Safety Matters is intended to promote discussions of safety issues among underground construction professionals. You should always read and understand the operator’s manual before operating any equipment. For additional information, please e-mail safety@ditchwitch.com.

**TOPIC:**

**Transport—PART 2: LOADING AND HOOKING UP A TRAILER**

**POTENTIAL HAZARDS**

- Struck by
- Rollover

**PRECAUTIONS**

- ALWAYS use safety chains.
- Connect breakaway brake cable (if equipped) to tow vehicle.
- ALWAYS maintain proper tire pressure and replace worn tires.
- Make sure the wheel lug nuts/bolts on the tow vehicle and trailer are tightened to the correct torque.
- Be sure the hitch, coupler, draw bar, and other equipment that connect the trailer and the tow vehicle are properly secured and adjusted.
- Check that the wiring is properly connected—not touching the road but loose enough to make turns without disconnecting or damaging the wires.
- Make sure all running lights, brake lights, turn signals, and hazard lights are working. Do not use the trailer without working lights.
- Verify that the brakes on the tow vehicle and trailer are operating correctly.
- Check that ALL items are tied down and securely fastened on the trailer, even if travelling only a short distance. Even small items can be hazardous if they aren’t secured.
- Use appropriate restraints (see equipment operator’s manual) and the tie-down points as indicated on equipment.
- Be sure the trailer jack, tongue support and any attached stabilizers are raised and locked in place.
- Check load distribution to make sure the tow vehicle and trailer are properly balanced front-to-back and side-to-side.
- Check side- and rear-view mirrors to make sure you have good visibility.
- Check routes and restrictions on bridges and tunnels.
- Make sure you have wheel chocks and jack stands. Use them before disconnecting the trailer from the tow vehicle.
- If equipment does not come with stow locks to secure attachments that may swing beyond the sides of the trailer, use tiedowns to secure them.

**INFORMATION/FACTS**

- Your ability to handle and control your tow vehicle and trailer is greatly improved when the cargo is properly loaded and distributed.
- Equipment can move during transport if not tied down. This can affect weight distribution and cause the trailer to sway.
- Safety chains should cross under the tongue to prevent the tongue from dropping to the road in case of a separation.
- Tongue weight is the amount of weight being supported by the tongue. Too little tongue weight can cause trailer sway. Too much tongue weight can exceed the rating of the hitch or raise the tow vehicle's front tires, decreasing control.
- Tongue weight is determined by the placement of the load on the trailer. To increase tongue weight, move the load forward on the trailer. Ten to fifteen percent of total trailer weight (equipment plus trailer) must be on the tongue to help prevent trailer sway.

**TALES FROM THE TRENCH**

- A bushing was left loose on an equipment trailer. During travel, the bushing fell off the trailer, bounced on the pavement and went through the windshield of a compact vehicle. The elderly woman driver was killed when the bushing struck her in the head.
- A small pedestrian machine was loaded on a trailer and was not tied down. It bounced on the small trailer and caused the trailer to sway. The driver lost control of the tow vehicle and caused a wreck.
- A large machine was not tied down to the trailer. While taking a sharp turn slightly too fast, the machine overturned and fell off the trailer. Fortunately, no other vehicles or pedestrians were in the way of the falling machine.

**DON’T LEARN SAFETY BY ACCIDENT**