

**Service Bulletins
January 1979 to
September 1986 inclusive**



**Rolls-Royce Silver Shadow
Long Wheelbase,
Corniche and Camargue
Bentley T Series and Corniche
Rolls-Royce Silver Shadow II
and Silver Wraith II
Bentley T2**

T.S.D. 4318

Important

Information in this publication relating to Corniche and Camargue motor cars is only applicable prior to the introduction of the 17 digit vehicle identification number (VIN).

For information on Corniche or Camargue motor cars with a 17 digit vehicle identification number (VIN) reference should be made to the Service Information Manual TSD 4446.

The name Bentley is registered trademark of
Bentley Motors Limited © 2005.

The name Rolls Royce is a registered trademark of
Rolls Royce plc.

All material enclosed in this publication was accurate at original publication.
Please refer to your authorised Bentley dealership for any update/changes.
Originally printed in 1979

TSD Publication 4318
Published by:-
Bentley Motors Limited.

Re-printed by Elanders Hindson Limited, England.

Service Bulletins

Contents

- A General Information
- B Special Processes
- C Air Conditioning
- D Lubrication and Maintenance
- E Engine
- F Propeller Shaft and Universal Joints
- G Hydraulic Systems
- H Sub-frames and Suspension
- J Final Drive
- K Fuel System and Carburettors
- L Engine Cooling System
- M Electrical System
- N Power Assisted Steering
- P Torque Tightening Figures
- Q Exhaust System
- R Wheels and Tyres
- S Body
- T Transmission
- U Emission Control Systems
- PVI Phantom VI

Service Bulletin



TSD 4318

Bulletin number	Index Issue 6						Date	23 12 86			Page	1 of 5		
Circulation list														

Category

ALL ROLLS-ROYCE FRANCHISE HOLDERS
SERVICE BULLETIN INDEX FOR TSD 4318

APPLICABLE TO

Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche, Camargue and Phantom VI cars.
Bentley T series, Bentley T2 and Corniche cars.

The following list contains all relevant Service Bulletins issued from 1 January 1979 up to and including 30 September 1986. It should be noted that on Corniche and Camargue cars, the bulletins listed apply only to cars released prior to the introduction of the seventeen (17) digit vehicle identification number (VIN).

Please note that this manual has been closed from the 30 September 1986. All future Service Bulletin information will be released under TSD 4736 Product Support Information.

A General Information

SY/A14	Issue 2	Fuel economy.
SY/A30		Changes to specification.
SY/A31		Revised spare tool kit.
SY/A32		Approval plate - UK (All Rolls-Royce Franchise Holders in the United Kingdom).
SY/A33		Vehicle identification number (VIN).

B Special Processes

No bulletins issued.

C Air Conditioning

SY/C15	Issue 2	Silencer hose assembly ACU (All Rolls-Royce Franchise Holders other than those in the United Kingdom, the Far East and Australasia).
SY/C16		ACU - New ambient compressor cut-off switch.
SY/C17		ACU - Identification and fitting of metric air conditioning compressor.
SY/C18		ACU - Fitting procedure replacement metric air conditioning compressor.
SY/C19		New rectangular fascia outlet control flap seals.

D Lubrication and Maintenance

SY/D23 BP VF7 SAE 10W/30 motor oil.

E Engine

SY/E36 Piston and cylinder liner grading.
SY/E37 Inlet and exhaust valve spring retaining collets.
SY/E38 Issue 2 Changes to specification.
SY/E39 Sparking plugs (All Rolls-Royce Franchise Holders in Australia, Canada, Japan and the USA).
SY/E40 Valve seals (All Rolls-Royce Franchise Holders in Canada, Japan and the USA).
SY/E41 Engine valve stem seal and spring replacement.
SY/E42 Oil seal, assembly crankcase backplate.
SY/E43 Valve spring compressor

F Propeller Shaft and Universal Joints

No bulletins issued.

G Hydraulic Systems

SY/G65 Front brakes - Brake pad retractor springs ('M' springs).
SY/G66 Hydraulic pipe connections to the rear height control ram.
SY/G67 Hydraulic hose replacement (All Rolls-Royce Franchise Holders in the USA and Canada).
SY/G69 Brake fluid reservoir labelling.
SY/G70 Brake pad fitments and uses.
SY/G71 Improved hydraulic reservoir lid sealing.
SY/G72 Hydraulic levelling system.
SY/G73 Hydraulic system mineral oil (LHM) contamination test kit.
SY/G74 Hydraulic system mineral oil reservoir
SY/G75 Height control valve.

H Sub-Frames and Suspension

SY/H27 Rear road spring rattle.
SY/H28 Front suspension dampers.

J Final Drive

SY/J9 Final drive output shaft seals.
SY/J10 Final drive pinion seal.
SY/J11 Introduction of constant velocity drive-shaft and joints.
SY/J12 Final drive pinion housing.

K Fuel System and Carburetters

SY/K15	Fuel filters.
SY/K16	Provision of altitude performance adjustments (All Rolls-Royce Franchise Holders in the USA only).
SY/K17	Poor hot starting (All Rolls-Royce Franchise Holders in North America only).
SY/K18	Fuel pump mount.
SY/K19	Pierburg fuel pump.

L Engine Cooling System

SY/L24	Engine cooling fan attachment.
--------	--------------------------------

M Electrical System

SY/M103	Issue 2	Stop lamp switch adjustment.
SY/M105	Issue 2	Replacement ice warning sensor.
SY/M111		Electronic speedometer wiring changes.
SY/M112		Replacement of early type electronic distributor modules.
SY/M113		Replacement of early type electronic speed control bellows.
SY/M114		Cassette tape player.
SY/M115		Replacement of early type automatic air conditioning ambient sensors.
SY/M116		Replacement of the headlamp dipswitch.
SY/M117		Digital instruments.
SY/M118		Gear change actuator.
SY/M119		Positive drive wiper anti-streak mechanism.
SY/M120		Courtesy light switch.
SY/M121		New Pioneer loudspeakers.
SY/M123		Replacement of a window lift motor.
SY/M124		Service replacement batteries (All Rolls-Royce Franchise Holders in Europe).
SY/M125		Automatic retraction of the radio aerial on operating the ignition switch.
SY/M126		Replacement ice warning sensor.
SY/M127	Issue 2	New longer Bosch Frankfurt six button radio.
SY/M128	Issue 2	4 in 1 instruments.
SY/M129		Automatic radio aerial.
Pages		
5 and 6	Issue 2	
SY/M130		Manually switched radio aerial.
Page 9	Issue 2	
SY/M131		Speed control system test procedures.
SY/M132		Automatic speed control system (control box).

N Power Assisted Steering

SY/N17	Issue 2	Steering wheels.
SY/N18		Steering rack internal lock stops.
SY/N19		Metric steering pump.
SY/N20		Steering pull.
SY/N21		Steering rack end cap sealing.
SY/N22		Power steering low pressure hoses.

P Torque Tightening Figures

No bulletins issued.

Q Exhaust System

No bulletins issued.

R Wheels and Tyres

SY/R42	Issue 2	Currently approved tyres.
SY/R43		Dunlop SP sport formula 70T/L 235/70 HR15 101H tyre.
SY/R44		Currently approved tyres.
SY/R45		Michelin 235/70 - HR15 XVS tyres.
SY/R46		Avon 235/70 - HR15 RR Turbosteel white sidewall tubeless tyres federal/ECE date code 419 (All Rolls-Royce Franchise Holders in the United Kingdom).
SY/R47		Dunlop SP sport D7 235/70 HR15 radial formula 70 tyres.
SY/R48		Deletion of the Avon radial 235/70 HR15 T textile tubeless or 235/70 HR15 101H textile braced tyres from the currently approved tyre range.
SY/R49		Currently approved winter tyres.

S Body

SY/S49		Replacement of the Kangol rear seat belt centre anchor brackets (All Rolls-Royce Franchise Holders in the USA only).
SY/S50		New electric door mirrors.
SY/S52		Leather upholstery.
SY/S53		Modification to Corniche door shuts.
SY/S54	Issue 2	Luggage compartment lock (All Rolls-Royce Franchise Holders in the United Kingdom).

T Transmission

SY/T1	Three speed torque converter gearboxes.
SY/T2	General Motors 400 gearbox.
SY/T3	General Motors 400 gearbox.
SY/T4	Gearbox Sun gear shaft.
SY/T5	Fluid loss from transmission vent pipe.
SY/T6	Transmission dipstick.

U Emission Control Systems

No bulletins issued.

PV1 Phantom VI

PV1/H1	Deletion of ride control.
PV1/R2	Phantome VI 'Cat A' bulletin (All Rolls-Royce Franchise Holders other than those in the USA and Canada).

Service Bulletins

Chapter A

General Information



Service Bulletin

TSD 4318

Bulletin number	SY/A14 (Issue2)							Date	25	7	79	Page	1	of	2
Circulation list															

Category C

ALL FRANCHISE HOLDERS AND DEALERS

FUEL ECONOMY

APPLICABLE TO:

All Rolls-Royce and Bentley motor cars.

INTRODUCTION:

A number of enquiries have been received requesting information on how to obtain the optimum fuel economy from the above vehicles. There are a number of steps which it is advisable to follow but primarily it is essential that all settings and adjustments are set in strict accordance with the information given in the relevant service literature.

The following description emphasises the critical areas where incorrect settings can result in excessive fuel consumption.

DESCRIPTION:

- 1 The ignition system and carburetters should be 'tuned' in strict accordance with the instructions given in the relative Workshop Manual.

It is stressed that before carburetter settings are adjusted, the ignition system should first be thoroughly checked. Adjusting carburetters first and then adjusting ignition systems will result in a poorly 'tuned' engine.

- 2 The ignition system should be checked to ensure that sparking plugs, HT leads, contact breaker points (where applicable) are set correctly and function efficiently. Ignition timing should be set accurately to the EXACT engine speed given in the relevant section of the service literature. It should also be noted that this engine

speed should always be approached from a higher engine speed which reduces the effect of hysteresis in the centrifugal advance mechanism.

- 3 The fuel mixture weakener device should be checked and set in strict accordance with the relative section in the Workshop Manual.
- 4 The automatic choke should be checked for correct operation, ensuring that there is no stiffness in the operating spindles and that all settings are correct.
- 5 The air filter should be checked and changed at regular intervals especially on cars operating in dusty conditions.
- 6 Fuel mixture settings should always be carried out with an engine at normal running temperature and using a carbon monoxide meter/exhaust gas analyser.

SU carburetted engines should be set to 2.5-3% CO.
Solex carburetted engines to 0.8-1.2% or 0.2-0.5% CO depending on the specification to obtain optimum fuel economy.
- 7 The complete fuel system should be checked to ensure that there are no leaks.
- 8 The cooling system should be operating efficiently by bringing the coolant temperature to its normal operating temperature in the shortest possible time. It is recommended that a simple check be made to ensure that there is a distinct thermostat opening during engine warm up. This can be felt at the thermostat elbow which will suddenly rise in temperature as the thermostat opens.
- 9 The parking brakes should be checked for correct adjustment and the brakes checked to ensure they are not binding or sticking.
- 10 Tyre pressures should be set in accordance with the relevant service literature. Under-inflated tyres will greatly increase rolling resistance causing excessive fuel consumption.
- 11 The most valuable contribution to economy lies with the driver and the way in which the car is driven. By smooth gentle driving, avoiding hard use of the accelerator, kickdown or brakes and by avoiding the practice of warming-up the car before using it when starting from cold, considerable benefits in fuel economy can be obtained.

Service Bulletin

TSD 4318

Bulletin number	SY/A30					Date	27 4 79			Page	1 of 3		
Circulation list													

Category C

ALL FRANCHISE HOLDERS AND DEALERS

CHANGES TO SPECIFICATION

APPLICABLE TO:

All Rolls-Royce Corniche and Camargue cars, and all Bentley Corniche cars from car serial number 50001.

INTRODUCTION:

A new rear suspension and hydraulic system mineral oil have been introduced on the above motor cars. Special workshop procedures and precautions must be adopted. This bulletin has been issued to advise Franchise Holders to ensure that all their service personnel are fully acquainted with the changes and procedures using the two Mastertech programmes (1. New Rear Suspension and 2. Introduction to Hydraulic System Mineral Oil) and the Hydraulic System Mineral Oil pack containing wall charts, posters and other material. It is important that the instructions in the letter contained in the pack are carried out.

Chapter G (part 2) and Chapter H (part 2) of TSD 4200-Workshop Manual will shortly be available and describe the full workshop procedures.

Other changes to specification have also taken place in the exhaust, fuel and electrical systems.

DESCRIPTION:

1. New Rear Suspension and Hydraulic System Mineral Oil.

A new rear suspension which provides better ride, handling and which reduces road noise has been introduced. The hydraulic system of the car has been completely revised and now uses

MINERAL OIL

as its operating medium.

The oil used in the system is sold under the brand name of
CASTROL HYDRAULIC SYSTEM MINERAL OIL

For service use an alternative oil has been approved for
replenishment or replacement purposes and is sold under
the brand name of TOTAL LHM.

However, it is IMPERATIVE that Hydraulic System Mineral
Oil and RR363/Brake Fluid, as used on cars prior to
serial number 50000 ARE NOT MIXED.

The seals and flexible pipes in the two types of system
are made from different materials and if they come
into contact with the wrong fluid they will rapidly
deteriorate. This will result in leakages and possibly
one or more hydraulic system failures.

The rectification of system contamination will be
expensive and time consuming.

There are a number of key identifying features which
are used.

- a) All cars using Hydraulic System Mineral Oil, have
serial numbers from 50001 upwards.
- b) GREEN is the colour code for Mineral Oil, its
components and associated material.

NB. RR 363 Brake Fluid is coloured amber.

- c) All components only suitable for use in Mineral Oil
systems use part numbers prefixed GMF.

2. Exhaust System

A new twin exhaust system with an exhaust pipe emerging
at each of the rear outer extremities of the car has been
introduced.

3. Fuel System

A recirculating fuel system incorporating a Pierburg rotary
fuel pump is now fitted. The fuel tank is installed
within the luggage compartment and there is an additional
fuel filter within the fuel tank.

4. Electrical System - Camargue motor cars

- 4.1 The ACU override switch for preferential selection
of the airflow through the facia outlets, instead
of the screen outlets, has been incorporated.

- 4.2 Separate switching of the front and rear fog lamps has been incorporated on cars other than those built to USA, Canadian, Australian and Japanese specification where fog lamps are not included.
- 4.3 The screwed plug and socket on the gearbox actuator has been deleted. The loom is now an integral part of the actuator and passes through the left-hand side of the transmission tunnel into the car interior.
- 4.4 On cars built to USA, Canadian, Australian and Japanese specification the exhaust gas recirculation cut-out control switch mounted on the carburetter assembly is now cut out by the operation of the kickdown switch.

5. Electrical System - Corniche motor cars

A number of changes to the electrical system on Corniche cars were made from car serial number DRX 33029 (refer to Service Bulletin SY/M110). These changes have been retained.

Hly/SJ

Service Bulletin

TSD 4318

Bulletin number	SY/A31					Date	16 7 79			Page	1 of 3		
Circulation list													

Category C

ALL FRANCHISE HOLDERS AND DEALERS

REVISED SPARE TOOL KIT

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars from car serial numbers:

SRG 35427 - Silver Shadow II and Bentley T2
LRG 35450 - Silver Wraith II
CRH 34830 - Corniche Saloon
DRX 34567 - Corniche Convertible
JRH 32180 - Camargue

INTRODUCTION:

A revised hand tool kit as illustrated in Figure 1 has been introduced on all Rolls-Royce and Bentley motor cars from the above car serial numbers:

DESCRIPTION:

The revised kit comprises of the following.

1 pair of engineers pliers
6" adjustable wrench
7/16in. - 1/2in. A/F and 1/2in. - 9/16in. A/F ring spanners
7/16in. - 1/2in. A/F and 1/2in. - 9/16in. A/F set spanners

2BA - 4 BA set spanner
3/16in. Allen key
Tyre pressure gauge
Tyre tread depth gauge
Two screw drivers, 1flat, 1 Pozidriv

In addition to the small tools, the tool tray lid contains the following spare bulbs.

2 stop/tail lamp bulbs
2 rear indicator bulbs
2 front side lamp bulbs
2 front indicator bulbs
2 rear number plate bulbs
1 bonnet lamp bulb

The tools contained in the heavy tools stowage bag remain unchanged.

JCL/JH

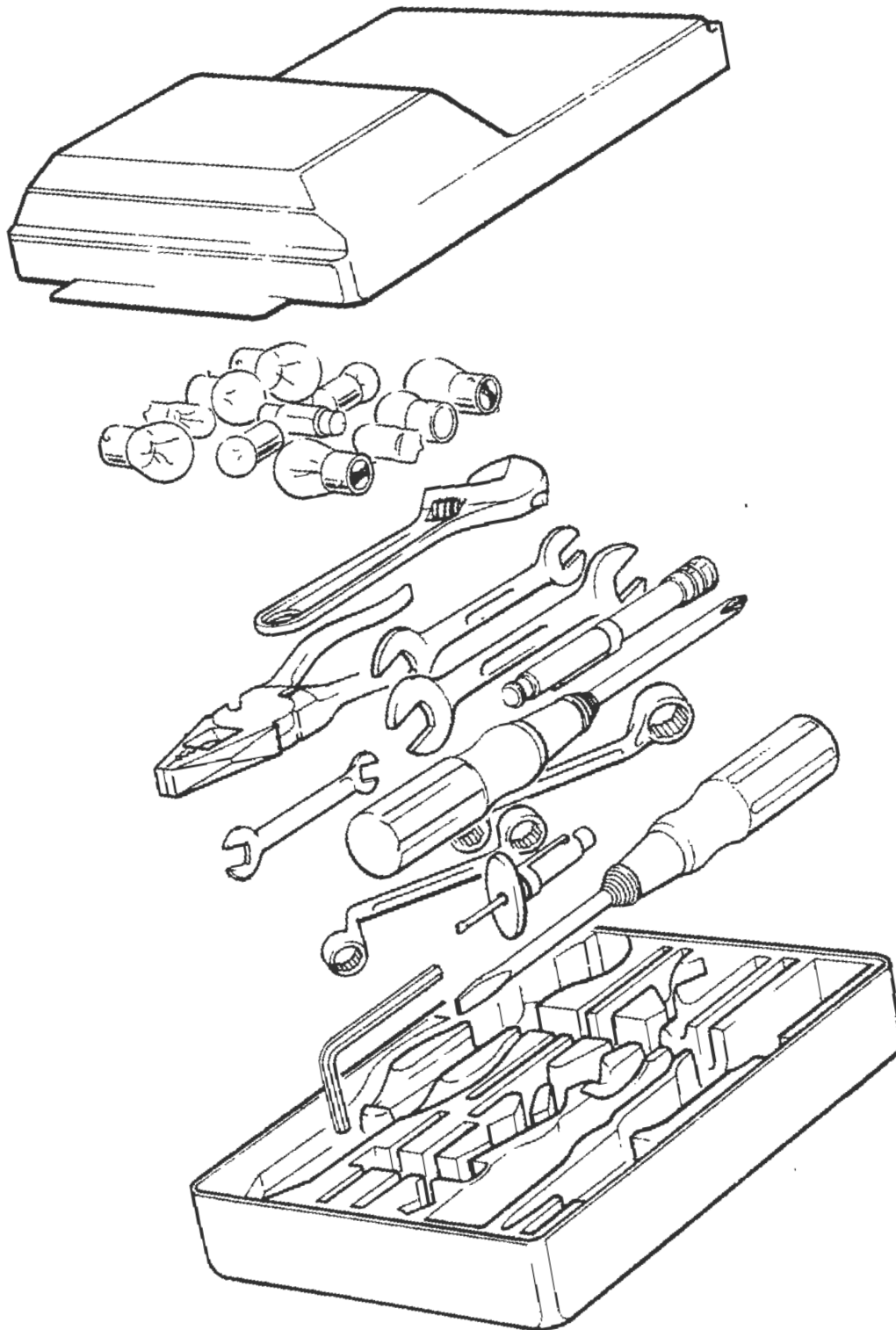


Fig. 1

Service Bulletin

TSD 4318

Bulletin number	SY/A32				Date	6 2 80				Page	1 of 2			
Circulation list														

Category C

ALL FRANCHISE HOLDERS AND DEALERS IN THE UNITED KINGDOM

APPROVAL PLATE - UK

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche, Camargue and Phantom VI cars and all Bentley T2 and Corniche cars from vehicle identification numbers.

SBH 0039654	-	Silver Shadow II and Bentley T2
LRH 0039998	-	Silver Wraith II
DRH 0050421	-	Corniche
JRH 0050294	-	Camargue
PGH 0000114	-	Phantom VI

DESCRIPTION:

On motor cars registered on or after the 1st April 1980, due to legislative requirements in the UK, the manufacturer is required to affix to the motor car a plate which bears the UK Approval Number. This plate will also bear the vehicle identification number formerly referred to as the car serial number (see Fig.1).

The plate will be secured to the right-hand side of the engine compartment bulkhead and is visible on opening the bonnet.

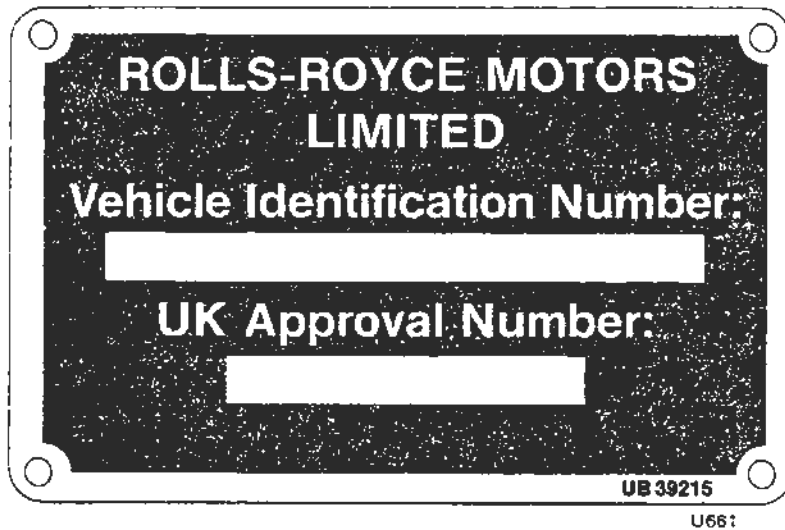


Fig.1

Service Bulletin



Car Division

TSD 4318

Bulletin number	SY/A33					Date	12 5 81			Page	1 of 3		
Circulation list													

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

VEHICLE IDENTIFICATION NUMBER (VIN)

APPLICABLE TO:

All Rolls-Royce Corniche and Camargue cars and all Bentley Corniche cars from car serial numbers

DRL 050772 - Corniche

JRX 050776 - Camargue

INTRODUCTION:

Legislation in certain countries requires the use of a 17 digit vehicle identification number (VIN), therefore such a number has been adopted for all markets from the above car serial numbers.

DESCRIPTION:

The vehicle identification number (VIN) consists of 17 digits as shown in Figure 1. The check digit is used for Factory checks on each vehicle identification number. This check digit varies according to the composition of the vehicle identification number.

It should be noted that the letters, I, O, and Q will not be used in the VIN as they could easily be confused with the figures one and zero.

The 17 digit VIN will be used from

SCAYDOOO9BCH01557 - Corniche

SCAYJ42A8BCX01570 - Camargue

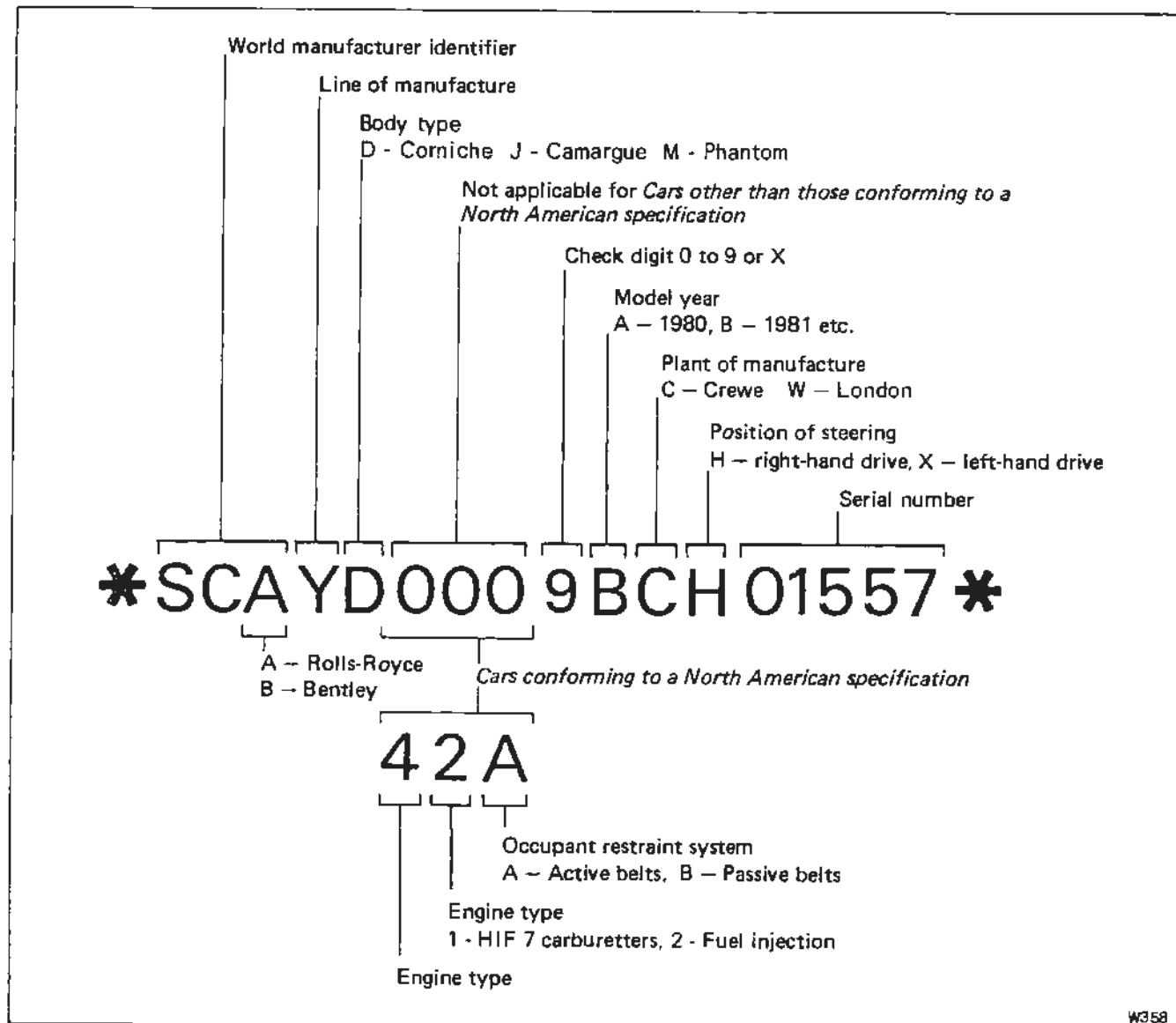


Fig. 1 Vehicle Identification Number (VIN)

LOCATION:

For Rolls-Royce Corniche, Camargue, and Bentley Corniche motor cars the vehicle identification number is located between the bulkhead and road spring pot support brackets (see Fig. 2). The number is stamped directly into the body panel.

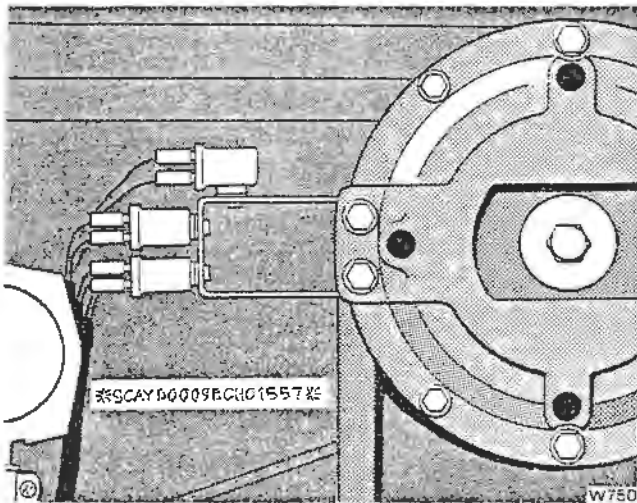


Fig. 2

Location of the vehicle identification number between the right-hand spring pot support bracket and the bulkhead.

There is an additional plate showing the vehicle identification number which can be found on the right-hand valance on Camargue cars, and on the right-hand side of the bulkhead on Corniche cars. Both plates are visible upon opening the Bonnet.

On cars conforming to a North American specification, a VIN plate is fitted on top of the demister panel, visible from outside the car in the left-hand lower corner of the windscreen.

On cars conforming to a Swedish specification, a VIN plate is fitted beneath the carpet in the luggage compartment adjacent to the lower storage compartment.

JCL/Hwd

Service Bulletins

Chapter B

Special Processes



Service Bulletins

Chapter C

Air Conditioning



Service Bulletin



Car Division

TSD 4318

Bulletin number	SY/C15 (ISSUE 2)										Date	24 5 79			Page	1 of 2		
Circulation list																		

Category C

ALL FRANCHISE HOLDERS AND DEALERS OTHER THAN THOSE IN THE UNITED KINGDOM, THE FAR EAST AND AUSTRALASIA

SILENCER HOSE ASSEMBLY ACU

APPLICABLE TO:

All Rolls-Royce and Bentley motor cars fitted with Automatic Air Conditioning.

INTRODUCTION:

With the introduction of Automatic Air Conditioning, hydraulic pumping noise from the refrigeration compressor has become more prevalent. This is due to the refrigeration compressor working for a major part of the time the engine is running. This bulletin describes the action which should be taken by the Franchise Holder in the event of a customer complaint.

DESCRIPTION:

In the majority of cases the hydraulic pumping noise from the compressor is transmitted to the interior of the car through the refrigeration pipework. This pipework must be isolated from the bodywork as much as possible.

From experience it has been found that the majority of noise originates from the compressor discharge hose. In many cars, a rubber lined clip (UR 14608) in place of the original steel clip will considerably reduce the noise level.

If the rubber lined clip has been fitted and the noise level has not diminished it may be necessary to fit the silencer hose assembly. Prior authorisation must be obtained from a Rolls-Royce Motors Service Representative or Service Department before the following procedure is undertaken.

