Number A.1.
Section General Information

Sheet 1 (of 1)
Date January, 1960

PRELIMINARY INFORMATION

(Mark 2 Models)

The following is the general data for the above models. It can be assumed that any items of data not listed are the same as for the previous models; in the case of the 3.8 litre Mark 2 the remaining data is the same as that for the 3.4 litre model.

DATA

	2.4 litre Mark 2	3.4 litre Mark 2	3.8 litre Mark 2
ENGINE			
Cylinder head type	'B' type	'B' type	'B' type
Cam lift	5/16"	$\frac{3}{8}$"	$\frac{3}{8}$"
Bore	3.2677"(83 mm)	3.2677"(83 mm)	3.425"(87 mm)
Sparking plug type			
7:1 comp. ratio	Champion L.7	Champion L.7	Champion N.5
8:1 comp. ratio	Champion N.5	Champion N.5	Champion N.5
9:1 comp. ratio	-	Champion N.5	Champion N.5
Sparking plug gap	.025"	.025"	.025"
Ignition timing			
7:1 comp. ratio	6° B.T.D.C.	T.D.C.	T.D.C.
8:1 comp. ratio	8° B.T.D.C.	2° B.T.D.C.	4° B.T.D.C.
9:1 comp. ratio	-	T.D.C.	5° B.T.D.C.
Valve seat angle			
Inlet and exhaust	45°	45°	45°
Carburetter needles			
7:1 comp. ratio	-	S.C.	T.X.
8:1 comp. ratio	-	S.C.	S.C.
9:1 comp. ratio	-	S.C.	S.C.

Continued

	2.4 litre Mark 2	3.4 litre Mark 2	3.8 litre Mark 2
STEERING			
Castor angle	$0^{\circ} \pm \frac{1}{4}^{\circ}$	$0^{\circ} \pm \frac{1}{4}^{\circ}$	$0^{\circ} \pm \frac{1}{4}^{\circ}$
Camber angle	$\frac{3}{4}^{\circ} \pm \frac{1}{4}^{\circ}$ pos	$\frac{3}{4}^{\circ} \pm \frac{1}{4}^{\circ}$ pos	$\frac{3}{4}^{\circ} \pm \frac{1}{4}^{\circ}$ pos
TRACK			
Disc wheels - front	4' 7"	4' 7"	4' 7"
- rear	4' $5\frac{3}{8}$"	4' $5\frac{3}{8}$"	4' $5\frac{3}{8}$"
Wire wheels - front	4' $7\frac{1}{2}$"	4' $7\frac{1}{2}$"	4' $7\frac{1}{2}$"
- rear	4' $6\frac{1}{8}$"	4' $6\frac{1}{8}$"	4' $6\frac{1}{8}$"

JAGUAR SERVICE BULLETIN

Number A.2
Section General Information

Sheet 1 (of 1)
Date March, 1960

"PERIODIC MAINTENANCE VOUCHER BOOKLET"

(All Models)

A copy of the above booklet is being included in the literature wallet issued with each new car.

The reason for the introduction of this Maintenance Voucher scheme is to provide a record of the maintenance services carried out and to encourage owners to have their cars regularly serviced. The record of service will be of value to a dealer who is undertaking work on a car for the first time in that he will be aware of the services that have been previously carried out. In addition, the completed vouchers will provide proof to a prospective purchaser that the maintenance operations have been carried out as recommended.

The existing form of 500 miles (800 km) Free Service Voucher is discontinued and will instead be included in the Voucher booklet.

Number A.3
Section General Information

Sheet 1 (of 1)
Date March, 1960

SPECIAL SERVICE TOOLS FOR JAGUAR CARS

In order to assist Distributors and Dealers in reducing labour costs and improving efficiency in their service organisations, a range of Special Purpose Tools have been designed and approved. Such tools are to be marketed by Messrs. V.L. Churchill & Co. Ltd., and the following procedure should be adopted.

(1) Home Distributors and Dealers:-

Order direct from V.L. Churchill & Co. Ltd.,
Great South West Road,
Bedfont, Feltham,
Middlesex.

(2) Overseas Distributors:-

Order on Jaguar Cars Ltd.,

(Overseas Dealers order on their Distributors)

The following Special Purpose Tools may now be ordered:

Ref. No.	Description	Price (Trade) £.	s.	d.	
J.1 (A)	Hub puller (5 stud hub)	7.	6.	0	(already advised)
J.2	Top timing chain adjusting tool	1.	16.	6	
J.3	Overdrive Drain Plug Spanner	1.	3.	9	
J.4	Mark V11, V111, 1X Gearbox rear oil seal removing adaptor	1.	14.	0	
J.5	2.4/3.4 litre and Mark 2 gearbox rear oil seal removing adaptor	1.	13.	0	
	Note: Applicable to standard gearbox only and used in conjunction with 7657 oil seal removing tool.				
J.6	Front suspension coil spring compressor	6.	10.	0	
J.7	Hub puller (Centre lock wire wheel type)	8.	7.	6	
J.8	Engine lifting plate	5.	0.	9	
J.6118	Valve spring compressor	2.	9.	3	
7657	Oilseal remover (for use with J.4 & J.5)	1.	17.	6	

/Cont'd...

Your attention is drawn to the range of Special Purpose tools available for servicing Laycock Overdrive Units and Salisbury Rear Axles already advised in Service Bulletin No.151.

Automatic Transmission Service Tools

The following Special tools for servicing the automatic transmission are also being marketed by Messrs. V.L. Churchill & Co. Ltd.,

Description	Original No.	Churchill No.	Price £.	s.	d.
ó Pressure gauge rig	J.4270	BW.1	5.	19.	6.
ó Band Adjuster	J.4285	BWA 2B	1.	16.	9.
ó Spline Adjustment fixture	J.4283	BW.5	15.	13.	0.
ó Converter Alignment flange	J.4286	BW.3	5.	1.	0.
Universal puller	HM.925	BW.55	3.	15.	0.
Puller Plate Rear Bearing) Adaptor rings " ")	J.12986	BW.55-1	4.	16.	5.
Mainshaft end float gauge	-	BW.13	6.	11.	0.
Ring gear retaining clip	-	BW.14		1.	9.
Transmission Pilot Studs	-	BW.4		7.	9.
Mainshaft Bearing replacer	-	BW.7	1.	1.	0.
Spring retainer remover	-	BW.8 (set)		15.	6.
Governor shaft Setscrew wrench	-	BW.9		5.	3.
Piston installing pins	-	BW.10		15.	10.
Clutch Assembly Tool	-	BW.11		16.	3.
Lubrication Valve Test Rod	-	BW.12		6.	5.
Bench cradle	-	BW.15	2.	4.	3.
Drive flange oil seal replacer (use with 550 handle)		BW.16		13.	9.
" " Remover (use with 55 puller)		BW.55/2	1.	4.	0.
Circlip pliers	-	7065		19.	9.
Oil seal driver handle	-	550		18.	0.

Those marked ó are the minimum requirement for diagnosis or removal and refitting of Transmission and converter.

JAGUAR SERVICE BULLETIN

Number A.3 (2nd issue)
Section General Information

Sheet 1 (of 1)
Date February, 1961

SPECIAL SERVICE TOOLS FOR JAGUAR CARS

(This bulletin supersedes A.3 of March, 1960)

In order to assist Distributors and Dealers in reducing labour costs and improving efficiency in their service organisations, a range of Special Purpose Tools have now been designed and approved. Such tools are to be marketed by Messrs. V.L. Churchill & Co. Ltd., and the following procedure should be adopted.

1. Home Distributors and Dealers:-

Order direct from V.L. Churchill & Co. Ltd.,
Great South West Road,
Bedfont, Feltham,
Middlesex.

2. Overseas Distributors:-

Order on Jaguar Cars Ltd.,
(Overseas Dealers order on their Distributors)

The following Special Purpose Tools may now be ordered:

	Description	Ref.No.
ABC	Hub Puller (5 stud hub)	J.1 (A)
ABC	Top timing chain adjusting tool	J.2
ABC	Overdrive Drain Plug Spanner	J.3
AB	Mark VII, VIII, IX Gearbox rear oil seal removing adaptor.	J.4
AB	2.4/3.4 litre and Mark 2 Gearbox rear oil seal removing adaptor Note: Applicable to standard gearbox only and used in conjunction with 7657 oil seal removing tool.	J.5
AB	Front suspension coil spring compressor	J.6
ABC	Hub puller (Centre lock wire wheel type)	J.7
AB	Engine lifting plate	J.8
ABC	Valve spring compressor	J.6118
AB	Oil seal remover (for use with J.4 & J.5)	7657

/Continued...

Your attention is drawn to the range of Special Purpose Tools available for servicing Laycock Overdrive Units and Salisbury Rear Axles already advised in Service Bulletin No. 151.

Automatic Transmission Service Tools

The following Special tools for servicing the automatic transmission are also being marketed by Messrs. V.L. Churchill & Co. Ltd.,

		Description	Original No.	Churchill No.
ABC	ϕ	Pressure gauge rig	J.4270	BW.1
ABC	ϕ	Band Adjuster	J.4285	BWA 2B
AB	ϕ	Spline adjustment fixture	J.4283	BW.5
AB	ϕ	Converter Alignment flange	J.4286	BW.3
A		Universal Pulley Puller	-	6312A
A		Mainshaft bearing adaptors	-	BW.6312A - 1
A		Mainshaft end float gauge	-	BW.13
A		Ring gear retaining clip	-	BW.14
A		Transmission Pilot Studs	-	BW.4
A		Mainshaft Bearing replacer	-	BW.7
A		Spring retainer remover	-	BW.8 (set)
A		Governor shaft setscrew wrench	-	BW.9
A		Piston installing pins	-	BW.10
A		Clutch Assembly Tool	-	BW.11
A		Lubrication Valve Test Rod	-	BW.12
A		Bench Cradle	-	BW.15
A		Drive flange oil seal replacer use (use with 550 handle)	-	BW.16
A		Circlip pliers	-	7065
A		Oil seal driver handle	-	550

Those marked ϕ are the minimum requirement for diagnosis or removal and refitting of Transmission and Converter.

Rear Axle Service Tools

ABC Axle shaft extractor - SL.13A

Overdrive Service Tools

ABC Rig for testing hydraulic pressure - L.188

The notation A, B or C against each tool indicates the minimum requirements for distributors, district distributors, area dealers, retail and sub-retail dealers.

A - Distributors
B - District Distributors and area dealers
C - Retail and sub-retail dealers

Number A.4
Section General Information

Sheet 1 (of 1)
Date May, 1960

"PERIODIC MAINTENANCE VOUCHER BOOKLET"

(All models)

Owing to the demand for the above booklets by owners of cars already in service it should be noted that these booklets can be obtained at a cost of 7/6d. each by placing an order on Jaguar Spares Department.

STEERING COLUMN CONTROLS

(2.4, 3.4 and 3.8 litre Mark 2 models)

Models affected	Commencing chassis numbers	
	R.H. Drive	L.H. Drive
2.4 litre	102242	125520
3.4 litre	151466	175683
3.8 litre	201087	212640

On cars with the above chassis numbers and onwards the overdrive or automatic transmission control and the flashing indicator control are changed over side for side on both right and left hand drive cars. The location and operation of the controls is now as follows:-

Automatic Transmission Selector Control

On the right-hand side of the steering column.

The selector lever must be raised when selecting P, L or R and when moving from P to any other position.

Overdrive Control

On the right-hand side of the steering column.

Operate the lever clockwise to engage overdrive and anti-clockwise to bring the drive into top (4th) gear.

Continued...

Flashing Direction Indicators

On the left-hand side of the steering column.

Move the lever clockwise to operate the flashing direction indicators on the right-hand side of the car and anti-clockwise to operate the left-hand indicators.

JAGUAR SERVICE BULLETIN

Number A.5
Section General Information

Sheet 1 (of 1)
Date September, 1960

MANUFACTURERS WARRANTY

(All models)

To simplify the procedure covering the issue of a new car guarantee to the purchaser of a Jaguar car and eliminate the need for an individual "Owners Identification Card" a new form of "Manufacturers Warranty" card, which replaces the existing guarantee form and owners identification card, will, in the near future, be included in the literature envelope issued with each new car leaving our works.

Distributors and Dealers when handing over a new car to the purchaser must adopt the following procedure or in the case of cars sold through traders who are not Jaguar dealers ensure that this procedure is carried out with the new type Manufacturers Warranty form.

1. Inside Warranty Card and below statement of Warranty

Type the details of chassis number, delivery date, purchaser's name and address. Apply dealers stamp or type in name and address of dealer and append signature on behalf of dealer. Ensure that this section of warranty card which serves as an Owners Identification Card is signed by the purchaser.

2. Registration of Ownership Card attached to Warranty Card

Type in all details called for on "Registration of Ownership" card.

Ensure that this card is signed by the purchaser, detach from warranty card and place in mail.

3. On rear of Warranty Card

Type in details called for under the heading "Details for the Purchaser".

4. Ensure that the completed warranty card is handed to the purchaser. Advise him to keep it in the car and to show it to the Jaguar dealer on whom he may call if warranty service should be required during the warranty period.

JAGUAR SERVICE BULLETIN

Number A.6.
Section General Information

Sheet 1 (of 1)
Date November, 1960

USE OF OIL ADDITIVES

In view of the large number of anti-friction additives now on the market we would remind you that we do not recommend the use of any oil additives.

It is emphasized that this is particularly important in so far as the rear axle, automatic transmission and gearbox/overdrive units are concerned in view of the special purpose oils used therein.

JAGUAR SERVICE BULLETIN

Number A.7
Section General Information

Sheet 1 (of 1)
Date February, 1961

RECOMMENDED LUBRICANTS - ADDITIONAL BRAND

(All Models)

The following lubricants manufactured by the Regent Oil Co. Ltd., are now added to our list of recommendations.

Engine - Summer	32° - 90° F	Advanced Havoline 30
Winter	Below 32° F	Advanced Havoline 20W
Tropical	Above 90° F	Advanced Havoline 40
U.C.L.		Regent U.C.L.
Gearbox Carburettor hydraulic piston dampers Distributor oil can points Oil can Lubrication		Advanced Havoline 30
Rear Axle		Universal Thuban 90
Steering Box		Universal Thuban 140
Rack and pinion steering Prop. shaft Wheel bearings Steering track rod Steering tie-rods Wheel swivels Handbrake cable Clutch and brake pedals		Marfak Multi-purpose 2
Automatic Transmission Power-assisted steering		3528 Texamatic Fluid
Multigrade Engine oil		Advanced Havoline Special 10W/30

Adjust at relief valve to give pressure between 2 lbs/sq.in ($.14$ kg/cm^2) to $2\frac{1}{2}$ lbs/sq.in ($.17$ kg/cm^2) maximum.

(iii) Remove fuel pump from tank to set relief valve. Adjustment is by setting screw and locknut on pump cover plate. To reduce the pressure turn setting screw in an anti-clockwise direction, and fully tighten locknut when completed.

(iv) Bench test unit with pump submerged in clean paraffin (kerosene).

Important: When testing the fuel pump the black cable must always be connected to the positive battery terminal.

(v) When refitting pump to tank always renew joint.

CLUTCH

Make and type	Borg and Beck 10" single dry plate
Colour of thrust springs	Violet
Operation	Hydraulic
Fluid	Castrol Crimson Hydraulic Brake Fluid

GEARBOX

Type	Four speed, synchromesh on 2nd, 3rd and Top gears.
Prefix letters	EB
Suffix letters	JS

Gearbox Removal and Refitting

Proceed as for engine removal.

REAR AXLE

Make and type	Salisbury - 4 H.U.
Ratio	Standard 3.31 to 1
Alternatives	3.54 to 1, 3.07 to 1, 2.93 to 1

REAR SUSPENSION

Type	Independent, coil spring
Rear camber angle	$\frac{3}{4}^\circ \pm \frac{1}{4}^\circ$ negative

/Continued...

Rear Axle and Suspension Unit - Removal and Refitting

Removal

Jack up car under rear axle and place stands under the frame members forward of the radius arm mountings. Remove the road wheels and release the handbrake.

Disconnect the feed pipe from the brake hose connection at the three way junction and blank off open connections to prevent ingress of dirt.

Disconnect the handbrake cable from the compensator assembly by removing the split pin and clevis pin from fork joint and unscrewing conduit from the abutment block.

Remove rear silencer and tail pipe assembly after disconnecting clamp from joint. Disconnect the two radius arms from the body at the forward mounting points by removing the two setscrews and lock washers. Remove anti-roll bar lower pivot pin bolts and disconnect propeller shaft.

With the jack in position under the rear axle assembly remove the eight bolts from the "Vee" mounting brackets, lower assembly and remove from the car.

Refitting

Refitting is the reverse of the removal procedure. It will be necessary to re-adjust the handbrake and re-bleed the rear brake hydraulic system. It is advisable to complete these operations before refitting the road wheels.

FRONT SUSPENSION AND STEERING

Type of steering	Rack and pinion
Castor angle	$1\frac{3}{4}^{o} \pm \frac{1}{4}^{o}$ positive
Camber angle - front	$\frac{1}{4}^{o} \pm \frac{1}{4}^{o}$ positive
Front wheel alignment	1/16" to $\frac{1}{8}$" (1.59 mm to 3.18 mm) toe-in
Number of turns lock to lock	$2\frac{1}{2}$

BRAKES

Make and type	Dunlop disc, self adjusting at both front and rear. Rear brakes are fitted inboard adjacent to differential unit.
Servo	Bellows type acting directly onto the brake pedal.

Continued....

Pedal Operation	Pedal operates twin master cylinders one for the front brakes and one for the rear through a compensating linkage. An indepent reservoir is provided for each system.
Handbrake/brake fluid warning light	Provided on both hydraulic systems

Removal of Rear Brake Calipers

It is necessary to remove the rear axle and suspension unit completely from the car before the brake calipers can be detached.

WHEELS AND TYRES

Wheel type	5 K rims 72 spoke	
Tyre type	Dunlop 6.40 x 15 (Road speed RS5)	
Tyre pressures	Front	Rear
Normal use up to maximum speeds of 130 m.p.h. (210 kph)	23 lbs/sq.in (1.62kg/cm^2)	25 lbs/sq.in. (1.76 kg/cm^2)
For sustained high speeds and maximum performance	30 lbs/sq.in. (2.11 kg/cm^2)	35 lbs/sq.in. (2.46 kg/cm^2)

DIMENSIONS

Wheel base	8' 0" "2.44 m)
Track - front and rear	4' 2" (1.27 m)
Overall length	14' 7.5/16" (4.45 m)
Overall width	5' 5¼" (1.66m)
Overall height	
Fixed Head Coupe	4' 0⅛" (1.22 m)
Open 2-seater	3' 10½" (1.18 m)
Ground clearance	5½" (140 mm)
Turning circle	37' 0" (11.27 m)
Weight (dry approximate)	
Fixed head Coupe	22½ cwt (1123 kg)
Open 2-seater	22cwt (1098 kg)

Number A.9
Section General Information

Sheet 1 (of 1)
Date March, 1961

CONTINENTAL TOURING KITS

With the large volume of Jaguar owners who now make continental tours and the improved service facilities in Continental Europe, we consider it no longer practicable or necessary to issue comprehensive Continental Touring Kits on a sale or return basis.

We are, however, making available small, low priced, First Aid Kits which some owners may wish to purchase to carry in their car when touring abroad or at home.

Note: THESE KITS ARE SUPPLIED ONLY ON AN OUTRIGHT SALE BASIS.

Distributors and Dealers will no doubt be pleased to supply to the owner on a sale or return basis any additional parts they may wish to carry with them on a particular tour.

The First Aid Kits now being made available consist of the following parts:

1	Fan Belt
2	Fuses (50 amp)
1 set	Distributor Contacts
1	Distributor Condenser
1	Distributor Rotor
1	Brake Master Cylinder Repair Kit
1	Clutch Master Cylinder Repair Kit
1	Cylinder Head Gasket
1	Inlet Manifold Gasket
2	Exhaust Manifold Gaskets
2	Camshaft Cover Gaskets
4	Oil Pipe Washers

Note: In some of the kits for the earlier models an additional camshaft cover gasket has been included for use where an electric rev-counter is incorporated.

Note that to ensure that the correct kit is obtained for a particular car it is necessary to know the engine number and in some cases whether the car has drum or disc brakes.

Details of the First Aid Kits are given in Spares Bulletin A.48

JAGUAR SERVICE BULLETIN

Number A.11. (4th issue)
Section General Information.

Sheet 1 (of 1)
Date December, 1962.

This Service Bulletin supersedes the 3rd issue of November, 1962 which should be destroyed.

ADDITIONAL SERVICE TOOLS.

The following service tools are now available in addition to those listed in Service Bulletin A.3. which bulletin also gives the procedure for obtaining these tools.

OVERDRIVE TOOLS

Applicable to:		Churchill Tool No.
Mark IX 3.8 litre Mark 2 3.8 litre XK.150	Accumulator Piston Housing Remover - for 1½" piston	L.216
Mark IX 3.8 litre Mark 2 3.8 litre XK.150	Accumulator Piston (1½" diameter) 'O' Ring Replacer	L.217
Mark IX 3.8 litre Mark 2 3.8 litre XK.150	Accumulator Piston Ring Compressor (1½" diameter)	L.218
Mark 10	Operating Piston Remover	L.300
Mark 10	Hydraulic Pressure Testing Equipment	L.301+

POWER - ASSISTED STEERING TOOLS

Mark 2 models	Power steering piston assembly sleeve	L.9
Mark 10	Power steering piston assembly sleeve	J.19
Mark IX Mark 10 Mark 2 models	*Hydraulic pressure gauge set comprises:-	J.10
	Gauge	J.10/2
	T. Adaptor	J.10/1
	Pipe	J.10/3

* See Service Bulletin No.II.5

\+ Consists of BW 1A and adaptor BW 38.

/cont'd.....

GENERAL TOOLS

5 stud hubs	⌀Hub Puller	J.1.C.
'E' Type Mark 10	Hydraulic damper/Rear spring dismantling adaptor	J.11.A.(use with SL.14).
'E' Type Mark 10	Servo Vacuum Gauge	J.12
'E' Type Mark 10	Servo Vacuum gauge adaptor	J.12-1(early cars)
'E' Type	Servo Vacuum gauge adaptor	J.12-2
	Servo Vacuum gauge adaptor	J.12-3(Later cars)
'E' Type Mark 10	Rear Hub end float gauge (dial indicator)	J.13
'E' Type Mark 10	Rear Wishbone pivot dummy shafts (2 off per set)	J.14
'E' Type Mark 10	Rear Hub Master Spacer and Bearing replacer	J.15
'E' Type Mark 10	Rear Hub outer bearing cone remover and replacer	J.16A (use with SL.14).
Engines with latest rear cover - see Service Bulletin B.13.	Crankshaft rear oil seal sizing tool	J.17
All O.H.C. engines	Valve guide reamer	J.18
'E' Type Mark 10	Rear Hub Inner and Outer Bearing Cup Remover and Replacer	J.20.(use with SL.12).

⌀Same as J.1.B. except for longer centre screw (J1C/3) and thread protector (J1C/7)

Note: To the application table of the "Jaguar Service Tools" pamphlet issued with this bulletin make the following additions.

Mark 10 Column

Add an asterisk against Tool numbers J6A, J11A, J16A, and SL14.

Mark 1 and 11 3.8 litre Column

Add an asterisk against Tool numbers J6118 and 7657.

'E' Type Column

Add an asterisk against Tool number J6118.

JAGUAR SERVICE BULLETIN

Number A.18.
Section General Information.

Sheet 1 (of 1)
Date June, 1963.

THE S.U. CARBURETTER SERVICE SCHOOL.

Distributors and Dealers are advised that a Service Course dealing with the correct method of assembly, installation and maintenance, repair procedure and practical tuning of S.U. Carburetters is now in full operation for the benefit of personnel dealing with these carburetters in service.

Full details of this course can be obtained from:-

The Service School,
The S.U. Carburetter Co. Limited,
Wood Lane,
Erdington,
Birmingham. 24.

JAGUAR SERVICE BULLETIN

Number A.19.
Section General Information.

Sheet 1 (of 1)
Date September, 1963.

RECONDITIONED EXCHANGE UNITS - OVERSEAS SCHEME.

Many enquiries are being received from overseas distributors concerning the scheme for obtaining reconditioned engine and gearboxes from the factory.

The attention of all Distributors and Dealers is drawn to the letter circulated in January 1963 which gives details and prices of the reconditioned exchange scheme.

JAGUAR

SERVICE BULLETIN

Number A.22.
Section General Information.

Sheet 1 (of 1)
Date May, 1964.

LABOUR ALLOWANCE FOR REMOVAL OF REAR HALF-SHAFTS.

Having examined the circumstances surrounding the removal and replacement of rear half-shaft assemblies on Mark 10, 'E' Type and 3.4 'S' and 3.8 'S' Type models, we find that the allowance made in our Repair Labour Schedule Operation H.14 is causing concern amongst a number of distributors and dealers.

A re-assessment has now been made of this operation having regard to all contingencies and we have decided to increase the allowance in this respect to 1½ hours. We would make it quite clear that 1½ hours covers the complete removal and replacement of the half-shaft assembly, but excludes re-adjustment of hub bearings, which would not be disturbed. Will all concerned please ensure that the necessary adjustments are recorded against Operation H.14 of the Repair Labour Schedule and submit guarantee claims in accordance with this revised allowance.

This increased allowance is effective from the 1st June, 1964 and is no way retrospective.

JAGUAR SERVICE BULLETIN

Number A.25.
Section General Information

Sheet 1 (of 1)
Date October, 1964.

NEW SERVICE TOOLS.

The following new service tools are now available.

Please note the new address of Messrs. V.L. Churchill & Co. Limited, - London Road, Daventry, Northants.

Tool No.		Models.	Supplier.
JD.23	Weatherstrip fitting tool (For use when fitting windscreen and backlight rubbers).	All	V.L. Churchill.
JD.24	Ball joint separator. (For "breaking" the taper of track rod and tie-rod ball joints).	All	V.L. Churchill.
10416	Brake piston retraction tool (For pushing back the pistons when fitting new friction pads on Series 3 brakes).	3.4/3.8 'S' 4.2 Mark 10	Jaguar Cars Ltd.

Mr A Denton - Snitterfield

JAGUAR SERVICE BULLETIN

Number A.2826
Section General Information

Sheet Sheet 1 (of 1)
Date November, 1965

PROTECTIVE WAX (HOME MARKET)

(All Models)

With effect from 1st October, 1965, all cars sold on the Home Market will be sprayed with a protective wax finish before leaving the factory, which must be removed before delivery to the customer.

The procedure recommended for de-waxing is as follows:

(1) Water wash, using "TERGEZ" or similar detergent agent to remove dirt and dust.

(2) De-wax by hand with S.B.P. white spirit or paraffin, the former being preferable.

(3) Clean glass and chrome.

(4) Final hand polish.

JAGUAR SERVICE BULLETIN

Number A.27
Section General Information

Sheet 1 (of 1)
Date April, 1966

De-Waxing of New Cars

If Distributors and Dealers have sufficient movement of new cars, it may be found that manual de-waxing presents something of a problem in regard to the time factor.

We have investigated the claims made for the Kismet Mini Master Steam Jet Cleaner, with particular reference to the de-waxing operation, using a hot spray with addition of 4% detergent (or paraffin) and find this to be entirely satisfactory equipment for this purpose.

Use of the Mini Master Cleaner under these conditions involves consumption of approximately 1½ gallons of paraffin per car. The operation take 12 to 15 minutes, depending on model, and has the most important advantage that THERE IS NO POSSIBILITY OF PAINTWORK BEING SCRATCHED as does occur with manual de-waxing.

The equipment costs £265 nett trade and it should be remembered that, in addition to hot water de-waxing, the equipment provides full steam-cleaning facilities.

We recommend this equipment but all enquiries should be made to Kismet Limited, Fenlake Works, Fenlake Road, Bedford, England.

JAGUAR SERVICE BULLETIN

Number A.28
Section General Information

Date September, 1966

RECOMMENDED LUBRICANTS
(All Models)

Following oil specification changes by certain Oil Manufacturers the RECOMMENDED LUBRICANTS listed have been modified as detailed below:-

		New Oil	Replacing
ENGINE	(Castrol	Castrol XL20W/50	Castrolite or Castrol XL
	(B.P.	Super Visco-Static	Visco-Static
STEERING	Mobil	Mobilube C140	Mobilube 9X140

These new oils are recommended for all current Jaguar models.

It should also be noted that ESSO Extra Motor Oil 5W/20 has now been deleted from the recommended Engine oil specification.

N Section.

JAGUAR

SERVICE BULLETIN

Number A.29
Section General Information

Sheet 1 of 1
Date March, 1967

PETROL GRADING - 'STAR' SYSTEM

For attention of all Jaguar HOME Distributors and Dealers

With reference to the introduction of a 'STAR' grading system to indicate the octane rating of petrol supplied to the Home Market, it is important to ensure that only the correct grade of petrol is used to suit the engine compression ratio.

ALL CARS WITH 8:1 COMPRESSION RATIO REQUIRE '4 STAR' PETROL (97 OCTANE) AND ALL CARS WITH 9:1 RATIO '5 STAR' PETROL (100 OCTANE).

The compression ratio (-8 or -9) is shown as an extension of the engine number stamped on the Commission Plate and on the Engine.

The use of petrol of a lower grading may cause detonation and, in severe cases, resultant piston damage.

Petrol Pump personnel should be notified of these requirements.

JAGUAR

SERVICE BULLETIN

Number A.30
Section General Information

Date July, 1968

TO ALL DISTRIBUTORS AND DEALERS

Although the general requirement is laid down in the First (Free) Service at 1,000 miles (1,600 km.) as quoted in the Owner's Handbook and the Service Voucher Booklet, that all bolts, nuts, hydraulic unions, etc., are checked for tightness, it is considered, that in line with the worldwide efforts to achieve greater road safety, more emphasis must be placed on safety-related items.

Will you please instruct all personnel accordingly, and ensure that specific attention is given during the First (Free) Service to such items as:-

(1) Tightness and freedom from leakage of all brake hydraulic and petrol pipe unions.

(2) Tightness of road wheel securing nuts and freedom from damage to tyres.

(3) Tightness of clamp pinch bolts on all steering column universal joints.

(4) Proper functioning of all door locks.

(5) Bonnet release returning to position.

(6) Lights legally required operating correctly.

These remarks apply to any First (Free) Service whether or not you are the vendor of the car and listing of these specific points does not remove the necessity of attention being given as laid down in the Service Schedule.

ROUTINE SERVICE VOUCHERS
(Publication No. E.153)
1,000 MILES (1,600 KM.) FREE SERVICE

IMPORTANT: To all Distributors and Dealers

When submitting the FREE Routine Service Voucher for payment, it is essential that the name and address of the SELLING DEALER is quoted in addition to the Servicing Dealer.

This information should be written on the back of the Voucher.

December, 1955.

JAGUAR

SERVICE AND SPARES ORGANISATION

SERVICE BULLETIN NO: 178.

ADVANCE SERVICING INFORMATION
2.4 LITRE MODEL

The following information is issued to assist Distributors and Dealers in servicing 2.4 litre models pending the distribution of the Operating, Maintenance and Service Handbook.

Car Number

Stamped on the identification plate attached to the right-hand wing valance.

Prefix "S" indicates a "Special Equipment" model.

Suffix "DN" to the car number indicates that an overdrive unit is fitted.

Engine Number

Stamped on the right-hand side of the cylinder block above the oil filter and at the front of the cylinder head casting.

/7 or /8 following the engine number denotes the compression ratio.

Gearbox Number

Stamped on a shoulder at the left-hand rear corner of the gearbox casing and on the top cover.

Letter "N" at the end of the prefix letters indicates that an overdrive unit is fitted.

Body Number

Stamped on a plate attached to the right-hand side of the scuttle.

GENERAL DATA

ENGINE

Bore	3.2677" (83 mm.)
Stroke	3.0118" (76.5 mm.)
Compression ratio	8 to 1 (7 to 1 alternative)
Distributor contact breaker gap	.014" - .016" (.36 - .41 mm.)
Sparking Plug Type	
7 to 1 comp. ratio	Champion L.10.S.
8 to 1 comp. ratio	Champion N.8B.
Sparking plug gap	.030" (.76 mm.)
Ignition timing	10° B.T.D.C.
Valve clearances(cold) inlet	.004" (.10 mm.)
exhaust	.006" (.15 mm.)

CARBURETTORS

Type: Solex downdraught.

Choke and Jet Sizes.

Choke	25 mm.
Main jet	115
Air correct jet	160

cont'd.....

Emulsion tube	10
Pump jet	55
Pilot jet	60
Pilot air bleed	1.5 mm.
Needle valve	2 mm.
Needle valve washer	1 mm.
Starter petrol jet	GS.105
Starter air jet	GA.4.5

CLUTCH

Type	Borg and Beck 9"
Operation	Hydraulic
Fluid	Genuine Lockheed Hydraulic Brake fluid(to S.A.E.Spec.70R2)

BRAKES

Type	Lockheed - vacuum servo assisted. Self-adjusting at both Front and rear.
Fluid	Genuine Lockheed Hydraulic Brake Fluid(to S.A.E.Spec.70R2)

FRONT SUSPENSION AND STEERING

Castor angle	$\frac{1}{2}^{o}$ - 1^{o} negative
Camber angle	$\frac{1}{2}^{o}$ - 1^{o} positive
Front wheel alignment	Parallel to 1/16"(1.59 mm.) toe-in.

REAR AXLE

Type:	3HA.
Ratio	4.55:1

TYRES

Type		6.40 x 15 Tubeless	
Pressures		Front	Rear
	Normal driving	24lbs./sq.in. (1.69 kg/cm^2)	22lbs./sq.in. (1.55 kg/cm^2)
	Fast touring (that is, long distances at maintained speeds of over 85 m.p.h. (135 k.p.h.)	30lbs./sq.in. (2.11 kg/cm^2)	28lbs./sq.in. (1.97 kg/cm^2)

CAPACITIES

	Imperial	U.S.	Litres
Engine - total	13 pts.	15½ pts	7½
Gearbox(without overdrive)	2½ "	3 "	1½
Gearbox(with overdrive)	4 "	4¾ "	2¼
Rear Axle	2½ "	3 "	1½
Cooling system(with heater)	20 "	24 "	11¼
Petrol tank	13½ galls.	16¼ galls.	61¼

OIL FILTER - DETAILS

Part Number.

C.11722	Element (FG.2306)
C.11713	Sealing ring,rubber in filter head (137366)

March, 1956.

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.182.

VARIOUS SERVICING ITEMS.

DISTRIBUTOR MICROMETER ADJUSTMENT.

Model affected
2.4 litre.

It should be noted that the direction of rotation for the micrometer adjustment of the advance and retard mechanism is opposite to that of the other current production models, that is, anti-clockwise to advance the ignition and clockwise to retard.

The direction of rotation to advance and retard is indicated on the distributor body adjacent to the vacuum advance diaphragm housing.

Index Reference - Sections B and P.

PETROL TANK CAPACITY.

Model affected
2.4 litre.

Note that the petrol tank capacity of the above model is 12 galls ($14\frac{1}{2}$ U.S.galls, $54\frac{1}{2}$ litres) and not $13\frac{1}{2}$ galls ($16\frac{1}{2}$ U.S.galls, $61\frac{1}{4}$ litres), as stated in Service Bulletin No.178, which should be amended accordingly.

Index Reference - Section A.

STATIC IGNITION TIMING.

Model affected
2.4 litre.

It should be noted that one flywheel tooth equals $3\frac{1}{2}$ crankshaft degrees. Top Dead Centre for No.1 and 6 pistons is indicated by the alignment of an arrow stamped on the crankcase and an arrow on the edge of the flywheel visible through a hole in the left-hand side of the clutch housing.

Index Reference - Section B.

PARKING PAWL ROD - SPLIT TYPE.

Models affected.	Commencing Transmission Number.
Automatic Transmission cars.	5011.

On cars with the above transmission number and onwards a split type of parking pawl rod is fitted which facilitates disengagement of the parking pawl on steep gradients.

If any difficulty is experienced in disengaging the parking pawl on a steep slope with the car facing downhill, the R (Reverse) position should be selected and the lever held in this position until the parking pawl releases and car moves rearward when the 'D' position can be selected and the car driven forward.

Conversely, if the car is on a steep slope facing uphill and it is required to reverse the car, hold the selector lever in the 'D' position until the car moves forward and then select the 'R' position.

Index Reference - Section FF.

DOOR LOCKS - OPERATION.

Model affected
2.4 litre.

Attention is drawn to the following instructions for operating the door locks which vary from the types of locks fitted to previous models.

The front doors may be opened from the outside by pressing the button incorporated in the door handle. The doors are opened from the inside by pulling the interior handles rearward.

Cont'd...

Both front doors can be locked from the inside by pushing the interior handles forward and allowing them to return to their original position; this feature only applies if the doors are fully closed before operating the interior handles.

Both front doors can be locked from the outside by means of the ignition key; the locks are incorporated in the push buttons of the door handles.

To lock the right-hand door insert the key in the lock, rotate anti-clockwise as far as possible and allow the lock to return to its original position - the door is now locked. To unlock the right-hand door turn key clockwise as far as possible and allow the lock to return to its original position.

To lock the left-hand door rotate key clockwise; to unlock, rotate key anti-clockwise.

KEYLESS LOCKING is obtained by first pushing the interior door handle full forward and allowing it to return to its original position. If the door is now closed from the outside with the push button of the handle fully depressed the door will become locked.

WARNING - If the doors are to be locked by this method the ignition key should be removed beforehand (or the spare key kept on the driver's person) as the only means of unlocking the front doors is with this key.

Index Reference - Section N.

DRIVING MIRROR.

Models affected.
XK.140
2.4 litre.

It should be noted that the driving mirror of each of the above models is adjustable for height. To adjust, rotate the knurled sleeve anti-clockwise, slide the mirror stem into the desired position and tighten the sleeve.

Index Reference - Section A.

REAR ROAD SPRING - REMOVAL AND REFITTING.

Model affected
2.4 litre.

Removal.

Jack up under the rear jacking socket until the road wheel is clear of the ground or ramp.

Remove the nut from the eye bolt at the rear of the spring. Remove the mounting plate from the centre of the spring.

Jack up under the front end of the spring and remove the front mounting plate. Lower the jack and remove the eye bolt from the rear of the spring when the spring can be withdrawn.

Refitting.

Enter the spring in the mounting bracket on the axle and fit the eye bolt but do not tighten nut.

Jack up under the front end of the spring and fit the front mounting plate. Remove the jack.

Lower the car gently on to its wheels, ensuring that rubber pad in the centre of the spring aligns with the pan in the underframe longitudinal member, and fit the centre mounting plate. With the weight of the car fully on the road wheels tighten the eye bolt nut at the rear of the spring.

Index Reference - Section K.

March, 1956

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.183.

VARIOUS SERVICING ITEMS.

FRONT ROAD SPRING.

Model affected	Commencing Chassis Numbers. R.H.Drive.	L.H.Drive
2.4 litre	900484	940020

On cars with the above chassis numbers and onwards, Front Road Spring C.8924/1, replaces Front Road Spring C.8924, and Packing Piece C.11874.

Identification.

Front Road Spring C.8924/1 is identified by a yellow splash of paint (irrespective of any other splashes of paint on the spring) on the end of the spring, and is a $\frac{1}{4}$" (6.3 m.m.) longer than Front Spring C.8924.

Interchangeability

(i) Road Spring C.8924/1 can be used to replace Road Spring C.8924 providing the $\frac{1}{4}$" (6.3 m.m.) Packing Piece C.11874 fitted at the top of the spring is dispensed with.

(ii) On and after the above chassis numbers only Front Spring C.8924/1 should be fitted.

Note:- When present stocks of Spring Part number C.8924 are exhausted only Spring Part number C.8924/1 will be supplied.

Index Reference - Section J.

PANHARD ROD.

Model affected	Commencing Chassis Numbers. R.H.Drive.	L.H.Drive.
2.4 litre	940020	900480

On cars with the above chassis numbers and onwards Panhard Rod Part number C.11994, Adjusting end C.11996 and Locknut UNF.256/L are fitted in place of Panhard Rod C.11033

Interchangeability.

The latest type of Panhard Rod assembly comprising the three items given above is interchangeable with the one piece Panhard Rod C.11033. The rubber pads, retaining washers and securing nuts are unchanged.

Index Reference-Section K

REVOLUTION COUNTER DRIVE AND CABLE.

Model affected	Commencing Chassis Numbers. R.H.Drive.	L.H.Drive.
2.4 litre	900532	940020

On cars with the above chassis numbers and onwards modified Rev counter angle drive gearbox Part number C.9914 and Rev counter cable Part number C.11787 (15" - 38.1 cm long) are fitted in place of angle drive gearbox Part number C.9913 and Cable Part number C.9644 ($14\frac{1}{2}$" - 36.8 cm long).

Interchangeability.

The modified Rev counter angle gearbox is interchangeable with the previous type providing that the Rev counter cable is also changed.

Index Reference - Sections B and M

Cont'd...

REVOLUTION COUNTER.

Model affected	Commencing Chassis Numbers. R.H.Drive.	L.H.Drive.
Mark VII	724688	738528

It should be noted that cars on and after the above numbers are fitted with revolution counter Part number C.9183 (danger band 5500 - 6000 r.p.m.) in place of Part number C.4535 (danger band 5200-5500 r.p.m).

Index Reference - Section P.

OIL PRESSURE AND WATER TEMPERATURE GAUGE.

Model affected	Commencing Chassis Numbers. R.H.Drive.	L.H.Drive.
Mark VII	725264	738706

It should be noted that cars on and after the above numbers are fitted with oil gauge Part number C.9542 reading up to 100 lbs. per sq.in. in place of oil gauge Part number C.4666 reading up to 60 lbs. per sq.in.

Index Reference - Section P.

BRAKE MASTER CYLINDER.

Model affected.	Commencing Chassis Numbers. R.H.Drive.	L.H.Drive.
2.4 litre	900522	940020

On cars with the above chassis numbers and onwards a modified type of brake master cylinder and reservoir Part number C.12184 is fitted in place of master cylinder and reservoir C.8955. The difference in the two assemblies is in the angle at which the reservoir is attached to cylinder in relation to the mounting studs. When fitted, the original type has the reservoir filler cap immediately in front of the cylinder; the later type has the filler cap situated to the right of cylinder.

Service Procedure.

The later type of master cylinder C.12184 is interchangeable with the previous type C.8955.

For replacement purposes, only the later type of master cylinder C.12184 will be supplied.

Index Reference - Section L.

REVOLUTION COUNTER CABLE.

Models affected.		Commencing Chassis Numbers. R.H.Drive.	L.H.Drive.
XK.140	Drop Head Coupe	807367	818385
XK.140	Fixed Head Coupe.	804640	815395

On Drop Head Coupe cars with the above chassis numbers and onwards modified revolution counter cable Part number C.11961 is fitted in place of cable C.8274.

On Fixed Head Coupe cars with the above chassis numbers and onwards modified revolution counter cable Part number C.11963 is fitted in place of cable C.9154.

Identification.

The modified cables have a nylon insert at one end of the inner cable.

Interchangeability.

(i) The modified cables with nylon inserts are interchangeable, as complete assemblies, with previous types fitted.

(ii) The inner and outer cables are NOT individually interchangeable.

Index Reference - Section M.

April, 1956.

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.184.

VARIOUS SERVICING ITEMS.

