ERRATA

WITH REFERENCE TO SERVICE BULLETIN JD 02/92, ITEM 16, THE FOLLOWING IS A CORRECTION TO THE FAULT DIAGNOSIS PROCEDURE ITEM:

"FUEL GAUGE ALWAYS READS EMPTY"

PLEASE NOTE, DURING THE CHECK PROCEDURE DETAILED, THE LOW FUEL WARNING LIGHT WILL ALSO REMAIN ILLUMINATED WHEN THE UPPER WIRE IS CONNECTED TO GROUND TO CHECK THE GAUGE NEEDLE MOVEMENT. THE CURRENT BULLETIN ONLY STATES THAT THIS WILL OCCUR WHEN DISCONNECTING THE UPPER WIRE TO CHECK IF THE GAUGE READS EMPTY.

XJ6 & XJ-S

ITEM: 27

00 WARRANTY CODE BOOK

To enable dealers to diagnose customer concerns of "brake pull" accurately, a new 4th digit code of "R" has been introduced into sections 6E and 6J of the XJ6 Warranty Code Book and section 6J of the XJ-S Warranty Code Book.

Dealers should amend their code books immediately to reflect this addition.

XJ6 3.2 & 4.0

ITEM: 28

03 REPAIR OPERATION TIME AMENDMENT

An error has been discovered within the XJ6 Repair Time Schedule Section 30-15, Exhaust Manifolds. The incorrect times have been issued and affect 3.2 and 4.0 catalyst non-EGR vehicles only. The correct times are as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-15-09</td>
<td>Exhaust Manifold Heatshield – Renew</td>
<td>0.20 Hrs</td>
</tr>
<tr>
<td>30-15-12</td>
<td>Exhaust Manifold Gasket – Engine Set – Renew</td>
<td>1.15 Hrs</td>
</tr>
<tr>
<td>30-15-20</td>
<td>Front Exhaust Manifold Gasket – Renew</td>
<td>0.95 Hrs</td>
</tr>
<tr>
<td>30-15-21</td>
<td>Rear Exhaust Manifold Gasket – Renew</td>
<td>1.00 Hrs</td>
</tr>
<tr>
<td>30-15-36</td>
<td>Front Exhaust Manifold – Renew</td>
<td>0.95 Hrs</td>
</tr>
<tr>
<td>30-15-37</td>
<td>Rear Exhaust Manifold – Renew</td>
<td>1.00 Hrs</td>
</tr>
<tr>
<td>30-15-38</td>
<td>Exhaust Manifold – Engine Set – Renew</td>
<td>1.15 Hrs</td>
</tr>
</tbody>
</table>

Please amend your Repair Time Schedules accordingly.

No other times are affected.
12 REVISED GASKET AND FIXING BOLT (FASTENER) PACKAGE

A revised gasket and fastener package has been introduced on production for V12 engines to overcome complaints of oil leaks in service.

The package was fitted from the following engine numbers:

<table>
<thead>
<tr>
<th>Engine Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7P 67281</td>
<td>S. III</td>
</tr>
<tr>
<td>8S 86317</td>
<td>XJ-S</td>
</tr>
<tr>
<td>8W 10641</td>
<td>XJR-S 6.0L</td>
</tr>
</tbody>
</table>

The gaskets and fasteners are available from Jaguar Parts Operations and are all able to be retro-fitted to earlier engines. Where specified below, the correct fasteners MUST be used. The new fasteners are designed to reduce torque relaxation.

Part numbers and fitting details are as follows:

Oil filter mounting gasket: EBC 9624 replaces EAC 6337. EBC 9624 should be fitted without RTV sealant.

Sump gasket: EBC 9623 replaces EAC 7251. EBC 9623 should be fitted without RTV sealant and must only be used with fasteners JZS 100033 and JZS 100035 in place of C 37175/4 and BH 505141/J, respectively. The fasteners should be torqued to 21-27 Nm. The dished serrated washer C 30075/2 should not be used.

Sump sandwich plate gasket: EBC 9637 replaces EAC 7252. EBC 9637 should be fitted without RTV sealant on split lines between the cylinder block and the timing cover and must only be used with fasteners JZS 100034 and JZS 100035 in place of SH 505081/J and BH 505141/J respectively. The fasteners should be torqued to 21-27 Nm. The dished serrated washer C 30075/2 should not be used.

