

**S-TYPE**

DATE 03/00

S211-01

SERVICE

TECHNICAL BULLETIN**Noise From P.A.S. –
Replace Check Valve**MODEL 2000 MY
S-TYPE

VIN L00600-L06869

Issue:

Some 2000 MY S-TYPE vehicles within the above VIN Range may experience a whine or hissing noise from the Power Assisted Steering (PAS) System, with the engine running and the steering off-center. Replacing the check valve located in the pinion housing should clear the problem.

This concern only affects vehicles in the VIN range L00600 - L06869

On later vehicles, the modified check valve has already been introduced in production.

Action:

In case of a Customer Complaint of a whine or hissing noise from the PAS, perform the following repair:

1. Position the vehicle on a 4-post lift. Open the hood and place covers over the fenders.

▲ Caution: Absolute cleanliness is essential during the following procedure to prevent dirt from entering the P.A.S. system. Clean the pinion housing and the high and low pressure fluid pipes before continuing.

2. Disconnect the top steering fluid pipe from the pinion housing and allow all fluid to drain. Discard all drained fluid.
3. Remove the stepped adapter nut into which the pipe union nut was threaded.
4. Extract the check valve from the pinion housing.
5. Insert the replacement check valve (which can be identified by **not** having a hole through its center). When in position, the copper-colored spring should **not** be visible.
6. Remove and discard the existing "Teflon" seal from the stepped adapter nut.
7. Lubricate a **new** seal with P.A.S. fluid. Install the new seal (Part No. XR8 5010) on the stepped adapter nut using the largest of the seal replacers from Special Tool Set 211-D027. (Instructions for using this Special Tool are illustrated in JTIS, Chassis, 211-02 Steering Gear, Removal and Installation, 57.40.34).
8. Reinstall the stepped adapter nut.
Torque for adapter nut: 33 Nm.
9. Remove and discard the O-ring seal from the pipe union nut.

10. Lubricate a **new** O-ring seal with P.A.S. fluid and fit it to the pipe union nut.
11. Connect the pipe to the pinion housing and tighten the union nut.
Torque for union nut: 25 Nm.
12. Refill the P.A.S. reservoir, using **new** fluid, and bleed the system, following the procedure detailed in JTIS Section 211-00, General Procedures, System Bleeding.
Note that a vacuum pump and adapter (Special Tool 416-001-01) are required.

Note: Failure to perform the bleeding procedure correctly, allowing air to remain in the system, can result in noisy operation and/or shuddering to be felt through the steering wheel.

It is **not** necessary to replace the P.A.S. reservoir during the above procedure.

Parts Information:

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Valve Repair Kit	JLM 21299	1
P.A.S. Fluid WSA-M2C195A 1 liter	JLM 20772	1
<u>Valve Repair Kit Contains:</u>		
Check Valve	-	1
O-ring - High Pressure Pipe Union Nut	-	1
Teflon washer - Adapter Nut	-	1

The above items are not available separately.

Warranty Information:

<u>FAULT</u>	<u>R.O.</u>	<u>DESCRIPTION</u>	<u>TIME</u>
<u>CODE</u>	<u>NUMBER</u>	<u>DESCRIPTION</u>	<u>ALLOWANCE</u>
GB BB 42	57.91.19	Replace Check Valve	0.65 hrs.