YOU ARE CORDIALLY INVITED
TO A CROSS-COUNTRY CAR RACE.
STARTING ORDER DETERMINED
BY RANDOM DRAWING.
PLEASE ATTEND THE DRAWING AT GIGINO,
323 GREENWICH ST., NEW YORK, NY.
SHOW THIS INVITATION AT THE DOOR.

THUNDERBALL Rally

A Polyhedron Mini-Game of High Octane Adventure

Thunderball Rally

Contents

For use as a complete campaign setting for the d20 Modern Roleplaying Game

This *Polyhedron* d20 System Mini-Game requires the DUNGEONS ET DRAGONS *Player's Handbook*, *Dungeon Master's Guide*, and *Monster Manual* to play. *Polyhedron* Mini-Games adapt the standard D&D rules and conventions to nonstandard settings and genres. Unless specifically noted in the text, this Mini-Game follows the core D&D rules. If you know how to play DUNGEONS ET DRAGONS, you'll pick up the rules of this game in moments.

Thunderball Rally utilizes game mechanics developed for the new DUNGEONS ET DRAGONS game by Jonathan Tweet, Monte Cook, Skip Williams, Richard Baker, and Peter Adkison and the d20 MODERN *Roleplaying Game* by Bill Slavicsek, Rich Redman, and Jeff Grubb. This Wizards of the Coast game contains no Open Game Content.

Based on the original Dungeons & Dragons game by Gary Gygax and Dave Arneson.

You have a reputation. You love speed. You have so many traffic violations you have to change your name every time you renew your license. You hear screaming tires in your sleep and you'd rather smell burning rubber in the morning than coffee or bacon. So the invitation to the famous, annual, highly illegal race across the United States puts an all-day smile on your face.

What Is Thunderball Rally?

Thunderball Rally is a d20 System game about racing across the United States of America in 1976. It's also a preview for the upcoming D20 MODERN *Roleplaying Game*. The D20 MODERN RPG contains all the rules for playing any flavor of modern-day fantasy. If you know how to play D&D or any other d20 System game, you already know how to play D20 MODERN.

Although the game creates an imaginary cross-country car race, you can use these d20 System modern vehicle rules with *Shadow Chasers* (*Polyhedron* #150) or some game of your own creation.

In *Thunderball Rally*, you play one of the crews in the largest, most lucrative, most illegal cross-country road race in America. If

you've seen *Cannonball Run*, *The Blues Brothers*, *Death Race 2000*, and *Smokey and the Bandit*, or if you always wanted to drive the *General Lee* and make a fool out of Boss Hogg and the sheriff, this game is for you.

You can play *Thunderball Rally* with all players in the same crew, or competing with each other. The race rules don't cover support staff, so you can have helicopters checking for speed traps, lawyers standing by to spring you from jail, or another car sporting machine-guns and riding shotgun.

Thunderball Rally Rules

If you are already familiar with D20 MODERN, skim the rules on character creation for any changes, then read the vehicle rules. You already know how skills and feats work.

You will need either a copy of the D20 MODERN rules, or both the *Player's Handbook* and the *Dungeon Master's Guide* to play this game.

Action

Thunderball Rally isn't about planning out your exact route for the race. It's not about figuring out every rest stop, bathroom break, and refuel point. It's about racing bumper-to-bumper, wheel-to-wheel, with the other crews. It's about outfoxing hick county sheriffs. It's about interacting with race fans and colorful characters on the roads of the United States, not to mention with other crews. After all, if there's no rule against sabotage or attacking other crews, it's not cheating...

GMs plan out Pit Stops, action scenes between players, or between players and NPCs. They don't all have to involve vehicles, or even other racers. Characters may encounter a hitchhiking runaway bride, find themselves pursued by a vengeful sheriff or F.B.I. agent, or decide to break one of their fellow racers out of jail. The key word, however, is action. There's no point in roleplaying driving down an empty, straight, level highway on a

nice day. Throw in some shotgun-toting drunken rednecks blasting Kansas from the 8-tracks in their pickup trucks, an overturned oil tanker truck, road construction, and some ruthless competitors, and you have a *Thunderball Rally* Pit Stop. Actions and accomplishments during Pit Stops affect winning the race.

Three Key Conceits

The law enforcement community knows the race exists and tries to stop it, but rarely knows exactly when and where the race will start. Organized crime sponsors the race, and chooses the best amateur drivers in the world to compete. From the first race in 1950 to the present, the Sicilian Cosa Nostra has run the race. Of course, they are completely honorable and would never stoop to fixing a competition...

Race Crew Generation

Anyone can be a racer. The only thing they all have in common is that they did something involving vehicles spectacular enough to garner the attention of the Thunderball Rally's sponsors. Maybe they bootlegged a truckload of beer across state lines in remarkably short time. Maybe they stole forty cars in twenty-four hours. Maybe they evaded pursuit by the Illinois Highway Patrol, and wrecked a record number of police vehicles in the process. Maybe they invented a revolutionary fuel injection system. They are car thieves, getaway drivers, truckers, delivery drivers, garage mechanics, assembly line workers at automotive plants, professional race car crews, bodyguards, mercenaries, smugglers, bootleggers, revolutionaries, and ordinary folks who like to drag race on weekends.

And at the end of the Thunderball Rally, one of them is going home a halfmillion dollars richer.

Abilities

Use the rules presented in Chapter 1 of the *Player's Handbook* to generate ability scores for your *Thunderball Rally* racer.

Races

All members of a *Thunderball Rally* racing crew are human. They can be of any ethnic persuasion, either male or female. There are no favored classes in *Thunderball Rally*.

Characters and Language

Thunderball Rally racing crews begin play speaking the primary language used in their country and American English. All other world languages are available for characters to learn.

The 1st-Level Racer

The 1st-level racer comes together as you combine ability scores with a class. Here's a summary of some of the game's new details.

Starting Wealth

All *Thunderball Rally* racers start the game with $20,000. They use this money to purchase a vehicle and any accessories or personal equipment they wish to own (see Chapter 5: Start Your Engines). Racers on the same team should pool their funds. Note that to be on the same team, racers must all have a way to reach the finish line. If you want 6 racers on your team, you need to have multiple vehicles, or six seats in one vehicle.

Additional Wealth

If racers start the game above 1st-level, they have an additional 1d6 x $1,000 per level at their disposal.

Winning a race nets an additional $500,000 characters can use to repair or improve their existing vehicle, or to purchase a new one for the next race.

Racers can sell equipment for half its listed value if undamaged, one-fourth its listed value if damaged.

Defense

Unlike in the DUNGEONS & DRAGONS game, there's no Armor Class in *Thunderball Rally*. Instead, characters have a Defense rating. Defense is determined by adding the following numbers: 10 + class bonus + Dex bonus + size bonus + any miscellaneous bonus. The total, called the character's Defense, represents the number an opponent must achieve when attacking the character.

Most *Thunderball Rally* racers do not wear any kind of body armor. Should you wish to import armor from other d20 System games, add the armor bonus to a character's Defense (this stacks with that character's class Defense bonus).

Bulky, archaic armor is hard to come by in 1976, and should usually prove prohibitively expensive. Many glamour-obsessed stars of the Thunderball Rally value style more than caution, so armor-wearing racers are likely to face ridicule from their more carefree competitors.

Action Points

Action Points represent a character's innate ability to influence the world around her. When a character faces extreme danger or just has to pull a miracle out of thin air, she spends an Action Point.

Navigators start with 1d4+1 Action Points, bodyguards start with 1d4+2 Action Points, and aces start with 1d4+3 Action Points. Gamemaster characters have a number of Action Points equal to half their Hit Dice, rounded up, unless specified otherwise.

A character spends an Action Point to influence a task resolution roll (either an attack roll, a skill check, an ability check, or a saving throw). The character can spend the Action Point before or after rolling the d20, but before the GM announces the result of the action.

Normally, a racer can use Action Points only on her own roll. However, any time a racer makes an aid another action, she can spend an Action Point on the check or roll she is assisting.

For instance, if an ace needs to make a Drive check to establish pursuit of another vehicle, the navigator can assist and spend one of her own Action Points on the Drive check.

An Action Point allows the racer to add +1d6 to all her d20 rolls for the rest of the round, thus allowing for a greater chance of success. A racer on any given action can spend only one Action Point, but several racers can each spend one Action Point if they are assisting each other. The players roll their d6s once and use the combined result for the rest of the round.

Multiclass Characters

Each time your character earns a new level, you can choose to take another level in your previous class or choose a new class. Adding a new class broadens your repertoire of abilities at the expense of focused expertise in a single class.

Level-Dependent Benefits

Beyond the skills, attack bonuses, saving throw bonuses, and other class features outlined for each class, characters gain other benefits from advancing in levels.

Table 1-1: Experience and Level-Dependent Benefits

Character Level	XP Total	Class Skill Max Ranks	Cross-class Skill Max Ranks	Feats	Ability Increase
1st	0	4	2	Feat, Feat	—
2nd	1,000	5	2.5	—	—
3rd	3,000	6	3	Feat	—
4th	6,000	7	3.5	—	increase
5th	10,000	8	4	—	—
6th	15,000	9	4.5	Feat	—
7th	21,000	10	5	—	—
8th	29,000	11	5.5	—	increase
9th	36,000	12	6	Feat	—
10th	45,000	13	6.5	—	—

Table 1-1: Experience and Level-Dependent Benefits identifies how many experience points (XP) you need to acquire each level and what benefits racers get at each level, regardless of their racer class.

Multiclass racers use their total character level on this table. In other words, a 3rd-level ace/1st-level navigator is a 4th-level character. Multiclass racers with more than 10 levels should use Table 3-2: Experience and Level-Dependent Benefits in the *Player's Handbook*.

XP Total: The number of experience points required to attain this level.

Class skill max ranks: The maximum possible number of ranks in each skill for a racer of this level. A skill counts as a class skill if it's on the class list of any of the racer's classes.

Cross-class skill max ranks: As above, but the maximum for skills that don't appear on the racer's class list.

Feats: The level at which racers can choose another feat.

Ability Increases: The level at which racers can improve the ability score of their choice by 1 point.

Classes

Classes in *Thunderball Rally* focus on the kinds of people who participate in the most lucrative (and illegal) street race in the 200-year history of the United States. They have a slightly different structure than those in the *Player's Handbook* to better represent the wide range of skills and knowledge to which modern people

have access. Each class level, therefore, represents an area of expertise in which that character trains, and multiclassing can be done freely and without restriction.

Players choose from three possible racer classes, presented in the following order:

The Ace: Levels in this class demonstrate mastery and control of automobiles. These characters possess keen reflexes and a sharp understanding of how to take their machine to the limits. They are the stars of the racing circuit.

The Navigator: Although most navigators are reasonable drivers, their skill truly shows in their ability to find shortcuts, pick the best route, and keep oriented in power slides and involuntary 360-degree spins. You can count on a good navigator to keep the car running, too.

The Bodyguard: Not everybody plays nice, so bodyguards provide protection for their racing crews. While bodyguards figure strongly in some teams' strategies, they're generally the unsung heroes of a racing crew.

The Ace

A character takes levels in this class if she wants to be the primary driver for her crew.

Aces come from all over the world, and from all walks of life. Some are wheelmen for the Mob, some are illegal street racers, and some are profes-

sional rally or stock car drivers. Of course, the pros risk being banned from legitimate tracks for life if they are caught in this illegal, unsanctioned race, but a clear shot at a cool half-million is difficult to pass up.

Aces tend to be flashy, charismatic people and the race circuit treats them like rock stars. They relish the attention, and love being the center of attention almost as much as they love winning races.

Hit Points

At first level, 8 + Con Modifier. At each additional level, 1d8 + Con Modifier.

Action Points

Aces gain 1d4+3 action points per level.

Class Skills

Bluff (Cha), Craft (Int), Diplomacy (Cha), Drive (Cha), Gather Information (Wis), Intimidate (Cha), Knowledge (Int), Listen (Wis), Pick Pockets

(Dex), Profession (Wis), Read/Write Language, Speak Language, Spot (Wis).

Skill Points at 1st Level: (5 + Int Modifier) × 4.

Skill Points at each additional level: 5 + Int Modifier

Class Features

All of the following are class features of the ace.

STARTING FEATS: The ace begins play with the Simple Weapon Proficiency feat and the Weapon Group Proficiency (basic firearms) feat.

BREAKER, BREAKER: The ace is adept at using citizen's band (CB) radios, and can use some of her other class abilities (attract, coordinate, presence, persuade) over a CB radio. The ace can use this ability a number of times per day (of game time) depending on her level (once at 1st level, twice at 5th level, and three times at 10th level).

UNCANNY DODGE: At 2nd level, the ace retains her Dexterity bonus to Defense (if any) regardless of being caught flat-footed or struck by an unseen attacker. At 9th level, the ace can no longer be flanked.

The ace uses this ability in vehicle combat as well as personal combat.

SPECIAL ABILITY: At 3rd, 5th, and 7th levels the ace selects a special ability from the following list (no special ability can be selected more than once):

Attract: The ace has the ability to temporarily improve the attitude of a Gamemaster character because of her overall appearance and personality. Once per day of game time, the ace can use this ability to improve a Diplomacy skill check to improve that character's attitude. This provides a bonus equal to one-half of the racer's ace levels, rounded down. See NPC Attitudes in Chapter 5: Campaigns of the *Dungeon Master's Guide.*

Bonus Class Skill: The ace may designate a cross-class skill as a class skill. Once designated, the skill is considered a class skill every time the character adds a new ace level. The skill must be one available in *Thunderball Rally,* and it should be relatively common, as well. The GM is free to rule that a specific skill is off limits as a bonus class skill.

Coordinate: The ace is the boss of the crew, and often has a knack for getting the crew to work together. When the ace can aid others and give directions, she provides a bonus to the task at hand by making an aid another check. This coordinate bonus is in addition to the normal aid another bonus (+2), and it is equal to one-half the racer's ace levels, rounded down. So the ace provides a total +3 bonus at 2nd level (+2 aid another bonus plus +1 coordinate bonus), and +7 at 10th level (+2 aid another bonus plus +5 coordinate bonus). Coordinate can't be used to assist in combat. Coordinate is a standard action.

Presence: Once per day of game time, the ace has the ability to temporarily awe a Gamemaster character using the strength of her presence and personality. The ace makes an awe check (d20 roll) and adds a bonus equal to one-half of the racer's ace levels, rounded down; plus her Charisma bonus. The target makes a Will saving throw to resist, and can add her own Reputation bonus to the save. If the driver's total is higher, the target can take no actions while in the racer's presence for a number of rounds equal to the presence bonus. The target can defend normally and is not helpless, but is struck with awe by the ace.

Table 1-2: The Ace

Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special	Defense Bonus	Reputation Bonus
1st	+0	+0	+2	+0	Breaker, Breaker, bonus feat	+1	+2
2nd	+1	+0	+3	+0	Uncanny Dodge, bonus feat	+2	+2
3rd	+2	+1	+3	+1	Special ability	+2	+2
4th	+3	+1	+4	+1	Bonus feat	+2	+3
5th	+3	+1	+4	+1	Special ability	+3	+3
6th	+4	+2	+5	+2	Bonus feat	+3	+3
7th	+5	+2	+5	+2	Special ability	+3	+4
8th	+6/+1	+2	+6	+2	Bonus feat	+4	+4
9th	+6/+1	+3	+6	+3	Uncanny dodge	+4	+4
10th	+7/+2	+3	+7	+3	Bonus feat	+4	+5

Persuade: Once per day of game time, the ace has the ability to hamper a Gamemaster character's course of action through the use of argument, entreaty, or expostulation. Persuade can't be used in combat, but it can be used prior to the start of a combat situation depending on circumstances. The ace makes a persuade check (d20 roll) and adds a bonus equal to one-half of the racer's ace levels, rounded down; plus her Charisma bonus. Compare the total to the target's attitude on the Initial Attitude table (see NPC Attitudes in Chapter 5: Campaigns of the *Dungeon Master's Guide*) to determine the target's new attitude based on the argument or entreaty the ace has presented. This new attitude lasts for a number of minutes equal to the persuade bonus; at the end of this period of time, the initial attitude returns.

Bonus Feat: Aces gain bonus feats at 1st, 2nd, 4th, 6th, 8th, and 10th levels. These feats must be selected from the following list: Circuit Heel, Circuit Hero, Clipping, Daredevil, Dirt Track Demon, Drive-By, Frightful Presence, Grease the Axles, Influence, Persuasive, Vehicle Combat, Vehicle Gunnery, or Window Dive.

The Navigator

A character takes levels in this class if he wants to reach his destination by the most efficient route. The navigator is an essential part of most driving teams, handling both the maps and the tool kit.

Most navigators are mechanics and automotive engineers testing their ideas and theories in ways that mainstream design firms would not allow. They come from filling stations and Big Three automobile manufacturers. Some navigators are even members of professional rally race teams.

Navigators often have exuberant, flamboyant personalities as a way to steal attention from aces.

Hit Points

At first level, 8 + Con Modifier. At each additional level, 1d8 + Con Modifier.

Action Points

Navigators gain 1d4+1 action points per level.

Class Skills

Craft (Int), Disable Device (Int), Drive (Dex), Knowledge (Int), Listen (Wis), Pick Pockets (Dex), Profession (Wis), Read/Write Language, Repair (Int), Search (Int), Sense Motive (Wis), Speak Language, Spot (Wis), Treat Injury (Wis).

Skill Points at 1st level: (7 + Int Modifier) x 4

Skill Points at each additional level: 7 + Int Modifier

Class Features

All of the following are class features of the navigator.

STARTING FEATS: The navigator begins play with the Simple Weapon Proficiency feat and the Weapon Group Proficiency (basic firearms) feat.

SKILL EMPHASIS: The navigator begins play with the Skill Emphasis feat. This feat may be applied to any class skill.

SPECIAL ABILITY: At 2nd, 5th, and 8th level, the navigator selects a special ability from the following list (no special ability can be selected more than once).

Focus: Once per day (in game time), the navigator can center his attention on a single task and gain a bonus equal to one-half his navigator levels, rounded down. The bonus can be applied to any skill check, but such intense focus requires that the racer spend twice as much time as normal to complete the task. So a skill check that requires an attack action or move action takes a full round, and a full-round action takes two rounds to complete.

Heart: The navigator possesses a great deal of self-confidence and courage. Because of this, once per day (in game time), the navigator can concentrate and gain a circumstance bonus based on his innate belief in himself and his abilities. The bonus is equal to one-half the racer's navigator levels, rounded down. The bonus can be applied to any ability check or attack roll. You can decide to use this class feature after making a die roll but before the GM reveals the result of the check or attack roll.

Table 1-3: The Navigator

Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special	Defense Bonus	Reputation Bonus
1st	+0	+0	+0	+2	Skill Emphasis	+1	+1
2nd	+1	+0	+0	+3	Special ability	+2	+1
3rd	+2	+1	+1	+3	Secret	+2	+1
4th	+3	+1	+1	+4	Breaker 1-9	+2	+2
5th	+3	+1	+1	+4	Special ability	+3	+2
6th	+4	+2	+2	+5	Secret	+3	+2
7th	+5	+2	+2	+5		+3	+3
8th	+6/+1	+2	+2	+6	Special ability	+4	+3
9th	+6/+1	+3	+3	+6	Secret	+4	+3
10th	+7/+2	+3	+3	+7	Secret	+4	+4

Options: The navigator has a knack for quickly analyzing a situation and seeing the best course of action. By using a full-round action, the navigator finds a weakness in an opponent or determines a better way to solve a problem. This translates into a bonus equal to one-half the racer's navigator levels, rounded down. This bonus must be used in the racer's next turn, applying it either to an attack roll or skill check, as the situation warrants. The navigator can use this ability a number of times per day equal to his navigator levels divided by two, rounded down.

Plan: before a dramatic situation, whether combat or skill related, the navigator can spend time to develop a plan to best handle things. This requires an hour of preparation and an Intelligence check. The check is made with a bonus equal to one-half the racer's navigator levels, rounded down; plus his Intelligence bonus. The result of the check provides all of the navigator's allies with a circumstance bonus due to his planning and preparation. 15-19, +2 bonus; 20-24, +3 bonus; 25+, +4 bonus. This bonus can be

applied to all skill checks and attack rolls made by the navigator and his allies, but the bonus only lasts for the first three rounds of the situation. After that, the bonus is reduced by 1 point for every additional round the situation continues, as the vagaries of circumstance begin to unravel even the best-laid plan. Plan can be attempted once every 24 hours of game time.

Trick: The navigator has the ability to temporarily confuse a Gamemaster character through the use of ploy and deception. To make a trick, the navigator must use an attack action. The target of the trick gets to make a Reflex save (DC 15) to think quickly on his feet and see through the trick. If the save fails, the target becomes befuddled and can only take a single action in his next turn (either an attack action or a move action, but not a full-round action). The navigator can use this ability a number of times per day equal to his navigator levels divided by two, rounded down.

Secret: Knocking around the tracks, streets, and garages, the navigator stumbles upon all sorts of applicable knowledge. At 3rd, 6th, 9th, and 10th level, the navigator chooses one

secret from the following list. Note that the racer must choose a different secret each time.

Secret of brawling: The navigator gains a +1 bonus to melee attack rolls.
Secret of danger avoidance: The navigator gains a +1 bonus to Reflex saves.
Secret of ducking: The navigator gains a +1 dodge bonus to Defense.
Secret of inner strength: The navigator gains a +1 bonus to Will saves.
Secret of marksmanship: The navigator gains a +1 bonus to ranged attack rolls.
Secret of stamina: The navigator gains a +1 bonus to Fortitude saves.
Secret of survival: The navigator gains 3 hit points.

Breaker 1-9: "Breaker one-nine" allows a navigator to take an aid another action via a CB radio or other radio transceiver. As long as the navigator and the racer that the navigator aids are in radio communication, the navigator can use this ability. If the navigator has the Back Seat Driver feat, she can use it with this ability.

The Bodyguard

A character takes levels in this class if he wants to excel in combat.

Teams recruit bodyguards from ghetto revolutionaries, inner city kung fu academies, and the bare-knuckle boxing circuit. Some bodyguards are Viet Nam veterans, some are mercenaries, a few are terrorists trying to win some bread to pay for their revolutions, and others are organized crime soldiers.

Some bodyguards prefer to have everyone pay attention to the drivers and navigators. That lets them work in the shadows. Others resent the lack of attention. Just as drivers and navigators compete with each other to win races, bodyguards compete with each other to be the strongest, fastest, toughest, best shot, and so forth.

Hit Points
At first level, 10 + Con Modifier.
At each additional level, 1d10 + Con Modifier.

Table 1-4: The Bodyguard

Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special	Defense Bonus	Reputation Bonus
1st	+1	+2	+0	+0	Bonus feat	+2	+0
2nd	+2	+3	+0	+0	+1 hit point, Bonus feat	+3	+0
3rd	+3	+3	+1	+1	Extreme effort 1	+3	+1
4th	+4	+4	+1	+1	Bonus feat	+4	+1
5th	+5	+4	+1	+1	+1 hit point	+5	+1
6th	+6/+1	+5	+2	+2	Extreme effort 2, Bonus feat	+5	+2
7th	+7/+2	+5	+2	+2	+1 hit point	+6	+2
8th	+8/+3	+6	+2	+2	Bonus feat	+7	+2
9th	+9/+4	+6	+3	+3	Extreme effort 3	+7	+3
10th	+10/+5	+7	+3	+3	Bonus feat	+8	+3

Action Points

Bodyguards gain 1d4+2 action points per level.

