



## Product Recall

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To: ALL DEALERS

From: TRACY SAUERBREY – WARRANTY/RECALL DEPARTMENT

Subject: RECALL 10V-396/10V-397 MVP-EF Mega fuse Junction Block

Date: December 8, 2010

Enclosed are copies of the customer notification letter and the repair procedures for Recall 10V-396/10V-397. This recall involves certain MVP-EF school and non school model buses manufactured between September 12, 2008 and July 18, 2010. The defect involves the mega fuse junction block. The location of the mega fuse exposes it to road splash, ice, snow, and dicing agents potentially causing some to rapidly corrode. In some instances the cables connected to the mega fuse have become corroded to the point of separating from the mega fuse causing an open circuit in the main chassis or body power circuit resulting in the vehicle shutting down or a loss of vehicle lighting, increasing the risk of a crash.

This is a universal notification sent to all dealers. You may or may not have customers in your area affected by this recall. If owners in your area are subject to this recall, we have enclosed a printout listing those customers' names and addresses. If there is not a printout enclosed according to our records there are no units in your area involved. **If you have a printout and any of the units on it are still in your possession it is your responsibility to ensure the recall is performed before the unit is delivered to the customer. NEW PROCESS: NHTSA is requiring two different recall numbers and printouts for school versus non school units. If you have received two reports you will notice that Recall 10V-396 is for school buses and Recall 10V-397 is for non-school buses. This is the same recall with the same repair for both school and non school just a different recall number.**

The remedy will consist of replacing the mega fuse junction block and electrical box. The mega fuse junction block will be moved inside the electrical box and self seal grommets will be used for cable pass through. A support bracket will be added to help support and limit movement of the cables. The labor allowance is 1.0 hour per unit for repair (SRT 90-115). If you sent in your contact information you will receive your report and can send in a request for parts. If you did not send your contact information in 50% of your total population will be shipped direct to your dealer location. When filing your claim please use kit number TBB 169538 and enter \$2.59 as the parts handling charge.

Thomas Built Buses has elected to notify all customers directly. Your customers will be contacting you to schedule an appointment for repairs. Reimbursement for labor, (if requested) may be obtained by filing a warranty claim.

If you know of any customers who own or operate a Thomas bus in this recall, whose name and address is NOT listed or is INCORRECTLY listed on the enclosed printout, please promptly notify Thomas Built Buses of that additional information in writing. Thank you for your cooperation and assistance.

Tracy  
Enclosures: Customer Letter Repair Procedure Printout (if applicable)



## RECALL #10V-396 & 10V-397

**MODEL:** MVP-EF

**SUBJECT:** REWORK MEGA FUSE JUNCTION BLOCK ENCLOSURE

**PAGE:** 1 OF 8

**IMPORTANT: READ ENTIRE PROCEDURE BEFORE BEGINNING.**

1. Check the tires and be sure the ignition key is in the "Off" position.
2. Turn the power disconnect switch to the "Off" position and disconnect the Negative battery Cable from the batteries.
3. Locate the Mega Fuse Junction Block (MFJB) mounted to the back of the Disconnect Switch enclosure. **Figures 1 & 2**

