

SLED BIKE

The sled bike is a ubiquitous form of personal transportation that is common and popular on frontier worlds. With all vital components fully enclosed within, the sled bike is well protected, durable and reliable in the toughest, dustiest or coldest environments.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Sled Bike	10	Flyer (grav)	+1	520	3, 000	1/–	—	Frame	2	2	460, 000	2 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Increased Speed x3, More Fuel Efficient x5

UNICOPTER

Used for short-range aerial surveillance, the unicopter is a single, rotary wing helicopter that contains an auto- stabilisation gyroscope. Able to carry a few passengers, the unicopter is often fitted with small sensor arrays within the nose.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Unicopter	10	Flyer (rotor)	+1	200/ 500	3,000	1/2	0.25 tons	No	1	2	38, 250	5 tons

Take-off Radius: 22m

Armour

Location	Armour
Front	3
Right	3
Left	3
Rear	3
Top	3
Bottom	3

Other Equipment/Modifications:

Communications (TL 6), Decreased Agility, Navigation (basic), Sensors (Advanced)

GROUND VEHICLES OF HAMMER'S SLAMMERS

SABRE HEAVY TANK

Launched by the weapon foundries of New Ukrania, the Sabre is a fusion-powered tank. Mounting an R88 Coilgun modified for greater range, a series of Kestrel rockets and a small anti-personnel 1cm Coilgun.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Sabre Heavy Tank	11	Drive (tracked)	–2	60	—	3/–	2 tons	No	25	25	2, 636, 350	25 tons

Armour

Location	Armour
Front	170
Right	140
Left	140
Rear	120
Top	130
Bottom	64
Large Top Turret Front	130
Large Top Turret Side/Rear	130

Weapon	Location	Damage	Range	Auto	Ammo
22cm Coilgun	Top Large Turret	14d6 MegaAP	Long	No	20
KP21 1cm Coilgun	Top Powered Ring Mount	3d6	Rifle	4	400
Kestrel Rocket	Dedicated Missile Bay	12d6	Medium	—	8

Other Equipment/Modifications:

Additional Armour x15, AFV, Communications (TL 8), Computer/3, Decreased Agility, Fusion Plant, Improved Fire Control +2 (22cm Coilgun), Increased Speed x5, Navigation (basic), Sensors (standard)

TR6BKU-1 BLACK SKORPION

Built upon the TR6 chassis, the Skorpion tank is a specialised tank killer. Replacing the turret with a massive 22cm Kuiper R88 coilgun. This weapon pushes the limits of what the medium tank can do.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Black Skorpion	10	Drive (tracked)	–1	115	—	2/–	2 tons	No	25	25	2, 329, 700	25 tons

Armour

Location	Armour
Front	40
Right	40
Left	40
Rear	40
Top	40
Bottom	40
Turret Top Front	40
Turret Top Side/Rear	40

Weapon	Location	Damage	Range	Auto	Ammo
22cm Coilgun	Top Forward Fixed Mount	14d6 MegaAP	Medium	No	20
KP21 1cm Coilgun	Front Fixed Mount	3d6	Rifle	4	400
R26 Coilgun	Top Small Turret	4d6 SuperAP	Rifle	6	400

Other Equipment/Modifications:

Small Turret: Top

Additional Armour x4, AFV, Communications (TL 8), Computer/2, Fusion Plant, Improved Fire Control +2 (22cm Coilgun), Increased Speed x5, Navigation (basic), Sensors (standard)

T-11 THYSSEN COLONIAL LIGHT TANK

The Thyssen Colonial Light Tank is a tracked, light howitzer tank. Using an internal combustion engine and armoured with both older and modern compounds. Simplistic but functional, the Colonial Light tank is a common defence on many recently settled planets.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
T-11	8	Drive (tracked)	–1	81	400	2/–	2 tons	No	15	15	658, 500	15 tons

Armour

Location	Armour
Front	30
Right	30
Left	30
Rear	30
Top	30
Bottom	30
Turret Front	30
Turret Side/Rear	30

