



Service Parts Instructions

Camshaft Bracket and Slack Adjuster Replacement on Meritor Steer Axles with Cam Brakes

Applies to Peterbilt Vehicle Chassis
Identification Numbers

817628 to 817727 with Q Plus™ LX500 Cam Brakes,
824511 to 824520 with Q Plus™ LX500 Cam Brakes and
821001 with Q Plus™ Cam Brakes

Meritor Service Kits MPS-4764 and MPS-4765

Important Service Notes

Peterbilt and ArvinMeritor have determined that a brake and steering component interference condition exists with certain Q Plus™ and Q Plus™ LX500 steer axle cam brakes with unhandled slack adjusters.

Only vehicles with the following chassis numbers are affected: 817628 to 817727 with Q Plus™ LX500 cam brakes, 824511 to 824520 with Q Plus™ LX500 cam brakes, 821001 with Q Plus™ cam brakes.

How to Obtain Additional Maintenance and Service Information

Refer to Maintenance Manual MM-96173, Q Plus™ LX500 and MX500 Cam Brakes; and Maintenance Manual 4, Cam Brakes. To obtain these publications, call ArvinMeritor's Customer Service Center at 800-535-5560 or visit the Tech Library on our website at arvinmeritor.com.

How to Obtain Parts

Service Kits MPS-4764 and MPS-4765

Service kits MPS-4764 and MPS-4765 are used to retrofit the brake chamber brackets to eliminate the potential steering component interference condition. Use kit MPS-4764 for vehicles with Q Plus™ LX500 series brakes. Use kit MPS-4765 for vehicles with Q Plus™ series brakes only. To obtain these kits, call ArvinMeritor's Commercial Vehicle Aftermarket at 888-725-9355.

Disassembly

Remove the Camshaft Bracket and Slack Adjuster Assembly

ASBESTOS AND NON-ASBESTOS FIBERS

WARNING

Some brake linings contain asbestos fibers, a cancer and lung disease hazard. Some brake linings contain non-asbestos fibers, whose long-term effects to health are unknown. You must use caution when you handle both asbestos and non-asbestos materials.

WARNING

To prevent serious eye injury, always wear safe eye protection when you perform vehicle maintenance or service.

Park the vehicle on a level surface. Block the wheels to prevent the vehicle from moving. Support the vehicle with safety stands. Do not work under a vehicle supported only by jacks. Jacks can slip and fall over. Serious personal injury and damage to components can result.

Use the following procedure to disassemble the camshaft bracket and slack adjuster assembly. Perform this procedure carefully as the camshaft will not be removed.


1. Park the vehicle on a level surface. Block the wheels to prevent the vehicle from moving.
2. Raise the axle you are servicing and support it with safety stands.
3. Remove both clevis pins and retainer clips, or cotter pins, from the clevis.
4. Remove the air chamber from the bracket assembly.
5. Remove the snap ring on the end of the camshaft.
6. Remove the washers.
7. Remove the slack adjuster.

8. Remove the spacer washer.
9. Remove the four bracket mounting fasteners.
10. Remove the camshaft bracket assembly. Ensure that the camshaft, bushing and seals are not damaged during disassembly. Do not push the camshaft back into the brake assembly.

Assembly

Installing the New Camshaft Bracket and Slack Adjuster Assembly

Use the following information to install the service kit components for both Q Plus™ LX500 and Q Plus™ brakes.

1. Thoroughly clean the camshaft and spider mounting surfaces.
2. To prevent assembly damage, apply a liberal amount of synthetic grease compound from the service kit to the seal lips in the bracket assembly. Use kit part number 2297-X-7304.
3. Install a new O-ring onto the flange end of the bracket.
4. Carefully slide the bracket over the camshaft ensuring that the camshaft is not pushed into the brake.
5. Mount the camshaft bracket assembly to the spider with four new capscrew fasteners. Tighten to 65-105 lb-ft (88-142 N•m) using the tightening sequence illustrated below. Figure 1. 

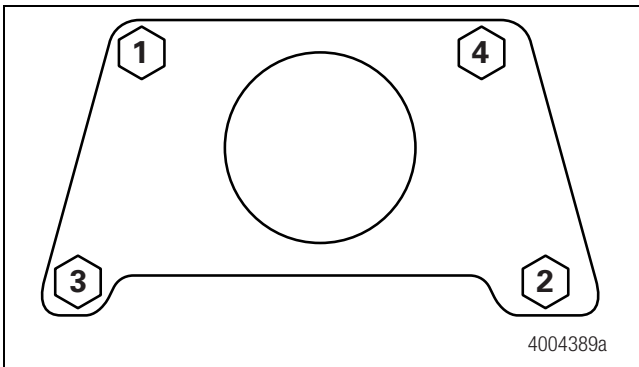


Figure 1

6. Apply a liberal amount of anti-seize compound to the camshaft splines. Use kit part number R580002.
7. Install the new camshaft washer. Refer to Figure 2, item number 7.

