

Clutch Air-Assist Cylinder Vent Relocation

M-413-006

(September 2007)

Valid for

Mack CXU,CHU,GU models

Case description

The clutch releases air-assist cylinder vents to atmosphere through a vent line, which is connected to the cylinder vent port and is routed along the clutch release cable. A sintered bronze filter is installed in the end of the vent line and is secured approximately mid-way up the cable. The purpose of the bronze filter is to prevent debris from entering the cylinder. Prior to this, the sintered bronze filter was installed directly in the cylinder vent port. With these two arrangements, however, the potential exists for moisture to be drawn into the cylinder, which can cause corrosion inside the cylinder resulting in sticking or binding clutch operation. To prevent this from occurring, the vent line can be relocated to the clutch cable mounting tube located on the cab bulkhead. Should sticking or binding clutch operation due to a corroded air-assist cylinder be encountered, the cylinder vent line can be relocated as outlined below.

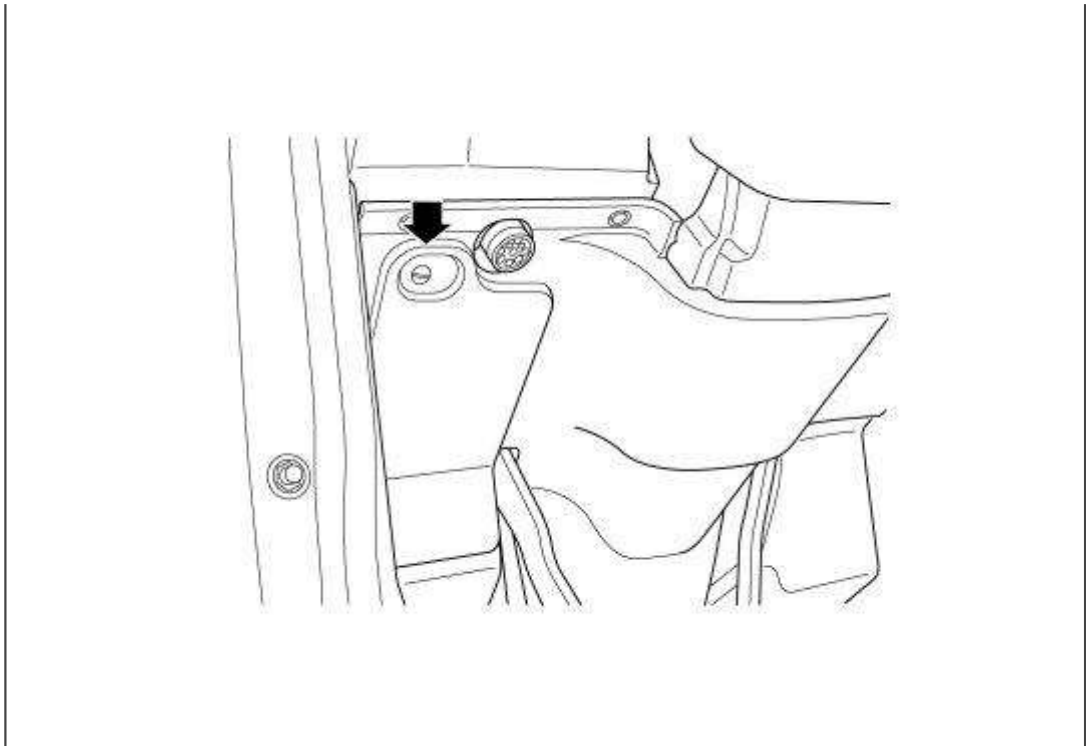
Note: Does not apply to Mack Trucks Australia.