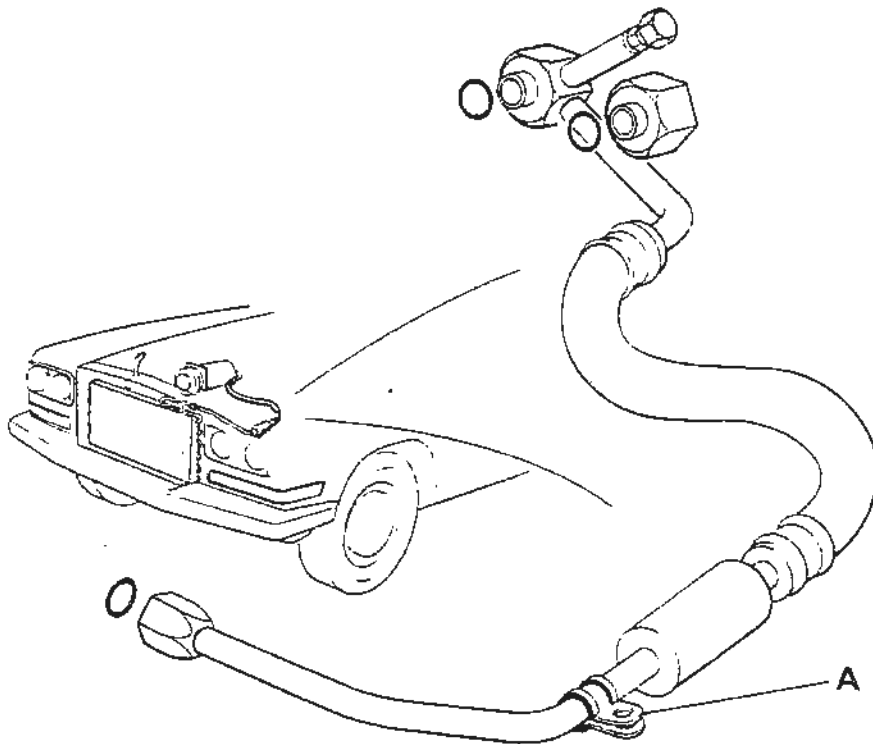
1. Discharge the refrigeration system as instructed in TSD 4200 - Workshop Manual - Chapter C - Section C2.

2. Remove the existing discharge hose (UD 20223) complete with 'O' rings and existing metal clip (fitted in position A in Figure 1).
3. Remove the existing 'O' ring from the suction hose, compressor end.
4. Fit a new 'O' ring (CD 4699) to the suction hose compressor end.
5. Fit a new 'O' ring to both ends of the silencer hose assembly. 'O' ring (UD 14799) to be fitted to the condensor matrix connection and 'O' ring (CD 4699) to be fitted to the compressor end.
6. Fit the silencer hose assembly (UD 22704) complete with 'O' rings and rubber lined clip (UR 14608). This clip replaces the metal clip (RE 14174) positioned at point A in Figure 1.
7. Charge the refrigeration system as instructed in TSD 4200 Workshop Manual - Chapter C - Section C2.

PARTS REQUIRED:

UD 22704	Silencer Hose Assembly
UR 14608	Clip
UD 14799	'O' Ring
CD 4699	'O' Ring

Kit Number RH 2769



T 911

Figure 1.

Hly/Per

Service Bulletin

ROLLS-ROYCE
MOTORS

Car Division

TSD 4318

Bulletin number	SY/C16					Date	9 5 80					Page	1 of 2				
Circulation list																	

Category C

ALL FRANCHISE HOLDERS AND DEALERS

ACU - NEW AMBIENT COMPRESSOR CUT-OFF SWITCH

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars from and including car serial numbers.

Silver Shadow II and

Bentley T2 - SRL 40244, SRH 0040245, SRL 40249,
 SRX 40271, SRX 40275, SRH 0040278,
 SRH 0040280

Silver Wraith II - LRH 39280, LRX 39995, LRX 39996
 LRX 39999

Corniche - DRL 50415, DRL 50446C.

Camargue - JRL 50435

INTRODUCTION:

A new ambient compressor cut-off switch, UD 23178, has been introduced and supersedes ambient compressor cut-off switches UD 20687 (fitted to Corniche and Camargue cars prior to car serial number 30000) and UD 21542 (fitted to Silver Shadow II, Bentley T2, Corniche and Camargue cars from car serial number 30000 up to the car serial numbers listed above.

The reason that the new switch has been introduced is to prevent the refrigeration compressor running at ambient air temperatures of 0°C or below, and so minimise the risk of blowing the compressor thermal fuse link.

The new switch will be used for all service replacement purposes. It may be fitted using the procedure detailed below.

PROCEDURE:

1. Locate the ambient compressor cut-off switch (positioned on the evaporator box cover at the rear of the engine compartment).
2. Disconnect the existing switch and remove it complete with the bush. On cars prior to car serial number 30000 release the three retaining screws and remove the switch complete with the gasket; replace the three retaining screws to blank off the holes.
3. Fit the bush UD 23179, into the evaporator box cover.
4. Smear the end of the new switch UD 23178 with a suitable lubricant to ease entry into the bush. When pressing the switch into the bush care must be taken not to push the bush into the evaporator box.
5. Cut off the existing plug, fitted on the Blue/Yellow and Yellow/Black wires and terminate these two wires with the Lucars and sleeves.
6. Connect the Blue/Yellow and Yellow/Black wires to the switch to complete the assembly. The wires may be connected to the terminals in any order.

PARTS REQUIRED:

Part No	Description
1 off UD 23178	Ambient compressor cut-off switch
1 off UD 23179	Bush
2 off UD 5406	Lucar
2 off UD 19094	Sleeve

Hly/Per

Service Bulletin

TSD 4318

Bulletin number	SY/C17					Date	18 6 80			Page 1 of 3
Circulation list										

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

ACU - IDENTIFICATION AND FITTING OF METRIC AIR CONDITIONING COMPRESSOR

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars from and including car serial numbers.

Silver Shadow II and Bentley T2

- SRH 0039969	SRH 0040143	SRH 0040145
SRX 40148	SRH 0040149	SRH 0040153
SRL 40154	SRH 0040155	SRH 0040156
SRH 0040161	SRH 0040163	SRL 40166
SRH 0040169	SRL 40170	SRX 40172
SRL 40177	and all subsequent serial numbers with the exception of SRL 40189	

Silver Wraith II

- LRH 39208	LRL 30265	LRL 39280
LRH 39344	LRX 39346	LRL 39349
LRH 39354	LRL 39356	

Corniche

- CRX 50362	DRL 50370	CRX 50379
DRL 50388	DRX 50391	CRX 50392
DRK 50394	and all subsequent serial numbers with the exception of DRL 50398 and CRH 50416	

Camargue

- JRX 50418	JRH 50420
-------------	-----------

INTRODUCTION:

The air conditioning compressor (UE 40547) with imperial mounting threads has been superseded by an air conditioning compressor (UE 43228) with metric mounting threads.

When replacement part stocks of the imperial mounted compressor (UE 40547) are exhausted, the metric mounted compressor (UE 43228) will be supplied for future replacement. The metric mounted compressor can be identified by a label that is attached to the top of the compressor. On later metric compressors this label is bilingual (English and French); see figure 1.

When the metric compressor is fitted to a car prior to the above serial numbers additional nuts, setscrews and bolts will be required. These are listed below:

PROCEDURE:

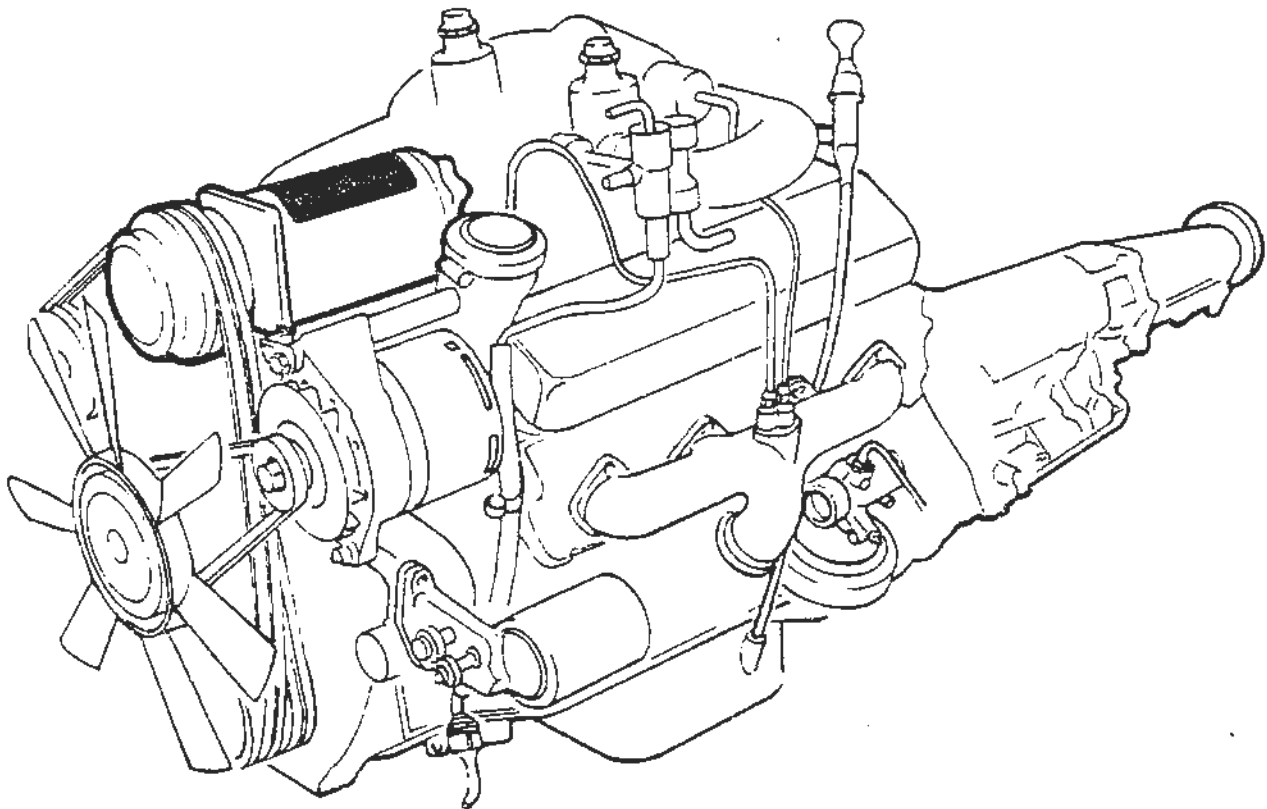
Removal and refitting procedure for the metric air conditioning compressor is exactly the same as for its predecessor. See Workshop Manual T.S.D. 4200 - Chapter C.


PARTS REQUIRED:

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1 off UE 43228	Air conditioning compressor (metric)
2 off SPM 1450	Lock-nut - front mounting
2 off SPM 1451	Setscrew - compressor to mounting plate
2 off SPM 1452	Setscrew - rear mounting bracket to compressor
*1 off SPM 1487	Bolt - cooler bracket to compress

*This additional bolt will only be required for cars fitted with a fuel cooler.

Hly/Per



 Delco Air Delco Air Conditioning Division General Motors, Dayton, Ohio	
S.A.E. J639	
CONFORME A LA NORME S.A.E. J639	
CODE NO. 121291	
CHARGE R-12	1.48kg (3.25lb)
REFRIGERANT OIL	0.28kg (10.0 oz)
HUILE RÉFRIGÉRANTE	
MODEL NO.	1131242
CAUTION	SYSTEM TO BE SERVICED BY QUALIFIED PERSONNEL ONLY. IMPROPER SERVICE METHODS MAY CAUSE PERSONAL INJURY. CONSULT SERVICE MANUAL.
R-12 REFRIGERANT UNDER HIGH PRESSURE	
NOTICE	MOUNTING HOLES HAVE METRIC THREADS.
ATTENTION	ENTRETIEN PAR DU PERSONNEL QUALIFIÉ EXCLUSIVEMENT. UN ENTRETIEN DÉFECTUEUX PEUT CAUSER DES ACCIDENTS. CONSULTER LE MANUEL D'ENTRETIEN.
RÉFRIGÉRANT R-12 SOUS HAUTE PRESSION	
AVIS	LES PAS DE VIS DES TROUS DE MONTAGE SONT EN SYSTÈME MÉTRIQUE.

Service Bulletin



TSD 4318

Bulletin number	SY/C18					Date	28 10 81					Page	1 of 2				
Circulation list																	

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

ACU - FITTING PROCEDURE REPLACEMENT METRIC AIR CONDITIONING COMPRESSOR

APPLICABLE TO:

All Rolls-Royce Silver Shadow I, Long Wheelbase, Corniche and Camargue cars and all Bentley T series and Corniche cars fitted with manually operated air conditioning.

INTRODUCTION:

The air conditioning compressor (UE 31406) is no longer available. This service bulletin explains how to fit the later type compressor (UE 43934) which has metric mounting threads. This compressor will be supplied for all future replacements.

PROCEDURE:

The removal and refitting procedure for the UE 43934 metric air conditioning compressor is the same as for its predecessor UE 31406. Refer to Workshop Manual TSD 2476 Chapter C.

When first fitting a metric air conditioning compressor to one of the above motor cars, the protection cover must be removed from the superheat switch which is located on the rear head of the compressor (see figure 1). This cover must be removed to prevent the discharge pipe from fouling surrounding components.

The following nuts and setscrews will be required.

PARTS REQUIRED:

Part Number	Description
1 off UE 43934	Air conditioning compressor (metric)

2 off SPM 1450
2 off SPM 1451
2 off SPM 1452
1 off SPM 1222

Lock Nut - front mounting
Setscrew - compressor to mounting plate
Setscrew - rear mounting bracket
Setscrew - Suction line clip

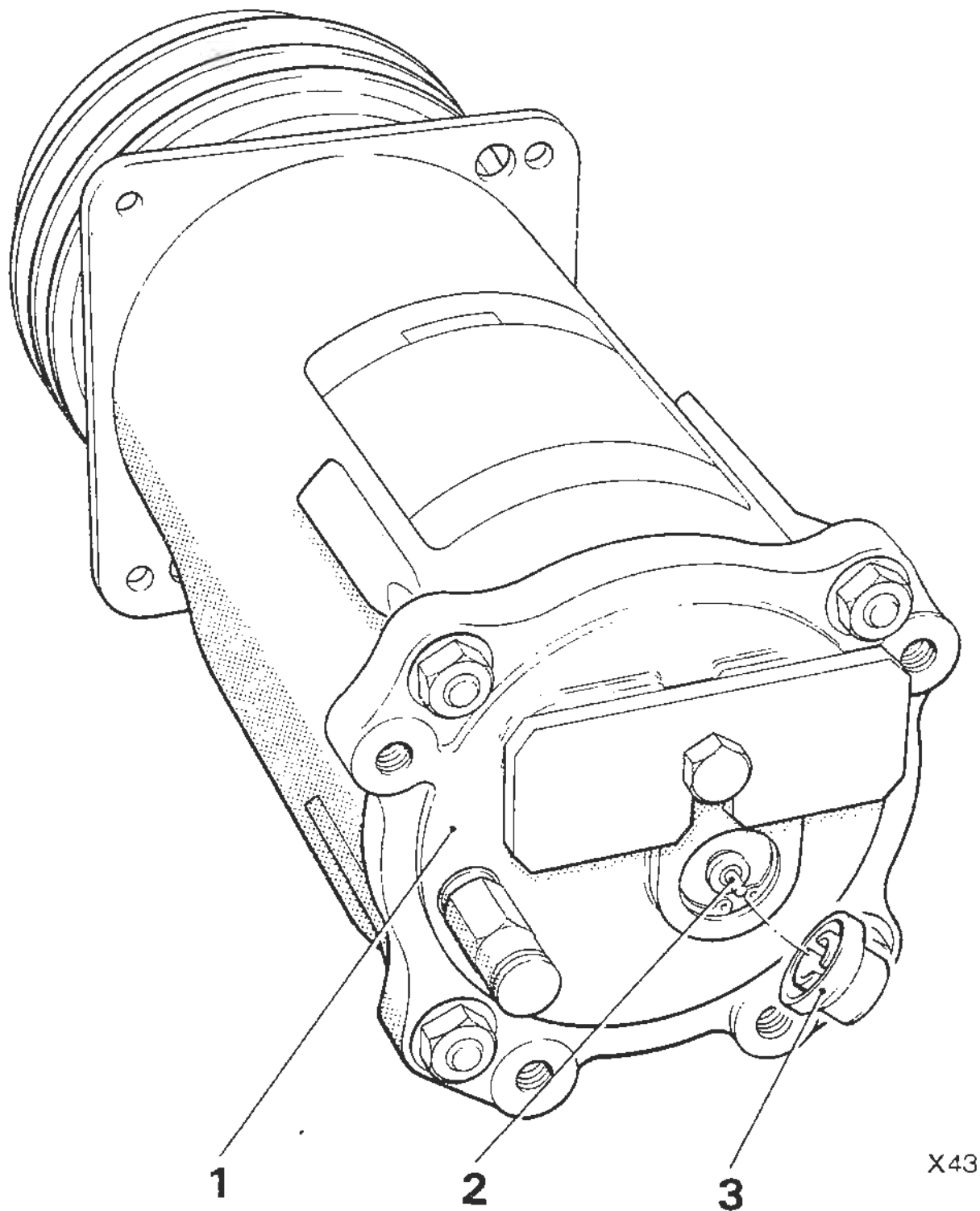


Fig. 1

- 1 Rear head
- 2 Superheat switch
- 3 Superheat switch cover

Hly/Per

Service Bulletin

TSD 4318

Bulletin number	SY/C19							Date	5 12 83			Page	1 of 3		
Circulation list															

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

NEW RECTANGULAR FACIA OUTLET CONTROL FLAP SEALS

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Bentley T2 series, Silver Wraith II and Corniche motor cars.

INTRODUCTION:

A new rectangular facia outlet control flap seal (part number UD 25579) has been introduced to overcome the problem of the control flaps sticking closed.

DESCRIPTION:

The new seals are a direct replacement for the earlier type and can be fitted retrospectively in cases where the control flaps are found to be sticking.

PROCEDURE:

1. Disconnect the battery.
2. Remove the lower trim and facia panels (see fig. 1,A and B).
3. Remove the centre console (see fig. 1,C).
4. Remove the rectangular facia outlet and ducting from the main heater box assembly as shown in figure 1.
5. Remove the 4 nuts and bolts, disconnect the flap connecting the linkage and carefully separate the rectangular outlet duct from the flap housing (see fig. 2).
6. 'Free off' the rectangular flap and remove the original flap seals.
7. Fit the new self-adhesive seals.
8. Re-assemble the rectangular duct and flap housing and refit all components.

PARTS REQUIRED:

Part Number	Quantity	Description
UD 25579	2	New rectangular facia outlet flap seals

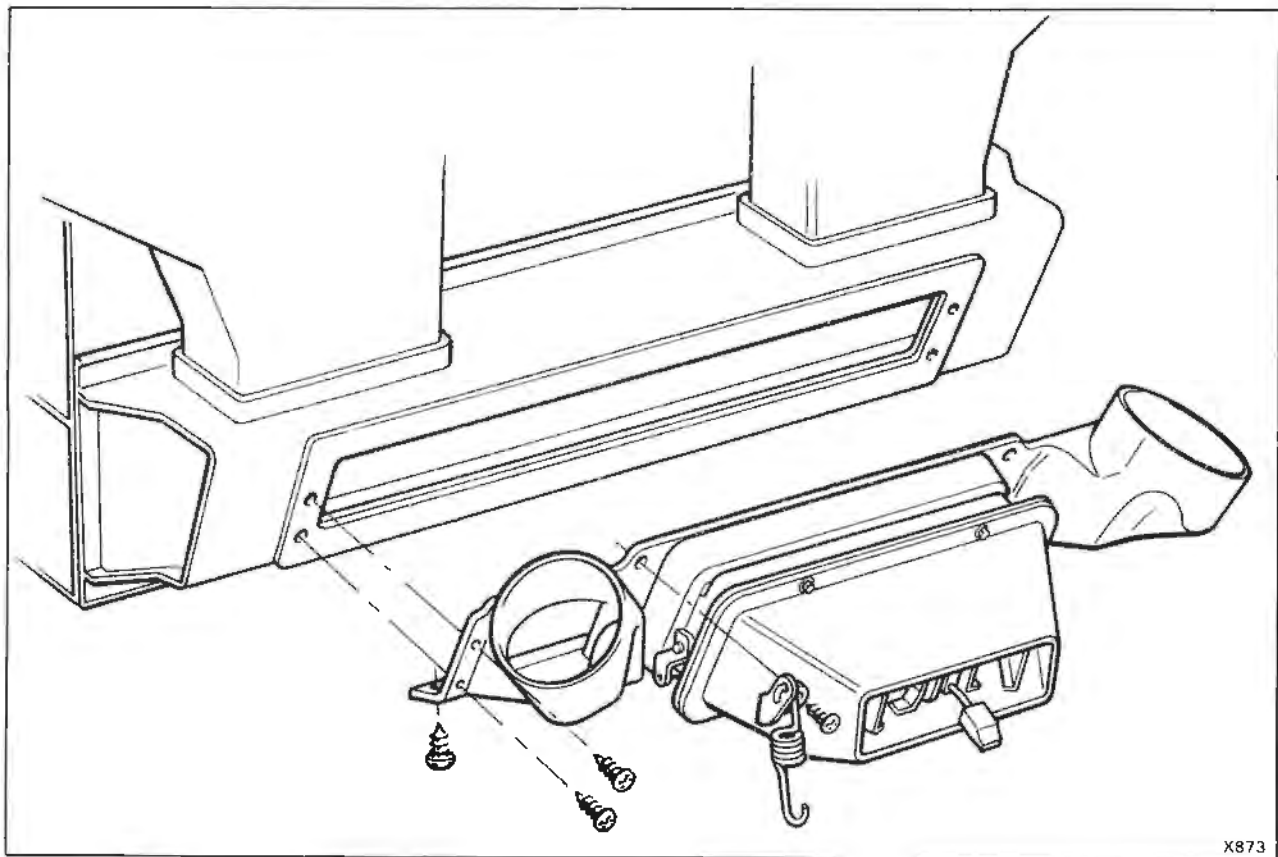
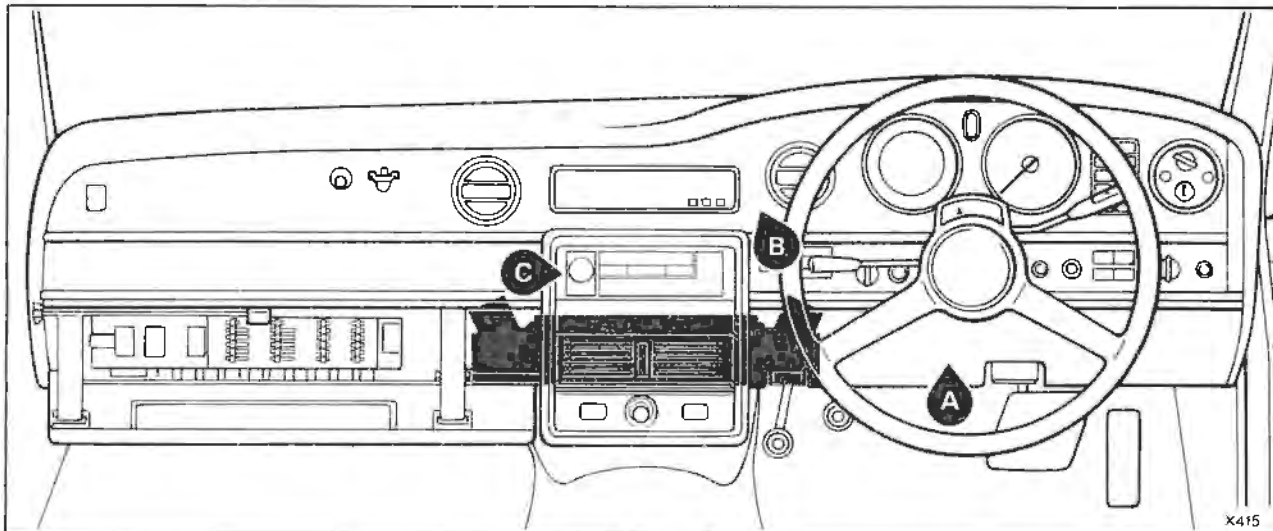


Fig. 1

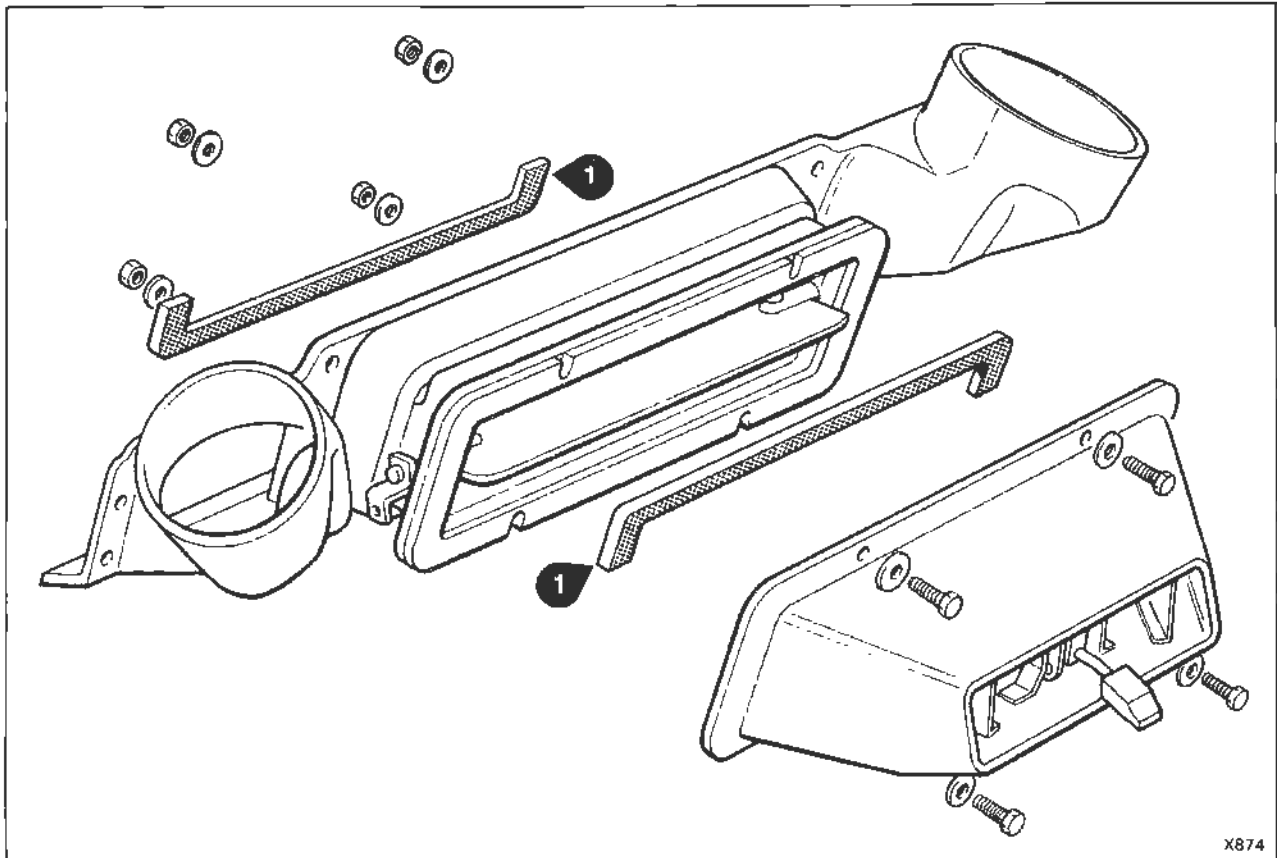


Fig. 2

1 Rectangular outlet flap seals

MAN-HOUR SCHEDULE OPERATION:

Number	Time Allowed
04 09 36	1.6 hours

Hly/DW

Service Bulletins



Chapter D

Lubrication and Maintenance

Service Bulletin



TSD 4318

Bulletin number	.SY/D23					Date	25 7 79				Page	1 of 1			
Circulation list															

Category c

ALL FRANCHISE HOLDERS AND DEALERS

BP VF7 SAE 10W/30 MOTOR OIL

APPLICABLE TO:

All Rolls-Royce and Bentley motor cars fitted with either a 6.25 litre or 6.75 litre Rolls-Royce V8 engine.

DESCRIPTION:

BP VF7 is a low viscosity engine oil having an SAE rating of 10W/30. It has been tested in accordance with Rolls-Royce Motors standard approval procedure and passed as acceptable for use in the above engines. It may therefore be used as a replacement engine oil.

It should be noted that, being of a lower viscosity, if the oil is used in an older worn engine which is burning or leaking a quantity of oil, then the rate of oil loss may increase.

JC1

Service Bulletins

Chapter E Engine



Service Bulletin



TSD 4318

Bulletin number	SY/E36					Date	25 7 79				Page	1 of 1			
Circulation list															

Category C

ALL FRANCHISE HOLDERS AND DEALERS

PISTON AND CYLINDER LINER GRADING

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche and Camargue cars and all Bentley T series, Bentley T2 and Corniche cars.

INTRODUCTION:

This bulletin has been issued to enable the correct grade pistons and liners to be installed in the event of overhaul or repair.

DESCRIPTION:

Current production practice has reduced the number of piston and liner grades.

Although effectively, grades H and J have been superseded by grade S; and grades K and L have been superseded by grade T, a certain amount of dimensional overlap does occur.

Due to this overlap there are certain limitations to fitting the later S and T graded pistons to engines fitted with H J K or L graded liners.

These limitations are as follows:

H graded liners cannot be fitted with S grade pistons.

K graded liners cannot be fitted with T grade pistons.

IN EITHER OF THE ABOVE EVENTS IT WILL BE NECESSARY TO CHANGE BOTH PISTON AND CYLINDER LINER AND TO FIT A MATCHED GRADED PAIR.

The larger M grade piston which was used for replacement in 'older' engines having acceptable bore wear is still available, but is now designated grade X.

Hly/DC

Service Bulletin



TSD 4318

Bulletin number	SY/E 37	Date	6 2 80	Page	1 of 2
Circulation list					

Category C

ALL FRANCHISE HOLDERS AND DEALERS

INLET AND EXHAUST VALVE SPRING RETAINING COLLETS

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars from car serial numbers:

SRK 38972 - Silver Shadow II and Bentley T2
LRK 38773 - Silver Wraith II
DRK 50285 - Corniche
JRH 50299 - Camargue

INTRODUCTION:

From the above car serial numbers, a new type of valve collet has been introduced, in line with the Rolls-Royce Motors Limited policy of continuous product improvement.

DESCRIPTION:

The new valve collet necessitates a change in the profile of the inlet and exhaust valve stems and the top valve spring retaining washer. (see Fig. 1)

Part numbers for these changes are as follows:

2 off Collet	UE 38212
1 off Exhaust Valve	UE 41083
1 off Inlet Valve	UE 38221
1 off Top Washer	UE 38219

PROCEDURE:

The procedure for removal and fitting the new collets is the same as that for the previous type, which is explained in detail in Chapter E of the workshop manual.

NB.

If the new type of valve is fitted in service, e.g. due to the previous type being unavailable, the new collets and top washers must also be used as the two types of valve collet are not interchangeable.

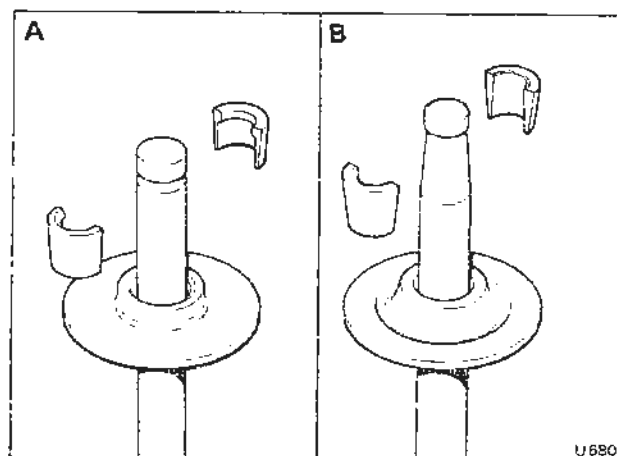


Fig. 1

A) Latest Type

B) Early Type

Service Bulletin

ROLLS-ROYCE
MOTORS

Car Division

TSD 4318

Bulletin number	SY/E38 Issue 2				Date	15 10 80				Page	1 of 3		
Circulation list													

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

CHANGES TO SPECIFICATION

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars from car serial numbers.

