

level where the second floor would be, to allow security observation. Mechanic service is available here, at going rates, for any vehicle.

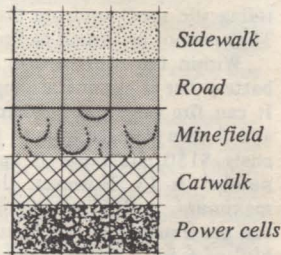
Referees are encouraged to expand and modify this information to fit their own campaigns!

Map Key

Building interior wall

Building exterior wall

Outer wall; the white dot is a floodlight.



INDEX OF SECTIONS

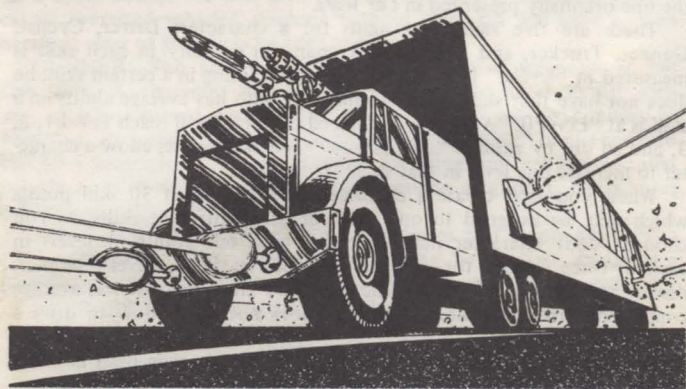
- | | |
|----------------------------------|-------------------------------|
| 1. Creating a Character | 6. Movement |
| Learning New Skills | Handling Class |
| Skill Descriptions | Maximum Weight |
| Repair Chart | and Acceleration |
| Tools | Deceleration |
| Jobs mechanics can do | Movement in Straight Lines |
| Learning the Mechanic skill | Maneuvers |
| 2. Keeping your Characters Alive | Ultra-Slow Movement |
| Organizations | Backing Up |
| Gold Cross | Loose Trailers |
| 3. Vehicle Design | 7. Crashes and Collisions |
| Tractors | Crash Table 3 |
| Trailers | Debris and Obstacles |
| Buses and RVs | Hazards to Oversized Vehicles |
| Sample Vehicles | Collisions |
| 4. New Weaponry | Steamrolling |
| 5. Combat for Oversized Vehicles | 8. Boarding Vehicles |
| Turret Field of Fire | 9. Cargo, Pay, and Background |
| Front and Rear Weapons | 10. Truck Stop Map |

CAR WARS RULE CLARIFICATIONS / CHANGES

Automatic fire: When a weapon fires on automatic, the line of fire is always straight out from the vehicle – i.e., straight ahead, behind, or to the side. Putting a weapon on autofire breaks any “sustained fire” that weapon had. Automatic fire is *never* “aimed” in any way.

Linking weapons. Any number of weapons, of any type, in any position, may be linked. A driver may install links, if he wants, so that every weapon he has may be fired by a single switch. *However*, weapons so fired will be on automatic – not aimed! The only weapons that can be linked so that they can be aimed and fired together are as described in the *Car Wars* rules: only two weapons, which must be of the same type and firing from the same position. However, it is legal to link three or even four machine-guns *if they are all in the same turret*.

TRUCK STOP



A Car Wars Role-Playing Supplement

Designed by Steve Jackson

Our special thanks go to David Ladyman, the editor of *Autoduel Quarterly*, for development of the character-generation system, and to Gordon Griffith for data on the “big rigs.”

Playtesters: Norman Banduch, Chris Smith, David Ladyman, Jim Gould
Cover by Dave Martin
Counters, back cover, and rulebook art by Denis Loubet
Copyright © 1983 by Steve Jackson

“Car Wars” is a trademark of Texas Instruments Incorporated. “Truck Stop,” “Autoduel,” and “Sunday Drivers” are trademarks of Steve Jackson Games. All rights reserved.

INTRODUCTION

The roads are rough. Cycle gangs, highwaymen, barricade operators, random duellists . . . all take their toll. Most of the interstates haven’t seen a repair crew in years. But somebody still has to take the big loads from city to city. And the big rigs are still rolling.

The truckers have quite a reputation. They’re professionals. They’re as skilled with their weapons as they are with their rigs . . . or they don’t last long. A trucker, they say, never takes the first shot – but he always gets the last one. (Not always true, but it makes a good story.) The men who make their living on the dangerous intercity runs aren’t interested in starting fights . . . only in finishing them. It’s not a good idea to mess with the 18-wheelers. And their cousins, the armored buses, are every bit as formidable.

But if you just want to meet their drivers, and hear stories about life-and-death road duels in places the TV cameras never see, drop in at the truck stop . . .

1. CREATING A CHARACTER

This is not just a combat game, but a role-playing adventure. Your character is just as important as his vehicle . . . so your first step should be to create him and his abilities. The system below is an expansion of the one originally presented in *Car Wars*.

There are five significant skills for a character: Driver, Cyclist, Gunner, Trucker, and Mechanic. A character's ability in each skill is measured in "levels." If a character has no training in a certain skill, he does not have that skill at all. A character who has average ability in a skill is at "Level 0." A more experienced character will reach Level 1, 2, 3, and so on, by gaining "skill points." Ten skill points allow a character to increase one level in that skill.

When you first create a character, you start with 30 skill points which may be assigned to one, two, or three different skills, as you choose. Your character may start out with ten points (1 level) in each of three skills - for instance, he could start as a Level 0 gunner, driver, and cyclist; this is a basic *Car Wars* character. He has average competence in those three skills, but does not know how to drive a truck or to fix anything.

A character could also take only two skills (or even one) in order to get greater ability in those skills. For instance, he could take two levels in Trucker and one in Gunner. This would make him an average gunner, but a Level 1 truck driver - better than average. He would not know how to drive a car, ride a cycle, or repair any sort of vehicle. An even more specialized character might be one who put all 30 skill points in Gunner - making him a Level 2 gunner. This fellow is a dead shot with any vehicle weapon, but not good for much else.

Learning New Skills

A newly-created character can never have more than 3 skills. If he wants to add any of the other skills, he can try to earn them in the usual way. This can be risky; for instance, a character without Gunner skill will probably get killed before he learns it in combat. The alternative is to take six months off (game campaign time) and go through a training course! This will cost \$1,000 for the skill of your choice. At the end of that time, the character will have the skill at Level 0. Further levels may only be attained through combat experience. Courses are available for Driver, Gunner, Cyclist, and Trucker. A character who wants to learn Mechanic will take longer, but can get paid for his time - see below under "Mechanic."

Skill Descriptions:

DRIVER. This is the ability to drive a standard car, pickup, etc. - anything with 4 or 6 wheels. A character without this skill may attempt to drive such a vehicle, but always subtracts 2 from his handling class. At Level 0, a character is an average driver. Each level of skill added after that (as per *Car Wars*) improves his reflex roll. This skill does not help a character ride a cycle or drive an oversized vehicle.

TRUCKER: This is the ability to drive an oversized vehicle: a bus, RV, or tractor-trailer rig. A non-Trucker subtracts 2 from handling class when trying to drive an oversized vehicle. Skill is gained in Trucker as for Driver, but only experience gained behind the wheel of an oversized vehicle counts. Each level of Trucker skill past Level 0 improves a trucker's reflex roll by 1. This skill does not help

drive smaller vehicles or ride cycles; some truckers really don't know how to drive a four-wheeler!

CYCLIST: Just like the above two skills, but dealing with cycles (two- and three-wheeled vehicles). Only experience gained while on a cycle counts for this skill. It does not help a character drive a car or oversized vehicles. Anyone without this skill will have a -3 on handling class of any cycle he tries to ride.

GUNNER: The ability to use vehicle-mounted weapons, as per *Car Wars*. A character without this skill will be at -3 to hit with any vehicle-mounted weapon. At Level 0, there are no bonuses or penalties. At Level 1 or above, a gunner gets a "to hit" bonus equal to his level number. Note that experience firing any vehicle-mounted weapon, either while driving or while serving as gunner, contributes to Gunner skill.

MECHANIC: The ability to repair vehicles and components. The time it takes to repair something (if it can be repaired at all) is a function of the character's Mechanic skill, as well as the difficulty of the job and the tools that are available.

