

## TSB 2013.08.004

### Utility Grounding Reel Installation, Maintenance & Use

Affected Reels: SGCR, GCR  
*Date Issued: August-2013*

#### Description:

Utility grounding reels are designed to provide a secure and efficient means for grounding vehicles and equipment when working on or near energized lines. Spring or hand-rewound, these reels make using and storing truck or equipment grounds simple. The worker need only pay out all cable from the reel and attach the free end to a suitable ground. Bolt down design allows reels to be easily removed for installation on new vehicles. Independently tested to simulated faults of the type and magnitude that could occur on a strong distribution system. Reels are rated to 43 KA for 30 cycles per (ASTM 855-90).

#### Installation:

The grounding reel should be mounted in a convenient location providing protection from damage and contamination which would degrade the current carrying capabilities of the reel, while allowing access for testing and maintenance. A bonding cable must be attached to the frame of the vehicle using suitable means.

#### Maintenance:

Routine inspection and maintenance are essential to the proper operation of the truck grounding reel. The reel should be accorded the same attention and care given any personal protective equipment.

Prior to use each day, the reel, cable, and clamps should be inspected for:

- Damaged cables
- Broken or defective mechanical parts
- Condition of all component parts to ensure they are clean, tight, and mechanically sound



⤴ **WARNING!!!** *If any of the above conditions exist, the truck grounding reel should not be used until repairs are made.*

Bi-annually (or more frequently if the reel is heavily used) remove cable and bonding jumper from the reel and clean all connections. Inspect reel for mechanical damage and proper working condition. Locate the grease zerk fitting on the side of one of the reel discs. With a hand-operated grease gun, pump in a couple pumps of grease. Hannay Reels recommends Acheson GP20 #0 conductive grease or equivalent. Such grease can be found at your local welding supplies distributor.

#### Maintenance (cont.):

Next the current carrying capacity of the cable and bonding jumper should be verified. This can be accomplished by using a portable tester for personal grounding assemblies. Reconnect cable and bonding jumper to reel. A brass or bronze bolt must always be used to attach bonding jumper to reel shaft. Using a low resistance Ohm meter, measure from the cable connection on the roto-ground to the bonding jumper shaft connection. Resistance readings in excess of 2mΩ require re-inspection of the connections. Do not place reel in service until high resistance readings are eliminated.

Spring tension for the spring rewind reel has been set at the factory. To increase or decrease the spring tension, see the instructions furnished with your reel - TSB#2013.07.005 (form H-9803-TSB).

#### Use

Perform the daily inspection and correct any problems found before using truck grounding reel. Payout all cable from the reel, leaving no coils on the reel or on the ground between the reel and the ground attachment point (see warning below). Connect free end of cable to a suitable ground. If serrated jaw grounding clamps are not used, the clamp jaws and the conductor should be cleaned with a wire brush before attachment. When connecting the ground end to or disconnecting from a system neutral, an insulated clampstick or properly rated rubber gloves should be used. Personnel should avoid contact with the vehicle or equipment when installing or removing the ground end of the cable.

All grounding shall be in accordance with OSHA 1926.954, 1910.269, and your company's policies and procedures regarding the grounding of vehicles and equipment.

⤴ **WARNING!!!** *All cable should be payed off the reel, with no coils remaining on the reel drum, to prevent the reel from becoming an inductance coil. This could increase the overall impedance of the truck grounding reel assembly under fault conditions, which may increase the touch potential danger for ground personnel. Failure to follow this warning could result in personal injury or death.*