SILVER SHADOW II - SILVER WRAITH II - CORNICHE - CAMARGUE
BENTLEY T2

SRH 39628 LRL 38984 DRL 50342 JRH 0050352

including:

SRX 39529	LRH 38533	DRL 50139	JRL 50348
SRX 39536	LRH 38634	DRL 50239	JRX 50349
SRH 39550	LRH 38646	DRL 50271	
SRH 39559	LRH 38755	DRL 50302	
RH 39568	LRX 38759	DRL 50307	
SRX 39571	LRH 38766	CBX 50309	
SRX 39577	LRH 38770	CRH 50313	
SRX 39586	LRH 38772	DRL 50315	
SRH 39590	LRH 38832	CRH 50316	
SRX 39595	LRH 38834	DRL 50321	
SRX 39596	LRH 38835	DRL 50330	
SRH 39600	LRX 38838	CRL 50331	
SRH 39602	LRX 38845	DRL 50335	
SRH 39604	LRH 38904	DRL 50336	
SRH 39605	LRX 38906	CRH 50337	
SRH 39607	LRH 38990	DRX 50338	
SRX 39608	LRX 38912	DRK 50339	
SRH 39614	LRK 38916		
SRH 39620	LRK 38973		
SRH 39623	LRL 38977		
	LRH 38978		
	LRH 38980		
	LRL 38981		

excluding:

SILVER SHADOW II - SILVER WRAITH II - CORNICHE
BENTLEY T2

SRH 39630	L RK 39044	DRK 50359
SRX 39659	LBH 39049	CRX 50360
SRX 39666	L RK 39060	DRK 50361
SRH 39764	L RK 39125	CRH 50365
	LRH 39279	

INTRODUCTION:

Engine specification changes have been introduced from engine serial number SYL 27683B. All later engines are distinguished by the letter B after the engine serial number. These changes have been introduced to ease manufacture and to give improved reliability in the field.

DESCRIPTION:

The changes incorporated are as follows.

1. Crankshaft

The crankshaft has integral balance weights, an integral flexplate adapter, larger diameter main bearings, a new crankshaft pulley and larger diameter thrust bearings.

The main bearing cap nuts have an increased torque figure of between 8,0 kgf. m. and 8,6 kgf. m. (58 lbf. ft. and 62 lbf. ft.). The crankshaft has lip seals front and rear. The rear seal can be repositioned in its housing, when overhauled in service, to enable it to seal on an unworn part of the sealing diameter.

2. Camshaft

There is a wider thrust collar on the camshaft.

3. Oil Pump

The oil pump body is machined to clear the larger main bearing cap. The oil pump driven gear is now steel with a bronze driving gear. The spacer between the bronze oil pump drive gear and the timing gear has an increased outer diameter.

Note

Should it be necessary to replace either gear it is essential that the correct replacement is fitted. Like metals must not be paired together as this will result in premature wear.

4. Crankcase

The crankcase has been altered to suit the larger main bearings and the wider camshaft thrust collar.

The oil pick-up is mounted on a block which is attached by 2 bolts, entered from the outside of the crankcase. These bolts must not be undone as this can allow the pedestal to drop.

There is also a new oil filter pedestal.

5. Distributor Drive

The distributor has a shorter pedestal, a shorter one piece drive-shaft and a new high tension harness.

6. Pistons

A new top piston ring is fitted.

The following are the compression ratios for all markets.

1980 California 8:1

1980 USA Federal, Canada, Japan and Australia 7.3:1

Camargue and Corniche cars fitted with the Solex carburetter 8:1

Four Door cars fitted with SU carburetters (other than those referred to above) 9:1

Interchangeability

Only the piston ring is interchangeable between early and late engines. All other parts mentioned in this bulletin are not interchangeable with earlier parts.

Hly/Fcr

Service Bulletin



TSD 4318

Bulletin number	SY/E39					Date	31 7 81			Page	1 of 1		
Circulation list													

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS IN
AUSTRALIA, CANADA, JAPAN AND THE USA

SPARKING PLUGS

APPLICABLE TO:

All Rolls-Royce Corniche and Camargue cars and all Bentley Corniche cars built to the 1981 Australian, Canadian, Japanese and USA specifications.

DESCRIPTION:

All cars built to the 1981 Australian, Canadian, Japanese and USA specifications are fitted with Champion RN 12 Y sparking plugs. RN 12 Y plugs should be used for all replacement purposes in these cars.

The sparking plug gap should be set to 0,89 mm. (0.035 in.).

Cars built to Australian, Canadian, Japanese and USA specifications prior to 1981 should continue to be fitted with RN 14 Y sparking plugs for replacement purposes.

Hly/DC

Service Bulletin



Car Division

TSD 4318

Bulletin number	SY/E40	Date	31 8 81	Page	1 of 3
Circulation list					

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS IN CANADA,
JAPAN AND THE USA

VALVE SEALS

APPLICABLE TO:

All Rolls-Royce Corniche, Camargue and all Bentley Corniche cars built to the 1981 Canadian, Japanese and USA specifications.

INTRODUCTION:

The inlet and exhaust valve sealing arrangement has been improved on all 1981 specification motor cars incorporating the Bosch 'K' Jetronic fuel injection system.

DESCRIPTION:

The previously used 'waxed string asbestos' type valve stem oil seal has been replaced by a simplified rubber type lip seal which offers improved oil control.

The new lip seal is located positively into an annular groove, in the outside diameter of the valve guide (see fig.1).

To aid initial 'running in' both inlet and exhaust valve stems are pre-treated with a special process. Valves subjected to this special process can be identified as having valve stems which are blue in colour.

With extended running this coating may eventually wear off, although not necessarily completely. This is considered to be quite normal.

Note

It is essential that ONLY valves having the blue coated stems are used in conjunction with the revised valve stem seals

ON NO ACCOUNT SHOULD THE SPECIAL 'BLUE COATING' BE REMOVED FROM VALVES PRIOR TO ASSEMBLY.

Should it be necessary during overhaul to replace the valves there is no necessity to lubricate the blue coated stem of the new valve during assembly, as the coating has its own lubricating properties for initial running. However, should valves be removed and refitted, or have the valve seals changed for any reason during service, then it is essential that the valve stems are generously lubricated with engine oil mixed with an assembly lubricant such as 'Rocol MTS 1000' (Part number X2/123) or 'Molykote G Rapid' (Part number X2/107).

Note

It will still be necessary with the new valve seal arrangement to seal the edges of the valve collets with 'Silastic 732 RTV Sealant' (Part number G2/131) as outlined in the following procedure.

1. Ensure that the top washer and collets are degreased and the valve tip area around the collet locating groove is wiped clean.
2. Arrange the valve collets in pairs on a clean surface. Apply a coat of 'Silastic' along one edge of each collet so that when assembled a 'Silastic' coated edge is adjacent to an uncoated edge (see fig.2). Allow approximately 10 minutes before assembly.
3. Compress the valve springs and carefully insert the collets keeping the gaps as equal as possible. Release the valve spring and wipe off the excess sealant from the valve tip and top washer.
4. Allow a period of at least 12 hours from applying the sealant before running the engine.

Because of these changes a number of parts have either been changed or deleted. The following gives details of those changes.

PARTS AFFECTED:

Displaced		New
UE 38221	Valve inlet	UE 43475
UE 41083	Valve exhaust	UE 43476
UE 42479	Valve guide inlet	UE 43404
UE 42480	Valve guide exhaust	UE 43405
RH 7906	Valve seal	UE 43407
UE 32068	Bottom washer	UE 43406

Parts which have been deleted are.

Spring	UE 391
Seal housing	UE 7427

Parts which remain unchanged are.

Collets	UE 38212
Inlet valve spring	UE 9672
Exhaust valve spring	UE 35548
Top washer	UE 38219

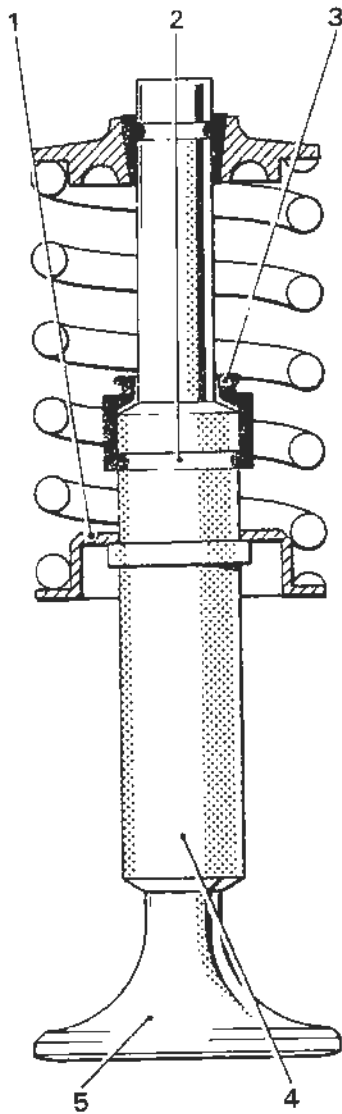


Fig 1.

1. Revised bottom washer
2. Valve seal locating groove
3. Rubber type lip seal
4. Revised valve guide
5. Valve - with specially treated valve stems

W904

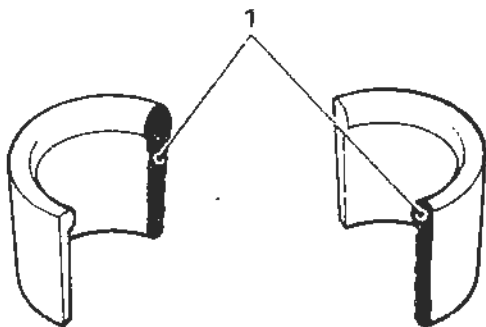


Fig 2.

1. Sealant coated edges prior to assembly

W905

Service Bulletin



TSD 4318

Bulletin number	SY/E41							Date	19 5 82			Page	1 of 4		
Circulation list															

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

ENGINE VALVE STEM SEAL AND SPRING REPLACEMENT

APPLICABLE TO

All Rolls-Royce Silver Shadow, Silver Shadow LWB, Silver Shadow II, Silver Wraith II, Corniche and Camargue motor cars and all Bentley T, Bentley T2 and Corniche cars.

INTRODUCTION

The purpose of this Bulletin is to advise the procedure for removal and replacement of the valve springs and/or valve stem oil seals without removal of the cylinder head.

This procedure supplements the information given in Chapter E of Workshop Manual TSD 4200.

NOTE

THE VALVE SPRING COMPRESSOR TOOL RH7094 WILL NEED TO BE MODIFIED TO ACCOMMODATE THIS PROCEDURE. IN DUE COURSE A REDESIGNED VALVE SPRING COMPRESSOR WILL BE MADE AVAILABLE.

1. Modify the valve spring compressor tool RH7094 as shown in fig 1.
2. Disconnect the battery.
3. Remove the carburettors and central 'T' piece assembly.
4. Remove the rockers cover(s).
5. Release the five setscrews securing the rocker shaft in position, (Do not withdraw the setscrews).
6. Carefully withdraw the rocker shaft complete with the setscrews.
7. Fit the RH7094 fulcrum bar and pedestals to the cylinder head.

8. Remove the sparking plugs.
9. Slowly rotate the engine and with the aid of a suitable probe inserted through the plug orifice of the cylinder being worked on, position the piston at the (T.D.C) top dead centre.
10. Tap the valve spring top washer with a soft headed mallet to disturb the valve collets in their seat.
11. Compress the valve spring, carefully remove and retain the collets, top washer, valve spring, seal spring housing, seal spring, seal housing and seal.
12. Reassemble with new components as required, noting the following,
 - a) The engine must not be rotated with the valve springs disassembled. The work must be completed on one cylinder before progressing to the next.
 - b) On reassembly, the edges of the collets must be coated with Sealastic 732, to seal the space between the collets.
 - c) If service replacement rubber valve seals are being fitted, it is imperative that the valve stems are adequately lubricated.

To facilitate lubrication of the stems, it will be necessary to make a simple tool, which will fit over the end of the valve guide and enable Rocol MTS 1000 or Molykote G rapid lubricant to be forced down the clearance between the valve guide and stem.

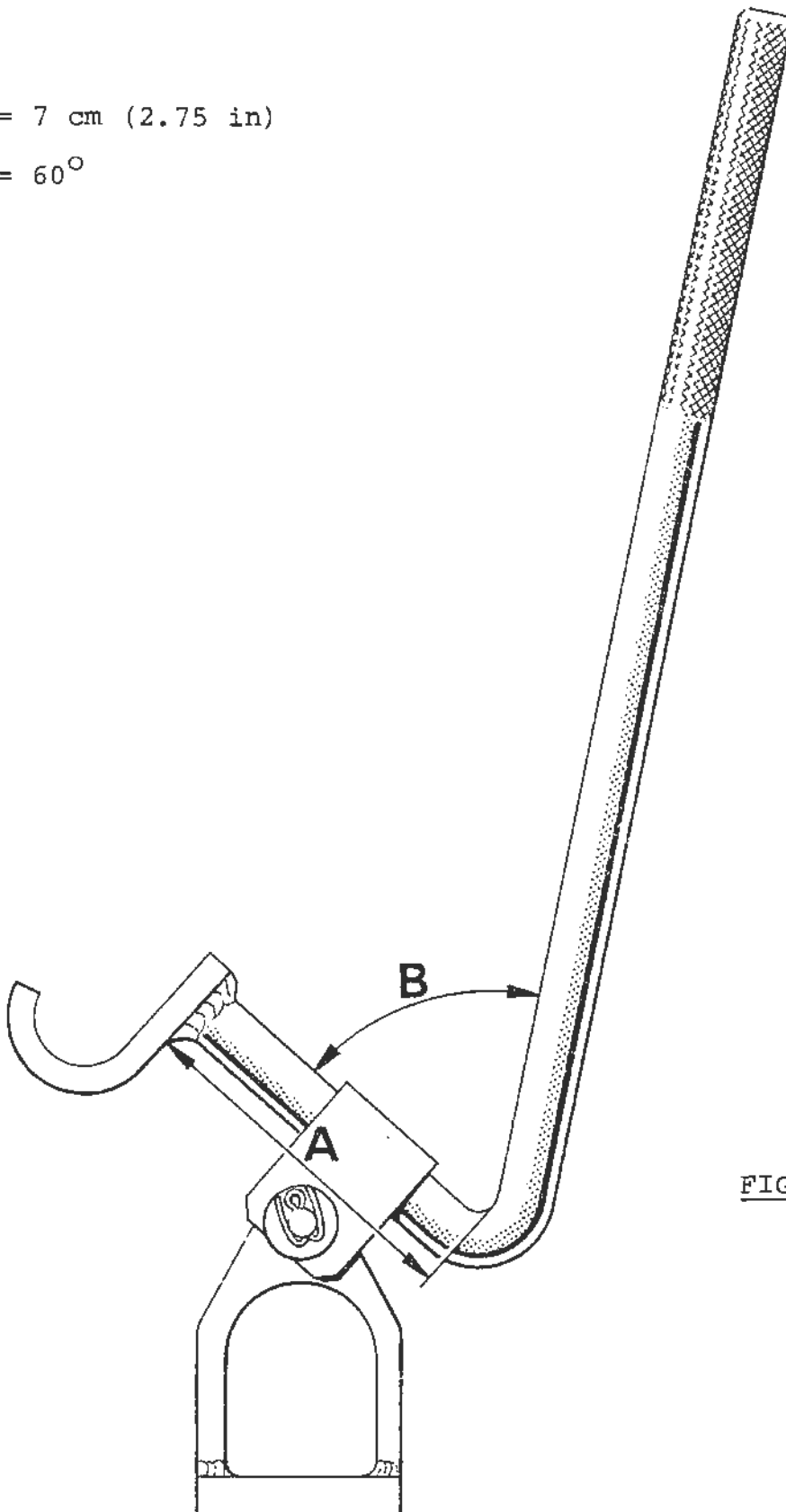
To ease penetration and improve the lubrication properties mix the Rocol or Molykote lubricant with 25% engine oil.

Essentially the tool is a short piece of thick walled rubber tube, see fig 2. A drilled and tapped plug fitted with a grease nipple is secured by a jubilee clip, the opposite end of the tube is secured by a jubilee clip to the valve guide. When fitted to the guide, the lubricant mixture can be forced down the guide/stem clearance with the aid of a grease gun.

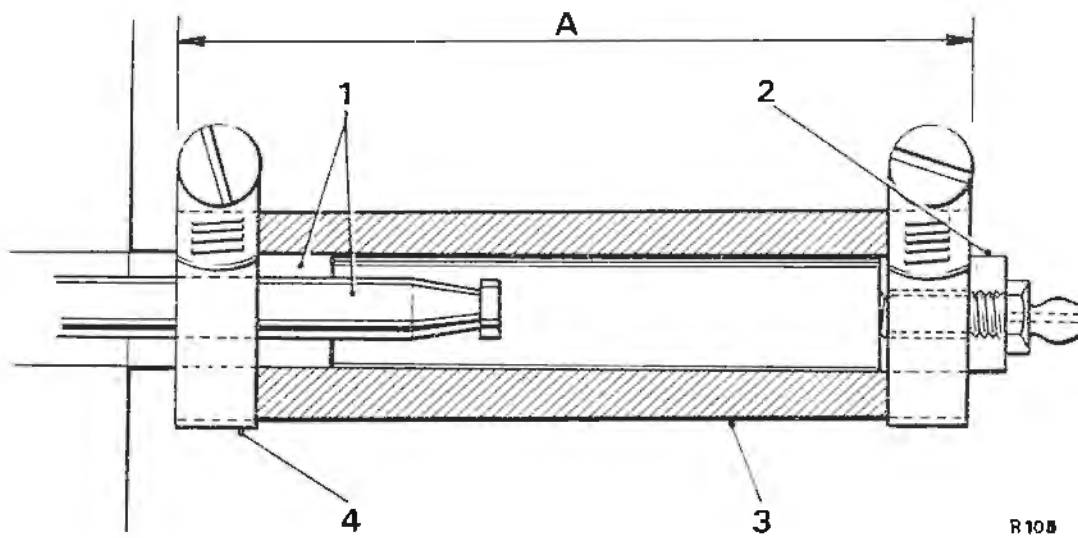
13. On completion of the work, reconnect the battery.

$A = 7 \text{ cm (2.75 in)}$

$B = 60^\circ$



X263

FIG 2

KEY Dimension A 10,2 cm. (4 inch) approximately.

1. Valve and guide
2. 16 mm. (0.62 inch) plug, drilled, tapped and fitted with a grease nipple.
3. Thick-walled rubber tube
4. 2 off, 25,4 mm (1 inch) Jubilee clips.

Service Bulletin



TSD 4318

Bulletin number SY/E42	Date 23 5 85	Page 1 of 2
Circulation list		

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

OIL SEAL, ASSEMBLY CRANKCASE BACKPLATE

APPLICABLE TO:

All Silver Shadow II, Silver Wraith II, Corniche, Camargue and Bentley T2 series motor cars from the following car serial numbers:

SILVER SHADOW II AND BENTLEY T2

SRH 38533	SRX 39529	SRX 39536	SRH 39550	SRH 39559
SRH 39568	SRX 39571	SRX 39577	SRX 39586	SRH 39590
SRX 39595	SRX 39596	SRH 39600	SRH 39604	SRH 39605
SRH 39607	SRX 39608	SRH 39614	SRH 39620	SRH 39623
SRH 39628				

To

SRL 41601

Except

SRH 39630	SRX 39659	SRX 39666	SRH 39764
-----------	-----------	-----------	-----------

SILVER WRAITH II

LRH 38634	LRH 38646	LRH 38755	SRX 38759	LRH 38766
LRH 38770	LRH 38772	LRH 38832	LRH 38834	LRH 38835
LRX 38838	LRX 38845	LRH 38904	LRX 38906	LRH 38910
LRX 38912	LRK 38916	LRK 38973	LRH 38974	LRL 38977
LRH 38978	LRH 38980	LRL 38981	LRL 38984	

To

LRL 41648

Except

LRK 39044	LBH 39049	LRK 39060	LRK 39125	LRH 39279
-----------	-----------	-----------	-----------	-----------

CORNICHE

30,000

CAMARGUE

JRH 19671

INTRODUCTION:

The purpose of this Service Bulletin is to advise that the current production rear crankshaft oil seal will be supplied for all replacement purposes in future.

DESCRIPTION:

The new P.T.F.E. seal provides improved sealing, and is directly interchangeable with its predecessor. However, storage and fitting instructions should be strictly adhered to.

Transportation and Storage:

The new seals are supplied on mandrels and they should not be removed from the mandrel during transportation or storage. The mandrel prevents the inherent memory of the P.T.F.E. from acting and straightening the element. This would increase the initial lip interference and possibly produce high assembly loads.

Fitting a new P.T.F.E. seal:

The outside diameter of the P.T.F.E. seal is already coated with a sealant.

NOTE: When fitting a new seal it is most important that the shaft and seal are NOT smeared with oil, but fitted dry.

PARTS AFFECTED:

Displaced Part Number	Description	New Part Number
UE 37760 UE 43792	Oil seal, crankcase backplate	UE 44273

Ons/GC/Br

Bulletin number	SY/E43	Date	21 2 86	Page	1 of 4
Circulation list					

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

VALVE SPRING COMPRESSOR

APPLICABLE TO

All Rolls-Royce and Bentley motor cars
 Silver Shadow T2
 Silver Wraith Corniche
 Corniche
 Camargue

INTRODUCTION

This service bulletin has been issued to advise service personnel of a revised valve spring compressor tool RH 7094, which facilitates valve stem oil seal and/or valve spring removal/replacement without the need to remove the cylinder heads. The revised procedure is also described.

DESCRIPTION

The modifications to the compressor comprise of a re-shaped operating lever and a revised pair of fulcrum bar pedestals which feature a recess to accomodate the cylinder head nut (see figs. 1 and 2).

To enable franchise holders to update their existing valve spring compressor, sets of the revised pedestals will be available separately, the existing operating lever should be modified as shown (see fig. 1).

PROCEDURE

- 1 Disconnect the battery.
- 2 Remove the complete carburettor and air horn assembly (S.U. Type carburettors).

On motor cars fitted with a solex carburettor, remove the complete air cleaner assembly.

On motor cars fitted with fuel injection, remove all fuel metering equipment above the induction manifold including the plenum chamber complete with throttle body, and E.G.R. valve assemblies. Also, remove the air injection system gallery pipes and the lower E.G.R. pipe (refer to Chapter 'U' of the Workshop Manual TSD 4200).

- 3 Remove the rocker covers.
- 4 Release the five setscrews securing the rocker shaft in position (do not withdraw the setscrews).
- 5 Fit the RH 7094 valve spring compressor tool fulcrum bar and pedestals to the cylinder head. The pedestals locate in the recesses used for the rocker shaft pedestals and are secured by screwing a $\frac{1}{4}$ in dia UNF x 2 in long bolt through the pedestals into the cylinder head nuts.
- 6 Remove the sparking plugs.
- 7 Slowly rotate the engine and with the aid of a suitable probe, inserted through the plug orifice of the cylinder being worked on, position the piston at the top dead centre (tdc).
- 8 Tap the valve spring top washer with a soft headed mallet to free the valve collets from their seat.
- 9 Compress the valve spring and carefully remove the collets, top washer, valve spring, and valve stem seal.
- 10 Assemble using new components as required noting the following.

The engine must not be rotated with the valve springs dis-assembled. The work must be completed on one cylinder before progressing to the next.

If the engine is fitted with the 'waxed string-asbestos' type valve stem oil seal, the edges of the valve collets must be sealed using sealastic 732 RTV sealant.

If the engine is fitted with the rubber lip-type valve stem oil seal, the edges of the valve collets should not be sealed.

SERVICE TOOL PART NUMBER

Description	Part Number
Valve Spring Compressor (Complete)	RH 7094
Pedestal - Fulcrum Bar - 2 off	RH 7094/Det 1
Bolt - $\frac{1}{4}$ in dia UNF x 2 in long -	
Pedestal Securing - 2 off	UA 114/Z

MAN HOUR SCHEDULE CODE

Item	Description	Time Allowed
09-05-55	To renew/replace one valve stem oil seal (on cars with fuel injection, add 1.2 hours for 'A' bank)	4.0 hours
09-05-55	To renew/replace all valve stem oil seals (on cars with fuel injection, add 3.3 hours)	15.70 hours
09-05-56	To renew/replace one valve spring (on cars with fuel injection add 1.2 hours for 'A' bank)	3.9 hours
09-05-56	To renew/replace all valve springs (on cars with fuel injection, add 3.3 hours)	14.00 hours

Hil/MS

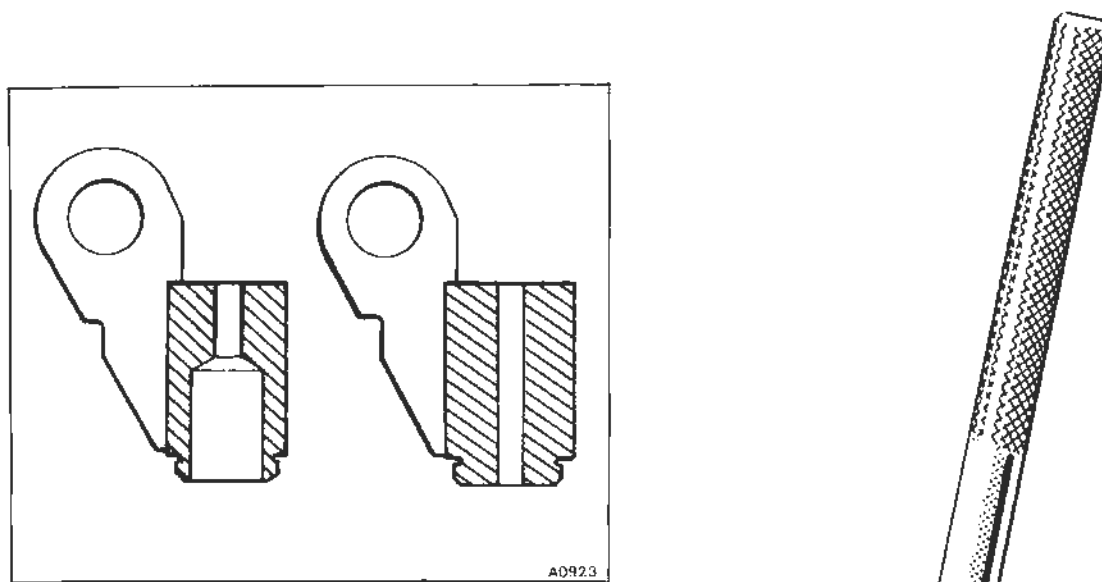


Fig. 2 Pedestal

A = 7cm (2.75in)

B = 60°

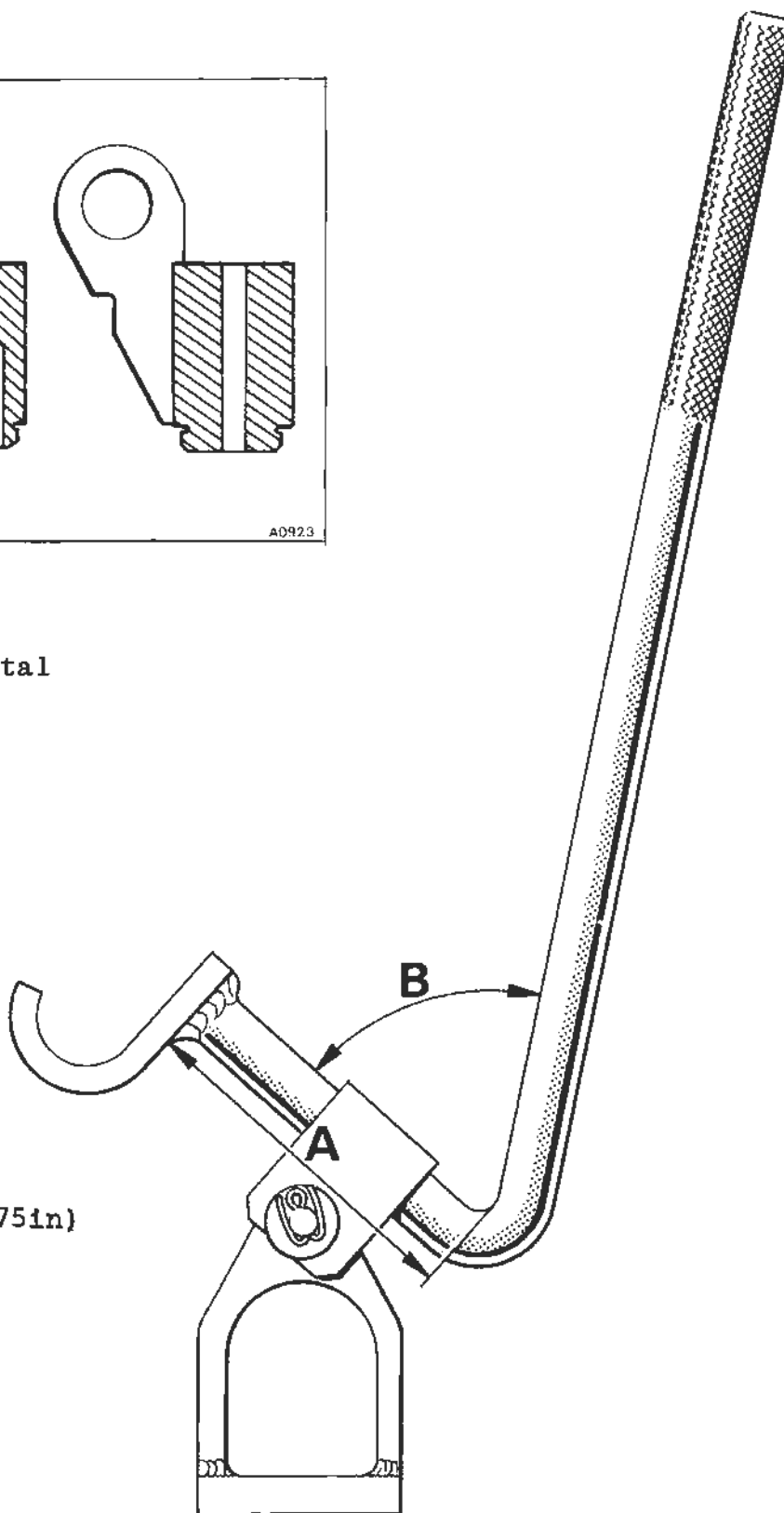


Fig. 1 Valve spring compressor

X263

Service Bulletins

Chapter F **Propeller Shaft** **and Universal Joints**



Service Bulletins

Chapter G Hydraulic Systems



Service Bulletin

TSD 4318

Bulletin number	SY/G65					Date	2	3	79	Page	1	of	3
Circulation list													

Category C

ALL FRANCHISE HOLDERS AND DEALERS

FRONT BRAKES - BRAKE PAD RETRACTOR SPRINGS ('M' SPRINGS)

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars from car serial numbers.

Silver Shadow II and
Bentley T2

- SRK 35879

Silver Wraith II

- LRH 35793 (including LRH 35791
and LRH 35649)

Corniche

- DRH 35878 (including DRG 35803,
DRG 35802, DRG 35468,
DRG 35341 and DRG 34838)

Camargue

- JRX 32636

INTRODUCTION:

Brake pad retractor springs ('M' springs) are currently being fitted to front brake caliper assemblies on production cars. Their purpose is to alleviate uneven brake disc wear, pad rattle and provide extended pad life.

