




MACK TRUCKS, INC.
2100 MACK BOULEVARD
P.O. BOX M
ALLENTOWN, PA 18105-5000

February 23, 2007 10:03


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February 23, 2007

TO: DISTRIBUTOR PRINCIPALS
SERVICE MANAGERS

SUBJECT: Vehicle Safety Recall - SC0315
Tri-drive Non-Compliance

On certain Mack CT model vehicles manufactured from February 2006 through June 2006 with three drive axles, the performance criteria, specified in US Regulation 49 CFR 571.121 section 5.7.1, cannot be achieved on the truck as it is currently configured.

Approximately 12 vehicles (3 US and 9 Canada) are involved in this safety recall.

A copy of the service bulletin covering the repair instructions and procedures is enclosed.

It is important that preparation be made immediately to assure prompt inspection and/or correction of all vehicles involved. The National Traffic and Motor Vehicle Safety Act and Canadian Motor Vehicle Safety Act requires dealers to insure that all new and used vehicles are free of safety defects and comply with all relevant safety standards at the time of delivery to the consumer. All Safety Recalls, which affect new or used inventory, must be performed before the vehicle is sold or leased. Please refer to Service Operations Service Letter #SL-004-001 dated 11/19/92 regarding the aforementioned amendment.

Please note that Dealers are responsible for performing the recall on all vehicles subject to the recall at no charge to the owner regardless of mileage, age of vehicle, or ownership from this time forward. Additionally, the National Traffic and Motor Vehicle Safety Act requires that the owner's vehicle(s) be corrected within a reasonable time after parts are available to the Dealer. The law states that failure to repair a vehicle within (60) days after tender for repair shall be a prima facie evidence of unreasonable time. However, circumstances of a particular situation may reduce the sixty (60) day period. If the vehicle is not repaired within a reasonable time, the vehicle owner may be entitled, without charge, to a reasonable equivalent vehicle or refund of the purchase price, less reasonable allowances for depreciation.

Please use the enclosed Notice of Mandatory Safety Campaign card(s) to report sold or transferred trucks. Make sure these cards are returned to us and not directly to the customer or to another dealer. A notice of the recall will be mailed to all identified registrants of affected vehicles. To avoid warranty denial of your claim for reimbursement of expenses connected with this recall, first, make sure the truck presented for the recall work is on your list. If not, check for the recall authorization on the MACKnet chassis inquiry. Also, check that another Mack dealer has not previously completed the recall.

Mack Trucks, Inc., recommends a follow-up by telephone or a personal visit, of all owners of vehicles subject to the recall who fail to bring the vehicle(s) in for repair. Your District Service Manager will be contacting you to assure that this recall attains the visibility we feel is necessary to ensure 100% completion. Please be prepared to review your progress and/or any problems associated with the recall.

If you have any questions about this recall, which may not have been covered in this letter or enclosures, please contact the Regulatory Affairs group by email at vtna.regulatoryaffairs@volvo.com

Very truly yours,

MACK TRUCKS, INC.

Enclosures: Customer Notice
Service Bulletin
Notification Cards



SAFETY RECALL

(Previously called Vehicle Recall)

SC315

(Not applicable to Mack Trucks Australia)

Date: 02/23/07

To: All MACK Dealers

Subject: Rear Axle Brakes Non-Compliance — CT713 with Tri-Drive Rear Axles

Information:

It has been determined that the brake system on certain CT713 model chassis equipped with tri-drive rear axles is not in compliance with Federal Motor Vehicle Safety Standards FMVSS 121 and Canada Motor Vehicle Safety Standards CMVSS 121, Air Brake Systems. The minimum stopping distance may not be achieved if a single-point failure in the service brake control circuit should occur. Approximately nine CT model chassis are involved in this campaign. A list of affected vehicles has been sent to all applicable dealers.

Procedures:

The rear axle air brake system on all affected vehicles must be reconfigured as outlined in this bulletin, and a secondary air extension reservoir must be added to increase the volume of the secondary air system. Before proceeding, determine Safety Recall eligibility by:

- a. Checking Safety Recall status in eWarranty.
- b. Checking the campaign completion label located on the lower edge of the passenger-side door (refer to page 11). If the campaign has been completed, SC315 should be written on the label.

Procedures for reconfiguring the rear axle brake system are as follows:

NOTE

The rear axle service brake relay valves will be identified as follows:

Relay valve No. 1 — Service brake relay valve supplying the front-rear axle.

Relay valve No. 2 — Service brake relay valve supplying the intermediate-rear and rear-rear axles.

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. Clearly mark the air lines at relay valve No. 1 for line-to-port identification.

4. Disconnect the air lines from the relay valve. Quick-connect air lines are disconnected as follows:
 - a. Using push-to-connect release tool (tool No. 9032-1800TRK), depress the collet head to release the grip on the tubing.

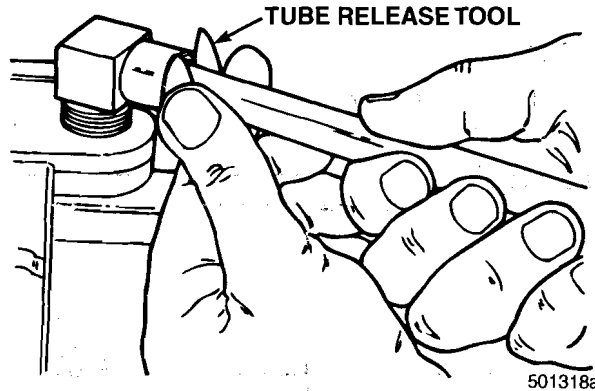


Figure 1 — Depressing Collet

- b. With the collet depressed, pull the tubing from the fitting.

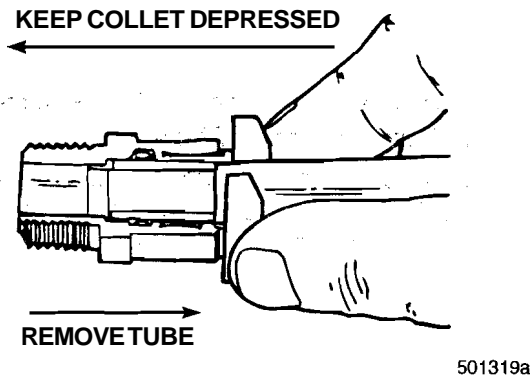
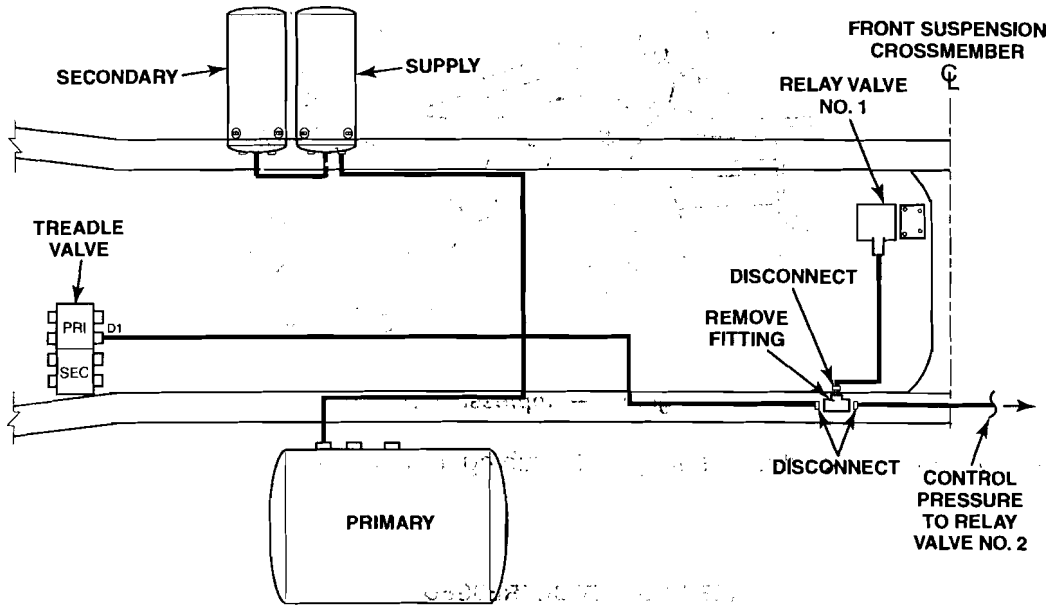


Figure 2 — Removing Tube

5. After disconnecting the air lines, remove relay valve No. 1 from the chassis.
6. Transfer the fittings to a new relay valve (part No. 745-802950). Using the same mounting hardware and bracket, install the new relay valve in the same location on the rear suspension crossmember. Tighten the mounting hardware to 23 N•m (200 lb-in).

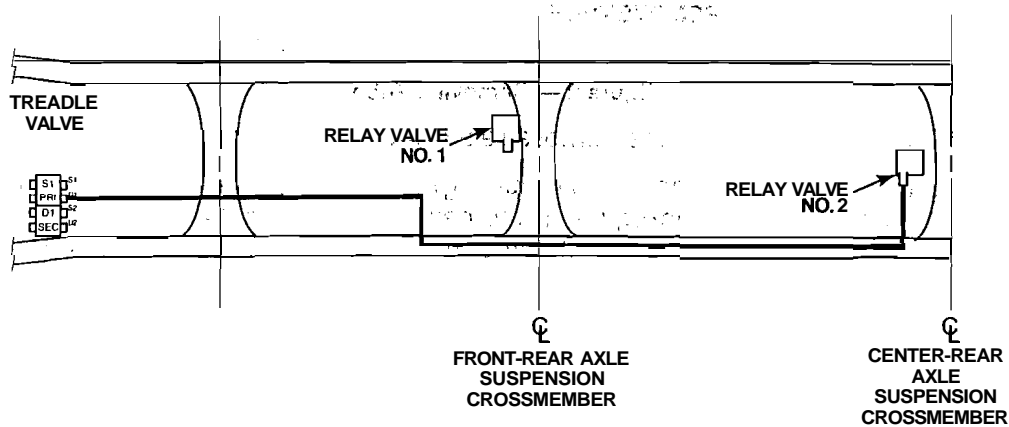
7. With the existing air system configuration, control pressure for relay valve Nos. 1 and 2 originates at the treadle valve D1 port and is directed to both relay valves through a frame-mounted T-fitting. Disconnect and remove the air line that connects between the treadle valve D1 port and the frame-mounted T-fitting. Also disconnect and remove the air lines connecting between the T-fitting and the control ports at both relay valve Nos. 1 and 2.