REVOLUTION COUNTER CABLE RUN.

Model affected.	Commencing Chassis Numbers. R.H.Drive.	L.H.Drive.
2.4 litre	900822	940207

On cars with the above chassis numbers and onwards the heater intake duct is modified to provide a straighter run for the revolution counter cable.

Service Procedure.

In the event of a replacement cable being fitted on cars prior to the above chassis numbers the above modification should be carried out. This modification consists of making a depression in the heater intake duct in line with the revolution counter cable run and the procedure is as follows:-

1. Remove the dash casing from underneath the facia panel.

2. Mark the heater intake duct at the point where any fouling occurs with the revolution counter cable.

3. Disconnect the cable from the revolution counter instrument and retain out of the way.

4. With a long drift make a depression approximately 1" (25 mm) wide and ¼" (6 mm) deep along the side of the heater intake duct to provide a straighter run for the cable from the instrument to the rubber grommet in the dash.

5. When refitting the cable ensure that it is routed above the demister flexible pipes and that the connecting nuts at each end of the cable are fully tightened.

Index Reference - Section M.

SOLEX CARBURETTERS - MODIFICATION.

Model affected	Commencing Engine Number.
2.4 litre	BB.2397.

On cars with the above engine number and onwards the following change has taken place on the Solex carburetters.

Part number.		
4984	Choke tube.	24 mm replaces 25 mm.
4977	Air Correction Jet.	180 replaces 160
4989	Needle valve.	1.5 mm replaces 2.0 mm.

Service Bulletin No.178 and the 2.4 litre Operating, Maintenance and Service Handbook should be amended accordingly.

If complaints of "flat spot" on low speed acceleration cannot be cured by normal tuning the above parts should be fitted. The Air Correction Jet is situated in the centre of the choke tube.

Index Reference Section C.

Cont'd....

PISTON RINGS - TAPERED TYPE.

Models affected	Commencing Engine Numbers.
Mark VII	N.4400
XK.140.	G.7229

On cars with the above engine numbers and onwards pistons with tapered periphery compression rings and modified oil control rings are fitted.

The part numbers are as follows:-

Upper Compression Ring (Chrome plated)	C.11954 replaces C.5830.
Lower Compression Ring.	C.11955 replaces C.5831.
Oil Control Ring.	C.11956 replaces C.5832.

Important.

It is MOST IMPORTANT that the tapered periphery rings are fitted the correct way up.

(i) The hard chrome plated upper compression ring has the word "Top" marked on the face to be fitted uppermost.

(ii) The black coated lower compression ring has the letter "T" marked on the face to be fitted uppermost.

The oil control ring can be fitted either way up.

Service Procedure.

In future only the latest types of piston rings will be supplied from the Jaguar Spares Department for the Mark VII, XK.140 and XK.120 models.

This change does not apply to the 2.4 litre model which will continue to be fitted with piston rings C.5830, C.5831 and C.5832.

Index Reference - Section B

SPEEDOMETER CABLES - NYLON INSERT TYPE.

Models affected.	Commencing Chassis Numbers. R.H.Drive.	L.H.Drive.
Mark VII (Standard Transmission).	750190	739886
Mark VII (Automatic Transmission).	750188	739851.

On cars with the above chassis numbers and onwards a modified type of speedometer cable is fitted.

The part numbers of the modified cables are as follows:-

Standard Transmission.	C.8303
Automatic Transmission.	C.8304

Identification.

The modified type of cable has a fluted outer cable and a nylon insert at one end of the inner cable.

Interchangeability.

The modified type of cable is interchangeable with the previous types fitted as a complete assembly. The inner cables and outer cables are NOT individually interchangeable.

Index Reference - Section M.

April, 1956.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.185.

VARIOUS SERVICING ITEMS.

EXHAUST VALVE GUIDES - "C" TYPE CYLINDER HEAD.

Models affected	Commencing Engine Number.
XK.140.	G.6678.S.

On cars with the above engine number and onwards modified exhaust valves (Part number C.7708 unchanged) and modified exhaust valve guides (Replacement part number C.8312) are fitted.

Identification.

The modified valve has a stem of reduced diameter under the valve head to form a scraping edge inside the guide.

The modified valve guide Part number C.8312 is 1.15/16" long and has no counterbore at the valve head end, the previous valve guide Part number C.9868 being 2" long and having a 7/16" counterbore at the valve head end.

Note: Exhaust valve guide C.8312 is now common to both the standard and "C" type cylinder head and when present stocks of C.9868 are exhausted only C.8312 will be supplied from the Jaguar Spares Department for Mark VII, XK.140 and XK.120 engines.

Index Reference - Section B.

REVOLUTION COUNTER CABLES - NYLON INSERT TYPE.

Models affected.		Commencing Chassis Numbers. R.H.Drive	L.H.Drive.
XK.140.	F.H.Coupe.	804640	815395
	D.H.Coupe.	807367	818385

On cars with the above chassis numbers and onwards a modified type of revolution cable is fitted.

The part numbers are as follows:-

F.H.Coupe.	C.11963.
D.H.Coupe.	C.11961.

Identification.

The modified type of cable has a nylon insert at one end of the inner cable.

Interchangeability.

The modified type of cable is interchangeable with the previous types fitted as a complete assembly. The inner cables and outer cables are NOT individually interchangeable.

Index Reference - Section M.

Cont'd..

ESSO ENGINE OILS - LATEST RECOMMENDATIONS.

Models affected.
All models.

With the introduction of a new range of Esso engine oils the following are the revised recommendations.

ENGINE.

Summer.	32° - 90°F 0° - 32°C	Esso Extra Motor Oil. 20W/30
Winter.	below 32°F below 0°C	Esso Extra Motor Oil. 20W/30
Tropical.	above 90°F above 32°C	Esso Extra Motor Oil. 40/50

GEARBOX.

The recommended lubricant for the gearbox remains "Essolube 30". Esso Extra Motor Oils should not be used in the gearbox.

UPPER CYLINDER LUBRICANT.

"Essomix" is now known as "Esso Upper Cylinder Lubricant".

Index Reference - Section B.

SYNTHETIC PAINT - ADDITIONAL COLOURS.

Models affected.
Mark VII
XK.140.
2.4.litre.

The following are additional paint colours to those given in Service Bulletins 114 and 136. The reference number given for each paint colour is for Quick Air Drying Enamel.

British Domolac.	British Racing Green.	Q.1076
" "	Birch Grey.	Q.1079
" "	Pearl Grey.	Q.1129
" "	Pacific Blue.	Q.1132/1
" "	Carmine Red.	Q.1190
" "	Arbor Green.	Q.1191
" "	Maroon.	Q.1135/1

Index Reference - Section N.

Addition to Service Bulletin No.176.

Under "Models affected" and "Commencing Engine Number" add the following details in respect of the XK.140 automatic transmission model:-

XK.140 Automatic Transmission. G.6615.

April, 1956.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.186.

VARIOUS SERVICING ITEMS.

REAR AXLE - LARGER DRIVE GEAR BOLTS.

Models affected.	Commencing Chassis Numbers. R.H.Drive.	L.H.Drive.
Mark VII Standard and Automatic Transmission.		
Mark VII Overdrive models.		
XK.140 Standard Transmission.		
Open 2 seater	800071	812311
F.H.Coupe	804676	815528
D.H.Coupe	807389	818488
XK.140 Overdrive models.		
Open 2 seater		
F.H.Coupe.		
D.H.Coupe.		
2.4 litre...	900862 plus 900613,665,668, 672,734-764.	940210 plus 940089,151-160.

The commencing chassis number for the Mark VII model and the XK.140 Overdrive models will be given in a later bulletin.

On cars with the above chassis numbers and onwards the bolts which secure the drive gear to the differential case are increased in size from 3/8" (9.5 mm) to 7/16" (11 mm).

With this change the drive gear, differential case and lockstraps are modified to suit.

The part number changes are as follows:-

The part numbers of the Rear Axle Assemblies will remain the same but will have the suffix /1.

4HA AXLES.
(Mark VII and XK.140 models)

Description.	New Part Number	Old Part Number.
Drive Gear Bolts.	3HA-075/6	3HA-075/4M
Drive Gear Bolt Lockstrap.	4HA-074/2	4HA-074/1
Diff.Case Assy.(3.31:1 and 3.54:1 ratio)	4HA-082/6	4HA-082
Diff.Case Assy.(4.09:1, 4.27:1,4.55:1 ratios)	4HA-082/7	4HA-082/1
Diff.Case only (3.31:1 and 3.54:1 ratio)	4HA-006/4	4HA-006
Diff.Case only (4.09:1,4.27:1,4.55:1 ratios)	4HA-006/5	4HA-006/1
Drive Gear and Pinions.		
3.31:1	4HA-105/8A	4HA-105/8
3.54:1	4HA-105/9A	4HA-105/9
4.09:1	4HA-105/13A	4HA-105/13
4.27:1	4HA-105/12A	4HA-105/12
4.55:1	4HA-105/14A	4HA-105/14

3HA AXLES.
(2.4 litre model).

Description.	New Part Number.	Old Part Number.
Drive Gear Bolts	3HA-075/6	3HA-075/4M
Drive Gear Lockstrap.	3HA-074/3	3HA-074/1
Diff. Case Assy.	3HA-082/15	3HA-082/9
Diff. Case only	3HA-006/9	3HA-006/6
Drive Gear and Pinion 4.55:1	3HA-105/23A	3HA-105/23

Cont'd...

Service Procedure for cars originally fitted with 3/8" Drive Gear Bolts.

When present stocks of Drive Gear and Pinions with 3/8" threads are exhausted only the later type with 7/16" threads will be supplied for 2.4 litre axles and 4HA Mark VII, XK.140 and XK.120 axles. In cases where a Drive Gear with 7/16" threads is supplied to replace a Drive Gear with 3/8" threads it will be necessary to carry out the following modification: -

Note: This change and modification does NOT apply to the 2HA type of axle fitted to early Mark VII and XK.120 cars.

1. Open out the holes in Differential Case with a 29/64" (11.5 mm) drill and reamer; the hole when opened out should be within the limits .448" - .453" (11.38 - 11.509 mm).

2. Fit the 7/16" Drive Gear Bolts 3HA-075/6.

3. Fit lockstraps 4HA-074/2 for the Mark VII, XK.140 and XK.120 models or 3HA-074/3 for the 2.4 litre models.

The above lockstraps are of the flat type and if the type being replaced are of the bridge type it will be necessary to cut back alternate webs on the differential case.

Index Reference - Section H.

CARBURETTER JETS - 7 to 1 Compression Ratio.

Model affected
2.4 litre

The following are the details of the carburetter settings for 7 to 1 compression ratio engines.

Choke	23 mm	Pilot Air Bleed.	1.5 mm
Main Jet.	115	Needle Valve.	1.5 mm
Air Correction Jet.	200	Needle Valve Washer.	1.0 mm
Emulsion Tube.	10	Starter Petrol Jet.	GS.105
Pump Jet.	55	Starter Air Jet.	GA 4.5
Pilot Jet.	60		

Index Reference - Section C.

STATIC IGNITION TIMING - 7 to 1 Compression Ratio.

Model affected
2.4 litre.

The ignition timing for the 7 to 1 compression ratio 2.4 litre engines is 1° B.T.D.C.

Index Reference - Section A

COIL FAILURE AND/OR ENGINE MISFIRING.

Models affected.
All cars fitted with ignition suppressors.

Note that it is ESSENTIAL that the suppressor in the high tension cable between the ignition coil and the distributor must be fitted in the centre terminal post of the distributor cap and NOT in the end of the coil. If the suppressor is fitted in the end of the coil a 1/4" air gap exists resulting in overheating of the coil and rupture of the coil's plastic cap.

If coil failure and/or engine misfiring is encountered a check should be made for the correct location of the distributor suppressor.

Index Reference - Section P.

May, 1956

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.187

PANHARD ROD OUTER BRACKET.

2.4 litre model.

A few cases of breakage of the bracket to which the outer end of the panhard rod is secured (body end) have been reported and examination has shown that the welding of the plates that form this bracket has not, in all cases, been satisfactorily carried out.

Will all Distributors and Dealers please arrange to examine this bracket on any cars coming in for service and ensure that the welding has been carried out fully as shown in the following sketches; this applies to cars prior to approximately 901615 R.H.Drive 940656 L.H.Drive.

In the case of your having an actual breakage reported please take the following action:-

1. Disconnect the panhard rod from the rear axle bracket.

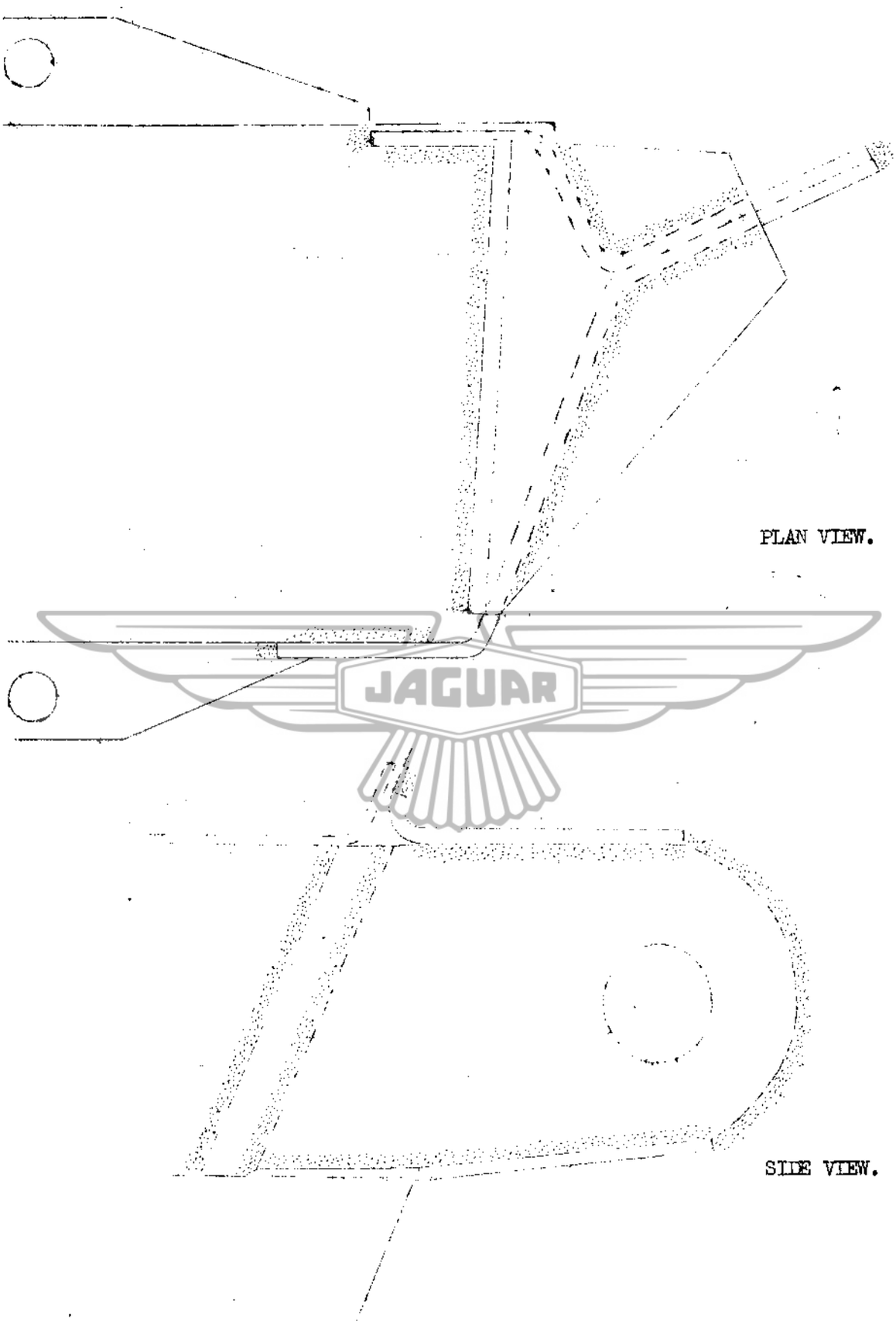
2. Remove the broken piece of bracket from the panhard rod and if the two pieces of plate are not spot welded together, weld around the two rounded edges ensuring that the two holes are in line.

3. Mate up the two parts of the broken bracket at the point of fracture and weld together.

4. Carry out the necessary welding to ensure that the bracket is welded at all the positions indicated in the following sketches.

5. Repaint the bracket and refit the panhard rod.

Continued overleaf.



PLAN VIEW.

SIDE VIEW.

Index Reference Section N

WELDING.

June, 1956.

JAGUAR

SERVICE AND SPARES ORGANIZATION

SERVICE BULLETIN NO.188

VARIOUS SERVICING ITEMS

REAR AXLE(NON OVERDRIVE CARS) - CHANGE IN RATIO

Models affected	Commencing Chassis Numbers.	
	R.H.Drive.	L.H.Drive.
2.4 litre.	901582	940606

On cars not fitted with an overdrive on and after the above chassis numbers the rear axle ratio is changed from 4.55:1 to 4.27:1. The axle ratio for cars fitted with an overdrive remains 4.55:1.

Details of the rear axles and the speedometers to suit are as follows:-

Rear Axles

	4.55:1 axle.	4.27:1 axle.
Rear Axle Assy.	C.8951	C.12007
Diff.case(3/8" holes)	3HA.006/6	-
Diff.case(7/16" holes)	3HA.006/9	3HA.006/12

Speedometers.

Non-overdrive cars.

Miles	C.9637	Miles	C.11591
Kilos	C.9638	Kilos	C.11592

Overdrive cars.

Miles	C.11593	-
Kilos	C.11594	-

Index Reference - Section H.

3HA AXLE-PINION SETTING FIGURES.

Models affected
2.4 litre.

The pinion setting figures for the 3HA type of axle fitted to the above model are as follows. These figures apply to both the 4.55:1 and the 4.27:1 ratio; a diagram showing exactly where the dimensions are taken is given on page H.16 of the Mark VII and XK.120 Service Manual.

A.	Pinion Drop	1.375"
B.	Zero Cone Setting	2.250"
C.	Mounting Distance	3.937"
D.	Centre line of Gear to Bearing Housing	5.130" to 5.120"

Index Reference - Section H.

cont'd Overleaf.

CLUTCH WITHDRAWAL LEVER RETURN SPRING.

Model affected.
2.4 litre

Commencing Chassis Numbers	
R.H.Drive.	L.H.Drive.
901592	940569

plus certain individual cars prior to these numbers.

On cars with the above chassis numbers and onwards a stronger return spring C.5120 (Mark VII type) spring plate C.5178, and shakeproof washer C.726 are fitted.

The spring plate and shakeproof washer are fitted to the lower mounting stud of the clutch slave cylinder and the return spring between the spring plate and the ball end pin of the operating rod; the return spring is fitted at the ball end between the flat washer and the double coil spring washer.

Service Procedure.

In the event of any complaints of clutch slip or difficulty being experienced in obtaining the necessary free travel at the clutch pedal the above parts should be fitted.

After fitting, check that the spring is returning the slave cylinder piston to the end of the cylinder, by pushing the operating rod towards the cylinder - no movement should be felt. If movement is obtained, extra tension can be applied to the return spring by rotating the spring plate and locking up with the nut in the desired position.

Index Reference - Section E.

SPEEDOMETER CABLE - NYLON INSERT TYPE.

Models affected.
2.4 litre.

	Commencing Chassis Numbers	
	R.H.Drive.	L.H.Drive.
Non-overdrive cars.	901483	940560
Overdrive cars.	901561	940580

On cars with the above chassis numbers and onwards a modified type of speedometer cable is fitted.

The part numbers of the modified cables are as follows:-

Non-overdrive cars.	C.11966
Overdrive cars.	C.8305

Identification.

The modified type of cable has a fluted outer cable and a nylon insert at one end of the inner cable.

Interchangeability.

The modified type of cable is interchangeable with the previous types fitted as a complete assembly. The inner cables and outer cables are NOT individually interchangeable.

Index Reference - Section M.

June, 1956.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I Z A T I O N

SERVICE BULLETIN NO. 189

VARIOUS SERVICING ITEMS

TOP DEAD CENTRE INDICATION.

Model affected.	Commencing Engine Numbers.
2.4 litre.	BB.2846

On cars with the above engine numbers and onwards a more accessible indication of Top Dead Centre is provided at the bottom of the clutch housing.

Top Dead Centre on Numbers 1 and 6 pistons is indicated when the embossed line on the clutch housing and an arrow on the edge of the flywheel are in line; the flywheel is visible through a hole in the clutch housing after the small cover plate has been pushed to one side.

The original hole in the left hand side of the clutch housing is retained for production use and should be disregarded.

Important Note.

The hole in bottom of the clutch housing was actually incorporated at Engine number BB.2580 but should be disregarded until Engine number BB.2846 as the marking on the flywheel is for the hole in the left hand side of the clutch housing.

As a check on the use of the correct markings, remove the sparking plug from No.6 (front) cylinder and insert a length of rod (at least $5\frac{1}{2}$" - 14 c.m. long) to ascertain when the piston is approximately on T.D.C. before referring to the markings.

Index Reference - Section B.

CRANKSHAFT VIBRATION DAMPER.

Model affected.	Commencing Engine Number.
2.4 litre.	BB.2500

On cars with the above engine number and onwards a vibration damper is fitted to the front end of the crankshaft.

The parts affected are as follows:-

Part No.	Description.	No. off.	
C.5896	Crankshaft Bolt	1	
C.2468	Crankshaft Washer	1	existing part.
C.12040	Crankshaft Lockwasher	1	
C.12039	Crankshaft Pulley	1	
C.12038	Crankshaft Damper Hub	1	
C.2466	Crankshaft Damper Cone	1	
C.12037	Crankshaft Damper	1	
NB.131/9F	Crankshaft Damper Bolt	6	
C.722	Crankshaft Washer	4	

It is not intended that retrospective action shall be taken in respect of this modification.

Index Reference - Section B.

Cont'd Overleaf...

NEW REAR LIGHTING REGULATIONS.(HOME TRADE ONLY).

With effect from the 1st October, 1956, it is compulsory for all cars to be fitted with two rear lamps which conform with certain regulations concerning size and mounting position.

The only post-war models which do not conform with the new regulations are the 1946-48, 1½ litre, 2½ litre and 3½ litre, and details of a suitable type of lamp and fitting instructions are given below.

The regulations regarding the mounting positions are -

1. One on each side of the car.
2. Not less than 21" apart.
3. Not less than 15" and not more than 42" from the ground.
4. Not more than 16" from the outer edge of the car.
(the regulation for lamp position is actually 24" but as usually combined rear lamp and reflectors will be fitted, the distance of 16" will conform with the regulations for both rear lamps and reflectors and allow any separate reflectors that are already fitted to car to be dispensed with).

The Rear/Stop lamp (and combined reflector) recommended is as follows:-

Jaguar Part Number.	Lucas Type.	Lucas Service Number.	No.off.
C.9663	549	53330	2

Installation.

The recommended position for the lamps is on the lower portion of the rear quarters panels that is the panels between the rear wings and the spare wheel compartment lid.

It will be necessary to drill approximately ½" diameter holes through the sides of the spare wheel compartment and through the rear quarter panels for the wires to the rear lamps. Fit rubber grommets to holes. Discard the lamp securing screwsprovided and fit appropriate sized self-tapping screws.

Electrical Installation.

Some wiring modifications will have to be carried out when fitting the new lamps. It will be found that the leads from the illumination box are connected to the leads in the body harness by means of rubber snap connectors at the rear of the spare wheel tray. When inserting the new leads, the leads should be connected at the following points.

1. Connect a length of 14/.012 cable from each new tail lamp filament to the lead (normally red) connected to the original rear lamp bulbs. (If a single snap connecter was used to join the two original leads together, replace the single connector with a double snap connector,Jaguar Part No.3570,Lucas Part No. 850641, which can then be used to join the original two leads and the two new leads.)

2. Disconnect the lead from the Illumination Box stop lamp bulb. (This stop lamp will no longer be used, except perhaps as a reverse lamp as mentioned in number 3). Connect a length of 14/.012 cable from each new stop lamp filament to the original lead in the body harness from the stop lamp switch.

3. Some owners may prefer to utilise the original stop lamp bulb as a second reverse lamp. To do this, replace the original all-red glass with a half white and half red glass, Jaguar Part No.3394, Lucas Part No.523308, and connect the lead from the original stop lamp to the lead from the reverse lamp switch.

Index Reference - Section P.

June, 1956.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I Z A T I O N

SERVICE BULLETIN NO.190.

VARIOUS SERVICING ITEMS

REMOVAL OF FACIA PANELS AND CAPPINGS.

Model affected.
2.4 litre.

Remove the dash casing situated between the facia panel and the toe-boards.

Withdraw the ash tray fully and from the underside remove the four screws securing the ash tray bracket at front and rear.

Remove the lighting switch lever knob and the windscreen wiper knob, both being retained by a spring-loaded pin registering with a hole in the side of the knob; press in pins and withdraw knobs.

Unscrew the two thumbscrews at the top corners of the centre facia panel. Unscrew the two round-headed screws securing the brackets at the underside of the centre facia panel.

The centre facia panel can now be withdrawn.

Removal of The Windscreen Rail.

Remove the Centre Facia Panel as described above.
From the underside of the windscreen rail remove the four nuts and washers when the rail can be withdrawn by lifting upwards.

Removal of the Side Facia Panels.

Remove the Centre Facia Panel and the Windscreen Rail as described above.
Remove the two countersunk screws securing each side facia panel to the body facia support; these screws are visible on the front faces of the panels.
From underneath each side facia panel remove the nut at the rear of the body facia support which secures the panel bracket. The side facia panels can now be withdrawn.

Removal of the Door Cappings.

With a wide thin bladed instrument prise the polish wood window surround away from the door until the clips are exposed. Press down the clips and withdraw the window surround.
Remove the two screws now exposed when the door capping can be withdrawn by lifting upwards.

Index Reference - Section N.

WITTER TRAILER TOWING BRACKET - INSTALLATION.

Model affected.
2.4 litre.

A trailer towing bracket (Part No.C.12310) is available for the 2.4 litre model from the Jaguar Spares Dept., price £3.10.0d retail.

Material.

A.	1 off.	Angle steel Cross Bar.
B.	1 off.	Pad shaped to outer contour of bumper and drilled to S.M.M. & T.Standard No.7. to suit all British makes of trailer coupling.

cont'd Overleaf...

B.1.	1 off.	Pad shaped to inner contour.
C.	1 off.	Angle steel Bracing Bar.
D.	2 off.	1" x 3/8" H.T.Bolts,Nuts and Springs,Plain and large Plain Washers.
E.	2 off.	Bushes 1.11/16" long.
F.	1 off.	Plate.
G.	1 off.	1" x ½" H.T.Bolt,Nut and Spring Washer and Plain Washers.
H.	1 off.	Yoke.
L.	2 off.	3½" x 5/8" H.T.Bolts,Nuts and Spring Washers.

FITTING.

Remove spare wheel. On the horizontal centre line of bumper drill, say, 3/8" hole 1.3/4" each side of centre line(marked vertically from boot lock), i.e. at standard 3½" centre for coupling.

Pilot or mark through these holes on to rear body skirt, taking care to project horizontally and to maintain the 3½" centres.

Detach bumper by undoing, on the inner mounting, the ½" bolts screwed into rubber centre and, on the outer mountings, the smaller bolts holding the rubber blocks to the body, and spring one end of bumper away first. (Take care that the other bumper end does not cut the paint when detaching or when remounting). Open up holes in bumper to 21/32".

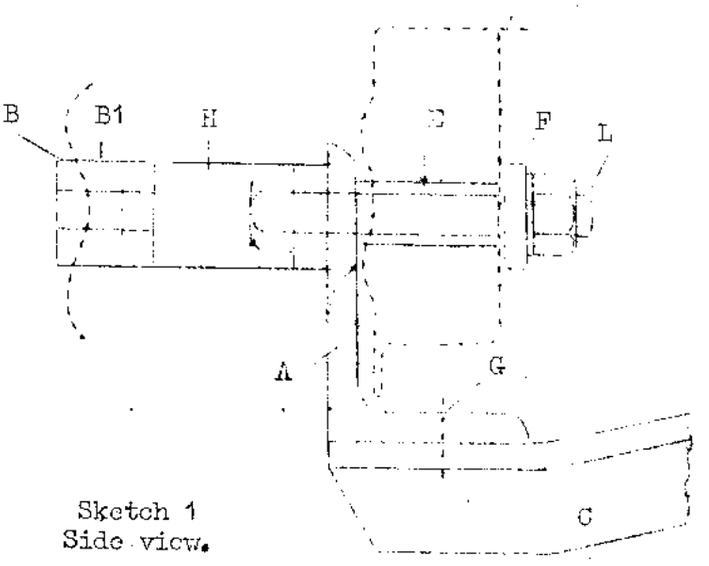
At the two points marked (at 3½" centres) on the body skirt drill 21/32" holes right through both panels and then file out holes in outer or rearmost panel to close fit on Bushes(E) 7/8" diameter. Assemble Cross Bar(A),Yoke(H) and Plate(F)with Bolts(L)and Bushes(E)as sketch 1 - but insert Bolt(G)first.

Attach Bracing Bar(C)loosely to Cross Bar(A)with Bolts(G)and, after positioning, as Sketch 2, drill two 13/32" holes up through the centres of the ribs in the spare wheel container and attach with Bolts(D). Washers should be used between Bracing Bar(C)and Cross Bar(A), or between Bracing Bar(C)and spare wheel floor, if required, to ensure that this floor is not stressed when the bolts are tightened up.

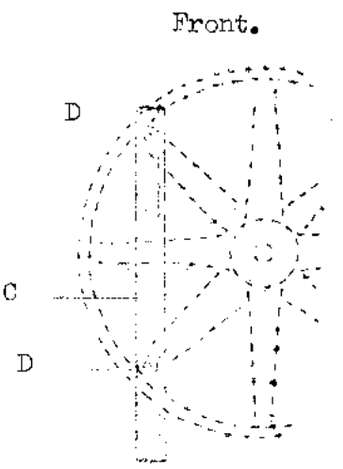
Remount the bumper without tightening bolts. Slip inner Pad (B1) between Yoke(H)and bumper and attach your coupling with outer Pad(B) with 5/8" H.T.Bolts of suitable length (2½"+ thickness of your coupling base). Tighten all bolts.

The Towing Capacity of the 2.4 litre model is 25 cwts(1270 kg).

Index Reference - Section 2.



Sketch 1
Side view.



Sketch 2
Plan view of spare wheel container.

June, 1956.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I Z A T I O N

SERVICE BULLETIN NO.191

INSTRUCTIONS FOR FITTING AN OVERDRIVE UNIT TO THE 2.4 LITRE MODEL.

General.

If the chassis number of the car concerned is prior to 901582 R.H.Drive or 940606 L.H.Drive the existing rear axle can be retained. On cars on and after the above chassis numbers it will be necessary to change the existing 4.27:1 ratio rear axle for one of 4.55:1 ratio Part No.C.8951.(see Service Bulletin No.188).

It will be found advantageous to carry out the installation of the wiring harnesses and the relay while the engine and gearbox is removed from the car. See "Electrical Installation".

Remove Engine and Gearbox.

- As described in Service Bulletin No.181.

Fit Overdrive Mainshaft to Gearbox.

Detach the clutch housing from the engine.

Dismantle gearbox and fit the overdrive mainshaft in place of the existing mainshaft.

The circlip C.5685 and spacing washer C.5983 supplied are fitted on the mainshaft behind the gearbox rear bearing. Shims C.8458/1,2 & 3(.002", .003" and .004" thick) are to take up clearance, if any exists, between the rear bearing and the spacing washer.

Fit Overdrive Unit to Gearbox.

- As described on page 14 of the "Service Manual" for the Laycock de Normanville overdrive unit for the Mark VII model".

If it is found necessary to align the splines in the overdrive unit turn the rearmost splines anti-clockwise with a long bladed screwdriver.

Refit Engine, Gearbox and Overdrive.

Assemble the gearbox and overdrive to the engine.

Refit the engine, gearbox and overdrive as a unit - see Service Bulletin No.181.

Fit Overdrive Type Propellor Shaft.

Fit propellor shaft assembly supplied in place of the existing shaft.

Remove Centre Facia Panel.

Remove the dash casing situated between the facia panel and the toe-boards.

Withdraw the ash tray fully and from the underside remove the four screws securing the ash tray bracket at front and rear.

Remove the lighting switch lever knob and the windscreen wiper knob, both being retained by a spring-loaded pin registering with a hole in the side of the knob; press in pins and withdraw knobs.

cont'd Overleaf....

Unscrew the two thumbscrews at the top corners of the centre facia panel.

Unscrew the two round-headed screws securing the brackets at the underside of the centre facia panel.

The centre facia panel can now be withdrawn.

Remove Windscreen Rail.

Remove the centre facia panel as described above.

From the underside of the windscreen rail remove the four nuts and washers when the rail can be withdrawn by lifting upwards.

Remove Side Facia Panel(Drivers Side)

Remove the centre facia panel and the windscreen rail as described above.

Remove the two countersunk screws securing the side facia panel to the body facia support; these screws are visible on the front face of the panel.

From underneath the side facia panel remove the nut at the rear of the body facia support which secures the panel bracket. The side facia panel can now be withdrawn.

ELECTRICAL INSTALLATION.

Fit Top Gear Switch.

Remove the brass blanking plug from the gearbox top cover and fit the top gear switch and gasket.

Fit Wiring Harnesses.

It will be found advantageous to fit the two wiring harnesses while the engine and gearbox unit is removed from the car.

The gearbox harness connections are as follows:-

Top Gear Switch	Green/Purple and Green.
Reverse Light Switch	Green/Brown and Green.(2 off to one side of switch).
Solenoid	Green/Black.

The Relay Harness connections are as follows:-

Relay.	
Terminal W1.	Green/Yellow.
Terminal W2.	Black.
Terminal C1.	Green/Black.
Terminal C2.	Green/Purple.
Manual Switch.	
Terminal B.	Green/Purple.
Terminal E.	Black.
Terminal-blank.	Green/Yellow.

Remove the existing reverse light switch wires from the snap connectors at the front of the scuttle and fit the new wires in their place. Dispense with the old reverse light switch wires.

Connect up the wires from the top gear switch with similar coloured wires in the relay harness.

cont'd on page 3.

After connecting up the wires to the relay fit the relay to the cover. Attach the cover to the left hand wing valance between the windscreen washer bottle and air cleaner intake pipe. The holes are already drilled in the valance and cage nuts are provided.

Take the wires for the manual switch through the hole in the scuttle adjacent to the heater box and fit a rubber grommet to the hole.

Take the wires for the manual switch through the hole in the metal dash behind the position for the manual switch and fit a rubber grommet to the hole. Connect up the wires to the manual switch (the earth wire from the manual switch is positioned under the nut securing the side facia panel and is connected when the panel is refitted).

Fit Manual Switch to Facia Panel.

A rebate for the overdrive switch is already made in the back of the side facia panel(drivers side).

Drill a 5/8" hole in the facia panel to take the threaded portion of switch. The switch is fitted with the terminals at the bottom and is secured with the knurled bezel behind which the escutcheon plate is fitted.

Fit Overdrive Speedometer and Cable.

Remove the three setscrews which secure the metal instrument panel.

Withdraw panel slightly and disconnect the oil gauge pipe and the speedometer and revolution cable cables.

Remove the three screws at back of the speedometer and withdraw the instrument. Fit speedometer provided to suit the overdrive speedometer gear ratio.

Remove the existing speedometer cable and fit the longer cable supplied, following the same run.

cont'd Overleaf....

MATERIAL REQUIRED FOR 2.4 LITRE OVERDRIVE CONVERSION

The following are the parts required to convert the 2.4 litre to overdrive. They can be supplied as a kit by quoting part number -

S.D.1046 for Right Hand Drive Cars.
S.D.1047 for Left Hand Drive Cars.

Qty.	Description.	Part No.
1	Gearbox Mainshaft	C.6830
1	Cam Operating Oil Pump	C.5982
1	Circlip on Gearbox Mainshaft	C.5685
1	Spacing Washer	C.5983
1 off each	Shims	C.8458/1,/2,/3.
1	Overdrive Unit	C.11032
1	Gasket	C.5935
1	Propellor Shaft Assembly	C.8933
1	Speedometer (Miles)	C.11593
	(Kilos)	C.11594
1	Speedometer Cable	C.8305
1	Top Gear Switch	C.1083
1	Gasket for Top Gear Switch	C.4531
1	Relay Switch	C.7472
1	Cover for Relay Switch	C.11618
1	Grommet in Relay Switch Cover	C.11808
2	Setscrews	UFS.419/3H
2	Nuts	UFN.119/L
2	Washers	C.723/A
3	Setscrews	UFS.125/3R
3	Washers	C.724
1	Manual Switch	C.7474
1	Escutcheon for Switch	C.8574
1	Electrical Harness for Gearbox	C.11803
1	Electrical Harness for Relay Switch. (Right hand drive)	C.11805
	(Left hand drive)	C.11804

----------ooOoo----------

1	4.55:1 Rear Axle Assy. (if required: see "General" on page 1 of S.Bulletin).	C.8951

Service Bulletin No.191

MATERIAL AND LABOUR COST FOR 2.4 LITRE OVERDRIVE CONVERSION

Qty.	Description.	Part No.	Price.
1	Gearbox Mainshaft	C.6830	£10. 7. 9d
1	Cam Operating Oil Pump	C.5982	14. 4d
1	Circlip on Gearbox Mainshaft	C.5685	1. 8d
1	Spacing Washer	C.5983	3. 0d
1off ea.	Shims	C.8458/1,/ 2,/3.	6d
1	Overdrive Unit	C.11032	£54. 8. 6d
1	Gasket	C.5935	1. 3d
1	Propellor Shaft Assembly	C.8933	£ 7. 14. 5d
			Exchange.
1	Speedometer (Miles)	C.11593	£ 3. 9. 9d
	(Kilos)	C.11594	Exchange.
1	Speedometer Cable	C.8305	£ 1. 2. 6d
1	Top Gear Switch	C.1083	7. 9d
1	Gasket for Top Gear Switch	C.4531	1d
1	Relay Switch	C.7472	13. 6d
1	Cover for Relay Switch	C.11618	1. 0d
1	Grommet in Relay Switch Cover	C.11808	3d
2	Setscrews	UFS.419/3H	4d
2	Nuts	UFN.119/L	4d
2	Washers	C.723/A	3d.Doz.
3	Setscrews	UFS.125/3R	9d
3	Washers	C.724	3d. Doz.
1	Manual Switch	C.7474	15. 0d
1	Escutcheon for Switch	C.8574	9d
1	Electrical Harness for Gearbox	C.11803	6. 6d
1	Electrical Harness for Relay Switch. (Right hand drive)	C.11805	13. 0d
	(Left hand drive)	C.11804	
			£81. 3. 0d
	Labour costs when carried out at Jaguar Service Department.		£32. 10. 0d
		TOTAL	£113. 13. 0d

------ooOoo------

1	4.55:1 Rear Axle Assy. (if required:see "General" on page 1 of Service Bulletin)	C.8951	£21. 0. 0d Exchange.

July, 1956.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I Z A T I O N

SERVICE BULLETIN NO.192.

VARIOUS SERVICING ITEMS.

SPEEDOMETER DRIVE - OIL WORKING UP CABLE.

Model affected.
2.4 litre.

If complaints are received of oil working up the speedometer cable the following rectification procedure should be adopted.

Non-overdrive cars.

Fit a modified type of Speedometer drive assembly C.12256 which incorporates a lip type rubber seal in the bore of bearing assembly. The speedometer drive assembly is supplied complete with the driven gear and it is IMPORTANT that the assembly is not dismantled before fitting.

Overdrive cars.

Disconnect the speedometer cable at the overdrive rear extension. Remove the screw and washer retaining the speedometer drive gear bearing and withdraw the assembly.

Withdraw the drive gear from the bearing.

Drill out the steel pin retaining the brass adapter to the phosphor-bronze bearing.

Unscrew the adapter from the bearing by means of the flats provided.

Remove the rubber seal from the recess in the bearing. Fit a new seal part number C.8773 so that the open end of the seal, through which the spring is visible, is to the bottom of the recess.(see sketch).

Screw the adapter into the bearing fully. If necessary, drill a new 1/16" (1.5 mm.) hole not more than 7/32" (5.5 mm.) in the side of the bearing; fit a mild steel pin, peen over and file flush.

Index Reference - Section M.

LOSS OF WATER FROM COOLING SYSTEM.

Model affected.
2.4 litre.

If complaints are received of appreciable loss of water from the Cooling system a check should be made at the two following points.

1. Cylinder Head.

Check that the domed cylinder head nuts are threaded to the bottom of the bore. If an unthreaded portion exists at the bottom of the hole increase the length of the thread by means of a 7/16"ANF. tap.

2. Radiator Filler Cap.

Check the cap and seating on the radiator filler neck for surplus solder, dirt or excess paint. Also ensure that the rubber faced pressure valve is seating properly on the rim in the radiator filler neck.

To check for efficient sealing of the filler cap run the engine at 3,000 r.p.m. for half a minute and note if an undue amount of water escapes from the radiator overflow pipe.

Note. Complaints of this trouble have only been received in respect of the 2.4 model, but similar trouble could conceivably be experienced on the Mark VII and XK.140 models in which case the above checks should be made.

Index Reference - Section D.

RENOLD HYDRAULIC CHAIN TENSIONER SPARES KIT.

Models affected.	Engines affected.
Mark VII	After number D.9869
XK.140	after number G.4431
2.4 litre.	From commencement of production.

A spare kit for servicing the Renold type of chain tensioner part number C.10332 is available under part number SD.1042.

This kit comprises the following items:-

Cylinder assembly	1 off	Bottom plug	1 off
Spring	1 off	Tab washer	1 off

Index Reference - Section B.

Amendment to Service Bulletin No.191.Page 4.

Add the following details to the list of parts required:-

Qty.	Description.	Part No.
4	Propeller shaft bolt	C.11207
4	Washer	C.787
4	Nut	NN.737/L
4	Split Pin	L.102.5/8.

SEPTEMBER. 1956.

JAGUAR

SERVICE AND SPARES ORGANISATION

SERVICE BULLETIN NO. 193.

VARIOUS SERVICING ITEMS

REAR ENGINE MOUNTING - COIL SPRING TYPE.

Model Affected.

2.4 model.

Commencing Chassis No.

R.H.Drive.	L.H.Drive.
902169	940973

On cars with the above chassis numbers and onwards a coil spring type of rear engine mounting is fitted in place of the rubber type of mounting.

The parts affected are as follows:-

Part Number.		No. off.	Remarks.
C.12298	Engine Mounting coil spring (3.5/32" long).	1	Non-overdrive cars.
C.12299	Engine Mounting coil spring ($3\frac{1}{2}$" long).	1	Overdrive cars.
C.12292	Channel support assy.	1	
FW.108/T	Washer	2	
C.12295	Spring Retainer assy.	1	

Assembly Procedure.

It will be found advantageous to remove and refit the coil spring mounting and channel support as an assembly. The coil spring mounting should be kept under compression and connected to the channel support by fitting a large flat washer to the bottom of the rubber bush and inserting a rod through the hole provided in the bottom of the centre pin. The rod should be 1/8" diameter and one end formed into a loop to enable the rod to be withdrawn after the assembly has been removed or refitted.

This also applies when removing or refitting the engine and gearbox.

