

Service Bulletin

File in Section: -

Bulletin No.: PIT5144

Date: February, 2012

PRELIMINARY INFORMATION

Subject: Service Trailer Brake Message With DTC B3894 (Fretting Corrosion)

Models: 2008 - 2011 Chevrolet Avalanche, Silverado, Suburban, Tahoe 2008 - 2011 GMC Sierra, Yukon, Yukon XL, Yukon Denali, Yukon Denali XL With RPO Code JL1 - Trailer Brake Controller

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

Condition/Concern:

Some vehicles may exhibit setting DTC B3894 Symptom 5A-Stop lamp Switch Circuit Plausibility. Many Stop Lamp Switches have been returned to the WPC for inspection and duplication on test vehicles; however, failure of these switches was not confirmed. We believe that the code was being set by a wiring/terminal issue at the brake switch.

Recommendation/Instructions:

Prior to replacing any switches, the terminals at the brake switch should be inspected. This condition may be caused by a buildup of non-conductive insulating oxidized debris known as fretting corrosion, occurring between two electrical contact surfaces of the connection or connector. This may be caused by any of the following conditions:

- Vibration
- Thermal cycling
- Poor connection/terminal retention
- Micro motion
- A connector, component or wiring harness not properly secured resulting in movement

On low current signal circuits this condition may cause high resistance, resulting in intermittent connections.

Note: Fretting corrosion looks like little dark smudges on electrical terminals and appear where the actual electrical contact is being made. In less severe cases it may be unable to be seen or identified without the use of a magnifying glass.

Important: DO NOT apply an excessive amount of dielectric lubricant to the connector as shown, as hydro lock may result when attempting to mate the connector. Use ONLY a clean nylon brush that is dedicated to the repair of the conditions in this bulletin.

- 1. With a one inch nylon bristle brush, apply dielectric lubricant to both the brake switch side and the harness side of the affected connector.
- 2. Reconnect the affected connector and wipe away any excess lubricant that may be present.

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.