Class Skills

Bluff (Cha), Climb (Str), Craft (Int), Demolitions (Int), Drive (Dex), Hide (Dex), Intimidate (Cha), Jump (Str), Knowledge (Int), Move Silently (Dex), Profession (Wis), Read/Write Language, Speak Language, Spot (Wis), Swim (Str), Treat Injury (Wis), Tumble (Dex).

Skill Points at 1st level: (5 + Int Modifier) × 4

Skill Points at each additional level: 5 + Int Modifier

Class Features

All of the following are class features of the bodyguard.

STARTING FEATS: The bodyguard begins play with the Simple Weapon Proficiency feat and the Weapon Group Proficiency (basic firearms) feat.

BONUS FEAT: The bodyguard gains bonus feats at 1st, 2nd, 4th, 6th, 8th, and 10th level. These bonus feats must be selected from the following list: any Weapon Proficiency feat, Ambidexterity, Burst Fire, Dodge (Mobility, Spring Attack, Whirlwind Attack), Expertise (Improved Disarm, Improved Trip), Far Shot (Dead Aim), Heroic Surge, Martial Arts (Advanced Martial Arts, Defensive, Improved Martial Arts), Point-Blank Shot (Double-Tap, Precise Shot, Skip Shot, Shot on the Run), Power Attack (Cleave, Great Cleave, Improved Bull Rush, Sunder), Quick Draw, Quick Reload, Strafe, Two Weapon Fighting (Greater Two-Weapon Fighting, Improved Two-Weapon Fighting), Vehicle Combat, Vehicle Gunnery, or Weapon Focus.

+1 HIT POINT: At 2nd, 5th, and 7th level, the bodyguard gains an additional Hit Point.

EXTREME EFFORT: The bodyguard can push himself to make an extreme effort a number of times per game session based on the racer's bodyguard level. The effort must relate to either an attack roll, or a Climb, Jump, or Tumble skill check. The effort provides a circumstance bonus based on the racer's bodyguard level. Making an extreme effort also hinders the bodyguard with a penalty Defense for one round, as determined by the racer's bodyguard level.

After making an extreme effort, the bodyguard becomes fatigued until the end of the current encounter.

Table 1-5: Extreme Effort

Bodyguard Level	Bonus	Defense Penalty	Uses
3-5	+3	-2	1/session
6-8	+4	-3	2/session
9-10	+5	-4	3/session

CHAPTER TWO
Skills

Staying alive while keeping the rubber-side down requires numerous skills. *Thunderball Rally* uses a variety of skills from the *Player's Handbook* as well as the new skills listed in this chapter. See page 31 for a full listing of skills used in the *Thunderball Rally* game.

Drive (Dex): Use this skill to operate tracked and wheeled ground vehicles, such as automobiles, semi-tractor trailer rigs, and Army tanks.

Check: Typical driving tasks don't require checks, but *Thunderball Rally* is about all those other driving tasks: Combat, chases, performing unusual maneuvers, or driving in extreme circumstances.

For detailed rules on using the Drive skill, see Chapter 5: Start Your Engines!

Special: When operating a vehicle, 5 or more ranks in Drive provide a +2 synergy bonus to attack rolls with the vehicle or vehicle weapons.

Demolitions (Int; Trained Only): Use this skill to create and set explosive devices (including a timer or detonator) for maximum impact.

Check: Setting a simple explosive to blow up at a certain spot doesn't require a check, but any attempt to build an explosive device or set an explosive to cause a specific damage effect does.

Set Explosive Device: Placing an explosive in the optimum location for

maximum blast efficiency takes skill and patience. Racers decide which type of explosive they wish to set, but the GM makes the check and compares it to the DC in Table 2-1, below (the GM makes the check so that you don't know exactly how well you've done). The DC indicates possible increases in base damage, as well as sets penalties to those caught in the blast radius. A failed check reduces the base damage by half, provides a +4 circumstance bonus to Reflex saves to avoid damage, and has a 15% chance of causing the device to explode prematurely.

Build Explosive Devices from Scratch: Creating a scratch-built explosive device requires the appropriate materials and time. In combat, the best that could be accomplished, regardless of the materials or skill check result, would be an improvised explosive device that's the equivalent of a Molotov cocktail (damage 1d6). In general, building explosive devices happens outside of combat or other dramatic situations.

When building explosive devices, the racer decides what kind of result he or she is after and tries to achieve the required DC. Adding a trap increases the complexity but doesn't affect the cost.

If the check fails, the device is ruined and the materials are wasted. There is also a 25% chance that the explosive detonates during construction on a failed check, dealing one-half of its intended damage.

Racers use the Disable Device skill to attempt to disarm a set explosive.

The DC is 10 for a simple explosive device, 15 for a moderate explosive device, 20 for a complex explosive device (and so on). If the builder was successful in adding a trap, increase the DC by +10, +15, or +20. Note that failing to disarm a trapped explosive device sets off the explosive.

Special: You can take 10 when using the Demolitions skill, but you can't take 20.

Setting an explosive device for maximum blast efficiency takes one minute or more, depending on the scope of the job. You can set a simple explosive device as a full-round action.

Building an explosive from scratch, which includes fashioning the raw materials and combining chemicals and combustibles inside a housing of some kind, requires a check that takes the following amount of time: improvised, full-round action; simple, one hour; moderate, 12 hours; complex, one day; powerful, three days; devastating, one week.

Knowledge (Int, Trained Only): This skill encompasses a number of unrelated skills. Knowledge represents a study of a body of academic or scientific discipline. Each skill point assigned to a Skill

Table 2-1: Set Explosive Device

Type	DC	Damage Increase	Penalty to Save
The Classic	10	None	0
Hot Potato	15	x2	-2
Wide Load	20	x3	-4
The $#!†	25	x4	-6

Table 2-2: Building Explosive Devices from Scratch

Type (and damage) of Scratch-Built Explosive	Blast Radius	DC	Cost
Improvised (1d6)	5 feet	5	10
Simple (2d6)	5 feet	10	100
Moderate (4d6+1)	10 feet	15	175
Complex (5d6+2)	15 feet	20	250
Powerful (6d6+4)	15 feet	25	500
Devastating (8d6+6)	20 feet	30	750

Add trap to disable attempts +5, +10, or +15 to DC

Drive and Aid Another
GMs should be very careful about when other racers can assist the driver. For instance, if a driver needs to make a Reflex save to avoid damage from a grenade, anyone who sees the grenade can instruct the driver which way to turn. Racers taking other actions or unable to see the grenade cannot assist.

Table 2-3: Skills

Thunderball Rally uses a mix of new skills as well as skills familiar to D&D players. Unless noted and described in this chapter, you can find descriptions of these skills in the *Player's Handbook*.

Skill	Ability	Untrnd?	Driver	Navigator	Bodyguard
Bluff	Cha	Yes	o	X	o
Climb	Str	Yes	X	X	o
Craft	Int	Yes	o	o	o
Demolitions	Int	No	X	X	o
Diplomacy	Cha	Yes	o	X	X
Disable Device	Int	No	X	o	X
Drive	Dex	Yes	o	o	o
Gather Information	Cha	Yes	o	X	X
Hide	Dex	Yes	X	X	o
Intimidate	Cha	Yes	o	X	o
Jump	Str	Yes	X	X	o
Knowledge	Int	No	o	o	o
Listen	Wis	Yes	o	o	X
Move Silently	Dex	Yes	X	X	o
Pick Pockets	Dex	No	o	o	X
Profession	Wis	No	o	o	o
Read/Write Language	None	No	o	o	o
Repair	Int	No	X	o	X
Search	Int	Yes	X	o	X
Sense Motive	Wis	Yes	X	o	X
Speak Language	None	No	o	o	o
Spot	Wis	Yes	o	o	o
Swim	Str	Yes	X	X	o
Treat Injury	Wis	No	X	o	o
Tumble	Dex	No	X	X	o

o: Class skill
X: Cross-class skill

points must be assigned to one of these specific areas of knowledge.

- Applied Sciences
- Art
- Behavioral Sciences
- Bureaucracy
- Business
- Current Events
- Earth Sciences
- History
- Law
- Life Sciences
- Physical Sciences
- Political Science
- Popular Culture
- Streetwise
- Tactics
- Technology
- Theology and Philosophy

Repair (Int, Trained Only): You can fix damaged machinery and electronic devices.

Check: Most repair checks are made to fix complex mechanical, electronic, or computerized devices, such as vehicles, computers, or weapons. The GM sets the DC, using the guidelines suggested below. There is also a monetary cost to making repairs, also shown on Table 2-3.

Simple repairs require no more than a few minutes.

Complex repairs can take multiple hours or more to complete. Working without the proper tools gives you a -5 penalty to the check.

You can make temporary (jury-rigged) repairs. This reduces the DC by 5 and allows you to make the check as a full-round action. However, a jury-rigged repair can only fix a single problem with a check, and the temporary repair only lasts until the end of the current encounter and then the item needs to be completely repaired. The jury-rig function of this skill can be used untrained.

Retry: You can try again, but only if you are aware that the repairs didn't work. The GM may decide that a failed Repair check has negative ramifications that prevent repeated checks.

Treat Injury (Wis, Trained Only): Use this skill to help characters that have been hurt by damage, poison, or disease.

THUNDERBALL Rally

Table 2-4: Jump, Tumble, and Moving Vehicles

If a character falls from a moving vehicle, he takes damage based on the vehicle's speed category. For definitions of speed categories, see Chapter 5: Start Your Engines.

Vehicle Speed	Damage
Stationary	1d6 per 10 feet fallen
Alley	1d8 per 10 feet fallen
Cruising	1d10 per 10 feet fallen
Attack	1d12 per 10 feet fallen
Ramming	1d20 per 10 feet fallen

A character can use Jump (DC 15) to reduce the damage if purposefully jumping from a moving vehicle and can use Tumble (DC 15) to reduce the damage if falling. Success means the character takes one fewer die of damage.

Table 2-5: Repair

Task	DC	Cost
Simple (*tools, simple weapon*)	10	1/5th price
Moderate (*high-tech weapon, electronic component*)	15	1/5th price
Complex (*vehicle component, computer*)	20	1/5th price
Very Complex (*airplane component*)	25	1/10th price

Check: The DC and effect depend on the task you attempt:

Task	DC
Long-term care	15
Treat disease	See below
Treat poison	See below
Use first aid kit	15

Long-term care: Some injuries require treatment that stretches over a number of days. The successful application of this skill allows a patient to recover hit points and ability points (lost to temporary damage) at twice the normal rate: 2 hit points per level for each day of light activity, 3 hit points per level for each day of complete rest, and 2 ability points restored per day. A new check is made each day; on a failed check, the recover rate occurs at the normal rate for that day of rest and care.

You can tend up to as many patients as you have ranks in the skill. You need medical supplies and the patients need to spend all of their time resting. You need to devote at least an hour of the day to each patient for whom you are caring.

You can't provide long-term care to yourself.

Treat Disease: You can tend to a diseased character. Every time the diseased character makes a saving throw against disease effects (after the initial contamination), you make a Treat Injury check to help the character fend off secondary damage. The diseased character uses your result instead of his own saving throw if your result is higher.

Treat Poison: You can tend to a poisoned character. Every time the poisoned character makes a saving throw against poison effects (after the initial introduction of the poison to his or her system), you make a Treat Injury check to help the character avoid secondary damage. The poisoned character uses your result instead of his own saving throw if your result is higher.

Use First Aid Kit: With a first aid kit and a little skill you can keep a badly wounded character from dying or restore hit points. This check is an attack action.

If a character has negative hit points and is losing more (at 1 per round, 1 per hour, or 1 per day), you can stabilize the character. The character regains no hit points but he or she does stop losing them. A character can be stabilized as often as necessary.
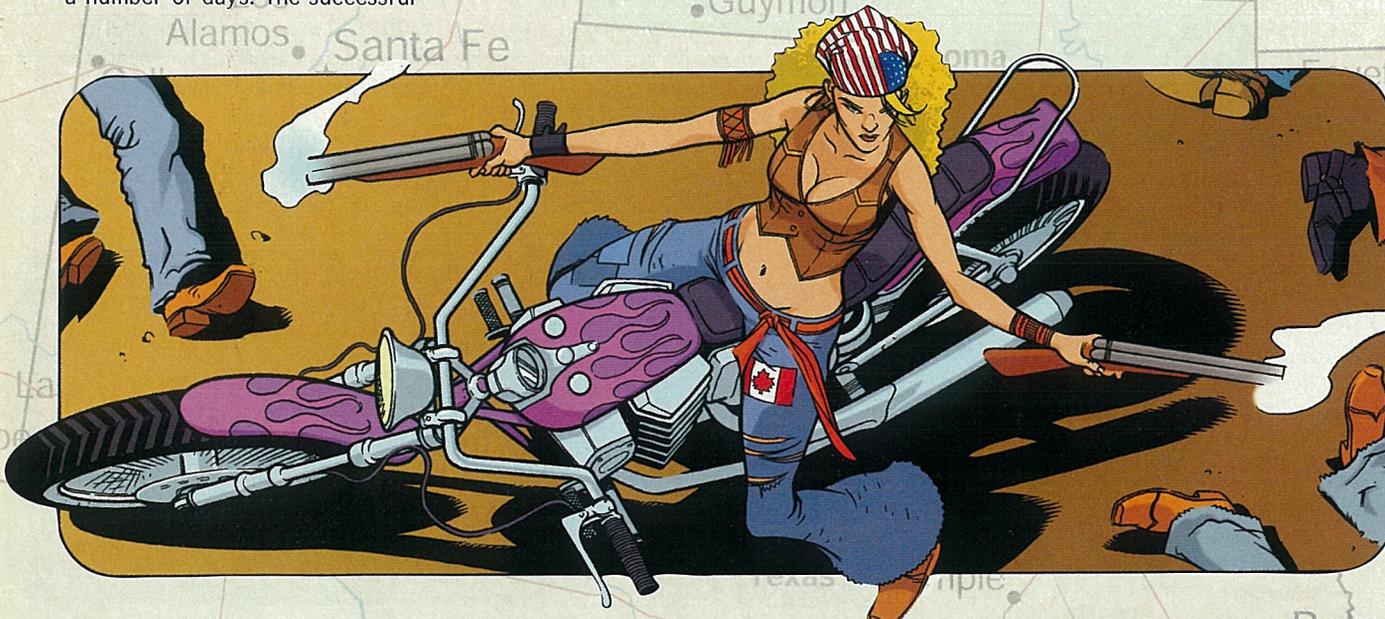
Thunderball Rally uses a mix of new feats as well as feats familiar to D&D players. Unless noted and described below, you can find descriptions of these feats in the *Player's Handbook*. Be careful how many additional feats you make available from other sources. Racers only have so many opportunities to gain new feats!

Some feats are marked A or B on Table 3-1: Feats. Aces and bodyguards gain bonus feats at various levels. An "A" indicates the feat is on the list of ace bonus feats. A "B" indicates the feat is on the list of bodyguard bonus feats.

Advanced Firearms Proficiency

You understand how to use military-style firearms and modes of fire.

Prerequisite: Weapons Group Proficiency (basic firearms).

Benefit: You can fire any personal firearm on any setting without penalty.

Normal: A character using autofire without being proficient with it suffers a -4 penalty to attack rolls.

Archaic Weapon Proficiency

Choose a type of archaic weapon, such as a sword. You understand how to use that type of weapon in combat.

Use this feat to expand the list of weapons you are proficient with beyond the basic lists included with your class description.

Benefit: You make attack rolls with the weapon normally.

Normal: A character that uses a weapon without being proficient with it suffers a -4 penalty on attack rolls.

Special: You can gain this feat multiple times. Each time you take the feat, it applies to a new weapon.

Back Seat Driver

You know how to give brief, helpful suggestions to the driver of a vehicle.

Benefit: You can spend an action point to assist a driver's Drive check or saving throw as long as you are in the same vehicle as that driver.

Normal: You can only spend action points on another racer's check if you make an aid another action.

Burst Fire

When using a weapon with an automatic setting, you can fire a short burst at an individual target.

Prerequisites: Advanced Firearms Proficiency, Wis 13.

Benefits: When using an automatic firearm with at least 5 rounds of ammunition loaded, you may fire a short burst as a single attack against a single target. The attack is -4 to hit, but deals +2 dice of damage (a weapon that deals 3d6 damage, for example, deals 5d6 instead). Firing a burst shoots 5 bullets, and can only be done if the weapon has 5 or more bullets in it.

Normal: Autofire normally targets a 10-foot by 10-foot area, and cannot be aimed at a specific target. See Autofire on page 40.

Cautious

You are especially careful with tasks that may yield catastrophic results.

Benefit: You get a +2 synergy bonus on all Demolitions checks and Disable Device checks.

Circuit Heel

Your antics and machinations on the tracks and roadways make you a hated enemy of most ethical racers. You've been the butt of more than one bumper sticker joke, but at least the insignificant losers fear you.

Benefit: You get a +3 circumstance bonus to all Charisma-based skill checks whenever the GM determines that your notoriety would be a benefit. However, such checks suffer a -3 penalty when the GM determines that your infamy would work against you.

Special: You can't select both Circuit Heel and Circuit Hero.

Circuit Hero

Your racing prowess has made you a minor celebrity. Most racers idolize you, and a line of personalized die-cast metal toy cars might soon be on the way.

Benefit: You get a +3 circumstance bonus to all Charisma-based skill checks whenever the GM determines that your celebrity status would be a benefit. However, such checks suffer a -3 penalty when the GM determines that your fame would work against you.

Special: You can't select both Circuit Hero and Circuit Heel.

Clipping

You are skilled at using your vehicle as a weapon.

Prerequisites: Drive skill, Vehicle Combat, Drive-By.

Benefit: When performing a side-swipe action, the target takes half the damage from a ram attack, while the

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Weapon Definitions

Personal Firearm: Any firearm designed to be carried and used by a single person. This eliminates, for example, rocket launchers (which aren't firearms) and heavy machineguns (which can be fired by one person, but not carried by one person). It includes most of what we think of as "guns."

Handgun: A personal firearm that can be used in one hand without penalty. This includes all pistols and some submachine guns and shotguns.

Longarm: A personal firearm that requires two hands to use without penalty. This includes some submachine guns and shotguns, as well as all rifles and machineguns.

Semi-automatic: Any weapon that does not require cocking between shots. This includes most personal firearms, but not pump-action, level-action, or bolt-action weapons.

Automatic: Any weapon capable of firing on automatic.

Table 3-1: Feats

Feat	Prerequisite
Alertness	—
Ambidexterity	—
Archaic Weapon Proficiency* (B)	—
Back Seat Driver	—
Cautious	—
Circuit Heel (A)	—
Circuit Hero (A)	—
Daredevil (A)	Drive 8 ranks
Dirt Track Demon (A)	Drive 5 ranks
Dodge (B)	Dex 13
Mobility (B)	Dodge
Spring Attack (B)	Mobility, +4 base attack
Exotic Weapon Proficiency* (B)	—
Expertise (B)	Int 13
Improved Disarm (B)	Expertise
Improved Trip (B)	Expertise
Whirlwind Attack (B)	Expertise, Spring Attack
Extra Action Points**	Cha 13
Far Shot (B)	—
Dead Aim (B)	Far Shot, Wis 13
Frightful Presence (A)	Cha 15, Intimidate 9 ranks
Gearhead	—
Heroic Surge	—
Improved Initiative	—
Influence (A)	—
Martial Arts (B)	—
Defensive (B)	Martial Arts
Improved Martial Arts (B)	Martial Arts
Advanced Martial Arts (B)	Improved Martial Arts
Persuasive (A)	—
Point Blank Shot (B)	—
Double-Tap (B)	Point Blank Shot, Dex 13
Precise Shot (B)	Point Blank Shot
Skip Shot (B)	Precise Shot
Shot on the Run (B)	Point Blank Shot, Mobility
Power Attack (B)	Str 13
Cleave (B)	Power Attack
Improved Bull Rush (B)	Power Attack
Sunder (B)	Power Attack
Great Cleave (B)	Cleave, base attack +4

Feat	Prerequisite
Quick Draw (B)	Base attack bonus +1
Quick Reload (B)	Base attack +1
Simple Weapon Proficiency (B)	—
Skill Emphasis*	—
Stealthy	—
Two-Weapon Fighting (B)	—
Impr. Two-Weapon Fighting (B)	Two-Weapon Fighting, base attack +6, Ambidexterity.
Greater Two-Weapon Fighting (B)	Improved Two-Weapon Fighting, base attack +11.
Vehicle Combat (A, B)	Drive skill
Vehicle Gunnery (A, B)	Vehicle Combat, appropriate weapon proficiency, Drive skill
Grease the Axles (A)	Vehicle Combat, Drive skill
Drive-By (A)	Vehicle Combat, Drive skill
Clipping (A)	Vehicle Combat, Drive-By, Drive skill
Weapon Focus* (B)	Proficient with weapon, base attack bonus +1
Weapons Group Proficiency (basic firearms) (B)	—
Adv. Firearms Proficiency (B)	Weapons Group Proficiency (basic firearms)
Burst Fire (B)	Advanced Firearms Proficiency, Wis 13
Exotic Firearms Group Proficiency (B)	Advanced Firearms Proficiency
Strafe (B)	Advanced Firearms Proficiency
Window Dive (A)	Dexterity 13, Drive 5 ranks

*You can gain this feat multiple times. Its effects do not stack. Each time you take the feat, it applies to a new weapon or skill.

**You can gain this feat multiple times. Its effects stack.

sideswiping vehicle still only takes one-quarter that damage.

Normal: A sideswipe does one-quarter damage to both the sideswiping vehicle and the target.

Daredevil

You are a trained stunt driver.

Prerequisites: 8 ranks in Drive.

Benefit: You may perform one additional stunt per round.

Dead Aim

You are capable of lining up precise and deadly shots with a firearm.

Prerequisites: Far Shot, Wis 13.

Benefit: Before shooting, you may take a full-round action to line up your shot. Doing so gives you a +2 circumstance bonus to your attack. Once you begin aiming, you cannot move (even to take a 5-foot step) until after you fire, or the benefit of aiming is lost. Likewise, if you are jostled or attacked, you loose the benefit of aiming (you cannot make a Concentration check to continue aiming).

Special: If you have a special ability that allows you to deal sneak attack damage, you can deal that damage with a ranged attack, even if you are out of the normal range for sneak attack damage, if you take the full-round action to aim.

Dirt Track Demon

You are accustomed to driving off-road.

Prerequisites: 5 ranks in Drive.

Benefit: You gain a +2 competence bonus to Drive and attack rolls when operating a vehicle off-road. You treat very poor terrain as poor, poor terrain as difficult, and difficult terrain as normal (see Table 5-6: Conditional Modifiers to Vehicle Movement and

Drive Checks) for both movement multipliers and Drive check penalties.

Double-Tap

You can fire two quick shots as a single attack.

Prerequisite: Point Blank Shot, Dex 13.

Benefit: When using a semi-automatic firearm with at least 2 rounds of ammunition loaded, you may fire two rounds with a single attack against a single target. You suffer a -2 penalty to your attack, but you deal +1 die of damage (a weapon that deals 3d6 damage, for example, deals 4d6 instead). Other feats and situational modifiers may modify the attack roll. Double-tapping shoots 2 bullets, and can only be done if the weapon has 2 or more bullets in it.

Drive-By

You are skilled at fast attacks from a moving vehicle.

Prerequisite: 1 rank in Drive, Vehicle Combat.

Benefit: When you are in a vehicle, you can move both before and after an attack action, provided that your total distance moved is not greater than your vehicle's speed. Moving in this way does not provoke an attack of opportunity from the defender you attack. You can't take more than a double move and use this feat.

Exotic Firearms Group Proficiency

Choose a group of weapons from the following list: heavy machineguns, flamethrowers, grenade launchers, or rocket launchers. You understand how to use all weapons of that group in combat.

Prerequisites: Advanced Firearms Proficiency.

Benefit: You make attack rolls with the weapon normally.

Normal: A character that uses a weapon without being proficient with it suffers a -4 penalty on attack rolls.

Special: You can gain this feat multiple times. Each time you take the feat, it applies to a different weapon group.

Extra Action Points

You have a knack for getting out of difficult situations.

Benefit: You get 1d4+1 action points.

Fan Shot

You can get greater distance out of a ranged weapon.

Benefit: When you use a firearm or projectile weapon (such as a crossbow), its range increment increases by one-half (multiply by 1.5). When you use a thrown weapon (such as a grenade), its range increment is doubled.

Frightful Presence

Your mere presence can terrify those around you.

Benefit: Once per round you can, as a free action, use your Frightful Presence. All opponents within 30 feet who have fewer levels than you must make a Will saving throw (DC 10 plus your level and Charisma modifier). An opponent who fails the save is shaken, suffering a -2 penalty to attack rolls, saves, and skill checks for a number of rounds equal to 1d6 plus your Charisma modifier rounds.

Gearhead

You have a way with machines.

Benefit: You get a +2 synergy bonus on all Repair checks and Disable Device checks.

Grease the Axles

You are trained in using your vehicle against pedestrians.

Prerequisites: Drive skill, Vehicle Combat

Benefit: When you attempt to ram with your vehicle, you do not suffer the normal -2 penalty to Defense.

Greater Two-Weapon Fighting

You are a master at fighting with a weapon in each hand.

Prerequisites: Ambidexterity, Two-Weapon Fighting, Improved Two-Weapon Fighting, base attack +11.

Benefit: You get a third attack with your off-hand weapon, albeit at an additional -10 penalty.

Heroic Surge

You can perform additional actions in a round.

Benefit: You may take an action in a round, either before or after your regular actions. You can use Heroic Surge a number of times per day, depending on your level, but never more than

once per round. 1st-4th level: 1/day; 5th-8th level: 2/day; 9th-12th level: 3/day; 13th-16th level: 4/day; 17th-20th level: 5/day.

Improved Two-Weapon Fighting

This functions like the Improved Two-Weapon Fighting feat in the *Player's Handbook*, save that it also includes fighting with a firearm in each hand, or with a firearm in one hand and a melee weapon in the other.

Influence

Because you are so good at manipulating the feelings and expectations of others, you find it easier to persuade people.

Benefits: You get a +3 circumstance bonus to your Reputation checks (see Chapter 6).

Point Blank Shot

You are skilled at making well-placed shots with ranged weapons at close range.

Benefit: You get a +1 bonus on attack and damage rolls with ranged weapons against opponents up to 10 meters from your position.

Precise Shot

You are skilled at timing and aiming ranged attacks.

Prerequisite: Point Blank Shot.

Benefit: You can shoot or throw ranged weapons at an opponent engaged in melee without suffering the standard -4 penalty (see Shooting or Throwing into a Melee in Chapter 8: Combat of the *Player's Handbook*).

Quick Reload

You can reload a firearm with startling speed.

Prerequisite: Base attack bonus +1.

Benefit: Reloading a weapon with an already filled box magazine or speed loader is a free action. Reloading a weapon with an internal magazine is a move action.

Normal: Reloading a weapon with an already filled box magazine or speed loader is a move action. Reloading a weapon with an internal magazine is a full-round action.

Shot on the Run

You are highly trained in skirmish ranged weapon tactics.

Prerequisites: Point Blank Shot, Dex 13, Dodge, Mobility.

Benefit: When using the attack action with a ranged weapon, you can move both before and after the attack, provided that your total distance is not greater than your speed.

Skip Shot

You can shoot a firearm to ricochet a shot around cover.

Prerequisites: Point Blank Shot, Precise Shot.

Benefit: If you have a solid, relatively smooth surface on which to skip a bullet (such as a street or concrete wall), and a target within 10 feet of that surface, you may ignore cover between you and the target. However, you suffer a -2 penalty to your attack, and your attack deals -1 die of damage (a weapon that deals 3d6 damage, for example, deals 2d6 instead).

Special: The surface does not have to be perfectly smooth and level—a brick wall or an asphalt road can be used. The target must be at least partially visible. For example, it is possible to hit a target hiding behind a car by skipping a shot underneath it, but you cannot hit someone around a corner if you cannot see any part of him or her.

Stealthy

You are particularly good at avoiding notice.

Benefit: You get a +2 synergy bonus on all Hide checks and Move Silently checks.

Strafe

You can use an automatic weapon to affect a wider area than normal.

Prerequisite: Advanced Firearms Proficiency.

Benefit: When using a firearm on an automatic setting, you can affect a 5-foot by 20-foot area perpendicular to your line of sight.

Normal: When normally firing a weapon on automatic, you affect a 10-foot by 10-foot area.

Two-Weapon Fighting

This functions exactly like the Two-Weapon Fighting feat in the *Player's Handbook*, save that it also includes fighting with a firearm in each hand, or with a firearm in one hand and a melee weapon in the other.

Vehicle Combat

You are skilled in fighting with your vehicle.

Prerequisite: 1 rank Drive.

Benefit: Once per round, when your vehicle is hit in combat, you may make a Drive check to negate the hit. The hit is negated if your Drive check is greater than the attack roll (essentially the Drive check becomes the vehicle's defense if it's higher than the vehicle's regular defense).

Vehicle Gunnery

You are skilled at using ranged weapons from a vehicle.

Prerequisite: Drive skill, appropriate weapon proficiency, Vehicle Combat.

Benefit: When in a vehicle and using a ranged weapon with which you are proficient, the penalty you suffer when using a ranged weapon from a vehicle is eliminated.

Weapons Group Proficiency (Basic Firearms)

You understand how to use basic firearms.

Benefit: You can fire any personal firearm that has a single shot setting in single shot mode without penalty. You are not proficient in autofire.

Normal: A character using a firearm without being proficient with it suffers a -4 penalty to attacks.

Window Dive

You are accustomed to entering cars through the window, rather than by opening the door.

Prerequisite: Dexterity 13, 5 ranks in Drive.

Benefit: You can start any vehicle as part of a move action, provided you end that movement in the car.

Normal: You can start most vehicles with a move action and a standard action.

Weapons and Combat

I n addition to the archaic and simple weapons listed in the *Player's Handbook*, (note that weapons classified as martial become archaic in *Thunderball Rally*), the modern-day weapons on chart 4-1 are available in the game.

Combat and Game Play

If you know how to play D&D, you know how to play *Thunderball Rally*. There are a few differences to account for the contemporary setting. These are detailed below.

Attacks of Opportunity

A character with a modern ranged weapon in hand threatens an area that extends 10 feet within his field of vision. An enemy that takes certain actions while in your threatened area provokes an attack of opportunity with your ranged weapon. Unless you have the Combat Reflexes feat, you can only make one attack of opportunity in a round whether with a melee weapon or ranged weapon.

Action Types

The following types of actions define the time frame for how long certain activities take to complete. A round consists of an attack action and a move action, or two move actions, or a full-round action, as described below.

Reactions

Some skill checks are instant. They are reactions to an event, such as making a Ride check to stay on a horse when the horse rears unexpectedly. Some are tests of what a character notices or recognizes, such as a Listen check to notice a thug sneaking up behind you. You can only make as many of these checks in a round as the situation calls for. In game terms, they take no time and are not considered actions.

Attack Action

An attack action allows you to make an attack, use a skill or feat (unless the skill or feat requires a full-round action to perform; see below), or perform

other similar actions. During a combat round, you can perform an attack action and move up to your speed. You can move before or after performing an attack action.

Move Action

A move action allows you to move your speed in a round or perform a similar action (a driver uses his move action to move the vehicle). You can move your speed, climb, draw a weapon, reload a weapon, pick up an item, make a Drive skill check to make a maneuver, or move a heavy object as a move action.

In a combat round, you can perform an attack action and move your speed, or you can move first and then perform an attack action. You can also perform two move actions in a round instead, using your second move in place of your attack action.

If the action you take during a round results in your moving no actual distance, you can take a 5-foot step.

Full-Round Action

A full-round action consumes all your effort during a round. The only movement you can take when performing a full-round action is a 5-foot step before, during, or after the action. Attacking more than once (if you are permitted to do so) or using a skill or feat that requires a full round to accomplish, such as using Search to examine a 5-foot-by-5-foot area, requires the use of a full-round action.

Free Action

Free actins consume a very small amount of time and effort, and over the span of a round their impact is so minor that they are considered to be free. You can perform one or more free actions while taking another action normally. However, the GM puts reasonable limits on what you can really do for free in the span of 6 seconds. Talking is generally considered a free action, but the GM may wish to limit the amount of chatter that might reasonably be exchanged in a single round.

Longer Than a Round

Some applications of skills take longer than a round to perform. The GM or the skill description sets the time frame for some types of actions.

Firearms Combat

Chapter 3 contains a breakdown of different weapon types as well as several feats which allow racers to make the most of their weapons. The following rules apply to shooters who do not possess these feats.

The basic rules for firearms allow them to be used in two ways: single shot and autofire. Other modes of attack require specialized feats.

Single-Shot Firearms

Most firearms have a single-shot setting, which allows the firer to shoot a single bullet at a single target by pulling the trigger once.

The feat Weapons Group Proficiency (basic firearms) allows you to make this sort of attack without the usual -4 nonproficient penalty.

Autofire

If a weapon has an automatic setting, you may fire it on automatic. You target a 10-foot by 10-foot area and make an attack roll against defense 10. Every creature within the affected area must make a Reflex save (DC 10 plus the amount by which the attack was made; effectively, the DC is equal to the attack result) or take the weapon's damage. Autofire shoots 10 bullets, and can only be done if the weapon has 10 bullets in it.

The feat Advanced Firearms Proficiency (basic firearms) allows you to make this sort of attack without the usual -4 nonproficient penalty.

Reloading

Reloading a weapon with an already-filled box magazine or speed loader is a move action. Refilling a box magazine or a speed loader, or reloading a revolver or any weapon with an internal magazine, is a full-round action.

Table 4-1: Firearms

Name	Caliber	Magazine	Acc. Bonus	Range	Dam.	Crit.	ROF	Size	Weight	Cost
Handguns										
Zip Gun	.22	1I	+0	10 ft.	2d4	20	1	T	18.5 oz.	$576
Pistol	.45	7+1B	+0	20 ft.	2d6	20	1	T	39 oz.	$747
Sub-Machine Guns										
Tommy Gun	.45	30	+1	20 ft.	2d6	20	A	M	10 lb. 12 oz.	$800
Rifles & Shotguns										
Assault Rifle	5.56mm	30B	+0	90 ft.	2d8	19-20	1, A	L	12 lb. 12 oz.	$1200
Hunting Rifle	.444	6I	+0	90 ft.	2d10	20	1	M	6.5 lb.	$465
Sawed-Off	12 ga.	2I	+1	10 ft.	2d8	19-20	1	S	4 lb.	$1000
Pump	12 ga.	6I	+1	30 ft.	2d8	20	1	M	6 lb., 6 oz.	$1000

Caliber: This is the diameter of the bullet fired in either millimeters or hundredths of an inch. Shotguns use a different system, where the smaller the gauge the larger the barrel's diameter.

Acc. Bonus: Some weapons grant a +1 accuracy bonus to attack rolls made by proficient users.

Magazine: This lists the number of bullets carried in the weapon. When listed as #+1, this indicates that the magazine carries the listed number of cartridges and the weapon can carry another cartridge in the chamber.

B: A box magazine, sometimes called a "clip," is a container for firearm cartridges with a spring in the bottom to push the cartridges up into the weapon. You can remove it from the weapon as a move-equivalent action, and replace with another, fully-loaded one.

I: An internal magazine must be reloaded one cartridge at a time.

Range: Any attack of less than this distance is not penalized for range, so a pistol can fire at enemies up to 19 feet away with no penalty. However, each full range increment causes a cumulative -2 penalty to the attack roll. Firing at a target 75 feet away suffers a -6 attack penalty (because 75 feet is at least three range increments but not four increments). Firearms may, at the GM's discretion, have a maximum range of ten increments.

Dam: The Damage column gives the damage you deal with a weapon when you score a hit.

Crit.: The entry in this column notes a weapon's critical threat range.

ROF: This column indicates rate of fire for the weapon. 1 indicates the weapon fires single shots. A indicates the weapon fires on full automatic. If more than one entry appears the player may choose which rate of fire his character uses on his action.

Size: This column indicates the weapon's size—T is Tiny, S is Small, M is Medium-sized, and L is Large.

Weight: This column gives the weapon's weight.

Cost: This column gives the weapon's cost in US dollars.

Firing into Melee and Grapples

Firing into melee imposes a -4 penalty on the shooter. This is true even if the shooter is involved in the melee himself, and even if the target is the only other combatant in the melee. In other words, firing at an opponent who is within 5 feet of you imposes a -4 penalty to your attack.

Firing at a grappled opponent is different. A shot fired into a grapple actually attacks a random grappler. In other words, if you fire at a target that is grappled with one other combatant, you actually have a 50% chance of shooting the other guy! Furthermore, this rule applies even if you are one of the grapplers. If you fire a gun at an opponent with whom you're grappling, you are just as likely to accidentally shoot at yourself.

Once you've made your attack roll, roll randomly to determine which combatant is targeted. You cannot change your mind and choose not to fire based on the result; you must fire at the combatant that is targeted, even if it's you. Remember that a grappling target does not get to include his Dex modifier in his Defense.

Attacks of Opportunity and Firearms

In most ways, firearms are like other forms of ranged weapons. But handguns in particular are in some manners more comparable to melee weapons in terms of how they draw attacks of opportunity.

Longarms are just like other ranged weapons: They draw attacks of opportunity when fired.

Handguns are a little different. A handgun does not draw an attack of opportunity from the opponent at which it is fired, but does draw attacks of opportunity from all other opponents.

Concealing Weapons

Few racers can carry their weapons openly almost everywhere they go. An obvious weapon is rarely appropriate—and even when it is, a racer might want to conceal a backup weapon to supplement the M-16 slung over her shoulder.

It's assumed that, when attempting to conceal a weapon, the character wears appropriate clothing—something moderately loose and bulky. Tighter or skimpier clothes make concealment harder, while larger clothes, like cloaks or long coats, make it easier.

Drawing a concealed weapon is harder than drawing a regularly holstered weapon, and normally requires an attack action. Keeping the weapon in an easier-to-draw position makes concealing it a bit harder.

To conceal a weapon, make a Pick Pockets check. A character concealing a weapon before she heads out into public should usually take 10, unless

she's rushed, trying to conceal it when others might see her, or under other unusual constraints. Characters untrained in Pick Pockets cannot roll to conceal a weapon. If you have no ranks in Pick Pockets, your result is automatically a 10.

The weapon's size imposes a penalty to the total, as shown on the table below. The type of clothing worn, and any attempt to make the weapon easier to draw, can also affect the roll.

Condition	Concealment Modifier
Weapon is Tiny	+4
Weapon is Small	no penalty
Weapon is Medium	-4
Weapon is Large	-8
Clothing is tight or small	-4
Clothing is especially loose or bulky	+2
Clothing is specifically modified for concealing weapon	+6
Weapon can be drawn normally	-2
Weapon can be drawn as free action with Quickdraw feat	-4

Noticing a concealed weapon requires a Spot check. The DC varies: If the target made a roll, the Spot check is simply opposed by her result. If she took 10, use this formula:

Spot DC = Pick Pockets skill modifier - concealment modifier + 10

Patting someone down for a hidden weapon is a similar check. However, the skill employed is Search, and the searcher gets a +4 circumstance bonus for the hands-on act of patting the target down.

The size modifiers on the table above only apply to weapons. Weapon size designations are not completely compatible with size designations for other objects. (A chair, for example, is a Small object, even though it is much bigger than many Large weapons.) When using these rules to conceal objects other than weapons, pick a modifier based on a comparably sized weapon, not on the object size.

Firearm Descriptions

Assault Rifle: Typical of the assault rifles used by militaries around the world.

Pistol: The classic heavy-caliber semi-automatic pistol.

Pump: The pump-action shotgun fires 12 gauge, 3-inch shells.

Sawed-Off: A 12-gauge, double-barreled shotgun with the stock and barrels sawed short. All that's left of the stock is a pistol grip, and the barrels are roughly 12 inches long. This is a homemade conversion of a sporting shotgun (price reflects the purchase of a full-sized, unmodified weapon). Possession of a sawed-off shotgun is generally against the law.

Tommy Gun: A typical submachine gun. It fires the same cartridges used by the pistol.

Zip Gun: A homemade, .22 pistol manufactured using a piece of metal tubing, a nail for a firing pin, and surgical rubber tubing to drive the nail into the cartridge.

Grenades and Grenade-like Weapons

A grenade-like weapon is one that "splashes." It has a broad enough effect that it can hurt characters just by landing close to them.

Grenade Types

Acid: You can throw a flask of acid as a grenade-like weapon. A flask is made of ceramic, metal, or glass (depending on the substance it has to hold), with a tight stopper, and holds about 1 pint of liquid. This entry represents any caustic substance. Acid may be purchased in many places, including hardware stores.

Dynamite: Perhaps one of the most common and straightforward explosives, dynamite is very stable under normal conditions. A stick of dynamite requires a fuse or detonator to explode. Extra sticks detonated together increase the damage by +1d6 and the radius by a foot. Dynamite does require a license to purchase, but is available outside the military and police.

Fragmentation Grenade: The most common military grenade, this is a small explosive device that sprays shrapnel in all directions when it explodes. Fragmentation grenades are unavailable outside the military or organized crime.

Table 4-2: Melee Weapons

Weapon	Cost	Damage	Critical	Range Increment	Weight	Type	Size	Proficiency Type
Brass Knuckles	$30	+1d4	20	—	1 kg	B	Tiny	Simple
Tire iron	$20	1d6	20	10 ft.	1 kg	B	Medium	Simple
Hatchet	$15	1d6	20	10 ft.	2 kg	S	Small	Martial
Knife	$50	1d4	19-20	10 ft.	.5 kg	P	Tiny	Simple
Heavy Cleaver	$30	1d6	20	—	1 kg	S	Small	Simple
Machete	$30	1d6	19-20	—	1 kg	S	Medium	Simple
Wrecking Bar	$25	1d6/1d6	20	—	7 kg	B	Large	Martial
Nunchaku	$10	1d6	20	—	1 kg	B	Small	Exotic
Chain*®	$30	1d6/1d6	20	—	2 kg	B	Large	Exotic

* See the description of this weapon for special rules
® Double Weapon
Range Increment: Thrown weapons have a maximum range of up to five range increments.

Table 4-3: Grenades and Grenade-like Weapons

Weapon*	Damage Direct Hit	Damage Splash**	Range Increment	Radius	Weight	Cost
Acid	1d6	1	10 ft.	5 ft.	1 lb.	$10
Dynamite (1 stick)	4d6	NA	10 ft.	10 ft.	1 lb.	$5
Fragmentation Grenades	3d6	NA	10 ft.	20 ft.	1 lb.	$75
Molotov Cocktail	1d6	1	10 ft.	10 ft.	1 lb.	$0
Smoke Grenades	NA	NA	10 ft.	40 ft.	2 lb.	$20
White Phosphorous Grenades	3d6	NA	10 ft.	20 ft.	2 lb.	$75

*Grenades and grenade-like weapons require no proficiency to use. See text for full details on using these weapons.

**Grenade-like weapons deal splash damage to all creatures within 5 feet of where they land.

Range Increment: Thrown weapons have a maximum range of up to five range increments.

Molotov Cocktail: A Molotov cocktail is an incendiary device made by pouring pure alcohol, very high proof liquor, or gasoline into a bottle, inserting a rag, and lighting the rag on fire. A simple Intelligence check (DC 5, and characters with ranks in Repair or Demolitions may use those skill bonuses instead) is all that's necessary to make one. The homemade device ignites in 2 rounds, or on impact, whichever comes first. On the round following a direct hit, the target takes an additional 1d6 points of fire damage. The target can take a full-round action to attempt to extinguish the flames before taking this additional damage. It takes a successful Reflex saving throw (DC 15) to extinguish the flames. Rolling on the ground allows the character a +2 bonus. Leaping into a lake or dousing the burning character with a fire extinguisher automatically smothers the flames.

Smoke Grenade: These create temporary concealment. The cloud obscures all sight beyond 5 feet. A racer or vehicle within 5 feet has one-half concealment (attacks suffer a 20% miss chance). Racers and vehicles farther away have total concealment (50% miss chance, and the attacker can't use sight to locate the target). A moderate wind (11+ mph) disperses the smoke in 4 rounds; a strong wind (21+ mph) disperses the smoke in 1 round. Smoke grenades are available in several colors, including white, red, yellow, green, and purple. Smoke grenades can occasionally be purchased in military surplus stores.

White Phosphorous Grenades: White phosphorous grenades use an explosive charge to distribute white phosphorous over the radius of effect. White phosphorous burns on contact with oxygen. On the round following a damage from a WP grenade, all damaged characters take an additional 1d6 points of fire damage. Only full submersion in water or mud stops the damage. Medical treatment is required to remove the particles of phosphorous.

In addition, WP grenades create clouds of smoke. The cloud obscures all sight beyond 5 feet. A racer or vehicle within 5 feet has one-half concealment (attacks suffer a 20% miss chance). Racers and vehicles farther away have total concealment (50% miss chance, and the attacker can't use sight to locate the target). A moderate wind (11+ mph) disperses the smoke in 4 rounds; a strong wind (21+ mph) disperses the smoke in 1 round.

