



Fleet Safety Program

Company Name:
Written Program ID:
Date:

This is (Company Name) Fleet Safety Program. It applies to all our work operations. (Name) will be responsible for overall direction of the Safety Program.

INTRODUCTION

The purpose of fleet safety guidelines is to increase vehicle operator safety and control of vehicle accidents. A written set of fleet safety guidelines helps management increase vehicle operator safety and control vehicle accidents. A few minutes of preparation before each trip, combined with the use of defensive driving tactics, can help employees avoid dangerous and costly accidents.

It cannot be expected that the employee will remember all of the information provided in written materials (forms, checklists, etc.). Therefore, refresher training should be provided when appropriate.

FLEET SAFETY POLICY

A strong, clearly worded statement of policy by management is generally considered essential. The statement must make it clear of the following:

- Management considers accident control essential both for humanitarian and economic reasons.
- The accident control plan will apply to all departments and all operations.
- The cooperation of all employees is expected and required.

The statement of policy will be communicated to all employees, and particularly to all supervisory personnel.

DRIVER SELECTION

Because the quality of job performance affects the success of the entire fleet operation and directly influences the fleet safety performance, every effort should be made to select the most qualified available person for each job. Management should know and define the requirements of the job to be filled.

The driver's ability to meet these requirements should be determined as follows:

1. An application form filled out in the driver applicant's own handwriting is one of the best tools for obtaining information.
2. A personal interview provides face-to-face contact and further appraisal of job knowledge, and qualifications.
3. References help to verify information from the application and interview along with past performance. Phone or written checks with previous employers are essential in good selection procedures.
4. A current and valid driver's license, compatible with the type(s) of vehicle(s) to be driven.
5. One of the most important references to check is the MVR (Motor Vehicle Record) at the State Motor Vehicle Authority. This is a requirement for fleets regulated by the Department of Transportation (DOT).
6. It is important that the doctor or clinic know the physical requirements and essential job functions of the driving position to properly evaluate the candidate(s). For non-regulated fleets that are subject to the



Americans with Disabilities Act (ADA), a physical exam cannot be given at the pre-offer stage, but can be given at the post offer stage as long as it is required for all candidates.

7. Written tests on traffic regulations can be a valuable tool. Test results should be placed in the driver's file.
8. Driving tests - All employees who drive, as a part of their duties should be given a road test, in traffic, in the type of vehicle they are expected to drive. Road test results should be documented.
9. The information you have collected should be assembled and a permanent personal record should be established. (Driver qualification files are required in federally regulated fleets.)

DRIVER TRAINING

A training program should include:

1. Orientation on company rules and procedures.
2. Basic on-the-job training, including "student trips."
3. Continued in-service training based on periodic performance evaluations.

DRIVER SUPERVISION

A supervisor's attitude toward safe driving will greatly affect the attitude and driving performance of those reporting to him.

1. Supervisors should be held accountable for safety performance in their areas of responsibility.
2. Supervisors should supervise in terms of proper and safe job performance.
3. Lines of communications between management and drivers should be kept open.

It is often advisable to provide specialized training for supervisors, including safety conference and fleet supervisor or management courses.

ACCIDENT INVESTIGATION AND RECORDS

Every accident will be reported, investigated, and reviewed as follows:

1. A procedure for tabulating and analyzing accident data should be established.
2. A master file of accidents and related data should be maintained by the person designated to handle accident reports and to coordinate investigations.
3. The primary purpose of investigating an accident is to find out the cause and initiate action to eliminate or control it. Another purpose is to obtain information to be used in determining whether the accident is preventable or non-preventable.
4. An accident review committee is desirable in determining accident preventability, including:
 - a. Review of accidents and determining preventability.
 - b. Recommending control measures.

MAINTENANCE

Mechanical failures, while accounting for a small percentage of vehicle accidents, are often quite serious in nature. A procedure should be established for determining the specifications for new equipment, based on its intended use. An effective preventive maintenance plan should be established. Guidance may be obtained from the equipment manufacturer.

Records should be kept for each piece of equipment. This is an often overlooked legal requirement in the case of federally regulated fleets. The goals of an award program are reduction in accidents, less down-time, reduced maintenance, improved driver morale, better sales, and public relations.



SAFETY INCENTIVES

Management can motivate employees operating company vehicles by showing interest for safety and efficient job performance. Safe driving deserves recognition the driver that does well deserves to be told so, and an award program often accomplishes this.

The award program should be administered on the fairest possible basis; drivers should have an opportunity to appeal decisions. An Accident Review Board can be helpful in this by determining a driver's eligibility for awards.

FLEET SAFETY RULES

The following are safe driving rules that should be included in your Fleet Safety program:

1. Do not take chances. To arrive safely is more important than to arrive on time.
2. Drivers should be mentally and physically rested and alert prior to each trip.
3. Drinking of alcoholic beverages while driving, consumption of restricted drugs or driving while under the influence of alcohol or restricted drugs is prohibited.
4. Drivers must have a valid driver's license for the type of vehicle to be operated, and keep the license(s) with them at all times while driving.
5. Traffic laws must be obeyed.
6. Speed shall never be faster than a rate consistent with existing speed laws and road, traffic, and weather conditions. Posted speed limits must be obeyed.
7. Never attempt to exercise the right-of-way; always let the other driver go first.
8. Keep to the right except when overtaking slow moving vehicles, or when getting into a position to make a left turn.
9. Never follow another vehicle so closely that you will not be able to make a safe stop under any conditions. Observe timed interval and following distance guidelines.
10. Turn signals must be used to show where you are heading; when going into traffic and before every turn or lane change. Remember, signaling intentions neither gives the driver the right of way, nor guarantees a safe lane change.
11. Slow down and watch for children in school zones.
12. Vehicles are to be driven by authorized drivers only.
13. Do not give rides to hitchhikers or strangers.
14. Drivers and passengers should wear seat belts.
15. Check your vehicle daily before each trip, and check the vehicle visually each time before driving. Check lights, tires, brakes, and steering particularly. An unsafe vehicle should not be operated until repairs are made.
16. Drivers must report all accidents immediately, as required by law and their company rules.
17. Drivers must report all arrests and traffic convictions to their company. Repeated traffic convictions or failure to report traffic accidents or convictions may result in disciplinary action.

Other safe driving rules adopted by your company, prescribed by State or Local laws, or by the applicable DOT Motor Carrier Safety Regulations must be adhered to.

THE DRIVER SELECTION PROCESS

The cornerstone of an effective fleet loss control program is proper driver selection. It is the single most important control that management can exercise to reduce fleet accidents.



Consider that management is literally handing over the keys to the candidate selected. These are the keys to an expensive company vehicle as well as whatever cargo may be hauled. A single accident could result in loss of life, serious injury, and/or serious property damage.

The purpose of driver selection is to identify and hire the most qualified candidate for the position available. The selection process is intended to be a series of screens through which only the most qualified candidates will pass. Items to be considered and evaluated should include the candidate's past driving experience with similar vehicles, driving skills and knowledge, and attitude toward defensive driving and company safety standards. The driver selection process applies not only to full-time drivers but also to incidental drivers, meaning those that drive occasionally or in addition to other job duties.

Many interstate motor carriers are subject to the Federal Motor Carrier Safety Regulations (FMCSR) that requires pre-qualification of applicants. In addition, some states have adopted the FMCSR requirements for intrastate motor carriers. If your company falls under these regulations, you will want to refer to Title 49 of the Code of Federal Regulations, Part 391, for the actual driver qualification requirements or to applicable state regulations.

SELECTION SCREENS

The following screens should be used in selecting drivers.

Job Descriptions

Job descriptions should be developed as follows:

1. Written job descriptions are the first step in selecting candidates and the time to develop them is before a job opening develops.
2. Management will need to determine the essential job functions of each position as well as the experience, skill level, and other qualifications needed.
3. The written job description documents the minimum requirements for each particular position against which all candidates can be easily and consistently evaluated. Once this is accomplished, the screening process begins.

Employment Application

Reviewing a completed job application is one of the first steps in the screening process. The application is a main source of information about the candidate and will help determine if the candidate has the minimum qualifications and background needed for the position. Legal counsel should determine that the application form does not violate anti-discrimination laws and can advise on the wording of a signed statement verifying the accuracy of the information.

