

SAFE WORK PRACTICE SWP-04

Revised: March, 2023 CARGO SECUREMENT AND TRAILER USE

PURPOSE/APPLICATION

To protect workers and the public from injuries/incidents associated with cargo that could shift or fall from a vehicle or trailer during transport.

Transporting material is a potential source of harm to workers, the public, property, and environment. The purpose of this Safe Work Practice is to outline the importance of driver training, competency, preuse inspection, load securement and journey management.

This practice applies to all Strike vehicles (owned, leased, rented and/or contracted) traveling on private or public roads. Note: Any time a Strike-owned vehicle is used to pull a trailer and the combined GVW equals or exceeds 4500kg, NSC (National Safety Code) requirements apply.

PPE

Strike minimum requirements

TRAINING

NSC Training

HAZARDS & CONCERNS

- Property damage loss
- Traffic violation
- Personal injury
- Spill/release











RESPONSIBILITIES

Supervisor

- Provide training, proper tools and equipment
- Ensure drivers are competent in coupling trailers
- Ensure drivers are properly trained in loading/unloading and hauling trailers
- Verify all drivers pulling trailers are approved NSC Drivers (where required) prior to assigning them to the task

Driver

- Responsible for the safe operation and securement of all loads (on trucks and on trailers)
- Perform all pre-use inspections of equipment to be used
- Know the manufacturer's recommendations of the equipment being used
- Responsible for checking the load before and during transport, whether you secured it initially or not
- Responsible for all traffic violations and fines
- Make yourself familiar with Strike's Nektar system to allow you to access trailer maintenance records and certifications
- Verify a spotter is in place prior to backing up a trailer on a worksite or near any existing facilities, vehicles, or equipment
- Utilize turn around locations wherever possible. Before towing a trailer into a site, verify there will be room to turn it around or back it out

Cargo Securement

DO'S

- **DO** Store items/materials in secure compartments when possible
- **DO** Ensure that appropriate permits are in place
- DO Plan your route and ensure adequate clearance of all structures and overhead power lines
- DO Allow sufficient time and schedule stops to assess/re-assess the securement of your load

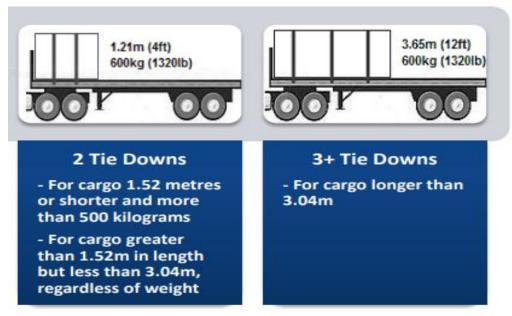


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- DO Stop at required intervals to inspect your load and to ensure securing devices are not loose and are properly tensioned. Required intervals are when there is a change in the duty status of the driver, the first 80 kilometers of your trip, and at a maximum of every 3 hours or 240 km
- **DO** Record each inspection in the Driver's Daily Log for the journey using the ELD (Electronic Logging Device)
- **DO** Follow manufacturer's specifications when using load securing devices
- DO Set up your tie downs so they can be adjusted and tightened during transportation
- **DO** Use rated equipment (e.g., straps, tie points, chains, etc.)
- **DO** Inspect tie downs for:
 - Broken stitching in the stitch patterns
 - Weld splatter, or any areas of melting or charring
 - Damage caused from UV rays: color looks bleached, or webbing feels stiff
 - Small particles embedded in the webbing
 - Burnt areas caused by acid, alkali, or other chemicals
 - Cracks, pits, or corrosion on ratchets, cam buckles, hooks, and other fittings.
 - Unusual wear patterns of webbing at the point of contact with the fitting
 - Tag: workload limit information must be legible
- **DO** Destroy and discard tie down straps that are in an unacceptable condition (to prevent future use)
- **DO** Use the proper amount of tie downs for the length and weight of the cargo you are hauling: 2 tiedowns for all cargo up to 10 feet, and then 1 tiedown for every additional 10 feet or any portion of 10 feet
- DO Strap across the width of the truck or trailer and not the length