The 'M' spring can only be fitted in conjunction with a new brake pad assembly UG 14480. This pad has a third hole between the two normal retaining holes and has a slightly different profile to prevent the pad lining overlapping the outer edges of the disc.

FITTING PROCEDURE: (FRONT ROAD WHEEL FRONT CALIPER)

- 1 Fit both pads and lower retaining pin and clip into the caliper.
- 2 Position the centre of the 'M' spring so that the centre of the 'M' points in the direction of disc rotation (see Fig. 2).
- 3 Locate the ends of the 'M' spring in the central holes of the brake pad back plate.

Note

During this operation the two ends of the 'M' spring must not be squeezed together more than the normal gap between the two brake pad backplates. Otherwise the spring may take on a permanent set due to being stressed beyond the elastic limit. If this happens the spring will not exert sufficient pressure to retract the pad effectively.

- 4 Ease the spring into position and secure with the upper pad retaining pin and clip.
- 5 The 'ears' must sit on the edge of the pad backing plate and the bends at the top of the 'M' figuration must butt against the caliper body (see Fig. 1).
- 6 Ensure that the ends of the 'M' spring are pushed fully through the holes provided in the brake pad back plate and that the 'M' spring is correctly positioned to avoid any foul with the brake disc.

FITTING PROCEDURE: (FRONT ROAD WHEEL REAR CALIPER)

- 1 The fitting procedure is similar to the front road wheel front caliper EXCEPT that the 'M' spring is fitted around the LOWER retaining pin.

Note

The 'M' spring must be renewed when new brake pads are fitted. This is due to the spring taking on a closer set towards the end of brake pad life, also the possible effects of corrosion.

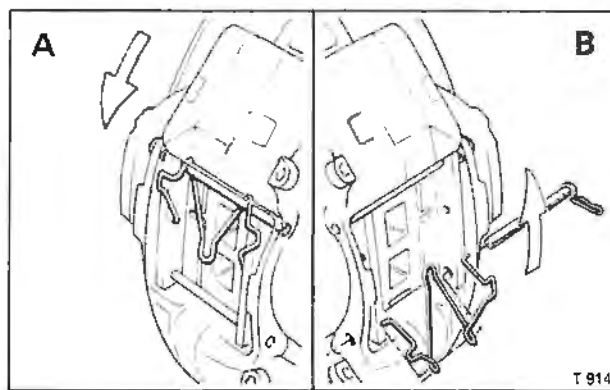
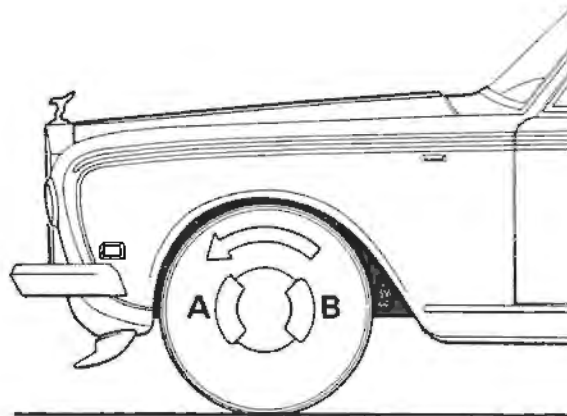


Figure 1

Figure 2

Hly/Per

Service Bulletin

TSD 4318

Bulletin number	SY/G66	Date	4 2 80	Page	1 of 1
Circulation list					

Category C

ALL FRANCHISE HOLDERS AND DEALERS

HYDRAULIC PIPE CONNECTIONS TO THE REAR HEIGHT CONTROL RAM

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche Saloon and Camargue cars and all Bentley T Series, Bentley T2 and Corniche Saloon cars prior to car serial number 50 001.

INTRODUCTION:

This bulletin has been issued to ensure the correct fitting of the hydraulic pipes when changing a rear height control ram. Incorrect fitting of the pipes may cause air to be trapped which could result in ram knock.

DESCRIPTION:

The rear height control ram has a feed port and a bleed port. The feed port has FEED stamped on the side of the port. The feed pipe, which is identified by a brown sleeve, must be fitted into the feed port and the bleed pipe, which has a pink sleeve, must be fitted into the unmarked port.

Hly/SJ

Service Bulletin



TSD 4318

Bulletin number	SY/G67					Date	23 5 80			Page	1 of 20		
Circulation list													

Category A

ALL ROLLS-ROYCE FRANCHISE HOLDERS IN THE USA AND CANADA



HYDRAULIC HOSE REPLACEMENT

APPLICABLE TO:

There are three specifications of motor cars affected by this Service Bulletin. For each of these specifications a kit of parts is available.

(Note. Corniche and Camargue models built after car serial number 50001 are not affected by this Service Bulletin).

The specifications of these motor cars are as follows:

	Specification	Chassis Range	Remarks
a)	USA/Canadian 1975-1977	From SRD 20755 CRD 20171 LRD 20628 and including JRD 19094 To SRH 26708	Single exhaust system with single exhaust catalytic converter Left-hand drive
b)	USA/Canadian 1977-1980	From SRH 30001 To SRL 40875	Twin exhaust system with twin catalytic converters Left-hand drive
c)	USA - Californian 1980	From SRL 39734C To LRL 40887C	Single catalytic converter Left-hand drive

INTRODUCTION:

The above listed motor cars are all built to comply with North American legislation and feature a catalytic exhaust system to control emissions. This results in high underbonnet and underfloor temperatures particularly in the region of the exhaust system.

It has been found in Service that these underbonnet temperatures coupled with chloride contamination can result in the eventual failure of the stainless steel braiding of certain accumulator to frame hoses. These hoses are located in the engine compartment and failure occurs as a result of stress corrosion.

Whilst all the brake hoses on the car meet the requirements of the Federal Motor Vehicle Safety Standards, it has also been found that the high exhaust temperatures can degrade the material of the hydraulic hoses carrying fluid between the body and sub-frame of the car. The particular hoses affected are those located at the front and rear of the car in the vicinity of the exhaust system.

The failure of any of the above hoses will cause a loss of hydraulic fluid from the dual hydraulic system, impairing the full efficiency of the braking system and constituting a potential fire hazard.

It has therefore been decided to replace the hoses on all of the above cars with ones of improved specification and on those cars featuring a dual exhaust system to fit an additional heat shield above the intermediate silencer units.

This bulletin is issued to instruct the fitting of these parts and to explain the fitting techniques to be employed.

DESCRIPTION:

1. Depending upon specification, the work involves changing and fitting the following.

(a) The accumulator to frame hydraulic hose and the use of special adapters.

(b) Left-hand trailing arm to rear caliper hydraulic hoses.

(Note. the right-hand trailing arm hoses on all specifications of motor cars are unaffected and should remain undisturbed).

- (c) Brake actuation mechanism to front sub-frame hydraulic hoses.
- (d) On cars with twin exhaust systems and twin catalytic converters the fitting of a heat shield assembly to the rear silencer boxes.

The detail changes of components listed above are as follows:

ACCUMULATOR TO FRAME HOSES

1. The end fittings now incorporate female swivel nuts with female flares as opposed to the previously used male pipe nuts and male flares (see fig. 5).
2. The hose fitted to the rear accumulator now incorporates a single right-angled connection end fitting which should only be attached to the accumulator valve.

The other end retains its 45 degree end fitting for attachment to the body 'Tee' piece connection.

3. In order to install these hoses with new type fittings, special adapters are required for the accumulator valve assemblies and body 'Tee' pieces.
4. The stainless steel hose braiding is coated with an anti-corrosion protective treatment. This treatment, which is blue in colour should not be removed or damaged during installation.

TRAILING ARM AND BRAKE ACTUATION MECHANISM TO FRONT SUB-FRAME HOSE

These hoses are of improved material and are a direct replacement to the previous type. The hexagon end fittings are increased from 9/16 in. A/F to 5/8 in. A/F. The replacement hoses can be identified by the longitudinal pattern on the exterior of the tubing as opposed to the herringbone pattern of the earlier hose (see fig. 4).

New copper washers, where necessary, are supplied with the kits.

HEAT SHIELD

An additional heat shield fitted above the rear silencer boxes on twin exhaust system cars only, comprises of a preformed shield, together with two pieces of insulation material sandwiched between the shield and silencer (see fig. 2b).

The complete assembly is secured to the upper bracket separating the two rear silencer boxes by a setscrew, washer (UA 1251/SS, manufactured in stainless steel), distance piece and clamping plate.

A spire nut, which accepts the setscrew, fits to the upper bracket separating the two silencers.

2. The following list of kits available shows the parts to be fitted and the displaced components.

Kit No. Car Specification

RH 2792 U.S.A. and Canada 1977-1980
Twin exhaust catalytic converters
(see fig. 2).

Quantity	Description	Original Part No.	Replacement Part No.
1	Left-hand accumulator/ frame hose	UR 17886	UR 22765
2	Adapters		UR 22819
1	Trailing arm hose	UR 19934	UR 22791
1	Trailing arm hose	UR 19936	UR 22793
1	Brake actuation mechanism/sub-frame hose	UR 19939	UR 22795
1	Brake actuation mechanism/sub-frame	UR 19940	UR 22796
4	Copper washers	UR 1200	UR 1200
1	Washer		UA 1251/ZP
1	Heat shield		UR 22638
2	Lagging		UR 22673
1	Bolt		SPC 2084
1	Spire nut		SPC 2083
1	Distance piece		SPC 2335
1	Washer		UA 1251/SS
1	Clamping Plate		UA 20208

Kit No. Car Specification

RH 2794 U.S.A. and Canada 1975-1977
with a single catalytic converter
(see fig. 1).

Quantity	Description	Original Part No.	Replacement Part No.
1	Accumulator/frame hose	UR 17886	UR 22765
2	Adapters		UR 22819
1	L.H. trailing arm hose	UR 19934	UR 22791
1	L.H. trailing arm hose	UR 19936	UR 22793
1	Brake actuation mechanism/ sub-frame hose	UR 19939	UR 22795
1	Brake actuation mechanism/ sub-frame hose	UR 19940	UR 22796
4	Copper washers	UR 1200	UR 1200
1	Washer		UA 1251/ZP

Kit No. Car Specification

RH 2795 U.S.A. - Californian 1980 model
year with a single catalytic
converter (see fig. 3).

Quantity	Description	Original Part No.	Replacement Part No.
1	Accumulator/frame hose	UR 17886	UR 22765
2	Adapters		UR 22819
1	L.H. trailing arm hose	UR 19934	UR 22791
1	L.H. trailing arm hose	UR 19936	UR 22793
1	Brake actuation mechanism/ sub-frame hose	UR 19939	UR 22795
1	Brake actuation mechanism/ sub-frame hose	UR 19940	UR 22796
4	Copper washers	UR 1200	UR 1200
1	Washer		UA 1251/ZP

Figs. 4 and 5 have been included in this bulletin
in order that all affected hoses can be easily identified.

PROCEDURE:

1. It is important that the correct specification of motor car is identified prior to work being carried out, to enable the correct kit of parts to be fitted. It must also be established that the car has not already been modified, by checking for a white paint spot on the forward bracket adjacent to the left-hand spring pot as shown in figure 6.

Recently produced motor cars are fitted with a Service Modification Plate on the right-hand inner wing valance adjacent to the air cleaner. Cars that have been modified are stamped with the letters RE 80 01.

For further confirmation that the car has been modified the new components are described in detail on page 3 of this bulletin.

2. Position the car on a ramp and depressurise the hydraulic system as detailed in Chapter G of the Workshop Manual. Firmly apply the parking brake, place the gear selector in the 'Park' position and remove the gear change isolator.
3. Clean any dirt from around all the connections of hoses requiring replacement and remove the left-hand accumulator to frame hose.
4. Fit the special adapters (UR 22819) into the accumulator valve and into the body connector 'Tee' piece. (see figs. 1a, 2c and 3b). It should be noted that the adapters have long and short threaded ends. The longer of these ends should be fitted into the accumulator valve and 'Tee' piece, leaving the shorter threaded ends protruding ready to accept the new hose.

Torque tighten the adapters to between 1,1 Kgf.m. and 1,4 Kgf.m. (8 lbf.ft. and 10 lbf.ft.).

5. Fit the replacement hose (UR 22765) to the accumulator valve adapter and the adapter in the body 'Tee' piece.
(Note. The right-angled end of the hose fits to the accumulator valve connection (see fig. 5).

Tighten the hose end connections ensuring that, during tightening, the fittings do not twist out of correct alignment. The correct torque tightness for these nuts is between 0,8 Kgf.m. and 1,1 Kgf.m. (6lbf. ft. and 8 lbf.ft.).

IT IS ESSENTIAL THAT THE HOSE DOES NOT CONTACT ANY PART OF THE BODY, ENGINE ASSEMBLY OR OTHER ADJACENT HOSES. A MINIMUM OF 19,1 mm. ($\frac{3}{4}$ in.) SHOULD BE APPARENT BETWEEN THE HOSE AND THE END OF THE COMPLIANT JAW AND ROD ASSEMBLY (SEE FIGS. 1a, 2c, AND 3a, DIMENSION A).

DO NOT, PRIOR TO OR DURING FITTING, REMOVE OR DAMAGE THE BLUE PROTECTIVE COATING APPLIED TO THE HOSE BRAIDING.

6. On cars after car serial number 30001, with the twin exhaust system (except 1980 Californian cars) a heat shield is fitted above the rear silencers.

In order to fit this heat shield and gain improved access to the left-hand trailing arm hoses it will be necessary to remove the rear section of the exhaust system as detailed in Chapter Q of the Workshop Manual.

The heat shield should be assembled as shown in figure 2b, with the two pieces of insulating material fitted between the exhaust system silencers and the heat shield. It should be noted that the front edge of the heat shield is scalloped and the rear edge straight, and that the heat shield must be fitted the right way round as shown in figure 2b.

The insulation material should also be fitted as shown in figure 2b.

The spire nut is fitted to the upper bracket separating the two silencers.

On single exhaust system cars (including 1980 Californian cars) no heat shield is necessary. Therefore, it is not required to remove the rear exhaust system.

7. Remove the two hydraulic hoses from the left-hand trailing arm and fit the replacement hoses from the kit of parts. (see figs. 1b, 2a and 3b). Identification of hoses can be made by measuring their lengths and comparing them with the dimensions given in figure 4. Ensure that, where necessary, the copper washers are replaced with ones from the kit of parts.
8. Having replaced the hoses, refit the rear section of the exhaust system as detailed in Chapter Q of the Workshop Manual.

ENSURE THAT THE HEAT SHIELD DOES NOT FOUL THE BODY OR TRANSMISSION PROPELLER SHAFT.

IF ANY FOULS ARE EVIDENT, THE EXHAUST SYSTEM OR HEAT SHIELD WILL REQUIRE RE-ALIGNMENT.

A MINIMUM OF 9,52 mm. (3/8 in.) SHOULD BE APPARENT BETWEEN THE HEAT SHIELD AND PROPELLER SHAFT AT ITS CLOSEST POSITION.

9. Remove the two hoses from the brake actuation mechanism to the front sub-frame, noting their connections on the sub-frame and their corresponding connections from the body. (see figs. 1c, 2d and 3c). As previously mentioned the hexagon sizes of the hoses have been increased from 9/16 in. A/F to 5/8 in. A/F on the replacement hoses. Because of this increase, it will be found that the corners of the hexagons foul when attempting to screw the hoses into the

'Tee' pieces. It is therefore necessary to remove the $\frac{1}{4}$ in. UNF bolt clamping the pair of 'Tee' pieces together and inserting the $\frac{1}{4}$ in. plated washer (UA 1251/ZP) from the kit between the two 'Tee' pieces.

Retighten the bolt and fit the replacement hoses together with the new copper washers supplied.

10. Having replaced all the hoses and fitted the heat shield, bleed the hydraulic system as detailed in Chapter G of the Workshop Manual.
11. On completion, the car itself should be identified for future reference by painting a white spot on the forward bracket adjacent to the left-hand spring pot as shown in figure 6.

On later cars, featuring the Service Modification Plate on the right-hand inner wing valance adjacent to the air cleaner, the reference number RE 80 01 should be stamped.

IMPORTANT:

All hoses removed from cars in service should be returned to Rolls-Royce Motors Inc. at Lyndhurst or Rolls-Royce Motor Cars in Montreal where they will be destroyed.

REIMBURSEMENT FOR WORK COMPLETED:

The time allowed for the work described in this bulletin is as follows:

For those cars where a heat shield is not required.

2.00 Man Hours

For those cars having a heat shield fitted together with all hoses.

2.50 Man Hours

A sample warranty claim is attached showing the information which is required for reimbursement, i.e. only the boxes marked need to be completed in full. Note, that no other information is necessary for the purposes of this exercise. Note also that the exercise has been given the reference number RE 80 01. This must be quoted as shown.

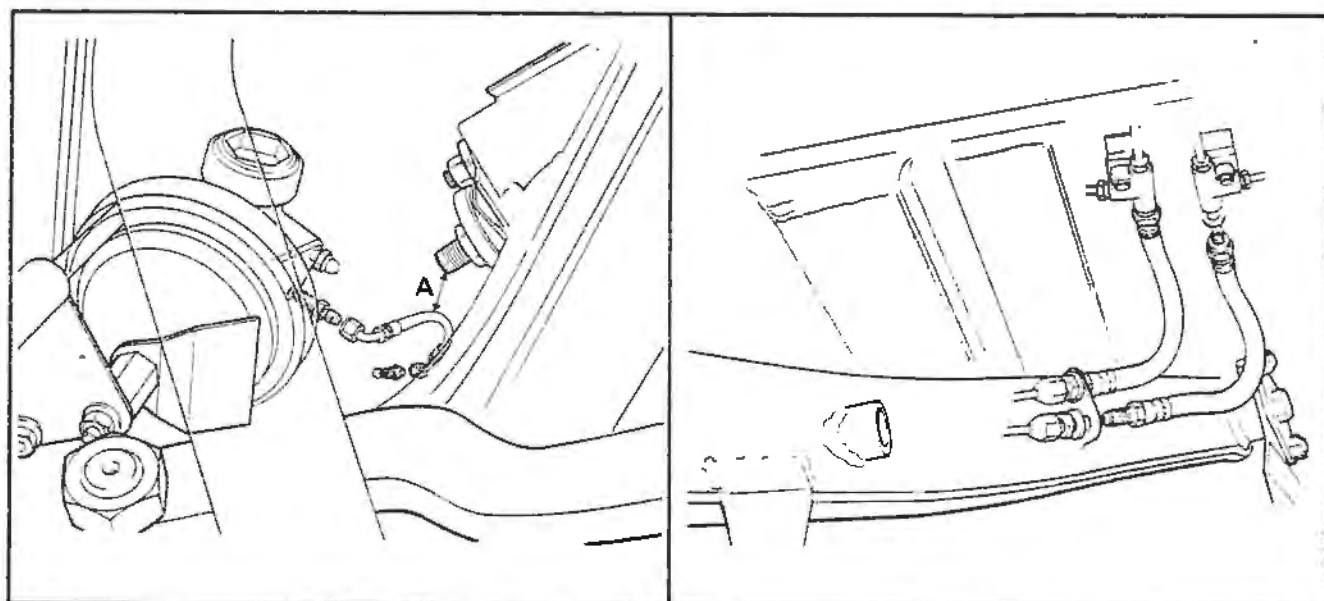
Hly/DC

FIG 1. - U.S.A. and Canadian Specification 1975 - 1977

- 1 (a) Replacement accumulator/frame hose with adapters.
Dimension 'A' minimum 19,1 mm. ($\frac{3}{4}$ in.) applicable when
hose is correctly installed.
- 1 (b) Left-hand trailing arm hoses.
- 1 (c) Brake actuation mechanism to front sub-frame hoses.

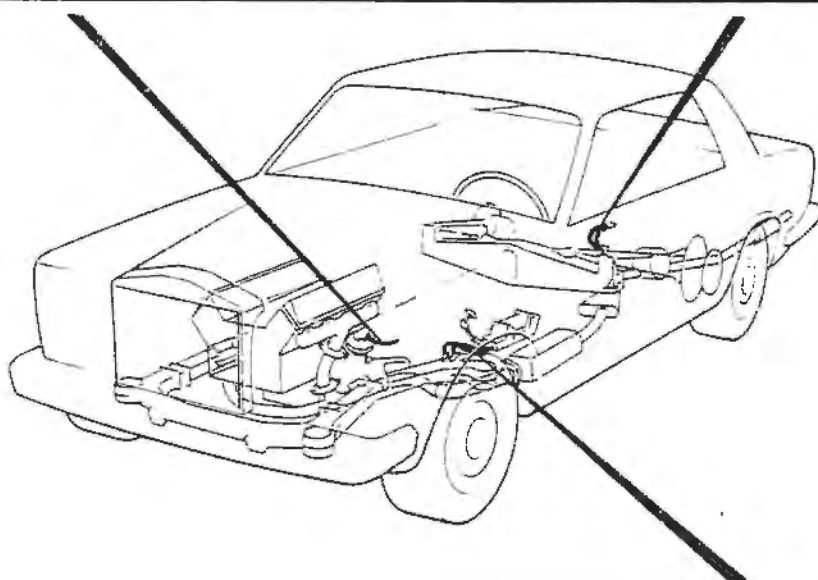
Note. Location of hoses and washer between 'Tee' pieces.

Fig.1



1a

1b



1c

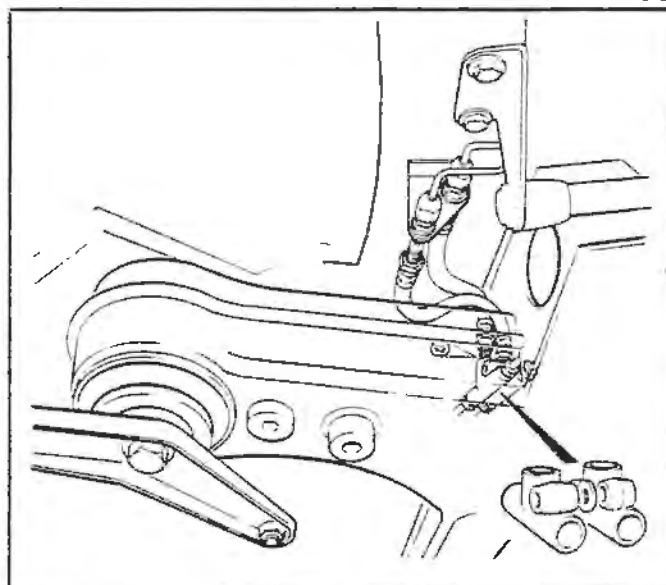


FIG 2. - U.S.A. and Canadian Specification 1977 - 1980

2 (a) Left-hand trailing arm hoses.

2 (b) Heat shield assembly fitted to rear silencers.

Note. 1. Scalloped front edge of shield to front of car.

2. Two insulation pads, note front edge cut away.

2 (c) Replacement accumulator/frame hose with adapters.
Dimension 'A' minimum 19,1 mm. ($\frac{3}{4}$ in.) applies when hose is correctly installed.

2 (d) Brake actuation mechanism to front sub-frame hoses.

Note. Location of hoses and washer between 'Tee' pieces.

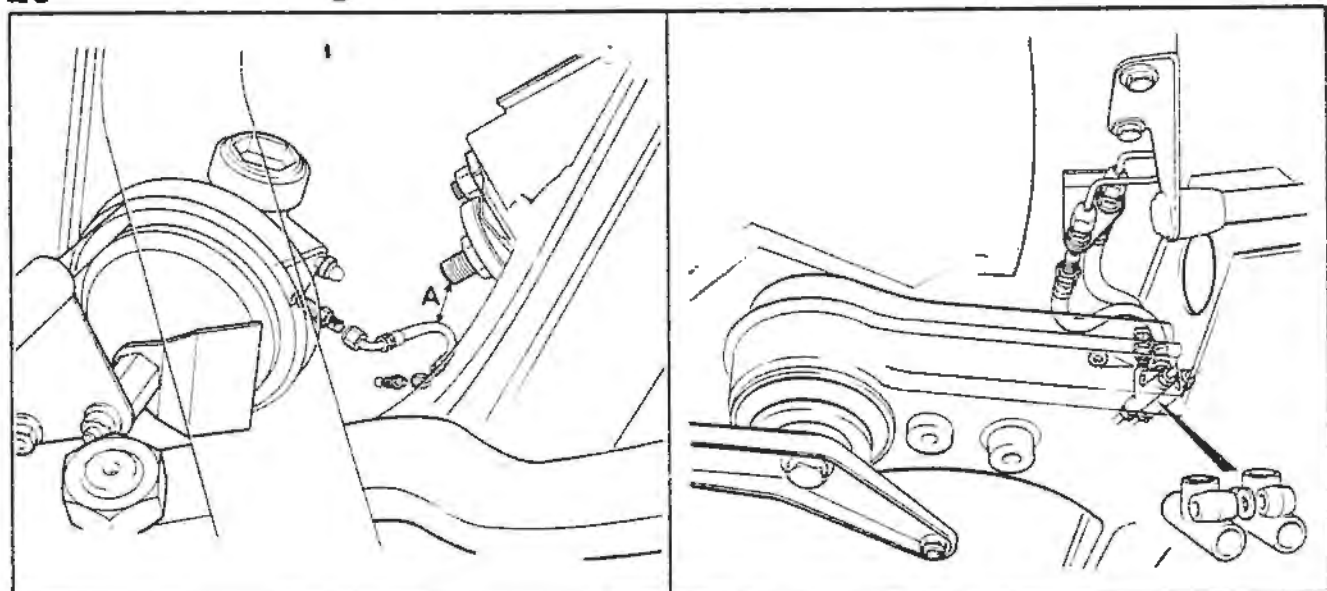
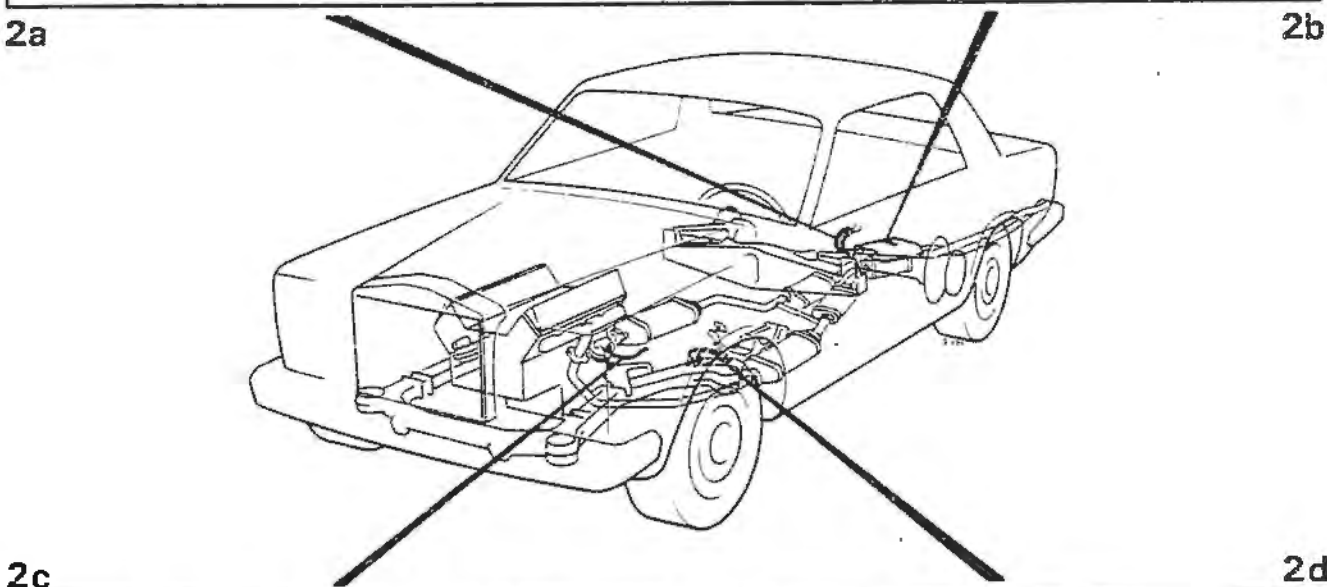
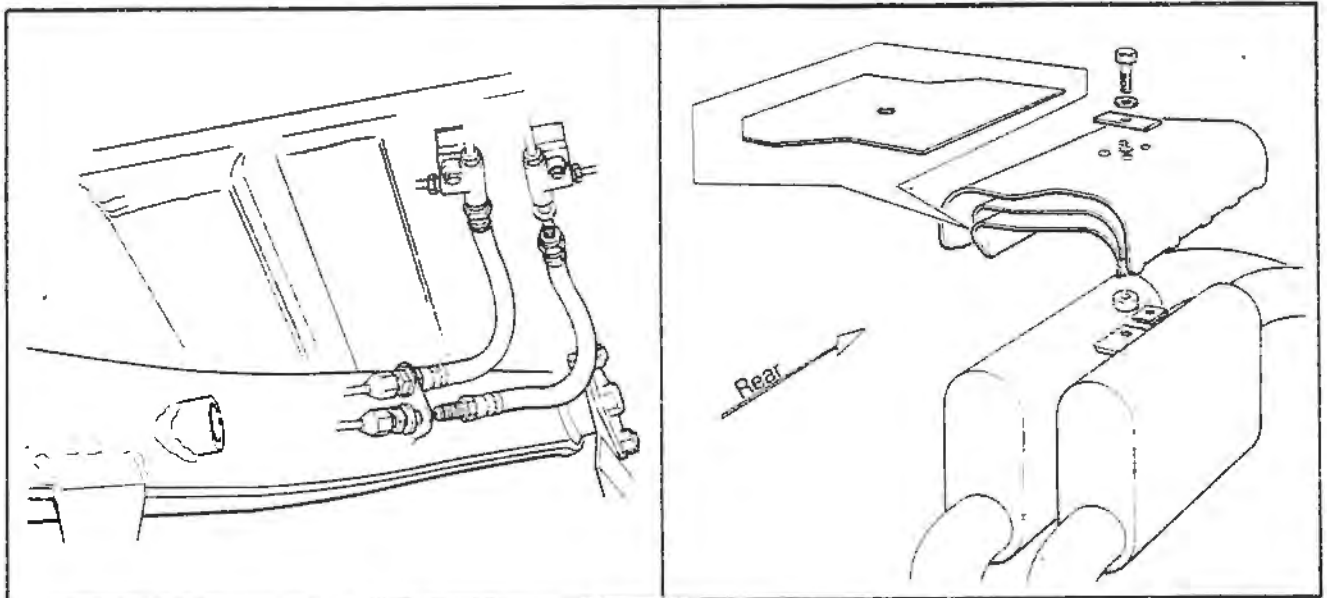
Fig. 2

FIG 3. - U.S.A. - Californian Specification 1980

3 (a) Replacement accumulator/frame hose with adapters.
Dimension 'A' minimum 19,1 mm. ($\frac{3}{4}$ in.) applies when
hose is correctly installed.

3 (b) Left-hand trailing arm hoses.

3 (c) Brake actuation mechanism to front sub-frame hoses.

Note. Location of hoses and washers between 'Tee' pieces.

