

Service Bulletin



ISSUE NO: JD 04/92

APRIL 1992

SHEET: 1 OF 1

S.R.O: 82-25-13
82-25-14

- MODEL : XJ6 / XJS / S.III V12 (AIR CONDITIONED MODELS)
- SUBJECT : BLOWER MOTOR ASSEMBLIES
- CUSTOMER CONCERN : Brush gear noisy operation, ie: low speed ticking / squeak.
- ADVICE TO CUSTOMER : Installation of revised blower motor assemblies incorporating a new 'P35' motor will overcome the noise concerns.
New blower motors have been introduced from the following VINs:
XJ6 (Air Con) - 657163
XJS - 183290
S.III - 486002
- DEALER ACTION : Yes
- REPAIR METHOD : Blower Assemblies incorporating the new motor are interchangeable on vehicles prior to the above VINs (see Parts Information below for model year variations).
Replacement of blower motor assemblies should be carried out in accordance with the following Service Manual instructions:
XJ6 - Volume 4, Section 82, Page 82-38/82-39
XJS - Volume 4, Section 82, Page 82-62/82-63
S.III - Section 80-82, Page 82-39/82-40
- SERVICE TOOLS : N / A
- PARTS INFORMATION : Owing to the introduction of 'PM5' harness connectors on blower motor assemblies fitted to XJ6 and XJS models from VINs:
XJ6 - 629286
XJS - 179737
Part Numbers for replacement units on vehicles PRIOR to the above VINs are as follows:
- | | RH | LH |
|-----|----------|----------|
| XJ6 | CBC 8966 | CBC 8967 |
| XJS | CCC 5546 | CCC 5547 |

Part Numbers for replacement units on vehicles FROM the above VINs are as follows:

	RH	LH
XJ6	CCC 5400	CCC 5401
XJS	CCC 5544	CCC 5545

S.III V12

The harness connector on Series III blower motors has not changed. For replacement units incorporating the new motor, the following Part Numbers apply:

	RH	LH
S.III	CCC 5546	CCC 5547

ADMINISTRATION
INFORMATION

: WARRANTY CODES

XJ6) 7TA (RH)
XJS) 7TB (LH)
S.III 7S4

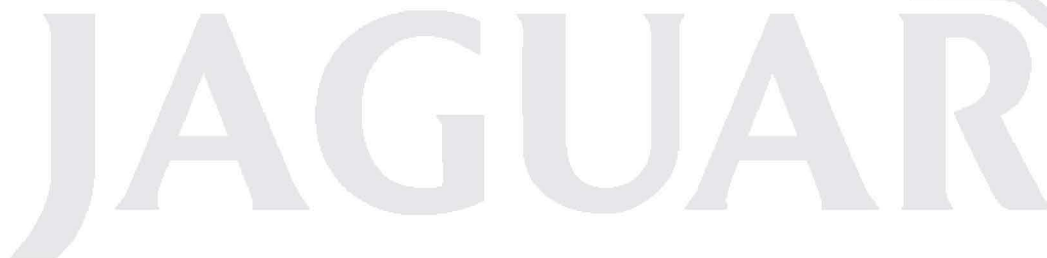
REPAIR OPERATION CODES

XJ6 / XJS MODELS:

SRO 82-25-14 (RH)	SRO 82-25-13 (LH)
(SRO 82-25-14/09	(SRO 82-25-13/09
LESS JDS ALLOWANCE)	LESS JDS ALLOWANCE)

S.III:

SRO 82-25-14 (RH)	SRO 82-25-13 (LH)
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Service Bulletin



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XJS

ITEM: 49

WARRANTY CODES

In the latest edition of the XJS Warranty Code book, codes for the battery and spare wheel covers have been duplicated.

To rectify this situation and prevent further confusion when submitting claims, the following codes have been removed from the warranty system:-

CODE	DESCRIPTION
9DS	Spare Wheel Cover
8PZ	Battery Cover Boot

Therefore, with immediate effect, Dealers should NOT submit further claims for these codes.

All future claims for the above parts should be submitted, using the following codes only:-

9DQ	Battery Cover
9DR	Battery Cover Support Panel
8NU	Spare Wheel Cover

XJS (FACELIFT)

ITEM: 50

WARRANTY CODES

The following new warranty complaint code has been allocated to cover the fuel gauge "anti-slosh module", introduced on XJS Facelift models.

Code	Description	SRO
7JU	Anti-Slosh Module	88.25.25

Jaguar Cars Limited

ALL MODELS

ITEM: 51

12 CYLINDER PRESSURE CHECK

WARNING: Would all technicians please note that before performing a cylinder pressure check, Repair Operation No. 12.25.01, all fuel should be purged from the fuel rail.

Purging of the fuel rail may be achieved by disconnecting the fuel pump relay and then cranking the engine for ten seconds.

XJ6 ALL MODELS & XJS 3.6 / 4.0

ITEM: 52

19 CRUISE CONTROL ACTUATOR LINKAGE ADJUSTMENT

Should customer complaints be received of an increase in the cruise control response time and a degree of hunting of the set speed, the cruise control actuator linkage adjustment should be checked in accordance with the following procedure, before taking any further action.

Dealers should ensure that the clearance between the end of the actuator to throttle link slot (A Fig 1) and the shoulder bolt (B Fig 1) is 0.5mm to 1mm (C Fig 1).

S.R.O.	19.75.11
Allowance	0.10 hrs
Complaint Code	7VCP

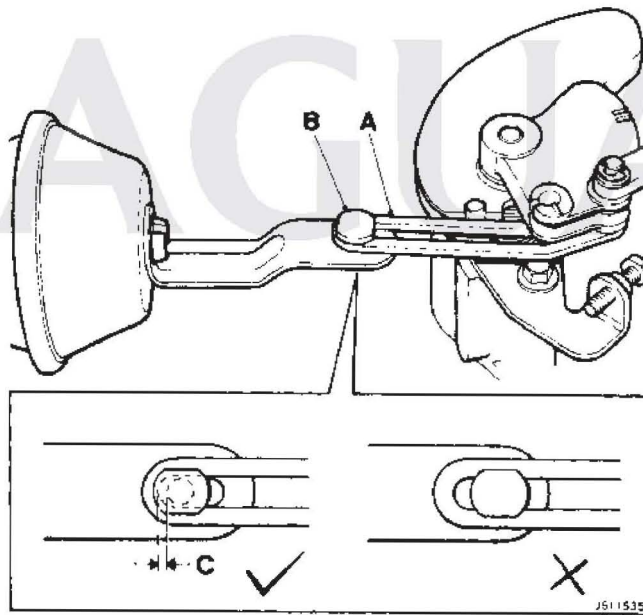


FIG 1

XJS V12

ITEM: 53

44 TRANSMISSION OIL COOLER CONNECTION

There have been a number of oil coolers returned with damaged coupling connector bosses, the cause of which can be attributed to poor workshop practice where backing spanners have not been used to support the integral hexagon connector of the oil cooler. This results in a fracturing of the connecting tube when torque is applied upon tightening or loosening the connection.

Technicians should use a backing spanner to hold the integral boss whilst tightening the cooler pipe connection to a torque of 15 – 17 Nm.

XJ6 / XJS / S.III / LIMOUSINE

ITEM: 54

60 FRONT HUB END FLOAT ADJUSTMENT

The following instructions supersede all previous instructions provided in service manuals. Manuals will be updated at the next reprint.

Front hub end float on the above models should be set between 0,0254 to 0,0762mm (0.001 to 0.003in). To achieve this in service use the following method:

Note: Prior to adjusting the hub end float an absorbent cloth should be placed around the brake fluid reservoir cap.

Slacken the road wheel nuts $\frac{1}{4}$ turn each.

Jack up the front of the vehicle and support with axle stands.

Remove one wheel nut, mark the wheel relative to the stud and remove the remaining wheel nuts.

Remove the roadwheel and tyre assembly.

Dependent upon model, gently prise the brake pads free or manipulate the brake caliper to ensure the brake pads are free within their mountings, i.e. the disc is free to rotate.

Prise off the hub grease cap (1 Fig. 1).

Fit a Dial Test Indicator (DTI) to the hub (Fig. 2).

Grasp the hub unit. Firmly pull and push the unit, oscillating at the same time, to determine the DTI end float reading.