WP grenades are available only through the military and organized criminal groups.
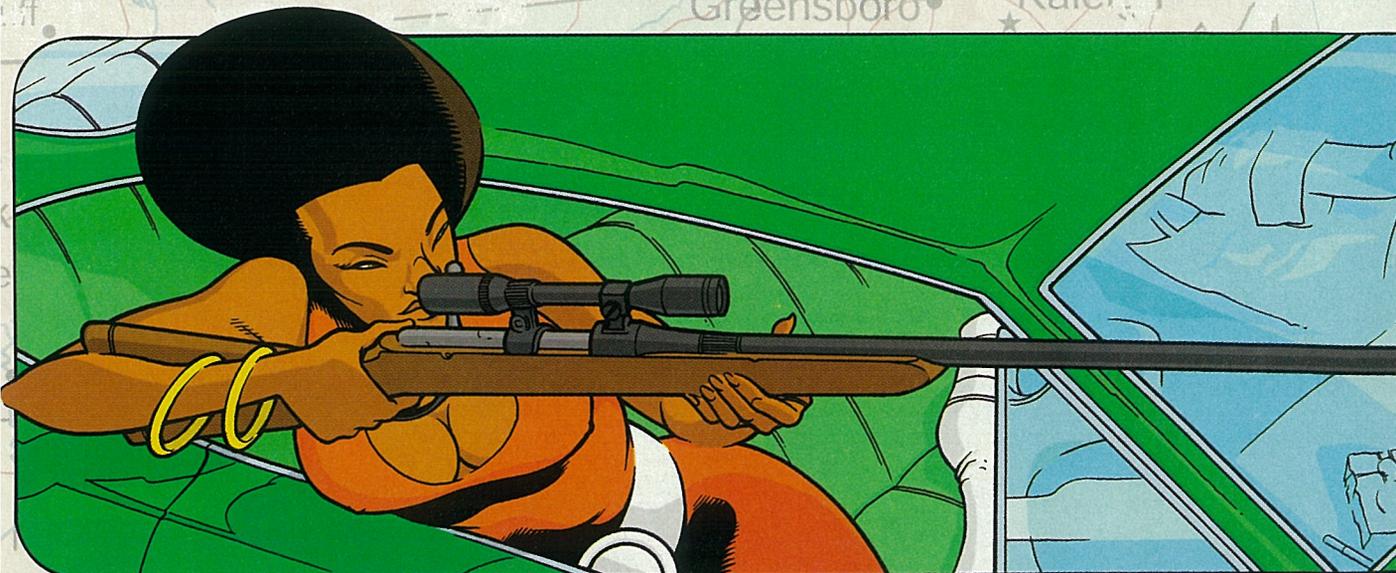
Start Your Engines!

In 1974, the United States government committed the greatest crime against its citizens that you can imagine: It established a national speed limit of 55 miles per hour on U.S. highways. Last year, automobile manufacturers began making cars with catalytic converters, forcing the nation to fill up with wimpy unleaded gas.

No more! This sweltering Summer of '76 is about the smell of burning rubber, the scream of turbochargers, the wind in your face, the scenery a blur out your window, and the sweet taste of victory!

But first, you've got to learn how to drive.

Skills

The complete D20 MODERN game uses skills such as Drive, Pilot, and Handle Animal to cover assisted movement. Since *Thunderball Rally* focuses on racing cars from one coast of the United States to the other, we use Drive exclusively in these rules for convenience.

A Note About Technology

These rules primarily present technology available in the 1970s. Airbags, infrared sensors, windshield heads-up displays, halogen headlights, curb feelers, under-car fluorescent lights, and satellite navigation systems are decades ahead of this game.

Vehicle Costs

Vehicles described in this chapter can be purchased for the costs listed. Supply and demand may cause the listed price to fluctuate. The Internet is a good place to look for the price of your favorite '70s vehicle.

Vehicle Systems

Vehicles range from simple to complex, and size isn't always what sets the complexity. Aircraft are inherently more complex than ground vehicles, for instance.

Engines: The primary source of power for vehicles in the modern world is internal combustion. Whether simple internal combustion engine, diesel, rotary, or turbine, they're all based on similar principles. However, some vehicles are powered by human muscle, some are powered by animals, and others are powered by wind or gravity.

Sensors: Essentially, sensors allow you to make Spot or Search checks at ranges or in situations in which they are not otherwise possible. The most common sensor used in the modern world is radar. Sonar is a close second, with the advent of tiny sonar systems used by fishing boats. Technically, headlights or night-vision systems also fall into this category.

Communications: Before cell phones, some vehicles carried radio transceivers operating on VHF, FM, or CB frequencies. The need for vehicle-mounted communication systems drops off after the advent of cellular phones.

Vehicle Movement

This section presents rules for moving vehicles on the same scale as characters and creatures, though in most cases vehicles move considerably faster. These rules explain how to handle simple maneuvers and stunts (maneuvers requiring Drive checks), what happens when stunts fail, and how to resolve combat between individuals and vehicles.

Using a Square Grid: As with personal combat, vehicle combat plays out on a square grid, with each square being 5-feet on a side. Vehicles often have extraordinary speeds, ranging from a mere 30 feet per action to much, much faster. If there are no slow-moving combatants involved, consider changing the size of each square

to 50 feet on a side, and divide the movement cost of maneuvers by 10.

Mapping Vehicle Combat

Considering that a normal move for most vehicles is hundreds of feet per round, mapping can be a trying process. If everyone involved in a combat is riding in or driving a vehicle, all that's important is the relative position of the vehicles, and any obstacles the GM wants thrown in their path. In such a case, you may choose to use the map grid to indicate the distance between the vehicles and their positions relative to each other. You never have to move the vehicles on the map when using this option unless their relative distance or positions change. Place obstacles when the vehicles approach them, and remove the obstacles once the vehicles pass them. You may find this makes mapping vehicle combat much easier.

Battlemats and Vehicle Combat: Battlemats work well with Matchbox® and Hot Wheels® cars. Treat each 1-inch square on the map as a 10-foot square. You can experiment with model railroad scale cars and figures as well, but they're a smaller scale making the map squares roughly 20-feet.

Thunderball Rally also includes many to-scale overhead car illustrations sized to fit on a standard grid of 5-foot squares.

Vehicles that Occupy Multiple Squares: Most vehicles are large enough to occupy multiple squares on the map grid. Even the average automobile is more than 5 feet wide and 5 feet long. Exactly how many spaces a vehicle occupies is covered in the vehicle's specific description at the end of this section.

When moving vehicles that occupy more than one square, count the squares from ground vehicles' rear squares. When turning, pivot ground vehicles on the rear square toward which they are turning (so a car making a left turn pivots on the left rear square). When firing weapons, count squares from the location of the weapon.

Multiple vehicles cannot occupy the same square unless they are at different altitudes.

Vehicle Sizes

Vehicles use the same size categories that characters and creatures do. Table 5-2: Vehicle Sizes shows size category, size modifier, the length in feet, and examples of vehicles in that category.

Getting Started

Most vehicles require only a move action to enter and a standard action to start. From that moment they are ready to roll.

Vehicle Speed Categories

At the beginning of a driver's action, the player must declare how much movement he intends to use during his action. As shown in Table 5-3: Vehicle Speeds and Modifiers, a vehicle's speed determines how far the vehicle can travel in a single move action (in feet), the vehicle crew's modifiers to attack rolls and skill checks, and the vehicle's bonus to Defense. The vehicle can change speed only at the beginning of the driver's action, not during.

At the beginning of a combat, the GM must decide how fast GM-controlled vehicles are moving. Use the maximum speed of the slowest vehicle in the group as the default.

Buying a Used Vehicle

Buying a used vehicle is always a dodgy proposition. How much do you trust the seller? Is she covering up a faulty engine or jury-rigged wiring? Or is the body held together with duct tape and Bondo?

To simulate this situation, the GM can roll D% to determine the used vehicle's general quality. The result indicates the flaw (or flaws) possessed by the vehicle.

In most cases, a malfunction or flaw can be detected by a successful Repair or Craft (engineering) check (DC 20) and a few hours of poking around. The GM also can allow characters to use alternative skills for these checks. For instance, a Computer Use check might notice problems with the sensors or fire control systems. Unfortunately, many sellers discourage the attention of such careful buyers.

At the GM's discretion, most of these flaws can be repaired, though they are considered complex repair jobs at best. See the Repair skill in Chapter 2: Skills for more information.

Price of a Used Vehicle

The exact price of a used vehicle is up to your GM. The GM sets a price that's at least 50% of the original vehicle price, and as much as 90% of the original vehicle price.

Table 5-1: Used Vehicle Flaws

D%	Flaw
01-30	None
31-50	Jury-rigged systems: -4 penalty to Repair checks made to fix vehicle.
51-60	Burned-out engine: -4 penalty to Drive skill check made to pursue vehicles.
61-70	Shaky steering: -4 penalty to Drive skill checks to turn or reverse direction, establish or break pursuit, ram a target, avoid a hazard, or regain control.
71-75	Malfunctioning Sensors: -4 to all skill checks made to operate sensors. This may be as trivial as burned out headlights if the vehicle has no other sensors.
76-80	Malfunctioning Fire Control: Reduce all fire control bonuses by 4 (minimum +0). If the vehicle has no fire control system, roll again on this table.
81-90	Hull Damage: Subtract 10% from maximum hull points.
91-95	Other: The GM is encouraged to be fiendish.
96-00	Roll two more times on this table.

Maneuvers

During vehicle combat, a vehicle moves about on the same map grid used in normal combat, through higher speeds can carry it quickly beyond the edges of the map. A vehicle can move only during a move action; basic movement requires no skill check.

A driver can make one attack action and one move action per round, or two move actions if he chooses not to attack (just as in normal combat, but if the driver and gunner are two different people, the driver can make two move actions while the gunner attacks).

There are two kinds of vehicle movement: simple maneuvers and stunts.

Table 5-2: Vehicle Sizes

Standard Scale	Modifier	Length (ft)	Examples
Colossal	+1	61-150	Yacht
Gargantuan	+2	31-60	Trucks
Huge	+4	15-30	Most automobiles
Large	+8	Up to 15	Motorcycle
Medium	+12		Human being
Small	+16		
Tiny	+20		
Diminutive	+24		
Fine	+28		

Simple Maneuver: Simple maneuvers (moving forward, moving backward, slipping, and turning) allow a car to move a specified number of squares on the map grid, as determined by its speed. As simple maneuvers are easy to perform, they do not require Drive checks.

As a move action, a driver can perform any number of simple maneuvers provided that the total number of squares moved does not exceed the vehicle's speed.

A vehicle does not have to spend all its movement during its turn; unspent movement simply indicates that the vehicle is moving at less than top speed.

Stunt: Stunts are difficult and sometimes daring maneuvers that enable a driver to change his vehicle's heading or orientation at no movement cost. A stunt can be attempted as a free action during the driver's move action. Stunts always require Drive skill checks. A driver can attempt only one stunt per move action.

Simple Maneuvers

As a move action, the racer driving a vehicle can perform the following maneuvers, expending movement or making a Drive skill check to negate the movement expenditure.

Forward and Reverse: All vehicles are capable of forward movement; the driver's only decision is how fast to go. A driver can always choose to advance more slowly than his vehicle's maximum speed. Bad terrain and obstacles might also slow the vehicle.

Traveling in reverse is somewhat more limiting, as most vehicles aren't geared to go full speed in reverse. Any vehicle can travel backward at alley speed or two speed categories less than the vehicle's maximum speed category, whichever is greater.

A vehicle cannot combine forward and reverse movement during a single move action.

Diagonal Movement: Moving diagonally (across the corner of a square) costs additional movement. The first diagonal move a vehicle makes during each action costs 1 square of movement. The second costs 2 squares of movement. The third costs 1, and so on. Thus, moving 2 squares diagonally is treated as having moved 3 squares.

Simple Slip: A driver might wish to move to the side without changing the vehicle's facing, for instance to change lanes. This is called a slip, and it allows the vehicle to avoid obstacles without slowing down to change facing. The simple slip moves the vehicle 1 square forward or back and 1 square to the right or left, and costs 3 squares of movement. With sufficient movement, a driver can perform multiple simple slips in the same action.

Tracked vehicles cannot perform simple slips.

Diagonal Simple Slip: When the vehicle faces a corner of its square instead of a side, a simple slip moves it into the forward left or right square and costs 3 squares of movement.

Diagonal Side Slips: Vehicles facing the corner of a square move into the forward left or right square, and then move one more square left or right (in the same direction only).

45-Degree Turn: Any vehicle can make a simple 45-degree turn by expending 1 square of movement. Before a vehicle can turn, it must move at least 1 square forward. Turning completely around and moving back the opposite direction (a half-circle) costs 8 squares of movement.

Stunts

The following actions always require a Drive check to perform successfully. Stunts allow a driver to perform special maneuvers without expending movement. Drivers must immediately check for loss of control if the Drive check fails by 10 or more. Remember that Table 5-3: Vehicle Speeds and Modifiers affects all the Drive checks described here.

Quick Turns: A quick turn allows a vehicle to turn without first moving forward 1 square. The Quick Turns diagram illustrates the DCs of a right or left turn, ranging from 45 to 180 degrees. A 180-degree Quick Turn is known as a "bootlegger reverse."

Failed Quick Turns: When a pilot fails a quick turn stunt, reduce the angle of the turn 45 degrees for every increment of 5 below the DC. For instance, a driver attempting a 180-degree turn (DC 20) rolls a 10. The vehicle can only turn 90 degrees. As with all failed stunts, the driver must immediately check for loss of control if the Drive check fails by 10 or more.

Attack Runs: A vehicle can ignore normal defensive maneuvering to line itself up with its target, gaining a bonus to attacks made against the target. The attacking vehicle must move straight toward the target, without turning or otherwise maneuvering, for at least half of its declared movement for that action. Until it actually passes the target, the attacking vehicle can fire its forward-facing weapons at the target, at any point along the attacking vehicle's movement.

This stunt requires a successful Drive check (DC 10) as part of the

Table 5-3: Vehicle Speeds and Modifiers

Speed Category	Movement Feet	5-foot Squares	Defense Modifier	Check/Roll Modifier
Stationary	0	0	+0	+0*
Alley	1-30	2-6	+2	+0
Cruising	31-300	6-60	+4	-1
Attack	301-750	60-150	+6	-2
Ramming**	751-1500	150-300	+8	-4

*A stationary vehicle cannot make Drive checks except to turn.
**Ramming speed is impossible for some vehicles in this game, while others can only achieve it through a double-move.
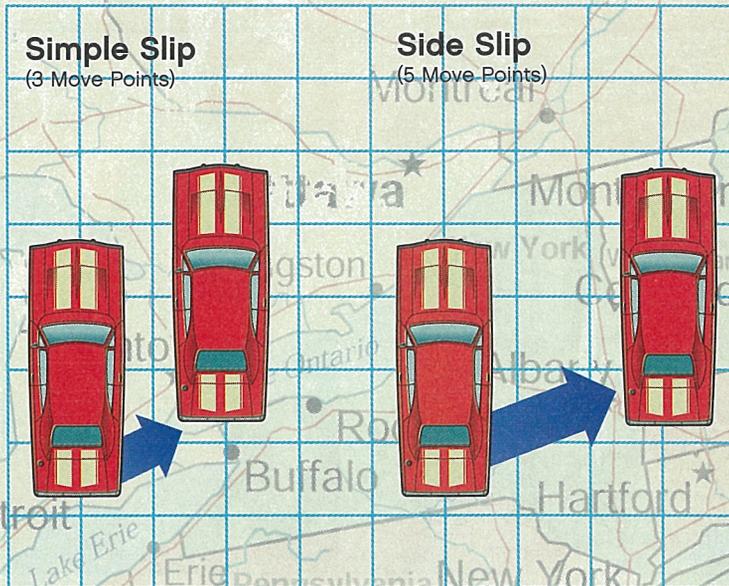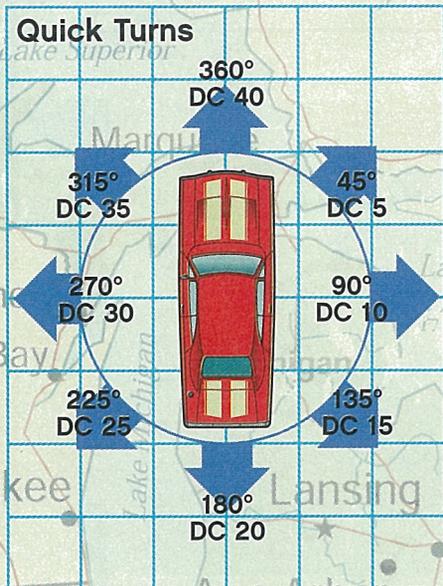 **Stationary:** The vehicle is motionless.
  Alley: This speed is used for safely maneuvering a vehicle in tight spaces, such as alleys or parking garages.
  Cruising: The vehicle is traveling at a normal cruising speed.
  Attack: The vehicle is moving at combat speed.
  Ramming: The vehicle is traveling at top speed.

Quick Turns

	360° DC 40	
315° DC 35		45° DC 5
270° DC 30		90° DC 10
225° DC 25		135° DC 15
	180° DC 20	

Simple Slip
(3 Move Points)

Side Slip
(5 Move Points)

vehicle's movement. If successful, the vehicle gains a +2 circumstance bonus to attacks made with weapons in the front firing arc but also suffers a -2 penalty to Defense. A vehicle making an attack run cannot fight defensively.

Up on Two Wheels: This stunt requires a successful Drive check (DC 10) as part of the vehicle's movement, and some low ramp to raise one side of the vehicle. Treat the vehicle as being half as wide while up on two wheels. Vehicles may not travel at more than Cruising speed while up on two wheels. Another Drive check (DC 10) is required as part of the vehicle's movement to return to having four wheels on the ground. Other crew may assist with this roll.

Jump: Jumping a car requires a successful Drive check, but there is no set DC. Instead, use the rules for the Jump skill in the *Player's Handbook*, substituting the Drive check for the Jump check. Vehicle jumps always count as running jumps, and vehicles must be moving at least Cruising speed to jump. In addition, divide the vehicle's current speed by 60 (the base speed for a Medium-sized character making a full move). Multiply the distance jumped by the result to get the distance the car jumps. Other crew members cannot assist with this roll.

Example: A police interceptor moving at 600 feet tries to jump across a collapsed bridge. The crew is Skilled (see Table 5-7: Vehicle Crew Quality, below) so the driver gets a +4 to his Drive

check. He rolls a 15. According to the Jump rules, the car covers 15 feet. When we divide 600 by 60, we get 10. 15 x 10 = 150 feet. The GM checks the width of the collapsed bridge and finds the interceptor easily makes the jump. The driver wipes the sweat from his forehead and continues his hot pursuit.

Rolling Screen: This stunt allows the driver to substitute Drive checks for Hide checks. The driver moves so that another, larger vehicle is between him and whoever he is hiding from. He paces his vehicle with the concealing vehicle. When trying to resolve whether or not an opponent spots the hiding vehicle, the GM compares the opponent's Spot or Search check with the hiding driver's Drive check. Other crew members may assist with this check. The concealing vehicle may cooperate, and assist, or not, according to the GM.

Check the Axle: Driving under the trailer of a big rig requires a Drive check (DC 20) as part of movement. The GM rules whether your car is low enough to slide beneath (import racers almost always are). Other crew members may assist with this roll. The driver of the big rig may assist, or not, according to the GM.

Avoiding Hazards: Vehicle combat rarely occurs on a perfectly flat, featureless, plain, especially not in *Thunderball Rally!* Rocks, trees, buildings, people, vehicles, wreckage, and other obstacles can get in the way.

When a vehicle tries to move through a square occupied by a haz-

ard, a driver must succeed at a Drive check to avoid the hazard and continue moving. The GM can rule that certain vehicles cannot pass through a square occupied by a large, solid obstacle (like a concrete wall or a building). Attempting to pass through such a square automatically results in a collision, the effects of which should be resolved using the rules for Ramming and Collisions, below.

Unlike other stunts, a driver can make as many Drive checks each round as needed to avoid the obstacles that appear in his path. To determine the DC for the Drive check to avoid a hazard, roll 1d20 and consult Table 5-4: Drive Check to Avoid Hazards. If the Drive check fails, use the Ramming and Collision rules to determine damage.

Table 5-4: Drive Check to Avoid Hazards

D20 Roll	DC to Avoid Hazard
1	40
2	35
3-4	30
5-7	25
8-11	20
12-14	15
15-17	10
18-19	5
20	0
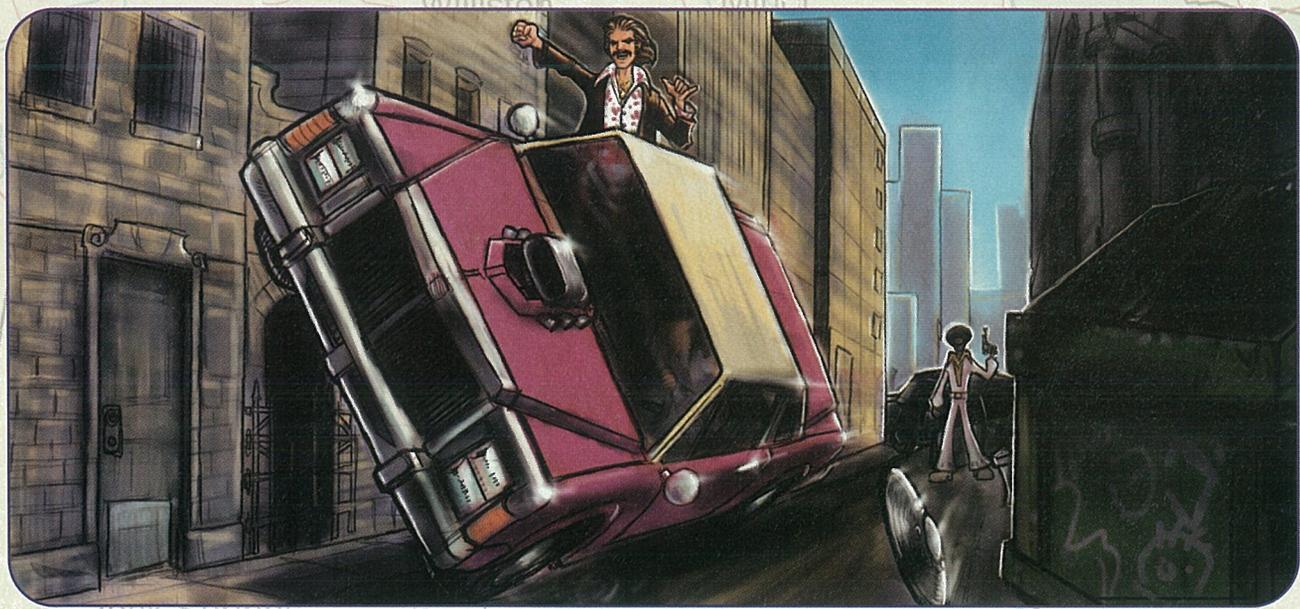
Failing a Drive check to avoid a hazard almost always means that the vehicle has collided with the obstacle. If the hazard is another vehicle, the driver of the second vehicle can also attempt a Drive check to avoid the collision. If both checks fail, the collision occurs. Some hazards require special rules to adjudicate, particularly when failure to avoid the hazard leads to something other than a collision. Regardless of the nature of the hazard, the Drive check determines whether the driver circumvents the hazard successfully. Some specific examples are presented here:

Cliffs and Chasms: Circumventing a cliff or crossing a chasm is tricky; roll 1d12 instead of 1d20 on Table 5-4: Drive Check to Avoid Hazards. A failed Drive check results in a fall that damages both the vehicle and its passengers (See Falling Damage in Chapter 4: Adventures of the *Dungeon Master's Guide*).

Toxic Spills: Determine the DC to avoid the spill normally. A failed check lands the vehicle in a pool of toxic waste. The vehicle itself is unlikely to sustain damage. However, passengers who do not have full cover might suffer adverse effects; refer to the poison rules in Chapter 3: Running the Game of the *Dungeon Master's Guide*.