License Validity Check

A visual check should be made of each candidate's driver's license. The license should be current, valid, and of the correct type for the position being filled. This is also a FMCSR requirement for regulated fleets.

Interview

A face-to-face interview with the candidate is invaluable since it provides management the opportunity to further assess and verify the candidate's qualifications, experience, knowledge, and attitudes. Examine the application prior to the interview and inquire about any gaps in employment. You may also compare the dates of employment with any fleet safety awards given by past employers. If the applicant drove for ten years with



the previous employer but only received a two-year safe driving award, ask about it. The applicant may reveal more information about accidents and violations than they had originally stated.

Also during the interview, ask what accidents and violations he or she has had over the past three years. Compare this to their motor vehicle record and have the candidate explain any discrepancies.

Employers subject to the Americans with Disability Act (ADA) are prohibited from asking any questions relating to the candidate's current physical condition or past medical history. According to the American Trucking Association, even the standard question, "Have you ever received a waiver from the U.S. Department of Transportation's physical qualification criteria?" This is prohibited since it indirectly solicits information relating to the candidate's physical condition.

Employers can ask about a candidate's ability to perform essential job functions but cannot inquire whether that person has a disability. Notes from the interview should be kept on file for reference.

Reference Checks

These can be accomplished via phone conversations or written requests. The best contact is often the candidate's former supervisor, if available. Information to be checked includes dates of employment, reason for leaving, description of job duties, types of vehicles driven, evaluation of job performance, and the former employer's opinion on whether or not they would rehire the candidate if they had the chance.

A written release authorizing the reference checks should be obtained from the candidate prior to contacting past employers. Written records of the results of these checks should also be kept on file.

MVR Check

The Motor Vehicle Record (MVR) is available from the state in which the candidate holds their driver's license. The MVR details the accident and traffic violation history of the candidate over the last three years. The value of the MVR is that it provides an indication of the candidate's future driving performance based on past accidents and violations. Note that some individual states do not report all accident and violation information on the MVR's. Because of this, a clear MVR does not necessarily indicate that the driver has not experienced recent accidents or traffic violations. In spite of this, the use of the MVR as a screen is still important and worthwhile. An MVR detailing a history of small violations or just one major violation needs to be closely examined by management. It is strongly recommended that a written policy be developed and adhered to so that there is uniformity in determining what constitutes an acceptable MVR. Your insurance company loss control representative can assist in setting up an MVR policy.

Check with your state on the MVR ordering procedure. Some states require a state form to be filled out; some require a signed release from the candidate. All states will charge a small fee for each MVR ordered. There are also service companies that can obtain MVRs for you on a fee basis. A copy of the MVR should be kept on file. A check of driving records is a FMCSR requirement for regulated fleets.

Road Tests

A road test allows the candidates to demonstrate their skill and proficiency in handling the vehicle and associated equipment that will be assigned to them. A pre-established route should be used that simulates the driving conditions encountered on the job. The test can qualify or disqualify an applicant provided the qualification criteria are reasonable and consistent. A qualified person should conduct these tests in a controlled and uniform manner. A check sheet listing the maneuvers to be executed and the actual results is useful as it helps assure consistency in the test and provides a written record of the results that are to be kept on file.



Written Tests

Motor carriers that fall under the Federal Motor Carrier Safety Regulations are required to administer a written examination designed to instruct candidates in the rules and regulations established by the Federal Highway Administration pertaining to commercial vehicle safety.

Aside from this exam, you may wish to test the candidate's knowledge of state traffic regulations to verify a working knowledge of these regulations. Each state has a booklet containing its traffic regulations with sample questions that can be used as a guide.

Physical Exams

For employers not regulated by the FMCSR but subject to ADA regulations, a physical exam may be administered after the candidate has been offered a job but prior to starting work. It is important that the doctor or clinic know the physical requirements and essential job functions of the position being filled to properly evaluate the candidate. The employer will need to determine if reasonable accommodations are needed for disabled candidates.

A physical exam is a FMCSR requirement for regulated fleets. Specific requirements can be found in Title 49 of the Code of Federal Regulations, Part 391, and Subpart E.

