

<b>Bulletin:</b> EXT-SPE-001	<b>Subject:</b> Discharge Cap and AOST Bracket Upgrade
<b>Dept:</b> Eng. (#1901011)	<b>Date:</b> 1 April 2015
<b>Author:</b> RR 07Apr2015	<b>Rev:</b> A
<b>Reviewed by:</b> PD 08Apr2015	<b>Approved by:</b> RD 08Apr2015

**Systems or Parts Affected:**

- S700170 Superior Diesel, JD6068
- S700172 Bell Power, JD6068

**Parts:**

**Kit: A900012**

- Tank Bracket P/N 1200837
  - (x1) C-clamp P/N 2200105
  - (x2) M8 bolts P/N 1520556
  - (x2) 5/16 washers P/N 1570067
  - (x2) M8 washers P/N 1560407
- Discharge Cap P/N 9200542
  - (x7) M6 x 45 bolts P/N 1540547
  - (x2) M12 x 70 P/N 1520644
  - Fastener Brace P/N 1200840
  - Tee-Fitting P/N 4800697
  - Viton O-Ring P/N 5830122

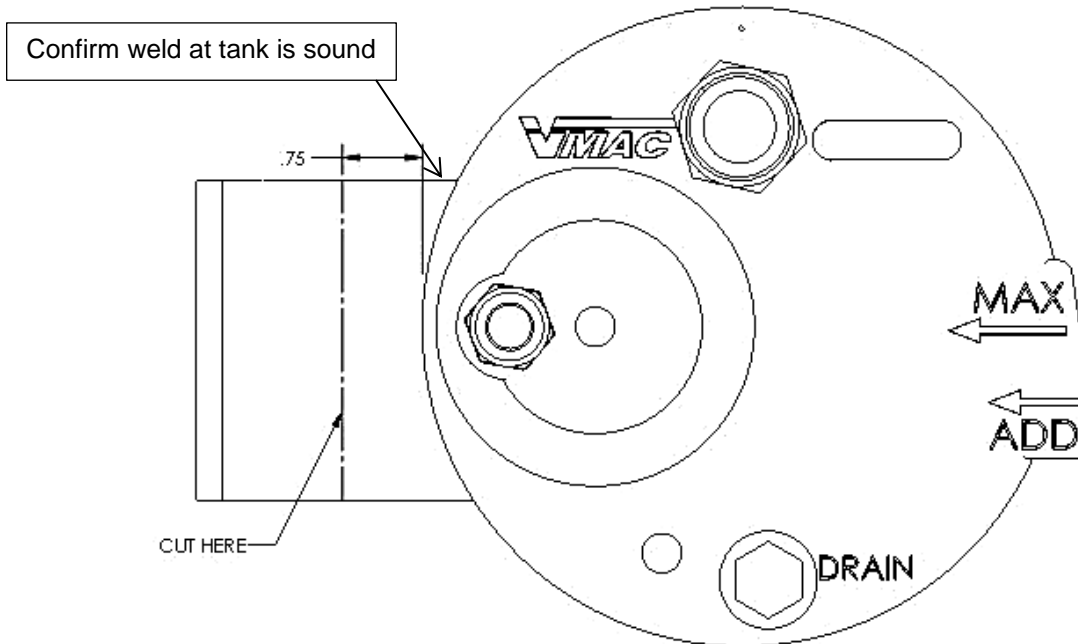
**Before You Start:**

- **Ensure system is de-pressurized prior to performing any work on the system**
- Thoroughly clean areas to be worked on to avoid contamination.
- All fasteners must be torqued to specifications. Use manufacturers torque values for OEM fasteners. Apply Loctite blue (242) or equivalent on all engine-mounted fasteners. Torque values are with Loctite applied unless otherwise specified.