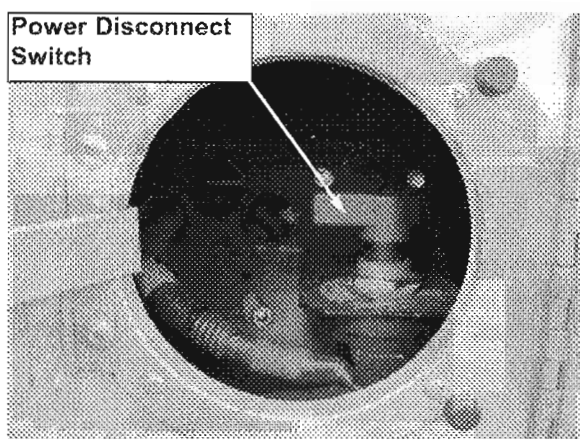


Figure 1

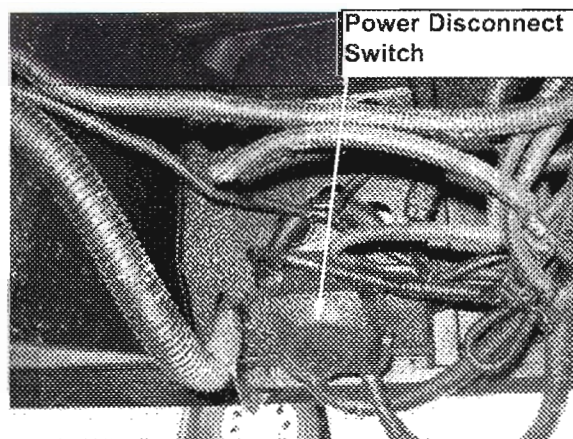


Figure 2

4. Cut the tie wraps that bundle power cables and Clean Power fuse harness at the MFJB.
5. Disconnect the Main Body and Chassis power cables, and the Clean Power (ECM/TCU) harness from the MFJB.
6. Inspect the terminals on the Main Body and Chassis power cables, and the Clean Power harness. If they show signs of damage or corrosion that can not be removed by a simple cleaning, remove and replace the terminals with the ones provided in the kit.
7. Remove the screws mounting the clean power fuses to the enclosure.
8. Remove the four (4) screws securing the enclosure to the mounting bracket. Support the enclosure while lowering it to gain access to the front. **Figure 3**

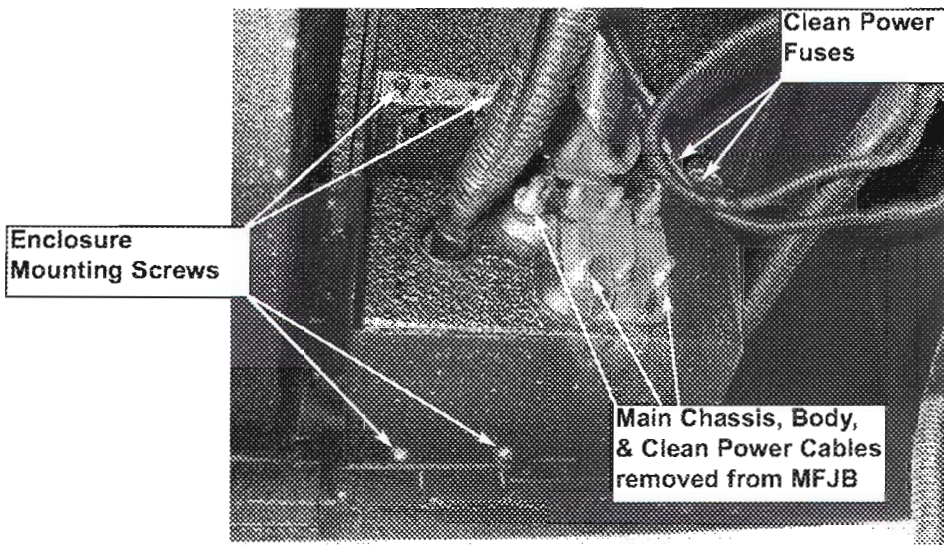


Figure 3

9. Unbolt the Disconnect Switch mounting bracket from the enclosure. This will allow the Main Battery and Starter cables to be disconnected from the Disconnect Switch. Retain the Disconnect Switch bracket assembly and terminal hardware for reuse in the new enclosure. **Figure 4**

