

Number 0.7.

Section Heating & Windscreen
Washing Equipment.

Sheet 1 (of 1)

Date April, 1965.

INTRODUCTION OF THE LUCAS 5SJ SCREEN JET WINDSCREEN WASHER.

Models affected.

Commencing chassis numbers.

	R.H. Drive.	L.H. Drive.
2.4 litre Mark 2	118878	127760
3.4 litre Mark 2	168957	180137
3.8 litre Mark 2	233919	224086
3.4 'S'	1B3605	1B25515
3.8 'S'	1B53950	1B77613
4.2 Mark 10	1D50548	1D75374
4.2 'E' Type Open 2-seater	1E1165	1E10754
4.2 'E' Type Fixed head coupe	1E20371	1E30825

On cars with the above chassis numbers and onwards Lucas 5SJ windscreen washer units are fitted, replacing the Lucas 2SJ unit previously fitted to all models.

The model 5SJ screen jet is an electrically operated unit comprising a small permanent-magnet motor driving a centrifugal pump through a 3-piece Oldham type coupling.

The water container is moulded in high density polythene.

The motor unit is controlled by the switch on the instrument panel as on the previous model, but, as no reservoir is incorporated in the design of the unit the operation is NOT automatic and the motor is energised only as long as the switch lever is held in the raised position.

The unit will fail to operate if the water level is allowed to fall below the pump unit; refilling with clean water to the bottom of the filler neck will restore operation.

The container capacity is approximately 2 pints (1 litre).

Lucas "Crystal Clear" screenjet fluid may be added to help dissolve greasy smears and to remove insect deposits from the windscreen.

No routine maintenance is necessary but the pump filter should be kept clean and the container kept free from sediment.

Number 0.8.
Section Heating & Windscreen
Washing Equipment.


Sheet 1 (of 1)

Date September, 1965.

LUCAS 5SJ WINDSCREEN WASHER.

(Cold Weather Protection)

The Lucas 5SJ windscreen washer container (reference service bulletin 0.7) which is made of high density polythene, can be given a safe degree of protection from frost damage by adding denatured alcohol (Methylated Spirits) in the following proportions:-



To protect down to	18.5°F (-7.5°C)	add	220 c.c. (20%)
to	6.8°F (-14°C)	add	330 c.c. (30%)
to	-16.6°F (-27°C)	add	440 c.c. (40%)

Number 0.8 (2nd issue)
Section Heating and Windscreen
Washing Equipment

Sheet 1 (of 1)

Date November, 1965

This Service Bulletin supersedes the original issue of September, 1965, which should be destroyed.

LUCAS 5SJ WINDSCREEN WASHER

(Cold Weather Protection)

The Lucas 5SJ windscreen washer container which is made of high density polythene can be given a safe degree of protection from frost damage down to -28°F (-33°C) by the use of propriety anti-freeze solvents as marketed by "TRICO" or "HOLTS SCREENWASH".

Instructions regarding the use of the solvent will be found on the container.

Denatured alcohol (Methylated Spirits) must NOT be used.

The use of this chemical will discolour the paintwork on the body.

Number	P.1
Section	Electrical and Instruments
Sheet	1 (of 1)
Date	January, 1960

INSTRUMENTS, OVERDRIVE AND AUTOMATIC
TRANSMISSION INDICATOR LIGHTS

Mark 2 Models

All the instruments with the exception of the speedometer are electrically controlled. The oil pressure gauge is controlled by a pressure operated element which is screwed into the oil filter head. The water temperature gauge is controlled by a temperature sensitive element in the form of a bulb fitted at the front end of the inlet manifold water jacket.

Access to Instruments

The centre instrument panel is hinged at the bottom and secured at the top by two knurled screws, one at each end. To gain access to the instruments and switches unscrew the two knurled screws and lower the panel.

Speedometer - Removal

The speedometer instrument is removed from the front of the fascia panel after carrying out the following work at the rear of the instrument:-

Disconnect the battery. Extend the steering column fully.

Unscrew the two bezels where the speedometer and rev. counter remote control cables protrude through the dash casing. Remove the dash casing.

At the rear of the instrument, unscrew the two knurled nuts and detach the earth wire and the two speedometer retaining pieces. Unscrew the knurled nut securing the speedometer drive cable to the instrument.

Draw out the speedometer from the front fascia and withdraw the three warning light bulb holders (Cable colours: Headlamp - blue/white, Ignition - brown/yellow and white, Fuel - green/white and green). Unscrew the trip control cable and withdraw the two illumination bulb holders when the speedometer can be removed.

Revolution Counter - Removal

It will be found advantageous to first remove the speedometer instrument as described in the previous paragraphs.

At the rear of the instrument unscrew the two knurled nuts and detach the earth wire and the two revolution counter retaining pieces.

Unscrew the remote control of the electric clock and detach the "snap-on" cable connection (Cable colour - brown). Withdraw the two illumination bulb holders and detach the "snap-on" cable connection for the revolution counter (Cable colour - black/blue and black/brown). The revolution counter can now be withdrawn.

Testing Operation of Revolution Counter

The only testing of this unit is with the engine ticking over. Place an AC voltmeter on the terminals of the generator at the rear of the right-hand camshaft, when a current should be recorded. As a rough guide, there should be a 1 volt output per 100 revs. Should the generator record a voltage output, due to its construction it can be assumed that it is functioning accurately. Should the revolution counter instrument not then function it must be replaced.



OVERDRIVE INDICATOR LIGHT

When the overdrive is in operation the word "Overdrive" in the quadrant behind the steering wheel becomes illuminated; when the side-lights are switched on the illumination is automatically dimmed.

AUTOMATIC TRANSMISSION INDICATOR LIGHT

When the ignition is switched on the letters P.N.D.L.R. in the quadrant behind the steering wheel become illuminated; when the side-lights are switched on the illumination is automatically dimmed.

Number	P.2
Section	Electrical and Instruments
Sheet	1 (of 1)
Date	January, 1960

DRAIN HOLES IN NEW TYPE REAR LAMPS

Models affected

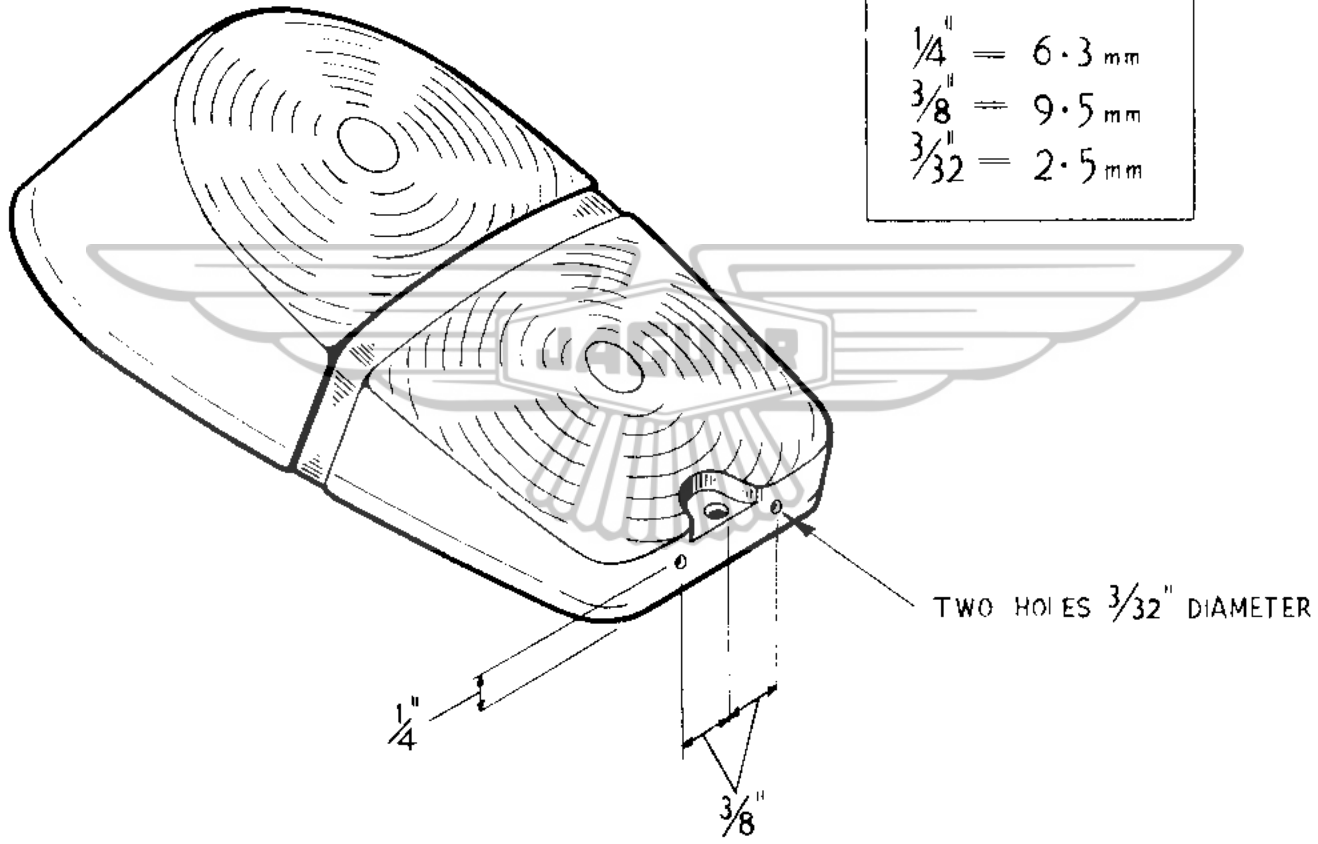
Cars with new type tail lamps

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.



$\frac{1}{4}''$	=	6.3 mm
$\frac{3}{8}''$	=	9.5 mm
$\frac{3}{32}''$	=	2.5 mm



Number	P.3
Section	Electrical and Instruments
Sheet	1 (of 1)
Date	January, 1960

OIL PRESSURE GAUGE - LOW INDICATED READING

Mark 2 Models

If it is suspected that the electrically operated oil pressure gauge is reading low, a normal type of pressure gauge should be connected to the lubrication system and comparative pressure readings taken on the two gauges at the same engine speed.

This is most easily done by using an oil gauge pipe union (Part number 2698) brazed to a banjo bolt (Part number C.5846) through the head of which an $\frac{1}{8}$ " hole has been drilled.

This adaptor can then be screwed into the cylinder block in place of the existing banjo bolt for the oil feed pipe to the camshafts. A normal oil pressure gauge can then be connected to the adaptor and the gauge reading compared with the electrically operated instrument.

INACCURACY OR FLUCTUATION OF FUEL GAUGE AND WATER TEMPERATURE GAUGE READINGS CONSISTENT WITH ENGINE SPEED

Mark 2 Models

Mark 2 models are fitted with an instrument voltage control unit which reduces the battery voltage to 10 volts for the fuel gauge and water temperature gauge.

If complaints are received of inaccuracy or fluctuation with engine speed with either of these gauges check the following points before changing the instrument or operating element.

1. Check voltage control unit for a good "earth". The unit is earthed to the panel by the mounting screw.
2. Cables incorrectly connected to voltage control unit. The cables should be connected as follows:-

Terminal 'B' = Dark green

Terminal 'I' = Light green with dark green tracer.

3. Faulty instrument voltage control unit. This can be checked by shorting out the 'B' and 'I' terminals on the unit when, if there is no change in the petrol gauge reading the unit can be assumed to be faulty.

The instrument panel voltage control unit is attached to the rear of the instrument panel between the oil pressure and water temperature gauges. To gain access to the rear of the instrument panel unscrew the two knurled screws at the top of the panel and lower the panel which is hinged at the bottom.



Number	P.4
Section	Electrical and Instruments
Sheet	1 (of 1)
Date	March, 1960

60 lb per sq. in. OIL PRESSURE GAUGE

Models affected

2.4 litre Mark 2
3.4 litre Mark 2
3.8 litre Mark 2

Commencing Chassis numbers

R.H. Drive	L.H. Drive
101446	125370
151003	175499
200668	211867

On cars with the above chassis numbers and onwards an oil gauge reading up to 60 lbs per sq. in. is fitted in place of a gauge reading up to 100 lbs per sq. in.; in conjunction with this change a different operating element is fitted to the oil filter head. The part numbers are as follows:-

	<u>Part number</u>
Oil pressure gauge (60 lbs per sq. in.)	C.15473
Electric operating element	C.15474

Servicing Procedure

Only the above parts will in future be supplied from the Jaguar Spares Department and when the 60 lb gauge is used to replace the 100 lb gauge (Part number C.15913) the appropriate element (Part number C.15474) must be fitted to the oil filter head. Similarly, if it is found necessary to replace the operating element (Part number C.15914) fitted in conjunction with a 100 lb gauge, a 60 lb oil pressure gauge must also be fitted.

Note: When checking for a suspected low indicated oil pressure as described in Service Bulletin P.3 it is advisable to maintain an engine speed of 2,500 r.p.m. for a period of 2½ minutes to obtain the true oil pressure reading on the electrically operated oil gauge.

Number	P.5
Section	Electrical and Instruments
Sheet	1 (of 1)
Date	May, 1960

HORN RING COVER CLIPS

(Mark 2 Models)

In the event of breakage of the spring clips which secure the horn ring cover to the horn ring centre, new clips (Part number 8342) should be fitted and fixed into position using an epoxy resin type of adhesive such as "Araldite" (1000 A and B) which is readily available from ironmongers, factors etc., This product is marketed in the U.S.A. by:-



Carefully remove the damaged clip with a pair of pliers and clean out all traces of the old adhesive from the spring clip recesses in the plastic moulding. When fitting the new spring clips into their recesses follow the instructions supplied with the adhesive.

Number P.7
Section Electrical and
Instruments
Sheet 1 (of 1)
Date June, 1961.

OXIDIZATION OF DISTRIBUTOR AND REGULATOR CONTACTS

(All Models)

Oxidization of the distributor points and regulator contacts can occur on a car which has been stored for a long period. As a result difficult starting or failure to start the engine, together with charging trouble may be experienced.

It is, therefore, advisable to clean both the distributor and regulator contacts before attempting to start the engine of a vehicle which has not been used for some time.



Number P.9
 Section Electrical and
 Instruments
 Sheet 1 (of 1)
 Date January, 1962

HEATER MOTORS

("E" Type)

It should be noted that the heater motors fitted to the "E" Type models are of A.C.-Delco manufacture and any correspondence relating thereto should be addressed to:-

A.C.-Delco Division of General Motors Ltd.,
 Watling Street,
 Dunstable,
 Bedfordshire.



REVOLUTION COUNTERS WITH MARK 11 MOVEMENTS

Models affected

Commencing Chassis Numbers

	R.H. Drive	L.H. Drive
2.4 litre Mark 2		
Standard Transmission	110821	126600
Automatic Transmission	110803	126597
Overdrive	110791	126598
3.4 litre Mark 2		
Standard Transmission	157655	177633
Automatic Transmission	157978	177658
Overdrive	157955	177645
3.8 litre Mark 2		
Standard Transmission	206743	218592
Automatic Transmission	206924	219046
Overdrive	206930	219028
"E" Type		
Open 2-seater	850289	876117
Fixed Head Coupe	860029	885206

On cars with the above chassis numbers and onwards, a rev. counter with a modified movement (Mark 11) is fitted. On

/Continued overleaf...

"E" Type cars this instrument is interchangeable with the Mark 1 instrument but on Mark 2 cars the instruments are NOT interchangeable.

When ordering a replacement rev. counter, the code numbers on the instrument face must be quoted.

Spares Bulletin Number Q.28 refers.



Number P.14.
 Section Electrical and
 Instruments
 Sheet 1 (of 2)
 Date April, 1962

ELECTRICALLY-HEATED BACKLIGHT

An electrically-heated backlight to provide demisting or defrosting has been introduced as an optional extra on all current production models except the Open 2-seater "E" Type.

A heating element consisting of a fine wire mesh between the laminations of glass is connected to the wiring harness. The element will come into operation when the ignition is switched on; the current consumption being approximately 5 amps.

Tinted (Sundym) glass is obtainable at an additional cost.

Mark 2

<u>Parts required</u>	<u>Description</u>	<u>No. off</u>
BD.21942	Backlight (Clear Glass)	1
BD.22742	Backlight (Sundym)	1
C.20125	Fuse Connector and Cables	1
BD.11524	Grommet	2
BD.22655	Clip for Fuse Holder	1
BD.711/5	Screw securing Clip	1
C.5204	Earth Terminal	1
BD.1229/7	Self-tapping Screw	1

Fit the fuse retaining clip (BD.22655) adjacent to, but below the present fuse block on the left hand wing valance. Connect the white cable from the fuse connector (C.20125) to the terminal A3 with existing white cables. Lead the black/white cable along with the present harness into the instrument panel, and across to the left hand body harness junction. Lead the cable down the left hand door sill into the luggage compartment. If difficulty is experienced in passing the cable through the door sill, it is permissible to place it under the carpet on the interior of the car.

Remove the original backlight, drill two $\frac{3}{8}$ " (9.5 mm) holes 12" (30.48 cm) from either side of the centre of the backlight and $\frac{1}{2}$ " (12.7 mm) below the lower edge of the glass. Place the two grommets (BD.11524) in position.

Pierce two holes through the glass rubber surround and pass

the heated backlight cables through.

Fit the backlight (BD.21942 or BD.22742) as described on page M.14 and 15 of the Mark 2 Service Manual. Take care to push the cables into the interior of the car when fitting the glass. Pass the cables through the rubber grommets into the luggage compartment and connect the black/white cable to its counterpart. The black cable from the heated backlight should be fitted with earth terminal (C.5204) and earthed at a suitable point near the cable.

Mark 10

<u>Parts required</u>	<u>Description</u>	<u>No. off</u>
BD.21857	Backlight (Clear Glass)	1
BD.22743	Backlight (Sundym Glass)	1
C.19724	Fuse Connector and Cables	1
C.20128	Bracket for Fuse Holder	1
BD.22655	Clip for Fuse Holder	1
BD.711/5	Screw, securing Clip	1
C.15639	Grommet	2
C.1040/13	Cable Clip	2
UFS.419/4H	Setscrew securing Cable Clip	2
UFN.119/L	Nut on Setscrews	2
C.723/A	Washer under Nut	2

On Mark 10 models the feed wire to the heated backlight is incorporated in the harness. Remove the two knurled nuts and hinge down the instrument panel. Release both fuse blocks on the left hand side and slide the bracket (C.20128) over the studs. Retain the bracket by refitting the fuse blocks. Fit the fuse retaining clip (BD.22655) to the bracket with the aid of the self-tapping screw (BD.711/5).

Place the fuse connector and cables (C.19724) in the clip already fitted and connect the white cable to the terminal block at which all other white cables are collected. Connect black/white cable from fuse holder to equivalent cable already situated in the original harness.

