

Noisy Servotronic II Steering Racks –  
Revised Restricters/Transfer Pipes –  
Replacement Kits

MODEL  
1999-2000 MY XK Range  
1999-2000 MY V8 XJ Series  
VIN  
031303-A09646  
853936-F17957

**Issue:**

Some 1999-2000 MY XK and XJ vehicles within the above VIN ranges may experience complaints of high-pitched or metallic noises from the steering rack area. A transfer pipe kit has been made available to be installed as an alternative to replacing the steering rack. Vehicles manufactured after this VIN range are factory-equipped with the revised transfer pipes and the replacement kits are available as a service item.

The replacement kits consist of a short and long transfer pipe containing revised restricters. The pipes **must be installed in pairs** (Illustration 1) to ensure the correct operation of the steering rack.

**Action:**

In cases of customer complaint only on a 1999-2000 MY XK and XJ vehicles within the above VIN ranges, take the following action.

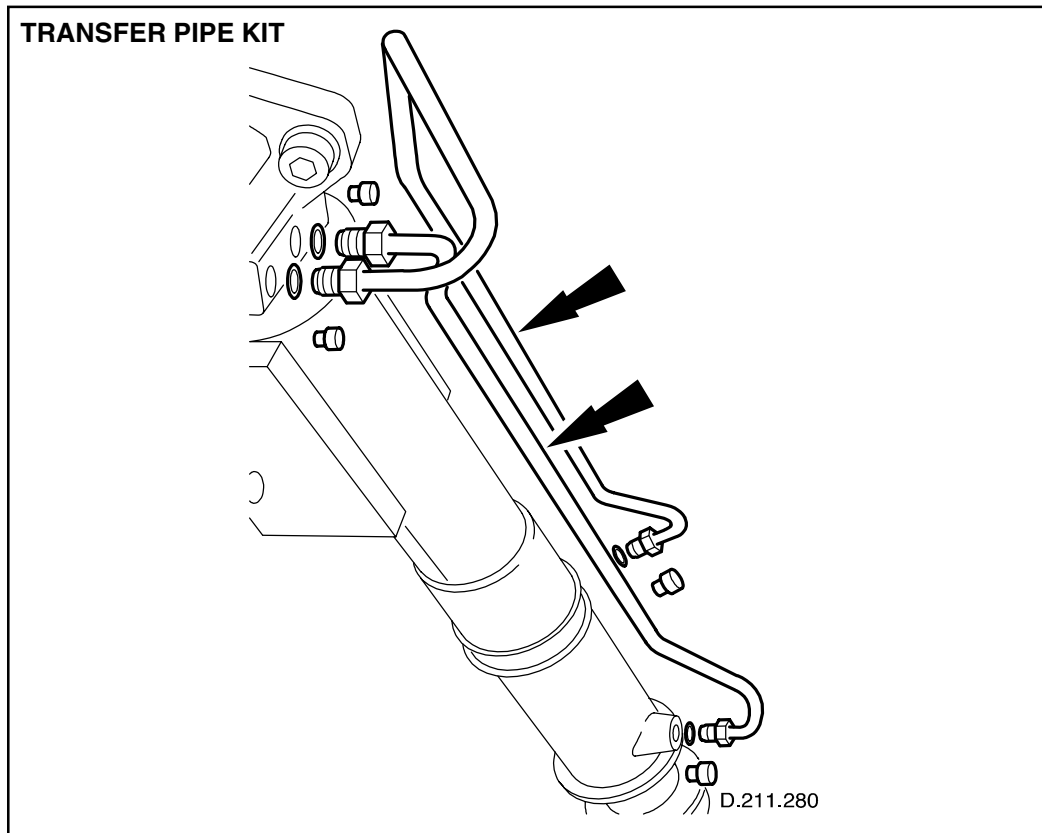


ILLUSTRATION 1

To install the transfer pipe replacement kits, follow the procedure below.

## WORKSHOP PROCEDURE

1. Disconnect the car battery.

**Note:** Before disconnecting the battery, note customer preferences such as sport mode switch, cruise control, clock settings, radio settings, etc.

**⚠ Warning:** After the battery has been disconnected, wait for one minute for the air bag system to disarm.

2. Raise the vehicle on a lift.
3. Center the steering wheel ensuring the wheels are facing forward.

**Note:** Check that the steering rack is centered by aligning the centering cap on the pinion with the locator on the pinion casting.

4. Loosen and remove the lower column clamp bolt at the pinion.
5. Mark the position of the lower column to rack centering cap for assembly purposes.
6. Reposition the lower column upwards.
7. Disconnect the connector for the steering rack transducer
8. Cut and remove the tie straps securing the PAS return pipe and transducer harness to steering rack.
9. Displace and remove the PAS feed pipe rubber insulators.
10. Clean the steering rack around the transfer pipes and feed and return union nuts.
11. Loosen and remove the PAS pipes to pinion housing retaining plate securing bolt.
12. Reposition the retaining plate down feed pipe.

**Note:** The down feed pipe must remain captive while being repositioned.

13. Place the drain pan under the steering rack.
14. Displace and reposition the PAS pipes from the pinion housing ensuring that the PAS fluid will run into the drain tin.
15. Remove the PAS feed and return pipe to pinion O-ring seals.
16. Undo and remove the steering rack and pinion mounting securing bolts.
17. Lower the steering rack and route the PAS return pipe past the pinion to steering rack pipes.
18. Loosen the transfer pipe union nuts.
19. Disconnect and remove the transfer pipes from the steering rack and place aside.
20. Lubricate the O-rings on the new transfer pipes and install to the steering rack.

**Note:** The replacement transfer pipes are to be tightened to 7.9 Nm +1 Nm.

21. Raise and align the steering rack to the securing holes in the crossmember while routing the PAS return hose behind the transfer pipes.

22. Install and tighten the steering rack mountings on the cross member securing bolts.
23. Place new O-rings to the PAS front return and feed pipes, lubricate and reinstall.
24. Install and fully seat the return and feed pipes into the pinion housing.
25. Reposition and align the PAS pipes retaining bracket.
26. Install and tighten the PAS pipe retaining bracket securing bolt.
27. Clean any spillage from the steering rack area.
28. Reposition and install the steering rack feed pipe rubber insulators.
29. Install and tighten the tie straps to secure the return pipe and transducer harness to the steering rack.
30. Cut the end from the tie straps.
31. Reposition and connect the lower column downwards to the steering rack pinion (to the same position as previously marked).
32. Install and tighten the lower column securing bolt.
33. Connect the steering rack transducer connector.
34. Top up the PAS reservoir.
35. Reconnect the car battery.
36. Reset customer preferences such as sport mode switch, cruise control, clock settings, etc.
37. Start the engine and turn the steering wheel lock-to-lock to bleed the system.
38. Stop the engine, check and top up the PAS reservoir.

### Parts Information:

<u>DESCRIPTION</u>	<u>PART NUMBER</u>
Left Hand Drive Transfer Pipe Kit	JLM 21603

### Warranty Information:

<u>FAULT CODE</u>	<u>R.O. NUMBER</u>	<u>DESCRIPTION</u>	<u>TIME ALLOWANCE</u>
GB BG 42	57.91.20	Install transfer pipe kit	0.85 hrs.