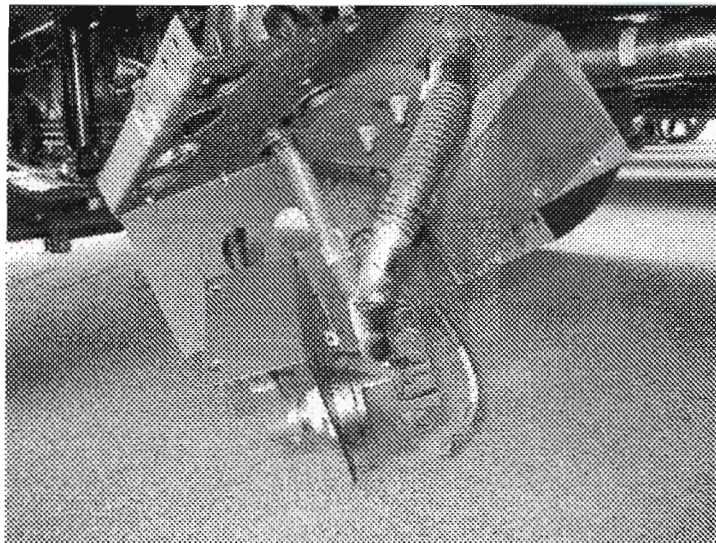


Figure 4

10. With all the cables disconnected, the old enclosure, MFJB, and power jumper cable can be removed and discarded.
11. Remove the knock-out from the four (4) 40.2mm Grommets, TBB 160568 and one (1) 32.2mm Grommet, TBB 160567. Insert the grommets into the new enclosure, TBB 168247.

12. Bolt the Cable Support Bracket, 23-09130-029 to the flange at the top of the enclosure using four (4) Flat Washers, TBB 61370348, two (2)  $\frac{1}{4}$ -20 Bolts, TBB 61370802, and two (2)  $\frac{1}{4}$ -20 Lock Nuts, TBB 29940006. Leave the  $\frac{1}{4}$ -20 nuts loose to ensure the enclosure mounting holes can be aligned during installation. **Figure 5**

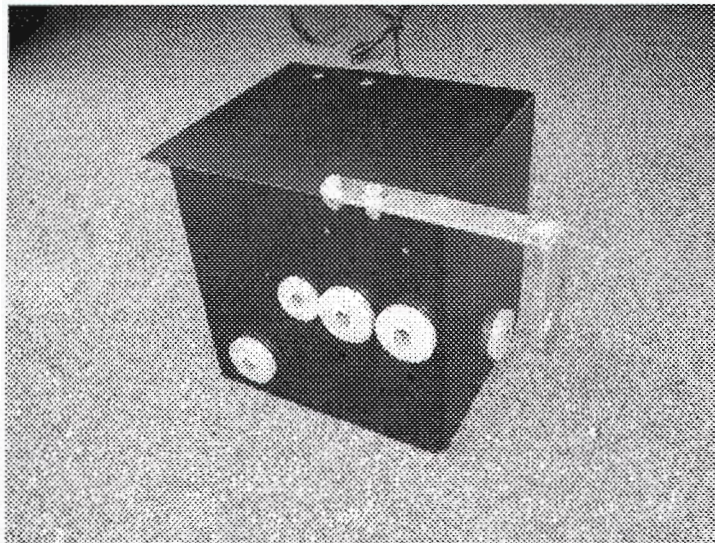


Figure 5

13. Move the center mega fuse to the third position on the MFJB, TBB 148338. Attach the MFJB to its Mounting Bracket, TBB 168248 using two (2)  $\frac{5}{16}$ -18 Toothed Nuts, TBB 69004003 and torque to 8-10 ft-lbs. Install the assembly in the enclosure using two (2)  $\frac{1}{4}$ -20 Thread Cutting Bolts, TBB 61370975. **Figure 6**