REPAIR CHART

LEVEL	Trivial	Easy	Medium	Hard	Very Hard
no skill	2	11	X	X	X
Mech-0	1	9	11	12	X
Mech-1	1	7	9	11	14
Mech-2	1	5	7	9	11
Mech-3	1	3	5	7	11

To perform a given repair job, a Mechanic must roll two dice, and get the number shown on the chart (or higher). He may try once per hour (30 minutes for a Mech-3). An "X" means the job is impossible at his skill level. These numbers assume the Mechanic has a hand tool kit. If he is working with improvised tools (pocket knife, chewing gum, etc.), subtract 2 from all rolls. If he has a portable shop (see below) but no garage, add 1 to each roll. If he is working in a regular garage, add 2. A successful roll repairs one point of damage on the item in question (3 points if armor is being repaired), or installs/dismounts it.

Any number of mechanics can work on the same vehicle, but no more than three can work on the same item at once. Each one rolls separately for success.

DIFFICULTY OF REPAIR JOBS

Impossible (cannot be attempted): repair damaged tires, repair computer.

Very hard: jury-rig heavy rocket or laser.

Hard: jury-rig other components; repair laser, power plant or CB radio.

Medium: Repair any weapon except a rocket or laser; reweld or patch armor; remount kingpin; repair fifth wheel; salvage CB or computer from wreck.

Easy: replace weapon linkage; dismount other weapons to salvage them from wreck.

Trivial (even someone with no Mechanic skill can do this): reload ammunition; replace or salvage tire; salvage spare magazines.

Tool kit. A standard box of mechanic's tools; a character is assumed to have this when rolling on the Repair Table. Includes all normal hand tools, plus spare light bulbs, fuses, sheets of armor plastic, welding epoxy, miniature torch, etc. Costs \$600 and takes up one space; weighs 40 lbs., and counts as a pedestrian's full load if carried. If a tool kit is part of a vehicle's cargo and takes damage, it has 2 DP. The first hit damages the case; the second hit breaks the case, ruins most of the contents, and scatters the rest. Get a new kit.

Portable shop. Everything a full-scale garage would have, except the overhead lift and the soft-drink machines – in miniaturized form. Includes a variety of jacks, heavy-duty cutting torch, thermite, plastic fabrication equipment, lubricants, battery parts and fluids, electronic testing gear, fire ax, and several drop-lights and beams that will run off any vehicle power plant. Weighs 300 lbs. (4 cases of 75 lbs. each). Each case takes up one space and has 2 damage points. The first point of damage mars the case; the second destroys the contents. If a mechanic is trying to use a portable shop with (for instance) only two cases left, there is a 50% chance that he won't be able to find what he wants, and the shop will do him no good. Each of the four cases costs \$1,000.

Jobs that Mechanics can do:

Repair is the process of fixing a damaged part. Each time the appropriate roll is made from the table above, one DP is repaired (or three points of armor restored). If a component is totally destroyed (no damage points left) it cannot be repaired – only jury-rigged (below).

Jury-rigging is a temporary repair job. By making his roll, a mechanic can perform a "jury-rig" on some kinds of totally wrecked vehicle components. This gives the jury-rigged component one DP, putting it temporarily back into service. It can never be properly repaired, and if it is damaged again it cannot be jury-rigged a second time. A referee, at his discretion, may declare any item so badly smashed that it cannot be jury-rigged – e.g., anything on a steamroller cycle.

Salvage is the removal of a part from a wreck. A mechanic needs to make the appropriate repair roll once to salvage any given part.

Installation is the opposite of salvage – putting a new part in to replace a destroyed one. The old part must first be "salvaged" (that is, removed), even if it was totally destroyed. The roll to install any part is the same as the roll to repair it – see chart, above. When the roll is successfully made once, the part is installed.

Learning the Mechanic skill

If a character wants to learn this skill (or improve it if he started with it) the *only* way is to spend game time as a full-time mechanic at a duel arena, truck stop, or garage. Since this is not especially exciting, most high-level mechanics will be the referee's characters, or player-characters that started by taking Mechanic at Level 1 or 2. If a character decides to drop out of duelling to become a mechanic, it takes one year (during which he also earns \$6,000 above living expenses) to get to Level 0. It takes two more years (clearing \$8,000 per year) to get to Level 1, three more years (clearing \$10,000/year) to Level 2, and five more years (clearing \$15,000 per year) to get to Level 3. A Level 3 mechanic has a fairly safe life and earns \$20,000 per year. Other skills can reach any level, but Mechanics do not progress past Level 3.

2. KEEPING YOUR CHARACTERS ALIVE

An adventurous character can have a very short life. This can be frustrating if you spend an hour working up a driver and he dies in fifteen minutes. There are three ways around this. The first, of course, is to run for home when the bullets start flying. This is safe enough, but not too interesting. Two good alternatives:

Organizations

Instead of playing an individual, you can play a whole group. You can run a trucking company, bus line, cycle gang, local police department, autoduelling club, vigilante group, hijacking ring – even the truck stop in this book. When an individual character dies, you can replace him – and the rest of the organization goes on. This lets you standardize cars and equipment . . . and if a character gets killed, his savings go to the organization. A good campaign can have several such groups, sometimes cooperating and sometimes fighting, with plenty of room left for people who want to play individual characters.

Gold Cross

This is a *real* life-insurance plan, made possible by the miracles of medicine available to the wealthy in the year 2033. (Note to referees: If you feel this section is too far-out, don't use it!)

Basically, Gold Cross is a clone bank. A few cells from your body are quickly grown into a mature clone. It is in perfect health, and will seem about 25 years old. Should anything happen to you, your clone can be activated – and you live again! Your new body will be legally recognized as "you," will have access to your bank account, etc.

Naturally, there are a few catches. The process is expensive (see below). When something happens to you, your body must be gotten to the Gold Cross center where your clone is kept . . . within a day, or a week if it is frozen within a day of death. A totally burned body, or a body that took more than 10 hits damage, cannot be "read." If your body gets there in time, though, the clone can be programmed with all your memories, up to the moment of death, and all your skills.

As an alternative, you can transfer your memories to your clone before anything happens to you – just to play it safe. This way, no matter what happens, your clone can be activated. A new memory transfer has to be made every month, or the clone mind will go blank (memories can only be stored in the human brain, not on tape). If you let more than a month go by without re-programming your clone, and something happens to you, your own body is the only source of your memories – so if something *permanent* happens to you, you're really dead. Note also that if your clone is activated from an old memory transfer, the clone will have only the memories and skills that you had when you programmed it. Furthermore, it takes a month to grow a new clone. Unless you can afford to keep *two* clone bodies in storage, don't get killed more than once a month.

In all cases, the donor must be present, alive or dead, to transfer memories. However, this process takes less than an hour.

Being killed lowers prestige: -1 for a heroic death, -2 for an ordinary combat death, -3 for a "mundane" death, -5 for a cowardly death.

When something happens to you, Gold Cross will act as soon as they hear about it – preparing your clone for activation if your body is on the way, or awakening a previously-programmed clone if that is neces-

sary. In most cases, notification must come from the friends of the temporarily deceased character.

Gold Cross has offices in all major cities. Its services are available to everyone, though wanted criminals often have to pay a substantial bribe to a doctor or administrator. It's a very mercenary operation, as might be expected from anyone selling new lives. Keep them paid, and they are very reliable. Miss a payment, and your clone will get chopped up for organ transplants.

The Gold Cross fee schedule:

To grow a clone body	\$10,000
First programming, a month after starting clone	\$1,000
Each reprogramming thereafter	\$3,000
Keeping clone alive if it is not reprogrammed monthly	\$1,000 per month
To tap memories from old body to clone after death.	\$5,000
To send refrigerated vehicle or helicopter for a body (on request).	Variable, but always high!

3. VEHICLE DESIGN

Large vehicles are built just like the smaller ones in *Car Wars*. They tend to be more expensive, both because they're bigger and because they are not produced in such quantity. The *Car Wars* vehicle planning sheet will do for oversized vehicles, but you should use one of the new Vehicle Records from this set (supplied on a separate sheet) to keep track of it in play. You may photocopy these sheets for your own use.