"A" bank cam cover gasket: EBC 9627 replaces C 29428. EBC 9627 must only be used with M6 bolts, Pt No FS 106251/J in place of SN 106251/J, torqued to 9.5-11.5 Nm.

"B" bank cam cover gasket: EBC 9628 replaces C 29429. All other details are as for the "A" bank cam cover gasket.

NOTE: RTV sealant should continue to be used on the rubber half-round seal located at the rear of the cam carrier.

Water rail gasket: EBC 9634 replaces C 30344. EBC 9634 should be fitted without RTV sealant.

Throttle body gasket: EBC 9635 replaces EAC 9759. EBC 9635 should be fitted without RTV sealant and with the tab on the gasket facing downwards.

Water pump elbow gasket: EBC 9636 replaces EAC 9805. The gasket should be fitted without RTV sealant and with the black side of the gasket to the pump body. This makes disassembly easier, should it be necessary.

Water pump gasket: (Between the 2 halves of the water pump) EBC 9630 replaces C 36542. EBC 9630 should be fitted without RTV sealant and grease should not be used to retain the gasket during assembly.
Water pump gasket – pump assembly to timing cover: EBC 9629 replaces C 29626. EBC 9629 should be fitted without RTV sealant and grease should not be used to retain the gasket during assembly.

Top cover gasket: (Also known as “Valley” gasket). EBC 9631 replaces C 29485. EBC 9631 should be fitted without RTV sealant or grease, with the black side of the gasket to the cylinder block. This makes disassembly easier, should it be necessary.

“A” bank timing cover gasket: EBC 9632 replaces EBC 3280.

“B” bank timing cover gasket: EBC 9633 replaces EBC 3281.

Timing cover top gasket: EBC 9625 replaces EBC 3282.

The three timing cover gaskets above must be fitted without RTV sealant or grease. After fitting the timing cover, the ends of the gaskets should be trimmed flush with the block, using a sharp knife.

All fixing bolts/screws and their torques, not mentioned above, remain as before.

XJ-S & S.III V12

12 OIL PUMPS

To improve quality, Jaguar is now using an alternative supplier for the V12 oil pump.

In most cases, the new pump can be used as a direct replacement with no modification to the block; however, in some cases, a foul condition may exist between the pump and certain areas of the old sand-cast block. To check for any foul condition, the pump should be offered in the correct position to the mounting bosses. If it lies flat against the bosses, the condition is correct. If the pump lies proud of the bosses, material should be removed from the foul area of the block (refer to shaded areas in Fig. 1 for possible foul areas) by careful use of a rotary file or similar implement.

WARNING: PROTECTIVE EYE WEAR MUST BE WORN WHEN USING ROTARY FILES.

FIG 1

Care should be taken when removing material to ensure that swarf produced by the operation is completely cleared from the area and that no other part of the engine, i.e. crank, main bearing, is damaged during the operation.
In some cases, the new pump may appear to be seized or difficult to turn. This can be explained by "stiction", arising due to storage, and does not mean that the pump is damaged in any way.

If the pump does appear to be seized, 10 ccs of engine oil should be poured into the suction port and the inner rotor of the pump turned, using a suitable implement.

The repair method is as outlined in the relevant Service Manual. Note: the torque for the fixing bolts remains the same at: 21.5 – 23.5 Nm.

Service Tools are as outlined in the relevant Service Manual.

The new part number is EBC 3163 for the pump and EBC 4240 for the adaptor collar, which must be used in conjunction with the pump.

In addition, shorter fixing bolts must be used: 4-off Part No SH 505071 J. The washers for the bolts remain the same, Part No C30075 2.

WARRANTY CODE: 1EA
REPAIR OPERATION CODE: SRO 12-60-26

ALL AJ6 ENGINES

12 CYLINDER HEAD EROSION

On removal of AJ6 cylinder heads for service work, it has been reported that in some cases a certain amount of erosion exists on the gasket face around the inlet side water jacket holes.

As a guide to whether the cylinder head should be changed, dealers should proceed as follows:

Clean the gasket mating face using fine emery cloth or a soft wire brush.

NOTE: CARE SHOULD BE TAKEN NOT TO SCORE OR DAMAGE THE SURFACE.

