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This bulletin replaces the Safety Recall bulletin SC0354, "Battery Cable Routing and Clipping" released 06.2011. Updates are noted with change bars on the left hand side of the page.

## Battery Cable Routing and Clipping

### **SAFETY RECALL INFORMATION:**

Mack Trucks Inc. (Mack), has decided that a defect relating to motor vehicle safety exists in certain Mack, GU model Vehicles.

On certain fleet vehicles the battery cables may contact chassis mounted bolts, which in extreme cases where the insulation is compromised, may cause a vehicle fire.

### **VEHICLES AFFECTED:**

Certain GU model vehicles manufactured by Mack between September 12, 2007 through April 8, 2011.

### **VEHICLE IDENTIFICATION NUMBERS (VIN):**

There are 263 vehicles affected by this recall.

## Required Parts

PART NUMBER	QUANTITY	DESCRIPTION
965580	1	BRACKET, 3*11*1110*3, 45 DEGREE ANGLE
66AM6	1	SCREW, CPV
21521968	44	ATTACHING CLAMP, HALF PLASTIC CLAMP
983019	6	FLANGE SCREW, M8*80
948645	10	FLANGE LOCK NUT, M8*9.4
980464	*	CABLE TIE, 100
20395795	*	CABLE TIE, DOUBLE HEAD
973924	8	FLANGE SCREW, M8*50
990190	8	SPRING NUT, M8 0.7-4
965566	1	BRACKET, 4*14.2*160*3, 90 DEGREE ANGLE
965565	2	BRACKET, 4*11*160*3, 90 DEGREE ANGLE
965567	1	BRACKET, 5*9*190*4, 90 DEGREE ANGLE
946173	2	FLANGE SCREW, M8*20
965558	1	BRACKET, 2*9*80*3, 90 DEGREE ANGLE
8153965	1	RETAINER, CABLE TIE 13
994786	1	SIX POINT SOCKET SCREW, M6*20
990949	1	FLANGE LOCK NUT, M6*6
21530755	1	BRACKET, BATTERY CABLE CLIPPING
965564	1	BRACKET, 4*9*160*3, 90 DEGREE ANGLE
984815	1	FLANGE SCREW, M12*30
969317	1	FLANGE LOCK NUT, M12*13.8
3180614	10	CLIP, MISCELLANEOUS CABLES, BATTERY CABLE SPACER
20437238	1	CABLE TIE, HEAVY DUTY
SN612X36	AR	RUBBER (local purchase) UNITED RUBBER SUPPLY COMPANY INC. at 12 Commercial Street Hicksville, NY 11801 1-800-772-3245.

## Repair Procedure

### DANGER

Before working on a vehicle, set the parking brake, place the transmission in neutral, and block the wheels. Failure to do so can result in unexpected vehicle movement and can cause serious personal injury or death.

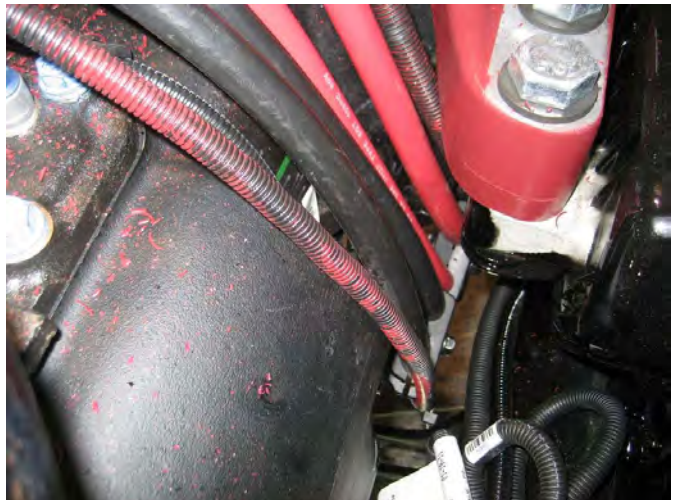
1. Disconnect all battery cables from the batteries.
2. Cut and loosen any cable ties securing battery cables within the battery box and out the rear to the bottom of the frame rail. Note: Ensure the cables are loose and free at this point.
3. Locate the first standoff bracket underneath the battery box/ frame area. Remove and discard the square rubber bound clamp (D-clamps) from the battery cables at this clip point.
4. Continue removing each and every square clamp and cable ties all the way up the frame rail, over the top of the transmission until you reach the starter. Note: It may prove beneficial to temporarily secure the cables up as you go with rubber hook straps.
5. Remove the battery cables from the starter.
6. Clean and check the cables thoroughly from end to end for areas that might deem the cable defective.  
Note: Check for areas on the coating that have been heavily chaffed, cut or worn to the point where the copper is either exposed or already oxidized.
7. Replace defective cable(s) before proceeding with new routing and clipping procedures
8. Connect the battery cables to the starter. Do not tighten at this time.