TRACTORS

The "tractor" — the unit that pulls a trailer — is the single most powerful vehicle on the road. A complete tractor will have a body (including fifth wheel), armor, ten wheels, and a power plant. At the purchaser's option, it may have a reinforced chassis, wheelguards, and various other items of equipment . . . plus, of course, weapons.

TRACTOR BODY SIZE & ARMOR	Body cost	Chassis weight	Max. load	Spaces	Armor cost/wt.
Std. cab-over	\$12,000	3,500	10,000	19	\$30/14
Std. long-nose	\$14,000	3,700	11,000	22	\$32/15
Sleeper cab-over	\$17,000	3,900	12,000	24	\$32/15
Sleeper long-nose	\$20,000	4,100	13,500	27	\$34/16

"Maximum load" refers only to the total weight of the tractor itself, not the amount of weight it can pull when the trailer is included.

The body price includes lights, standard CB, loud horns, and fairly luxurious interior upholstery. It also includes the "fifth wheel."

CHASSIS STRENGTH	Modifier to weight carried	Modifier to body cost
Standard	none	none
Heavy	+10%	+50% body price
Extra heavy	+20%	+100% body price

This applies only to tractor, bus, and RV chassis strength. No strengthening of trailer chassis is necessary or possible.

POWER PLANT	Cost	Weight	Spaces	DP	Maximum rig weight
Reg. truck	\$15,000	3,000	10	20	40,000
Large truck	\$20,000	3,500	13	26	60,000
Super truck	\$25,000	4,000	16	32	80,000

The *Car Wars* power factors are omitted from these power plant listings. All oversized vehicles use truck power plants. All truck power plants have the same top speed (100 mph) and the same acceleration (see Sec. 7). The power plant determines the total weight allowable for an oversized vehicle (or for tractor + trailer in a rig). The power plant is always assumed to be in front of the driver, even in a cab-over.

SUSPENSION only comes in one type for the oversized vehicles: heavy. Therefore, suspension cost is included in body cost. Any tractor, by itself, has a handling class of zero. Any bus, RV, or tractor-trailer rig has a handling class of 1.

TRUCK TIRES	Cost per tire	Weight per tire	DP
Standard	\$ 150	60	6
Heavy duty	\$ 300	80	9
Puncture-resistant	\$ 600	100	14
Solid	\$1,500	150	18

Solid truck tires are totally immune to both spike and debris damage (though obstacles still affect them).

The FIFTH WHEEL is the "yoke" on the back of a tractor — the hitch that allows a trailer to be attached. It is included in the tractor body price. A fifth wheel has 4 damage points and can be hit in combat. If this happens, it can be rebuilt or replaced for \$150 per point of damage. It will work until it is totally destroyed, but if it is destroyed while in use, the trailer will come loose. The fifth wheel must be located outside the armor, and can be attacked (see Sec. 5). However, if the tractor is rammed from the rear, the fifth wheel takes damage after rear armor and before rear-firing weapons.

WHEELGUARDS are an option for any vehicle (regular or oversized). These are armor flaps, either permanent or retractable, to help protect the wheels. One is required for each wheel, except that when wheels are paired (i.e., one inside the other, as on a trailer) one guard will cover both. Thus, a fully equipped tractor has three guards per side.

Normal wheelguards for any vehicle can have up to 10 points of armor each, at \$10 and 4 lbs. per point of armor per wheelguard. Any shot directed at a wheel will be taken by the guard instead, on a roll of 1-4 on 1d6, until the guard is destroyed. *Retractable* wheelguards are as above, but add another \$250, 50 lbs., and one space per guard. While retracted, these guards are invisible but useless. They are activated before phase 1 of any turn, and fall "in place" on phase 1 of the next turn; they can be retracted after phase 10 of any turn. While in place, wheelguards subtract 1 from the HC of any vehicle under 20 feet long — so they do not affect the handling of oversized vehicles. (Destroyed wheelguards are not "in place.")

WEAPONS AND ARMOR

Weapons and armor for a tractor are located as for regular *Car Wars* vehicles. Weapons are not usually mounted to fire to the rear, as the trailer would interfere! One two- or three-space turret or cupola may be mounted on top of a tractor's cab.

PERSONNEL

Almost all tractors are designed for two people – one driver and one alternate driver or gunner. Some have space for three. Two spaces and 150 lbs. must be allowed for each person riding in the tractor's cab. A "sleeper style" cab allows extra space. If this space is actually used for sleeping room (rather than weaponry), allow 3 spaces per sleeping area. This lets one person sleep while the rig is on the road, allowing very long hauls.

TRAILERS

A semi-trailer has 8 wheels in back; a "full" trailer has eight in back and two or four in front. Each trailer must have a body and one "kingpin." Armor is not required, but is desirable. Trailers may also have wheelguards, weapons, and other accessories.

TRAILER BODY TYPE & ARMOR	Body cost	Chassis weight	Spaces	Armor cost and weight
40' flatbed trailer	\$ 3,000	2,000	50*	\$40/18
40' van trailer	\$ 6,000	3,000	80	\$40/18
40' "reefer" trailer	\$10,000	3,500	75	\$40/18
40' tanker trailer	\$16,000	5,000	60	\$40/18

No maximum weight is given for trailer capacity. A rig's maximum load is determined by the tractor's power plant.

Armor on a trailer is located in *ten* positions, not six – see below. Exception: A flatbed trailer, by definition, has no top or sides; it has bottom armor only. A small armored box (limit 6 spaces) may be installed on the back of a flatbed, usually for defensive weaponry; cost for armor on this box on top, sides, front, and/or back is \$11/5.

*Note that the "space" on a flatbed is an approximation. The higher the cargo is stacked, the more can be carried. 50 is the maximum for safe hauling, but twice that might be attempted!

The minimum allowed armor on a tank trailer is 20 points per area. A lighter tank would be in danger of leaking or exploding, even under non-combat conditions.

TIRES for trailers are the same as truck tires (see above). A *semi-trailer* must have eight tires, all on the back half of the trailer; they are paired two and two. (When shot at from the side, the outer tire always takes damage before the inner one.) A *trailer* adds two more tires (one on each side) or four more (a pair on each side) at its front end. Almost all rigs on the road use semi-trailers. A trailer, though, can roll when the tractor is not attached, which is helpful if it comes loose while moving! Semi-trailers have legs that swing down and support the front when not attached to a tractor. These legs have 5 DP each, but cannot be attacked unless the trailer is resting on them, and are -5 to hit.

The KINGPIN fits into a tractor's fifth wheel, holding the two together. Each trailer must have one and only one kingpin. It cannot be fired at in combat, but can be destroyed in other ways. There are three types of kingpin:

Standard kingpin: costs \$100, adds no weight, uses no space. Cannot be released except from outside – about a 5-minute process.

Explosive kingpin: costs \$500, adds no weight, uses no space. Performs like a standard kingpin, but, in an emergency, it can be blown loose from inside the cab (this counts as a firing action). This releases the trailer instantly (see "Loose Trailers"). The kingpin must be replaced before the trailer can be attached to any tractor (assuming the trailer survives at all).

Quick-release kingpin: Costs \$1,000; adds no weight, uses no space. Performs like an explosive kingpin except that it doesn't destroy itself when activated. Thus, the trailer can be reattached (if it doesn't crash after being released). It takes about 30 minutes to reconnect a quick-release kingpin.

RAMPS

Wheel ramps can be installed on flatbed trailers (or, occasionally, van-type trailers) to make it possible to drive small vehicles on board. Cost, for a set of 2 ramps, is \$300. Weight is 200 lbs.; no extra space is required. The ramps are only destroyed if the trailer is wrecked.

An *assault ramp* may be installed on a van trailer (or bus or RV) to allow men, cycles, or subcompact cars to get in and out quickly. It is essentially an extra door in the back, a full 7½' wide. It may be dropped in any phase, but takes a full second (10 phases) to close. Since the assault ramp is essentially the rear armor, the vehicle's contents are exposed while the ramp is open. The ramp is only destroyed if all the rear armor is destroyed. Cost: \$1,000. Weight: 100 lbs. Requires one extra space for the opening/closing mechanism.

PERSONNEL

Trailers don't have drivers. Space for gunners or passengers may be allowed in a trailer. Each gunner takes two spaces; each passenger also takes up two spaces (rather than 1 as in a passenger vehicle).

