

Cummins ISB and ISC, Low Coolant Level Sensor Conversion

54-265

FLA COE
FLB COE
FLD Conventional
Business Class
FLC 112 Conventional

Century Class Conventional
Argosy COE
Cargo
Columbia

Coronado
> Business Class M2
Cascadia
108SD/114SD

Freightliner
Service Bulletin

General Information

The three-wire low coolant level sensor (CAS 700685 001) on some M2 vehicles built from 2007 to October 8, 2009, with Cummins ISB and ISC engines, may develop an internal leak, causing the engine light to illuminate and the engine to shut down. The wire connectors to the sensor may also become corroded. A new two-wire sensor (KYS 5022 11366 05) with a harness (A06-66670-012) and module (KYS 1539 10206 03), is available to replace this part.

Follow the instructions below to replace the sensor.

Replacement

1. Park the vehicle on a level surface, shut down the engine and set the parking brakes. Chock the tires.
2. Drain the coolant from the cooling system enough to get it below the level of the low coolant level sensor.
3. Disconnect the batteries.
4. Disconnect the wire harness from the sensor.
5. Remove the sensor from the surge tank. See [Fig. 1](#).

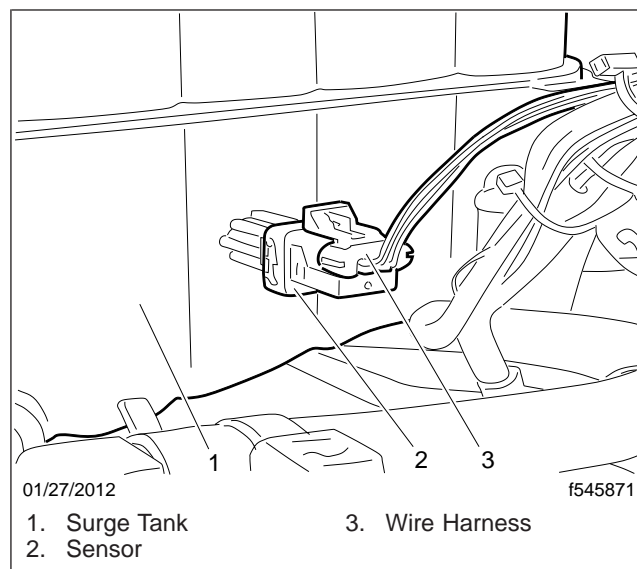


Fig. 1, Low Coolant Level Sensor Installation

6. Inspect the wiring harness connector terminals for signs of corrosion. Clean or replace the connector as needed.
7. Install the new two-wire sensor in the surge tank.
8. Mount the module to the frontwall using an unused stud near the horns. See [Fig. 2](#).
9. Connect the new wire harness to the original low coolant sensor connector, the module, and the new sensor. Secure the new harness to the existing wiring with zip ties as needed. See [Fig. 3](#) for replacement parts.
10. Connect the batteries.
11. Fill the cooling system with coolant, and check for leaks.

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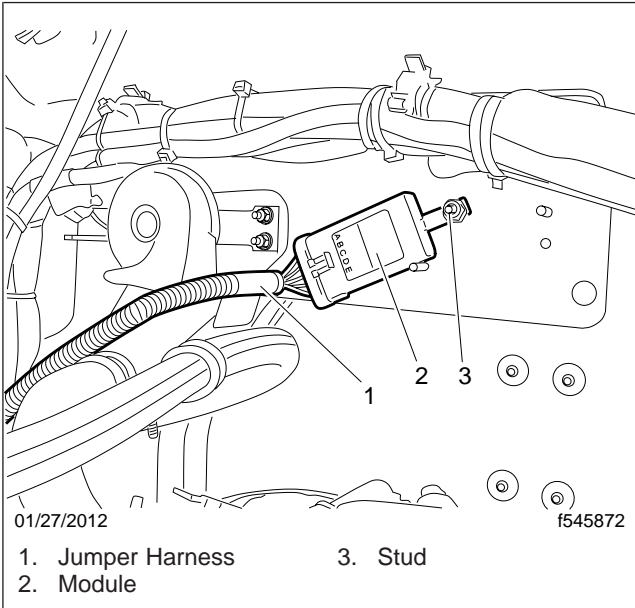


Fig. 2, New Module Installation

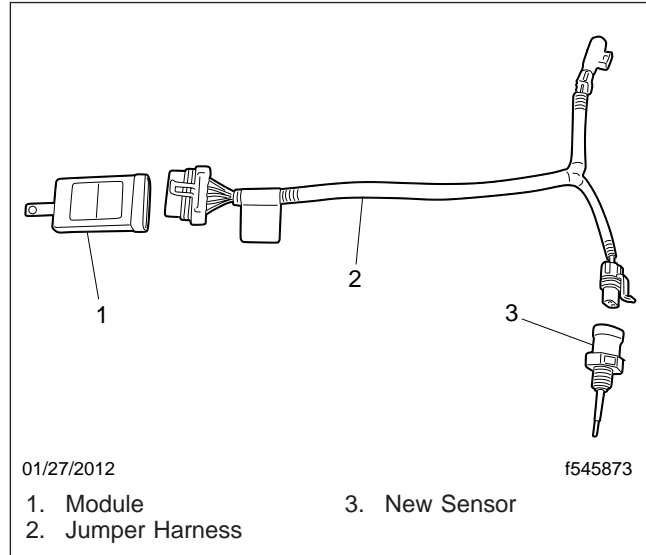


Fig. 3, Replacement Sensor, Harness and Module

Parts

Parts are available through the PDC. See [Table 1](#) for replacement parts.

Low Coolant Level Sensor Replacement Parts			
Original Part		Replacement Parts	
Part Number	Description	Part Number	Description
CAS 700685 001	Low Coolant Level Sensor, 3-Wire	KYS 5022 11366 05	Low Coolant Level Sensor 2-Wire
		A06-66670-012	Harness
		KYS 1539 10206 03	Module

Table 1, Low Coolant Level Sensor Replacement Parts

Warranty

This procedure is warrantable one time only per vehicle, and only if the described condition exists and the repair is performed within the applicable base or extended coverage warranty period. If a failure is not found, this procedure is considered preventive and warranty does not apply.

Normal warranty applies. See [Table 2](#) for QuickClaim damage code and labor allowance information. Refer to this service bulletin by number at the beginning of the claim comments. See [Table 3](#) for OWL VMRS codes and labor allowance information. Enter this service bulletin number in the *Service Bulletin #:* field.

QuickClaim Damage Code and Labor Allowance			
Damage Code	SRT Code	Description	Time: Hours
152-007548609	152-5025A	Sensor, Low Coolant Level, R/R	0.7

Table 2, QuickClaim Damage Code and Labor Allowance

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OWL VMRS Codes and Labor Allowance					
Primary Failed Part	Component Code	Cause Code	SRT Code	Description	Time: Hours
CAS 700685 001	003-001-052	18	152-5025A	Sensor, Low Coolant Level, R/R	0.7

Table 3, OWL VMRS Codes and Labor Allowance