

Technical Service Bulletin Number
--

TSB170004



Technical Service Bulletin

Subject

Injector Sleeve Seal Leakage Causing Fuel and Coolant Cross-Contamination

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

- ISX CM570
- ISX CM870
- ISX CM871
- ISX CM871 E
- QSX CM570

Issue

Symptom:

- Fuel in coolant system
- Coolant in fuel system
- Fault Code 418: Water-in-fuel indicator
- Pressurized cooling system

Root Cause:

- Shrinkage of injector sleeve seal material can create a leak path between cylinder head cooling jacket and injector bore.

Verification

- Injector sleeve seal material shrinkage is **only** one possible cause of symptoms discussed in this document. Published troubleshooting procedures **must** be followed to determine root cause.
- Inspection for fuel or coolant leakage past injector sleeve seal should **only** be completed when other possible sources of contamination, such as fuel heaters, have been ruled out.

Verification Step:

- Injector sleeve seal leaks are to be verified in-chassis by pressurizing cooling system. See corresponding Service Manual. Reference Procedure 002-014 in Section 2.

NOTE: If cylinder head has already been removed, injector sleeve seal leaks can be verified by leak testing coolant passage. See corresponding Service Manual. Reference Procedure 002-004 in Section 2.

Resolution

- If cylinder head leaks at injector sleeve; replace lowest green injector o-ring, Part Number 3347937, with blue o-ring, Part Number 5440257, on all injectors.
- For removal and replacement information as well as maintenance concerning injector o-rings, see corresponding Service Manual. Reference Procedure 006-026 in Section 2.

Service Parts Availability

Service parts are available. See Table 1 below.

Table 1, Service Parts	
Part Description	New Part Number
Seal, O Ring	5440257

Publications Affected

Table 2, Publications Affected					
Manual Type	Engine	Bulletin Number	Procedure Title	Procedure	Section
Service Manual	ISX: CM570, CM870, CM871 QSX: CM570	3666239	Injector Sleeve, Cylinder Head	Refer to Procedure 002-014	2

Document History

Date	Details
2017-1-11	Module Created
2017-3-21	Updated part number from 3347939 to 3347937.

Last Modified: 22-Mar-2017

Copyright © 2000-2010 Cummins Inc. All rights reserved.