# SERVICE BULLETIN

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	UALUF	IN	
Cylinder head type	'B' type	'B' type	'B' type
Cam lift	5/16"	3 <sub>8</sub> n	<u>3</u> 11
Bore	3.2677"(83 mm)	3.2677"(83 mm)	3.425"(87 mm)
Sparking plug type 7:1 comp. ratio 8:1 comp. ratio 9:1 comp. ratio	Champion L.7 Champion N.5	Champion L.7 Champion N.5 Champion N.5	Champion N.5 Champion N.5 Champion N.5
Sparking plug gap	.025"	.025"	.025"
Ignition timing 7:1 comp. ratio 8:1 comp. ratio 9:1 comp. ratio	6° B.T.D.C. 8° B.T.D.C.	7.D.C. 2° B.T.D.C. T.D.C.	T.D.C. 4 B.T.D.C. 5 B.T.D.C.
Valve seat angle Inlet and exhaust	45 <sup>0</sup>	45°	45°
Carburetter needles 7:1 comp. ratio 8:1 comp. ratio 9:1 comp. ratio	=	S.C. S.C. S.C.	T.X. S.C. S.C.

	2.4 litre Mark 2	3.4 litre Mark 2	3.8 litre Mark 2
STEERING Castor angle Camber angle	0° ± ±° 3° ± ±°pos	0° ± 4° 3° ± 4° pos	0° ± 1° 3° + 1° 4° pos
TRACK			
Disc wheels - front	41 7"	41 7"	41 7"
- rear	4' 58"	4 58"	41 5番"
Wire wheels - front	4' 7½"	4' 72"	4" 72"
- rear	4° 61°	4 61 m	4" 6 <del>1</del> "

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.

# JAGUAR

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 VII, VIII, 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 conjunction with 7657 oil seal remove			n
J.6	Front suspension coil spring compressor	6.	10.	0
J.7	Hub puller (Centre lock wire wheel type)	8.	7• 0• 9•	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

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.	2	Price	
6	Pressure gauge rig Band Adjuster Spline Adjustment fixture Converter Alignment flange Universal puller Puller Plate Rear Bearing Adaptor rings " ")	J.4270 J.4285 J.4283 J.4286 HM.925 J.12986	BW.1 BWA 2B BW.5 BW.3 BW.55 BW.55	1.		0.
	Mainshaft end float gauge Ring gear retaining clip Transmission Pilot Studs Mainshaft Bearing replacer Spring retainer remover Governor shaft Setscrew wrench Piston installing pins	JAGUAR	BW.13 BW.14 BW.4 BW.7 BW.8 (set) BW.9 BW.10	1.	11. 7. 1. 15. 5.	0. 9. 9. 0. 6. 3.
	Clutch Assembly Tool Lubrication Valve Test Rod Bench cradle Drive flange oil seal replacer	handle)	BW.11 BW.12 BW.15 BW.16	2.	16. 6. 4. 13.	3. 5. 3. 9.
	" " Remover (use with Circlip pliers Oil seal driver handle	)) puller/ - -	BW•55/2 7065 550	1.	4. 19. 18.	0. 9. 0.

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

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

Sheet 1 (of 1)
Date February, 1961

SERVICE BULLETIN

#### 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	J.4
	adaptor.	
AB	2.4/3.4 litre and Mark 2 Gearbox rear oil seal	J.5
	removing adaptor	
	Note: Applicable to standard gearbox only and used	
	conjunction with 7657 oil seal removing tool.	
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

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.,

	<u>De</u>	scription	Original No.	Churchill No.
ABC	ø	Pressure gauge rig	J.4270	BW.1
ABC	ø	Band Adjuster	J.4285	BWA 2B
AB	6	Spline adjustment fixture	J.4283	BW.5
AB	6	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	IAR I	BW.10
A		Clutch Assembly Tool		BW.11
A		Lubrication Valve Test Rod	1/// -	BW.12
A		Bench Cradle	-	BW.15
A		Drive flange oil seal replacer u	se –	BW.16
		(use with 550 handl	e)	
A		Circlip pliers	-	7065
A		Oil seal driver handle	_	550

Those marked of 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

#### SERVICE BULLETIN

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

2.4 litre 3.4 litre 3.8 litre

#### Commencing chassis numbers

///\	R.H.	Drive	L.H.	Drive
////	10:	221+2	12	5520
III	15	151466		5683
	20	1087	21	2640

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.



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.

Number 4.6.

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.



# 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

 $32^{\circ} - 90^{\circ} \text{ F}$ 

Advanced Havoline 30

Winter

Below 32° F

Advanced Havoline 20W

Above 90° Tropical

Advanced

U.C.L.

Havoline 40 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

Multigrade Engine oil 3528

Texamatic

Fluid

Advanced Havoline

Special 10W/30 Jaguar Cars Limited 2005

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
- l Brake Master Cylinder Repair Kit
- l Clutch Master Cylinder Repair Kit
- l Cylinder Head Gasket
- l 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

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 1X )	Accumulator Piston Housing Remover - for 1½" piston	L.216
3.8 litre Mark 2 )	Accumulator Piston (1½" diameter) 'O' Ring Replacer	L.217
3.8 litre XK.150 )	Accumulator Piston Ring Compressor $(1\frac{1}{2})^n$ diameter)	L.218
Mark 10	Operating Piston Remover	L.300
Mark 10	Hydraulic Pressure Testing Equipmen	t L.301 <sup>+</sup>
POWER - ASSI	STED STEERING TOOLS	
Mark 2 models	Power steering piston assembly slee	ve L.9
Mark 10	Power steering piston assembly slee	ve J.19
Mark IX	*Hydraulic pressure gauge set	J.10
Mark 10 )	comprises:-	
Mark 2 models )	Gauge T. Adaptor Pipe	J.10/2 J.10/1 J.10/3
* See Ser	vice Bulletin No.II.5	

+ Consists of BW 1A and adaptor BW 38.

/cont'd.....

#### GENERAL TOOLS

5 stud hubs	∮ <sub>Hub Puller</sub>	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 'E' Type	Servo Vacuum gauge adaptor Servo Vacuum gauge adaptor Servo Vacuum gauge adaptor	J.12-1(early cars) J.12-2 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.	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).
Øs ama	ac I l B eveent for larger centre	

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.

### 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.

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.





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.

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).	A11	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 BENTON SNITTERFILMS



# SERVICE BULLETIN

Number A.28-26 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.

### 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

Page 1 of 1 Date September, 1966

# (All Models)

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

		New Oil	Replacing
ENCTAIR	(Castrol	Castrol XL20W/50	Castrolite or Castrol XL
ENGINE	(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/2O has now been deleted from the recommended Engine oil specification.

N. BENTEN.

# 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.

#### SERVICE BULLETIN

Number A.30 Section General Information

> Page 1 of 1 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.

JAGUAR

Number A.32 Section General Information

> Page 1 of 1 Date February, 1969

# 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.

### SERVICE AND SPARES ORGANISATION

#### SERVICE BULLETIN NO.211

#### ADVANCE SERVICING INFORMATION

#### 3.4 Litre Model.

#### GENERAL DATA

ENGINE.

Cylinder Head

Bore

"B" type

3.2677" (83 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 compression ratio

8 to 1 compression ratio

Champion L. 10.S. Champion N. 8.B.

Sparking Plug Gap.

.025" (.64 mm.)

Ignition Timing

8 to 1 compression ratio

7 to 1 compression ratio

2° F.T.D.C.

T.D.C.

Valve Clearances (cold)

Inlet

Exhaust

.004" (.10 mm.

.006" (

Valve Seat Angle

Inlet

Exhaust

45°

Carburetters

- type

- needles

- tuning

H.D.6.

LoBoto T. L.

See Service Bulletin No.200

CLUTCH.

Operation

Fluid

Hydraulic

Genuine Lockheed Hydraulic

Brake Fluid No.102 (to S.A.E.Spec

70-R1)

BRAKES

Type

Lockheed-vacuum servo assisted.

Self adjusting at both Front

and Rear.

Fluid

Genuine Lockheed Hydraulic Brake Fluid No.102 (to S.A.E.

Spec. 70-R1)

FRONT SUSPENSION AND STEERING

Camber angle

Front wheel alignment

 $\frac{10}{2}$  -  $1^{\circ}$  negative  $\frac{10}{2}$  -  $1^{\circ}$  positive

Parallel to 1/16" (1.59 mm)

toe in.

Continued on page 2.

REAR AXLE

Type 4HA

Ratio

Cars fitted with synchro-mesh gear box only 3.54 to 1
Cars fitted with an overdrive 3.77 to 1
(Overall ratio with overdrive engaged 2.93:1)
Cars fitted with automatic transmission 3.54 to 1

TYRES

Type Dunlop 6.00/6.40 x 15 Road Speed

Pressures

Front Rear

Normal\_driving 25 lbs.per sq.in 22 lbs per sq.in (1.76 kg/cm/2) (1.55 kg/cm<sup>2</sup>)

Fast touring (that is long distances at sustained speeds in region of 100 mpp.h.) with short bursts at maximum speed) 31 lbs per sq.in. 28 lbs per sq.in. (2.18 kg/cm<sup>2</sup>) (1.97 kg/cm<sup>2</sup>)

For when maximum speed capabilities are likely to be exploited to the full

34 lbs.per sq.in. 31 (2.39 kg/cm²) (2.

31 lbs.per sq.in. (2.18 kg/cm<sup>2</sup>)

#### CAPACITIES.

	Imperial.	U.S.	Litres
Engine - refill	11 pints 13 pints 2½ pints 4 pints 15 pints 3½ pints 22 pints 12 galls	13½ pints 15½ pints 3 pints 4½ pints 18 pints 4½ pints 26½ pints 14½ galls	6-4-2-12-2-2 12-2-2 22-2 54-2 12-2-2

# INTERNEDIATE SPEED HOLD. (fitted to Automatic Transmission Models)

A switch mounted on the facia provides a means for the driver to obtain a downshift from direct to intermediate gear without depressing the accelerator pedal and to retain the drive in the intermediate range. This will be found convenient for overtaking or when hill climbing.

With the switch in the "In" position no automatic upshift will take place between intermediate and direct drive; placing the switch lever in the "Cut" position will cause the transmission to shift to direct drive, provided the normal upshift speed has been obtained.

Warning: DO NOT allow the maximum permitted engine revolutions to be exceeded through allowing the "Intermediate Speed Hold" to remain in operation longer than necessary or by switching in the "hold" at speeds in excess of 75 m.p.h. (121 k.p.h.)

# SERVICE AND SPARES ORGANISATION

### SERVICE BULLETIN NO.211 A.

### ADVANCE INFORMATION ON SERVICING ITEMS.

Model affected

Commencing

3.4 litro

Engine No. KE.1001 <u>Ohassis No.</u> 970001 R.H.Drive 985001 L.H.Drive

Items which may be required to service 3.4 models are listed below.

The detail perts for the 3.4 litre cylinder head are as for the Mark Vill model (see Service Bulletin No.200A)

Part No.	Description	No per Unit.	Remarks.
	FNG INBIAGUAR		
C.12386	OIL SUIP ASSY:	1	
C.8595	Gasket, between Oil Sump and Cylinder Blocks	2 Halves	
0.9166	FILTER BASKET ASSY INSIDE OIL SUMP	1	
C.9171	COVER, AT BOTTOM OF OIL SUMP RETAINING FILTER BASKET.	1	žo.
0,9173	Gasket, at each side of Filter	2	*
NS.131/5D	Basket Screw, Set, securing Cover and filter	8	
fw.105/E	Basket to Oil Sump Washer (Copper) on Setscrews	8	
<b>0.128</b> 96	DIPSTICK ASSY, FOR OIL SUMP	1	
C.12532	OIL CLEANER ASSY	1	
		24	н
6144. 6145	Filter Head Assy (41032) Valve Seat (103127)	1	
6146	Circlip retaining Valve Seat	1	
6147	(175043) Clamping Plate (134282)	1	Continued on page 2.

		<b>-</b> 2 <b>-</b>	a a	
Par	rt No	Description	N••pe:	
		ENGINE (Continued.)	Unit	•
614	+8	Anchor Insert holding, Clamping Plate to Filter Head (103118)	1	
615		Drain Plug (103181)	1	
614 271		Washer on Drain Plug (150382) Relief Walve (118076)	1	
646	52	Spring for Relief Valve (160604)	1	
269	98	Union Scrow for connection of	1	
g: 63		Flexible Hose to Pressure Gauge (102256)		
524		Washer for Union Screw (4323)	1	
615	5	Sealing Ring between Filter Head and Canister (137366)	1	
615		Canister Assy (61871)	1	
615	59	Spring at pottom of Canister	1	
616	50	(160441) Plain Tasher at top of Spring (174660)	1	
616	51	Felt Washer under Fressure Flate (141251)	1	
616	52	Pressure Plate at bottom of Camister (134337)	1	
152		Element (FG.2306)	1	
615	00	Bolt, securing Janister to Filter Head (103183)	1	
615	8	Rubber Washer under head of Bolt	1	
616	53	(137367) Spring Ulip on Bolt (174966)	1	
	2534	Banjo for Connection of Mose to	1	
C. 1	12533	Oil Sump Solt, securing Bango to Filter	1	
	2.2	Head		
615		Washer at each side of Bango	2	
		Gasket, between Oil Cleaner and Cylinder Block.	2	
	F1 6-	O Bolt, securing Oil Cleaner to Cylinder Block. OD Bolt, securing Oil Cleaner to	1	
		Cylinder Block  D Bolt, securing Oil Bleaner to	2	
153	8 A	Cylinder Block.	2	
FW.10	05/E	Washer (Jopper) on Bolts, adjacent to Cylinder Block	4	
FW.10	05T	Washer (Steel) under head of Bolts	4	
0.123	382	HOSE, FROM CIL CLEANER TO OIL SUMP	1	
0.290	05/2	Clip, securing Mose	2	
0,123	381	BLANKING PLATE BETWEEN OIL CLEANER AND CYLLIDER BLOCK	1	
J.806	68	FLEXIBLE CIL PIPE PROM CIL CLEARER TO COPPER PIPE	1	
J.116	628	COPPER OIL PIPE BETVEEN PLEXIBLE PIPES	1	
C.101	110	FLEXIBLE CIL PIPE FROM JOPPER PIPE TO PRESSURE GAUGE ON INSTRUMENT PANEL	1	Continued on page 3.
				The Ford of