Drill two $\frac{1}{4}$ " (6.35 mm) holes $12\frac{3}{4}$ " (31.1 cm) from either side of the centre of the backlight aperture and $\frac{3}{8}$ " (9.52 mm) from the rear edge of the parcel shelf. Fit the two grommets (C.15639) in the holes drilled in the parcel shelf. Pierce two holes in the glass surround rubber and pass the black/white and black cables through the rubber.

Fit the heated backlight (BD.21857 or BD.22743) as already described under Mark 2 fitting instructions. Pass the cables through the parcel shelf and into the luggage compartment. Drill two $7/32$ " (5.55 mm) holes into the underside of the parcel tray approximately 3" (7.62 cm) from the holes already drilled. Secure cables with clips

(C.1040/13) to the underside of the parcel tray with the setscrews, nuts and washers provided. Join the black/white and black cables to their equivalent in the rear harness.

"E" Type

<u>Parts required</u>	<u>Description</u>	<u>No. off</u>
BD.22629	Backlight (Clear Glass)	1
BD.22741	Backlight (Sundym Glass)	1
C.20124	Fuse Connector and Cables	1
C.20123	Backlight connector Cables	1
C.15639	Grommet	2
C.18341	Grommet	3
BD.22655	Clip for Fuse Holder	1
BD.711/5	Screw securing Clip	1
C.20081	Sail Eyelet and Ring	1
C.17001	P.V.C. Strapping (3½" long)	2
C.17002	Stud	2

Lower the instrument panel and fit the fuse retaining clip (BD.22655) to the lower edge of the right hand lower fuse block. Place the fuse connector (C.20124) in the clip provided and connect the white cable to the terminal block where all white cables are collected. Lead the black/white cable from the fuse connector down the left hand door sill following the rear harness to the covered aperture provided in the left hand rear quarter tail casing.

Drill two ¼" (6.35 mm) holes 18" (45.72 cm) apart from the centre of the backlight. The holes should be drilled parallel to the backlight glass to enter between the inner and outer skins of the boot lid. Insert the two grommets (C.15369) in the holes drilled.

Pierce two holes 18" (45.72 cm) apart in the backlight rubber surround and pass the black/white and black cables through the rubber.

Fit the heated backlight (BD.22629 or BD.22741) as detailed on page N.19 of the "E" Type Service Manual. When fitting the backlight, take care to keep the cables inside the car. Pass the cables through the two grommets in the rear panel and fit the backlight connector cables (C.20123) to the black/white and black cables from the backlight heating element.

Drill a 7/16" (11.11 mm) hole adjacent to the lower door hinge, insert the sail eyelet and ring, and pass the cables out through this aperture. Strap the cables to the lower door hinge and pass through another 7/16" (11.11 mm) hole drilled in the left hand quarter tail casing approximately 2½" (5.40 mm) to the rear of the lower hinge and 2¼" (5.71 mm) from the top of the quarter tail casing. Connect the

black/white cable to its equivalent situated in the aperture in the rear quarter. The interior light earth snap connector is changed to a double connector and the black cable from the heated backlight is inserted to provide an earth.



Number P.14. (2nd issue)
Section Electrical and Instruments

Sheet 1 (of 3)
Date December, 1962.

This Service Bulletin supersedes the original issue of April 1962 which should be destroyed.

ELECTRICALLY-HEATED BACKLIGHT.

An electrically-heated backlight to provide demisting or defrosting has been introduced as an optional extra on all current production models except the Open 2 - seater 'E' Type.

The heating element, consisting of a fine wire mesh between the laminations of the glass, is connected to the wiring harness.

The heating of the element will come into operation when the ignition is switched on, the current consumption being approximately 5 amps, and a 15 ampere fuse is incorporated in the circuit.

Tinted (SUNDYM) glass is obtainable at an additional cost.

MARK 2 MODELS

<u>Parts required</u>	<u>Description</u>	<u>No. off</u>
BD 21942	Backlight (Clear Glass)	1
BD 22742	Backlight (SUNDYM)	1
C 20125	Fuse Connector and Cable	1
BD 11524	Grommet	2
BD 22655	Clips for Fuse Holder	1
BD 711/5	Screw securing Clip	1
C 5204	Earth Terminal	1
BD 1229/7	Self-tapping Screw	1

Fit the fuse retaining clips (BD 22655) adjacent to, but, below the fuse block on the left hand front wing valance. Connect the white cable from the fuse connector (C 20125) to the terminal A3 on the fuse block along with the existing white cables.

Tape the black/white cable into the panel harness and lead across to the left hand body junction.

/cont'd.....

Feed the cable along the left hand door sill with the body rear harness and terminate in the luggage compartment.

If difficulty is experienced in passing the cable through the door sill it is permissible to place it under the carpet.

Remove the original backlight as detailed in the Mark 2 Service Manual - page N 14.

Drill two $\frac{3}{8}$ " (9.5 mm) holes 12" (30.48 cm) either side of the centre line of the backlight and $\frac{1}{2}$ " (12.7 mm) below the lower edge of the glass on the inner body panel. Place the two grommets (BD 11524) in position.

Pierce two holes in the inner face of the glass rubber surround and pass the heated backlight cables through into the body.

Fit the backlight (BD 21942 or BD 22742) as described on page N 14 of the Mark 2 Service Manual.

Pass the cables through the rubber grommets into the luggage compartment and connect the black/white cable to its counter part previously installed. The black cable from the backlight should be fitted with earth terminal (C 5204) and earthed to a suitable point near the cable.

MARK 10 MODEL

<u>Parts required</u>	<u>Description</u>	<u>No off</u>
BD 21857	Backlight (Clear Glass)	1
BD 22743	Backlight (SUNDYM)	1
C 19724	Fuse Connector and Cables	1
C 20128	Bracket for Fuse Holder	1
BD 22655	Clip for Fuse Holder	1
BD 711/5	Screw, securing Clip	1
C 15639	Grommet	2
C 1040/13	Cable Clip	2
UFS 419/4H	Setscrew securing Cable Clip	2
UFN 119/L	Nut on setscrew	2
C 723/A	Washer under Nut	2

On Mark 10 models the feed wire to the heated backlight is incorporated in the harness. Remove the two knurled screws and hinge down the instrument panel.

/cont'd.....

Release both fuse blocks on the left hand side and slide the bracket (C 20128) over the studs. Retain the bracket by refitting the fuse blocks. Fit the fuse retaining clip (BD 22655) to the bracket with the aid of the self tapping screw (BD 711/5).

Place the fuse connector and cables (C 19724) in the clip and connect the white cable to terminal A3 on the fuse block along with the existing white cables.

Connect the black/white cable from the fuse holder to the equivalent cable already situated in the existing body harness.

Remove the rear backlight as detailed in the Mark 10 Service Manual - page N 15.

Drill two $\frac{1}{4}$ " (6.35 mm) holes $12\frac{3}{4}$ " (31.1 cm) from either side of the centre of the backlight and $\frac{3}{8}$ " (9.5 mm) from the rear edge of the parcel shelf. Fit the two grommets C 15639 in the holes drilled in the parcel shelf.

Pierce two holes in the glass rubber surround and pass the backlight cables through into the body.

Fit the backlight BD 21857 or BD 22743 as detailed in the Mark 10 Service Manual - page N 15.

Pass the cables through the parcel shelf and into the luggage compartment. Drill two $7/32$ " (5.55 mm) holes into the underside of the parcel tray approximately 3" (7.62 cm) from the holes already drilled. Secure the cables with clips to the underside of the parcel tray with the setscrews, nuts and washers provided. Join the black/white and black cables to their equivalent in the rear harness.

'E' TYPE

<u>Parts required</u>	<u>Description</u>	<u>No off</u>
BD 22629	Backlight (Clear Glass)	1
	(From Car No.860001 - 860478 (RHD) and 885001 -886013 (LHD)	
BD 22740	Backlight (Clear Glass)	1
	(From Car No.860479 onwards (RHD) and 886014 onwards (LHD)	
BD 22741	Backlight (SUNDYM)	1
	(From car No.860001 - 860478 (RHD) and 885001 - 886013 (LHD)	
BD 22744	Backlight (SUNDYM)	1
	(From Car No.860479 onwards (RHD) and 886014 onwards (LHD)	
C 20124	Fuse Connector and Cables	1
C 20123	Backlight connector Cables	1
C 15639	Grommet	2

'E' TYPE CONT'D.

<u>Parts required</u>	<u>Description</u>	<u>No off</u>
BD 22655	Clip for Fuse holder	1
BD 711/5	Screw securing Clip	1
C 17001	P.V.C. Strapping (3½" long)	2
C 17002	Stud	2
C 18341	Grommet	1

Lower the instrument panel and fit the fuse retaining clip (BD 22655) to the lower edge of the right hand fuse block.

Place the fuse connector (C 20124) in the clip and connect the white cables to terminal A3 along with the existing white cables.

Tape the connector cable into the panel harness and lead across to the left hand side.

Feed the cable along the left hand door sill following the run of the left hand rear body harness and terminate in the left hand rear quarter.

Remove the left hand rear quarter casing aperture cover and locate the rear window harness.

Connect the black (earth) cable together with the interior light earth cable using the double snap connector supplied.

WARNING Do not attempt to lift the trimming completely from the door sill. Raise the lower portion only and route the cable under the leather cloth.

Ease the rear quarter casing away from the panel.

Insert grommet (C.18341) in the ½" hole located adjacent to the lower hinge bracket. Pass the cable harness through the grommet and clip to the lower hinge using the P.V.C. strapping (C 17001 and studs C17002).

Refit rear quarter casing.

Remove the rear backlight as detailed in the 'E' Type Service Manual -- page N 19.

Drill two ¼" (6.35 mm) holes 9" (22.8 cm) either side of the centre line of the backlight on the lower edge of the aperture. The holes should be drilled parallel to the glass to enter between the inner and outer panels of the lid.

NOTE: Some early backlight glasses to Part No's BD 22629 and BD 22741 may be supplied with the cable connectors protruding from the top of the glass.

In this case drill the two $\frac{1}{4}$ " holes in the UPPER edge of the aperture and feed the extended cables inside the door frame to the left.

Pierce two holes through the glass rubber surround and pass the cables through into the luggage compartment lid.

Fit the backlight BD 22629 - BD 22740 - BD 22741 or BD 22744 as detailed in the 'E' Type Service Manual - page N 19. When fitting take care to keep the cables inside the car.

Remove the lid stay and rubber clip mountings and prise away the door casing from the lower clip fixings.

Pass the body connector cables under the casing and connect to the backlight cables.

Refit casing, stay and rubber clip mountings.

Number P.15.
 Section Electrical and
 Instruments
 Sheet 1 (of 1)
 Date May, 1962

RADIO FITTING INSTRUCTIONS

("E" Type)

The attention of Distributors and Dealers is drawn to the following points when fitting the Smiths Radiomobile.

It is most important when fitting the radio receiver, to remove any felt material in the area behind and underneath the receiver heat sink to assist in ventilation. It may also be necessary to trim the carpet to assist in clearing the heat sink.

When connecting the twin loudspeakers, it is important for the terminal with the rubber sleeve to be fitted to the top screw termination of each loudspeaker. This will ensure that the speakers are connected to operate in anti-phase giving the correct tone.



JAGUAR

FOGLAMP FITTING INSTRUCTIONS

(Mark 10 Model)

Twin rectangular foglamps with yellow bulbs are now available for fitting to the Mark 10 model as optional extras.

<u>Parts required</u>	<u>Description</u>	<u>No. off</u>
C.20443	Foglamp	2
C.20246	Lighting switch (4 position)	1
C.15447	Escutcheon	1
C.15463	Foglamp connector (cable)	2
C.2706	Grommet	2
C.1426	Grommet	2
C.20444	Foglamp bracket L.H.	1
C.20445	Foglamp bracket R.H.	1
C.17001	Cable strapping	12"
C.17002	Stud	2

The foglamp brackets should be bolted to the bumper utilizing the two inner bumper bracket bolts. The foglamps are fitted to the brackets and are positioned under the bumper on the inside of the

overriders. On later cars, a hole is provided in the front cross member cover plate adjacent to the bumper bracket, and the foglamp connector cable should be passed through utilizing a grommet.

Early cars will require a hole drilled in the front cross member cover plate as shown in the illustration.

Feed the cable through the $1\frac{1}{2}$ " hole utilized by the radiator drain tap on the left-hand side, and the corresponding hole on the right-hand side. Place the large grommet in the aperture to prevent the cable from chafing.

Connect the left-hand foglamp cable to the red/yellow cable incorporated in the wiring harness, which is situated at the top of the wing valance in line with the front of the engine.

The red/yellow cable for connection to the right-hand foglamp will be found behind the air cleaner. Remove the flexible hose to the air cleaner intake box. Remove the two quick release fasteners and withdraw the paper element. Pass the foglamp cable through one of the air cleaner intake trumpets.

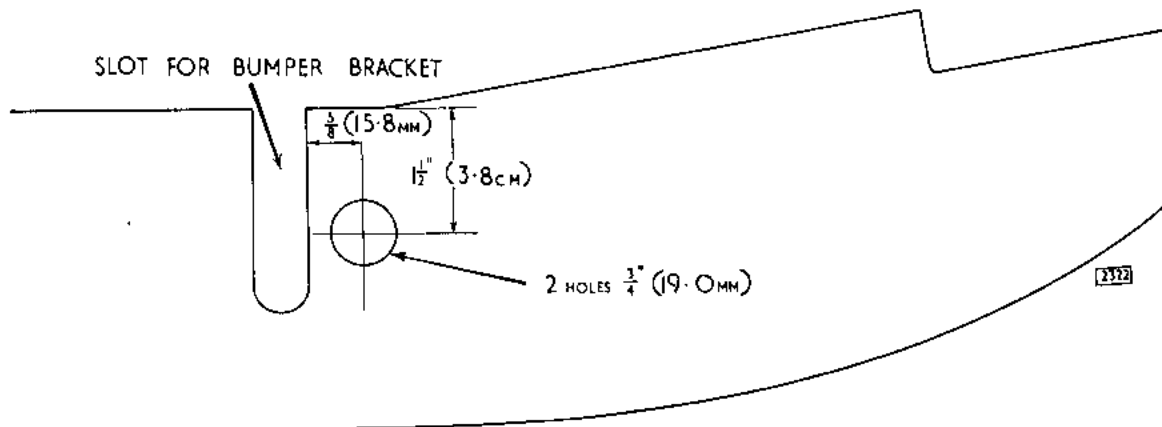
Clip the foglamp cables to the bumper brackets with the aid of the cable strapping.

Remove the original lighting switch and escutcheon and replace with the four position switch and a new escutcheon plate.

Replace the cables in their original positions and connect the red/yellow cables, incorporated in the harness, to the foglamp terminal.

The foglamps and necessary parts are available from the Jaguar Spares Division, Coventry.

Spares Bulletin number Q.39 refers.



Number P.15. (3rd issue)

Section Electrical and Instruments

Sheet 1 (of 1)

Date January, 1963.

This Service Bulletin supersedes the 2nd issue of July 1962 which should be destroyed.

RADIO FITTING INSTRUCTIONS

(All models fitted with transistor radios)

The attention of Distributors and Dealers is drawn to the following points when fitting the Smiths Radiomobile.

It is most important when fitting the radio receiver, to remove any felt material in the area behind and underneath the receiver heat sink to assist in ventilation. It may also be necessary to trim the carpet to assist in clearing the heat sink.

When connecting the twin loudspeakers, it is important for the terminal with the rubber sleeve to be fitted to the top screw termination of each loudspeaker. This will ensure that the speakers are connected to operate in anti-phase giving the correct tone.

FOGLAMP FITTING INSTRUCTIONS

(Mark 10 Model)

Twin rectangular foglamps with yellow bulbs are now available for fitting to the Mark 10 model as optional extras.

<u>Parts required</u>	<u>Description</u>	<u>No off</u>
C.20443	Foglamp	2
C.20246	Lighting switch (4 position)	1
C.15447	Escutcheon	1
C.15463	Foglamp connector (cable)	2
C.2706	Grommet	4
C.20444	Foglamp bracket L.H.	1
C.20445	Foglamp bracket R.H.	1
C.17001	Cable strapping	12"
C.17002	Stud	2

The foglamp brackets should be bolted to the bumper utilizing the two inner bumper bracket bolts. The foglamps are fitted to the brackets and are positioned under the bumper on the inside of the overriders. On later cars, a hole is provided in the front cross member cover plate adjacent to the bumper bracket, and the foglamp connector cable should be passed through utilizing a grommet.

Early cars will require a hole drilled in the front cross member cover plate as shown in Fig.1.

It will be necessary to drill a $\frac{3}{4}$ " (19.05 mm) hole inside the engine compartment adjacent to the radiator drain tap aperture and a corresponding hole on the opposite side of the radiator. The holes should be drilled 2" (5.08 cm) from the outer edge of the longitudinal underframe member and $\frac{3}{4}$ " (19.05 mm) from the radiator support panel. Fit the grommets provided and pass the foglamp cables through the grommets into the engine compartment.

Connect the left-hand foglamp cable to the red/yellow cable incorporated in the wiring harness, which is situated at the top of the wing valance in line with the front of the engine.

The red/yellow cable for connection to the right-hand foglamp will be found behind the air cleaner. Remove the flexible hose to the air cleaner intake box. Remove the two quick release fasteners and withdraw the paper element. Pass the foglamp cable through the grommet adjacent to the top air cleaner intake trumpet.

Clip the foglamp cables to the bumper brackets with the aid of the cable strapping.

Remove the original lighting switch and escutcheon and replace with the four position switch and a new escutcheon plate.

Remove the printed circuit resistance from the original switch (terminals 2 and 11) and refit to the new switch (terminal 2 - 4)

Fit the resistance with the large hole over the centre post and the printed circuit to the switch back plate.

Replace the cables as shown in Fig.2. and connect the red/yellow cables, incorporated in the harness, to the foglamp terminal.

The foglamps and necessary parts are available from the Jaguar Spares Division, Coventry.