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Figure 3 — Current Air Piping Configuration — Control Pressure

8. Remove and discard the frame-mounted T-fitting.
9. Using a line having the same inside diameter as the removed line, connect a new line at the treadle valve D1 port. Route and connect the line to the control port at relay valve No. 2. Secure the line to the existing air line bundle as required.

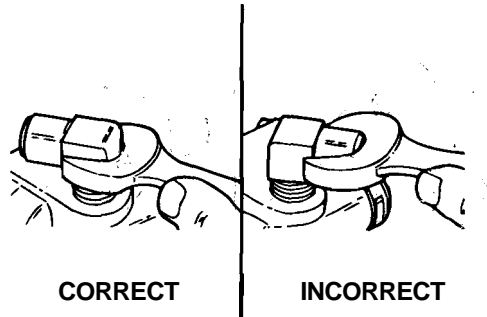


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Figure 4 — Install New Air Line Between Treadle Valve D1 Port and Second Relay Valve

Push-t6-connect air lines are installed as follows:

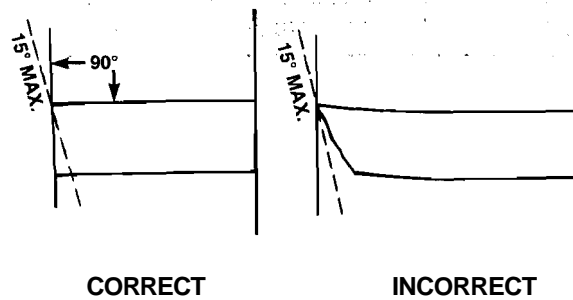
- a. Make any final alignment adjustments to the air fittings with a wrench on the hex or flats of the fitting body. DO NOT use a wrench near the tubing entry or collet head of the fitting.



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Figure 5 — Properly Adjusting Fitting Alignment

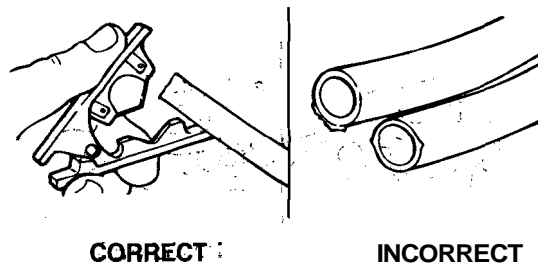
- b. Inspect the end of the tube. The end should have a square (90-degree) clean cut edge. (An angled cut up to 15 degrees is acceptable.)



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Figure 6 — Inspect Tube End

If the tube end is not clean or square, use a tubing cutter (Weatherhead part No. T919 or equivalent) to cut the tube. Dull knives, side cutters or other types of cutting tools may not ensure a good clean cut. Burrs, oval tubing and contamination can damage the fitting seals.



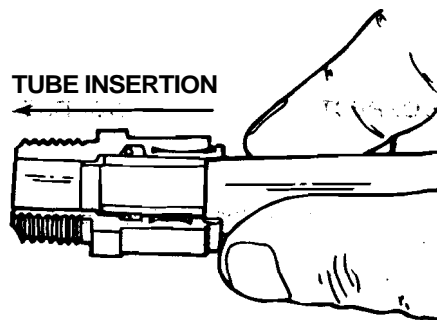
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Figure 7 — Use Tubing Cutter for Proper Cut Edge

- c. Insert the tubing straight into the fitting until a solid stop is felt. The tubing grip and seal (on the O-ring) is then accomplished. Always protect against contaminants in the cartridges and fittings during assembly.

NOTE

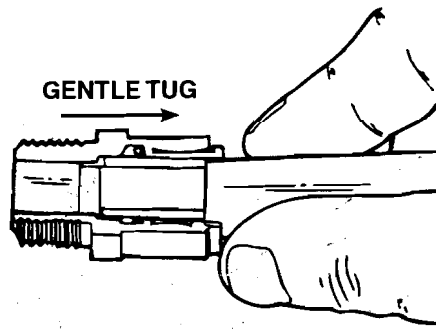
DO NOT use detergent, soap and water or similar types of solutions as a lubricant when installing the tube.