Part No.	Description	No.per Remarks.
	ENGINE (Continued.)	
0.12114	FLYWHEEL	1
O.12 <b>74</b> 6	HEATER RETURN PIPE AT REAR OF CYLINDER BLOCK	1
J.11818	Olip, securing Return Pipe to Exhaust Marifold Stud	1
0.11742	HOSE FROM REAR RETURN PIPE	1
0.2905/1	Olip, securing Hose	2
O <b>.</b> 4836	PRATER RETURN TIFE AT SIDE OF CYLINDER BLOCK	1
G•127 <b>4</b> 2	Clip, securing Front Return Pipe to Inlet Manifold Studs	2
BD•215/1	ELSO, HOSE FOR HEATER PIPE	1
<b>3.11730</b>	HOSE FOR REATER FRED ADAPTOR	
0.12391	FAN ASSEMBLY	1
0.2485/1	FLEXIBLE PIPE FOR BREATHER HOUSING (27" LONG)	
C•11480	BRACKET ASSY FOR L.H.FROWN ENGINE MOUNTING	1
J.11481	BRAJKET ASSI FOR R.H.FRONT ENGINE MOUNTING.	1
3.11757	LOVER BRACKET ASSY FOR MID ENGINE MOUNTING	1 Not required when Automatic Transmission is fitted.
0.10665	REV. COUNTER DRIVE SHAFT ON INLET CAMSHAFT	1
J <b>.1</b> 2339	REV. COUNTER ADAPTOR ON INLET CALSHAFT	1
J•10666	Screw, securing Rev. Counter Adaptor	r 2
C•9914	REV COUNTER GRARBOX	1
0.10667 0.11777	Gasket for Rev. Jounter Gearbox Screw, securing Gearbox	1 2
SD.1054	JYLINDER HEAD ASSY (Complete with Valves, Inserts, Guides, Springs, Tappets, Jamshafts, Rev. Jourter Gearbox, etc.)	1

Part No.		per nit	Remarks.
	EMGINE (Continued.)		
0.12012	EXHAUST WANIFOLD, FROMT	1	ė.
0.12013	EXHAUST ANIFOLD, REAR	1	ń.
J.12422	WATER CUTLET ELBOW	1	
0.12867	WATER THERMOSTAT IN CUTLET ELBOW	1	
J.12515	Bracket for anchoring of Throttle Return Spring	1	
0.13097	PETROL FEED PIPE ASSY LINKING CARBURETTURS	1	e .
C.12481	GRAKE SERVO VALVE (70149)	1	
0.12480 0.12482	Spring for Servo Valve (70150) Seat for Servo Valve (70332)	1	
0.12695	AIR CLEATER AID SILENCER	1	
0.12705	Stud for fixing of Air Oleaner	2 .	
0.12691	DRACKET ASSY, SUPPORTING AIR CLEANER OVER CYLLIDER FEAD	1	
0.12734	Wing Nut, securing Air Cleaner to Bracket.	2	
C.12694	RUBBER SEAL BETWEEN AIR CHARLER AND INTAKE PIPE	1	27 7426
0.12584	AIR INTAKE PIPE FOR AIR CLEANER	1	2
C.12648	HOSE BETWEEN AIR CLUBAER AND WING VALANCE	1	
0.2905/9	Olip, securing Hose	. 2	,
C.12225	STRAP ASSY FOR FIXING OF STARTER -	1	
0,12737	PIPE ASSY RETWEEN CLUTCH SLAVE CYLINDER AND FLEXIBLE MOSE	1	R.H.DRIVE CARS ONLY
0.12738	PIPE ASSY SMIWEEN CLUTCH SLAVE CYLINDER AND FLEXISLE HOSE.	1	L.H.DRIVE CARS ONLY.
0.12731	Bracket, securing Jlutch Pipe to Cylinder Head	1	
0.12477	OVERDRIVE UNIT, COMPLETE (28/1474)	1	SUPPLIED TO SPECIAL ORDER ONLY.
C.11837	Accumulator Spring (XN.4972)	1 Cont	inued on page 5.

Part No.	Description	No.per Unit.		Remarks.
		OHLU		
	ENGINE (Continued.)	e × e		
	AUTOMATIC TRANSMISSION UNIT.			
0.12523	AUTOMATIC TRANSMISSION ASSY, COMPLETE.	1		
C•12485	Stop Plate, restricting Rever Gear Operating Lever	rse 1		s S v
0.125553	CONVERTER HOUSING	1		***
C.12888	Support Bracket at R.H. side	of 1		
C.12889	Converter Housing Support Bracket at L.H.side	of 1		
C.13383	Converter Housing Lockwasher (Converter to Dri	wing 3		
	Plate.)		•	
C•12577	MOUNTING BRACKET UNDER GEARD EXTENSION	OX REAR 1		3
C.12578	REAR ENGINE MOUNTING BRACKET	ASSY 1	0.	
<b>d.</b> 12027	Spacer for Rear Engine Mount Bracket	ing 4		
C.12677	RUBBER MOUNTING, SUPPORTING AT REAR	engine 2		ar.
C•12890	MID ENGINE MOUNTING LINK	1		e*
5 <b>4</b> 22				, <sup>9</sup> ,
	ACCELERATOR CONTROLS.			
			921	8
C.12547	PIVOT STEADY	1	}	1
C-12545	CONTROL ROD ASSY. LOWER	1	)	R.H.DRIVE CARS ONLY
C.13395	Spacer for Control Shaft Mour Bracket	nting 2	}	th ex
			•	*
302	CONTROL ROD, UPPER	1	}	¥
C•12286	BELL CRANK ASSY	1	{	*
O.12322	CONTROL ROD ASSY, LOWER	1	{	milla to T T Tuins some
C.13307	AUGELERATOR PEDAL SHAFT ASSY	1	3	Fitted to L.H.Drive cars at Chassis No. 985312 and Subs.
C.13316	Distance Collar on Pedal Sha	ft 1	}	,
C•13308	Bearing Housing Assy on R.H. side of Scuttle	1	}	Continued on page 6

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Part No.	The state of the s	o.per	Remarks.
	ACCELERATOR CONTROLS (Continued	<u>1.</u> )	
	a *		
0.13310	LEVER ON CROSS SHAFT AND FOR	2)	66 (C
	RETURN SPRING	- }	
	*	)	
0.13355	Return Spring for Throttle	1 )	·
0.13305	PIVOT STEADY ASSY	1 (	
C•13387	BRACKET, MOUNTING ACCELERATOR PEDAL TO FLOOR	1 }	

# ACCELERATOR CONTROLS (For use when Automatic Transmission is fitted.)

0.12413	CONNECTING LINK ASSY	1 )	,
C.12408	BELL CRANK ASSY	1 {	Fitted to L.H.Drive Car.
0.12315	PIVOT STEADY	1	at Chassis No.
0.12322	CONTROL ROD ASSY, LOWER	1	985001BW tc 98503BW
C•12288	CONTROL ROD, UPPER	1 )	a e
C.12286	BELL URANK ASSY	1 }	
C.13314.	KICK-DOWN LEVER ASSY	1 \	Fitted to L.H.Drive Comat Chassis No.
0.13310	THROTTLE LEVER	1 }	985031BW and subs.
0.13305	PIVOT STEADY ASSY	1 2	
0.12322	CONTROL ROD ASSY, LOWER	1 2	
302	CONTROL ROD, UPPER	1 }	*
100 × 30 × 6			*
C.12547	PIVOT STEADY	1 )	9
0.12545	CONTROL ROD ASSY, LOWER	1 }	TO IN TARTITUDE OF THE
0.12413	CONNECTING LINK ASSY	1 (	R.H.DRIVE CARS ONLY.
C.12408	BELL CRANK ASSY	1 }	
	ii a	,	
G-12060	PROPELLOR SHAFT ASSY	1	For Standard cars only
0.12183	PROPELLER SHAFT ASSY	1	For cars fitted with Overdrive Unit.

Part No.	Description	No.per Unit.	Remarks.
	PROPELLER SHAFT (Continued.)	-	5
C.12155	FRONT PROPELLER SHAFT ASSY	1 }	
0.12156	REAR PROPELLER SHAFT ASSY	1 {	For cars fitted with nutomatic Transmission
0,12531	MOUNTING ABBY FOR PROPELLER SHAFT DENTRE BEARING	1 }	Unit.
	BRAKE CONTROLS		
0.12431	VACUUM PIPE ASSY, FROM BRAI SERVO UNIT TO INLET MANIFO		v v
O <sub>1</sub> 12884	HYDRAULIC PIPE ASSY, FROM 3-WAY ADAPTOR TO R.H.REAR CYLLINDER.	1 Wheel	z <sup>e</sup> z — w
0,12885	HYDRAULIJ PIPE ASSY, FROM 3-WAY ADAPTOR TO L.H.REAR CYLINDER		9 e **
	725		
	For use when Automatic Trans	smission is	fitted)
0.12589	HYDRAULIC PIPE ASSY, FROM ADAPTOR TO ANTI-CREEP SOLI		
0.12591	HYDRAULIC PIPE ASSY FROM AI OREEP SOLENOID TO 3-WAY AI		N <sub>E</sub>
C.13070 .	Cover Plate, blanking Clute Pedal hole in Pedal Housin		
C.8966	Return Spring for Brake Ped	lal 1	
C.13066 C.13062	BRAKE PEDAL PLATE ASSY BRAKE PEDAL PLATE ASSY	1 1	R.H.DRIVE CARS ONLY L.H.DRIVE CARS ONLY
<b>3.687</b> 6	RUBBER PAD FOR BRAKE PEDAL	1	ě
C.11881	BRAKE PEDAL	1	
	HANDERAKE JONTROL		ŝ
0.12838 0.13217	HANDBRAKE COMPENSATOR ASSY HANDBRAKE JOMPENS TOR ASSY		R.H.DRIVE CARS ONLY L.H.DRIVE CARS ONLY
J.12839	Cable from Cross Shaft Lever to Compensator	1	
0.12840 0.12841	Compensator Lever Compensator Tube	4 1	•
0.12842	Compensator Sleeve	1	

Part No.	Description	No.per Unit	Remarks.
	HANDBRAKE CONTROL (Conti	nued)	
C•2296/4 C•12843 C•12844 C•12845 C•12846	Copper Washer, betw Compensator Spring Compensator Bracket Compensator Bracket Cable, 17.5/8" long	1 1 1 , from 1	R.H.DRIVE CARS ONLY L.H.DRIVE CARS ONLY
C•12847	Compensator to Rea Backplate Cable, 25.11/16" lo Compensator to Rea	ng from 1	
UFB.125/12R C.8667/1 C.13218	Backplate Bolt, securing asse Compensator Nut, Self-Locking, Shim for Compensato	on Bolt 1	d.
J.105/11.5S FW.105/T L.103/7U C.13410	Clevis Pin, securing Cab Rear Brakes Washer, Plain, on Clevi Split Pin, retaining Cl Clip, securing Handorak Silencer Strap	s Pins 2 evis Pins 2	
O.12848	LEVER, FROM HANDBRAKE O SHAFT TO LINK	PERATING 1	
C.12849	FORK END FOR HANDBRAKE  CHASSIS	CABLE 1	
C•12585	FRONT SUSPENSION COIL S	PRING 2	
C•12186	PANHARD RCD ASSEMBLY	1	
0.12890	STABILISING LINK AT REA	ROF 1	5
C.12111	REAR AXLE ASSEMBLY (4HA (RATIO 3.77:1)	-001/26A) 1	For use when Overdrive Unit is fitted
C•11925	REAR AXLE ASSEMBLY (4HA (RATIO 3.54:1)	<b>-</b> 001/26) <b>1</b>	For use on Automatic and Standard Transmission cars
6975	REAR AXLE SHAFT (4HA-OC	5/24) 2	
C.12788 C.12789	R.H.REAR BRAKE ASSY (LO L.H.REAR BRAKE ASSY (LO	CKHEED) 1 CKHEED) 1	
0.12566	TYRE FOR ROAD WHEELS (I 'ROAD SPEED' 6.40 x 15		
C.12557	TUBE FOR TYRES (6.40 x	15) 5	*

Part No.	Description	No.per Unit	Remarks.
	CHASSIS (Continued)	. 4	
J.12672	RADIATOR BLOCK ASSY	1	,
C.12424	TOP WATER HOSE	1	
G.12630	BOTTOM WATER HOSE	1	
J <b>.</b> 12883	COWL, ON RADIATOR BLOCK, WATER PUMP FAN	AROUND 1	
C.12718	FRONT DOWN PIPE ASSY FOR SYSTEM	EXHAUST 1	7
C.1759	Flexible Pipe (12" 1	ong) 1	
C.12720	REAR DOWN PIPE ASSY FOR SYSTEM	EXHAUST 1	9
0 <del>2</del> 1759	Flexible Pipe (12" 1	ong) 1	
O.13063	Clip, securing Down Pipes Silencers	to 2	ï
0.12723	INNER TAIL PIPE FOR EXHA	UST 1	
C.12724	CUTER TAIL PIPE FOR EXHA	UST 1	
0.12717	TWIN SILENCER ASSY	1	æ
C.13225 C.13226 C.13227 C.13228	Single Silencer, Inn Single Silencer, Gut Strap, securing Sile Strap Assy, securing Silencers	er 1 ncers 3	
C•8397	RUBSER MCUNTING FOR SUSP OF TAIL PIPES END SILEN		
	HAND CONTROL FOR FUTOMAT TRANSMISSION UNIT	<u>ric</u>	a
G•12757	HAND CONTROL ASSY, COMPI	ÆTE 1	3 R %
C.12758 C.12759 C.12760 C.12761 C.12762 C.12764 C.12765	Support Plate, top Support Plate, Botto Bearing Collar Spacing Collar Support Bracket Assy Bearing Washer for I mounting Selector Gate	1 4 1	
G.12767 G.12771 R.102/6W G.12727 G.12772 R.102/6W	Operating Lever Assy Spring for Operating Rivet securing Sprin Spacer for Spring Hand Lever River, securing Hand	g Lever 1 ng 2 1 1 1 Lever 2	ontinued on page 10

Part No.		o.per nit	Remarks
2000	HAND CONTROL FOR AUTOMATIC TRANSMISSION UNIT (Conti	nued)	8
0.12773 J.103/3.5S	Link, operating Starter and Reverse Lights Switch Clevis Pin, securing Link		e g
0.12706	COVER FOR GEAR SELECTION (INS P.N.D.L.R.)		e <sub>us</sub>
0.13112 0.13117	Masking Plate under Cover Support Collar on Woodscrews	<b>1</b> 2	e e
0.12596	GEAR CONTROL CABLE	1	2
C.12586	Abutment Jlamp for Gear Jontr Cable	ol 1	
UCB.131/28R	Bolt, securing Abutment Clamp to Transmission Housing	1	9 *
C.12689	MOUNTING BRAJKET FOR GEAR CONTROL CABLE	1	es ( ,
C•12690	Locknut, securing Cable to Mounting Bracket	2	
C.12587	CONTROL JOINT BODY ATTACHED T SELECTOR LEVER	0 1	
0.13075	GEAR CONTROL END FITTING		
C.7071	Bush for attachment to End Fitting to Lever on Transmis Unit	1 sion	¥
	AUTOMOTIC TRANSMISSION KICK-DOWN CONTROLS	9	•
0.12409	UPPER JONTROL ROD	1 )	
0.6936 0.6925	Guide for Control Rod Spring for Kick-Down Contr•1 Rod	1 }	R.H.DRIVE CARS ONLY.
G.12611	inner cable assy for kijk-dow Control	3.5	FOR R.H.DRIVE CARS ONLY
0.12613	Nipple for Inner Cable	1 )	ψ.
C•12614	OUTER CABLE FOR KICK-DOWN CONTROL	1	R.H.DRIVE CARS ONLY
C.12588 C.10701 J.103/98	Lock-Pin for Inner Jable Jaw, for connection of Inner Cable to Gearbox Lever Clevis Pin for Jaw	1	***
0.12793 0.3880	Abutment for attachment of Outer Cable to Gearbox Abutment for attachment of	1	•
	Outer Cable to Carburetter L	ever Con	tinued on page 11

