



Sedan Range

DATE 8/97

03.1-10

SERVICE

## TECHNICAL BULLETIN

### Intermittent Poor Idle – Carbon Deposits On Exhaust Valves – Repair Procedure

MODEL 1995-97 MY  
XJR Sedan  
VIN 720001-792388

#### ISSUE:

Some 1995-97 MY XJR vehicles within the above VIN range may experience intermittent poor idle. The condition can be caused by a buildup of carbon deposits on the exhaust valves and stems. The deposits cause the valve stem to become sticky, which may result in the valves failing to seat fully.

The condition is most likely to occur on vehicles which are frequently driven at low speed, such as in towns or cities. Highway driving can then cause the condition to clear up significantly as carbon deposits are removed. When the vehicle is again driven at low speed for prolonged periods, the condition can occur again as carbon deposits build up again.

“Carbon cutter” exhaust valves entered production beginning with VIN 792389. These exhaust valves are manufactured with a 90 degree angle at the leading edge of the stem which is designed to scrape off carbon as it builds up.

#### ACTION:

Verify the customer complaint by driving the vehicle at low speed. Once the condition occurs, drive the vehicle at extended highway speeds. If the vehicle behaves as described above, **make a copy** of the AJ16 Supercharged Rough Idle Evaluation Form (page 3) and complete the checks listed on the form. Rectify any problems identified by this process. If all readings are within specifications, install “carbon cutter” exhaust valves. Submit the copy of the form to Jaguar Cars Product Investigation (fax 201-818-9763) and keep a copy with the vehicle file in accordance with Jaguar Warranty Policies.

#### INSTALLING “CARBON CUTTER” EXHAUST VALVES

Refer to Section 4.5 “Cylinder Head, Overhaul” on page 16 of the AJ16 Engine Service Manual to remove and install exhaust valves.

**PARTS INFORMATION:**

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
"Carbon cutter" exhaust valve	NBD 2532AA	12

**WARRANTY INFORMATION:**

<u>FAULT CODE</u>	<u>R.O. NUMBER</u>	<u>DESCRIPTION</u>	<u>TIME ALLOWANCE</u>
AD GC NW	12.29.64	Install "carbon cutter" exhaust valves	12.70 hrs
	10.10.10	Drive in/drive out	0.15 hrs.

**WARRANTY POLICY:**

The checks identified on the rough idle form must be completed and the results recorded and attached to the hard copy of the repair order. Jaguar will not pay for come-back repairs as a result of misdiagnosis.



**AJ-16 SC ENGINE ROUGH IDLE  
EVALUATION REPORT  
FAX TO PRODUCT INVESTIGATION DEPT.  
201-818-9763**

Dealer Name \_\_\_\_\_ Dealer No. \_\_\_\_\_ Date \_\_\_\_\_

VIN \_\_\_\_\_ Mileage \_\_\_\_\_ Engine No. \_\_\_\_\_

Repair Order No. \_\_\_\_\_ Customer Complaint \_\_\_\_\_

1 - Check for DTCs

DTC # \_\_\_\_\_ Description \_\_\_\_\_  
 DTC # \_\_\_\_\_ Description \_\_\_\_\_  
 DTC # \_\_\_\_\_ Description \_\_\_\_\_

2 - Fuel Pressure (3.7 bar [53.7 psi] nominal pump delivery)

Vacuum Line connected \_\_\_\_\_ PSI      Vacuum Line Disconnected \_\_\_\_\_ PSI

3 - Check for Vacuum Leaks     O.K       Rectified

4 - Check for Intake Air Restrictions     O.K.       Rectified

5 - Compression Test

Cylinder pressure should be 9.5 - 11.0 bar (137.8 - 159.5 PSI) with all spark plugs removed, throttle fully open, engine at operating temperature, and minimum cranking speed of 300 rpm.

Maximum difference between cylinders 1.1 bar (15.95 PSI)

#1 \_\_\_\_\_ #2 \_\_\_\_\_ #3 \_\_\_\_\_ #4 \_\_\_\_\_ #5 \_\_\_\_\_ #6 \_\_\_\_\_

6 - Leak Down Test (%)

#1 \_\_\_\_\_ #2 \_\_\_\_\_ #3 \_\_\_\_\_ #4 \_\_\_\_\_ #5 \_\_\_\_\_ #6 \_\_\_\_\_

Repairs previously performed:

\_\_\_\_\_  
 \_\_\_\_\_  
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