

**TECHNICAL SERVICE BULLETIN****Bulletin No.:** TSB-020**Date:** January 8, 2016**Subject:** PRD Manifold Mount**Models:** Generation 1 & 2 Frame Mount Fuel Storage Modules**Background**

All generation 1 & 2 frame mount FSMs have Pressure Relief Device (PRD) manifolds. The PRD manifolds are connected to a live port on the tank valve and are designed to safely vent the cylinder under certain conditions.

**Condition**

In some cases, the P-Clamp which holds the PRD manifold assembly in place, may fail and allow the PRD line to droop. If the PRD manifold is permitted to droop and is not corrected, then PRD valve damage or fuel leakage may occur.

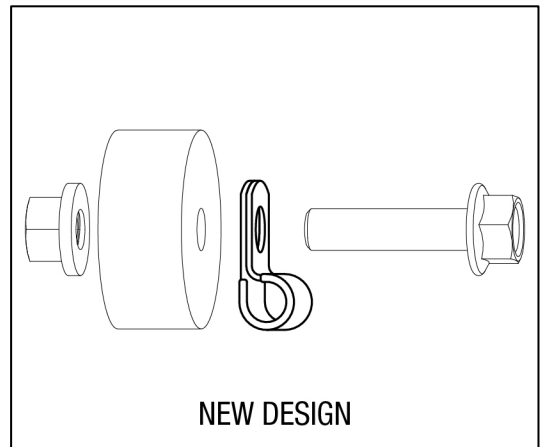
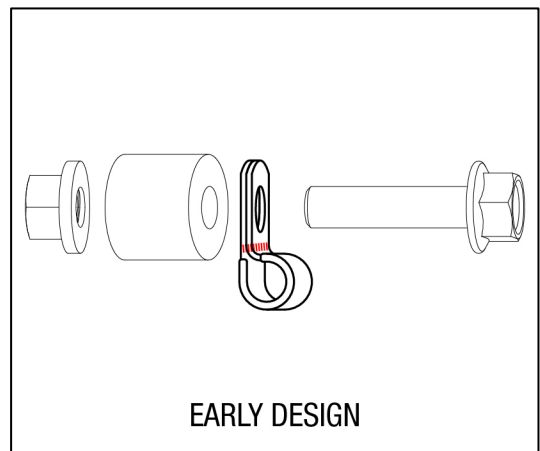
**Cause**

Earlier PRD manifold assemblies used a smaller diameter vibration mount. Under certain conditions, the P-Clamp may fail against the vibration mount causing the PRD line to droop and cause the PRDs to contact the FSM covers.

**Correction**

Replace the PRD manifold mounts as necessary following the procedure in this bulletin.

Once the PRD manifold assembly and/or mounts have been repaired, leak test all interface areas and device(s) at initial pressurization and at system operating pressure. Additional information regarding leak checking is available in the [CNG Cylinder Installation and Maintenance Manual](#) located at [www.qttw.com/service](http://www.qttw.com/service).



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**Labor Time**

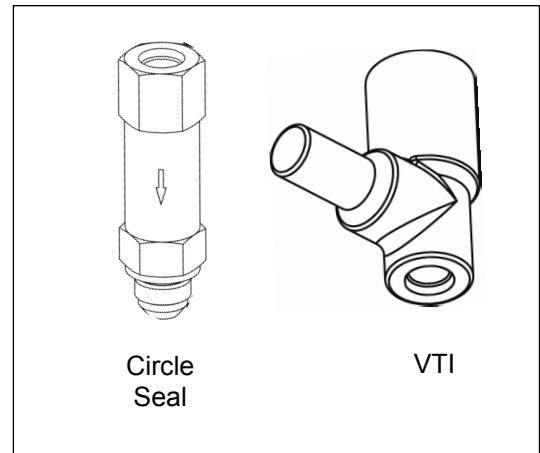
The estimated labor time required to perform this procedure is approximately 1.5 hours, but may vary depending on the fuel storage module configuration and installation.

**Parts Information**

Replacement PRD Manifold Mount Kit (1/2")	
Description	Part Number
3/8" PRD Manifold Mount Kit (VTI)	117739
1/2" PRD Manifold Mount Kit (Circle Seal)	116491

**Application**

Circle seal PRD manifolds equipped with 1/2" lines.  
 The VTI PRD manifolds equipped with 3/8" lines.


**Contact Information:**

E-Mail: [QTService@qtw.com](mailto:QTService@qtw.com)

Phone: 800.816.8691

Fax: 949.930.3401

## TECHNICAL SERVICE BULLETIN

### PRD Manifold Mount Replacement Procedure

The following procedure may be used to replace the PRD Manifold Mount on Frame Mount CNG Fuel Storage Modules.