Part No.	Description	No.per Unit.	Remarks.
ž.	e 8		¥
	AUTOMSTIC TRANSMISSION KICK-DOWN CONTROLS (Continu	led)	
J•444±3	Abutment for attachment of Outer Cable	2)	
3.4.7745	TETOTE DOWNER DOWNER DOWNER	4 1	
U.13315	KICK-DOWN CONTROL ROD ASSY	1 )	
0.13309	Felt Washer on Kick-Down Roo	, )	
J.13356	LOWER JONTROL ROL ASSY	1 )	
0.13358	JONTROL LEVER FORK ASSY	1 )	L.H.DRIVE CARS ONLY
<b>0.</b> 6925 <b>0.</b> 13361	Raturn Spring for Kick-Down Washer, fixing Spring to For	1 ) ck 1 )	
	ELECTRICAL EXQUIPMENT	,	
O.12679	STARTER MOTOR (LUCAS 26140- M.45G/GC.70)	1	
0.12700	Adaptor lasy for Starter Sol	Lenoid 1	
C.12732	DISTRIBUTOR (EUJAS 40576/A-DMB3.6)	R	For 8:1 Jompression Ratio Engines
0.12733	DISTRIBUTOR		For 7:1 Compression Ratio Engines
0.8821	CONTROL ECK (LUCAS 37189/H-E		
0.12365 0.12366 .	Bracket Assy, mounting Control Cover for Control Box	rol Box 1	
C.12602	INSTRU-WINT PANEL ASSY (LUDAS 30224/A-GC.256)	3 1	,
J.12603	Auretor (36237/L-3M.A)	1	
0.13236	INSTRUMPME PANIAL ASSY	1	Fitted only to cars exported to U.S.A.
	Note: - Instrument Panel C.13 identical with Panel with the following ex	C.12602	e e
C.5577 C.8165	Lighting Switch Escutcheon for Lighting Switch	1	Replaces C.9117 Replaces C.9118
	All other items as for 2.4 I Instrument Panel 0.9634	litre	
0.12739	Special Washer for Instrumenting	nt 10	
0.12698	CHASSIS HURNESS (794200)	1 .	æ.
C•4636	Cable, Coil to Distributor (99:42)	1	Continued on page 12  Jaguar Cars Limited 2005

Part No.	Description	lo.per	Remarks.
	ELECTRICAL EQUIPMENT (Continue	Unit.	
0.1507	N 2		
C.4593	Jable, Jarburetter Solenoid to Thermostat (860268)	1	
0.12702	Jable, Solenoid to Starter (813728)	1	€
J <b>.</b> 12699	Jable, Starter Solenoid Connector (864537)	1	Not required when Automatic Transmission is fitted
O.12701	BATTERY CABLE (NEGATIVE) (810811)	1	φ
0.12425	Grownet, in Bulkhead, for Rev. Jounter	1	
C.13036	SPUEDOLETER (SLITH SN.6363/23) (Dali Research in Alles)	1	FOR 3.54:1 RATIO AXLE
O.13037	SPEEDO-STER (SPITH SH.6365/24) (G.LLERATED IN KILOS)	1	FOR 3.54:1 RATIO AXIE
J•12989	RELUTE COMTROL OPERATING TRIP LILLEAGE RECORDER OF SPEEDOWET	1 ER	$\overline{x}$
O.12606	REV. JOUNTER AND JLOOK. (RN. 7460	1	
O.12704	FLEXING REV. SOUTHR SASLE (DF.1190/00/13g)	AR)	
6284 6897	Inner Jable only (DI.1110/ Outer Jable only (DO.1110/	30/13 <sub>2</sub> ) 36/13 <sub>2</sub> )	1 1
C.8305	FLEXIBLE SPEEDOMETER CABLE (DF.1104/00/70)	1	e É uz e p <sup>a e</sup> ge
6272 6273	Inner Jable only (DI.1110/Cuter Jable only (DO.1104/	00/70) 00/70)	1 1
O.12605	OIL PRESSURE AND MATER TELLORAL GAUGE (GD.1600/02)	TUR <b>E</b>	1
3.12604	PHTROL GLUGE (FG. 26 /00)	1	
J.12741	HEATER FUED PIPE	1	
0.12745	HEATER RETURN PIPE	1	
C.12443	ELBOW HOSE FOR THATER	3	×
¥	ELECTRICAL EQUIP COT For cars fitted with Overdrive	Unit.	a
3.12748	ELECTRICAL BARNESS FOR RELAY SWITCH (864550)	1	L.H.DRIVE CARS ONLY
J.12749	ELECTRICAL HARNESS FOR RELAY SWITCH (864551)	1	R.H.DRIVE CARS ONLY
			Continued on page 13.

Part No.	Description No.	per Lt.	Remarks.
J.13038	SPEEDCRETER (SMITH SN.6363/19) (DELIBRATED IN MILES)	1	FOR 3.77:1 AXLE RATIO
C.13039	SPEEDCAFTER (SMITH SN.6363/20) (JALIBRATED IN KILOS)	1	FOR 3.77:1 AXLE RATIO
C•12756	FLEXIBLE SPEEDOWETER CABLE (DF.1104/00/78)	1	
6898 6899	Inner Table only (DI.1110/00 Outer Cable only (DO.1104/00		1
C.12750	ANTI-CREEP SCLENOID VALVE (LUCAS 76502/D)	5	1
O.12751	ANTI-JREEP PRESSURE JOHTROL SWIT (LUJAS 31393/A)	HCT	1
J.12752	SWITCH OPERATING REVERSE LIGHT / STARTER OUT-OUT (LUCAS 31680/A- 55.SA)	A7101 (2010) - A2000.	1
O•12791	BRAJKET FOR MOUNTING OF STARTER REVERSE SKITJHES	ŒMÀ	1
0.13111	Bracket for fixing of Starter/ Reverse Switch Bracket		1
C <sub>4</sub> 12740	SOLENOID OPERATING INTERMEDIATE GEAR CONTROL (LUCAS 76459/A)		1
0.12649	Washer for fixing of Solenoid		4
C.12743	HARMESS FOR MITI-CREEF SOLEMOID		1
C•13040	SPEEDCMETER (SWITH SN.6363/17) CALIBRETED IN MILES		1 For 3.54:1 AXLE RATIO
3.13041	SPREDOMETER (SHITH SN.6363/18) (CALIBRATED IN KILOS)		1 FOR 3.54:1 AXLE RATIO
J.12544	FLEXIBLE SPEEDONETER JUBLE (DF.1302/00/54)		1
6972 6973	Inner Jable only (DI.1314/On Outer Jable only (DO.1314/or		1
J <b>.</b> 12558	SHITCH FOR INTERNATIONATE GEAR CON	TROL	1
J.12570	Escutcheon for Switch		1

# Index Reference - Section 3.

#### JAGUER

# SIRVICE AND SPARES ORGANISATION

# SERVICE BULLETIN 10.212

# VARIOUS SERVICING ITELS

# RYAR ROAD SPRINGS - RUBER INTERLEAVED THEE

Models affected

Commencia Chassis Numbers R.F.Drive

Hark V11

L.H.Drive 750788

Mark V111

740195

750476

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 0.13109 are fitted with synthetic rubbers buttons between the soring leaves, and therefore no gaiters are fitted.

Interchangeability.

Rear Springs 0.13109 are interchangeable with the previous type

C.7914 but should be fitted in pairs.

Index Reference. Section K.

RADIATOR ASSEMBLE

Model affected 2.4 litre

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

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

2.4 litre

R.H.Drive 906949 L.H.Drive 942190

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 IB.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 vire 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

Mar's V111 cars fitted with ignition suppression 2.4 litre cars fitted with ignition suppression 3.4 litre cars fitted with ignition suppression

Note that the TarBZ 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.

#### SERVICE AND SPARES ORGANISATION

# SERVICE BULLETIN NO. 213

#### VARIOUS SERVICING ITEMS

# RADIATOR GRILLE AND APERTURE

# Model affected

3.4 Litre

Commencing Chassis Numbers L.H.Drive Only 985600

e j. L. . \* was a see a

On left-hand drive cars with the above chassis numbers and onwards the aperture for the radiator grille is slightly smaller and a modified grille is fitted to suit; the modified grille also has a five stud mounting as against the four stud mounting of the previous type.

Note: All right-hand drive cars are fitted with the latest conditions of radiator grille and front wings.

# Radiator Grille - Interchangeability

The two types of radiator grille are not interchangeable and should be fitted in accordance with the following details:

	Prior to Chassis No. 985600	On and after Chassis No. 985600
Radiator Grille Assy	BD.12472/19	BD.13161
Medallion	BD.12448	BD.12448
Medallion Backing Piece	BD.11499	BD.11499
Medallion Packing Piece	BD.12558	BD.12558
Medallion Boss Assy	BD.12472/1	BD.13160

## FRONT WINGS - SIRVICE REPLACEMENT PROCEDURE

For service replacements only the latest type of front wings with the small aperture will be supplied, and it will necessary carry out the following procedure, (on L.H.Drive cars prior to chassis No.985600) depending on whether one or both of the front wings are to be fitted.

#### One front wing only to be replaced

The half of the radiator grille aperture in the replacement front wing will have to be enlarged to suit the other front wing and the existing larger type radiator grille. Two new holes for the radiator grille mounting study will have to be drilled in the replacement wing.

# Both front wings to be replaced.

If the radiator grille is damaged and needs replacing, the latest type radiator grille (see Radiator Grille - Interchangeability) can be fitted without alteration to the wings.

If the radiator grille is not damaged and it is desired to refit it, the aperture will have to be enlarged and new holes drilled for the radiator grille studs.

The part numbers of the 3.4 litre front wings are as follows:-

371/196 Right-hand 371/197 Left-hand

Index Reference. Section N.

#### INTERMEDIATE SPEED HOLD SOLENOID

Model affected

Mark V111 Automatic Transmission

Model

Commencing Engine Number

N.7197

On automatic transmission cars with the above engine numbers and onwards a modified solenoid Part number C.12740 is fitted, replacing solenoid Part number C.12594.

Solenoid C.12740 has a three point mounting and a large diameter plunger whereas Solenoid C.12594 has a two point mounting and s small diameter plunger.

#### Interchangeability

Solenoid C.12740 is not interchangeable with the previous type C.12594.

Index Reference. Section FF.

# Amendment to Service Bulletin No.211A

On page 13 immediately above C.12750 Anti-Creep Solenoid Valve insert the heading:-

ELECTRICAL EQUIPMENT
For cars fitted with Automatic Transmission

# SERVICE AND SPARES ORGANISATION

### SERVICE BULLETIN NO. 214

# VARIOUS SERVICING ITEMS

# "J.S." SUFFIX GEAPBOX

# Models affected

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:-		602
C.11931	Front End Cover	1 J.L. and S.L. prefix ser
C.11934	Front End Cover Oil Seal	1 ) . II. and S. D. merix Ser
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
0.10201	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	4
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	Inrust Washer (.475"/.476" thick)	2) Mainshaft Gears
		× X
C.12178	Clutch Housing Assy	G.B. prefix series
C.11934	Clutch Housing Oil Seal	1)
202 (12)	W. 1. 1. U. O. H. 1.	
7.7 L		

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 NELDLES - 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

# PANEL VALANCE ASSELBLY - 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.

#### SERVICE. AND SPARES ORGANISATION

#### SERVICE BULLETIN NO. 246.

#### VARIOUS STRVICING INEMS

# HYDRAULIC CHAIN TIMSIONER FILITER.

Commencing Engine Number		
BC.1881		
KE.2705		
N.8252		
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 CRILLE 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.	2nd Type. ·
	(Brass)	(Die-cast) 524 BD.12745 - 524
Radiator grille frame	BD-12294	BD.12745 - Jan
Bonnet top motif	BD.12301	BD.14154
Jaguar mascot base.	BD.12717	BD.12253

#### Index Reference - Section N.

#### CARBURETTER INSULATING WASHER.

Model affected. 2.4 litre Commencing Engine Number.
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 WAR 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.

JAGUAR

WHELL 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 sheel 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 solit pin inserted in the nearest hole.

Adjustment of the rear wheel bearings is by shims between the flanges of the able 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 XX.150 model.

Index Reference - Section J. and H.

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#### JAGHAR

# SERVICE AND SPARES ORGANISATION

# STRVICE BULLTIN NO.217 VARIOUS SERVICING ITEMS.

# OIL FILTIR AND BLANKING PLATE - MODIFIED TYPE

Model affected.		Commencing	Engine	Number
	40	,		
2.4 litre		BC-225	56	
3.4 litre	27	KE.305	54	

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 RR	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	+
6883	Sealing ring between filter head and canister	1
6879	Spring for relief valve	1
6154	Dome nut retaining relief valve spring	4
6880	Washer under dome nut	4
C.12803	Blanking plate between filter head and	1
0.1200)	cylinder block	
C.13091	Casket at each side of blanking plate	2
NB.131/15D	Bolt (short) securing oil cleaner to	2
1.20.7.7.55	cylinder block	
C.12861	Hose between oil filter and oil sump	1
e a	NOTE:- Oil filter C.12776 may be used to repolar oil filter C.12532 providing the foll 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.13	owing
	B (II)	

Index Reference - Section B.

#### WINDSCREEN WIP'R MOTOR - CHANGE IN TYPE

· Model affected.	Commencing Chassis Numbers.		
	R.H.Drive	L.H.Drivc	
Mark V111	76 <b>09</b> 89	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
Windscreen wiper motor	C.13501	R.H.Drive C.13503	L.H.Drive 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:-

_	-	Eark W11.	2.4 and 3.4 litre
Terminal	Number 1.	JAGUAR	Black
ē. · · ·	2.	Green with blue	
3	3.	// Green with brown	Green with yellow
	4.	///Black	none.
	4. 5. 6.	Green with yellow	w Green with brown
	6.	Green with red	-
	7.	Green with white	-
1	8.	•	Green with blue
	10.	-	Green with white
e ¥	11.	-	-
	12.	-	-
	13.	-	Green with red

Index Reference - Section P.

# SPARKING FLUGS - CHANGE IN DESIGNATION

# Models affected

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 - Scotion 3 and P.