If the reading is within the specification quoted there is no need to carry out the adjustment. If not, remove the hub nut split pin and cover (2, 3 Fig. 1).

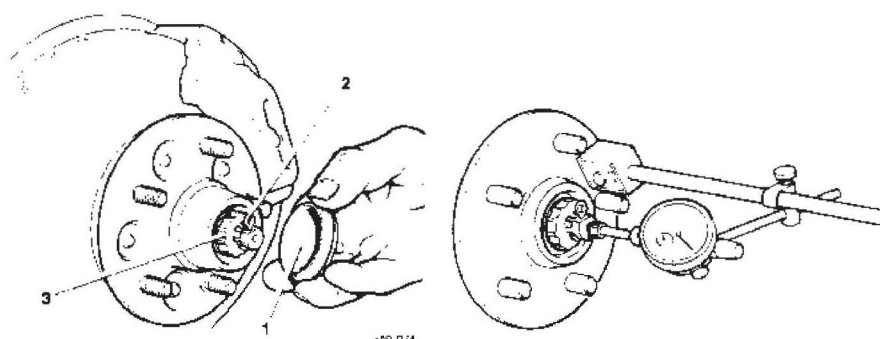


Fig. 1

Fig. 2

Note: For identification purposes only,
 Fig. 1 shows XJS, S III & Limo. type hub.
 Fig. 2 shows XJ6 hub.

Adjust the nut, as necessary, to give a reading of 0,0508mm + / - 0,0254mm (0.002in + / - 0.001in).

Always try to achieve the mid-point of the tolerance i.e., 0,0508mm (0.002in).

Align the hub nut cover and secure with a new split pin.

When the new split pin is fitted, ensure the end float is re-checked using the DTI gauge (Fig. 2).

If necessary, re-adjust using the same method, until the end float is correct.

Always finish the adjustment by checking with a DTI gauge.

Always ensure the end float is within the limits quoted.

Refit the grease cap.

Refit the road wheel.

Carry out the adjustment procedure on the opposite front hub.

When finished, lower the vehicle from the stands.

Ensure the wheel nuts are tightened to the specified torque.

Remove the absorbent cloth from around the brake fluid reservoir cap, ensuring the area is clean and dry.

Before moving the vehicle, pump the brake pedal to centralise the pads.

ALL MODELS

ITEM: 55

77 BODY REPAIR

To avoid the risk of causing permanent damage to vehicle ECUs during body repairs, the following precautions must be observed prior to using any electrical welding equipment.

1. Disconnect the vehicle battery and alternator.
2. Disconnect and remove all ECUs in the immediate area of any panels to be electrically welded. As a general rule, all ECUs within 2 feet of the area to be welded should be removed; for more detailed information, refer to the relevant Service Manual.
3. When using welding equipment, the earth return clamp should be located as close as possible to the area of repair.

XJ6 ALL MODELS

ITEM: 56

82 DRIVER'S BLOWER MOTOR ASSEMBLY

The repair operation time for renewing the driver's side blower motor assembly has changed on all XJ6 Vehicles from VIN 629286.

The repair operation times are now as follows:-

Left Hand Drive Vehicles:

82.25.13	Blower assembly – Left Hand – Renew	01.25 Hours
82.25.13/09	As 82.25.13 (Less J.D.S. Allowance)	00.90 Hours

Right Hand Drive Vehicles:

82.25.14	Blower Assembly – Right Hand – Renew	01.25 Hours
82.25.14/09	As 82.25.14 (Less J.D.S. Allowance)	00.90 Hours

Please amend your repair time schedules accordingly.
No other repair times are affected.

To achieve these times in service, adhere to the following procedure:–

REMOVE

Open the bonnet and disconnect the battery earth lead.
Remove the driver's side dash liner.
Remove the retaining clip from the air conditioning unit's pliable trunking.
Displace the pliable trunking from the air conditioning unit.
Displace the relay bases from their mounting brackets.
Cut and remove the ratchet straps securing the brake switch harness.
Disconnect the vacuum hose from the blower motor assembly servo unit.
Disconnect the blower motor multi-way connectors.
Undo and remove the steering column lower mounting securing nuts.
Undo and remove the steering column upper mounting securing nuts.
Lower the steering column assembly.
Retrieve the column upper packing shims.
Remove the washer bracket from the column.
Manoeuvre the steering column towards the centre of the vehicle for access.
Undo and remove the steering column outer stabilizer bar's upper and lower securing nuts.
Displace and remove the steering column stabilizer bar (Fig. 1).
Reposition the vehicle harness connectors to gain access to the blower motor assembly securing bolts.
Undo and remove the blower motor assembly securing bolts.
Displace and remove the blower motor assembly.
Remove and discard the unit intake gasket.
Remove the pliable trunking to assembly securing tape.
Remove the trunking from the unit.

REFIT

Fit and align trunking to the new blower motor assembly.
Secure the trunking to the assembly with tape.
Smear the new intake gasket with a suitable adhesive.
Fit the gasket to the blower motor assembly intake.
Fit and align the blower motor assembly into its mounting position.
Connect the pliable trunking to the air conditioning unit.
Refit and tighten the blower motor assembly securing bolts.
Fit and align the trunking retaining clip.
Connect the blower motor multi-way connectors.
Connect the vacuum hose to the blower motor assembly servo unit.

Fit and align the steering column stabilizer bar and tighten the securing bolts (10 – 14 Nm).

Fit and align the washer bracket to the column.

Loosely fit the steering column upper mounting securing nuts.

Fit the steering column packing shims as necessary.

Fit and tighten the steering column lower mounting securing nuts (20 – 22 Nm).

Fully tighten the steering column upper mounting securing nuts (20 – 22 Nm).

Reposition the brake switch harness to the blower motor assembly.

Secure the brake switch harness to the unit with ratchet straps.

Fully seat the relay bases to their mounting brackets.

Refit the driver's dash liner assembly.

Reconnect the battery earth lead and close the bonnet.

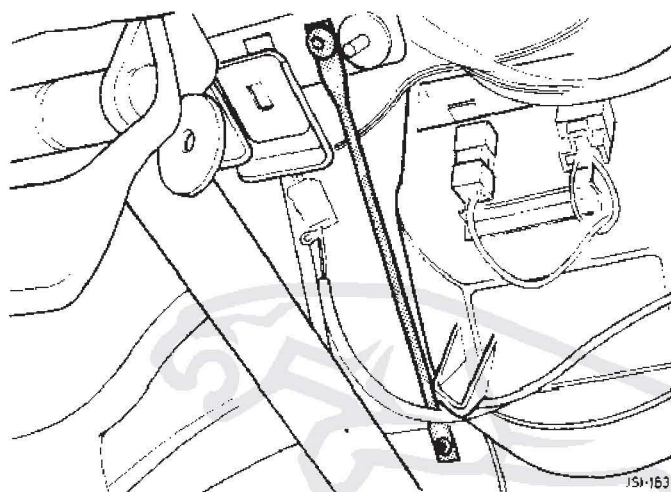


Fig. 1

S.III, XJS & XJ6 UP TO VINs:-

506664 – USA

506448 – CANADA

507471 – R.O.W.

ITEM: 57

82 AIR CONDITIONING COMPRESSOR (GM A6 TYPE)

Investigations have confirmed the unnecessary replacement of compressors for noise and leaks.

If excessive compressor noise exists, check the following items:-

- . Compressor drive belt tension.
- . Compressor mountings.
- . A/C refrigerant hose routing (ensure that hoses are not in contact with other components).
- . Ensure that the refrigerant charge weight is correct (refer to Section 82 of the Service Manual for additional information).

- Ensure that the compressor is filled to the correct level with oil. A MAXIMUM of 4 ozs (114 cc) of refrigerant oil can be added to the compressor without discharging the refrigerant. Using an oil injector tool (such as 'Snap-on' oil injector tool ACT 111), add oil in 2 oz (57 cc) increments. (Refer to the procedure detailed below).

NOTE: LOW OR EXCESSIVE CHARGE WEIGHT OR A LOW OIL LEVEL WILL CAUSE COMPRESSOR NOISE.

- Clutch drag or bearing noise (refer to the clutch replacement procedure, Section 82 of the Service Manual).
- Compressors which leak oil or Freon must have the seals replaced in accordance with the procedure detailed in Section 82 of the Service Manual.