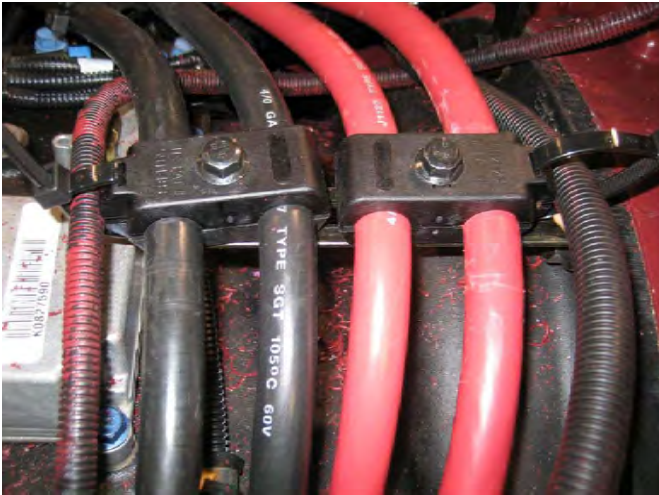
9. Locate and install bracket part number 965580 onto engine as shown. Install plastic cable clamps and secure both positive and both negative cables. Secure smaller cables with cable ties as shown  
Note: Use third slot in bracket.



10. Tighten the nuts on the starter to the proper specification.
11. Locate and secure battery cables at the next clip point between the transmission and frame. Use the existing L-bracket mounted to clutch housing and secure cables with the plastic cable clamps and cable ties as shown.



12. Locate and replace the existing bracket on the upper center of clutch housing with bracket part number 965536. Install plastic clamps and cable ties as shown.

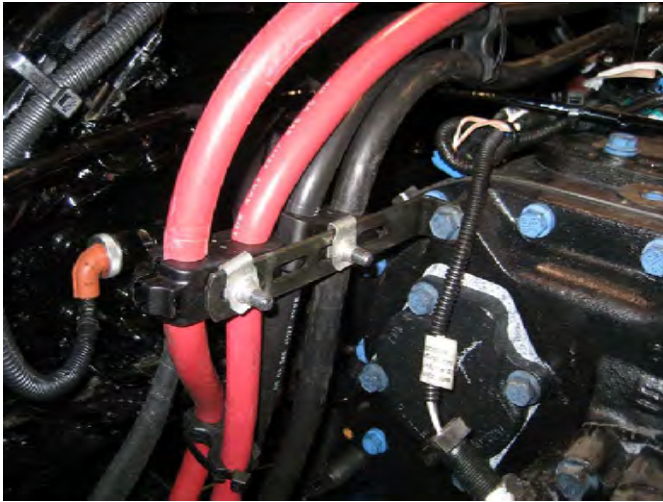


13. Install plastic cable clamps and cable ties as shown on the top side of the transmission.



14. Install spacers as needed in between fixed bracket locations as shown above.  
Note: This will allow for proper spacing and reinforce the battery cable clipping.

15. Remove the existing bracket on rear of transmission and install new bracket part number 965565 and plastic cable clamps as shown.