# SERVICE AND SPARES ORGANISATION

# SERVICE BULLETIN NO.219

# VARIOUS SERVICING ITEMS

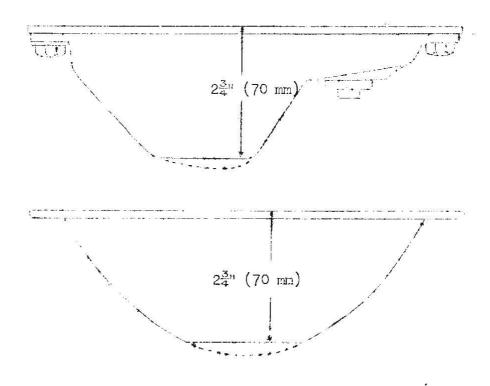
#### REAR ALLE FOULING BODY

Model affected 3.4 litre.

On the majority of cars prior to chassis number 970592 R.H.Drive and 986301 L.H.Drive there is a possibility that the rear axle cover plate may foul the body giving rise to a knock from the rear of the car under fully laden or full bump conditions.

All cars coming in Distributors and Dealers premises should be examined for signs of the paint having been rubbed off the rear axle cover plate. If fouling is evident carry out the following procedure.

- 1. Drain the rear axle.
- 2. Remove the rear axle cover plate and gasket.
- 3. Modify the rear cover plate in accordance with following sketch. It will be necessary to locally heat the portion to be flattened and when modified the distance to the flange of the cover plate must not be less than 23 (70 mm.)
- 4. Offer up the rear cover plate to the rear axle case without the gasket, and temporarily secure with four setscrews.
- 5. Check that no fouling occurs between the rear cover plate and the drive gear, by jacking up both rear wheels and rotating in the same direction. Examine the inside of the cover plate for signs of contact.
- 6. If satisfactory refit cover plate and gasket and replenish with oil.



## PANHARD ROD - DETAILS AND ADJUSTMENT.

# Model affected 3.4 litre

It should be noted that the Panhard rod tube on the 3.4 litre model is shorter by  $\frac{1}{2}$ " (12 mm) than that fitted to the 2.4 litre model owing to a difference in the location of the bracket on the rear axle.

The procedure for the assembly of the panhard rod is as given in Service Bulletin No.203 for the 2.4 litre, but the rod should be adjusted to 14 3/16" (36 cm) between the inner faces of the Panhard rod brackets on the rear axle and body.

The part number for the 3.4 litre panhard rod tube assembly is C.12186 the remaining parts are as for the 2.4 litre model.

# Index Reference - Section K.

# ACCELERATOR PEDAL - HEAVY OPERATION

# Model affected 3.4 litre Automatic Transmission

If the accelerator on 3.4 litre Automatic Transmission models is hard to operate the return spring between the governor control lever (at left-hand rear of the transmission unit) and the rear engine mounting cradle should be removed and examined.

If the overall length of the spring is less than  $7\frac{3}{4}$ " (19.7 cm) the spring should be discarded and a new spring Part number C.13355 fitted.

At the same time the accelerator linkage should be thoroughly lubricated.

# Index Reference - Section M.

## SERVICE AND SPARES ORGANISATION.

## 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.

a	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 Later cars	420-440 p.s.i. 480-500 p.s.i.	28/1390 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.

JAGUAR

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 SHALING 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.

# <u>ELEVENTS</u>

Jaguar Part No.	Tecalemit Part No.	Remarks
1523	FG.2312	1946-8 1 <sup>1</sup> / <sub>2</sub> litre R.H.D.
1527	FG.2346	1946-8 1½ litre L.H.D.
1526	FG.2306	1946-8 $2\frac{1}{2}/3\frac{1}{2}$ litre Mark V $2\frac{1}{2}$ and $3\frac{1}{2}$ litres 2.4 litre 3.4 litre $\frac{3.4}{150}$
1535	FG.2383	NK.120 up to Eng.No.W.4382
1538	FG.2388 JAGUA	Mk.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 $1\frac{1}{2}/2\frac{1}{2}/3\frac{1}{2}$ litres Mk V $2\frac{1}{2}$ and $3\frac{1}{2}$ litres
5911	137363	XK.120 Mark V11 up to Eng.No.B.5304
5180	137365	Mark V11 for B.5305 and subs KK.140,"D" Type, KK '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.

# SERVICE AND SPARES ORGANISATION

# 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<sup>2</sup>)

155 p.s.i. (approx) (10.90 kg/cm<sup>2</sup>)

The compression pressures for previous models fitted with

the XK type engine are:

8 to 1 compression ratio

120 p.s.i. (approx) (8.44 kg/cm<sup>2</sup>)

Index Reference - Section

PROCEDURE TO OVERCOME FOULING BETWEET 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

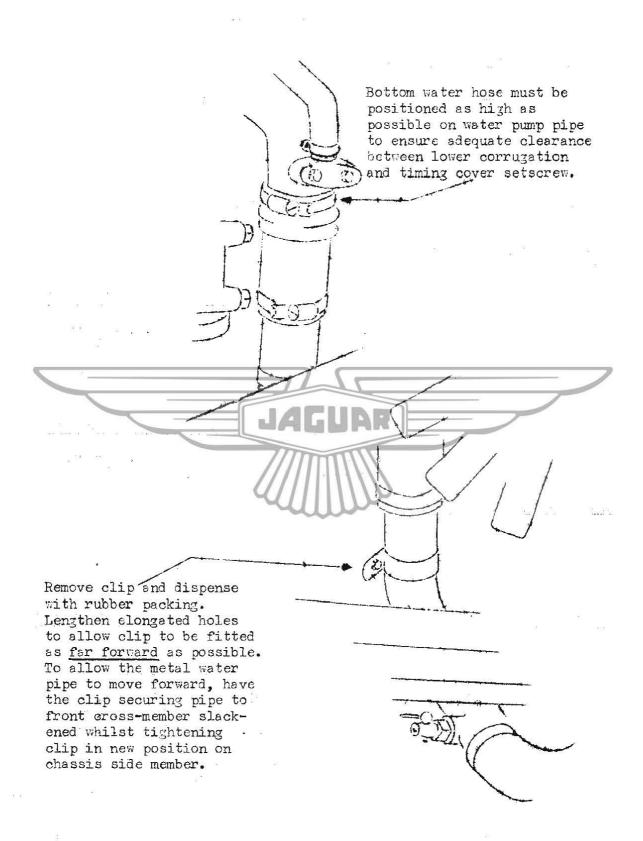
In some instances, on left hand drive cars prior to the above chassis numbers, the water hose between the water pump and the metal pipe may be positioned too close to the timing cover with consequent chafing between the hose and timing cover setscrews.

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.

#### JAZUAR

# SERVICE AND SPARES ORGANISATION

#### SERVICE BULLECIN 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.

# JAGUAR

- 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.

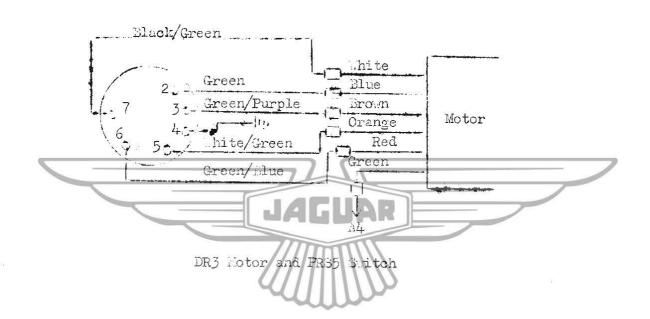
- 1) Cut off the original five connectors from the wiper motor harness, and solder on the five "bullet" connectors.
- Using rubber snap connectors, connect the leads from the DR3 motor to the harness, as illustrated below.(it will be seen from the two circuits that two methods of wiring are involved dependent on whether the vehicle is equipped with a Model PRS5 or PRS7 panel switch.)

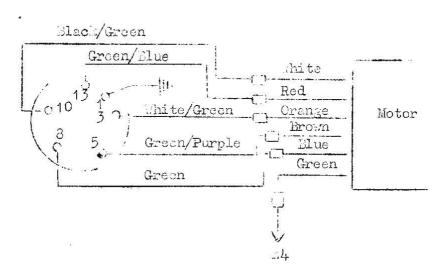
Continued ....

It will be necessary to remove and tape up the green cable feeding the panel control suitch, since it is no longer required. (With PRS5 suitches, the feed cable is connected to terminal 2; with PRS7 suitches, 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 "A4" fuse box terminal.

NOTE:- The PRS5 type suitch is fitted to the Mark V11 and Mark V111 model; the PRS7 is fitted to the KM. 40, KM. 150, 2.4 and 3.4 litre models.

If on testing the liper 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 hearbox cable outlet, one or two serrations at a time until the correct position is obtained.





LR3 Motor and PR37 Switch

#### SERVICE AND SPARES ORGANISATION

#### 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. 3888
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	Fan Belt
	Size	Part Number	Part Number
Mark V111	3"	C-13594	C.13595
3.4 litre	3"	C-13594	C.13595
XK.150	311	C.13594	C.13595
2.4 litre	3 <del>3</del> 11	0.13592	C.13593
Index Reference - Sec	ction 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

odels affected	Commencing Engine Numbers
2.4 litre	BC.3048
Mark V111	N. 9062
3.4 litre	KE.4018
汉.150	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	725		
Model affected		Commencing Ch	assis Numbers
	JAGU	R.H.Drive	L.H.Drive
Mark V141		761907	781082
3.4 litre	/////	971141	986771
::K.150	F.H.Coupe	824046	834491
	D.H.Coupe	/// <del>/</del>	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".

#### SERVICE AND SPARES ORGANISATION

#### SERVICE BULLETIN NO.224

# VARIOUS SERVICING ITEES

#### OVERDRIVE THROTTLE SWITCH - ADJUST INT

#### 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 Cverdrive 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.
- 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.
- 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 <sup>1</sup>/<sub>5</sub>" 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.

# 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.
- 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  $\frac{1}{5}$ "  $\frac{1}{4}$ " (3 6 mm) towards the L position.
- Slacken the rut 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 position.

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

Index Reference - Section FT.

#### REAR BRAKE SHOE RETURN SPRINGS.

Model affected Lark VII

On early Mark V11 cars the return spring (Part number 2515 or GB 41734) at the wheel cylinder and 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.

#### SERVICE AND SPARES ORGANISATION

### 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 ½" (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 ‡" (6 mm) from the bracket, or when assembled the cross wires may foul the torque arms.

14" (6.5 mm)

# 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  $1/16^{\circ}$  (1.61 nm) diameter breather hole at  $90^{\circ}$  to the existing breather hole and  $\frac{3}{6}^{\circ}$  (9.5 nm) 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

XIC. 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  $(6\frac{7}{8})^n$  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 IK.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 5.4 litre the air cleaner is attached to the right-hand wing valance.

# Index Reference - Section L.

# SERVICE AND SPARES ORGANISATION

#### SERVICE BULLETIN NO.226

#### VARIOUS SERVICING ITEMS

# WHEEL BEARING ADJUSTMENT - CARS WITH DISC BRAKES.

### Models affected

2. '; 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 KK.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 THPORTANT 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-.20mi) for the rear wheel bearing end float is permitted.

Index Reference - Section J and H.

JAGUAR

INLET VALVE QUIDES - LONGER TYPE

Model affected

Commencing Engine Numbers.
N.8478

Mark V111 3.4 litre

KE.3025

3.4 Litre

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:-

 Length
 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 3.

# REVISED M.R. ING ON IGNITION COILS

# Models affected

All

The markings of (shitch) 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 soitch to the - (negative) terminal.

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

Index Reference - Section P.

# STALMOSKS AND T TEPIPES

Model affected
3.4 litre

Commencing Chassis Numbers
R.F.Drive D.K.Drive
970077 986554

On cars ith the above chassis numbers and on ards modified silencers and tailpipes are fitted:-

The details are as follows:-

	ist type Part number	2nd type Part namber
Twin silencer assy Inner silencer only	G./2717 G./3225	03578 03578/1
Outer silencer only	. Ø.13226	0.13578/2
Inner tail gipe	C. 12723	C.13577
Outer tail pipe	C. 2721,	G. 3576
Mounting bracket	0.12725	C. 3809

# Interchangeability

The above parts are not interchangeable.

Index Reference - Section M.

#### SERVICE AND SPARES ORGANISATION

#### 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	82 <b>7001</b>	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:-

79	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.

# OIL PRUSSURE. RELIEF VALVE - MODIFIED TYPE.

Model affected.		Commencing	Engine	numbers.
2.4 litre 3.4 litre XK.150	8.	BC.3600 KE.4856 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	Free	Fitted to	Fitted to E	ngine Numb	ers.
Part No.	Length	The second secon	2.4 litre	3.4 litre	K.150
6462.	2" (50.8mm)	C12532 (FA2705)	BB1001-9000 BB9001-9999 BC1001-2255	KE1001 to 3053	
6879	1美 <sup>n</sup> (44.5mm)	Cl2776 (FA2720)	BC2256-3599	KXE3054 to 4855	V1001 to V2010
7315 (and Stop Pin.7357)	21/16" (52.4mm)	C.12776 (FA2720)	BC3600 - onwards	KE4856~ onwards	V2011 onwards

Index Romence Section B.

# TIMING COVER AND SETSCREWS.

Mode	als	aff	ecte	d.
MK.	/11	L.	7045 (Village St. 1986)	
3.4	111	trc		
XK.	150			

Commencing Engine Numbers. N9460 KE4580 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 MB.137/13D were fitted.

Index Reference Section B.

#### SERVICE AND SPARES ORGANISATION

#### SERVICE BULLETIN NO.229

#### TARIOUS SERVICING ITEMS

#### TIMING CHAIN DAMFERS - RUBBER TYPE.

Models affected.	Commencing Engine numbers.			
2.4 litre	BC.3699			
3.4 litre	KE.4964			
XK.150	v.2029			
Mark VIII	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.	2.4litre.
	Mark VIII.	
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.

#### EMHAUST SILENCERS AND DOWNPIPES.

Model affected	Commencing C	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.12729/1 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.

3.4 litre

Commencing Chassis numbers R.H.Drive. L.H.Drive.

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 masket 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 3K.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.

# SERVICE AND SPARES ORGANISATION

# SERVICE BULLETIN NO.230

### VARIOUS SERVICING ITEMS

# 52" BRAKE SERVO UNIT - MODIFIED TYPE.

Models affected.	Commencing	Chassis numbers
3)	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 reduce internal items interchangeability is affected and reference should be made to the items listed below.

Servo Unit	C.11000	ervo Unit C.l	3621
Part No	Description	Part No.	Remarks
6352	Slave Cylinder Body	7263	Interchangeable, Use
	//////	11111	modified Cylinder Body
6381	Distance Fices	7265	Not interchangeable
6387	Vacuum Cyl. Piston Assemb	ly 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	7973	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 Lut	7275	Additional item
•	Nut	7279	Additional item
-	Gasket	2538	Additional item
6597	Vacuum Cyl. Piston Repair Kit	7280	Not interchangeable

Index Reference Section L.