Replace the compressor only after checking all of the above-mentioned items.

NOTE: All returned compressors must be complete and sealed, using the blanking plate provided on the replacement unit.

Procedure for compressor oil injector tool usage:-

- Operate the A/C system. Make sure that the system is full of Freon. Refer to Section 82 of the Service Manual for the test procedure.
- Remove the sealing gaps from the high and low pressure A/C charging points.
- Check that the valve on the oil injector tool is closed.
- Remove the threaded end cap from the oil injector tool and add 2 ozs (57 cc) of compressor oil. Replace the end cap.
- Attach the short flexible hose on the oil injector to the low pressure fitting of the vehicle A/C system.
- Attach one end of an A/C system extension hose to the fitting on the side of the valve of the oil injector tool. Attach the other end of the extension hose to the high pressure fitting of the vehicle A/C system.
- Run the engine at idle with the A/C system operating.
- Slowly open the oil injector tool valve until it is fully open. Allow the oil to flow into the compressor for 2 minutes.
- Close the oil injector tool valve. Let the engine run an additional minute, then switch off the ignition.
- Carefully remove the charging hoses from the high and low pressure fittings and install the sealing caps.
- Check the A/C system for compressor noise. If noise still exists, repeat the procedure once more, adding an additional 2 ozs (57 cc) of compressor oil.
- **NOTE: NEVER ADD MORE THAN 4 OZS (114 cc) OF OIL TO THE A/C SYSTEM.**
- Attach a self-adhesive label to the A/C hose (adjacent to the low pressure hose fitting), stating how much oil was added and the date.

DATE: NOVEMBER 1991

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REF: JD 09/91

ERRATA

Would Dealers please note that in Service Bulletin JD 05/91, Item 31 "Forged Alloy Wheels", the Part No. for the XJS road wheels should be CBC 6175 (not CBC 9175).

XJ6 MODELS

ITEM: 58

44 TRANSMISSION FRONT PUMP ASSEMBLY

A new front pump assembly has been introduced which cannot be retro-fitted to earlier models as the intermediate plate is not compatible.

Should this later type be fitted inadvertently to an earlier transmission unit, the internal pressures created will blow-out the pump seal (this is because the ventilation channel is now in a different position).

Part No.	Qty	Description
2.9, 3.2 & 3.6 Litre Models		
Up to Gearbox Serial No. 1158414:		
JLM 1957	1	Front Pump Assembly
JLM 885	1	Intermediate Plate
From Gearbox Serial No. 1158415:		
JLM 2286	1	Front Pump Assembly
JLM 10715	1	Intermediate Plate
4.0 Litre Models		
Up to Gearbox Serial No. 35365:		
JLM 10441	1	Front Pump Assembly
JLM 10448	1	Intermediate Plate
From Gearbox Serial No. 35366:		
JLM 10716	1	Front Pump Assembly
JLM 10717	1	Intermediate Plate

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DATE: OCTOBER 1992

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REF: JD 16/92

ERRATA

Owing to revised information, the torque figure for the coolant temperature transmitter to engine, XJS models, is 14,5 to 19,5 Nm.

The torque figure given in Service Bulletin JD 10/92 and Section 88 of XJS Service Manual, JJM 10 04 06/20, should be ignored and only the revised figure used.

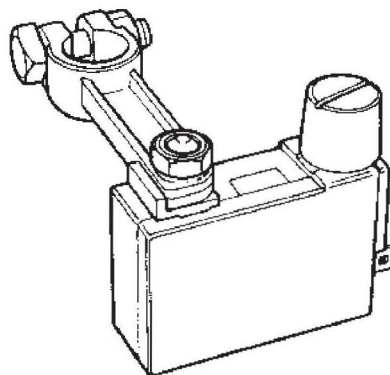
Service Manuals will be amended at the next reprint.

XJ6 93 MY (FROM VIN 667829)

ITEM: 44

BATTERY TRANSIT RELAY – REMOVAL

Owing to the relocation of the battery into the boot at 93 MY, a revised battery transit relay has been introduced, (see Fig 1).



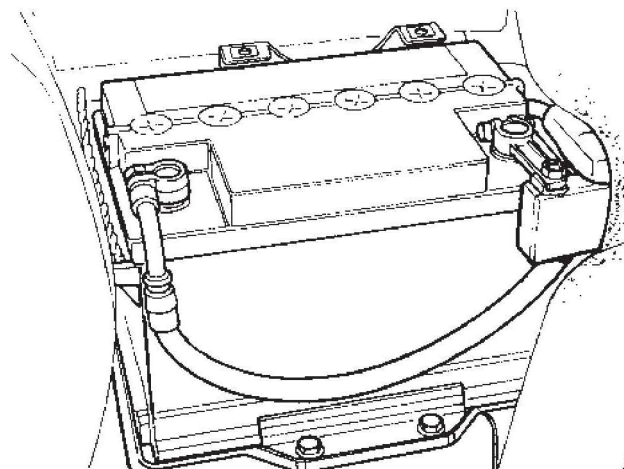
J51-1773

FIG 1

The procedure for the removal of this new relay is as follows:

WITH THE IGNITION OFF:

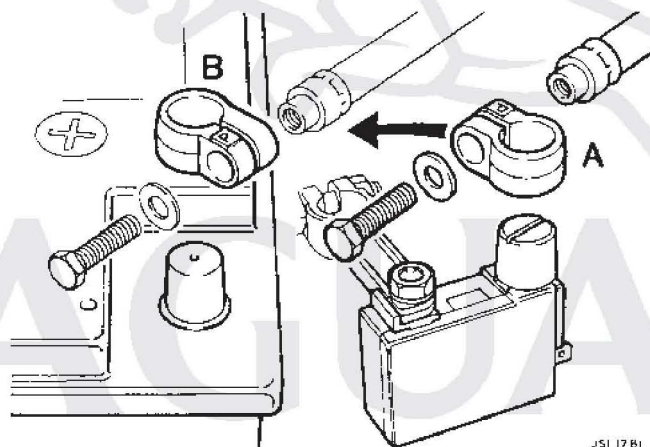
1. Open the boot and remove the battery cover, (see Fig 2).
2. Remove the negative lead from the battery.
3. Disconnect the transit relay from the battery.
4. Remove the white / yellow (W/Y) ignition wire from the transit relay.



J51-1778

FIG 2

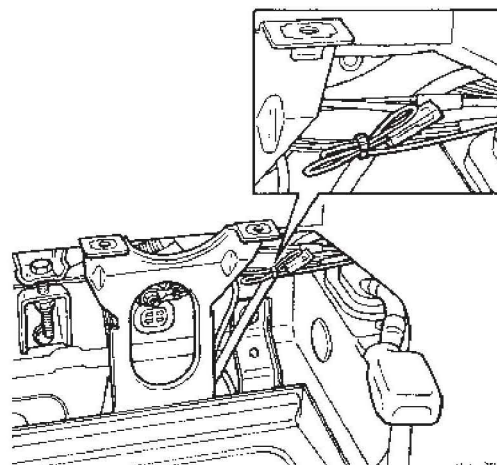
5. Remove the positive lead from the transit relay terminal post, (A, Fig 3).
6. Reverse the positive lead clamp and refit the clamp to the positive lead (B, Fig 3).



J51 1781

FIG 3

7. Displace the battery.
8. Tie back and secure the white / yellow (W/Y) ignition wire, (see Fig 4).



J51 1780

FIG 4

9. Refit the battery.
10. Refit and secure the positive and then negative lead of the battery.
11. Replace the battery cover.

NOTE: ALL UK DEALERS MUST CONTINUE TO RETURN THE DISPLACED TRANSIT RELAYS.

REMOVAL OF THE TRANSIT RELAY SHOULD BE CARRIED OUT NO LONGER THAN 24 HOURS BEFORE THE VEHICLE IS HANDED OVER TO THE CUSTOMER.

THE RADIO AND TIME CLOCK MUST BE RESET AFTER THE RELAY IS REMOVED.

IMPORTANT: UNDER NO CIRCUMSTANCES SHOULD THE RELAY BE USED OR RETAINED AS AN ISOLATION DEVICE FOR ROAD USE.