Failed Stunts

A failed Drive check on a stunt means the driver failed to execute the stunt. If the Drive check fails by 10 or more, the driver might lose control of the vehicle (a driver cannot lose control due to a failed opposed check). The driver must make another Drive check at the same DC as the original (failed) check. If the second check succeeds, the driver maintains control of the vehicle, but still fails to accomplish the desired maneuver. If the second check fails, the driver lost control of her vehicle. Compare the driver's measure of failure (the amount by which she failed the check) to Table 5-5: Loss of Control to determine the effect.

Failed Stunt Effects

Roll: The vehicle rolls in a straight line along its last declared vector for a number of feet determined by its last declared speed category: Alley 1d10, Cruising 1d10x10, Attack 1d10x20, Ramming 1d10x50. A roll deals 1d6 points of damage to the vehicle plus an additional 1d6 points of damage per 10 feet rolled; the vehicle's occupants take 1d4 points of damage per die of damage applied to the vehicle. If the vehicle sustains enough damage, it might explode (see Exploding Vehicles, below). If it does not explode and still has hull points remaining, it stops moving. There is a 50% chance that the car will land right side up. If it does, a successful Drive check to regain control allows the driver to "restart" the vehicle.

If the roll brings the vehicle into contact with another object, see Ramming and Collisions, below.

Skid: The vehicle skids forward along its last declared vector for a number of feet determined by its last declared speed: Alley 2d4, Cruising 2d4x2, Attack 2d4x5, Ramming 2d4x10.

Although its facing remains unchanged, the vehicle loses the rest of its movement for the action. If the skid brings the vehicle into contact with another object, see Ramming and Collisions, page 50.

Spin: The vehicle spins wildly and loses the rest of its movement for the action. Roll 1d8 to determine the degree of the turn: 1, no change; 2, right 45 degrees; 3, right 90 degrees; 4, right 135 degrees; 5, left 45 degrees; 6, left 90 degrees; 7, left 135 degrees; 8, 180 degrees. Reorient the vehicle accordingly.

Exploding Vehicles

If a vehicle ever suffers twice as much damage in a single attack as it has remaining hull points, it explodes. This inflicts 10d6 damage to everyone within the vehicle (Reflex save, DC 20, for half damage), and half that much to everyone and everything within 30 feet of the explosion (Reflex save, DC 15, for half damage).

Difficult Conditions

Obstructions, harsh terrain, and poor visibility can hinder a vehicle's speed or a driver's ability to control a vehicle. If any of these factors exist, the vehicle's speed might be reduced and the pilot might suffer a penalty to all Drive checks, as noted in Table 5-6: Conditional Modifiers to Vehicle Movement and Drive Checks.

Vehicle Combat

The GM has two options for determining initiative in vehicle combat. First, the GM

can use individual initiative just as in normal combat, in which each character rolls separately. This is probably the best method if most characters are aboard the same vehicle, but it can result in a lot of delayed or readied actions as gunners wait for drivers to perform maneuvers. An easier way is to roll initiative for each vehicle, using the vehicle's size modifier as the initiative modifier. This is particularly appropriate when characters are in separate vehicles and allows everyone on the same vehicle to act more or less simultaneously.

Table 5-3: Vehicle Speeds and Modifiers (page 50) notes bonuses to a vehicle's Defense and penalties (if any) to the crew's attack rolls and skill checks based on the vehicle's speed. You will refer to this table frequently during combat.

Crew Quality

Rather than force a GM to create, or remember, statistics for every racing crew, most vehicle descriptions provide a general "crew quality" descriptor. This indicates the crew's aptitude with vehicle systems, including driving, weapons, and defenses.

Table 5-7: Vehicle Crew Quality lists the five levels of crew quality for GM-controlled vehicle crews, along with the appropriate check modifier. Use the Check Modifier for all skill checks related to the operation of the vehicle (including Drive and Repair checks). Use the Attack Bonus for all attack rolls performed by the crew.

This doesn't restrict GMs from creating unique racing crews. See Chapter 6: Hitting the Streets for examples of pregenerated racer crews.

Table 5-5: Loss of Control (Wheeled Ground Vehicles)

Drive Check Failed By...	Effect	Skill Check Penalty	Vehicle Defense Penalty
Up to 5	Skid	-2	-1
6-10	Skid and Spin	-4	-2
11+	Roll	-8	NA

Vehicle Attack Rolls

There are three kinds of attack rolls involving vehicles: attacking with the vehicle itself, attacking with vehicle-mounted weapons, and attacking with personal weapons while in a vehicle.

Attacking with the Vehicle: Attacking with a vehicle, such as ramming or sideswiping a target, requires an attack roll modified by the driver's base attack bonus, Dexterity modifier, and speed (see Table 5-3: Vehicle Speeds and Modifiers).

Attacking with Vehicle-Mounted Weapons: Vehicle mounted weapons are modified by their firing arc (see Facing and Firing Arcs, below). Using vehicle-mounted weapons requires the appropriate exotic weapon or exotic firearm proficiency, or suffers the standard -4 non-proficiency penalty. The person using the weapon makes an attack roll modified by base attack bonus, Dexterity modifier, and speed (see Table 5-3: Vehicle Speeds and Modifiers). Firing a ranged weapon from a moving vehicle suffers a -4 penalty unless you have the Vehicle Gunnery skill.

Attacking with Personal Weapons: Using a personal weapon while in a vehicle is a normal attack roll, modified by vehicle speed (see Table 5-3: Vehicle Speeds and Modifiers). Firing a ranged weapon from a moving vehicle suffers a -4 penalty unless you have the Vehicle Gunnery skill.

Vehicle Combat Actions

As with personal combat, a character can take both a move action and an attack action in each round of vehicle combat. Instead of taking an attack action, a character can take a second move action.

Driving Defensively: Just as in melee combat, one can "fight defensively" while driving a vehicle, which grants a +2 dodge bonus to the vehicle's Defense and applies a -4 penalty on attack rolls. A driver can also choose "all-out defense," which grants a +4 dodge bonus to Defense but does not allow the driver to attack (gunners suffer a -8 penalty on attack rolls). These modifiers last until the driver's next round of actions.

Making Attack Rolls: Firing a vehicle's weapon requires an attack action and uses the driver's or gunner's base ranged attack value (including Dexterity modifier).

A vehicle operator with 5 or more ranks of Drive gains a +2 synergy bonus when firing vehicle weapons or attacking with the vehicle itself. Some military vehicles possess fire-control computers, and they grant a computer bonus to attack rolls (determined by the computer's quality) with vehicle weapons enhanced by the computer.

Full Attack Actions: A driver can make a full attack only if the vehicle continues along its last vector at its last declared speed. Performing a maneuver or stunt, including changing speed or direction, requires concentration and prevents the driver from taking a full attack action.

Table 5-6: Conditional Modifiers to Vehicle Movement and Drive Checks

	Condition	Example	Movement Multiplier	Drive Check Penalty
Obstruction	Moderate	Undergrowth, city street	×3/4	-2
	Heavy	Thick undergrowth, crowded city street	×1/2	-4
*Terrain**	Difficult	Uneven ground	×3/4	-2
	Poor	Steep slope, mud	×1/2	-4
	Very poor	Deep snow, desert sand	×1/4	-6
Visibility	Poor	Smoke, light fog	NA	-2
	Very poor	Darkness, thick fog	NA	-4

*Tracked ground vehicles cross "Difficult" surfaces without penalty. They treat "Poor" surfaces as "Difficult" and "Very Poor" surfaces as merely "Poor."

Table 5-7: Vehicle Crew Quality

Crew Quality	Check Modifier	Attack Bonus
Untrained	-4	-2
Normal	+2	+0
Skilled*	+4	+2
Expert	+8	+4
Groovy	+12	+8/+3

*Race crews should be skilled at worst, and most should be experts. Leave normal for the bystanders!

Gunners also can take full attack actions. As a rule of thumb, if a weapon is under a character's direct control (such as front-firing weapons or mounted weapons), the character can take a full attack action with that weapon.

Multiple Attacks: A character can make multiple attacks with a single weapon, a group of fire-linked weapons, or a set of adjoining weapons. If two or more identical weapons have identical facings, they are considered adjoining weapons. The gunner of a tank can make one attack with the tank gun and one attack with a machine gun, for example.

Taking a full attack action is only useful if a character can make more than one attack. Characters with a base attack bonus high enough to get multiple attacks (+6 or higher) may take the full attack action to make multiple attacks during vehicle combat. Characters with the Rapid Shot feat can use it to make an extra attack with vehicle weapons.

Ram Attack: A vehicle can, as a full attack, ignore normal defensive maneuvering to ram a target (either a character, creature, obstacle, or another vehicle). The attacking vehicle must move directly toward the target during its action.

The driver must make an attack roll to see whether the target is rammed, ignoring the target's armor bonus to Defense. The ramming vehicle gains a +2 circumstance bonus to the attack roll but also suffers a -2 penalty to Defense until the beginning of the driver's next action. A vehicle making a ram attack cannot fight defensively.

If the ram attack succeeds, resolve the damage as a collision (see Ramming and Collisions, below). If the attack fails, the vehicle that attempted the ram continues along the same course a number of squares equal to its unspent movement.

Vehicle Combat Actions

Actions during vehicle combat are handled the same way as actions during personal combat. In general, a character can take two move actions, one move action and one attack action, or one full-round action in a round. Free actions can be performed normally, in conjunction with another action.

Free Actions: Communicating orders and switching weapon fire modes are examples of free actions. Characters can perform as many free actions as the GM permits in 1 round.

Move Actions: The vehicle moves a number of squares as determined by its speed. A move action can be used to propel the vehicle forward or backward, complete simple maneuvers such as turns and slips, or perform a stunt.

Attack Actions: A driver or gunner can make a single attack with one of a vehicle's weapons using her ranged attack bonus. Various modifiers can apply to the attack roll. Note that either a driver or gunner may be able to use a personal weapon as an attack action rather than a vehicle weapon.

Full-Round Actions: A full-round action requires an entire round to complete and cannot be coupled with a move action or attack action. When a driver chooses to make a full-round action, the vehicle continues along its last vector at its last declared speed. Each crewmember can perform one full-round action in one round, including a full attack.

The Fine Art of Stopping a Car

Stopping a car when you're not in it is a major concern for most law-enforcement agencies, and may become a concern for characters in *Thunderball Rally*. Here are a few rules to help you out.

Shoot the Tires: Most people don't know that it's possible to drive on a flat tire. The repair bill that follows will be astronomical, but it is possible. Treat tires as Defense 26 (+16 size) for rolling to hit, and DR 3 for damage. They have 7 hit points. Each flat tire on a wheeled vehicle imposes a -4 penalty on Drive checks.

Caltrops: See Vehicle Accessories (page 52).

Barriers: Most barriers use the collision rules to determine whether they break, allowing the vehicle to pass, or remain intact and stop the vehicle. Many law-enforcement agencies are experimenting with lightweight, portable barriers that expand to cover an area up to 30-feet across. These portable barriers have metal spikes sticking straight up from them, and they use the caltrop rules (page 52) with the exception that each spike does 2 points of damage rather than 1. This means that the barrier destroys a tire on a roll of 5 or greater.

Ramming and Collisions

Collisions occur when a vehicle loses control and strikes a solid object or when a driver decides to ram her vehicle into something on purpose.

Resolving Ram Attacks: When a driver chooses to use her vehicle as a weapon by ramming another vehicle, a character, a creature, or an object, follow this procedure:

1. *Declare the vehicle's speed category* (alley, cruising, attack, ramming, supersonic). The speed must be sufficient to carry it to the target, or the ram attempt fails automatically.

2. *Move the vehicle straight toward the target.* The movement must be in a straight line (no backing up allowed). Until the next round, the vehicle suffers a -2 penalty to Defense. The vehicle can pass through obstacles if the driver succeeds at the appropriate Drive checks (see Table 5-4: Drive Check to Avoid Hazards).

3. *When the ramming vehicle enters the square occupied by its target, resolve the ram attack.* The forward momentum gives a +2 circumstance bonus to the driver's attack roll, and the target's armor bonus to Defense (if any) does not apply. A vehicle can only attempt to ram a single target once during a round.

4. *If the attack succeeds, a collision occurs* (see below). If the attack fails, the vehicle continues along the same course, using up any unspent movement from its declared speed.

Resolving Collisions: Vehicle collisions depend on the speed and size of the objects involved. Use the highest speed of the two colliding objects (at the moment of impact) to determine the damage die type.

Determine the number of dice to roll using Table 5-9: Collision Damage by Size, and the smallest object involved (note that this table uses the same size scale as Table 5-2: Vehicle Sizes).

Finally, decide the collision's damage multiplier based on the movement vectors of the ramming vehicle and the target.

Once the damage has been determined, apply it to both vehicles (or objects) involved in the collision. If a vehicle sustains enough damage, it might explode (see Exploding Vehicles, page 48).

Table 5-8: Collision Damage by Speed

Highest Speed	Damage Die Type
Alley	d4
Cruising	d8
Attack	d10
Ramming	d12

Table 5-9: Collision Damage by Size

Vehicle Size	# of Dice
Colossal	8
Gargantuan	6
Huge	4
Large	2
Medium	1
Small and smaller	0

## Table 5-10: Collision Vector Multipliers

Target is	Multiplier
Moving toward the ramming vehicle	x2
Moving perpendicular to the ramming vehicle	x1
Moving away from the ramming vehicle	x1/2

Sideswipes

During a vehicle's movement action, a driver can attempt to sideswipe a vehicle or other target, either to deal damage without fully ramming it or to cause another driver to lose control of his vehicle.

A sideswipe requires enough movement to pass through the target to perform the stunt. The size and speed of the target determines the DC of the Drive check. See Table 5-11: Drive Checks to Sideswipe Targets to determine the DC for the stunt. If the stunt is successful, the damage dealt to both the sideswiping vehicle and the target is one-quarter the damage of a successful ramming attack (use the Ramming and Collisions sidebar and divide the final damage result by 4, rounding down).

If the stunt succeeds and the target is another moving vehicle, the driver of the sideswiped vehicle must succeed at a Drive check (DC 10) at the beginning of his next action or lose control of the vehicle; a failed check is treated like a failed stunt (see Failed Stunts, below).

If the sideswipe stunt fails, the driver of the attacking vehicle must make a second Drive check to avoid ramming the target as he passes through the target's square, as if avoiding a hazard (see Avoiding Hazards, above).

Pursuit

Sometimes a driver wants to get behind an opponent and follow his every move, whether to draft behind a much larger vehicle or to take advantage of a "blind spot." To establish pursuit, a vehicle must be within Point Blank range (10 feet or closer) and in the target vehicle's rear arc. Drivers make an opposed Drive check. The target gains a +5 circumstance bonus to his check unless he's completely unaware of the pursuer. If the pursuer's Drive check result is higher, she successfully establishes pursuit.

Pursuing: Once a driver has established pursuit, she becomes the target's shadow: She acts on the same initiative, moves at the same declared speed (if possible) and must do everything the target does to maintain pursuit. A pursuing vehicles moves at the same time as its target through exactly the same squares the target moves through—even squares including obstacles, if need be—and must perform all the same stunts and Drive checks to avoid hazards. If a pursuer fails to execute the maneuvers taken by the target, the pursuit ends (even if the pursuer does not suffer any damage as a result of a failed check).

Attack as a Free Action: After the target declares his speed for the round (which also determines the pursuer's speed for the round), the driver of the pursuing vehicle can make a single attack with one forward-firing weapon. All gunners with forward-firing weapons can act as normal. While pursuing a vehicle, a driver or gunner ignores all speed modifiers to the pursued vehicle's Defense.

Flanking: Similar to flanking in personal combat, two or more vehicles can "bracket" an enemy vehicle and thus increase their chances of successfully hitting it with an attack. Two or more vehicles that have established pursuit on the same target gain a +2 circumstance bonus on attacks versus the pursued vehicle.

Breaking Off Pursuit: A pursuer can break off pursuit at any time by choosing a different course than his target.
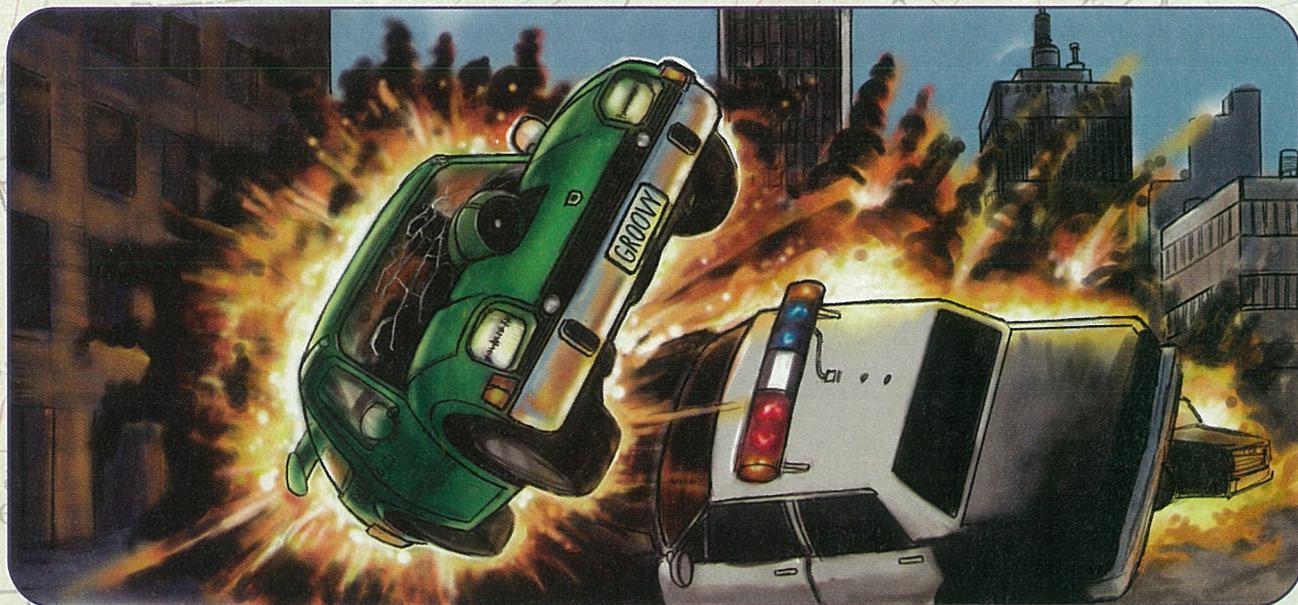
Breaking off pursuit is a special delaying action. When the pursuer decides to break off pursuit the pursuer's initiative automatically drops by one; she no longer acts at the same time as her erstwhile target.

Escape Pursuit: To escape a pursuer, the driver of the pursued vehicle must make an opposed Drive check. The pursuer gains a +5 circumstance bonus to the check. If the pursued driver wins, he breaks the pursuit, and the pursuer no longer ignores the speed modifiers of the pursued ship's Defense. Whenever a vehicle escapes pursuit, its pursuer's initiative drops by one; it no longer acts at the same time as its erstwhile target.

Facing and Firing Arcs

All standard-mounted weapons point in one of four directions: forward, aft (rear), right, or left. Some weapons are turret-mounted (allowing them to fire in all four directions). A weapon's facing and arc of fire is listed in the vehicle's description.

Often, the part of the vehicle that includes a given fire arc is two or more squares wide. If it becomes important (such as for determining range, or for firing at point-blank range), count the number of weapons included in that fire arc, and divide by the number of squares the vehicle has in that fire arc. That will determine, in most cases, exactly how many weapons are actually in a given square on a vehicle, and thus how much of the vehicle's firing actually comes from that square.

Critical Hits to Vehicles

Critical hits in vehicle combat function similarly to critical hits in personal combat, but instead of dealing additional damage, a critical hit with a vehicle weapon bypasses a target' damage reduction, dealing damage directly to its hull.

Table 5-11: Drive Checks to Sideswipe Targets

Target Size	Base DC	Speed of Target	DC Modifier
Colossal	0	Stationary	-10
Gargantuan	5	Alley	-5
Huge	10	Cruising	+0
Large	15	Attack	+5
Medium-size	20	Ramming	+10
Small	25		
Tiny	30		
Diminutive	35		
Fine	40		

Critical hits represent extraordinarily lucky shots that manage to find weak points in a vehicle's armor. Most vehicle weapons have a threat range of 20; they still need to make a second attack roll to confirm any attack that is a threat.

Shoving

To shove another car, a driver must successfully sideswipe it. The attacker and the defender make opposed Drive checks. You each add a +4 bonus for each size category you are above Medium-size or a -4 penalty for each size category you are below Medium-size. The faster car gets a +2 bonus for each speed category above the slower car. If the attacker beats the defender, he pushes the defender 5 feet along the attacker's last vector. If the attacker moves with the defender, the attacker can push him up to a distance of an additional 1 foot for each point by which the attacker exceeded the defender's check result. The attacker cannot exceed his normal movement limit. If the attacker failed to beat the defender's Drive check, neither vehicle moves.

Using Cover

When you open fire with a vehicle's weapons, objects or vehicles in the way can provide cover for your target. Cover provides a bonus to a target's Defense. The more cover, the greater the bonus.

When you declare an attack, draw an imaginary line from the center of the square from which you're firing (see Facing and Firing Arcs, above) to the center of the square that includes the target. When your target occupies more than one square, you must declare which square you're firing at. Each square that includes an object—whether a vehicle, character, creature, obstacle—provides some degree of cover for your target, making the shot more difficult. Table 5-12: Vehicle Cover lists the Defense bonuses by different sizes of objects. When multiple obstacles occupy the same square, apply their cumulative cover bonus.

When firing at a target occupying the same square as an obstacle, the cover bonus for the obstacle applies. Obstacles in the same square as the attacking vehicle do not provide cover to the target.

Striking the Cover: An attack that misses a target with cover might inadvertently strike the cover instead. This occurs when the attack roll would have hit the target had it not had cover, and the attack roll is high enough to hit the cover's Defense. To determine which covering object was struck, start with the object closest to the target vessel, and compare the attack roll to its Defense. If the roll is sufficient to hit, apply the damage to the cover. If not, move outward to the next distant covering object, and repeat this process until either a piece of cover is struck or all the cover has been missed. If the covering object is a vehicle, and the driver of the vehicle is using a dodge ability that keeps the covering vehicle from being struck, the original target is truck after all. Effectively, the covering vehicle has dodged out of the way, saving itself instead of providing cover.

Fire-linked Weapons

Vehicles sometimes have fire-linked weapons that point and fire in the same direction. Fire-linked weapons are treated as a single weapon (fired with a single attack roll and all at the same target) that deals greater damage than either weapon alone. Each doubling of the number of fire-linked weapons (two, four, eight, and so on) adds one die of damage (before multiplication). This allows the firing of multiple weapons for some additional effect while only requiring a single attack action.

Only identical weapons can be fire-linked.

Damage

All vehicles have hull points, which are roughly equivalent to a character's hit points. Most vehicles also have a damage reduction (DR) rating. Whenever a vehicle takes damage, subtract the vehicle's DR from the damage dealt. This reflects the fact that even the best pistol shot simply can't deal enough damage to the hull of an armored truck.

When a vehicle is reduced to 0 hull points, it is disabled. If a vehicle ever suffers twice as much damage in a single attack as it has remaining hull points, it explodes (see Exploding Vehicles, above). If the vehicle explodes

when ramming or colliding with another vehicle, the other vehicle suffers the same damage.