NOTE: No slack adjuster seal replacement is required for vehicles equipped with Q Plus™ brakes.


8. Install the new outboard slack adjuster seal. Refer to Figure 2, item number 8.

9. Install the new handed slack adjuster assembly obtained separately. Refer to the maintenance and service procedures in Maintenance Manual 4B, Automatic Slack Adjuster.
10. Install the new inboard, orange, slack adjuster seal. Refer to Figure 2, item number 9.
11. For vehicles equipped with Q Plus™ LX500 brakes, assemble the new spacing washers to achieve a 0.005-0.020-inch (0.127-0.508 mm) maximum end play.
12. For vehicles equipped with Q Plus™ brakes, assemble the new spacing washers to achieve a 0.005-0.060-inch (0.127-1.524 mm) maximum end play.
13. Install the new camshaft snap ring to retain the slack adjuster. Ensure that the camshaft rotates freely.
14. Perform the lubrication procedures in the next section.

Lubrication



Q Plus™ LX500 and Q Plus™ Series Brakes

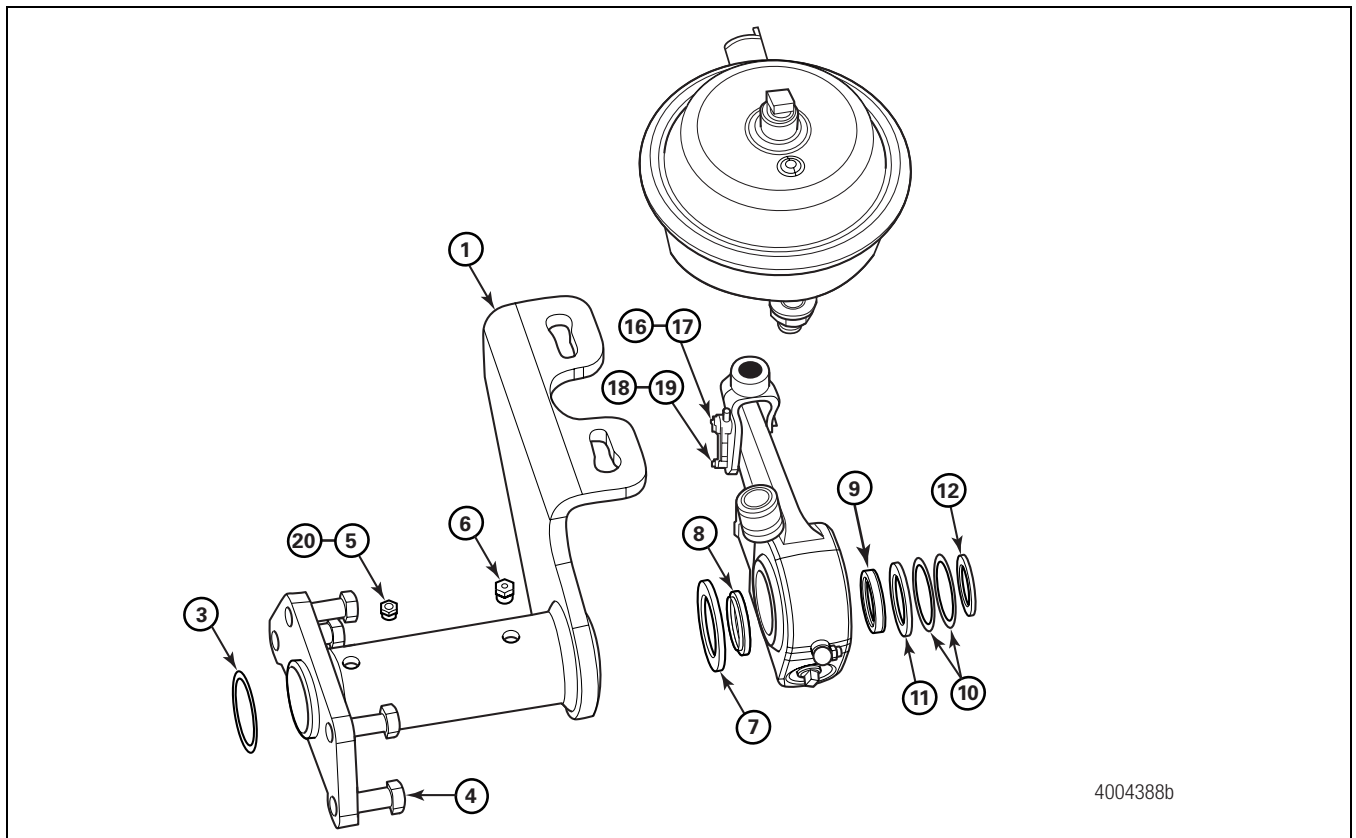
This lubrication procedure requires service kit MPS-4764 and applies to Q Plus™ LX500 series brakes only. For Q Plus™ brakes, refer to the brake lubrication procedures and guidelines in the applicable Peterbilt brake service manual.