XJS

ITEM: 45

03 REPAIR OPERATION TIMES

Air Conditioning Blower Motor Assembly

The repair operation times for renewing the air conditioning blower motor assemblies have been re-studied on 1992 MY vehicles.

The new operation times for vehicles from VIN 179737 are as follows:

Right-hand drive vehicles

82-25-13	Blower Assembly – Left-Hand – Renew	0.95 Hrs
82-25-13/09	As 82-25-13 (Less JDS Allowance)	0.60 Hrs
82-25-14	Blower Assembly – Right-Hand – Renew	1.60 Hrs
82-25-14/09	As 82-25-14 (Less JDS Allowance)	1.25 Hrs

Left-hand drive vehicles

82-25-13	Blower Assembly – Left-Hand – Renew	1.60 Hrs
82-25-13/09	As 82-25-13 (Less JDS Allowance)	1.25 Hrs
82-25-14	Blower Assembly – Right-Hand – Renew	0.95 Hrs
82-25-14/09	As 82-25-14 (Less JDS Allowance)	0.60 Hrs

Please amend your repair times accordingly.

No other repair times are affected.

XJ6 / XJS

ITEM: 46

10 BRAKE SYSTEM SERVICE RECOMMENDATIONS

Note: This bulletin supersedes Item 21 of Service Bulletin JD 03/92.

With the introduction of the ABS brake system, from the following VINs, the brake servicing recommendations have changed:

1. XJ6 from VIN 594576.
2. XJS (5.3 convertible) from VIN 147269.
3. XJS (5.3 coupe) from VIN 148782.
4. XJS (3.6 coupe) from VIN 148945.

No routine replacement of system seals is necessary. The system and components, which are sealed for life, require no maintenance. Repair is by replacement.

The braking system must still be inspected for satisfactory operation and condition at the regular service intervals.

Because of its hygroscopic nature, brake fluid must be renewed at 2 year or 30 000 mile (48 000 km) intervals, whichever is sooner.

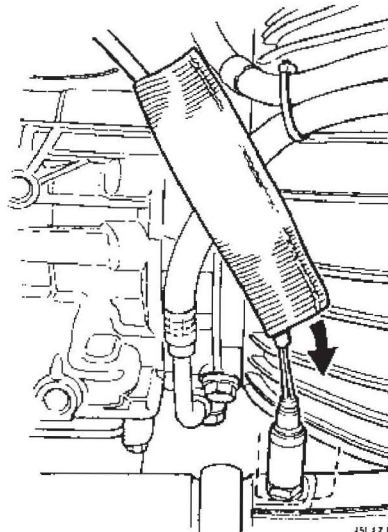
XJ6 ALL MODELS

ITEM: 47

18 LAMBDA SENSOR SPLASH-SHIELD

Following reports of the intermittent display of "Fuel Failure 44" on the instrument pack, it was found that this symptom could be caused by water penetrating the lambda sensor.

A lambda sensor splash-shield has been introduced from VIN 664941, which can be fitted retrospectively and should be installed whenever a lambda sensor is changed. This will reduce the possibility of water ingress.



SLEEVE
C. 33139/4

The six-inch silver heat-proof sleeve is fitted by sliding it over the sensor, prior to its replacement. After the sensor has been fitted, Dealers should ensure that the sleeve is pushed fully back down to cover the whole sensor.

ALL MODELS

ITEM: 48

18 IGNITION SPARK PLUGS

Spark plugs have been returned under warranty with a yellow / brown stain visible on the insulator housing. Dealers have incorrectly interpreted this as leakage of combustion gases between the insulator and metal housing and the cause for spark plug misfire. The following is an explanation for the staining and the more likely cause for spark plug misfire.

During most atmospheric conditions a form of static discharge, common to high voltage conductors, can occur, which is commonly known as "Corona discharge".

Ignition systems are particularly prone to this effect during wet weather, when the air space surrounding the spark plugs becomes charged with a gas composed of electrons, ions and air particles, forming a state of general ionization. Too much ionization counteracts the spark plug insulation and causes a partial discharge, which in turn gives out a blue light.

Under normal circumstances this will in no way affect the running of the car, providing the spark plug insulators are kept clean.

Running problems would normally only occur if the spark plug insulators were coated in a film of dirt, which would allow high voltage tracking, known as "flashover", between the spark plug terminal stud and earth, thus causing a misfire.

However, protection is provided against this eventuality by the inclusion of "ribs" along the insulator body. To identify whether or not the spark plugs have been subjected to Corona discharge, plugs should be examined in daylight for the presence of a yellow / brown stain at the base of the insulator, next to the metal housing.

The actual stain is caused by oil-contaminated particles, in suspension around the spark plug insulator, receiving the electrostatic charge of ionization and fusing themselves to the plug. The stain is quite harmless and can usually be wiped off easily.

Corona discharge will cause no deterioration in service or malfunction of the spark plug.

Moisture or dirt may cause "flashover" but Corona discharge does not. Cleanliness is vital, therefore, spark plug insulators should be kept clean and dry at all times.

Note: Spark plugs returned under warranty may be rejected as "no fault found" for the reasons given above.

XJ6 ALL MODELS

ITEM: 49

64 REAR SHOCK ABSORBERS

Jaguar Cars Limited 2005

From VIN 667829, a new rear shock absorber is fitted to all non-ride-levelling vehicles. This new part is fully interchangeable with all previous components when

This new part, number CCC 6923, should be used in all cases where rear shock absorbers are replaced, with immediate effect.

Under no circumstances should this new part be mixed with old condition parts on a vehicle axle.

When failures are identified in service, single shock absorbers only need to be changed if the parts have less than 25,000 miles (40,000km) service use.

The new units, which have a black finish, can be easily distinguished from the previous parts by a new sealed gaiter, which will reduce dirt ingress.

XJS 6CYL / V12 AND SERIES III V12

ITEM: 50

82 RECEIVER DRIER BOTTLE

When replacing the receiver drier bottle, Part Number CAC 1881, it is essential that the receiver drier bottle is mounted with the sight glass vertical. This is to ensure that the pick-up tube inside the drier bottle is always immersed in liquid refrigerant. If the receiver drier bottle is mounted at angles in excess of +/- 20 degrees from the vertical, there is a risk, under certain conditions, that vapour rather than liquid may enter the pick-up tube. Should this occur, erratic air conditioning performance may result.

XJS 4.0L / V12

ITEM: 51

86 LOW COOLANT WARNING LIGHT FAULT DIAGNOSIS

Dealer investigations into low coolant warning light concerns have resulted in a high number of low coolant probes and control units being replaced unnecessarily, as most probes and control units tested by the supplier reveal no faults. In order to reduce this unnecessary replacement, the following electrical checks should be carried out by Dealers before condemning or replacing components where the cause is found to be low coolant level. The checks should include inspection of the coolant system for leaks, which is best achieved by pressure testing the coolant system to locate the source of the leak.

Coolant leaks may be caused by: loose hose clip connections, worn or damaged pressure cap seals, or damaged hoses. Lack of coolant recovery from the atmospheric recovery bottle may be a further reason for low coolant level in the header tank.

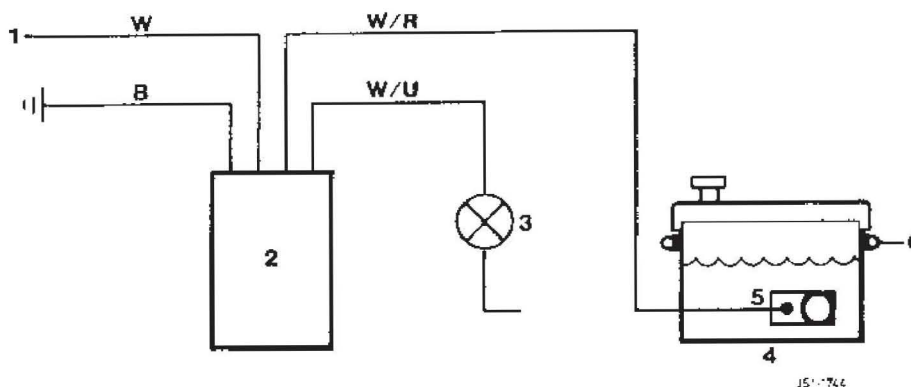
Transfer of coolant from the atmospheric recovery bottle relies on the presence of a vacuum, as the coolant contracts when the engine is turned off. Checks should be made to ensure that the recovery bottle and its connections through to the header tank are leak-free and unrestricted. In addition, the vacuum valve in the header tank should be checked to ensure that it operates correctly and does not stick.

