



PLAYING INFINITY VEHICLES

The Human Sphere is filled with vehicles. The streets of cities teem with cars, trucks, and motorcycles. Battlefields thunder with the sound of combat vehicles. The wilderness is traversed with all-terrain craft. This section provides details on how vehicles function in action scenes.

VEHICLE MOBILITY

A vehicle's mobility is measured in two ways:

- Top speed is a measure of how fast the vehicle can move when pushed to its limits. Vehicles seldom travel at this speed unless they're travelling long distances, and this value is used primarily for narrative descriptions of travel.
- Combat manoeuvrability reflects that a vehicle in the midst of an action scene may not be travelling at its full speed. The drivers' need for awareness, and a need to manoeuvre around obstacles forces vehicle crews to move more carefully. A vehicle's Combat Manoeuvrability rating determines how quickly and easily the vehicle can manoeuvre around obstacles and over difficult terrain. This rating is a value between zero and three, and it is the quantity of bonus Momentum added to any Pilot test made by the vehicle's crew when operating the vehicle.

CREW AND CARRYING CAPACITY

A vehicle's entry will list how many crew it requires to operate, in what positions (commander, pilot, or gunner), and how many passengers it can carry.

VEHICLE QUALITIES

The following common qualities are found on numerous vehicles, and they are collected here for convenience.

AGILE

These vehicles can maintain a decent speed, even when negotiating rough terrain and other hazards. On any movement action that the vehicle makes, the vehicle moves one additional zone.

AIRCRAFT

These vehicles operate in the air, rather than on land. Aircraft in the air must take a Pilot action

each turn or they will fall from the sky. Some aircraft are listed as Aircraft (VTOL), which allows them to hover rather than continuing to fly forwards each turn. VTOL aircraft must still take a Pilot action each turn, but this action can simply be to maintain its position. Aircraft in combat occupy zones above ground level, representing their altitude.

ASSISTED (X)

More advanced vehicles have quantronic systems that aid their users in their operation, both day-to-day and in crisis situations.

The vehicle has a skill rating – one skill for all the tasks that the vehicle can perform. This stands in place of its Attribute and Expertise ranks, though it has no Focus value. The vehicle cannot attempt skill tests on its own, but it can provide assistance on any tests that characters attempt while operating the vehicle – the vehicle rolls 1d20 using its skill rating and adds any success generated to that of the member of the crew attempting the test.

This sort of advantage is normally accompanied by some technological vulnerability befitting the sophisticated nature of these support systems.

BIKE

The vehicle is lightweight and extremely mobile. It is designed for a single rider and possibly a single passenger. A bike's small size and small turning circle means that it can re-roll any dice that fail when attempting a Pilot test to negotiate an obstacle or avoid an attack; the second result stands. Crew and passengers of a bike may attack with their own personal weaponry, in addition to any mounted on the vehicle. However, bikes are relatively light machines, and even ones designed for the brutality of battle can only take so much. A bike has its own hit location table.

ENCLOSED

A significant majority of combat vehicles are Enclosed, protecting crew and passengers from the hazards of the outside world with armour plating. Crew and passengers within an Enclosed vehicle may not attack targets with their own personal weaponry. They also increase the difficulty of all Observation tests made by crew or passengers by one step due to their restricted field of vision. Within an Enclosed vehicle, crew and passengers cannot be targeted by attacks against the vehicle.

EXPOSED

The vehicle's passenger and/or crew compartments are not sealed, and are instead visible to the world around them. This limits their protection, but allows transported characters better awareness of their surroundings. Crew and passengers in an Exposed vehicle can be affected by attacks against the vehicle, and they count as separate targets from the vehicle if the vehicle is hit by attacks with the Area quality (though the vehicle may provide some degree of cover). Crew and passengers of Exposed vehicles may attack with their own personal weapons. Partly-enclosed vehicles, such as cars with only thin glass between the driver and the outside world, still count as Exposed.

HOVER

The vehicle floats above terrain and obstacles. Hover vehicles typically fly at just above head height for a human being, but will adjust their precise altitude in order to avoid obstacles. Hover vehicles are not true aircraft, and cannot operate at higher altitudes — their means of hovering relies on pushing against the ground. Hover vehicles ignore all ground-level difficult terrain and all obstacles that are shorter than an average person.

PONDEROUS

The vehicle is so massive and bulky that it cannot move quickly. A Ponderous vehicle can only take the Careful or Ramming Speed movement actions, and it may never move further than Medium range (1 zone) in a single turn.

REMOTE

A remote is an unmanned vehicle, or drone, which is operated remotely. They function autonomously under most circumstances, relying on their basic programming to navigate, perceive their surroundings, and attack enemies. An operator — carrying the proper equipment to command one or more Remotes — can intervene at any point to control the machine's actions directly.

