

<b>Technical Service Bulletin Number</b>
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TSB150177
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## Technical Service Bulletin

### Subject

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New Two Wire Coolant Level Sensor Introduction

### Warranty Statement

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

### Contents

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#### 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- Coolant level sensor, Part Number 2872933, has been superseded to multiple part numbers.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 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.

Table 1, Coolant Level Sensor Repair Scenarios By Engine Family and Application		
Engine Family and Application	OEM	Repair Scenario
ISL9 CM2350 L101 and ISB6.7 CM2350 B101 Transit Bus	NOVA BUS	Scenario 2
ISL9 CM2350 L101 and ISB6.7 CM2350 B101 Transit Bus	All Others	Scenario 1
All Others – See Product Affected	All	Scenario 2

### 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:

- Install the existing coolant level sensor, Part Number 2872933, if part inventory is available.
- If existing coolant level sensor, Part Number 287293, is **not** available, 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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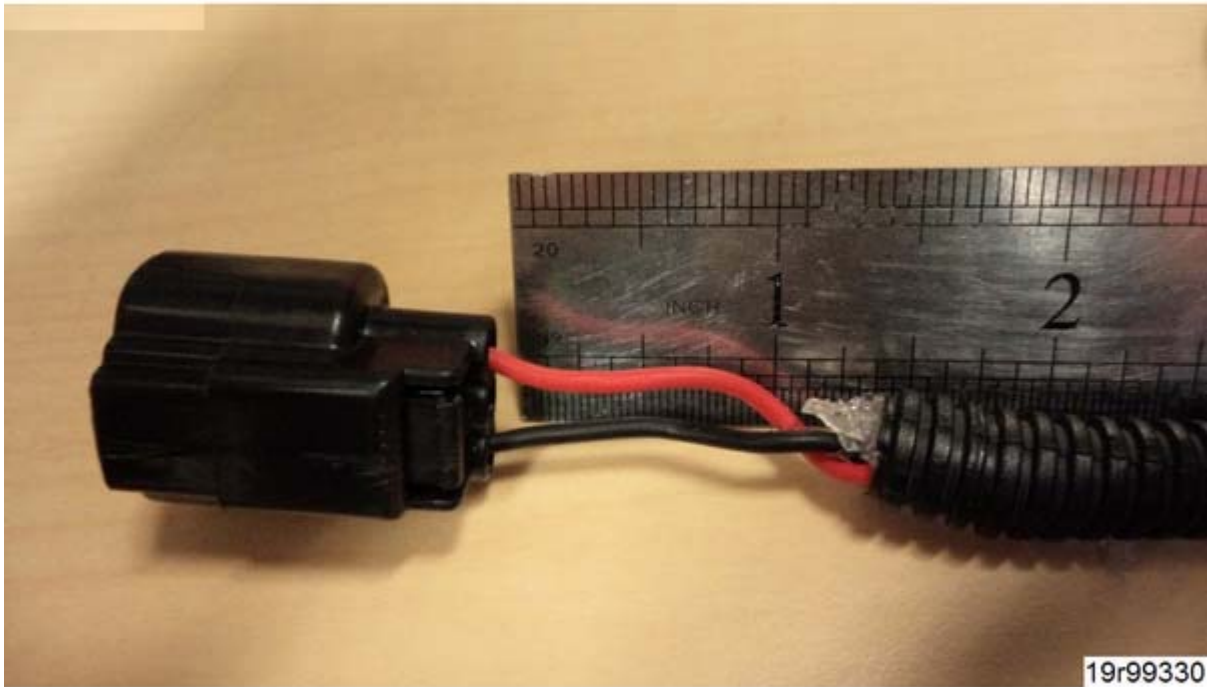


Figure 1, OEM Engineered Plastic Components (EPC) Connector

### Service Parts Availability

Service parts are available. See Table 2 below.

Table 2, Service Parts			
Description	Obsolete Part Number	Engine Family and Application	New Part Number
Two Wire Coolant Level Sensor	2872933	ISB6.7 CM2350 B101 and ISL9 CM2350 L101 Transit Applications	4359193*
		All Others	4384190
* 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, is **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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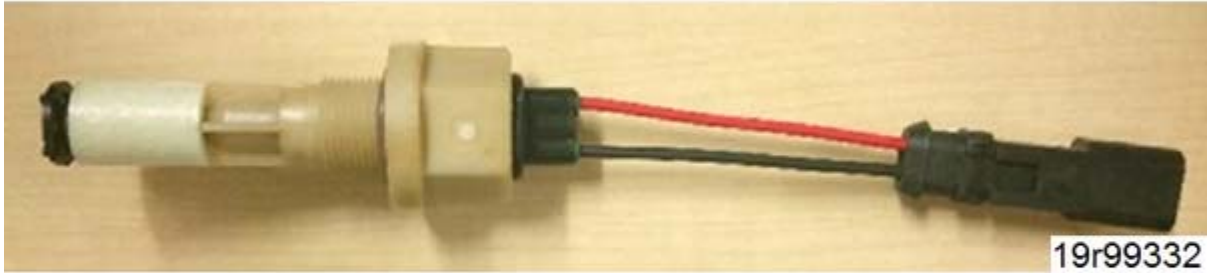


Figure 3, New Coolant Level Sensor for ISB6.7 CM2350 B101 and ISL9 CM2350 L101  
Transit Applications, Part Number 4359193

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Figure 4, New Coolant Level Sensor for All Other Products and Applications, Part Number 4384190

## Document History

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Date	Details
2015-11-3	Module Created
2015-12-30	Product Problem Solving (PPS)

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**Last Modified: 13-Jan-2016**

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