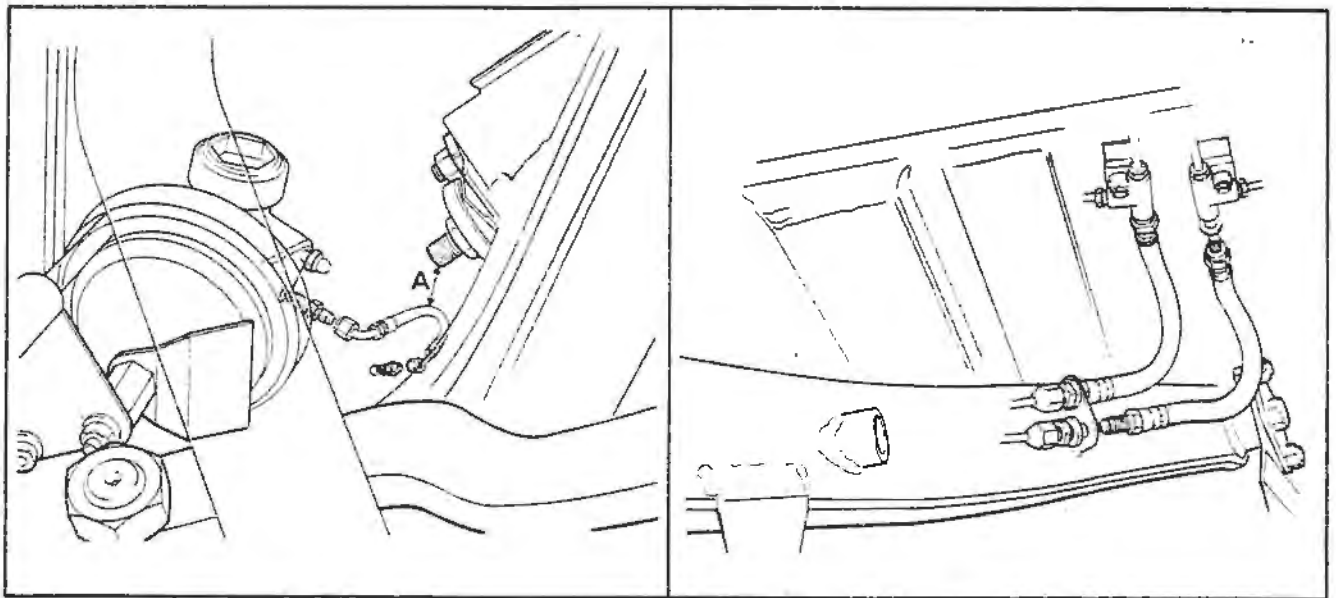
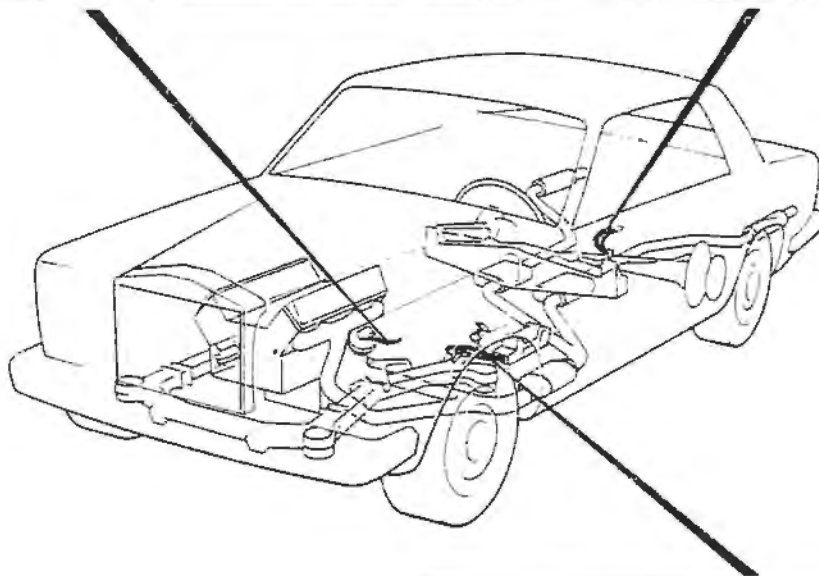
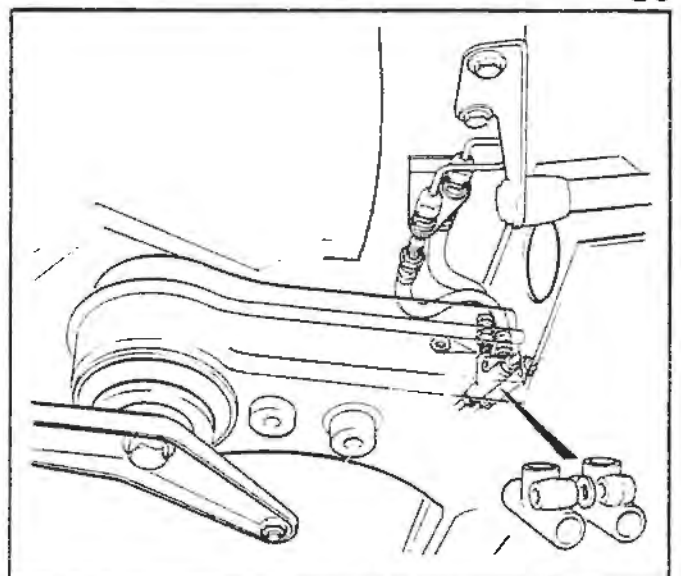
Fig. 3**3a****3b****3c**

FIG. 4

Original hoses designated	1a, 2a, 3a, 4a,
Replacement hoses designated	1b, 2b, 3b, 4b,

1 (a) UR 19934	20,32cm. - 20,95cm.
----------------	---------------------

Dimension A

1 (b) UR 22791	(8.00 in. - 8.250 in.)
----------------	------------------------

2 (a) UR 19936	24,13cm. - 24,76cm.
----------------	---------------------

Dimension B

2 (b) UR 22793	(9.50 in. - 9.750 in.)
----------------	------------------------

3 (a) UR 19939	27,94cm. - 28,57cm.
----------------	---------------------

Dimension C

3 (b) UR 22795	(11.00 in. - 11.250 in.)
----------------	--------------------------

4 (a) UR 19940	29,21cm. - 29,84cm.
----------------	---------------------

Dimension D

4 (b) UR 22796	(11.50 in. - 11.750 in.)
----------------	--------------------------

Note. End connections and differences at each end of each hose.

Fig.4

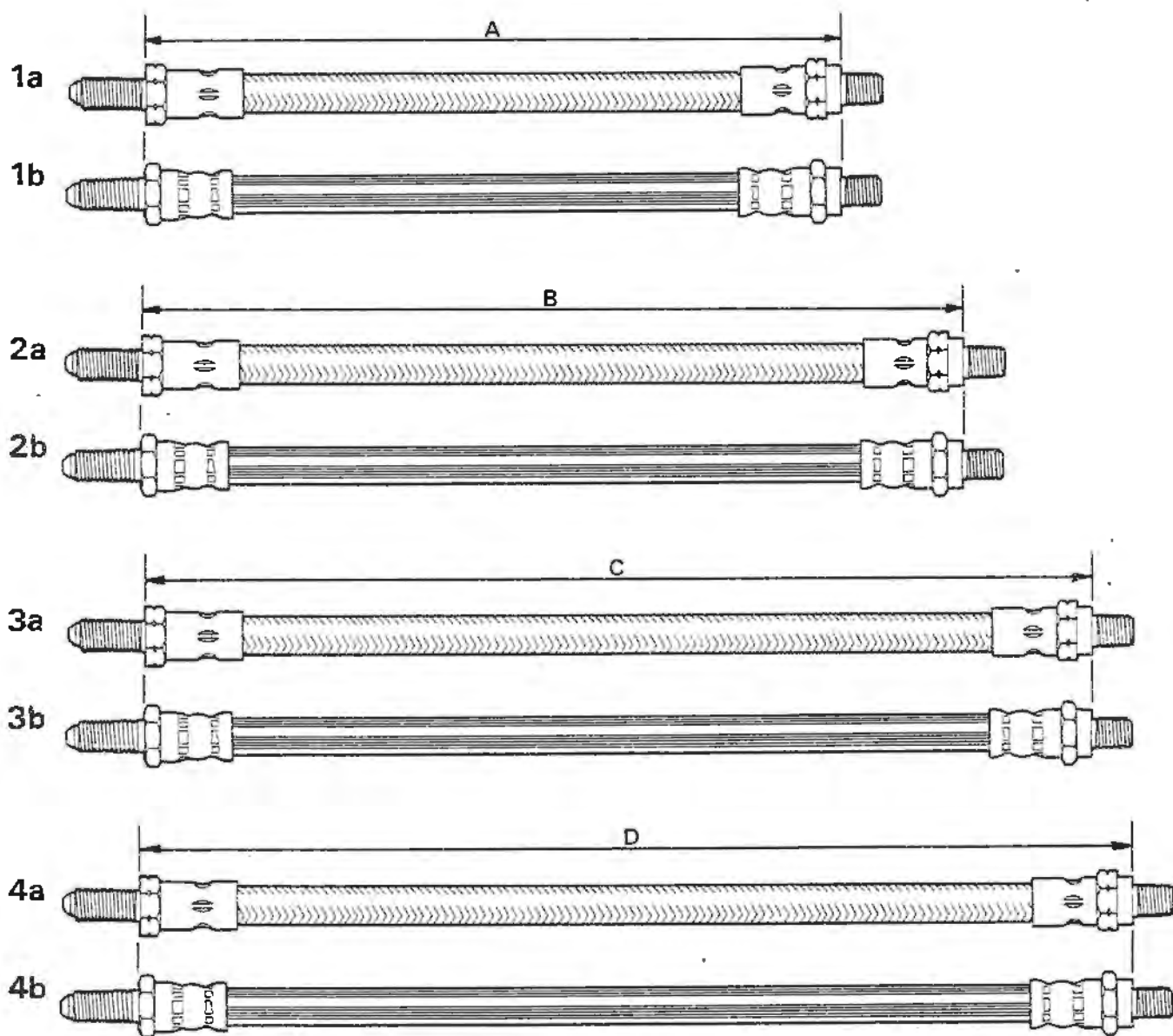
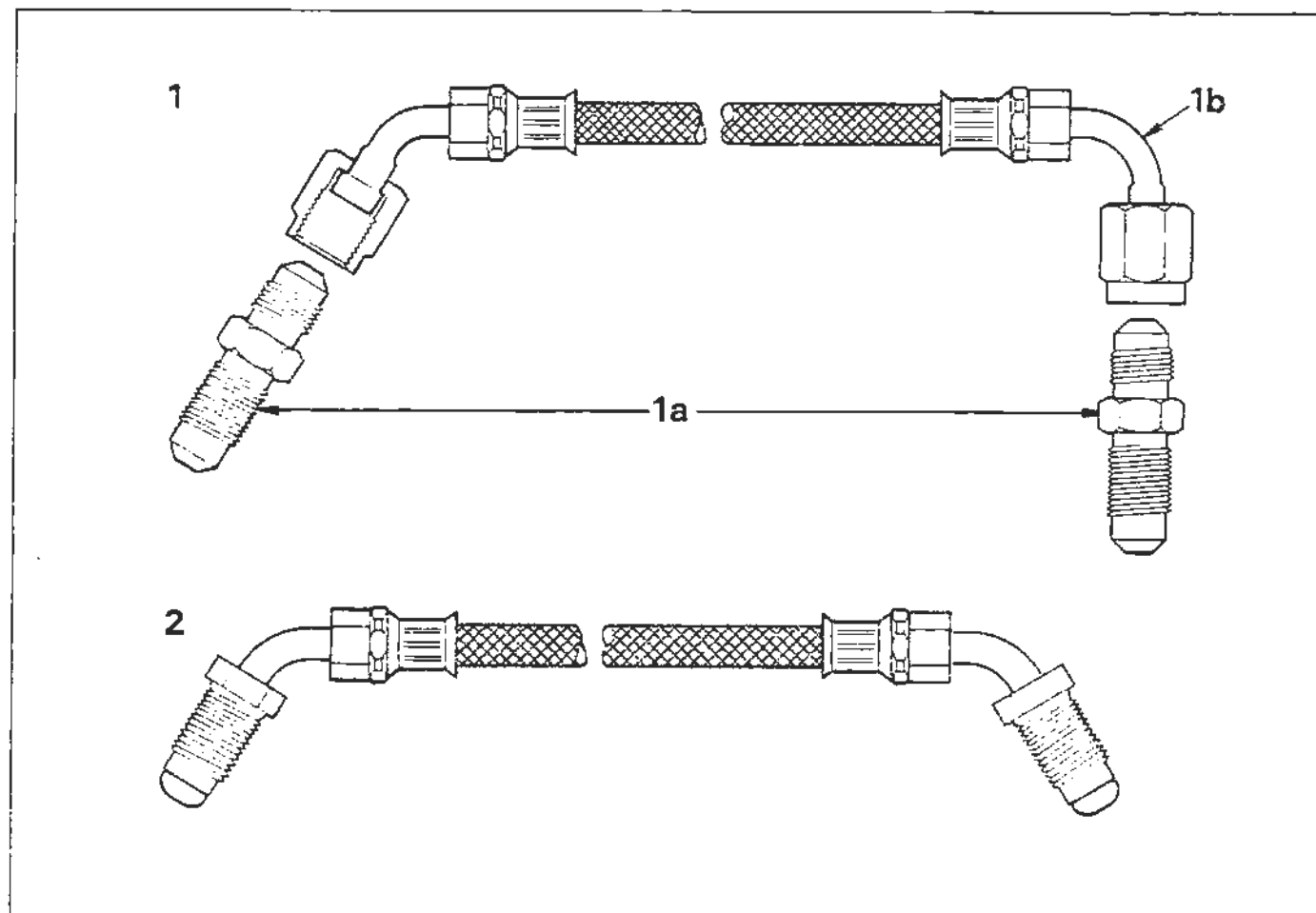


Fig. 5



U918

FIG 5.

1. Replacement accumulator to frame hose.
- 1 (a) Adapters - Must be fitted right way round.
Short threaded end for hose attachment.
- 1 (b) Right-angled connection for attachment to accumulator
valve only.
2. Original hose.

Fig. 6

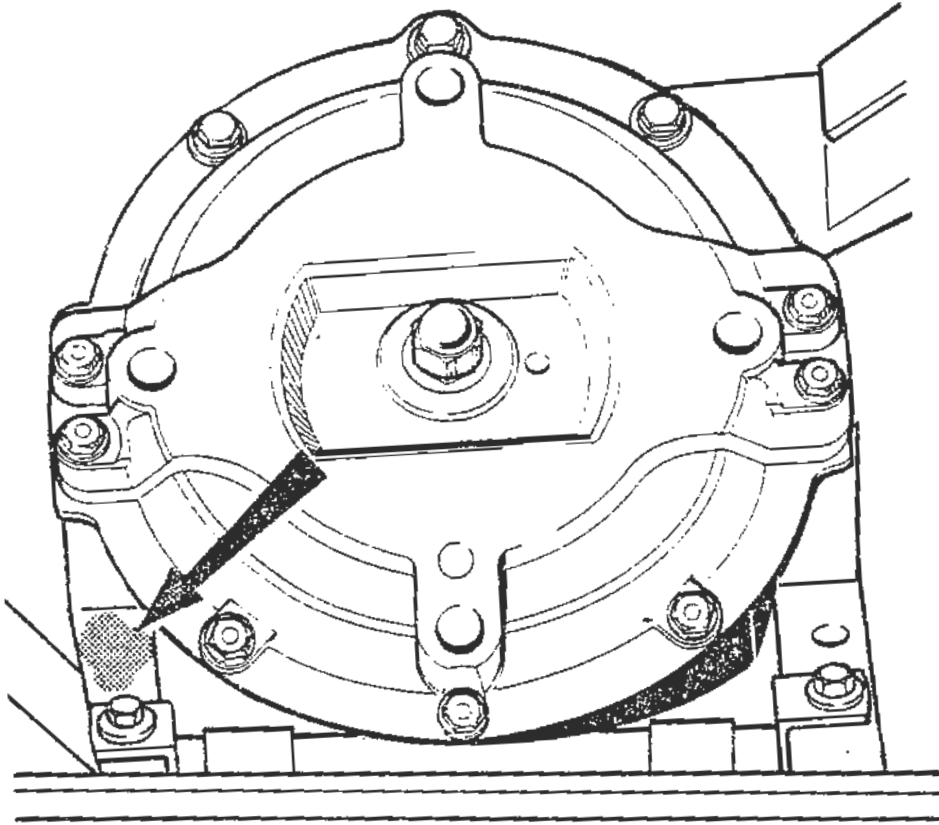



FIG 6.

Identification of cars having modification completed.
White paint spot on forward bracket adjacent to left-hand
spring pot.

1 Dealer Identification Plate				ROLLS-ROYCE MOTORS INC. P.O. Box 476 LYNDHURST, N.J. 07071  WARRANTY CLAIM				2 Owner Identification Plate				VALIDATION WARRANTY DEPT USE: THIS CLAIM IS <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%; text-align: center;">A</td> <td style="width:15%;">ACCEPTED</td> <td style="width:15%;">ADJUSTED</td> <td style="width:15%;">RETURNED</td> <td style="width:15%;">REJECTED</td> <td style="width:40%;">CLASSIFICATION</td> </tr> <tr> <td style="text-align: center;">B</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>				A	ACCEPTED	ADJUSTED	RETURNED	REJECTED	CLASSIFICATION	B					
A	ACCEPTED	ADJUSTED	RETURNED	REJECTED	CLASSIFICATION																						
B																											
4 Dealer code 29W		5 Claim number 123		6 Chassis number SRK 12345		7 Mileage 4321 Kms <input type="checkbox"/>		8 Date work completed 20 05 80		9 Repair order no		10 Dealer Use: This claim is <input type="checkbox"/> Submitted for authorization <input type="checkbox"/> Submitted for payment <input type="checkbox"/> Resubmitted		11 Date claim submitted		12 Warranty date											
A		13A Warranty class E		14A Describe complaint and diagnosis						B		13B Warranty class		14B Describe complaint and diagnosis													
15A MHS op RE 80 01		16A Del		17A Fail		18A Description of work done		19A Time allowed		20A Amount		15B MHS op		16B Del		17B Fail		18B Description of work done		19B Time allowed		20B Amount					
21A Additional MHS op		22A Description of work done						23A		24A		21B Additional MHS op		22B Description of work done						23B		24B					
25A Sublet						26A		27A		25B Sublet						26B		27B									
28A Authorization number		29A Date		30A Signature		Total labour		31A 2,50		33A 25,00		28B Authorization number		29B Date		30B Signature		Total labour		31B		33B					
32A		34A																32B		34B							
35A Part no		36A Description				37A Invoice number		38A Qty		41A Amount		35B Part no		36B Description				37B Invoice number		38B Qty		41B Amount					
						Total parts		42A 10,00		45 Currency code UD		46 Rate of exchange								Total parts		42B					
								43A														43B					
														ACCT NO		AMOUNT		TOTAL AMOUNT OF CLAIM									

SPECIMEN

No. R 53427

I certify that to the best of my knowledge, all information contained in this warranty claim is correct

 Dealer/Service Manager Signature
ALL CLAIMS APPROVED SUBJECT TO AUDIT AND PARTS INSPECTION

23 5 80

20 OF 20

SY/G67

Service Bulletin

ROLLS-ROYCE
MOTORS

Car Division

TSD 4318

Bulletin number	SY/G69					Date	5 3 81			Page	1 of 2		
Circulation list													

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

BRAKE FLUID RESERVOIR LABELLING

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Long Wheelbase and Corniche cars and all Bentley T Series and Corniche cars built from October 1970 to March 1973 between car serial numbers 11130 and 15638 approximately.

INTRODUCTION :

The brake fluid reservoir fitted to the above motor cars carries a label instructing the use of "Castrol Green Brake Fluid" in the Hydraulic Systems.

In March 1973 Rolls-Royce Motors introduced Castrol RR363 to their hydraulic systems and no longer recommended the use of Castrol Green Brake Fluid. Castrol RR363 is coloured amber.

Recently Mineral Oil has been introduced to the hydraulic systems of cars from serial number 50001 onwards.

Since Mineral Oil is coloured Green there is a risk that the instructions on these early motor cars might lead owners and mechanics to think that it can be used in those cars.

As explained in the Workshop Manual TSD 4200 Chapter G, Mineral Oil and Brake Fluid are incompatible and the use of Mineral Oil in the Hydraulic systems of these cars would lead to a degradation of the rubber components in the systems and subsequently leakage of fluid.

Therefore, a new self-adhesive label has been designed for fitting to the brake fluid reservoir on this range of motor cars, a sample of which is attached. It should be fitted to any of the above range of motor cars wherever possible following the instructions detailed below.

PROCEDURE:

1. Remove all traces of contamination from the existing reservoir label.
2. Peel the backing material from the new label and fix in position over the old label.

Note that once the new label has dried in position, it cannot be removed in one piece due to its type of construction.

PARTS USED:

Labels can be obtained free of charge from Rolls-Royce parts service using the normal parts supply channels.

The part number to quote is RH 9638.

JCl

Service Bulletin



TSD 4318

Bulletin number	SY/G70	Date	9 6 81	Page	1 of 5
Circulation list					

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

BRAKE PAD FITMENTS AND USES

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche and Camargue cars and all Bentley T series, Bentley T2 and Corniche cars built since the end of 1965.

INTRODUCTION:

There have been a number of changes to the material and dimensional specification of brake pads. These changes have been introduced for a number of reasons such as improved life, compatibility with the introduction of metric calipers and to facilitate easier servicing.

This service bulletin has been issued to

1. Describe the different pads, materials, and their application.
2. Explain the types of brake condition which may be encountered in service and how they may be remedied.
3. Describe the purpose of abrasive coated brake pads and how they should be used.

DESCRIPTION:

1. Brief history of brake pad material

The first materials to be used were Ferodo DC1 and Mintex M69. These pads offered a good all round performance although they had disadvantages, such as a tendency towards

1. Brake squeal.
2. Rumble when stopping from very high speeds under heavy braking, which was only a temporary condition and disappeared when the pads and discs had cooled.
3. An inadequate pad life for certain customers.

In an effort to improve life and reduce high speed rumble, M170 pad material was introduced at the same time as metricated front brake calipers. Its service life and resistance to high speed rumble was excellent, although these pads had the disadvantage of depositing high levels of resin glaze on the discs. This sometimes led to brake judder, due to the uneven surface of the disc that this condition created.

The present brake pad material V1431 replaced M170 early in 1975 and offers a high service life and good resistance to rumble. It does not deposit large amounts of resin on the brake disc surface. This V1431 material like all harder materials which offer increased service life has a tendency to 'chase' dimensional errors in the disc. This occurs when the pad is in light contact with the disc in the 'brake off' position. This can lead to uneven or 'thick/thin' wear of the disc and eventually cause brake judder. To overcome this, 'M' springs were introduced to ensure that the brake pads are held off the disc (front only) in the 'brake off' position.

See table 1 for brake pad application.

2. Types of brake condition that may be encountered in service.

The above heading can be split into two main categories

- a) Noise
- b) Judder

Noise

Noise can be further separated under these headings

- i Squeal

This is usually apparent when braking the car lightly from speeds up to approximately 56 k.p.h. (35 m.p.h.) and is generally present for as long as the braking effort is held constant.

ii Squeak

This can be heard at low speeds particularly on heavily cambered roads or when manoeuvring when the brakes are not applied. This can often be remedied by adjusting the hub end float to the correct limits.

iii Graunch

Is a noise, which on occasions creates the sensation of judder. This occurs on the first application of the brakes after the car has been left standing for sometime. Graunch usually occurs when the brakes are cold. It is usually caused by the characteristics of the brake pad material.

Brake noise is frequently caused by resin build up and can be alleviated by deglazing the brake disc to brake pad contact area. Abrasive brake pads may be used for this purpose (see Section 3 for details).

It should be noted that brake squeak/squeal and resin build up is an inherent characteristic of disc brakes, the level of noise being dependent upon the type of use to which the brakes are subjected. As such, deglazing is a service operation and would normally be charged to the customer.

Judder

Judder can take two different forms

i Medium speed judder

This is usually associated with braking from around 80 to 96 K.p.h. (50 to 60 m.p.h.) under light to medium foot pedal loads.

ii High speed shudder

This is a shudder experienced when braking from high speeds and is associated with the presence of blue/black spots of carbon around the friction surface of the disc. The judder is due to the inconsistent friction levels as a result of the presence of carbon unevenly distributed around the disc/pad contact area. These are formed by very high temperatures causing free carbon in the disc to migrate to the surface. The high temperatures usually arise from abnormally high braking load conditions. It is not always possible to completely remove this carbon with the use of abrasive pads, or even grinding the discs.

3. Abrasive brake pads and their use

Introduction

Abrasive brake pads have been introduced to simplify brake disc servicing. They comprise of a standard brake pad onto which a thin layer of abrasive has been applied.

The purpose of the abrasive is to

1. Deglaze the disc.
2. Remove corrosion deposits.
3. True-up any irregularities in the friction surfaces of the disc.

It should be noted that abrasive pads are only intended to correct the condition of discs which are in a reasonable condition. As a guide, the pads will only remove approximately 0.025 mm. (0.001 in.) of material from the disc surface. The pads may also be used for normal pad replacement, thereby obviating the need to clean or deglaze the discs before fitting the new pads. If the car is redelivered to the customer before the abrasive is worn off, he must be advised of the correct procedure to 'bed in' his new brake pads. During the first 80 to 160 km. (50 to 100 miles), depending on the number of brake applications, gentle braking should be observed as far as possible.

Hly/Per

TABLE 1

PART NUMBER	MATERIAL	AVAILABILITY	COMMENTS	CONTENTS OF PART NUMBER	FRONT/ REAR
UG 12325	DCI	Still available		4 pads only	Front
UG 12323	DCI	Still available		4 pads only	Rear
UG 12431	M69	Still available		4 pads only	Front
UG 12430	M69	Still available		4 pads only	Rear
UG 13841	M170	Obsolete	Use CD 6014 or CD 6015	4 pads only	Front
UG 13858	M170	Obsolete	Use UG 14081	4 pads only	Rear
UG 14080	V1431	Obsolete	Use CD 6014 or CD 6015	4 pads only	Front
UG 14081	V1431	Still available		4 pads only	Rear
CD 6009	M69 plus full abrasive coating	Obsolete	Use CD 6015	4 pads only	Front
CD 6014	V1431	Still available		8 pads suitable for use with 'M' springs. 4M springs, 4 pins and 4 spring clips.	Front
CD 6015	V1431 plus strips of abrasive coating	Still available		As CD 6014 but partial abrasive coated pads.	Front

CONSULT PARTS LISTS FOR PART NUMBER TO CAR SERIAL NUMBER REFERENCE.

Service Bulletin



TSD 4318

Bulletin number	SY/G71					Date	21 7 81			Page	1 of 2		
Circulation list													

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

IMPROVED HYDRAULIC RESERVOIR LID SEALING

APPLICABLE TO:

All Rolls-Royce Corniche, Camargue, and all Bentley Corniche motor cars from car serial number 50001.

INTRODUCTION:

An improved method of sealing the lid of the hydraulic system mineral oil reservoir has been introduced on the above cars. This bulletin has been issued to advise Service personnel of the correct fitting procedure for the new sealant.

DESCRIPTION:

Until recently, a stiffening plate has been used in addition to the gasket to seal the hydraulic system mineral oil reservoir. This method was used as an interim solution, until the introduction of the present urethane seal.

In the event of a reservoir requiring sealing, the following procedure should be adopted.

PROCEDURE:

To Fit - Reservoir lids using liquid sealant.

1. Discard the stiffening plate on those cars where these were fitted over the reservoir lids.
2. Discard the reservoir lid gasket.

3. Ensure that both the reservoir bowl and lid are clean and dry. If not, clean with methylated spirits and dry with compressed air.
4. Using sealant RR G2/139 apply an unbroken bead of sealant approximately 6,35 mm (.250in) diameter around the reservoir bowl.
5. Immediately after applying the sealant, fit the reservoir lid and secure with the screws, tightening them to a torque of 13,56 Nm (10 lbf ft).
6. Remove the reservoir filler cap and filter and check that no sealant has been extruded over the lip of the bowl and dropped into the interior of the reservoir. If this happens the reservoir lid should be removed as described below.
7. Allow the sealant to cure for a minimum of six hours and then cut off any excess sealant from the edge of the joint with a sharp knife.

To remove - Reservoir lids, the following procedure should be followed.

1. Remove the screws securing the lid and gently prise off taking care not to damage either face.
2. Peel off the sealant and/or gasket from both surfaces. Care must be taken to ensure that small pieces of sealant are not left around the screw holes.
3. Clean both surfaces with methylated spirits and dry with compressed air.

AFFECTED PARTS

Displaced Parts

UR 21528 Gasket-Reservoir
GMF 1060 Stiffening Plate

New Parts

Betaseal Sealant
G2/139

Hly/AEB

Service Bulletin



TSD 4318

Bulletin number	SY/G72										Date	21 7 81		Page	1 of 4	
Circulation list																

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

HYDRAULIC LEVELLING SYSTEM

APPLICABLE TO:

All Rolls-Royce Corniche and Camargue cars and all Bentley Corniche cars from car serial numbers.

CRH 0050550 - Corniche

JRH 0050622 - Camargue

INTRODUCTION:

The minimum pressure valves (MPVs) fitted to 50 000 series motor cars are sensitive to flow rate and as the valves are subject to varying operating conditions, i.e. varying flow rates, the valve cut-off pressure has been found to be inconsistent.

Should the valve cut off below the prescribed limits of 20,6 to 24,1 bar (300 to 350 lbf/in²), the reservoir of oil retained in the gas spring and strut assembly can be insufficient to supply the needs of an extending strut. This results in a phenomenon known as 'cavitation'.

This 'cavitation' presents itself as a knocking noise that emanates from the region of the suspension strut.

From the above car serial numbers, restrictors have been incorporated into the levelling systems which maintain consistent flow rates across the minimum pressure valves regardless of operating conditions.

DESCRIPTION:

Restrictors have been incorporated into the hydraulic lines between the height control valves (HCVs) and minimum pressure valves (MPVs), see figure 1.

The following parts have been displaced

- 1 off UR 21135 - Pipe - Height Control Valve to Minimum Pressure Valve - right-hand side Colour Coded Red
- 1 off UR 21142 - Pipe - Height Control Valve to Minimum Pressure Valve - left-hand side Colour Coded Orange
- 2 off GMF 1088 - Minimum Pressure Valve
- 2 off UA 172/Z - Mounting Bolt (height control valve)

The following parts have been introduced

- 1 off UR 22736 - Height Control Valve to Restrictor-right-hand side Colour Coded Red
- 1 off UR 19172 - Restrictor to Minimum Pressure Valve - right-hand side Colour Coded Red
- 1 off UR 22737 - Height Control Valve to Restrictor-left-hand side Colour Coded Orange
- 1 off UR 19173 - Restrictor to Minimum Pressure Valve-left-hand side Colour Coded Orange
- 2 off GMF 1091 - Restrictors
- 2 off GMF 1095 - Minimum Pressure Valve
- 2 off UA 175/Z - Mounting Bolt (height control valve)

A kit of parts (RH 2805) is available and can be used to modify earlier cars should the necessity arise. It should however be established that 'cavitation' is the cause of complaint before proceeding with the modification.

'Cavitation' can be diagnosed as follows

Road test the car with a load of at least 227 Kg. (500 lb) in the luggage compartment. This load effectively causes operation of the height control valve operating links thereby raising the pressure in the strut assembly.

If the noise can no longer be produced during road test, the cause will almost certainly have been due to 'cavitation.'