Procedure

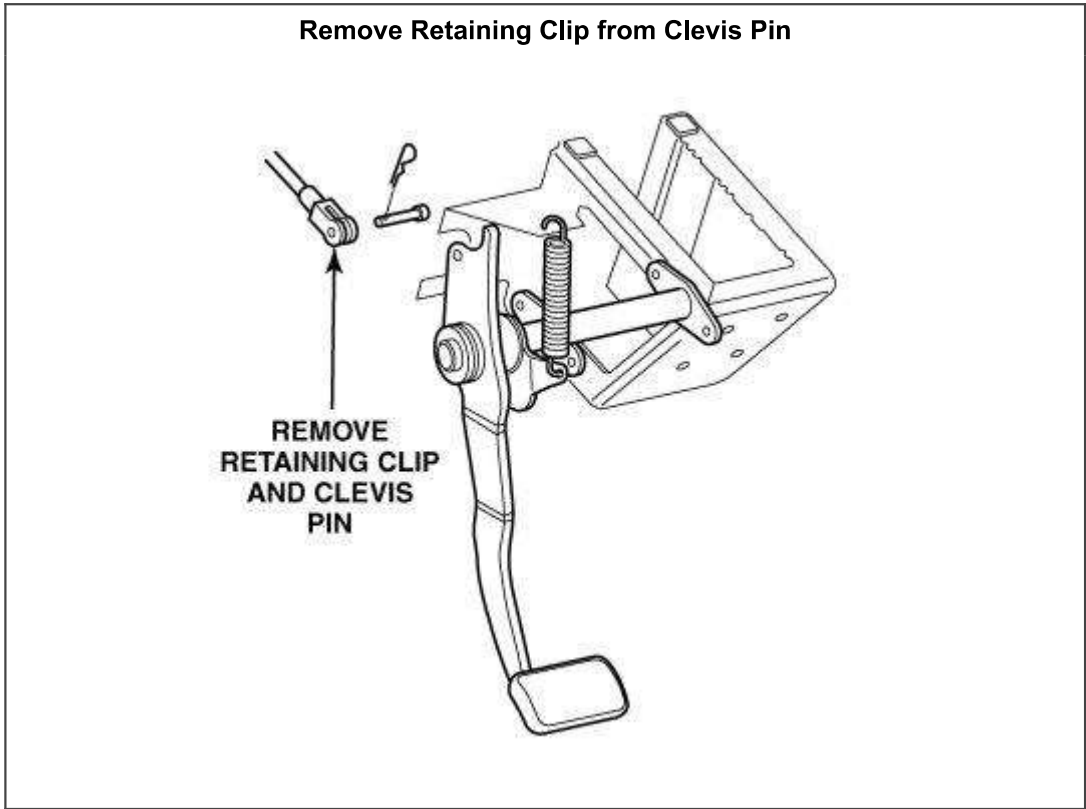
1. Secure the chassis for service, apply the parking brakes and block the wheels to prevent the vehicle from moving.
2. Cut the tie wraps that secure the existing air-assist cylinder to the clutch cable, and disconnect the line from the 90-degree fitting located in the cylinder vent port. Discard the vent line and sintered bronze filter.
3. Remove the access cover for the fuse/relay center, which is located under the instrument panel to the left of the clutch pedal.

