

## Winch Operation Instructions

### Care of Winches

- Winches shall be inspected prior to each use to ensure that the winch has not been damaged and is in proper working condition.
- Winches shall be cleaned and lubricated to ensure the winch pawl will drop freely between the ratchet teeth by gravity. Dirt, mud, snow, ice, road salt, cleaning solutions, etc. can prevent the pawl from freely dropping between the ratchet teeth by gravity.
- Portable winches should be stored in a dry location when not in use.



### Operation of Winches

- Before tensioning, pull excess webbing through mandrel slot. When the tie-down is fully tensioned, two (2) to three (3) wraps of webbing shall be on the mandrel (four to six layers of webbing). Additional wraps of webbing can cause damage to the winch if excessive tension is applied to the winch. Excessive wraps can also make it difficult to apply or release tension.
- When tensioning or releasing the winch tie-down in rain, ice or snow conditions, properly position your feet and body to prevent slipping.
- Use only winch bars that have been designed to tension and release winch tie-downs. A winch bar with a slip resistant handle is recommended. Never use a bar or tube as a winch bar. They can slip out of the winch end cap holes and injure the user.



Winch Bar



- The winch bar shall be inserted through both holes in the winch end cap. Using only one (1) hole in the end cap can damage the winch and winch bar tip, eventually causing them to fail and injure the user.
- "Cheater bar" (extender) shall never be used to apply tension to a winch tie-down assembly. Using a "cheater bar" can injure the user, when the winch bar and/or "cheater bar" slips off the winch, or causes the winch to fail.
- When tensioning or releasing the winch tie-down assembly, always stand clear (to one side) of the winch bar, in case the winch bar slips. Maintain a firm grip on the winch bar and never release it without checking the pawl to ensure that it is fully and properly engaged between the ratchet teeth.
- Winches shall not be located between the tire and the bed of the vehicle, this creates a potentially hazardous condition.
- Portable winch set screws are designed to position the winch while the tie-down is being tensioned. They shall only be "snug" tight. Over tightening of the screws may cause the bracket to bend, weakening the winch and causing it to fail.
- Winches shall never be loaded in excess of their Working Load Limit.
- Winches shall be used in accordance with federal, state, local and industry regulations applicable to cargo securement. Example: Federal Motor Carrier Safety Regulations 392.9 & 393.100.

### Inspection and Training

- Winches shall be inspected prior to each use. Winches that are damaged or inoperable should be removed from service and replaced with a new winch.
- A training program for truck drivers is recommended for the correct and safe use of cargo securement products.



**Note** This bulletin lists some of the most important considerations for the proper care and operation of cargo securement winches, but it is not an all-inclusive list.