WEAPONS AND ARMOR

Because a trailer is so long, armor must be bought for *ten* locations: front, back, front left, back left, front right, back right, front top, back top, front underbody, back underbody. Essentially, the four "long" sides are divided into two target areas each (see "Combat").

Similarly, weapons placed in or on trailers must be located in one of these areas. Turrets must be placed either front top or back top, and so on. If there are two turrets, one will be placed higher than the other to give it a totally clear field of fire. Weapon limitations for trailers:

Flatbeds may not have turrets. Tankers normally don't.

No dropped weapon devices may be placed on the front half of a trailer.

It is very rare for a tank trailer to have any sort of weapons at all except defensive devices mounted on the rear, behind the tank, and antipersonnel grenades all around.

Trailers never have front-firing weapons (except turrets).

BUSES AND RECREATIONAL VEHICLES

These are really two names for the same sort of vehicle – an RV is just a luxurious privately-owned bus. When the term “bus” is used in these rules, RVs are also included. Some buses are designed mostly for defense and escorted by heavily-armed cycles or cars. Others mount more than enough weaponry to take care of themselves.

A complete bus or RV will have a body, power plant, ten tires, armor, and (probably) weapons. It may have a strengthened chassis, wheelguards, and other accessories. Almost all such vehicles have large passenger compartments – they are built for carrying and protecting customers, not for duelling.

Note that the information presented here supersedes the design notes for the “Killer RV” in the first edition of *Sunday Drivers*.

BUS OR RV BODY SIZE & ARMOR	Body cost	Chassis weight	Max. load	Spaces	Armor cost/wt.
30-foot body	\$5,000	4,000	16,000	45	\$35/17
40-foot body	\$7,000	5,500	21,000	60	\$40/18

CHASSIS STRENGTH and POWER PLANT are chosen as for a tractor (see above). The power plant may be in front or in back.

TIRES are chosen as for a truck. A bus or RV has ten wheels: two in front and two pairs of two on each side in the rear. Wheelguards (up to three on each side) may be added.

PERSONNEL

These vehicles are designed for passengers. Since space for luggage, aisles, etc., must also be allowed, leave 2 spaces for each passenger to be carried (not 1 space as in an automobile). For a luxurious vehicle, allow 3 spaces (and an extra \$500) for each passenger. Any bus must allow 200 lbs. per passenger; the extra 50 pounds covers luggage, etc.

A bus will have one driver and usually at least one gunner. A gunner may be located in the very back of a bus; if so, he takes damage after the rear-mounted weapons do, and before any of the vehicle's contents. Allow 2 spaces and 150 lbs. for each driver or gunner.

WEAPONS AND ARMOR

Buses, like trailers, are very long. Like trailers, they have ten positions which must be armored, and weapons may be located at any of these ten positions except the two underbody ones. Turrets must be designated as front or back. If a bus has two turrets, one (usually the back one) will be higher, so it can fire over the other one.

SAMPLE VEHICLES

Magnum Motors “Roughrider” basic tractor. This is almost the bottom of the line; not stripped, but not fancy. Designed for short hauls; much too lightly equipped for truly dangerous areas. Standard cab-over; heavy chassis; regular truck power plant; solid tires. Armor F30, R20, L20, B15, T25, U15. One driver, one gunner. Mounts two MGs in front and turreted RR on cab. One extra cargo space in tractor. Weighs 11,000 lbs; price \$58,100.

Houston Metal Fabricators Type Two Van. A typical van-type (that is, enclosed) semi-trailer. 40-foot van body; eight solid tires; standard kingpin. Armor: 20 in each position. 75 cargo spaces. Mounts one smokescreen, one minedropper, and one oil jet, all to the rear. Weighs 8,150 lbs (with ammo, but no cargo); costs \$27,950.

Self Security Systems Unit Twelve. A Q-truck – designed to look ordinary while concealing heavy weapons. This particular trailer will carry a fair load of cargo, but some Q-trucks exist purely to trap hijackers, and could never pay for themselves in commerce! Like most Q-trucks, this trailer is “one of a kind.” 40-foot van trailer; 12 solid tires; quick-release kingpin. 40 cargo spaces. Mounts two oil jets, two minedroppers, and one surplus tank gun to the rear; pop-up turrets with single lasers at front and back top; MGs at front right, front left, back right, and back left. Carries two gunners, each with hi-res computer. Armor: six 10-point retractable wheelguards plus F60, B60, FR60, BR60, FL60, BL60, FT60, BT60, FU30, BU30. Weapon links: two minedroppers; two oil slicks; all 4 together; one minedropper and one oil slick. Total weight 19,810 lbs; price \$97,900.

Model E Busnought (Busnought Division, Foster Motor Vehicles). A super-luxury vehicle to carry a few passengers in perfect safety. 40' bus; extra-heavy chassis; regular truck power plant; 10 solid tires. Armor: six 10-point wheelguards, plus 50 armor points in all 10 positions. Mounts 8 MGs: two front (linked), two back (linked), one in each side position, and minedropper to rear; AT gun in front turret, heavy laser in back turret. Driver plus two gunners; all have hi-res computers. 7 passengers, 9 extra cargo spaces. Weighs 25,190 lbs (full); price \$112,700.

4. NEW WEAPONRY

These may be placed on any vehicle unless specified otherwise.

Surplus tank gun. Not always available (referee's discretion). Too big for any turret (except a *real* tank's turret). Can only be mounted facing straight forward or back. A D2 hazard to its own vehicle whenever it is fired! Hits on 7 or better; 6 dice damage; 10 DP; 1,200 lbs.; 10 spaces; holds 10 shots; costs \$10,000. Each shell costs \$100 and weighs 20 lbs. A tank gun can only go in an oversized vehicle.

Heavy laser. Just like a regular laser, but bigger. Hits on 6 or better; 4 dice damage; 2 DP; weighs 1,000 lbs.; costs \$12,000. 3 spaces.

3-space turret. Can only be mounted on an oversized vehicle (any type) or a passenger van. Can hold 3 linked MGs (all weapons in any turret are considered linked), a heavy laser, or an AT gun. If an AT gun is fired in any direction except straight forward or back, it is a D1 hazard to the vehicle. Costs \$2,500; weighs 300 lbs. The rotating mechanism only requires two spaces, so this turret, in effect, adds one space to the capacity of the vehicle.

4-space turret. As above, but holds 4 spaces of weapons. Costs \$3,500; weighs 400 lbs.; oversized vehicles only. The mechanism takes only two spaces, so the turret adds a net two spaces to the vehicle.

Three-space cupola. A “cupola” is a turret that carries a gunner inside it with the weapon. A 3-space cupola can hold a gunner and a machine-gun. The advantage is that a cupola gunner has a +1 to hit; the disadvantage is that he can only fire the cupola weapon, and if the top armor is penetrated, he takes damage before the cupola weapon. Costs \$3,500; weighs 400 lbs. The mechanism takes two spaces inside the

vehicle, so this cupola (in effect) adds one space to the vehicle. Can be mounted on passenger vans and oversized vehicles only.

Four-space cupola. As above, but will hold a gunner and two spaces of weapons. Oversized vehicles only. Costs \$5,500, weighs 500 lbs. The rotating mechanism takes only two spaces, so this cupola adds two spaces to the vehicle.

Rocket platform. This is a rotating platform, totally unarmored, that can hold one, two, or three heavy rockets. Its advantage is that it is very cheap (\$150, plus \$100 each for rockets), very light (200 lbs.), and can be retrofitted to an existing vehicle — which means that it *does* add space. Of course, it cannot be mounted if there is already a turret or cupola there. No weapons other than heavy rockets may be mounted on this platform. Will fit on oversized vehicles and passenger vans only.

Pop-up turrets. These turrets are concealed during regular operation, but can be raised for combat. The top of the turret is normally flush with the top armor, so it can be damaged (but not specifically targeted) while the turret is lowered. The turret can be raised on the speed-setting phase of any turn, and can fire during the turn after that. It may be lowered on the speed-setting phase of any following turn.