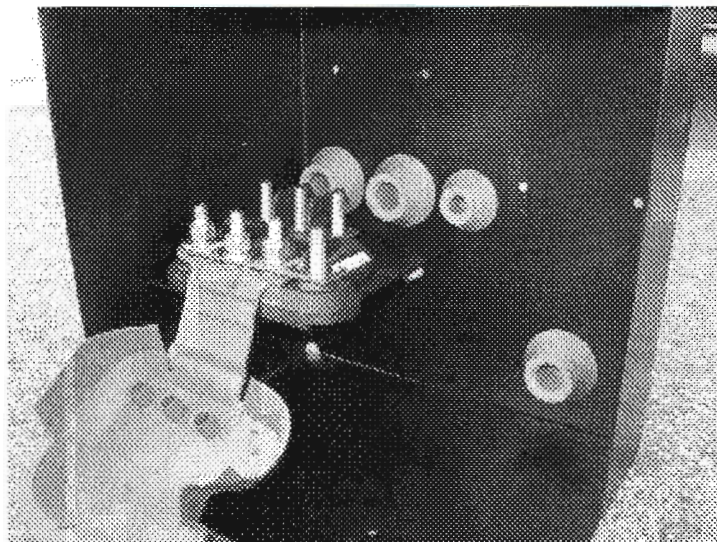
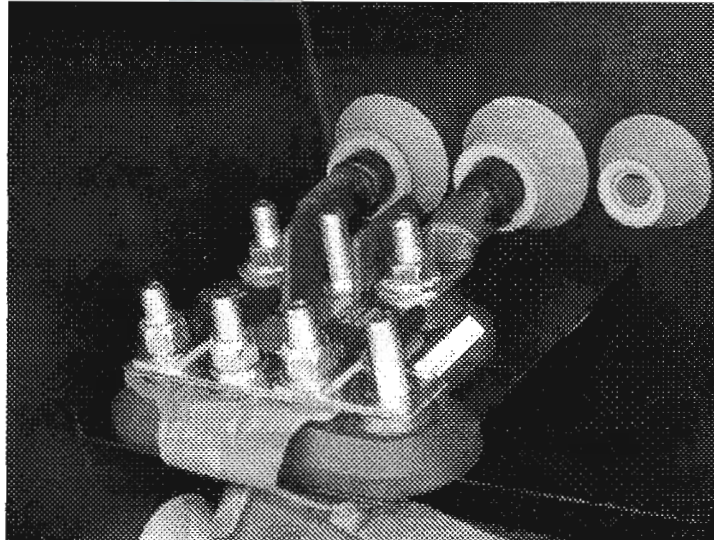


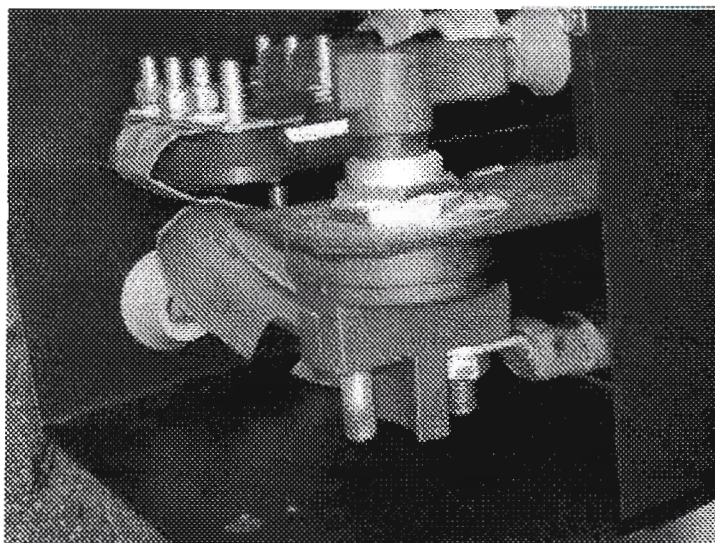
Figure 6

14. Position the enclosure just below its mounting bracket under the bus. Feed the Main Chassis and Body power cables through the two upper grommets aligned with the mega fuses. Secure the cables using two (2) 5/16-18 Toothed Nuts, TBB 69004003 and torque to 8-10 ft-lbs. **Figure 7**