Index Reference - Section B.

cont'd overleaf.

ENGINE STABILIZER - CORRECT ASSEMBLY.

Model affected.
2.4 litre.

When reassembling the stabilizer at the rear of cylinder head, on refitting the engine, the following procedure must be adopted.

1. The front and rear engine mountings must first be connected and tightened up.

2. Screw the lower flanged washer up the stabilizer pin until the flange contacts the bottom of the stabilizer rubber mounting. The washer is slotted on its upper face and can be screwed up the pin by engaging a thin bladed screwdriver in the slot through the centre hole of the rubber mounting.

3. Fit the upper flanged washer and tighten down with the self-locking nut.

Failure to observe the above procedure may cause engine vibration and/or fouling of the gearbox in the cowl owing to the engine being pulled up on its mountings.

Index Reference - Section B.

REAR ROAD SPRING FRONT MOUNTING PLATE.

Model affected.	Commencing Chassis Nos.	
2.4 litre.	R.H.Drive.	L.H.Drive.
	902220	941010

On cars with the above chassis numbers and onwards a front mounting plate consisting of a one piece pressing is fitted in place of the fabricated type of front mounting plate.

Details of the new parts are as follows:-

Part Number.		No. off.
C.12343	Front mounting plate.	2
UFS.131/8R	Bolts.	4

Interchangeability.

The new mounting plate C.12343 is interchangeable with the previous type but they must be fitted in pairs, and the longer bolts detailed above fitted at the rear mounting points.

Index Reference - Section K.

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.194

VARIOUS SERVICING ITEMS.

SOLEX CARBURETTERS - WEIR TYPE.

Model affected.	Commencing Engine Nos.
2.4 litre.	BB.3118

On cars with the above engine number and onwards modified carburetters which incorporate a weir in the float chamber, are fitted.

Identification.

Weir type carburetters can be identified outwardly by the number 72 stamped on the accelerator pump housing; previous carburetters were stamped with the number 73.

		7 to 1 Compression Rato.			8 to 1 Compression Ratio.	
		Part No.	Size.		Part No.	Size.
Carburetter complete-front.		C.12220	-		C.12250	-
Carburetter complete-rear.		C.12219	-		C.12251	-
Choke.		6654	23 mm.		4984	24 mm.
Main jet.		4981	115		4981	115
Air Correction jet.		6655	200		4977	180
Emulsion tube.	+	6612	14	+	6612	14
Pump jet.		4982	55		4982	55
Pilot jet	+	6614	50	+	6614	50
Pilot air bleed.	+	6613	1.2 mm.	+	6613	1.2 mm.
Needle Valve.		4989	1.5 mm.		4989	1.5 mm.
Needle valve washer.		4990	1.0 mm.		4990	1.0 mm.
Starter petrol jet.		4979	GS.105		4979	GS.105
Starter air jet.		4978	GA.4.5		4978	GA.4.5

\+ denotes change in size from previous carburetters.

High Altitude - Adjustments required.

The adjustments required for high altitude operation with this type of carburetter are as follows:-

5,000 - 10,000 ft. Reduce main jets from 115 to 110.
Above 10,000 ft. Reduce main jets to 105.

No alteration to the pilot jets are necessary.

Index Reference - Section C.

SOLEX CARBURETTERS - SERVICING PROCEDURE.

Model affected.
2.4 litre.

To facilitate the servicing of the 2.4 litre carburetters and to reduce the number of jets to be held in stock, carburetters fitted prior to Engine Number BB.3118 can be brought up to the latest condition (as for the 'weir' type carburetters see above) in jets sizes by fitting all the items listed overleaf.

cont'd overleaf...

Engine Numbers. BB. 1001 - BB.2396	Part No.	Engine Numbers. BB.2397 - BB.3117	Part No.
Choke Tube(8 to 1 compression)	4984	Emulsion tube.	6612.
Choke Tube(7 to 1 compression)	6654	Pilot jet	6614
Air Correction Jet(8 to 1 compression.	4977	Pilot air bleed.	6613
Air Correction Jet(8 to 1 compression)	6655		
Needle Valve	4989		
Emulsion tube	6612		
Pilot jet	6614		
Pilot air bleed	6613		

In both cases a type 72 accelerator pump (Part Number 6646) must be fitted in place of the existing type 73 pump. Note that when connecting the pump lever to the push rod the split pin should be inserted in the centre hole of the three.

Index Reference - Section C.

ENGINE OIL LEVER - REVISED METHOD OF CHECKING.

Model affected.
2.4 litre.

The revised procedure for checking the engine oil level is as follows:-

Check the oil level with the car standing on level ground and when the engine has reached its normal operating temperature.

The previous recommendation (Page 22 of the Operating Maintenance and Service Handbook) was for the level to be checked before starting the engine from cold.

Index Reference - Section B.

ENGINE REFILL CAPACITY.

Model affected.
2.4 litre.

The quantity of oil required to replenish the engine after draining and refilling the sump and oil filter is as follows:-

11 Imperial pints. 13½ U.S.pints. 6¼ litres.

This amount of oil will bring the level above the top mark on the dipstick, but the level will fall as soon as the engine has been run.

The quantity of 13 Imperial pints quoted in the handbook and Service Bulletin No.178 is the total capacity of the engine and this amount will only be required when replenishing a completely dry engine.

Index Reference - Section B.

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 195.

VARIOUS SERVICING ITEMS.

CLEANING OFF LANOLIN.

Models affected.
ALL.

Engine parts liable to corrosion are coated with Lanolin before cars leave the factory and it has been assumed that this would be cleaned off before the car was delivered to the customer.

It would appear, however, that this has not always been carried out and we would request that Distributors and Dealers ensure that engines are cleaned down prior to delivery.

Index Reference - Section Q.

'FLY-OFF' HANDBRAKE.

Model affected.

	Commencing Chassis Nos.	
	R.H.Drive.	L.H.Drive.
XK.140 Open 2-seater.	800072	812647
Fixed head coupe.	804767	815755
Drop head coupe.	807441	818729

On cars with the above chassis numbers and onwards a 'fly-off' type of handbrake is fitted.

The operation of this type of handbrake should be explained to owners collecting a new car. That is, to release the handbrake pull back the lever and allow it to 'fly-off'; to apply the handbrake pull back the lever and press down the button.

Index - Reference - Section L.

STATIC IGNITION TIMING.

Model affected.
2.4 litre. 8 to 1 compression ratio.

The static ignition timing for all 8 to 1 compression ratio 2.4 litre engines has been changed from 10° B.T.D.C. to 6° B.T.D.C. ($1\frac{3}{4}$" flywheel teeth).

Amend Service Bulletin No.178 and the 2.4 litre Operating, Maintenance and Service Handbook in accordance with the above information.

Index Reference - Section B.

CONT'D OVERLEAF..

SUMP STRAINER COVER PLATE.

Model affected.	Commencing Engine Nos.
2.4 litre.	BB.5024

On cars with the above engine number and onwards copper washers Part No.FW/105/E are fitted to the cover plate studs in the base of the sump.

If trouble is experienced with oil leakage at this point the above washers should be fitted in addition to the spring washers.

Index Reference - Section B.

OVERDRIVE CONVERSION - FITTING OF PACKING PIECES.

Model affected.
2.4 litre.

When carrying out a conversion to overdrive as described in Service Bulletin No.191 it is necessary ,if they are not already installed, to fit 4 aluminium packing pieces(Part No.C.11427) and 8 longer setscrews (UFB.131/9R) between the rear engine mounting channel support and the body floor. This will ensure that no fouling takes place between the overdrive unit and the gearbox cowl).

Amendment to Service Bulletin No.191.

Add the above parts to the 'Material Required' on Page 4 with the remark 'If not already fitted'.

Index Reference - Section F.

Amendment to Service Bulletin No.189.

A more suitable type of lamp for fitting to the 1946-48, 1½, 2½ and 3½ litre models to conform with the new rear lighting regulation is as follows:-

Jaguar Part Number.	Lucas type & service number.		No. off.
C.8266 (right hand)	L.549	53341	1
C.8267 (left hand)	L.549	53340	1

This is the type of rear lamp that is fitted to the Type 'M' Mark VII.

Amendment to Service Bulletin No.183.

The commencing chassis numbers for the modification to the 'Panhard Rod' are transposed and should read:-

R.H.Drive.	L.H.Drive.
900480	940020

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 196.

GEARBOX IDENTIFICATION.

The following details are issued to assist Distributors and Dealers in identifying the various types of gearboxes and the gears which are fitted to each type. This information supplements that already given in Service Bulletin No. 145.

It will be appreciated that it is more than ever important to quote the gearbox number together with any prefix or suffix letters when ordering parts for a particular gearbox.

The details given below apply to gearbox types:-

JH, JL, JLN, GB, GBN, SH, SL. JLE.

	STANDARD RATIO	CLOSE RATIO.
IDENTIFICATION	No suffix letters after gearbox number.	Suffix letters to gearbox number. CR or MS.

GEARBOX RATIOS.

Top.	1:1	1:1
3rd.	1.367:1	1.21:1
2nd.	1.982:1	1.74:1
1st.	3.375:1	2.98:1
Reverse	3.375:1	2.98:1

CONSTANT MESH GEARS - NUMBER OF TEETH.

Constant pinion.	26	28
Constant wheel(layshaft)	39	37

PART NUMBER OF GEARS.	JH,JL,JLE,JLN,GB,GBN,	SH,SL.	CR.	MS.
Constant pinion	C6751	C.1836	C.9252	C.8912
Mainshaft-1st speed gear.	C2040	C.1897	C.2040	C.1897
" -2nd speed gear.	C4125	C.4118	C.4125	C.4118
" -3rd speed gear.	C4123	C.4117	C.4123	C.4117
Layshaft -constant wheel.	C2045		C.5826	
" -1st speed gear.	C2041	C.1857	C.2041	
" -2nd speed gear.	C2047		C.2047	C.8913
" -3rd speed gear.	C2046		C.2046	

cont'd overleaf..

PROTECTIVE TREATMENT ON NEW CARS

To preserve the exterior finish, cars now being produced are treated with a protective wax coating.

This protective coating must be removed when the car is being prepared for delivery to the customer or before the car is placed in your Showrooms.

REMOVAL OF PROTECTIVE COATING.

1. Wash car to remove any grit or abrasive dirt.

2. Remove wax using white spirit (petroleum distillate) or petrol applied with mutton cloth or similar non-abrasive cloth.
   Use of petrol having alcohol must be avoided.

3. Polish car.

Index Reference - Section Q.

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N.

SERVICE BULLETIN NO.197

REAR ROAD SPRINGS

2.4 Litre Model

REAR ROAD SPRINGS - CHANGE IN TYPE.

Models affected.	Commencing Chassis number	
	R.H.Drive	L.H.Drive
2.4 litre	902882	941156

On cars with the above chassis numbers and onwards modified rear springs are fitted incorporating synthetic rubber buttons in the ends of the spring leaves. The part number of the rear spring (C10791) is unchanged.

Index Reference. Section K.

REAR ROAD SPRINGS - MODIFICATION TO OVERCOME KNOCKING OR CREAKING.

Model affected.
2.4 litre

If complaints of knocking or creaking from the rear springs are received gaiters should be fitted in accordance with the following instructions. This modication applies only to springs NOT fitted with synthetic rubber buttons. (see above).

Parts required.

C12521 Rubber gaiter-short (Front end of spring)	2 off
C12518 Rubber gaiter-long (Rear end of spring)	2 off
C12668 Spring clip bolts	4 off

Fitting Instructions.

1. Remove rear springs as described in Service Bulletin No.182.

2. File off the peened over ends of the spring clip bolts and remove the bolts and distance pieces.

3. Separate the second and third longest leaves at each end of the spring by means of wedges.

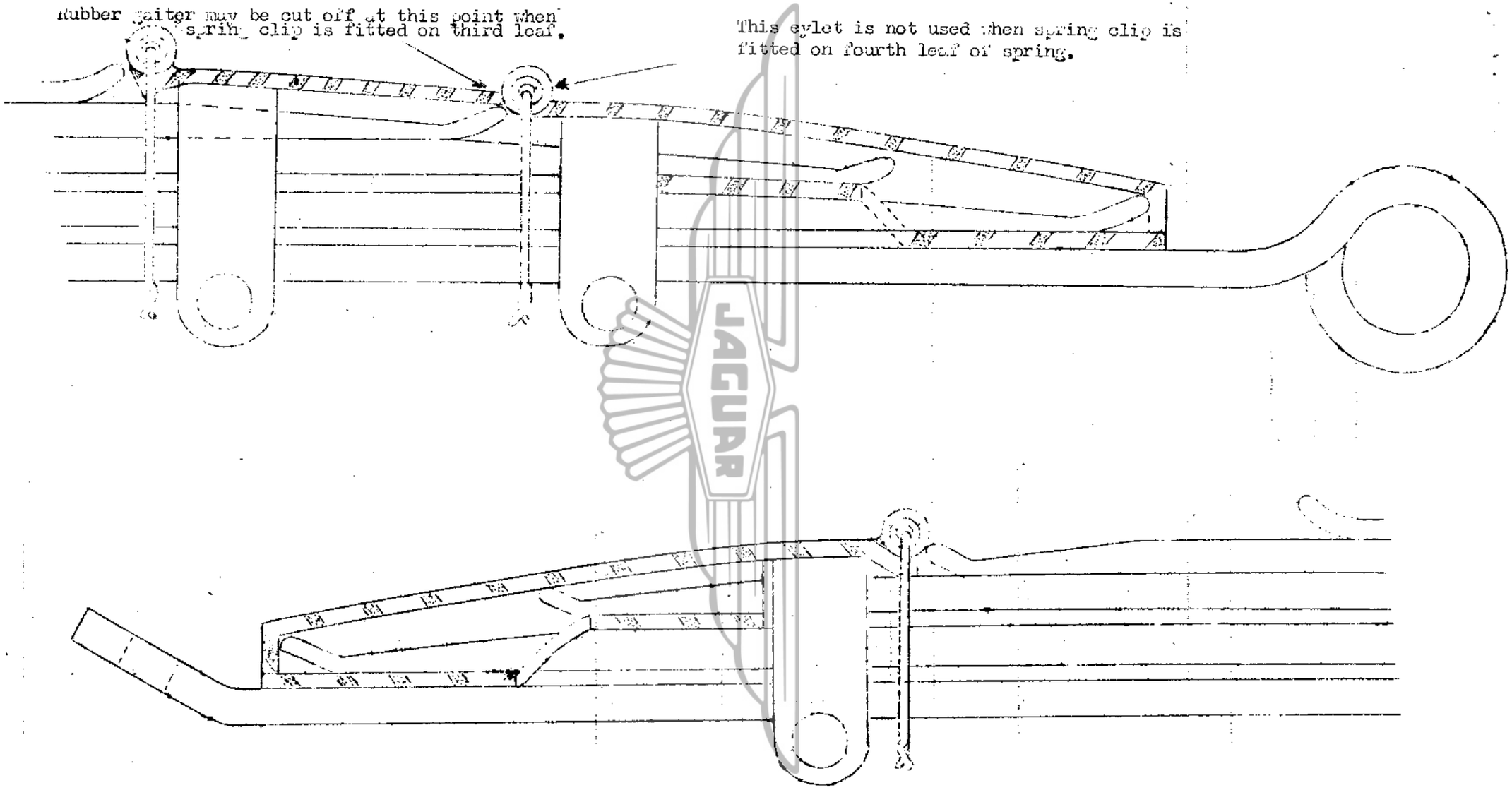
4. Fit the rubber gaiters to the ends of the spring leaves; the longer gaiter is fitted to the rear of spring or spring eye end, as shown in the following sketch.

5. Secure the rubber gaiters to the spring by means of locking wire; pass the locking wire through the ferrules in the end of the gaiter and twist wire together against the main leaf inward of the spring clip.
   Note. When the spring clip at the eye end of the spring is fitted on the 3rd leaf the extended portion of the gaiter may be cut off as shown in the following sketch.

6. Fit new spring clip bolts C12668 and peen over ends. Do NOT refit the distance pieces to the spring clip bolts.

7. Refit rear springs to car.

Index Reference Section K.



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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.198.

VARIOUS SERVICING ITEMS.

AUTOMATIC TRANSMISSION - OVERHAUL KITS.

Models affected.	Effective from
Mark V11 Automatic Transmission	Automatic Transmission
XK.140 Automatic Transmission	Serial Number J.2426

Kits of gaskets and seals for use when overhauling or repairing Automatic transmission units are available from the Jaguar Spares Department under the following part numbers:-

SD.1049 Overhaul gasket set.
SD.1050 Repair kit of seals.

These kits are only for use on first speed start transmission units, that is, with effect from the above serial number.

Index Reference. Section FF.

LOSS OF WATER FROM COOLING SYSTEM.

Model affected.
2.4 litre.

If complaints of an appreciable loss of water from the cooling system cannot be cured by following the instructions given in Service Bulletin No.192 the following check should be made:-

1. Remove the cylinder head.

2. Check if any fouling has taken place between the projection of the machined face at the left-hand side (Looking from the rear) of the cylinder block adjacent to No.1 cylinder and the raised boss at the same corner of the cylinder head.

3. Whether there is evidence of fouling or not, file a chamfer to eliminate the cylinder block face projection.
   Note: No alteration is necessary to the other cylinder block face projection adjacent to No 4 cylinder.

4. Refit the cylinder head.

On current production cylinder heads the milled joint face is extended so that no fouling can occur. These cylinder heads can be recognised by the fact that the raised bosses at the left hand and right-hand sides of the cylinder head are of unequal width.

Index Reference. Section D.

SPEEDOMETERS - DRIVES

Model Affected.
2.4 Litre.

The following information is issued to assist in the identification of speedometer or the variations of the above model.

Model.	Axle Ratio.	Chassis Number	Smiths Code Number	Cable Revs. per Mile.
Non-overdrive	4.55:1			
		LHM. 09637.	51-116-303-00	1300
		RHM. 09638.	51-116-303-01	820
Non-overdrive	4.27:1			
		LHM. 011591	SM.6303-10	1240
		RHM. 011592	SM.6303-11	780
With overdrive	4.55:1			
		AHM. 011593	SM.6303-02	1400
		RHM. 011594	SM.6303-03	880
Police Cars.				
Non-overdrive	4.55:1			
		LHM. 012115	SM.6752	1325
Non-overdrive	4.27:1			
		RHM. 012202	SM.6303-12	1240
With-overdrive	4.55:1			
		LHM. 012116	SM.6755	1400

Note. The Smiths code number and cable revolutions per mile are marked on the speedometer dial.

Index Reference. Section P.

DOORS-CHANGE IN SPECIFICATION.

Model Affected.		Commencing Chassis numbers	
		R.H.Drive	L.H.Drive
2.4.140	Fixed H.Coupe	804781	815773
	Drop H.Coupe	807447	818796

On coupe cars with the above chassis numbers and onwards, steel doors are fitted in place of aluminium alloy doors.

Index Reference. Section N.

Amendment to Service Bulletin No.195.

The information at the end of the first paragraph under the heading "Static Ignition Timing" should read (1¾ flywheel teeth) and not (1¾" flywheel teeth.)

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S E R V I C E A N D S P A R E P A R T S O R G A N I S A T I O N

SERVICE BULLETIN NO.199

VARIOUS SERVICING ITEMS.

SOLEX WEIR CARBURETTERS - MODIFICATION TO WEIR.

Model affected.
2.4 litre.

If complaints are received on cars fitted with "Weir" type carburetters (see Service Bulletin No.194) of the engine "cutting out" when taking bends at high speed the following modification should be carried out.

1. Remove the carburetters from the engine.
2. Remove the float lid and float.
3. Remove the jet marked "Main Jet Holder"
4. Using a 4mm drill through the main jet passage make a small spot in the weir to locate the smaller drill to follow. With a 2.5 mm drill make a hole completely through the weir.
5. Clean out the drilling swarf from the float chamber.
6. Reassemble carburetters and refit to engine.

Index Reference. Section C.

SPEEDOMETER CABLES - NYLON INSERT TYPE.

Models affected.	Commencing Chassis numbers	
XK.140	R.H.Drive	L.H.Drive
Standard transmission.		
Open 2 seater	800074	812707
Fixed H.Coupe	804781	815778
Drop H.Coupe	807447	818801
Overdrive Cars		
Open 2 seater	800072	812735
Fixed H.Coupe	804784	815784
Drop H.Coupe	-	818830
Auto:Transmission cars.		
Fixed H.Coupe	804677	815532
Drop H.Coupe	807387	818493

On cars with the above chassis number and onwards a modified type of speedometer cable with a nylon insert at one end of the inner cable is fitted. The part numbers are as follows:-

Standard transmission	C.8303
Overdrive cars	C.11964
Automatic Transmission cars	C.11965

Interchangeability.

The modified type of cable is interchangeable with the previous types fitted as a complete assembly. The inner cables and outer cables are NOT individually interchangeable.

Index Reference - Section M.

HYDRAULIC DAMPERS - MODIFIED TYPE.

Model affected.	Commencing Chassis numbers	
	R.H.Drive	L.H.Drive
2.4 litre	904285	941631

On cars with the above chassis numbers and onwards modified front and rear hydraulic dampers are fitted. The part numbers are as follows:-

	Old type	New type
Front	C.10841	C.8923
Rear	C.10842	C.8926

Interchangeability.

The new type dampers are interchangeable with the previous type fitted.

Index Reference. Section J. and K.

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 201

VARIOUS SERVICING ITEMS.

GEARBOX MAINSHAFT - CORRECT ASSEMBLY.

Attention is drawn to the correct assembly of the following parts of the mainshaft assembly.

First speed wheel to 2nd speed synchronising sleeve.

Ensure that the relieved tooth at the rear end of the first speed wheel is in line with the plunger and ball in the 2nd speed synchronising sleeve. (see Plate F.14 in the Mark V11 and XK120 Service Manual).

3rd/top synchronising sleeve to 3rd/top operating sleeve.

The larger boss of the inner synchronising sleeve must be on the same side as the wide chamfer of the outer synchronising sleeve. The holes in the inner synchronising sleeve for the balls and plungers must be in line with two relieved teeth in the outer synchronising sleeve.

Assembly of 3rd/top synchronising sleeve assembly to mainshaft.

It should be noted that there are two tranverse grooves on the mainshaft splines which take the 3rd/top synchronising sleeve assembly and that one groove is further forward (nearer the spigot end) on the mainshaft than the other.

When fitting the synchronising sleeve assembly to the mainshaft observe -

(a) That the end of the outer sleeve with the wide chamfer is facing forward (towards the spigot end).
(b) That the relieved tooth at the wide chamfer end of the outer sleeve is in line with the foremost groove (nearest the spigot end) in the mainshaft.

Failure to observe operation (b) will result in the locking plungers engaging with the wrong grooves, preventing full engagement of top and third gears.

Index Reference - Section. F.

SCUTTLE VENT SHROUD.

Model affected	Commencing Chassis numbers	
	R.H.Drive	L.H.Drive
2.4 litre	905061	941767.

On cars with the above chassis numbers and onwards a shroud is fitted to the scuttle vent aperture to prevent the ingress of water behind the instrument panel when the car is driven in the rain with the vent open.

If such complaints are received the shroud can be fitted to cars prior to the above chassis numbers by carrying out the following procedure.

Fitting Instructions.

The part required are as follows:-

BD.12487.	Scuttle vent shroud	1 off.
UCS.519/3H.	Countersunk screw. 10 UN.C. $\frac{3}{8}$" long	3 off.
BD.5440/4.	Square nut.	3 off.

Open the scuttle vent fully. Remove the gauze by unscrewing the three screws. From underneath the vent lid remove the two nuts, spring and flat washers and lift off the lid. Remove the lid sealing rubber.

Using the shroud flange as a template mark the positions for the three securing screws at the rear end of the scuttle vent aperture. With a 3/16" drill make three holes for the screws; countersink with a $\frac{3}{8}$" drill.

Fit the three screws and start the nuts on the threads. Enter the flange of the shroud between the nuts and the body and tighten screws.

If the shroud is in contact with the sealing rubber for the recirculation door prise the centre of the plate forward.

Refit the sealing rubber, vent lid and gauze.

Index Reference. Section N.

TRACK ROD - CORRECT FITTING PROCEDURE.

Model affected.
2.4 litre.

As the track rod ends are fitted with rubber bushes it is essential that steering drop arm and idle lever are parallel to the centre line of the car before tightening up the track rod end nuts. Failure to observe this procedure will cause undue torsional loading of the rubber bushes, resulting in premature failure and a possible tendency for steering wander.

Index Reference. Section I.

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N.

SERVICE BULLETIN NO.202

VARIOUS SERVICING ITEMS

BRAKE LININGS - CHANGE IN TYPE.

Model affected	Commencing Chassis Number.	
	R.H.Drive	L.H.Drive
2.4 litre	905431	941795

On cars with the above chassis numbers and onwards the leading shoes of the front brakes only are fitted with M.S.3. linings in place D.M.52. material.

Service Procedure.

If complaints of brake grab on light pedal application or persistent brake squeal are received, brake shoes with M.S.3. linings should be fitted at the front brake leading shoe position only. The leading shoe is the foremost of the two shoes on either the right-hand or left-hand side, that is, the shoe adjacent to the smaller diameter of the wheel cylinder.

The parts affected are as follows:-

		Jag:Part Number	Lockheed Part Number
Brake shoe complete with M.S.3. lining.	Export Only.	6792	89121
M.S.3. lining only		6798	89125
Rivets (12 off per shoe)		2586	HLB 48045

Index Reference. Section L.

BRAKE SERVO CYLINDER - LUBRICATION.

Models affected
Mark VII

The Silicone M.S.4 compound recommended in Service Bulletin No.177 is superseded by "Molytone C" available in 2 ounce tubes (Part number 6763) from the Jaguar Spare Parts Department.

Index Reference. Section L.

BRAKE REPAIR KITS.

Model affected.
2.4 litre.

The following repair kits for the overhaul of the brake hydraulic system are available from the Jaguar Spare Parts Department.

	Part number
Master cylinder kit.	6592.
Front wheel cylinder kit.	6594.
Rear wheel cylinder kit.	6595.
Vacuum servo kit.	6596.
Servo vacuum piston kit.	6597.

Index Reference. Section L.

CLUTCH HYDRAULIC SYSTEM - REPAIR KITS.

Model affected.
2.4 litre.

The following repair kits for the overhaul of the clutch hydraulic system are available from the Jaguar Spare Parts Department.

	Part number
Clutch master cylinder kit.	6593
Clutch slave cylinder kit.	6053.

Index Reference. Section L.

SOLEX CARBURETTERS - CHANGE IN MAIN JET.

Model affected.	Commencing Engine Number
2.4 litre	3B.7113

On cars with the above engine number and onwards the main jets are reduced in size from 115 (part number 4981) to 110 (part number 6748).

High Altitude - Adjustments required.

The adjustments required for high altitude operation are as follows:-

5,000-10,000 ft. Reduce main jets from 110 to 105 (Part Number 6747)
Above 10,000 ft. Reduce main jets to 100 (Part number 6811).

Amendment to Service Bulletin 194.

Under the heading "Solex Carburettors - Servicing Procedure" page 2 add:-

Prior to Engine number 7113

	Part number
Main Jet (110)	6748

Index Reference Section C.

November 1956.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN 203

VARIOUS SERVICING ITEMS

ENGINE SUMP.- CHANGE FROM ALUMINIUM TO STEEL

Model affected	Commencing Engine Number
2.4 litre	BB.9001

On cars with the above engine number and onwards a pressed steel sump is fitted in place of the cast aluminium sump used previously.
The principal parts affected by this change are as follows:-

Part number		No.off.
C9155.	Sump (pressed steel)	1.
NS131/5D	Sump strainer cover bolts	8.
C12532	Oil filter assy.	1.
C12381	Oil filter blanking plate	1.
C12534	Oil filter banjo connection	1.
C12533	Oil filter banjo bolt	1.
6153	Aluminium washer - banjo bolt	2.
C12382	Rubber hose - filter to sump	1.
C2905/2	Rubber hose - clip	2.
C12620	Dipstick - oil level	1.

Oil Capacity.

The oil capacity of the pressed steel sump is the same as for the aluminium sump, that is,

	Imp. pints	U.S. pints	Litres
Refill capacity	11	13¼	6.25
Total capacity	13	15½	7.5

Oil Level.

With the new dipstick C12620 used in conjunction with the pressed steel sump the oil level marking is represented by a knurled patch on the blade.

If the oil level is on the knurled patch with the engine hot or cold no additional oil is required. If the engine has been run immediately prior to making the oil level check, wait one minute after switching off before checking the oil level.

The new dipstick C.12620 is not interchangeable with dipstick C.10369 used on the cast aluminium sump.

Oil Pressure.

With the pressed steel sump the return from the oil pressure relief valve is taken to the rear of the sump via an external pipe.

With this type of return a considerable variation in oil pressure exists between starting from cold, when the pressure may be in the region of 70 to 80 lbs per sq.inch, and with the oil hot when the normal running pressure of 40 to 50 lbs per sq.inch will be registered. With the direct return of the cast aluminium sump the oil pressure does not vary to any extent between starting from cold or when the oil is hot.

Oil Filter Blanking Plate.

With the new type of oil return from the pressure relief valve a blanking plate is fitted between the oil filter head and the flange on the cylinder block.

It is ESSENTIAL, after removal for any reason, that this blanking plate is fitted the correct way round otherwise the oil feed to the bearings will be cut off.

The holes in the blanking plate must match up with the holes in the flange on the cylinder block and blank off the original return hole which is the hole that is drilled completely through the crankcase.

Index Reference. Section B.

PANHARD ROD - CORRECT ASSEMBLY.

Model affected.
2.4 litre

There have been certain cases of the rear axle being pulled out of alignment owing to incorrect adjustment when refitting the Panhard rod.

The following points must be observed when refitting the Panhard rod.

1. The full weight of the car must be on the wheels or axle.

2. After screwing the adjusting rod into the tube to enable the Panhard rod to be entered into the brackets fully tighten the securing nut at the rear axle bracket end.

3. Screw out the adjusting rod fully and hold the rod by means of the flats provided while tightening the securing nut at the body bracket end. Secure the adjusting rod by tightening the locknut.

4. When completely refitted the distance between the inner faces of the Panhard rod brackets on the rear axle and the body should be 14 11/16" (37.3 cm).

Index Reference Section K.

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 204

VARIOUS SERVICING ITEMS.

FITTING LOCK TO PETROL FILLER DOOR.

Models affected.
2.4 litre.

If it is desired to fit a lock to the petrol filler door of the 2.4 litre model a satisfactory job can be made by utilising a Mark V11 petrol filler lock and making up a striker plate to suit.

Procedure.

1. Drill a 11/16" hole at the rear of the door ¾" from the rear edge and 1¾" from the top. File out the hole to take lock.
2. Make up a striker plate 1 15/16" long, 7/16" wide and ½" thick.
3. Remove the top rubber button and offer up the striker plate to suit the lock striker. Drill two 7/32" holes in the depression of the door aperture for securing the striker plate.
4. Mark off the positions of these holes on the striker plate and drill and tap two 3/16" threads.
5. Secure striker plate inside door aperture with two 3/16" countersunk screws.

The part numbers of suitable Mark V11 locks are as follows:-
BD.4360 or BD.9186.
One key will be supplied with each lock and if a further key is required a request should be made on the order.

Index Reference. Section N.

SPEEDO DRIVEN GEAR AND CABLE.

Models affected	Commencing Chassis Number	
	R.H.Drive	L.H.Drive
2.4 litre Non-Overdrive Cars.	906248	941930

On cars with the above chassis numbers and onwards a modified Speedometer drive gear and bearing assembly part number C.12378 and Speedometer cable C.8305 are fitted.

Interchangeability.

This speedometer driven gear has a smaller square hole for the cable than the previous type and therefore Speedometer gear C.12378 and cable C.8305 must only be used in conjunction with each other.

Index Reference. Section M.

SPEEDOMETER CABLE.

Model affected	Commencing Chassis Numbers	
	R.H.Drive	L.H.Drive
2.4 litre Overdrive models	906251	941930.

On overdrive cars with the above chassis numbers and onwards Speedometer cable Part number C.12756 (78" long) is fitted in place of cable Part number C.8305 (70" long).

Interchangeability.

These two cables are interchangeable as complete assemblies.

MULTI-GRADE OILS - OIL CONSUMPTION

Models affected
A11.

You will be aware that multi-grade engine oils are approved (see Service Bulletins 167 and 175) since this type of lubricant is of value to owners operating in low temperature conditions or under stop-start conditions.

It must however be pointed out that the oil consumption rate with multi-grade oils is in excess of that which applies to the normal grades of engine oils that we recommend. This matter should be pointed out to customers making enquires regarding the use of multi-grade lubricants.

Index Reference. Section B.

VACUUM CHECK VALVE- INTRODUCTION.

Model affected	Commencing Chassis Numbers	
	R.H.Drive	L.H.Drive
2.4 litre	906247	941930

On cars with the above chassis numbers and onwards a check valve is fitted in the vacuum line between the inlet manifold and the brake servo. The check valve is attached to the inlet manifold studs.

The new parts are as follows:-

Part numbers		No.off.
C.12790	Check valve	1
C.12798	Check valve mounting plate	1
C.12796	Inlet pipe	1
C.12797	Outlet pipe	1
C.12795	Hose - check valve	2
C.2905/2	Clips	4
C.12802	Servo banjo union	1
C.8070	Hose - banjo union	1
C.2905/2	Clips	2

Index Reference - Section L.

Additions to Service Bulletin No.200.

Under the heading "Carburetter - needles" add:-
T.L. (7 to 1 compression ratio).
Under the heading "Ignition Timing" add:-
4° B.T.D.C. (7 to 1 compression ratio).

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 205

VARIOUS SERVICING ITEMS

SPARKING PLUGS - CHANGE IN TYPE

Model affected.	Commencing Engine Number
2.4 litre (8 to 1 compression ratio).	BB. 9234

On cars with the above engine number and onwards Champion N...8 sparking plugs are fitted in place of Champion N.8.B.

Servicing Procedure.

When it becomes necessary to change the sparking plugs, Champion N...8. type should be fitted on all 8 to 1 compression ratio 2.4 litre engines.

Index Reference. Section B. and P.

PETROL FILLER CAP.

Models affected.
2.4 litre

If trouble is experienced with petrol starvation or if there is evidence of weak mixture a 1/16" (1.5 mm) hole should be drilled through the top of the filler cap. The hole should be drilled in the centre of cap and through the outer skin only; a hole is already drilled through the inner skin of the filler cap.

Index Reference Section C.

SYNTHETIC PAINT - ADDITIONAL COLOURS

Models affected.
Mark V11
Mark V111
XK.140
2.4 litre

The following are additional paint colours to those given in Service Bulletins No's 114,136 and 185. The reference number given for each paint colour is for Quick Air Drying Enamel.

Imperial Maroon	Q.1229
Claret.	Q.1230
Sherwood Green	Q.1231
Cornish Grey	Q.1236
Mist Grey	Q.1235
Indigo Blue	Q.1233
Cotswold Blue	Q.1234

Index Reference. Section N.

STARTER MOTOR - REMOVAL

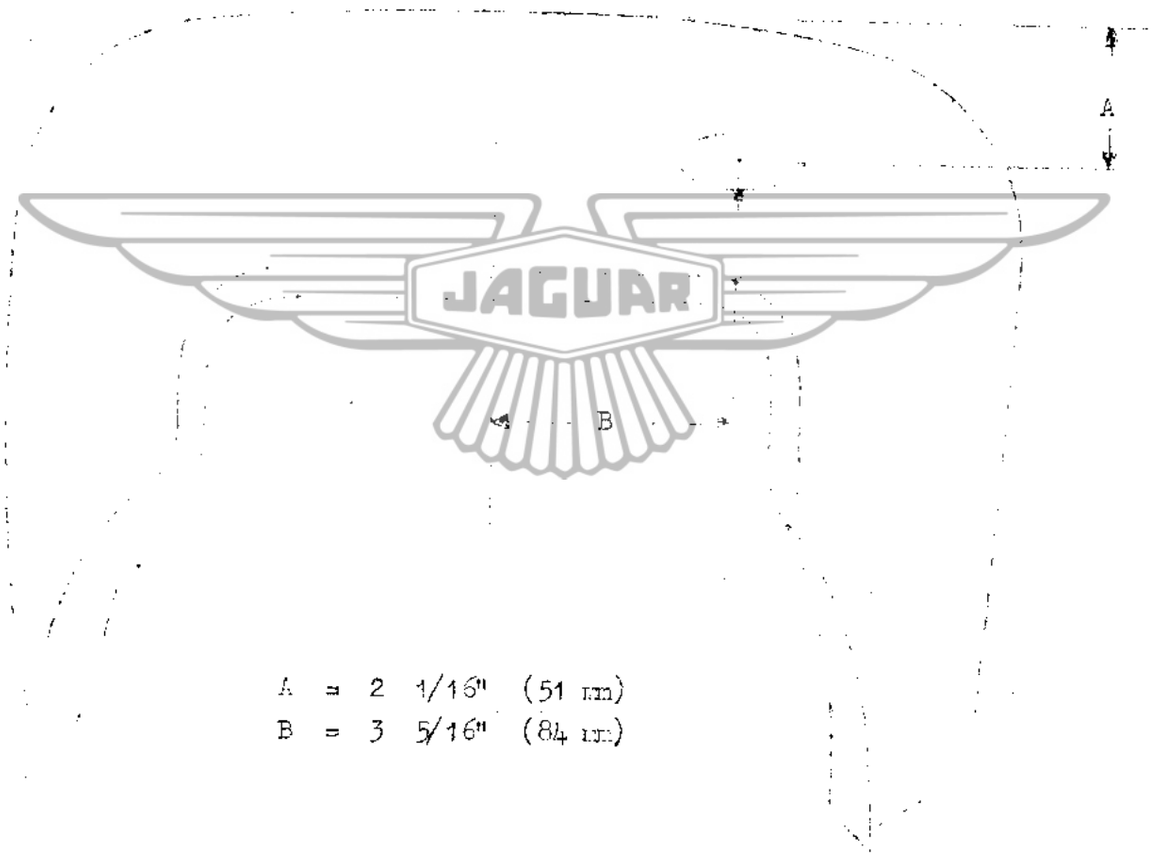
Model affected
2.4 litre

The two bolts securing the starter motor are welded to a semi-circular plate and two securing nuts are fitted adjacent to the clutch housing.

On later cars, access to the top nut is gained through an aperture (covered by a circular plate) on the right-hand side of the gearbox cowl underneath the carpet and anti-drum material.

When removal of the starter is necessary on early cars without this aperture a hole can be made in gearbox cowl at the position shown in the following sketch. After making a suitably sized hole to gain access to the top securing nut, a sheet metal cover plate should be made up and secured with three self-tapping screws.

Index Reference. Section P.



A = 2 1/16" (51 mm)
B = 3 5/16" (84 mm)

REAR HUB PULLER:-

Models affected
MK.V, MK.V11, MK.V111
XK.120, XK.140, 2.4 litre

A service tool for withdrawing rear hubs of the five stud type is available from V.L.Churchill and Co Ltd., Gt.South West Rd, Bedfont, Feltham, Middlesex. The part number is J.1. and the price to the trade is £6.9.4d. nett.

Order for this tool should be placed with Messrs V.L.Churchill direct and not through Jaguar Cars Ltd.

Index Reference. Section H.

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.206

PETROL ECONOMY

The following information is issued for the benefit of owners who live in countries where petrol rationing exists.

It is stressed that the following economy measures should only be adopted while the present rationing exists and as soon as sufficient petrol supplies are available the normal carburetter settings should be restored.

It must be understood that with the economy settings, performance will be sacrificed and owners installing the economy settings must be prepared to limit the maximum speed by at no time exceeding 3,000 r.p.m.

If the following recommended economy settings are adopted in conjunction with a suitable driving technique, considerable fuel economy will result.

Warning: If coasting downhill is resorted to, do not switch off the engine on cars fitted with vacuum servo brakes (that is MK.V11, MK.V111 and 2.4 litre, models) otherwise greatly increased pressure on the footbrake pedal will be required to obtain satisfactory retardation.

GENERAL

Sparking Plugs.

While the economy settings are installed, Champion N.A.8 plugs should replace Champion N.8.B where this latter type of plug is fitted as standard.

Multi-grade Engine Oils.

Multi-grade oil can be used with advatage in the engine to reduce the use of the choke when starting and will be found particularly beneficial for stop-start driving conditions.

Tyre Pressures.

Increasing the tyre pressures to the "Fast touring" figures, that is, 6lbs/sq.in (.42 kg/cm^2) above the normal pressures, will also assist in economising fuel.

Thermostat.

Ensure that the thermostat is operating correctly and gives a running temperature of 70/75°C.

Air Cleaner

Ensure that the air cleaner element is absolutely clean. If of the wire mesh type, re-oil the mesh sparingly after having thoroughly washed out the mesh in a bath of petrol or paraffin.

If the element is of the felt type and if there is any doubt as to its state of cleanliness it will be found advantageous to fit a new element.

Continued on page 2.

S.U.CARBURETTERS - MK V11,MK V111,XK 140.

The following economy settings are recommended for S.U.Carburetters on models as set out below.

The recommendation is to fit the weak needle and, as far as possible, to limit the maximum revolutions used in any gear to 3,000 r.p.m. By this means a considerable economy will be effected.

An additional economy can be obtained by fitting a cut-out switch to the starting carburetter circuit to reduce the period for which this is engaged. Weakness will be observed, particularly on acceleration, but the cars will all operate satisfactorily up to speeds of 80 m.p.h.

The LBA in the very weak column is usable and will give maximum possible economy, Weakness however, is apparent and with this setting it is necessary to drive with consideration.

The following are the details of economy needles for current models.

MODEL	STANDARD	WEAK	V.WEAK
MK.V11 Std.	SK.	CIW	LBA.
MK.V11 C.Type Head.	SL.	SJ.	
XK.140 Std.	SJ.	LBA.	
XK.140 C.Type Head	W02	SL.	
MK.V111	TL.	CIW	LBA.

SOLEX CARBURETTERS - 2.4 LITRE.

Ensure that the carburetters are brought up to the latest condition as detailed in Service Bulletin No.194 under the heading "Solex Carburetters - Servicing Procedure." and in No.202 under the heading "Solex Carburetters - Change in Main Jet."

Observe the recommendations under the heading "General".

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.207

VARIOUS SERVICING ITEMS

VALVE SPRINGS

Models affected	Commencing Engine Number
Mark V111.	N.6545

On cars with the above engine number and onwards Exhaust Valve springs Part number C.7137 (Inner) and C.7136 (Outer) are fitted, replacing Part number C2271 (Inner) and C2272 (Outer). This makes Valve springs C7137 and C7136 common to both Inlet and Exhaust valves and only these springs will be supplied as replacements.

Amendment to Service Bulletin No.200 A.

On page 1 of Service Bulletin No.200 A amend the details concerning valve springs in accordance with the above information.

Index Reference Section B.

RELINED BRAKE SHOES - (HOME TRADE ONLY)

Model affected.
Mark V11.

A number of braking complaints received have, on investigation, been found to be due to cars fitted with relined brake shoes other than those supplied by Jaguar Cars Ltd., and having brake linings of a different make and type than those we recommend. This has occurred in spite of such lined shoes bearing different suffix letters and colour code to any shown in our Service and Spares literature.

It is MOST IMPORTANT that Distributors and Dealers should avoid such complaints arising by obtaining their brake shoes through the normal Jaguar supply channels, and by ensuring that their existing stocks are correct by both part number and colour code.

The correct details are as follows:-

Front Brakes

Girling Part No.	Ferodo Quality	Colour Code
GB/B.46100 CJ	DM.8 WM	1 blue and 1 yellow stripe
GB/B.46101 CJ	DM.8 WM	

Rear Brakes

Girling Part No.	Ferodo Quality	Colour Code.
GB/B.41470 CF (Leading)	M.S.1.	All blue
GB/B.41471 CF (Trailing)	M.S.1.	All blue

Index Reference. Section L.

Continued on page 2.

RECOMMENDED LUBRICANTS - ADDITIONAL BRAND

Models affected
All.

The following lubricants manufactured by Messrs Alexander Duckham and Co Ltd., are now added to our list of recommendations.

Engine - Summer, 32° - 90°F	NOL Thirty
Winter, below 32°	NOL Twenty
Tropical, above 90°F	NOL Forty
Gearbox	
Carburetter Hydraulic Piston Dampers	NOL Thirty
Distributor	
Oil Can Lubrication	
Rear Axle	Hypoid 90
Steering Gear (Mark V11, Mark V111, XK.120, 2.4 litre)	NOL.E.P.140
Propeller Shaft Needle Bearings	
Wheel Bearings	L.B.10 Grease
Propeller Shaft Spline	
Water Pump	L.B.10 Grease
Fan	or M.P.G.
All Chassis Nipples	
Steering Gear (XK.140)	
Upper Cylinder Lubrication	Adcoid Liquid
Automatic Transmission	NOLMATIC

Multigrade Engine Oil..... 3.5500

Index Reference. Section 3.

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.208

VARIOUS SERVICING ITEMS

BRAKE LININGS - CHANGE IN TYPE

Model affected	Commencing Chassis Number	
	R.H.Drive	L.H.Drive
2.4 litre	906508	941994

On cars with the above chassis numbers and onwards Ferodo M.S.3 brake linings are fitted all round in place of Ferodo D.M.52 linings. NOTE: This change took place at an earlier date at the leading shoe position of the front brakes only - see Service Bulletin number 202.

The new part numbers are as follows:-

FRONT BRAKES

	No.off	Jaguar Part No.	Lockheed Part No.
Brake shoe complete with M.S.3 linings	4	6792	89121
M.S.3 Lining only) Export	4	6798	89125
Rivets) Only.	48	2586	KLB 48045

REAR BRAKES

	No.off	Jaguar Part No.	Lockheed Part No.
Leading shoe R.H.	1	6793	89122
Leading shoe L.H.	1	6794	89123
Trailing shoe	2	6795	89124

Identification.

	Colour of lining.	Colour Code.
D.M.52	Straw	5 blue 5 yellow paint stripes on edge of lining.
M.S.3.	Grey	2 blue 2 yellow paint stripes on edge of lining.

Interchangeability.

Although brake shoes with M.S.3 linings (and M.S.3 linings only for export countries) are interchangeable with D.M.52 type it is IMPORTANT that individual cars are fitted with brake linings to one or other of the following conditions.

Condition 1. M.S.3 linings at the leading shoe position of the Front brakes only. DM.52 linings at all the remaining positions.

Condition 2. M.S.3 linings all round.

Index Reference. Section L.

Continued on page 2.

OIL BATH AIR CLEANERS - MAINTENANCE.

Models affected.
Export models fitted with oil bath air cleaners.

Remove the top cover. Lift out filter element, and wash element by swishing up and down in a bowl of paraffin and allow to drain thoroughly. Empty oil from the oil base and clean out the accumulated sludge. Fill oil base with engine oil to the level indicated by the arrow. Replace filter element and top cover, ensuring that the gaskets are clean and in good condition. It is unnecessary to recoil the filter element as this is done automatically when the car is driven.

The periods at which procedure must be carried out will vary according to the particular conditions under which the cleaner operates. For Export territories where dust is prevalent once every 1,000 miles may be necessary; as a general rule 2,500 miles can be taken as a safe guide to the proper cleaning period.

Reference - Section C.

REAR BRAKE OPERATING CYLINDER - FIXED PIVOT TYPE BRAKES.

Model affected
Mark V.

For early production cars fitted with fixed pivot type brakes, replacement cylinders may have one of two methods for securing the locating bolt (see Plate L.17 in the Mark V Service Manual.)

(i) Spring Washer
(ii) Locking wire through hole in bolt head.

It is MOST IMPORTANT that the two methods should not be mixed owing to the difference in length of the Bolts. Either the Bolt with Spring Washer or the Bolt with Locking Wire may be used.

If the earlier locating Bolt is used without the washer, the Sleeve will not be free to move, and if the washer is used beneath the Bolt with a hole drilled through the head, the Sleeve could rotate and render the cylinder inoperative.

Careful setting is always necessary to ensure that the full stroke of the cylinder and the expander is available, by locking up the shoes in the drum with the adjuster before fitting a Transverse Wheel Cylinder or adjusting any part of the Handbrake mechanism.

Index Reference. Section L.

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J A G U A R

S.E.R.V.I.C.E. A.N.D. S.P.A.R.E.S. O.R.G.A.N.I.S.A.T.I.O.N

SERVICE BULLETIN NO.209

VARIOUS SERVICING ITEMS

SPEEDOMETER DRIVEN GEAR AND CABLE.

Model affected.
2.4 litre
Non-Overdrive Cars.

Reference the above subject in Service Bulletin number 204 note that in future speedometer drive gear and bearing assembly (with a small square drive hole) part number C.12378 will be supplied for all 2.4 litre non-overdrive cars.

Where this type of speedometer driven gear is supplied to replace the previous type of driven gear C.12256 with the large square drive hole, that is, prior to chassis numbers 906248 R.H.Drive and 941930 L.H.Drive a speedometer cable C.8305 will also be supplied.

The above remarks supersede those given in Service Bulletin number 192 for non-overdrive cars.

Index Reference. Section M.

SUSPENSION HYDRAULIC DAMPERS - MODIFIED TYPE.

Model affected	Commencing Chassis Numbers	
	R.H.Drive	L.H.Drive
2.4 litre	906500	941985

On cars with the above chassis numbers and onwards higher setting suspension hydraulic dampers (Part numbers C.12692 Front and C.12693 Rear) are fitted.

Service Procedure

When present stocks of the previous type dampers (C.10841 and C.8923 Front and C.10842 and C.8926 Rear) are exhausted only the high setting type will be supplied from the Jaguar Spares Department.

Interchangeability.

The high setting dampers are interchangeable with the previous types fitted but must be fitted in PAIRS to either front or rear and should preferably be fitted in car sets.

Index Reference. Section J. and K.

Continued on page 2.

DRILLED CAMSHAFTS.

Model affected.	Commencing Engine Numbers
Mark V111 2.4 Litre	N.6662 BB.9657

On cars with the above engine numbers and onwards modified camshafts are fitted, to reduce tappet noise when starting from cold.

The modified camshafts have a hole drilled through the base of each cam into the main oilway.

The part numbers of camshafts with this modification are as follows and are fully interchangeable with the previous types fitted.

	Inlet.	Exhaust
Mark V111 ($\frac{3}{8}$" lift)	C.13080	C.13081
2.4 litre (5/16" lift)	C.13082	C.13083

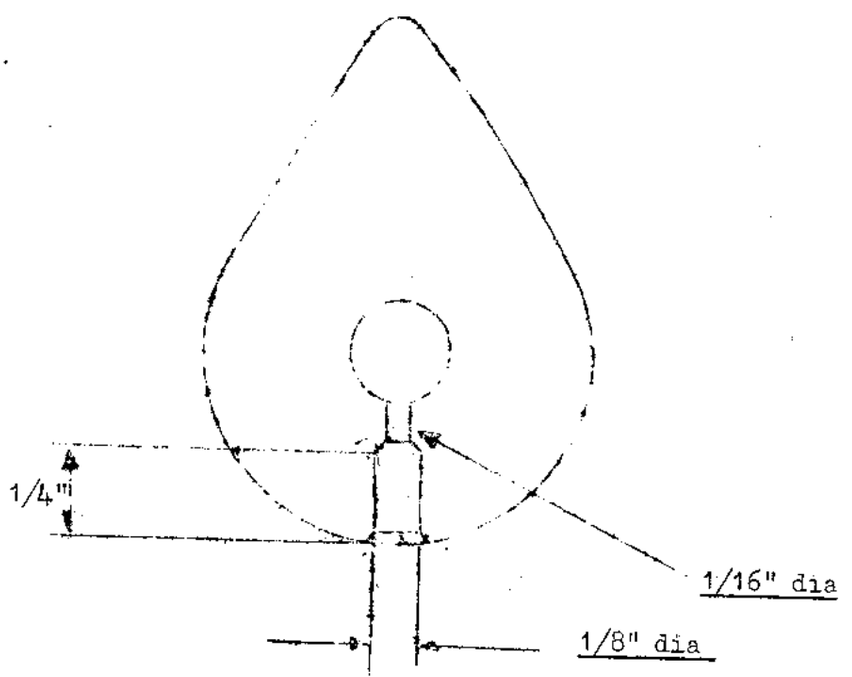
Service Procedure.

If complaints of tappet noise when starting from cold are received this modification can be carried out in service by carrying out the following procedure.

1. Support the camshaft on Vee blocks at the front and rear bearing journals and clamp down the camshaft while drilling each cam.

2. With a high speed drill make an $\frac{1}{8}$" (3 mm) diameter hole $\frac{1}{4}$" (6.35 mm) deep in the centre of the base of each cam and follow through with a 1/16" (1.5 mm) high speed drill until the hole breaks through into the main oilway. (see sketch). Chamfer the edge of the $\frac{1}{8}$" hole to remove the sharp corner.

3. After drilling all the cams thoroughly wash out the oilways to remove all traces of drilling swarf.



Index Reference.. Section B.

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.210

VARIOUS SERVICING ITEMS.

REAR SPRING MOUNTING - MODIFICATION

Model affected.

2.4 litre.

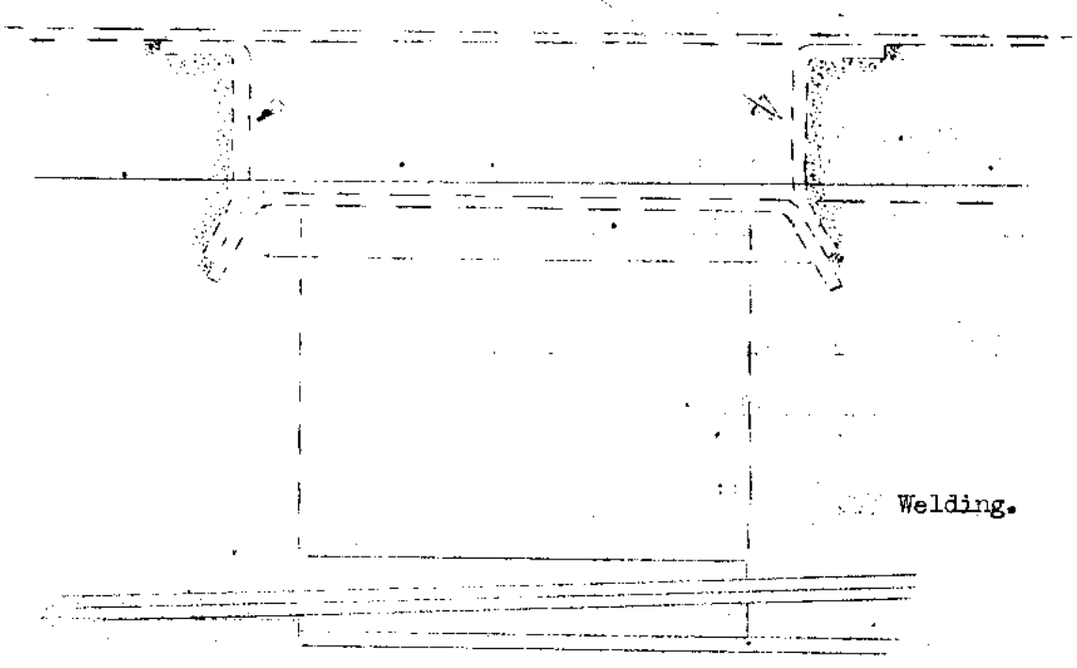
If a complaint of knock from the rear springs is received which cannot be traced to the rear springs themselves, the upper spring mounting clamps (see Fig 2 items 6 and 7 in the Integral Body/Chassis Repair Manual) should be examined for distortion. If any distortion exists this should be rectified and in addition support brackets, (Part number C.12779) should be fitted and welded between the spring mounting clamp and the spring reinforcing channel (Fig 2, item 5) as shown in the following sketch.

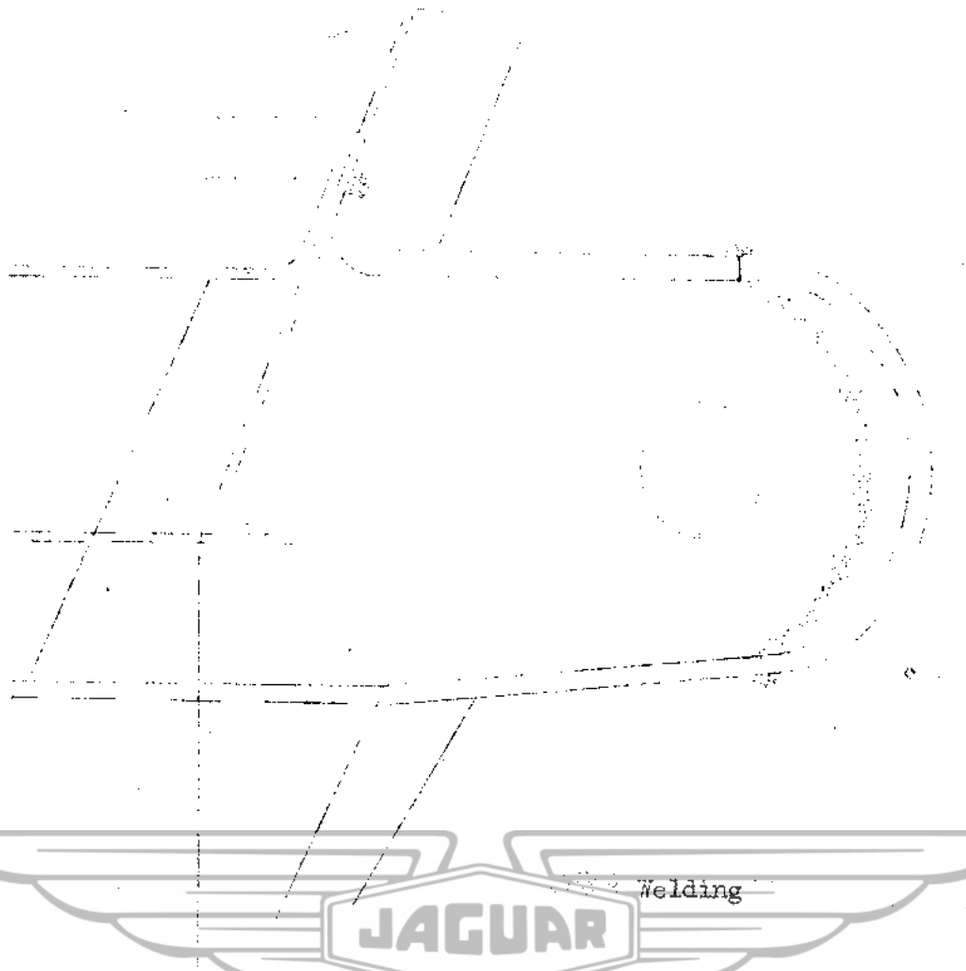
Note:- At the left-hand side a support bracket is fitted at both front and rear of the spring mounting clamp.
At the right-hand side, a support bracket is fitted at the front of the spring mounting clamp only.

While carrying out this modification a semi-circular bracket C.12778 should be welded to the end of the panhard rod bracket on the body as shown in the sketch overleaf.

If the semi-circular edge of the panhard rod bracket has been welded previously, face off the edge until the semi-circular bracket will butt against the top and bottom plates.

Support brackets C.12779





Index Reference. Section M.

CYLINDER HEAD GASKET.

Models affected.
Mark V11
XK.120
XK.140
Mark V111
2.4 litre.

In future, the only cylinder head gaskets supplied by the Jaguar Spares Department for the above models will be the steel type Part number C.7861, which supersedes the previous type Klingerite gasket (C.2250) and cupro-nickel gasket (C.3335).

Index Reference. Section B.

REAR ENGINE MOUNTING - COIL SPRING TYPE.

Model affected.
2.4 litre.

On a few occasions we have found that Dealers have fitted a split pin and washer to the centre pin of the rear engine mounting as there is an unused hole at the bottom of this pin.

It is pointed out that this hole is for assembly purposes only (see S.Bulletin No.193) and on no account must a washer and split pin be fitted at this point.

Index Reference. Section Q.

MAY 1957

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN C.212

VARIOUS SERVICING ITEMS

REAR ROAD SPRINGS - RUBBER INTERLEAVED TYPE

Models affected	Commencing Chassis Numbers	
	R.H.Drive	L.H.Drive
Mark VII	750788	740195
Mark VIII	780476	780462

On cars with the above chassis numbers and onwards Rear Springs Part Number C.13109 are fitted replacing Rear Springs Part Number C.7914.

Rear Springs C.13109 are fitted with synthetic rubbers buttons between the spring leaves, and therefore no gaiters are fitted.

Interchangeability.

Rear Springs C.13109 are interchangeable with the previous type C.7914 but should be fitted in pairs.

Index Reference. Section K.

RADIATOR ASSEMBLY

Model affected	Commencing Chassis Numbers	
	R.H.Drive	L.H.Drive
2.4 litre	906964	942194

On cars with the above chassis numbers and onwards Radiator Part Number C.12672 is fitted replacing Radiator Part Number C.8972.

Radiator C.12672 has a separate filler and inlet pipe whereas Radiator C.8972 has the filler incorporated in the inlet pipe.

Note:- Radiator C.12672 is fitted on the 3.4 litre model from the commencement of production.

Interchangeability

Radiator C.12672 is interchangeable with the previous type of radiator C.8972. The radiator hoses are unchanged.

Index Reference. Section D.

VOLTAGE AND CURRENT REGULATOR

Model affected	Commencing Chassis Numbers	
	R.H.Drive	L.H.Drive
2.4 litre	206949	242190

On cars with the above chassis numbers and onwards an RB.310 Voltage and Current Regulator Part Number C.8821 is fitted replacing the RB.106 Voltage Regulator Part Number C.9631. To suit this change chassis harness C.13550 is fitted replacing chassis harness Part Number C.8914.

Interchangeability

The RB.310 regulator is interchangeable with the RB.106 regulator provided the following instructions are carried out.

1. Remove the existing regulator and dispense with the plate on which the regulator is mounted.
2. Join the two wires originally connected to the A and A1 terminal and solder them to a spade terminal. Connect these wires to the "B" terminal on the regulator.
3. Join the two wires originally connected to the "D" terminal and solder them to a spade terminal. Connect these wires to the "D" terminal on the new regulator.
4. Solder a spade terminal to the wire originally connected to the "F" terminal. Connect this wire to the "F" terminal on the new regulator.
5. The wire originally connected to the "E" terminal should be taped up and dispensed with, as the RB.310 regulator is earth by the securing screws.
6. Secure the regulator and shield plate to the scuttle with the existing setscrews in the cage nuts already fitted.

Index Reference Section F.

DISTRIBUTOR SUPPRESSOR

Models affected
Mark VIII cars fitted with ignition suppression
2.4 litre cars fitted with ignition suppression
3.4 litre cars fitted with ignition suppression

Note that the DMBZ type of distributor fitted to the above models incorporates an inbuilt suppressor.

The suppressor normally fitted in the centre terminal post of the distributor is therefore unnecessary and must not be fitted.

Index Reference. Section P.

MAY 1957

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.214

VARIOUS SERVICING ITEMS

"J.S." SUFFIX GEARBOX

Models affected
All

A new type of gearbox with shaved gears which has the suffix "J.S." to the gearbox number is now in production. The gearbox ratios are as follows:-

Top	1:1
3rd	1.283:1
2nd	1.86:1
1st & rev	3.378:1

The importance of quoting the gearbox number together with both the prefix and suffix letters is again stressed when ordering spare parts for a particular gearbox.

The parts which vary from other production gearboxes are as follows:-

C.11931	Front End Cover	1	J.L. and S.L. prefix series
C.11934	Front End Cover Oil Seal	1	
C.11932	Locknut - Front Bearing	2	
C.11933	Tab Washer for Locknut	1	
C.10200	Constant Pinion Shaft	1	
C.10208	3rd/Top Synchro Sleeve	1	
C.10201	1st Speed Mainshaft Gear	1	
C.10202	2nd Speed Mainshaft Gear	1	
C.10203	3rd Speed Mainshaft Gear	1	
C.10204	Countershaft Cluster	1	
C.10205/1	Reverse Gear Assy	1	
C.10209	2nd Speed Synchro Sleeve Assy	1	
C.10210	Spacer for Needle Rollers	1	
C.10206/1	Thrust Washer (.471"/.472" thick)	2	Front and rear of
C.10206/2	Thrust Washer (.473"/.474" thick)	2	2nd and 3rd speed
C.10206/3	Thrust Washer (.475"/.476" thick)	2	Mainshaft Gears
C.12178	Clutch Housing Assy	1	G.B.prefix series
C.11934	Clutch Housing Oil Seal	1	

Note: With the "J.S." type gearbox the constant pinion shaft is located by a nut and locknut and a smaller front oil seal is fitted.

Index Reference Section F.

CARBURETTER NEEDLES - CHANGE IN RECOMMENDATION

Model affected
3.4 litre

The recommended carburetter needle for the above model is changed from L.B.1 to T.L. Service Bulletin No.211 should be amended in accordance with this information.

Index Reference - Section C.

CHASSIS SIDE MEMBER ASSEMBLY - SERVICE CONDITION

Models affected
2.4 litre
3.4 litre

A service condition of the body chassis side members (Item 1, Fig 2 in the Repair Manual for Integral Body/Chassis Construction) will, in future, be obtainable from the Jaguar Spares Department.

This assembly is a more suitable condition for repair work and consists of the complete chassis side member back as far as the front mounting point of the rear springs, with all the brackets and reinforcements etc, but less the front jacking bracket.

The part numbers of the "Service condition" chassis side members are as follows:-

471/102	Right-hand
471/103	Left-hand

and comprise -

371/022-3	Member Chassis Side Assy, less -
171/700-1	Longitudinal Member Rear
371/714-5	Bracket Attachment Front Jacking Tube Assy
371/712-3	Bracket Attachment Rear Jacking Tube Assy
171/702-3	Extension Rear - Chassis side
171/852	Brackets Front Mounting Plate Rear Springs

Index Reference - Section N.

PANEL VALANCE ASSEMBLY - SERVICE CONDITION

Model affected
2.4 litre
3.4 litre

A service condition of the Panel Valance will, in future, be obtainable from the Jaguar Spares Department.

This condition is the panel valance (Item 11 Fig 2) but complete with all the captive nuts which are not included on the production condition 171/088 Right-hand and 171/089 Left-hand

The part numbers of the "Service Condition" panel valances are as follows:-

471/100	Right-hand
471/101	Left-hand

Index Reference - Section N.

JULY 1957

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.216.

VARIOUS SERVICING ITEMS

HYDRAULIC CHAIN TENSIONER FILTER.

Models affected	Commencing Engine Number
2.4 litre	BC.1881
3.4 litre	KE.2705
Mark V111	N.8252
XK.150	V.1191

On cars with the above engine number and onwards a conical filter gauze (Part number C.13457) is fitted to the oil feed hole for the hydraulic chain tensioner in the cylinder block.

Service Note.

If the hydraulic tensioner is removed for any reason on engines prior to the above numbers a filter gauze can be fitted to the cylinder block. The gauze should be inserted into the hole pointed end first until the ferrule is located by the small shoulder in the hole.

Index Reference - Section B.

RADIATOR GRILLE FRAME AND BONNET TOP MOTIF

Model affected.	Commencing Chassis Numbers	
	R.H.Drive	L.H.Drive
Mark V111.	761116	780870

On cars with the above chassis number and onwards the radiator grille and bonnet top motif are die-cast alloy the previous types being brass.

The part numbers of the relevant parts are as follows:-

	1st Type. (Brass)	2nd Type. (Die-cast)
Radiator grille frame	BD.12294	BD.12745
Bonnet top motif	BD.12301	BD.14154
Jaguar mascot base.	BD.12717	BD.12253

J24

Index Reference - Section N.

CARBURETTER INSULATING WASHER.

Model affected.	Commencing Engine Number.
2.4 litre	BC.2011

On cars with the above engine number and onwards Carburetter insulating washer Part number C.13562 replaces C.11549.

In future, only the latest type washer will be supplied from the Jaguar Spares Department.

Index Reference - Section C.

Continued.....

REMOVAL OF WAX COATING ON NEW CARS.

Further to Service Bulletin No.196 which gave instructions for the removal of the protective wax coating on new cars, experience has shown that the following procedure is advantageous. The use of paraffin is advised instead of petrol or white spirit (petrol distillate.)

The following procedure should now be adopted:-

1. Place car on wash.

2. Remove all dust and grit by thoroughly hosing down car, using high pressure hose.

   NOTE:- Do not dry car.

3. Dissolve wax coating, using paraffin liberally, applied by mutton cloth or similar non abrasive cloth.

4. Dry off car using compressed air only.

5. Polish car in normal way, using liquid polish, not wax polish.

The time required for the complete operation is four hours per car.

Index Reference - Section Q.

WHEEL BEARING ADJUSTMENT

Model affected.
XK.150

Note that on cars fitted with disc brakes the end float of the wheel bearing must be kept to a minimum otherwise the brakes may tend to drag and not function correctly.

The correct end float for both front and rear wheel hub bearings is .003" to .005" (.07 to .13 mm).

Adjustment of the front wheel bearings is by means of the hub nut which should be tightened until there is no end float, that is, when rotation of the hub feels slightly "sticky." The hub nut should be slackened back one castellation and the split pin inserted in the nearest hole.

Adjustment of the rear wheel bearings is by shims between the flanges of the axle tubes and the caliper mounting plates. The normal procedure applies but it will be necessary to remove the brake caliper, brake disc and hub before access to the shims is gained. Installation instructions for the brake assemblies are given in the Disc Brake booklet for the XK.150 model.

Index Reference - Section J. and H.

JULY 1957

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.217

VARIOUS SERVICING ITEMS.

OIL FILTER AND BLANKING PLATE - MODIFIED TYPE

Model affected.	Commencing Engine Number
2.4 litre	BC.2256
3.4 litre	KF.3054

On cars with the above engine numbers and onwards a modified type of oil filter is fitted.

The modified type of oil filter has a dome nut to retain the oil pressure relief valve and has a straight outlet adaptor for the hose to the oil sump whereas the previous type of filter had a banjo connection.

The modified blanking plate has a "dimple" formed in the plate to ensure that it cannot be fitted the wrong way round.

The part affected by this change are as follows, the remaining parts are as for the previous type of oil filter C.12532.

Part Number	Description	No.off
C.12776	Oil filter, complete (FA.2720)	1
6884	Canister assembly	1
6886	Pressure plate at bottom of canister	1
6885	Bolt through canister	1
6877	Filter head assembly	1
6882	Outlet adaptor for attachment of hose to oil sump	1
6881	Sealing washer on outlet adaptor	1
6883	Sealing ring between filter head and canister	1
6879	Spring for relief valve	1
6154	Dome nut retaining relief valve spring	1
6880	Washer under dome nut	1
C.12803	Blanking plate between filter head and cylinder block	1
C.13091	Gasket at each side of blanking plate	2
NB.131/15D	Bolt (short) securing oil cleaner to cylinder block	2
C.12861	Hose between oil filter and oil sump	1

NOTE:- Oil filter C.12776 may be used to replace oil filter C.12532 providing the following parts are also changed:-

Fit C.12803 Blanking plate to replace C.12381
Fit C.13091 Gasket to replace C.12177
Fit C.12861 Hose to replace C.12382
Fit NB.131/15D Bolt to replace C.NB.131/11D

Index Reference - Section B.

WINDSCREEN WIPER MOTOR - CHANGE IN TYPE

Model affected.	Commencing Chassis Numbers.	
	R.H.Drive	L.H.Drive
Mark V111	760989	780777
2.4 litre	907359	942311
3.4 litre	970327	986134

On cars with the above chassis numbers and onwards a DR 3 type windscreen wiper motor is fitted replacing the DR.1 type motor.

The part numbers are as follows:-

	Mark V111	2.4 and 3.4 litre	
		R.H.Drive	L.H.Drive
Windscreen wiper motor	C.13501	C.13503	C.13504
Windscreen wiper motor harness	C.13485	C.13492	C.13492

The motor cables should be connected to the lead cables at the snap connectors as follows:-

Green with white tracer	to White
Green with blue tracer	to Blue
Green with brown tracer	to Brown
Green with yellow tracer	to Yellow
Green with red tracer	to Red
Green	to Green.

The connections to the two speed wiper switch are as follows:-

	Mark V111.	2.4 and 3.4 litre
Terminal Number 1.	-	Black
2.	Green with blue	-
3.	Green with brown	Green with yellow
4.	Black	-
5.	Green with yellow	Green with brown
6.	Green with red	-
7.	Green with white	-
8.	-	Green with blue
10.	-	Green with white
11.	-	-
12.	-	-
13.	-	Green with red

Index Reference - Section P.

SPARKING PLUGS - CHANGE IN DESIGNATION

Models affected
All

In the near future Champion sparking plugs will have a simplified type designation. The new designations for sparking plugs fitted to current production vehicles are as follows:-

Old designation	New designation.
L.10 S	L.7
N.8 B	N.8
NA 8	N.5
NA 10	N.3

Note that this is a numbering change only and involves no change in the heat value for individual sparking plugs. Under the new system a lower number indicates a colder plug.

Index Reference - Section B and P.

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.220

VARIOUS SERVICING ITEMS

OVERDRIVE HYDRAULIC PRESSURE

The following are the working oil pressures for overdrives fitted to the various model and should be referred to when testing the hydraulic pressure as a check for faulty operation of an overdrive unit.

	Pressure	Overdrive unit type
Mark V11	480-500 p.s.i.	28/1270
Mark V111	480-500 p.s.i.	28/1270
XK.140		
Early cars	420-440 p.s.i.	28/1390
Later cars	480-500 p.s.i.	28/1482
2.4 litre	350-370 p.s.i.	28/1369
3.4 litre	420-440 p.s.i.	28/1474
XK.150	480-500 p.s.i.	18/1516

Index Reference - Section F.

BRAKE AND CLUTCH MASTER CYLINDERS - IDENTIFICATION

Models affected
2.4 litre
3.4 litre

The brake and clutch master cylinders are now fitted with an hexagon end plug in place of a circular end plug.

The means of differentiating between the two cylinders remains the same, that is:-

The brake master cylinder has a plain hexagon.
The clutch master cylinder has a groove at each point of the hexagon.

Note that some cars have been fitted with one cylinder having an hexagon end plug and the other a circular end plug.

Index Reference - Section L.

Continued .....

OIL FILTER ELEMENTS AND SEALING RINGS - SUMMARY

The following is a summary of the oil filter elements and sealing rings (fitted between canister and filter head) for all post-war models.

ELEMENTS

Jaguar Part No.	Tecalemit Part No.	Remarks
1523	FG.2312	1946-8 1½ litre R.H.D.
1527	FG.2346	1946-8 1½ litre L.H.D.
1526	FG.2306	1946-8 2½/3½ litre Mark V 2½ and 3½ litres 2.4 litre 3.4 litre XK.150
1535	FG.2383	XK.120 up to Eng.No.W.4382
1538	FG.2388	XK.120 for W.4383 and subs Mk.V11 up to Eng.No.B.5304
1550	FG.2421	MK.V11 for B.5305 and subs XK.140 "C" Type.
6691	FG.2326	"D" Type XK.'SS'

SEALING RINGS

C.1088/W	-	1946-8 1½/2½/3½ litres Mk V 2½ and 3½ litres
5911	137353	XK.120 Mark V11 up to Eng.No.B.5304
5180	137365	Mark V11 for B.5305 and subs XK.140,"D" Type, XK 'SS'. 2.4 litre up to Eng.No.BC.2255 3.4 litre up to Eng.No.KE.3053
6883	137493	2.4 litre for BC.2256 and subs 3.4 litre for KE.3054 and subs XK.150

Index Reference - Section B.

AUGUST 1957

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.221

VARIOUS SERVICING ITEMS

ENGINE COMPRESSION PRESSURES.

Models affected
Mark V111
XK.150
2.4 litre
3.4 litre

The following are the compression pressures at starter cranking speed for the current production range of vehicles.

Compression pressures should be taken with all sparking plugs removed, carburetter throttles wide open and engine at normal operating temperature (70° C approx)

7 to 1 compression ratio	8 to 1 compression ratio
125 p.s.i. (approx) (8.79 kg/cm^2)	155 p.s.i. (approx) (10.90 kg/cm^2)

The compression pressures for previous models fitted with the XK type engine are:-

7 to 1 compression ratio	8 to 1 compression ratio
110 p.s.i. (approx) (7.73 kg/cm^2)	120 p.s.i. (approx) (8.44 kg/cm^2)

Index Reference - Section B.

PROCEDURE TO OVERCOME FOULING BETWEEN WATER HOSE AND TIMING COVER SETSCREWS.

Model affected	Cars affected
XK.150	Prior to chassis numbers F.H.Coupe 834380 L.H.Drive D.H.Coupe 837005 L.H.Drive

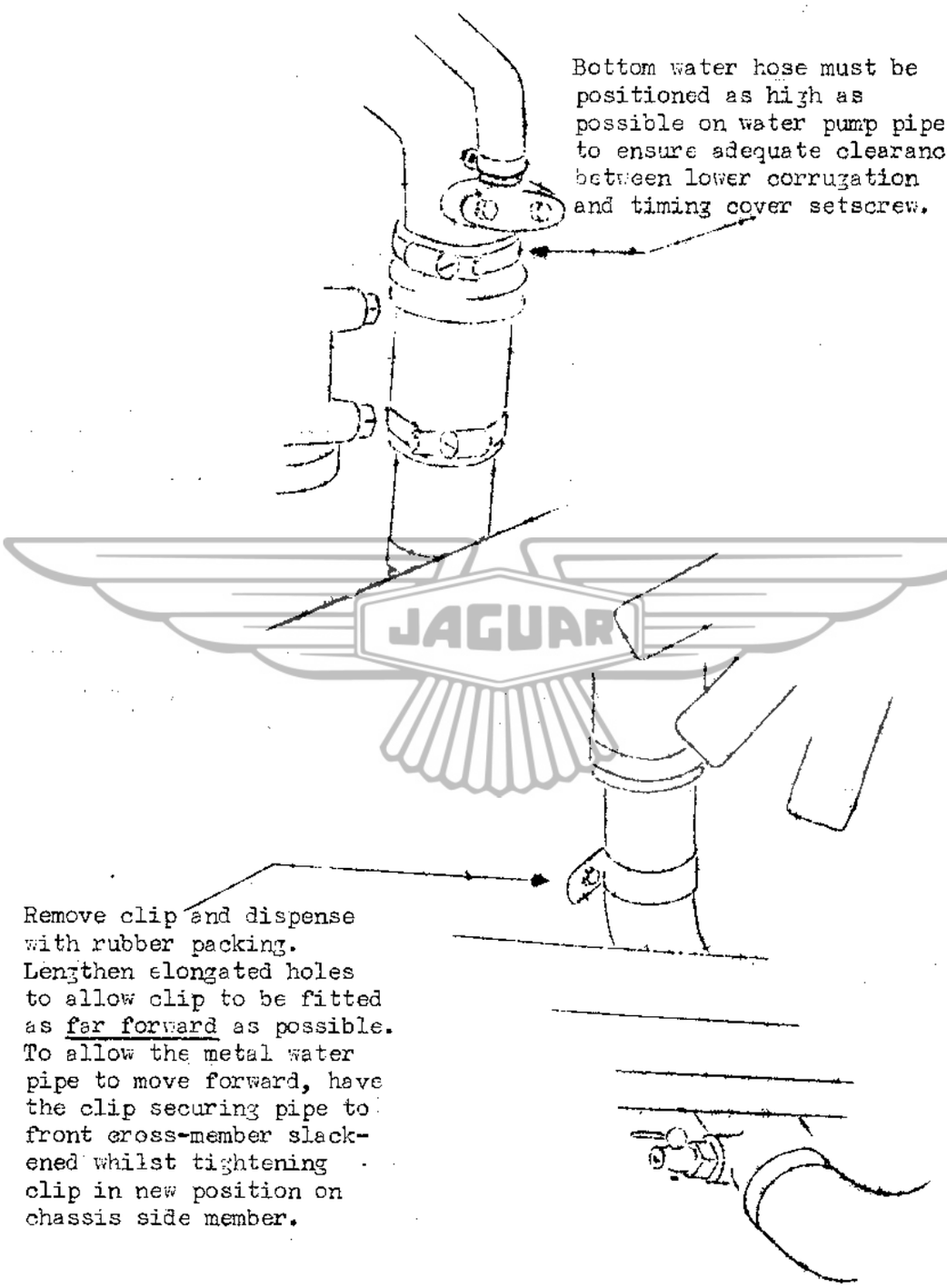
In some instances, on left hand drive cars prior to the above chassis numbers, the water hose between the water pump and the metal pipe may be positioned too close to the timing cover with consequent chafing between the hose and timing cover setscrews.

Distributors and dealers are, therefore, requested to examine all XK.150 cars prior to the above chassis numbers, which come into their premises, for adequate clearance between the hose and timing cover setscrews. If insufficient clearance exists the following rectification procedure should be carried out and if chafing of the hose has occured a new hose (Part number C.12924) must be fitted.

Continued...

Rectification Procedure

Carry out the instructions detailed on the following sketch.



Index Reference - Section B.

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.222

WINDSCREEN WIPER MOTOR - REPLACING TYPE DR1 WITH TYPE DR3.

Models affected.
Mark V11
XK.140
Mark V111
2.4 litre
3.4 litre

See Service Bulletin No.217 for introduction point of DR3 type motor.

As present stocks of DR1 wiper motors become exhausted DR3 motor will be supplied as a service replacement. The DR3 wiper motor and the DR1 motor are similar type units, both being two speed, self-parking wipers, the main difference between the two units being that whereas with the DR1 the mounting pillars are secured to the motor portion, the pillars are cast as part of the gearbox with DR3 units. Therefore a conversion bracket Jaguar Part number 7259 (Lucas Part number 744144) will be necessary with each DR3 replacement which when bolted to the DR3 mounting pillars, will allow the new unit to be fitted as a direct replacement for the DR1 motor.

NOTE:- When replacing the DR1 motor on the 2.4 litre model it will be found that the conversion bracket is not necessary, since the DR3 mounting pillars will fit directly into the holes drilled in the wheel valance after removing the DR1 complete with the original fixing bracket.

Fitting Instructions.

1) Disconnect the cables and remove the original motor from the vehicle. To disconnect the crosshead and flexible rack, the circlip (or hexagon nut on earlier DR1 motors) around the gear shaft on the underside of the gearbox should be removed. This will allow the final gear assembly to be partially withdrawn so that the connecting rod can be lifted clear of the crosshead.

2) Remove the gearbox cover and circlip from the replacement DR3. Partially withdraw the final gear assembly and connecting rod, and attach the crosshead to the connecting rod. Push the final gear back into its original position and replace the circlip and gearbox cover

3) Fit the conversion bracket to the motor, and bolt the assembly in position on the vehicle.

Wiring Instructions.

1) Cut off the original five connectors from the wiper motor harness, and solder on the five "bullet" connectors.

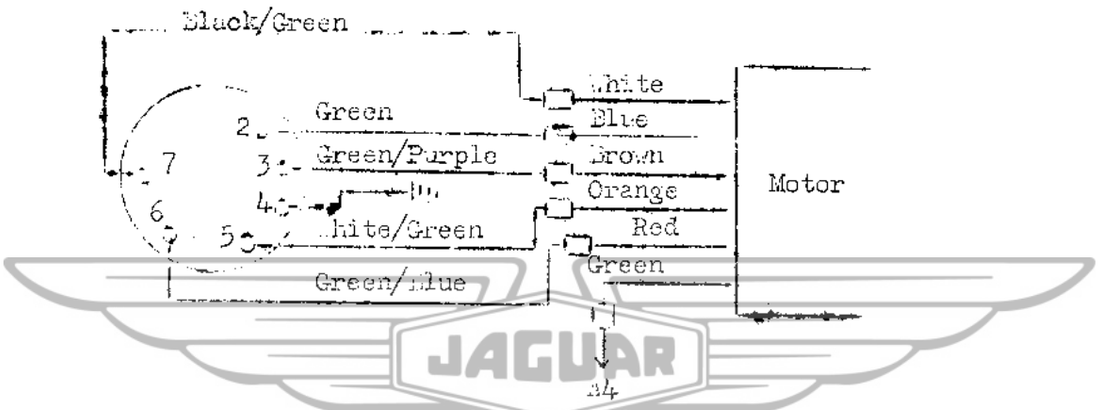
2) Using rubber snap connectors, connect the leads from the DR3 motor to the harness, as illustrated below. (it will be seen from the two circuits that two methods of wiring are involved dependent on whether the vehicle is equipped with a Model PRS5 or PRS7 panel switch.)

Continued....

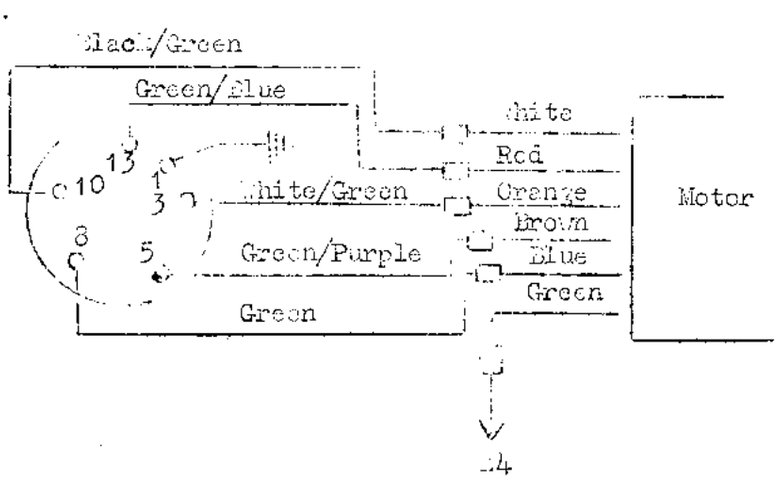
3) It will be necessary to remove and tape up the green cable feeding the panel control switch, since it is no longer required. (With PR35 switches, the feed cable is connected to terminal 2; with PR37 switches, the feed cable is connected to terminal 8) Using the length of green cable supplied with the replacement motor, connect the green lead from the motor to the "L4" fuse box terminal.

NOTE:- The PR35 type switch is fitted to the Mark V11 and Mark V111 model; the PR37 is fitted to the XK.140, XK.150, 2.4 and 3.4 litre models.

If on testing the wiper it is found that the blades fail to park correctly, the parking position can be corrected by turning the knurled adjusting nut located near the gearbox cable outlet, one or two serrations at a time until the correct position is obtained.



DR3 Motor and PR35 Switch



DR3 Motor and PR37 Switch

Index Reference - Section P.

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.223,

VARIOUS SERVICING ITEMS

DYNAMO SPEED - INCREASE.

Model affected	Commencing Engine Number
Mark V111	N.8974
2.4 litre	BC.2959
3.4 litre	KE.3883
XK.150	V.1599 and onwards

On cars with the above engine number/ the dynamo speed has been increased by the fitting of a smaller dynamo pulley. The length of the fan belt has been shortened to suit.

The details are as follows:-

	Dynamo Pulley Size	Dynamo Pulley Part Number	Fan Belt Part Number
Mark V111	3"	C.13594	C.13595
3.4 litre	3"	C.13594	C.13595
XK.150	3"	C.13594	C.13595
2.4 litre	3 3/8"	C.13592	C.13593

Index Reference - Section P.

TOP DEAD CENTRE MARKS - LOCATION

Model affected
2.4 litre-Automatic Transmission model
3.4 litre-Automatic Transmission model

On the above models T.D.C. indication is provided at the left-hand side of the converter housing, below the left-hand camshaft cover.

A T.D.C. mark, visible through a hole in the converter housing, is stamped on the converter behind the starter ring gear which should be aligned with the mark scribed on the converter housing and crankcase.

Index Reference - Section B.

Continued ....

CYLINDER BLOCK - REAR COVER AND SEALING RING

Models affected	Commencing Engine Numbers
2.4 litre Mark V111	BC.3048 N.9062
3.4 litre XK.150	XE.4018 V.1631

On cars with the above engine numbers and onwards the cylinder block rear cover (Part number C.2258) and sealing ring (Part number C.2332) are of a modified type.

On the modified type the Allen headed cap screws are inserted from the top instead of from the bottom as on the previous type.

Interchangeability.

As stocks of the earlier type of rear cover and sealing ring are now exhausted, it will be necessary, on all XK type engines prior to the above numbers, to fit both items as an assembly.

Index Reference - Section B.

ANTI-CREEP SOLENOID VALVE

Model affected		Commencing Chassis Numbers R.H.Drive	L.H.Drive
Mark V111		761907	781082
3.4 litre		971141	986771
XK.150	F.H.Coupe	824046	834491
	D.H.Coupe	-	837030

On automatic cars with the above chassis numbers and onwards Anti-creep solenoid valve Part No.C.12750 is fitted replacing Part number C.6857.

Solenoid valve Part number C.12750 (Lucas Part number 76502D) is of a larger diameter than C.6857 but the two parts are interchangeable.

Index Reference - Section FF.

Amendment to Service Bulletin No.220

Under the heading "Sealing Ring" delete Tecalemit Part number 137365 and insert Part number 137494.

In the "Remarks" column for Element, Jaguar Part number 1550 add "Mark V111".

In the Remarks column column for Sealing Ring, Jaguar Part number 5180 add "Mark V111".

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.224

VARIOUS SERVICING ITEMS

OVERDRIVE THROTTLE SWITCH - ADJUSTMENT

Model affected

Mark V11 Overdrive models.

Mark V11 cars are fitted with H.D.6 type carburetters which have no throttle adjusting screws it is therefore necessary to adjust the overdrive switch by a different method to that given on page 16 of the Mark V11 Overdrive Service Manual.

The procedure is as follows:-

1. Check that the idling speed of the engine is 500 r.p.m, if not, adjust the slow running by rotating the two volume screws by exactly equal amounts. Switch off engine.

2. Engage top gear.

3. With a screwdriver short out the C1 and C2 terminals on the top relay secured to the wing valance. The overdrive solenoid will then be heard to engage with a click and the manual switch warning light will become illuminated.

4. Slacken the pinch bolt securing the operating lever to the spindle of the throttle switch.

5. By trial and error position the operating lever on the spindle so that when the carburetter spindles are rotated, the full throttle stops on the spindles move approx $\frac{1}{8}$" before the overdrive solenoid is heard to disengage and the warning light in manual switch goes out.

Index Reference — Section P.

OVERDRIVE THROTTLE SWITCH - ADJUSTMENT

Model affected
XK.150

The throttle switch is located in a bracket situated between the two carburetters.

1. Check that the idling speed of the engine is 500 r.p.m, if not, adjust the slow running by rotating the two volume screws by exactly equal amounts. Switch off engine.

2. Slacken the locknut and screw down the switch until the plunger in the centre of the switch is fully depressed by the lever on which it operates. Tighten the locknut.

Index Reference - Section P.

Continued....

ADJUSTMENT OF REVERSE LIGHT AND STARTER CUT-OUT SWITCH.

Models affected.
2.4 and 3.4 litre Automatic Transmission

On the above models the Starter cut-out and Reverse light switch is situated behind the dash casing and is connected to the manual selector control linkage.

The purpose of the switch to ensure that (i) the starter motor circuit is only operative when the manual selector lever is in the P (Park) or N (Neutral) so that the engine cannot be started when the transmission is in any one of the driving ranges (ii) the reverse light is closed when the manual selector lever is in the R (Reverse) position and the ignition is switched on.

The method of adjustment for the switch is as follows:-

1. Remove dash casing.

2. Raise the boot lid so that the reverse light can be seen through the rear window.

3. Switch on the ignition. Place the selector lever in the R (Reverse) position so that the centre line of lever is in line with the letter R; move lever $\frac{1}{8}$" - $\frac{1}{4}$" (3 - 6 mm) towards the L position.

4. Slacken the nut securing the switch bracket to the radio mounting bracket. Move the switch bracket until the reverse light becomes illuminated and tighten the securing nut.

Test the operation of the starter switch with the manual selector lever in the P N and D positions. The starter should operate only when the lever is in the P or N positions.

Note:- When testing in the "D" position apply the footbrake firmly.

Index Reference - Section FT.

REAR BRAKE SHOE RETURN SPRINGS.

Model affected
Mark VII

On early Mark VII cars the return spring (Part number 2515 or GB 41734) at the wheel cylinder end of the rear brake assembly was fitted between a pin in the backplate and the leading shoe. On later cars the return spring is a double formation spring (Part number 6169 or 48185) which is fitted between the leading and trailing shoes.

Interchangeability

The latest type spring can be fitted in place of the early type.

Index Reference - Section L.

September 1957.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.225

VARIOUS SERVICING ITEMS

PROCEDURE TO OVERCOME HANDBRAKE COMPENSATOR FOULING BODY

Model affected

3.4 litre
2.4 litre cars fitted with handbrake compensator

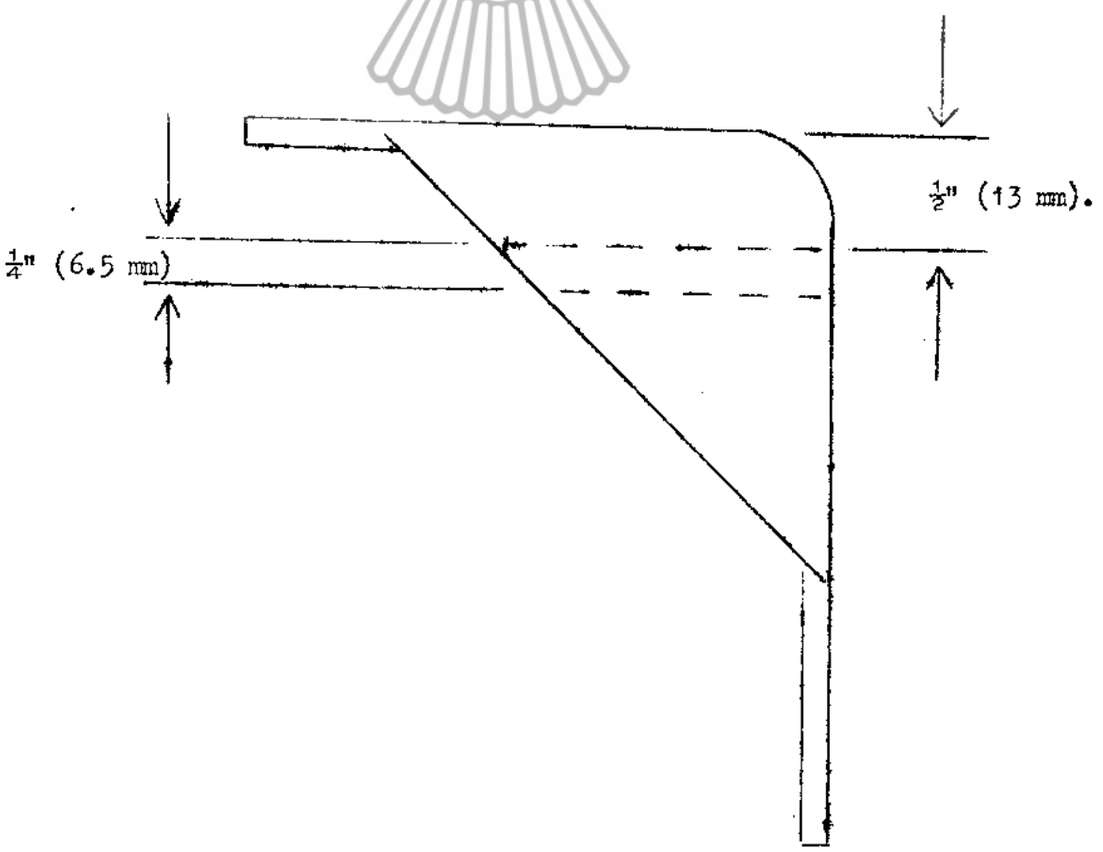
Under full bump conditions there is a possibility that the handbrake compensator fitted to the rear axle may foul the bottom of the luggage boot floor giving rise to a knock from the rear of the car.

Rectification Procedure.

1. Remove the handbrake compensator bracket which is secured by two of the rear axle cover screws.

2. With a hacksaw cut out a $\frac{1}{4}$" (6 mm) strip of metal to reduce the effective height of the bracket. Weld the two halves of the bracket together. (see sketch).

NOTE: Do not cut more than $\frac{1}{4}$" (6 mm) from the bracket, or when assembled the cross wires may foul the torque arms.



Index Reference - Section L and N.

Continued...

PRESSURE "BUILD-UP" IN HYDRAULIC SYSTEM

Model affected
Mark V11
Mark V111

A number of complaints of pressure "build-up" in the hydraulic system have been traced to blockage of the breather hole in the brake fluid supply tank filler cap.

Blockage of the breather hole is usually due to an accumulation of brake fluid and dirt on top of the filler cap and is usually indicated by an escape of air pressure when the cap is removed.

Rectification Procedure

1. Clean out the existing breather hole and wash cap in methylated spirits. Lift the spring retainer on the inside of the cap to allow hole to be cleaned.

2. Drill a further 1/16" (1.61 mm) diameter breather hole at 90° to the existing breather hole and $\frac{3}{8}$" (9.5 mm) from the centre of the cap.

3. Obtain a 1/16" or 3/64" (1.6 or 1.2 mm) split pin and cut off legs to a length of $\frac{1}{2}$" (12.5 mm). Insert the split pin in the hole from the top and bend the legs at right-angles at $\frac{1}{8}$" (3 mm) from the bottom of each leg.

Ensure that the split pin is a free sliding fit in the hole.

Index Reference - Section L.

BRAKE SERVO - AIR CLEANER

Models affected
XK.150
2.4 litre cars fitted with disc brakes
3.4 litre cars fitted with disc brakes

On the above types of cars fitted with the large type brake servo ($6\frac{7}{8}$" diameter) an air cleaner is fitted to air intake of the servo.

Maintenance

Every 5,000 miles (8,000 kilometres) the air cleaner should be removed and washed in methylated spirits. After drying out re-lubricate the wire mesh with brake fluid.

Location.

On the XK.150 model the air cleaner is connected directly to the brake servo which is situated in a compartment at the rear of the left-hand front wheel opening.

On the 2.4 litre and 3.4 litre the air cleaner is attached to the right-hand wing valance.

Index Reference - Section L.

September 1957.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.226

VARIOUS SERVICING ITEMS

WHEEL BEARING ADJUSTMENT - CARS WITH DISC BRAKES.

Models affected

2.4 litre cars with disc brakes
3.4 litre cars with disc brakes

Further to Service Bulletin No.216 dealing with Wheel bearing adjustment on the XK.150 model, attention is drawn to the importance of keeping the end-float of the wheel bearings to a minimum, on cars with disc brakes.

In production, the end float of both front and rear wheel bearings will be set at between .003" - .005" (.07 - .13 mm) on both cars fitted with disc and drum brakes.

When setting the end-float in service it is IMPORTANT that on cars fitted with disc brakes the end-float does not exceed .005" (.13 mm).

On cars fitted with drum brakes a wider tolerance of .003" - .008" (.07-.20mm) for the rear wheel bearing end float is permitted.

Index Reference - Section J and M.

INLET VALVE GUIDES - LONGER TYPE

Model affected	Commencing Engine Numbers.
Mark VIII	N.8478
3.4 litre	KE.3025
XK.150	V.1281

On cars with the above engine numbers and future, plus certain individual engines prior to these numbers, longer inlet valve guides are fitted.

The details are as follows:-

	1st Type	2nd Type
Length	1½"	1 13/16"
Part Number	C.9867	C.7260

The 2nd type inlet valve guides are interchangeable with the first type in complete sets.

Index Reference - Section B.

REVISED MARKING ON IGNITION COILS

Models affected

All

The markings SW (switch) and CB (contact breaker) for the coil terminals is to be replaced by the positive sign (+) and the negative sign (-).

On positive earth circuits the lead from the distributor must be connected to the + (positive) terminal of the coil and the lead from the ignition switch to the - (negative) terminal.

On negative earth circuits the connections must be the reverse, ie distributor to - (negative) terminal and switch to + (positive) terminal.

Index Reference - Section P.

SILENCERS AND TAILPIPES

Model affected	Commencing Chassis Numbers	
	R.H.Drive	L.H.Drive
3.4 litre	970077	886554

On cars with the above chassis numbers and onwards modified silencers and tailpipes are fitted:-

The details are as follows:-

	1st type Part number	2nd type Part number
Twin silencer assy	C.12717	C.13578
Inner silencer only	C.13225	C.13578/1
Outer silencer only	C.13226	C.13578/2
Inner tail pipe	C.12723	C.13577
Outer tail pipe	C.12724	C.13576
Mounting bracket	C.12725	C.3609

Interchangeability

The above parts are not interchangeable.

Index Reference - Section M.

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.227

VARIOUS SERVICING ITEMS.

RADIATOR GRILLE AND FRONT WINGS - STANDARDISATION BETWEEN 2.4 AND 3.4 LITRE

Model affected	Commencing chassis numbers	
	R.H.Drive	L.H.Drive
2.4 litre	907974	942465

On cars with the above chassis numbers and onwards the wider 3.4 litre type of radiator grille is fitted. The front wings and the intake for the air cleaner situated behind the grille are modified to suit.

The parts affected by this change are as follows:-

Part Number		No.off
BD.13161	Radiator Grille Assy	1
BD.12448	Medallion	1
BD.11499	Medallion Backing Piece	1
BD.12558	Medallion Packing Piece	1
BD.13160	Medallion Box Assy	1
371/196	Front wing assy. Right-hand	1
371/197	Front wing assy. Left-hand	1
C.12709	Air Intake Adaptor	1

Index Reference - Section N.

PETROL FILTER - INTRODUCTION

Model affected	Commencing Engine Numbers
2.4 litre	BC.3161

On cars with the above engine number and onwards a Petrol Filter (Part number C.13681) is fitted. The filter is attached to the inlet manifold, and is of the glass bowl type with a flat filter gauze.

Maintenance.

Every 5,000 miles (8,000 kilometres), or more frequently if the glass bowl shows signs of becoming full of sediment, slacken the locking nut, swing the retaining clip to one side and remove the bowl, sealing washer, and filter gauze.

Clean the filter gauze and bowl by washing in petrol. Examine the sealing washer and if necessary fit a new one.

Index Reference - Section C.

REAR BRAKE CALIPER - MODIFIED TYPE

Model affected		Commencing Chassis Numbers	
		R.H.Drive	L.H.Drive
XK.150	F.H.Coupe	824023	834454
	D.H.Coupe	-	837014

On cars with the above chassis numbers and onwards Rear brake calipers with 1⅝" (41.3 mm) diameter pistons are fitted replacing calipers with 1¾" (44.4 mm) diameter pistons.

The part numbers are as follows:-

	1st Type (1¾" pistons)	2nd Type (1⅝" pistons)
Right-hand	C.13010	C.13910
Left-hand	C.13011	C.13911

Index Reference - Section L.

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.228

VARIOUS SERVICING ITEMS

HANDBRAKE ADJUSTMENT

Models affected.

All cars fitted with disc brakes.

If reasonable travel of the handbrake lever cannot be obtained by following the method detailed in the handbook, the following procedure should be adopted.

Adjust handbrake pads by means of adjuster bolt until a solid contact between the pads and disc is obtained and with the handbrake lever in the full off position, adjust the handbrake cable to eliminate all slack, but ensuring that a tight condition of the cables is not created.

Fully release handbrake pads by means of the adjuster bolt and with a .006" (.15 mm) feeler inserted between the face of one pad and the disc face re-adjust with the adjuster bolt until the feeler is just nipped.

With the handbrake lever in the "off position rotate the discs and check that the handbrake friction pads are not rubbing.

Index Reference. Section L.

UPPER STEERING COLUMN ASSEMBLY.

Models affected	Commencing Chassis Numbers.	
	R.H.Drive	L.H.Drive.
2.4 litre	908570	942574
3.4 litre	971313	986950
XK.150 F.H.Coupe	824076	834600
XK.150 D.H.Coupe	827001	837071

On cars with the above chassis numbers and onwards a modified upper steering column is fitted. This modification is to provide more positive locking of the steering wheel

The part numbers are as follows:-

	R.H.Drive	L.H.Drive.
2.4 and 3.4 litre.	C.13669	C.13670
XK.150	C.13666	C.13666

Interchangeability. The above numbered upper steering columns are interchangeable with the previous types fitted as complete assemblies.

Index Reference Section I.

Cont'd.....

OIL PRESSURE. RELIEF VALVE - MODIFIED TYPE.

Model affected.	Commencing Engine numbers.
2.4 litre	BC.3600
3.4 litre	KE.4856
MK.150	V.2011

On cars with the above engine numbers and onwards a modified type of oil pressure relief valve is fitted.

The modification consists of a stop pin part number 7357 fitted in the centre of spring which limits the travel of the oil pressure relief valve. In conjuction with the stop a new relief valve spring (Part number 7315) is fitted. This spring is longer and lighter than the previous type of spring fitted (Part number 6879).

Interchangeability. The new spring (Part number 7315) can be fitted in place of the previous type of spring (Part number 6879) fitted to Oil Filter C.12776 (FA 2720) but the stop pin, must also be fitted. (Part number 7357).

The following table gives the position regarding oil pressure relief valves since the commencement of production of each model:

RELIEF VALVE SPRING Part No.	Free Length	Fitted to Oil Filter	Fitted to Engine Numbers. 2.4 litre	3.4 litre	MK.150
6462.	2" (50.8mm)	C.9085 (FA2705) C12532 (FA2705)	BB1001-9000 BB9001-9999 BC1001-2255	KE1001 to 3053	-
6879	1¾" (44.5mm)	C12776 (FA2720)	BC2256-3599	KKE3054 to 4855	V1001 to V2010
7315 (and Stop Pin.7357)	2 1/16" (52.4mm)	C.12776 (FA2720)	BC3600 - onwards	KE4856- onwards	V2011 onwards

Index Reference Section B.

TIMING COVER AND SETSCREWS.

Models affected.	Commencing Engine Numbers.
MK.VIII	N9460
3.4 litre	KE4580
MK.150	V1921

On cars with the above engine numbers and onwards the five bottom setscrew hole bosses are machined to the same length. The five setscrews are of the same length and setscrew part number NB.137/11D must be fitted at the five lower holes.

On engine prior to the above numbers, one short setscrew NB.137/11D and four longer setscrews NB.137/13D were fitted.

Index Reference Section B.

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.229

VARIOUS SERVICING ITEMS

TIMING CHAIN DAMPERS - RUBBER TYPE.

Models affected.	Commencing Engine numbers.
2.4 litre	BC.3699
3.4 litre	KE.4964
XK.150	V.2029
Mark V111	N.9628

On cars with the above engine numbers and onwards synthetic rubber bonded chain dampers are fitted replacing the nylon type. The part numbers are as follows:-

	3.4 litre, XK.150. Mark V111.	2.4litre.
Left-hand Damper (Upper chain)	C.13616.	C.13616.
Right-hand Damper (Upper chain)	C.13617.	C.13617.
Distance Piece. 4 off	C.13660.	C.13660.
Intermediate Damper (Upper chain)	C.13615.	-
Damper (Lower chain)	C.13614.	C.13613.

Interchangeability: The rubber type of chain dampers are interchangeable with the previous types fitted.

Index Reference. Section B.

EXHAUST SILENCERS AND DOWN PIPES.

Model affected	Commencing Chassis numbers.	
	R.H.Drive.	L.H.Drive.
3.4 litre.	971503	987132

On cars with the above chassis numbers and onwards the stub pipes at the front of the exhaust silencers (Part numbers C13578/1 and C13578/2) are increased in length by 2" (50 mm). To suit this modification the down pipes are shortened in length by 2" and/1 added to the part number, that is C.12720/1 for the rear pipe and C.12718/1 for the front pipe.

Interchangeability. The latest type of silencers are interchangeable with the previous type fitted from chassis numbers 970877 R.H.Drive and 986554 L.H.Drive, but it will be necessary to cut 2" (50 mm) off each of the down pipes.

Index Reference. Section M.

OIL BATH AIR CLEANER - INTRODUCTION.

Model affected.	Commencing Chassis numbers	
	R.H.Drive.	L.H.Drive.
3.4 litre	971637	987293

On cars with the above chassis numbers and onwards an oil bath air cleaner is fitted as standard. With the introduction of this type of cleaner the carburetter needles are changed from TL to SC.

An oval shaped air silencer, is also fitted across the cylinder head. This silencer is similar in appearance to the previous type of air cleaner but is not fitted with a wire mesh element and is without a detachable end cover. The silencer requires no maintenance.

It is important that only an air silencer is fitted in conjuction with the oil bath air cleaner ; a wire mesh air cleaner must not be fitted.

Maintenance.

The periods at which the following procedure must be carried out will vary according to the conditions under which the car is operated. For normal conditions every 2,500 miles (4,000 kms) can be taken as the proper cleaning periods, but in dusty territories more frequent cleaning, as often as 1,000 miles (1,600 kms) or less, may be necessary.

The cleaner is situated underneath the left-hand front wing and should be completely removed from the car for attention.

Slacken the clip and disconnect the large diameter hose from the cleaner. Slacken the pinch bolt securing the cleaner in the circular retainer and lift out the cleaner complete. Remove the rubber band, unscrew the central screw and withdraw the shell and top cover from the oil base. Lift out filter element, and wash element by swishing up and down in a bowl of paraffin and allow to drain thoroughly. Empty oil from the oil base and clean out the accumulated sludge. Fill oil base with engine oil to the level indicated by the arrow. Ensure that the top cover gasket is in good condition. It is unnecessary to re-oil the filter element as this is done automatically when the car is driven.

Re-insert the centre screw through the shell and top cover and assemble to oil base. Refit rubber band to cover the join between shell and oil base.

Index Reference. Section B and C

BRAKE AND CLUTCH PEDALS.

Models affected.
XK.150.

On earlier XK.150 cars certain of the pedals were made with alternative holes for use as either brake or clutch pedals.

If the master cylinder push rod is disconnected from the pedal it is most important that they are reconnected as follows:-

Brake pedal. - Top hole.
Clutch pedal. - Bottom hole.

Index Reference. Sections L and E.

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.230

VARIOUS SERVICING ITEMS

5½" BRAKE SERVO UNIT - MODIFIED TYPE.

Models affected.	Commencing Chassis numbers	
	R.H.Drive.	L.H.Drive.
2.4 litre cars with drum brakes.	908095	942483
3.4 litre cars with drum brakes.	970948	986592

On cars with the above chassis numbers and onwards a modified Brake Servo Unit Part No.C.13821 is fitted, replacing Servo Unit Part No. C.11000.

The effect of this modification is to introduce an adjustable type of Push Rod and, as the parts affected are all internal (which eliminates the possibility of identifying the revised Unit) a tab is wired to the modified Servo Unit bearing the number 89368.

Interchangeability.

Servo Unit Assembly Part No. C.13821 may be used to replace a Servo Unit Part No. C.11000 fitted prior to the above Chassis numbers but if it is desired to replace internal items interchangeability is affected and reference should be made to the items listed below.

Servo Unit C.11000 Part No.	Description	Servo Unit C.13821 Part No.	Remarks
6352	Slave Cylinder Body	7268	Interchangeable, Use modified Cylinder Body
6381	Distance Piece	7269	Not interchangeable
6387	Vacuum Cyl.Piston Assembly	7269	Not interchangeable
6396	End Stop	7270	Not interchangeable
6393	Piston Plate (Outer)	7271	Not interchangeable
6390	Piston Plate (Inner)	7272	Not interchangeable
6389	Locating Washer	7273	Not interchangeable
6388	Push Rod	7274	Not interchangeable
6391	'O' Ring	7142	Not interchangeable
FW.106/T	Backing Washer	7276	Not interchangeable
UFN.137/L	Nut	7277	Not interchangeable
C.741	Shakeproof Washer	7278	Not interchangeable
-	Spring	7266	Additional item
-	Washer	7171	Additional item
-	Circlip	6444	Additional item
-	Adjuster Nut	7275	Additional item
-	Nut	7279	Additional item
-	Gasket	2338	Additional item
6597	Vacuum Cyl.Piston Repair Kit	7280	Not interchangeable

Index Reference Section L.

BRAKE SERVO UNIT - REPAIR KIT.

Models affected.

Mark V11
Mark V111

A Repair Kit is now available for servicing the Hydraulic Cylinder on Brake Servo Units fitted to Mark V11 and Mark V111 models.

Supplies of the Repair Kit may be obtained from Jaguar Spares Department through the Distributor organisation under Part No.7317.

This Kit is additional to the Main Repair Kit (Part No.6995) which is already available for this Servo Unit.

Index Reference. Section L.

CLUTCH MASTER CYLINDER REPAIR KIT.

Model affected.

XK.150

A Repair Kit is available for the servicing of Clutch Master Cylinders on XK.150 models. Repair Kits may be obtained from Jaguar Spares Department through the Distributor organisation under Part No.7012.

Index Reference Section E.

Amendment to Service Bulletin No.224

Under the heading "Overdrive Throttle Switch Adjustment" alter Mark V11 under "Model affected" and on the first line to read Mark V111.

CORRECTION TO 2.4 LITRE SPARES PARTS CATALOGUE (PUBLICATION J.20.)

There has unfortunately been a transposition of Part Nos. on Page 31A of the above publication. The following correction should be made:-

Plate No.AH.5 - The item should read

Part No.6817 Seating Gasket between Element Assembly and Oil Container(1573510)

Plate No.AH.6 - The item should read

Part No.6816 Seating Gasket between Element Assembly and Cover (1579931).

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.231

VARIOUS SERVICING ITEMS

BRAKE FLUID - CHANGE IN SPECIFICATION.

Model affected.

2.4 litre cars with drum brakes.
3.4 litre cars with drum brakes.

Note that the specification for the Lockheed brake fluid recommended for 2.4 and 3.4 litre cars fitted with drum brakes has been changed from SAE Spec: 70R2 to SAE Spec: 70R1.

Index Reference. Section L.

FRONT WINGS - NOSE SECTION.

Models affected.

XK.140.

A service condition of the XK.140 front wings is now available from the Jaguar Spares Dept., and will be found useful for accident repair where damage is confined to the nose of the wing.

The service condition of the front wing consists of the nose section and includes the headlamp and sidelamp nacelles.

The part numbers are as follows:-

Front wing nose section Left-hand 7319
Front wing nose section Right-hand 7320

Index Reference. Section N.

ENGINE OIL CHANGING - ADVERSE CONDITIONS.

Models affected
All

Under certain adverse operating conditions, conducive to oil dilution and sludge formation, more frequent oil changing that the normal 2,500 mile (4,000 km) period is advised.

Where the car is used mainly for low-speed city driving, stop-start driving particularly in cold weather or in dusty territory the oil should be changed at least every 1,000 miles (1,600 km).

Index Reference. Section B.

CARBURETTER FLOAT CHAMBER - CLEANING.

Models affected.
Mark VIII
3.4 litre.
XK.150

It has been found that on cars fitted with the HD.6 type of carburetter, blowing out the float chamber with compressed air is likely to cause rupture of the rubber jet diaphragm. This method of cleaning out the float chamber should, therefore, not be resorted to.

Index Reference. Section C.

50 AMP ELECTRICAL FUSES - INTRODUCTION.

Models affected.	Commencing Chassis numbers.	
	R.H.Drive.	L.H.Drive.
2.4 litre	908751	942616
Mark VIII	762263	781141
3.4 litre.	971462	987106
XK.150 F.H.Coupe.	824096	834658
XK.150 D.H.Coupe.	827001	837090

On cars with the above chassis numbers and onwards 50 amp fuses are fitted to certain of the electrical circuits in place of the 35 amp type.

Taking the appropiate Operating Handbook illustration as a guide, fuses are now fitted as follows:-

	Fuse number.					
	1	2	3	4	5	6
Mark VIII	35 amp	35 amp	50 amp	50 amp	-	-
2.4/3.4 litre.	50 amp	50 amp	-	-	-	-
XK.150	50 amp	50 amp	35 amp	35 amp	50 amp	50 amp

If required 50 amp fuses can be fitted to the circuits detailed above, on cars prior to the above chassis numbers.

Index Reference. Section P

RETRACTOR PIN SLEEVES.

Models affected
All cars fitted with disc brakes.

As stated in the Dunlop Disc Brake booklet for the XK.150 model the amount of friction pad wear can be estimated by the amount the retractor pins have receded into the cylinder block - when the ends of the retractor pins are approximately 5/16" (8 mm) below the face of the cylinder block the pads need renewing.

It may be found, however, that some cars are fitted with sleeves around the retractor pins which project above the cylinder block. In this case the sleeves, which are only a taper fit in the cylinder block can be withdrawn with a pair of pliers. The sleeves need not be-refitted as they are provided primarily for protection of the retractor pins during transit.

Index Reference. Section L.

November, 1957.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.232

DIVIDED PROPELLER SHAFT ALIGNMENT

Models affected.

3.4 litre Automatic Transmission.
2.4 litre Automatic Transmission.

The alignment of the divided propeller shaft is most important and if removal of the engine or propeller shafts has taken place the following checks should be made on replacement. Failure to do this may result in Transmission shudder when taking up the drive from a standing start.

NOTE -

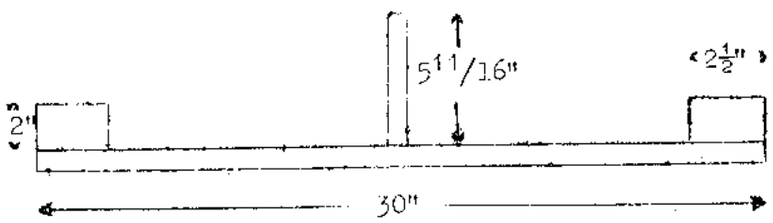
Before carrying out any checking or rectification work ensure -

(a) That the Engine Stabilizer at the rear of the cylinder head is disconnected. To disconnect the engine stabilizer remove the self-locking nut and flanged washer from the top of the stabilizer and screw the lower washer down the centre pin by engaging a thin bladed screwdriver in the slot in the washer through the centre hole of the rubber mounting.

(b) That the rear engine mounting rubbers are not distorted. Note that the holes in the rear engine mounting cradle are slotted and the holes in the bracket attached to the extension case are enlarged to allow the positions of the rubbers to be adjusted.

Check 1.

Check the distance from the bottom of the front flange of the front propeller shaft to the bottom faces of the longitudonal chassis side members. This distance should be 3.11/16" ± 1/16" (93.5 mm ± 1.5 mm). A simple checking jig can be made for checking this distance as shown in the following sketch.



Remedy

If the propeller shaft flange is too LOW suitable packings can be fitted between the rear engine mounting rubbers and the mounting brackets at the top or bottom of the rubbers.

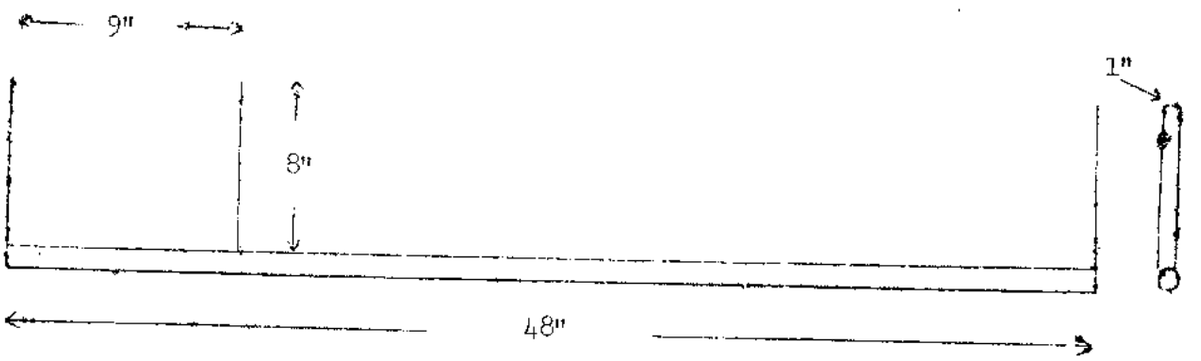
If the propeller shaft is too HIGH suitable packing can be fitted between the rear engine mounting cradle and the body floor.

Check 2.

Check that the front and rear propeller shafts are in a straight line in the horizontal plane.

Cont'd.....

The most convenient way to do this is to make up a simple jig as shown in the following sketch. The jig consists of 3 pieces of flat bar 8" x 1" x 3/16" (20.5 cm x 2.5 cm x 4.75 mm) which are welded exactly in line on to a piece of tube of 1⅛" (28.5 mm) outer diameter at the distances shown in the sketch. The jig is then held against the front and rear propeller shafts, with the three bars vertical, when any malalignment will be evident.



An alternative method is to use three plumb bobs and sight along the three cords. Two cords should be positioned at the front and rear of the front propeller shaft tube and the remaining cord at the rear end of the rear propeller shaft tube.

Remedy.

Alignment of the propeller shafts is carried out at the centre bearing bracket by elongating the two holes through which the setscrews pass to secure the bracket to the body floor. The position of the centre bearing bracket can then be adjusted to allow the propeller shafts to be aligned.

Adjustment of Engine Stabilizer.

After having carried out the work and tightened up the rear engine mounting adjust the stabilizer as follows:-

1. Screw the lower flanged washer up the stabilizer pin until the flange contacts the bottom of the stabilizer rubber mounting. The washer is slotted on its upper face and can be screwed up the pin by engaging a thin bladed screwdriver in the slot through the centre hole of the rubber mounting.

2. Fit the upper flanged washer and tighten down with the self-locking nut.

Failure to observe the above procedure may cause engine vibration and/or fouling of the gearbox in the cowl owing to the engine being pulled up on its mountings.

Index Reference Section G.

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J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 233

2.4 LITRE AUTOMATIC TRANSMISSION.

The automatic transmission unit fitted to the 2.4 litre model is basically the same, both in construction and operation, as transmission unit, (Part number J20-004/3). Serial number 3001 onwards but varies in the following respects.

2.4 litre automatic transmission units can be of either American or British manufacture, and can be distinguished by the identification plate on the side of the unit. American units are marked Detroit. Mich. U.S.A., whereas British units are marked Letchworth. Herts. England. The variations that exist between American made and British made units are detailed in the following information.

Note: Details of Transmission unit J20-004B are contained in the Spare Parts Catalogue for Automatic Transmission (Publication No.J.19) and in the "Supplement to the Automatic Transmission Service Manual" pages 12 to 35.

Torque Converter.

Although externally similar, a different type of converter is fitted. The variation is in respect of the direct drive clutch plate and it is important that the correct type of converter is fitted.

The 2.4 litre converter is identified by a pink paint patch, irrespective of any other colour paint patches on the converter.

Low and Forward Servo Unit

A single piston is fitted to the low cylinder which necessitate a different Low and Forward brake cylinder.

Note: American made units are fitted with a double piston low cylinder as used on transmission unit J20-004B.

Relay Valve.

No relay valve (see Fig.22 in Automatic transmission supplement) is fitted in the Valve block assembly which necessitates having a different Converter valve Body.

Note: On American made units the relay valve is fitted but is rendered inoperative by the inclusion of a plug under the head of the valve.

Multiple Disc Clutch.

Only four separator plates (J.20-3461) and three friction discs(J.20-3472) are fitted in the multiple disc (first) clutch. To compensate for this decrease in thickness of the multiple disc plates a thicker Retainer plate is fitted.

9 retractor springs (J.20-348) are fitted instead of 12.

Parking Brake Actuating Rod.

The parking brake rod has a lighter tension spring incorporated.

Intermediate Speed Hold.

An intermediate speed hold mechanism is fitted which necessitates alterations to the rear pump.

Selector Valve. A lighter tension selector valve detent spring is fitted.

Cont'd.....

Automatic Low in "D" (Drive) Position (see Fig. 9 and 10 in the Automatic Transmission Supplement).

Only the forward band is applied for low gear in the "D" position. Hydraulic flow to the low band servo is stopped by the converter valve body (or by the position of the relay valve on American made units).

For the Selected Low position both the forward and low bands are applied (see Fig. 15).

The following list shows component parts of the 2.4 litre Automatic Transmission Unit which are not common to the Mark VII Automatic Transmission Unit J.20-004/B.

To aid identification of spares items for 2.4 litre Units, reference is made to the page in Publication J.19 upon which the similar item for the Mark VII Unit appears.

Description.	2.4 Litre Part No.	Replaces Mark VII Part No.	Remarks.
Page 1			
AUTOMATIC TRANSMISSION UNIT COMPLETE (J.20-0043)	C.13774	C.12092	
CONVERTER ASSEMBLY (TC.90002)	C.13773	C.10986	
Page 2			
ROD ASSEMBLY, ACTUATING PARKING BRAKE, FROM SELECTOR CONTROL SHAFT TO TOGGLE ARM LEVER (J.20-6443).	7336	J.20-6441	
Page 3			
SERVO CYLINDER FOR FORWARD LOCK-UP BAND (J.20-525/C).	7362	J.20-525/D.	

NOTE: British built Transmission Units are fitted with a single piston for the Low Band cylinder whilst on Units of American manufacture a double piston Low Band cylinder is still incorporated as on J.20-004/B Units.

Page 4			
PISTON ASSEMBLY FOR LOW LOCK-UP BAND	Not required	J.20-513/A	
Seal for Piston	Not required	J.20-516	
PLATE ASSEMBLY FOR LOW BAND SERVO CYLINDER (J.20-5271).	7363	J.20-5272	
'O' Ring between Plate and Piston.	Not required	J.20-120	

NOTE: Outer Piston Assembly, Piston Seal and 'O' Ring are eliminated from British built Transmission Units but are still fitted to Transmission Units of American manufacture.

Cont'd.....

Description.	2.4 Litre Part No.	Replaces Mark VII Part No.	Remarks.
Page 7			
Plate between Friction Discs (J.20-3461)	6683	J.20-3461	4 only required for 2.4 litre.
Friction Disc for First Clutch (J.20-3472)	6676	J.20-3472	3 only required for 2.4 litre.
Retainer Assembly for First Clutch Plate (J.20-349/B)	7364	J.20-417	
Page 10			
VALVE BLOCK ASSEMBLY, COMPLETE (J.20-54053)	7365	J.20-5405	
Manifold Plate Assembly (J.20-5414)	7367	J.20-5412	
Body Assembly for Converter Valve (J.20-5602).	7368	J.20-5603	
Gasket for Converter Valve Body (J.20-5732).	7373	J.20-5733	

NOTE: 2.4 litre Valve Block Assembly, Part No.7365, is fitted to British built Units (i.e.Relay Valve is eliminated - see paragraph headed "Relay Valve"). All other components for Valve Block Part No.7365 are as quoted under group Part No. J.20-5405 on page 10 of Publication J.19.

VALVE BLOCK ASSEMBLY, COMPLETE (J.20-54054).	7366	J.20-5405	

NOTE: 2.4 litre Valve Block Assembly, Part No.7366 is fitted to American built Units (i.e. Relay Valve is included but is rendered inoperative by the fitting of a plug under the head of the Valve - see paragraph headed "Relay Valve"). All components for Valve Block Part No. 7366 are as quoted under group Part No. J.20-5405 on Page 10 of Publication J.19.

MANIFOLD PLATE ASSEMBLY (J.20-5414).	7367	J.20-5412	
Spring, Selector Valve Detent (J.20-544/B)	7337	J.20-544	
Ball, ¾" dia., for Selector Valve (JGM.147485)	5914	JGM.147485	

Cont'd.....

Description	2.4 litre Part No.	Replaces Mark VII Part No.	Remarks.
	Page 10 Cont'd.		
CONVERTER VALVE BODY ASSEMBLY (J.20-5602)	7368	J.20-5603	
Body only for Converter Valve (J.20-5612)	7369	J.20-5613	
Converter Shuttle Valve, Direct (J.20-6381)	6754	J.20-6381	
Converter Shuttle Valve, Reverse (J.20-6411)	6779	J.20-6411	
Sleeve for Converter Shuttle Valve (J.20-6431)	6999	J.20-6431	
Retainer for Shuttle Valve Sleeve (J.20-617/A	6681	J.20-617/A	
Relay Valve	Not required	J.20-677	
Plunger for Relay Valve	Not required	J.20-676	
Spring, operating Relay Valve	Not required	J.20-675	
End Cover for Relay Valve Body	Not required	J.20-6791	
Gasket for End Cover	Not required	J.20-6781	
Screw and Lockwasher Assembly, securing End Cover to Relay Valve Body	Not required	JGM.216357	
	Page 11		
EXTENSION CASE ASSEMBLY, COMPLETE (J.20-7019)	7370	J.20-7013	
Valve and Fork Assembly for Governor Control (J.20-7902)	7339	J.20-790	
Extension Case Assembly (J.20-7049)	7371	J.20-704	
NOTE: All other components for Extension Case, complete, are as quoted under group Part No.J.20-7013 on Page 11 of Publication J.19.			
	Page 12		
Return Spring on Governor Shaft (J.20-7848)	7372	J.20-7843	
REAR PUMP ASSEMBLY (J.20-7503)	7180	J.20-750	
Body only for Rear Pump (J.20-7512)	C.12644	J.20-751	
Cover for Rear Pump (J.20-7622)	C.12714	J.20-762	
Plug in Rear Pump Cover (JGM.444732)	7341	Not required	
NOTE: All other components for Rear Pump Assembly are as quoted under group Part No.J.20-750 on page 12 of Publication J.19.			
Gasket between Rear Pump and Extension (J.20-7662)	C.12755	J.20-766.	
Screw, countersunk head, for Pump Cover	C.12753	Not required.	

Cont'd.....

Description.	2.4 Litre Part No.	Replaces Mark V11 Part No.	Remarks.
The following are ADDITIONAL ITEMS which are required for the 2.4 litre Automatic Transmission Unit.			
GUIDE TUBE AND BELLOWS ASSEMBLY FOR INTERMEDIATE SPEED HOLD	C.12652	-	
Ferrule at end of Guide Tube	C.12633	-	
Washer behind Ferrule	C.12634	-	
Locknut	UFN.225/L	-	
Connecting Pin for Guide Tube	C.12635	-	
Spring Washer behind Connecting Pin	AG.102/X	-	
OUTER TUBE FOR INTERMEDIATE SPEED HOLD	C.12637	-	
SEAL FOR OUTER TUBE	C.12640	-	2 required
SPRING BEHIND GUIDE TUBE	C.12638	-	
Seat for Spring	C.12639	-	
BRACKET, MOUNTING SOLENOID FOR INTERMEDIATE SPEED HOLD.	C.12713	-	
SOLENOID FOR INTERMEDIATE SPEED HOLD (76459/A)	C.12740	-	
Plunger for Solenoid	C.12708	-	
Setscrew, securing Solenoid	UFS.319/3E	-	3 required
Washer, Spring, on Setscrews	AG.102/X	-	3 required.

Index Reference. Section FF

BRITISH MADE AUTOMATIC TRANSMISSION UNITS - IDENTIFICATION

The following are the prefixes and commencing serial numbers for current production automatic transmission units manufactured in England.

Mark V111 ----------J B 8 1001 onwards.

XK.150 ----------J B X 1001 onwards.

3.4 litre ----------J 3 B 1001 onwards.

2.4 litre ----------J 2 B 1001 onwards.

Index Reference. Section FF

January, 1958.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.235

VARIOUS SERVICING ITEMS

COLD STARTING IN EXTREME CONDITIONS - MODIFICATION.

Model affected.

2.4 litre

Where difficulty is experienced with starting from cold in extreme conditions, that is, temperature consistently in the region of - 15°F (-26°C) the following alterations can be carried out to the Solex carburetters.

(i) Remove the GS.105 Starter Petrol Jet and fit a GS.135 jet (This jet is Item 20 Plate G in the 2.4 litre Spare Parts Catalogue).

(ii) Remove the GA.4.5 Starter Air Jet (Item 19 Plate G in the 2.4 litre Spare Parts Catalogue), and leave the hole in the carburetter open.

Note: The above settings must only be used when extreme cold conditions in the region of -15°F (-26°C) prevail and when normal conditions return the standard starter petrol jet and starter air jet must be refitted.

Index Reference. Section B and C.

REAR SPRING MOUNTING MODIFICATION

Model affected.

2.4 litre
3.4 litre

It should be noted that the modification to the rear spring mounting as detailed in Service Bulletin No.210 was carried out in production from the following approximate chassis numbers:-

	R.H.Drive	L.H.Drive
2.4 litre	906119	941878
3.4 litre	Commencement of production	

At a later date a different modification was incorporated which did not include the Support brackets C.12779 as shown in Service Bulletin 210, and we understand that in some cases it has been assumed that the rear spring mounting has not been strengthened.

It will be appreciated therefore that the absence of the Support brackets welded between the rear spring clamp and the channel is now no indication that this part has not been strengthened.

Index Reference. Section N.

Cont'd.....

THERMOSTAT - MODIFIED TYPE

Models affected.	Commencing Engine numbers.
Mark VIII	NA.1076
2.4 litre	BC.4408
3.4 litre	KE.5733

On cars with the above engine numbers and onwards a modified Thermostat Part number C.13944 is fitted replacing Thermostat C.3731/1.

To suit this change the bore in the water outlet pipe to take the thermostat has been increased in diameter by .010" (.25 mm) and the part numbers changed as follows:-

2.4 litre.	C.14134 replaces C.11533
3.4 litre and Mark VIII	C.14133 replaces C.12439

Interchangeability.

The new thermostat C.13944 must not be fitted in place of Thermostat C.3731/1 (that is, to cars prior to the above engine numbers) as there is a possibility of the movement of the thermostat being restricted in the smaller bore water outlet pipe.

Thermostat C.3731/1 can be used to replace C.13944 on cars on and after the above engine numbers if the latter type is not available.

Identification.

Thermostat C.3731/1	Thermostat C.13944
Smith number ~~M.85025/74~~ stamped on body.	Smith number ~~43570/5~~ stamped on body.
Opening temperature 78°C.	Opening temperature 74°C.

Index Reference. Section B and D.

VACUUM BRAKE SERVO KIT.

Model affected.

XK.140

For XK.140 owners who would prefer less effort to operate the brake pedal a servo kit is now available from the Jaguar Spares Department under Part number 7076.

Detailed instructions for carrying out this modification to the Fixed Head Coupe Model are included with each kit.

The details for the Open 2 seater and Drop Head Coupe models are similar to those for the Fixed Head Coupe Model except that on the side to which the servo unit is fitted, that is the steering column side, there is no battery compartment. It will therefore be necessary to make up a shield to protect the servo from mud thrown up from the road wheel, instead of the box described and illustrated in the instructions.

Index Reference. Section L.

Amendment to Service Bulletin No.233.

Under the heading "Multiple Disc Clutch" on page 1 delete the line:-

9 retractor springs (J20-348) are fitted instead of 12.

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.236

DISC BRAKES AND WIRE SPOKE WHEELS-CONVERSION KITS.

Models affected.

2.4 litre
3.4 litre

For customers who purchased cars just prior to the introduction of Disc brakes and Wire spoke wheels as optional equipment and who may have expressed a desire to have their cars converted, the above kits are now available from the Jaguar Spares Department. Instructions for carrying out these conversions will be included with each kit.

Requests for these kits should be made on a separate order form and the following particulars given:-

Model - 2.4 litre or 3.4 litre.
Right - hand or Left - hand Drive.
Chassis number of vehicle (if possible).

FOR CONVERTING DRUM BRAKES TO DISC BRAKES ONLY

Requirements:-

Kit A (Part number 7389)

plus items listed below to suit the particular model.

		2.4 litre	3.4 litre
Handbrake compensator assembly	R.H.Drive	C.13873	C.13875
	L.H.Drive	C.13874	C.13876
Vacuum Check Valve		C.12790	-
Vacuum check mtg. plate		C.12798	-
Sleeve nut		C.12799 (2 off)	-
Bolt		UFS.125/7R(2 off)	-
Setscrew		UFS.125/5R(2 off)	-
Plain washer		FY.104/2 (2 off)	-
Spring washer		FG.104/X (4 off)	-
Nuts		NN.125/L (2 off)	-
Vacuum pipe		C.13963 (1 off)	-
Vacuum pipe		C.13962 (1 off)	-
Hose - check valve		C.13964 (1 off)	-
Hose		C.14135 (1 off)	-
Hose		C.13965 (1 off)	C.13704
Adaptor plate		-	C.13254

Cont'd.....

FOR CONVERTING TRUM BRAKES TO DISC BRAKES
AND DISC WHEELS TO WIRE SPOKE WHEELS.

Requirements:-

Kit B (Part number 7390)
Kit C (Part number 7391)

plus items listed below to suit the particular model.

		2.4 litre	3.4 litre
Handbrake compensator assembly	R.H.Drive	C.13873	C.13875
	L.H.Drive	C.13874	C.13876
Vacuum Check Valve		C.12790	-
Vacuum check mtg. plate		C.12798	-
Sleeve nut		C.12799 (2 off)	-
Bolt		UNB.125/7R(2 off)	-
Setscrew		UFS.125/5R(2 off)	-
Plain washer		MW.104/T (2 off)	-
Spring washer		MG.104/X (4 off)	-
Nuts		MN.125/L (2 off)	-
Vacuum pipe		C.13963 (1 off)	-
Vacuum pipe		C.13962 (1 off)	-
Hose - check valve		C.13964 (2 off)	-
Hose		C.14135 (1 off)	-
Hose		C.13965 (1 off)	C.13704
Adaptor plate		-	C.13254

FOR CONVERTING FROM DISC WHEELS TO WIRE SPOKE WHEELS ONLY

Requirements:-

Kit C (Part number 7391)

PRICES.

	Retail Price.
Kit A (Part number 7389) (including the individual items required)	£100
Kit B (part number 7390) (including the individual items required)	£80
Kit C (Part number 7391)	£83

Extras

Fully chrome wire wheels - extra cost per wheel £7. 19. 6d.

2.4 Litre model only.

If converting from disc wheels to wire spoke wheels it will be necessary to fit the following additional parts:-

5 inner tubes (if existing tyres are tubeless type) £1. 8. 0d.each

2 rear wheel valances (cut-out type) £4. 2. 0d.each

Index Reference. Section L. and M.

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.238
VARIOUS SERVICING ITEMS

DISC BRAKE MASTER CYLINDER BODY - CHANGE IN MATERIAL

Models affected.

XK.150
2.4 litre cars with disc brakes
3.4 litre cars with disc brakes

Cars fitted with disc brakes now in production have a cast iron master cylinder body replacing a body made from aluminium. In conjunction with this change an unhardened piston is fitted to the master cylinder.

The relevant part numbers are as follows:-

	2.4 litre 3.4 litre	XK.150
Brake Master Cylinder Assembly.	C.14225	C.14224.
Master Cylinder body (cast iron).	7474	7474
Master Cylinder piston (unhardened).	7475	7475

Service Procedure.

In future it is not intended to supply Aluminium master cylinder bodies (Part number 6939) or hardened master cylinder pistons (Part number 6940) from the Jaguar Spares Department. Any outstanding orders will be supplied with the cast iron body and unhardened piston.

If it is considered necessary to replace a piston in an aluminium bodied master cylinder the whole unit should be replaced with a master cylinder having a cast iron body.

Index Reference. Section L.

MASTER CYLINDER DUST EXCLUDER - RUBBER GREASE

Models affected.

XK.150
2.4 litre cars fitted with disc brakes.
3.4 litre cars fitted with disc brakes.

In the Descriptive and Maintenance Notes for Disc Brakes it is recommended that the rubber dust excluder at the end of the master cylinder be filled with Wakefield No.3 Rubber grease.

If this or no other recognised rubber grease is available the dust excluder should be assembled dry. Ordinary lubricating grease MUST NOT be used.

Index Reference. Section L.

Cont'd.....

SYNTHETIC PAINTWORK - SUMMARY OF COLOURS.

Models affected.

Cars finished in synthetic enamel.

The following is a summary of the paint colours detailed in Service Bulletins 114, 135, 185 and 205 together with the more recent additions. The reference number given for each paint colour is for Quick Air Drying Enamel.

Where there has been a change in the shade of a particular colour the date when the change took place in production is given.

	British Domolac.	Pinchin Johnson.
Dove Grey	-	J.861
British Racing Green	Q.1076	J.860
Old English White		J.863 J.863/C
Birch Grey	Q.1079 Q.1079/1 (14.5.56.)	J.865
Pastel Blue (Non-Metallic)		J.867
Lavender Grey	Q.1072 Q.1072/1 (14.5.56.)	J.871
Suede Green	Q.1080 Q.1080/1 (14.5.56.)	J.873
Black	Q.1073	J.869
Battleship Grey	Q.1075 Q.1075/1 (14.5.56.)	J.875
Pastel Green (Non-Metallic)	Q.1081 Q.1081/1 (14.5.56.)	J.877
Red	Q.1089	
Pearl Grey	Q.1129 Q.1129/1 (5.3.56.) Q.1129/2 (14.5.56.)	
Pacific Blue	Q.1132/1	
Carmine Red	Q.1190	
Arbor Green	Q.1191 Q.1191/1 (14.5.56.)	
Maroon	Q.1135 Q.1135/1 (13.6.55.) Q.1135/2 (14.5.56.)	
Imperial Maroon	Q.1229 Q.1229/1 (25.2.57.)	
Claret	Q.1230 Q.1230/1 (25.2.57)	
Sherwood Green	Q.1231	
Forest Green	Q.1232	
Cornish Grey	Q.1236	
Mist Grey	Q.1235	J.889
Indigo Blue	Q.1233	
Cotswold Blue	Q.1234	

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.239
VARIOUS SERVICING ITEMS

DISC BRAKE CALIPER BRIDGE PIPE - VERY IMPORTANT

Models affected.

MK.150
2.4 litre cars with disc brakes.
3.4 litre cars with disc brakes.

In the event of the removal of the bridge pipe connecting the two cylinder blocks fitted to each caliper, it is ABSOLUTELY ESSENTIAL that the pipe is refitted the correct way round.

It will be noted that one end of the pipe has an approximate right-angle bend whereas the other end has a more acute "hairpin" bend.

The end of the pipe with the "hairpin bend" MUST be connected to the INBOARD cylinder block. This is illustrated in Fig.1 in the Dunlop Disc Brake Descriptive and Maintenance Notes for the MK.150 model.

If the pipe is fitted the wrong way round the pipe will foul the road wheel.

Index Reference. Section L.

FRONT WINGS - NOSE SECTION.

Model affected.

MK.150

Further to Service Bulletin No.231 regarding Front Wing nose sections for the MK.140 model a similar condition is now available from the Jaguar Spares Department for the MK.150 model.

	Part number.
Front wing-nose section. Left Hand	~~7478~~ 7477
Front wing-nose section. Right Hand	~~7479~~ 7486

Index Reference. Section N.

Cont'd.....

6⅞" VACUUM SERVO - INTRODUCTION ON DRUM BRAKE CARS

Models affected.	R.H.Drive.	L.H.Drive
2.4 litre	909061	942677
3.4 litre	971732	987406

On cars with the above chassis numbers and onwards a larger brake servo (6⅞" diameter) is fitted in place of the 5½" type.

In conjunction with this change a brake pedal of reduced ratio is fitted which also necessitates a change in the brake and clutch pedal housing.

The relevant part numbers are as follows:-

	R.H.Drive.	L.H.Drive
Vacuum Brake Servo (6⅞")	- C.13672 -	
Brake pedal (normal transmission and overdrive)	C.14024	C.14025
Brake pedal (automatic transmission)	C.14071	C.14025
Pedal housing	- C.14026 -	

Index Reference. Section L.

Amendment to Service Bulletin No.228.

If satisfactory travel of the handbrake lever cannot be obtained by using a .006" (.15 mm) feeler gauge to adjust the handbrake a .004" (.10 mm) feeler can be used.

Amendment to Service Bulletin No.236.

On page 2 under the heading "For Converting from Disc Wheels to Wire Spoke Wheels Only" insert (Applicable only to cars fitted with disc brakes)

Amendment to Service Bulletin No.235.

Amend the information on page 2 under "Thermostat, Modified type - Identification" as follows:-

Thermostat C.13944 Smiths number M25024/74 stamped on body	Thermostat C.3731/1 Smiths number 43570/5 or /28 stamped on body
Opening temperature 74°C.	Opening temperature 73°C

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.240

FRONT SUSPENSION - PROGRESSIVE BUMP STOPS.

Models affected.	Commencing chassis numbers.	
	R.H.Drive.	L.H.Drive.
2.4 litre	909536	942729
3.4 litre	972037	987685

On cars with the above chassis numbers and onwards, plus certain individual cars prior to these numbers, progressive bump stops are fitted to the front suspension.

This type of bump stop takes the form of a tapered rubber block attached to turret of the front suspension cross member and a bump stop plate fitted to the lower wishbone levers.

Interchangeability.

The progressive type of bump stop can be fitted in place of the previous arrangement if desired, but should only be carried out at the customers request and will be on a chargeable basis except in special circumstances.

Procedure.

The necessary welding should preferably take place with arc welding equipment but if this is not available and gas welding equipment is used, suitable asbestos or metal shields should be placed around the front suspension coil springs to protect them from the flame.

Jack up the car, remove the front wheels and place supports under the chassis side members. Jack up under the lower mounting of the shock absorber. Disconnect the top ball joint from the upper wishbone levers taking care not to lose or transpose the castor shims. Allow the stub axle carrier to fall outwards but do not permit the brake flexible hoses to become stretched.

1. Remove the bump stop cups from the flange at the bottom of the front suspension cross member turret. File the underside face of the flange flat and smooth. Clear the two holes already drilled in the flange.

2. Offer up the bump rubber bracket C.13917 to the front suspension cross member turret. To provide an accurate location two dimples or holes are formed in the bracket, which should register with the two holes drilled in the turret flange.

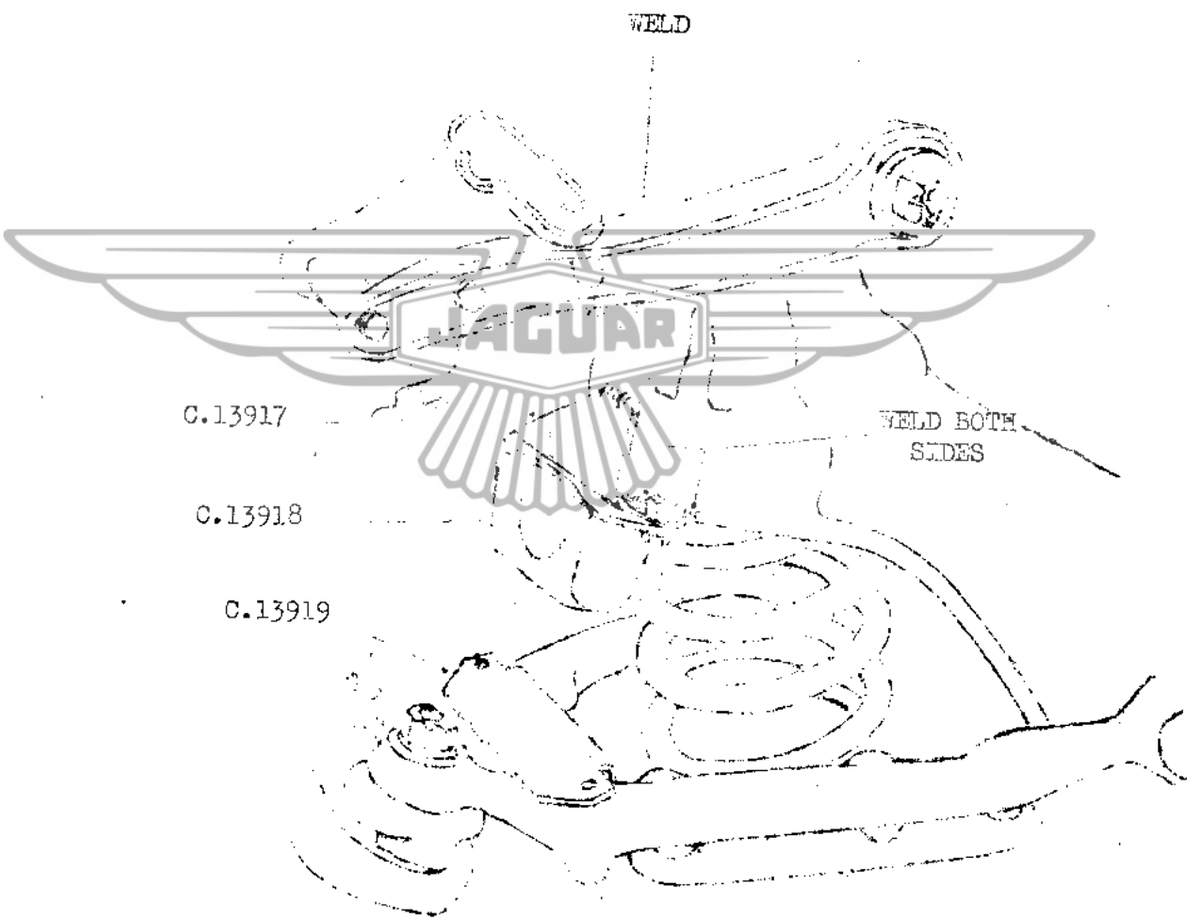
3. Clamp the bracket in position and weld to the front suspension cross member turret as shown in the sketch.

4. Secure the bump rubber C.13918 to the bracket with two 5/16" x $\frac{3}{4}$" bolts and self locking nuts. (Bolt part no. UFS.131/6R Nut. C.8667/2).

5. Remove the two existing bump stop rubbers from the lower wishbone levers. Cut a $\frac{1}{4}$" x 45° chamfer at the top of the holes from which the bump rubbers were removed.

6. Fit bump stop plate C.13919, in place of the bump stops and secure with the existing self-locking nuts. The lip of the plate is fitted inwards. (see sketch).

7. Repeat for the other side.



Index Reference. Section J.

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S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 241

MODIFICATION TO CONTROL HANDBRAKE CROSS CABLES FOULING BODY.

Models affected.

2.4 litre cars fitted with disc brakes
3.4 litre cars fitted with disc brakes

If complaints are received of the handbrake cross cables fouling the rear wheel arch when the car is heavily laden, the following modification can be carried out on a guarantee basis.

This modification was introduced in production at the following chassis numbers:-

	R.H. Drive.	L.H. Drive.
2.4 litre	910118	942854
3.4 litre	972401	988216

Parts required.

7492	Inner pad carrier assembly. Right hand	1
7493	Inner pad carrier assembly. Left hand	1
7494	Operating Lever	2
6926	Clevis pin	2
J.105/11.5S	Clevis pin	2
FW.105/T	Plain washer	2
L 102/4U	Split pin	2
L.103/7U	Split pin	2
6925	Setscrew securing Handbrake to Caliper	2
6932	Tab washer	2
C.13871	Handbrake cross cable	1
C.13872	Handbrake cross cable	1
	Handbrake Compensator Bracket - as detailed below for various models.	
C.14258	2.4 litre - Right hand drive	1
C.14259	2.4 litre - Left hand drive	1
C.14260	3.4 litre - Right hand drive	1
C. ~~12461~~ 14261.	3.4 litre - Left hand drive	1
7481	Luggage compartment floor-patch plate	1

Modification to Caliper Handbrake.

It is necessary to replace each inner pad carrier and lever with the modified type supplied.

Disconnect the handbrake cross cable from the handbrake lever.

Unscrew the adjuster bolt completely to separate the inner and outer pad carriers.

Tap back the tab washers and remove the setscrew securing the inner pad carrier to the caliper.

Remove the inner pad carrier. When fitting the new carriers note that they are handed; the top end of the friction pad should conform with the periphery of the brake disc.

Cont'd.....

Fit the new inner pad carrier to the caliper using a new tab washer and setscrew if necessary. Lubricate the setscrew with zinc base grease on assembly. Attach the handbrake lever to the inner pad carrier as follows:-

Place the lever against the inner carrier. Hold the locknut firmly against the outer face of the trunnion and screw in the adjuster bolt until three or four threads engage the locknut.

Align the holes in the lever and pivot seats, fit the pivot pin and lock it with the split pin.

Note: The above procedure is described and illustrated under "Relining the Handbrake" in Disc Brake Descriptive and Maintenance Notes for the XK.150 model.

Do NOT fit the pivot pin connecting the lever to the inner pad carrier until the adjuster bolt has been screwed a few turns into the locknut otherwise the return spring will not be preloaded.

Repeat for the other rear brake.

Fitting the modified Compensator Bracket.

Disconnect the fork end at the front end of the handbrake cable.

Remove the self-locking nut which secures the handbrake compensator to the bracket attached to the rear axle. Remove the two setscrews securing the bracket to the rear axle. Replace the existing bracket with the modified type supplied.

Secure the bracket to the rear axle with the existing setscrews and attach the compensator to the bracket.

Fit the two cross cables supplied so that the fixed fork ends are connected to the compensator on the rear axle.

Adjust the handbrake and handbrake cables as follows:-

Screw in the handbrake adjuster bolt at each rear brake until the handbrake pads are in hard contact with the brake discs.

Fully release the handbrake lever. Remove the clevis pin securing the fork end to the operating link at the front of the main cable. Slacken the locknut and adjust the position of the fork end so that with the clevis pin refitted there is no slack in the main cable and the two cross cables. It is, however, important to ensure that the cables are not under tension.

Unscrew the adjuster bolt and insert a .004" (.10 mm) feeler gauge between the face on one handbrake pad the disc. Screw in the adjuster bolt until the feeler gauge is just nipped. Withdraw feeler gauge and check disc for free rotation. Repeat for the other side.

Modification to Luggage Compartment Floor.

To provide adequate clearance for the handbrake compensator in its new position it is necessary to cut out one of the longitudonal depressions in the trunk floor and weld in the patch plate provided.

It will be noted that there are six depressions in the trunk floor; for Left hand drive cars the patch plate should be fitted to the third depression from the left and for right hand drive cars the patch plate should be fitted to the third depression from the right - see sketch.

Using the patch plate as a template mark out the portion to be cut out. Cut out the portion marked so that when the plate is welded in position it will be flush with the surrounding metal.

Cont'd.....

If there is already a small patch plate welded in the depression this can be cut out to allow the patch plate supplied to be fitted.

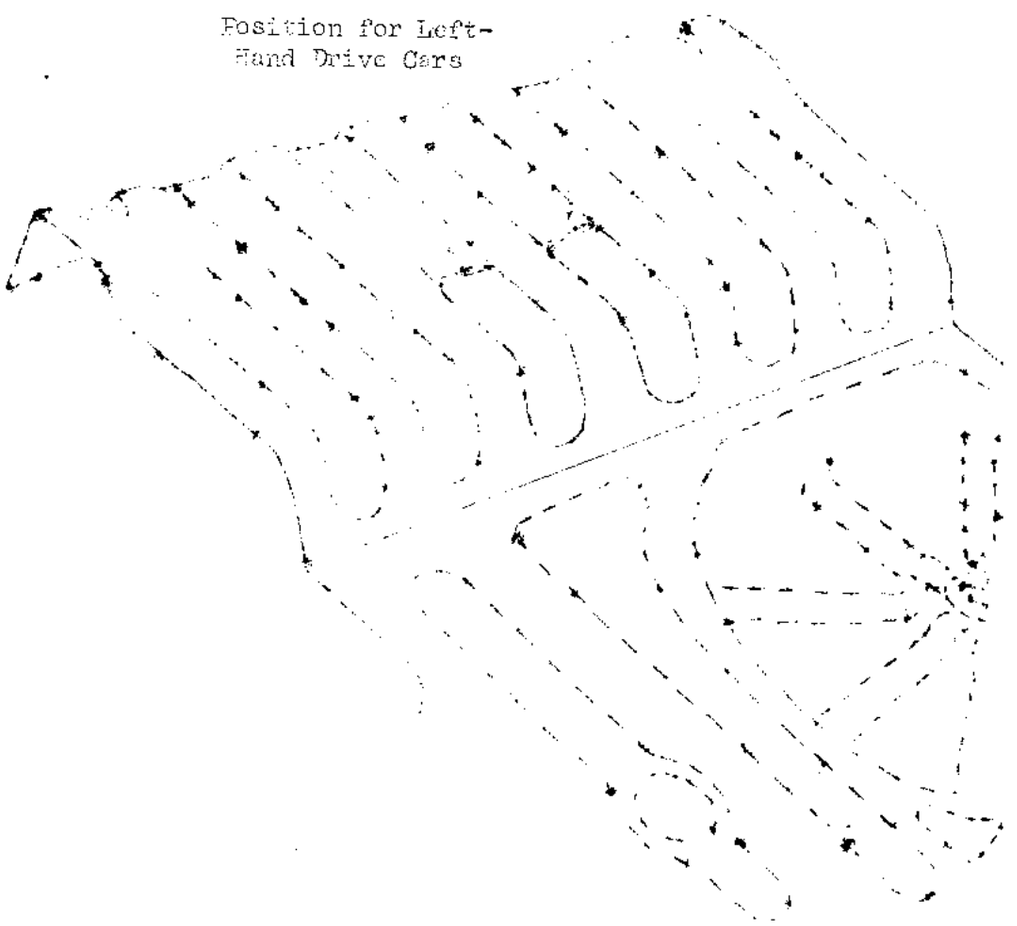
Note: On Right-hand drive cars it will facilitate the use of a hacksaw if the steering wheel cover plate and steering wheel are removed.

Modification to Wheel Arch.

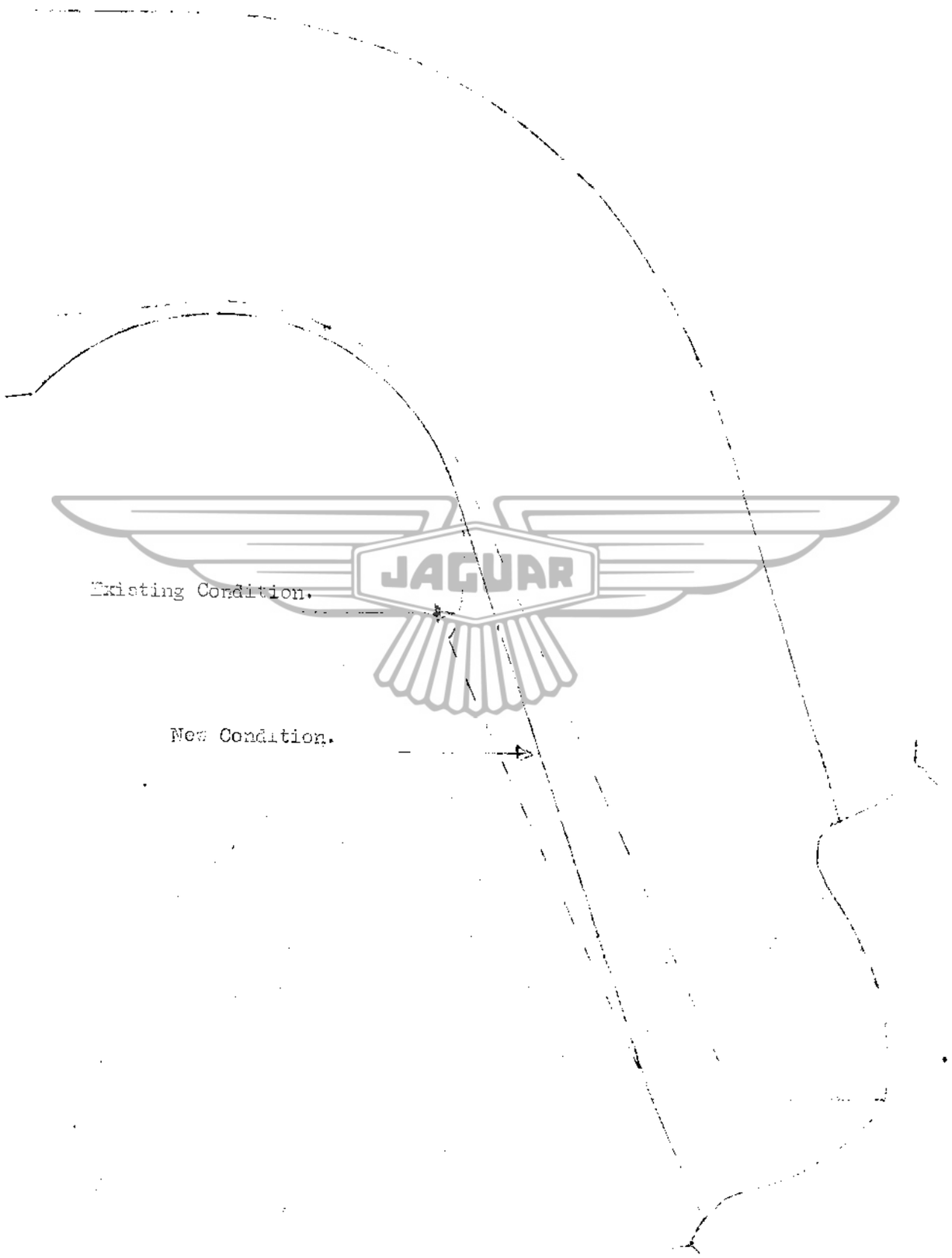
The flange of the chassis side member should be knocked back with a mallet flush with the box section as illustrated in the following sketch.

Note: It is IMPORTANT to carry out the above two body modifications otherwise fouling will take place between the handbrake compensator and trunk floor, and also between the handbrake cross cables and the wheel arches.

MODIFICATION TO LUGGAGE COMPARTMENT FLOOR.



LOCATION TO WHEEL ARCH.



Index Reference. Sections L and N.

March, 1958

JAGUAR

SERVICE AND SPARES ORGANISATION

SERVICE BULLETIN NO.242.

VARIOUS SERVICING ITEMS

WHEEL HUBS - OVER LUBRICATION.

Models affected.

All models.

Attention is drawn to the importance of not over-lubricating wheel hubs provided with grease nipples. Failure to observe this precaution will cause grease to find its way into the brake drum or on to the brake disc. Indications of when sufficient lubricant has been applied are as follows:-

FRONT WHEEL HUBS.

Disc Wheel Hubs.

Escape of grease from hole in hub end cap.

Wire Wheel Hubs.

Escape of grease past the outer hub bearing which can be observed through the bore of the splined hub.

REAR WHEEL HUBS.

Escape of grease through hole in the top of axle tube above grease nipple.

Index Reference. Sections H and J.

SPRAYING REAR SPRINGS - PRECAUTIONS.

Models affected.

Cars fitted with disc brakes.

When spraying rear springs with penetrating oil, every precaution must be taken to avoid oil getting on to the brake discs and friction pads. All lubrication bay operators must be informed of the importance of this instruction.

Index Reference. Section K.

Cont'd.....

HYDRAULIC FLUIDS FOR CLUTCH AND BRAKE SYSTEMS - IMPORTANT.

It is MOST IMPORTANT that the following revised recommendations regarding Brake Fluids are absorbed and strictly adhered to. All Distributors and Dealers service staff must be acquainted with these instructions.

DRUM BRAKES.

Model.	Preferred Fluid.	Alternative Fluids.
Mark VIII Mark VII Mark V	Wakefield Crimson Hydraulic Brake Fluid.	Lockheed No.102 Heavy Duty Brake Fluid. Delco Special No.11 Brake Fluid Chrysler MS 3511 Brake Fluid. WAGNER 21B.
2.4 litre 3.4 litre MK.120 MK.140	Lockheed No.102 Heavy Duty Brake Fluid.	Wakefield Crimson Hydraulic Brake Fluid Delco Special No.11 Brake Fluid Chrysler MS 3511 Brake Fluid. WAGNER 21B

DISC BRAKES.

MK.150 2.4 litre 3.4 litre	Wakefield Crimson Hydraulic Brake Fluid	Lockheed No.102 Heavy Duty Brake Fluid. Delco Special No.11 Brake Fluid. Chrysler MS 3511 Brake Fluid. WAGNER 21B

CLUTCH OPERATION

Model.	Preferred Fluid.	Alternative Fluids.
Mark VIII MK.150 Mark VII	Wakefield Crimson Hydraulic Brake Fluid.	Lockheed No.102 Heavy Duty Brake Fluid. Delco Special No.11 Brake Fluid. Chrysler MS 3511 Brake Fluid. WAGNER 21B
2.4 litre 3.4 litre	Lockheed No.102 Heavy Duty Brake Fluid.	Wakefield Crimson Hydraulic Brake Fluid. Delco Special No.11 Brake Fluid. Chrysler MS 3511 Brake Fluid. WAGNER. 21B

NOTE

In countries where the above fluids are unobtainable use only a recognised brake fluid guaranteed to conform to the S.A.E. Specification 70 R.1.

IMPORTANT.

In the event of deterioration of the rubber seals and hoses due to the use of incorrect fluids, all the seals and hoses must be replaced and the system thoroughly flushed and refilled with one of the above fluids.

Index Reference. Section L.

MAY, 1958.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.245.

VARIOUS MODELS.

RELAY VALVE - MODIFICATION

Models affected.	Commencing Engine numbers
Mark VIII Automatic transmission	U.A. 1938
3.4 litre Automatic transmission	K.E. 7052
XK.150 Automatic transmission	V. 3208

On automatic transmission cars with the above engine numbers and onwards a modification to the valve block is incorporated to eliminate the possibility of a jerk when a closed throttle downshift between intermediate and low gear takes place.

The modification entails removing and discarding with the Relay valve spring (Item 8. Fig. 22 in the Automatic Transmission Supplement), and inserting a plug (Part number 20-687) between the Relay valve plunger (7) and the cover (3). (Some cars are fitted with a double coil spring washer instead of a plug.

This has the effect of cutting off the hydraulic flow to the low band servo so that only the forward band is in operation for Automatic Low in the "D" (Drive) position.

Service Procedure

If complaints are received of a jerk being experienced on a closed throttle downshift between the intermediate and low gears, the above modification can be carried out.

Index Reference Section F.

OIL CONTROL PISTON RINGS.

Models affected.

Mark VII
XK.140
Mark VIII
3.4 litre
XK.150

Note that the "Maxilite" oil control ring Part number C.11956 is not fitted to piston assemblies fitted in production or supplied for service replacement although shown in the Spares Parts Catalogues and Service Bulletin No.184.

The piston ring fitted to production and service replacement piston assemblies is the "Maxigroove" type - Part number C.5832.

The "Maxilite" oil control ring C.11956 is supplied only when piston rings are ordered separate from pistons.

Index Reference Section B

DISC BRAKE ADAPTOR PLATE BOLTS - CORRECT ASSEMBLY

Models affected

All cars fitted with disc brakes.

Note that it is important that the bolts securing the adaptor plate to the rear axle tube are fitted the correct way, that is, with the head of the bolt toward the brake disc. If the bolt is fitted the reverse way the end of the bolt may foul the bolts securing the brake disc to the hub.

Index Reference Sections H and L. ✓

REAR ROAD SPRINGS - CHANGE IN CAMBER

Models affected	Commencing chassis numbers. R.H.Drive.	L.H.Drive.
2.4 litre	910309	942922
3.4 litre	972599	988372

On cars with the above chassis numbers and onwards Rear springs Part number C.10791/1 are fitted replacing Rear spring C.10791. The difference between these two springs is in the free camber and the details are as follows:-

	C.10791.	C.10791/1.
Free camber	3.45" (87.5mm)	3.45" to 3.7" (87.5 to 94 mm)

Interchangability

The latest type spring, C.10791/1 is interchangeable with the previous type C.10791 fitted prior to above chassis numbers but they must be fitted in pairs.

Existing stocks of C.10791 should be used up on cars prior to the above chassis numbers.

Index Reference Section K ✓

SERVO PISTON RETURN SPRING - ASSEMBLY

Models affected

Mark VII
Mark VIII.

Clayton Dewandre servo units fitted to later Mark VII and Mark VIII cars are fitted with the piston return spring the reverse way to that illustrated on page L.20 of the Mark VII and XK.120 Service Manual.

When reassembling any Mark VII or Mark VIII servo unit the piston return spring should be fitted in the latest manner that is, with the smaller diameter end towards the piston.

Index Reference Section L ✓

MAY, 1958.

J A G U A R

S E R V I C E A N D S P A R E O R G A N I S A T I O N

SERVICE BULLETIN NO. 246.

MODIFICATION TO DISC BRAKE MASTER CYLINDER.

Models affected

2.4 litre cars fitted with disc brakes.
3.4 litre cars fitted with disc brakes.
XK.150 cars fitted with disc brakes.

To deal with cases where a long brake pedal action is sometimes experienced on the first application of the brake pedal when the car has been standing, but normal pedal action is obtained on the second action of the pedal the following modification has been introduced in production commencing with chassis numbers:-

	Right-hand drive	Left-hand drive.
2.4 litre	910970.	943035.
3.4 litre.	973377.	988746.
XK.150 Open 2 seater.	-	830438.
XK.150 Drop head coupe.	827072.	837434.
XK.150 Fixed head coupe.	824420.	836566.

and certain individual cars prior to these numbers.

IDENTIFICATION

Externally the Master Cylinder remains unchanged but is identified by a cable clip bearing the following relative new part numbers, fitted to the barrel of the Master Cylinder between the flange fitting and the outlet boss.

XK.150.	C.14580	(VBM 3248)
2.4/3.4 litre.	C.14579	(VBM 3249)

DETAIL MODIFICATION

The following parts become redundant:-

Part Number.		
6950	Seal	Item 9, Plate C on page 21 of the Disc Brake Spare Parts Catalogue.
6949	Bush	Item 10, " " " "
6952	Valve	Item 7, " " " "
6941	Spring Support	Item 6," " " "

and are replaced by the following new parts:-

Dunlop Part Number.	
VBO 3541	Seal
VBO 3539	Valve
VBO 3540	Spring Support

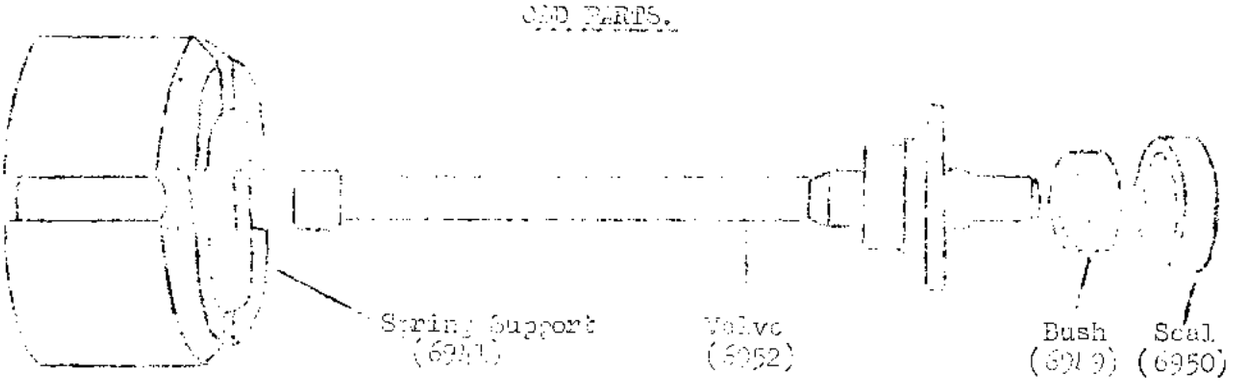
Note: A separate bush for the seal is no longer used. The drawings on the next page show the difference between the old and the new parts. The differences between the old and new parts are easily recognisable except in the case of the spring supports between which there is no visible difference. The old type spring support must not, in any instance, be refitted.

Cont'd....

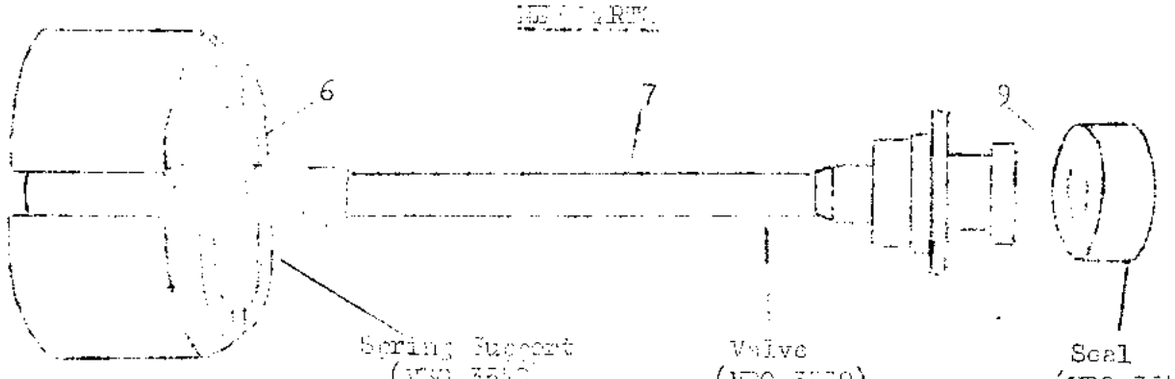
MODIFICATION - REPLACING BY NEW TYPE CYLINDER
(Refer to Plate C on page 21 of the Disc Brake Spares Catalogue)

(1) Withdraw the dust excluder (14) at the push rod end of the master cylinder and with suitable pliers remove the circlip (13).
(2) Remove the push rod (11) and the washer (12).
(3) Withdraw all internal components and dismantle the assembly comprising items (4) to (8) inclusive by disengaging the valve (7) via the key slot in the spring support (6).
(4) Discard the valve seal (9), bush (10), valve (7), rear end spring support (6) and 'O' ring (3).
(5) Clean the cylinder body and all remaining components with methylated spirit or hydraulic brake fluid. Examine the cylinder bore for damage and scoring. If there is evidence of these defects the master cylinder must be replaced by a new unit.
(6) Using the new components (6), (7) and (9) shown in the sketch below reassemble items (4) to (9) inclusive in the order shown and retain them by engaging the valve (7) in the central bore of the spring support (6). NOTE: The old and new spring supports item (6) are almost identical in appearance but it is essential that only the new support is used for this modification.
(7) Lubricate the new 'O' ring (3) with hydraulic brake fluid and fit it to the piston (1).
(8) Slide the internal components into the bore of the cylinder body, position the washer (12) and the push rod (11) and retain them with the circlip (13).
(9) Fill the dust excluder with the special Dunlop rubber grease provided in the modification kit. NOTE: No other grease must be used for this purpose. Refit the dust excluder around the end of the master cylinder, ensuring that the lip registers properly in the groove.
(10) Fit the appropriate identification clip around the master cylinder body, at a point between the attachment flange and the connection bosses.