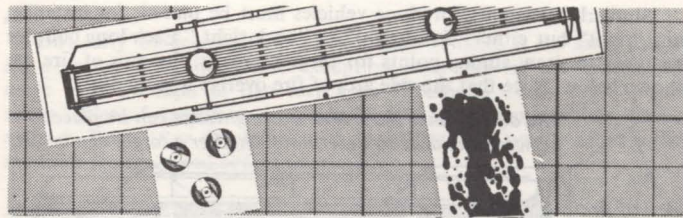
Since a pop-up turret is normally carried inside the vehicle, it takes up interior space equal to its own capacity, plus two spaces (for armor, raising mechanism, etc.). Thus, they are not usually found except on Q-trucks and other disguised combat vehicles. Note: pop-up cupolas, like regular cupolas, can be designed for entry either from inside the vehicle or from outside, but not both.

Vehicle size limitations for turrets and cupolas are the same as for regular turrets or cupolas of the same type.

One-space pop-up turret	\$2,000	300 lbs.	3 spaces
Two-space pop-up turret	\$2,500	350 lbs.	4 spaces
Three-space pop-up turret	\$3,500	450 lbs.	5 spaces
Four-space pop-up turret	\$4,500	600 lbs.	6 spaces
Three-space pop-up cupola	\$4,500	600 lbs.	5 spaces
Four-space pop-up cupola	\$6,500	750 lbs.	6 spaces

Anti-personnel flechette grenade. This device is mounted on the outside of a vehicle, and detonated from within. It throws a cloud of plastic splinters at high velocity. The effect on a pedestrian or cyclist is just as though a grenade had gone off (2" burst radius, 1 die damage, etc.). However, the plastic fragments will not affect vehicle armor at all, so anyone within or behind a vehicle is safe. Since these grenades are mounted outside a vehicle's armor, there is a 1 in 6 chance that each unfired AP grenade will be destroyed any time the armor on that part of the vehicle is hit by enemy fire; if all the armor is destroyed, or if the vehicle rolls, all AP grenades on the affected side are destroyed. No more than one grenade may be placed in each 7.5-foot length of vehicle — thus, for instance, a 30-foot bus could have a maximum of one in front, one in back, four along the top, and four along each side (plus four on the bottom, if desired). Weight negligible; cost \$50 each as original equipment, and \$25 to replace one after it is fired.

Side-firing defensive weapons. Oil jets, smokescreens, mine-droppers and spikedroppers can be mounted to fire to the side of a vehicle (see diagram) instead of to the rear. Cost, weight, etc., same as for rear-mounted weapon. Mines and spikes fired this way will affect the firing vehicle unless it is doing more than 30 mph when it fires!



Limpet mine. Not a vehicle weapon, but an anti-vehicle device. A limpet mine looks much like a grenade and explodes in just the same way; it can be used as a grenade if desired. However, it can be armed with a delay of up to 15 minutes and attached to any fairly smooth surface (it does not stick magnetically, but by a sort of super-gue in plastic beads that break and adhere). When an emplaced limpet mine goes off, it does grenade-type damage to everything within its 2" burst radius, and 1d+1 damage to the armor below. If it is put on or over a weapon port, the damage goes directly to the weapon! However, a limpet mine will not stick if thrown; it has to be placed by hand. Arming and placing a limpet is a pedestrian "firing action" like arming and throwing a grenade. Cost \$60; weight 1 grenade.

5. COMBAT RULES FOR OVERSIZED VEHICLES

When oversized vehicles are involved in a combat, use the following additional modifiers:

Firing at front or rear of any oversized vehicle	no modifiers
Firing at side of tractor.	+1 to hit
Firing at side of trailer, bus, or RV	+2 to hit
Targeting any tire	-3 to hit (as always)
Targeting legs of semi (while they are down)	-5 to hit
Targeting fifth wheel of a tractor	-6 to hit

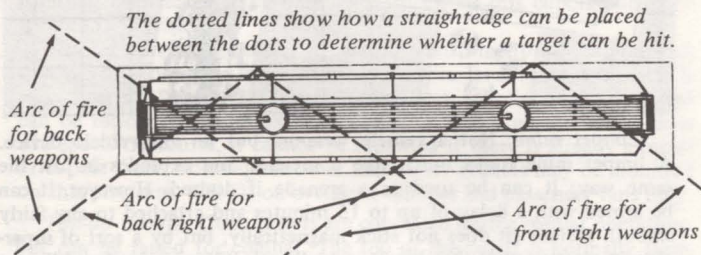
Turret field of fire: Because an oversized vehicle is so tall, a turret mounted on its roof cannot fire on any target (except another oversized vehicle) within 1½" of the center of the turret. If a smaller vehicle is at least 1½" and less than 6" from the center of the turret, though, the turret can fire at its *top* (as well as any sides that present a line of fire) if its owner wishes. This can be devastating if the smaller vehicle has little or no roof armor.

Note also that a turret on a tractor cannot fire over its own trailer, unless that trailer is a flatbed. It *can* fire over any small vehicle within 6", if necessary. A turret on a bus, trailer, or RV can also fire over a small vehicle within 6".

Front and rear weapon locations: Weapons and armor for a tractor are located as for regular *Car Wars* vehicles. Note that the "fifth wheel" is exposed — not protected by armor — and can be targeted at -6 by any opponent that can get a line of sight on the black dot, whether or not a trailer is attached. The fifth wheel will never be hit by gunfire unless it is being targeted.

When an opponent fires at the top, underbody, or side of a bus or trailer, he must specify whether he is firing at the front or back half, and trace a line of sight to the half that he is attacking.

Similarly, weapons for these vehicles must be placed, for instance, not "right" but either "front right" or "back right." Each long counter has dots to show aiming points for these weapons; the arcs of fire are shown below. Note that the side arcs of fire overlap a great deal.



If the front right armor is penetrated, any weapon firing from the front right will be first to take damage, followed by the vehicle's contents and the front left weapons. Damage taken to the front right does not affect back-right-firing weapons, and so on. In general, fire must penetrate the front, top front, side front, or underbody front armor to affect anything in front, and the back, top back, side back, or underbody back armor to affect anything in the back of a bus or trailer.

6. MOVEMENT

Movement for oversized vehicles follows the principles of the *Car Wars* rules, with certain changes.

Handling Class

Oversized vehicles don't handle easily. The handling class of a tractor without a trailer is 0. Addition of a trailer makes the whole rig HC 1. Buses and RVs are also HC 1. Further increases in handling class can come only from good reflexes, aided by the "Trucker" skill.

Maximum Weight and Acceleration

Trucks and buses are never geared for anything but gradual acceleration and heavy loads. All tractor-trailer rigs have an acceleration of 2.5 mph until they reach 25 mph. Buses, trailers without tractors, and tractor-trailer rigs moving 25 mph or more will always have 5 mph acceleration. Due to the way these vehicles must be geared, greater acceleration is not possible.

Therefore, since acceleration does not have to be computed at all, "power factors" are not given for the various power plant sizes. Instead, *maximum loads* are given. For a bus, this is the total weight of the vehicle. For a tractor, this is the total rig weight (tractor plus trailer plus cargo) that can be pulled. If a vehicle or rig exceeds the overall weight allowed for its power plant, redesign it with less weight or install a bigger power plant.

When running a vehicle accelerating at only 2.5 mph per turn, a player will have to put the marker counter between the speed lines on the movement chart (i.e., between 5 mph and 10 mph to show a 7.5 mph speed). A rig at one of these intermediate speeds moves during the same phases as the next highest speed (i.e., 12.5 mph moves when 15 mph does). A rig at an intermediate speed takes a $\frac{1}{4}$ " or $\frac{3}{4}$ " move, exactly like the regular $\frac{1}{2}$ " "half-move," at some point during the turn.

Deceleration

Difficulty of deceleration for oversized vehicles is the same as for all other vehicles, with one exception. Any big rig decelerating at more than 30 mph in one turn goes directly to Crash Table 3 and takes 2 dice of damage to each tire. Note that when any vehicle checks a Crash Table after decelerating, the modifier used on the table is the modifier for the speed *before* deceleration.

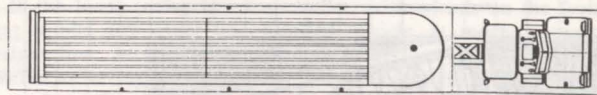
Movement in Straight Lines

Buses are represented by single long counters. Counters for 18-wheelers, though, have two components: the tractor and the trailer. These are combined to form a "rig." A trailer cannot accelerate by itself, and usually crashes if it comes loose during movement (see below). A tractor can move by itself; its acceleration is better but its handling class is worse, as explained above.

