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1.0 PURPOSE

1.1 Proper load securement while transporting materials, tools, or equipment prevents unsecured loads from resulting in property damage or personal injuries. This SWP provides information and safe work practices on proper load securement.

2.0 LOAD SECURMENT

- **2.1** All load securement devices shall be inspected before use.
- 2.2 Straps shall be installed to prevent them from being cut or abraded during use.
- **2.3** Loose strap ends shall be secured.
- **2.4** Loads shall be balanced and adequately secured.
- **2.5** Refer to FMCSR (49 C.F.R. Part 393) for technical specifications on load securement.
- **2.6** Refer to the Versant Power Safety Manual Section 3.9 Attachment A for general information on load securement.
- 2.7 Any cargo in the back of a truck shall be contained, immobilized, or secured during transportation.
- **2.8** Hand lines, tackle blocks and other ropes shall not be hung on the outside of the vehicle.

3.0 TIE-DOWNS

- **3.1** Tie-downs shall be inspected for the following defects:
 - a. No knots or obvious damage
 - b. No distress
 - c. No weakened parts
 - d. No weakened sections
- **3.2** Each tie-down must be attached and secured so that it does not become loose or unfastened, opened, or re leased during transit.
- 3.3 Edge protection must be used if a tie-down could be cut or torn when touching an article of cargo. The edge protection itself must also resist crushing, cutting, and abrasion.
- **3.4** Position the tie-downs as symmetrically as possible over the length of the article.
- **3.5** Position the tie-downs to preserve the integrity of the article.



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4.0 TIE-DOWN REQUIREMENT

- **4.1** 5ft or shorter and 1100lbs or lighter = 1 tie-down minimum
- **4.2** 5ft or shorter and over 1100lbs = 2 tie-downs minimum
- 4.3 More than 5ft but less than 10ft = 2 tie-downs minimum
- 4.4 Longer than 10ft = 2 tie-downs + 1 tie-down for every 10ft or part thereof
- **4.5** All Cargo = 1 tie-down for every 10ft or part thereof

5.0 PRE-TRIP DRIVER INSPECTION

- **5.1** Make sure that cargo is properly distributed and adequately secured.
- **5.2** Make sure that all securement equipment and vehicle structures are in good working order and used consistent with their capability.
- **5.3** Stow vehicle equipment.
- **5.4** Make sure that nothing obscures front and side views or interferes with the ability to drive the vehicle.

6.0 PERIODIC INSPECTIONS DURING TRANSIT

- **6.1** Inspect cargo and securing devices.
- Adjust cargo or load securement devices as necessary to ensure that cargo cannot shift on or within, or fall from the commercial motor vehicle.
- **6.3** As necessary, add more securing devices.

7.0 INSPECTION REQUIREMENTS

7.1 The driver is responsible for the following cargo securement inspection activities:

Driver Action Re- quired	Pre-Trip	Within first 50 miles	When duty status of driver changes	At 3 hour intervals or 150 miles, whichever is first
Inspect Cargo and Securing Devices	✓	✓	✓	✓
Adjust Cargo and/or Securing Devices	As Necessary	As Neces- sary	As Necessary	As Necessary
Add Additional Securing Devices	As Necessary	As Neces- sary	As Necessary	As Necessary



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8.0 WORKING LOAD LIMIT

- **8.1** The Working Load Limit (WLL) is the maximum load that may be applied to a component of a cargo securement system during normal service.
- **8.2** The WLL is usually assigned by the component manufacturer.
- **8.3** The WLL for a tie-down is the lowest WLL of any of its parts, or the WLL of the anchor points it is attached to, whichever is less. Every device contributes to the WLL of the securement system.
- **8.4** The minimum WLL requirement for the securement system is 50% of the weight of the cargo.

9.0 AUTOMOBILES/UTV'S/LIGHT TRUCKS

- **9.1** Securing automobiles, light trucks, and vans that weigh 10,000lb or less.
 - a. Use at least two tie-downs at both the front and rear of the cargo to prevent movement.
 - b. Side-to-side
 - c. Forward and rearward
 - d. Vertically

9.2 Edge protectors

a. Not required for synthetic webbing at points where the webbing comes in contact with the tires.

Note: Picture indicates acceptable tie-down locations.

Figure 6

10.0 HEAVY EQUIPMENT SECUREMENT

- **10.1** Securing machinery that weighs more than 10,000 lb.
 - a. Lower and secure all accessory equipment (hydraulic shovels, booms, etc.).
 - b. Restrain articulated vehicles to prevent articulation while in transit.
 - c. Set the parking brake on the equipment being transported.

10.2 Tie-down requirements

- a. Restrain cargo using a minimum of four tie-downs, each having a Working Load Limit (WLL) of at least 5,000 lb.
- b. Tie-downs need to prevent cargo movement
 - i. Side-to-side
 - ii. Forward and rearward
 - iii. Vertical



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10.3 Attach tie-downs either at the front and rear of the vehicle or at the mounting points on the vehicle designed for securement.