OLD PARTS.



NEW PARTS.



SERVICE ACTION - EXPORT

All Distributors will be supplied with a small stock of modified Master Cylinders -

Part Number.

C.14580	XK.150.
C.14579	2.4 litre/3.4 litre

together with a supply of Master Cylinder Repair Kits Part Number 7660.

In every case when a report of long pedal action after standing is received the Master Cylinder is to be changed immediately for the modified type.

It is also considered desirable that all Master Cylinders of the original type not having a cable clip bearing the new part number should be changed as soon as is practicable. This operation is to be carried out on a guaranteed basis irrespective of the age of the car.

The Distributor must withdraw from his Dealers all stocks of the following Master Cylinders -

Part Number.

C.13100 and C.14214	XK.150.
C.13675 and C.14225	2.4/3.4 litre.

and proceed as follows:-

1. All Master Cylinders having an aluminium body (Part numbers C.13100 and C.13675) are to be scrapped and a claim submitted for these units.

2. All Master Cylinders having a cast iron body (Part numbers C.14224 and C.14225) are to be reconditioned by the Distributor incorporating the modified parts included in Master Cylinder Repair Kit Part number 7660 which contains:-

	Dunlop Part Number
Dust Excluder	VBO.1869
'O' Ring	VBO.2417
Valve	VBO.3539
Seal	VBO.3541
Spring Support	VBO.3540
Tube of Rubber grease	VBO.3554
Identification Cable clip	VBO.3552 and VBO.3553
Fitting Instruction Sheet	-

Spare Parts Replacement

All stocks of the following parts held by Dealers are to be returned to their Distributor for credit.

Part Number.

6950	Seal
6949	Bush
6952	Valve
6941	Spring Support

These parts, or the new parts that replace them, will no longer be supplied as individual replacements parts. The new parts will form part of a new Master Cylinder Repair Kit - Part number 7660.

The Distributor is to scrap all these parts including their own stocks and submit a guarantee claim for the parts scrapped.

Cont'd....

Parts Ordering

Distributors are requested to place orders for the quantity of Master Cylinder Repair Kits, Part number 7660 they require for their territory and any additional stock of Master Cylinders in excess of those forwarded.

Labour Allowance

An allowance of 2 hours will be made for removal of an original type Master Cylinder and the fitting of a modified type including bleeding the brakes. All such claims are to be endorsed "Fitting of Modified Master Cylinder - Reference Service Bulletin No.246."

IMPORTANT

1. Ensure that whenever modified parts are fitted to an original type Master Cylinder that the relative identification clip is fitted. Two cable clips are included with each Master Cylinder Repair Kit 7660. The one for the XK.150 model bears the number C.14580 (VBM.3248); the one for the 2.4 and 3.4 litre model bears the number C.14579 (VBM.3249).

2. When refitting the Master Cylinder on an XK.150 model check the alignment of the Master Cylinder push rod and ensure that on cars having two clevis pin holes in the brake pedal that the clevis pin is fitted in the upper hole. (see Service Bulletin No.229).

July, 1958.

J - G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.248

VARIOUS MODELS

THORNTON LIMITED SLIP DIFFERENTIAL - PRECAUTIONS.

Models affected

Cars fitted with Thornton "Powr-Lok" differential

1. On a car fitted with a Thornton Powr-Lok differential the engine must NOT be run with the car in gear and one wheel off the ground otherwise, owing to the action of the differential, the car may drive itself off the jack or stand.

If it is desired to turn the transmission by running the engine with the car in gear both wheels must be jacked up clear of the ground.

2. Note that when withdrawing an axle shaft it is possible for the axle shaft spacer to be drawn out of the differential and to fall into the axle tube which will be evident when attempting to replace the axle shaft.

If this should happen the spacer can be removed with a length of magnetised rod. The spacer can be replaced as follows:-

Insert the spacer into the end of a length of tubing in which it is a tight fit.

Pass the tubing into the axle tube and enter the spacer in its bore in the differential.

Pass a long rod down the centre of the tubing until it contacts the spacer.

The tubing can now be disengaged from the thrust button by holding the rod firmly and pulling on the tubing.

If both axle shafts have been removed do not attempt to fit both spacers and then the axle shafts. Fit one spacer and an axle shaft to the same side, before fitting the other spacer and axle shaft.

3. If a Thornton powr-lok differential is fitted to an existing rear axle the filler plug will foul the differential case.

A special cover plate is available for use with a Thornton Powr-lok differential under the following part numbers.

Cover plate only.	4 HA-010-1
Cover plate with filler plug.	4 HA-064-3

If a special cover plate is not available, the end threads of the filler plug can be cut off to obtain at least 1/16" (1.5 mm) clearance between the end of the plug and the differential case.

Index Reference. Section H.

COIL SPRING PACKING PIECE.

Models affected	Commencing chassis numbers. R.H.Drive.	L.H.Drive.
2.4 litre	911033	943054
3.4 litre	923493	938794

On cars with above chassis numbers and onwards a packing piece may be fitted at the top of the coil spring to compensate for slight manufacturing variation in the fitted lengths of the springs.

The packing pieces are in ¼" (6.4 mm) and ⅛" (3.2 mm) thicknesses and are fitted in accordance with the following details:-

Colour code of packing.	Thickness of packing piece.
2.4 litre	
White	¼" (6.4 mm) Pt. number C11874
Blue	⅛" (3.2 mm) Pt. number C11874/1
Green	No packing piece fitted.
3.4 litre	
Red	¼" (6.4 mm) Pt. number C11874
Yellow	⅛" (3.2 mm) Pt. number C11874/1
Purple	No packing piece fitted.

In service, if the coil springs are removed for any reason on a car prior to above chassis numbers, packing pieces can be fitted in accordance with the above details.

Index Reference. Section J.

HEATER RHEOSTAT SWITCH

Models affected.	Commencing chassis numbers. R.H.Drive	L.H.Drive.
XK.150		
Open 2 seater	-	830439
Fixed Head Coupe	824420	835566
Drop Head Coupe	827072	837434

On cars with the above chassis numbers and onwards a rheostat switch is fitted to allow the heater motor speed to be controlled.

The switch is positioned adjacent to the revolution counter and is marked 'Heater, Fast-Slow'.

The switch is off when rotated fully anti-clockwise. Rotation clockwise switches on the motor at its minimum speed, further rotation brings the rheostat into operation and the motor speed progressively falls until the knob reaches the end of its travel. The motor is fused through the ignition switch and will be automatically switched off with the ignition.

Index Reference. Sections O and P

Amendment to Service Bulletin 232

Amend the part numbers under 'Front Wing - Nose Section' as follows:-

	Part number
Front wing - nose section. Left-hand	7479
Front wing - nose section. Right-hand.	7480

July, 1958.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.249

VARIOUS SERVICING ITEMS

PANHARD ROD - ADJUSTMENT

Models affected

2.4 litre
3.4 litre

After setting the panhard rod to the dimension giving on page K8 of the "Rear Suspension" section, a further check should be carried out to ensure that the rear wheels are central in relation to the front wheels. The procedure is as follows:-

Place a straight edge across one rear tyre and check the distance to the flange of the chassis side member at the point at which the rear spring centre clamping plate is bolted; repeat for the other side. The dimension at each side should be the same; if not, re-adjust the panhard rod as necessary. Note: the rear tyres must be of the same type and set at the same pressure when carrying out this check.

The point of the chassis side member flange at which the dimension should be taken is between the two bolts which secure the rear spring centre clamping plate.

Index Reference. Section K. ✓

OVERDRIVE MANUAL SWITCH.

Models affected

2.4 litre
3.4 litre
~~Mark VIII~~

The clear plastic manual switch and relay has now been superseded by a metal switch, similar in appearance to the Intermediate Speed Hold switch fitted to Automatic transmission cars.

No relay is fitted with the later type switch and it is important that the earlier type switch is not used to replace the later type as the switch may burn out due to the absence of a relay in the circuit.

Index Reference. Sections F and P. ✓

BRAKE LININGS - EXAMINATION FOR WEAR.

Models affected.

All models.

Please note that the period for examining the brake linings or friction pads for wear is being reduced from every 10,000 miles (16,000 km) to every 5,000 miles (8,000 km).

This applies to either cars fitted with drum or disc brakes.

Index Reference. Section L. ✓

Cont'd....

N.D.V. SUPPORT BRACKET.

Models affected.

2.4 litre
3.4 litre

Please note that the chrome plated bracket to which the No Draught Ventilator hinge is attached, is not supplied as a separate item under the following part numbers.

N.D.V. Support bracket.	Left-hand	BD.9653
N.D.V. Support bracket.	Right-hand	BD.9654

Index Reference. Section N.

DISC BRAKE BRIDGE PIPE.

Models affected

Cars fitted with disc brakes.

Reference Service Bulletin number 239, note that to assist in the correct fitting of the caliper bridge pipe an identification tag is now fitted marked "Inner top".

Index Reference. Section L.

REAR SUSPENSION NYLON INTERLEAF.

Models affected		Commencing chassis numbers. R.H.Drive.	L.H.Drive.
Mark VIII		764370	781366
XK.150	Open 2 seater	-	830960
	Closed Head Coupe	824691	836671
	Drop Head Coupe	827168	837573

On cars with the above chassis numbers and onwards the rear springs are fitted with full length nylon interleaving between the top and second leaves.

The relevant part numbers are as follows:-

	Mark VIII	XK.150
Rear spring with nylon interleaf	C13109/1	C14473
Nylon Interleaf	C.13109/2	C13109/2

Service Procedure.

If complaints of rear spring squeak are received on cars equipped with springs having rubber buttons, a nylon interleaf can be fitted between the top and second leaves of the following points should be noted.

1. On the Mark VIII model a rubber button is fitted between the top and second leaves at the rear end of the spring. When fitting a nylon interleaf this button should be discarded.

2. On the XK.150 model it will be necessary to cut 2" (51 mm) off the front end of the interleaf before fitting.

Index Reference. Section N.

July, 1958.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.250.

VARIOUS SERVICING ITEMS.

LOSS OF DRIVE IN "D" (DRIVE) AND REVERSE

Models affected	Cars affected prior to transmission numbers
Mark VIII Automatic Transmission	JB8 3302
2.4 litre Automatic Transmission	J2B 1522
3.4 litre Automatic Transmission	J3B 3619

If a complaint is received of loss of drive in the "D" (Drive) and R (Reverse) positions on automatic transmission cars prior to the above numbers the most likely cause of the trouble is that the two low brake drum plate dowels (Ref.Fig.116 in the Automatic Transmission Service Manual) have become displaced due to a faulty snap ring.

The actual symptoms are as follows:-

No drive in Automatic Low in the "D" (Drive) position.

No drive in the "R" (Reverse) position.

Drive possible in the "L" (Selected Low) position.

The car can be driven if desired by starting off in the "L" position and then selecting "D" when the car has reached a speed of approximately 15 m.p.h. (24 k.p.h.). If the car is stopped for any reason this procedure will have to be repeated.

To rectify this trouble, it will be necessary to remove the transmission unit and withdraw the main shaft assembly as described on page 67 of the Automatic Transmission Service Manual.

Remove the rear bearing and for ard brake drum as described in paragraphs 9-11 on page 70. Collect the two dowels if they have become displaced; the dowels can be refitted if they are not damaged.

Remove the low brake drum plate snap ring (as described in paragraph 15 page 70).

Discard the existing snap ring and fit the dowels and a new snap ring (Part number J20-350). Check that the snap ring is a good fit in its groove and that the gap between the ends of the ring is narrower than the diameter of one of the dowels.

This rectification should be carried out on a guarantee basis and the claim endorsed "Reference Service Bulletin Number 250".

Note: The only other fault which will give similar symptoms to those listed above is a faulty reverse free-wheel.

If the dowels are found to be in position and the snap ring is secure, the reverse free-wheel can be examined at the same time without further dismantling.

Index Reference. Section MF./

Cont'd.....

REAR SPRING - MODIFIED TYPE.

Models affected.	Commencing Chassis Numbers. R.H.Drive.	L.H.Drive.
XK.150 Open 2 seater	-	830960
Fixed Head Coupe	824551	835671
Drop Head Coupe	827168	837573

On cars with the above chassis numbers and onwards a modified Rear spring (Part number C.14476) replaces Rear spring Part number C.13006.

The modified type of rear spring C.14476 has a thicker top leaf than the previous type, and a front spring eye of different design. A full length nylon interleaf is fitted between the top and second leaves - see Service Bulletin No.249.

Interchangeability.

Rear spring C.14476 is interchangeable with Rear Spring C.13006 in pairs.

Index Reference. Section K. ✓

CLUTCH RELEASE BEARING.

Models affected.

Mark VII
Mark VIII
XK.120
XK.140
XK.150
2.4 litre
3.4 litre

To ensure adequate clearance between the back of the clutch release bearing and the gearbox front oil seal cover to allow the necessary clearance between the release bearing and the clutch to be obtained use only Clutch release bearing Part number 2590 (BB 48443).

This release bearing can be easily identified by the presence of two grooves machined in the lugs of the release bearing cup.

Index Reference. Section E. ✓

Amendment to Service Bulletin No.249

Under "Overdrive Manual Switch" delete Mark VIII model.

September, 1958.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 251.

VARIOUS SERVICING ITEMS.

PRESSURE "BUILD-UP" IN HYDRAULIC SYSTEM

Models affected
XK.150
2.4 litre cars fitted with 6⅞" Lockheed vacuum servo.
3.4 litre cars fitted with 6⅞" Lockheed vacuum servo.

The 6⅞" Lockheed servo is fitted to all cars with disc brakes and also to cars equipped with drum brakes on and after the following chassis numbers:-

	R.H.Drive.	L.H.Drive.
2.4 litre	909061	912677
3.4 litre	977732	987406

A number of complaints of brake drag or binding, caused by a slow pressure build-up in the hydraulic system, have been traced to insufficient clearance between the servo piston rod and the slave cylinder piston (Item E and H, Fig.40 in the "Brakes" section of the 2.4/3.4 litre Service Manual).

The trouble will be indicated by a reduction of brake pedal travel, or varying pedal travel, which returns to normal after the car has been left standing.

CORRECTIVE ACTION.

The correct method of adjustment of the push-rod is described and illustrated on page L.43 of the 2.4/3.4 litre Brake section but entails partial dismantling of the slave cylinder.

The simple method to overcome pressure build-up is as follows:-

Remove the servo unit from the car.
Remove the end cover (six nuts and bolts).
Slacken the locknut at the end of the piston push rod.
Unscrew the push rod one complete turn and tighten the locknut.
Re-fit the end cover. Re-fit the servo unit and bleed the hydraulic system.

Carry out a road test making frequent applications of the brake pedal, to ensure that no brake drag exists.
If pressure "build-up" is still present, increase the clearance between the push-rod and piston by unscrewing the push rod a further half a turn.

Index Reference. Section L.

Cont'd.....

OIL BATH AIR CLEANER - INTRODUCTION.

Models affected.	Commencing Chassis Numbers. R.H.Drive.	L.H.Drive.
2.4 litre	911658	943149

On cars with the above chassis numbers and onwards plus certain individual cars prior to these numbers, an oil bath air cleaner (Part number C.14213) is fitted as standard. Air is drawn into the air cleaner through the short pipe which runs forward to the radiator. The large diameter pipe located under the left-hand front wing is retained to assist the under bonnet ventilation.

The air cleaner is fitted on top of the cylinder head and the maintenance instructions are as follows:-

The periods at which maintenance should be carried out will vary according to the conditions under which the car is operated. For normal conditions every 2,500 miles (4,000 kms) can be taken as the proper cleaning periods, but in dusty territories more frequent cleaning, as often as 1,000 miles (1,600 kms) or less, may be necessary.

Unscrew the wing nut and remove the top cover. Spring back the three clips and lift out the filter element. Wash the element by swishing up and down in a bowl of paraffin and allow to drain thoroughly.

Remove the three set bolts securing the oil base to the support brackets. Lift off the oil base, empty out the oil and clean out the accumulated sludge. Fill the oil base with engine oil to the level indicated by the arrow. It is unnecessary to re-oil the filter element as this is done automatically when the car is driven. Ensure that the top cover gasket is in good condition and re-assemble the filter.

Index Reference. Section C.

60 WATT HEADLAMP BULBS - INTRODUCTION.

Models affected.	Commencing Chassis Numbers. R.H.Drive.
2.4 litre Home and R.H.Drive Export	910846
3.4 litre Home and R.H.Drive Export.	973206

On cars with above chassis numbers and onwards modified headlamps incorporating 60 watt bulbs are fitted.

The part numbers are as follows:-

	Part Number
Headlamp complete	C.14237
Bulb. 60 watt (Lucas No.404)	C.8904.

Interchangeability.

1. The complete headlamp C.14237 is interchangeable with the previous type C.8808.

2. The 60 watt bulb cannot be fitted to headlamp C.8808.

Index Reference. Section P.

September, 1958.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 252.

VARIOUS SERVICING ITEMS.

FRESH AIR HEATING EQUIPMENT.

Models affected.	Commencing chassis numbers. R.H.Drive	L.H.Drive.
XK.150.		
Open Two Seater		831140
Fixed Head Coupe	824585	835719
Drop Head Coupe	827194	837628

On cars with the above chassis numbers and onwards fresh air heating and ventilating equipment replaces the Re-circulating equipment.

The following are the revised instructions:-

The car heating and ventilating equipment consists of a heating element and an electrically driven fan mounted on the engine side of the scuttle. Air from the heater unit is conducted:-

(a) To a built-in duct fitted with two doors situated under the instrument panel.

(b) To vents at the bottom of the windscreen to provide demisting and defrosting.

FRESH AIR is introduced into the system by opening the air intake in the left-hand front wing and switching on the fan.

Temperature Control.

The lever controlling the flow of water from the engine cooling system to the heating element is situated at the top of the instrument panel.

When the lever knob is placed in the Cold position, the supply of hot water from the engine is completely cut off; placed in the fully Hot position the maximum possible amount of hot water from the engine is allowed to pass through the heater element. By placing the lever knob in intermediate positions the temperature of the air from the heater can be varied between these two extremes.

Fan switch

The heater fan switch situated at the bottom left of the instrument panel is off when rotated fully anti-clockwise. Rotation clockwise switches on the motor at its maximum speed; further rotation brings a rheostat into operation and the motor speed progressively falls until the knob reaches the end of its travel. The motor will be automatically switched off with the ignition if the fan switch is inadvertently left on.

The following directions for heating the car interior in cold weather and ventilating the car interior in hot weather are given as a guide but it will be appreciated that the degree of heating can be regulated by the controls.

Cont'd.....

Fresh air is introduced into the system by opening the door in the left-hand front wing. The lever operating the door is situated in the driving compartment forward of the left-hand door; push the lever forward to open the intake door, pull the lever rearward to close the door.

Note: The air intake must always be open when using the heating and ventilating equipment.

COLD WEATHER

To obtain car heating, demisting and defrosting.

(a) OPEN air intake (in left-hand front wing).
(b) Set temperature control to the DESIRED POSITION.
(c) Switch ON fan (to required speed).
(d) OPEN heater doors.

To obtain rapid demisting and defrosting.

(a) OPEN air intake (in left-hand front wing).
(b) Set temperature control to HOT.
(c) Switch ON fan (at maximum speed).
(d) CLOSE heater doors.

HOT WEATHER

To obtain ventilation and demisting.

(a) OPEN air intake (in left-hand front wing).
(b) Set temperature control to COLD.
(c) Switch ON fan (to required speed).
(d) OPEN heater doors.
(e) OPEN ventilator (in right-hand front wing).

Index Reference. Section O.

AIR CLEANER MAINTENANCE.

Models affected

All

As it has been found that Distributors and Dealers have not been carrying out maintenance of air cleaners, attention is again drawn to the importance of carrying out this service at the recommended periods. (see Service Bulletin Nos. 229 and 251 for maintenance instructions for the oil bath type of air cleaners).

Failure to carry out periodic maintenance of air cleaners will cause high petrol consumption, reduced performance and premature engine wear.

Index Reference Section C

IMPORTANT NOTICE. It has come to our notice that some of the instructions contained in certain of our Service Bulletins are not being carried out. Particular attention is called to the following Service Bulletins the instructions in which must be observed.

Service Bulletin Number	Subject.
241	"Modification to overcome Handbrake cross cables fouling body".
242	"Hydraulic Fluid for Clutch and Brake Systems-Important".
246	"Modification to Disc Brake Master Cylinder."

November, 1958

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.255

VARIOUS SERVICING DETAILS

GENERAL - HYDRAULIC DAMPERS - MODIFIED TYPE

Models affected.		Corresponding Chassis Numbers	
		R.H. Drive	L.H. Drive
2.4 litre -	Front	911522	943124
	Rear	912637	943269
3.4 litre -	Front	973987	989137
	Rear	975162	990176

On cars with the above chassis numbers and onwards modified hydraulic dampers are fitted giving consistent damping at all operating temperatures.

The part numbers are as follows:-

Front	C.14586	2 off
Rear	C.14587	2 off

Interchangeability

The new dampers are interchangeable with the previous types, but must be fitted in pairs to either front or rear.

Index Reference Sections J and K.

REAR CALIPER ADAPTOR PLATE BOLTS

Models affected.

2.4 litre cars with disc brakes.
3.4 litre cars with disc brakes.
XK.150

Disc brake cars now in production are fitted with a revised arrangement for attaching the adaptor plate to the rear axle.

The original arrangement of bolts, shakeproof washers and nuts is superseded by longer bolts and self-locking nuts.

The part number of the new bolts and nuts are as follows:-

Model		Part number	No. off per car
2.4/3.4 litre	Bolt.	7755	8
XK.150	Bolt.	7757	8
All	Nut - self locking	7756	8

Index Reference Section F.

9 to 1 COMPRESSION RATIOS - PANEL REPLACEMENTS.

Models affected

All cars fitted with 9 to 1 compression engines.

It is important that only super grade fuel with a minimum octane

/ Octane.....

rating of 98 (Research method) is used with engines having 9 to 1 compression ratio pistons (indicated by /9 after the engine number).

If, of necessity, the car has to be operated on lower octane fuel do not use full throttle otherwise detonation may occur with resultant piston trouble.

Index Reference Section B. ✓

12 BLADED FAN - INTRODUCTION

Models affected.	Commencing Chassis Numbers	
	R.H. Drive	L.H. Drive
2.4 litre	915349.	943118

On cars with the above chassis numbers and onwards a 12 bladed fan is introduced.

The fan cowl fitted with the previous type 4 bladed fan is dispensed with, but a fan shield is fitted at the top of the radiator.

The part numbers are as follows:-

12 bladed fan.	C.12391.
Fan shield.	C.14732.

Index Reference Section D. ✓

SELECTOR LINKAGE ADJUSTMENT

Models affected

Mark VII Automatic Transmission.
Mark VIII Automatic Transmission.

If the selector linkage is found to be persistently in need of adjustment and to disengage from the "D" position under hard acceleration or heavy braking the most likely cause of the trouble is slackness or softening of the engine mounting rubbers.

In this case new engine mountings should be fitted all round and the manual selector linkage re-adjusted as described on page 22 of the Automatic Transmission Service Manual.

Index Reference Section FF. ✓

January, 1959

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 257

VARIOUS SERVICING ITEMS

BRIDGE TYPE CALIPERS WITH QUICK CHANGE PADS

Models affected	Commencing Chassis Numbers	
	R.H. Drive	L.H. Drive
2.4 litre cars with disc wheels	913144	943331
2.4 litre cars with wire wheels	913234	943343
3.4 litre cars with disc wheels	975688	990694
3.4 litre cars with wire wheels	975783	990795
XK.150 Open 2-Seater	820004	831712
XK.150 Drop Head Coupe	827236	837836
XK.150 Fixed Head Coupe	824669	835886

On cars with the above chassis numbers and onwards bridge type calipers with quick change pads are fitted.

The servicing instructions are as follows:-

Every 5,000 miles (8,000 km)

Friction Pads - Examination for Wear

At the recommended intervals, or if a loss of braking efficiency is noticed, the brake friction pads (2 per brake) should be examined for wear; the ends of the pads can be easily observed through the apertures in the brake caliper. When the friction pads have worn down to a thickness of approximately a $\frac{1}{4}$" (7 mm) they need renewing.

Friction Pads - Renewal

To remove the friction pads, unscrew the nut from the bolt attaching the friction pad retainer to the caliper and extract the bolt. Withdraw the pad retainer.

Insert a piece of strong cord (or wire) through the hole in the metal tag attached to the friction pad and withdraw the pad by pulling on the cord.

To enable the new friction pads to be fitted it will be necessary to force the pistons back into the cylinder blocks by the use of Special Tool 7840 or by means of suitable levers.

Before doing this, it is advisable to half empty the brake supply tank otherwise forcing back the friction pad will eject fluid from the tank with possible damage to the paintwork. When all the new friction pads have been fitted, top up the supply tank to the recommended level.

Insert the new friction pads into the caliper ensuring that the slot in the metal plate attached to each pad engages with the button in the centre of the piston.

Finally, refit the friction pad retainer and secure with the bolt and nut. Apply the footbrake a few times to operate the self-adjusting mechanism, so that normal travel of the pedal is obtained.

/Cont'd....

The new part numbers are as follows:-

XK.150 and XK.150 'S'

C.14874	R.H. Front Caliper Assembly.
C.14875	L.H. Front Caliper Assembly.
C.14876	R.H. Rear Caliper Assembly.
C.14877	L.H. Rear Caliper Assembly.
7654	Friction Pad Assembly.

2.4 and 3.4 litre

C.14874	R.H. Front Caliper Assembly.
C.14875	L.H. Front Caliper Assembly.
C.14894	R.H. Rear Caliper Assembly.
C.14895	L.H. Rear Caliper Assembly.
7654	Friction Pad Assembly.

Index Reference Section L. ✓

½" FAN BELT - INTRODUCTION

Models affected	Commencing Engine Numbers
XK.150	V.5733
XK.150 'S'	VS.1523
3.4 litre	KF.2501

On cars with the above engine numbers and onwards a ½" (12.5 mm) fan belt is fitted; the pulleys are modified to suit.

The part numbers are as follows:

C.14535	Fan Belt.
C.14588	Fan Pulley.
C.14589	Crankshaft Pulley.
C.14590	Dynamo Pulley.

Index Reference Section B.

CALIPER PISTON RETRACTOR TOOL

Models affected

Disc brake cars fitted with quick change pads.

When replacing friction pads it is necessary to force back the pistons into the caliper before the new pads can be fitted. A special tool (Part No. 7840) to carry out this operation is now available from the Jaguar Spares Department, price 13/3d.

Index Reference Section L. ✓

JANUARY, 1959.

JAGUAR

SERVICE AND SPARES ORGANISATION

SERVICE BULLETIN NO. 258

VARIOUS SERVICING ITEMS.

BRAKE VACUUM RESERVOIR - INTRODUCTION

Models affected	Commencing Engine Numbers
2.4 litre	B.C. 8075
3.4 litre	K.F. 2501

On cars with the above engine numbers and onwards a vacuum reservoir is incorporated in the vacuum line between the inlet manifold and the servo.

The vacuum reservoir tank is located underneath the right-hand front wing forward of the wheel. The tank has a vacuum check valve attached, to which the hoses are connected as follows:-

Hose from inlet manifold - to longer check valve connection.

Hose to servo - to shorter check valve connection.

Inlet Manifold

The vacuum check valves originally fitted to the 2.4 litre and 3.4 litre models are now discontinued, and the hose to the inlet manifold is now taken to an adaptor at the rear of the manifold which also incorporates a connection for the windscreen washer pipe.

The re-designed inlet manifold for the 3.4 litre model also incorporates a six branch distribution arrangement for the auxiliary starting carburetter.

The part numbers of the main items are as follows:-

No. off.		
1	Vacuum Reservoir	C.14681
1	Check Valve.	C.14693
1	Adaptor at rear of inlet manifold.	C.14715
1	Hose - Manifold to Vacuum Reservoir	C.14714
1	Hose-Vacuum Reservoir to Servo	C.14963
1	Inlet Manifold (2.4 litre)	C.14893
1	Inlet Manifold (3.4 litre)	C.14651/A.

Index Reference Section L. ✓

PETROL FILTER-INTRODUCTION

Model affected	Commencing Engine Number
3.4 litre	KF.2501

On cars with the above engine number and onwards a petrol filter of the glass bowl type is fitted. The filter is fitted to the right-hand wing valance and the maintenance instructions are as given in Service Bulletin 227 for the 2.4 litre model.

Index Reference Section C. ✓

/Cont'd....

UPPER WISHBONE BALL JOINT

Models affected	Commencing Chassis Numbers	
	R.H. Drive	L.H. Drive
2.4 litre with drum brakes	912622	943267
2.4 litre with disc brakes	912744	943288
3.4 litre	975232	990270
XK.150 Open 2-seater	820004	831698
XK.150 Fixed Head Coupe	824668	835882
XK.150 Drop Head Coupe	827235	837831
Mark IX	770220	790196

On cars with the above chassis numbers and onwards modified upper wishbone ball joints are fitted. These modified ball joints have a larger diameter ball and an increased angle of movement. In the case of the 2.4 litre and 3.4 litre models the ball joint bolt hole centres in the upper wishbone levers and packing piece are increased from 1.11/16" (4.28 cm) to 1¾" (4.44 cm).

The new part numbers are as follows:-

Number per car	Part Number
2 off Upper Wishbone Ball Joint	C.14434
4 off Upper Wishbone levers (2.4 and 3.4 litre only)	C.14436
2 off Packing Piece (2.4 and 3.4 litre only)	C.4740

Interchangeability

(i) On the Mark IX and XK.150 models upper wishbone ball joint C.14434 is interchangeable with the previous type, but it will also be necessary to fit grease nipple C.9048, Self-locking nut C.8737/5 and Plain washer C.791.

(ii) On the 2.4 litre and 3.4 litre models the upper wishbone ball joint C.14434 is not interchangeable with the previous types fitted.

Index Reference Section J.

SPARKING PLUGS - CHANGE FROM N.8 to N.5 TYPE

Models affected

All

The Champion N.5 (old designation N.A.8) sparking plug is now fitted to all current production engines for which the N.8 (N.8.B) type was originally specified. Engines prior to this change must have N.5 sparking plugs fitted when replacement becomes necessary.

It is also recommended that this change takes place on non-current production engines originally equipped with N.8 or N.8.B plugs.

Index Reference Sections B and P.

JANUARY, 1959.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 259.

VARIOUS SERVICING ITEMS.

60 WATT HEADLAMP BULBS - INTRODUCTION ON L.H. DRIVE CARS

Models affected	Commencing Chassis Numbers L.H. Drive
2.4 litre	943324
3.4 litre	990610

On cars with the above chassis numbers and onwards modified headlamps incorporating 60 watt bulbs are fitted.

The part numbers are as follows:-

	Part Number
Headlamp complete	C.14238
Bulb. 60 watt (Lucas No. 406)	C.8905

Interchangeability

1. The complete headlamp C.14238 is interchangeable with the previous type C.8809
2. The 60 watt bulb cannot be fitted to headlamp C.8809.

Index Reference Section P.✓

AIR INTAKE LEVER SEALING RUBBERS

Models affected

XK.150 cars with fresh air heater (see Service Bulletin No. 252).

Cars now in production are fitted with a sponge rubber seal (Part No. BD.16680 - 2 off) at the top and bottom of the air intake lever situated at the left-hand side of the driving compartment.

These seals are fitted to prevent the ingress of cold air when the air intake is opened for operation of the heating system.

The seals are affixed to the air vent box with rubber solution and contact each other along the whole of their lengths.

Index Reference Section O.✓

/Cont'd....

72 SPOKE WIRE WHEELS

Model affected	Commencing Chassis Numbers	
	R.H. Drive	L.H. Drive
3.4 litre cars fitted with wire wheels	975230	990262

On cars with the above chassis numbers and onwards 72 spoke wire wheels are fitted, replacing 60 spoke wire wheels.

The new part numbers are as follows:-

72 spoke Wire Wheel (painted)	C.14766
72 spoke Wire Wheel (chrome plated)	C.14802

60 spoke and 72 spoke wheels should only be fitted to individual cars in complete sets.

Index Reference Section M.

POWER STEERING INNER COLUMN AND VALVE ASSEMBLY

Models affected

Mark VIII cars fitted with power steering.
Mark IX model.

The 'O' ring (Item 16 plate CC in the Mark VIII Spares Catalogue) is now superseded by an oil excluding sleeve, retaining washer and circlip.

The original type of inner column and valve assembly will be serviced with the later type incorporating the oil excluding sleeve; the orginal part numbers for this assembly (7566 for L.H. Drive and 7565 for R.H. Drive) will be retained.

Index Reference Section I.

GUM DEPOSIT ON INLET VALVES

Models affected

All

If allowed to stand for any length of time, some present day fuels have a tendency to form gum which may be deposited on the inlet valves when the engine is started after a period of storage; this may cause sticking valves.

It is therefore suggested, that in cases where a car is likely to be stored for any length of time, the fuel should be drained from the petrol tank and carburetters. A small quantity of oil should also be injected into each cylinder.

Index Reference Section B.

FEBRUARY, 1959.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.261

BRAKES - MAINTENANCE AND RECTIFICATION

IMPORTANT

The following information is given to ensure more satisfactory brake maintenance and to simplify the handling of complaints.

Contents

BRAKE MAINTENANCE

1. Ensure that only the brake fluids specified in Service Bulletin No. 242 are used.
2. Check the brake fluid level in the Reservoir on <u>every</u> occasion a customers car is in your hands for service and if the level is low investigate as detailed below.
3. Check for brake lining or friction pad wear whenever you carry out regular maintenance service and advise the owner if re-lining is necessary immediately or in the near future.
4. Fully bleed the hydraulic system and refill with new brake fluid whenever a brake re-line or overhaul is carried out.
5. Check the condition of the rubber brake hoses and the rubber servo hose connections when carrying out a brake re-line or overhaul.

RECTIFICATION

BRAKE FLUID LEVEL

If the brake fluid level in the reservoir is found to be low <u>always</u> make a careful check to find out <u>WHY</u> before topping up.

/Cont'd...

There will be a progressive reduction in level consistent with lining or pad wear due to the increased fluid volume contained in the wheel cylinders but if the fluid level has dropped to any extent carefully check the following points for fluid loss.

1. Push rod end of brake master cylinder.

   If any trace of fluid is found on the push rod, pull back the rubber boot and observe whether there is evidence of brake fluid leaking past the master cylinder piston seal. If this condition exists fit a replacement master cylinder or overhaul the existing unit.

2. Apply and maintain full pressure at the brake pedal and carefully examine all brake connections and wheel cylinders for fluid loss. Note in the case of drum brake cars, when checking the wheel cylinders, pressure at the pedal should be maintained for some minutes and the drums then removed for inspection of the wheel cylinders.

   If when pressure is maintained on the brake pedal the pedal progressively sinks, examine all connections and wheel cylinders and if no fluid loss is found, the loss of pressure should be traceable to the master cylinder recuperation seal or main seal. Fit a replacement master cylinder or overhaul the existing unit. Fully bleed the system and repeat the above pressure check.

If low fluid level is found and the foregoing checks do not reveal reason for fluid loss but fluid level is low enough to suggest loss is definitely occurring, measure the fluid level in the reservoir. Leave car standing without engine being run for 12/24 hours and re-check level. If level has dropped, remove brake servo (without having re-started engine) dismantle servo and examine for evidence of brake fluid having entered the servo vacuum cylinder or the servo operating valve chamber. If brake fluid is found, fit a replacement servo or replace all the seals in the servo unit.

LONG BRAKE PEDAL TRAVEL - RECTIFIED BY BLEEDING BRAKES

This complaint can only be due to air getting in the hydraulic system. If you deal with a car on which the brake pedal has to be pumped when the car is stationary to obtain a normal brake pedal action but bleeding the system produces normal brake pedal action, do not release the car until you have traced the reason for air getting into the hydraulic system.

Possible causes are:-

(a) Air entry past servo piston rod seal (for Mark V11 and Mark V111 Clayton-Dewandre servos see Service Bulletin No.260)

(b) Air entry past servo plunger seal.

(c) Air entry past wheel cylinder seals.

(d) Air entry past master cylinder main seal (in this case bleeding will probably be difficult).

(e) Air in hydraulic system due to brakes having being overheated and the fluid vapourised.

LONG PEDAL TRAVEL - SELF RECTIFIED WHEN CAR HAS BEEN STANDING

This complaint arises due to severe overheating of the brakes and boiling of the brake fluid - self rectified when fluid cools, and can be due to:-

/Cont'd...

(a) Servo vacuum piston not fully returning and in this case all four brakes will show signs of having being overheated.

(b) Insufficient free movement on master cylinder push rod, again all four brakes with show signs of overheating.

(c) Automatic Transmission cars only.
Fault in anti-creep pressure switch (at rear of transmission unit) holding rear brakes on. Rear brakes only will show signs of overheating.

(d) Car has been driven with hand brake on - rear brakes only will show signs of overheating.

Note: In the event of the brakes having been overheated the wheel cylinder piston seals should be examined. In the case of disc brake cars overheating of the wheel cylinder piston seals will result in loss of interference and long pedal action ON ROAD

LONG PEDAL TRAVEL ON ROAD AND WHEN STATIONARY - NOT CORRECTED BY BLEEDING

This complaint is only likely to occur on drum brake cars for the following reasons:-

Girling Brakes (Mark V11 and Mark V111)

(a) Rear brakes not in adjustment.

(b) No friction between front brake self adjuster friction pads and brake shoe webs.

(c) Front brake shoes incorrectly set up relative to drums (see Service Bulletin No.256), or drums badly out of round.

Lockheed Brakes

(a) Rear brake self adjusters not operating.(2.4/3.4 litre only)

(b) Front brake self adjuster ratchet broken and/or no friction on self adjustment friction pads.

(c) Front brake shoes incorrectly set up relative to drums or drums badly out of round.

LONG PEDAL TRAVEL ON ROAD BUT NORMAL PEDAL TRAVEL WHEN STATIONARY

Disc Brakes

(a) Excess play in front hub bearings.

(b) Excess end float of rear axle shafts.

(c) Excess run out on discs.

(d) Shake back on wheel cylinder pistons (due to insufficient interference between piston seal and wheel cylinder bore - see note under heading "Long pedal travel - self rectified when car has been standing")

Note: If excess disc run out is found check the hub flanges for run out and for dirt between the hub flange and disc mating faces.

Also note when checking Mark 1X rear discs for run out or when setting the calipers relative to the discs, the disc should be securely bolted to the hub flange using suitable distance pieces under the wheel nuts.

Lockheed Drum Brakes

(a) Insufficient friction or broken ratchet on front brake self adjusters.

/Cont'd...

(b) Hydraulic check valve in end of servo (Part No.6466) not maintaining residual line pressure.

Girling Drum Brakes

Insufficient friction on front brake self adjuster friction pads.

Heavy Pedal Action - (sometimes wrongly described by owners as fade).

1. Servo connecting hose-vacuum pipe to inlet manifold take off - collapsed.
2. Vacuum check valve stuck or incorrectly assembled.
3. Servo performance low - sluggish piston or no interference between piston leather and vacuum cylinder.
4. Long brake pedal travel resulting in maximum servo point being passed before full braking effort obtained. (see foregoing paragraph on Long Pedal Travel).

EXCESS BRAKING ON FRONT WHEELS

Disc Brake Cars

Rear brake pads sticking in calipers (check by inserting feeler gauge between pad and disc and note if the feeler is nipped when the brakes are applied).

Drum Brake Cars

(a) Rear wheel cylinder seized. (b) Rear brake shoes fitted incorrectly.

BRAKES HANGING ON

(a) Brakes drag on all four wheels and do not release when the engine is switched off - Servo piston sticking in vacuum cylinder.

(b) Brakes drag on all four wheels but release when engine is switched off - Servo plunger valve sticking.

BRAKES PULLING, LOCKING OR KNOCKING ON BRAKE APPLICATION

The above complaints can be due to:-

(a)

Disc Brake Cars

Slackness of the bolts searing the brake caliper and/or the bolts securing the caliper adaptor plate to the stub axle carrier or rear axle flange.

Drum Brake Cars

Slackness of the bolts searing the brake backplate to the stub axle carrier or the rear axle flange.

(b) Grease or oil on the friction pads - clean off grease or oil from the brake disc with petrol or trichloreythelene.

(c) On the Mark V11, Mark V111 and Mark 1X models slackness of the bolts securing the lower wishbone brackets to the chassis frame. Slackness of the rear spring 'U' bolts.

(d) On the 2.4/3.4 litre models, slackness of the rear spring centre bolts.

WHISTLE FROM ENGINE

An elusive whistle noticed at approximately 1200 r.p.m. on a small throttle opening but not reproduced when car is stationary or coasting in neutral with engine switched off will be traced to an air leak at the servo diaphragm chamber joint face (Lockheed 6$\frac{7}{8}$" Servo only)

APRIL, 1959.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 262

VARIOUS SERVICING ITEMS

STEERING UNIT AND IDLER - MODIFIED TYPE

Models affected	Commencing Chassis Numbers R.H. Drive	L.H. Drive
2.4 litre	914564	943496
3.4 litre	976917	991866

On cars with the above chassis numbers and onwards a re-designed Steering box and Idler assembly is fitted.

The steering unit is lower geared than the previous type and gives approximately 4¼ turns from lock to lock. The hole centres in the steering drop arm and in the idler lever are reduced from 5⅞" (14.92 cm) to 5½" (13.97 cm).

The part numbers of the main items are as follows:-

	Part Number
Steering Unit RHD	C.14845
LHD	C.14846
Steering Drop Arm	C.14847
Steering Idler Assembly	C.14887
Steering Idler Lever	C.14848

Interchangeability

It is important that only the correct drop arm and idler lever are fitted with the new steering unit.

The above parts are not individually interchangeable with the previous types fitted.

Index Reference Section I

FOULING OF CLUTCH PEDAL

Model affected

XK.150

If fouling of the clutch pedal is experienced, the most likely cause is that the clutch over-centre spring bracket is contacting the split pin end of the clevis pin which secures the brake master cylinder fork end to the brake pedal.

In this event the position of the clevis pin should be reversed so the head of the pin is facing the clutch pedal linkage.

Index Reference Section E

/Cont'd...

