

Date: Aug-2014



Service Bulletin

## PRELIMINARY INFORMATION

Subject: Check Trailer Wiring Message Displayed On DIC

Models: 2009 - 2013 Chevrolet Avalanche

2009 - 2014 Chevrolet Suburban, Tahoe

2007 - 2013 Chevrolet Silverado

2014 Chevrolet Silverado 2500/3500

2007 - 2013 GMC Sierra

2014 GMC Sierra 2500/3500

2009 - 2014 GMC Yukon Models

With Integrated Trailer Brake Controller (RPO JL1)

## This PI was superseded to update Model Years and Condition/Concern. Please discard PIT4366F.

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

## Condition/Concern

Some customers may experience an intermittent "Check Trailer Wiring" message in vehicles equipped with ITBC (Integrated Trailer Brake Controller) RPO JL1 and no DTC's stored.

Below are two possible causes for this concern:

- 1. This message may be displayed each time the trailer's running lamps, turn signal lamps, or brake lamps are turned on, especially if the trailer is equipped with a large number of lamps. This condition is most likely caused by insufficient trailer grounding and the trailer ground wiring will need to be repaired and/or upgraded.
- 2. This concern could be caused by a poor connection at the 7-way trailer connector. There are several manufacturers of 7-way (trailer side) connectors and many do not comply with the SAE standard specifications. Some 7-way (trailer side) connector plugs may not properly engage the truck's 7-way connector socket and cause open circuits. Also, they may cause deformation and excessive wear of the terminals on the truck's 7-way connector socket. Over time this will lead to poor terminal tension between the 7-way (trailer side) connector plug and the truck's 7-way connector socket. Since the Trailer Brake Control Module is always monitoring the vehicle and trailer circuits/components, a poor connection at the 7-way connector can cause a "Check Trailer Wiring" message on the DIC.

## Recommendation/Instructions

- 1. Inspect and clean the ground wire (normally white wire) connection on the trailer side of the 7-pin connector.
  - Make sure that the wires inside the trailer side connector are clean and securely fastened
  - If an electrical junction box exists on the trailer, make sure the wires inside the junction box are clean and securely fastened.
  - Once this procedure is complete, check to see if the condition has been corrected. If the condition still exists, perform the following procedure:
    - 1.1 Remove the original trailer ground wire (normally white wire) from the trailer side of the 7-pin trailer connector.
    - 1.2 Install a ring terminal (PN 12103512 or equivalent) to this wire and fasten the ring terminal to the metal or aluminum chassis of the trailer using ar M6x1x20 self taping phosphate zinc coated screw (PN 11515925 or equivalent).
  - Pre-drill trailer chassis location with a 3/16" hole.

- Make sure the trailer chassis location is clean of paint or coating material prior to installation.
- · Galvanic corrosion between dissimilar trailer and screw metals may require that this ground location be periodically cleaned.
  - 1.3 Obtain a sufficient length of minimum 10 gauge (5.0 mm) white wire and fasten with ring terminal (PN 12103512 or equivalent) to the trailer chassis at the same location as the original ground wire.
  - 1.4 Install and fasten the other end of the new ground wire into the trailer side of the 7-pin trailer connector
  - 1.5 Install conduit on the original and new trailer ground wires and secure the conduit to the existing trailer harness.
- 2. Engineering has recommended the use of Pollak Heavy Duty 7-Way (Trailer Side) Connector Plugs. Pollak is the OEM manufacturer of the truck's 7-way connector socket; by using a Pollak Heavy Duty 7-Way (Trailer Side) Connector Plug will ensure proper fit when the two connectors are mated. Pollak's website is: www.pollakaftermarket.com/. Once at the home page select "Connectors" and then "Heavy Duty 7-Way Plugs and Accessories".

**Note:** If the truck's 7-way connector socket terminals are deformed or have excessive wear, it will be necessary to replace the truck side connector (with a GM CCA Customer Care and After sales Part) along with the trailer's 7-way connector plug to a Pollak HD.

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.

WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION