

TB-2335 REV A

# **REMOVAL AND INSTALLATION OF DEF MULTIFUNCTION HEAD UNIT**

## **DEF RESERVOIR ASSEMBLIES**

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**INDEX OF REVISIONS**

<b>REVISION</b>	<b>DESCRIPTION</b>	<b>APPROVED BY/ DATE</b>
-	Initial Release	CKM 4/19/2010
A	Updated Torque Specification	CKM 9/10/2010

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## 1.0 INTRODUCTION:

### 1.1 PURPOSE:

The purpose of this document is to illustrate the proper steps for the removal of the DEF Multifunction Head Unit from a Reservoir Assembly and the installation of a DEF Multifunction Head Unit.

### 1.2 EQUIPMENT LIST:

- DEF Reservoir with head unit
- 1/8" Hex Key/Allen Wrench
- Flathead Screwdriver
- Parker O-Lube or equivalent DEF compatible petroleum grease
- Loctite 242

## 2.0 PROCEDURE:

### DEF Multifunction Head Unit Installed in Reservoir

(Note: If the unit has been in service, wipe down the exterior of the reservoir and Head Unit with a damp cloth to prevent debris from entering the tank during installation.)



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1. Using an Allen wrench/hex key, unscrew the Allen screws holding the retaining ring to the reservoir from the unit counter clockwise and place safely aside to be used at a later time.



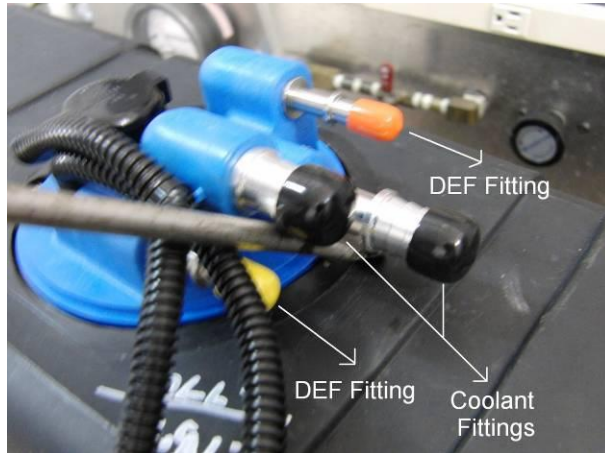
2. Remove the stainless steel retaining ring from the unit.



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3. Slide the flathead screwdriver underneath the DEF and/or coolant fittings and gently apply upward force, creating a slightly gap between the Head Unit and the reservoir opening. (Note: Avoid applying pressure to any plastic fittings attached to the Head Unit)



4. Insert the end of the flathead screwdriver in between the gap and while applying a twisting motion with the screwdriver, gently pull on the sides of the Head Unit until it's free from the reservoir. Do NOT pull on the wires for removal.

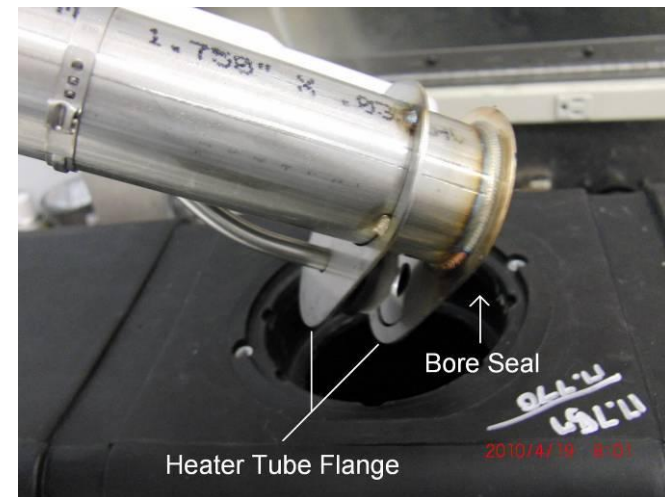
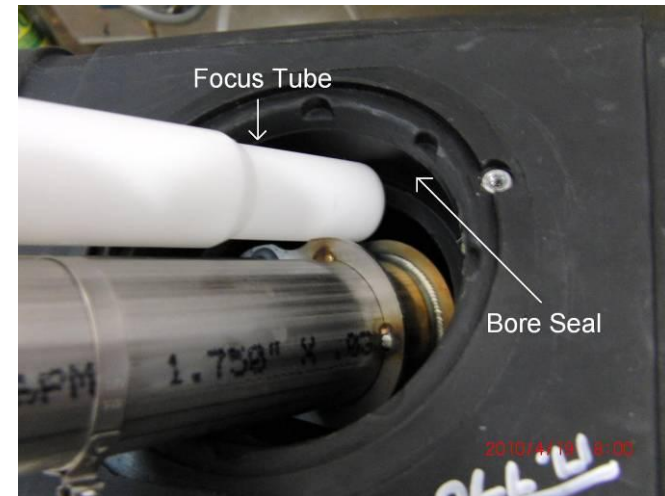


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5. Once loosened from the DEF reservoir, pull the head unit out of the tank, twisting the unit towards the bottom of the heater tube to allow clearance for the focus tube and flange, and drain the head unit of any coolant still inside by turning the unit upside down and allowing it to drain completely.

