

Early Warning Number	Revision Level	Date
E05033		03-AUG-2005
Engine Family	Fuel System	
6B, B5.9 6C, C8.3 ISL, QSL9	Bosch VP44 - ISB CAPS - ISC, QSC8.3, ISL, QSL9 Bosch VP44 - ISB	
Design Application	Market Application	
Automotive	All	
Industrial	Agriculture	
Industrial	Construction	
Marine Propulsion	Marine	



## Early Warning

# Lift Pump Leakage Due to Ultra Low Sulfur Diesel Fuel

## Summary of the Early Warning

This Early Warning informs the field of a potential lift pump fuel leak, if a customer switches to Ultra Low Sulfur Diesel (ULSD) fuel after using Low Sulfur Diesel (LSD) fuel.

## Affected Engines

This warning affects ISB and QSB CM550, ISC, QSC, ISL, and QSL CM554 engines.

## Symptoms and Observations

If a fleet changes fuel from LSD to ULSD, the lift pump can leak between the bracket and the lift pump body or at the electrical connector.

## Failure Verification

If a fuel leak appears on the lift pump, determine if the customer has begun to use ULSD fuel recently.

## Suspected Cause

There is a nitrile gasket between the lift pump body and the bracket. Once the nitrile gasket absorbs fuel, the gasket expands and seals. If the fuel type is changed from LSD to ULSD, the nitrile gasket will shrink and no longer seal, causing a fuel leak.

## Potential Component Damage Assessment

None

## Repair Instructions

To avoid fuel leaks when changing to ULSD fuel, customers ought to consider replacing the lift pump as well. The table below lists the present part numbers for 12-VDC and 24-VDC lift pumps.

Lift Pump Part Numbers		
Engine Family	VDC	Part Number
ISC, ISL, QSL, QSC	12	3949085 and 3939894
ISC, ISL, QSL, QSC	24	3939898 and 3949086
ISB, QSB	12	3990105
ISB, QSB	24	3990106

## Requested Failure Information

None

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