Make a paper template of the cored holes in the cylinder block that correspond with the affected water holes in the head. To orientate the template to the head water holes, include the cylinder head bolt holes on the template. (See Fig. 1)

Position the template on the cylinder head by aligning the cylinder head bolt holes on the template to those on the head.
ONLY IF THE EROSION ON THE HEAD OVERLAPS THE CORED HOLE CUT-OUTS SHOULD THE HEAD BE CHANGED.

If the erosion is within the cut-out the cylinder head should be refitted in the normal manner.

![Diagram showing correct and incorrect erosion]

FIG. 2

Dealers should ensure that Jaguar coolant / anti-freeze / corrosion inhibitor is used in the cooling system at the correct concentration, or, where this is not available, phosphate-free anti-freeze to BS 6580 should be used.

NOTE: CYLINDER HEADS SHOULD NOT BE REMOVED TO LOOK FOR THIS CONDITION. THE ABOVE SHOULD ONLY BE NECESSARY WHEN THE CONDITION IS NOTICED ON REMOVAL OF A CYLINDER HEAD FOR OTHER REPAIR WORK.

AJ6 ENGINES

12 DISTRIBUTOR / ROTOR ARM – SETTING GAUGE

Initial setting of the distributor body and rotor arm may be carried out with Service Tool JD 189 as follows:

Unclip and remove the distributor cap (H.T. leads remain connected).

Set the engine to T.D.C., firing on No.1 cylinder (rotor arm at approx. 5 o’ clock).

Slacken the distributor clamp bolt.

Fit Service Tool JD 189 ((setting gauge) Fig. 1) to the distributor body.

Adjust the distributor body to enable the tool to engage the distributor body and rotor arm (Fig. 2).

Tighten the distributor clamp bolt.
ERRATA

WITH REFERENCE TO SERVICE BULLETIN JD 17/92, PLEASE NOTE THAT THE WARRANTY COMPLAINT CODE SHOWN ON PAGE 2 AS 1LBK IS INCORRECT. THIS CODE SHOULD READ 1LKB

V12 AND AJ6 ENGINES

INTRODUCTION OF GRADED CRANKSHAFT BEARINGS

As part of Jaguar's on-going commitment to improving quality, three grades (sizes) of crank pin and journal bearings have been introduced on all production V12 and AJ6 engines. This will improve engine and vehicle refinement by reducing the maximum crank running clearances by approximately 20%.

Graded bearings were introduced on production from the following engine numbers:

V12 XJS: 8S 86817

V12 Series III: 7P 76912

6.0 JaguarSport: TBA *

3.2: 9B 111574

4.0: 9E/9W 164637

* 6.0 litre JaguarSport engines will use the grading system when a common crankshaft is used for both JaguarSport and Jaguar 6.0 litre engines.

The three different grade diameters of the journals and pins are represented by a letter which corresponds to a colour, i.e. “P” equals Pink, “R” equals Red, etc. The grade of each individual journal and pin on each crankshaft is identified by having the grading diameter colour stamped on the No 1 balance weight, indicating the grade of shell to be fitted, as follows:
A: F Indicates front
B: Journals 1 to 7
C: Pins 1 to 6

A: F Indicates front
B: Journals 1 to 7
C: Pins 1 to 6

The bearing shell is identified by having the colour on one of its edges.
The grade letter and colour for each diameter are as follows:

### V12

<table>
<thead>
<tr>
<th>GRADE LETTER</th>
<th>GRADE COLOUR</th>
<th>GRADE DIAMETER</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>PINK</td>
<td>3.0005 INS (76.212MM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0008 INS (76.220MM)</td>
</tr>
<tr>
<td>W</td>
<td>WHITE</td>
<td>3.0009 INS (76.222MM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0012 INS (76.230MM)</td>
</tr>
<tr>
<td>G</td>
<td>GREEN</td>
<td>3.0013 INS (76.233MM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0016 INS (76.240MM)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GRADE LETTER</th>
<th>GRADE COLOUR</th>
<th>GRADE DIAMETER</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>RED</td>
<td>2.2993 INS (58.402MM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.2996 INS (58.409MM)</td>
</tr>
<tr>
<td>Y</td>
<td>YELLOW</td>
<td>2.2997 INS (58.412MM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.3000 INS (58.420MM)</td>
</tr>
<tr>
<td>B</td>
<td>BLUE</td>
<td>2.3001 INS (58.422MM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.3004 INS (58.430MM)</td>
</tr>
</tbody>
</table>