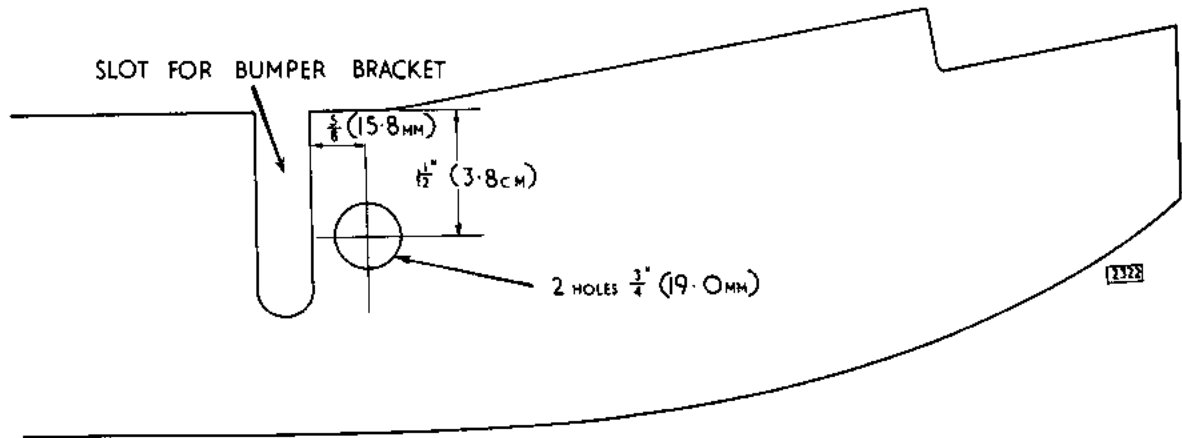


FIG. 1

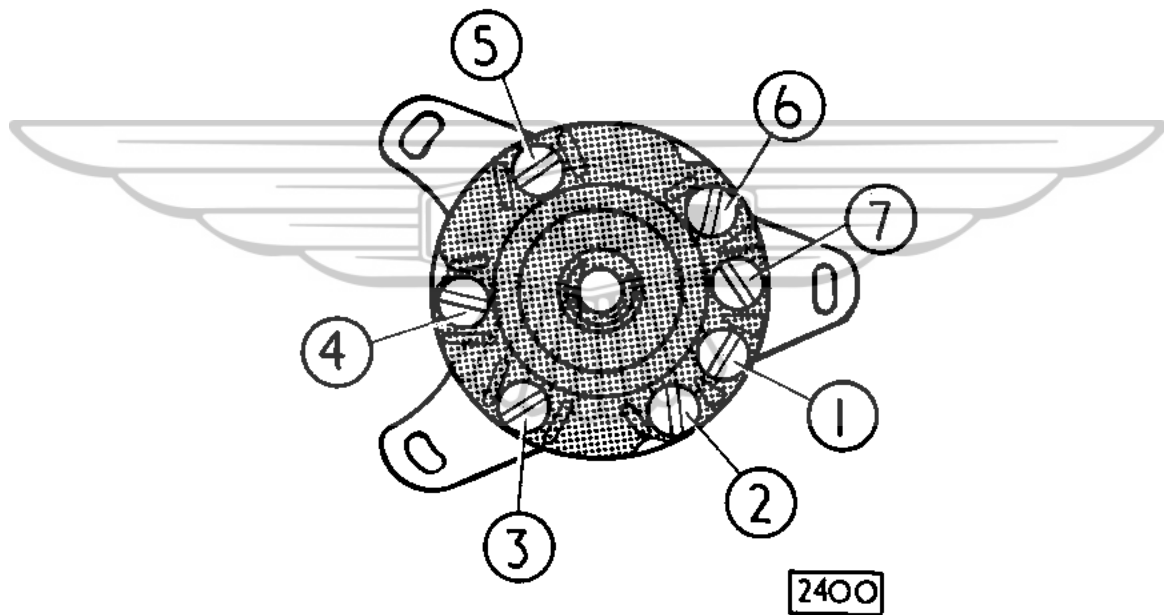


FIG 2

1. -
2. Green (Automatic) yellow/purple (Overdrive)
3. Red/black (Sidelights and taillights)
4. Black/red (Warning light - automatic or overdrive)
5. Brown/white (Ammeter)
6. Red/yellow (Foglamps)
7. Blue (Headlamps)

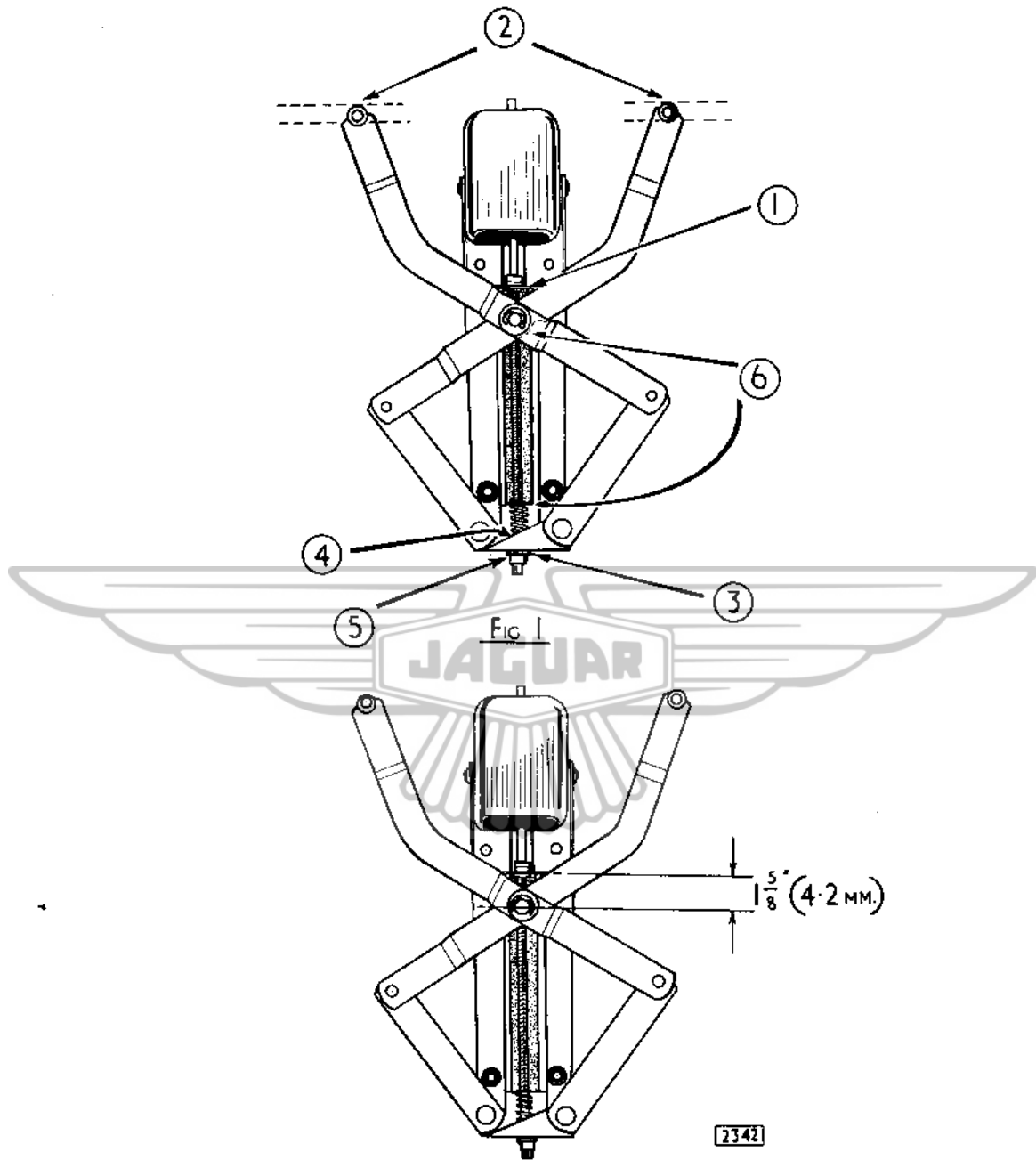


FIG 2

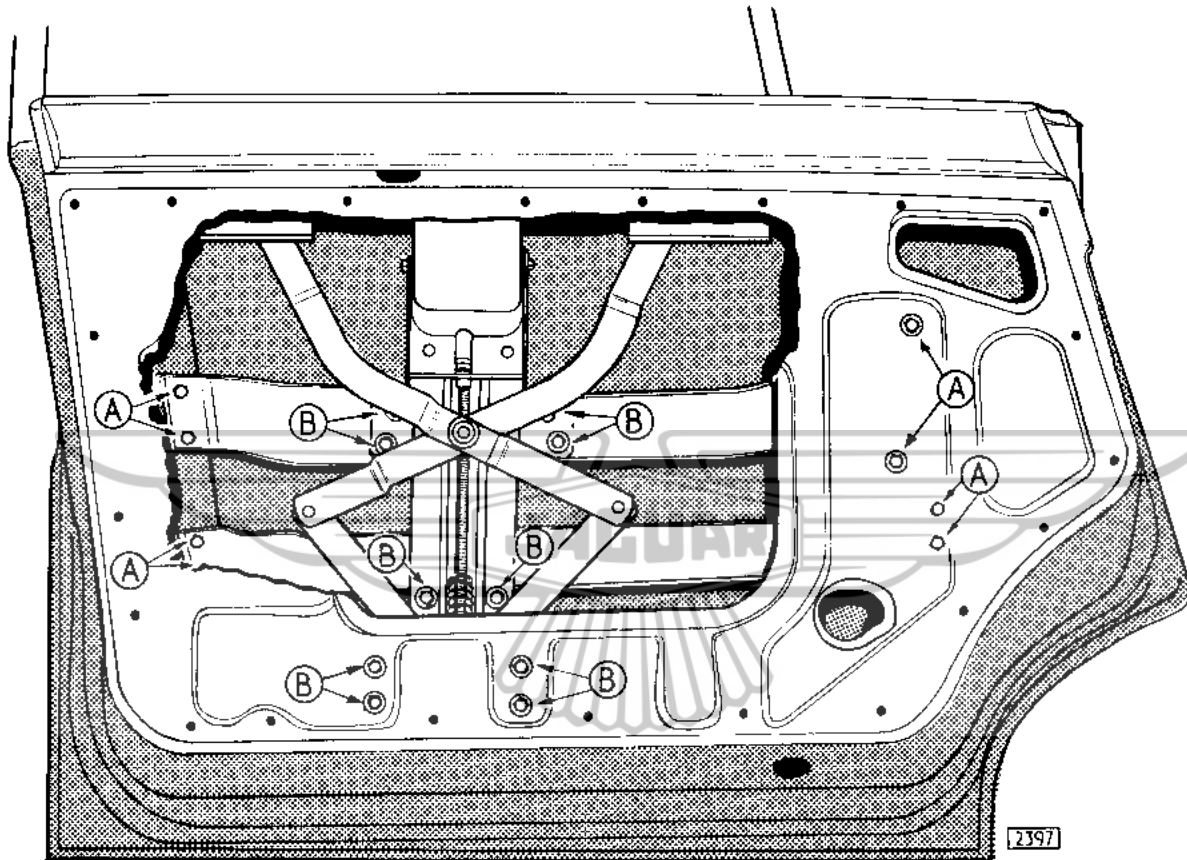


FIG. 3.

Number P.17.
Section Electrical and
Instruments
Sheet 1 (of 1)
Date September, 1962

INTRODUCTION OF SEALED BEAM HEADLAMPS

Models affected

2.4 litre Mark 2
3.4 litre Mark 2
3.8 litre Mark 2

Commencing Chassis Numbers

R.H. Drive

112995
160201
208535

Commencing at the above chassis numbers, all R.H. Drive Mark 2 cars are fitted with a complete sealed beam unit. The unit (Part No. 8386) consists of the reflector, glass and filament. If failure of the lamp is experienced, the complete sealed beam unit must be changed.

The new headlamps are interchangeable, provided they are fitted in pairs, with those they replace.

Spares Bulletin number Q.45 refers.

Secure the two reverse lamp wires encased in P.V.C. to the top registration plate securing bolt with a clip Part No. C 1040/12.

Replace the floorboard covering the petrol tank and secure with six setscrews.

Replace the floorboard covering the spare wheel aperture and refit the floor covering.

Re-connect the battery.



Number P.19.
Section Electrical and Instruments.

Sheet 1 (of 1)
Date December, 1962.

EXAMINATION OF SPEEDOMETER CABLE OIL SEAL.

(Current Production Overdrive Models).

It has been noticed that speedometer heads are being changed due to excess oil entering the mechanism. When a car is received in Service with this complaint, it is advisable to examine the oil seal contained in the bronze bush of the speedometer cable drive gear contained in the overdrive rear casing.

If oil is found to be working along the cable, it will be necessary to change the complete driven gear bush.

ELECTRICALLY OPERATED WINDOWS - LIMITED BACKLASH COUPLING

(Mark 10 Model)

This bulletin should be used in conjunction with the information given in Service Bulletin Nos. P.13 and 16.

Cars now in production are being fitted with a new rubber coupling (Part No. BD.20909) and driving peg (Part No. BD.25088) to allow the electric motor to gain momentum before raising or lowering the window. (The rubber coupling is item 15 in Fig 53 on page P.43 of the Mark 10 Service Manual.

It will be necessary to remove the complete regulator and motor unit as described on page P.41, 42 and 43 of the Mark 10 Service Manual.

Remove the motor from the regulator bracket and lift the coupling off the "D" shaped shaft.

Fit the driving peg onto the "D" shaped driven shaft, then place the rubber coupling with the lug facing the bottom of the regulator in position over the driving peg. The coupling should be free to rotate on the driven shaft.

Replace the motor ensuring that the motor output shaft is aligned correctly in the "D" shaped hole in the rubber coupling.

Replace the regulator assembly ensuring that the directions given in the aforementioned bulletins are closely followed.

Number P.19. (2nd issue)
Section Electrical and Instruments

Sheet 1 (of 1)
Date January, 1963.

This Service Bulletin supersedes the original issue of December 1962 which should be destroyed.

EXAMINATION OF SPEEDOMETER CABLE OIL SEAL

(Current Production Overdrive Models).

It has been noticed that speedometer heads are being changed due to excess oil entering the mechanism. When a car is received in Service with this complaint, it is advisable to examine the oil seal contained in the bronze bush of the speedometer cable drive gear contained in the overdrive rear casing.

If oil is found to be working along the cable, it will be necessary to change the complete driven gear bush.

ELECTRICALLY OPERATED WINDOWS - LIMITED BACKLASH COUPLING

(Mark 10 Model)

This bulletin should be used in conjunction with the information given in Service Bulletin Nos. P.13 and 16.

Cars now in production are being fitted with a new rubber coupling (Part No. BD.20909) and driving peg (Part No. BD.25088) to allow the electric motor to gain momentum before raising or lowering the window. (The rubber coupling is item 15 in Fig 53 on page P.43 of the Mark 10 Service Manual.)

Remove the woodwork and trim panel from the door.

Remove the two setscrews on either side of the motor securing the motor to the support plate.

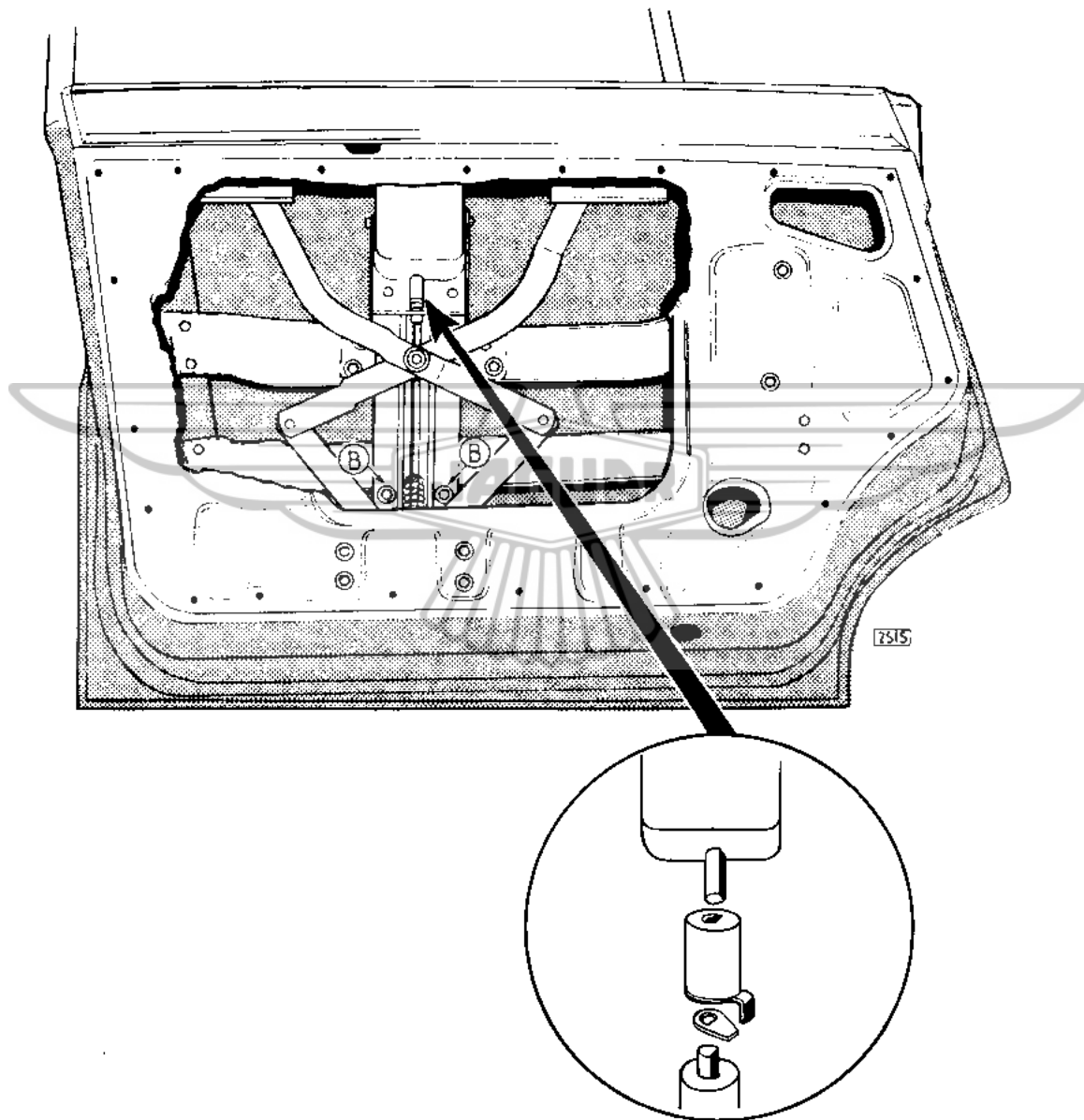
Move the motor up from the regulator bracket sufficiently to lift the coupling off the "D" shaped shaft.

Fit the driving peg onto the "D" shaped driven shaft, then place the rubber coupling with the lug facing the bottom of the regulator in position over the driving peg. The coupling should be free to rotate on the driven shaft.

Refit the motor ensuring that the motor output shaft is aligned correctly in the "D" shaped hole in the rubber coupling.

/cont'd.....

Whilst carrying out this operation, it is advisable to treat all the window felts with a siliconized fluid such as Duckhams "Adsil".



Number P.20.
Section Electrical and Instruments.

Sheet 1 (of 1)
Date January, 1963.