Drug Tests

Tests can be administered to the candidate to detect the use of controlled substances as a further screen. The candidate needs to be advised as to what substances are being tested for and how the information will be used. A qualified lab or medical clinic needs to be used and various controls (such as a chain of custody) need to be in place to assure consistency and accuracy. Medical and legal counsels are strongly recommended prior to implementing this type of screen.

The FMCSR also requires drug testing per Title 49, Code of Federal Regulations, Parts 40, and 391. A listing of the controlled substances to be tested is contained in this code.

LEGAL REVIEW

It is important to obtain legal review of your company's screening procedure to assure compliance with applicable state and local laws.

DRIVER ORIENTATION AND TRAINING

The objectives of the driver orientation procedures are:

1. To make the new employee productive quickly.
2. To avoid accidents which injure employees.
3. To avoid damage to cargo or equipment.
4. To avoid accidents or errors which have a negative impact on customer relations.

Driver orientation covers all aspects of the driving job. Even when a company hires an experienced driver from another company or from a driver training school, that employee still needs to learn company policies, procedures, and safety regulations.

The new employee is anxious to feel at home, to meet other workers, and to learn the job routine. It is at this stage that he/she can be trained to be a productive, loyal employee. If such training is not provided, either the



new employee will turn to the company's "grapevine" as a source of information or he will learn through a potentially costly process of trial and error.

The orientation should be planned and include:

1. **Introductions:** Key management personnel, supervisors, coworkers, company organization, and objectives.
2. **Reporting to work:** When, where, and to whom to report procedures for signing in or clocking in.
3. **Work standards:** Dates and responsibilities, motor vehicle record review process, performance evaluation, incentive program, benefits disciplinary procedure, vehicle accident reporting, and review procedure.
4. **Pre-trip, on the road, and post-trip inspections:** Making inspections, recording results, and the importance of having defects corrected before departure.
5. **Emergency procedures:** Vehicle accident handling at the scene and accident reporting procedures, how to handle breakdowns, or other emergencies.
6. **Rules and regulations:** Company safety rules, local, state, and Federal Motor Carrier Safety Regulations.
7. **Routes and schedules:** Road conditions, hazardous and congested areas, overhead clearances, and width restrictions.
8. **Equipment familiarization:** Operator controls, emergency equipment, and safety equipment.
9. **Handling of cargo:** Dealing with shippers and consignees, handling of bills, checking cargo, security, and safety precautions.
10. **Special equipment:** Load tie downs, winches or hoists, pumps and hoses, etc.
11. **Procedures at completion of trip:** Parking and refueling vehicle, completion of records and reports, post trip inspections.



COMMERCIAL DRIVER ORIENTATION CHECKLIST

Subject		Trainer	Date
Introductions	Management Personnel Supervisor Coworkers		
Reporting to Work	Locations Hours Signing In		
Work Standards	Duties and Responsibilities Benefits Motor Vehicle Record Review Procedure Performance Evaluation Incentive Programs Disciplinary Procedures Vehicle Accident Reporting and Review Procedures		
Pre-Trip, On the Road, and Post Trip Inspections	Inspection Procedures Equipment Condition Reports Correcting Defects		
Emergency Procedures	Vehicle Accident Reporting and Review Procedures Breakdowns Air Brakes		
Rules and Regulations	Company Safety Rules Local Regulations State Regulations		

ACCIDENTS

Although the ultimate objective of a fleet loss control program is to prevent accidents, the fact remains that they still occur. When one of your drivers is involved in a motor vehicle accident, you will probably not be there, so it is vitally important that your drivers be instructed in the proper procedures to be followed.

To minimize the results of an accident, the driver must prevent further damages or injuries, obtain all pertinent information, and report it accurately:

- Take immediate action to prevent further damage or injury at the scene of the accident.
- Pull onto shoulder or side of road.
- Actuate four-way flashers and place warning signals promptly and properly.
- Assist any injured person, but do not move them unless they are in danger of further injury.
- Call the police.
- If someone is injured, request medical assistance.
- If the driver cannot get to a nearby phone, he/she should write a note giving location and seriousness of the accident, and give it to a reliable-appearing motorist and ask him/her to notify police.
- The vehicle should not be left unattended except in extreme emergency.
- Exchange "Traffic Accident Exchange Information" forms with other driver(s).
- The driver should give identifying information to the other party involved, but should make no comments about assuming responsibility.



