



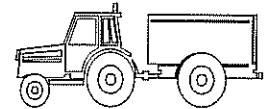
Job Name: \_\_\_\_\_ Job Site Location: \_\_\_\_\_

Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ Finish Time: \_\_\_\_\_ Foreman/Supervisor: \_\_\_\_\_

## *Topic 194: Trailer Towing Safety*

**Introduction:** Trailer towing is safe when precautions are taken. Following are safety guidelines for safe towing of trailers:

- **Towing ability** can vary with the vehicle used. A larger engine will have a much easier time towing a 5,000-pound load than a smaller engine because it has more horsepower and torque. The transmission, brakes and rear axle are upgraded to correspond with the larger engine.
- **Ensure that** the weight of the trailer doesn't exceed the maximum towing capacity of your tow vehicle, and that the trailer does not exceed the rating for your trailer hitch. Trailer hitches are rated according to the capacity of the load weight and tongue weight. A Class III hitch can handle up to 5,000 pounds. For heavier trailers, a Class IV hitch (up to 7,500 pounds) would be required.
- **Incorrect tongue weight** can cause fishtailing and loss of control of the towing vehicle, resulting in serious injury and equipment damage. Remove or adjust the trailer load to get the correct tongue weight. Do not let the tongue weight exceed the coupler and hitch rating. Be sure the towing vehicle hitch is the correct type, size, and rating to match the coupler. Be sure the hitch is properly installed onto the towing vehicle. On optional ball couplers, always insert the hitch safety pin before towing. Make sure the hitch and ball are properly sized.
- **Safety chains or cables** must be so connected to the towed and towing vehicles, and to the tow bar, as to prevent the tow bar from dropping to the ground in the event the tow bar or coupling device fails. Safety chains, cables, and links must have a tensile strength equivalent to the gross weight of the towed vehicle. No more slack must be left in the safety chains or cables, than must be necessary, to permit proper turning. Cross the safety chains under the coupling to prevent the tongue from dropping to the ground. All chains, cables and links must be inspected before towing begins.
- **Towed vehicles** having a gross weight in excess of 5,000 pounds are required to be equipped with two or more safety chains or cables.
- **A red flag** must be placed on the extreme end of materials that project 4 feet or more beyond the vehicle body when transported during daylight hours. A red light must be displayed at night.
- **When using a sign**, install the mounted point up and place the sign on the vehicle 2-6 feet above the ground. Place the perpendicular plane to the direction of travel (+ -) 10 degrees. Place the sign as near to the rear center as possible.
- **Inspect all lights** before towing operations begin. Most regulations require trailers used on highways to have tail, stop, turn, and side marker lights. Turn signals, flashing warning lights and a red brake light are recommended when towing on public roadways. A standard seven terminal break-away connector plug should be used. Appropriate lighting for roadway travel includes at least one red tail lamp and two amber flashing warning lamps. These lights must be on the towing vehicle and trailer, and visible from the rear. The trailer must have at least two red reflectors visible to the rear. Check the condition of the wiring harness leads, plugs, and connections. Repair or replace damaged parts or wires.
- **Always inspect** the tires before towing operations begin. A dual-axle trailer is more desirable as they provide better load distribution. In the event of a tire failure, there's still one good tire on each side of the trailer, which makes the trailer easier to handle in a blowout.
- **Check** brake fluid level before use. Trailer brakes are recommended for trailers with a GTW of 2,000 pounds or more.
- **Allow double** the amount of space normally needed between you and the vehicle in front of you when towing a trailer. The heavier the load, the more space you should allow for braking.
- **When** you experience trailer sway, the problem could be insufficient tongue weight. When encountering difficulties, slow down by taking your foot off the accelerator. Let the vehicle speed decrease, but do not put your foot on the brake pedal, which can make the situation worse. Once you're down to a safe speed, carefully apply the brakes and stop. You should then readjust the load or determine what else might be causing this condition. Shift heavier items to the front of the trailer and lighter ones to the rear.
- **When** you are inexperienced in backing trailers, it is recommended that you practice in an empty lot. Do not rely on rearview mirrors.
- **For wider trailers**, you will need side-view mirrors that stick out, far enough, so that you can see down the side of the trailer.
- **Going downhill**, you want to use a combination of the engine and the brakes to keep your speed safe. Do not ride the brakes and get them hot. Downshift to a lower gear, and use the engine as a brake on steeper hills, and then when needed, use the brakes sparingly to slow down.
- **When** the trailer is uncoupled from the towing vehicle, use the jack on the front and block the rear to prevent tilting. Wheels must be chocked when the trailer is uncoupled from the vehicle. Chock in the direction of the grade. Position the chock snugly behind the tire. Place chock square to the tire. Tap chock into place. For added protection, chock both sides of the tire.



**Conclusion:** Remember to check gross trailer weight, tongue weight, and total weight distribution – do not overload. Check that the correct hitch is properly installed on the towing vehicle. When coupling, check that the coupler locking device (safety pin), safety chains, and breakaway cable (when applicable) are properly connected. Check that the tires are properly inflated and that wheel nuts are properly torqued. Check that all lights are working properly. Follow these safety guidelines for safe towing operations.



### *Work Site Review*

Work-Site Hazards and Safety Suggestions: \_\_\_\_\_

Personnel Safety Violations: \_\_\_\_\_

**Employee Signatures:**

*(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)*


*City of San Angelo Foreman/Supervisor's Signature:* \_\_\_\_\_

*These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.*