(Note: Use caution when removing/inserting the Heater Tube through the bore seal as to not damage or scratch the sealing surface of the tank bore.)



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6. Place the Multifunction Head Unit on a clean surface so as to prevent the introduction of debris into the reservoir and apply some Parker O-Lube or equivalent DEF compatible petroleum grease to the o-ring on the new DEF Multifunction Head Unit before replacing.



7. Utilizing the same caution as earlier, position the new DEF Multifunction Head Unit over the reservoir. Angle the head units so that it will fit through the opening, then straighten the head unit and slide it into the reservoir.



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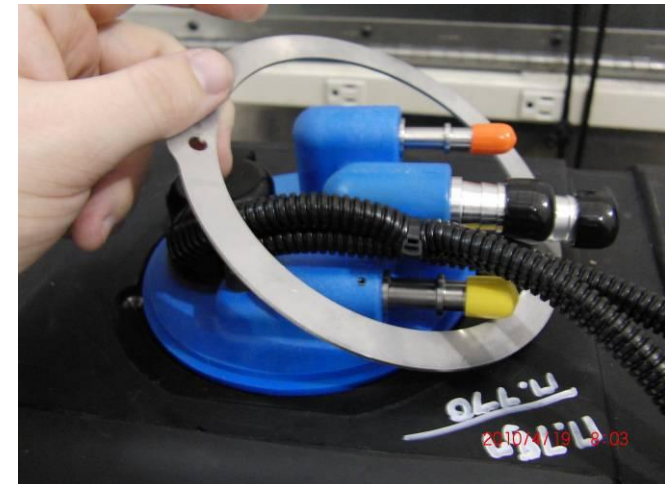
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8. Orient the head unit to the desired position or as required so that the fittings are aligned correctly with the hose routing in the DEF system and push the head unit back into place. Add a few drops of Loctite 242 to the threaded screw holes on the reservoir.



9. Slide the stainless steel retaining ring over the split wire loom coverings and onto the head unit, making sure the screw holes align with the inserts on the tank.

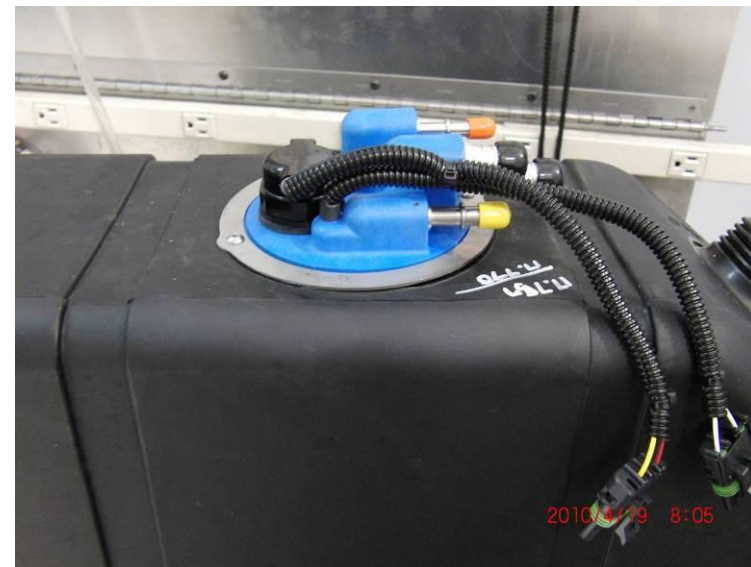
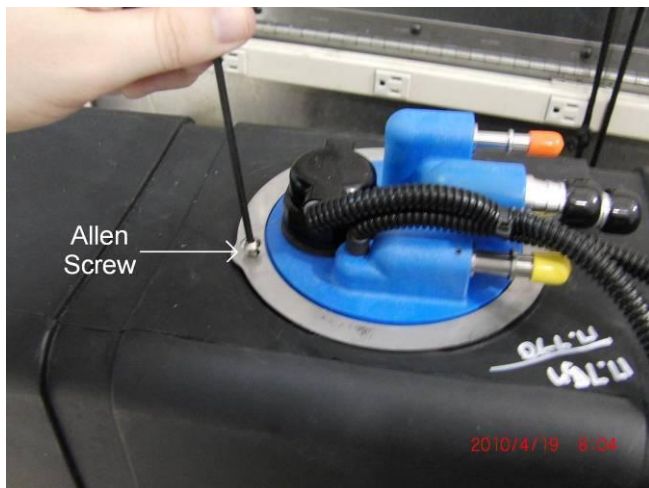


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10. Using the Allen Wrench/Hex Key, screw the Allen screws back into place clockwise with a max torque of 20-30 in-lbs and installation is complete.



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