Developing Flaws: After losing 50% or more of its hull points in a battle, a vehicle might pick up a flaw. When the vehicle is repaired, roll on Table 5-1: Used Vehicle Flaws to see whether a flaw has developed. The flaw might not be apparent immediately, remaining hidden until the affected system is used (or takes damage, in the case of hull points).

Repairing Damage: Damage to a vehicle's hull must be repaired manually (by welding hull patches onto the vehicle). A full hour of work is required to repair lost hull points. The result of the Repair check equals the number of hull points repaired.

A vehicle that suffers more damage than twice its hull points cannot be repaired.

Table 5-12: Vehicle Cover

Cover Size	Defense Bonus
Colossal	+12
Gargantuan	+8
Huge	+4
Large	+2
Small/Medium-size	+1
Fine/Diminutive/Tiny	+0

Vehicle Descriptions

This section describes a variety of common vehicles you might want to have available in your *Thunderball Rally* campaign. The complete D20 MODERN includes several additional vehicles.

Terminology

The vehicle descriptions in this section use the following terminology.

Class: The vehicle type: Flying, Hover, Tracked (Ground), Water (Surface), or Wheeled (Ground).

Size: The vehicle's size category.

Passengers: The number of passengers and/or troops that the vehicle can carry (in addition to the crew listing, below). Each passenger space can be converted to 2 cargo units (see Vehicle Accessories).

Cargo Capacity: The amount of cargo units the vehicle can carry. A cargo unit is approximately equal to 5 cubic feet. Note that open trucks (such as pick-up trucks) show cargo units based on the dimensions of the cargo bed. It's also worth noting that the listed cargo capacity assumes the standard seating (passengers and crew as listed), and you can convert a seat to 2 cargo units (see Accessories).

Speed: The number of feet the vehicle can cover in a move action. If the vehicle uses two move actions, it can move twice this far in a round. A vehicle can also use all-out movement (a full-round action) and move four times its listed speed.

Maximum Speed: The vehicle's maximum overland speed in miles per hour.

Cost: The vehicle's price in U.S. dollars.

Crew: The minimum number of crew needed to operate the vehicle. The quality of the crew and the modifier to appropriate skill checks (see Vehicle Crew Quality, page 49) follow in parentheses.

Initiative: The modifier added to initiative rolls for this vehicle and crew.

Maneuver: The modifier added to any Drive checks attempted by this crew and vehicle.

Defense: The vehicle's Defense includes the vehicle's size modifier.

Hull Points: The vehicle's maximum hull points.

DR: Damage Reduction. Subtract this number from any damage dealt to the vehicle's hull. If it reduces the damage to 0 or less, no damage is dealt by the attack.

Victory Roll Modifier: This modifier applies to the team's Victory Roll (see Chapter 6: Hitting the Streets).

Economy Cars

This category covers cars like the AMC Gremlin and Volkswagen Beetle. Typically, they have lap seat belts and AM radios. They are two squares wide and three squares long.

Class: Wheeled (Ground)
Crew: Normal +2 (1 driver)
Size: Huge
Initiative: +7 (+4 size, +1 vehicle, +2 crew)
Passengers: 4
Maneuver: +5 (+4 size, -1 vehicle, +2 crew)
Cargo Capacity: 3
Defense: 14*(+4 size)
Speed: 220 feet
Maximum Speed: 100 mph
Hull Points: 20
DR: 7
Cost: $15,000
Victory Roll Modifier: -1
*Provides three-quarter cover for crew and passenger.

Luxury Cars

This category covers Cadillacs and top-of-the-line sedans from most major manufacturers. Typically, they have lap seat belts, and AM/FM radios with both front and rear speakers. Some have 8-track tape players. They are two squares wide and four squares long.

Class: Wheeled (Ground)
Crew: Normal +2 (1 driver)
Size: Huge
Initiative: +7 (+4 size, +1 vehicle, +2 crew)
Passengers: 4
Maneuver: +7 (+4 size, +1 vehicle, +2 crew)
Cargo Capacity: 4
Defense: 14*(+4 size)
Speed: 265 feet
Maximum Speed: 120 mph
Hull Points: 35
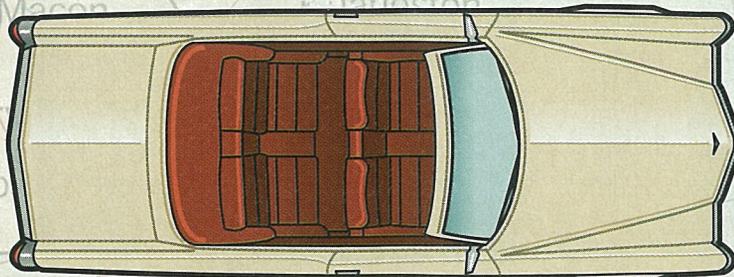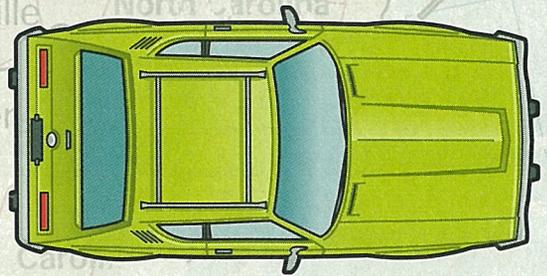**DR:** 7
Cost: $40,000
Victory Roll Modifier: +0
*Provides three-quarter cover for crew and passengers

Mid-Size Cars

This category covers mid-sized "family" sedans. Typically, they have AM/FM radios with front speakers.

They are two squares wide and four squares long.

Class: Wheeled (Ground)
Crew: Normal +2 (1 driver)
Size: Huge
Initiative: +6 (+4 size, +0 vehicle, +2 crew)
Passengers: 5
Maneuver: +5 (+4 size, -1 vehicle, +2 crew)
Cargo Capacity: 4
Defense: 14*(+4 size)
Speed: 235 feet
Maximum Speed: 109 mph
Hull Points: 25
DR: 7
Cost: $20,000
Victory Roll Modifier: +0
*Provides three-quarter cover for crew and passengers.

Motorcycles

Mounting and starting a motorcycle is a free action, rather than two move-equivalent actions. We cover two types, the racing motorcycle and the touring motorcycle. Both are one square wide and two squares long. Weapons mounted on motorcycles fire into either the front or rear arcs, but not the sides.

Racer

Class: Wheeled (Ground)
Crew: Normal +2 (1 driver)
Size: Large
Initiative: +14 (+8 size, +4 vehicle, +2 crew)
Passengers: 0
Maneuver: +11 (+8 size, +1 vehicle, +2 crew)
Cargo Capacity: 1
Defense: 18*(+8 size)
Speed: 460 feet
Maximum Speed: 210 mph
Hull Points: 3
DR: 3
Cost: $17,000
Victory Roll Modifier: +2
*Provides no cover for crew and passengers

Touring

Class: Wheeled (Ground)
Crew: Normal +2 (1 driver)
Size: Large
Initiative: +13 (+8 size, +3 vehicle, +2 crew)
Passengers: 1
Maneuver: +11 (+8 size, +1 vehicle, +2 crew)
Cargo Capacity: 2
Defense: 18*(+8 size)
Speed: 330 feet
Maximum Speed: 150 mph
Hull Points: 5
DR: 3
Cost: $18,000

Victory Roll Modifier: +1
*Provides no cover for crew and passengers

Other Vehicles

Armored Truck

Used to transport money between businesses and financial institutions, armored trucks often make people nervous. After all, you never know when someone will try to rob one. Armored trucks generally have 3 doors. Standard features include air conditioning, power steering, AM/FM radio, and automatic transmission. Most armored trucks have radio transceivers to communicate with their home office. Some armored transport companies also issue walkie-talkies to their truck crews. Most armored trucks have firing ports that allow the crew to use their firearms without leaving the vehicle. The armored truck is two squares wide and four squares long.

Class: Wheeled (Ground)
Crew: Skilled +4 (1 driver, 1 assistant)
Size: Huge
Initiative: +5 (+4 size, -3 vehicle, +4 crew)
Passengers: 0
Maneuver: +5 (+4 size, -3 vehicle, +4 crew)
Cargo Capacity: 34
Defense: 14*(+4 size)
Speed: 215 feet
Maximum Speed: 98 mph
Hull Points: 40
DR: 14

Cost: $100,000
Victory Roll Modifier: -1
*Provides 9-tenths cover for crew and passengers

Limousine

A limousine is a big, comfortable car. The statistics here are for a moderate sized vehicle, rather than a super-stretch or a conventional car with a professional driver. Other standard features include air conditioning, rear defogger, power locks, power mirrors, power steering, power windows, AM/FM radio, 8-track, power driver seat, tilt steering, and automatic transmission. Most limousines contain a radio transceiver for the driver. The limousine is two squares wide and five squares long.

Class: Wheeled (Ground)
Crew: Skilled +4 (1 driver)
Size: Huge
Initiative: +7 (+4 size, -1 vehicle, +4 crew)
Passengers: 7
Maneuver: +6 (+4 size, -2 vehicle, +4 crew)
Cargo Capacity: 4
Defense: 14*(+4 size)
Speed: 240 feet
Maximum Speed: 110 mph
Hull Points: 35
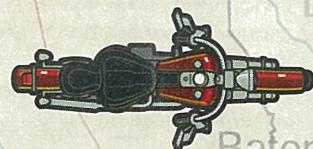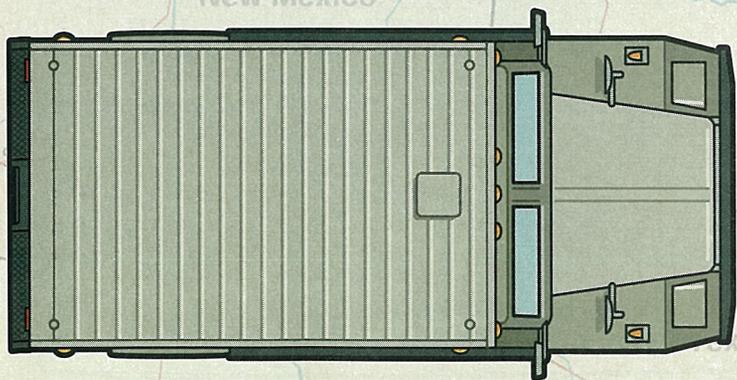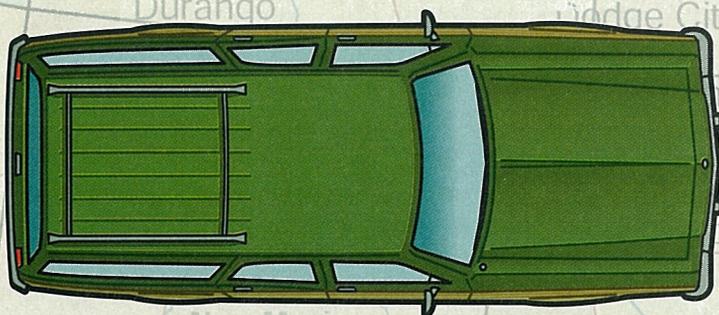**DR:** 7**
Cost: $175,000
Victory Roll Modifier: +0
*Provides three-quarter cover for crew and passengers
**VIP limousines used to transport diplomats, ambassadors, and presidents, will have DR 14 or higher.

Moving Truck

This is a large, two-axle truck used to move furniture

and similar large objects, generally within one city. They are often available through rental agencies such as Ryder and U-Haul. Rented trucks generally have air-conditioning, automatic transmissions, and AM radios. Commercial trucks may or may not have air-conditioning, and generally have CB radio transceivers to communicate with their home office. A moving truck is two squares wide and five squares long.

Class: Wheeled (Ground)
Crew: Normal +2 (1 driver)
Size: Huge
Initiative: +4 (+4 size, -2 vehicle, +2 crew)
Passengers: 2
Maneuver: +3 (+4 size, -3 vehicle, +2 crew)
Cargo Capacity: 310
Defense: 14*(+4 size)
Speed: 210 feet
Maximum Speed: 95 mph
Hull Points: 35
DR: 7
Cost: $95,000 (but you can rent them for as little as $19.95/day)
Victory Roll Modifier: -1
*Provides three-quarter cover for crew and passengers

Performance Cars

This category includes American muscle cars like the 1969 Dodge Charger R/T (the *General Lee*, from *The Dukes of Hazzard*), the Ford Mustang, and the Chevrolet Camaro; and smaller racing vehicles from overseas like the Aston-Martin DB5, and anything made by Porsche or Ferrari. Typically they have the latest quadraphonic stereo sound, AM/FM radios with 8-track tape players, and three-point seatbelts.

Muscle Car

This car is two squares wide and four squares long.
Class: Wheeled (Ground)
Crew: Normal +2 (1 driver)
Size: Huge
Initiative: +9 (+4 size, +3 vehicle, +2 crew)
Passengers: 1
Maneuver: +7 (+4 size, +1 vehicle, +2 crew)
Cargo Capacity: 3
Defense: 14*(+4 size)
Speed: 430 feet
Maximum Speed: 195 mph
Hull Points: 30
DR: 7
Cost: $16,000
Victory Roll Modifier: +2
*Provides three-quarter cover for crew and passengers

Import Racer

This car is two squares wide and three squares long.

Class: Wheeled (Ground)
Crew: Normal +2 (1 driver)
Size: Large
Initiative: +13 (+8 size, +3 vehicle, +2 crew)
Passengers: 1
Maneuver: +11 (+8 size, +1 vehicle, +2 crew)
Cargo Capacity: 2
Defense: 18*(+8 size)
Speed: 355 feet
Maximum Speed: 160 mph
Hull Points: 30
DR: 7
Cost: $17,000
Victory Roll Modifier: +2
*Provides three-quarter cover for crew and passengers

Pick-up Trucks

These are big, muscular trucks modified for various purposes including work as tow trucks. They generally have bench seats, manual transmissions, AM radios, and many have CB radio transceivers. They are two squares wide and four squares long.
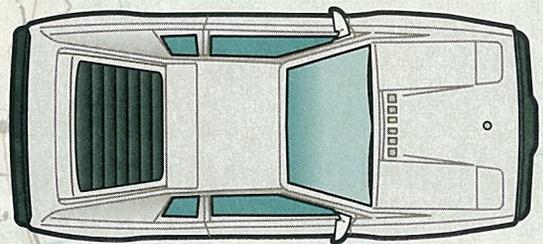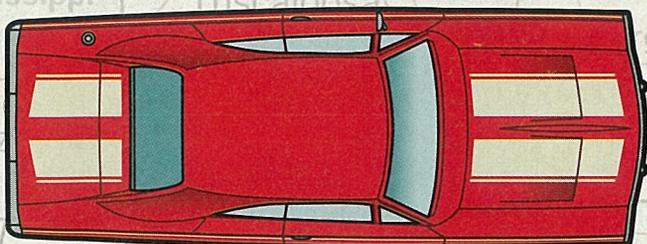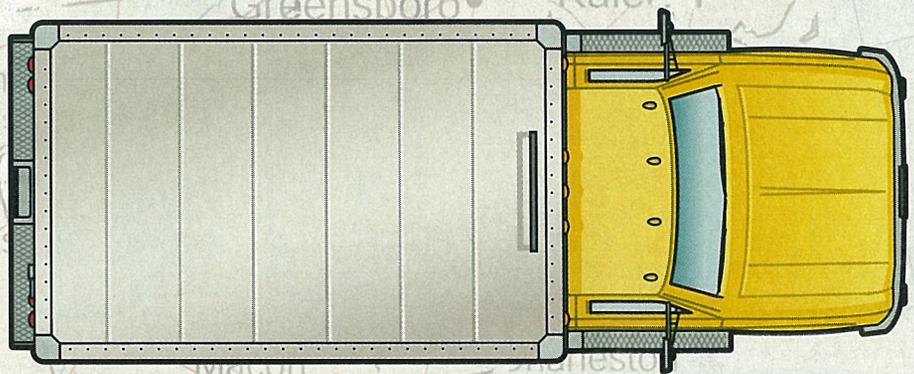**Class:** Wheeled (Ground)
Crew: Normal +2 (1 driver)
Size: Huge
Initiative: +6 (+4 size, +0 vehicle, +2 crew)
Passengers: 2
Maneuver: +5 (+4 size, -1 vehicle, +2 crew)
Cargo Capacity: 24
Defense: 14*(+4 size)
Speed: 220 feet
Maximum Speed: 100 mph
Hull Points: 30
DR: 7
Cost: $21,000
Victory Roll Modifier: -1
*Provides three-quarter cover for crew and passengers

Vans

Typical delivery vans have plenty of cargo room and the added bonus of being inconspicuous. They are two squares wide and four squares long.
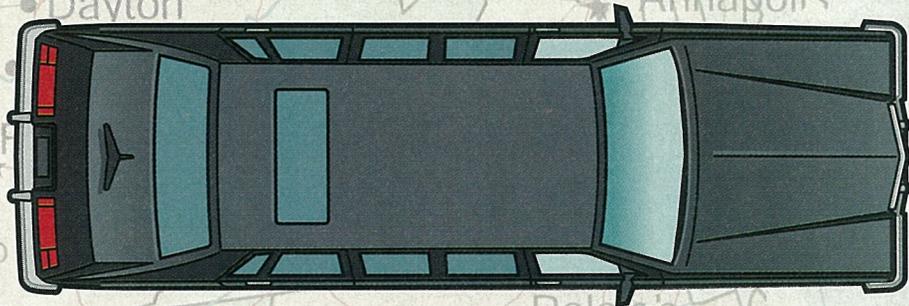
Class: Wheeled (Ground)
Crew: Normal +2 (1 driver)
Size: Huge
Initiative: +5 (+4 size, -1 vehicle, +2 crew)
Passengers: 1
Maneuver: +3 (+4 size, -3 vehicle, +2 crew)
Cargo Capacity: 34
Defense: 14*(+4 size)
Speed: 215 feet
Maximum Speed: 98 mph
Hull Points: 30
DR: 7
Cost: $21,000
Victory Roll Modifier: -1
*Provides three-quarter cover for crew and full cover for passengers

Vehicles Not on the Open Market

Police Vehicles
Local police forces use modified versions of commercially available vehicles. Depending on the location, the size of the force, and their mission, police forces may use modified mid-size cars, performance cars, or pickup trucks.

Cruisers
This vehicle is based on mid-size sedan. Standard features for a police cruiser include police-band radio, spotlight, bubble lights, and brush guard. Though there is room in the front seat for two officers and the shotgun rack. A metal cage separates front and rear seats. "Low profile" cruisers lack the bubble lights, and "under-cover" cruisers lack the identifying logos and colors as well. A cruiser is two squares wide and four squares long.

Class: Wheeled (Ground)
Crew: Skilled +4 (1 driver)
Size: Huge
Initiative: +9 (+4 size, +1 vehicle, +4 crew)
Passengers: 4
Maneuver: +8 (+4 size, +0 vehicle, +4 crew)
Cargo Capacity: 5
Defense: 14*(+4 size)
Speed: 290 feet
Maximum Speed: 130 mph
Hull Points: 30
DR: 7
Cost: Unavailable for purchase
Victory Roll Modifier: +0
*Provides three-quarter cover for crew and passengers

Interceptors
This vehicle is based on an American muscle car. With faster and faster sports cars on the streets, the police occasionally need faster cars to catch them. Most major cities only operate interceptors on special occasions, and other police departments only rent them. They share the same standard features as cruisers, but generally lack the rear seat space to carry prisoners. An interceptor is two squares wide and four squares long.

Class: Wheeled (Ground)
Crew: Skilled +4 (1 driver)
Size: Huge
Initiative: +12 (+4 size, +2 vehicle, +4 crew)
Passengers: 3
Maneuver: +9 (+4 size, +1 vehicle, +4 crew)
Cargo Capacity: 3
Defense: 14*(+4 size)
Speed: 370 feet
Maximum Speed: 170 mph
Hull Points: 25
DR: 7
Cost: Unavailable for purchase
Victory Roll Modifier: +2
*Provides three-quarter cover for crew and passengers

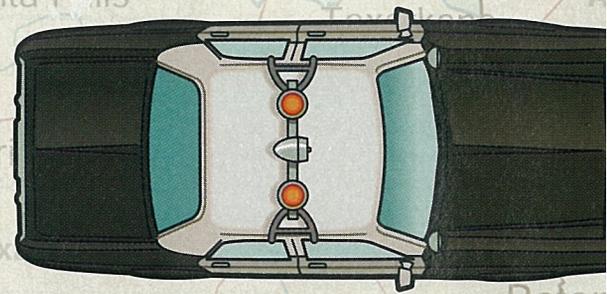## Converting More Vehicles
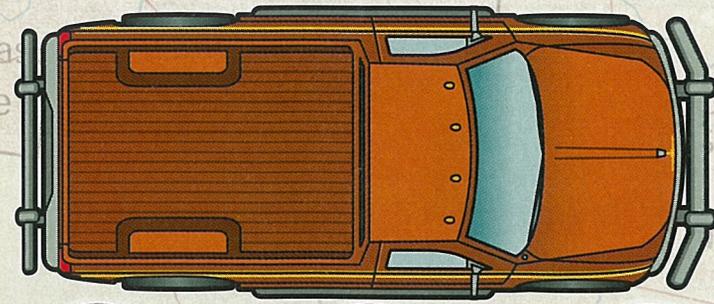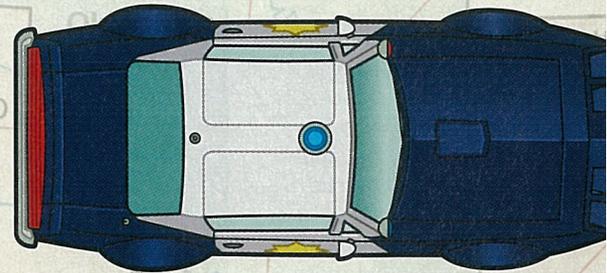We arrived at our numbers using a variety of web sites, such as www.autosite.com.

Magazines such as *Car and Driver* and *Road & Track* often contain the information you need to convert real-world vehicles to the d20 System.

Most of the numbers we use are real-world numbers. Some statistics only exist in the game world, however. Here are guidelines for deriving them:

Size: Table 5-2: Vehicle Sizes shows how to derive a size category. Vehicles up to 5 feet wide are one square wide. Vehicles 6-10 feet wide are two squares wide, and so on. Once you have a vehicle's width in feet, divide by 5 and round any fraction up. That gives you the width in squares. Similarly, divide the vehicle's length in feet by 5 and round any fraction up. That gives you the length in squares.

Initiative: We used vehicles' 0-60 MPH performance to set this as follows.