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Figure 8 — Inserting Tube

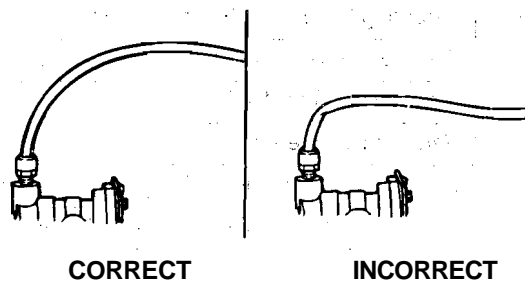
- d. After the tube has been fully inserted, gently tug on the tubing to ensure that it is secure in the fitting.



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Figure 9 — Ensure Tubing is Secure

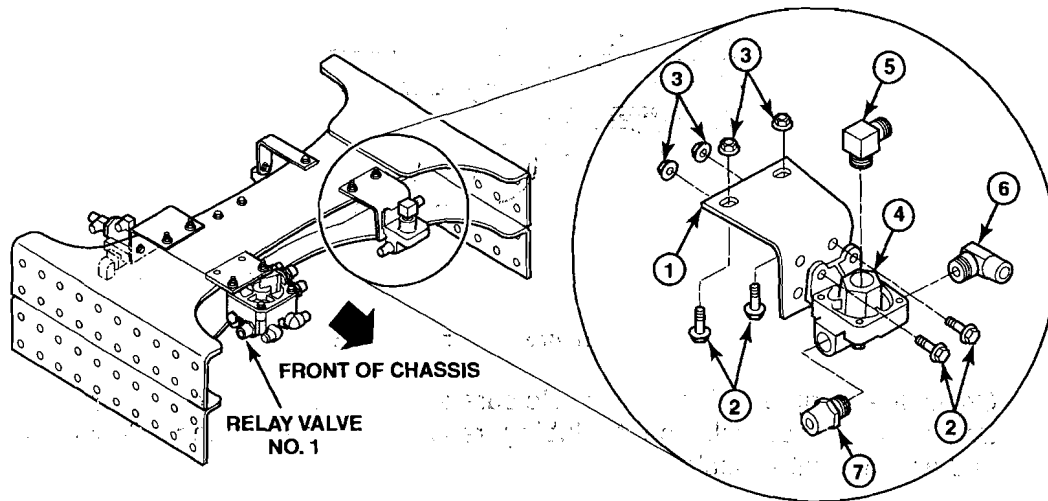
- e. Check the completed installation. Be sure to allow ample room for a gradual bend. Severe bends can collapse the tubing, resulting in line blockage, flow restrictions and an eventual air leak.



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Figure 10 — Inspect Final Installation

0. Install a 90-degree elbow fitting (part No. 63AX51092) into the inlet port of the quick release valve (part No. 745-229813), and then install a straight fitting, (part No. 63AX51083) and a 45-degree elbow fitting (part No. 63AX51162) into the appropriate ports as shown in the illustration below. Use a mounting bracket (part No. 29QE3210M) to mount the quick release valve to the front side of the same rear suspension crossmember where relay valve No. 1 is mounted.

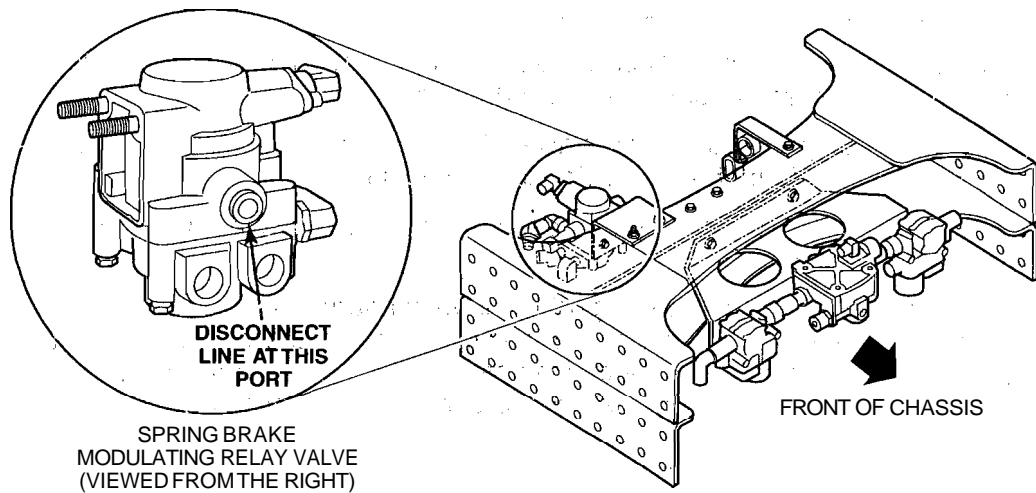


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Figure 11 — Install Quick Release Valve