Weapon	Location	Damage	Range	Auto	Ammo
10cm Howitzer	Top Large Turret	8d6 Super AP	Long	No	15
Autocannon	Top Large Turret	4d6 AP	Rifle	4	100

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +2 (Autocannon), Improved Fire Control +2 (Howitzer)

Additional Armour x4, AFV, Communications (TL 8), Increased Speed x4, Navigation (basic), Sensors (basic)

TR6A4 THYSSEN GLADIUS LIGHT TANK

This fusion powered tank fully replaces the earlier colonial model. Bringing to bear greater firepower, improved internal systems and enough armour to stand its ground against the more popularly mentioned Supertanks.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Gladius Light Tank	10	Drive (tracked)	–1	105	—	2/–	2 tons	No	25	25	2, 432, 000	25 tons

Armour

Location	Armour
Front	150
Right	140
Left	140
Rear	120
Top	130
Bottom	80
Turret Front	132
Turret Side/Rear	132

Weapon	Location	Damage	Range	Auto	Ammo
6cm Railgun	Top Large Turret	8d6 MegaAP	Medium	No	20
Autocannon	Top Large Turret	4d6 AP	Rifle	4	100
KP21. 1cm Railgun	Front Fixed Mount	3d6 SuperAP	Rifle	4	400

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +2 (Autocannon), Improved Fire Control +2 (6cm Railgun)

Additional Armour x15, AFV, Communications (TL 8), Computer/2, Fusion Plant, Increased Speed x8, Navigation (basic), Sensors (standard)

HOVERCRAFT OF HAMMER'S SLAMMERS

FABRIQUE NATIONAL A21 1100K JEEP

The A21 series of hover jeeps is used by the Slammers and several other merc units. These rugged vehicles have steel armour over a ceramic-beryllium sandwich, trading speed for protection. The rear compartment can be fitted with a variety of weapons.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
A21 1100K	9	Drive (hover)	+1	165	500	1/1	0.25 tons	Open Topped/ Bed	1	1	193, 250	3.5 tons

Armour

Location	Armour
Front	12
Right	12
Left	12
Rear	12
Top	12
Bottom	12

Weapon	Location	Damage	Range	Auto	Ammo
—	—	—	—	—	—

Other Equipment/Modifications:

Additional Armour x3, Communications (TL 6), Computer/2, Increased Speed x2, Navigation (basic), Powered Pintle Mount (undefined weapon), Sensors (basic)

M1A1

The M1 was one of the first blower tanks built by Icarus Industries of Hamburg on Terra. Ushering in a new era of tanks and armoured warfare, the M1A1 may lack in firepower and advanced systems but the enhanced movement of the hoverframe gives it an unparalleled advantage over older forms of heavy AFV.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
M1A1	11	Drive (hover)	+1	127	2,100	3/–	2 tons	No	13	14	9, 249, 850	20.5 tons

Armour

Location	Armour
Front	128
Right	104
Left	104
Rear	104
Top	104
Bottom	80
Turret Front	104
Turret Side/Rear	104

Weapon	Location	Damage	Range	Auto	Ammo
15-cm Powergun	Top Large Turret	15d6+15 Super Destructive	Long	No	20
Flechette gun	Top Powered Pintle Mount	4d6	Rifle	8	200

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +2

Additional Armour x12, AFV, Communications (TL 6), Computer/2, Greater Fuel Capacity x3, ERA II, Navigation (basic), Sensors (basic)

M2A1

The M2 'Ursa' series is the backbone of the Slammer's arsenal. The archetype of the modern supertank, with a cast-iridium hull offering superior armour and armaments and an upgraded computer system.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
M2A1	11	Drive (hover)	+1	112	2,100	2/–	2 tons	No	13	13	8, 834, 700	20 tons

Armour

Location	Armour
Front	180
Right	150
Left	150
Rear	150
Top	140
Bottom	70
Turret Front	140
Turret Side/Rear	140