- Secure names and addresses from all witnesses. Witnesses should be asked to complete a Witness Information Card. If there are no witnesses, the name and address of the first person to arrive at the scene should be obtained.
- Complete the "Driver's Report of Motor Vehicle Accident" Form. Drivers should remember the following general rules for filling in the report:
 - Print or write legibly.
 - Follow instructions to the letter.
 - Answer all questions completely. If unable to answer any question, mark "not known."
 - Use additional sheets of paper if space is lacking for necessary information.
- Report the Accident
 - The driver should call the company immediately in the event of any accident.
 - The accident should be reported to the nearest insurance claims office as listed in the Vehicle Accident Report packet.

PREVENTIVE MAINTENANCE

To manage a fleet properly, a program for maintaining the mechanical condition of the equipment is necessary. The primary purpose of such a system is to ensure safe efficient vehicle performance and lengthened life span. The benefits of a Vehicle Maintenance Program include:

1. **Reduced maintenance costs:** Adjustments and repairs made during regularly scheduled service checks help prevent unnecessary and costly repairs.
2. **Decrease in downtime:** Preventive maintenance reduces interruptions to product flow caused by breakdowns.
3. **Accident reduction:** Proper vehicle maintenance can reduce accidents caused by faulty brakes, tires, steering, and other major components.
4. **Improved driver morale:** When vehicles are kept in top condition, drivers are more likely to handle the equipment with care.
5. **Customer relations:** Clean, well-maintained vehicles enhance the company image as a safety minded entity.

EQUIPMENT SPECIFICATIONS

The maintenance program begins when the vehicles are ordered. Management must consider use, route, terrain, cargo size, and weight when setting specifications.

Specifications should call for as much standardization as possible. Vehicle standardization can be by manufacturer and model type or by component within the vehicle. Advantages to standardization include reduced parts inventory, enhanced ability of mechanics to make repairs more efficiently and dependably due to their familiarity with the various components, reduction of inadvertent abuse of vehicles by drivers and, if the fleet has many similar units, better appraisal of the suitability of equipment for the task.

MOTOR VEHICLE EQUIPMENT

1. **Critical equipment maintenance:** Critical component parts, which affect the safe operation of the vehicle, must always be maintained. They include: brakes, tires, suspension equipment, steering components, lights, mirrors, windshield and windows, wipers, and horn.
2. **Demand maintenance:** To retain the safety and dependability of the vehicle, it is essential that periodic inspections, maintenance, and service be performed (follow the manufacturer's schedule of maintenance), including lubrication service, inspection/replacement of filters, engine drive belts, exhaust system, etc.



3. **Driver responsibility for maintenance:** Management must require driver inspections to report vehicle safety defects. Prior departure and en route checks should be mandatory. A Vehicle Inspection Report should be completed quarterly.

RECORDKEEPING

Up-to-date records are an essential part of a complete vehicle maintenance program. Recordkeeping forms should serve one of three purposes - showing vehicle's maintenance needs, indicating a schedule of work to be done, and recording completed maintenance and costs.

The usual types of records, which cover these requirements, include:

1. Driver's Vehicle Condition Report.
2. Service and Inspection Report.
3. Vehicle history folder - Provides a complete history of the costs of maintenance, parts, and labor associated with the vehicles.

INSPECTION RECORDS

The critical item inspection program focuses inspection efforts on vehicle equipment and driver requirements most often identified as causing or contributing to passenger car accidents.

The adoption of a critical item checklist process consists of a very detailed inspection of all vehicle equipment. The critical inspection checklist is a useful tool in supplementing existing preventive maintenance programs.

Brakes

- **Parking Brake and Transmission (Park) Mechanism:** Park on a fairly steep hill and hold the car with the parking brake only. This checks holding ability. For automatic transmissions, check (Park) by releasing all brakes after moving the shift level to "P."
- **Brakes:** Repeated pulling to one side when braking, strange sounds, or increased brake pedal travel indicates brake problems. Have the system inspected at once and repair if needed. Inspect brakes more often if habits or conditions result in frequent braking.

