



Technical Service Bulletin

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Dash Lamps Illuminated Always after CM2380 ECM Upfit	

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Warranty Statement

The information in this document has no effect on present warranty coverage or repair practices, nor does it authorize TRP or Campaign actions.

Contents

Product Affected

- ISL G CM2180
- ISX12 G CM2180 EJ

Issue

Symptom:

- Check Engine Lamp, Stop Engine Lamp, Malfunction Indicator Lamp, and Low Fuel Pressure Lamp are illuminated always after upfitting the engine to a CM2380 ECM.

Root Cause:

- Changes in the CM2380 ECM lamp driver circuits are **not** compatible with 24 VDC dash lamp circuits. This change results in the ECM driven lamps being illuminated always.

Verification

Check for 24 VDC at the OEM harness 31 pin connector on pins 1, 2, 4, and 25. If 24 VDC is present the lamp circuit will **not** function properly with a CM2380 ECM.

Resolution

Contact the OEM to see if the dash lamps can be converted to 12 VDC. If conversion of dash lamps to 12 VDC is **not** feasible a standard 12 VDC normally open automotive relay can be used to restore functionality of the dash lamps. An individual relay will be needed for each dash lamp.

Reason for Change

12 VDC dash lamps were required per engine installation instructions. However, some OEM installations utilized 24 VDC dash lamps. With CM2180 ECMs the dash lamps still functioned as intended with the higher voltages.

Service Instructions

If possible, work with the OEM to update the dash lamps to 12 VDC. In some instances, this update might **not** be feasible. If the OEM is **not** able to update the dash, a standard 12 VDC automotive relay must be used to restore dash lamp functionality. Two example circuits are shown in Figure 1 and Figure 2 below. An individual relay will be needed for each dash lamp.

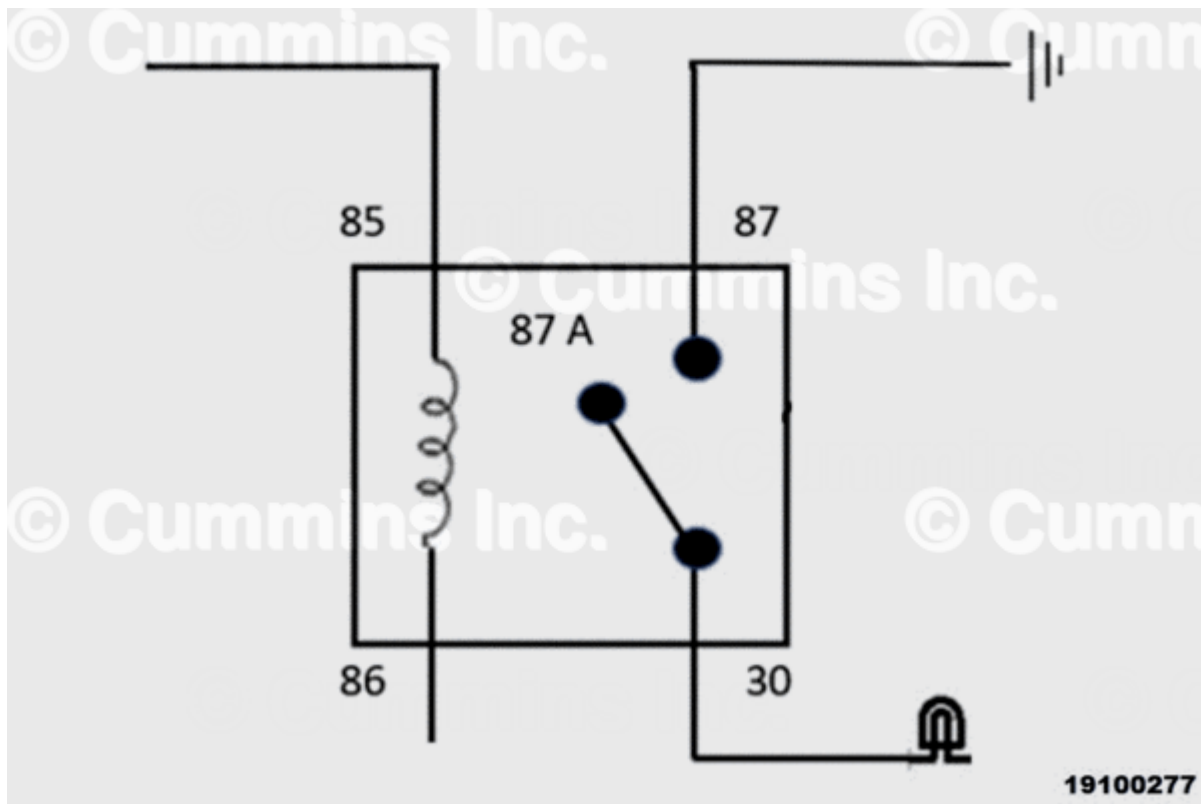


Figure 1, Relay Wiring Example Circuit

Figure 1 Pin Connections:

