
Trailer Towing Safety Check: Lights, Hitch, and Tires

1.0 Objective & Scope

The objective of this procedure is to ensure that every trailer towed by a fleet vehicle is roadworthy and compliant with Transport Canada regulations before departure. This SOP covers the mandatory pre-trip inspection of all lighting systems, the hitch coupling mechanism, and tire condition (including pressure, tread depth, and sidewall integrity). The Lead Driver or designated Fleet Operator is responsible for executing this check and documenting results in SiteQueue.

This procedure applies to all field operations involving trailers with a Gross Vehicle Weight Rating (GVWR) exceeding 1,500 kg, including equipment trailers, cargo trailers, and flatbed trailers. Any defects found during inspection must be reported immediately to the Fleet Manager and the trailer must not be moved until repairs are completed.

2.0 Required Equipment & Tools

- Mobile tablet or smartphone with SiteQueue application installed and logged in
- Digital tire pressure gauge (accurate to ± 1 PSI)
- Tread depth gauge (or a Canadian toonie for quick reference – 1.75 mm minimum legal tread depth)
- Flashlight or headlamp for inspecting wiring and undercarriage
- 7-pin or 4-pin trailer connector tester (optional but recommended)
- Safety vest (high-visibility, Class 2 or higher)
- Work gloves
- Chock blocks (minimum 2) for securing trailer during inspection
- Spare fuses (for trailer light circuit, if applicable)

3.0 Site Safety & Hazard Assessment

- High-visibility vest and steel-toed boots are mandatory when working near active traffic or in loading/unloading zones.
- Park the tow vehicle and trailer on level, stable ground. Engage the parking brake and chock the trailer wheels before beginning inspection.
- Be aware of overhead power lines when raising or lowering the trailer tongue jack. Maintain a minimum clearance of 3 metres.
- Do not crawl under the trailer unless it is properly supported with jack stands. Never rely solely on the tongue jack or landing gear.
- If inspecting at night or in low-light conditions, ensure the area is well-lit with portable lighting or vehicle headlights.
- Keep hands and loose clothing clear of moving parts (hitch ball, coupler, safety chains) during coupling and uncoupling.

4.0 Step-by-Step Execution Procedure

1. Position the tow vehicle and trailer on level ground. Apply the parking brake, place the transmission in Park (or gear for manual), and chock both sides of the trailer wheels.

- 2.** Inspect the hitch coupling: verify that the hitch ball is the correct size for the coupler (typically 2-inch or 2-5/16-inch). Check for cracks, deformation, or excessive wear on the ball and coupler. Ensure the coupler latch closes fully and locks securely.
- 3.** Inspect the safety chains: confirm they are crossed under the coupler and attached to the tow vehicle frame. Check for broken links, rust, or stretched links. Ensure chains are long enough to allow turns but short enough to prevent the coupler from hitting the ground if disconnected.
- 4.** Inspect the breakaway switch and cable: locate the breakaway switch on the trailer tongue. Pull the pin to verify it is not seized. Reinsert the pin securely. Ensure the cable is attached to the tow vehicle and not dragging on the ground.
- 5.** Perform a full lighting check: turn on the tow vehicle headlights and activate the trailer lights. Walk around the trailer and verify that all lights are functioning: tail lights, brake lights, turn signals (left and right), and running lights. Use a helper or reflective surface if alone.
- 6.** Inspect the wiring harness and connector: check the 7-pin or 4-pin connector for corrosion, bent pins, or damaged insulation. Ensure the connector locks into the tow vehicle receptacle securely. If using an adapter, verify it is rated for the trailer's electrical load.
- 7.** Check all tires for proper inflation: use a digital gauge to measure pressure when tires are cold. Compare to the manufacturer's recommended PSI (found on the tire sidewall or trailer placard). Inflate or deflate as needed. Do not exceed the maximum pressure stamped on the tire.
- 8.** Inspect tire tread depth and sidewall condition: use a tread depth gauge to measure at least three points across the tread. Minimum legal tread depth in Canada is 1.6 mm for trailers. Look for uneven wear, bulges, cuts, or cracks in the sidewall. Replace any tire that shows cord or has a visible bulge.
- 9.** Check wheel lug nuts: using a torque wrench, verify that all lug nuts are tightened to the manufacturer's specification (typically 90-120 ft-lbs for standard trailer wheels). Look for signs of rust or corrosion around the lug nuts.
- 10.** Inspect the trailer frame and suspension: visually examine the frame rails, springs, and shackles for cracks, rust, or loose bolts. Check that the leaf springs are not broken or sagging. Ensure the axle is not bent or leaking grease.
- 11.** Verify the trailer registration and safety decals: confirm that the trailer has a valid license plate and that the VIN matches the registration documents. Check that the Transport Canada compliance label is legible and not tampered with.
- 12.** Document the inspection in SiteQueue: open the pre-trip inspection form in the SiteQueue app. Record tire pressures, tread depths, and any defects found. Upload photos of the hitch, lights (with lights on), and tires. If all checks pass, mark the inspection as complete. If defects are found, flag the trailer as unsafe and notify the Fleet Manager immediately.

5.0 Verification, Sign-off & Reporting

- 1.** After completing the inspection, perform a final walk-around with the tow vehicle running and trailer lights activated. Confirm all lights are functioning and the hitch is secure.
- 2.** If the trailer is being used for a customer delivery or site move, obtain a verbal confirmation from the site supervisor or customer that the trailer appears roadworthy. Do not proceed if any safety concern is raised.
- 3.** Log the completed inspection in SiteQueue. Ensure all required fields are filled: date, time, driver name, trailer VIN, tire pressures, tread depths, and a pass/fail status. Attach at least three photos: one of the hitch, one of the lights (with lights on), and one of the tire sidewall showing the DOT code.
- 4.** If any defects were identified and the trailer was deemed unsafe, submit a maintenance request in SiteQueue. Tag the trailer as 'Out of Service' in the fleet management system. Do not dispatch the trailer until repairs are verified by a qualified mechanic.
- 5.** Retain the digital inspection record for a minimum of 6 months as per Transport Canada record-keeping requirements. The Fleet Manager will review weekly inspection reports to identify recurring issues.

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