Key	Qty.	Part No.	Description
1	1	29QE3210M	Mounting bracket, quick release valve
2	4	26AM13	Bolt, flange head, M8 x 1.25 x 25 mm long
3	4	191AM2	Flangenut, M8 x 1.25
4	1	745-229813	Valve, quick release
5	1	63AX51092	Fitting, 90-degree elbow, 3/8" NPTF, 3/8" tube size, push-to-connect
6	1	63AX51162	Fitting, 45-degree elbow, 1/4" NPTF, 3/8" tube size, push-to-connect
7	1	63AX51083	Fitting, connector, male, 1/4" NPTF, 3/8" tube size, push-to-connect

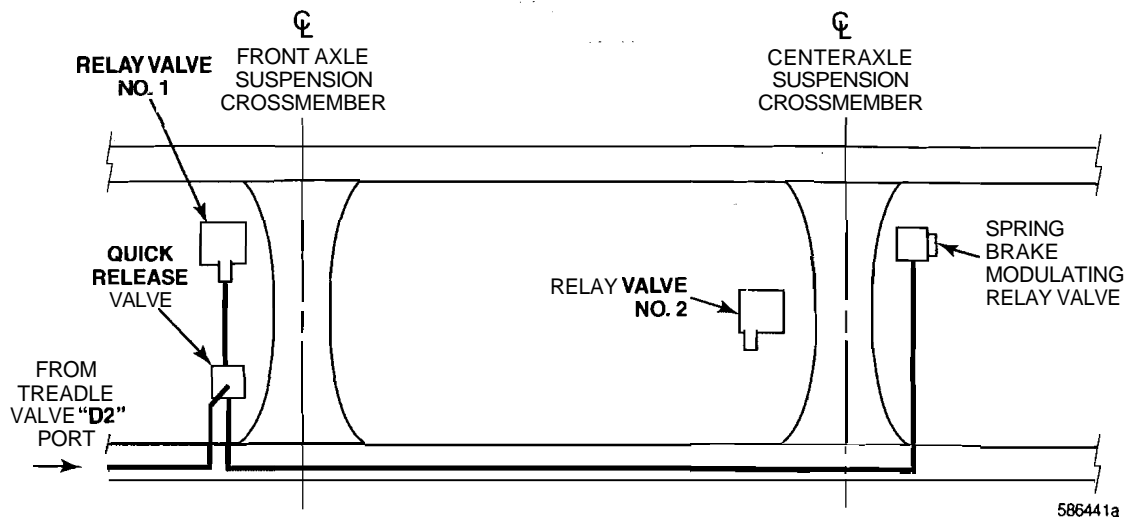
- Disconnect the air line from the secondary control port of the spring brake modulating relay valve (refer to figure 12). This valve is located on the right-hand side of the vehicle, mounted on the intermediate rear axle suspension crossmember.



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Figure 12 — Disconnect Secondary Control Circuit Air Line from Control Port of Spring Brake Modulating Relay Valve

- Remove the air line from the bundle of lines, and then cut the line in the vicinity of the newly installed quick release valve. Connect this line to the quick release valve inlet port.
- Connect the short section of the air line (disconnected previously) from the quick release valve to relay valve No. 1 control port.
- Install a new 3/8" air line (part No. 101AX124RF) from the quick release valve to the secondary control port of the spring brake modulating relay valve.



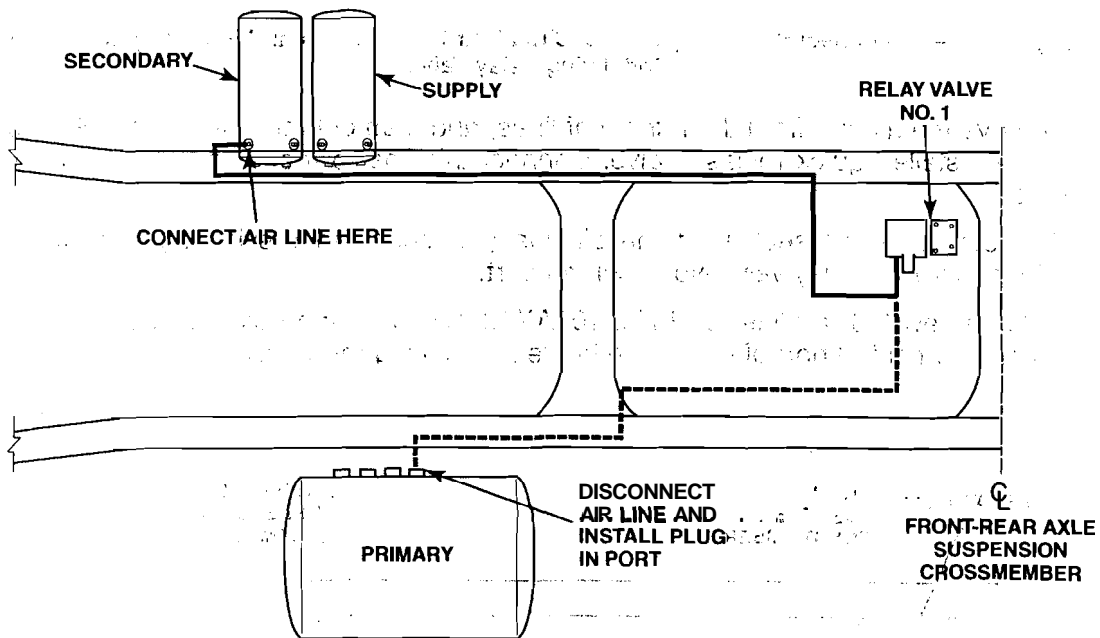
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Figure 13 — Quick Release Valve, Relay Valve and Spring Brake Modulating Relay Valve Piping