REVOLUTION COUNTER AND CLOCK - SERVICING

(All current production models)

Distributors and Dealers are advised that in future, Revolution Counters will be supplied ONLY less Clock. Complete instruments will, therefore, no longer be available, though the Electric Clock will, of course, continue to be serviced as a separate item.

In all Guarantee Claims concerned with a faulty Revolution Counter, the Electric Clock **MUST** be removed before the instrument is returned to the factory. Similarly, if the Electric Clock is faulty, this Unit **ONLY** must be returned to the factory for Guarantee replacement.

All concerned are asked to save the containers in which the Revolution Counter or Electric Clock is packed, and to urge their staffs to use these cartons when returning displaced units to the factory. This will prevent transit damage.

It should be noted that this new procedure is **EFFECTIVE IMMEDIATELY** and any complete instruments being received at these Works after receipt of this Bulletin will be treated as requiring attention to both the Revolution Counter and the Electric Clock even though one or the other may be functioning correctly. In this case full charge will be made for the assembled instrument.

Number P.21.
Section Electrical and Instruments.

Sheet 1 (of 1)
Date March, 1963.

HEADLAMP FLASHING IN THE FULL BEAM POSITION.

(Italian market cars only)

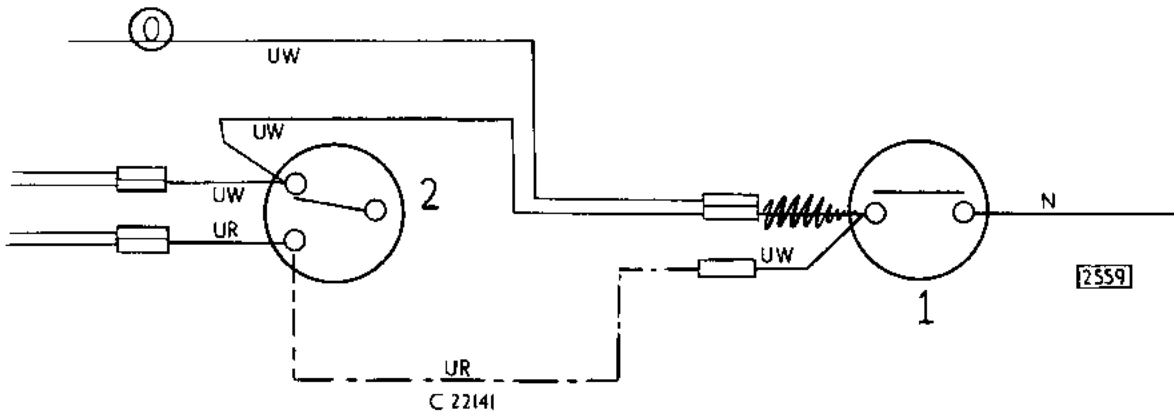
Models affected.

Commencing Chassis Numbers.

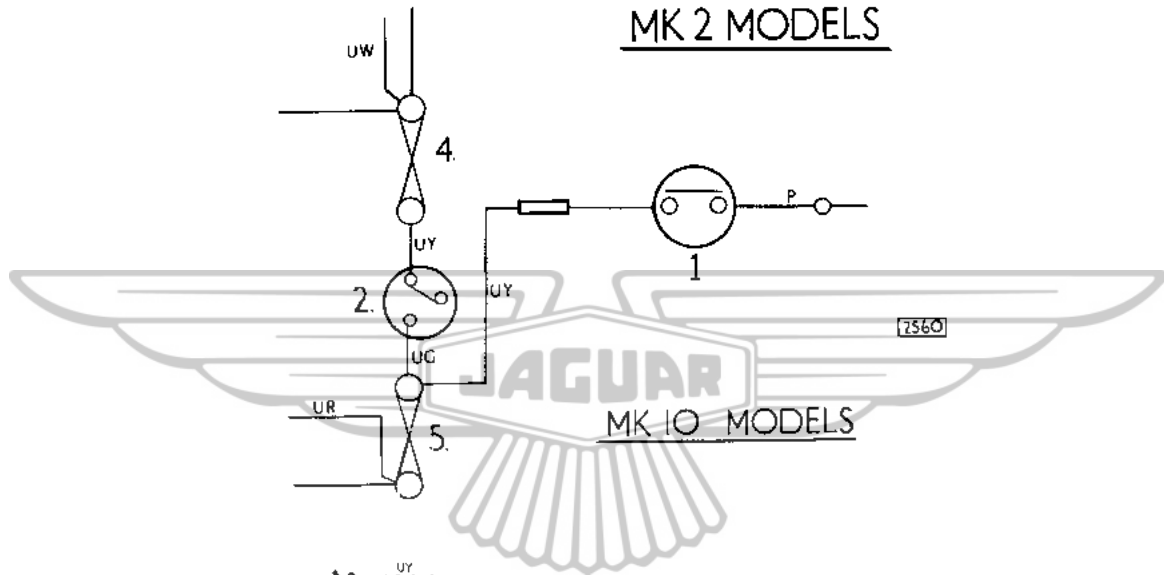
	L.H.Drive.
2.4 litre Mark 2.	127056
3.4 litre Mark 2.	178968
3.8 litre Mark 2.	222239
Mark 10.	352199
'E' Type Fixed Head Coupe.	888264
Open 2 seater.	879067

Commencing at the above chassis numbers, all cars for the Italian market will have the headlights wired to "flash" when the lights are "off" or when they are in the main beam position: They will not "flash" in the dipped position.

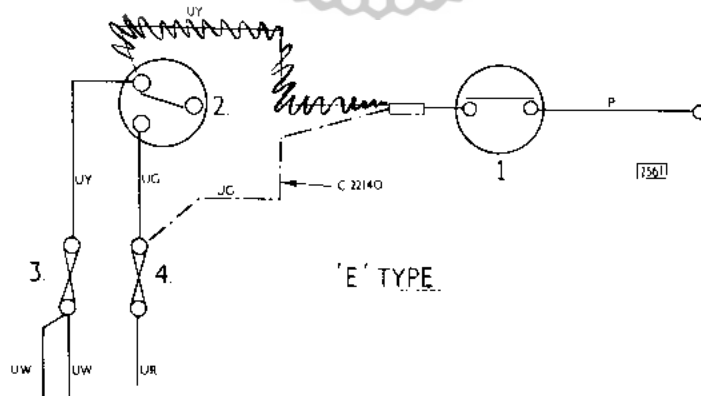
The amended wiring circuits are shown overleaf.



MK 2 MODELS



MK 10 MODELS



'E' TYPE

Key to illustration numbers.

- 1. Headlamp "flasher" switch.
- 2. Dipper switch.
- 3. Fuse No.1.
- 4. Fuse No.2.
- 5. Fuse No.3.

Key to cable colours.

- U. = Blue.
- N. = Brown.
- R. = Red.
- P. = Purple.
- G. = Green.
- W. = White.
- Y. = Yellow.

Number P.22.

Section Electrical and Instruments.

Sheet 1 (of 1)

Date April, 1963.

INTRODUCTION OF MODIFIED DISTRIBUTOR.

All current production cars are now fitted with a new 22D6 type distributor. (illustrated overleaf)

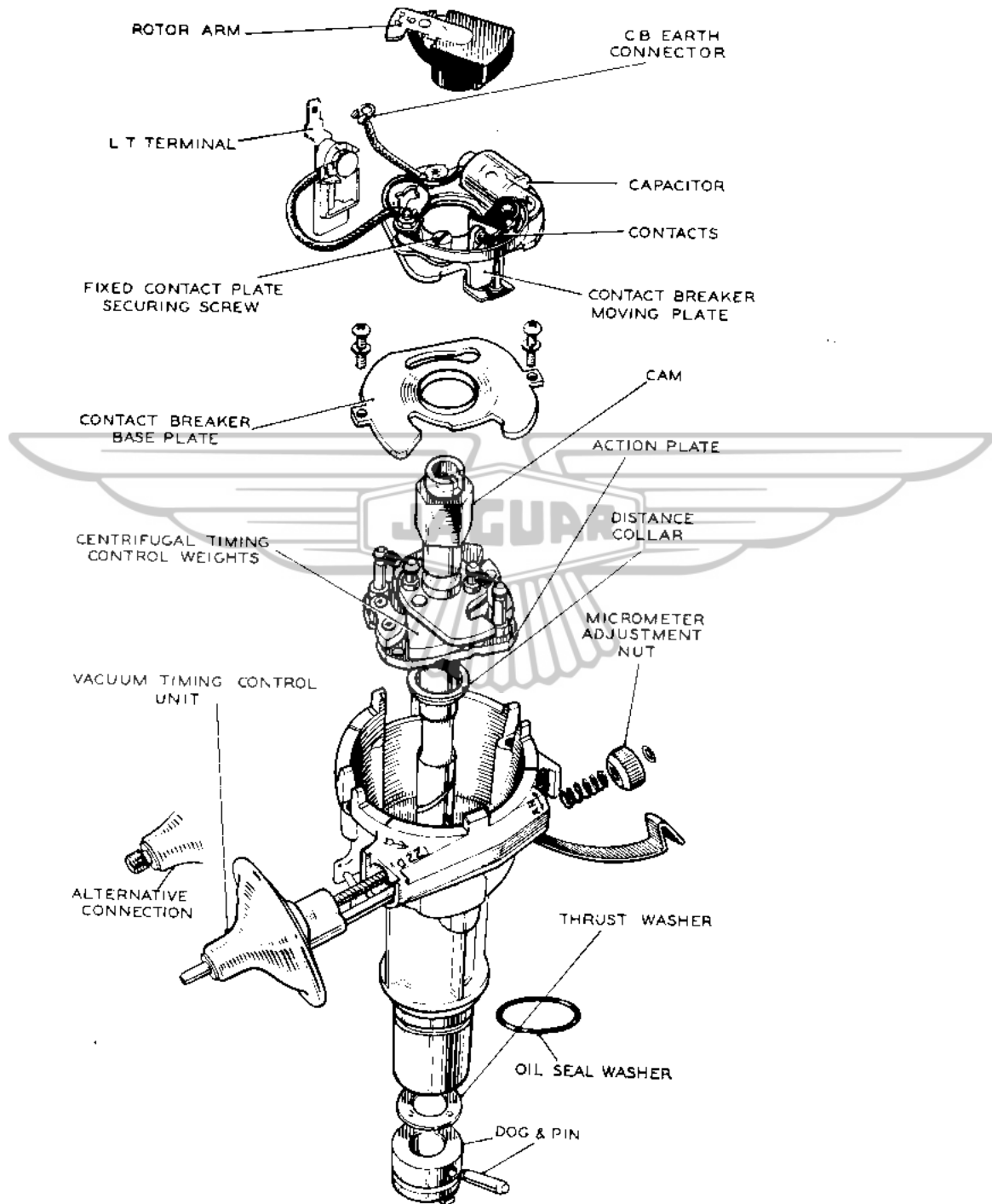
This type of distributor is different in construction to the previous DMBZ6 type fitted but the advance curves remain the same.

The new type distributors are interchangeable with their appropriate predecessors provided a new type suction pipe is fitted.

Spares Bulletin No's. Q.53 and Q.59 refer.

*Cancelled
See 2nd Issue*

DISTRIBUTOR MODEL 22 D6



Number P.22. (2nd Issue)
Section Electrical and Instruments.

Sheet 1 (of 1)
Date June, 1963.

This bulletin supersedes the previous issue of April 1963 which should be destroyed.

INTRODUCTION OF MODIFIED DISTRIBUTOR.

All current production cars are now fitted with a new 22D6 type distributor. (illustrated overleaf)

This type of distributor is different in construction to the previous DMBZ6 type fitted but the advance curves remain the same.

The new type distributors are interchangeable with their appropriate predecessors provided a new type suction pipe is fitted.

Adjusting the Contact Breaker Points.

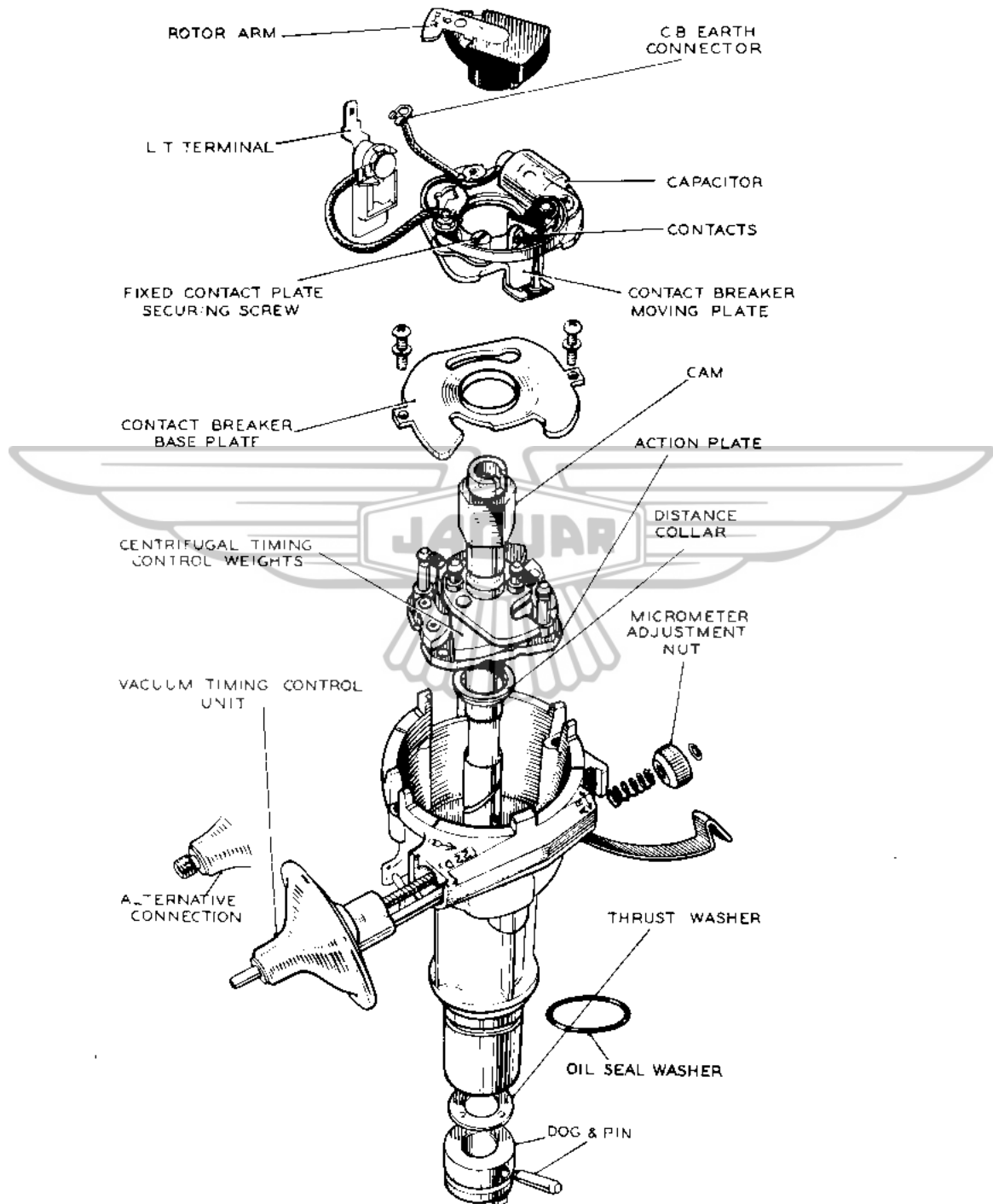
The method of adjusting the contact point is now different to that described in the handbook and the following procedure should be adopted:-

The correct gap is .014" - .016" (.36 mm - .41 mm).

If the gap is incorrect, slacken (very slightly) the contact plate securing screw and adjust the gap by turning a screwdriver in the slot in the contact plate (clockwise to decrease the gap and anti-clockwise to increase the gap). Tighten the securing screw and recheck the gap.

Spares Bulletin No's. Q.53 and Q.59 refer.

DISTRIBUTOR MODEL 22 D6



Number P.23.
Section Electrical and Instruments.

Sheet 1 (of 2)
Date April, 1963.

INTRODUCTION OF MODIFIED DYNAMOS AND CONTROL BOXES.

(Mark 2 Models)

All current production Mark 2 cars are now equipped with a different type dynamo and control box. The illustrations show the C.40L dynamo fitted to 2.4 litre cars and the C.42 dynamo fitted to 3.4 litre and 3.8 litre cars.

The C.40L and the C.42 dynamo fitted to standard steering cars has a bush at the rear end of the dynamo which should be lubricated with engine oil through the hole marked "Oil" every 5,000 miles (8,000 km).

The settings for the new dynamos and control boxes are given below:-



2.4 LITRE.

C.40L DYNAMO

Performance Data.

Cutting in speed.	1250 r.p.m. (max.) at 13.0 dynamo volts.
Maximum output.	25 amps at 2400 r.p.m. at 13.5 dynamo volts.
Field resistance.	6.0 ohms.

CONTROL BOX (RB 340) 37342 D.

Voltage Regulator (open circuit settings).

<u>Ambient Temperature.</u>	<u>Voltage</u>
10°C (50°F)	14.9 - 15.5
20°C (68°F)	14.7 - 15.3
30°C (86°F)	14.5 - 15.1
40°C (104°F)	14.3 - 14.9

Cut-out Relay (settings).

Cut-in Voltage	12.6 - 13.4
Drop of Voltage	9.3 - 11.2

/cont'd.....

3.4 and 3.8 LITRE.

C.42 DYNAMO

Performance Data.

Cutting in speed. 1,250 r.p.m. (max.) at 13 dynamo volts.
Maximum output. 30 amps at 2,200 r.p.m. at 13.5 dynamo volts.
Field resistance. 4.5 ohms.

CONTROL BOX (RB 340) (37331A)

Voltage Regulator (Open Circuit Settings).

<u>Ambient Temperature.</u>	<u>Voltage</u>
10°C (50°F)	15.0 - 15.6
20°C (68°F)	14.8 - 15.4
30°C (86°F)	14.6 - 15.2
40°C (104°F)	14.4 - 15.0

Cut-out Relay (Settings).

Cut-in Voltage	12.6 - 13.4
Drop of Voltage	9.25 - 11.25

Spares Bulletin Nos. Q.52 and Q.56 refer.

Number P.24.
Section Electrical and Instruments.

Sheet 1 (of 1)
Date April, 1963.

This Service Bulletin supersedes the information given in Service Bulletin P.19 which should be endorsed "See Service Bulletin P.24".

EXAMINATION OF SPEEDOMETER CABLE OIL SEAL.

(Current Production Overdrive Models).

It has been noticed that speedometer heads are being changed due to excess oil entering the mechanism. When a car is received in Service with this complaint, it is advisable to examine the oil seal contained in the bronze bush of the speedometer cable drive gear contained in the overdrive rear casing.