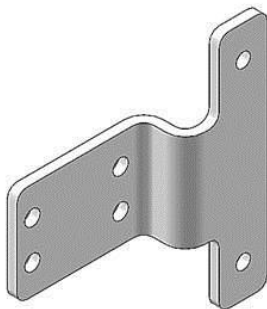
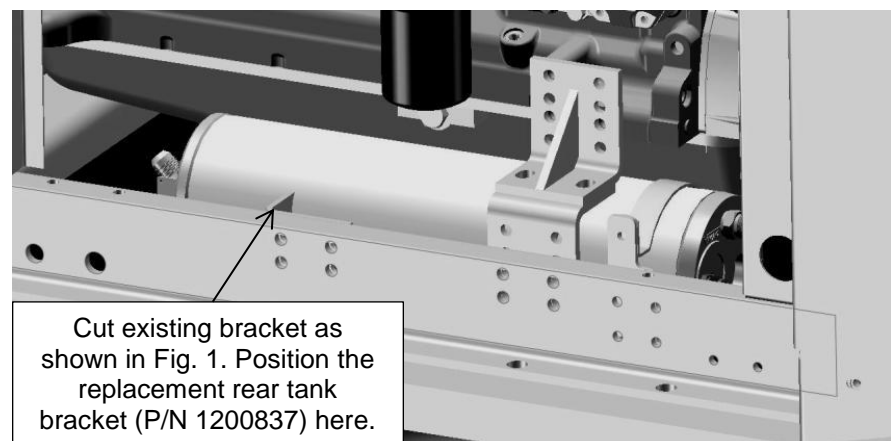
STANDARD GRADE 8 NATIONAL COARSE THREAD								
Size	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4
Foot-pounds (ft-lb)	9	18	35	55	80	110	170	280
Newton meter (N•m)	12	24	47	74	108	149	230	379
STANDARD GRADE 8 NATIONAL FINE THREAD								
Size	3/8		7/16		1/2		5/8	
Foot-pounds (ft-lb)	40		60		90		180	
Newton meter (N•m)	54		81		122		244	
METRIC CLASS 10.9								
Size	M8		M10		M12		M16	
Foot-pounds (ft-lb)	19		41		69		174	
Newton meter (N•m)	25		55		93		236	

**1.) AOST Bracket Upgrade:**

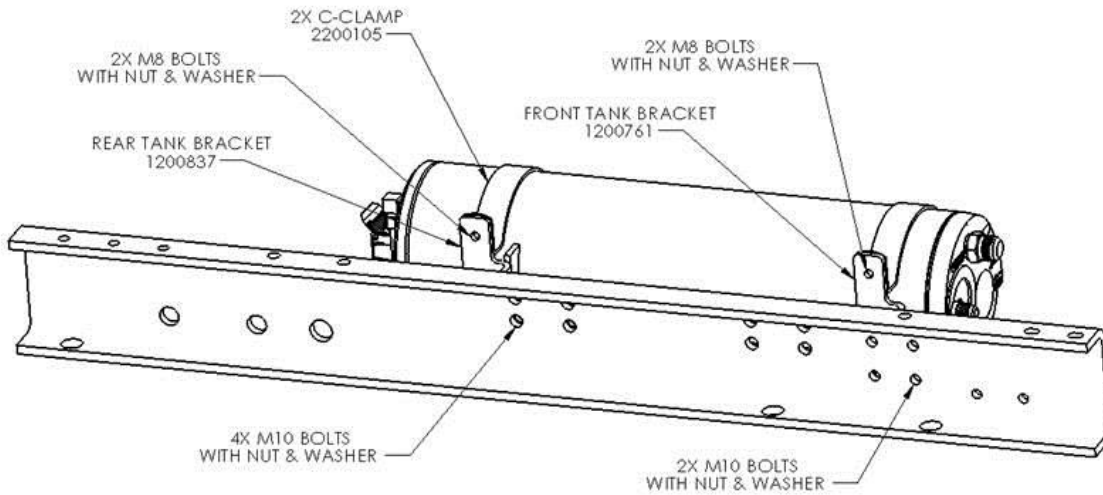
1. Confirm weld on rear tank bracket is not cracked or otherwise overstressed.
  - a. If there are cracks or other signs of weakness please contact Technical Support as the tank will most likely need to be replaced
2. Remove tank from unit if necessary and cut welded tank bracket approximately  $\frac{3}{4}$ " from tank as shown in **Fig. 1.1**

