



# SAFETY RECALL

(Previously called Vehicle Recall)

## SC312

(Also applies to Mack Trucks Australia)

**Date:** 12/18/06 (Supersedes SC312 dated 10/27/06)

**To:** All MACK Dealers

**Subject:** Bulkhead-Mounted Air Manifold — CV, CT, CL, CXN and CHN Models

### Information:

It has been determined that a manufacturing defect exists in the bulkhead-mounted air manifold (part No. 40QE54M) used on CV, CT, CL, CXN and CHN model chassis manufactured between February 1, 2006 and May 15, 2006. With these manifolds, the possibility exists for certain fittings to disengage from the manifold, resulting in air leaks and the unexpected application of the parking brakes. Approximately 8,800 chassis are involved in this campaign. A list of affected vehicles has been sent to all applicable dealers.

### Procedures:

The bulkhead-mounted air manifold must be replaced on all chassis involved in this campaign.

### NOTE

Before proceeding, check the campaign status in the eWarranty system to see if the campaign has already been completed. Campaign status can also be checked by looking at the Campaign Completion Label located on the lower edge of the passenger-side door. If the campaign has been completed, the campaign number (SC312) and the completion date should be written on the label.

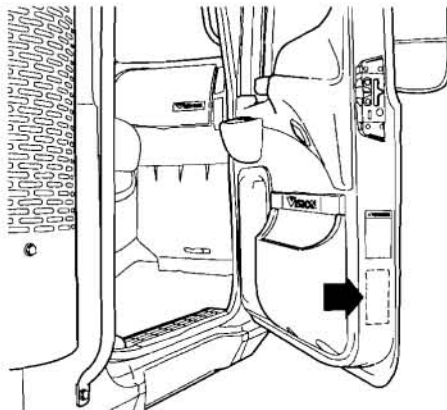


Figure 1 — Campaign Label Location

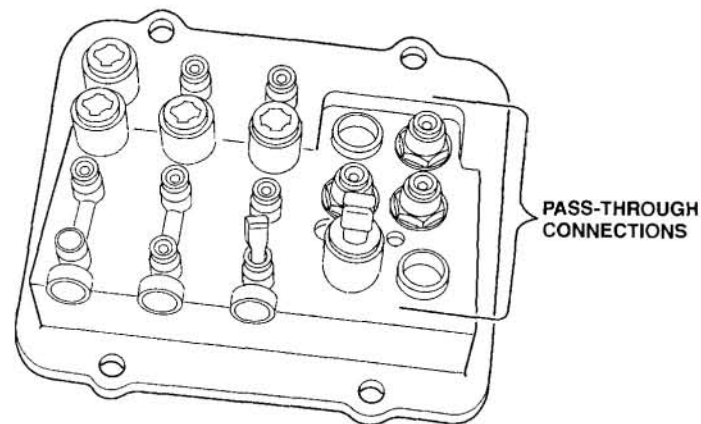
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Procedures for replacing the air manifold are as follows:

**NOTE**

For piping diagrams and air manifold connections, refer to the *Air and Brake System Service Manual*, 16-104.

1. Secure the chassis for service, apply the parking brakes and block the wheels to prevent the vehicle from moving.
2. Completely drain the air system.
3. Open the hood.
4. Inside the engine compartment, disconnect the two bulkhead electrical connectors located directly above the air manifold which is located on the left-hand side of the cab bulkhead. Position the harnesses in a location where they will not interfere with the remaining operation. It may be necessary to remove some of the tie wraps that secure the harnesses and air lines together.
5. The manifold includes five large and three small pass-through holes. Depending upon chassis equipment, the large holes are used for certain air connections such as the fifth wheel air control switch, PTO control valve, air suspension control valve, etc. The three small holes are used for exhaust lines, and for the supply line from the pressure protection valve to the dashboard air switches. Push-to-connect bulkhead fittings are installed in the large holes when used for pass-through connections, and closure plugs are installed in any unused holes.



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**Figure 2 — Air Manifold Pass-Through Connections**

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Clearly mark to identify the air lines connected to each of the pass-through bulkhead fittings, and then use the push-to-connect release tool (tool No. 9032-1800TRK) to disconnect the lines from the fittings. This tool is available through the MACK Parts System. The lines must be clearly marked to ensure they are reconnected to the correct ports on the replacement manifold.

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6. Disconnect the air line from the pressure protection valve located on the treadle valve.
7. Clearly mark to identify all the air lines connected to the air manifold fittings, and then use the push-to-connect release tool (tool No. 9032-1800TRK) to disconnect the air lines from the manifold.