#### BRAKE SERVO UNIT - REPAIR KIT.

Models affected.

Mark VII Mark VIII

A Repair Kit is now available for servicing the Hydraulic Cylinder on Brake Servo Units fitted to Mark VII and Mark VIII 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.

IK.150

A Repair Kit is available for the servicing of Clutch Master Cylinders on KK.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 VII under "Model affected" and on the first line to read Mark VIII.

# CORRECTION TO 2.4 LATRE STARES 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 Scating 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).

### SERVICE AND SPARES ORGANISATION

### STRVICE 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: 70Rl.

Index Reference.

Section L.

FRONT WINGS - NOSE SECTION.

Models affected.

Ж.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

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 CHALBER - CLEANING.

Models affected.

Mark VIII

3.4 litre.

KK.150

It has been found that on ears fitted with the ND.6 type of carburetter, blowing out the float chamber with compressed air is likely to cause rupture of the rubber jet disparagm. This method of cleaning out the float chamber should, therefore, not be resorted to.

Index Reference. Section C.

### 50 AMP ELECTRICAL FUSES - INTRODUCTION.

	Commencing	Chassis numbers.
Models affected.	R.H.Drive.	L.H.Drive.
2.4 litre	908751	942616
Mark VIII	762263	781141
3.4 litre.	971462	987106
XX.150 F.H.Coupe.	824096	834658
XK.150 D.H. Coupc.	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 appropr		ng Han	dbook	illust	tration	as a	guide,
fuses are now fitted as for		JAR		Fuse	numbe	er.	
				- 3	).		6
Mark VIII	///m	35	35	50	50	<i></i>	6
	4////	amp	amp	amp	amp		
2.4/3.4 litro.	-du	50	50	-	-	-	-
	20	amp	amp				
.XK.150		50 amp	50	35	35	50	50
		amp	amp	amp	amp	amp	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.

### SERVICE AND SPARES ORGANISATION

### SERVICE BULLETIN NO.232

### DIVIDED FROFELLER 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 -

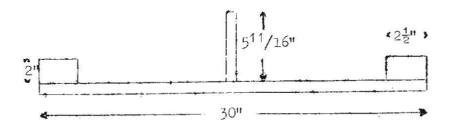
- Before carrying out any checking or rectification work ensure -

- (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"  $^{\pm}$  1/16" (93.5 mm  $^{\pm}$  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.

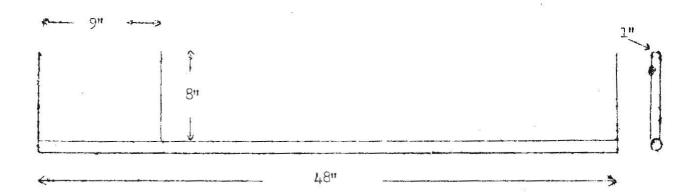
If the propeller shaft is too HTGH suitable packing can be fitted between the rear engine mounting cradle and the body floor.

### 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  $8" \times 1" \times 3/16"$  (20.5 cm x 2.5 cm x 4.75 mm) which are welded exactly in line on to a piece of tube of 18" (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 tree 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.

January, 1958.

### JAGUAR

# SERVICE AND SPARES ORGANISATION SERVICE BULLETIN NO. 234

SPARE PARTS CATALOGUE. (Publication J.22).

Model affected.

3.4 litre.

Some confusion appears to exist regarding the ordering of spares details from the 3.4 litre Spare Parts Catalogue. Orders are being received by Jaguar Spares Department for items which are reculiar to cars fitted with Overdrive Unit or Automatic Transmission and the part numbers for such items are being taken from the above publication.

Will all Distributors and Dealers please note that the 3.4 litre Spare Parts Catalogue, in its present form, is intended to be used for cars fitted with Standard Transmission as has been the practice in previous Spare Parts Catalogues (e.g. Mark VII, XX.140, 2.4 litre) whilst details of items used for Overdrive or Automatic Transmission models have been the subject of separate Catalogues (e.g. Publications J.18 and J.19). In due course, an amendment will be published to incorporate in Publication J.22 those items which are used only when 3.4 litre cars are fitted with Overdrive Unit or Automatic Transmission.

In the meantime, the part number should be omitted from orders for such items as Propeller Shaft, Speedometer, Speedometer Cable, Carpets, Gearbox Cover and, in the case of stock orders, these items should be clearly marked on the order "For Overdrive Unit" or, alternatively, "For Automatic Transmission". If these parts are required for an individual car, it will suffice if the Chassis number is quoted, providing the suffix letters "DN" or "BN" (whichever applies) are quoted after the Chassis number.

Index Reference. Section ?.

### SERVICE AND SPARES ORGANISATION

### 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  $-15^{\circ}F$  (-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 Flate 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 SIRING MOUNTING GODIFICATION

### 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:-

2.4 litre 3.4 litre R.H.Drive L.H.Drive 906119 941878 Commencement of production

At a later date a different modification was incorporated which did not include the Support brackets 0.12779 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.....

### SERVICE BULLETIN NO.235 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

C.13944

Smith number 43570/5 stamped

on body.

Thermostat

C.13944

On body.

Opening temperature 78°C.

Opening temperature 77°C.

Index Reference.

Section B and D.

### VACUUM BRAKE SERVO KIP.

### 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.

### SERVICE AND SPARES ORGANISATION

### SERVICE BULLETIN NO.236

# DISC BRAKES AND WIRE SLOCK 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 Mire 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 & (Part number 7389)

plus items listed below to suit the particular model.

qu	2.4 1	itre	3.4 litre
Handbrake compensator assembly		31253	C.13875
a a	L.H.Drive 0.138	14	C.13876
Vacuum Check Valve	C.127	90	-
Vacuum check mtg. plate	C.127	- A-3	
Sleeve nut		99 (2 off)	
Bolt	UFB.125	/7R(2 off)	×35.50
Setscrew	UFS.125	/5R(2 off)	-
Plain washer		/T (2 off)	
Spring washer		/X (4 off)	=
Nuts		/L (2 off)	~
Vacuum pipe		63 (1 off)	-
Vacuum pipe		62 (1 off)	-
Hose - check valve	다시나 지사하는 하는 사람들이 되었다.	164 (? off)	-
Hose		35 (1 off)	-
Hose	C.139	165 (1 off)	C.13704
Adaptor plate	-	2	C.13254

Cont'd.....

### FOR CONVERTING TRUM BRAKES TO DISC BRAKES AND DISC THEELS TO THE SPOKE THEELS.

Requirements:-

Kit B (Fart number 7390) Kit C (Fart number 7391)

plus items listed below to suit the particular model.

	2.4 litre	3.4 litre
Handbrake compensator assembly		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	UB.125/7R(2 off)	-
Setscrew	UFS.123/5R(2 off)	•
Plain washer	FW.104/T (2 off)	=
Spring washer	FG.104/X (4 off)	-
Nuts	HM.125/L (2 off)	-
Vacuum pipe	C.13963 (1 off)	-
Vacuum pipe	C.13962 (1 off)	•••
Hose - check valve	C.13964 (2 off)	-
Hose	g.14135 (1 off)	-
Hose	C.13965 (1 off)	C.13704
A7- 4 3-1-		~ 17051
Adaptor plate	-	C.13254

Requirements:-

Kit C (Part number 7

PRICES.

Retail Price.

Kit A (Fart number 7389) £100 (including the individual items required) 082 Kit B (part number 7390) (including the individual items

required)

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) Sl. 8. Od.each

2 rear wheel valances (cut-out type) £4. 2. Od.each

Index Reference. Section L. and M.

### FOR CONVERTING TRUM BRAKES TO DISC BRAKES AND DISC THEELS TO THE SPOKE THEELS.

Requirements:-

Kit B (Fart number 7390) Kit C (Fart number 7391)

plus items listed below to suit the particular model.

	2.4 litre	3.4 litre
Handbrake compensator assembly		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	UB.125/7R(2 off)	-
Setscrew	UFS.123/5R(2 off)	•
Plain washer	FW.104/T (2 off)	=
Spring washer	FG.104/X (4 off)	-
Nuts	HM.125/L (2 off)	-
Vacuum pipe	C.13963 (1 off)	-
Vacuum pipe	C.13962 (1 off)	•••
Hose - check valve	C.13964 (2 off)	-
Hose	g.14135 (1 off)	-
Hose	C.13965 (1 off)	C.13704
A7- 4 3-1-		~ 17051
Adaptor plate	-	C.13254

Requirements:-

Kit C (Part number 7

PRICES.

Retail Price.

Kit A (Fart number 7389) £100 (including the individual items required) 082 Kit B (part number 7390) (including the individual items

required)

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) Sl. 8. Od.each

2 rear wheel valances (cut-out type) £4. 2. Od.each

Index Reference. Section L. and M.

### SERVICE AND SPARDS ORGANISATION

### SLIVECE BULLETIN NO.241

### MODIFICATION TO OVEROUS HAT DERAKT 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:-

22 E	R.H. Drive.	L.H. Drive.
2.4 litre	910118	942854
3.4 litre	972401	988216

### Parts required.

7492 7493 7494 6926 J.105/11.5S FW.105/T L 102/4U L.103/7U 6925 6932 C.13871 C.13872	Inner pad carrier assembly. Right hand Inner pad carrier assembly. Left hand Operating Lever Clevis pin Clevis pin Plain washer Solit in Solit pin Setscrew securing Handbrake to Caliper Tab washer Handbrake cross cable Handbrake cross cable Handbrake Compensator Bracket - as detailed below for various models.	1 2 2 2 2 2 2 2 2 2 1	7
C.14260	2.4 litre - Right hand drive 2.4 litre - Left hand drive 3.4 litre - Right hand drive 3.4 litre - Left hand drive	1 1 1	ş.
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 oad carrier. When fitting the new carriers note that they are handed; the too end of the friction pad should conform with the peraphery of the brake disc.

-2-

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 rivot 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 scring will not be preloaded.

Repeat for the other rear braite.

### 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 ande. Remove the two setscrews securing the bracket to the rear ande. Replace the existing bracket with the modified type supplied.

Secure the bracket to the rear axle with the existing setserews 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 cads 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 calles 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. Mithdraw feeler gauge and check disc for free rotation. Repeat for the other side.

### Modification to Luggage Compartment Ploor.

To provide adequate elearance 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 degressions in the trunk floor; for Left hand drive cars the patch plate should be fitted to the third degression from the left and for right hand drive cars the patch plate should be fitted to the third degression 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.....

# STRVICT BULLTUN MC.241

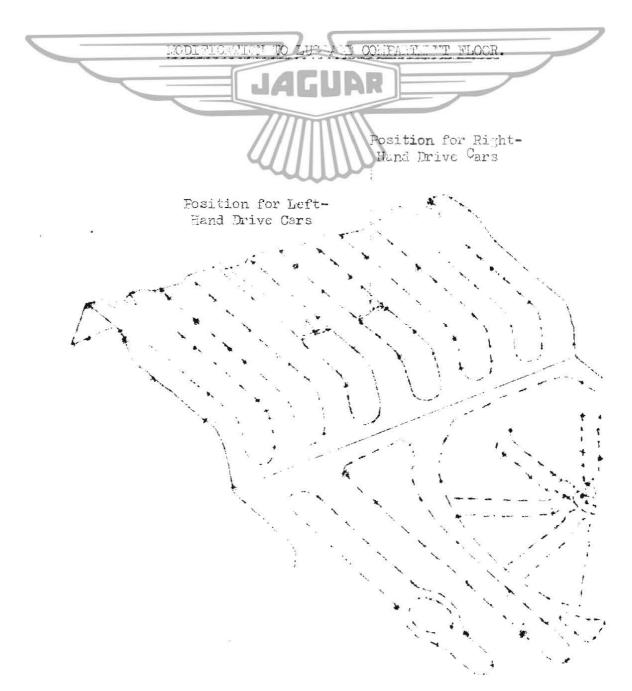
If there is already a small patch thate welded in the decression this can be cut out to allow the patch plate supplied to be fitted.

Note: On Right-hand drive cars it will facilitate the use of a hacksaw if the spare wheel cover plate and spare wheel are removed.

### Modification to Wheel Arch.

The flange of the chassis side member should be knocked back with a mallet flush with the bex section as illustrated in the following sketch.

Note: It is I FORTANT 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 WHILL ARCH.



Index Reference. Sections L and N.

### STRVICE AND SPARIS ORGANISATION

# STRVICT BULLTIN NO.246.

### ICOLFICATION TO DISC BRAK, MASSER CYLINDER.

### Models affected

2.4 litra cars fitted with disc brakes.

3.4 litre cars fitted with disc brakes.

M. 150 cars fitted with disc brakes.

To deal with cases where a long brake godal action is sometimes experienced on the first application of the brake godal how the car has been standing, but normal godal action is obtained on the second action of the godal the following modification has been introduced in production commencing with chassis numbers:

m 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Maria Carlos Company
Right-hand drive Left-hand d	

2.4 litre	910970.	943035.
3.4 licre.	973377.	988746.
M. 150 Open 2 seator.	=	830438.
M. 150 Drop head coupe.	327072.	837434.
M. 150 Fixed head coups.	824420.	835566.

and certain individual cars prior to these numbers.

## IDEFTIFICATION

Externally the laster Cylinder remains unchanged but is identified by a cable chip bearing the following relative new part numbers, fitted to the barrel of the Mast r Cylinder between the flange fitting and the outlet boss.

XX.150. 0.14580 (VBM 3248) 2.4/3.4 litrc. 0.14579 (VBM 3249)

### HT AMAL MODIFIC HIGH

The follo in; parts become redundant:-

### Part Tumber.

6950	Seal.	Item 9, Pla	tc C :	on page	a 21 of th	he
		Dis Brake	Spare	Fart	Catalogue	€.
6949	Bush	Item 10, "	.1	16	11	
6952	Valve	Item 7.	3 8	11	18	
6941	Caring Su	oport Item 6.	11	11	11	

and are replaced by the following new parts:-

### Dunlop Part Mumber.

MBO 3341	Scal
VBO 3539	Valvo
VBO 3540	Swing Suscort

Note: A separate bush for the scal 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 reflitted.

# INSTRUCTION FOR MODIFYING AND MASTER CYLIFTER (Former Catalogue)

Withdraw the dust excluder (14, at the such rod and of the master cylinder and suth suitable likers remove the carelin (13).

(2) Remove the push rod (11) and the washer (12).

(3)ithdraw all internal components and dismanile the assembly commissing items (4, to (8) unclusive by disensating the valve (7)

(4)

via the key slot in the strang surfort (5).

Discard the valve seal (9), bush (10), valve (7), rear and saring support (6) and '0' ring (3).