**Fig. 1.1**

3. Mount new rear tank bracket (**Fig. 1.2**) on frame in same location as old bracket. (**Fig. 1.3**)

**Fig. 1.2****Fig. 1.3**

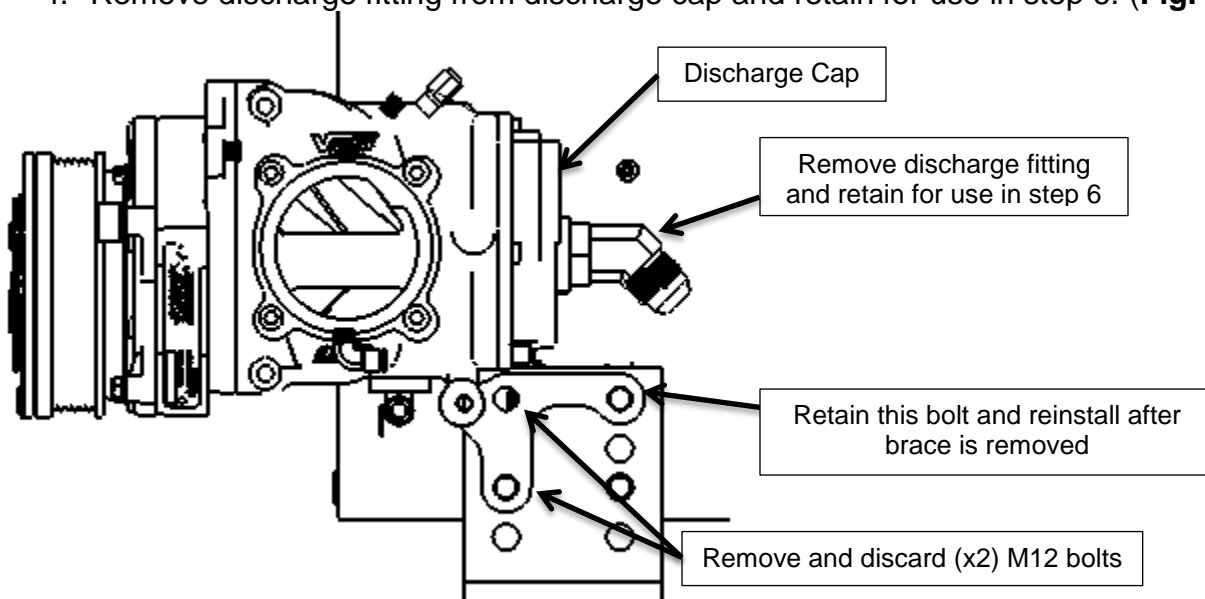
4. Slide rear C-clamp onto tank
5. Mount tank to front and rear tank brackets as in **Fig. 1.4**



**Fig. 1.4**

## 2.) Discharge Cap Upgrade:

1. **Clean compressor thoroughly to avoid contamination after discharge cap is removed and bearings are exposed.**
2. **Although not required, the inlet valve may be removed for ease of access. Ensure the openings are covered to avoid contamination.**
3. Remove discharge hose and fill cap on original T-fitting and retain for use later.
4. Remove discharge fitting from discharge cap and retain for use in step 6. (**Fig. 2.1**)