ELECTRICAL CHECK PROCEDURE

CIRCUIT / SYSTEM DETAILS

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The system operates by measuring the resistance of the coolant. With resistance below 5,000 Ohm, the warning light is off. The light will illuminate with the resistance



COMPONENT / CIRCUIT CODE

- 1 – Ignition (IGN) supply
- 2 – Low coolant control unit
- 3 – Warning light (W/L)
- 4 – Header tank
- 5 – Low coolant probe
- 6 – Header tank earth via fixing bolts

WIRING CODE

- W – White
- W/R – White / Red
- W/U – White / Blue
- B – Black

FAULT	CAUSE	ACTION
W/L does not illuminate at any time. (Bulb check does not occur i.e. @ 1 sec on following ign)	Blown W/L or open circuit on W/L wire	Check by shorting white / blue (W/U) wire to earth – W/L should come on.
	Earth wire at unit open circuit	Check resistance to good chassis ground – less than 2 Ohm.
	Ign supply to unit open circuit	Check supply at unit, should be battery voltage.

If the above checks are satisfactory replace faulty low coolant unit.

W/L on all the time with ign	Low coolant	Check and top up as required
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If the coolant level is satisfactory, the following check will determine which part of the circuit is at fault.

Disconnect the probe wire at the tank and short to ground. If the W/L goes out, proceed to (A). If the W/L stays on, go to (B).

(A)	Poor connection, tank body to earth	Check resistance of tank body to good chassis earth – should be less than 2 Ohm.
	Poor connection on Lucar connector Red / White wire. Lucar rivet loose on low coolant probe	Visual check – clean, replace as required.
	Low coolant probe / plating contaminated	Remove probe from tank – clean with wire wool – if probe Lucar is damaged or loosened during re-

(B)	Short to earth in W/L wire or W/L bulb-holder pack	Unplug low coolant unit. If the W/L goes off, circuit OK – If W/L remains illuminated – locate short circuit.
	Short to earth on probe wire White / Red (W/R)	With unit and probe disconnected, check the White / Red wire resistance to good chassis earth – should be above 20,000 Ohm.

If all of the above checks are satisfactory, replace faulty low coolant unit.

W/L flashes on, then goes off	Low coolant level	Check – top up as required.
	Intermittent open circuit, on White / Red (W/R) low coolant probe wire	Ground probe wire at tank – test drive vehicle. If fault recurs, check harness / connectors, locate open circuit
Less likely causes but may in certain conditions, with an out of specification unit, cause a fault	Bad connection tank body to earth	Check resistance of tank body to good chassis earth – should be less than 2 Ohm.
	Poor connection on Lucar connector Red / White (R/W) wire. Lucar rivet loose on low coolant probe	Visual check – clean replace as required.
	Low coolant – probe / plating contaminated	Remove probe from tank, clean with wire wool – if probe Lucar is damaged or loosened during removal replace probe.

DATE: APRIL 1992

PAGE: 1 of 4

REF: JD 03/92

Owing to revised information received from Engineering, pages 11 of Service Bulletin JD 01/92, 3/4 and 9/10 of Service Bulletin JD 02/92 are being re-issued and are provided at the end of this Bulletin, marked " *Issue 2* ".

Existing pages of the above should be removed and discarded to be replaced with the revised version.

XJ6 3.2 & 4.0

ITEM: 20

03 ADDITIONAL REPAIR OPERATION TIME

The following Repair Operation Times are now available:

12.29.16 – Cylinder Head Gasket Rear Blanking Plate – Renew – 1.40 Hrs
Gasket

12.29.17 – Cylinder Head Rear Blanking Plate – Renew – 1.40 Hrs

Please amend your Repair Operation Time Schedule accordingly.

No other Repair Times are affected.

XJ6 / XJS

ITEM: 21

10 BRAKE SYSTEM SERVICE RECOMMENDATIONS

With the introduction of new brake components on the above models, the brake servicing recommendations have changed.

No routine replacement of system seals is necessary as the seals are designed to last for the life of the vehicle.

The braking system must still be inspected for satisfactory operation and condition at the regular service intervals.

Brake fluid to be renewed at 2 years or 30 000 miles (48 000 km) intervals, whichever is the sooner. For North America only, 18 months or 30 000 miles (48 000 km).

Note: Service Manuals will be up-dated at the next reprint.

ALL AJ6-ENGINEED VEHICLES**ITEM: 22****26 WATER PUMPS**

A revised water pump assembly has been introduced on AJ6 engines. The assembly now has a gasket between the two halves, instead of RTV sealant as previously used.

The revised assembly is fitted from the following engine numbers:

3.2 : 107696

4.0 : 157275

The part number of the new assembly is EBC 8550 and replaces EBC 4437. The part number of the gasket is EBC 9220.

Note: THE GASKET CANNOT BE RETRO-FITTED TO RTV-SEALED WATER PUMPS. IF A LEAK BETWEEN THE TWO HALVES IS APPARENT, THE OLD STYLE PUMP ASSEMBLY MUST BE REPLACED BY EBC 8550.

When EBC 8550 has been fitted to an engine, the bolts securing the two halves together must be re-torqued to 21.5 Nm – 28.5 Nm, to overcome the possibility of gasket relaxation.

XJ6 / XJ-S / S.III**ITEM: 23****80 AIR CONDITIONING/HEATER MICROPROCESSOR****82**

Refer to Service Bulletin JD 09/91, Item 62.

To improve the retention of the air conditioning/heater servo drive motor ICs (integrated circuits) secured to the microprocessor unit heatsink, the supplier has now changed the process to "Rivscrews".

This modification commenced during mid-November 1991 and replaced the previous bolt-type fixings.

Air conditioning/heater units fitted with revised microprocessors were progressively introduced from VINs:

XJ6	-	659029
XJS	-	183501
S.III	-	486299

XJ6**ITEM: 24****84 WINDSCREEN WIPER ARM AND BLADE**

From VIN 657725, all XJ6 vehicles have been fitted with a revised wiper arm and blade assembly.

These new parts are interchangeable with cars built prior to this VIN, when changed as an assembly only. Dimensional changes prevent the fitment of a mixed condition of arm and blades.

Dealers are reminded that wiper blade replacement remains a part of the 7500 mile (12000 km) service schedule for all vehicles.

XJS

ITEM: 25

86 STOP LIGHT FAILURE SENSOR MODULE – LOCATION

From VIN 179737 (92MY Facelift XJS), the stop light failure sensor module is located in the boot of the vehicle, attached to the inside of the boot side reinforcement panel (drainage channel) L.H. (Fig. 1).

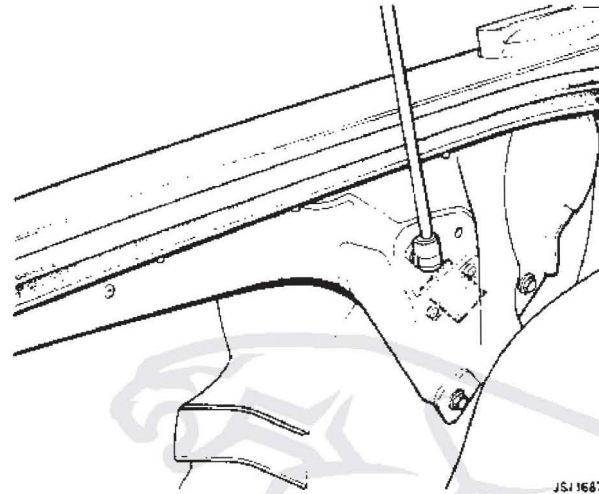


FIG. 1

Prior to VIN 179737 (90MY XJS), the module is located beneath the centre console veneer finisher, attached to a bracket in front of the stowage compartment (Fig. 2).