Clean the cylinder body and all remaining components with methylated spirit or hylraulic brake fluid. Examine the cylinder bore for damage and scoring. If there is evidence of these defects the master

cylinder must be replaced by n not unit.

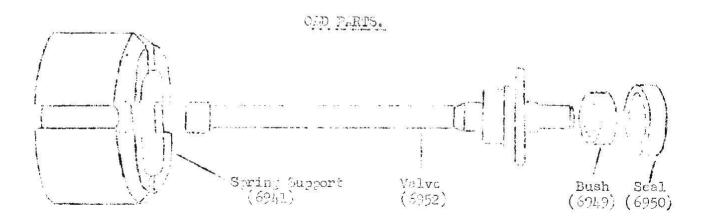
(6) Using the new components (6), (7) and (9) shown in the sketch below reassemble items (4) to (9) inclusive in the order shown and rotain them by engaging the valve (7) in the central bore of the spring support (5). NOT: The old and not spring supports item (6) are almost identical in agreerance but it is essential that only the new support is used for this modific tion.

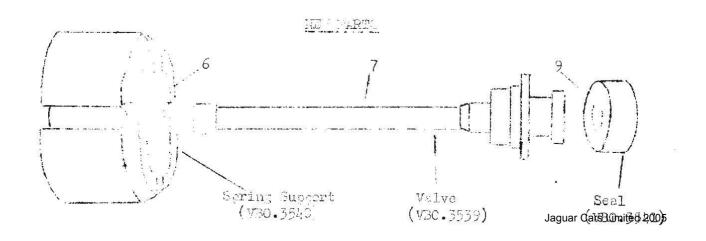
(7) Lubricate the new '0' ring (3) with hydraulic brake fluid and fit it to the miston (2).

Slide the internal commonents anto the bore of the cylinder body, rosition the washer (12) and the sush rod (11) and retain them with the circlip (13).

(9) Fill the dust excluder with the secenal Dunlop rubber grease provided in the modification kit. MO. The other grease must be used for this purpose. Reseat the dist 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, nt a point betreen sitachment flange and the consection bosses.





### SERVECT ACTION - EXPORT

All Distributors will be supplied with a small stock of modified Master Cylinders -

### Part Number.

C.14580

IK.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 required 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 bearin; the new part number should be changed as soon as is practicable. This operation is to be carried out on a guarantee 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.14224

JK. 150.

C.13675 and C.14225

2.4/3.4 litre.

### and proceed as follows:-

- 1. All Master Cylinders having an eluminium body (Part numbers C.13100 and C.13675) art to be tarapped and a claim submitted for these units.
- 2. All Master Cylinders having coast 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 7560 which contains:~

## Dunlop Part Humber

Dust Excluder	VBO. 1869		
'O' Ring	VB0.2417		
Уа <u>1</u> vc	VBO.3539		
Seal	VB0.3541		
Scring Support	VB0.3540		
Tube of Rubber grease	VB0.3554		
ldenti ication Cable clip	VBO.3552	and	VBO.3553
Fitting Instruction Sheet	-		

### Sparc Parts Replacement

All stocks of the following parts held by Dealers are to be returned to their Distributor for credit.

### Part Number.

69 <b>5</b> 0	Seal
6949	Bush
6952	Valve
5941	Soring 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 Regair Ki. - Fart number 7660.

The Distributor is to scrap out these parts including their own stocks and submit a guarantee claim for the parts scrapped.

Jaguar Cars Limited 2005

### SERVICE AND SPARES ORGANISATION

### 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

	Page
Brake Maintenance	1
Brake Fluid Level	1
Long Pedal Travel - Rectified by Bleeding Brakes	2
Long Pedal Travel - Self Rectified When Car Has Been Standing	2
Long Pedal Travel on Road and When Stationary - Not Corrected by Bleeding	3
Long Pedal Travel on Road but Normal Pedal Travel When Stationary	3
Excess Braking on Front Wheels	4
Brakes Hanging on	4
Brakes Pulling, Locking or Knocking on Brake Application	4
Whistle from Engine	4

### 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 every 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 always make a careful check to find out WHY before topping up.

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 restarted 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 VII and Mark VIII 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 THEN 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:-

Gardar Cars Limited 2005

- (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 VII and Mark VIII)

- (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 Bullctin 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 pags.
- (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 soal 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 IX 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...

- 4 -

(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).

- Servo connecting hose-vacuum pipe to inlet manifold take off - collapsed.
- Vacuum check valve stuck or incorrectly assembled.
- Servo performance low sluggish piston or no interference between piston leather and vacuum cylinder.
- 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

Rear brake shoes fitted incorrectly. Rear wheel cylinder seized.

### BRAKES HANGING ON

- Brakes drag on all four wheels and do not release when the engine (a) is switched off - Servo piston sticking in vacuum cylinder.
- Brakes drag on all four wheels but release when engine is switched (b) off - Servo plunger valve sticking.

### BRAKES PULLING, LOCKING OR KNOCKING ON BRAKE APPLICATION

The above complaints can be due to:-

### (a) Disc Brake Oars

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 VII, Mark VIII and Mark IX models slackness of the bolts securing the lower wishbone brackets to the chassis frame. Slackness of the rear spring 'U' bolts.
- (a) 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) Index Reference

Section L. Jaguar Cars Limited 2005

### SERVICE AND SPARES ORGANISATION

# STRVICE BULLETIM NO.238 VARIOUS SERVICIM: TTEMS

### 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:-

	e	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 Frocedure.

# JAGUAR

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 unpardened 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, 130, 185 and 205 together with the more recent additions. The reference number given for each paint colour is for Juick 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.

date when the change took place	in production is given.	
	British Demolac.	Pinchin Johnson.
Dove Grey	~	J.861
British Racing Green	).1076	J.860
Old English White		J.863 J.863/C
Birch Grey	9.1079 9.1079/1 (14.5.56.)	J.865
Pastel Blue (Non-Metallic)		J.867
Lavender Grey	9.1072 9.1072/1 (14.5.56.)	J.871
Suede Green	2.1080 2.1080/1 (14.5.56.)	J.873
Black	2.1073	J.869
Battleship Grey	2.1075 2.1075/1 (14.5.56.)	J.875
Pastel Green (Non-Metallic)	ე.1081 ე.1081/1 (14.5.56.)	J.877
Red	Q.1089	
Pearl Grey	2.1129 2.1129/1 (5.3.56.) 1.1129/2 (14.5.56.)	
Pacific Blue	2.1132/1	e
Carmine Red	9.1190	
Arbor Green	9.1191 9.1191/1 (14.5.56. <b>)</b>	
Maroon	9.1135 9.1135/1 (13.6.55.) 9.1135/2 (14.5.56.)	
Imperial Maroon	9.1229 9.1229/1 (25.2.57.)	
Claret  Sherwood Green Forest Green Cornish Grey Mist Grey Indigo Blue Cotswold Blue	2.1230 2.1230/1 (25.2.57) 2.1231 2.1232 2.1236 2.1235 2.1233 2.1234	J.889

### SERVICE AND SPARIS ORGANISATION

### SIRVICE BULLITET NO.239 VARIOUS SERVICING ITEMS

### DISC BRAKE CALIFER BRIDGE PIEC - VERY IMEGREANT

Models affected.

XIC. 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 ESSETTIAL that the pipe is refitted the correct way round.

It will be noted that one end of the pipe has an approximate rightangle 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 KK. 150 model.

If the pipe is fitted the wrong way round the pape will foul the road wheel.

Index Reference.

Section L.

FRONT INGS - MOSI SUCTION.

'Model affected.

IK.150

Further to Service Bulletin No.231 regarding Front wing nose sections for the NK.140 model a similar condition is now available from the Jaguar Spares Department for the NK.150 model.

Part number.

Front wing-nose section. Left Hand Front wing-nose section. Right Hand 7478 7471 7479 7486

Index Reference.

Section N.

Cont'd.....

# SERVICE BULLETIN NO.239

-2-

# 67" VACUUL SIRVO - 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 ( $6\frac{7}{5}$ ) diameter) is fitted in place of the  $5\frac{1}{2}$ " 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 (670)	- C.1.3	3672 <b>-</b>
Brake pedal (normal transmission and	C.14024	C.14025
overdrive)		
Brake pedal (automatic transmission)	0.14071	
Pedal housing	- C.12	<sub>+</sub> 026 <b>-</b>

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 headin "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.

1 0 1

Amend the information on page 2 under "Thermostat, Modified type - Identification" as follows:-

Thermostat
C.13944
C.3731/1
Smiths number K85024/74
Stamped on body

Thermostat
C.3731/1
Smiths number 43570/5 or /28
stamped on body

Opening comperature 74°C. Opening temperature 73°C

### SERVICE AND STARES ORGANISATION

### SERVICE BULLETIN NO.240

### FRONT SUSTIMISION - TROGRESSIVE BUMP STOPS.

Models affected.	Commencing of	assis 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 suscension.

This type of bump stop takes the form of a tagered rubber block attached to turret of the front suspension cross member and a bump stop plate fitted to the lower wishbone levers.

### Interchangeability.

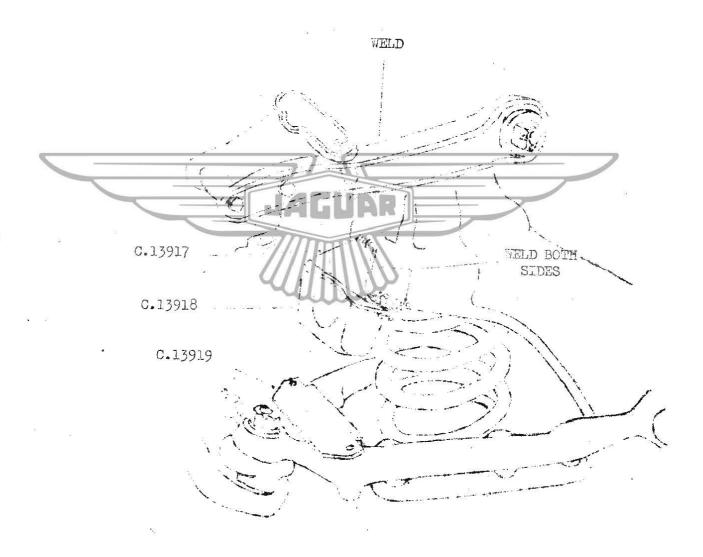
The progressive type of bump stop can be fitted in place of the previous arrangement if desired, but should only be carried out at the customers request and will be on a chargeable basis except in special circumstances.

### 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 easter 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 hump 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 rosition 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  $\frac{5}{4}$ " 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 mishbone levers. Cut a 10 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.

### SERVICE AND SPARES ORGANISATION

# VARIOUS SURVICING ITIMS

### 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:-

### FRO T WHELL 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.

RYAR WHEEL HUBS.

Escape of grease through hole in the top of axle tube above grease nipple.

Index Reference.

Sections H and J.

### SFRAYING REAR STRUIGS - ERECAUTIONS.

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 SYSTIMS - INFORTANT.

It is MOST EMPORTANT 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 IIS 3511 Brake Fluid. WAÇNER 2/8.
2.4 litre 3.4 litre XK.120 XK.140	Lockheed No.102 Heavy Duty Brake Fluid.	Nakefield Crimson Hydraulic Brake Fluid Delco Special No.11 Brake Fluid Chrysler MS 3511 Brake Fluid. WAGNER 21B

# DISC BRAKES.

XK.150	Wakefield Crimson Hydraulic	Lockheed No. 102 Heavy Duty
2.4 litre	Brake Fluid	Brake Fluid.
3.4 litre	7	Delco Special Mo.11 Brake
		Fluid.
	LIACII	Chrysler MS 3511 Brake Fluid.
	DALLE	Chrysler MS 3511 Brake Fluid. WAÇNER 218

### CLUTCH OTTRETION

Freferred Fluid.

	the are a regard throughout which is a regard	the gap is an extraptive property of the advantage of the property of the prop
Mark V111 XK.150	' Wakefield Crimson Hydraulic Brake Fluid.	Lockheed No.102 Heavy Duty Brake Fluid.
Mark Vll		Delco Special No.11 Brake Fluid.
		Chrysler MS 3511 Brake Fluid.
2.4 litre	Lockheed No.102 Heavy Duty Brake Fluid.	Wakefield Crimson Hydraulic Brake Fluid.
Me.: 10		Delco Special No.11 Brake Fluid.
		Chrysler NS 3511 Brake Fluid. WAGNER. 21B
	TAN SIT	. €

### 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.

# LAFORTANT.

In the event of deterioration of the rubber scals 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.

Model.

Alternative Fluids.

### SERVICE AND SPARES ORGANISATION

# STRVICE BULLETIN NO.243

### VARIOUS SURVICING IT MS

### DUMLOP R.S.4 ROAD SPEED TYRES

Model affected

3.4 litro model

As no doubt you will have noticed, 3.4 litre cars recently delivered from our Works have been equipped with Dunlop Road Speed tyres having a new pattern tread, this tread pattern being similar to that already in use with the tubeless tyre equipment fitted to the 2.4 litre model. This tyre is known as the Dunlop Road Speed R.S.4, as opposed to the previous Road Speed tyre fitted, the Dunlop R.S.3.

Certain changes have been made in the construction of the Road Speed tyre which, together with the change in tread pattern, have brought about greatly improved adhesion, particularly under wet road surface conditions.

In the event of tyres being replaced, but only two tyres requiring replacement at one particular time, it is recommended that the R.S.4 Road Speed tyres then fitted should be placed on the rear wheels of the car, but it is, of course, preferable that wherever possible all four tyres should be replaced at the same time.

Due to the construction of the R.S.4 Road Speed tyre, some light tyre thump may be noticeable on a smooth surfaced road in the first three to five miles after driving away from cold. This condition is due to tread distortion which occurs then standing, and exists only for a short period prior to the tyre varming up.

There is no reason for this complaint, if raised, to cause any concern. It is brought to your notice to avoid the possibility of any such complaint being thought to originate from a mechanical part of the car.

Index Reference.

Section M.

### OVER - ADVANCING I NUMBION

Models affected

All models .

It is pointed out that no improvement in performance will be gained by advancing the ignition above the recommended setting.

Over-advancin the ignition will result in rough running at idling speed, "jerky" operation when driving on a constant throttle, and may cause detonation with consequent piston ring breakage and allied troubles.

The above warning is particularly important now that 9 to 1 compression ratio engines are available on certain models.

Index Reference.

Section B.

## THORNTON FO AR-LOK DIFFERENTIAL - IDENTIFICATION

Rear axles fitted with a Thornton Power-Lok differential in production are now identified with a metal tag stamped P/L which is fitted underneath the head of the differential cover bolt adjacent to the bolt carrying the ratio tag.

In the event of the tag not being in position it can be ascertained if a Thornton power-lok differential is fitted to a particular rear axle by removing the filler plug. If the differential case can be seen adjacent to the filler plug hole it can be taken that a power-lok differential is fitted.

