



Diversified Metal Fabricators Technical Reference Bulletin TRB0014

Title	Traction Control Bypass for GM & International Medium Duty
Document No.	TRB0014 Rev #
Issue Date	10/28/20 (TAM)
Release	General
Units Affected	2019+ GM Silverado 4500/5500/6500 and International CV Series
Purpose	Provide guidance on bypassing traction control while on rail

DMF RW-1019B railgear as installed on 2019+ GM Silverado 4500/5500/6500 and International CV Series elevates the front axle to prevent the front tires from contacting the rail. Unless bypassed according to the following directions, the traction control system will limit travel speed to ~5 mph when on rail.

Proximity Sensor:

A proximity sensor should be used to detect when the railgear is in the deployed position, providing a trigger to bypass the traction control system.

DMF includes a weld-in sensor bung (P/N 46072) with each set of railgear that can be installed in a factory-provided hole in any of the front longarms. The suggested location is on the inner passenger side arm, to provide the most direct wiring path. The sensor bung accepts common M18x1 threaded body inductive proximity sensors, and its position reliably detects the pivot arms when deployed.

DMF offers an optional kit (P/N 309009) that includes a compatible proximity sensor and relays. Upfitters are free to select a different sensor or mounting arrangement, but may need to modify the wiring instructions shown to suit. Care should be taken to ensure that proximity sensor is properly adjusted and will not be damaged during railgear deployment.

SENSOR INSTALLATION

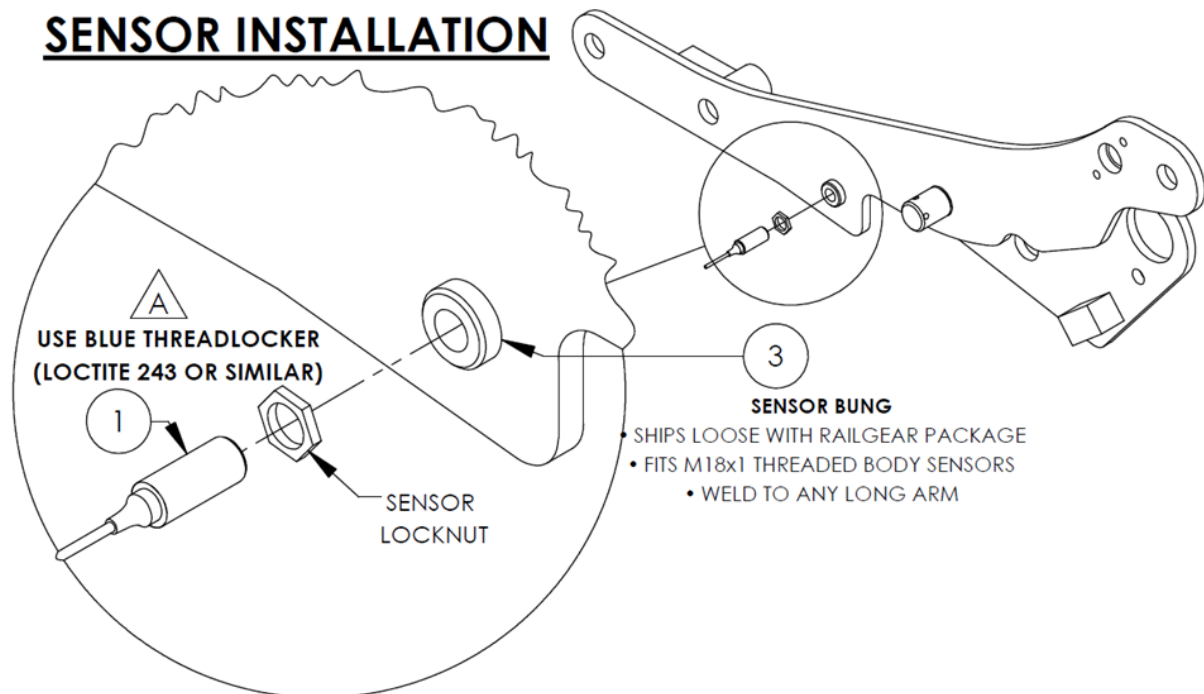


Figure 1. Proximity Sensor Location

Wiring:

- 1) See wiring diagram on DMF Drawing 309009. Wiring shown is based on use of DMF's PNP proximity switch. Wiring will vary if using a installer-supplied NPN switch.
- 2) Mount relays on firewall near X50A underhood fuse box. See Figure 2 for suggested location.
- 3) Locate an ignition power source for the proximity switch and relay 2 and install a suitable in-line fuse.
- 4) Locate the fuse for the Electronic Brake Control Module (EBCM). The 25A fuse is located in the X50A underhood fuse box in cavity 83 (Figure 3).
- 5) Remove the EBCM fuse and leave ignition off for remainder of installation.
- 6) Locate the output wire for the EBCM fuse (wire 1940, RED/VIOLET in color) inside the wire loom exiting the fuse X50A fuse box (Figure 4).
- 7) Locate the parking brake switch in the driver's footwell. Splice into the parking brake switch wire (wire #1134, BLUE/VIOLET in color; Figure 5).
- 8) Ignition power and/or parking brake wiring can be routed from cab to underhood through the wire pass through in the firewall shown in Figure 6. A suitable chassis ground point can also be found on the firewall above the pass through.



Figure 2. Suggested Relay Mounting Location (Firewall, Driver's Side)

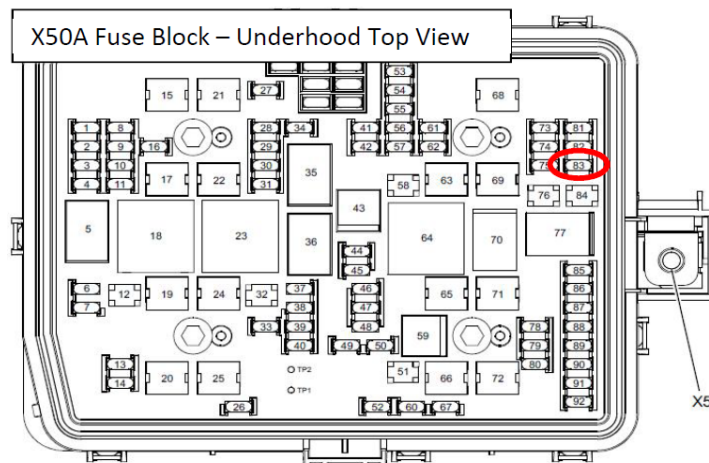


Figure 3. EBCM Fuse Location - Underhood Fuse Box



Figure 4. Wire Loom Location for EBCM wire

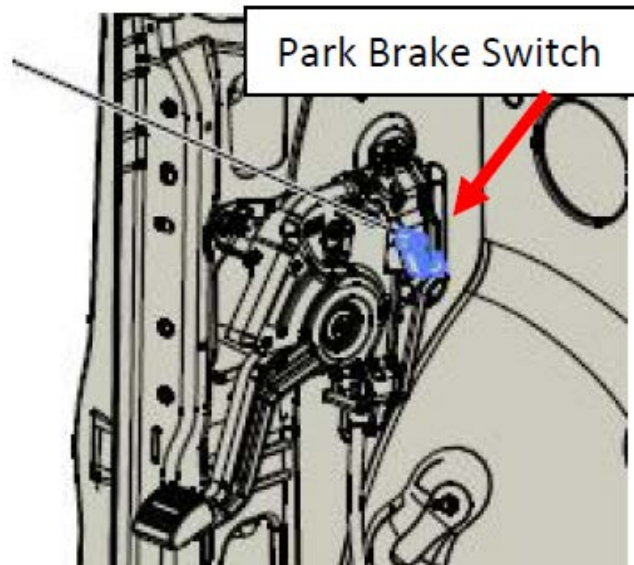


Figure 5. Park Brake Switch Location (Driver's Footwell)

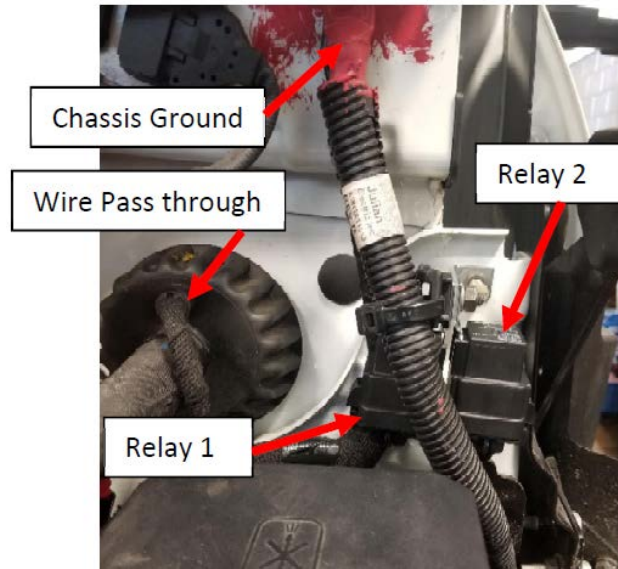


Figure 6. Firewall Pass Through and Chassis Ground