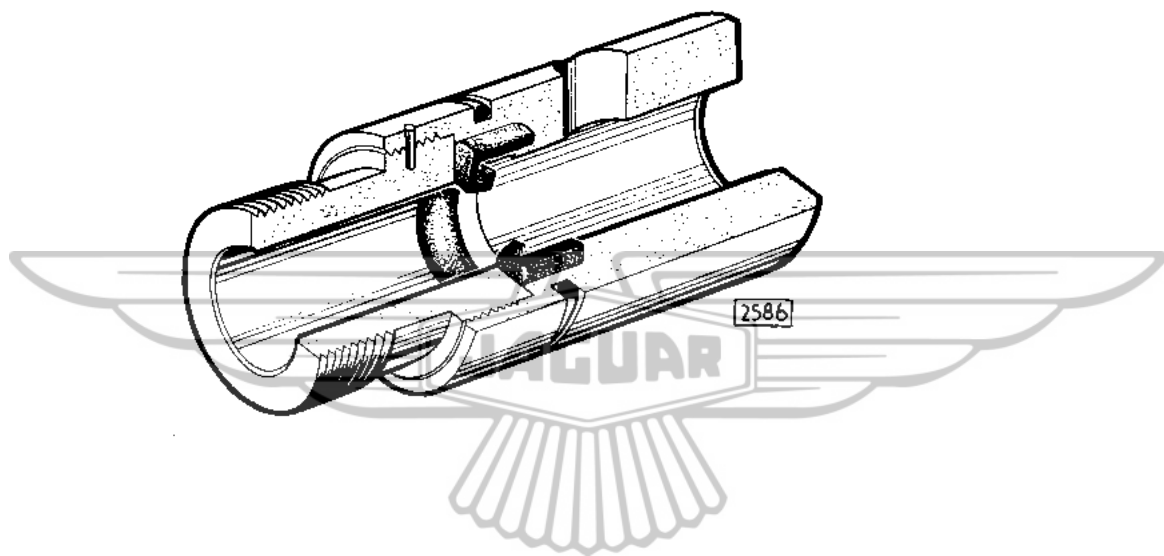
If oil is found to be working past the inner seal it will be necessary to dismantle the driven gear bush as follows:-

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

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

Remove the rubber seal from the recess in the bearing. Fit a new seal (Part No. C.8773) so that the open end of the seal through which the spring is visible, is facing the bottom of the recess of the bronze bearing (See illustration overleaf).

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



Number P.25.
Section Electrical and Instruments.

Sheet 1 (of 1)

Date August, 1963.

INTRODUCTION OF NEW DIRECTION INDICATOR/HEADLAMP

FLASHER SWITCH.

<u>Model affected.</u>	<u>Commencing Chassis Numbers.</u>	
	R.H.Drive.	L.H.Drive.
'E' Type Open 2 Seater	850726	879551
Fixed Head Coupe	861198	888767

Commencing at the above chassis numbers, a new direction indicator/headlamp flasher switch (Part No. C.21710) striker plate (C.22872) and special washers (C.23008) are introduced to replace the existing switch.

The two special washers are used in conjunction with the striker plate securing screws and shakeproof washers and must be positioned between the striker plate and shakeproof washers.

The new switch is fully interchangeable with the earlier type provided all three items mentioned above are used.

Spares Bulletin No. Q.67 refers.

WATERPROOFING OF THE DISTRIBUTOR.

<u>Models affected.</u>	<u>Commencing Engine Numbers.</u>
2.4 litre Mark 2	BH. 9981
3.4 litre Mark 2	KJ. 1073
3.8 litre Mark 2	LC. 6957
'E' Type	RA. 2290
Mark 10	ZA. 9238

Commencing at the above engine numbers, a waterproof rubber cap (Part No. C.2607) is fitted over each of the six plug leads and the H.T. lead where they enter the distributor cap.

These rubber caps can be fitted to earlier cars if desired.

Number P.26.

Section Electrical and Instruments.

Sheet 1 (of 1)

Date October, 1963.

INTRODUCTION OF "LIVE" HORN BUTTON.

Models affected

2.4 litre Mark 2
3.4 litre Mark 2
3.8 litre Mark 2
Mark 10.

Commencing chassis numbers.

R.H.Drive.	L.H.Drive.
116114	127312
164402	179499
231586	223125
306489	353182

Commencing with the above chassis numbers the centre horn button is now "live" and can be used in addition to the horn ring to operate the horns.

The Mark 2 steering wheel is now common with the Mark 10 wheel but certain individual Mark 2 cars prior to the above numbers were fitted with the Mark 10 wheel without a "live" horn button.

Spares Bulletin No. Q.70 refers.

Number P.27.
Section Electrical and Instruments.

Sheet 1 (of 1)

Date November, 1963.

ELECTRIC TIME CLOCK.

Models affected.

Commencing Chassis Numbers.

	R.H.Drive.	L.H.Drive.
2.4 litre Mark 2	115205	127141
3.4 litre Mark 2	163007	179136
3.8 litre Mark 2	230516	222555
'E' Type Open 2 seater.	850702	879324
'E' Type Fixed Head Coupe.	861169	888543
Mark 10	304482	352709

Commencing at the above chassis numbers, the electric time clock fitted to the revolution counter dial, incorporates a rectifier. This is to reduce fouling of the contact points in the clock.

If at any time the clock is removed for servicing and subsequent testing on the bench, IT IS MOST IMPORTANT that the feed terminal on the back of the clock is connected to the negative side of the battery and that the outer casing of the clock is positively earthed. In correct connection of a rectified clock to the battery will instantly destroy the rectifier.

Spares Bulletin No. Q.61 refers.

Number P.28.
Section Electrical and Instruments.

Sheet 1 (of 1)

Date March, 1964.

IGNITION SUPPRESSION - HOME TRADE ONLY.

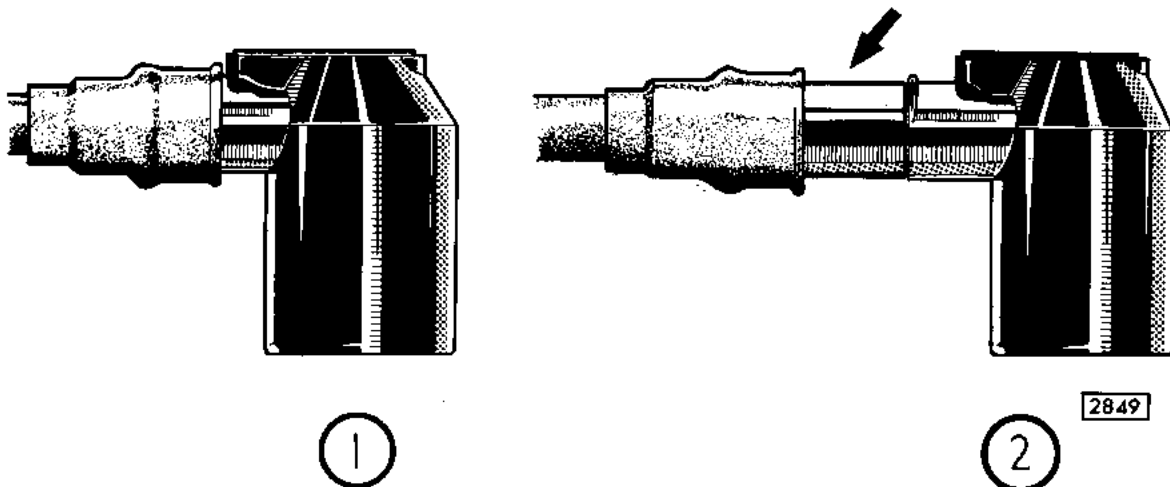
(All models)

A certain number of cars may have left the factory without ignition suppressors being fitted to the sparking plug terminals.

Fig.1 shows a sparking plug terminal without a suppressor fitted. Fig.2 shows the sparking plug terminal with suppressor fitted.

Distributors and dealers are requested to examine all cars coming in for service and check if suppressors are fitted. If suppressors are not fitted on cars within the guarantee period these must be fitted on a f.o.c basis to the customer.

Supplies may be obtained from the Jaguar Spares Division under Part number C.16979 (6 off) and a guarantee claim submitted quoting all relevant details. The time required for this work is negligible but a maximum allowance of $\frac{1}{4}$ hour will be made should this be considered necessary.



Number P.29.
Section Electrical and Instruments.

Sheet 1 (of 1)
Date May, 1964.

CARE OF BATTERIES.

(All models)

If cars (or batteries in store) are held in stock for more than a month the following procedure should be observed to ensure that the battery is kept in good condition. Failure to carry out these instructions may invalidate the Lucas guarantee in any subsequent claim.

Topping-up.

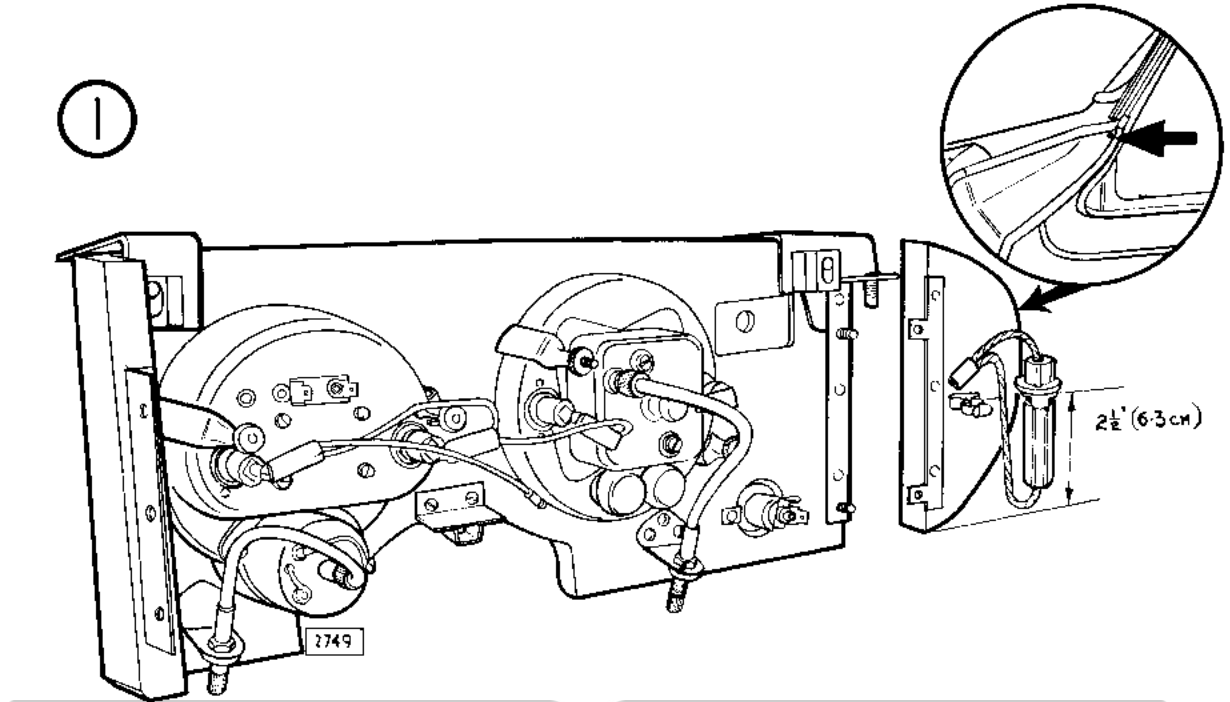
Add distilled water until the top edges of the separators or separator guards are just covered. Do not overfill. Keep the cell tops dry.

Freshening Charge.

Give the battery a charge at 5 amperes until the electrolyte is gassing freely and repeat at monthly intervals as long as the car is in your care.

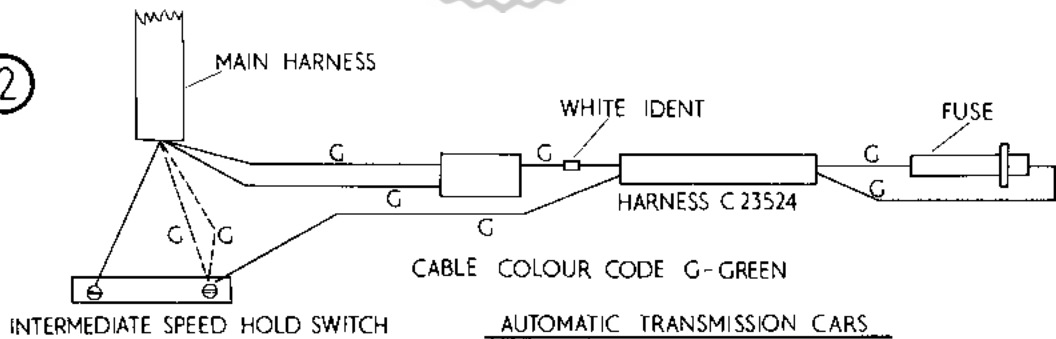
These remarks apply to wet charge batteries only.

1

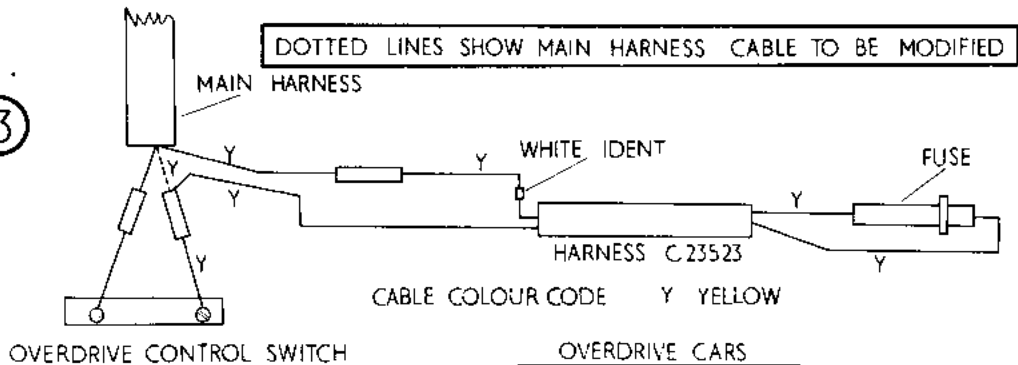


JAGUAR

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3



274B

Number P.31.
Section Electrical and Instruments.

Sheet 1 (of 2)

Date May, 1964.

INTRODUCTION OF LINE FUSE IN
AUTOMATIC TRANSMISSION AND OVERDRIVE SOLENOID CIRCUITS.

<u>Models affected.</u>	<u>Commencing chassis numbers.</u>	
	<u>R.H.Drive.</u>	<u>L.H.Drive.</u>
2.4 litre Mark 2	117397	127492
3.4 litre Mark 2	166188	179744
3.8 litre Mark 2	232275	223449
3.4 'S' Type	1B1004	1B25005
3.8 'S' Type	1B50321	1B75053

An 8 ampere fuse has been introduced in the intermediate speed hold switch circuit (Automatic transmission) and the control switch circuit (Overdrive transmission) models on and after the above chassis numbers.

The fuse holder is retained in a spring clip located behind the side facia panel on the steering wheel side.

Earlier models may be modified by utilising the following parts:

- Automatic transmission - Connector Harness - C.23524
- Connector Nipples (2) - 3585
- Clip BD.22655
- Screw BD.711/5
- Overdrive transmission - Connector Harness - C.23523
- Clip BD.22655
- Screw BD.711/5

FITTING INSTRUCTIONS.

Mark 2 Models.

Remove the under-scuttle casing on the steering wheel side.

All Models.

Disconnect the battery.

Automatic Transmission Models.

Remove the ring nut securing the intermediate speed hold switch to the side facia panel and push the switch forward.

Pull the switch down below the panel and modify the connections as follows:

/cont'd.....

Secure the chromium plated clip to the back face of the side facia panel below the automatic speed hold switch.

Care must be taken when drilling the hole for the screw to ensure that the polished face of the panel is not pierced by the drill point.

Disconnect the green cable connected by an eyelet to the switch and cut off the eyelet. Strip the insulation from the cable for a length of $\frac{3}{8}$ " (9.5 mm) and solder on the nipple.

Connect the green cable into the connector tube located on the fuse connector harness (Jaguar Part number C.23524).

Connect the eyelet on the connector harness to the vacant terminal on the switch. See circuit diagram Fig.1.

Refit the switch to the side facia panel.

Clip the fuse holder into the spring clip previously fitted.

Reconnect the battery and test the circuit by operation.

Refit the under-scuttle casing (Mark 2 models only).

Overdrive Transmission Models (Mark 2 Models)

Secure the chromium plated clip to the back face of the side facia panel below the revolution counter.

Care must be taken when drilling the hole for the screw to ensure that the polished face of the panel is not pierced by the drill point.

Disconnect the yellow cable attached to the switch at the connector tube located behind the side facia panel above the steering column and connect to the yellow cable with the single connector contained in the fuse connector harness (Jaguar Part number C.23523).

Connect the yellow cable, with white ident, to the vacant single connector tube on the main harness. See circuit diagram Fig.2.

Refit the switch to the side facia panel.

Clip the fuse holder into the spring clip previously fitted.

Reconnect the battery and test the circuit by operation.

Refit the under- scuttle casing.

Overdrive Transmission Models (3.4/3.8 'S' Models)

Secure the chromium plated clip to the back face of the side facia panel below the revolution counter.

/cont'd.....

side facia panel below the brake warning light unit.

Care must be taken when drilling the hole for the screw to ensure that the polished face of the panel is not pierced by the drill point.

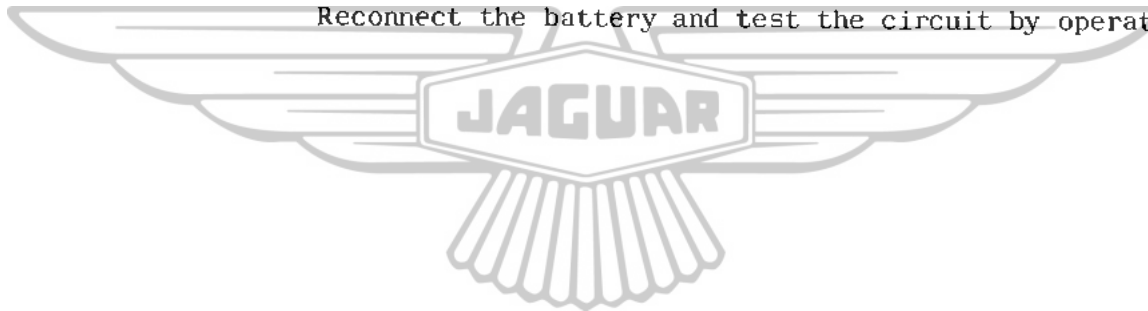
Disconnect the yellow cable attached to the switch at the connector tube located behind the side facia panel above the steering column and connect to the yellow cable with the single connector contained in the fuse connector harness (Jaguar Part number C.23523).