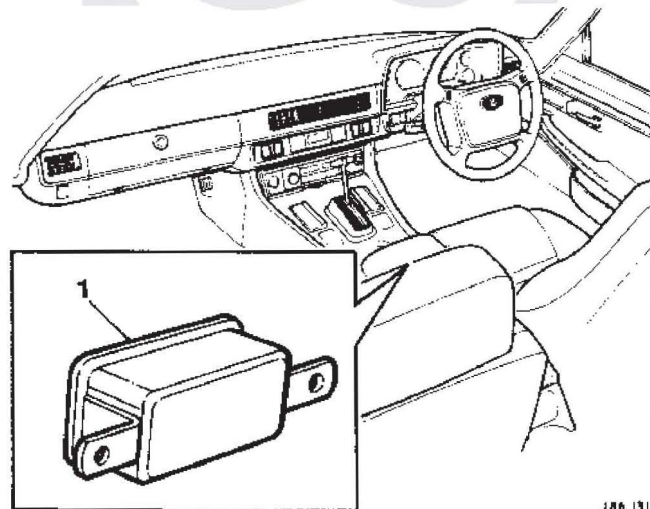


FIG. 2

XJ6

ITEM: 26

88 EXTERNAL SPEED SENSOR BRACKETS – IDENTIFICATION

Two external speed sensor brackets are available for use on XJ6 models. To avoid any confusion, they are identified as follows:

Bracket Part No	Description Of Use
CAC 9884	For all Drive Units prior to the introduction of EBC 9750 and EBC 9751 (no colour identification).
EBC 9820	For all Drive Units from the introduction of EBC 9750 and EBC 9751 (identified by a "spot" of blue paint).



DATE: SEPTEMBER 1993

PAGE: 1 of 5

REF: JD 26/93

00 ERRATA

PLEASE NOTE THE FOLLOWING ERRATA IN RECENT SERVICE BULLETINS:

1. JD 17/93 dated August 1993 Page 6 FOURTH DIGITS
The Fourth Digit codes J and V have been duplicated.
Please delete code J, so that in future only code V will be used for "Thread Damage".
2. JD 17/93 dated August 1993 Page 7 Lines 21 & 22
The entry 9YV is duplicated on these lines.
The first entry should read: 9YU - Engine Compartment
3. JD 24/93 dated September 1993 Page 2 Line 12
This line should read: 44-15-39/09 As 44-15-39 (Less JDS .. etc)

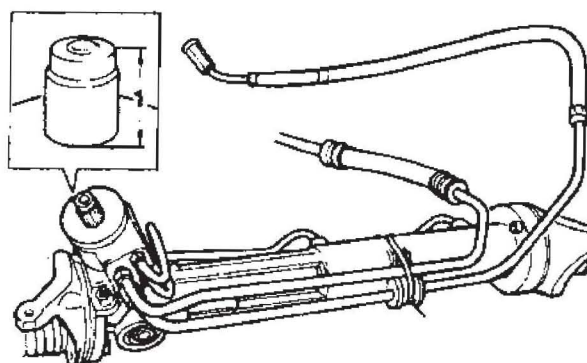
XJ6 AND XJ12 1994 MY ALL VARIANTS

ITEM: 26

00 INFORMATION ADDITIONAL TO THE 94 MY TECHNICAL GUIDE

The 1994 Model Year specification is enhanced by the inclusion of two new features designed to refine both the handling and cosmetic qualities of Jaguar saloons.

INTRODUCTION OF THE ZF PHASE 2 STEERING RACK



J57-259

FIG. 1

The ZF Phase 2 Steering Rack (Fig. 1) is added to the 1994 MY specification. The rack body consists of two aluminium pressure diecastings; the rack mounting is unchanged. The pinion height (1, Fig. 1) is increased by 7mm; the steering column is altered to accommodate this change. The fluid pipe union positions in the valve block are also altered, with the fluid pipes being modified accordingly. The steering rack assembly is a non-serviceable item.

INTRODUCTION OF REAR WHEEL ALIGNMENT ADJUSTMENT

A system of rear wheel alignment adjustment is now incorporated in the rear suspension assembly.

The lower suspension arm has a plate, with a rectangular recess machined in the centre, added to the rear pivot eye (1, Fig. 2). The suspension arm pivot bolt hole (2, Fig. 2) is elongated, horizontally, at this point.

The pivot bolt has an integral eccentric (3, Fig. 2) below the bolt head, which, when in position in the plate, has a slight clearance at the sides but full clearance at the top and bottom. Rotation of the bolt head, with the eccentric constrained between the vertical faces, causes the bolt shank to be moved in the horizontal plane, thus displacing the hub carrier and effecting wheel alignment adjustment.

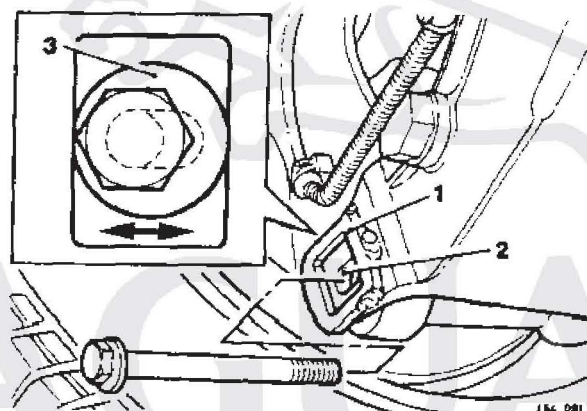


FIG. 2

XJS FROM VIN 187900

ITEM: 27

30 EXHAUST SYSTEM – DETAIL CHANGES

From the above VIN a number of changes, mainly to dimensions, have been introduced to exhaust systems. The object of the changes is to improve clearance between exhaust system components, the seat pan heat shield and the rear axle, thus giving less possibility of fouling. The items affected are:

1. Intermediate pipe – shortened by 10mm.
2. New 'Torca' clamp – tack-welded in production (for ease of assembly) to the rear catalytic convertor, to clamp to the intermediate pipe.

Note that in service the tack-welds may be cut away with a chisel, enabling the clamp to be discarded. New clamps should always be used when the exhaust system is being re-assembled.

3. The rear catalytic convertors (with attached clamps, as above) have a longer outlet pipe. The convertors fit lower in the vehicle than previously, improving clearance between convertors and the seat pan heat shield.

New Part Nos.	Description	Market Application
NMB 6740AA	Intermediate pipe	All markets
EBC 9257/7	Clamp	All markets
EBC 11122	Catalytic Convertor RH	EEC (inc. GB), Middle East, Malta, Cyprus, Poland.
EBC 11123	Catalytic Convertor LH	
EBC 11128	Catalytic Convertor RH	All other markets
EBC 11129	Catalytic Convertor LH	All other markets

XJ6 AND XJ12**ITEM: 28****51 IDENTIFICATION OF FINAL DRIVE UNITS / LIMITED SLIP DIFFERENTIALS**

Dealers may find that certain owners, particularly those who may also drive high-performance vehicles under sporting or competition conditions, express concern that their saloon vehicle appears to have a defective or inoperative limited slip differential unit, or that the final drive appears to be of a "plain" or conventional type.

Some clarification is therefore necessary concerning the performance characteristics and identification of limited slip differential units.

A Powr-Lok differential essentially varies from a conventional bevel gear unit in having the addition of friction plates between the output bevel gears and differential casing; the friction plates are loaded by input torque to the differential unit, in addition to a static pre-load. The mode of operation of such a unit is that the speed of rotation of a slipping road wheel is limited by the braking action of the friction plates, and greater torque is applied to the road wheel having the better grip on the road surface. This principle is common to all friction plate differential units.

The capacity to transfer torque is expressed as the "Bias Ratio", which can be modified to suit the vehicle application. The selection of "Bias Ratio" is a complex process, being a compromise between vehicle handling, refinement, and traction. A HIGH "Bias Ratio" will tend towards a locked differential condition, as may be suited to a high-performance vehicle tuned for competition purposes; a vehicle so fitted will benefit from greater traction capabilities than one fitted with a low "Bias Ratio" unit, but at the expense of refinement and ease of handling.

It is basically in the interests of refinement that the Powr-Lok differential units fitted to current Jaguar Saloon models is of the LOW "Bias Ratio" type, whilst still conferring the benefit of partial locking between the rear wheels under conditions of low tyre adhesion.

Dealers may confirm that a Powr-Lok differential is fitted to a particular vehicle by a BLACK CROSS on the identification label on the rear cover of the differential housing. In addition, from VIN 684618, all Powr-Lok differentials have a metal tag, stamped "P/L", attached to one of the bolts securing the rear cover.