Remove Fuse/Relay Center Access Panel



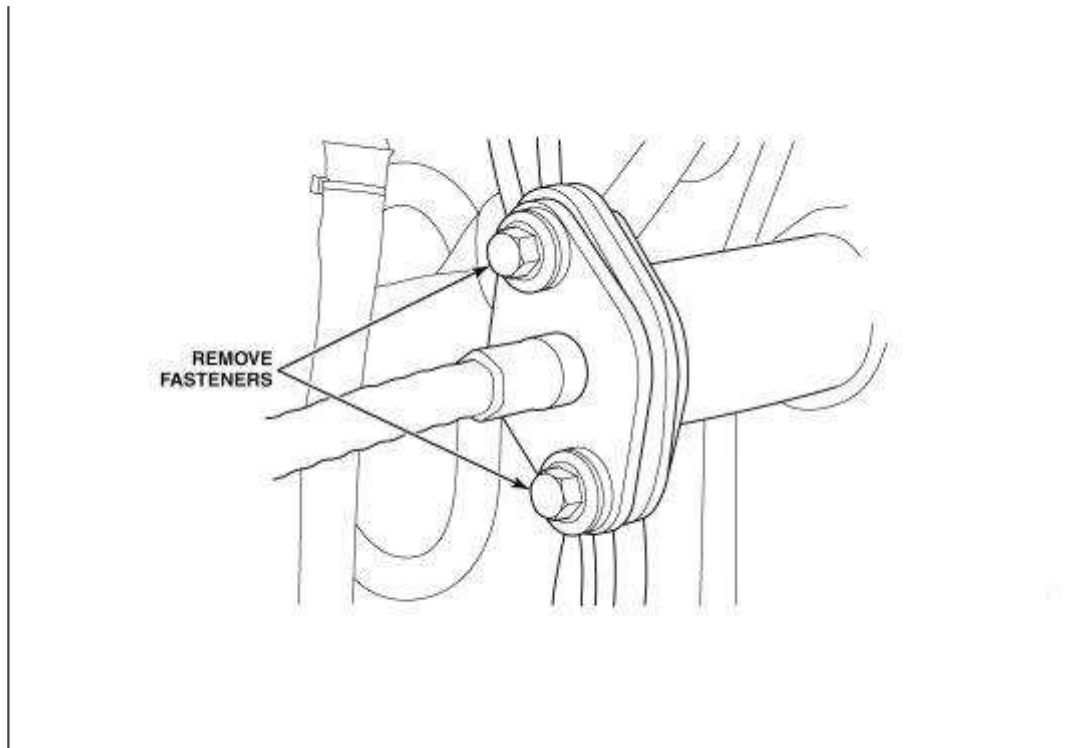


4. Remove the retaining clip from the clutch cable clevis pin and then remove the clevis pin from the clutch pedal and clevis.