Less than	
4 seconds	+4
4-5 seconds	+3
5.1-7 seconds	+2
7.1-9 seconds	+1
9.1-11 seconds	+0
11.1-14 seconds	-1
14.1+ seconds	-2

Maneuver: We used vehi-

cles' slalom speeds to set their maneuver rating.
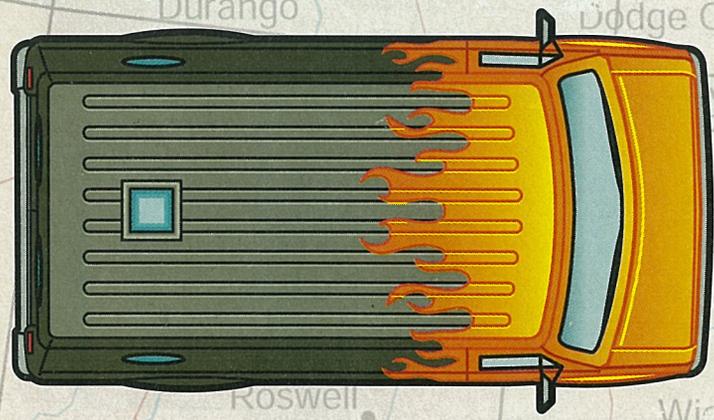
Less than	
40 MPH	-2
41-50 MPH	-1
51-60 MPH	+0
61-70 MPH	+1
71-80 MPH	+2

Defense: We chose an armor bonus of 7 for all vehicles unless there was some reason for them to be heavily armored. This is roughly the equivalent of wearing half-plate armor.

Speed: Take the maximum speed in miles per hour and divide by 600 to get miles per round (divide by 60 to get rounds per minute, then divide again by 10 to get miles per 6-seconds, which is the length of a round). Then multiply by 1,320 to get feet per movement action (multiply by 5,280 to convert miles to feet, then divide by 4 since moving at maximum speed requires a full-move action that is 4 times base speed). Round to the nearest 5, since the standard grid uses 5-foot squares.

DR: We assigned a rating of 7 to all civilian and civilian-based vehicles because they should be able to withstand the average damage from a pistol.

Hull Points: We based this on vehicles' weight as follows:

2001 lb - 2500 lb	15
2501 lb - 3000 lb	20
3001 lb - 3500 lb	25
3501 lb - 4000 lb	30
4001 lb - 4500 lb	35
4501 lb - 5000 lb	40
5001 lb - 5500 lb	45
5501 lb - 6000 lb	50
6501 lb - 7000 lb	55

For motorcycles, we divided 2001 pounds by the motorcycle's weight, and then divided 15 hull points by the result of that division.

Victory Roll Modifiers: This is based on maximum speed.

0-99 MPH	-1
100-139 MPH	+0
140-159 MPH	+1
160+ MPH	+2

Vehicle Accessories

Vehicle accessories fall into three general categories. First is offensive weapons, such as rockets and machine-guns, second is defensive equipment such as caltrops and oil sprayers, and third is mechanical equipment like spare fuel tanks and turbochargers. All accessories, regardless of category, have a cost and a size, rated in cargo units.

Cargo Units

A cargo unit is roughly 5 cubic feet. Every vehicle has a cargo rating, generally based on its trunk space. While not all these items actually fit in the trunk, building them into the vehicle requires some standard vehicle equipment to shift around. For instance, forward-firing machine guns require some items normally under the hood to shift to the trunk space.

You cannot exceed the cargo rating when adding equipment to your vehicle.

Trading Seats

A seat is approximately 2 cargo units. You may remove a seat and replace it with one or more pieces of equipment. Such equipment is immediately obvious to anyone looking in the car window, so it adds +1 to your GM's roll to see if you attract unwanted attention (see Unwanted Attention in Chapter 6: Hitting the Streets).

Concealment

Most equipment is concealed except when in use. Exceptions appear in individual descriptions (and see Trading Seats, above). Unconcealed equipment is a +1 to your GM's roll to see if you attract unwanted attention (see Unwanted Attention in Chapter 6: Hitting the Streets).

Turret-mounted weapons are never concealed. Turrets add a +4 to your GM's roll to see if you attract unwanted attention.

Installation

Racers install accessories themselves. Doing so requires the appropriate tools and a suitable garage. A decent, complete set of tools costs $500. Spending $1,000 on tools buys a deluxe set that grants a +2 equipment bonus to Repair checks using them. A garage space costs $1,000. Spending $5,000 on garage space grants a +2 bonus on Repair checks using that garage. Garage space isn't portable, but tools are. A standard set of tools uses no appreciable cargo space in the vehicle. The deluxe set requires 1 cargo unit to transport.

To install an item after purchasing it, make a Repair check (DC 20). Base installation time is 12 hours. You may not take 20 on these checks, but you may take 10. Succeeding by 5 or more on your Repair check cuts the time in half. Failing by 5 or more damages the vehicle and the item, forcing Repair checks to fix them before starting the installation from scratch.

Offensive Weapons

Vehicles pack much heavier weapons than the firearms described elsewhere in this book, but they follow similar rules. Refer to Table 5-13: Offensive Weapons for more details.

Weapon Descriptions

Auto Cannon: Originally mounted on aircraft, these extra-large machine guns fire cartridges over half an inch in diameter. Auto cannons are mounted firing front or rear, but not to the sides. They may be turret-mounted. Multiple auto cannons can be fire-linked.

Extra Ammo: You may purchase extra auto cannon and machine gun ammunition. Another magazine costs half as much as the weapon, and takes up half as much cargo space. For instance, purchasing another 900 cartridges of auto cannon ammunition costs $2,500, and takes 2 cargo units in addition to the 4 already used by the weapon and the first magazine. Using the additional ammunition requires no special action or roll. You just have more.

Hub Blades: These razor sharp blades spring from the axles of your car. When you sideswipe a vehicle, these blades deal damage directly to the vehicle's tires (see The Fine Art of Stopping a Vehicle, above). If you sideswipe a pedestrian, the blades deal damage to the pedestrian. Price and cargo units are for a set of 2 blades. You may mount both blades on one side of your vehicle, or you may mount both in the front or rear axle.

Machine Gun: These come in two sizes, a .50 caliber heavy machine gun and a 7.62mm medium machine gun. Heavy machine guns may be mounted firing front or rear, but not to the sides. Medium machine guns may be mounted in any firing arc. All machine guns may be turret-mounted. Multiple machine guns may be fire-linked.

Table 5-13: Offensive Weapons

Name	Caliber	Magazine	Range	Dam.	Crit.	ROF	Cargo	Cost
Auto cannon	20mm	900	120	3d10	20	A	4	$5,000
Hub Blades	NA	NA	none	2d6	20	NA	0	$1,000
Machine gun	.50	1000	90	2d10	19-20	A	2	$2,000
Machine gun	7.62mm	2000	90	2d8	20	A	1	$1,000
Ram Horns	NA	NA	none	NA	NA	NA	2	$500
Rocket	70mm	1	50	6d6	20	1	2	$2,000

Ram Horns: Ram horns are extensions of your front bumper designed to protect your vehicle when ramming another. Ram horns grant your vehicle an additional 5 points of damage resistance, but only when resolving damage from purposely ramming another vehicle. Ram horns are never concealed, but since many former police vehicles, sold at auction, come equipped with them, they have no affect on attracting unwanted attention.

Rocket: This is an unguided rocket with a high-explosive warhead. When fired, the rocket travels 100 feet in a straight line from the firing vehicle. On subsequent rounds it travels 200 feet until it reaches its maximum range. If it hits a person, vehicle, or building, it explodes. The explosion has a radius of 15 feet and a Reflex save for half damage (DC 20). Rockets may be mounted firing in any arc, or may be turret-mounted. Multiple rockets may be fire-linked.

Defensive Equipment

Sometimes it's better to beat your enemies by defending yourself. Refer to Table 5-14: Defensive Equipment for more information.

Defense Descriptions

Caltrops: This device contains enough caltrops to fill an area ten feet wide and twenty feet long. You may double the length by spending half the original price. The additional caltrops require half the original cargo units. Caltrops are always mounted in the rear arc.

If a wheeled vehicle crosses a square that contains caltrops, it does not stop. There is no chance for the driver to avoid the caltrops by moving slowly. Assume that a 5-foot square area of caltrops only affects the tires on the side of the vehicle passing through it. The DM rolls 1d10 to determine how many caltrops the tire hits. The first three caltrops reduce the DR of the tire. All caltrops after that damage the tire's hit points, so a result of 10 on the 1d10 roll automatically destroys the tire. Each flat tire on a wheeled vehicle imposes a -4 penalty on Drive checks.

Extra Armor: Racers may add additional armor to their vehicle, increasing its DR. Price is for +2 DR. Racers may add as much armor as they can afford both in terms of money and of cargo space. Each +2 DR is a -1 to the Victory Roll (See Victory Roll in Chapter 6: Hitting the Streets).

Oil Sprayers: This device sprays a slick coating of oil on the road. It fills an area ten feet wide and twenty feet long. You may double the length by spending half the original price. The additional oil requires half the original cargo units. Oil sprayers are always mounted in the rear arc.

If a wheeled vehicle enters an oil slick area, all Drive checks for the next 4 rounds are at -4. Oil slicks are flammable. If ignited, they function as smoke screens rather than oil slicks.

Smokescreens: This device sprays a cloud of smoke, filling an area 10 feet wide, 10 feet high, and 20 feet long each round it operates. The basic device can operate for four rounds before needing a refill. Refills cost half as much as the original price. Additional fuel costs the same as a refill. Each addition doubles the operating time and takes up half as many cargo units as the original device. A smoke cloud provides 100 percent concealment. Smoke clouds remain at full strength for 2 rounds, and then provide 50% concealment for another 2 rounds. Strong winds halve those times. Smokescreens are always mounted in the rear arc.

Mechanical Equipment

The key to success doesn't always come from extra armor or ammunition. Sometimes, it's the little mechanical masterpieces under the hood. Refer to Table 5-15: Mechanical Equipment for more details.

Mechanical Descriptions

Extra Fuel Tanks: Extra Fuel tanks allow racers to drive further without refueling. They provide a +1 bonus to the Victory Roll (see Chapter 6: Hitting the Streets). Extra fuel tanks are always concealed, unless they replace a vehicle's seats.

NOS: A nitrous oxide system doubles the damage caused when the vehicle mounting NOS explodes. Nitrous oxide provides a tremendous performance boost to an engine. It adds 440 feet (about 200 MPH) to the vehicle's speed while operating, but the boost only lasts 2 rounds. Activating NOS is a free action. While operating, NOS provides a -4 penalty to the vehicle's maneuver rating. Operating a NOS unit for more than 2 rounds burns out the engine, causing a -4 penalty to attempts to establish pursuit until it is repaired. Burning out an engine causes a -1 penalty to the Victory Roll (see Chapter 6: Hitting the Streets). NOS is concealed except when in use or when mounted on a motorcycle.

Sidecar: A sidecar mounts on the right side of a motorcycle. It requires no particular cargo space, and provides 3 cargo units or a passenger seat and 1 cargo unit. Weapons mounted in the

Table 5-14: Defensive Equipment

Item	Cargo	Cost
Caltrops	2	$1,000
Extra caltrops	1	$500
Oil sprayers	2	$2,000
Extra fuel	1	$1,000
Smokescreens	2	$2,000
Extra fuel	1	$1,000
Extra Armor	1	$1,000

Table 5-15: Mechanical Equipment

Item	Cargo	Cost
Extra Fuel Tank	2	$1,000
NOS	4	$5,000
Additional NO2	2	$2,500
Sidecar	0	$500
Spinning Plates	0	$1,000
Turbo I	1	$5,000
Turbo II	2	$7,500
Turret	4	$10,000

sidecar can only fire in either the front or rear arcs. A sidecar reduces a motorcycle or motorcycle driver's initiative bonus by -1, and reduces speed 50 feet (about 25 MPH).

Spinning Plates: This allows a driver to change license plates without leaving the driver's seat. Activating spinning plates is a free action. Spinning plates provide a -4 penalty to the GM's Fuzz Check (see The Fuzz in Chapter 6: Hitting the Streets). Spinning plates are always concealed except when activated.

Turbo I: A turbo supercharger activates automatically when a driver places sudden, extreme demand on an engine. A turbine driven by engine exhaust drives a supercharger that forces air into the engine to increase power. Turbo I increases vehicle speed 100 feet (about 50 MPH), but increases the DC for all Repair checks to the engine by +5. While operating, turbo I provides a -2 penalty to the vehicle's maneuver rating. Operating a turbo system for more than 5 rounds burns out the engine, causing a -4 penalty to attempts to establish pursuit until it is repaired. Burning out an engine causes a -1 penalty to the Victory Roll. Otherwise, turbo I provides a +1 bonus to the Victory Roll (see Chapter 6: Hitting the Streets). Turbo I is concealed except when operating.

Turbo II: Where turbo I uses subtle vents to bring air to the supercharger, turbo II requires a hole in the hood through which a large "blower" protrudes. Turbo II increases vehicle speed 220 feet (about 100 MPH), but increases the DC for all Repair checks to the engine by +5. While operating, turbo II provides a -4 penalty to the vehicle's maneuver rating. Operating a turbo system for more than 5 rounds burns out the engine, causing a -4 penalty to attempts to establish pursuit until it is repaired. Burning out an engine causes a -1 penalty to the Victory Roll. Otherwise, turbo II pro-vides a +2 bonus to the Victory Roll (see Chapter 6: Hitting the Streets), but a +1 bonus to Fuzz Checks. Turbo II is never concealed, and cannot be mounted on motorcycles.

Turret: Turrets are never concealed. Weapons mounted in turrets are never concealed. A turret provides a 360-degree arc of fire for weapons mounted in it. A turret requires 4 cargo units to install, but provides 3 cargo units for weapons and ammunition. You cannot mount smokescreens, extra fuel tanks, NOS, or turbo in a turret. Because of their weight and the additional drag they create, turrets reduce speed 100 feet per round (roughly 50 MPH) and cause a -1 penalty to the Victory Roll (see Chapter 6: Hitting the Streets). Turrets grant a +4 bonus to Fuzz Checks in addition to the bonus for unconcealed equipment.

Table 5-16: Compiled Vehicle Data

Name	Size	Crew	Cost	Vic. Roll Mod.	Pass.	Cargo	Init.	Man.	Speed	Max. Speed	Def.	DR	Hull Points
Economy Cars	Huge	Normal +2 (1)	$15,000	-1	4	3	+7	+5	220 ft.	100 mph	14	7	20
Luxury Cars	Huge	Normal +2 (1)	$40,000	+0	4	4	+7	+7	265 ft.	120 mph	14	7	35
Mid-Size Cars	Huge	Normal +2 (1)	$20,000	+0	5	4	+6	+5	235 ft.	109 mph	14	7	25
Motorcycles													
Racer	Large	Normal +2 (1)	$17,000	+2	0	1	+14	+11	460 ft.	210 mph	18	3	3
Touring	Large	Normal +2 (1)	$18,000	+1	1	2	+13	+11	330 ft.	150 mph	18	3	5
Other Vehicles													
Armored Truck	Huge	Skilled +4 (2)	$100,000	-1	0	34	+5	+5	215 ft.	98 mph	14	14	40
Limousine	Huge	Skilled +4 (1)	$175,000	+0	7	4	+7	+6	240 ft.	110 mph	14	7	35
Moving Truck	Huge	Normal +2 (1)	$95,000	-1	2	310	+4	+3	210 ft.	95 mph	14	7	35
Performance Cars													
Muscle Car	Huge	Normal +2 (1)	$16,000	+2	1	3	+9	+7	430 ft.	195 mph	14	7	30
Import Racer	Large	Normal +1 (1)	$20,000	+2	1	2	+13	+11	355 ft.	160 mph	18	7	30
Pick-up Trucks	Huge	Normal +2 (1)	$21,000	-1	2	24	+6	+5	220 ft.	100 mph	14	7	30
Vans	Huge	Normal +2 (1)	$21,000	-1	1	34	+5	+3	215 ft.	98 mph	14	7	30
Vehicles Not on the Open Market													
Police Cruiser	Huge	Skilled +4 (1)	NA	+0	4	5	+9	+8	290 ft.	130 mph	14	7	30
Police Interceptor	Huge	Skilled +4 (1)	NA	+2	3	3	+12	+9	370 ft.	170 mph	14	7	25

(Column groups: General = Name, Size, Crew, Cost; Capacity = Vic. Roll Mod., Pass., Cargo; Performance = Init., Man., Speed, Max. Speed; Defense = Def., DR, Hull Points)

Compiled Vehicle Data Information Key

General: This category includes name of the vehicle, size, and typical crew skill for Drive checks, and price.

Capacity: This category shows the vehicle's capacity for passengers and cargo.

Performance: This category provides initiative and maneuver modifiers and speeds.

Defense: This category covers defense, damage resistance, and hull points.

Name: Vehicle's name. Vehicles appear in the same order and category in which their descriptions appear.

Size: The size category of the vehicle from Table 5-2: Vehicle Sizes. Actual vehicle length and the squares occupied by the vehicle appear in the vehicle descriptions.

Crew: This column shows the typical crew quality and the modifier for Drive checks (see Man., below). A parenthetical note shows the number of crew necessary to drive or pilot the vehicle. See Table 5-7: Vehicle Crew Quality for an explanation of crew quality and to find the modifiers for attack rolls.

Cost: Manufacturer's Suggested Retail Price in United States dollars.

Vic. Roll Mod: This modifies the team's Victory Roll (see Chapter 6: Hitting the Streets).

Pass: Number of passengers using the standard seating arrangement.

Cargo: Cargo units of storage space (approximately 5 cubic feet each) when using the standard seating arrangement. The cargo capacity of pick-up trucks is based on the dimensions of the bed, doubled because there is no height limit.

Init: Vehicle initiative modifier. See the vehicle descriptions for factors that add to this number. Only use this number when determining initiative by vehicle instead of by individual characters.

Man: Vehicle maneuver modifier. Use this number to make Drive checks for GM-controlled vehicles. See the vehicle descriptions for factors that add to this number

Speed: The distance the vehicle travels in feet, in one movement action.

Max. Speed: The maximum speed of the vehicle given in miles per hour.

Def: The total Defense rating of the vehicle. See the vehicle descriptions for factors that add to this number and to see how much cover the vehicle provides to crew and passengers.

DR: The amount of Damage Reduction subtracted from damage done to the vehicle.

Hull Points: The amount of damage the vehicle can withstand before it ceases to function.

CHAPTER SIX
Hitting the Streets

This chapter provides the basic information you'll need to make the mid-'70s, the golden age of cross-country race movies, come alive on your table top. Load up an 8-track and turn on the mood lights. We're going for a ride to the past.

1976

While the tires squeal and racers duck gunfire from greedy opponents, the world beyond the race just keeps on truckin'. Here are a few high (and low) points from 1976 to help you flesh out your *Thunderball Rally* campaign.

World Events
• Mairead Corrigan and Betty Williams (both from Northern Ireland) win the Nobel Peace Prize.
• Khmer Rouge leader Pol Pot becomes prime minister (and virtual dictator) of Cambodia after Prince Sihanouk steps down (April 2).
• Israeli airborne commandos attack Uganda's Entebbe Airport and free 103 hostages held by pro-Palestinian hijackers of Air France plane; one Israeli and several Ugandan soldiers killed in raid (July 4).
• 19-month civil war ends in Lebanon after threatening to escalate to global level (Nov.).

U.S. Events
President: Gerald R. Ford
Vice President: Nelson A. Rockefeller
Population: 218,035,164
Life expectancy: 72.9 years
Violent Crime Rate (per 1,000): 52.9
Property Crime Rate (per 1,000): 48.2

• US Supreme Court rules that blacks and other minorities are entitled to retroactive job seniority (March 24).
• Ford signs Federal Election Campaign Act (May 11).
• US Supreme Court rules that death penalty is not inherently cruel or unusual and is a constitutionally acceptable form of punishment (July 3).
• Nation celebrates Bicentennial (July 4).

• Mysterious disease strikes American Legion convention in Philadelphia, eventually claiming 29 lives (Aug. 4).
• Jimmy Carter elected US President (Nov. 2).

Crime
• The Summer of Sam: "Son of Sam" killer David Berkowitz kills his first victim, July 29, 1976.
• Ted Bundy sentenced to 15 years in prison in Utah (he escapes in 1977).
• Joseph Pistone (Donnie Brasco) infiltrates the Bonanno crime syndicate in New York, September, 1976.
• October 15, 1976: Death of Carlo Gambino, head of the Gambino crime family, in Long Island, NY.

Sports
Super Bowl: Pittsburgh d. Dallas (21–17)
World Series: Cincinnati d. NY Yankees (4–0)
NBA Championship: Boston d. Phoenix (4–2)
Stanley Cup: Montreal d. Philadelphia (4–0)
Wimbledon Women: Chris Evert d. E. Cawley (6–3 4–6 8–6)
Wimbeldon Men: Bjorn Borg d. I. Nastase (6–4 6–2 9–7)
Kentucky Derby Champion: Bold Forbes
NCAA Basketball Championship: Indiana d. Michigan (86–68)
NCAA Football Champions: Pittsburgh (12–0–0)

Entertainment
Pulitzer Prizes
   Fiction: *Humboldt's Gift*, Saul Bellow
   Music: *Air Music*, Ned Rorem
   Drama: *A Chorus Line*, Conceived by Michael Bennett

Academy Award, Best Picture: *One Flew Over the Cuckoo's Nest*, Saul Zaentz and Michael Douglas, producers (United Artists)
Nobel Prize for Literature: Saul Bellow (US)
Record of the Year: "Love Will Keep Us Together," Captain and Tennille

Album of the Year: *Still Crazy After All These Years*, Paul Simon (Columbia)
Song of the Year: "Send in the Clowns," Stephen Sondheim, songwriter
Miss America: Tawney Elaine Godin (NY)

• The Steadicam is used for the first time in *Rocky*.
• Philip Glass completes *Einstein on the Beach*, the first widely known example of minimalist composition.
• NBC broadcasts *Gone with the Wind* and scores record-breaking ratings.

At the Box Office: *Rocky*, *Taxi Driver*, *Network*, *All the President's Men*.

On the Radio: "Baby, I Love Your Way" (Peter Frampton), "Beth" (KISS), "Blinded by the Light" (Manfred Mann's Earth Band), "Bohemian Rhapsody" (Queen), "Car Wash" (Rose Royce), "(Don't Fear) The Reaper" (Blue Oyster Cult), "Dream Weaver" (Gary Wright), "Fernando" (ABBA), "Free Bird" (Lynyrd Skynyrd), "More than a Feeling" (Boston), "Play that Funky Music" (Wild Cherry), "(Shake, Shake, Shake) Shake Your Booty" (K.C. and the Sunshine Band), "Take it to the Limit" (Eagles), "Turn the Beat Around" (Vicki Sue Robinson).

Books
• Raymond Carver, *Will You Please Be Quiet, Please?*
• Judith Guest, *Ordinary People*
• Alex Haley, *Roots*
• Maxine Hong Kingston, *The Woman Warrior*
• Robert Lowell, *Selected Poems*
• Gabriel García Márquez, *Autumn of the Patriarch*
• Gore Vidal, *1876*

Science
• Air France and British Airways begin the first regularly scheduled commercial supersonic transport (SST) flights.
• Viking I lands on Mars.
• The US Navy tests the Tomahawk cruise missile.

- Richard Leakey discovers a 1.5 million year old *Homo erectus* skull in Kenya.
- Cosmic string theory first postulated by Thomas Kibble.

The Thunderball Rally

Watch any of the *Cannonball Run* movies once and you'll realize that the race is just an excuse for the scenes that happen on the road. The race is not the plot of the story, but it is what puts the characters in the middle of the plot. In *Thunderball Rally*, those scenes are known as Pit Stops.