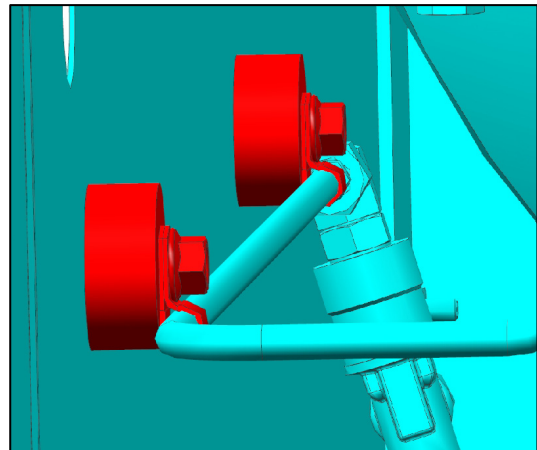
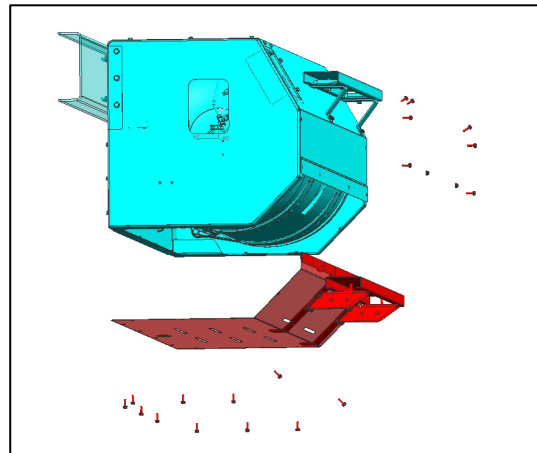
#### **⚠ DANGER**

*This PRD line is pressurized even with the valve turned off. The FSM must be vented safely to service the PRD line. Failure to vent the FSM prior to servicing the PRD line may result in death or serious injury.*

#### **⚠ WARNING**

*Natural gas is highly flammable. In order to reduce the risk of fire and personal injury, keep sparks, flames, and smoking materials away from the vehicle while you perform any Compressed Natural Gas (CNG) fuel system service. Failure to follow this instruction may result death or serious injury.*

1. Verify the vehicle ignition is OFF.
2. Remove the bolts and nuts from the front cover as shown in the illustration to the right.
3. Support the lower cover. Remove the lower cover bolts from the FSM.
4. Carefully move the lower lip of the top cover to clear the studs on the lower cover, then remove the lower cover.
5. Inspect the mount hardware, PRD line, and PRDs for wear and/or abrasion damage.
  - a. If either the PRDs and/or manifold assembly have been damaged, then the entire PRD manifold assembly will need to be replaced. Follow the cylinder vent procedure and safety messages as specified in the CNG Cylinder Installation & Maintenance Manual at [www.qttw.com/service](http://www.qttw.com/service).
  - b. Once the cylinder has been safely vented, replace the PRD manifold assembly. Proceed to Step 6 when installing the mount hardware.



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**⚠ WARNING**

*Remove each PRD line mount one at a time. Removing all PRD line mounts at the same time may cause the PRD line to bend and cause damage to the PRD line at the valve and/or may cause the PRD line connection to loosen causing CNG to escape from the FSM. Remove and service only one PRD line mount at a time. Failure to only remove and service one PRD line mount at a time could result in death or serious injury.*

6. Remove one existing PRD line mount.

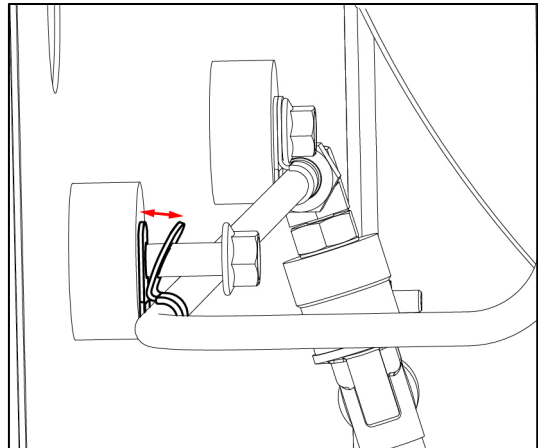
**⚠ DANGER**

*While enlarging the PRD line mount hole with a 3/8" drill bit, use a drill shield and/or a drill stop so that the drill bit does not penetrate the cylinder. Failure to not use a drill shield and/or drill stop when enlarging the PRD line mount hole and penetrate the cylinder will result in death or serious injury.*

7. If necessary, some PRD mount holes may need to be enlarged. Once one of the PRD line mount has been removed from the rear panel, carefully enlarge the hole with a 3/8" drill bit.

*If it is not necessary to enlarge the mount hole, then proceed to step 11.*

8. Apply a zinc-rich primer to the exposed metal.
9. Loose-fit the PRD line mount hardware with the parts provided as shown in the illustration.
10. Repeat steps 7-9 until each PRD line mount has been replaced.



11. Tighten the PRD Manifold mount fastener until the gap in the P-Clamp closes. Once the gap in the P-Clamp is closed, then tighten the fastener an additional 1/2 turn. The rubber mount should be slightly compressed if properly tightened.

12. Inspect the PRD line for leaks.
13. Replace the lower cover of the FSM and install all the cover bolts and nuts. Torque to the specifications outlined in the CNG Frame Mount Installation Manual for the matching generation posted at [www.qttw.com](http://www.qttw.com).