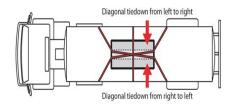


11.0 SECURING REELS OF WIRE

- 11.1 All metal coil shipments that, individually or together, weigh 5,000lb or more must be secured according to Specific requirements.
- 11.2 Metal coils that weigh less than 5,000lb may be secured according to general securement requirements.
- **11.3** Types of Coil Orientations:
 - i. Eyes vertical
 - ii. Eyes crosswise
 - iii. Eyes lengthwise
- **11.4** Type of Vehicle Required:
 - i. Flatbed vehicles
 - ii. Sided vehicles with or without anchor points

12.0 REQUIREMENTS FOR SECURING A SINGLE COIL EYE POSITIONED LENGTHWAYS

- **12.1** To prevent the coil from tipping forward, rearward, and sideways, arrange tie-downs to include the following:
 - i. Attach at least one tie-down diagonally across eye of coil from left side of vehicle to right side of vehicle.
 - ii. Attach at least one tie-down diagonally across eye of coil from right side of vehicle to left side of vehicle.
 - iii. Attach at least one tie-down over eye of coil from side-to-side.
- **12.2** To prevent forward movement, use one of the following:
 - i. Blocking
 - ii. Bracing
 - iii. Friction mats
 - iv. A tie-down passed around the front of the coil.





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13.0 REQUIREMENTS FOR SECURING A ROW OF COILS EYE POSITIONED VERTICALLY

- **13.1** Attach at least one tie-down against the front row of coils to restrain against forward motion.
 - i. If possible the angle between tie-down and deck should be less than 45°, when viewed from the side of the vehicle.
- **13.2** Attach at least one tie-down against the rear row of coils to restrain against rearward motion.
 - i. If possible the angle between tie-down and deck should be less than 45°, when viewed from the side of the vehicle.



- **13.3** Attach at least one tie-down over top of each coil or side-by-side row of coils to restrain against vertical motion.
- 13.4 Tie-downs going over the top of coil must be as close as possible to the eye of the coil.
- 13.5 Arrange tie-downs, blocking, or bracing to prevent shifting or tipping in any direction.

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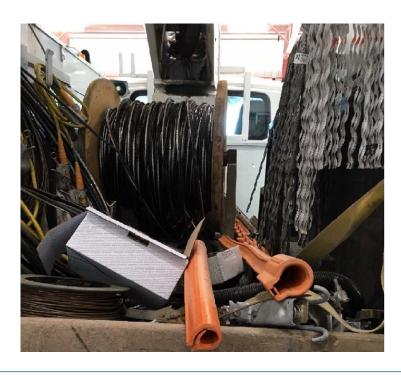
JANUARY 9, 2019

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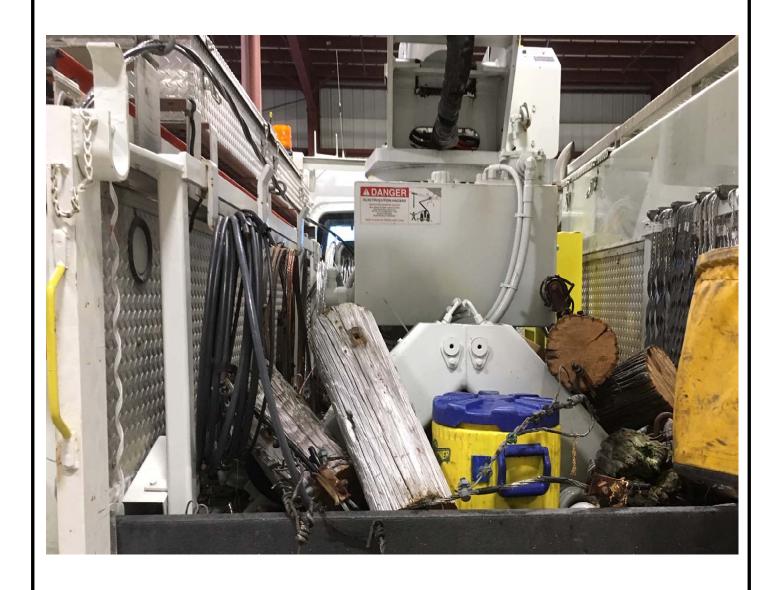
Stock can easily bounce out







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WHY SHOULD YOU SECURE YOUR LOAD ?

1 IT SAVES LIVES

Road debris accidents and highway litter are all too common. Across North America road litter, either dumped intentionally by motorists or accidental fall-outs from unsecured loads, causes at least 25,000 accidents every year. Road debris is responsible for nearly 100 or more fatalities annually. Road litter poses a serious hazard here in Washington too. On average, there are 350 accidents involving road debris on state highways each year. (Source: Washington State Department of Transportation)



3 IT COSTS MONEY

The fine for transporting an unsecured load is currently \$216 if an item fails out of or off of your vehicle and causes bodily injury. Drivers are charged with a gross misdemeanor, which carries a penalty up to \$5,000 and may include jail time. If the item causes property damage, you'll be facing a misdemeanor. The fine for littering something as small as a piece of paper is \$103 and can go up to \$5,000 for bigger items such as a mattress or other pieces of furniture. A lit cigarette fine is \$1025 or more if it starts a fire. Covering and securing your load keeps our state highways clean and money in your pocket.

