

SWP Purpose

This Safe Work Practice (SWP) will provide GDTA volunteers with a set of guidelines or “Do’s and Don’ts” that have been developed to mitigate hazards associated with this work task. Volunteers performing this work task are required to be trained, knowledgeable and competent.

Towing is very different from everyday driving – it requires additional driving skills and safety precautions. As a driver, you have a responsibility to other road users when towing a trailer or other vehicle.

Scope

All GDTA workers will comply with the guidelines in this SWP.

Responsibilities

Responsibilities apply to the Trip Manager/Volunteer Lead, all workers, and the Health and Safety Committee.

It is the responsibility of the Trip Manager/Volunteer Lead to

- Comply with this SWP and ensure that workers are trained and knowledgeable in towing
- Be sure that all workers who are towing trailers have been instructed in their proper use and any hazard they pose.
- Reinforce to workers that any recommended controls must be applied consistently
- Require that this SWP be implemented

It is the responsibility of the Workers to

- Comply with this SWP
- Follow recommended controls consistently
- Ensure recommended controls are implemented and used appropriately.
- Immediately report any concerns regarding trailer load limits or damage to the trailer or vehicle hitch to the Crew Lead

It is the responsibility of the Safety Committee to

- Maintain this Safe Work Practice
- Perform periodic audits to assess that these requirements/SWP are being acted upon.
- Reinforce that recommended controls are to be implemented and used appropriately.

Background

Trailer towing involves three primary elements: the vehicle used to tow; the trailer and payload being towed; and towing system components (e.g., hitch system and safety chains). Each has limiting factors that directly affect maximum towing capability.

Truck manufacturers publish maximum trailer tow rating and gross combined weight rating (GCWR) in the trailer towing guide or as part of the vehicle specification guide. Additionally, the trailer towing guide may include maximum trailer tow ratings based on conventional towing (which uses a coupling device attached to the rear of the towing vehicle) or fifth wheel towing (which utilizes a coupling device attached to the top of the chassis near the rear axle and is sometimes referred to as a gooseneck). Alternatively, medium- and heavy-duty truck dealers provide information based on the OEM order guide or through application engineering departments. The chassis manufacturer determines GCWR using a variety of factors, including specific drivetrain components of the engine, transmission, number of drive axles, axle ratios and braking capability. Each OEM tests chassis towing and stopping capability before determining vehicle GCWR.

Chassis manufacturers also provide maximum trailer weights for conventional and fifth wheel/gooseneck towing. Normally, these maximum trailer weights are for complete vehicles such as pickups and vans, and do not include work trucks built from incomplete chassis. Truck GCWR helps determine maximum trailer towing capacity. Both the weight of the towing vehicle and the trailer (towed vehicle) are included in the GCWR total. Essentially, vehicle trailer towing capacity is determined by remaining GCWR after taking into consideration chassis, truck body, equipment, passenger, fuel and payload weight. The amount of payload carried on the work truck can raise or lower maximum trailer towing capacity. For example, if your work truck has a 26,000-pound GCWR and 19,000-pound gross vehicle weight rating (GVWR) and is completely loaded to the GVWR, maximum trailer weight would be 7,000 pounds — even if the truck manufacturer stated the maximum trailer weight was 11,000 pounds.

The second element of trailer towing is trailer GVWR — the maximum allowed weight of the trailer and its payload, which can be found on the required trailer certification label. Typically, the certification label for a trailer is a metal plate welded or riveted to the forward half of the left front. Trailer GVWR will be based on the limiting factors of the axle(s), tires, frame, coupler and safety chains. The trailer manufacturer is required to take all components into consideration when determining final GVWR.

The third factor in trailer towing is the trailer coupling system, which contains the components necessary to connect the towing vehicle and trailer. Conventional trailer, fifth wheel and gooseneck towing systems are rated by SAE International Standards.

Controls

Do:

Provincial Inspection records for the trailer should be available upon request by the trailer driver.

Trailer inspections requirements are covered under Alberta's Vehicle Inspection Program. Trailers towing ≥ 11794 kilograms are required to have an annual inspection by a qualified mechanic. See link below for more information:

<https://www.alberta.ca/vehicle-inspection-program-overview.aspx>

- a) Perform a trailer safety check prior to use.
 - Ensure the tires are properly inflated and free of damage.
 - Inspect all light, safety chain and break connections for compatibility between trailer and vehicle.
 - Perform a function check of all lights and brakes if equipped.
 - Check that all connections are secure between the vehicle and trailer and lock pins in place.
 - Ensure that ball hitch is the exact size to match the trailer hitch.
- b) Make sure the trailer load is balanced side to side and front to back.
- c) Ensure that loads are secured to the trailer so that they do not move independently of the trailer, when rocked back and forth by hand
- d) Use three points of contact when climbing on and off trailers.
- e) Properly attach safety chains in a crisscross or basket configuration prior to departure
- f) Pause after 10-20 km of towing to check all hitch connections, load tie downs and adjustments, and again each 100-200 km.
- g) Reduce speeds while towing.
- h) Allow additional distance for following and stopping to account for additional load on vehicle's controls.
- i) Make use of tow/haul function on vehicle and or use lower gears when descending a grade.
- j) Perform a walk around of the trailer prior to backing up a trailer.
- k) If possible, have a spotter positioned to the rear of the vehicle and trailer to assist in backing up.
- l) Make use of turnouts, when required, to let other traffic pass safely.

DO NOT:

- a) Do not become complacent about towing on the highway.
- b) Do not exceed weight limit of the trailer or tow vehicle (GVWR).
- c) Do not decide to tow without necessary safety gear, even for short distances.
- d) Do not let safety devices drag on the ground while underway.
- e) Do not become distracted while securing or unhooking trailer from tow vehicle.
- f) Do not climb on unsecured cargo while tying them down.

g) Do not tow trailers that are damaged.

Training

Experience with towing and familiarity with the existing vehicle and trailer is required. Review controls verify the hook-up and test out towing in a safe environment prior to highway use.

Resources, References, Definitions

Revision History

<u>Revision</u>	<u>Date</u>	<u>Description of Change</u>	<u>Personnel Involved</u>
REV 0	Feb 2020	New SWP	D Yanchula
Rev 1	Feb 2023	Reviewed – No changes	D Yanchula