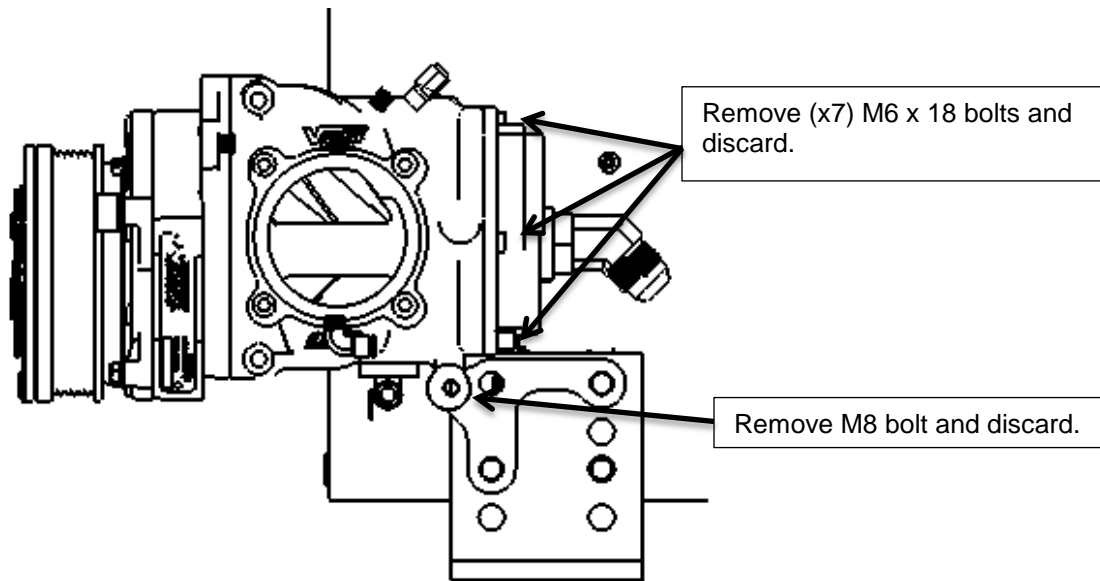


**Fig. 2.1**

5. Take off existing rear brace by removing (x3) M12 bolts and 1x M8 bolt. Retain (x1)

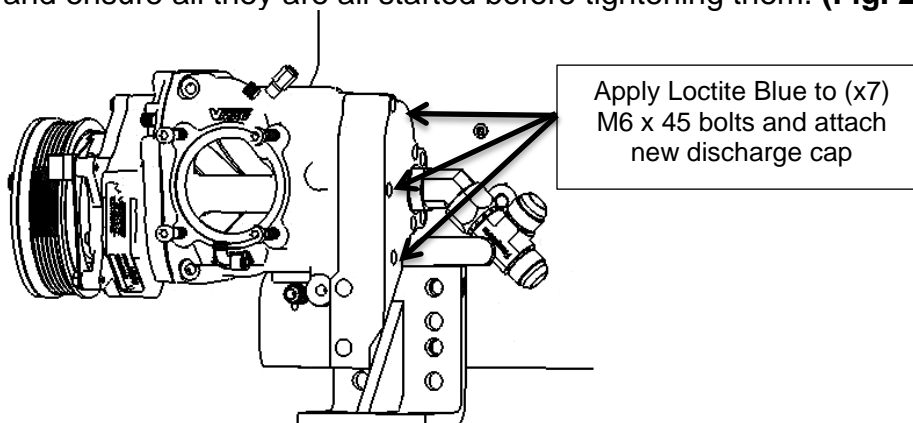
M12 bolt and reinstall after brace is removed. (Fig. 2.1)

6. Remove temperature probe in discharge cap and retain as spare part.
7. Take off original discharge cap on compressor by removing (x7) M6 x 18 bolts. (Fig. 2.2).