If however the noise is still apparent, then either it is not the result of cavitation or the strut is not being pressurised due to a fault in the system. If the latter is suspected, the system pressures can be checked by connecting a suitable pressure gauge into the strut bleed point.

Should it be found necessary to install a RH 2805 modification kit the following procedure should be followed.

PROCEDURE:

1. Position the car on a ramp and carry out the normal workshop safety precautions.

2. Depressurise the hydraulic systems using the accumulator internal bleed screws. In addition, discharge the gas spring and strut assemblies at the two height control bleed points.
 3. Remove pipe UR 21135 Height Control Valve to Minimum Pressure Valve right-hand side
Remove pipe UR 21142 Height Control Valve to Minimum Pressure Valve left-hand side
Remove both GMF 1088 Minimum Pressure Valves
Remove both UA 172/Z Lower Height Control Valves Mounting Bolts
 - *4. Fit GMF 1095 Minimum Pressure Valves (2 off)
 5. Fit UR 22736 Pipe-Height Control Valve to Restrictor-right-hand side
Fit UR 19172 Pipe-Restrictor to Minimum Pressure Valve-right-hand side
Fit UR 22737 Pipe-Height Control Valve to Restrictor-left-hand side
Fit UR 19173 Pipe-Restrictor to Minimum Pressure Valve-left-hand side
 6. Fit UA 175/Z height control valve mounting bolts (2 off) and GMF 1091 restrictors (2 off).
 7. Check all disturbed pipe connections and component mounting bolts for tightness.
 8. Bleed the levelling system. In order to bleed the levelling systems, it is necessary to load the luggage compartment sufficiently to operate the height control valve and the engine must be run until the accumulators are fully charged. During bleeding, the accumulator pressure must not be allowed to fall below the pressure at which the priority valve closes 89,6 to 120,6 bar (1300 to 1750 lbf/in²). A reasonable indication of the priority valve closing is the illumination of the warning lights. Therefore, during the bleeding operation, the warning lights should not illuminate. If this occurs, the system should be allowed sufficient time to repressurise and the bleeding operation repeated.
- *The incorporation of a restrictor in the system has affected the 'in factory rig' setting pressure. However, the 'on car' operating pressures remain unaffected at 20,6 to 24,1 bar (300 to 350 lbf/in²). On cars fitted, or being fitted with restrictors only the later GMF 1095 minimum pressure valve should be used. These minimum pressure valves can be identified by a letter 'R' or 'R1' etched on the large end cap.
- Note
It is essential that the minimum pressure valve(s) are fitted correctly with the smaller end cap uppermost and the feed port (see Fig. 2) connected via the restrictor to the height control valve.

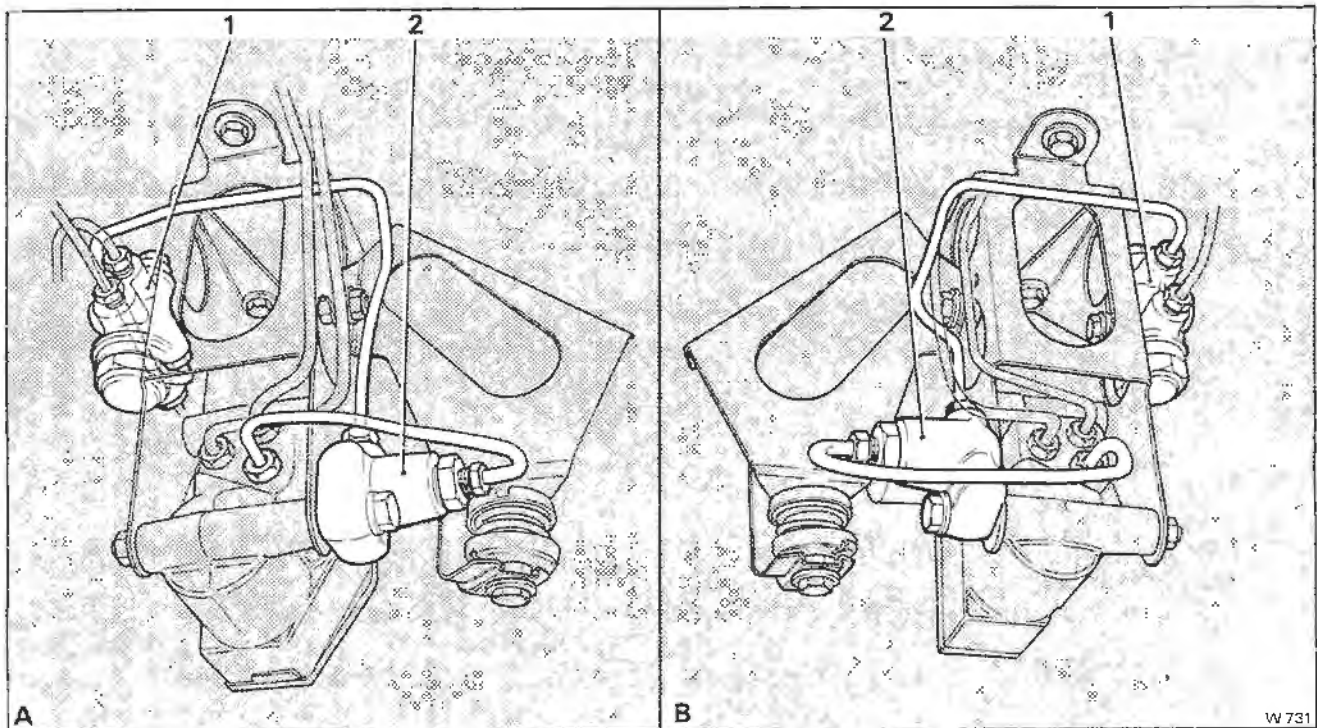


FIG. 1

A. Left-hand
B. Right-hand

1. Minimum pressure valve
2. Restrictor

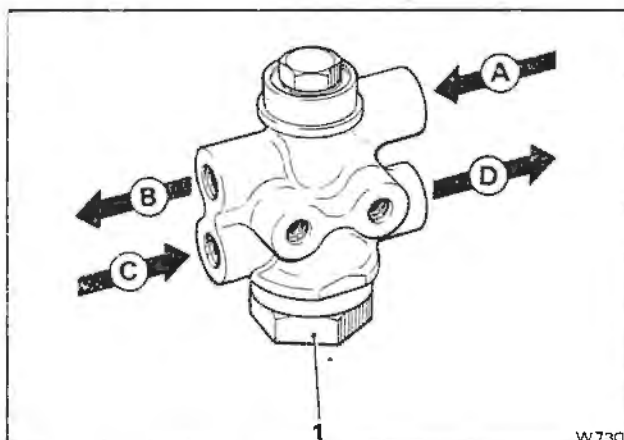


FIG. 2

1. Large end cap (letter 'R' or 'R1' etched on cap denotes later GMF 1095 minimum pressure valve for use with restrictor).

A. High pressure feed from height control valve via restrictor.

B. High pressure feed to strut.

C. Seepage return line from strut.

D. Seepage return line to reservoir via priority valve.

Hly/Fcr

Service Bulletin



TSD 4318

Bulletin number SY/G73	Date 16 7 82				Page 1 of 4
Circulation list					

Category

ALL ROLLS-ROYCE FRANCHISE HOLDERS

HYDRAULIC SYSTEM MINERAL OIL (LHM)
CONTAMINATION TEST KIT

APPLICABLE TO:

All Rolls-Royce Corniche and Camargue cars and all Bentley Corniche cars from serial number 50001.

INTRODUCTION:

Despite numerous warnings an increasing number of reports are being received of mineral oil (LHM) hydraulic systems being contaminated with conventional types of brake fluid, e.g., (RR363).

When contamination does occur, it only requires a small percentage of brake fluid to be in the system for a brief period of time for seal/component failure to take place. Contamination also incurs a considerable amount in rectification costs to eliminate the contaminant and its effects from the hydraulic system.

DESCRIPTION:

Rolls-Royce have developed a simple test kit and procedure which will allow Franchise Holders to quickly check the mineral oil (LHM) hydraulic system for contamination.

Two test procedures have been established.

The first (a) a forecourt method is for use on all cars which come in for servicing or other work. This test can be done in the Owners presence since it is relatively quick.

The second (b) is a workshop method which should be used when contamination is suspected (to determine the extent of contamination).

These simple methods of testing the hydraulic system mineral oil (LHM) for contamination have been developed to assist Franchise Holders in the following circumstances:

1. To determine the presence of a conventional type of brake fluid e.g., (RR363) in the hydraulic system mineral oil (LHM) prior to the cars going into the workshops. This is to help protect the Franchise Holders against claims of liability for contamination of the system.
2. To determine the presence of contamination in second-hand cars prior to the Franchise Holders accepting cars for part exchange or retailing.

NOTE:

Once the hydraulic system mineral oil has been tested and proved to be free from contamination, warning label (part no. RH9700) should then be affixed over each reservoir lid.

TEST KIT:

The hydraulic system mineral oil (LHM) contamination test kit consists of the following:

- 1 off Dropping bottle with dye solution
- 1 off Test tube rack
- 10 off Glass test tubes with corks
- 1 off Photograph - depicting the colour for different strengths of contamination
- 1 off Sampling pipe
- 1 off Set of instructions

The kit can be ordered from Rolls-Royce Motors Ltd on RH 2841

NOTE:

CLEANLINESS THROUGHOUT THE SAMPLING AND TESTING PROCEDURE IS OF VITAL IMPORTANCE.

PROCEDURE:

a) SAMPLING - FORECOURT METHOD

To be used on all cars coming in for Service.

1. With the ignition switched 'on', depressurize the hydraulic system by "pumping" the brake pedal until both low pressure warning lamps illuminate. Continue pumping for at least a further 20 applications. (This will ensure that all accumulator oil has returned to the reservoir).
2. Using the sampling tube provided, extract a 50 ml sample from the top and bottom of each hydraulic reservoir.
3. Put the sample from each hydraulic system into a CLEAN test tube.

EACH OF THE SAMPLES TO BE TESTED.

b) SAMPLING - WORKSHOP METHOD

To be used when contamination is suspected.

1. Bleed off approximately 50 mls of fluid from each caliper.

Front brakes - front calipers - Number 1 system
Front brakes - rear calipers - Number 2 system
Rear brakes - upper pistons - Number 1 system
Rear brakes - lower pistons - Number 2 system

Label each sample with either Number 1 or Number 2 systems.

2. Depressurize Number 1 and Number 2 accumulators by releasing the internal bleed screw (this returns all high pressure fluid to the reservoirs).

Take a sample of approximately 50 mls from both the top and bottom of each reservoir using the sampling tube.

IMPORTANT:

Thoroughly clean out the sampling tube with Genklene (Trichloroethane) or an alternative harmless, degreasing agent before taking each sample.

(PARAFFIN OR PETROL SHOULD NOT BE USED)

Identify the samples with either Number 1 or Number 2 systems.

3. Operation 2 has now depressurized all components forward of the minimum pressure valve (MPV), i.e., the gas springs, struts etc, are still pressurized.

Bleed off right-hand side strut (Number 1 system) at the bleed point on the right-hand sill and collect a sample of approximately 50 mls.

4. Bleed off the left-hand strut (Number 2 system) at the bleed point above the left-hand drive shaft (early cars) or left-hand sill (later cars) and collect a sample of approximately 50 mls.

EACH OF THE ABOVE SAMPLE MUST BE TESTED.

TEST PROCEDURE FOR DETERMINING CONTAMINATED HYDRAULIC SYSTEM MINERAL OIL (H.S.M.O) LHM WITH CONVENTIONAL TYPES OF BRAKE FLUID E.G., (RR363)

1. Shake the sample taken from the hydraulic system to ensure it is well mixed.
2. Ensure the test tube is clean and dry, fill the test tube with approximately 10 mls of hydraulic fluid.
3. With the dispenser add two drops of the red dye solution.
4. Cork the test tube and shake well.
5. Leave for half an hour and then examine.

RESULTS:

A red precipitate indicates that the hydraulic system mineral oil (LHM) is contaminated with a conventional type of brake fluid e.g., (RR363).

Left to stand, the red precipitate settles at the bottom of the tube. The volume of precipitate in the bottom of the test tube indicates the amount of contamination within the hydraulic system mineral oil (LHM).

NOTE:

AS LITTLE AS $\frac{1}{2}\%$ OR LESS OF A CONVENTIONAL TYPE OF BRAKE FLUID E.G., (RR363) CONTAMINATING THE HYDRAULIC SYSTEM MINERAL OIL (LHM) IS SUFFICIENT TO CAUSE SEAL AND COMPONENT FAILURE.

JCL/DW

Service Bulletin



TSD 4318

Bulletin number	SY/G74					Date	21	2	86	Page	1	of	6
Circulation list													

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

HYDRAULIC SYSTEM MINERAL OIL RESERVOIR

APPLICABLE TO

All Rolls-Royce and Bentley
 Corniche Corniche
 Camargue

motor cars from chassis number 50001 onwards.

INTRODUCTION

To further reduce the possibility of incorrect type fluids being introduced into the hydraulic system a new reservoir filler device has been introduced.

This new reservoir filler may also be fitted to earlier motor cars. This service bulletin briefly describes the new filler device and gives the procedure for fitting of the new filler to the above motor cars.

DESCRIPTION

The new filler device incorporates a spring loaded ball valve which is opened by the filler nozzle of a purpose designed container of fresh hydraulic system mineral oil. The filler nozzle, when inserted into the reservoir filler device, can be locked into place thus allowing the container to be tipped and oil poured into the reservoir.

IMPORTANT

THE NEW CONTAINER AND RESERVOIR FILLER HAVE BEEN DESIGNED TO PROTECT BOTH THE FRANCHISE HOLDER AND THE OWNER. DO NOT REFILL OR RE-USE EMPTY CONTAINERS.

To fit the new reservoir fillers to the motor cars under the heading APPLICABLE TO, it is necessary to fit a set of modified mounting brackets to provide adequate clearance between the filler and the underside of the bonnet.

The modifications comprise of a shorter end support bracket and a shorter spacer for the front attachment point to the left-hand spring cover (see figs. 1 and 2).

PROCEDURE

- 1 Remove the end support bracket from the rear of the reservoir assembly.
- 2 Remove the Phillips headed screw and nut from the rear reservoir cover (see fig. 3 item A).
- 3 Remove the nut and bolt securing the reservoir assembly front mounting to the left-hand spring cover. Remove and discard the spacer.
- 4 Secure the new end support bracket (see fig. 1) to its lower attachment points on the inner wing.
- 5 Carefully ease the reservoir assembly down until the Phillips headed screw (see fig. 3 item B) can be started in its securing nut, do not fully tighten at this stage.

Note

To enable the reservoir assembly to be lowered sufficiently it will be necessary to bend the hydraulic pipes slightly.

- 6 Using the new spacer supplied (see fig. 2) secure the reservoir assembly front mounting to the left-hand spring cover.
- 7 Remove the multi-lingual warning plate (see fig. 4, A or 4, B).
- 8 Remove and discard the old type filler cap and warning label from the rear reservoir.
- 9 Fit the new anti-contamination filler and sealing ring to the rear reservoir.
- 10 Position the new locking plate supplied with only one captive nut (see fig. 3 item C) between the top of the new end support bracket and the reservoir assembly. Firmly secure the new filler cap using the socket capscrews supplied.
- 11 Tighten the Phillips headed screw in the rear reservoir cover (see fig. 3 item B).
- 12 Remove the two reservoir cover end screws and nuts from the front reservoir.
- 13 Remove and discard the old type filler cap and warning label from the front reservoir.
- 14 Fit the new anti-contamination filler cap and sealing ring to the front reservoir.
- 15 Using the new locking plate and socket capscrews supplied firmly secure the new filler cap.

Hil/MS

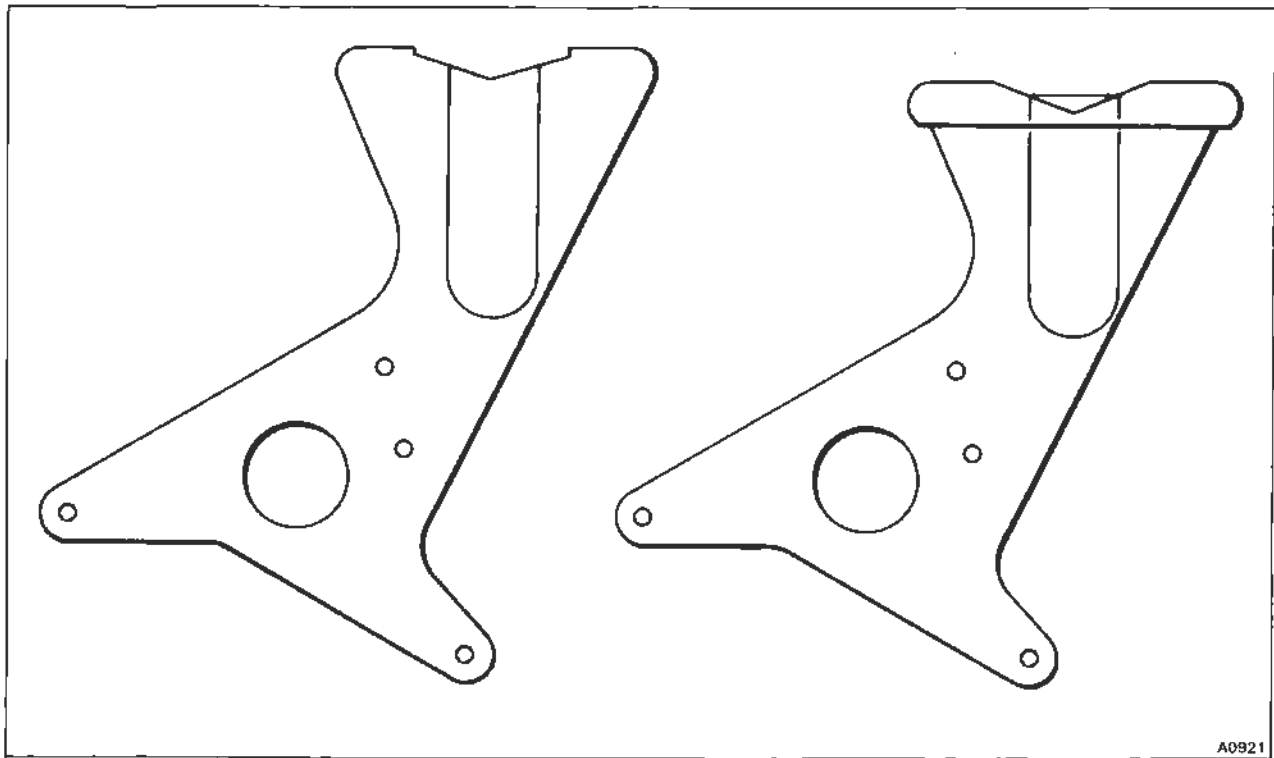


Fig. 1 Modified end support bracket

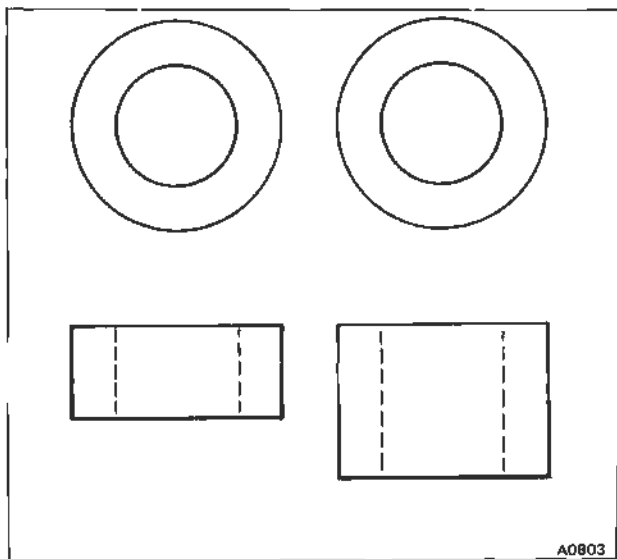
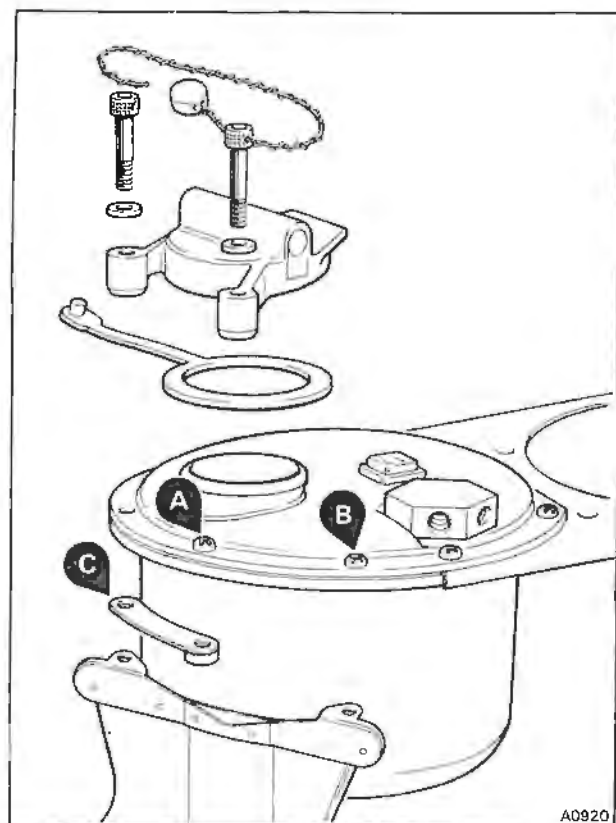


Fig. 2 Modified spacer



A0920

Fig. 3 Modified end support bracket installations

A

DO NOT USE	ALWAYS USE
Do not use RR363, Universal, or any other brake fluid.	Use only Hydraulic System Mineral Oil (LHM) from special container. Spare container in luggage compartment.
Ne pas utiliser RR363, Universal, ou tout autre liquide pour freins.	Utiliser seulement de l'huile minérale pour système hydraulique (LHM) provenant d'un conteneur spécial. Conteneur de réserve dans le coffre à bagages.
Es dürfen keine RR363, Universal oder andere Bremsflüssigkeiten verwendet werden.	Nur Mineralöl (LHM) für Hydrauliksystem aus dem Spezialbehälter verwenden. Ersatzbehälter im Gepäckraum.
Non usare fluido per freni RR363, Universal o di altro tipo.	Usare solo olio minerale per impianto idraulico (LHM) dal contenitore speciale. Contenitore di scorta nella bauletto.
No usar RR363, Universal o cualquier otro líquido para frenos.	Usar solamente aceite mineral para sistema hidráulico (LHM) del recipiente especial. Se incluye recipiente de reserva en el maletero.
لا تستخدم آر ٣٦٣ أو أي سائل آخر للفرامل.	استعمل زيت معدني هيدروليكي (LHM) فقط من حاوية خاصة. حاوية احتياطية في صندوق الأمتعة.

WARNING. CLEAN FILLER PLUG BEFORE REMOVING. USE ONLY HYDRAULIC SYSTEM MINERAL OIL FROM SEALED CONTAINER.

B

ACHTUNG: NUR HYDRAULIKÖL MINERAL (LHM) NACHFÜLLEN

ATTENTION: UTILISEZ SEULEMENT LIQUIDE HYDRAULIQUE MINERAL (LHM)

ATTENZIONE: USARE SOLO FLUIDO A BASE MINERALE PER L'IMPIANTO IDRAULICO (LHM)

ATENCIÓN: USE SOLAMENTE ACEITE MINERAL HIDRÁULICO (LHM)

استعمل فقط زيت (L) هيدروليكي معدني

Y36

Fig. 4 Multi-lingual warning label

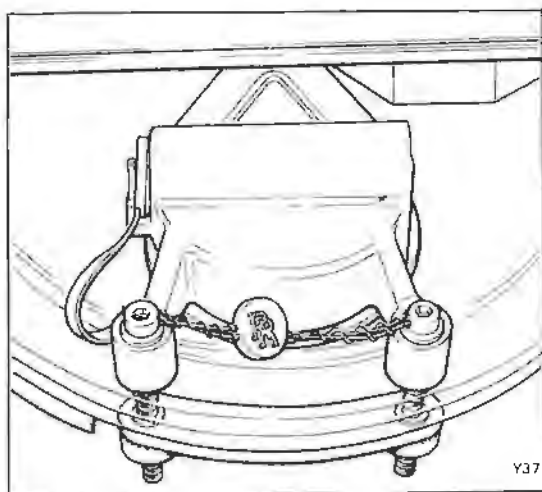


Fig. 5 Security seal

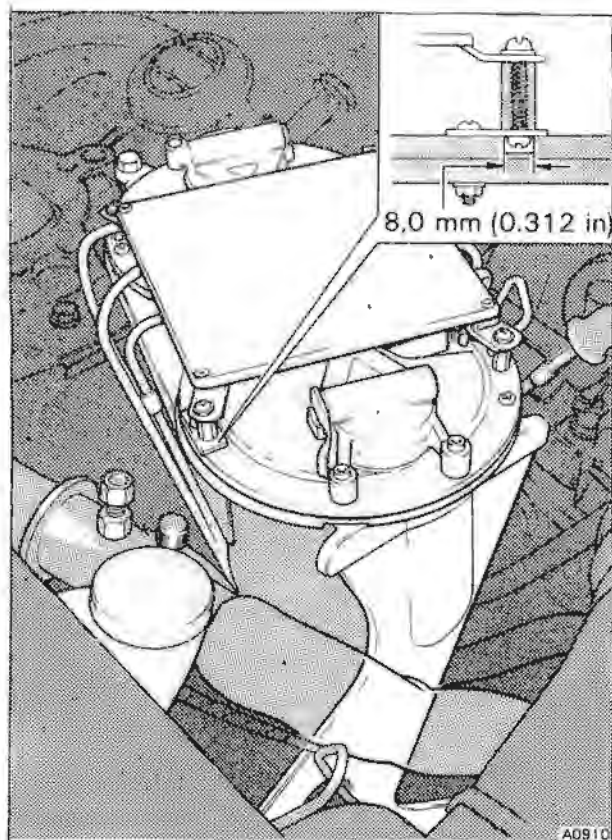


Fig. 6 Warning label fitting -
Corniche and Camargue

Service Bulletin

ROLLS-ROYCE
MOTORS

Car Division

TSD 4318

Bulletin number	SY/G75	Date	10	10	84	Page	1	of	10
Circulation list									

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

HEIGHT CONTROL VALVE

APPLICABLE TO:

All Rolls-Royce and Bentley motor cars from car serial numbers.

DRH 50003 - Corniche
to

DRX 50757

JRK 50001 - Camargue
to

JRX 50776

INTRODUCTION:

This service bulletin has been issued to advise all Service Personnel of the procedure to be adopted and the parts required to retrospectively fit the latest type of height control valve to the above cars.

DESCRIPTION:

The kit of parts consists of a height control valve and mounting bracket assembly. This includes an adjustable minimum pressure valve, height control valve actuator assembly, connector block, restrictor, pipe adapters, special pipes, and drain hose.

The above assemblies are common to all cars. However, due to varying car specifications, the kits will include some or all of the following items. Exhaust mounting brackets, hydraulic filters, and shorter actuation link rods.

In addition to the parts supplied, it will be necessary to shorten one or two pipes (depending upon car specification) and to replace the metric pipe unions with unified unions. It will also be necessary to locally manufacture two short pipes which connect the filter to the height control valve.

As there are a number of different minimum pressure valve setting pressures on cars in service, the use of an adjustable minimum pressure valve enables the individual valve to be set to the required pressure on the car.

The new height control valve assemblies will be supplied for all replacement purposes when stocks of the earlier valve are exhausted.

Note

As there is a slight variation in operating characteristics between the early and late type height control valves, the new valves must be fitted in car sets only.

PROCEDURE - HEIGHT CONTROL VALVE - TO REPLACE

- 1 Place the car on a suitable ramp. Chock the front wheels, select Neutral, remove the gearbox thermal cut-out and isolate the battery.
- 2 Depressurize the hydraulic system and struts as described in Chapter G of the Workshop Manual TSD 4400.
- 3 Remove the exhaust tailpipes.
- 4 Remove the height control valve and restrictor (if fitted).
- 5 Remove the exhaust tailpipe front mounting bracket. This is fitted adjacent to the height control valve mounting bracket.
- 6 Remove the height control valve mounting bracket.
- 7 Clamp the hose in the fuel return line, on the fuel tank side of the non-return valve (see fig. 1, item 6). (Cars other than Turbo and petrol injection models).
- 8 Slacken the clips (see fig. 1, item 5) and remove the hose from the non-return valve.
- 9 Remove the clips securing the hydraulic pipes to the underfloor of the car (see fig. 1, items 3 and 4).
- 10 On cars fitted with hydraulic filters adjacent to the priority valve, lower the priority valve to height control valve pipe (see fig. 1, item 12). Using a pipe cutter, cut the pipe at the third bend from the end of the pipe (see fig. 1, item 2).
- 11 Fit a unified pipe union and reflare the pipe using a suitable hand held tool such as Snap-on (number TF7A) or Sykes- Pickavant (number 026300).

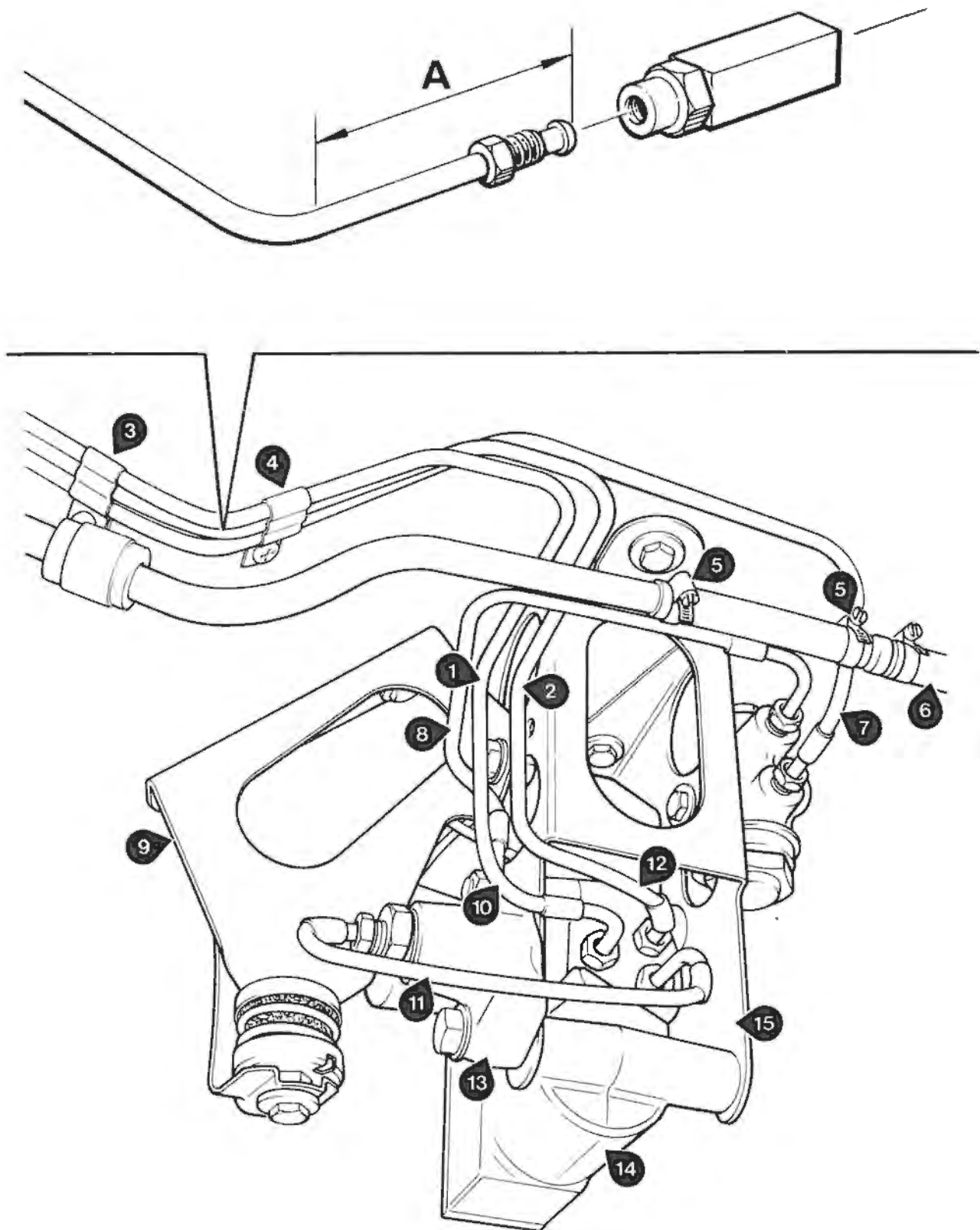


Fig. 1

- 1 Point at which the height control valve return pipe is cut.
- 2 Point at which the priority valve to height control valve is cut.
- 3 Pipe Clip.
- 4 Pipe Clip.
- 5 Hose Clips.
- 6 Fuel return hose and clamping position.
- 7 Strut drain to reservoir return pipe.
- 8 Restrictor to minimum pressure valve pipe.
- 9 Tail pipe mounting bracket.
- 10 Height control valve to reservoir return pipe.
- 11 Height control valve to restrictor feed pipes.
- 12 Priority valve to height control valve feed pipe.
- 13 Restrictor.
- 14 Height control valve.
- 15 Height control valve mounting bracket.