8. On the inside of the cab, clearly mark to identify the air lines connected to the pass-through bulkhead fittings, and then use the push-to-connect release tool to disconnect the lines from the fittings.
9. Pull the dashboard air switch supply line through the manifold.
10. Clearly mark to identify all the air lines connected to the air manifold fittings, and then use the push-to-connect release tool to disconnect the air lines from the manifold.
11. Mark to identify and then disconnect the wires from the pressure switches mounted in the air manifold.
12. Remove the four mounting screws that secure the manifold to the cab.
13. Remove the air manifold by pushing the manifold into the cab from inside the engine compartment. A firm push may be required to loosen the manifold from the adhesive.
14. Clean any remnants of the seal and adhesive that may remain on the manifold mounting surface of the cab bulkhead.
15. Transfer the brass bulkhead fittings and closure plugs from the pass-through holes in the existing manifold to the same pass-through holes in the replacement manifold (part No. 40QE54M).
16. Transfer any plugs from the existing manifold to the same ports in the replacement manifold as required.
17. Transfer the pressure switches from the existing manifold to the same ports in the replacement manifold.
18. Using the same mounting screws, install the replacement manifold in the cab.

<b>NOTE</b>
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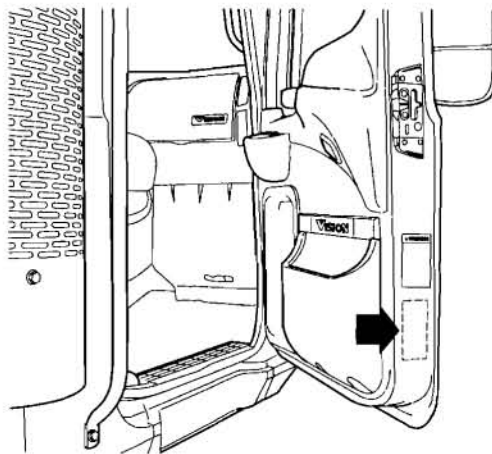
Before reconnecting the air lines, inspect the ends to ensure the lines are cut square and there are no burrs or other defects that may affect sealing. If the line ends are not in good condition, use an approved tubing cutter (such as Weatherhead part No. T919 or equivalent) to recut the lines. For information concerning push-to-connect air line fittings, refer to the *Air and Brake System Service Manual*, 16-104.

19. On the inside of the cab, feed the exhaust lines and the dashboard air switch supply line through the appropriate pass-through holes in the manifold. If desired, MACK RTV Silicone Sealant (part No. 342SX33) can be used to seal the lines in the manifold.
20. Paying attention to the wire identification markings that were made in step 11, reconnect the wires to the air switches.
21. Reconnect the cab-side air lines to the correct manifold fittings and pass-through bulkhead fittings per the identification markings made previously. Gently tug on the air lines to ensure they are fully seated.
22. Inside the engine compartment, reconnect the dashboard air switch supply line to the pressure protection valve.

23. Reconnect the engine compartment-side air lines to the correct manifold fittings and pass-through bulkhead fittings per the identification markings that were made previously. Gently tug on the lines to ensure they are fully seated.
24. Reconnect the two bulkhead electrical connectors.
25. Using tie wraps, secure the air lines and wire harnesses as required to prevent rubbing and chafing.
26. Start the engine and build system pressure to governor cut-out (125–135 psi).
27. Stop the engine and then use a soap and water solution to check all manifold connections for air leaks. Correct leaks as required.
28. Close the hood and return the vehicle to service.

### NOTE

To signify that the campaign has been completed, use a permanent-type marker (such as a Sharpie®) to write the campaign number (SC312) and completion date in the spaces provided on the Campaign Completion label located on the lower edge (below the door latch) of the passenger-side door. If a label is not already affixed to the door, apply a label (part No. TS897) and supply the information as required. Campaign Completion labels are available in packs of 50 and can be ordered by faxing a completed BR313 to Pacesetters Business Services at 610-264-9465.



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**Figure 3 — Campaign Label Location**

**Parts Required:**

Order vehicle recall parts on a separate stock order and process through the parts distribution center normally serving your area. Do not include parts on this requisition that are not required for this recall campaign.

International orders are to be prefixed — V.O.R.

Qty.	Part No.	Description
1	40QE54M	Air manifold, bulkhead mounted

**Removed Parts:**

The removed air manifold can be scrapped locally.

**Reimbursement:**

Campaign expenses are to be recovered through normal warranty claim procedures. Enter the following information on the warranty claim:

**UNDER**

**ENTER**

Failed Part (Causal Part) ..... SC0312

eWarranty Authorization No..... SC0312

Labor Code/Allowance ..... 533 9A 00 95 — 0.2 hr.

Time allowed to take charge of vehicle and check eWarranty system to determine campaign involvement.

533 9B 00 95 — 2.1 hrs.

Time allowed to remove and replace bulkhead-mounted air manifold on CV, CT, CL, CXN and CHN model chassis involved in this campaign. Does not include "take-charge" time.

<b>NOTE</b>
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As required by Federal Motor Vehicle Safety Standards 49 CFR 573.11, no vehicle subject to an open safety campaign shall be delivered to the customer until such time as the defect or noncompliance is remedied.