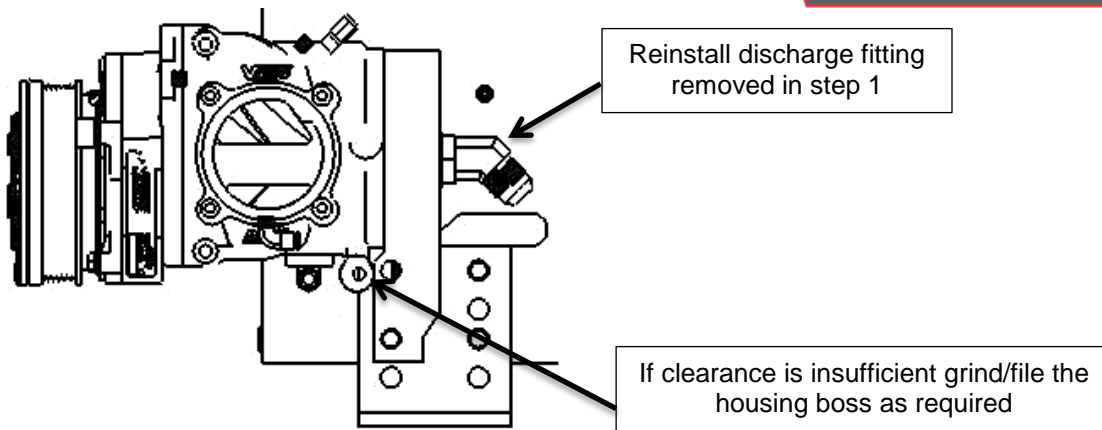


**Fig. 2.2**

8. Test fit discharge cap and check for clearance between the compressor housing boss and the discharge cap. If clearance is insufficient, grind/file the housing boss as required. (Fig. 2.4). Also check for interference between discharge cap and upper edge of engine mount angel plate. Grind /file mount angel plate as required to allow discharge cap to sit flush.
9. Install new Viton O-Ring (P/N 5830122) and mount new discharge cap (P/N 9200542) on compressor using (7X) M6 x 45 bolts. Apply Loctite Blue to all bolts and ensure all they are all started before tightening them. (Fig. 2.3)

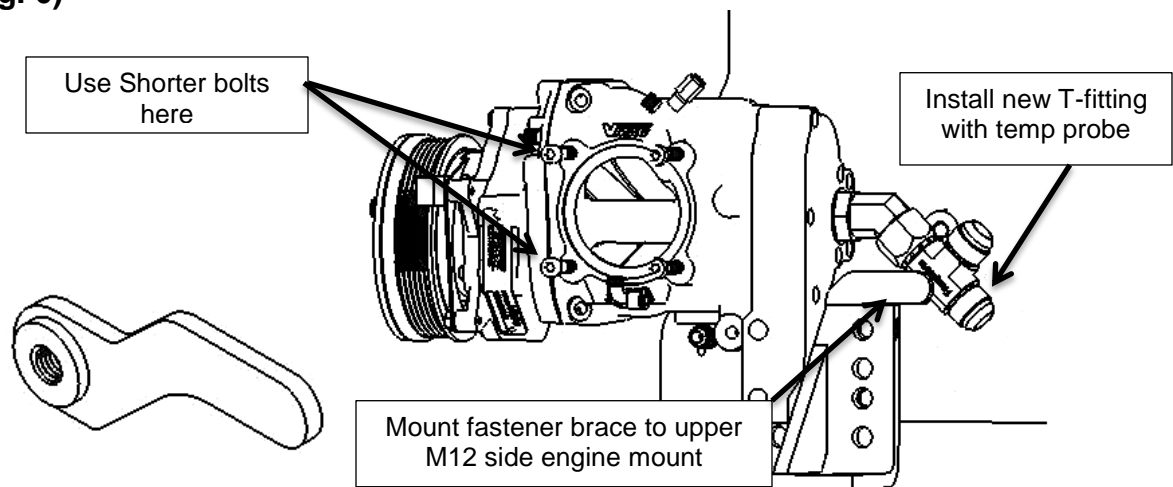


**Fig. 2.3**



**Fig. 2.4**

10. Install discharge fitting in new discharge cap. **(Fig. 2.4)**
11. Apply Loctite Blue and install the supplied 2x M12 x70 bolts through the new discharge cap and into the engine. Use supplied fastener brace with welded nut (P/N 1200840) shown in **Fig. 5** with the upper mount bolt, behind the angle plate. **(Fig. 6)**



**Fig. 5**

**Fig. 6**

12. Attach new T-fitting with temperature probe onto discharge fitting. **(Fig. 6)**
13. Attach fill cap retained in Step 3 to new T-fitting.
14. Attach discharge hose to new T-fitting.
15. If removed, reinstall inlet valve with O-ring between inlet and compressor.



**Note the shorter bolts are used on the clutch end  
 Never use an impact wrench or driver to install inlet bolts.  
 Use hand tools and torque to 19 ft-lb.**

16. Check all hoses are tight and oil is at the correct level.
17. Run unit and check for leaks.

For more information regarding this or to order parts please contact  
**VMAC Tech Support 1-888-241-2289**