V8 XJ Series/XK8

600-03

# AGUAR

# **TECHNICAL BULLETIN**

Part-Load Engine Breather – Partial Blockage of Restrictor – Scheduled Cleaning – Service Action S474 MODEL 1997-2001 MY XK8 Range 1998-2001 MY V8 XJ Series VIN 001001-**A13614** 812256-**F25708** 

Remove and destroy Bulletin 600-03, amended 11/00. Replace with this Bulletin. Revisions are marked with a bar and in **bold text**.

### Issue:

Jaguar vehicles with the V8 engine, can experience partial blockage of the restricter in the engine part-load breather during normal service. This blockage would restrict the correct operation of the engine breather system.

Until further notice, Jaguar Cars is introducing a routine cleaning procedure for this restricter. Initially this procedure should be performed at the first service opportunity on any XK8 or V8 XJ Series vehicle, that has already covered more than 10,000 miles (16,000 Km). This cleaning procedure will then be performed at scheduled maintenance intervals of 10,000 miles (16,000 Km). The frequency of this cleaning procedure is listed below.

| PRESENT                           | FIRST                                      | SUBSEQUENT   |
|-----------------------------------|--|--|
| <b>ODOMETER</b>                   | CLEANING                                   | CLEANING   |
| READING                           | PROCEDURE                                  | PROCEDURES   |
| Under 10,000 miles<br>(16,000 Km) | 10,000 mile Routine Service<br>(16,000 Km) | Every 10,000 mile scheduled<br>maintenance there after (16,000 Km) |
| Over 10,000 miles<br>(16,000 Km)  | First Service Opportunity                  | Every 10,000 mile scheduled<br>maintenance there after (16,000 Km) |

# Action:

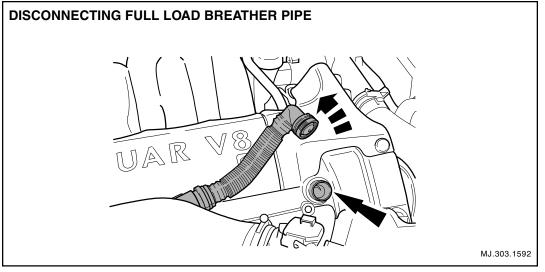
Ensure that this routine cleaning procedure is put into effect on all Jaguar vehicles **within the above VIN ranges** equipped with V8 engines.

Once the warranty expires on a vehicle covered by this service action, the cleaning procedure should continue to be included in all scheduled maintenance visits at multiples of 16,000 Km (10,000 miles).

# PROCEDURE

- 1. Open the hood. Cover the fenders with protective fender covers.
- 2. On normally aspirated engines, remove the engine cover from the left cylinder bank.
- 3. Start the engine.





**ILLUSTRATION 1** 

- 4. Disconnect the full load breather line on the right camshaft cover, (Illustration 1).
- 5. Hold a small piece of paper (approximately 60mm x 60mm) over the breather stub pipe. If the paper is sucked to the stub pipe proceed to step 6.

On AJ 26 engines, if the paper is not sucked to the stub pipe, clean the throttle butterfly and bore (Refer to Technical Bulletin 310-06, Amended 10/00), then proceed to step 6. This does not apply to AJ27 engines.

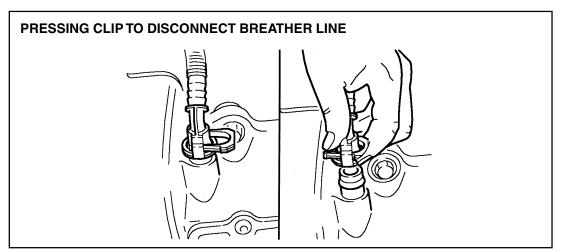
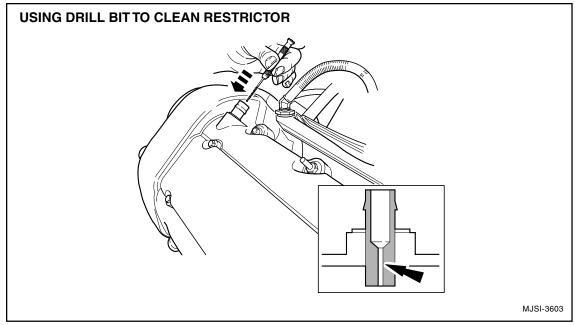


ILLUSTRATION 2

**Note:** Failure to clean the throttle butterfly and bore on AJ 26 engines may result in engine start/driveability issues.

6. Depress the retaining clip (Illustration 2) of the connector of the part-load breather line, allowing the line connector to be disconnected from the breather stub on the left camshaft cover.



**ILLUSTRATION 3** 

 Insert a 3/32" (2.5 mm) diameter drill bit in a hand-held pin chuck such as Snap-on Tools® Part No. YA 806 (Illustration 3). Verify that the drill bit does not exceed 3/32" (2.5 mm) diameter.

**A** Caution: Do not use a power drill under any circumstances. The drill bit must always be turned by hand only. Using a power drill can damage the restricter or the breather stub which needs to provide a good seal to the connector of the flexible breather line.

**A** Caution: Do not allow the diameter of the restricter to increase. Use a micrometer to verify that the diameter of the drill bit does not exceed 0.098 inch (2.5 mm.).

8. Carefully push the drill tip into the breather stub and through the restricter while slowly rotating the drill to clear any deposits that may have accumulated inside the restricter. The top end of the restricter is approximately 30 mm below the tip of the line stub and extends for an additional 5 mm into the camshaft cover.

As a result, the tip of the drill bit must penetrate into the stub at least 40 mm to ensure penetration through the entire length of the restricter. No damage will occur if the tip of the drill bit penetrates 45 mm.

If available, use a 'long flute' type drill bit. - The additional length of flutes and shank will provide more clearance from surrounding components to ease rotation of the pin chuck and drill.

- 9. When the drill can be turned freely, all deposits have been cleared from the restricter.
- 10. Remove the drill bit from the restricter and line stub.



- 11. Reconnect the breather line connector to the breather stub, checking first that the two O-rings are in place in the connector. Engage the connector retaining clip.
- 12. On normally aspirated engines, reinstall the engine cover on the left bank, ensuring that all fasteners are fully engaged.
- 13. On all vehicles, remove the fender covers and close the hood.

Note: <u>Always use a pin chuck to hold the drill bit securely</u>. The risk of using a drill bit held only in the fingers is that if the drill bit is allowed to slip through oily fingers completely into the breather stub and restricter, it would be necessary to remove the camshaft cover to retrieve the drill bit.

#### Tools:

A suitable pin chuck (pin vise) for this application is available as Snap-on Tools® Part No. YA 806

#### Warranty Information:

#### Service Action S474

| VEHICLE   | SUMMARY<br><u>CODE</u> | R.O.<br><u>NUMBER</u> | DESCRIPTION<br>ALLOWANCE                   | <u>TIME</u> |
|---|------------------------|-----------------------|--|-------------|
| XK8<br>1997- <b>2001</b> MY<br>XK8<br>VIN 001036-<br><b>A13614</b><br>Model codes 28<br>2840<br>1998- <b>2001</b> MY<br>V8 XJ Series<br>VIN 812256-<br><b>F25708</b><br>Model codes 28<br>2851, 2853, 291<br>2953 | 11,                    | 12.91.96              | Clear restrictor in the part load breather | 0.10 hrs.   |