NOTE

Existing air lines that are not long enough to be connected due to relocation of the valve(s) must be replaced with new lines of sufficient length. DO NOT use unions to lengthen the lines.

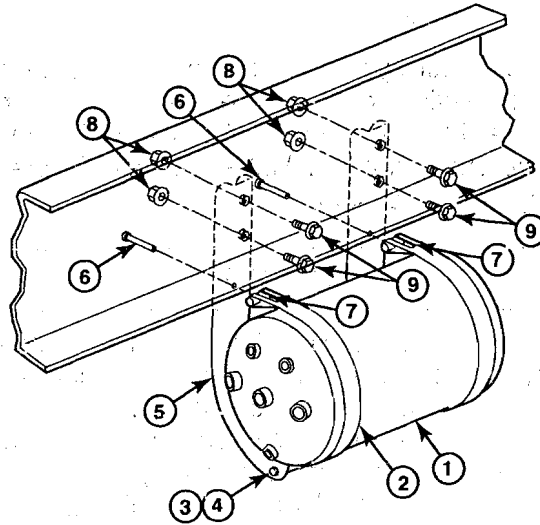
15. Reconnect the remaining air lines to relay valve No. 1, making sure that the lines are connected to the correct ports as identified earlier.
16. Locate the supply line for relay valve No. 1 at the primary reservoir, and then disconnect the line from the reservoir and remove the fitting.
17. Remove the line from the bundle of lines, and reroute the line to an available port in the secondary reservoir.,
8. Remove the plug from an unused port in the secondary reservoir and install the fitting that was removed from the primary reservoir. Connect the supply line to the fitting. Secure the air line to the bundle of lines as required, and use the plug removed from the secondary reservoir to seal the unused port in the primary reservoir.



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Figure 14 — Supply from Secondary Reservoir to First Relay Valve

19. Install the secondary extension reservoir at any available location on either the left- or right-hand frame rail. Refer to the following illustration and parts list for installation. The mounting brackets must be mounted on the frame rail with the vertical centerlines of the mounting holes 300 mm (11.81") apart.



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Figure 15 — Secondary Extension Reservoir

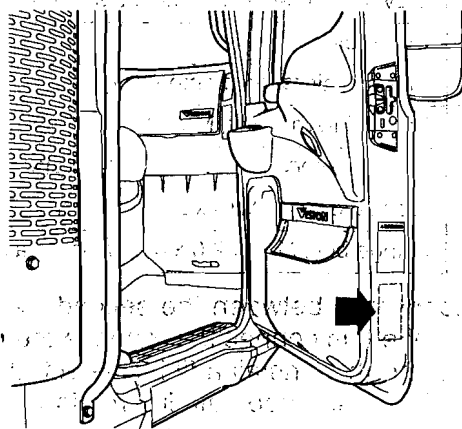
Key	Qty.	Part No.	Description
1	1	8075917	Reservoir, secondary circuit extension, 31.8 L (33.6 qts.)
2	2	24QE477M	Strap, air reservoir mounting
3	2	314AM7	Clevis pin, reservoir mounting strap, lower
4	2	315AM7	Cotter pin
5	2	29QE460M	Bracket, air reservoir mounting
6	2	45AM11	Screw, internal hex, M8 x 1.0 x 60 mm long, air tank mounting strap, upper
7	2	65RU2418M	Pin, air reservoir mounting strap, upper
8	4	191AM13	Flange locknut, M14 x 2.0, air reservoir mounting
9	4	27AM87	Flange bolt, M14 x 2.0 x 40 mm long, air reservoir mounting

20. A 1/2" air line will be connected between the secondary reservoir and the secondary extension reservoir. To make this connection, remove the plug from any unused port in the secondary reservoir, and then install a fitting selected from the part numbers listed below. Fitting selection will depend upon air line routing.
- 63AX53292 — 45-degree elbow, 1/2" NPTF, push-to-connect, 1/2" air line
 - 63AX51094 — 90-degree elbow, 1/2" IVPTF, push-to-connect, 1/2" air line
 - 63AX51086 — Straight, 1/2" NPTF, push-to-connect, 1/2" air line
21. Install one of the fittings listed above into an available port in the secondary extension reservoir.
22. Connect a sufficient length of 1/2" air line (part No. 101AX126RF) to the fittings. Route the line along an existing air line bundle and secure as required. Avoid sharp bends, kinks and areas where the line may rub against other components.