Connect the yellow cable, with white ident, to the vacant single connector tube on the main harness. See circuit diagram Fig.2.

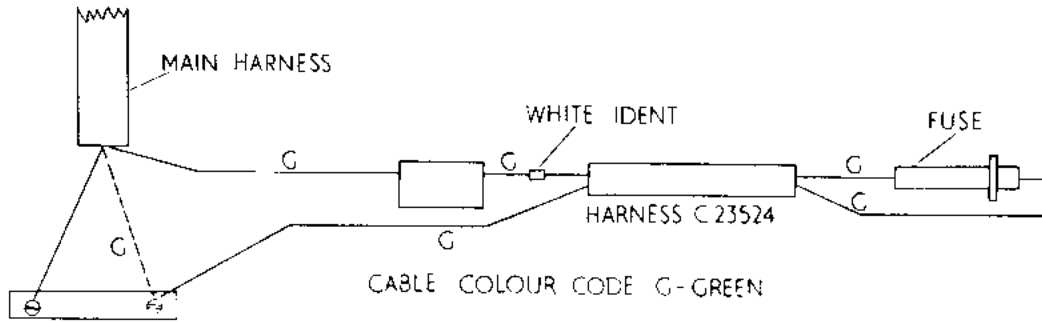
Refit the switch to the side facia panel.

Clip the fuse holder into the spring clip previously fitted.

Reconnect the battery and test the circuit by operation.

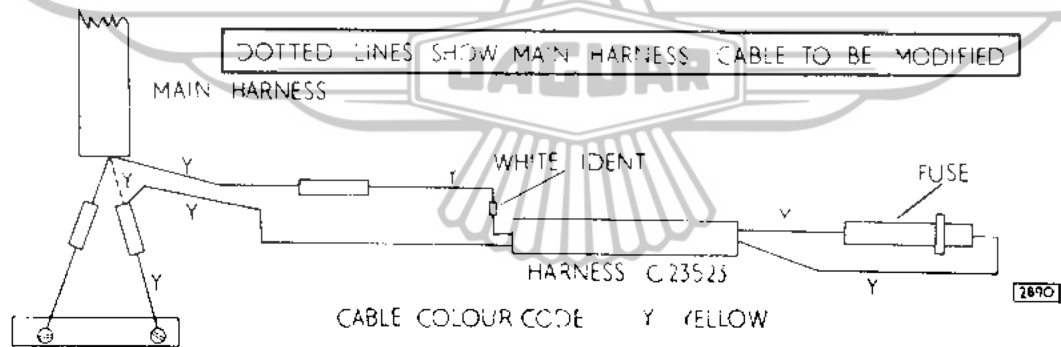


1



INTERMEDIATE SPEED HOLD SWITCH AUTOMATIC TRANSMISSION CARS

2



OVERDRIVE CONTROL SWITCH OVERDRIVE CARS

Number P.33.
Section Electrical and Instruments.

Sheet 1 (of 1)
Date October, 1964.

SHORTING OF IGNITION WARNING LIGHT OR
FUEL GAUGE WARNING LIGHT CIRCUIT.

Models affected.

2.4 litre Mark 2
3.4 litre Mark 2
3.8 litre Mark 2
Mark 10
'E' Type
3.4/3.8 'S' models

Isolated instances of an electrical short circuit in the wiring installation have occurred on the above models.

These have been traced to (1) faulty insulation in the ignition warning light unit or (2) on the fuel gauge warning light unit. (The last item is not applicable to those cars fitted with dual fuel tanks).

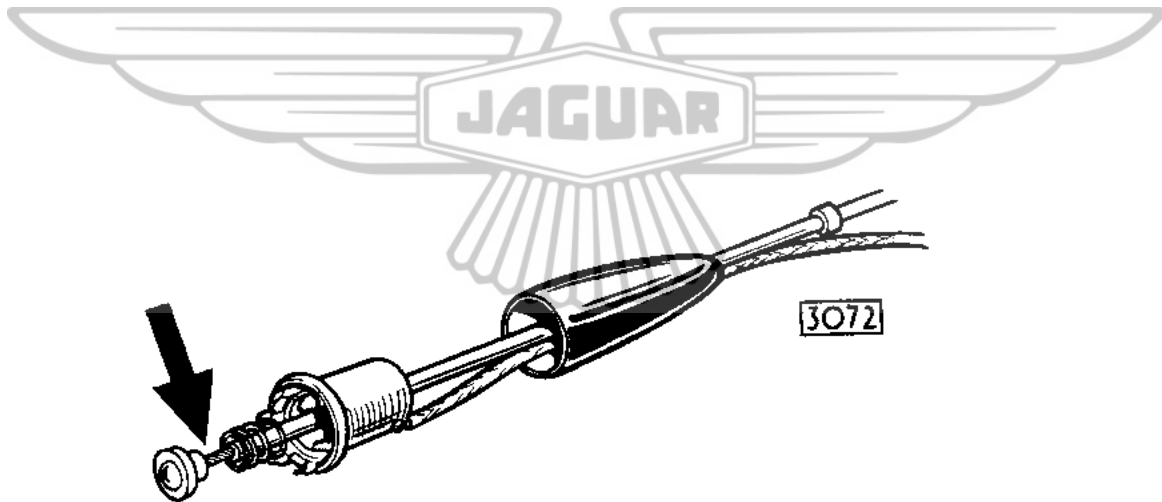
Distributors and Dealers are requested to check all cars and rectify as necessary during the first available service period as follows:-

1. Disconnect the battery.
2. Remove the under scuttle casing (steering wheel side) if fitted.
3. Withdraw the ignition warning light unit and fuel gauge warning light unit (when applicable) from the back of the speedometer and remove the bulb from the holder.
4. Slide back the ident sleeve and the insulating cover.
5. Push the centre cable upwards through the bulb holder to expose the terminal. Slide the spring away and check that no bare wires are visible between the contact terminal and cable insulation. Insulate any bare wires exposed with "LASOVIC" P.V.C adhesive tape. Extend the tape over the cable insulation to prevent any further movement.

/cont'd.....

6. Refit the bulb unit(s) and under scuttle casing and reconnect the battery. Care must be taken when refitting the bulb unit to ensure that all the prongs enter the sleeve on the speedometer correctly.

NOTE: Later models will have the contact terminal crimped (not soldered) and no action is necessary. This crimping is visible when the bulb is removed from the unit.



Number P.38.
Section Electrical and Instruments.

Sheet 1 (of 1)
Date April, 1965.

BATTERY TRAY DRAIN TUBE.

Models affected.

Mark 2 Models
3.4/3.8 'S' Models.

It has been found that the drain tube from the battery tray can become displaced so that the end of the tube is adjacent to one of the brake pipes. To obviate this possibility the drain tubes have now been lengthened and this should be carried out in service if the end of drain tube is found to be above the brake pipe.



ACCESS TO STARTER MOTOR.

(4.2 Mark 10 Model)

In Service Bulletin P.35 under the removal of the Mark 10 starter motor, mention is made of an access panel in the right-hand side of the gearbox tunnel.

This panel is now being deleted and therefore the setscrews securing the starter motor will only be accessible from underneath the car.

The best method of removing the setscrews is to use a socket spanner with extensions of approximately 30" (76 cms) in length and enter the spanner from behind the transmission unit. A second operator will be needed to guide the socket spanner on to the setscrews from inside the engine compartment.

Amendment to Service Bulletin No. P.34.

Page 2 last line:-

Delete the words "brown/purple" and insert "black".

Number P.39.

Section Electrical and Instruments.

Sheet 1 (of 1)

Date April, 1965.

WINDSCREEN WIPERS.

Following service complaints of unsatisfactory windscreen wiper operation, investigations have shown that in the majority of cases an incorrect setting procedure is being adopted with the result that the wiped area is unequal and the self-parking feature rendered inoperative.

The correct method of fitting and setting is as detailed below.

1. Switch on the ignition.
2. Switch on the windscreen wipers to "SLOW" speed and note the arc of rotation of the wiper wheelbox spindle.
3. Switch off the ignition when the spindle reaches the left-hand limit of travel.
4. Fit the wiper arms to the spindles in the approximate left-hand position and switch on the ignition. Adjust the position of the arms to give equal movement either side of the arc centre line.

Lift the spring locking catch before withdrawing the arms from the spindles.

5. Switch off the wiper switch.
6. Adjust the parking position of the arms by turning the knurled adjuster knob or nut as detailed in the appropriate Jaguar Service Manual - Section P Electrical and Instruments.

On 2.4, 3.4, 3.8 Mark 2 models and 3.4/3.8 'S' models turn the adjuster:

Clockwise to lower the arm (Right-hand drive cars)
Anti-clockwise to lower the arm (Left-hand drive cars).

On all Mark 10 and 'E' Type models reverse the above procedure.

Number P.40.
Section Electrical & Instruments.

Sheet 1 (of 1)
Date June, 1965.

DISTRIBUTORS - INTRODUCTION OF WATERPROOF COVER.

<u>Models affected.</u>	<u>Commencing engine numbers.</u>
2.4 litre Mark 2	BJ.4484
3.4 litre Mark 2	KJ.6898
3.8 litre Mark 2	LE.2047
3.4 'S' Type	7B.3615
3.8 'S' Type	7B.55645
4.2 'E' Type	7E.2459
4.2 Mark 10 (Overdrive Transmission)	7D.50740

Commencing at the above engine numbers distributors are fitted with a waterproof cover which is retained in position by the distributor cap.

Although the Jaguar part number and Lucas service numbers are changed because of this modification the distributor data and test figures quoted in the various service manuals for the previous type distributors are also applicable to the new distributors quoted below:

<u>Jaguar Part No.</u>	<u>Lucas Service No.</u>	<u>Model.</u>
C.25329	41061/A	2.4 litre Mark 2 - 7:1 comp.ratio.
C.25330	41062/A	2.4 litre Mark 2 - 8:1 comp.ratio.
C.25331	41063/A	3.4/3.8 Mark 2 and 'S' Type - 7:1 or 8:1 comp. ratio.
C.25332	41064/A	3.4/3.8 Mark 2 and 'S' Type - 9:1 comp. ratio.
C.25285	41060/A	4.2 Mark 10 (Overdrive) and 4.2 'E' Type - 8:1 or 9:1 comp. ratio.

ENGINE SPEED LIMITER.

(4.2 Mark 10 Automatic Transmission Models Only)

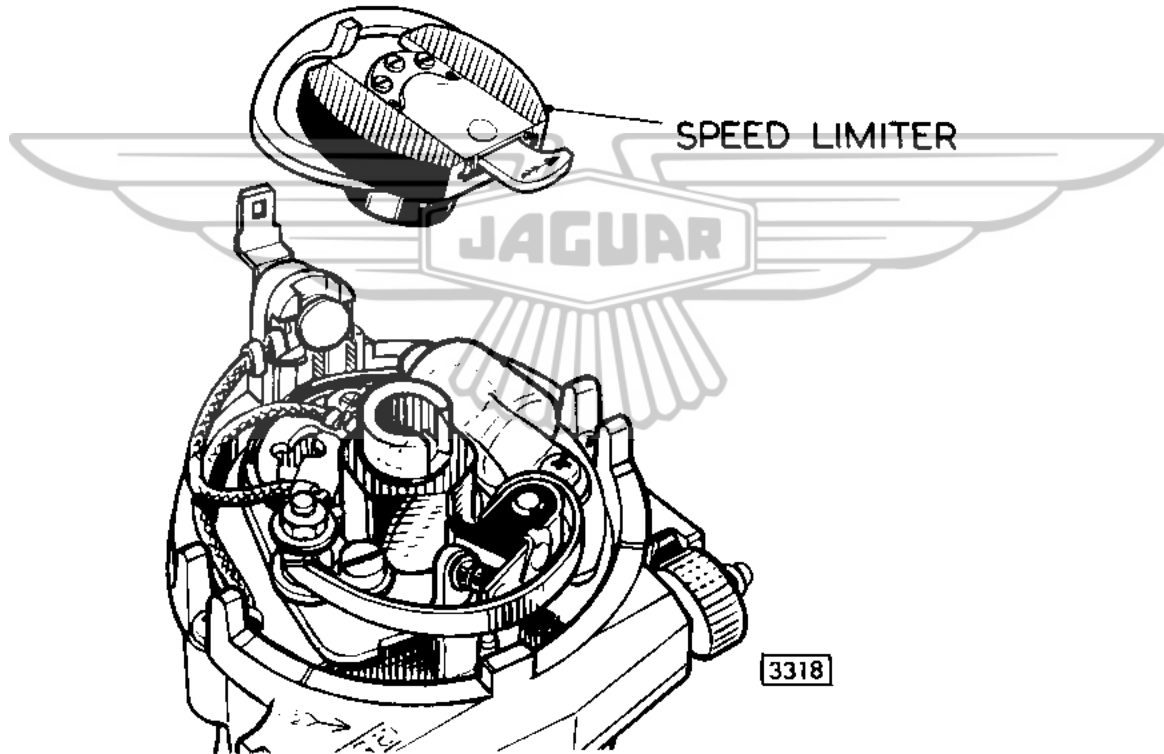
As mentioned in Service Bulletin A.23 the 4.2 Mark 10 Automatic Transmission Model has a speed limiter incorporated in the distributor rotor.

This device consists of a spring controlled governor plate

attached to the rotor arm which throws out at an engine speed of 5400 r.p.m (2,700 distributor r.p.m) to earth out the H.T., circuit.

If replacement of the rotor on an automatic transmission model becomes necessary only the speed limiter type (Part number C.25328) must be fitted.

Spares Bulletin Q.113 refers.



Number P.41.
Section Electrical & Instruments.

Sheet 1 (of 1)
Date September, 1965.

REAR LAMP CIRCUITS.
(German Market Only)

<u>Models affected.</u>	<u>Commencing chassis numbers.</u>
	L.H. Drive.
3.4 'S' Type	1B.25633
3.8 'S' Type	1B.78204
4.2 'E' Type Fixed head coupe	1E.31300
4.2 'E' Type Open 2 seater	1E.11207
4.2 Mark 10	1D.75690

To conform to GERMAN traffic regulation on all cars exported to Germany, commencing at the above chassis numbers, all lamps controlled by the tail lamp circuit will NOT be fused.

The wiring diagrams in the respective service manuals and Owner's Handbooks will continue to show the circuits fused. This should be noted if checking for faults in the rear lamps.

The fuse label attached to the instrument panel will also continue to show the circuits fused.

TRAFFIC HAZARD WARNING DEVICE.
(U.S.A., Market Only)

In order to comply with new traffic regulations for the State of New York, U.S.A., all cars exported to the U.S.A and cars sold for subsequent shipment to the U.S.A., after September 1st 1965 will have a traffic hazard warning device fitted as standard equipment.

The system operates in conjunction with the four flashing turn indicator lamps fitted to the car and the operation of a toggle switch on a sub-panel will cause the four turn indicator lamps to flash simultaneously.

A red warning lamp is incorporated in the circuit to indicate that the hazard warning system is in operation. A 25 amp in-line fuse (14 amp American rating) is incorporated in the sub-panel circuit.

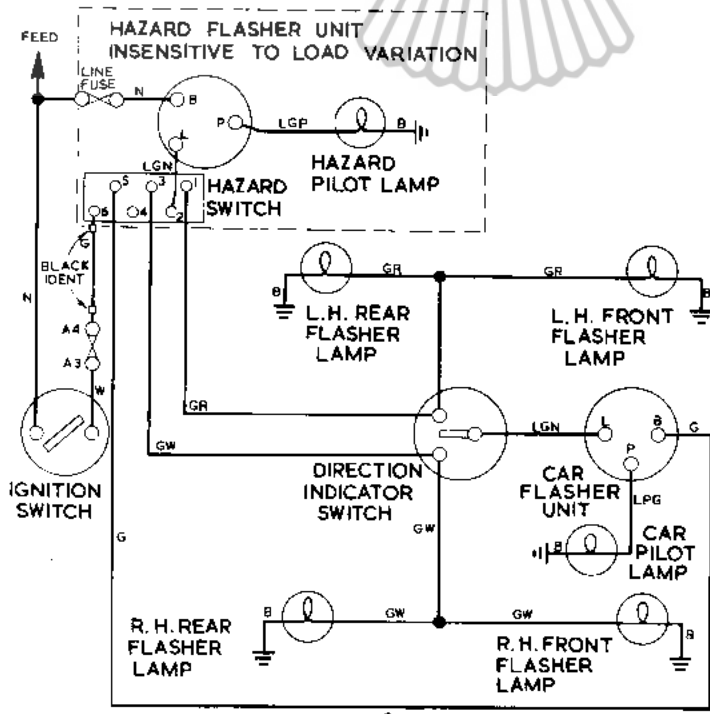
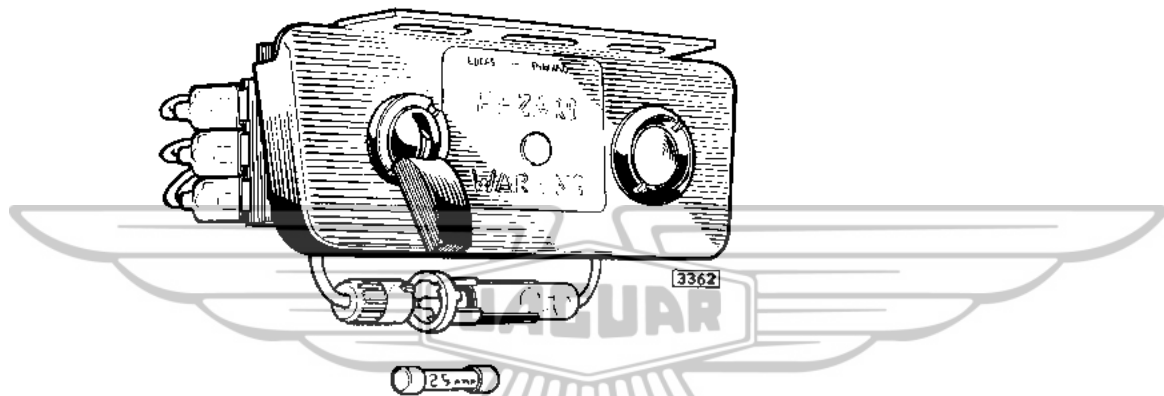
The flasher unit is located behind the instrument sub-panel and is of the plug-in-type. The unit is similar in appearance to the one used for the flashing turn indicators but has a different internal circuit.

A correct replacement unit must be fitted in the event of failure.

The pilot lamp bulb is accessible after removing the chrome bezel and detaching the bulb holder.

Bulb - 12 Volt 2.2 watts (Lucas No. 987).

See illustration for circuit diagram.



B	BLACK	LGN	LIGHT GREEN \ BROWN
G	GREEN	LGP	LIGHT GREEN \ PURPLE
GR	GREEN \ RED	N	BROWN
GW	GREEN \ WHITE	W	WHITE

3361

Number P.42.