A = 44mm (1.75 in)

IMPORTANT

Cleanliness is of the utmost importance if component failure is to be avoided. Therefore, it is imperative that the pipes are checked for the presence of swarf or dirt before making a connection.

- 12 On earlier cars without filters, cut and flare the priority valve to height control pipe (see fig. 1, item 12) at the position marked A in figure 1 i.e. 44mm (1.75 in) from the bend. The filter can then be fitted in the position indicated.
- 13 Lower the height control valve to reservoir return pipe (see fig. 1, item 10). Cut the pipe (see fig. 1, item 1), fit a unified pipe union and reflare the pipe.
- 14 If the car is already fitted with hydraulic filters adjacent to the height control valve, it will be necessary to locally produce two pipes to connect the filters to the height control valves (see fig. 2).
- 15 Fit the shorter height control valve links to the new height control valves.
- 16 Fit the height control valve assemblies to the car, using the bolts supplied in the kit which accomodates the additional spacers, fitted between the mounting bracket and floor of the car.



Fig. 2

CARS OTHER THAN PETROL INJECTION MODELS

Right-Hand Pipe

A = 95mm (3.75 in) B = 76mm (3.00 in)

Left-Hand Pipe

A = 76mm (3.00 in) B = 64mm (2.50 in)

PETROL INJECTION MODELS

Right-Hand Pipe

A = 59mm (2.31 in) B = 54mm (2.12 in)

Left-Hand Pipe

A = 70mm (2.75 in) B = 64mm (2.50 in)

- 17 Re-align and fit the minimum pressure valve to strut feed pipe into the upper port of the minimum pressure valve (see fig. 3, item 4).
- 18 Re-align and fit the strut drain to minimum pressure valve return pipe into the lower port of the minimum pressure valve (see fig. 3, item 5).
- 19 Fit the strut drain to reservoir return pipe, to the lower port of the minimum pressure valve (see fig. 3, item 3).
- 20 Fit the filter to the priority valve to height control valve pipe (early cars).
- 21 Fit the filter to height control valve pipe into the upper port of the two-way connector block with the longer leg of the pipe into the two-way connector block.
- 22 Fit the height control valve to reservoir return pipe, into the lower port of the two-way connector block.
- 23 Re-clip the hydraulic pipes to the floor of the car.

- 24 Reconnect the fuel return hose and remove the clamp.
- 25 Fit new exhaust tail pipe mounting brackets, cars other than turbo (Brackets are not refitted on turbo cars, therefore the mounting bolt holes should be suitably blanked off).
- 26 Fit the exhaust tail pipes.
- 27 Reconnect the battery.

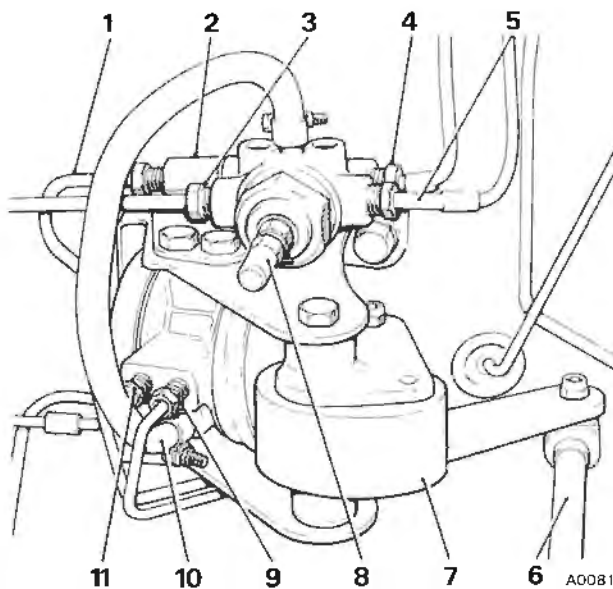


Fig. 3

- 1 High pressure feed height control valve to minimum pressure valve.
- 2 Restrictor
- 3 Low pressure return - strut drain to reservoir
- 4 High pressure feed to strut
- 5 Low pressure return - strut drain to minimum pressure valve
- 6 Height control valve link
- 7 Actuator assembly - height control valve
- 8 Adjuster - minimum pressure valve setting pressure
- 9 Low pressure return - height control valve to reservoir
- 10 Hose - height control valve drain
- 11 High pressure feed - priority valve to height control valve

HEIGHT CONTROL VALVE LINKS - TO SET

- 1 Ensure that the tools, jack and spare wheel are fitted.
- 2 The fuel tank must be full or weight added to compensate i.e. add 3,4kg (7.5 lb) of weight for each missing 4,5 litres (1 Imp Gallon) of fuel, placed as close as possible to the fuel tank.

- 3 Remove the strut bleed screws and fit pressure gauges (part number RH 9727 GMF).
- 4 Start the engine and allow the hydraulic system to fully pressurize (allow four minutes).
- 5 Bleed the struts.
- 6 Raise the actuation links equal amounts. Check that there is a delay before the car begins to rise and that the car rises smoothly. Allow the car to rise until approximately 35 bar (500 lbf in²) registers on the pressure gauge.
- 7 Slowly pull both links down simultaneously to the fully lowered position. Check that there is a delay before the car begins to fall.
- 8 Allow the car to settle at the fully lowered position, then check the minimum pressure valve setting pressure.

Note

On cars which were fitted with restrictors mounted on the height control valve mounting bracket (and also cars without restrictors) the pressure should be: 21 to 24 bar (300 to 350 lbf in²).

On later cars having the restrictor in the inlet port of the minimum pressure valve, the setting pressure should be 24 to 26 bar (350 to 380 lbf in²).

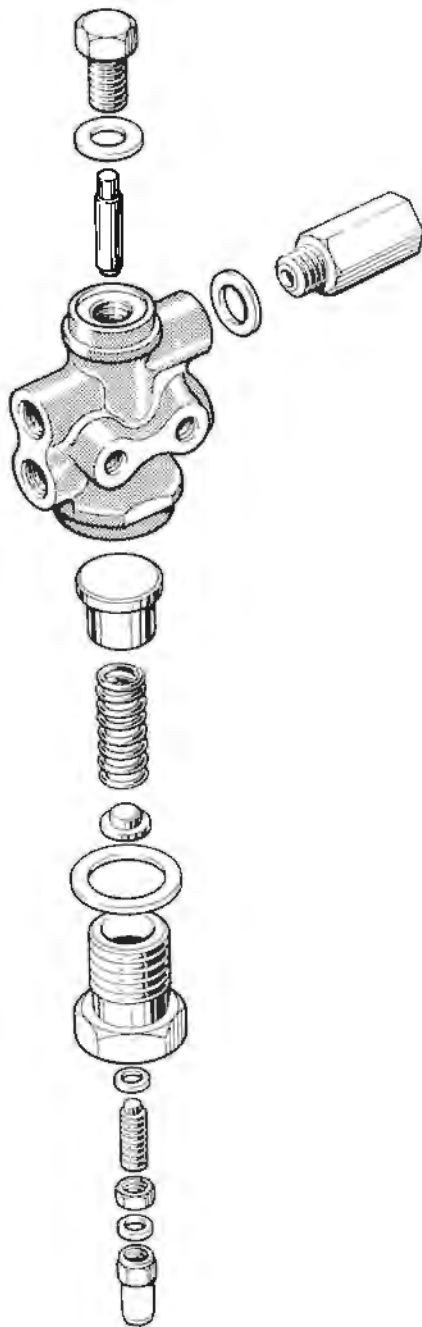
- 9 If the minimum pressure valve setting pressure does not meet the above specification, then the valve should be adjusted using the following procedure.
- 10 Remove the domed nut (see fig. 3, item 8) from the underside of the minimum pressure valve. Slacken the lock-nut on the exposed Allen screw (see fig. 4) and either turn the Allen screw clockwise to increase the setting pressure or anti-clockwise to decrease the pressure.

Note

A quarter turn of the Allen screw will alter the setting pressure by approximately 7 bar (10 lbf in²).

After making an adjustment to the pressure setting carry out operations 6 to 8 above, then tighten the lock-nut and replace the domed nut.

- 11 Slowly raise both links until the pressure gauge needles begin to move. Immediately pull both links down sufficiently to stop the needles moving. The height control valves are now in the neutral position.



A00182

Fig. 4 Adjustable Minimum Pressure Valve and Restrictor

- 12 Adjust the actuation links until the ball joints fit neatly onto the ball pins on the trailing arms. Grease the joints, adjust to give zero free play while still ensuring freedom of movement. Tighten the ball joint lock-nuts.
- 13 Pull down the rear bumper and check that both sides of the car rise smoothly.
- 14 Release the bumper, and check that both sides of the car lower down smoothly to the minimum pressure valve setting pressure.
- 15 Depressurize the hydraulic system and struts.
- 16 Remove the pressure gauges.
- 17 Remove the weights, if applicable.
- 18 Bleed the system.
- 19 Top-up and seal the reservoirs.

MAN-HOUR SCHEDULE OPERATION

Number	Description	Time
15 11 00 S	Height Control Valves to renew	6.00 Hours

PARTS REQUIRED

- a) RH 2891 GMF Height Control Valve Conversion Kit
comprising of:

Part Number	Description	Quantity
UR 23674/A1	Height Control Valve Assembly Left-hand	1 off
UR 23674/A2	Height Control Valve Assembly Right-hand	1 off
UR 27138	Spacer - Height Control Valve Mounting Bracket	6 off
UA 104/Z	Bolt - Height Control Valve Mounting Bracket	6 off
UR 23334	Filter	2 off
UR 26627	Mounting Bracket - Tail pipe Left-hand	1 off
UR 26628	Mounting Bracket - Tail pipe Right-hand	1 off
SPC 3270	Actuation Link Rod	2 off

APPLICABLE TO

All Silver Spirit, Silver Spur, Corniche, Camargue and Mulsanne cars, prior to (VIN) *SCAZS0000BCH02055*(other than North American Corniche and Mulsanne Turbo cars).

- b) RH 2888 GMF Height Control Valve Conversion Kit
comprising of:

Part Number	Description	Quantity
UR 23674/A1	Height Control Valve Assembly Left-hand	1 off
UR 23674/A2	Height Control Valve Assembly Right-hand	1 off
UR 27138	Spacer-Height Control Valve Mounting Bracket	6 off
UA 104/Z	Bolt - Height Control Valve Mounting Bracket	6 off
UR 26627	Mounting Bracket - Tail pipe Left-hand	1 off
UR 26628	Mounting Bracket - Tail pipe Right-hand	1 off
SPC 3270	Actuation Link Rod	2 off

APPLICABLE TO

All Silver Spirit, Silver Spur, Corniche, Camargue and Mulsanne cars from (VIN) *SCAZS0000BCH02055* (other than North American Corniche and Mulsanne Turbo cars).

- c) RH 2887 GMF Height Control Valve Conversion Kit
comprising of:

Part Number	Description	Quantity
UR 23674/A1	Height Control Valve Assembly Left-hand	1 off
UR 23674/A2	Height Control Valve Assembly Right-hand	1 off
UR 27138	Spacer - Height Control Valve Mounting Bracket	6 off
UA 104/Z	Bolt - Height Control Valve Mounting Bracket	6 off
UR 23334	Filter	2 off
UR 26627	Mounting Bracket - Tail Pipe Left-hand	1 off
UR 26628	Mounting Bracket - Tail pipe Right-hand	1 off
SPC 2785	Actuation Link Rod	2 off

APPLICABLE TO

All North American Corniche cars prior to (VIN) *SCAZS0000BCH02055*.

Hly/AEB

Service Bulletins



Chapter H Sub-frames and Suspension

Service Bulletin



TSD 4318

Bulletin number	SY/H27					Date	26 10 84					Page	1 of 3				
Circulation list																	

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

REAR ROAD SPRING RATTLE

APPLICABLE TO:

All Rolls-Royce and Bentley motor cars from car serial numbers.

DRH 50003 - Corniche

JRK 50001 - Camargue

INTRODUCTION:

A number of complaints of rear road spring noise have been reported on cars in service. In order to resolve the problem, a new road spring has been introduced. All cars now leaving the factory are fitted with the new spring.

The new spring will be supplied for all replacement purposes.

A modification using a flexible packing ring has been developed for use on earlier motor cars.

This service bulletin has been issued to describe the features of the new spring, and to advise of the procedure to be adopted should the complaint develop on earlier cars.

DESCRIPTION:

The noise is produced when the chamfered ends of the first coil make and break contact with the second coil of the spring. In order to eliminate this condition, it has been necessary to remove the chamfered part of the spring leaving the ends cut square.

The noise may manifest itself as either a rattle, or a twanging noise particularly over sharp bumps at low speeds, around 8 - 16 km/h (5 - 10 mile/h).

On receiving a complaint of road spring rattle on earlier cars, it should be established that the rattle is emitted by the spring and not due to cavitation of the strut. If there is any doubt, add approximately 227 kg (500 lb) of weight to the luggage compartment of the car. This ensures that the height control valves are actuated, and the struts fully pressurized. The car should then be road tested. If the noise is eliminated, then the rattle would have been caused by cavitation. However, if the rattle is still evident then the following procedure should be adopted.

PROCEDURE:

- 1 Remove the rear road spring as described in the relevant Workshop Manual.
- 2 Decompress the spring using service tool numbers RH 7909 and RH 9504.
- 3 Obtain four flexible rear road spring seats (part number UR 20847) remove the rim, then cut the remaining flat circular washer as illustrated in figure 1, items 1 and 2.

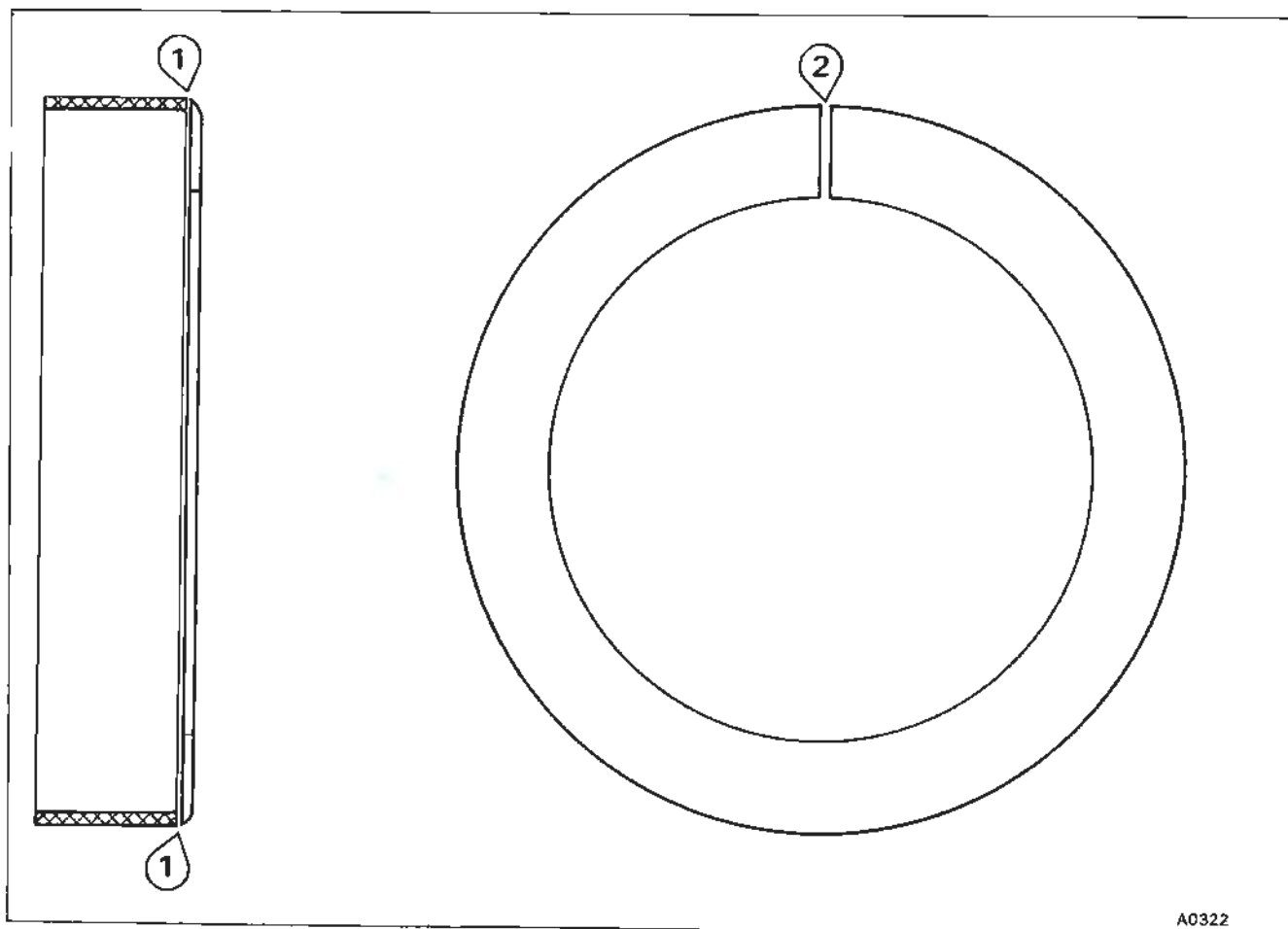


Fig. 1 Flexible Spring Seat

- 4 Place the flexible washers between the first and second coils at each end of the springs (see fig. 3).
- 5 Compress the spring, and refit them to the car.

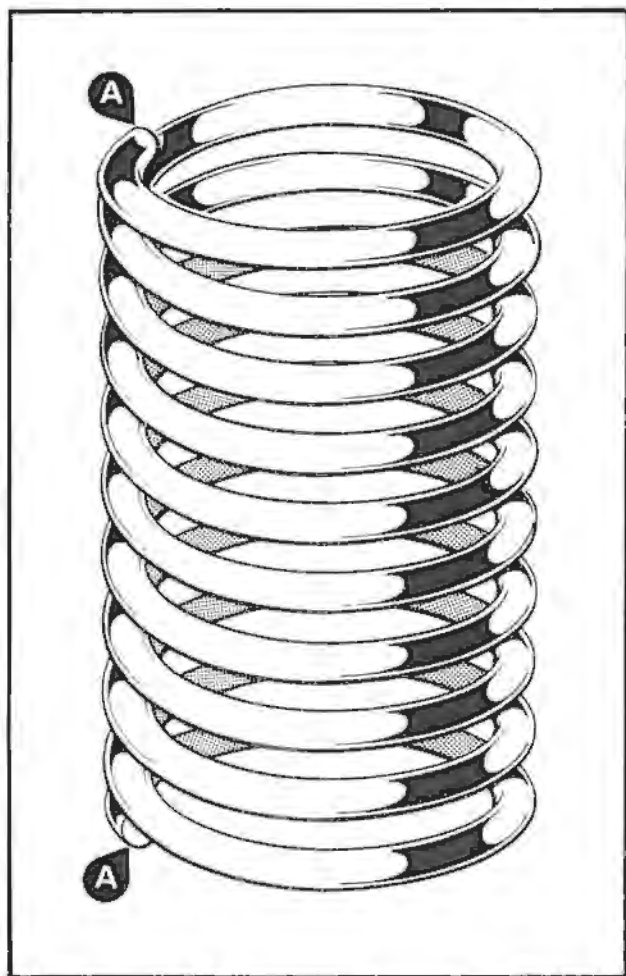


Fig. 2 New Spring

A Square cut coil ends

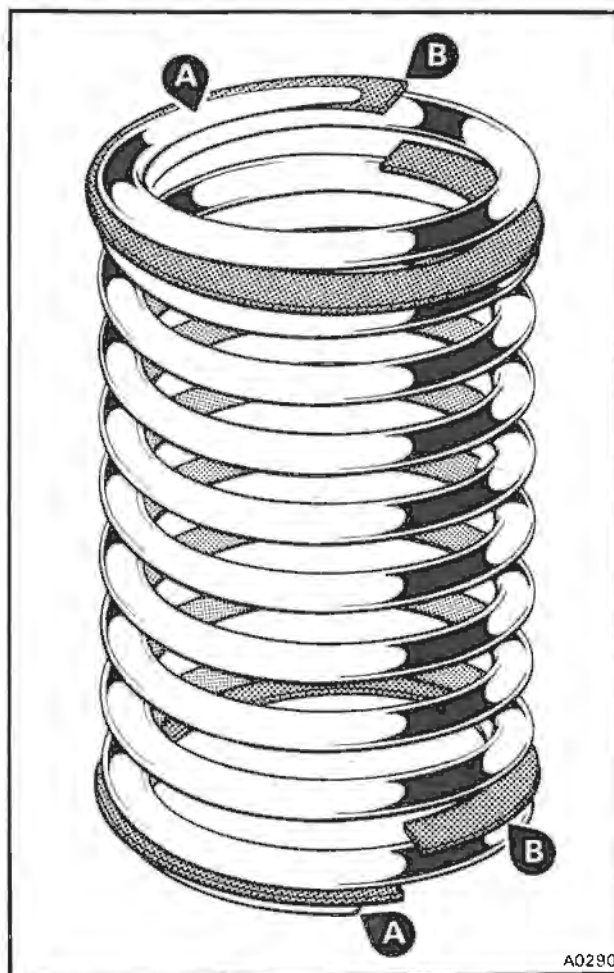


Fig. 3 Early Spring

A Chamfered coil ends
B Flexible washerPARTS AFFECTED:

Displaced Part Number	Description	New Part Number	Quantity
	Rear Road Spring	UR 23473 (Existing Number)	2 off
	Flexible Spring Seat	UR 20847	4 off

MAN HOUR SCHEDULE OPERATION:

21 01 00S Detail Code 00 Failure Code 18

Hly/AEB

Service Bulletin



TSD 4318

Bulletin number	SY/H28										Date	27.9.85			Page	1 of 2		
Circulation list																		

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

FRONT SUSPENSION DAMPERS

APPLICABLE TO

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche and Camargue cars and all Bentley, Bentley T, Bentley T2 and Corniche cars.

INTRODUCTION

We have been informed by Girling that they have ceased the manufacture of front suspension dampers.

This service bulletin is to advise service personnel that alternative dampers are available and will be supplied for all replacement purposes.

DESCRIPTION

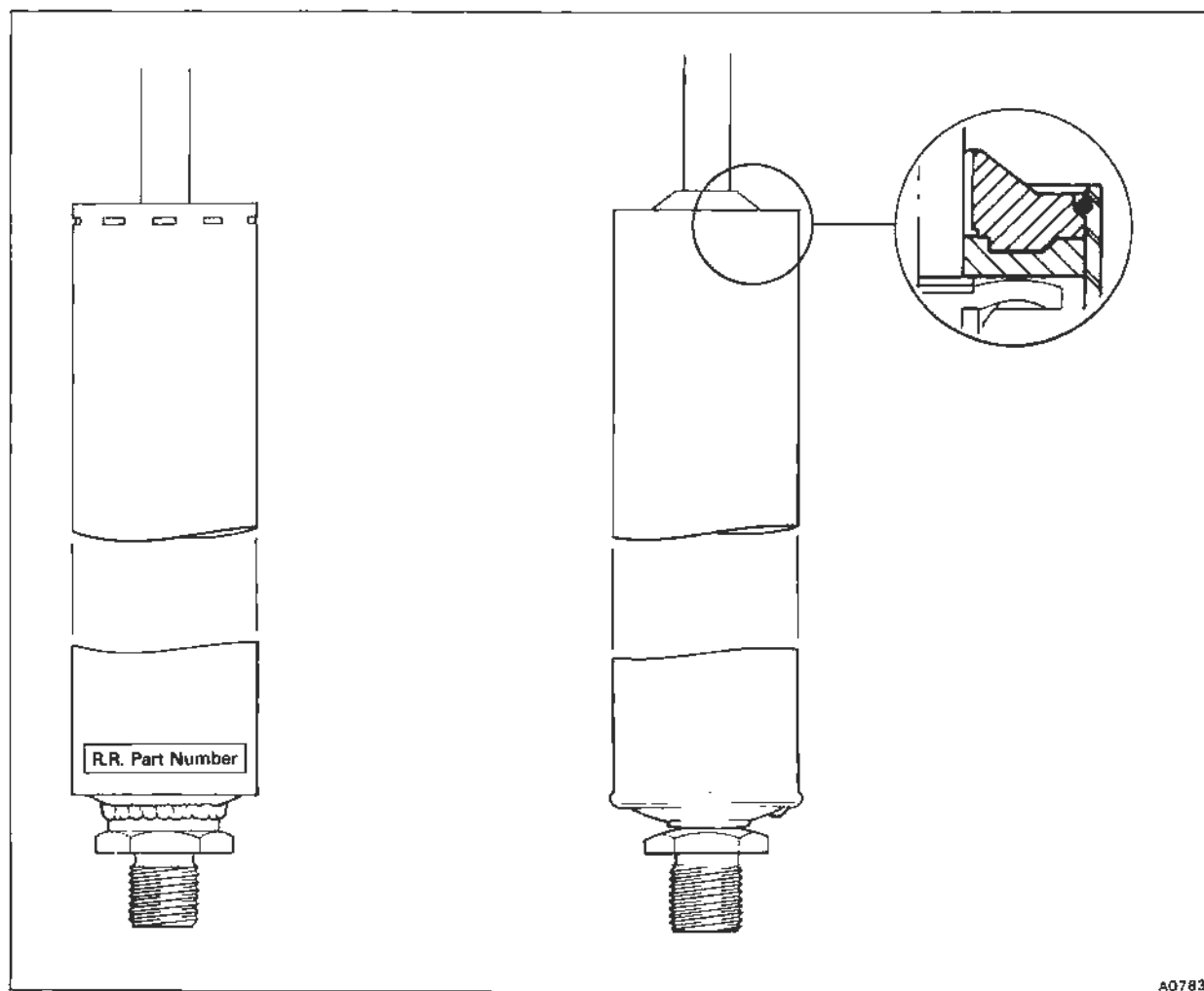
The new dampers retain the original part numbers and are interchangeable as individual units.

The new dampers can be identified by the part number which can be found on the lower periphery of the damper and by the crimping at the top of the damper (see fig. 1).

The old type damper can be identified by an internal circlip at the top of the damper (see fig. 1).

PARTS AFFECTED

UR 16333	Front Suspension Damper
UR 16327	Front Suspension Damper
UR 16330	Front Suspension Damper
UR 16331	Front Suspension Damper
UR 16332	Front Suspension Damper
UR 17051	Front Suspension Damper



New type

Old type

Fig. 1. Front suspension damper

Service Bulletins



Chapter J

Final Drive

Service Bulletin



Car Division

TSD 4318

Bulletin number	SY/J9				Date	22 4 81				Page	1 of 1			
Circulation list														

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

FINAL DRIVE OUTPUT SHAFT SEALS

APPLICABLE TO:

All Rolls-Royce (except Phantom VI) and Bentley motor cars from car serial number SBH 1001.

INTRODUCTION:

The purpose of this bulletin is to advise of the introduction of improved output shaft lip seals from car serial number DRX 50755.

DESCRIPTION:

The new output shaft lip seals obtainable under part number UG 14641 are of an improved design and are directly inter-changeable with the previous seal UG 10061.

Replacement procedures are unaffected.

Prior to fitting the seal into the housing the outer periphery should be brushed with Wellseal sealant.

When existing stocks of the earlier seal are exhausted, the new seal will be used for replacement purposes on all Rolls-Royce and Bentley cars from serial number SBH 1001, but excluding Phantom VI motor cars.

Hly/Fcr

Service Bulletin



TSD 4318

Bulletin number	SY/J10					Date	22 4 81			Page	1 of 1		
Circulation list													

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

FINAL DRIVE PINION SEAL

APPLICABLE TO:

All Rolls-Royce (except Phantom VI) and Bentley motor cars from car serial number SBH 1001.

INTRODUCTION:

The purpose of this bulletin is to advise of the introduction of an improved final drive pinion oil seal from car serial number SRH 0040341.

DESCRIPTION:

The pinion flange seal (UG 10331) has been replaced by a new seal (UG 14581).

This new lip seal provides improved sealing and is directly interchangeable with its predecessor. It will therefore be supplied for all replacements on the above series cars when existing stocks of the earlier seal are exhausted.

Prior to fitting the seal into the housing, the outer periphery should be brushed with Wellseal sealant to prevent oil from seeping around the outside of the seal.

Hly/Fcr

Service Bulletin



TSD 4318

Bulletin number	SY/J11										Date	31 7 81			Page	1 of 3		
Circulation list																		

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

INTRODUCTION OF CONSTANT VELOCITY DRIVE-SHAFT AND JOINTS

APPLICABLE TO:

All Rolls-Royce Corniche and Camargue cars and all Bentley Corniche cars from the following vehicle identification numbers.

SCAYD0004BCHO2440 - Corniche
including.
SCAYD0009BCHO1557
SCAYD42A8BCX01558
SCAYD0004BCX01561
SCAYD0006BCHO1564
SCAYD0007BCX01568

SCAYJ0007BCHO2568 - Camargue
including
SCAYJ42A3BCX01573
SCAYJ0008BCHO2126

INTRODUCTION:

Drive-shafts featuring a 'Hookes' joint and 'Detroit' type joint were previously fitted to cars prior to the above vehicle identification numbers. These have now been replaced with constant velocity joints, generally referred to as 'Lobro' drive-shafts, after the name of their manufacturer, Löhrr and Bromkamp.

DESCRIPTION:

The 'Lobro' constant velocity drive-shaft assembly consists of a shaft, splined at each end, onto which are pressed constant velocity joints. These are retained by circlips.

