



F.I. – Work Brake Valve Replacement

Release: 1**Technician Skill Level:** B**Revision Note:** 09/2026 Initial Release**Market:** North America**Service Category:** Service Department**Applicability:** Please refer to VDA+**Section:** Function Group 563**Description:**

Certain Mack LR model trucks with a dual drive, when the work brake is turned off, there is a 5 second window where the driver can shift gears with no service brake applied.

Concern:

Transmission could be put into gear without the service brake being applied.

Action:

Follow the instructions outlined in the document to relocate the Quick Release (QR) valve and add a double check valve.

Warranty Information

This repair is covered by an authorized Service Program. Reimbursement is obtained through the normal claim handling process.			
Claim Type (used only when uploading from the Dealer Bus. Sys.)			B
Labor Code		Description	Hours
Main Code	1720-16-09-01	Campaign, General (25 X 0.1)	2.5
Causal Part		20812943	
SCC Authorization Code		S5075	
Expiration Date		September 30, 2027	

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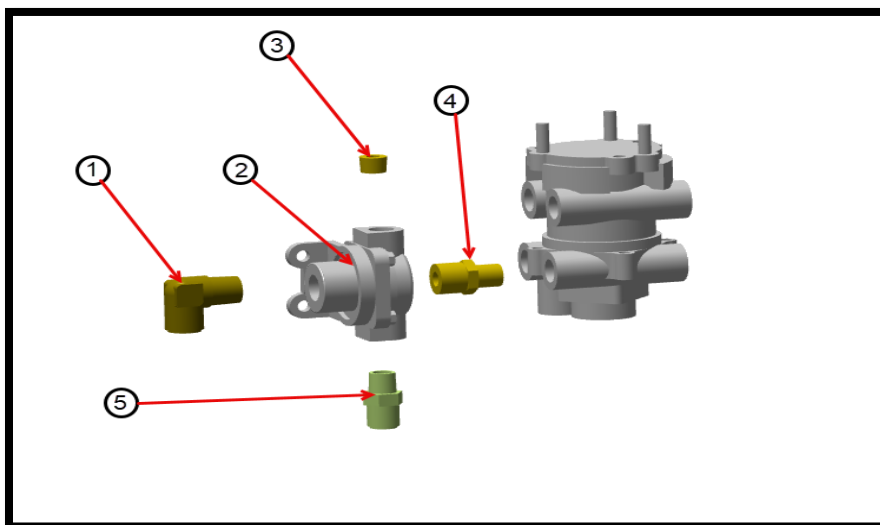
Parts Information

Order using the normal process. Fittings can be sourced locally if needed.

Part Numbers	Part Names	Quantity
24737096	Check Valve	1
26009198	90 deg fitting	1
3180120	1/2 – 3/8 Nipple	2

Repair Procedure

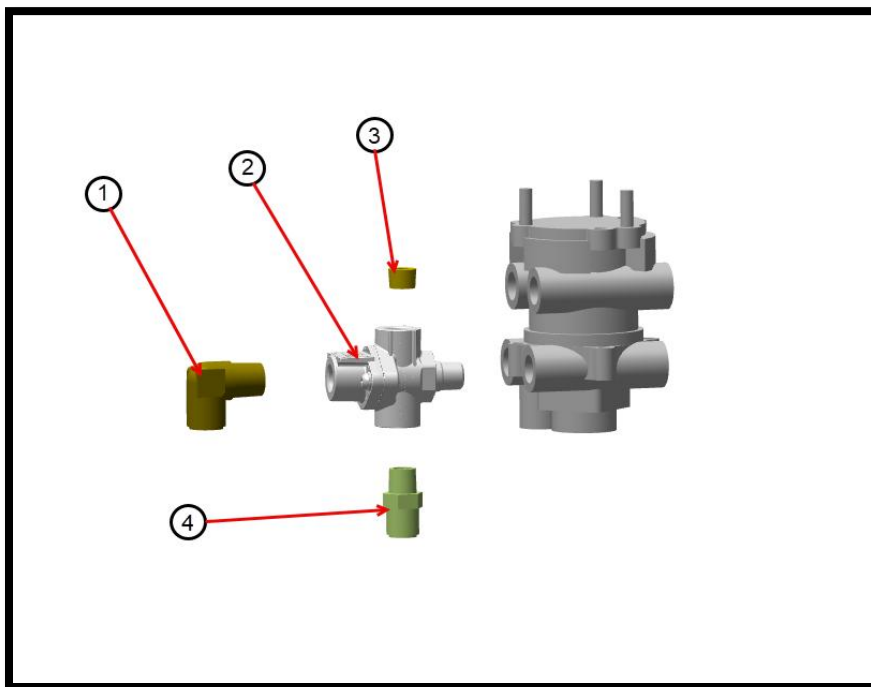
1. Secure the vehicle for service.
2. Locate the QR Valve on the right-side brake valve.
3. Remove the QR and discard fittings that are no longer required.



Item	Description	Disposition
1	½ NPT (90-Deg Fitting)	Discard
2	QR Valve	Keep for relocation
3	3/8 NPT (Plug)	Keep
4	3/8-1/2 NPT (Nipple)	Discard
5	3/8 NPT (Stright Fitting)	Discard

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4. Install the check valve **24737096** in the brake valve where the QR valve was removed.



