

Technical Service Bulletin Number
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TSB150177



Technical Service Bulletin

Subject

New Two Wire Coolant Level Sensor Introduction

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

- ISL9 CM2350 L101
- ISB6.7 CM2350 B101
- QSB7-DM CM850
- QSB4.5 CM850
- QSK50 CM2150 K107

Description of Change

- A short jumper harness with a Deutsch™ connector has been added to the coolant level sensor for certain ISB6.7 CM2350 B101 and ISL9 CM2350 L101 equipped transit applications to provide better protection against moisture.
- Coolant level sensor, Part Number 2872933, has been superseded to multiple part numbers. See Table 2 below.
- Coolant level sensor, Part number 4359193, now has a potted connector for added moisture and corrosion resistance needed in transit bus applications.
- Coolant level sensor, Part Number 4384457, has the same potted connector, but has a longer pigtail for proper fitment in Nova Bus applications.

- Coolant level sensor, Part Number 4384190, is the same as the original sensor but has a new part number.

Reason for Change

ISB6.7 CM2350 B101 and ISL9 CM2350 L101 equipped transit bus applications with coolant level sensor, Part Number 2872933, are experiencing pin corrosion as the result of poor sealing performance of the original equipment manufacturer (OEM) Engineered Plastic Components (EPC) connector.

Service Instructions

When coolant level sensor replacement is required, use Table 1 below to determine the appropriate repair direction based on engine family, application, and OEM.

Engine Family and Application	OEM and Application	Repair Scenario
ISL9 CM2350 L101 and ISB6.7 CM2350 B101 Transit Bus	All Other Transit Bus OEMs	Scenario 1
ISL9 CM2350 L101 and ISB6.7 CM2350 B101 Transit Bus	Nova Bus	Scenario 2
All Others – See Product Affected	Non Transit	Scenario 3

Scenario 1 Resolution:

- Disconnect coolant level sensor, Part Number 2872933, from the OEM harness and remove sensor from the coolant surge tank.
 - See ISB6.7 CM2350 B101 Service Manual, Bulletin 2883567. [Refer to Procedure 019-017](#) in Section 19.
 - See the ISL9 CM2350 L101 Service Manual, Bulletin 4310787. [Refer to Procedure 019-017](#) in Section 19.
- Cut the OEM harness 25.4 mm [1 in] behind the OEM Engineered Plastic Components (EPC) connector. See Figure 1 below.
- Install electrical connector, Part Number 5299971. See Figure 2 below.
 - See ISB6.7 CM2350 B101 Service Manual, Bulletin 2883567. [Refer to Procedure 019-199](#) in Section 19. Reference Solder Splice section.
 - See the ISL9 CM2350 L101 Service Manual, Bulletin 4310787. [Refer to Procedure 019-199](#) in Section 19. Reference Solder Splice section.
- Install new coolant level sensor, Part Number 4359193, into the surge tank and connect to electrical connector, Part Number 5299971. See Figure 3 below.

Scenario 2 Resolution:

- Disconnect coolant level sensor, Part Number 2872933, from the OEM harness and remove sensor from the coolant surge tank.

- See ISB6.7 CM2350 B101 Service Manual, Bulletin 2883567. Refer to Procedure 019-017 in Section 19.
- See the ISL9 CM2350 L101 Service Manual, Bulletin 4310787. Refer to Procedure 019-017 in Section 19.
- Cut the OEM harness 25.4 mm [1 in] behind the OEM Engineered Plastic Components (EPC) connector. See Figure 1 below.
- Install electrical connector, Part Number 5299971. See Figure 2 below.
- Install new coolant level sensor, Part Number 4384457, into the surge tank and connect to electrical connector. See Figure 4 below.
 - See ISB6.7 CM2350 B101 Service Manual, Bulletin 2883567. Refer to Procedure 019-199 in Section 19. Reference Solder Splice section.
 - See the ISL9 CM2350 L101 Service Manual, Bulletin 4310787. Refer to Procedure 019-199 in Section 19. Reference Solder Splice section.
- Install new coolant level sensor, Part Number 4384457, into the surge tank and connect to electrical connector. See Figure 4 below.

Scenario 3 Resolution:

- Install new part number 4384190. The electrical connector, Part Number 5299971, is **not** required.
- See corresponding Service Manual. Reference Procedure 019-017 in Section 19.