23. Install a drain valve (part No. 61AX117) into the lower-most port in either end of the secondary extension reservoir.
24. Use the following plug part numbers to seal the remaining unused ports in the secondary extension reservoir:
 - 63AX51 — 11/2" NPTF plug
 - 63AX335 — 11/4" NPTF plug
25. Start the engine and build air system pressure to governor cut-out. Stop the engine. Use a soap and water solution to check the areas of the air system affected by this reconfiguration for air leaks. Additionally, check the air line routing for kinks, sharp bends and areas of potential chafing. Make sure all air lines are secured with band clamps and/or tie wraps as necessary.

NOTE

To signify that the campaign has been completed, use a permanent-type marker (such as a Sharpie®) to write the campaign number (SC315) 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 16 — 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	745-802950	Valve, service brake relay
1	745-229813	Valve, quick release
1	63AX51092	Fitting, 90-degree elbow, 3/8" NPTF, 3/8" tube size, push-to-connect
1	63AX51162	Fitting, 45-degree elbow, 1/4" NPTF, 3/8" tube size, push-to-connect
1	63AX51083	Fitting, connector, male, 1/4" NPTF, 3/8" tube size, push-to-connect
1	29QE321CM	Mounting bracket, quick release valve
4	26AM13	Bolt, flange head, M8 x 1.25 x 25 mm long, quick release valve mounting
4	191AM2	Flange nut, M8 x 1.25, quick release valve mounting
1	8075917	Reservoir, secondary extension
2	29QE460M	Mounting bracket, secondary extension reservoir-to-frame
2	24QE477M	Mounting strap, secondary extension reservoir
2	65RU2418M	Pin, secondary extension reservoir mounting strap, upper (refer to note below)
2	314AM7	Clevis pin, secondary extension reservoir mounting strap, lower
2	315AM7	Cotter pin
4	191AM13	Flange locknut, M14 x 2.0, air reservoir mounting
4	27AM87	Flange bolt, M14 x 2.0 x 40 mm long, air reservoir mounting
2	45AM11	Screw, internal hex, M8 x 1.0 x 60 mm long, air tank mounting strap, upper
1	61AX117	Drain valve, secondary extension reservoir
	63AX51	Plug, 1/2" NPTF
*	63AX335	Plug, 1/4" NPTF
*	63AX53292	Fitting, 45-degree elbow, 1/2" NPTF, push-to-connect, 1/2" air line
*	63AX51094	Fitting, 90-degree elbow, 1/2" NPTF, push-to-connect, 1/2" air line
	63AX51086	Fitting, straight, 1/2" NPTF, push-to-connect, 1/2" air line
*	101AX126RF	Tubing, 1/2", plastic air line
*	101AX124RF	Tubing, 3/8", plastic air line

* Quantity as required.

NOTE

Contact your parts expediter to place a ship-direct order for the 65RU2418M pin.

Removed Parts:

Removed parts may 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)	SC0315	
eWarranty Authorization No.....	SC0315	
Labor Code/Allowance	531 9A 00 95 — 0.2 hr.	Time allowed to take charge of vehicle and determine Safety Recall status in eWarranty and by checking campaign completion label.
	531 9B 00 95 — 10.0 hrs.	Time allowed to reconfigure rear axle brake air system and install secondary extension reservoir on CT model chassis equipped with tri-drive rear axles. Does not include "take-charge" time.

NOTE

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.



MACK TRUCKS, INC.
2100 MACK BOULEVARD
P.O. BOX M
ALLENTOWN, PA 18105-5000

**NON-COMPLIANCE RECALL SC0315
FEBRUARY 2007**

Handwritten mark

DEAR MACK TRUCK OWNER:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Mack Trucks, Inc. has decided that a non-compliance, which relates to motor vehicle safety, exists in certain Mack CT model vehicles with three drive axles manufactured from February 2006 through June 2006.

NON-COMPLIANCE: The truck cannot achieve the performance criteria, specified in US Regulation 49 CFR 571.121 section 5.7.1, as it is currently configured.

PRECAUTIONS YOU CAN TAKE: There are no precautions you can take other than having your vehicle repaired by a Mack Parts and Service Center.

TIME REQUIRED FOR THE REPAIR: The labor time required to repair your vehicle is approximately ten hours.

WHAT YOU SHOULD DO: You should contact the nearest Mack Parts and Service Center and make an appointment. The trucks pneumatic system will be repaired at **no charge** to you. All Mack Parts and Service Centers have been sent a bulletin covering all the details required to perform the safety recall.

You can locate the closest Mack Parts and Service Center by going on line to <http://www.macktrucks.com/> and selecting "Dealer & Service Locations" or by calling our toll-free number: (800) 866-1177.