A Remote cannot accept any Crew; instead, it is treated as if it had a Commander with 7 in all Attributes and Expertise 1 in the Pilot, Observation, and Ranged Weapons skills. A Remote is treated as a Trooper NPC: whenever a Remote attempts a skill test, it rolls only 1d20 rather than the normal 2, and it can only suffer a single Harm before becoming disabled. However, while a Remote is within Long range of its operator, that operator may use his own actions as if he were the Remote's Commander, using his skills instead of the Remote's. Hackers also have their own ways of interacting with Remotes.

RUGGED

Robust power systems, modular chassis pieces, and redundant systems make a vehicle easy to repair, saving time and resources, and allowing the vehicle to be put back into use far more swiftly. All successful Tech tests to repair a vehicle with the rugged quality gain two bonus Momentum.


ARTWORK IN PROGRESS



SELF-REPAIRING

The vehicle's construction is designed so that minor damage can be recovered swiftly and without effort. The vehicle regains all lost Structure at the end of a scene, requiring only a few minutes of the vehicle being idle. This has no effect on Faults – they require more significant work to repair.

UNHACKABLE

The vehicle has no networked quantronics, and thus is not vulnerable to Infowar techniques. The vehicle has no Firewall value, cannot suffer Breaches, and cannot be targeted by any hacking attacks. It also cannot connect to a character's personal network and thus cannot benefit from such a connection.

WALKER

The vehicle strides around on two or more legs, mimicking the movement of men or creatures. A Walker treats difficult terrain and obstacles as a normal creature would (though it is obviously much larger), and may engage in melee combat as creatures do.

WHEELED

The vehicle travels on two or more wheels. It is swift across open ground but sometimes difficult to control over rough terrain. A Wheeled vehicle is the assumed default for these rules, and has no specific bonuses or penalties.

VEHICLES IN COMBAT

MOVEMENT

Movement for vehicles is virtually identical to movement for normal characters. A vehicle can take a maximum of one movement action each turn. Vehicles obey all the normal rules for combat, using zones to determine range and movement. However, vehicles will normally require different rulings from the GM than creatures with regards to what counts as difficult terrain, obstacles, and hazardous terrain (a car cannot normally reach an area only accessible by ladder, for example).

ACTIONS AND CREW ROLES

Each vehicle receives a single turn. During that turn, the vehicle receives a single set of actions per crewman, with the available actions defined by each crewman's role. The roles are as follows: commander (up to one), gunner (up to one per weapon system), and pilot (up to one). Many vehicles do not have sufficient space to fill all the roles with different characters, and a character can take on multiple roles. Each crewman still only gets one set of actions, no matter how many roles he fills.

- A character in the Commander role can take actions from any other role, but as he only

receives one Standard Action, vehicles with multiple characters can achieve more. This consideration is for vehicles with small crews, where the commander may also be the pilot, or single-seat craft where one person has to do everything. Commanders also have actions to benefit other characters' performance, using the Command skill.

- Pilots can take actions to move the vehicle more quickly or through difficult environments. These actions require the Pilot skill.
- Gunners can take actions operating the vehicle's weapons. One gunner can operate several individual weapons, but each one takes a separate action to fire, so larger vehicles may have several gunners. Each weapon may be operated by one gunner at most.

Multiple actions from multiple crewmen make larger vehicles more powerful than smaller ones. This is deliberate – big vehicles are tougher, have more actions, and can achieve more.

Characters may still attempt normal actions when in a vehicle, whether they are crew or passengers. However, all actions that interact with the vehicle itself are connected to the Crew Roles listed in this section. Further, a character cannot provide assistance on a vehicle action using the normal Assist standard action – the close confines of a vehicle has an influence on how a team interacts.

COMBAT ACTIONS

The following is a list of the actions available to characters operating a vehicle in combat.

PILOT

Pilot actions all involve movement, as the name suggests. Where a test is required, use the Pilot skill. Only a single move action can be taken on any given turn. Vehicles treat difficult terrain in the same way as creatures do, though they use the Pilot skill instead of Acrobatics or Athletics, and different types of vehicles may consider different types of terrain to be obstacles, hindrances, or hazards. Movement under normal circumstances thus requires a **Simple (D0) Pilot test**.

- **Manoeuvre:** Free Action move. The vehicle moves anywhere within Close range.
- **Careful Driving:** Minor Action move. The vehicle moves anywhere within Medium range.
- **Hasty Driving:** Minor Action move. The vessel moves to any point in Long range, but all skill tests made by any crew or passengers – including Terrain tests attempted by the Pilot – increase their difficulty by one step.
- **Flat Out:** Standard Action move. The pilot

attempts an **Average (D1) Pilot test** (or adds one to the difficulty of any terrain test attempted that turn). The vehicle moves two zones – to any point within Long range, plus one additional zone for every Momentum spent (Repeatable).