Weapon	Location	Damage	Range	Auto	Ammo
20-cm Powergun	Top Large Turret	20d6+20 Super Destructive	Long	No	20
Tribarrel	Top Pintle Mount	4d6+4 Destructive	Rifle	6	200

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +3

Additional Armour x15, AFV, Communications (TL 10), Computer/2, Greater Fuel Capacity x3, ERA II, Navigation (standard), Sensors (standard)

M2A4

The main production model of the Ursa tank. With greater armour, additional rocket batteries and a complete overhaul, the M2A4 is a larger and fearsome upgrade on its predecessor.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
M2A4	12	Drive (hover)	+1	120	2,450	2/–	4 tons	No	20	20	17, 119, 900	30 tons

Armour

Location	Armour
Front	200
Right	180
Left	180
Rear	160
Top	160
Bottom	80
Turret Front	160
Turret Side/Rear	160

Weapon	Location	Damage	Range	Auto	Ammo
20-cm Powergun	Top Large Turret	20d6+20 Super Destructive	Long	No	20
Tribarrel	Top Pintle Mount	4d6+4 Destructive	Rifle	6	200
Ground Penetrating Rocket	Right Dedicated Rocket Bay	12d6	Medium	No	
Ground Penetrating Rocket	Right Dedicated Rocket Bay	12d6	Medium	No	

Other Equipment/Modifications:

Large Turret: 1 Crew, Improved Fire Control +3

Additional Armour x15, AFV, Communications (TL 10), Computer/3, Greater Fuel Capacity x3, ERA II, Increased Speed x4, Navigation (standard), Sensors (standard)

M9 COMBAT CAR

Icarus Industries M9-series of combat cars is the latest in their range of air cushioned fighting vehicles. The M9-series is the largest and most heavily armoured in the series, girded in cast iridium and armed with three powerful tri-barrel powerguns.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
M9 Combat Car	11	Drive (hover)	+1	142	900	4/–	0.5 tons	Open Bed	5	6	1, 814, 450	5.5 tons

Armour

Location	Armour
Front	80
Right	80
Left	80
Rear	80
Top	80
Bottom	80
Front Gunshield	22
Right Gunshield	22
Left Gunshield	22

Weapon	Location	Damage	Range	Auto	Ammo
Tribarrel	Top Powered Pintle Mount	4d6+4 Destructive	Rifle	6	200
Tribarrel	Top Powered Pintle Mount	4d6+4 Destructive	Rifle	6	200
Tribarrel	Top Powered Pintle Mount	4d6+4 Destructive	Rifle	6	200

Other Equipment/Modifications:

Additional Armour x9, AFV, Communications (TL 6), Computer/2, ERA II, Navigation (basic), Sensors (basic)

SKIMMER

Skimmers are small one-man hoversleds used by the Slammers infantry. Skilled riders can operate their skimmers with one hand and fire a sidearm at the same time.

Vehicle	TL	Skill	Agility	Speed	Range	Crew / Passengers	Cargo	Open?	Hull	Structure	Cost (Cr.)	Shipping Size
Skimmer	9	Drive (hover)	+1	240	500	1/–	0.25 tons	Frame	1	1	72, 000	1.5 tons

Armour

Location	Armour
Front	1
Right	1
Left	1
Rear	1
Top	1
Bottom	1

Other Equipment/Modifications:

Increased Speed x2

Supplement 5-6:
The Vehicle Handbook

Completely rewritten with an all new flexible and easy to get to grips with design system, the Vehicle Handbook is a central resource for the Traveller RPG. As well as providing details of every vehicle published for the Traveller RPG, along with many new designs, the Vehicle Handbook also contains a complete construction system allowing you to build any vehicle in any setting, from a simple bicycle to advanced power armour, from a floating aircraft carrier to a massive piloted robot. The Vehicle Handbook is designed to become an integral part of the Traveller RPG.

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