XJS MODELS**ITEM: 29****57 STEERING RACK ASSEMBLY**

Commencing at VIN 188105 a revised pattern of steering rack assembly has been introduced on all XJS models.

These units (identified below) are fully interchangeable with the steering rack assemblies on all earlier XJS derivatives.

In common with the XJ6/XJ12 steering racks supplied through Jaguar Parts Operations, the racks will be supplied with a Centralising Pin installed. Upon fitment of the rack assembly to the vehicle, this pin must be removed and replaced by a screw and special washer, as listed below.

Whilst an Exchange Programme of rack assemblies will be introduced, initial units will all be new. The appropriate suffix, N or E, should be used.

NEW Part No.	REPLACES Part Nos.	Applications
CCC 6012	CCC 5660 & CCC 5666	V12 Sportspack RHD & 3.6/4.0 Litre Coupe RHD
CCC 6013	CCC 5661 & CCC 5667	V12 Sportspack LHD & 3.6/4.0 Litre Coupe LHD
CCC 6014	CCC 5662 & CCC 5668	V12 (Standard Spec.) RHD & 4.0 Litre Convertible RHD
CCC 6015	CCC 5663 & CCC 5669	V12 (Standard Spec.) LHD & 4.0 Litre Convertible LHD
JZS 100046	Screw	All above applications
JZW 100019	Washer	All above applications

In common with XJ6 and XJ12 models, the above assemblies can not be serviced. To assist identification where warranty claims are submitted for the fitment of replacement units, the following NEW warranty codes should be utilised:

5PA	Power Steering Rack & Pinion
5PD	Rubber Gaiter
5PF	Rack Pipes
5PG	Rack Pipe Unions
5PH	Track Rod LH
5PJ	Track Rod RH
5PK	Rack Mounting Bush LH
5PL	Rack Mounting Bush RH
5PM	Rack Mounting Bracket LH
5PN	Rack Mounting Bracket RH
5PQ	Front Wheel Tracking
5PR	Outer Track Rod Ball Joint LH
5PS	Outer Track Rod Ball Joint RH
5PT	Rack Mounting Bracket Fixings

XJ6 1993 MY

ITEM: 30

74 HUB CAP DAMAGE

To prevent distortion to the hub caps, arising from over-tightening of the securing screw, a new plastic "snap on" pattern of hub cap has been introduced from VIN 684705.

The road wheels affected are the 'Roulet' alloy (Part No. CCC 2708) and the 'Radial' alloy wheel (Part No. CCC 3524).

The new pattern of hub cap is available as Part No. CCC 5281.

**ALL XJ6, XJ12, XJS MODELS
FROM VIN 673299 XJ12, 676725 XJ6, 188105 XJS**

ITEM: 31

74 16 INCH ALLOY WHEELS

A new surface finish is now being applied to 16 inch Alloy wheels which will provide increased protection against corrosion and pitting arising from brake dust.

Dealers should bring to the attention of owners concerned that **ONLY** the Jaguar-approved wheel cleaner should be used; acid-based cleaning products may lead to discoloration of alloy wheels.

The revised-condition wheels are available through Jaguar Parts Operations under Part Number MHB 6115AA.

XJS FROM VIN 187645

ITEM: 32

76 DOOR ARM REST ESCUTCHEON

A re-designed chrome escutcheon (securing screw concealer) for the door arm rests has been introduced from VIN 187645.

This revised item (Part No. BEC 23781) provides an increased clearance between the escutcheon and the trim cover of the arm rest, compared to the previous condition.

XJ6 4.0 & 3.2, XJ12

ITEM: 33

80 HEATER MATRIX – COOLANT LEAKS

Investigations into heater matrix units returned with the complaint of coolant leakage have resulted in design changes. Modifications to the top and bottom tanks and collector plates have been introduced to correct this concern.

Heater units incorporating the modified matrix assemblies were introduced at VIN 680591.

All current stock held by Jaguar Parts Operations is to the revised condition.

XJ6 / XJ12 SERVICE MANUAL

ITEM: 34

82 ERRATUM – SECTION 82 PAGE 82-23

Your attention is drawn to an error in the text on the above page, in Issue 2, dated January 1993. The correct version of the text is included below; a revision bar is placed to the left of the changed text, which is also underlined. Until this section is re-issued, please amend the Service Manual page concerned.

See 82.10.20. 82.10.08 for removal etc.
 ... Reassembly and fitting is the reversal of this procedure noting that special tool JD 164 must be placed over the compressor shaft for seal installation and that the replacement seal must be fitted with the aid of JD 197.

Service Bulletin



JAGUAR

Daimler

DATE: DECEMBER 1993

PAGE: 1 of 6

REF: JD 44/93

XJS 4.0 LITRE 1994 MY FROM VIN 190528

ITEM: 46

30 EXHAUST SYSTEM - DETAIL CHANGES, USA & CANADA ONLY

Prior to the above VIN, for the USA and Canada markets ONLY, the exhaust system basically consisted of:

- downpipe
- plain intermediate ('Y') pipe
- twin catalytic convertors
- over-axle pipes
- rear silencer assemblies

Commencing at the above VIN, the exhaust system layout becomes:

- downpipe
- intermediate ('Y') pipe with integral single catalytic convertor
- twin plain silencers
- over-axle pipes
- rear silencer assemblies

The following part numbers are applicable to the later condition, from VIN 190528:

<u>NEW PART NOS</u>	<u>DESCRIPTION</u>	<u>MARKET APPLICATION</u>
EBC 10144	Intermediate ('Y') pipe with integral catalytic convertor	USA & CANADA
EBC 9782	Intermediate silencer assembly RH	USA & CANADA
EBC 9783	Intermediate silencer assembly LH	USA & CANADA

76 BONNET RELEASE MECHANISM

Coinciding approximately with the introduction of XJS 1993.5 Model Year vehicles, a revised pattern of bonnet release catch has been introduced as a running change. In the course of development of the new type of catch, a method of gaining access to the engine compartment has been established to overcome the problem which would arise in the rare event of release cable failure.

This method allows the bonnet to be released and opened without panel or paintwork damage to the bonnet itself or adjacent panels. The bonnet release problem may then be traced and rectified.

Strict observance of the following method is essential to avoid cosmetic damage:

1. Ensure that the radio code is known prior to disconnection of the battery. Open the boot. Remove the battery cover and disconnect the battery.
2. Apply masking tape to the outside edges of the bonnet and adjacent panels, wrapping the tape as far as possible around the panel edges. Fit wing covers.
3. Remove the front grille.
4. Remove the bolts retaining the bonnet hinges.

Important: Have an assistant ready to prevent the front end of the bonnet being raised by the action of the gas struts as the bolts are removed.

5. Allow the front end of the bonnet to be raised through a short distance by the gas struts, the rear end meanwhile pivoting on the strikers still engaged to the catches.

Continue to raise the front end slowly and carefully until access is available to the bonnet ball-joint of each gas strut.

Carefully release each ball joint from its pivot ball.

Important: Ensure that the assistant holding the bonnet appreciates that as each strut is released (and allowed to extend), there will be a change from holding the bonnet down to the need to support the bonnet.

6. Have the assistant raise the front end of the bonnet a short distance further, until access is available to the catches. Care is required that the rear corners of the bonnet do not contact the plenum panel below.

7. Release the RHS catch by operating the latch arm directly by hand.
8. Using the locally-made release tool illustrated in Fig. 1. below, the LHS catch may be released after passing the release tool across the top of the engine. The notch on the end face of the tool prevents slippage from the catch.
9. Remove the bonnet by lifting it up and away from the engine compartment aperture.
10. Trace and rectify the release problem.
11. Refit and adjust the bonnet to the aperture.
12. Refit the front grille.
13. Reconnect the battery and refit the battery cover.
14. Re-code the radio; re-set the clock.