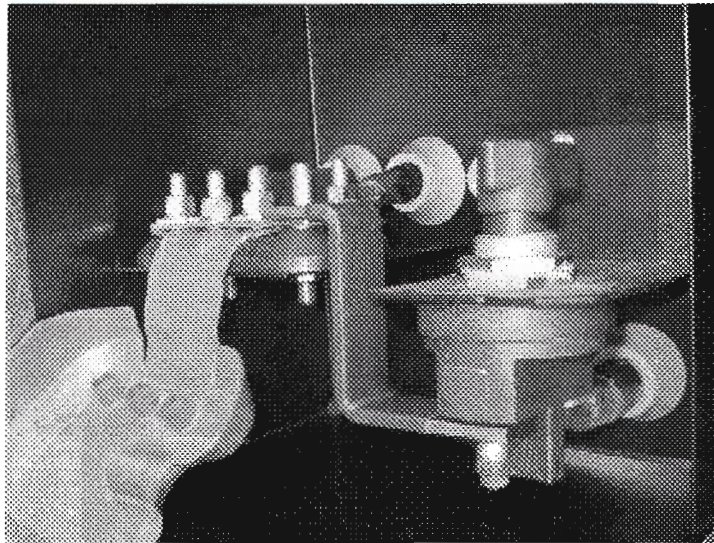
**Figure 7**

15. Feed the Main Battery cable through the lowest grommet on the back of the enclosure. Connect the Main Battery cable to the rear terminal of the Disconnect Switch assembly using the existing hardware and torque to 11-15 ft-lbs. Be sure that the terminal offset is positioned away from the Disconnect Switch. This will align the Main Battery cable with the grommet.
16. Once the Main Battery cable is connected to the Disconnect Switch assembly, mount the Disconnect Switch assembly into the enclosure using two (2) ¼-20 Thread Cutting Bolts, TBB 61370975. Leave the mounting bolts loose & backed out by ¼ inch. **Figure 8**



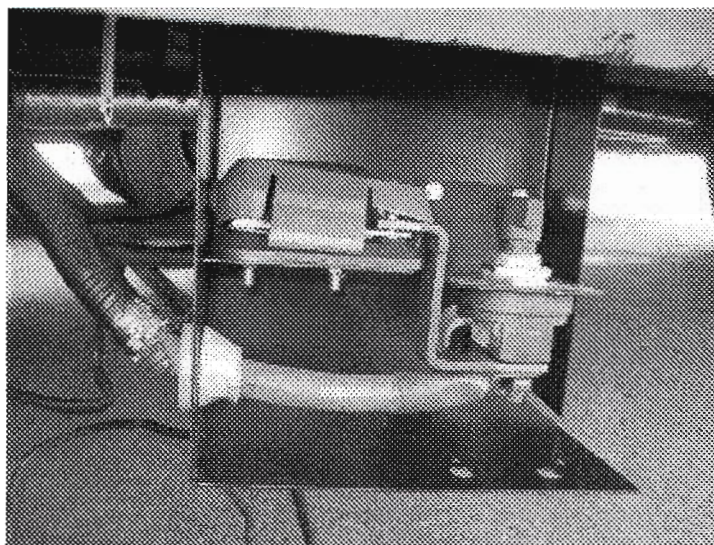
**Figure 8**

17. Install the short leg of the Buss Bar, TBB 168570 over the input stud of the MFJB. With the Disconnect Switch assembly loose, lift the assembly so the buss bar can be installed over the front terminal stud of the disconnect switch.
18. Tighten the Disconnect Switch mount bracket bolts. **Figure 9**



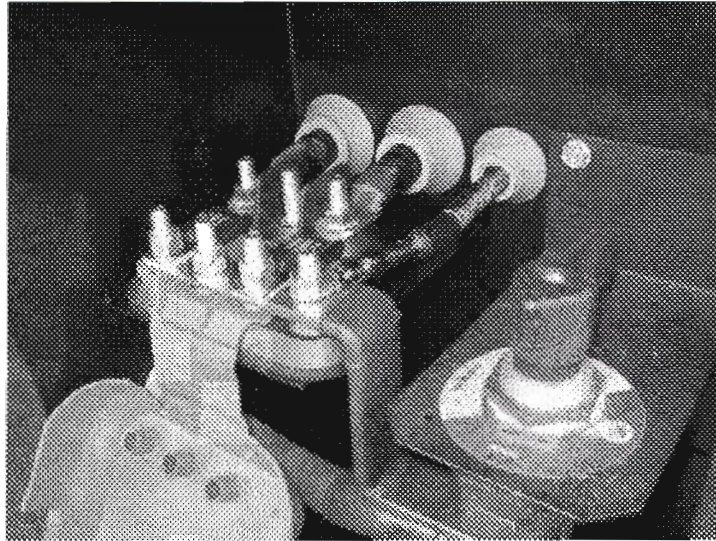
**Figure 9**

19. Remove the tape and pull back about eight (8) inches of loom from the Starter power cable. Feed the Starter power cable through the front side grommet in the enclosure. Install the Starter power cable on the front terminal of the Disconnect Switch (on top of the buss bar) and secure using the existing hardware and torque to 11-15 ft-lbs. Cut off the excess loom from the Starter power cable just past the grommet. **Figure 10**



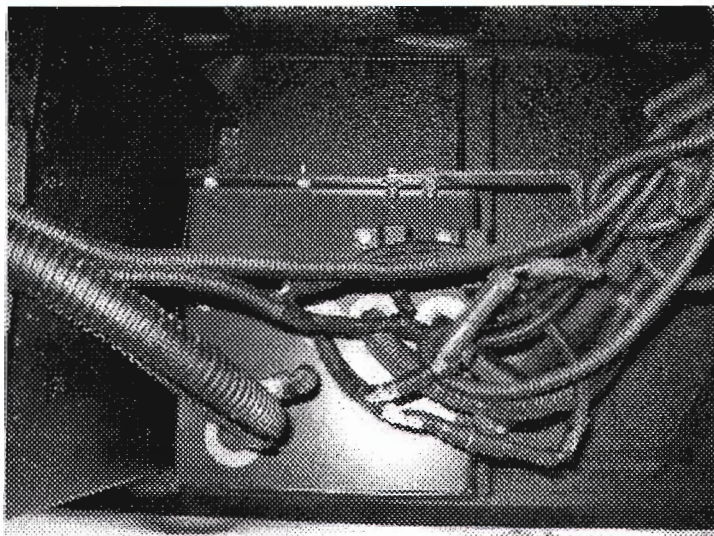
**Figure 10**

20. Feed the Clean power harness through the small grommet on the back of the enclosure. Install the Clean power cable over the MFJB input terminal (on top of the buss bar) and secure using a 5/16-18 Toothed Nut, TBB 69004003 and torque to 8-10 ft-lbs. **Figure 11**