To use the tractor and trailer counters, place the trailer so it overlaps the back of the tractor. The black dot on the front of the trailer represents its "kingpin." The black dot on the back of the tractor represents the "fifth wheel." The kingpin on a trailer fits into the fifth wheel; therefore, the black dot on the trailer must be directly over the black dot on the tractor at all times.

Two good tricks to help you handle the 18-wheeler counters: punch or cut out the dot on the trailer, so you can see exactly where the fifth wheel on the tractor is, and put a small amount of rubber cement around the fifth wheel in order to hold the counters together until they need to be repositioned for a maneuver.

For straight-line movement, the counters are positioned thus:



The combined counter moves forward one inch during every phase in which it moves ($\frac{1}{2}$ " for a half-move), just like a passenger car. This is the normal hauling configuration. Angling the trailer is a maneuver, as described below.

Maneuvers

Buses and tractors maneuver in the same way that regular *Car Wars* vehicles do, except that a bus may not attempt a bootlegger. Use the *Car Wars* maneuver chart. The car pictures on the chart should be assumed to represent the front inch of the oversized vehicle.

Semi-trailers crash immediately if released by a moving tractor; trailers without tractors proceed in a straight line and do not maneuver. See "Loose Trailers," below.

Tractor-trailer rigs maneuver in a very interesting way, since they are made up of two separate parts joined by the kingpin. At all times, the black dot on the trailer (the kingpin) must be directly over the black dot on the tractor (the fifth wheel). The tractor may never make less than a 90-degree angle with the trailer; if it does, the rig has jackknifed. Roll one die; on a 1, 2, or 3, the kingpin breaks and the trailer comes loose. The key to handling a rig: avoid *unnecessary* speed or maneuvers.

To maneuver with a tractor-trailer rig, first move the tractor counter. It may attempt any maneuver except a bootlegger, moving as per the maneuver chart.

Next, move the trailer counter as follows:

First, move it in a straight line along its long axis (see illustration) the same distance the tractor moved — i.e., if the tractor moved an inch, the trailer moves forward an inch.

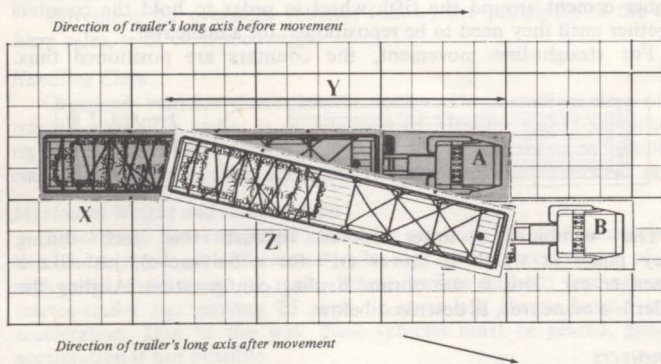
Second, hold one rear corner of the trailer counter in place, and pivot the trailer until its kingpin is as close as possible to the tractor's fifth wheel.

Third, move the trailer (usually forward 1/8" to 1/4") until the kingpin is exactly over the fifth wheel.

If the trailer is now touching a wall or another counter, a collision has occurred. However, if the trailer happened to overlap something during the first two steps of its movement, *no collision took place*.

In the example below, the shaded positions are the original ones; the outlined positions are the final ones after execution of a steep drift. The double-ended arrow shows where the trailer was located at its intermediate position; it moved forward one inch, exactly covering the old position of the tractor. The tractor went from A to B. The trailer went from X to an "imaginary" position at Y, and then pivoted to reach its final position at Z.

Arrows also show the long axis of the trailer before and after it moved.



Ultra-slow Movement

When a truck needs to make complicated maneuvers in a tight space (i.e., parking or entering a fortified area), it will move very slowly. In real life, it might move at only 1 mph. For game purposes, 2.5 mph is the slowest movement practical. This translates to one 1/4" square per turn, moving in Phase 5.

A rig moving at this speed should place its speed marker on the line between 0 and 5 mph on the record sheet. On each turn, the tractor may move as follows:

- 1/4" straight forward, or
- 1/4" straight forward and pivot, as per *Car Wars* maneuver, or
- pivot without any forward movement at all.

The trailer will follow the tractor as per normal movement.

Backing Up

A rig may attempt to back up at any reverse speed up to 20 mph. However, backing up naturally tends to jackknife a rig. It is not wise to back up at more than 5 mph; 2.5 mph is safer yet.

Reverse movement is handled just like regular movement. First, move the tractor counter to its new position. Then move the trailer counter *backwards* in a straight line along its long axis. When the kingpin is as close as possible to the fifth wheel, hold one corner of the trailer down and pivot it until the kingpin is over the fifth wheel. As with forward movement, collision takes place only if the trailer ends its movement in contact with another object.

When you try backwards movement, note the realistic jackknife effect that takes place. This is the way a trailer actually behaves. Learn about it in advance; if you ever have to back your way out of a tight spot in a game, you don't want to run into a wall.

Regardless of the player's skill, though, the *character* must be able to drive a rig. If a non-Trucker character tries to drive a rig in a straight line in reverse, he must roll 1 die on every phase of movement. On a 1, the rear of the trailer swerves 1 square (1/4") out of line. If the rig is being backed in any way except a straight line, the trailer will swerve on a roll of 1, 2, or 3. The swerve will always be in the direction that tends to jackknife the trailer, rather than to straighten it out.

Loose Trailers

When a fifth wheel is shot off, a kingpin breaks, or a trailer is deliberately released, there will be a loose trailer on the road. Since this doesn't happen often, only one marker counter is included.

If the loose trailer is a *true trailer*, with wheels on the front end, treat it like any other uncontrolled vehicle. It moves forward in a straight line, decelerating at 5 mph each turn. It cannot maneuver. Treat it as having Handling Class 1; if it encounters a hazard a roll must be made as for any other vehicle, and a "loss of control" result will send it to Crash Table 2. As long as it does not lose control, any gunners in the trailer may fire the trailer's weapons (except lasers, which require the tractor's power plant).

If the loose trailer is a *semi-trailer*, with no front wheels, the front of the trailer will hit the ground instantly. The underbody front armor takes one die of damage for every 10 mph it is going when it hits, and the semi goes to Crash Table 2. If by chance it does not "lose control" at that point, it moves in a straight line, decelerating by 15 mph at the beginning of every turn and doing more damage, as above, at the beginning of every turn until it stops. It has HC -1. If there are gunners in the semi, they will not be able to fire their weapons until it stops, and then only if it is right-side-up.

When a semi hits the ground, the kingpin breaks; thus, it cannot be reattached to a tractor until the kingpin has been replaced.

7. CRASHES AND COLLISIONS

Trucks and tractors without trailers use the regular *Car Wars* crash tables if they lose control. When a tractor-trailer rig loses control for any reason, it goes directly to Crash Table 3, below. This table is used like Crash Tables 1 and 2, with the same modifiers.

CRASH TABLE 3 – TRACTOR-TRAILER RIGS

- 1 – Trivial skid. The tractor moves $\frac{1}{4}$ " is a "trivial skid" as per Crash Table 1. The trailer follows as for a normal maneuver.*
- 0 – Minor fishtail. The tractor does not move; the trailer fishtails $\frac{1}{4}$ ". Treat as a regular fishtail; roll randomly for right or left and move the rear of the trailer $\frac{1}{4}$ " in that direction, keeping the kingpin over the fifth wheel.*
- 1 – Minor skid. The tractor skids $\frac{1}{2}$ "; the trailer follows normally.**
- 2 – Major fishtail. The tractor does not move; the trailer fishtails as for result 0, above, but moving $\frac{1}{2}$ " (two squares).**
- 3 – Minor skid and fishtail. As result 1 above, followed by result 2.**
- 4 – Major skid and fishtail. As result 3, above, except that the tractor skids $\frac{3}{4}$ " and then the trailer fishtails $\frac{3}{4}$ ".***
- 5 – Extreme fishtail. The tractor stays still; the trailer fishtails 1"****
- 6 – Major skid and fishtail: the tractor skids 1"; the trailer follows normally and then fishtails 1"****
- 7 – Kingpin breaks. The trailer comes loose. The tractor's fifth wheel takes (1d-2) damage. A further D2 hazard! See "Loose Trailers."****
- 8 – As above, but the trailer goes into a roll.***
- 9 – As result 7, but the tractor rolls. There is a 50% chance that it will catch fire.***

Whenever a rig jackknives (bends at less than a 90-degree angle) roll one die. On a 1, 2, or 3, the kingpin breaks and the trailer comes loose.