- **Defensive Driving:** Standard Action move. The vehicle moves anywhere within Medium range. Until the beginning of its next turn, all attacks against the vehicle, as well as all attacks made by the vehicle's crew and passengers, increase their difficulty by one step.
- **On Target:** Standard Action move. The vehicle moves anywhere within Medium range. The Pilot may assist a single attack made by one of the crew or passengers (which may not be himself), applying his Pilot skill to the attack's test. However, any attack made against the vehicle gains one bonus Momentum until the start of the Pilot's next turn.
- **Ramming Speed:** Standard Action move and attack. The vehicle moves into Reach of any other creature or vehicle within Medium range, and tries to collide with it. Make an **Average (D1) Pilot test** as a melee attack, inflicting the vehicle's Impact Damage, and suffering the target's Impact Damage in return. As creatures do not have an Impact Damage value, a vehicle ramming a creature instead suffers $1 + \text{IN} 2$ damage, modified by the creature's normal melee damage bonus. Increase the difficulty by one step for targets at Medium range. The Pilot may add his Ranged Damage bonus to the Impact Damage of his vehicle when ramming, though not when being rammed or for any other purpose.
- **Evasive Action:** Response Action. This is the vehicular equivalent of the Defence reaction, using the Pilot skill to resist physical attacks (ranged or melee).

GUNNER

Gunner actions all involve the vehicle's weapons. These actions are specific to the operation of vehicle-mounted weaponry, and a character must use one of these actions to operate any weapon mounted on a vehicle, rather than the normal attack actions (which apply to personal weapons).

- **Open Fire:** Standard Action. The gunner makes a ranged attack with one of the weapons he controls.
- **Firing Solution:** Standard Action. The gunner devises a firing solution that improves the effectiveness of his attacks. He nominates a target and attempts an **Average (D1) Observation test**. If successful, his next Open Fire action against that target adds the Piercing 2 quality to the attack, and may gain a bonus d20 and $+ \text{IN} 1$ to the attack's damage for each Momentum spent (Repeatable). This action is equivalent to Exploit, but is specific to the operation of vehicle

weaponry, and its effects do not stack with Exploit (nor can a character use Exploit to benefit a vehicle weapon). A commander may perform this action on a gunner's behalf, or if the vehicle has multiple gunners, one gunner may spend a Reload to use this action on another's behalf (representing tracers and ranging shots). In such instances, the gunner receiving the benefit gains the full benefit of this action, without spending an action himself.

- **Defensive Fire:** Reaction. If an enemy creature or vehicle attempts to move into or within Close range (and the gunner is aware of the target), the gunner may make an immediate ranged attack against that creature or vehicle with any weapon he has. The difficulty of this attack increases by one step, due to the urgency.

COMMANDER

Commander actions bolster the effectiveness of other crewmen, making them work as a coherent whole rather than disparate individuals. Where a test is required, use the Command skill. A commander can take any action from any of the other roles. Performing any gunner action other than Firing Solution requires that the commander have a mounted weapon of his own – he cannot take control of another gunner's weapon. Performing any pilot action requires that the commander have access to the vehicle's controls (often a duplicate set). The vehicle cannot take more than one movement action during a turn, from any source.

- **Coordinate:** Standard Action. The commander directs his subordinates to bolster their effectiveness. The commander may assist any skill test attempted by another member of the vehicle's crew, or one of the passengers, using his Command skill.
- **Firing Solution:** See gunner, above. As noted above, a commander can perform this action on behalf of any gunner in the same vehicle, passing the benefits to that gunner's next Open Fire attack.

ATTACKING A VEHICLE

Attacking a vehicle is fundamentally the same as attacking a creature. There are a few differences from standard attacks, such as a different set of hit locations, and being treated as an object rather than a creature for damage (thus, it uses Structure and Faults instead of Vigour and Wounds). Many vehicles have higher Armour Soak values than creatures do, as they're made of metal, ceramics, carbon fibre, and plastic instead of flesh and bone. As inanimate machines, vehicles cannot suffer mental damage (though their crews can as normal).



Vehicles also have BTS values, as some suits of armour do (see page XXX). These apply not only to the vehicle itself, but to any crew or passengers inside the vehicle – the protective systems of the vehicle help protect those within it. A given crew member or passenger in the vehicle may use their own BTS or the BTS of the vehicle, whichever is greater.

VEHICLE HIT LOCATIONS

Vehicles, for obvious reasons, have a different set of hit locations than people. When rolling to determine where a vehicle has been hit, roll on the following table. Results are determined by whether the vehicle is Enclosed, Exposed, or a Bike.