1. Install the new grease fitting into the cam assembly housing. Refer to Figure 2, item number 20.
2. Install the new pressure relief fitting into the cam assembly housing. Refer to Figure 2, item number 6. Tighten to 45-180 lb-in (5-20 N•m). 

CAUTION

Q Plus™ LX500 cam brakes require synthetic grease specified by ArvinMeritor. Do not install standard brake grease or other chassis grease. Damage to components can result.

3. Use a manual grease gun to apply grease to the cam assembly housing grease fitting. Use kit part number 2297-X-7304. Continue to apply grease to the cam assembly housing until the grease visibly purges through the pressure relief valve in the camshaft tube.
4. Remove the grease fitting.
5. Install the new pipe plug into the brake camshaft tube. Tighten to 45-180 lb-in (5-20 N•m). 
6. Apply the lubrication interval tag supplied in the kit.
7. Install the air chamber using the new clevis pins and clips. Tighten the air chamber mounting bolts to 125-155 lb-ft (169-210 N•m). 
8. Adjust the slack adjuster. Refer to Maintenance Manual 4B, Automatic Slack Adjuster.
9. Test the vehicle brakes to ensure correct operation.



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Figure 2

Table A: MPS-4764 Kit Parts Description — Q Plus™ LX500 Brake

Item	Description	Part Number	Quantity
1	LH camshaft and chamber bracket	B87-3299Z6786	1
2	RH camshaft and chamber bracket	B87-3299A6787	1 (Not shown)
3	O-ring	1205-G-761	2
4	Capscrew	S-2810B-2	8
5	Pipe plug	1250-J-1284	2
6	Pressure relief fitting	1199-U-3947	2
7	Camshaft washer, thick	1299-H-4090	2
8	Outboard slack adjuster seal	1205-E-2527	2
9	Inboard slack adjuster seal, orange	1205-F-2528	2
10	Spacing washer, thin	1229-J-3130	4
11	Spacing washer, thick	1229-W-3117	4
12	Camshaft snap ring	1229-D-2942	2
13	Synthetic grease cartridge, 14 oz.	2297-X-7304	1 (Not shown)
14	Anti-seize compound tube, 0.5 oz.	R580002	4 (Not shown)
15	Instruction tag	2297-Z-7228	2 (Not shown)
16	Clevis pin	19X127	2
17	Clevis clip	2257C1173	2
18	Clevis pin	19X1116	2
19	Clevis clip	2257D1174	2
20	Grease fitting	1199-N-1860	2

Table B: MPS-4765 Kit Parts Description — Q Plus™ Brake

Item	Description	Part Number	Quantity
1	LH camshaft and chamber	B86-3299Z6786	1
2	RH camshaft and chamber	B86-3299A6787	1
3	O-ring	1205-G-761	2
4	Capscrew	S-2810B-2	8
5	Grease fitting	1199-N-1860	2
6	Camshaft washer, thick	1229-S-2697	2
7	Spacing washer, thin	1229-J-3130	4
8	Spacing washer, thick	1229-N-4590	4
9	Camshaft snap ring	1229-D-2942	2
10	Clevis pin	19X127	2
11	Clevis clip	2257C1173	2
12	Clevis pin	19X1116	2
13	Clevis clip	2257D1174	2

ArvinMeritor™

Meritor Heavy Vehicle Systems, LLC
 2135 West Maple Road
 Troy, MI 48084 USA
 800-535-5560
 arvinmeritor.com



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Printed in the USA

TP-0424
 Revised 03-04
 (16579/24240)