Index Reference

Section H

# 3.4 LITRE 9 to 1 COMPRESSION RATIO - INNITION AND CARBURETTER NEEDLE DATA

The following is the distributor, sparking plug and carburetter needle data for 9 to 1 compression ratio engines fitted to the 3.4 litre model.

Distributor - type - Lucas Service number 40617A

Jaguar part number C.14269

Ignition Timing

T.D.C.

Sparking Plug type

Champion N.5 (or N.A.8.)

Carburetter Needle

\$.0.

Index Reference

Sections B and C.

### Addition to Service Bulletin No.242 page 2.

To each list of Alternative Fluids, add the following recommended fluid.

"Wogner 21B Brake Fluid".

### Amendment to Service Bulletin No.241

Alter the part number of the Handbrake Compensator Bracket for the 3.4 litre - Left-hand drive model from C.12461 to C.14261.

### SERVICE AND SPARES OR ANISARION

# SERVICE BULL THE NO.245.

### V. RIOUS EIRYLOUIG IELS.

### RELAY TALTE - MODIFICATION

### Models affected.

### Commencing Ingine numbers

Mark Vlll	Automatic	transmission	I. A.	1938
3.4 litre	Automatic	transmission	K.E.	7052
XI.150	Automatic	transmis ion	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 dispensing with the Relay valve apring (Item F. Fig. 22 in the Automatic Transmission Supplement), and inserting a clug (Part number 20-687) between the Relay valve plunger (P) and the cover (B). (Some cars are fitted with a double coil spring washer instead of a slug).

This has the effect of cutting off the hydraulic flow to the low band serve so that only the forward band is in operation for Automatic Low in the "D" (Drive) position.

# Service Procedure

# JAGUAR

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 FT.

### OIL COMMROL PISTON RIMAS.

### Models affected.

Mark VII XK.140 Mark VIII J.4 litre XK.150

Note that the "Maxilite" oil control ring Part number C.11956 is not fitted to diston assemblies fitted in production or supplied for service replacement although sho n in the Spares Parts Catalogues and Service Bulletin No.184.

The piston ring fitted to production and service replacement piston assemblies is the "Marigroove" type - Part number 0.5832.

The "Maxilite" oil centrol ring 0.11956 is supplied only when piston rings are ordered separate from eistons.

### Index Reference Section B

### DISC BRAKE ADAPTOR PLATE BOLLES - CORALCT 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 flitted 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

Pections H and L.

# REAR ROAD STRINGS - CHAPTER IN CARRIER

 Models affected
 Commencing chassis numbers.

 R.H.Drive.
 L.E.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" 3.45" to 3.7" (87.5 to 94 mm)

### Interchan; cability

The latest type spring 0.10791/1 is interchangeable with the previous type 0.10791 fitted prior to above chassis numbers but they must be fitted in pairs.

Maisting stocks of 0.10791 should be used up on cars grior to the above chassis numbers.

Index Reference

Section K

### SERVO RITURN SI ALUG - AL 113500G

Models aff cted

Mark VII. Mark VIII.

Clayton Dewandre servo units fitted to later Herk VII and Wark VIII cars are fitted with the piston return spring the reverse day to that illustrated on page L.20 of the Mark VII and EK.120 Service Lenual.

When reassembling any Mar's VIII or Mark VIII serve unit the giston return sering should be fitted in the letest manner that is, with the smaller diameter and towards the piston.

Index reference Section L

#### J - G U A R

### SERVICE AND SPERIS ORGANISED ON

# STRVICT BULL THE NO.248 VARIOUS STRUCTURE LINES

### THORMION LIMITED SLIP DIVINEL - PRICAGONS.

### Models affected

Cars fitted with Thornton "Powr-Lok" diffe ential

1. On a cir fitted lith a Thornton Powr-Lok differential the engine must NOT be run with the car in year 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 withdraking 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.

Pas, 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 aid pulling on the tabing.

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 ith 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./

-7-

### COIL SPRING TACKET PHIC.

Models affacted

2.4 litre 3.4 libre

Commune chastis numbers.
R. U. Drive. L. H. Drive. 911033 943054

275493

On cars tith a ove chassis numbers and on ids a packing piece may be fitted at the tos of the coil swin to compensate for slight manufacturing variation in the fitted longths of the coringo.

The packing pieces are in # (3.0 mm) and \* (5.4 mm) thicknesses and are fitted in accordance with the followin details: -

Colour code of soring.

Anickness of packing piece.

2.4 litre

White Blue Green

(6.4 min)Pt. number C11874 3" (3.2 mm)Pt. number C11874/1 No packing ciece fitted.

### 3.4 litre

Red Yellow Purple

[# (6.4 mm)Pt. number 011874 g" (3.2 mm)P0. number 011874/1 No packing piece fitted.

In service, if the coil swings are removed for any reason on a car prior to above chassis numbers, packin; pices can be ditted in accordance with the above details.

Index Reference.

### H ATER REFORDED A TECH

Models affected. K.150

Open C scater Fired Foad Coupe Dron Head Counce

Commencing chassis numbers.
R.E. Drive L.M. Drive. R.H. Drive

330439 824420 835366 827072 837434

On cars with the above chasses numbers and onwards a rhoostat switch is fitted to allow the heater motor speed to be controlled.

. The writch is positioned adjacent to the revolution counter and is marked "Heater, Fast-Slow".

The switch is off them rotated fully anti-clockwise. Rotation clockwise switches on the motor at its marminum speed, further rotation orings the rheostat into operation and the motor speci no ressively falls until the knob reaches the end of its travel. The motor is fired through the ignition switch and fill be automotically switched off with the ignition.

Index Reference. SectionsO and P

### Amendment to Gervice Bulletin 239

Amend the part numbers under "Front an, - Four Section" as follows:-

Part number Front sung " note section. Left-hand 7479 Front sing - note section. At his-hand. 7480

### SERVICE AND SPARES ORGANISATION

### SERVICE BULLETIN NO. 249

### VARIOUS STRVICING 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 SWIECH.

### 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 relation litted 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. J

### BRAKT LININGS - EVANINATION FOR WUAR.

### 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.

Jaguar Cars Limited 2005

#### SIRVICE BUILDEN NO. 249 -2-

#### N.D. W. SUPPORT BR. CKPT.

#### Models affected.

2.4 litre

3.4 litre

Pleast note that the chrome placed braket to which the No Draught Ventilator hinge is attached, is now supplied as a separate item under the follo ing part numbers.

M.D.V. Support bracket. N.D.V. Support bracket.

Left-hand

BD. 9653

Right-hand

BD. 9654

Index Reference.

Section N. V

# 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 califer bridge size an identification tag is now fitted marked "Inner top".

# Index Reference.

Section L.

# RIAE STRUCT NYLON DE

~~	- 7 -	1. 53.54	ecte	3
- 010		8111	Chil	3

Commencing chas is numbers. R. Drive. L. H. Drive.

781 166

Hark VIII 754370 TT. 150 Ocen 1 stater

830960 Palied Hoad Coupe 824551 835671 Dron Head Coupe 327168 837573

On cars ith the above chassis number, and on aris the rear springs are fitted with full length nylon interleaving between the top and second leaves.

The relevant part number: are as follows:-

Rear string bith hylon interles: Mark VIII
Nylon Interless
Mark VIII
013109/1 Mylon Interleaf 0.13109/2013109/2

#### Service Procedure.

If complaints of rear string squak are received on cars equipped with spring, having rubber buttons, a mylon interleaf can be fitted between the top and second leaves but the follo any points should be noted. .

- On the Mark Vill model a rubber bulyon is fitted between the too and second leaves at the rear end of the porting. Then it in a mylon injurleas this button should be assessed.
- 2. On the IN. 150 model it will be necessary to cut 2' (51 mm) off the lon or and of the interleaf before fitting.

#### Index Reference. Section I.,

#### JACUAR

#### SIRVICE AND SPARES ORTANISATION

#### SINVICE BURNETI NC.250.

#### VARIOUS SERVICING ITHIS.

# LOSS OF DRIVE IN "D" (DRIVE) AND REVERSE

y:Fi

liodels affected					affected	
		orior	to	tran	smission	numbers
Mark VIII Automatic	Transmission			JB8	3302	
2.4 li re Automatic	Transmis-ion			J2B	1522	æ
3.4 litre Autometic	Transmis ion			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 (F.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 """ (Drive) position.

No drive in the "?" (Leverse) 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.o.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 and brake frum as described in paragraphs 9-11 on mage 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 place 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 ands 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 docels 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 TT.

# SERVICE BULLETIN 250

#### REAR SPRING - MODIFIED TYPE.

Models affected.	Commencing	Chassis Numbers.
	R.H.Drive.	L.H. Drive.
XK.150 Open 2 seater	( <del>-</del>	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 Vll

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 VIll model.

# SIRVICE AND SPARES ORGANISATION

#### SERVICE BULLETIN NO. 251.

# VARIOUS SERVICING ITEES.

# PRESSURE "BUILD-UP" IN HYDRAULIC SYSTEM

Models affected XK.150

2.4 little cars fitted with  $6\frac{7}{8}$ " Lockheed vacuum servo.

3.4 litre cars fitted with 68" Lockheed vicuum servo.

The  $6\frac{7}{8}$ " 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	942677
3.4 litre	971732	9874-06

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 clear nee between the serve 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 Manaul).

The trouble will be indicated by a reduction of brake pedal travel, or varying pedal travel, high 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 4.43 of the 2.4/3.4 litre Brake section but entails partial distantling of the slave cylinder.

The simple nothed to overcome pressure build-up is as follows:-

Remove the serve unit from the car.
Remove the end cover (six nuts and bolts).
Slacken the lockmut at the end of the piston push rod.
Unscreen the push rod one complete turn and tighten the lockmut.
Re-fit the end cover. Re-fit the serve unit and bleed the hydraulic system.

Carry out a road test making frequent applications of the brake pedal, to ensure that no brake dra 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 Meforance.

Section L

Cont'd.....

# OIL BATH AIR CLEANER - INTRODUCTION.

Models affected.

2.4 litre

Commencing Chassis Numbers. R.H.Drive. L.H.Drive. 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 drain into the air cleaner through the short pipe thich runs for and to the radiator. The large diameter pipe located under the left-hand front ling 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 we nove the top cover. Spring back the three clips and lift out the filter element. Washer the element by saishing up and down in a boal 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 arro. It is unnecessary to re-oil the filter element as this is done automatically then 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 M.H.Drive

Emort.

973206

On cars with above chassis numbers and onwards modified headlamps incorporating 60 watt bulbs are fitted.

The part numbers are as follows:-

Headlamp complete

Bulb. 60 watt (Lucas No. 404)

0.14237 C.8904.

Part Number

#### Interchangeability.

- The complete headlamp C.14237 is interchangeable with the previous type C.8808.
- The 60 wait bulb cannot be fitted to headlamp C.8808. 2.

Index Reference.

Section P.

#### SERVICE AND SPARES ORGANISATION

#### SERVICE BULLETIN NO. 252.

#### VARIOUS SERVICING ITEMS.

#### FRESH AIR HEATING EQUIPMENT.

Models affected.	Commencing	chassis numbers.
* 9	R.H.Drive	L.H.Drive.
XK. 150.	<b>%</b>	
Open Two Seater		831140
Open Two Seater Fixed Head Oupe	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 penel.
- (b) To vents at the bottom of the sindscreen 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 for 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.....

# SERVICE BULLETIN NO. 252

Fresh air is introduced into the system by opening the door in the left-hand front wing. The lover 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 rearrand 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).
- Set temperature control to the DESIRED POSITION.
- Switch ON fan (to required speed).
- 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).
- CLOSE heater doors.

#### HOT WATHER

To obtain ventilation and demisting.

- OPIN air intake (in left-hand front wing).
- Set temperature control to COLD.
- Switch ON fan (to required speed).
- OPEN heater doors.
- OPEN ventilator (in ri ght-hand front wing).

Index Reference.

Section

# AIR CLEANER HAINLYMANCE.

# 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 weat.

# 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.

"Modification to overcome Handbrake cross 241 cables fouling body".

242 "Hydraulic Fluid for Clutch and Brake Systems-Important".

"Modification to Disc Brake Master Cylinder." 246

#### SERVICE AND SPARES ORGANISATION

# SERVICE SULLIFICATIO, 255

# VARIOUS SERVICIES ITEES

#### GIALING HIDRAULIC DAUPIES - MODIFIED HYPE

lodels affected.	Courtencing	Chassic Numbers
	R.A. Drive	L.H. Drive
2.4 litre - Front	911522 912637	943124 943269
3.4 litre - Front	973987 -	989137
Roar	975132	99 <b>017</b> 8

On care with the above chassis numbers and onwards modified hydraulic dampers are fitted giving consistent damping at all operating temperatures.

The part runbers are as follows:-

 Pront
 0.14586
 2 off

 Resr
 0.14587
 2 off

#### Interchangeability

The new dampers are interchangeable with the previous types, but

Index Reference Sections J and K.

# RELA CALIPER ADAPTOR PLATE BOLDS

# lodels affected.

- 2.4 litre cars with disc brakes.
- 5.4 litre cars with disc brakes.

XK.150

Disc brake cars no in production are fitted with a revised arrangement for attacking the adoptor 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:-

Lodel		Part number	lic. of f per car
XK.150	Bolt.	7755 7757	8 8
All.  Index Koforence		: (130	o

# 9 to 1 CO PRESSION FIGURE - FUEL REQUIRE HERS.

#### Models affected

All cars fitted with 9 to 1 compression engines.

It is important that only super grade fuel with a minimum octane

**-** 2 **-**

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 FAX - INTRODUCTION

Models affected.

Commencing Chassis Numbers

R.H. Drive 9/1349.

L. H. Drive

2.4 litre

943118

On cars with the above chassis numbers and onwards a 12 bladed fan is introduced.

The fan coul 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.

# SERVICE AND SPARES ORGANISATION

#### SERVICE BULLETIN NO. 257

#### VARIOUS SERVICING ITEMS

# BRIDGE TYPE CALIPERS WITH QUICK CHANGE PADS

Models affected	Commencing Cl	nassis 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 whoels	975783	990795
XK.150 Open 2-Seater	820004	831712
XK.150 Drop Head Coupe	827236	837836
XK.150 Fixed Head Coupe	824669	8 <b>3</b> 5886

On cars with the above chassis numbers and orwards 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 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.

#### SERVICE BULLETIN NO. 257

The new part numbers are as follows:-

# XK.150 and XK.150 'S'

C.14874	R.H.	Front Caliper Assembly.
C.14875		Front Caliper Assembly.
C.14876	R.H.	Rear Caliper Assembly.
<b>8.</b> 14877	L.H.	Rear Caliper Assembly.
7654		tion 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. V

# In FAN BELT - INTRODUCTION

#### Models affected

# Commencing Engine Numbers

XK.150	₹,5733	
XK.150 'S'	VS.1523	
3.4 litre	KF.2501	

On cars with the above engine numbers and onwards a  $\frac{1}{2}$ " (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.

