

 Technical Service Bulletin: TSB150089
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 New Backflow Connector for the Bosch® Aftertreatment Diesel Exhaust Fluid (DEF) Dosing Unit.

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Core Issue

In some cases the aftertreatment Diesel Exhaust Fluid (DEF) dosing lines are **not** being fully purged during the purge cycle.

This can result in internal cracking of the aftertreatment DEF dosing unit and leakage of DEF. A revised backflow connector for the Bosch® aftertreatment DEF dosing unit has been released. The revised backflow connector will help to fully purge DEF from the DEF dosing lines and aftertreatment DEF dosing unit during the purge cycle.

Confirmation

Product Affected

Table 1, Product Affected		
Engine Model Name	Engine Control System	Identifier
ISB6.7	CM2350	B101
	CM2250	Not Applicable
ISC	CM2250	Not Applicable
ISL9	CM2250	Not Applicable
	CM2350	L101, L111
ISX12	CM2350	X102
ISX12/ISX11.9	CM2250	Not Applicable
ISX15	CM2250	Not Applicable
	CM2350	X101
L9	CM2350	L123B
QSF3.8*	CM2350	F107
QSB4.5*	CM2350	B106
QSB6.7*	CM2350	B105
QSL9*	CM2350	L102
*Off-higway		I

Resolution

The existing aftertreatment DEF dosing unit, Part Numbers 2871879 and 2871880 and existing backflow connector, Part Number 2888180, have been obsoleted.

Aftertreatment DEF dosing units will be released as two different part numbers, one with the revised backflow connector and one with the existing backflow connector. The revised temporary backflow connector can be distinguished by the laser mark around the base. The revised final backflow connector is red or white in color. See Figure 2 for examples of each connector.

Verify the DEF dosing unit part number is correct before installing the revised back flow connector.

The location of the aftertreatment DEF dosing unit varies by OEM. **Not** all OEMs will require the revised backflow connector.

For removal and installation instructions of the revised backflow connector. See procedure 011-058 Aftertreatment Diesel Exhaust Fluid Dosing Unit in section 11 in the corresponding service manual.



Figure 1, Revised Backflow Connector, Part Number 4387302, Installed in the Aftertreatment DEF Dosing Unit



Figure 2, Backflow Connectors From Left: Existing Design, Temporary Revised Design, Final Revised Design **Service Instructions**

Scenario 1: If the unit is **not** an Original Equipment Manufacturer (OEM) listed in Table 2 below and **only** the backflow connector does not meet reuse guidelines.

Scenario 1 Resolution: The revised backflow connector, Part Number 4387302 **must** be used.

Scenario 2: If the unit is **not** an OEM listed in Table 2 below and the aftertreatment DEF dosing unit does not meet reuse guidelines.

Scenario 2 Resolution: The aftertreatment DEF dosing unit, Part Number 4387304 or 4387305, with revised backflow connector **must** be used.

Scenario 3: If the unit is one of the OEMs listed below in Table 2 and **only** the backflow connector does not meet reuse guidelines.

Scenario 3 Resolution: The existing backflow connector, Part Number 4387659, **must** be used.

Scenario 4: If the unit is one of the OEMs listed below in Table 2 or is operating in China and the aftertreatment DEF dosing unit does **not** meet reuse guidelines.

Scenario 4 Resolution: The aftertreatment DEF dosing unit, Part Number 4387657 or 4387658, with existing backflow connector **must** be used.

Off-highway units listed above with ECM calibration codes after 1 December 2015 must have the revised backflow connector installed or damage to the DEF dosing system can occur.

Reference Table 3 and 4 below for full part descriptions.

Table 2, OEM Name

Autocar IIc	KME	Newell	Seagrave	Tiffin
Emergency One	Linkbelt	Nova Bus	Spartan Motors Inc.	Van Hool
Ferrara	Lodal Inc.	Oshkosh	Sutphen	New Flyer
Grove	MCI	Pierce	TEMSA	-
HME	NABI	Rosenbauer	Terex	-

Service Part Availability

Service Parts are avaiable. See Tables 3, 4, and 5 below

Aftertreatment DEF Dosing Unit Identification:

- Voltage rating (12 volt or 24 volt) is stamped into housing of DEF dosing unit next to electrical connection.
- Gray electrical connector face on electrical harness indicates a 24 volt unit.
- Black electrical connector face on electrical harness indicates a 12 volt unit.
- Electrical connectors are keyed differently and are **not** interchangeable.

Table 3, Revised Backflow Connector and Aftertreatment DEF Dosing Units With Revised Backflow Connector

Part Description	Part Number
Backflow Connector	4387302
Supply Module 12 VDC	4387304
Supply Module 24 VDC	4387305

Table 4, Existing Backflow Connector and Aftertreatment DEF Dosing Units With Existing Backflow Connector

Part Description	Part Number
Backflow Connector	4387659
Supply Module 12 VDC	4387657
Supply Module 24 VDC	4387658

Table 5, Obsolete Backflow Connector and Obsolete Aftertreatment DEF Dosing Units

Part Description	Part Number
Backflow Connector	2888180
Supply Module 12 VDC	2871879
Supply Module 24 VDC	2871880

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.

Document History

Date	Details
2015-6-4	Module Created
2015-11-3	Non-Product Problem Solving (PPS)
2016-2-5	Added Figure 2. Added caution.
2017-6-14	Removed reference to TRP1732.
	Added condition of operating in China to Scenario 4. Added Aftertreatment
2017-10-20	DEF Dosing Unit Identification section to Service Part Availability section.
2017-11-16	Added L123B to Product Affected.
2018-7-20	Added New Flyer to OEM table
2022-1-20	Corrected typo.
2022-10-27	Added "Verify the DEF dosing unit part number is correct before installing the revised back flow connector."

Last Modified: 31-Oct-2022