

Technical Service Bulletin

Bulletin No.: TSB-011

Date: November 21, 2014

Subject: ITT Regulator PRD Discharge

Models: Fuel Storage Modules Equipped With ITT Regulators

Background

The ITT regulator has an integrated PRD which is designed to protect components downstream of the regulator. An integrated solenoid is used to control the fuel flow through the regulator. The regulator uses engine coolant to heat the regulator and prevent the unit from freezing.

Condition

Some ITT regulators used in Quantum Technologies' Fuel Storage Modules (FSM) may experience a PRD discharge during operation. If the ITT regulator experiences this condition, then the ITT Regulator PRD will need to be repaired.

Cause

Within the ITT regulator there is a PRD poppet and spring which may fail. When the PRD poppet and spring fails, the PRD will discharge or leak during normal operation.

Correction

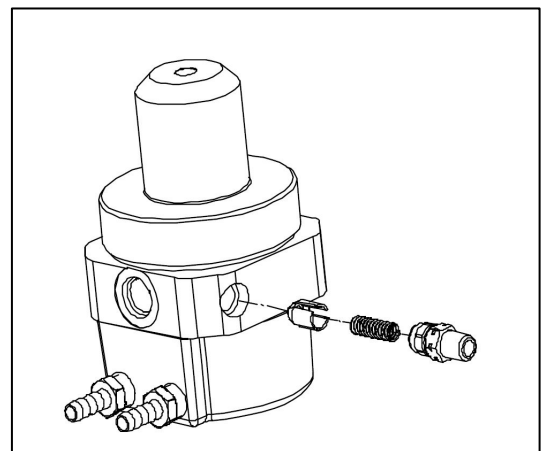
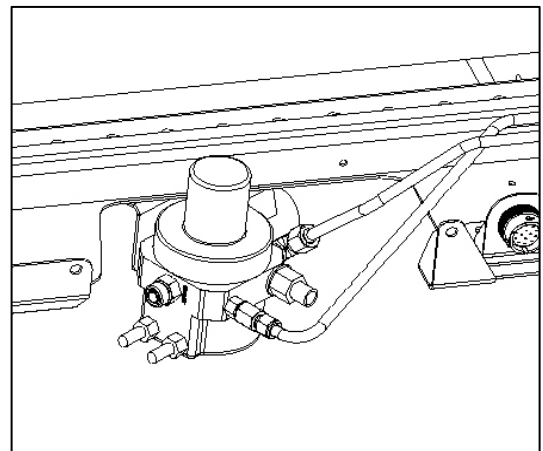
The ITT PRD poppet and spring will need to be removed and discarded, then replaced with the components supplied in the ITT PRD Kit.

Follow the ITT PRD Kit Installation Instructions attached to this bulletin for the PRDKit -1A, -1B, -1C.

Mark the PRD fitting with a paint pen when completed.

Labor Time

- **Back Of Cab FSM (Gen 1)**
0.3 Hours
Add: 0.5 Hours for regulator removal (if needed)
- **Back of Cab FSM (Gen 2)**
0.5 Hours
- **Frame Mount FSM (Gen 1 and 2)**
1.3 Hours
- **Frame Mount FSM (Gen 3)**
0.6 Hours



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Parts Information

Quantum PN 117527 Repair Kit – PRD.

Regulators Affected

Some units listed below have been reworked and may not experience any concern.

Part Number:	Date Code:	Serial No.:	Date Made:
HPNGV4SX3HBP150	14199	-83 thru -97	7/18/2014
	14202	-01 thru -88	7/21/2014
	14209	-01 thru -47	7/28/2014
	14210	-01 thru -08	7/29/2014
	14078	-01 thru -10	3/19/2014
	14029	-40 thru -49	1/29/2014

Quantum Back-Of-Cab Serial Numbers Affected

Each Back-Of-Cab unit is equipped with a serial number located on the left side of the fill panel.

 Sample: XXXXPXXXX**4714**1234

 The Date Code is in a **WWYY** format.

- WW represents the calendar week.
- YY represents the year.

 Back-Of-Cab units built before **4714** may be affected.

Contact Information

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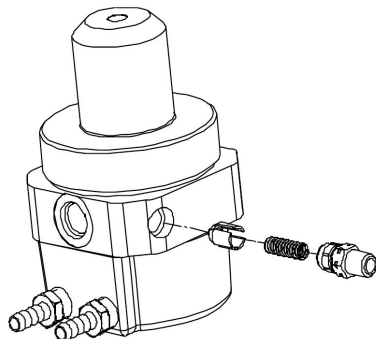
PRD Kit Installation – Capture Pipe Style p/n PRDKIT-1A, -1B, -1C

1. Prior to any disassembly, clean the area around the existing PRD, fully bleed system pressure and verify system is depressurized.
2. Remove vent line connection hardware from the PRD capture pipe.
3. Remove PRD capture pipe by unscrewing it from the regulator in a counterclockwise direction with a 5/8" wrench.
4. Remove and discard the PRD spring.
5. Remove and discard the PRD poppet. This part slips into the bore and is held against the bottom by the spring previously removed. If the part does not freely come out with a dull instrument, air pressure applied to the outlet line attached to the regulator may be used to eject the part from the regulator body.

CAUTION: The PRD poppet may be ejected with substantial velocity if stuck. A dull instrument can be used to rotate the PRD in the bore to loosen it and reduce the air pressure required to eject it.

6. Install the new PRD poppet in the body.
7. Install the new PRD spring into the poppet.
8. Install the PRD capture pipe into the regulator by compressing the PRD spring and screwing the part in a clockwise direction.
9. Tighten the PRD capture pipe to 180 in-lb with a 5/8" wrench.
10. Connect vent line connection hardware to the PRD capture pipe, while supporting the PRD capture pipe with a 5/8" wrench.
11. Verify all connections and commission system. Check for leakage.

NOTE: Mark the PRD fitting with a paint pen to indicate the updated PRD kit has been installed.



PRDKIT-IOM Rev. A 04/14