* Any further fire from that vehicle will be at a -3 to hit.

** Any further fire from that vehicle will be at a -6 to hit.

*** No further fire permitted from that vehicle on this turn.

Debris and Obstacles

Because of their weight, oversized vehicles are much less vulnerable to road hazards – which is a good thing, since their HC is so low.

Oversized vehicles (unless they have solid tires) can still take tire damage from road debris. However, debris does not cause a hazard. Striking an *obstacle* counts as a D1 hazard for any oversized vehicle. It does normal damage (1 die minus 3) to each wheel. When an oversized vehicle hits debris or an obstacle, the hazard (if any) occurs immediately, and damage (if any) is assessed against each wheel. The vehicle is NOT considered to have hit the same debris/obstacle again on the next turn, even if the vehicle counter is still over it. The same holds true for mines and spikes; if an oversized vehicle does not "hit" them the first time it rolls, it does not roll again on the next or later turns.

A mine damages the underbody and each tire within 1" of the edge of the counter at the moment it explodes. The hazard is figured as though the *total* damage (underbody plus tires) was from enemy fire.

Hazards to Oversized Vehicles

Striking an obstacle counter: D1
 Enemy fire does 13-21 hits: D2
 Enemy fire does 22+ hits: D3
 Trailer released while tractor is in motion: D2

AT gun fired to side: D1
 Tank gun fired: D2
 Cycle steamrollered: D1
 Compact or subcompact steamrollered: D2

Tire blowouts: First tire of a pair on trailer: D1

Second tire of a pair on trailer: D3

First tire of a pair on other vehicle: D2

Second tire of a pair on other vehicle, or unpaired (front) tire: D3

Note: When all tires on one corner of a tractor or trailer are lost, go to Crash Table 3. When all tires on one corner of a bus or unattached tractor are lost, go to Crash Table 2. In either case, HC goes to -3.

Collisions

Collisions involving oversized vehicles do more damage than most, just as collisions involving cycles do less damage. The damage a vehicle does when it rams is determined by its speed (the RAM column of the movement chart) multiplied by a weight factor as follows:

Pedestrians do only 1/5 damage when hit.

Motorcycles do only 1/3 damage in any collision.

Cars, station wagons, pickups, and passenger vans do normal damage as shown on the RAM column.

Oversized vehicles between 10,000 and 19,999 pounds do *double* damage – twice the amount shown on the RAM column – when they collide with another vehicle or a fixed object.

Oversized vehicles between 20,000 and 39,999 pounds do *triple* the damage shown on the chart.

Oversized vehicles between 40,000 and 80,000 pounds do *four times* the damage shown on the chart.

When colliding with other vehicles, oversized vehicles are less likely to "bounce." The rules for movement after collision are modified as follows when one vehicle weighs more than 5 times the other. (Note that this could also apply to a collision of a car and cycle.) In the examples below, H is the heavy vehicle, L the light one.

H and L collide head-on: Position and speed of H are not affected, but it takes a D4 hazard. Pick up L's counter and drop it randomly in front of H from 3" high. L also takes a D4 hazard; its speed is cut by 50 mph. It may also be "steamrollered" – see below.

L collides with H from the rear: A D2 hazard for H; a D4 hazard for L. The position and speed of H are unchanged. The position of L is unchanged, but its speed drops to that of H.

H collides with L from the rear: A D2 hazard for H; a D4 hazard for L. H does not stop moving when it hits L; it pushes L in front of it. The position and speed of H are unaffected. L's speed is increased to that of H (unless it is "steamrollered"), and it will be pushed in front of H until it can get out of the way. (Further "collisions" will do no damage, as the speeds are now equal.)

H sideswipes L: A D1 hazard for H, a D4 hazard for L. Neither vehicle's speed is affected. H moves on through L's previous position, pushing L directly to the side.

L sideswipes H: A D1 hazard for H; a D4 hazard for L. Position and speed of H are unaffected. L stops its lateral movement where it hit H, with its forward speed unaffected.

H "T-bones" L: As if H had hit L in a head-on collision (above).

L "T-bones" H: Treat H as though it had been a solid obstacle; its speed and position are unaffected. If L was going 20 mph or less, it stops moving. If it was going 25 mph or more, pick it up and drop it from 3", and reduce its speed by 50 mph.

Steamrolling

When a tractor hits a cycle, compact, or subcompact in any way but a sideswipe, it may "steamroller" it — that is, run right over it — due to the difference in heights. Roll one die when such a collision takes place. On a 1 or 2, a normal collision occurred; on a 3-6, the smaller vehicle was steamrolled. When this takes place, the speed of the small vehicle is reduced to zero. The tractor (and its trailer, if any) simply run over the smaller vehicle's counter. This is a D1 hazard if a cycle is being run over, and a D3 hazard if a car is being run over (in addition to collision hazard). The vehicle being steamrolled takes regular damage from the collision (as per the tractor's weight) and the same amount of damage from being run over. The damage from being run over counts as ram damage to the top of a car; when a cycle is steamrolled, this damage is spread evenly between all parts of the cycle (including its driver and/or passenger). A cyclist who is about to be steamrolled had better jump; any chance is better than none!

When a tractor or rig steamrollers a small vehicle, all its tires take damage as though an obstacle had been struck: 1d-3 points per wheel.

8. BOARDING VEHICLES

To climb aboard the front or back of a tanker or van-type trailer, or any portion of a flatbed, a pedestrian must make a roll, as follows:

Vehicle speed 10 mph or less automatic success
15 mph. roll 4 or more on 2 dice
20 mph. roll 5 or more on 2 dice
25 mph. roll 7 or more on 2 dice
30 mph. roll 9 or more on 2 dice; take 1d-3 damage if you fail.
35 mph. roll 10 or more on 2 dice; take 1d-2 damage if you fail.
40 mph. roll 11 or more on 2 dice; take 1d-1 damage if you fail.
45 mph or greater speed impossible.

A pedestrian trying to board a pickup or tractor adds 5 mph to the vehicle's effective speed. A pedestrian trying to board a passenger car or van, a bus, or the side of a van or tanker, adds 15 mph to its effective speed.

Being noticed: There is only a 1 in 6 chance that a pedestrian will not be noticed if he boards an occupied bus or trailer. There is a 3 in 6 chance he will not be noticed if he boards an unoccupied trailer hitched to an occupied tractor. He will automatically be noticed if he boards any other vehicle. At the referee's discretion, these chances may be modified for weather, diversions, etc.

Dropping in for a visit: A pedestrian may also drop onto the top of any vehicle if it passes directly beneath him. To do so successfully, he must roll as follows, on two dice:

4 or better to land on a bus, or any trailer except a tanker
5 or better to land on a tractor (taking double damage for failure)
6 or better to land on a tanker (the top is curved!)
6 or better to land on a pickup or passenger van
7 for other passenger vehicles, or 8 for a compact or subcompact.

Subtract 1 from the roll if weather is bad. Subtract 1 if the vehicle is going 20 to 30 mph, 3 if it is going 35 or 40 mph, etc. A character who drops onto a vehicle has the same chance to be noticed as one who climbs aboard it (see above). A character who tries to drop on a vehicle, and misses, will fall to the road, taking damage as in *Sunday*

Drivers: 1d-4 if he dropped 10 feet or less, 1 d for 11 to 20 feet, 1d+1 for 21 to 30 feet. Figure distance from his starting point to the road. If he missed a drop onto a tractor pulling a trailer, he bounces off the trailer and takes double damage. Body armor does not protect from falling damage! The pedestrian counter is placed on the road behind the vehicle, and cannot get up until the beginning of the next turn.