#### SERVICE AND SPARES ORGANISATION

#### SERVICE BULLETIN NO. 258

#### VARIOUS SERVICING ITEMS.

#### BRAVE 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
I	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 C	hassis Numbers
	R.H. Drive	L.H. Drive
2.4 litre with drum brakes	91.2622	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 1X	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  $1\frac{3}{4}$ " (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

JAGUAR

- (i) On the Mark IX and XK.150 models upper vishbone 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 By and P.

#### SERVICE AND SPARES ORGANISATION

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 0.

/Cont'd....

- 2 -

#### 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 '0' 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

A11

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.

# SERVICE AND SPARES ORGANISATION

#### SERVICE BULLETIN NO. 262

#### VARIOUS SERVICING ITEMS

#### STEERING UNIT AND IDLER - MODIFIED TYPE

Models affected	Commencing C	hassis 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  $4\frac{1}{2}$  turns from lock to lock. The hole centres in the steering drop arm and in the idler lever are reduced from  $5\frac{7}{8}$ " (14.92 cm) to  $5\frac{1}{2}$ " (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 Edler 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 EV

/Cont'd...

(2)

#### LEAD INDIUM BIG END BEARINGS - INTRODUCTION

Models affected		Commencing Engine Numbers
2.4 litre	10.5	BE.1116
3.4 litre		KF.6219
XK.150		v.6709
Mark V111	30.00	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 FLATE BATTERY - INTRODUCTION

Models affected	Commencing	Chassis	Numbe
	P. H. Drive	T.H.	Darive

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	0.14886	BV.11A	72 amp. hr.	at 20hr rate

Index Reference Section P 🗸

#### NOISE FROM REAR WHEEL ARCHES

# Models affected.

Later Mark VIII models Early Mark 1X 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 /

# SERVICE AND SPARES ORGANISATION

#### SERVICE BULLETIN NO. 263

#### VARIOUS SERVICING ITEMS

#### POWER STEERING BANJO AND BANJO BOLL

Models affected

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

770927

790559

Mark 1X

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.

- /Contid...

(2)

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

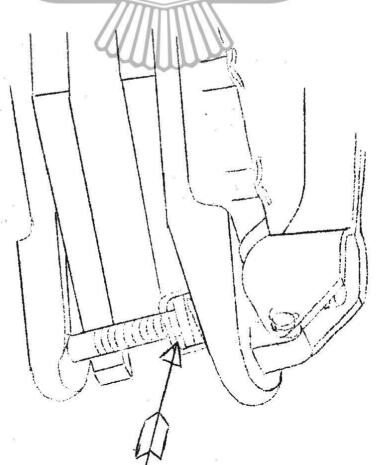
#### Models affected

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 mut 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 scif 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 /

#### SERVICE BULLETIN NO. 265

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 worm 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 FITHOUT EITHER CLEANING OR CHANGING THE OIL FILTER ELEMENT.

Index Reference

Section B

#### WHEEL BALANCING WITH "HEELS 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 MVand HV

#### SERVICE AND SPARES ORGANISATION

#### SERVICE BULLETIN NO. 266

#### VARIOUS SERVICING ITEMS

#### OIL FILTER BLANKING PLATE

Models affected	Commoncing 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 crank-case 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) 0il 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
0.15951 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

(2)

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 Vll, Mark Vlll 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.
- 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 V

# SERVICE AND SPARES ORGANISATION

#### 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		83 <b>208</b> 8	
Drop Head Coupe	827273	838259	
Fixed Head Coupe	824,900	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	0.15256	0.15255	C.15255	C.15254
Lucas type	C45-PV-6	645-PVS-6	C45-PVS-6	C45-PVS-6
Lucas part number	224 <b>8</b> 9D	22496A	22496A	22528D
Voltage/current regulato:				
Jaguar part number	/C.15257	C.15257	C.15257	C.15257
Lucas type	RB.310	NB.310	RB.310	RB.310
Lucas part number	37297.F	37297.F	37297.F	37297•F

The revised current setting of the new woltage 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

#### SERVICE AND SPARES ORGANISATION

#### S ERVICE BULL TIN NO. 268

#### VARIOUS SERVICING ITEMS

#### ELECTRIC REVOLUTION COUNTER - INTRODUCTION

Models affected	Commencing Cha	ssis numbers
	R.H. Drive L	.H. Drive
2.4 litre	91 521 4	943590
3.4 litre	977860	992652
XK.150 Open 2-seater	820043	832088
Fixed Head Coupe	824905	836233
Drop Head Coupe	827373	838272
Mark 1X	771820	791 072

On cars with the above chassis numbers and onwards plus certain individual cars prior to these numbers an electrically operated revolution counter replaces the vable 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 f	ollows:-		
	2.4 litre	Mark 1X	XK.150
	3.4 litre	e sero se	
Electric Rev. Counter	0.14993	C.14995	C.14994
Instrument with Clock			
Harness for Electric	0.15268	Cut 5268.	C.15269
Revolution Counter	///////		440
Revolution Counter Generator		C.14996	1.55 5:
Driving Haw	C.14989	14 50 100	C.14989
Plate Washer	C.15918		C.15918
Lock Tasher (3 off)	C.15919	C. 15919	C.15919
'O' Ring	C.14990	C-14990	C.14990
Setscrews (3 off)	C-14992		C.14992
Cylinder Head	0.14955(2.4 litre)	0.14958	C.14956(XK.150)
	C.14956(3.4 litre)		C.14957(XK.150'S')
Inlet Camshaft Cover	C.14987		C.14987
Inlet Camshaft Cover Gasket	C.14988		C.14988
Neoprene Sealing Ring	C.14991	C.14991	
Rear Bearing Cap	C.14984		C.14984
Inlet Camshaft	C.14986(2.4 litre)	C.14985	C.14985
	C.14985(3.4 litre)		

#### 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 Board 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 ...

#### SERVICE BULLETIN NO. 268

(2)

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 LX 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

Commencing Chassis numbers Models affected R.H. Drive L.H. Drive Mark 1X 771823 791081 832089 XK.150 Open 2-sea 82004.3 Fixed Head Coupe 824903 836227 Drop Head Coupe 827379

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 1X 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 C.15647

- left hand

Jaguar Cars Limited 2005

#### SERVICE AND SPARES ORGANISATION

SERVICE BULLETIN NO. 269

#### VARIOUS SERVICING ITEMS

# 67" 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  $6\frac{7}{8}$ " serve 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 :

# 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

(2)

#### 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
		20	Temperature
2.4 litre, 3.4 litro	C.13944/1		80/85° c.
Mark 1X, XK.150	C.12867/1	35.1°	80/85° C.

#### Index Reference

#### SERVICE AND SPARES ORGANISATION

SERVICE BULLETIN NO. 270

#### VARIOUS SERVICING ITEMS

# $6_8^7$ " SERVO - INTRODUCTION OF CUP SPREADER

#### Models affected

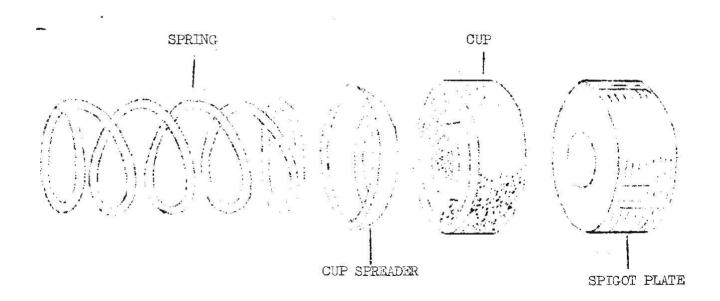
Cars fitted with  $6\frac{7}{3}$ " diameter servo unit

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

#### SERVICE BULLETIN NO. 270

(2)

# GIRLING HYDRAULIC DAMPER - MODIFIED TYPE

Model affected

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

Mark 1X

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

ommencing Chassis Numbers

L.H. Drive 791445

Mark 1X

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	<b>C.</b> 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	8021
fixings)	

# Interchangeability

The new type handbrakes are not interchangeable with the previous type.

Spares Bulletin K.16 refers.

Index Reference

Section L

# 2.4 litre (Mark 1) Model

COMPRESSION	TYPE OF CYLINDER	CAM	EXHAUST	CARBURETTER	CARBURETTER				DISTRIBUTOR STAT		STATIC IGNITION	SPAR	MPION RKING YPE & GAP	
RATIO	HEAD	LIFT	SYSTEM	ТҮРЕ	SETTINGS	Part Number	Service Number	BREAKER GAP	TIMING	Touring	Racing			
7 10 1	Standard (Silver Top)	is "	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)	<b>18</b> ″	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)	\$.**	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)	980	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)	3,*	Twin	S.U. HD. 6 11" 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.

# ERVICE SERVICE A Z BULLETIN ARES No.

(Mark

Models

SERVICE BULLETIN No. 271
Page 2

# Jaguar Cars Limited 2005

# 3.4 litre (Mark 1) Model

	VICTOR REPORTS	-			CARBURETTE	ER NEEDLES	DISTRI	BUTOR	DISTRIBUTOR	STATIC IGNITION TIMING	CHAMPION	
COMPRESSION RATIO	TYPE OF CYLINDER	CAM LIFT	EXHAUST SYSTEM	CARBURETTER TYPE	with	with	Jaguar Lucas		ucas CONTACT BREAKER Ervice GAP		SPAR PLUG TY	
IN/1170	HEAD				Wire mesh air cleaner	Oil bath air cleaner	Part Number				Touring	Racing
7 ∞ 1	'B' Type (Light blue top)	3*	Twin	S.U. HD. 6 13" bore	T.L.*	s.c.	C12733	40578A	.014′016′	TDC	L.7 (.025*)	L.5 (.025*)
8 to 1	'B' Type (Light blue top)	3.7	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)	37	Twin	S.U. HD. 6 1¾ bore	T.L.*	S.C.	C14269	40617A	.014″016″	TDC	N.5 (.025")	N.3 (.025")

\* L.B.1, needles fitted to early cars.

#### SERVICE AND SPARES ORGANISATION

#### 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 DETANDRE SERVO UNIT - IMPORTANCE OF FITTING PISTON ROD

#### lodels affected

Mark Vll Mark Vlll

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 <u>must</u> be fitted in conjunction with the new seals when everhauling 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 OP RATION

# 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 any time, 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

#### SERVICE AND SPARES ORGANISATION

SERVICE BULLETIN NO. 274

#### VARIOUS SERVICING ITEMS

#### LACK OF SERVO ASSISTANCE

#### Models affected

3.4 litre Hark 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 CHAIMS - 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

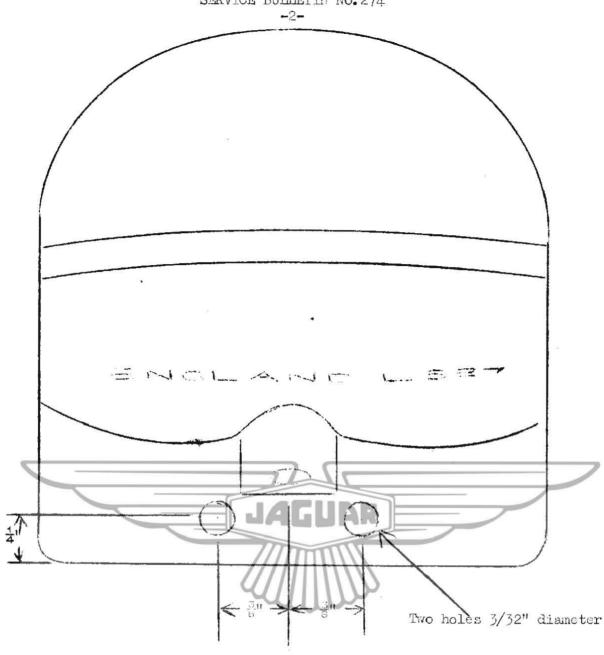
Cars with new type tail lamps

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.

/Cont'd ...

SERVICE BULLETIN NO. 274



Index Reference

Section P

#### TWIN LIP OIL SEAL - INTRODUCTION

5 " Y "	00 1 7	
MONG	affected	
THOUGHS	all colour	

Commencing chassis numbers
R.H. Drive L.H. Drive

Mark 1X

773282 792205

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 Vill 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

#### 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.

/Cont'd ...

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 property and the second seco

Mark V111 Mark 1X
XK.150 Mark 1X

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 lace the previous welded type and the original tailpipe clipped to the silencer with the following parts:

Part number	the philosophics of	No. off
C . 13063	Clip	1
UFB131/22R	Bolt	mercent 1 and
FW105T	Washer	2
UFN131/L	Nut	mitteen 1 mil

When separating the old silencer from the tailpipe cut through the tailpipe immediately behind the point where it is welded to the silencer. enti danup I am dang I stelly

Index Reference

Section M

#### SERVICI AN D 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	- 7
Filler cap	C.16177	
"Lucar" connectors (female) 2 off	8193	54942078
Insulating sleeve 2 off	8194	541 90042
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).

Hake 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 screeks.

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 1½" 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.1617) 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.

(2)

Take a cable from the connector to one of the connections on the warning light holder.

On the 3.4 litre model there is a loose cable (coloured green) behind the instrument panel. (This is the cable which feeds the mixture control warning light on the 2.4 litre model). Take a wire from the connector at the end of this cable to one of the connections on the warning light holder.

- 2. Take a cable from the other connection on the warning light holder to one of the connections on the reservoir filler cap.
- 3. Take a cable from the other connection on the filler cap to a good earth.

Note: The terminal connections on the filler cap are of the "Lucar" type and it will be necessary to fit connectors of this type to the ends of the two cables which are connected to the supply tank. To connect the cable to the "Lucar" connector, the cable should be bared back about 5/16", the wire strands passed through the 'D' flap, bent back and soldered to the underside of the connector. Care should be taken not to allow solder to run through the spring blade. The cable should be secured by crimping the cleats over the cable insulation. Fit the insulating sleeves.

After refitting the glovebox test the warning light by switching on the ignition and depressing the float pin on top of the reservoir filler cap hen the warning light should become illuminated.

Index Reference

Section L

#### GUM DEPOSITS ON ENLET VALVES

#### Models affected

All

To again refer to the above subject covered in Service Bulletin No.259 and stress the point that some present day fuels form gum deposits in a comparatively short space of time if a relatively small quantity of petrol is left in the tank(s). These deposits will result in sticking valves when the car is put into service.

Cars should not be stored with a small quantity of petrol in the tank(s). If the car is to be stored for a long period, drain the tank(s) and carburetters. If the storage period is likely to be only of short duration the tank(s) should be completely filled.

Index Reference

Section B

#### IMPORTANT

The attention of Distributors and Dealers is again drawn to the absolute importance of quoting letter references and chassis or other serial numbers when corresponding with the factory. A great deal of unnecessary delay and inconvenience is caused if this is not complied with.