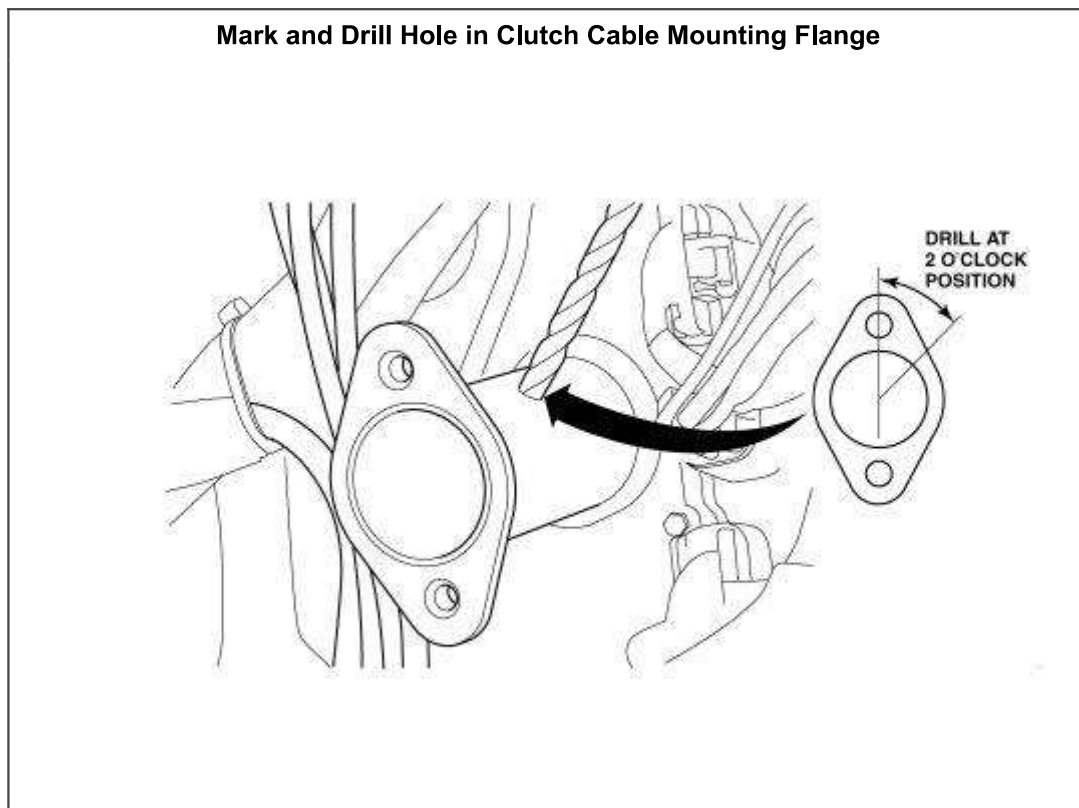


5. Remove the two fasteners that secure the clutch cable to the mounting flange, and then remove the clutch cable.

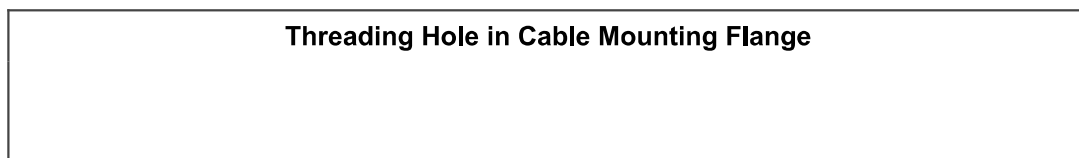


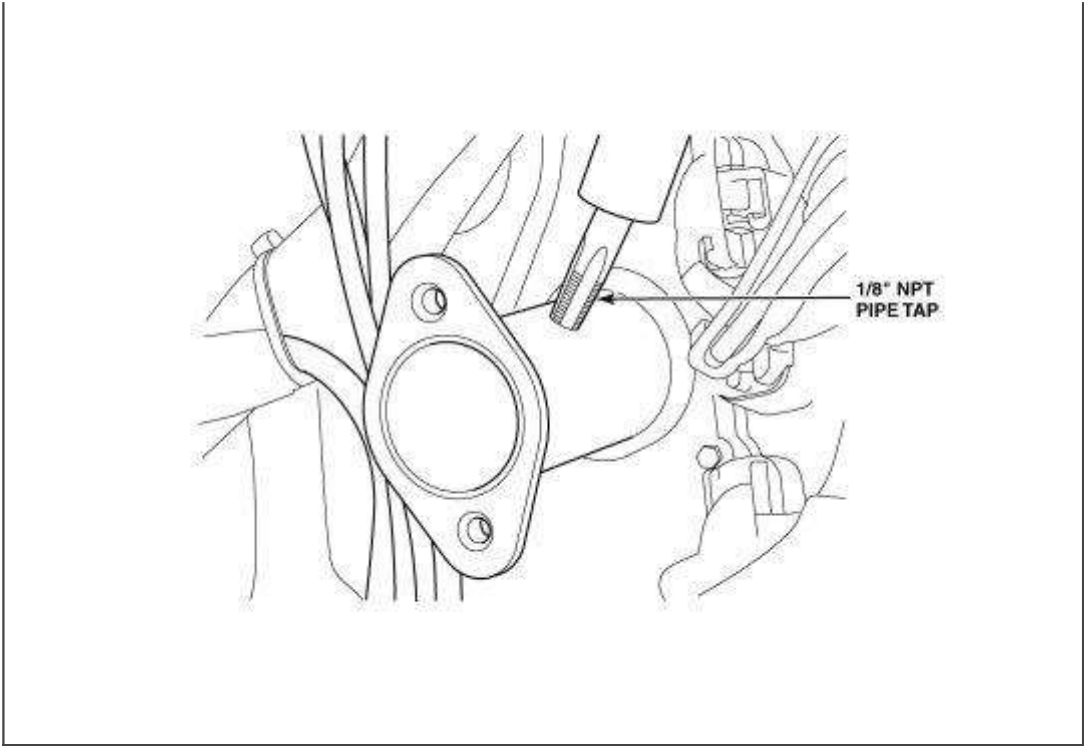


6. Mark the location on the clutch cable mounting tube, in the approximate 2:00 position (when facing the flange), 50.8 mm (2") to the rear of the flange mounting face. Drill a $2\frac{1}{64}$ " hole at the marked location.