- **DO** Inspect ratchet load binders before each use for wear, bending, cracks, nicks or gouges. If bending or cracks are present, do not use the ratchet load binder; turn it in for a replacement
- **DO** Routinely lubricate pivot and swivel points of ratchet load binders, the pawl part and screw threads to extend product life and reduce friction wear
- **DO** Cross-chain machinery/equipment
- **DO** Block and/or brace your cargo to assist in stabilizing the load, if required
- **DO** Ensure materials used for blocking, bracing, chocks or cradles are strong enough to withstand being split or crushed by the tie downs
- DO Use edge protectors if a tie down could be cut or torn when touching an article of cargo
- **DO** Put all load securement devices away after use and keep them out of the elements



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DO Utilize a tarp or cargo net if hauling small items or aggregate (e.g., fill, gravel, etc.)

DON'Ts

DON'T Transport cargo until you have measured the length, height, width, and scaled the truck and trailer to ensure compliance with applicable regulations

DON'T Overload the vehicle or trailer

DON'T Use unmarked tie downs. Tie downs must be marked with the working load limit by the manufacturer

DON'T Use tie downs that are not rated for the weight of the load being secured

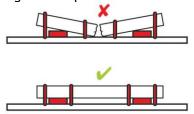
DON'T Use lever type load binders. Always use ratchet type load binders with chains

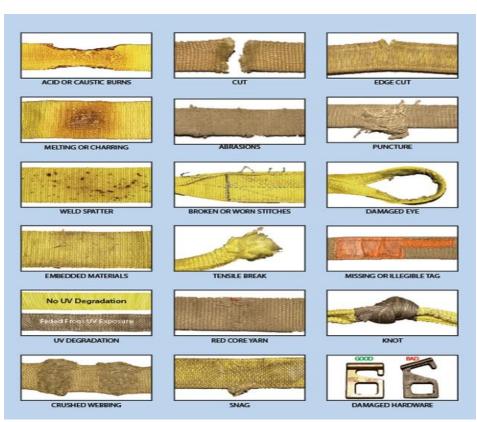
DON'T Use rub rails as anchor points (It is acceptable if the tiedown is fitted with a flat hook end and if it is not possible to attach the hook to another more suitable anchor point. However, best practices would have tiedowns routed inside the rub rail)

DON'T Use less than the required amount of tie downs

DON'T Use tie downs that are not in proper working order

DON'T Use tie down straps on rough or sharp surfaces without using an abrasion pad/softener







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INSPECTION AND LOADING OF TRAILER

DO'S

- DO Pre-Use inspection of the truck, trailer, hitch, and receiver and complete required documentation
- **DO** Ensure the vehicle, trailer and hitch are rated for the load
- **DO** Match the proper coupler with the proper hitch
 - Check the size of the ball with the size of the ball hitch
 - Make sure the correct pintle hitch size and towing capacity are used
- **DO** Ensure the coupler mechanism is free from dirt or rust and all parts move smoothly and freely
- **DO** Ensure coupler pins and fasteners are in good condition
- **DO** Inspect axle springs and ensure they are attached to both anchor and pivot points
- **DO** Ensure the wheel bearings and spring pivots are adequately greased
- **DO** Inspect the tires on both trailer and truck for wear, proper inflation, bulges, cuts, or cracks
- **DO** Check the wheel studs/nuts are properly tightened and in good condition
- **DO** Check the trailer frame for signs of bending or twisting and signs of cracked or broken welds
- **DO** Properly level the trailer and truck when using all types of hitch combinations (ball/pintle/5th wheel/gooseneck)
- DO Make sure the load is distributed on the trailer properly, with 10–15% of the load weight on the hitch (aka tongue weight)

DON'Ts

- **DON'T** Use a trailer without inspecting the braces, struts, spring hangers, fenders etc. are securely welded or bolted in place
- DON'T Use a truck that is not rated to tow the trailer size and weight
- **DON'T** Use a truck that does not have the proper mirrors for towing
- **DON'T** Exceed the maximum gross trailer weight
- **DON'T** Proceed until the load is properly secured to prevent shifting
- **DON'T** Cover the load with a tarp that isn't strong enough and securely tied down
- **DON'T** Use a 5th wheel hitch that is not properly greased and lubricated

COUPLING A TRAILER (GENERAL REQUIREMENTS FOR ALL TRAILER TYPES)