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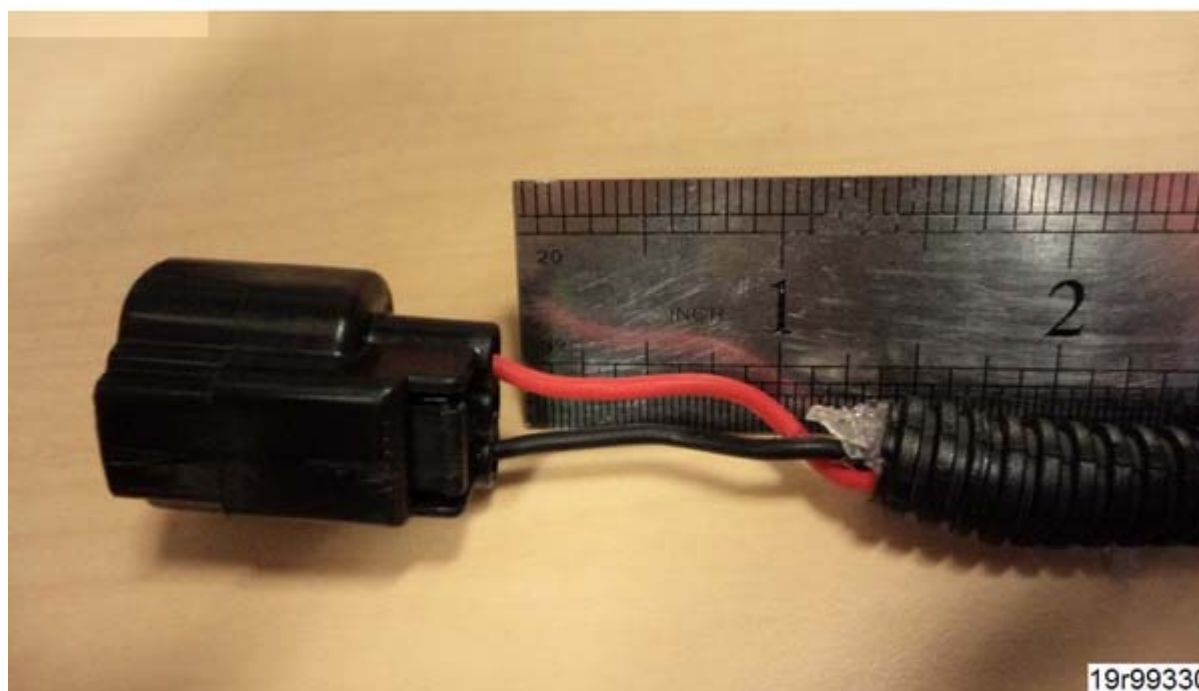


Figure 1, OEM Engineered Plastic Components (EPC) Connector

Service Parts Availability

Service parts are available. See Table 2 below.

Table 2, Service Parts					
Description	Existing Part Number	Obsoleted	Superseded	New Part Number	Engine Family and Application
Two Wire Coolant Level Sensor	2872933	Yes	No	4359193*	ISB6.7 CM2350 B101 and ISL9 CM2350 L101 Transit Applications
				4384457*	ISB6.7 CM2350 B101 and ISL9 CM2350 L101 Transit Applications – Nova Bus Only
				4384190	All Others
* Electrical connector, Part Number 5299971, also required for first time installation.					

Part Compatibility

For ISB6.7 CM2350 B101 and ISL9 CM2350 L101 equipped transit applications **only**:

- New coolant level sensor, Part Number 4359193 and 4384457, are **not** compatible with the OEM Engineered Plastic Components connector. The OEM Engineered Plastic Components connector will need to be cut off and replaced with electrical connector, Part Number 5299971, for the first time repair.

For all others products and applications:

- New coolant level sensor, Part Number 4384190, is compatible with the OEM Engineered Plastic Components connector.

Part Identification

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Figure 2, Electrical Connector, Part Number 5299971.

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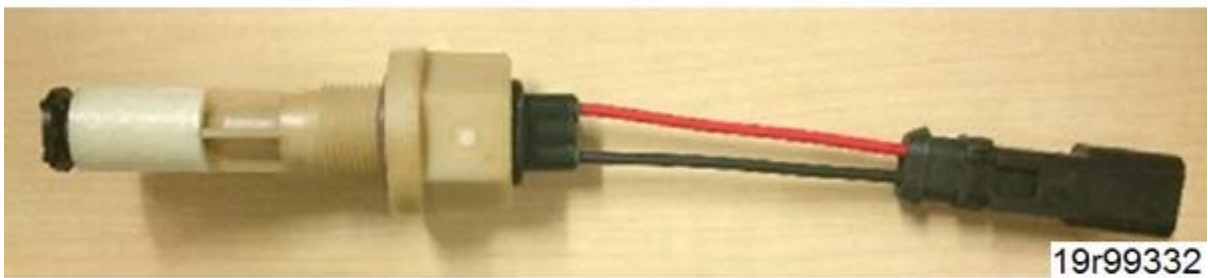


Figure 3, New Coolant Level Sensor for ISB6.7 CM2350 B101 and ISL9 CM2350 L101 Transit Applications, Part Number 4359193.

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Figure 4, New Coolant Level Sensor for ISB6.7 CM2350 B101 and ISL9 CM2350 L101 Nova Bus Transit Applications only, Part Number 4384457.

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Figure 5, New Coolant Level Sensor for All Other Products and Applications, Part Number 4384190.

Document History

Date	Details
2015-11-3	Module Created
2015-12-30	Product Problem Solving (PPS)
2016-3-8	Added mention of part number 4384457 to Description of Change. Updated Table 1 with new scenario. Updated Scenario 2 Resolution. Updated Table 2 to include part number 4384457. Updated part compatibility section. Added Figure 4.

Last Modified: 17-Mar-2016

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