Pit Stops

Pit Stops are encounters involving racers and their opponents, and sometimes other NPCs. Taken together, these scenes make up the story of your game. Most scenes should have goals related to the race (see The Victory Roll, below). For example, picking up a hitchhiker who has good Repair skills should grant a +1 bonus to the Victory Roll. Making a particularly tricky maneuver that's central to the scene (jumping a washed-out bridge or through a train boxcar) should grant a +1 bonus. Accomplishing the goal should help the racers toward victory. Encounters generally take the form of character encounters, driving encounters, or action encounters.

Character Encounters

These encounters help players define their characters. If a bunny hops out into the road in front of their car, does the crew swerve or run it over? Do they stop for the sexy hitchhiker on the side of the road? Here are some examples of possible character encounters:

- The racers wreck their car, and must find another to finish the race. They may buy or steal one.
- The racers encounter a crooked entrepreneur who bet a ton of money on them. Will they cheat for him? This could or could not be a trap set by the people running the race. What happens if they catch the racers cheating?
- The racers spot a sexy hitchhiker on the road and choose whether or not to stop.
- The law busts the racers, but offers to waive the charges if they'll rat out the other racers and the organizers. The racers may buy their freedom, or they may try to escape.

- An orphan stows away in the back of the racers' car. He's got nowhere to go, and maybe he even has some skills that will come in handy. He just wants to get to California.
- The racers come upon a family-filled RV on a one-lane road. They're driving very slowly. Depending on how you handle this, it could easily become a driving encounter.
- The racers encounter a traffic jam.
- The racers come across what appears to be an easily knocked-over armored car. Will they go for the fast money while risking the ire of the cops and losing the race?

Driving Encounters

These encounters are about going as fast as you can while still maintaining control of the car.

- The racers encounter a police or FBI roadblock. Depending on its position, they may be able to go around, or they may have to abruptly turn around. Either way, a chase ensues.
- There's a bridge out. If the racers jump it successfully, give them a bonus on their roll to win the race.
- A long train blocks the road. A gravel pile nearby could provide a ramp, but the racers have to get their car through the open doors of a boxcar. Give them a +1 bonus on their Victory Roll if they make it.
- One of the other racing crews sets an ambush for the racers.
- A motorcycle gang wants the racers' ride, and doesn't particularly care if the racers are in a selling kind of mood.
- Another crew sabotages the racers' car while they sleep, and now they have no brakes (and therefore can't reduce speed normally).
- Wreckers set traps in the road to cause accidents so they can salvage the vehicles.

Action Encounters

These encounters happen while the racers are outside their vehicles.

- The racers discover that the gas station they were counting on for refueling in the middle of nowhere has been abandoned. They investigate, looking for enough gas to make the next town.
- The racers stop for food at a truck stop manned by gun-toting, slack jawed yokels.

- The racers swing into a 7-11 for chips and water as it is being robbed. The robbers want the heroes' car for their getaway.
- A crop duster flies overhead, releasing some sort of gas that makes it difficult to see or makes the road slippery. Someone is cheating, but whom?
- The racers come across a road gang hijacking a fuel truck.

Encounter Enhancers

It's one thing to jump your car over a gulch. It's another thing altogether to jump that gulch with three cop cars on your tail, a gun-crazy stowaway bride in the back seat, and a box of unstable chemicals in the trunk. Use some of the following ideas to bring cinematic spice to your *Thunderball Rally* encounters.

- Firework stands always lend needed spice to encounters.
- Tanker trucks loaded with flammable liquids.
- Dishonest police, or car salesmen.
- An ice cream truck. The kids love ice cream.
- Bad weather.
- Animals in the road.

Stories

Stories in *Thunderball Rally* begin just before the race, and end when the race ends. The following race outline assumes that the player character racers have a rival, a sleazebag hustler named Steve Jones. The PC racers respect, and sometimes even like, Jones and his generally well-meaning crew but their rivalry is so intense that both crews care more about beating each other than about winning the race.

This year Jones has an expensive import racer with a souped-up engine and a new driver. What the player characters do not know is that the ace, Franco Bertollini, is a ringer. The rest of the year, he is a professional Formula 1 driver in Europe.

Opening Scene

The PC racers meet the other crews at Gigino in New York City the night before the race. They renew their rivalry with Steve, trading good-natured insults, and he introduces them to his new driver, "Frank."

Scene Two

Tensions are high in the warehouse garage the night before the race. Every crew meticulously checks over their vehicle one last time. The rival crew reports that someone sabotaged their car. Steve does not blame the heroes, he just warns them to keep their eyes open.

Scene Three

The race is in progress. The heroes and the rival team meet when they both choose the same ferry to cross a river. The ferry is a quarter of a mile away, and untying from the dock. There is room on the back of the ferry for only one more car. Whoever makes it gains a significant advantage (+2 on the Victory Roll, see below).

Scene Four

At a roadside diner and gas station, the player characters run into another team. The other team's car has been sabotaged and they are out of the race. They think someone is trying to fix the race, and they ask the player characters to "go get" the team that sabotaged their car.

Scene Five

The player characters catch up to the saboteurs and a high-speed battle ensues on the road.

Closing Scene

At the docks in San Diego, the heroes discover who won the race, find out whether or not they beat Steve and Franco, all grudges are settled, and the Cosa Nostra sponsors throw the Family members who tried to fix the race into the ocean.

Reputation: Good Attention

Every racer has a reputation of one sort or another. As a racer advances in levels, he or she gains a Reputation bonus that the GM sometimes can allow the character to use with certain Charisma-based skills in certain situations (see Chapter 1: Characters for details on your racer's Reputation). There are a number of ways and situations in which Reputation comes into play.

In general, a high Reputation bonus benefits a racer. Those who recognize the racer are more likely to help him (or do what he asks). However, a high Reputation bonus also makes it difficult for the racer to avoid unwanted attention (see The Fuzz, below).

Generally, a racer doesn't get a choice whether or not to apply a Reputation bonus. When the GM decides that a racer's Reputation can be relevant to a scene, the racer's player must apply the Reputation bonus to the check.

Fame and Infamy

Most racers with a high Reputation bonus (+4 or higher) are considered "famous." That is, their reputation is generally positive. The Circuit Hero feat adds to this positive reputation.

However, some racers are infamous, which results in different reactions. As a general rule, a racer with the Circuit Heel feat is considered infamous (No racer can select both the Circuit Hero and the Circuit Heel feat).

Also, at the GM's option, a racer might be considered infamous in certain situations due to events that transpired in a previous race. For instance, if your racer caused a lot of property damage in Toledo, he or she would be considered infamous when attempting to interact with folks in Toledo.

Using the Reputation Bonus

Whenever the GM decides that a racer's reputation can be a factor in an encounter (usually when interacting with law enforcement, race crews, race fans, or reporters), the racer's Reputation bonus is added to the following skill checks: Bluff, Diplomacy, Gather Information, and Intimidate.

In situations in which the character's positive reputation or fame can sway another character's reaction, the racer adds to the skill check. For instance, if Steve Jones and Franco Bertollini have a breakdown and need the local mechanic (and fan) to work on their car immediately, either's fame and positive reputation grants a Reputation bonus to his Diplomacy check.
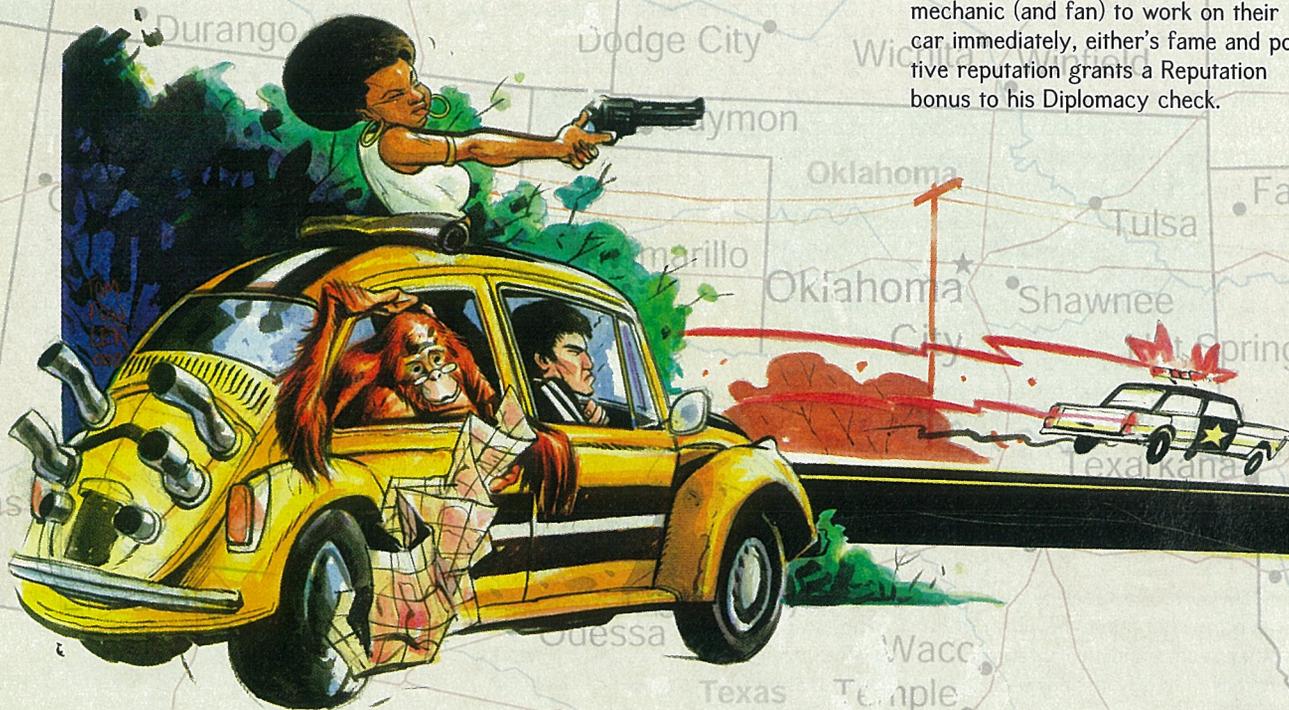
In situations in which the character's negative reputation or infamy can help sway another character's reaction, the bonus adds to the skill check. For example, Knuckles Magee is tailing Steve and Franco and needs the mechanic to tell him which route the heroes took out of town. His notoriety and reputation as a dangerous body-guard and thug grants him a Reputation bonus on his Intimidate check.

In situations where the racer's negative reputation or infamy makes another character react poorly toward him, the Reputation bonus is subtracted from the skill check (it becomes a penalty instead of a bonus). For example, if Steve or Franco double park while picking up some food, the higher of their two Reputations is a penalty when trying to Bluff their way out of a parking ticket (and could get them some unwanted attention, see The Fuzz, below).

Remember that the GM must determine that a character's fame or infamy can come into play in a given situation for the Reputation bonus to apply. Most people on the street won't know you from Richard Petty (six-time Winston Cup champion by 1976, and most popular Winston Cup Series Driver in 1976), and can't be influenced by your reputation. Other notes regarding Reputation bonuses and these Charisma-based skills follow.

Bluff: In general, being either famous or infamous aids Bluff checks. However, any Bluff check made to deny or hide your identity ("I don't have 200 moving violations, there must be someone else with the same name") automatically turns the racer's Reputation bonus into a penalty for that check.

Diplomacy: Infamous characters use their Reputation bonus as a penalty when making Diplomacy checks (it's tough to talk your way out of a speeding ticket when the police think you're a killer).

Gather Information: People are more willing to help someone they know, whether happily (for a Circuit Hero) or fearfully (for a Circuit Heel).

Intimidate: A famous character can use his reputation to "throw his weight around," but he gets to use only half of his Reputation bonus (round down). An infamous character, on the other hand, uses his full Reputation bonus when making an Intimidate check.

The Fuzz: Bad Attention

To determine when racers attract the attention of law enforcement, and how much attention they attract, the GM makes a Fuzz Check (DC 20) any time he feels that the PCs' actions might bring them under legal scrutiny. Assume the law enforcement crew are Skilled, so they get a +4 to their check. Add all the following modifiers that apply each time the GM makes a Fuzz Check.

Circumstantial Modifiers

Unconcealed equipment*	+1
Unrepaired vehicle damage	+1
Turbo II	+1
Turret	+4

Hero Action

Speeding	+2
Blowing up buildings	+4
Shooting firearms	+2
Vehicle-related deaths	+6

Modifier for Location

Urban	+6
Suburban	+4
Rural	+2
Middle of Nowhere	+0

*This modifier is for each piece of unconcealed equipment.

Fuzz Check Result

Less than 20	No attention
20-25	One police vehicle takes up the chase
30-35	Police block the road ahead with four vehicles and give chase.
36+	A dozen police cars (some of them interceptors) give chase.

If police take up the chase, run a driving encounter (see Pit Stops, above). If the racers disable all the pur-

Table 6-1: Victory Roll Modifiers

Source	Modifier
Equipment	
Each extra armor	-1
Burned out engine	-1
Turret	-1
Extra Fuel Tanks	+1
Turbo I	+1
Turbo II	+2
Scene Modifiers	
Accomplish goal of the Pit Stop (as set by the GM)	+1
Disable* opponent's vehicle	+1
Destroy opponent's vehicle	+2
Incapacitate** opposing driver	+1
Incapacitate** opposing navigator	+1
Your vehicle disabled*	-1
Your vehicle destroyed	-2
Your driver incapacitated**	-1
Your navigator incapacitated**	-1
Additional Modifiers	
Each day spent recovering from injuries	-2
Each time you attract unwanted attention (see The Fuzz)	-1
Superior Planning (the navigator provides this assistance bonus with a Drive check (DC 10))	+2

*Disabled means the vehicle crew must make a Repair check to get the vehicle moving again.

**Incapacitated, in this case, includes being dead.

The maximum bonus for any scene is +10. There is no minimum. NPC racers only earn scene modifiers for scenes in which they and the PCs both appear. Otherwise they get modifiers for equipment and may attempt to gain the Superior Planning bonus.

suing vehicles, the scene ends. If all pursuers lose sight of the racers (a Search check opposed by the racer's Hide check, with a +4 bonus to Search assuming the pursuers are skilled), pursuit ends. The GM uses his or her best judgment when determining if sufficient concealment exists to allow a Hide check.

Characters

Colorful is always better in this game. A crew that wants to race a limousine with an orangutan in the front seat "driving" while they handle the real controls from the back understands the spirit of *Thunderball Rally*. The navigator with a split personality who sometimes thinks he's a superhero deserves at least one GM-granted +2 bonus to a check during the game, and maybe more. Reward colorful roleplaying.

GM characters should steal shamelessly from television and the movies. It's much more fun if the black van the heroes think belongs to their opponents actually belongs to a group of Viet Nam veterans accused of crimes they didn't commit and on the run from the Army. If they stop to help a car broken down on the side of the highway in Death Valley, the owner should be Elvis Presley or Frank Sinatra. Pick your favorite Hollywood character actors and use their voices and mannerisms for GM characters.

The Victory Roll

You still need to determine who wins the race. You do so with a Victory Roll. A Victory Roll is a d20 check made by all racers not in a hospital and still in possession of a vehicle. The GM rolls for NPC racers, and whoever is playing the driver rolls for the heroes. Each vehicle has a Victory Roll Modifier, as outlined in Chapter 5. Add that modifier to the d20 roll, and then add any of the modifiers

on Table 6-1: Victory Roll Modifiers, if applicable.

In the unlikely event of a tie, the top racers spot each other about a mile from the *Queen Mary*. They must race each other to the finish. Throw lots of obstacles and turns in their path so the fastest car isn't automatically the winner. Whoever wins the final mile wins the race.

Filmography

To truly understand the spirit of *Thunderball Rally*, you've got to immerse yourself in racing movies filled with hijinks and car-fueled mayhem. Here are a few choice examples, courtesy of imdb.com.

•**Vanishing Point**
Barry Newman delivers a supercharged Dodge Charger from Colorado to California, and bets he can make the trip in 15 hours. Considered by many to be the finest car movie ever made. (1971)

•**Death Race 2000**
Cult cinema legend David Carradine, Sylvester Stallone, and others compete in a cross-country car race in which racers score points for running over pedestrians. Brilliant. (1975)

•**Every Which Way But Loose**
What's better than a movie in which Clint Eastwood plays a fistfighting semi driver? One that also stars an orangutan, of course. (1978)

•**Cannonball Run**
Burt Reynolds, King of the Car Movie, stars in the film that perfected the genre. If you only rent one of these movies, this is the one. (1981)

Other Notable Flicks
Bullitt (1968), *Le Mans* (1971), *Gone in 60 Seconds* (1974), *Gumball Rally* (1976), *Mother, Jugs & Speed* (1976).

Drivers

Level	1	3	5	7
Hit Points	9	19	29	39
Initiative	+6	+6	+7	+7
Speed	30	30	30	30
Defense	13	14	16	16
Reputation	+2	+2	+3	+4
Attacks	-1 melee, +1 ranged	+1 melee, +3 ranged	+2 melee, +6 ranged	+4 melee, +7 ranged
Damage	2d8 (sawed-off shotgun)	2d8 (sawed-off shotgun)	2d8 (sawed-off shotgun)	2d8 (sawed-off shotgun)
Saves	Fort +1, Ref +4, Will +1	Fort +2, Ref +5, Will +2	Fort +2, Ref +7, Will +2	Fort +3, Ref +8, Will +3
Abilities	Str 8, Dex 15, Con 13, Int 10, Wis 12, Cha 14	Str 8, Dex 15, Con 13, Int 10, Wis 12, Cha 14	Str 8, Dex 16, Con 13, Int 10, Wis 12, Cha 14	Str 8, Dex 16, Con 13, Int 10, Wis 12, Cha 14
Skills	Bluff +6, Diplomacy +6, Drive +6, Intimidate +6, Spot +5	Bluff +8, Diplomacy +10, Drive +8, Intimidate +10, Spot +9	Bluff +10, Dipl. +12, Drive +11, Intimid. +12, Spot +11	Bluff +12, Diplomacy +14, Drive +13, Intimidate +14, Spot +13
Feats	Imp. Init., Infamy, Vehicle Combat	Alertness, Imp. Init., Infamy, Influence, Vehicle Combat	Alertness, Daredevil, Imp. Init., Infamy, Influence, Veh. Cbt.	Alertness, Daredevil, Drive-By, Frightful Presence, Imp. Init. Infamy, Influence, Veh. Cbt.
Class Abilities	Breaker, Breaker	Breaker, Breaker; Coordinate, Uncanny Dodge	Breaker, Breaker; Coordinate, Presence, Uncanny Dodge	Attract, Breaker, Breaker; Coordinate, Presence, Uncanny Dodge
Action Points	1	2	3	4

Vehicles:
First and Third Level: Muscle Car with two forward-firing, fire-linked 7.62mm machineguns; ram horns; and an extra fuel tank.
Fifth and Seventh Level: Muscle Car with turbo II, hub blades, ram horns, and two forward-firing, fire-linked 7.62mm machineguns, and extra armor.

Navigators

Level	1	3	5	7
Hit Points	9	19	29	39
Initiative	+0	+4	+4	+4
Speed	30	30	30	30
Defense	11	13	14	14
Reputation	+1	+1	+2	+3
Attacks	-1 melee, +0 ranged	+1 melee, +2 ranged	+2 melee, +3 ranged	+4 melee, +6 ranged
Damage	2d6 (pistol)	2d6 (pistol)	2d6 (pistol)	2d6 (pistol)
Saves	Fort +1, Ref +0, Will +4	Fort +2, Ref +1, Will +5	Fort +2, Ref +1, Will +6	Fort +3, Ref +2, Will +7
Abilities	Str 8, Dex 10, Con 12, Int 15, Wis 14, Cha 13	Str 8, Dex 10, Con 12, Int 15, Wis 14, Cha 13	Str 8, Dex 10, Con 12, Int 16, Wis 14, Cha 13	Str 8, Dex 10, Con 12, Int 16, Wis 14, Cha 13
Skills	Disable Device +6, Drive +4, Knowledge (applied sciences) +6, Listen +6, Repair +9, Search +6, Sense Motive +6, Spot +6, Treat Injury +6	Dis. Dev. +10, Drive +6, Know (app. sci.) +8, Listen +8, Repair +13, Search +8, Sense Motive +8, Spot +8, Treat Injury +8	Dis. Dev. +13, Drive +8, Know. (app. sci.) +11, Listen +10, Repair +16, Search +11, Sense Motive +10, Spot +10, Treat Injury +10	Diplomacy +3, Dis. Dev. +15, Drive +10, Know. (app. sci.) +13, Listen +12, Repair +18, Search +13, Sense Motive +12, Spot +12, Treat Injury +12
Feats	Back Seat Driver Gearhead	Back Seat Driver, Gearhead, Imp. Init.	Back Seat Driver, Gearhead, Imp. Init.	Back Seat Driver, Gearhead, Imp. Init. Point Blank Shot
Class Abilities	Skill Emphasis (Repair)	Skill Emph. (Rep.), Focus, Secret of Ducking	Skill Emph. (Rep.), Focus, Secret of Ducking, Breaker 19, Trick	Skill Emph. (Rep.), Focus, Secret of Ducking, Breaker 19, Trick, Secret of Marksmanship
Action Points	1	2	3	4

Bodyguards

You may also use these characters as "mechanics," gun-toting slack-jawed yokels, or any time you need a combat threat.

Level	1	3	5	7
Hit Points	11	24	37	50
Initiative	+2	+2	+3	+3
Speed	30	30	30	30
Defense	14	15	18	19
Reputation	+0	+1	+1	+2
Attacks	+3 melee, +3 ranged	+5 melee, +5 ranged	+7 melee, +8 ranged	+9/+4 melee, +10/+5 ranged
Damage	1d6+2 (tire iron), 2d6 (tommy gun)	1d6+2 (tire iron), 2d6 (tommy gun)	1d6+2 (tire iron), 2d8 (assault rifle)	1d6+2 (tire iron), 2d8 (assault rifle)
Saves	Fort +3, Ref +2, Will +1	Fort +4, Ref +3, Will +2	Fort +5, Ref +4, Will +2	Fort +6, Ref +5, Will +3
Abilities	Str 14, Dex 15, Con 13, Int 10, Wis 12, Cha 8	Str 14, Dex 15, Con 13, Int 10, Wis 12, Cha 8	Str 14, Dex 16, Con 13, Int 10, Wis 12, Cha 8	Str 14, Dex 16, Con 13, Int 10, Wis 12, Cha 8
Skills	Bluff +3, Drive +6, Intimidate +3, Jump +6, Tumble +6	Bluff +5, Drive +8, Intim. +5, Jump +8, Tumble +8	Bluff +7, Drive +11, Intim. +7, Jump +10, Tumble +11	Bluff +9, Drive +13, Intim. +9, Jump +12, Tumble +13
Feats	Adv. Firearms Prof., Quick Draw, Strafe	Adv. Firearms. Prof., Quick Draw, Quick Reload, Strafe	Adv. Firearms. Prof., Far Shot, Quick Draw, Quick Reload, Strafe	Adv. Firearms Prof., Far Shot, Martial Arts, Imp. Martial Arts, Quick Draw, Quick Reload, Strafe
Class Abilities	N/A	Extreme effort I	Extreme effort I	Extreme effort II
Action Points	1	2	3	4