DO'S

- **DO** Chock the trailer wheel on both sides of the front axle
- DO Use a spotter when required and follow SWP 75 Vehicle and Equipment Spotting
- **DO** Walk around the area where you will be coupling and check for obstructions and ground conditions
- **DO** Stop and check the height and position of the trailer pin when 30 60cms from the hitch and pin
- **DO** Use the emergency brake when getting out of the truck
- DO Use the safety pins to lock latches closed and cotter pins or locking pins (bolts can fall out)
- **DO** Ensure safety chains are connected, crossed, and not dragging.
- DO Ensure electrical wires, breakaway cables are properly connected, functional, and not dragging
- **DO** Verify that the trailer is coupled properly.
- **DO** Verify that the emergency brakes on the trailer (if so equipped) are functioning properly
- **DO** Remove chocks from wheels and raise the gear to travel position

DON'Ts

- **DON'T** Attempt to couple a 5th wheel trailer until you check that the receiver is adjusted, and the jaws are open
- **DON'T** Continue if you lose sight of the spotter
- **DON'T** Back into trailer until all connecting lines are up and out of the way from being run over
- **DON'T** Use safety chains that drag on the ground
- **DON'T** Use damaged chain hooks that don't freely open and close, or have non-functional latches



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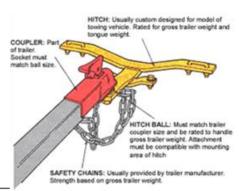
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DON'T Connect the breakaway cable to the safety chains, always connect to the vehicle

Coupling a Trailer - Ball & Pintle Hitch Type

DO'S

- Use trailer jack to verify that hitch lock is functional (raising jack should pull truck up too) on empty and lightweight ball-style trailers
- **DO** Pull test to verify secure coupling of trailer
- **DO** Verify the ball size hitch capacity is sufficient for the load being towed
- DO Verify that the coupler socket matches the ball size on the trailer, the size of the coupler should be stamped on it. If the size is not stamped on the coupler, measure the inside opening to determine the size of the coupler



| Light-duty Towing | Medium-duty Towing | Heavy-duty Towing | | |
|-------------------------------|---------------------------|--------------------------------|--|--|
| | | | | |
| 1-7/8-inch Trailer Hitch Ball | 2-Inch Trailer Hitch Ball | 2-5/16-Inch Trailer Hitch Ball | | |

Coupling a Trailer - 5th Wheel Hitch Type

DO'S

- DO Leave the landing gear down and do not attach any chains or electrical wires to truck yet
- DO Shift truck into drive and give the trailer a tug to ensure the 5th wheel has properly locked
- DO Release the forward pressure by shifting into neutral and then park
- DO Apply parking brake
- DO Check to ensure the 5th wheel is locked and secured. Use safety pin when required

CLEAN: ALL MOVING COMPONENTS GREASE: RECOMMENDATION: Clean with spray WD-40 or CRC Release handle and spring Pocket fittings (right and left sides) OIL LUBRICATE: CAM PLATE PROFILE AND WASHERS RECOMMENDATION: Yoke tips Lubricate with SAE 10W or 20W motor oil RECOMMENDATION: A "low temp" grade grease for -30°F or lower, such as: Cato Oil & Grease #5213 Craftsman Chemical Co. #LTF 2 Mystic LP-200

UNCOUPLING A TRAILER

DO'S

- **DO** Park on even grade and apply brakes
- **DO** Park the tow vehicle and trailer in a straight line



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DO Chock the trailer wheels on both sides of the front axle

DO Lower the trailer landing gear with a dolly pad set up underneath, just enough to remove the weight of the trailer from the towing vehicle

DO Disconnect all safety and electrical lines from the towing vehicle and unhook the trailer

DON'Ts

DON'T Pull fully away without completing a walk around

DON'T Leave the hitch sticking out from the vehicle; take it off and store it properly

DON'T Leave the 5th wheel receiver open. Flip it down and bolt it closed (for picker trucks with flip 5th wheel receivers)

REFERENCES / ADDITIONAL INFORMATION

SWP 28 Driving & Journey Management SWP 29 Loading/Hauling/Unloading Equipment SWP 75 Vehicle and Equipment Spotting HSEMS Section 21 Fleet Safety and Journey Management NSC Standard – 10 Cargo Securement

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| Approved by: | 1. HSE Committee | | | Date: | Mar 2, 2023 |