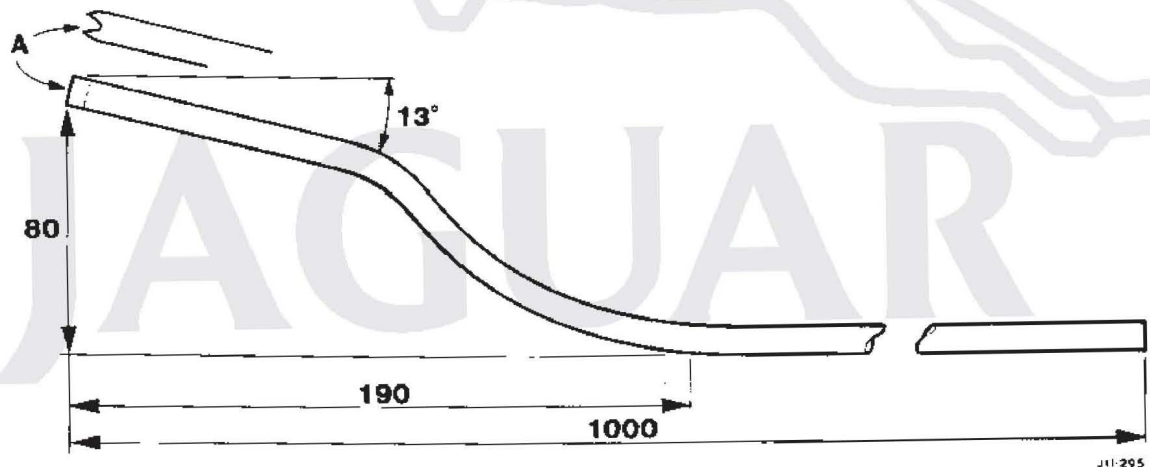


Fig. 1.

The tool illustrated above should be locally manufactured from a length of steel rod, 6.00mm diameter, approximately 1000mm long. The overall length, however, is not critical, provided that the tool is sufficiently long to provide access across the engine compartment.

76 USE OF LISTED 'PLASTIC PADDING' BODY REPAIR PRODUCTS

Being widely available through Body Refinishing trade suppliers, Jaguar make the following recommendations as a result of laboratory tests carried out on the two products concerned:-

'Plastic Padding'	WB2000 Stonechip
'Plastic Padding'	'ULTIMA' Universal Body Filler

WB STONECHIP

This is a sill-coat repair product, spray applied as a water-based emulsion. Though primarily an air dried product, it may be force dried if necessary.

It is confirmed that this material MAY be employed as a repair product on Jaguar and Daimler vehicles, where the repair will be the subject of Warranty.

Tests indicate, however, that the product will give a coarser finish than that given by the original factory finish sill-coating. Two coats of the product are recommended to give a minimum dry-film thickness of 400 microns.

Colour finishing by the conventional 2K process should be force-dried at 60°C maximum. (Low bake at 90°C may produce 'fine-boil' effects.)

It should be noted that repairs adjacent to clear coat must be preceded by thorough flattening of the clear coat (360 grit paper) to achieve satisfactory adhesion and anti-chip performance.

'ULTIMA' UNIVERSAL BODY FILLER

This is a filler product, to be knife-applied over etch-primed metal surfaces. After appropriate sanding, a conventional 2K colour process may be applied.

This product is NOT APPROVED for body repairs which carry Warranty.

The product is assessed as 'equivalent to other similar materials' of the catalysed polyester type, and shares with them the tendency to produce micro-blistering around the interface between the repair and original materials, particularly in high humidity conditions. Hence, on Jaguar and Daimler vehicles its use must be confined to repairs which do not carry Warranty.

82 BLANKING PLUGS FOR REFRIGERATION CIRCUITS

Attention is drawn to the need for connections on Refrigeration Circuit components to be blanked off, whenever the circuit is disturbed for servicing or component replacement, in order to prevent contamination of the circuit by the ingress of moisture and 'foreign' material. As well as being necessary for on-vehicle components, this also applies to components being returned under Warranty, since subsequent investigation of these components is often compromised by contamination of their interior before receipt at Jaguar.

Components being returned to Jaguar should be blanked off using the blanks installed on the replacement part. Components on the vehicle should be blanked off using suitable internal line plugs and external line caps.

A set of plugs and caps found suitable for most of the components in the Refrigeration Circuit is the Vacuum and Fuel Line Plug Set, available from Snap-on Tools, under their Part No. THX 312. It is recommended that Dealers should obtain sets of these, or their equivalent, from their local distributors.

In addition, certain connections can be blanked off using a Bonnet Stop, Part No. BD 10224, available via Jaguar Parts Operations.

It is important to note that plugs and caps kept for repetitive use on Refrigeration Circuits should be kept segregated from those used for other purposes, such as blanking off fuel or hydraulic components.

82 RECEIVER DRIER ASSEMBLY

Current instructions require that the Receiver Drier Assembly be replaced whenever the Refrigeration Circuit is opened, even though there may be no reasons to suspect the serviceability of the Drier. This Service Bulletin revises that requirement and permits the Drier to remain in service provided:-

- blanks are installed on component and refrigerant line connections immediately after disconnection.
- blanks are only removed from component and refrigerant line connections immediately prior to reconnection.

Note: 1. Refer to Item 49 above of this Service Bulletin for details of the blanking plugs and caps required.

2. Refer to Service Bulletin JD 45/93 for details of the latest standard 'O' ring seals for R134A systems on XJ6 and XJ12 models.
3. When reconnecting the refrigerant line, new 'O' ring seals, lubricated with the recommended refrigerant oil, must be used.

However, the Receiver Drier Assembly must still be replaced if:-

- it is suspected that there is swarf, or some other contaminant, in the Drier as a result of a component failure in the Refrigerant Circuit.
- the Drier is blocked, damaged or leaking.
- there is corrosion in the Drier or in the Refrigerant lines (indicating the presence of moisture in the system).



Service Bulletin



JAGUAR

Daimler

DATE: MARCH 1994

PAGE: 1 of 2

REF: JD 26/94

ALL JAGUAR AND DAIMLER VARIANTS WITH AIR CONDITIONING

ITEM: 22

XJ6 & XJ12 VIN RANGE 507471 TO 667578

XJS VIN RANGE 100001 TO 190527

SERIES III 1985 MY TO VIN 487641

82 CONVERSION TO HFC 134A REFRIGERANT FROM CFC R12

As refrigerant R12 becomes increasingly less available world-wide, in favour of refrigerant HFC 134A which is more environmentally friendly, it will become necessary to convert the refrigeration systems of certain vehicles, which were originally manufactured with a refrigeration system filled with R12 refrigerant, to accept HFC 134A refrigerant.

While the above situation may arise following component damage due to collision, or from component failure, Dealers may also be requested by customers to change their vehicle to the later refrigerant. Apart from these situations, vehicles equipped with CFC R12 systems should continue to be serviced using R12 refrigerant, and only retro-fitted to HFC 134A standards when R12 is no longer available or cost-effective.

The principal change involved is the replacement of the existing compressor lubricating oil (compatible **ONLY** with R12 refrigerant) by an oil compatible with both HFC 134A refrigerant and with residues of the earlier lubricating oil, which it is not possible to eliminate completely from the refrigerant system. In addition, it is also necessary to replace the input shaft seal of the compressor by a seal compatible with the later refrigerant.

Full details are contained in a Technical Guide, which is being issued at the same time as this bulletin.

The necessary Parts for the above conversions are available from Jaguar Parts Operations in kit form:

KIT PART NO.	MODEL	APPLICATION
JLM 11610	All XJ6 & XJ12	up to VIN 667578
JLM 11611	All XJS	up to VIN 190527
	Series III models	Post 1984 MY

Jaguar Cars Limited

Service Operation and Labour Time Allowance

The following Fitting Operation Times apply:

MODEL	VIN RANGE	COMPRESSOR	R.O.T.
XJ6, XJ12	507471 - 593883	SANDEN 810	3.10 hours
	593884 - 667578	SANDEN 709	
XJS 3.6L	112586 - 179739	HARRISON	3.00 hours
XJS 4.0L	179740 - 190527	SANDEN 709	3.35 hours
XJS 5.3L	100001 - 188104	HARRISON	3.10 hours
XJS 6.0L	188105 - 190527	SANDEN 709	3.45 hours
SERIES III 5.3 LITRE	PRIOR TO 487641	HARRISON	3.10 hours

Details of the retro-fit procedure are contained in the Technical Guide, "Air Conditioning System - HFC Refrigerant Retrofit".

JAGUAR