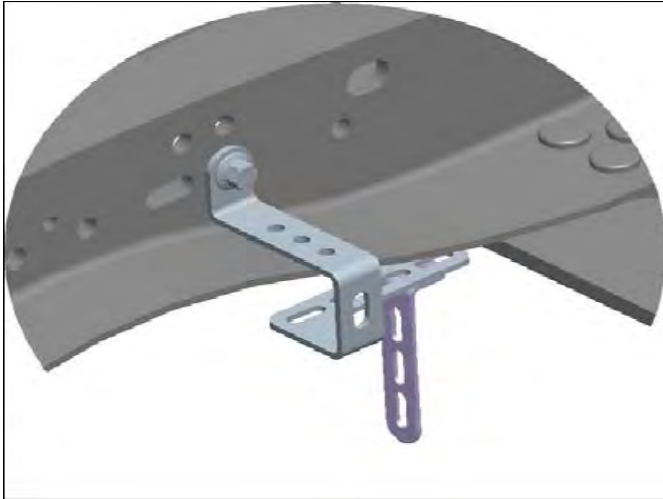


16. Install spacers as needed in between fixed bracket locations.  
Note: This will allow for proper spacing and reinforce the battery cable clipping.

17. Install bracket part number 965567 and 965558 onto fuel tank J-bracket in the location shown.  
Install plastic cable clamps, cable tie retainer, and cable ties as shown.



18. Locate the back of cab cross member and install the bracket part number 21530755 and 965564 in the hole location and orientated as shown.



19. Install plastic cable clamps and cable ties as shown.



20. Locate the next bracket location on the frame rail and install the plastic cable clamps and cable tie as shown.



21. Install spacers as needed in between fixed bracket locations.  
Note: This will allow for proper spacing and reinforce the battery cable clipping.



22. Locate the next bracket location on the frame rail and install the plastic cable clamps and cable tie as shown.



23. Locate the bracket on the frame rail behind the battery box and install the plastic cable clamps and cable tie as shown.



24. Install spacers as shown in between the fixed bracket and the back side of the battery box.  
Note: This will allow for proper spacing and reinforce the battery cable clipping.
25. Locate the three fasteners protruding into the battery box rear mounting flange and reverse the direction the bolts face so the flange head is on the battery box side of the frame rail. Torque the fasteners to 175 Nm (129 ft-lb).



26. Cut 2 pieces of flat rubber stock material 2" x 3". Cut holes where the battery hold-down and cable tie fasteners will install.
27. Lay both rubber flaps onto the end of the battery hold-down metal plate and insert the push through cable tie fasteners.



28. Locate the area between the battery box and frame rail.  
Route the battery cables as shown.



29. Connect the battery cables and secure  
Make certain the routing agrees with illustration and then secure each cable as shown with the proper cable tie.  
Torque the battery stud nuts to  $20 \pm 2$  Nm ( $14.8 \pm 1.5$  ft-lb).



30. Check that all electrical equipment is functioning properly.

## Reimbursement

<b>This repair is covered by an authorized Safety Recall campaign. Reimbursement is obtained through the normal claim handling process.</b>	
<b>Claim Type (used only when uploading from the Dealer Bus. Sys.)</b>	40
Vehicle repaired per instructions	2-Modified per instructions
<b>Labor Code</b>	
Primary Labor Code	7212A-ZZ-95 - 8.5 hrs.
Time to take charge of vehicle	101AA-0A-00 - 0.3 hrs.
<b>Causal Part</b>	25109211
<b>Authorization No.</b>	SC0354

Take-charge time is not included in the labor code for this operation. Take charge may be eligible, but can only be used once per vehicle repair visit. If the vehicle is having other warranty repairs performed, take-charge should be charged to the warranty repair, otherwise take-charge can be charged to this Safety Recall campaign.

**NOTE:** Dealers are to perform Safety Recall Campaigns on all subject vehicles at no charge to the vehicle owner regardless of mileage, age of vehicle or ownership (original purchaser or subsequent purchasers). Whenever vehicles are subject to a safety recall are brought to your dealership for service, or taken into your dealership vehicle inventory, it is strongly recommended that every effort be made to perform the recall correction before the vehicle is sold or released to the owner.