LEAD INDIUM BIG END BEARINGS - INTRODUCTION

Models affected	Commencing Engine Numbers
2.4 litre	BE.1116
3.4 litre	KF.6219
XK.150	V.6709
Mark VIII	NA.3386

On cars with the above engine numbers and onwards lead indium big end bearings are fitted.

The part number is as follows:-

12 halves Big-end bearing C.5893

Interchangeability

The lead-indium bearings are interchangeable with the previous white metal type in complete sets.

Section Reference Section B

11 PLATE BATTERY - INTRODUCTION

Models affected	Commencing Chassis Numbers R.H. Drive	L.H. Drive
3.4 litre	976364	991361
Cars for U.S.A. and Canada commenced at	-	990336

On cars with the above chassis numbers and onwards a 11 plate battery replaces the 9 plate type.

The details are as follows:-

	Jaguar Part Number	Lucas type	Capacity
9 plate battery	C.8792	GTW9A	57 amp. hr. at 20 hr rat
11 plate battery	C.14886	BV.11A	72 amp. hr. at 20 hr rate

Index Reference Section P

NOISE FROM REAR WHEEL ARCHES

Models affected.

Later Mark VIII models
Early Mark IX models

If a rubbing noise is experienced from the rear when the car is fully laden, it may possibly be due to the sliding roof rear drain tubes in the rear wheel arches fouling the tyres. If so, the drain tubes should be shortened so that they clear the tyres.

Index Reference Section N

APRIL. 1959.

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.263

VARIOUS SERVICING ITEMS

POWER STEERING BANJO AND BANJO BOLT

Models affected	Commencing Chassis Numbers	
	R.H. Drive	L.H. Drive
Mark IX	770927	790559

On cars with the above chassis numbers and onwards a modified banjo bolt C.15273 (Item CG.13 in the Mark VIII Spares Catalogue) is fitted at the top end of the steering unit to obtain greater depth of thread engagement. With the introduction of this bolt, banjo C.13857 originally fitted for Right-hand drive cars only, is now also specified for Left-hand drive cars.

Interchangeability

For replacement purposes -
Use Banjo bolt C.15273 with aluminium banjo C.13857.
Use banjo bolt C.1506 with phosphor bronze banjo C.1505.

Index Reference Section I ✓

MECHANICALLY OPERATED OVERDRIVE

Models affected	Commencing Chassis Numbers	
	R.H. Drive	L.H. Drive
XK.150 'S' Open 2-seater	-	831963

Cars with the above chassis numbers and onwards are fitted with a mechanically operated overdrive. The operating lever is mounted forward of the normal gearshift lever and will only allow the overdrive to operate on top gear.

To engage overdrive from top gear pull the lever rearward; to change down from overdrive to top gear push the lever forward. If a change is made direct from overdrive to third gear the lever will automatically disengage from overdrive.

Index Reference Section F ✓

KNOCK-ON HUB CAPS - GERMANY ONLY

Models affected

All models fitted with wire wheels.

Cars now in production are fitted with special knock-on hub caps to comply with German safety regulations. These hub caps have shorter lugs and require the use of a special tool for removal and replacement. This removal tool fits over the hub cap and has suitable lugs to allow a copper mallet to be used.

/Cont'd...

The part numbers are as follows:-

Hub cap - right-hand	C.14891
Hub cap - left-hand	C.14892
Hub cap remover	C.14927

Index Reference Section M ✓

DISC BRAKE HANDBRAKE SETTING

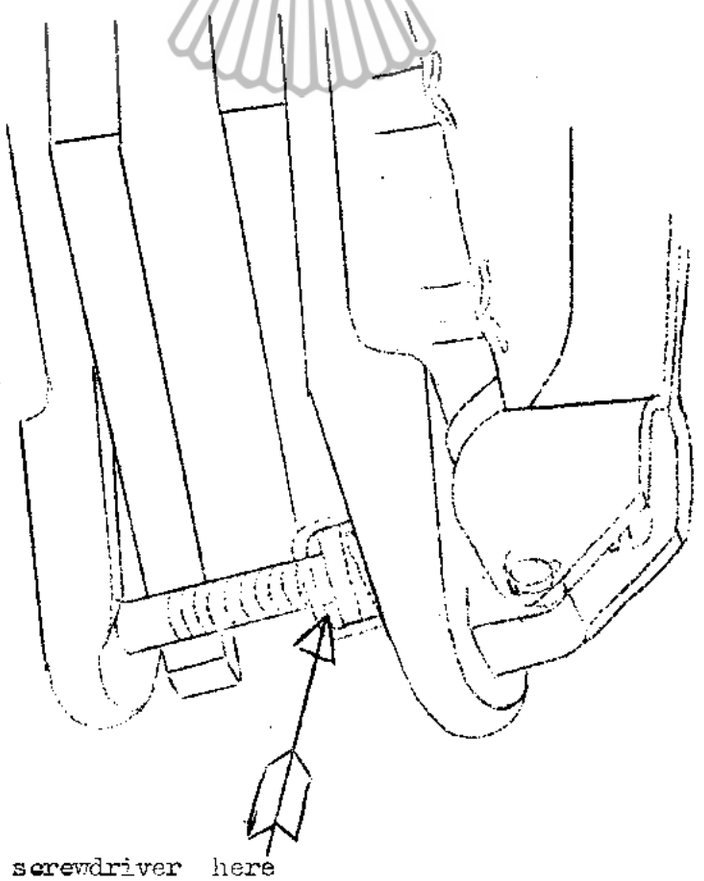
Models affected

All models fitted with disc brakes.

If complaints are received of the handbrakes being in need of frequent adjustment the following procedure should be carried out.

Check that there is a gap between the square spring retaining nut and the spring cage through which the adjuster bolt is screwed. If not, unscrew the adjuster bolt and proceed as follows:-

Prior to screwing the adjuster bolt into the self locking nut, insert a screwdriver between the square spring retaining nut and the spring cage to partly compress the spring. Hold the locknut firmly against the trunnion and ensure that the adjuster bolt engages the threads of the locknut at the first turn. After screwing in the adjuster bolt three or four turns the screwdriver can be released from the spring cage and the normal adjustment carried out.



Insert screwdriver here

Index Reference Section L ✓

MAY, 1959

JAGUAR

SERVICE AND SPARES ORGANISATION

SERVICE BULLETIN NO. 265

VARIOUS SERVICING ITEMS

QUICK CHANGE FRICTION PADS - CHANGE IN MATERIAL

Models affected	Commencing Chassis numbers	
	R.H. Drive	L.H. Drive
2.4 litre - disc wheels	914891	943531
- wire wheels	915136	943568
3.4 litre - disc wheels	977498	992317
- wire wheels	977791	992531
Mark IX	771535	790835

On cars with the above chassis numbers and onwards Mintex M33 material friction pads are fitted in place of Ferodo DS5 pads.

The part numbers are as follows:-

	2.4 and 3.4 litre	Mark IX
Friction pads (8 off)	7937	-
Friction pads - front (4 off)	-	7936
rear (4 off)	-	7937

The use of Mintex M33 pads alters the part numbers of the caliper assemblies as follows:-

Front caliper assembly - right hand	C.15648	C.15657
- left hand	C.15649	C.15658
Rear caliper assembly - right hand	C.~~14894~~ 15646	C.15655
- left hand	C.~~14895~~ 15647	C.15656

Identification

In production Mintex M33 friction pads are identified by red and white stripes across the width of the pads.

Interchangeability

Mintex M33 pads are interchangeable with Ferodo DS5 quick change square type pads in complete car sets.

Note: Ferodo DS5 pads will continue to be used on the XK.150 model.

Index Reference Section L

AIR CLEANER - PAPER TYPE

Models affected	Commencing Chassis numbers	
	R.H. Drive	L.H. Drive
XK.150 'S' Open 2-seater	820039	832076
Fixed Head Coupe	824864	836187
Drop Head Coupe	827355	838246

Cars with the above chassis numbers and onwards are fitted with a single paper air cleaner in place of three wire mesh type elements. To gain access to the paper element, remove the cover box from the rear of the valance underneath the right-hand front wing.

/Cont'd...

Unscrew the two self-locking nuts which secure the air cleaner cover plate. Remove the cover plate when the paper element can be withdrawn taking care not to lose the distance pieces from the studs.

The maintenance instructions are as follows:-

Every 2,500 miles (4,000 km)

Remove the paper element and blow out the accumulated dirt with compressed air. Take care not to perforate the paper with the air line nozzle.

Every 10,000 miles (16,000 km)

Renew the paper element. (Part number C.15258)

Index Reference Section B

OIL FILTER CHANGING

Models affected

All models

It has come to our notice that oil filter elements are not being cleaned and changed at the recommended periods.

The importance of carrying out this service cannot be overstressed. Under conditions conducive to oil dilution and sludge formation more frequent changing of the element than the normal 5,000 miles is advised.

With a worn engine or when the car is used mainly for low speed, stop-start city driving the filter element should be changed every 2,500 miles.

NEVER CHANGE THE ENGINE OIL WITHOUT EITHER CLEANING OR CHANGING THE OIL FILTER ELEMENT.

Index Reference Section B

WHEEL BALANCING WITH WHEELS ON CAR

Models affected

All models

If balancing equipment is used which dynamically balances the road wheels on the car, the following precaution should be observed.

In the case of the rear wheels always jack both wheels off the ground otherwise damage may be caused to the differential.

This is doubly important in the case of cars fitted with a Thornton "Powr-Lok" differential as in addition to possible damage to the differential, the car may drive itself off the jack or stand.

Index Reference Sections M and H

MAY, 1959

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 266

VARIOUS SERVICING ITEMS

OIL FILTER BLANKING PLATE

Models affected	Commencing Engine numbers
2.4 litre	BE.1582
3.4 litre	KF.7140
XK.150	V.6861

On cars with the above engine numbers and onwards the blanking plate C.12803 originally fitted between the oil filter and cylinder block is no longer used.

In conjunction with this change the following modifications are incorporated.

(1) Cylinder Block

The oil filter joint face on the cylinder block is modified as follows:-

(a) The oil feed drilling for the centre main bearing is now threaded and blanked off with a grub screw.

(b) The hole originally drilled completely through the crankcase is no longer drilled.

(2) Oil Filter

(a) Shorter oil filter bolts are fitted.

(b) Only copper washers are fitted under the bolt heads.

(c) Only one gasket C.13091 is used between the filter and cylinder block.

(3) Oil Sump

The joint face flange of the sump is cut-a-way to clear the oil filter head casting.

The new part numbers are as follows:-

Part number		No. off
C.15950	Cylinder block - 2.4 litre	1
C.15951	Cylinder block - 3.4 litre XK.150	1
NB131/35D	Oil filter bolt	1
NB131/13D	" " "	2
NB131/25D	" " "	1
C.15964	Oil sump 2.4 and 3.4 litre	1

Interchangeability

CYLINDER BLOCK

2.4 litre

The new cylinder block C.15950 can be used to replace cylinder block C.8611 on engines with a pressed steel sump which have an external return pipe from the oil pressure relief valve.

3.4 litre and XK.150

The new cylinder block C.15951 is interchangeable with cylinder

/Cont'd...

block C8610/1 when used on the 3.4 litre and XK.150 models.

Note: The new cylinder block is NOT interchangeable with cylinder block C.8610/1 when used on Mark VII, Mark VIII and XK.140 models that is, engines with a vertical oil filter.

OIL SUMP

The new sump C.15964 can be used to replace pressed steel sumps C.9155 and C.12386 fitted to the 2.4 litre and 3.4 litre models but if it is required to fit an early type sump to engines after the above engine numbers it will be necessary to file the edge of the sump flange to clear the oil filter head casting.

Index Reference Section B ✓

CHECKING AUTOMATIC TRANSMISSION FLUID LEVEL - REVISED INSTRUCTIONS

Models affected

All cars fitted with Automatic Transmission.

To obtain a more accurate reading, the following method of checking the automatic transmission fluid level is now recommended.

1. Remove the cover plate from beneath the floor carpet to expose the dipstick. Clean the area around the dipstick hole.

2. With the car on a level floor, set the hand brake firmly. Set the selector lever in the P position and start engine. With the footbrake applied move the selector level to L and raise the transmission fluid temperature by running the engine at 800 r.p.m. for 2 or 3 minutes.

3. Remove the dipstick and wipe it dry. With the foot still on the brake and the selector lever at L run the engine at its normal idling speed and check the fluid level. Add sufficient fluid to bring the level up to the "Full" mark on the dipstick. DO NOT OVERFILL. The space between the "Full" and "Low" marks on the dipstick represents approximately one pint.

Index Reference Section FF

SHELL AND B.P. AUTOMATIC TRANSMISSION FLUIDS - NEW SPECIFICATION

Models affected

All cars fitted with Automatic Transmission

The two following new automatic transmission fluids are now in production.

Shell, Donax T6 - AQ/ATF/844A

BP Energol ATF Type A Suffix A - AQ/ATF/1020A

These two fluids are much lighter in colour than the previous type fluids being similar colour to engine oil. They can, however, be mixed with the other Automatic fluids that we recommend.

Index Reference Section FF ✓

MAY, 1959

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.267

25 AMP DYNAMO AND NEW VOLTAGE/CURRENT REGULATOR

Models affected	Commencing Chassis numbers	
	R.H. Drive	L.H. Drive
2.4 litre	913953	943437
3.4 litre	977762	992494
XK.150 Open 2-seater	-	832088
Drop Head Coupe	827273	838259
Fixed Head Coupe	824900	836222
Mark 1X	771237	790713

On cars with the above chassis numbers and onwards a 25 amp output dynamo and voltage/current regulator with a revised current setting are fitted.

The details are as follows:-

	2.4 litre	3.4 litre	XK.150	Mark 1X
Dynamo				
Jaguar part number	C.15256	C.15255	C.15255	C.15254
Lucas type	C45-PV-6	C45-PVS-6	C45-PVS-6	C45-PVS-6
Lucas part number	22489D	22496A	22496A	22528D
Voltage/current regulator				
Jaguar part number	C.15257	C.15257	C.15257	C.15257
Lucas type	RB.310	RB.310	RB.310	RB.310
Lucas part number	37297.F	37297.F	37297.F	37297.F

The revised current setting of the new voltage regulator is as follows:-

24 to 26 amperes at 4,000 dynamo r.p.m.

Interchangeability

(i) The new voltage/current regulator is not interchangeable with the previous type fitted.

(ii) The new 25 amp dynamo can be used to replace the previous type fitted.

Index Reference Section P ✓

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

S ERVICE BULLETIN NO. 268

VARIOUS SERVICING ITEMS

ELECTRIC REVOLUTION COUNTER - INTRODUCTION

Models affected	Commencing Chassis numbers	
	R.H. Drive	L.H. Drive
2.4 litre	915214	943590
3.4 litre	977860	992652
XK.150 Open 2-seater	820043	832088
Fixed Head Coupe	824905	836233
Drop Head Coupe	827373	838272
Mark IX	771820	791072

On cars with the above chassis numbers and onwards plus certain individual cars prior to these numbers an electrically operated revolution counter replaces the cable operated type.

The revolution counter instrument is energised by a small generator driven from the rear of the inlet camshaft. As the generator drive and mounting at the rear of the cylinder head is different to that for the right-angle cable drive, the cylinder head, inlet camshaft, inlet camshaft cover and gasket are modified to suit the new arrangement.

The details are as follows:-

	2.4 litre 3.4 litre	Mark IX	XK.150
Electric Rev. Counter Instrument with Clock	C.14993	C.14995	C.14994
Harness for Electric Revolution Counter	C.15268	C.15268	C.15269
Revolution Counter Generator	C.14996	C.14996	C.14996
Driving Haw	C.14989	C.14989	C.14989
Plate Washer	C.15918	C.15918	C.15918
Lock Washer (3 off)	C.15919	C.15919	C.15919
'O' Ring	C.14990	C.14990	C.14990
Setscrews (3 off)	C.14992	C.14992	C.14992
Cylinder Head	C.14955(2.4 litre) C.14956(3.4 litre)	C.14958	C.14956(XK.150) C.14957(XK.150'S')
Inlet Camshaft Cover	C.14987	C.14987	C.14987
Inlet Camshaft Cover Gasket	C.14988	C.14988	C.14988
Neoprene Sealing Ring	C.14991	C.14991	C.14991
Rear Bearing Cap	C.14984	C.14984	C.14984
Inlet Camshaft	C.14986(2.4 litre) C.14985(3.4 litre)	C.14985	C.14985

Interchangeability

Note that the new inlet camshafts detailed above are interchangeable with the previous types but the earlier type camshafts must NOT be fitted to cars with an electric revolution counter.

Index Reference Sections B and P

CHANGING BRAKE DISCS

Models affected

Cars fitted with disc brakes

There have been a number of cases of brake discs having been changed in the mistaken belief that they have been cracked. On examination the suspected crack has been found to be a grinding mark or a corrosion mark at a point where the handbrake pad has stopped against the disc.

/Cont'd...

Of the discs returned to us for examination not one has been found to be cracked.

Index Reference Section L ✓

REAR SPRING INTERLEAVING

Models affected

Mark VIII
Mark IX
XK.150

If on cars with nylon interleaved rear springs (see Service Bulletin No. 249) it is found that the interleaving has a tendency to work out from between the spring leaves, the ends of each rear spring should be bound with plastic or similar tape from the spring eyes to a point just short of the adjacent clip.

Index Reference Section K ✓

CLUTCH SLAVE CYLINDER BRACKET - STRENGTHENED TYPE

Models affected	Commencing Chassis numbers R.H. Drive	L.H. Drive
Mark IX	771823	791081
XK.150 Open 2-seater	820043	832089
Fixed Head Coupe	824903	836227
Drop Head Coupe	827379	838273

On cars with the above chassis numbers and onwards a stronger type of clutch slave cylinder bracket is fitted. The new part numbers are as follows:-

	Part number
Mark IX	C.15706
XK.150	C.15709

Service Procedure

If, on cars prior to the above numbers, a case of the clutch not disengaging is experienced when the normal pedal adjustment is correct, an examination should be made to ascertain if the clutch slave cylinder mounting bracket is flexing when the clutch pedal is fully depressed.

If this is found to be so, a strengthened type of bracket should be fitted.

Index Reference Section E ✓

Addition to Service Bulletin No. 255

With the introduction of the 12-bladed fan on Home market 2.4 litre cars add the following commencing chassis number under the heading "12-bladed Fan - Introduction" -------- R.H. Drive
915349 ✓

Amendment to Service Bulletin No. 265

Amend the part numbers of the Rear caliper assembly for the 2.4 and 3.4 litre models to read as follows:-

Rear Caliper Assembly - right hand C.15646 and not C.14894 ✓
- left hand C.15647 and not C.14895

OCTOBER, 1959

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 269

VARIOUS SERVICING ITEMS

$6\frac{7}{8}$" VACUUM SERVO - DIFFERENCE BETWEEN DRUM AND DISC BRAKE TYPE

Models affected

Cars fitted with $6\frac{7}{8}$" diameter servo.

It will be noted that the $6\frac{7}{8}$" servo unit used in conjunction with drum brakes varies from the unit used with disc brakes.

The only difference between the two servo's is that units used in conjunction with drum brakes incorporate a check valve (item 53a, Plate AW in the 2.4 litre Spare Parts Catalogue) and a rubber seat in the adaptor at the end of the slave cylinder whereas units for use with disc brakes do not have these parts fitted.

Note: On early units the check valve was incorporated in a separate housing as shown in Fig.39 of Section L - 2.4/3.4 litre Service Manual.

Index Reference Section L

REAR AXLE NOISE DIAGNOSIS

Models affected

All models

There have been several instances of noise attributed to the rear axle, having in actual fact been due to one of the following causes.

1. Wind noise from roof-rack.

   Re-test with rack removed.

2. Tread noise from non-standard tyres.

   Re-test with standard tyres fitted.

3. Noises being conducted through sliding roof drain tubes (in rear wheel arches). Mark VII, VIII and IX models

   Re-test with drain tubes blanked off with corks. (Remove corks after test).

Index Reference Section H

POWER STEERING RESERVOIR DIPSTICK

Models affected

Mark VIII and Mark IX cars fitted with power-assisted steering

The reservoir dipstick fitted to early power-assisted cars is marked "Use 10 W oil". This should be disregarded and only one of the recommended Automatic Transmission fluids used in the system.

Index Reference Section I

/Cont'd...

POWER STEERING UNIT - TOP OIL SEAL REPLACEMENT

Models affected

Cars fitted with power-assisted steering

When removing the top end plate of the steering unit to replace the oil seal it is ESSENTIAL that the flange of the top adjustable ball race (Item 18, Plate CC of the Mark VIII Spare Parts Catalogue) is not allowed to lift otherwise the loose balls which form the upper ball race will drop into the box.

When refitting the top end plate, cover the serrations of the input shaft with cellulose tape or thin paper in order not to damage the lip of the seal.

Remove all traces of the tape or paper after the top end plate has been secured.

Index Reference Section I

FLUID LEAKAGE FROM AUTOMATIC TRANSMISSION UNIT

Models affected

Cars fitted with Automatic Transmission

Cases of fluid leakage from the transmission brought to our notice, have in most instances been caused by incorrect servicing such as neglecting to observe torque specifications or instructions regarding the use of new gaskets and washers.

As even slight leakage is likely to be accentuated by the high pressures under operational conditions, a considerable amount of fluid will be lost in a very short time. It is emphasized that any loss of fluid in excess of two pints (1 litre) will cause slip of the friction bands and clutches with risk of serious damage to the transmission.

It is imperative, therefore, that any cases of fluid loss reported is rectified without delay.

Index Reference Section FF

HIGH SETTING THERMOSTATS

Models affected

2.4 litre
3.4 litre
Mark 1X
XK.150

Special high temperature thermostats are available for countries where extreme winter conditions prevail. The details are as follows:

	Part Number	Opening Temperature
2.4 litre, 3.4 litre	C.13944/1	80/85° C.
Mark 1X, XK.150	C.12867/1	80/85° C.

Index Reference Section D

OCTOBER, 1959

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.270

VARIOUS SERVICING ITEMS

$6\frac{7}{8}$" SERVO - INTRODUCTION OF CUP SPREADER

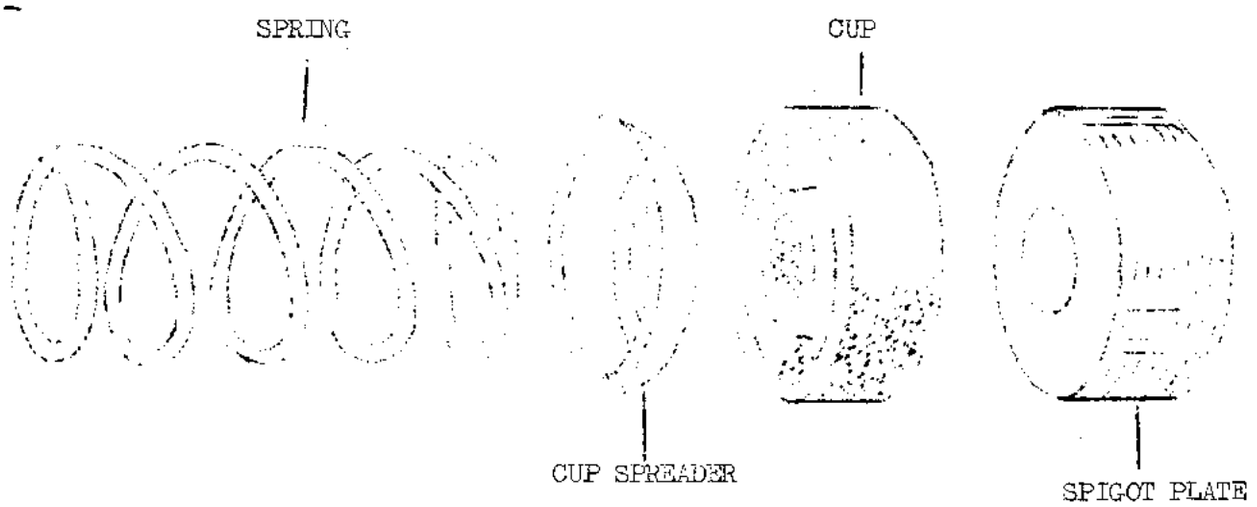
Models affected

Cars fitted with $6\frac{7}{8}$" diameter servo unit

Current production servo units are fitted with a cup spreader in the slave cylinder.

This cup spreader (Part No. 7896) will be included in future repair kits and should be incorporated in all servo units undergoing overhaul.

The spreader is fitted between the cup and spring (Items 60 and 49 in Fig.41 of Section L, 2.4/3.4 litre Service Manual) with the concave side towards the spring. (See sketch).



Index Reference Section L

GIRLING HYDRAULIC DAMPER - MODIFIED TYPE

Model affected	Commencing Chassis Numbers	
	R.H. Drive	L.H. Drive
Mark IX	772081	791442

On cars with the above chassis numbers and onwards modified hydraulic dampers are fitted at the front. These dampers are of the C.S.V. type and give consistent damping at all operating temperatures.

The part number is as follows:-

Front damper C.15999 2 off

Interchangeability

The new dampers are interchangeable with the previous type in pairs.

Index Reference Section J

HANDBRAKE ASSEMBLY - MODIFIED TYPE

Model affected	Commencing Chassis Numbers	
	R.H. Drive	L.H. Drive
Mark IX	772085	791445

On cars with the above chassis numbers and onwards rear calipers with modified handbrakes are fitted.

The handbrakes are of a stronger section and incorporate M.34 type handbrake pads of the quick change type. A brass retractor is now fitted to each handbrake to keep the handbrake pads clear of the disc when the handbrake is in the "off" position.

The part numbers are as follows:-

Rear Caliper assembly - right hand	C.15860
Rear Caliper assembly - left hand	C.15861
Right Hand Handbrake assembly	C.15858
Left Hand Handbrake assembly	C.15859
Right Hand Inner Pad Carrier	8022
Right Hand Outer Pad Carrier	8023
Left Hand Inner Pad Carrier	8025
Left Hand Outer Pad Carrier	8026
Operating Lever	8024
Handbrake Repair Kit (set of pads and fixings)	8021

Interchangeability

The new type handbrakes are not interchangeable with the previous type.

Spares Bulletin K.16 refers.

Index Reference Section L

JAGUAR
SERVICE AND SPARES ORGANISATION

SERVICE BULLETIN No. 271

Tuning Data
2·4 litre and 3·4 litre (Mark 1) Models

2·4 litre (Mark 1) Model

COMPRESSION RATIO	TYPE OF CYLINDER HEAD	CAM LIFT	EXHAUST SYSTEM	CARBURETTER TYPE	CARBURETTER SETTINGS	DISTRIBUTOR		DISTRIBUTOR CONTACT BREAKER GAP	STATIC IGNITION TIMING	CHAMPION SPARKING PLUG TYPE & GAP	
						Jaguar Part Number	Lucas Service Number			Touring	Racing
7 to 1	Standard (Silver Top)	⅜"	Single	Solex 23 mm Choke	Main Jet 110 Air Correction Jet 200 Pump Jet 55	C8789	40557A*	.014"-.016"	4° BTDC*	L.7 (.030")	L.5 (.030")
8 to 1	Standard (Silver Top)	⅜"	Single	Solex 24 mm Choke	Main Jet 110 Air Correction Jet 180 Pump Jet 55	C11903	40528A	.014"-.016"	6° BTDC	N.5 (.030")	N. 3 (.030")
8 to 1 Stage 1 Tuning	Standard (Silver Top)	⅜"	Single Straight Through	Solex 26 mm Choke	Main Jet 120 Air Correction Jet 190 Pump Jet 60	C11903	40528A	.014"-.016"	6° BTDC	N.5 (.025")	N.3 (.025")
8 to 1 Stage 2 Tuning	Standard (Silver Top)	½"	Single Straight Through	Solex 26 mm Choke	Main Jet 120 Air Correction Jet 190 Pump Jet 60	7068	40591A	.014"-.016"	8° BTDC	N.5 (.025)	N.3 (.025")
8 to 1 Stage 3 Tuning	'B' Type (Light blue top)	½"	Twin	S.U. HD. 6 1¾" bore	T.O. Needles.	C13428	40584A	.014"-.016"	5° BTDC	N.5 (.025")	N.3 (.025")

*Early cars were fitted with the 8 to 1 compression ratio distributor 40528A and the ignition timing set at 1° B.T.D.C.

3·4 litre (Mark 1) Model

COMPRESSION RATIO	TYPE OF CYLINDER HEAD	CAM LIFT	EXHAUST SYSTEM	CARBURETTER TYPE	CARBURETTER NEEDLES		DISTRIBUTOR		DISTRIBUTOR CONTACT BREAKER GAP	STATIC IGNITION TIMING	CHAMPION SPARKING PLUG TYPE & GAP	
					with Wire mesh air cleaner	with Oil bath air cleaner	Jaguar Part Number	Lucas Service Number			Touring	Racing
7 to 1	'B' Type (Light blue top)	⅜"	Twin	S.U. HD. 6 1¾" bore	T.L.*	S.C.	C12733	40578A	.014"-.016"	TDC	L.7 (.025")	L.5 (.025")
8 to 1	'B' Type (Light blue top)	⅜"	Twin	S.U. HD. 6 1¾" bore	T.L.*	S.C.	C12732	40576A	.014"-.016"	2° BTDC	N.5 (.025)	N.3 (.025")
9 to 1	'B' Type (Light blue top)	⅜"	Twin	S.U. HD. 6 1¾" bore	T.L.*	S.C.	C14269	40617A	.014"-.016"	TDC	N.5 (.025")	N.3 (.025")

*L.B.I. needles fitted to early cars.

Index Reference: Sections B and C

NOVEMBER, 1959

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO. 273

VARIOUS SERVICING ITEMS

VEHICLE OPERATION ON MOTORWAYS

The following points should be brought to the notice of owners who are likely to operate their cars on the new motorways.

Speeds

Do not maintain an engine speed in excess of 5,000 r.p.m. for any length of time.

Occasionally, release accelerator slightly and allow car to overrun for a few seconds.

Oil Pressure and Water Temperature Gauges

Occasionally check if the oil pressure and water temperature are normal, although there may be slight variations from normal after a long period of sustained high speed driving.

Tyre Pressures

Tyres should be inflated to a pressure of 6 lbs per sq. in above normal for sustained high speed driving (as already recommended in the Operating Handbooks).

Winter Grip Tyres

Although the advice of the particular tyre manufacturer should be taken on the question of maximum speeds with these types of tyre it is generally recommended that speeds in excess of 85 m.p.h. should not be maintained.

Index Reference Section Q

CLAYTON DI'ANDRE SERVO UNIT - IMPORTANCE OF FITTING PISTON ROD

Models affected

Mark VII
Mark VIII

With reference to Service Bulletin No.260 and the introduction of the new repair kit Part No. 7876, it is pointed out that the piston rod (Part No. 1771) included in the kit must be fitted in conjunction with the new seals when overhauling the unit, even if the existing piston rod appears to be serviceable.

Index Reference Section L

STICKING FORWARD SERVO

Models affected

All cars fitted with Automatic Transmission

Symptoms

Car drives forward in Neutral, transmission drags in Reverse, normal operation in D and L selector positions.

Action

The reason for a sticking servo is not always obvious but the following action will normally effect a cure:-

(1) Ensure that there are no burrs or ragged edges on the outside diameter of the piston.

(2) If bore of servo is rough, polish with fine emery cloth.

(3) Inspect hole in centre of the steel servo plate. Ensure that the piston moves freely in the hole which should have a smooth finish.

(4) Refit servo, tightening bolts to a torque of 15/18 lbs ft.

(5) Check forward and low band adjustments.

Index Reference Section FF

OVERDRIVE OPERATION

Models affected

Cars fitted with an overdrive

In the Mark 2 Operating Handbooks it is recommended that the overdrive should not be brought into operation at high speed with a wide throttle opening. The accelerator should be momentarily released when engaging the overdrive otherwise the cone clutch may stick and cause the overdrive to remain in engagement even though switched "out" and when in gears other than top.

This also applies to other overdrive models and as the new instructions appear to contradict the previous ones they should be brought to the notice of all service personnel.

Note: If the overdrive does not disengage at anytime, do not reverse the car otherwise damage may be caused to the unit. On some occasions it may be possible to disengage the cone clutch by tapping the cast iron brake ring, which is sandwiched between the front and rear casing of the overdrive, with a block of wood.

Index Reference Section F

NOVEMBER, 1959

J A G U A R

S E R V I C E A N D S P A R E S O R G A N I S A T I O N

SERVICE BULLETIN NO.274

VARIOUS SERVICING ITEMS

LACK OF SERVO ASSISTANCE

Models affected

3.4 litre
Mark VIII
XK.150

If on cars with the vacuum check valve in the underside of the inlet manifold (see Fig.17, 2.4/3.4 litre Service Manual) lack of servo assistance is experienced, the valve seal should be removed and examined for signs of swelling or hardening. If faulty, a replacement seal should be fitted.

Other causes of lack of servo assistance are:

(i) Servo breather blocked.
(ii) Vacuum hose(s) blocked.
(iii) Dry vacuum piston leather in servo unit.

Index Reference Section L

FITTING SNOW CHAINS - PRECAUTIONS

Models affected

Cars fitted with Disc Brakes

On cars fitted with disc brakes, strap-on type snow chains must not be fitted as the straps will foul the caliper bridge pipe. However, chains which fit completely around the periphery of the tyre can be used provided that the rear wing valances are removed.

Index Reference Section M

DRAIN HOLES IN NEW TYPE REAR LAMPS

Models affected

Cars with new type tail lamps

A certain number of 1960 cars with the new type rear lamps (with separate flasher and tail light bulbs) were sent out of the factory without the drain holes in the bottom of the lamp lens.

Cars in stock or cars coming in for servicing should be checked for having two holes drilled in the bottom of the rear lamp lens. If not so drilled, two holes should be made in the bottom of the lens as shown in the sketch overleaf.

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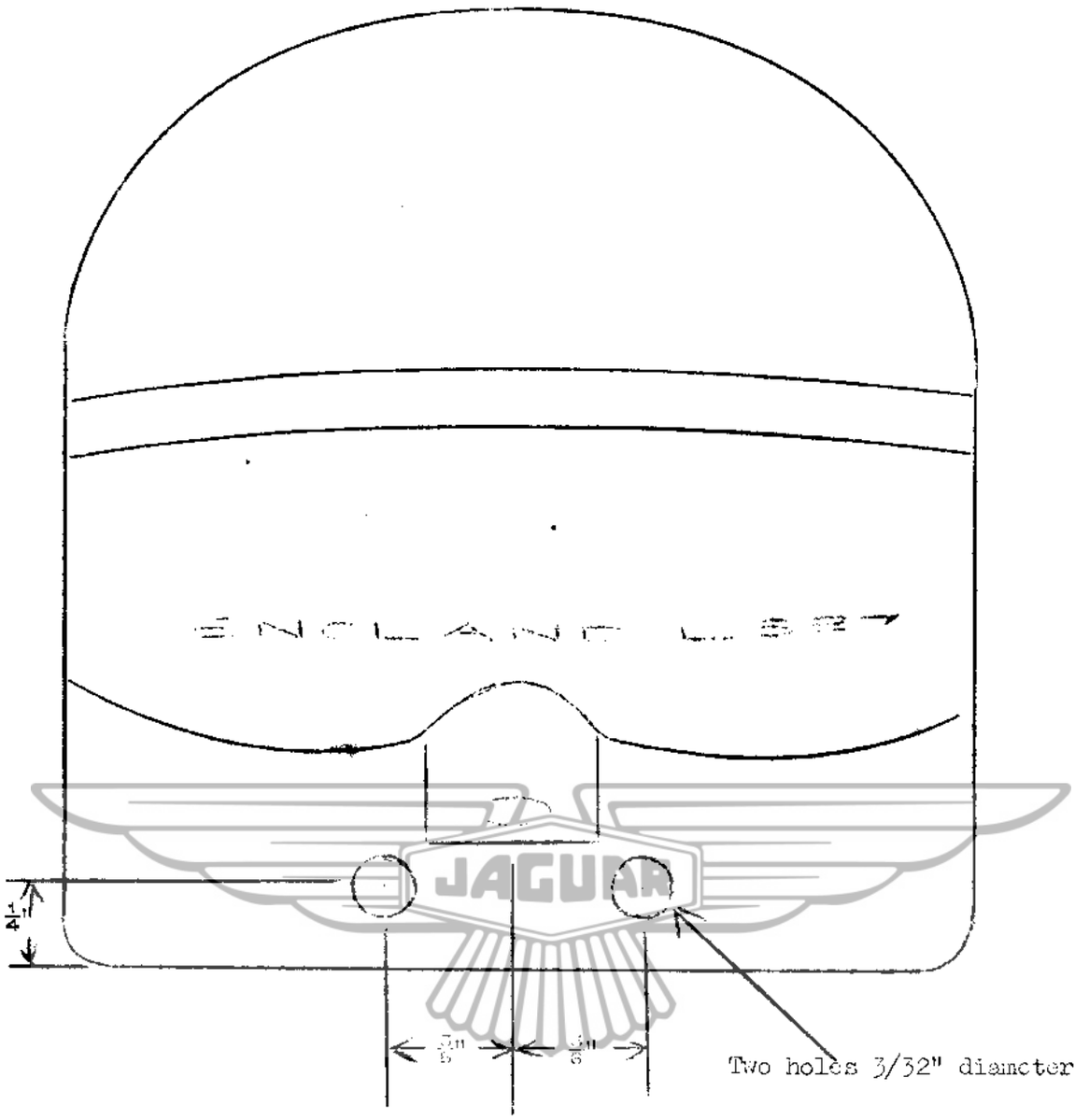

Index Reference Section P

TWIN LIP OIL SEAL - INTRODUCTION

Models affected	Commencing chassis numbers R.H. Drive	L.H. Drive
Mark 1X	773282	792295

On cars with the above chassis numbers and onwards a twin lipped oil seal (Part number 8216) is fitted at the top of the power steering unit (Item 25 Plate CC in the Mark V111 Spare Parts Catalogue).

The twin lipped oil seal can be used to replace the previous type of seal 7588 but attention is drawn to the instructions given in Service Bulletin No.269 page 2. The seal must be fitted with the circular spring facing the steering unit.

A dust shield (Part number C.16396) should be fitted in conjunction with the twin lipped seal.

This is fitted over the wormshaft, concave side downwards, and should be tapped down the shaft with a tubular punch until the top face of the shield is 1.5/16" (33.5 mm) below the top of the wormshaft.

Index Reference Section I

NOVEMBER, 1959

JAGUAR

SERVICE AND SPARES ORGANISATION

SERVICE BULLETIN NO.275

HYDRAULIC BRAKE FLUIDS - IMPORTANT

The absolute importance of adhering to the instructions already given on the subject of hydraulic brake fluids is once again stressed and we will appreciate your bringing the following instructions to the notice of any of your staff who have anything to do with the servicing of the braking systems on Jaguar cars.

1. Use ONLY the recommended grades of brake fluids, as listed hereunder:

   Wakefield Crimson Hydraulic Brake Fluid.)
   Lockheed No. 102 Heavy Duty Brake Fluid.) Preferred fluids

   Delco Special No.11 Brake Fluid)
   Chrysler MS 3511 Brake Fluid.) Alternatives if preferred
   Wagner 21B Brake Fluid) fluids not available.

   In countries where the above fluids are unobtainable use only a recognised brake fluid guaranteed to conform to the S.A.E. Specification 70 R.1

2. Great care must be taken that any container that is used either for the purpose of topping-up the reservoir or during the bleeding operation is perfectly clean and must not have previously contained any form of mineral oil that is, engine oil or paraffin etc.,

   Containers used for these purposes must be cleaned only with methylated spirits. If this is not available, clear petrol should be used and the container thoroughly dried out and then rinsed with new brake fluid.

3. Brake fluid must in no circumstances be stored in containers which are left open to the atmosphere since the brake fluid can absorb water from the atmosphere with consequent reduction in boiling point.

4. It is preferable that brake fluid stocks should be held in small sealed containers, that is, ½ pint, 1 pint or 1 quart tins so that there is no likelihood of small quantities being used from containers that have been standing with only a small quantity in them.

5. Clean the exterior of brake units such as master cylinders, wheel cylinders with petrol and not paraffin. Bear in mind when handling such units that cleanliness is of vital importance.

6. When dismantling brake units for overhaul or seal replacement do so on a bench free from any possible mineral oil contamination. Use a shallow tray kept solely for this purpose. Clean tray after use as described in paragraph 2 and use only one of the recommended brake fluids for cleaning internal parts.

7. Before removing the reservoir filler cap carefully clean the area around the cap with a clean non-fluffy rag and avoid the possibility of dirt or fluff entering the reservoir when the filler cap is removed.

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8. Please impress on your staff that a high percentage of brake troubles arise through carelessness in servicing hydraulic systems and that if the above precautions are taken the possibility of such troubles occuring can be greatly reduced.

Index Reference Section L

EXHAUST SILENCERS AND TAILPIPES

Models affected

Mark Vlll
Mark 1X
XK.150

Cars now in production have the tailpipes clipped to the silencers instead of being welded.

The new silencers (Part numbers unchanged) have saw cuts at the end of exit pipes which are of increased length to take the tailpipes.

The new silencers can be used to replace the previous welded type and the original tailpipe clipped to the silencer with the following parts:

Part number		No. off
C.13063	Clip	1
UFB131/22R	Bolt	1
FW105T	Washer	2
UFN131/L	Nut	1

When separating the old silencer from the tailpipe cut through the tailpipe immediately behind the point where it is welded to the silencer.

Index Reference Section M

JAGUAR

SERVICE AND SPARES ORGANISATION

SERVICE BULLETIN NO.276

VARIOUS SERVICING ITEMS

BRAKE FLUID LEVEL WARNING LIGHT CONVERSION

Models affected

2.4 litre Mark 1 cars with disc brakes
3.4 litre Mark 1 cars with disc brakes

This conversion is made available following a number of requests from Mark 1 2.4 litre and 3.4 litre owners for a similar brake fluid level warning device to that fitted to the Mark 2 models. This conversion does not incorporate the handbrake warning and it is suggested that as a check on the bulb, the float pin on the top of reservoir filler cap should be occasionally depressed when the bulb should light up.

Parts required:-

	Jaguar Part No.	Lucas Part No.
Warning light	C.16178	-
Escutcheon	C.16183	-
Bracket	C.16184	-
Filler cap	C.16177	-
"Lucar" connectors (female) 2 off	8193	54942078
Insulating sleeve 2 off	8194	5419004Z
Double snap connector (2.4 litre only)	3570	851868
Bullets	3585	900269

Modification to Glovebox

Remove the glovebox on the drivers side of the car (described on page P.40 of Section P, 2.4/3.4 litre Service Manual).

Make a 1.9/32" (32.5 mm) hole in a suitable position to take the warning light.

Fit the warning light bracket (C.16184) into the hole just made and secure with two wood screws.

From the rear of the escutcheon scrape off the word "Handbrake" and fill in with black cellulose.

Fit the warning light holder to the bracket and secure with the bezel and escutcheon from the front face of the glovebox.

Remove the existing filler cap from the brake fluid reservoir. If the fluid level is higher than 1¼" from the top of the filler neck drain the fluid by disconnecting pipe until the level is at this figure; this will allow for displacement of the float attached to the new filler cap. Fit the new filler cap and float (C.16177) to the existing reservoir.

Note: It may be necessary to lower the reservoir in its clip to ensure clearance between the filler cap and the bonnet.

Electrical Connections

Remove the dash casing.

1. On the 2.4 litre model fit a double snap connector in place of the single connector which feeds the mixture control warning light.

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