Steering and Suspension System

- **Steering:** Be alert for any changes in steering action. Inspection or service is needed when the steering wheel is hard to turn or has too much free play, or when strange sounds occur during turning or parking.
- **Suspension System:** Uneven or abnormal tire wear, or a pull right or left on a straight and level roadway may show the need for a wheel alignment. A vibration of the steering wheel or seat at normal highway speeds may mean that wheel balancing is needed.

Tires and Wheels

Tires mounted on passenger automobiles, pickup trucks, and light duty vans must have at least 2/32 inch (1.6 mm) tread depth at all points in all major grooves. Tires must not be used which have un-repaired fabric breaks; exposed or damaged cord, bumps, bulges, or cuts that measure more than one inch (25 mm) in length.

Lights

Check license plate lights, side marker lights, headlights, parking lights, taillights, brake lights, turn signals, backup lights, and hazard warning flashers. Have head light aim adjusted promptly if the beam is improperly aimed.



Windshield and Windows

Replace or repair broken, scratched, or damaged glass that reduces vision or could cause injury.

Windshield Wipers

Check operation and condition of the wiper blades and the flow and aim of the washer spray.

Horn

Sound the horn now and then to make sure it works. Check all button locations.

Driver Vehicle Inspection Report

Each vehicle must receive an inspection by the users of the vehicle or the assigned driver. The frequency of this inspection will depend upon the use of the vehicle. For example, a business with a territory involving hilly and mountainous terrain should inspect the vehicle's brakes more frequently than a company located in a central plains state.

When defects are noted or when problems develop during vehicle operation, a documented system of repair is necessary. The system should provide the driver with a means to notify management that the defect or problem exists and requires attention. The system should also provide a means of dating repair documentation, corresponding to the specific vehicle inspection report.

Maintenance Records

Every preventive maintenance program is supported by thorough, up-to-date recordkeeping. To be useful, maintenance records should be kept current, and should be reviewed on a periodic basis.

Every vehicle should have a record of all the preventive maintenance and repair work, which has been performed. Such a record will allow management to develop needed cost data and review the past performance of a specific vehicle or group of vehicles. It allows management to analyze the maintenance, which has been performed on a vehicle to determine if additional work is necessary or can be expected. It also gives clues to problems, which have been overlooked in routine maintenance.

Management should review the vehicle inspection and maintenance records annually. There are no specific forms or formats, which are required. However, management should establish that the preceding elements are in place and are covering the essential functions of inspection, maintenance, and repair.

Vehicle inspections should be recorded and completed daily, weekly, or monthly depending on operational use or law:

1. If DOT regulated, a truck preventative maintenance checklist must be done daily.
2. If not DOT regulated, a preventative maintenance inspection with checklist should be completed monthly.
3. A critical item inspection with checklist should be completed monthly, or at least quarterly on passenger cars, vans, and pick-up trucks.
4. Your insurance company loss control department will provide checklists upon request.

TRAILER HAULING

Needless accidents occur every year due to improper trailer towing. The most severe accidents take place when the entire trailer uncouples and breaks away from the towing vehicle. Collision of the trailer with pedestrians, fixed objects, and motor vehicles can result. Multiple collisions are also a real possibility.



Other common problems involve jackknives of the unit, rear-ending of the vehicle ahead, and being rear-ended by the vehicle behind. Generally, problems occur as a result of improper coupling of the towing and trailer units, inadequate or failed braking capacity, improper installation and/or maintenance of the unit, unequal weight distribution in the trailer, and inadequate following distance and/or excessive speed while towing. A few minutes of repair or adjustment can prevent a serious accident.

INSTALLATION AND MAINTENANCE

Selection of the proper coupling hardware is necessary for towing safety. The Society of Automotive Engineers (SAE) has classified hitches and couplings into four categories, based on the gross vehicle weight (GVW) of the trailer.