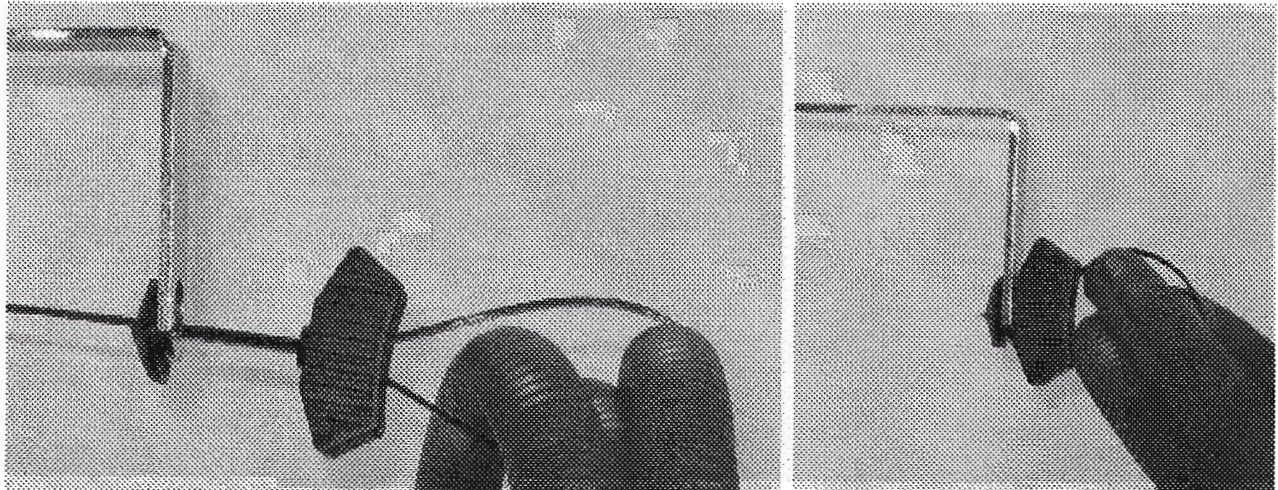
**Figure 11**

21. Move the enclosure up into the existing mount bracket. When positioning the enclosure, the top of the enclosure may be positioned inside or outside of the top of the mounting bracket, either way is acceptable. Align the mounting holes in the enclosure and mounting bracket and secure using four (4) Pan Head Self-tapping Screws, TBB 69003249. **Figure 12**



**Figure 12**

22. Tighten the cable support bracket mounting hardware. Secure the Clean Power fuse housings to the enclosure using one (1) Pan Head Self-tapping Screw, TBB 69003249 for each housing.
23. Use one (1) Tie Wrap, TBB 61371374 and one (1) Saddle Mount, TBB 61480921 to secure the Main Body, Chassis, and Starter power cables to the cable support bracket. The bends of the cables should be natural and apply No force or tension to the cables. **Figure 13**



**Figure 13**

24. Use two (2) Tie Wraps, TBB 65001018 to bundle and secure the Clean power harness and Power Cables.
25. Reconnect the batteries and remove the tire chocks.
25. Test the unit for correct operation.

**MATERIALS REQUIRED: PARTS REQUIRED: TBB 169538 – KIT, MFJB ELECTRICAL BOX, MVP-EF**

<u>PART NUMBER</u>	<u>QTY.</u>	<u>DESCRIPTION</u>
TBB 169538	1	KIT, RECALL #10V-396 & 10V-397
<i>CONSISTING OF:</i>		
TBB 168247	1	MFJB AND PWR DISCONNECT SWITCH BOX
TBB 168248	1	MFJB MOUNTING BRACKET
23-09130-029	1	MFJB - CABLE SUPPORT BRACKET
TBB 168570	1	POWER SUPPLY BUSS BAR, MFJB
TBB 160567	1	GROMMET - EPDM 32.2 HOLE
TBB 160568	4	GROMMET - EPDM 40.2 HOLE
TBB 148338	1	MFJB - ASSEMBLY WITH TWO 150 AMP MEGA FUSES
TBB 52000183	2	TERMINAL - 5/16" STUD 2/0 AWG. #K972
TBB 22203365	1	TERMINAL - RING, 5/16" STUD, 12-10 AWG
TBB 61370975	4	1/4 - 20 X 3/4 HEX HEAD , SELF-TAP
TBB 69003249	6	NO. 12 X .63 L PAN HEAD, TAPPING
TBB 61370348	4	FLAT WASHER, SAE GRADE 8, #14
TBB 61370802	2	SCREW - CAP, HEX, 1/4-20 UNC
TBB 29940006	2	LOCKNUT, 1/4-20, HEX, GRADE B
TBB 69004003	5	NUT, 5/16 - 18, TOOTHED CONICAL
TBB 65001018	2	TIES - CABLE, #08403 BLACK, 14 1/2"
TBB 61371374	1	Button Head Tie Wrap, 14 3/4"
TBB 61480921	1	Saddle Mount, Button Head Tie Wrap