NOTICE REGARDING LEASED VEHICLES: If you are a Lessor of vehicles subject to this Notice, you have an obligation under Federal Law to provide a copy of this Notice to all Lessees within 10 days of your receipt of this Notice. Further, you must maintain a record, which identifies the Lessee(s) to whom you send a copy of this letter, the date you send this letter, and the Vehicle Identification Number(s) of the vehicle(s) that you have leased to that lessee. For purposes of this Notice, the term Lessor means: a person or entity that is the owner, as reflected on the vehicle's title, of any five or more leased vehicles (as defined in CFR Section 577.4), as of the date of notification by the manufacturer of the existence of a safety-related defect or non-compliance with a Federal Motor Vehicle Safety Standard in one or more of the leased motor vehicles.

OWNER RECALL RESPONSE CARD: The enclosed "Notice of Vehicle Recall" identifies your vehicle. If you no longer own the vehicle, please help us update our records by completing the "Vehicle Disposition Record" portion of the enclosed postage-free Notice of Mandatory Safety Campaign card and mailing it back to us.

**ASSISTANCE1
COMPLAINTS:**

If your vehicle has not been repaired within a reasonable time after delivering it to a Mack Parts and Service Center, please contact:

Mack Trucks Inc.
Regulatory Affairs Department,
P.O. Box 26115
Greensboro, NC 27402-6115
vtna.regulatoryaffairs@volvo.com

You may also submit complaints to the Administrator of the National Highway Safety Administration (400 Seventh Street, S.W., Washington DC 20590 or call the toll-free Auto Safety Hot Line at 1-888-327-4236 (TTY: 1-800-424-9153), or go to <http://www.safercar.gov> if you believe that Mack Trucks Inc. has failed to remedy the defect without charge, or has failed to remedy the vehicle within 60 days of the owners first tender to obtain repair following the earliest time that parts are available.

**PRE NOTIFICATION
REMEDIES:**

If you have previously paid for repairs as a result of this issue, you may be entitled to recovery of those expenses.

Submit copies of all documentation supporting your claim according to the rules specified in the "General Plan for Reimbursement of Pre-notification Remedies" provided in this mailing.

We regret any inconvenience this may cause to your operation, but hope you will appreciate our sincere efforts to demonstrate Mack's commitment to provide our customers with the best possible product.

MACK TRUCKS, INC.

General Plan for Reimbursement of Pre-Notification Remedies

Mack Trucks Inc. will administer this plan through its Corporate Regulatory Compliance Department.

The provisions of this plan set forth the procedures to be followed for reimbursing owners (claimants) for the costs associated with repairs performed prior to notification of a recall, to remedy safety defects and non-compliances.

Required Information:

If the claimant's Mack vehicle is affected by a recall campaign and the claimant had the problem corrected at their own expense prior to receiving notification of the recall, Mack Trucks will reimburse the claimant by check for the reasonable amount paid for the appropriate pre-remedy repairs (i.e. the cost of parts, labor, taxes and disposal fees) in accordance with the provisions set forth in this document. In order to process each claim, the claimant **MUST** submit the following documentation to support the request to the Regulatory Compliance Department as specified in the section titled "*Contact Information*":

- Claimant's name, mailing address, and telephone number; and,
- The recall number, title, and description; and,
- The complete 17 digit Vehicle Identification Number (V.I.N.); and,
- A notarized statement by the claimant that the pre-notification repair addressed the defect specified in the owner notification letter; and,
- A copy of the repair invoice or receipt for the repairs.
 - The invoice / receipt must provide the VIN, total amount paid (i.e. total amount of reimbursement requested by the claimant), and include a breakdown of the parts, labor, and other costs.

Limitation of Claims

Mack Trucks will consider all claims, but may deny all or part of the claim for any of the following reasons:

- The vehicle was not part of the recall;
- The repairs were performed more than one (1) year prior to the date, that Mack Trucks notified the National Highway Traffic Safety Administration or Transport Canada, that a safety related defect or non-compliance exists;
- The repairs were performed more than 10 calendar days after the last mailing of the initial customer notification letter, pertaining to the recall;
- The vehicle was still covered by warranty or extended warranty on the date of repair which would have provided a free repair;
- If the receipt / invoice is not itemized by parts & labor;
- If the repair did not address the safety defect or non-compliance that led to the recall;
- If the repair was not reasonably necessary to correct the safety defect or non-compliance that led to the recall;
- If the claim is fraudulent;
- If the repair was not of the same type (repair, replacement, and refund) as the recall remedy;
- If adequate documentation as described above is not submitted to the appropriate address specified in this plan in the section titled "*Contact Information*".

Contact Information

Submit copies of all documentation supporting your claim to:

Mack Trucks Inc.
Regulatory Compliance Department
Attn: Regulatory Compliance Administrator
P.O. Box 26115
Greensboro, NC 27402-6115

Claims will be processed within 60 days of receipt