Section Electrical & Instruments.

Sheet 1 (of 1)

Date September, 1965.

JAGUAR AIR CONDITIONING EQUIPMENT

(All Models)

To overcome the danger of the air conditioning equipment "icing up" before delivery to the customer due to the "ON-OFF" toggle switch being inadvertently left in the "ON" position all cars so equipped will, in future, leave the works with the system inoperative.

To bring the system into operation it will be necessary to complete the electrical circuit by connecting the compressor clutch cable to the feed cable connector which is clipped to the radiator header tank front mounting bracket.

The Distributor and Dealer from whom the car is obtained is instructed to carry out this service before releasing the car.

Number P.43
Section Electrical & Instruments

Sheet 1 (of 1)
Date November, 1965

HEADLAMP BEAM SETTING

It is now recommended that the headlamp alignment is checked as a "Routine Maintenance Service" at the following mileage intervals:-

<u>Models affected</u>	<u>Mileage interval</u>
2.4 Mark 2	10,000
3.4 Mark 2	10,000
3.8 Mark 2	10,000
3.4 'S' Type	12,000
3.8 'S' Type	12,000
4.2 'E' Type	12,000
4.2 Mark 10	12,000

This service recommendation will be included in future handbook and service voucher book reprints.

The headlamp alignment should also be checked when renewing **headlamp** bulbs or light units.

Number P.44
Section Electrical & Instruments

Sheet 1 (of 1)
Date November, 1965

TRANSISTORISED ELECTRIC CLOCKS

Following complaints received concerning faulty transistorised electric clocks investigation has shown that in the majority of cases the fault is due to the clock not being restarted manually when the battery has been reconnected after work on the car.

This results in the gold-plated contacts in the clock chattering and subsequently burning.

It is therefore ESSENTIAL to check that the clock is always running when connected to the electrical supply. Failure to ensure this will effectively shorten the service life of the clock.

To start the clock, the hand setting control must be firmly depressed, held for a few seconds, and then released sharply. This can be done at the same time as re-setting the hands.

Number P.45
Section Electrical and Instruments

Sheet 1 (of 1)
Date April, 1966

DIRECTION INDICATOR SWITCH
(See also Service Bulletin I.24)

<u>Models affected</u>	<u>Commencing chassis numbers</u>	
	<u>R.H. Drive</u>	<u>L.H. Drive</u>
4.2 Mark 10	1D.51955	1D.76088
3.4 'S' type	1B.56872	1B.78909
3.8 'S' type	1B.6092	1B.25788
2.4 litre Mark 2	119581	127912
3.4 litre Mark 2	170091	180310
3.8 litre Mark 2	234715	224271

Cars with the above chassis numbers and onwards are fitted with an improved type direction indicator switch.

The switch trip mechanism operates through a freely rotated castellated nylon striker ring which is in direct contact with the striker attached to the inner column.

Removal of the switch necessitates re-adjustment of the upper steering column top bearing when refitting, as detailed below:-

Removal

Remove the steering wheel as detailed in the appropriate Service Manual - Section I - Steering.

Disconnect the universal (pot) joint and withdraw the inner column.

Note: It is not necessary to remove the outer column.

Disconnect the cables from the switch connector. Note cable colours for reference when refitting.

Release the locknut, withdraw both securing screws from the switch and detach the clamp. Collect the distance piece from the upper screw and the two lockwashers.

Withdraw the switch from the outer column.

/cont'd....

Refitting and Adjusting

Pass the two fixing screws through the switch clamp, attach the spring washer and locknut to the bottom screw and the distance piece and washer to the upper screw.

Feed the two screws through the column brackets and attach the indicator switch.

Tighten the upper screw fully.

Rotate the nylon striker ring until the striker web is located centrally between the switch trip levers.

Refit the inner column, ensuring that the striker tongue is located in the top right castellation of the striker ring.

Temporarily fit the steering wheel (if removed).

Attach a spring balance to the steering wheel rim and tighten the bottom switch securing screw until the wheel will just turn with a pull of 5 ozs. (141.7 grammes) registered on the balance (see illustration).

Turn the locknut towards the switch carrier bracket and lock the screw.

Two thicknesses of distance piece are available to compensate for any variation in the bore of the column.

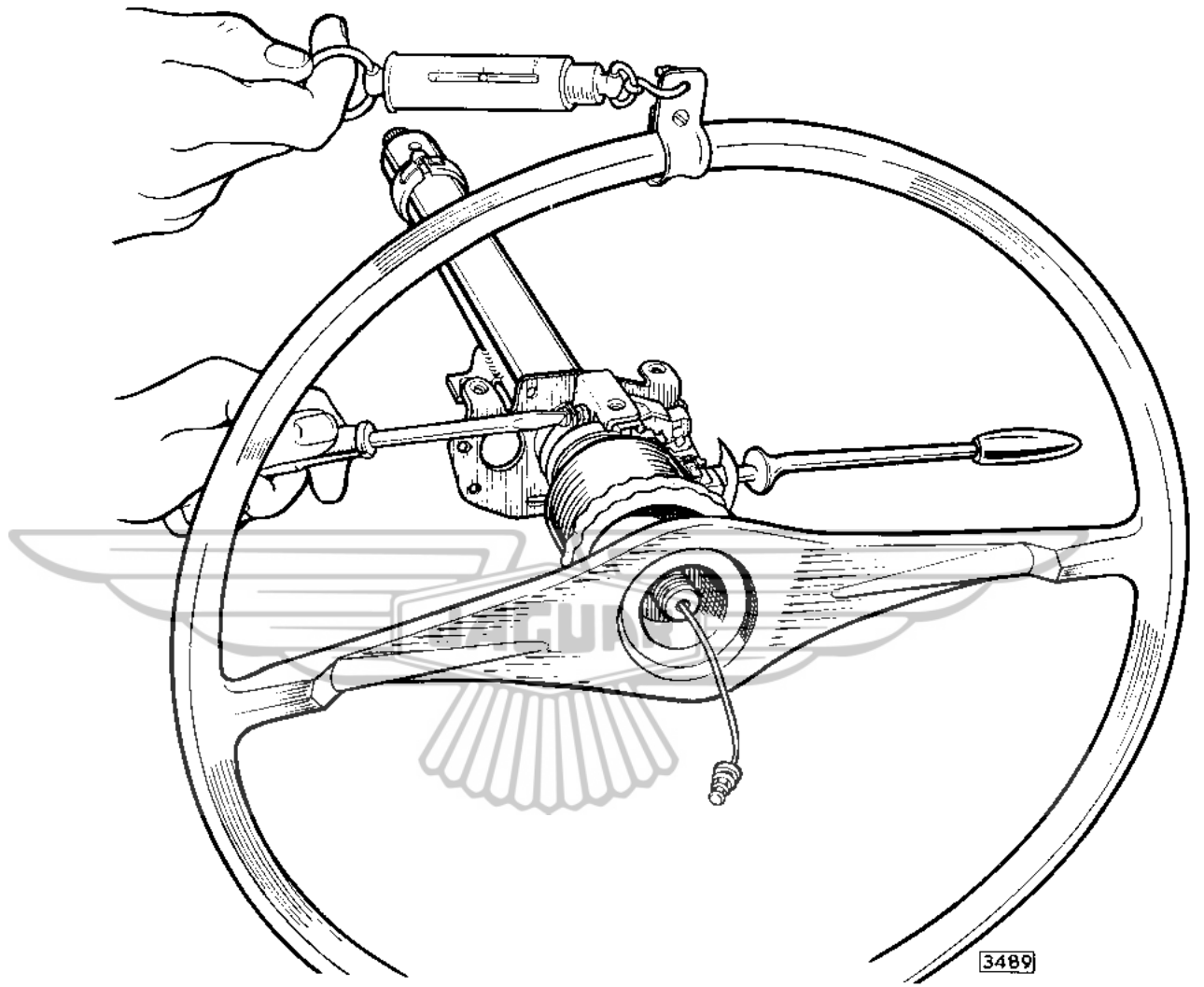
Grade 'A' .188" (4.7 mm.) (Part No. C.26023/1)

Grade 'R' .160" (4.06 mm.) (Part No. C26023/2)

Reconnect the switch connector cables.

Position the road wheels in the straight ahead position, centralise the steering column and reconnect the universal (pot) joint as detailed in the appropriate Service Manual - Section I - Steering.

Complete refitting of steering wheel and nacelle covers.



Number P.46

Section Electrical and Instruments

Sheet 1 (of 1)

Date April, 1966

INTRODUCTION OF LUCAS 9H HORNS

<u>Models affected</u>	<u>Commencing chassis numbers</u>	
	<u>R.H.D.</u>	<u>L.H.D.</u>
2.4 litre Mark 2	119432	127886
3.4 litre Mark 2	169762	180276
3.8 litre Mark 2	234499	224234

Commencing at the above chassis numbers Lucas 9H horns are fitted, replacing the Lucas 618U horns.

These horns may be fitted as replacements to earlier Mark 2 cars in pairs only.

The fixing brackets (10209) will be supplied separately with the horns C.22255 (Low Note) and C.22254 (High Note) and when fitting replacement horns it is essential that the following procedure be carried out.

- (1) Fit the lockwashers in their correct order, one on each side of the mounting bracket centre fixing.
- (2) Ensure after positioning the horn, that the 5/16" centre fixing bolt is secure but not over-tightened. Over-tightening of this bolt will damage the horn.
- (3) Ensure that when a centre fixing bolt or washers other than those supplied is used, the bolt is not screwed into the horn to a depth greater than 11/16" (17.5 mm.)

Adjustment

If required, after a lengthy period of service, adjustments may be made by means of a small serrated screw in the rear cover.

Turning the screw will only take up wear in the moving parts and will not alter the tone.

Connect an 0-25 moving coil ammeter in series with the horn supply feed. The ammeter should be protected from overload by connecting an ON-OFF switch in parallel with its terminals. Keep this switch on except while taking readings, that is when the horn is sounding.

Turn the adjustment screw anti-clockwise until the horn just fails to sound.

Turn the screw clockwise until the horn operates within the specified current limits of 6.8 - 7.0 amperes.

Spares Bulletin Q.124 refers.



Number P.49
Section Electrical and Instruments

Sheet 1 (of 1)
Date April, 1966

HEATED BACK LIGHTS

Incorporation of Control Switch in Electrical Circuit

Models affected	Commencing chassis numbers	
	R.H.D.	L.H.D.
2.3 Litre Mark 2	119902	127998
3.4 Litre Mark 2	170565	180398
3.8 Litre Mark 2	235046	224417
3.8 'S' Model	1B.57175	1B.79231
3.4 'S' Model	1B.6438	1B.25850
4.2 Mark 10	1D.52838	1D.76425
4.2 'E' Type	1E.21223	1E.32609

Commencing at the above chassis numbers the Heated Backlight has a control switch, warning light and relay with resistance included in the electrical circuit.

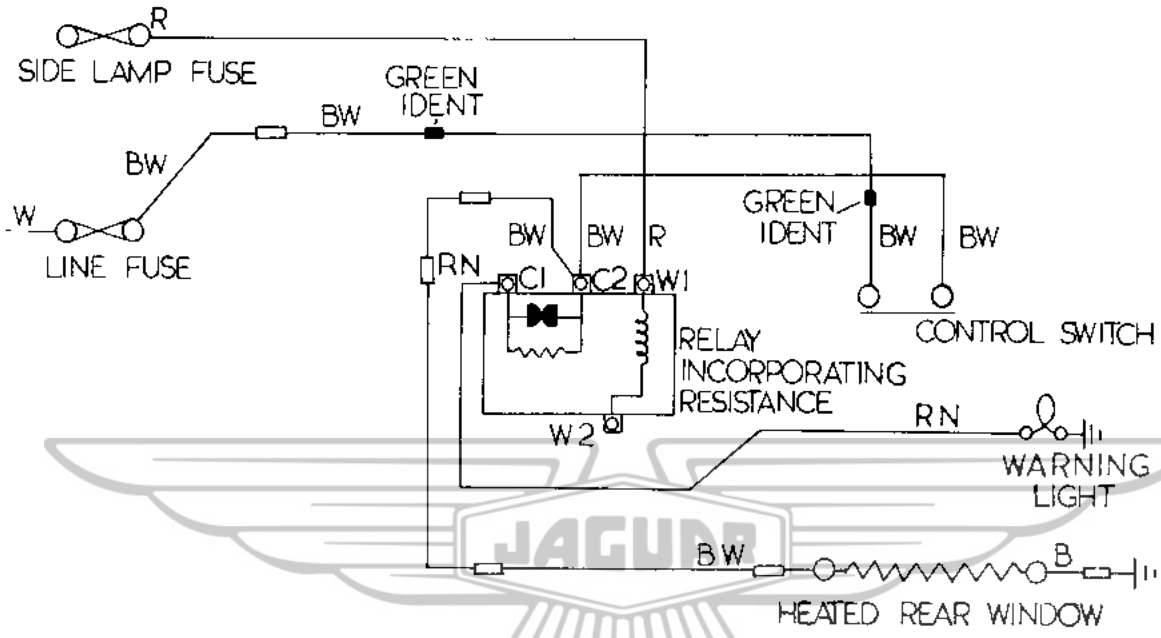
The warning light, operating through the resistance, is dimmed when the side lights are switched on.

The circuit remains ignition controlled and there is no change in the fuse rating, fuse location and the current consumption.

The control switch is mounted on the side facia panel adjacent to the brake fluid warning light, the relay being located on the back face of the panel above the switch terminals.

It should be noted that the warning light is only intended as an indication that the circuit is switched "ON".

If the warning light does not glow when the heated window is switched "ON" check the bulb filament before proceeding further.



3502

Number P.50
Section Electrical and Instruments

Page 1 of 1
Date September, 1966

TRANSISTORISED ELECTRIC CLOCKS

Despite the issue of Service Bulletin P.44 in November, 1965, it is apparent that the importance of the instructions contained therein are not receiving the attention they warrant.

Abundant evidence is available that most of the trouble experienced with the transistorised electric clock can be traced to the fact that they are not being started IMMEDIATELY THE BATTERY IS RECONNECTED.

It cannot be too strongly emphasized that FAILURE TO ENSURE THAT THE CLOCK IS WORKING AS SOON AS THE BATTERY IS CONNECTED WILL INEVITABLY RESULT IN IRREPARABLE DAMAGE TO THE TIMEPIECE.

All Distributors and Dealers are requested to issue instructions to Service personnel that this small but MOST IMPORTANT operation shall be carried out WHENEVER THE ELECTRICAL SUPPLY IS RECONNECTED AFTER ANY PERIOD OF ISOLATION FROM THE BATTERY.

Number P.51

Section Electrical and Instruments

Page 1 of 1

Date December, 1966

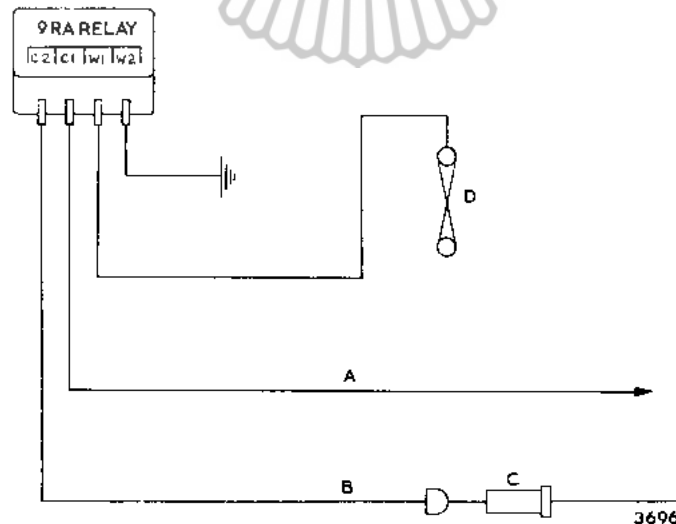
IGNITION SWITCH - AIR CONDITIONED CARS

Isolated instances have occurred of ignition switch failure on cars fitted with an Air Conditioning System.

This has been traced to an excessive load being imposed on the two evaporator fan motors when operating under certain adverse conditions conducive to icing up, resulting in an overload on the ignition switch contacts and subsequent breakdown.

To prevent this fault recurring, a Lucas 9 RA Relay (Part No. C.19085) has been introduced into the Air Conditioning Electrical circuit on current production cars, the revised circuit being as illustrated.

If complaints are received of ignition switch failure, it is recommended that the relay is fitted in a convenient position and the circuit modified. The main output terminal (A) should have a 35 amp terminal fitted to connect to the alternator.



- A - To alternator main output terminal (Cable to carry 30 amperes)
- B - To air conditioning line fuse (Cable to carry 30 amperes)
- C - In line fuse
- D - Ignition fuse (No. 3)

Number P.52

Section Electrical and Instruments

Page 1 of 1

Date December, 1966

BRAKE FLUID WARNING LIGHT UNIT INSULATION

<u>Models affected</u>	<u>Commencing chassis numbers</u>	
	<u>R.H.D.</u>	<u>L.H.D.</u>
2.4 Litre Mark 2	119913	127998
3.4.Litre Mark 2	170583	180398
3.8 Litre Mark 2	235054	224416
3.4 Litre 'S' Model	1B.6440	1B.25856
3.8 Litre 'S' Model	1B.57204	1B.79355
4.2 Mark 10	1D.52857	1D.76436
4.2 'E' Type (Open Sports)	1E.1481	1E.12638
4.2 'E' Type Fixed Head Coupe	1E.24435	1E.32667
4.2 'E' Type 2+2	1B.50008	1E.75075

Commencing at the above chassis numbers a rubber sleeve (Part No. C.2607) is fitted over the Brake Fluid Warning Light unit terminals.

This modification prevents the possibility of a short circuit with other fittings which may be adjacent. The sleeve may, if desired, be fitted to cars prior to those given above, as follows:

Disconnect the White and Red/Green cables connected to the warning light unit, at the snap connectors in the main harness located behind the side fascia panel.

Feed the cables through and slide the sleeve down until it covers the warning light terminals.

Reconnect the cables at the snap connectors.

Spares Bulletin Q.132 refers.

Number P.53
Section Electrical and Instruments

Page 1 of 1
Date December, 1966

TRAFFIC HAZARD WARNING SWITCH PANEL

(Fitted for U.S.A. Market only)

Isolated instances have occurred on cars fitted with the traffic hazard warning system where a short circuit has developed when re-inserting the flasher unit after removal from the switch panel.

Investigation has shown that this is due to the cable terminals in the socket being forced into contact with the earthed back face of the panel by the blades of the flasher unit.

An insulator is now being interposed between the contacts housing and the metal panel to eliminate the possibility of short circuit.