- Pin 86: 12 VDC Switched Power
- Pin 85: OEM 31 Pin Connector Lamp Signal Circuit
- Pin 87: OEM 31 Pin Chassis Ground
- Pin 87A: **Not** Used
- Pin 30: Lamp Signal Circuit from the OEM Dash

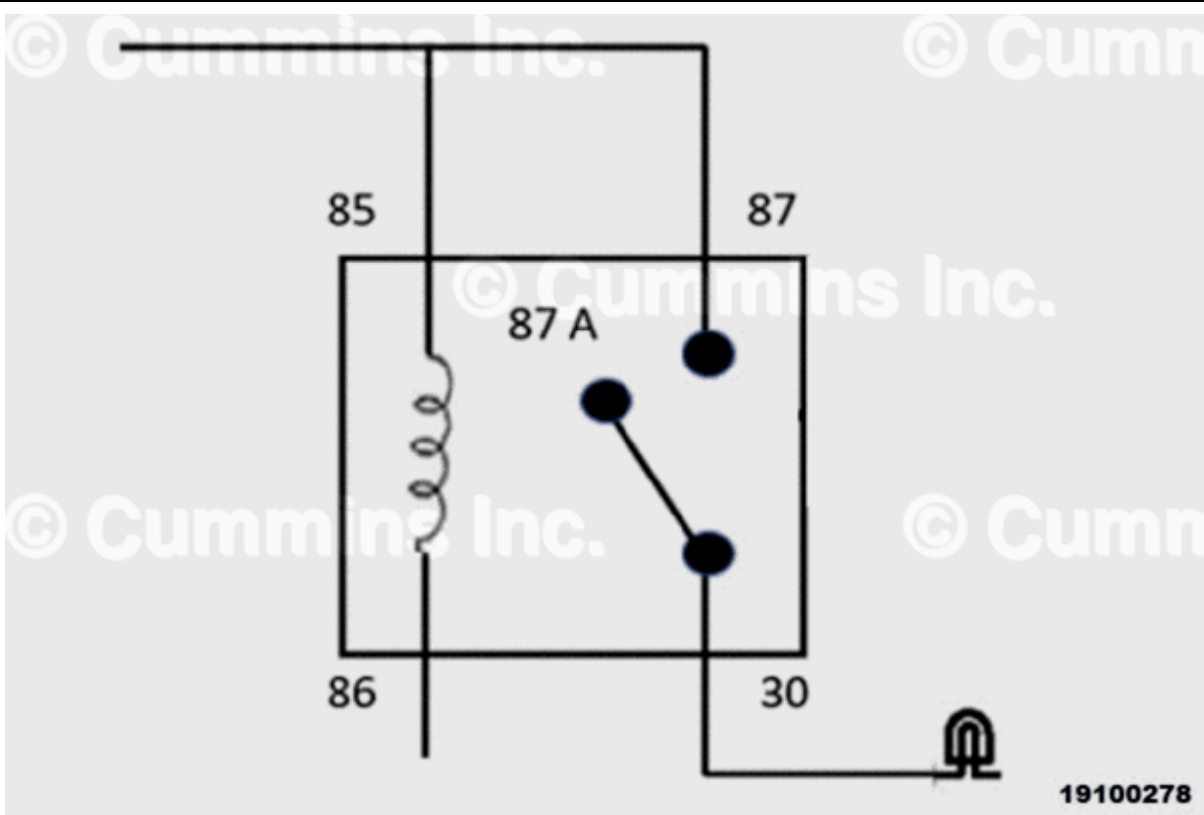


Figure 2, Relay Wiring Example Circuit

Figure 2 Pin Connections:

- Pin 86: 12 VDC Switched Power
- Pin 85: OEM 31 Pin Connector Lamp Signal Circuit
- Pin 87: OEM 31 Pin Connector Lamp Signal Circuit
- Pin 87A: **Not** Used
- Pin 30: Lamp Signal Circuit from the OEM Dash

Document History

Date	Details
2020-6-1	Module Created

Last Modified: 09-Jun-2020