Item	Part Number	Item description	Designation
1	26009198	3/8 NPT (90-Deg Fitting)	Install in port #12 of check valve
2	24737096	Check Valve	Install in port #22 of brake valve
3	Reuse from QR Valve	3/8 NPT (Plug)	Install in port #21 of check valve
4	Reuse from QR Valve	3/8 NPT (Stright Fitting)	Install in port #22 of check valve

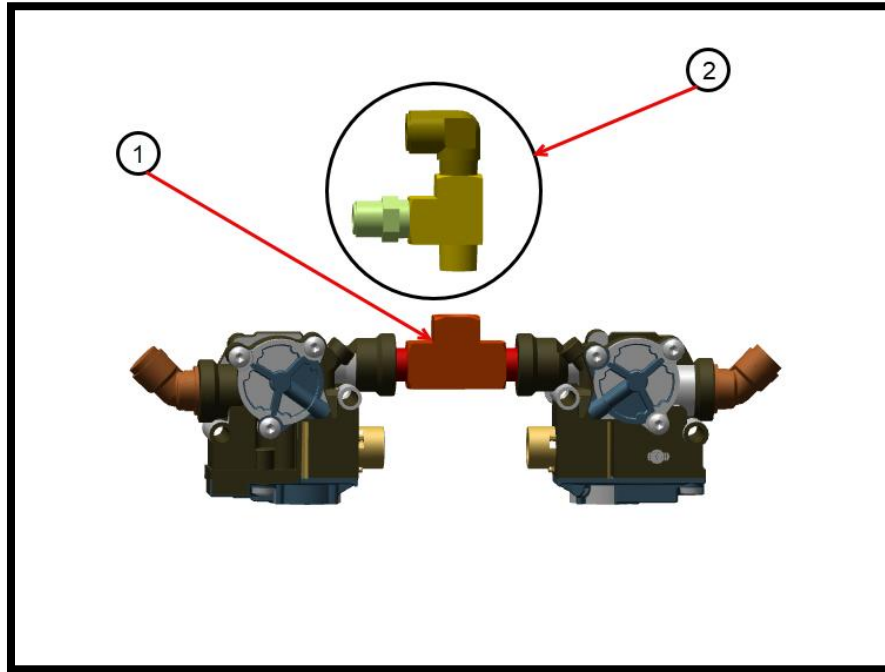
Torque Spec.

3/8 NPTF Fittings

38 ± 1.9 Nm (28 ± 1.4 lb_r-ft)

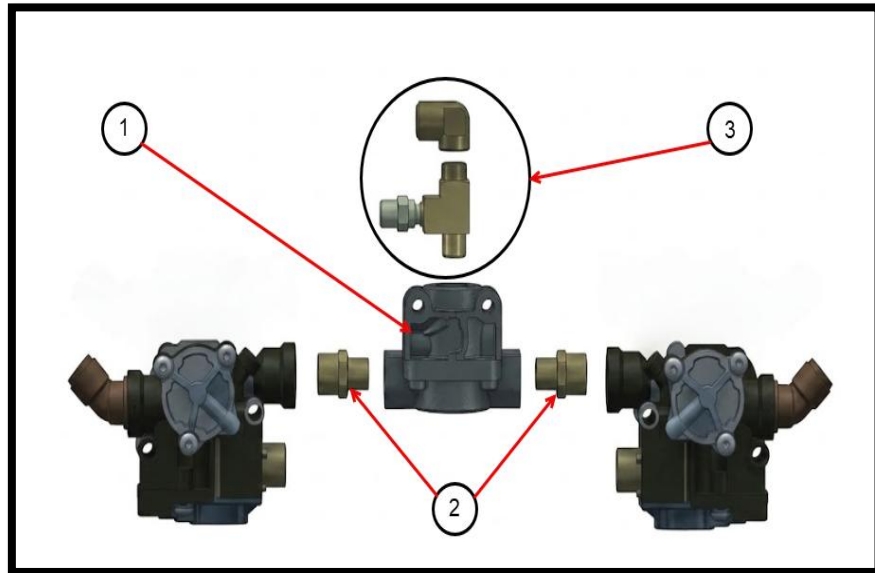
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5. Locate and remove the steering axle modulator valve assembly.
6. Remove the tee fitting and install the QR valve previously removed from the brake valve.



Item	Item description	Disposition
1	½ NPT (Tee Fitting)	Discard
2	Tee and fitting assembly	Keep

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Item	Part Number	Item description	Designation
1	Reuse	QR Valve	Install between the modulator valves
2	3180120	3/8 NPT-1/2 NPT (Nipple)	Install in between modulator and QR valve
3	Reuse	Tee and fitting assembly	Install in the supply port of QR valve

Torque Spec.	
3/8 NPT Fittings	38 ± 1.9 Nm (28 ± 1.4 lb _r ·ft)
1/2 NPT Fittings	68 ± 4.0 Nm (50 ± 3.0 lb _r ·ft)

7. Install the steer axle modulator valve assembly on the truck.
8. Air up system and check for leaks.
9. Release truck back into service.