These four classes are:

- Class I (Light duty towing) - Trailer weight less than 2,000 pounds GVW.
- Class II (Medium duty towing) - Trailer GVW ranges from 2,000 to 3,500 pounds.
- Class III (Heavy duty towing) - Trailer GVW ranges from 3,500 to 5,000 pounds. Generally, trailers over 4,000 pounds will have tandem axles.
- Class IV (Extra heavy duty towing) - Trailer GVW ranges from 5,000 to 10,000 pounds. Trailers will have a tandem axle.

Manufacturer's instructions must be thoroughly reviewed and followed for all installation and maintenance work. Maintenance should include a visual check of the ball, coupler, chains, and lights prior to each trip. Wiring connections must be properly grounded for proper operation of trailer lights. Inflate tires to the manufacturer's specifications before towing. Adjust mirrors to minimize blind spots. Do not tow if the vehicles or hardware are in need of adjustment or repair.

COUPLING ARRANGEMENTS

The towing vehicle and trailer are only attached at one point, the coupling, so it is imperative that the coupling be secure and tight. The trailer will have a coupler with a socket that locks onto the hitch ball. Hitch balls come in two standard sizes and the ball size hitch is used. The coupler latch must be fully engaged so that the ball and socket remain seated while towing.

As a back-up control to accidental uncoupling, safety chains must be attached to the trailer coupling and upon each hookup, crossed under the hitch tongue, and fastened to the towing vehicle. The chains should be of sufficient length to allow full articulation of the trailer, yet prevent the trailer coupler from striking the ground if uncoupling occurs.

TRAILER BRAKES

Trailer brakes are not required in all towing arrangements. Light to medium duty trailers may be successfully towed without trailer brakes, provided the tow vehicle is in good mechanical condition, you tow at a reduced speed, follow at an increased distance, and scan the road ahead to anticipate stops.

Most states require trailer brakes that operate in conjunction with the ordinary brakes on the tow vehicles for trailers exceeding 3,000 pounds GVW. Since state requirements can vary widely, you should check towing requirements with your state Department of Motor Vehicles.

Breakaway brakes are also available and utilize a spring set braking system that always tries to apply the trailer brakes. An electrical connection from the towing vehicle provides continuous current to neutralize the spring



action. However, upon breakaway of the trailer, the electrical current ceases and the trailer brakes are set, bringing the errant trailer to rest. Again, state requirements should be checked.

DEFENSIVE DRIVING

Defensive driving takes on added significance while towing due to the articulated movement of the towing unit, the additional weight of the unit, and the stability of the unit.

Normal driving speeds should be reduced 10-15 mph, while normal following distances should be doubled. Top speed should not exceed 45 mph. The driver should scan the road ahead as far as possible to anticipate stops in advance. These precautions will reduce the possibility of colliding with the vehicle ahead.

Keeping your speed down and staying in the right-hand lane as much as possible will encourage tailgaters to pass.

When passing other vehicles, and completing turns, allow extra room for your trailer to clear the space. Brake smoothly and moderately.

Back slowly and use a spotter, if available. Choose parking spaces where you can pull out of the space when leaving to eliminate backing at all. Take curves slowly to minimize cargo shifts and trailer sway.

CARGO

Cargo should be loaded somewhat in the front of the trailer and kept as low as possible. Sixty percent of the load should be in the front half of the trailer and 40 percent in the rear half.

The trailer should never be overloaded and the weight resting on the hitch should be 10 percent or less of the GVW.

If the tow vehicle and trailer are not aligned horizontally, a load equalizer may be necessary for the tow vehicle. Never tow a trailer that sways. Pull safely off the roadway and redistribute the load evenly. The cargo should be secured to prevent excessive movement inside the trailer.

Tie down or secure loads that could shift during towing. Tools, bar stock, and equipment on rollers or wheels are just a few examples. It is advised that the load be checked after the first few minutes of towing and periodically thereafter.

Liquid loads present special stability problems especially when the tanks or drums are only partially full. The weight of the fluid is redistributed each time a stop, start, or turn is executed. The driver needs to be aware of this and execute these moves slowly and steadily. A sudden stop, start, or wheel movement could upset the load or lead to a jackknife.

Wide loads and long loads should be conspicuously marked in accordance with state and local regulations. The trailer should never be overloaded past the manufacturer's specifications.