2 IT'S THE LAW

"No vehicle shall be driven or moved on any public highway unless such vehicle is loaded as to prevent any of its load from dropping, sifting, leaking, or otherwise escaping." (Source: RCW 46.61.655) State law specifically refers to "unsecured" loads.

Please check with local authorities in your community most have a local county ordinance for compliance that goes beyond the state law and requires loads to be covered.

4 IT PREVENTS LITTER

No person shall throw, drop, deposit, discard, or otherwise dispose of litter upon any public property in the state... whether from a vehicle or otherwise. (Source: RCW 70.93.060[1])

Thirty percent of the litter-related violations issued by Washington State Patrol in 2007 were for a failure to secure a load and an additional 23% were issued for debris escaping from those loads. It is estimated that unsecured loads cause up to 60% froadside litter. (Source: www.ecy.wa.gov)





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When you safeguard your load everyone benefits

Eliminate your risk:

Unsecured loads are very dangerous to all motorist & motorcyclist. Drivers of open-bed light and medium-duty trucks and trailers hauling unsecured loads are at risk of fines, lawsuits and financial ruin. Pay now or pay more later...

Reduce your liability:

Drivers and/or their employers bear responsibility for items that fall onto the roadway or highway system. If an injury occurs drivers and/or their employers can be charge and possibly serve jail time.

Help keep your state beautiful and green:

Approximately 60% of litter comes from unsecured loads. Safeguarding your load helps to protect and preserve our environment for future generations.

Road debris costs taxpayers millions:

When a load is intentional or unintentionally deposited onto the road or highway system taxpayers pay the bill - cities, counties and states spend ten's of millions to cleanup & remove litter and debris.

Your Cargo SafetyWeb purchase helps to support highway safety. Please secure your load!



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Secure Your Load: Save Lives



- Have you ever been driving along the highway and suddenly litter flies out of the open bed of a pick-up or debris falls off the back of a truck in front of you?
- Maybe you had to brake hard or swerve suddenly to avoid a collision.
- Serious problems arise when items such as ladders, Insulators, Top Pins, Cross Arms and construction debris fall off of trailers or other vehicles.
- Unsecured loads are responsible for about 25,000 accidents each year in North America, resulting in approximately 80-90 DEATHS



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What is a load?



- A load can consist of a number of things in the bed of a truck, such a large heavy objects or just a loose bag or can.
- Many truck drivers find they have a "magic" truck bed. Papers, wrappers, cans, leaves, and other litter that gets tossed into the bed has magically "disappeared" when the truck arrives at its destination. That's because all of that stuff gets blown out along the freeway.
- Litter should not be put in the beds of trucks, to prevent unintentional littering.



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Use your netting



- Large or heavy items should be firmly secured with solid straps, rope, or netting.
- Tie large items directly to your vehicle.
- Small string is not adequate tie down materials must be able to withstand the wind loads of 70 mph on the highway.
- A lot of people are not aware that at 70 mph, wind is providing about a 20-pound-per-squarefoot push on those loads, which can dislodge those loads and push them right off your vehicle.
- Don't use restraints if they are frayed, cut or damaged in any way





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Double-Check.



- Double check your load to make sure it is secure at the back and on the sides and top.
- Remember that loads can move and settle during a journey, allowing restraints to loosen.
- If possible, recheck restraints shortly after beginning your trip



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Ask Yourself:



- Is there any chance of debris falling or blowing out of my vehicle?
- Would I feel safe if I were driving behind MY vehicle?
- What would happen to MY load if I had to brake suddenly or if I hit a bump?



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Title 29-A: MOTOR VEHICLES AND TRAFFIC

- UNSECURED LOAD. A PERSON MAY NOT OPERATE ON A
 PUBLIC WAY A VEHICLE WITH A LOAD THAT IS NOT FASTENED,
 SECURED, CONFINED OR LOADED TO REASONABLY PREVENT
 A PORTION FROM FALLING OFF.
- FOR THE PURPOSES OF THIS SECTION, "LOAD" INCLUDES, BUT IS NOT LIMITED TO, FIREWOOD, PULPWOOD, LOGS, BOLTS OR OTHER MATERIAL, BUT DOES NOT INCLUDE LOOSE HAY, PEA VINES, STRAW, GRAIN OR CORNSTALKS.
- A VIOLATION OF THIS SECTION IS A TRAFFIC INFRACTION SUBJECT TO A FORFEITURE OF NOT LESS THAN \$150 NOR MORE THAN \$500.



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Unsecured debris from a truck