Movement on top of a vehicle: A pedestrian can only move around atop an oversized vehicle (or in a pickup bed). There is no place to go on a smaller vehicle! It takes one second (10 phases) to reach the top of a vehicle from the ground, or to stand up after dropping onto it. A pedestrian on a vehicle moves at one square (3.75 feet) per second, during phase 10. If he wants to move twice per turn (phases 5 and 10) he must roll 4 or better on two dice each turn, to avoid falling (subtract 1 for bad weather). To move 3 times per turn (phases 3, 6, and 9) he must roll a 5 or better each phase to avoid falling. A pedestrian who falls off a vehicle will automatically be noticed, and will take normal damage for leaving a moving vehicle. This is the same amount of damage he would take if hit by a passenger car moving 10 mph slower.

Attacking from above: A pedestrian atop a vehicle can fire his weapon, throw grenades, etc., normally. He can also plant a limpet mine; no die roll is required to succeed at this.

A pedestrian on a vehicle will be subject to fire from a turret on that vehicle if he is at the turret's level. Use common sense to determine this, or call in the referee if common sense is not available. Examples: A pedestrian atop a bus can be hit by a turret on the bus, or on another bus the same size. A man in the bed of a pickup cannot be hit by a turret on the pickup's cab, unless he stands up. A pedestrian on a trailer cannot be hit by a turret on the tractor, since the trailer top is higher than the tractor. A pedestrian cannot hide behind or atop a turret; it moves quickly enough that he would be thrown off.

A pedestrian on a vehicle can also attack its front, side, top, and back-mounted weapons, using his own hand weapon, if he can move adjacent to the appropriate side/end of the vehicle. He automatically hits, doing one point damage; there is a 50% chance each time that the damage will bypass the armor and hit the weapon directly.

Getting off again: If a vehicle crashes with a person on top, he or she is assumed to jump clear, taking normal damage as from leaving any moving vehicle — see above. Add one point of damage if the vehicle was oversized. If no wreck is involved, the pedestrian may attempt to "swing down" from the edge. The chance of making it without injury, and of being noticed, is the same as for getting onto that vehicle at that speed; if he fails his roll, he is off the vehicle, but takes damage. In either case, he cannot move until the beginning of the next full turn.

Any hazardous event or maneuver may throw riders off the top of a vehicle. When a vehicle undergoes any D2 or greater hazard, or any D3 or greater maneuver, all pedestrians on board must roll to stay on. The roll is 3 or better on 2 dice, plus 1 for every 10 mph the vehicle is traveling — i.e., 8 or better at 50 mph.

Running underneath a trailer: A trailer has a clearance of better than 2 feet above the ground. Thus, no normal vehicle can pass under a trailer. However, a pedestrian could move (or hide) under a trailer, moving at 1/3 speed (phases 3, 6, and 9 only).

9. CARGO, PAY, AND BACKGROUND

The value of a truck's cargo may range from a few thousand dollars to half a million or more, depending on what is being carried, whether it is legal or illegal, and how much in demand it is. Possible cargoes include anything that is carried today – with the exception of gasoline and other petroleum products, which are in extremely short supply.

An experienced trucker or gunner can earn in excess of \$40,000 per year. "Hazard pay" for travelling into exceptionally dangerous areas can double this sum. A man who owns his own rig can clear twice this much after ordinary expenses (power, ammo, etc.).

The "Brotherhood" – a loosely organized but very serious society of professional highway drivers and gunners – exists to deal with road problems that threaten the lives and incomes of its members. Unfair law enforcement, highwaymen, price gouging, and trigger-happy road duellists are typical problems; the Brotherhood's response may range from a service slowdown in the affected area to (rarely) a fullscale attack, heavy guns blazing, on an offending area. More often, they simply circulate descriptions and license numbers of offenders. If every truck, bus, or armed courier vehicle is your enemy, you'd better stay off the road! An infinite number of scenarios can be devised around run-ins with the Brotherhood or individual truckers.

However, truckers are usually very courteous drivers, if you don't make trouble for them. A truck or bus will often stop to help a driver in trouble, or even intervene to break up an unfair road duel. Warning: anyone who attempts to ambush a driver by taking advantage of his good nature will *certainly* be marked by the Brotherhood if they find out who he is. Sending a brother to Highway One in a fair fight is one thing; double-crossing a Good Samaritan is *evil*.

Autoduel Quarterly will present more detailed data and situations for scenarios, and welcomes ideas from readers. To start off with, try the *Car Wars* "Pack Attack" scenario, with one busnought or a rig worth \$80,000 vs. \$120,000 worth of cars and cycles.

10. TRUCK STOP MAP

The map represents a typical fortified truck stop. It offers a variety of services, from food and power all the way up to major repair. An establishment like this is often the strongest bastion of law and order on the longer stretches of highway. It's the equivalent of a medieval tavern: a safe place to spend the night sharing drinks and stories.

The map can be used as a combat arena without further preparation. However, it's much more fun when you "stock" it with characters, weaponry, loot, and situations. Some basic data to get you started:

Entrways. The main gate is (deliberately!) hard to enter; vehicles must move slowly. For a test of maneuvering skill, try to bring a rig through the main gate without scraping the walls. The other gate is a "crash gate," designed to be opened only if someone must enter at high speed. In that case, the electric minefield is turned off. The switch is in the security office. Counters are supplied for both gates; they slide out from inside the wall, and are remote-controlled from the gatehouse and the security office (which can override the gatehouse). They open and close at one square per second, and will not close if a vehicle over 2,000 lbs. is blocking them. Lighter vehicles will be crushed.

Walls. The outer walls are two stories high and have a strength of 50

(as per buildings in *Sunday Drivers*) but will never collapse entirely. The gates have strength 20; the buildings and corner turrets have strength 10.

Defenses. The main defenses are the four turrets at the corners, each of which is located just above wall level. All are armed with heavy lasers (though the referee can change this). They can be operated from the roof behind the turrets, from inside the small turret buildings (overriding the roof) or from the security building (overriding everything). They cannot be turned to fire on anything within the walls.

Within the courtyard is an old artillery piece to provide counter-battery fire if anyone attempts to shell the truck stop from a distance. It can fire once every 10 turns; it does 8 dice damage on a direct hit and 3 dice damage in a 3" burst radius. Each shot weighs 30 lbs. and costs \$150. Its range is approximately 12 miles! Its base "to hit" number is 13. However, there is no modification for range, up to maximum, and if an "artillery spotter" has the target in view, it can get a sustained fire bonus of +1 per shot, down to a minimum "to hit" of 6 for a stable target or 9 for one moving no more than 30 mph. (Even with a spotter, faster targets would be hit only by blind luck.) A counter is supplied for players who want a second artillery piece.

Gatehouse. A small building designed to control the gates and examine anyone wanting entry – though, except in times of trouble, the truck stop is open to everyone except obvious riffraff.

Power building. Contains the giant storage batteries used to power up trucks. There is a huge windmill on its roof, a land line to the local power plant, and a bank of solar cells on top of each building; it's not impossible to cut off the truck stop's power, but it's hard. To recharge, a vehicle pulls up to the side of the building where there is no sidewalk. Two vehicles can be charged at once; a full charge takes ten minutes and costs \$20 for a cycle, \$50 for a car, or \$100 for an oversized vehicle. It will last for about 200 miles at 50 mph – much less if high speeds are required or a laser is fired.

Security building. Contains living quarters for the security chief and his assistant; the wardroom; the security office, which contains a holding cell for unruly customers and video monitors covering a number of locations; and the armory. Weapons and ammo can be purchased there, and vehicle weapons are often taken there for repair.

Main building. Two stories tall; includes a bar, restaurant, showers for truckers; motel-type bedrooms (B); rest rooms (RR), offices, etc. On the second story, the floor plan is the same. Over the bedrooms are identical bedrooms; over the main offices and radio room are living quarters for the truck stop's owner; over the restaurant and bar is a storage area; over the TV room and lounge are a convenience store and laundry room, respectively. Access to the main building is possible only at the front door or through the garage (under the catwalk). Everyone except an employee will be "requested" to check all firearms at the entry. The management insists on a high level of peace on the premises, though pistol duels are permitted behind the garage.

Tunnel: An escape tunnel, known only to key employees, begins at the "X" in the radio room and leads off the map to a hidden hatch. It will be used only in dire need; it is normally locked, with a desk on top.

Garage: Also two stories high, but without a second floor inside. Connected to the main building. Includes nine service bays and a well-locked ammo storage room. The cross-hatching shows a catwalk, at the