Motive System could be tracks, wheels, leg hydraulics, magnetic generators, fuel lines, and so on. These systems are often quite fragile, regardless of the type of vehicle, and they seldom have as much Soak as the rest of the vehicle.

Hull is the main bulk and structure of the vehicle. Powerful hits could reach the engine, fuel, or ammunition stores, or damage crucial control systems.

Crew/Passengers refers to the creatures operating the vehicle. In Enclosed vehicles, they are relatively safe, but Exposed vehicles and bikes leave these individuals vulnerable to harm (though they may provide Cover). If there is more than one crewmen or passenger present, determine randomly which is hit. Resolve all hits against crew or passengers as normal for an attack against a creature.

Weapon hits strike the nearest or easiest-to-reach weapon to the attacker (randomly determined, or GM's discretion). If a vehicle has no weapons (or none remaining), count this as a Hull hit instead. It is only for the purposes of the hit location table that they are grouped together.

DAMAGING A VEHICLE

When attacking a vehicle, the process of determining how much damage is inflicted is unchanged. However, the way that damage is tracked and the effects it causes, are slightly different. Vehicles take physical damage as objects, and thus have a Structure damage capacity to resist physical damage, and suffer Faults when they take too much damage.

Each Fault inflicted on a vehicle increases the difficulty of all skill tests made to operate or repair the vehicle by one step. The fourth Fault renders the vehicle immobile and all of its systems (such as weapons) inoperable, though this damage can still be repaired. The fifth Fault wrecks the vehicle beyond repair.

Vehicles operated by NPCs can be defined as Troopers or Elites. As with their creature counterparts, a Trooper vehicle is taken out of action after a single Fault, while an Elite is taken out of action after the second Fault. Trooper vehicles can be grouped up in the same way as Trooper NPCs – this is common for light vehicles such as motorcycles. An NPC-operated vehicle cannot be rated as a weaker category of NPC than the crew, though it can be better – Elite NPCs cannot have their vehicles classified as Troopers, but a mob of Troopers could operate a single Elite vehicle.

REPAIRING A VEHICLE

A vehicle doesn't recover from damage naturally as a person does. A character can attempt a Treat action using the Tech skill to recover lost Structure or repair Faults inflicted on a single stationary vehicle within Reach.

INFOWAR VS VEHICLES

Unless noted otherwise, vehicles have a number of networked quantronic systems, helping them to operate more smoothly, connect to the personal networks of their owners and operators, and secure the vehicle from unauthorised users.

Vehicles have a natural Firewall value, and possibly a Security value, and can be targeted by Infowar attacks. As normal, Breaches inflicted increase the difficulty of all tests to use the vehicle or any connected systems, and can eventually shut the vehicle down entirely. However, if a vehicle has both Breaches and Faults, then the difficulty of tests is increased only by whichever of the two the vehicle has more of. An NPC vehicle's ability to withstand multiple Breaches is determined by the type of NPC – a Trooper vehicle's network shuts down after a single Breach, for example.

There are a number of systems present in a vehicle that are vulnerable to Infowar attacks:

- **Engine Controls** are the computer systems that regulate and govern the function of the vehicle's engine, reactor, or other source of motive power. Engine Controls can be shut down as a Breach Effect, and a vehicle with a shutdown engine cannot move until the engine has been restarted.
- **Navigation** systems help the pilot get the vehicle where it needs to be. They normally involve accessing external satellite systems or geographic information services to determine where the vehicle is globally. Navigation systems can be taken over as a Breach Effect, allowing a hacker to see where a vehicle has been, and where it is currently going, as well as to input his own navigation instructions (fake maps, fictional routes, etc). This doesn't allow the vehicle to be controlled directly, however.

- **Communicator** systems function identically to the Comlogs carried by individuals, and sync to the users' Comlogs automatically when the vehicle is occupied. Civilian vehicles often carry them to convey news and current events info to drivers, and to call for assistance in an emergency.
- **Access Control** systems determine who is permitted to enter and use the vehicle and which roles people are permitted to take, though these can be overridden by an authorised user (normally the owner) within the vehicle as a Free Action. They can be overridden as a Breach Effect, allowing a hacker to grant or revoke access to individuals. Access cannot be revoked from a character currently using the vehicle.

A character in the commander role of a vehicle can nominate himself or another character in the vehicle – passenger or crew – to govern the vehicle's network. This nominated character subsumes the vehicle's network into their own, using their own Firewall and Security values instead of the vehicle's values. This also means that the character can use the Defend Reaction against Infowar attacks targeted at the vehicle, as well as from any Expert Systems the vehicle possesses.