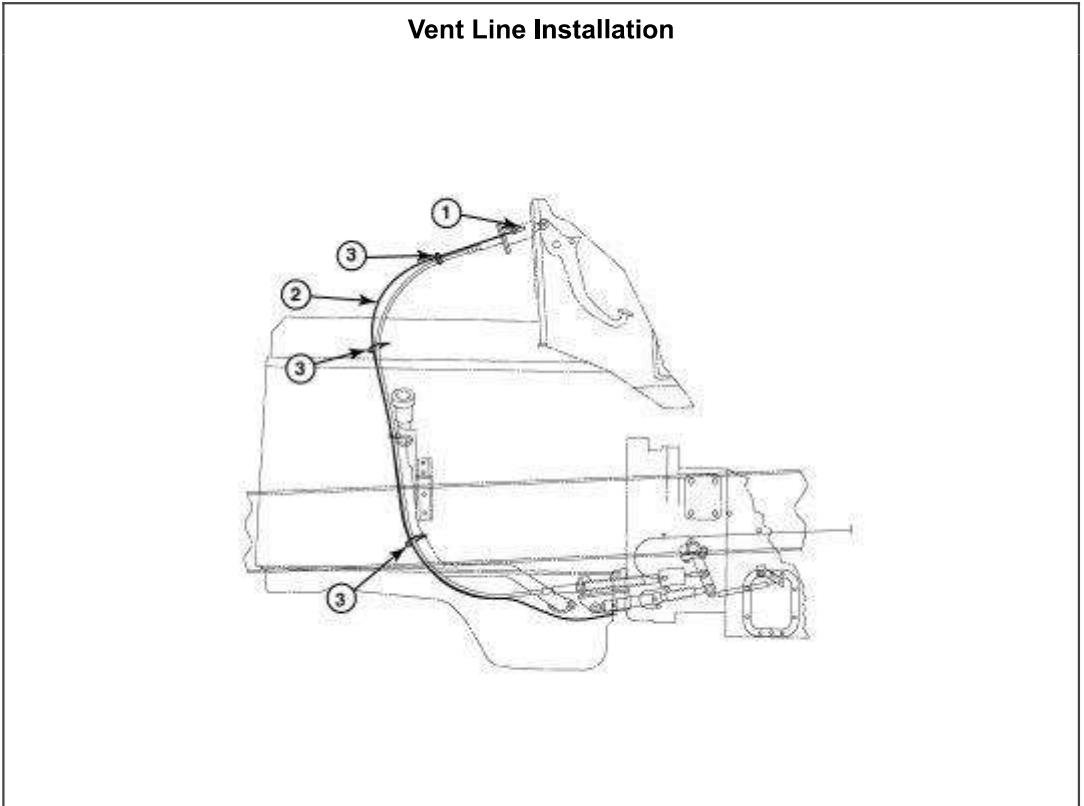


7. Tap threads in the hole with a $\frac{1}{8}$ " NPT tap for installation of a 90-degree elbow fitting. Ensure that the hole is not threaded too deep or too shallow. Being threaded too deep may not allow the elbow fitting to be properly tightened, or being threaded too shallow may prevent the fitting from being started in the hole.





8. Thoroughly clean the metal chips from inside the tube.
9. Apply pipe thread sealant to the threads of a 90 degree push-to-connect elbow fitting (part number 63AX54124), and then install the fitting to the clutch tube. When properly tightened, the fitting should be facing to the front.
10. Reinstall the clutch cable.
11. Connect a length of new plastic tubing (part number 101AX120RF), approximately 90" long, between the 90-degree fitting located in the exhaust port of the air-assist cylinder and the 90-degree fitting installed in the clutch mounting tube. Use tie wraps (part number 48RU2313) to secure the vent line to the clutch cable, and ensure that the cable or the vent line do not come into contact with any moving parts.



Key	Qty.	Part number	Description

1	1	63AX54124	Fitting, 90-degree elbow with 1/8" external pipe threads
2	1	101AX120RF	Tubing, 1/4", approximately 2286 mm (90") long
3	*	48RU2313	Tie wraps
* Quantity as required.			

12. Reinstall the fuse/relay center access panel.

Warranty Information

Reimbursement

This repair may be eligible for reimbursement if a product failure was experienced within time and mileage limits of the applicable Warranty coverage. Reimbursement is obtained via the normal claim handling process.

Claim Type (used only when uploading from the Dealer Bus. Sys.)

01

Labor Code

Primary Labor Code

313 1A 00 80 — 0.5 hr. —
Time allowed to relocate
clutch air-assist cylinder vent
line. Does not include "take
charge" time.

Issued by

Technical Service

Mack Trucks, Inc. engages in a continuous program of testing and evaluating to provide the best possible product. Mack Trucks, Inc., however, is not committed to, or liable for updating existing chassis.