If a flasher unit is removed from the panel, the cable terminals should be checked for excessive movement when pushing the Flasher unit into position. If such movement is present, the insulator should be fitted and retained on the panel by applying a quality adhesive to the face of the insulator.

The insulator is available from Jaguar Spares Division to Part No. 11427.

It will be appreciated that whilst this equipment is fitted only to cars intended for export to U.S.A., and Distributor or Dealer may be called upon to replace the flasher unit and may, therefore, find it necessary to apply the above instructions.

Number P.54
Section Electrical and Instruments

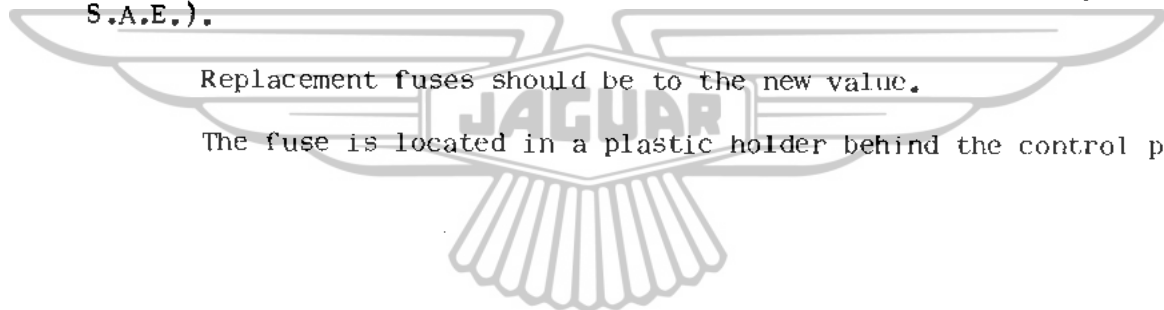
Sheet 1 of 1
Date March, 1967

TRAFFIC HAZARD WARNING CONTROL PANEL

The fuse rating for the traffic hazard warning control has now been increased to 35 amperes (English rating) (20 amperes S.A.E. rating). The previous rating was 25 amperes (English) (14 amperes S.A.E.).

Replacement fuses should be to the new value.

The fuse is located in a plastic holder behind the control panel.



Number P.55
Section Electrical and Instruments

Sheet 1 of 1
Date March, 1967

INSTRUMENT GAUGE TEST EQUIPMENT

In order to facilitate the testing of the electrical gauges and indicators fitted to Jaguar cars, Messrs. SMITHS Motor Accessories have now produced a compact test unit which will quickly determine whether the fault is in the indicator transmitter or bi-metal voltage stabiliser.

Previously, the only easy way of tracing a faulty unit has been by substitution.

Apart from tracing the fault easily, it will be appreciated that time will be saved, thereby reducing labour costs, and will also avoid components in good working order being unnecessarily returned for replacement.

The unit is known as the "Automatic Electrical Testing Instrument", and is available at reasonable cost from the Manufacturers, SMITHS MOTOR ACCESSORIES, OXGATE LANE, CRICKLEWOOD, LONDON, N.W.2., under Part No. SR/D.366.

Full working instructions are included with each instrument.

Number P.60
Section Electrical & Instruments

Page 1 of 2
Date January, 1968

CARE OF BATTERIES (NEW CARS)

This Bulletin supplements Bulletin P.29 dated May, 1964, and gives more detailed information concerning the care of batteries.

In order to ensure that batteries fitted to new cars are in perfect condition when the car is sold, it is **ESSENTIAL** that the following procedure is carried out whilst the car is in the showrooms.

Batteries standing idle lose charge slowly at the rate of 1% per day at normal room temperature, rising to 3% per day under tropical conditions.

This means that a battery could be "flat" in about four months.

A "flat" battery can be recharged provided that the standing period has not been too prolonged, but the neglect will have left its mark on the battery and charging will not entirely restore it to its original healthy state.

It is now recommended that batteries receive a freshening charge of 5 amperes every month until the correct specific gravity is reached (see table below).

Climates having a shade temperature normally below 80°F (26.6°C)
Specific gravity - 1.270 to 1.290
Open circuit voltage - 12.7

Climates having a shade temperature frequently above 80°F (26.6°C)
Specific gravity - 1.210 to 1.230
Open circuit voltage - 12.7

The battery should be charged until the specific gravity (S.G.) no longer rises and all cells are gassing freely. A four hour charge period each month should be sufficient. Fully charge and correct the electrolyte level before sending the battery out into service.

/cont'd....

The state of the charge can be checked by specific gravity (S.G.) or open circuit (O.C.V.) readings as follows:-

	<u>Climates normally below 80° F (26.6° C)</u>		<u>Climates frequently above 80° F (26.6° C)</u>	
	<u>S.G.</u>	<u>O.C.V.</u>	<u>S.G.</u>	<u>O.C.V.</u>
Battery fully charged	1.280	12.7	1.220	12.4
Battery $\frac{3}{4}$ charged	1.240	12.5	1.180	12.2
Battery $\frac{1}{2}$ charged	1.200	12.3	1.140	12.0
Battery $\frac{1}{4}$ charged	1.160	12.1	1.100	11.8
Battery fully discharged	1.120	11.9	1.060	11.6

Fast charging, prior to delivery to the customer, should NOT be resorted to in the hope that the battery will be restored to its originally healthy condition. Neither is the practice of running the engine for a short period each week sufficient.



Number P.63
Section Electrical and Instruments

Page 1 of 1
Date July, 1968

PILOT HEADLAMPS
(GERMAN MARKET ONLY)

<u>Models affected</u>	<u>Commencing Chassis Numbers</u>
240	1J.30338
340	1J.80286
'S' type 3.4 litre	1B.26299
'S' type 3.8 litre	1B.80372
420	1F.27280
420G	G1D.77569

Commencing at the above chassis numbers all cars exported to Germany will have the side lamp bulb incorporated in the headlamp.

On cars with the four headlamp system, the bulb will be located in the outer headlamp only.

The existing sidelamps will be retained in position but will not be connected.

The wattage of the head and sidelamp bulbs will remain unaltered.

Access to the bulb for replacement purposes will be as for the headlamp.

Number P.64

Section Electrical and Instruments

Page 1 of 1

Date July, 1968

WATER TEMPERATURE GAUGE

<u>Models affected</u>	<u>Commencing Chassis Numbers</u>	
	<u>R.H.D.</u>	<u>L.H.D.</u>
240	1J.2037	1J.30225
340	1J.5118	1J.80222
'S' Type 3.4 litre	1B.9118	1B.26283
'S' Type 3.8 litre	1B.59610	1B.80350
4.2 'E' Type F.H.C.		1E.34945
4.2 'E' Type Open 2 seater		1E.16538
4.2 'E' 2 + 2		1E.77838

Commencing at the above chassis numbers a Water Temperature Gauge was introduced which has zonal dial markings, replacing the existing method of calibrating in degrees. The new gauge is marked "NORMAL" to indicate a safe water temperature, whilst the 'danger' area is illustrated by means of red colouring.

In all other respects the new gauge remains identical with the old instrument, is fully interchangeable, and will be used for all Spares replacements when stocks of the existing gauges are exhausted.

Number P.65

Section Electrical and Instruments

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Date July, 1968

IGNITION COILS AND H.T. LEADS

<u>Models affected</u>	<u>Commencing Chassis No.</u>		<u>Commencing Engine No.</u>
	R.H.D.	L.H.D.	
240			7J.2891
340			7J.51712
3.4 litre 'S' model			7B.10458
3.8 litre 'S' model			7B.65020
4.2 'E' type			7E.17655
4.2 'E' type 2 + 2			7E.54609
420	1F.6629	1F.27389	
420G	G1D.55267	G1D.77609	

Commencing at the above Engine or Chassis Numbers, LUCAS ignition coils with "push-in" H.T. terminals were fitted.

Coils with the nut type terminals are interchangeable with the later type which are available under Jaguar Part Number C.30120. It will, however, be necessary to replace the existing cable connector with connector C.30667, and fit cable sleeve C.28854.

Fit the connector as follows:-

- (1) Strip insulation back $\frac{1}{2}$ " (12.7 mm.) and fold back wire.
- (2) Fit connector and crimp securely in position.

The coil terminals on the new coils will be indicated by "+" and "-" signs and not as previously with "SW" and "CB" signs.

When connecting the L.T. leads care must be taken to ensure that the leads are connected as follows:-

Cars with positive (+) earth system - white cable to negative (-) terminal.

Cars with negative (-) earth system - white cable to positive (+) terminal.

The new coils are a universal type and the clamp position may have to be adjusted to enable the cables to be attached. Tighten the clamp bolt after re-positioning to a torque of 8 - 15 lb./in. (9.2 - 17.3 kg/cms.).

Over-tightening will collapse the coil case.

Spares Bulletin Q.146 refers.

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Date December, 1968

HEADLAMPS
(AUSTRIAN MARKET)

<u>Models affected</u>	<u>Commencing Chassis Numbers</u>
	L.H.D.
240	1J.30465
340	1J.80425
3.4 'S' Type	1B.26356
3.8 'S' Type	1B.80406

Commencing at the above chassis numbers the standard pattern L.H.D. European headlamps (C.21726) were fitted replacing headlamp C.21728 which was for the Austrian market only.

The new lamps are interchangeable with the earlier type, but due to the change in lens pattern, should only be fitted in pairs.

The bulb (Lucas No. 410) remains unchanged.

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Date December, 1968

STARTER SOLENOID SWITCH
(INERTIA DRIVE STARTER MOTORS)

<u>Models affected</u>	<u>Commencing Chassis Numbers</u>	
	<u>R.H.D.</u>	<u>L.H.D.</u>
240	1J.3432	1J.30571
340	1J.52241	1J.80536
340 (Police Equipment)	1J.52173	

Commencing at the above chassis numbers, a new type of Lucas starter solenoid switch was fitted (Jaguar Part No. C.30287).

This new switch is interchangeable with the previous type and may be used as a replacement if supplies of the original are not available.

September 1957.

J A G U A R

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

SERVICE BULLETIN NO.222

WINDSCREEN WIPER MOTOR - REPLACING TYPE DR1 WITH TYPE DR3.

Models affected.


Mark V11
MK.140
Mark V111
2.4 litre
3.4 litre

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

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

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

Fitting Instructions.

- 
- 1) Disconnect the cables and remove the original motor from the vehicle. To disconnect the crosshead and flexible rack, the circlip (or hexagon nut on earlier DR1 motors) around the gear shaft on the underside of the gearbox should be removed. This will allow the final gear assembly to be partially withdrawn so that the connecting rod can be lifted clear of the crosshead.
 - 2) Remove the gearbox cover and circlip from the replacement DR3. Partially withdraw the final gear assembly and connecting rod, and attach the crosshead to the connecting rod. Push the final gear back into its original position and replace the circlip and gearbox cover
 - 3) Fit the conversion bracket to the motor, and bolt the assembly in position on the vehicle.

Wiring Instructions.

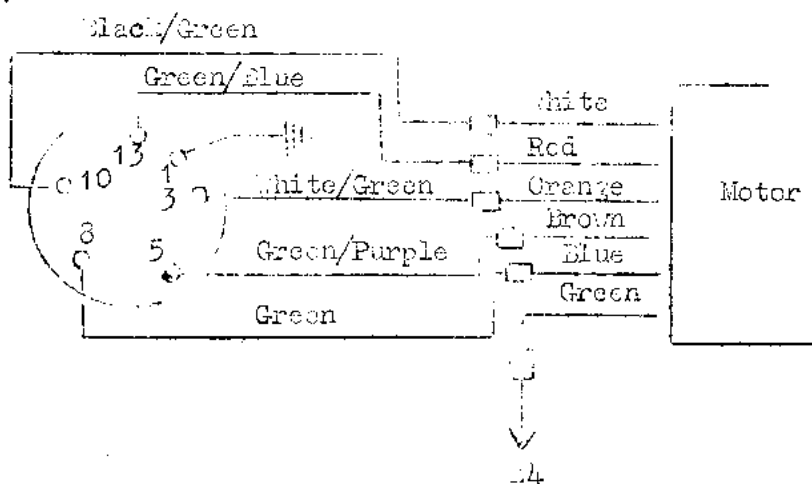
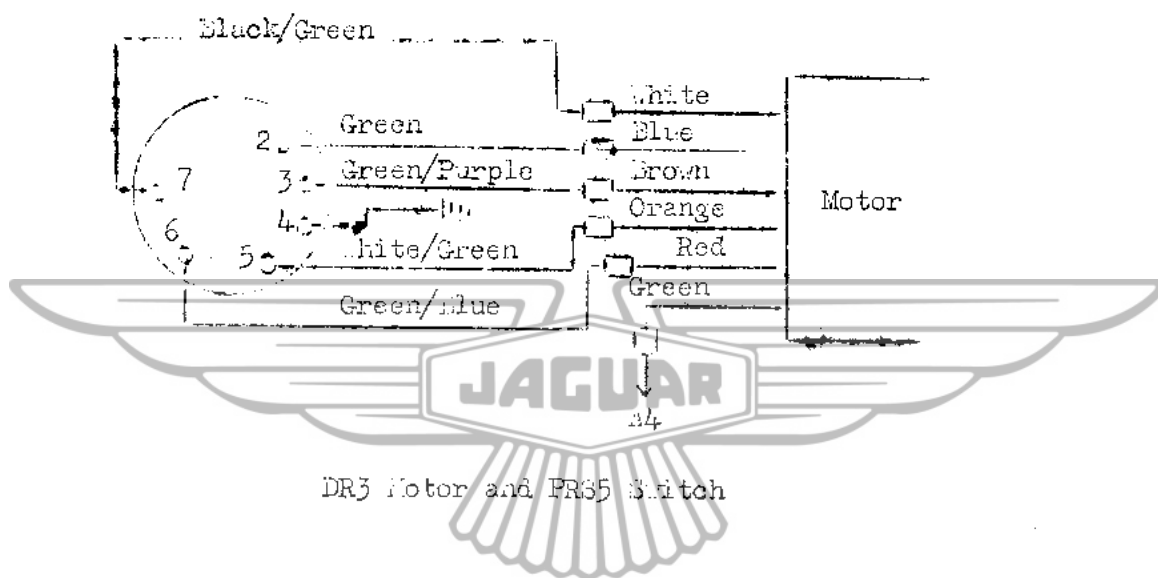
- 1) Cut off the original five connectors from the wiper motor harness, and solder on the five "bullet" connectors.
- 2) Using rubber snap connectors, connect the leads from the DR3 motor to the harness, as illustrated below. (it will be seen from the two circuits that two methods of wiring are involved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

Continued....

3) It will be necessary to remove and tape up the green cable feeding the panel control switch, since it is no longer required. (With PR35 switches, the feed cable is connected to terminal 2; with PR37 switches, the feed cable is connected to terminal 8) Using the length of green cable supplied with the replacement motor, connect the green lead from the motor to the "14" fuse box terminal.

NOTE:- The PR35 type switch is fitted to the Mark V11 and Mark V111 model; the PR37 is fitted to the ML.40, ML.50, 2.4 and 3.4 litre models.

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



DR3 Motor and PR37 Switch

MAY, 1959

J A G U A R
S E R V I C E A N D S P A R E S O R G A N I S A T I O N
S E R V I C E B U L L E T I N N O . 2 6 7

25 AMP DYNAMO AND NEW VOLTAGE/CURRENT REGULATOR

<u>Models affected</u>	<u>Commencing Chassis numbers</u>	
	R.H. Drive	L.H. Drive
2.4 litre	913953	943437
3.4 litre	977762	992494
XK.150 Open 2-seater	-	832088
Drop Head Coupe	827273	838259
Fixed Head Coupe	824900	836222
Mark IX	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:-

	<u>2.4 litre</u>	<u>3.4 litre</u>	<u>XK.150</u>	<u>Mark IX</u>
Dynamo				
Jaguar part number	C.15256	C.15255	C.15255	C.15254
Lucas type	C45-FV-6	C45-FVS-6	C45-FVS-6	C45-FVS-6
Lucas part number	22489D	22496A	22496A	22528D
Voltage/current regulator				
Jaguar part number	C.15257	C.15257	C.15257	C.15257
Lucas type	RB.310	RB.310	RB.310	RB.310
Lucas part number	37297.F	37297.F	37297.F	37297.F

The revised current setting of the new voltage regulator is as follows:-

24 to 26 amperes at 4,000 dynamo r.p.m.

Interchangeability

- (i) The new voltage/current regulator is not interchangeable with the previous type fitted.
- (ii) The new 25 amp dynamo can be used to replace the previous type fitted.

Index Reference

Section P ✓

J A G U A R

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

S E R V I C E B U L L E T I N N O . 2 6 8

V A R I O U S S E R V I C I N G I T E M SE L E C T R I C R E V O L U T I O N C O U N T E R - I N T R O D U C T I O N

<u>Models affected</u>	<u>Commencing Chassis numbers</u>	
	R.H. Drive	L.H. Drive
2.4 litre	915214	943590
3.4 litre	977860	992652
XK.150 Open 2-seater	820043	832088
Fixed Head Coupe	824905	836233
Drop Head Coupe	827373	838272
Mark LX	771820	791072

On cars with the above chassis numbers and onwards plus certain individual cars prior to these numbers an electrically operated revolution counter replaces the cable operated type.

The revolution counter instrument is energised by a small generator driven from the rear of the inlet camshaft. As the generator drive and mounting at the rear of the cylinder head is different to that for the right-angle cable drive, the cylinder head, inlet camshaft, inlet camshaft cover and gasket are modified to suit the new arrangement.

The details are as follows:-

	2.4 litre	Mark LX	XK.150
Electric Rev. Counter Instrument with Clock	C.14993	C.14995	C.14994
Harness for Electric Revolution Counter	C.15268	C.15268	C.15269
Revolution Counter Generator	C.14996	C.14996	C.14996
Driving Flaw	C.14989	C.14989	C.14989
Plate Washer	C.15918	C.15918	C.15918
Lock Washer (3 off)	C.15919	C.15919	C.15919
'O' Ring	C.14990	C.14990	C.14990
Setscrews (3 off)	C.14992	C.14992	C.14992
Cylinder Head	C.14955(2.4 litre) C.14956(3.4 litre)	C.14958	C.14956(XK.150) C.14957(XK.150'S')
Inlet Camshaft Cover	C.14987	C.14987	C.14987
Inlet Camshaft Cover Gasket	C.14988	C.14988	C.14988
Neoprene Sealing Ring	C.14991	C.14991	C.14991
Rear Bearing Cap	C.14984	C.14984	C.14984
Inlet Camshaft	C.14986(2.4 litre) C.14985(3.4 litre)	C.14985	C.14985

Interchangeability

Note that the new inlet camshafts detailed above are interchangeable with the previous types but the earlier type camshafts must NOT be fitted to cars with an electric revolution counter.

Index Reference

Sections B and P ✓

CHANGING BRAKE DISCSModels 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.