Both joints are pre-packed with grease and are enclosed on the inner face with a pressed steel adapter and convoluted rubber boot. There is a pressed steel cap on the outer face.

The inner constant velocity joint is coupled to the final drive using a splined output-shaft retained in the drive-shaft bearing housing by a circlip. Six metric capscrews and three crescent shaped plate washers secure the constant velocity joint to this drive flange. A tapered and keyed driven flange is attached to the rear hub drive-shaft and secured by a large nut. The outer constant velocity joint is then attached to this flange by six metric capscrews and three crescent shaped plate washers.

There are several advantages in using 'Lobro' constant velocity joints, they are.

1. They improve the refinement of the car particularly under accelerating and cornering conditions.
2. 'Lobro' constant velocity joints have a longer service life than the 'Hookes' and 'Detroit' type joints.
3. Final drive removal and refitting is made easier and quicker.

To remove the 'Lobro' constant velocity drive-shaft assemblies the following procedure should be adopted.

PROCEDURE:

To remove

1. Place the car on a suitable ramp, apply the parking brake, chock the wheels and isolate the battery.
2. Identify each shaft to ensure correct positioning when refitting.
3. Remove the metric capscrews securing the constant velocity joints to the flanges, and remove the drive-shaft assembly.

To remove the Differential and Axle coupling flanges proceed as follows.

4. Remove the six nuts securing the drive-shaft bearing housing to the final drive casing, and withdraw the output-shaft and bearing housing.
5. Remove the circlip and washer from the output-shaft; remove the bearing and housing.
6. Remove the large nut securing the driven flange to the rear hub drive-shaft and remove the driven flange with a suitable puller.

To refit

Fit the 'Lobro' constant velocity drive-shaft assemblies by reversing the above procedure.

Torque tightening figures are as follows.

Nut, driven flange to hub drive-shaft	664 Nm to 691 Nm (67,7 kgf m to 70,5 kgf m; 490 lbf ft to 510 lbf ft)
Nut, drive-shaft bearing housing	10 Nm to 13 Nm (1,1 kgf m to 1,4 kgf m; 8 lbf ft to 10 lbf ft)
Metric capscrews	48 Nm to 57 Nm (4,9 kgf m to 5,8 kgf m; 36 lbf ft to 42 lbf ft)

Whilst the constant velocity joints themselves are not serviceable it is possible to change the rubber boot in the event that the old one is damaged or fails in service.

Note

'Lobro' drive-shaft assemblies will not be fitted retrospectively.

PARTS AFFECTED:

Displaced		New
UG 13857	Differential Output-Shaft	UG 14592
UG 14604	Shaft and Constant Velocity Joint	UG 14547
UG 13286	Driven Flange	UG 14545
UG 4505	Capscrews	SPM 1396
-	Plate Washer	SPM 1405
-	Rubber Boot	CD 6183
-	Clip - large	CD 6184
-	Clip - small	CD 6185

Hly/AEB

Service Bulletin



Car Division

TSD 4318

Bulletin number	SY/J12				Date 84				Page 1 of 3			
Circulation list												

Category

ALL ROLLS-ROYCE FRANCHISE HOLDERS

FINAL DRIVE PINION HOUSING

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche and Camargue cars, and all Bentley T Series, Bentley T2 and Corniche cars.

INTRODUCTION:

All new and reworked final drive assemblies supplied by the factory, are fitted with revised pinion bearing housings. The revised housings improve the oil flow to the pinion tail bearing during low temperature drive-away. The revised housing will be supplied for all replacement purposes.

This service bulletin has been issued to advise all service personnel that, in the event of an earlier type pinion and housing assembly requiring an overhaul or rework, the pinion bearing housing should be revised to conform to the current specification.

DESCRIPTION:

In order to improve the oil flow to the pinion tail bearing it has been necessary to increase the size of the oil delivery hole from 7,93 mm (0.312 in) to 12,7 mm (0.500 in).

The hole enters the pinion housing at an angle of 13 degrees from the vertical plane instead of being produced at a right-angle, as on the earlier type (see figs. 1,2 and 3).

The part number of the housing remains unchanged.

PROCEDURE:

- 1 Remove the pinion from the housing.
- 2 Place the pinion housing in a suitable vice with the oil delivery hole vertically uppermost (see fig. 3).
- 3 Tilt the pinion housing to an angle of 13 degrees from the horizontal plane, (see fig. 2) and secure it in the vice.

- 4 Using a 12,7 mm (0.500 in) drill held vertically, carefully redrill the oil delivery hole. Ensure that the drill does not remove the ridge of material to the rear of the hole, as this forms a reservoir for the bearing lubricating oil (see fig. 4).
- 5 Ensure that the hole is free of burrs and swarf.
- 6 Thoroughly clean the housing and reassemble.

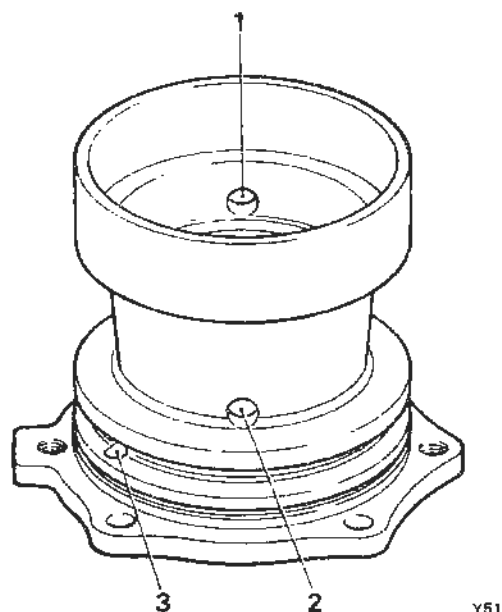


Fig. 1

- 1 Oil delivery hole - pinion centre bearing
- 2 Oil delivery hole - pinion tail bearing
- 3 Oil return hole - pinion tail bearing

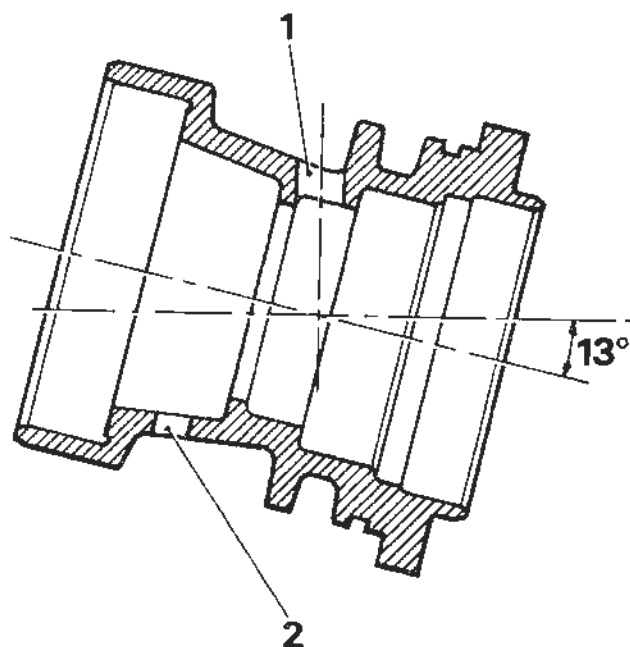
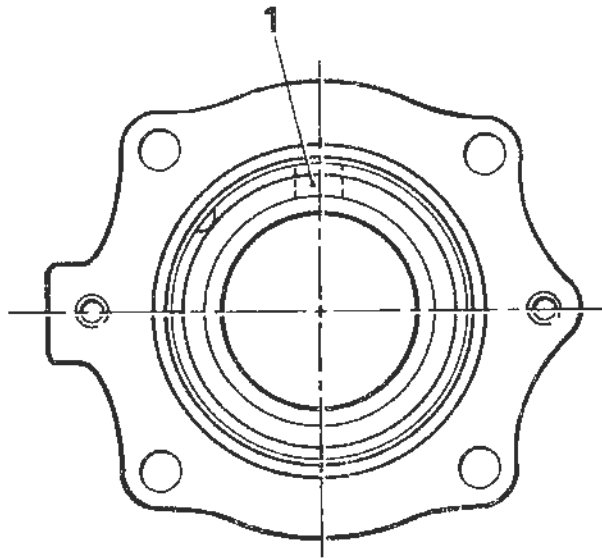


Fig. 2

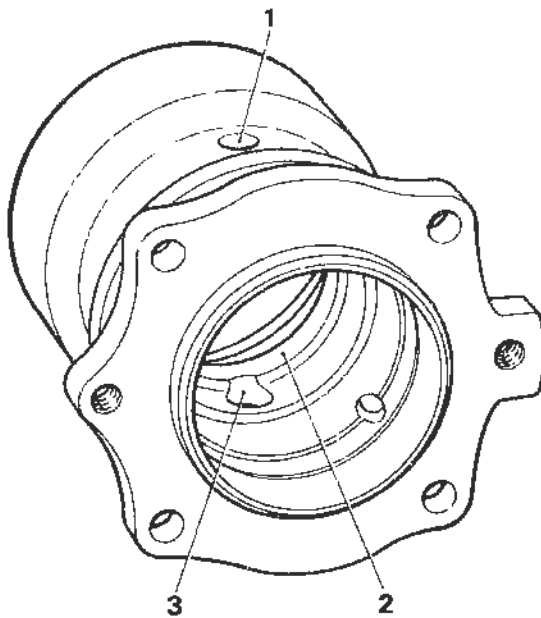
- 1 Oil delivery hole - pinion tail bearing - drilled at revised angle
- 2 Oil delivery hole - pinion centre bearing



Y50

Fig. 3

- 1 Position of oil delivery hole when secured for drilling



Y52

Fig. 4

- 1 Oil delivery hole - pinion centre bearing
2 Wall of oil reservoir - tail bearing
3 Revised oil delivery hole - tail bearing

Hly/AEB

Service Bulletins

ROYCE



Chapter K Fuel System and Carburetters

Service Bulletin



TSD 4318

Bulletin number	SY/K15					Date	18	8	81	Page	1	of	2
Circulation list													

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

FUEL FILTER

APPLICABLE TO:

All Rolls-Royce Corniche and Camargue cars and all Bentley Corniche cars (other than those fitted with petrol injection) from the following vehicle identification numbers (VIN).

SCAYD0005BCH01686 - Corniche
SCAYJ0000BCX01954 - Camargue
(including JRH0050758
and *SCAYJ0001BCX01574*)

INTRODUCTION:

A new fuel filter has been introduced on the above cars. This service bulletin has been issued to describe the new filter and the revised servicing procedures.

DESCRIPTION:

The new filter consists of a die cast aluminium alloy head incorporating two bleed screws, a steel filter bowl with a centre bolt securing the bowl to the head, and a paper filter element having the same filtering area as the filter previously fitted.

The filter is situated in a similar position to the previous unit, but no longer uses brackets to support it.

There are several advantages over the old type filter. They are:

1. The filter element is easier and quicker to change in service.
2. The centre bolt securing the bowl greatly improves the bowl sealing.
3. Improved corrosion resistance due to a change in the bowl material.
4. There is no longer any need for brackets for the filter as it is now supported by the pipe work.

SERVICING REQUIREMENTS:

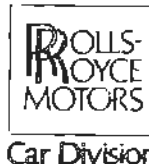
Servicing remains unchanged and the fuel filter element should be renewed at each 40,000 kilometres (24,000 miles) or 2 years service.

PARTS AFFECTED:

Displaced		New
UR 8551	Fuel Filter Assembly	UR 22695
UR 21298	Pipe Check Valve to Filter	UR 22705
UR 21284	Pipe Fuel Filter to Toeboard	UR 22704

Hly/AEB

Service Bulletin



TSD 4318

Bulletin number	SY/K16					Date	30	11	82	Page	1 of 2	
Circulation list												

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS IN THE USA ONLY

PROVISION OF ALTITUDE PERFORMANCE ADJUSTMENTS

APPLICABLE TO:

All Rolls-Royce and Bentley motor cars manufactured for initial sale in the USA (1968-1980 model years inclusive, except 1980 Californian specification cars).

INTRODUCTION:

Regulations concerning the provision of altitude performance adjustments, applying to all model years from 1968 to 1982 inclusive, necessitate the fitting of new needles to the carburetters to improve the exhaust emissions.

These adjustments concern vehicles being operated at altitudes other than those for which the vehicles were originally certified and applies to all Rolls-Royce and Bentley motor cars outlined above.

Supplements in Chapter U of the Workshop Manuals (TSD 2476 and TSD 4200) have been added which set out the correct procedures to be adopted when carrying out these modifications.

The changes necessary are briefly as follows.

1. Changing the carburetter needles.
2. Fitting a Vehicle Emission Control Information Update Label.
3. Checking and, if necessary, adjusting the idle CO.

DESCRIPTION:

The parts for these changes are supplied in kit form from
Rolls-Royce Motors Inc., Lyndhurst, New Jersey.

The following information gives model years of effected vehicles,
the relevant kit part numbers, needle identification, and the
relevant section of the Workshop Manual.

MODEL YEAR	KIT PART NUMBER	REPLACEMENT NEEDLE IDENTIFICATION NO. (stamped on shank)	RELEVANT WORKSHOP MANUAL AND SECTION
1968	RH 2819	CAA	Chapter U Section U.10
1969)			
1970)	RH 2820	BFR	Supplement Number 9
1971)			
1972)			
1973	RH 2821	BFQ	TSD 2476
1974	RH 2822	BFP	
1975)			
1976)	RH 2823	BFN	
1977)			Chapter U
1978)			
1979)	RH 2824	BEH	Supplement Number 1
1980)			
(Federal Spec. Only)			TSD 4200
<u>Note</u>	RH 2824 is Low to High altitude change		
1977)			
1978)	RH 2825	BEA	
1979)			
<u>Note</u>	RH 2825 is High to Low altitude change.		

Service Bulletin



TSD 4318

Bulletin number	SY/K17					Date	30	11	82	Page	1	of	3
Circulation list													

Category

ALL ROLLS-ROYCE FRANCHISE HOLDERS IN NORTH AMERICA ONLY

POOR HOT STARTING

APPLICABLE TO:

All Rolls-Royce and Bentley cars conforming to the following.

1977-1979 Californian specification
1977-1980 Federal specification
1977-1980 Canadian specification.

INTRODUCTION:

Reports from the field have identified a hot starting difficulty on some 1977 to 1980 Federal and Canadian specification cars and 1977-1979 Californian specification cars following a "hot soak" in high ambient temperatures.

The starting difficulties caused by rapid evaporation of fuel in the float chambers can cause fuel vapour to enter the induction and weakener system during "hot soak" conditions. This causes an excessively rich mixture during a subsequent start whilst the engine is still hot.

DESCRIPTION:

In order to alleviate this condition it is necessary to carry out the following.

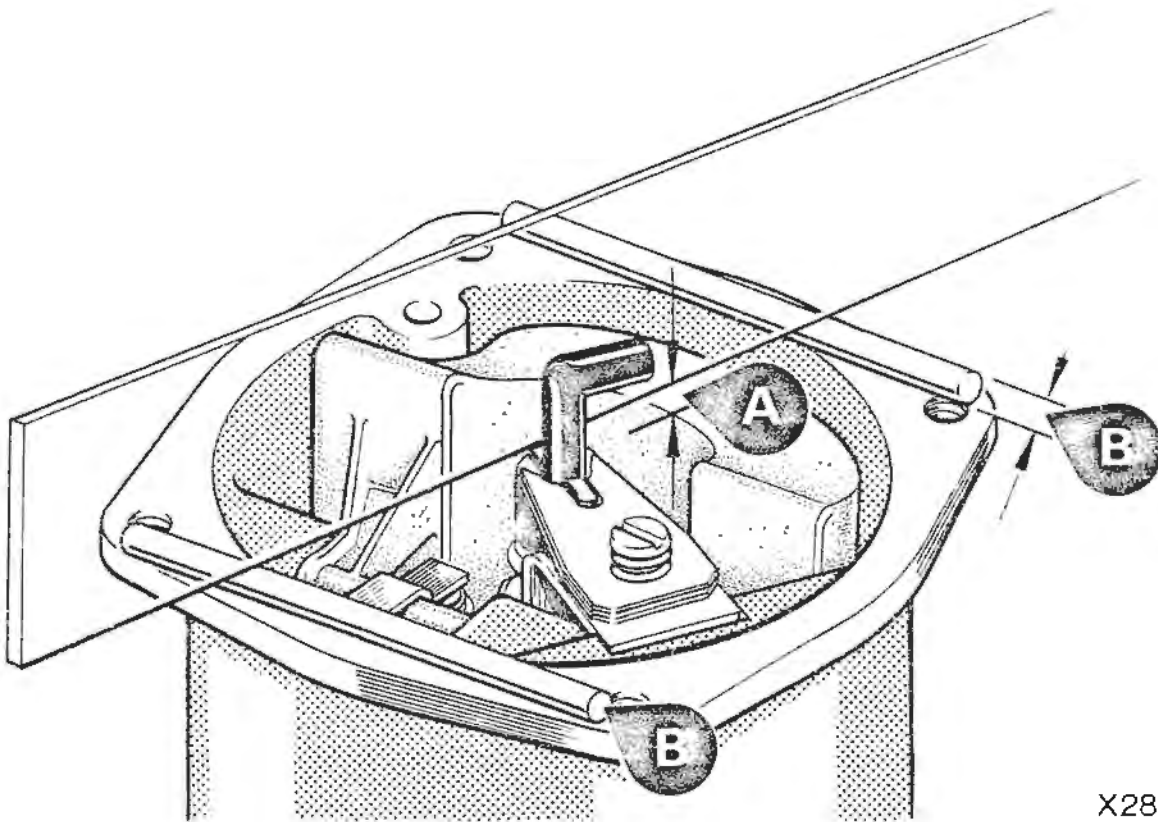
- 1 Remove and drill out the fuel recirculation restrictor from 1,90 mm (0.075 in) (nominal) to 3,17mm (0.125 in). DO NOT EXCEED THIS FIGURE.
- 2 Lower the float chamber fuel level.
- 3 Replace the existing brass bodied float chamber needle valve by a spring-loaded aluminium bodied valve.

PROCEDURE:

- 1 Remove the complete carburetter assembly as detailed in Chapter K of the Workshop Manual (TSD 4200).
- 2 Remove the fuel recirculation restrictor from 'A' bank carburetter filter housing.

- 3 Carefully drill out the restrictor using a 3,17mm (0.125 in) diameter drill. Remove any burrs and ensure that all traces of swarf are removed. Refit the restrictor.
- 4 Remove the bottom cover plates from the carburettor float chambers and remove the float assemblies.
- 5 Remove and discard both needle valves, leaving the brass seats in place.
- 6 Locate the wire stirrup of the aluminium bodied spring-loaded needles onto the brass anvil of the carburettor float.
- 7 Carefully lower the float and needle valve assembly into the float chamber, ensuring the needle valve locates correctly into the valve seat. Refit and tighten the pivot pin.
- 8 The revised float level settings are such that when the carburettors are inverted and the float is resting on the spring-loaded plunger (WITHOUT DEPRESSING THE PLUNGER), the lowest point of the float is above the float chamber flange.

To achieve the correct figures it will be necessary to employ two 1,52mm (0.060 in) dia. rods, which rest on either side of the float chamber flange (see fig.1).



X281

Fig. 1
A Zero to 1,01mm(0.040 in)
B 1,52mm(0.060in)

With a rule resting across the two rods and across the lowest level of the float (see fig.1) the rule should just touch the float, or a gap of up to 1,01mm (0.040in) should exist between the rule and the float.

Adjustment can be achieved by carefully bending the brass anvil. NOTE: Care should be taken not to depress the spring-loaded plunger when checking the float levels.

- 9 Refit the float chamber covers and refit the carburetter assembly.
- 10 Recheck and if necessary adjust the idle CO. ⁵

In the U S A, individual needle valves are available from Rolls-Royce Motors Inc., Lyndhurst, New Jersey; or in Canada from Rolls-Royce Motor Cars Limited, St. Laurent, Quebec.

Part number RH 9712.

Time allowed for this operation 2.3 hours.

Service Bulletin



TSD 4318

Bulletin number	SY/K18					Date	15 1 85					Page	1 of 1				
Circulation list																	

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

FUEL PUMP MOUNT

APPLICABLE TO:

All Rolls-Royce and Bentley motor cars built to North American and Japanese specifications from car serial numbers.

SRF 30001	-	Silver Shadow II
LRX 30083	-	Silver Wraith II
DRX 30009	-	Corniche
JRE 26486	-	Camargue

Also, all Rolls-Royce and Bentley motor cars other than those built to North American and Japanese specifications from car serial numbers.

DRH 50003	-	Corniche
JRH 50085	-	Camargue

INTRODUCTION:

There have been a number of reports of failed fuel pump mounts on cars in service. Therefore, a new mount has been introduced on all car models from vehicle identification number.

SCBZS8002FCH12295

DESCRIPTION:

Failure of the previous mount was due to metal corrosion inducing bond failure. Therefore, a brass and rubber bonded mount which is more resistant to the corrosive undercar environment than the steel and rubber mount, has been introduced.

As the same mount is used to mount the air conditioning blower motors, stocks of the earlier mount should be used for this application (as it is not subject to the same corrosive conditions).

Although similar in appearance to the earlier mount, the new mount can be identified by the threaded brass insert as opposed to the steel insert of the earlier type.

PARTS AFFECTED:

Displaced Part Number	Description	New Part Number
SPC 1889	Fuel Pump Mount	SPC 3391
Hly/AEB		

Bulletin number	SY/K19				Date	10	6	85	Page	1	of	2
Circulation list												

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

PIERBURG FUEL PUMP

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Bentley T 2 motor cars built to North American and Japanese specifications.

All Rolls-Royce Corniche, Camargue, and Bentley Corniche cars from car serial number CRH 50001 onwards.

INTRODUCTION:

A new fuel pump has been introduced and will be supplied for all replacement purposes when stocks of the previous pump are exhausted.

DESCRIPTION:

The new pump incorporates a different type of electrical connection. When used as a service replacement for the previous pump, a new type of Lucar connector will be required to adapt the existing wiring loom (see fig. 1 and 2).

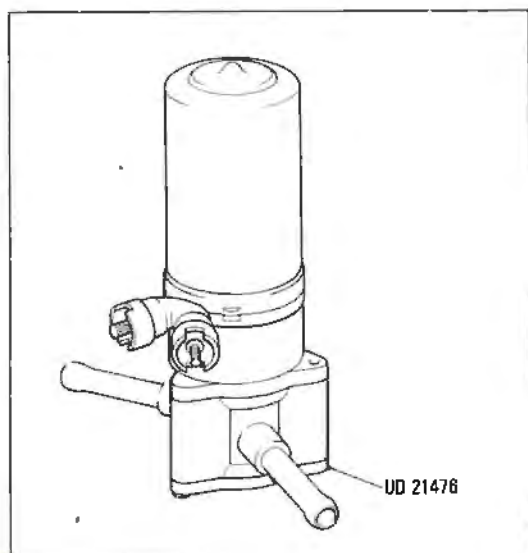


Fig. 1 Displaced fuel pump

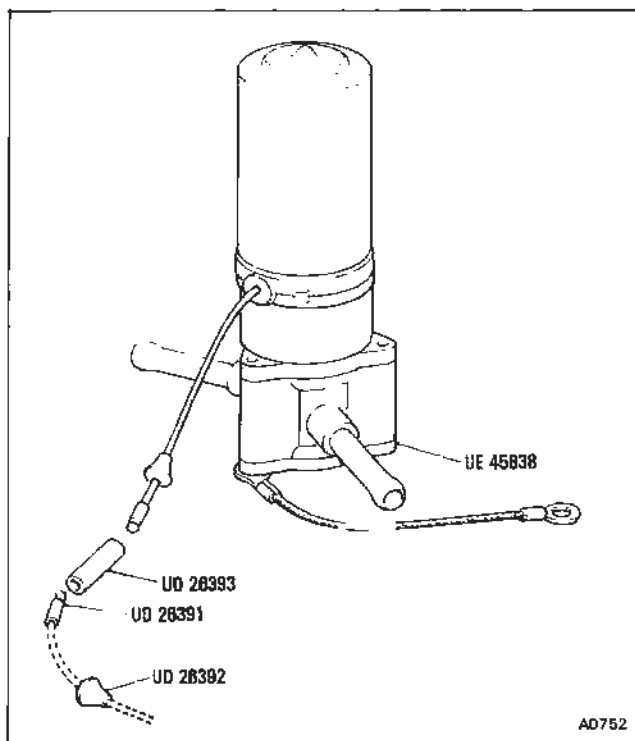


Fig. 2 New fuel pump

PARTS AFFECTED:

Displaced Part Number	Description	New Part Number
UD 21476 - 1 off	Pump, Fuel	UE 45838 - 1 off
	Lucon Connector	UD 26391 - 1 off
	Lucon Moulding	UD 26392 - 1 off
	Lucon Double Connector	UD 26393 - 1 off

Ons/GC/Br

Service Bulletins

Chapter L

Engine Cooling System



Service Bulletin



TSD 4318

Bulletin number	SY/L24										Date	22 4 81			Page	1 of 2	
Circulation list																	

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

ENGINE COOLING FAN ATTACHMENT

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars from car serial numbers

LRL 41592 - Silver Shadow II, Silver Wraith II and Bentley T2

CRL 50626 - Corniche Saloon

DRL 50734 - Corniche Convertible

JRL 50644 - Camargue

INTRODUCTION:

The method of securing the cooling fan assembly to the water pump spindle has been changed to provide an improved positive location.

DESCRIPTION:

The coolant pump spindle extension piece (UE 40165) and retaining bush (SPC 1800) have been modified to provide a keyed location as shown in Figure 1.

The part numbers applicable to the new pieces are

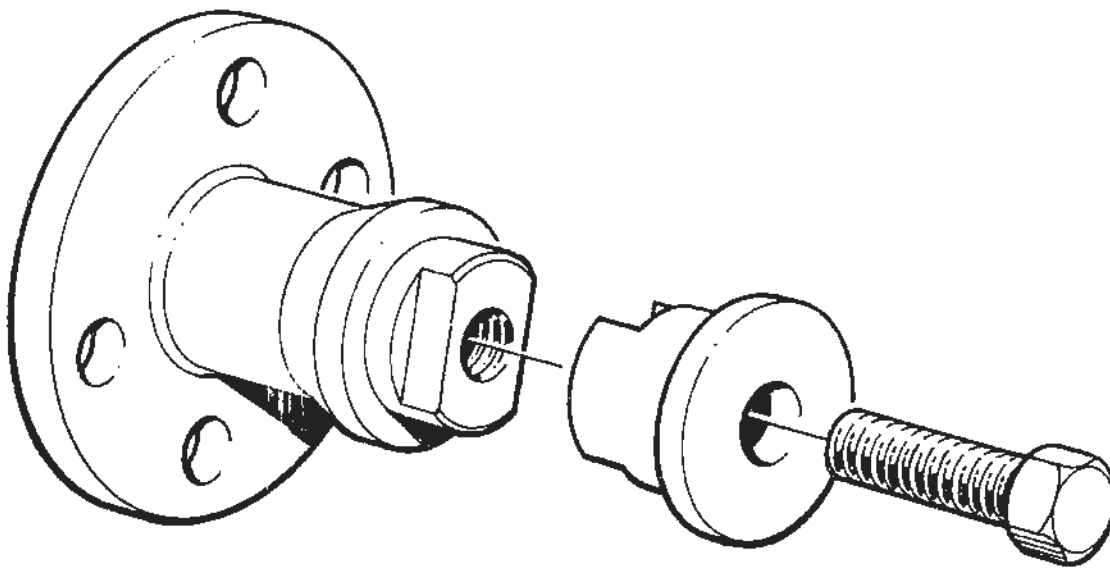
RH 9649	extension piece
RH 9650	retaining bush
UA 206/A	securing bolt

The new method of attachment can be fitted to cars prior to the above serial numbers noting the following

1. When using the earlier UE 40165 extension piece the fan assembly MUST be secured with a SPC 1800 retaining bush and hexagonal cap screw UA 75652.
2. When using the later RH 9649 extension piece the fan assembly MUST be secured with a RH 9650 retaining bush and hexagon headed bolt UA 206/Z.

Note

In both the above cases the hexagon headed bolt/hexagonal cap screw should be torque tightened to between 39 Nm and 43 Nm (4,0 kgf m and 4,4 kgf m; 29 lbf ft and 32 lbf ft)



W 406

Fig.1

Hly/Fcr

Service Bulletins

Chapter M

Electrical System



Service Bulletin



TSD 4318

Bulletin number	SY/M103 Issue 2				Date	2 7 79				Page	1 of 3			
Circulation list														

Category C

ALL FRANCHISE HOLDERS AND DEALERS

STOP LAMP SWITCH ADJUSTMENT

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Long Wheelbase, Corniche and Camargue, Bentley T series and Corniche cars from car serial numbers:

SRD 22118 - Silver Shadow and Bentley T series

LRD 22073 - Long Wheelbase

CRH 22648 - Corniche

JRH 14674 - Camargue

Also all Rolls-Royce Silver Shadow II, Silver Wraith II and Bentley T2 cars.

INTRODUCTION:

This service bulletin has been issued to describe an improved setting for the stop lamp switch.

DESCRIPTION:

1. The brake pedal height should be checked, and, if necessary, reset so that the distance between the underside of the brake pedal and the pedal seal is not less than 101,6mm. (4.0in.).
2. Make electrical connectors to switch (see Fig. 2).

3. Slacken the front securing nut of the switch (see Fig.1, item 1).
4. With the switch pressed forward and by rotating the rear securing nut (see Fig. 1, item 2) adjust the switch position until the stop lights are just extinguished. At this point there should be no pressure being applied to the brake pedal.
5. Release the rear securing nut a further 10 to 11 flats and then tighten up the front securing nut.
6. Check that the stop lights illuminate with a maximum of 15mm. (0.512in.) of the brake pedal travel.
7. The mechanism should be checked to ensure smooth operation.

TIME ALLOWED:

To adjust switch - 0.5 hours.

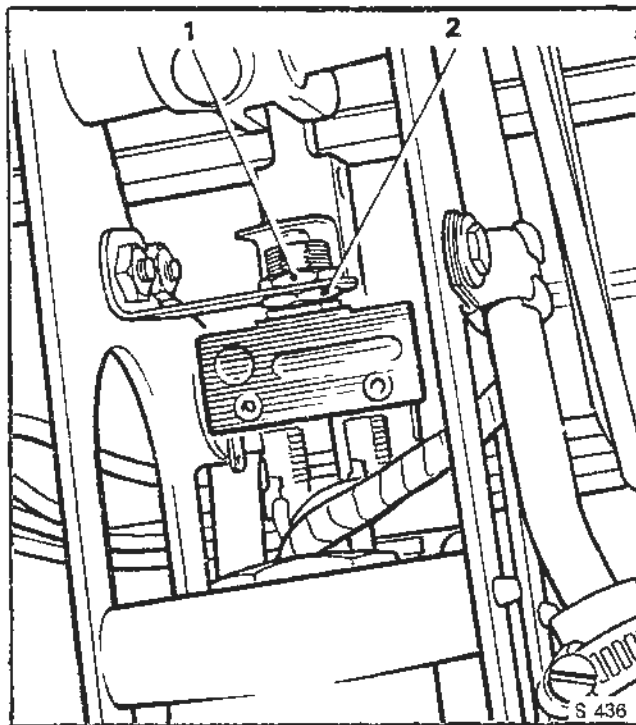


Figure 1. Stop lamp switch adjustment

1. Front securing nut
2. Rear securing nut

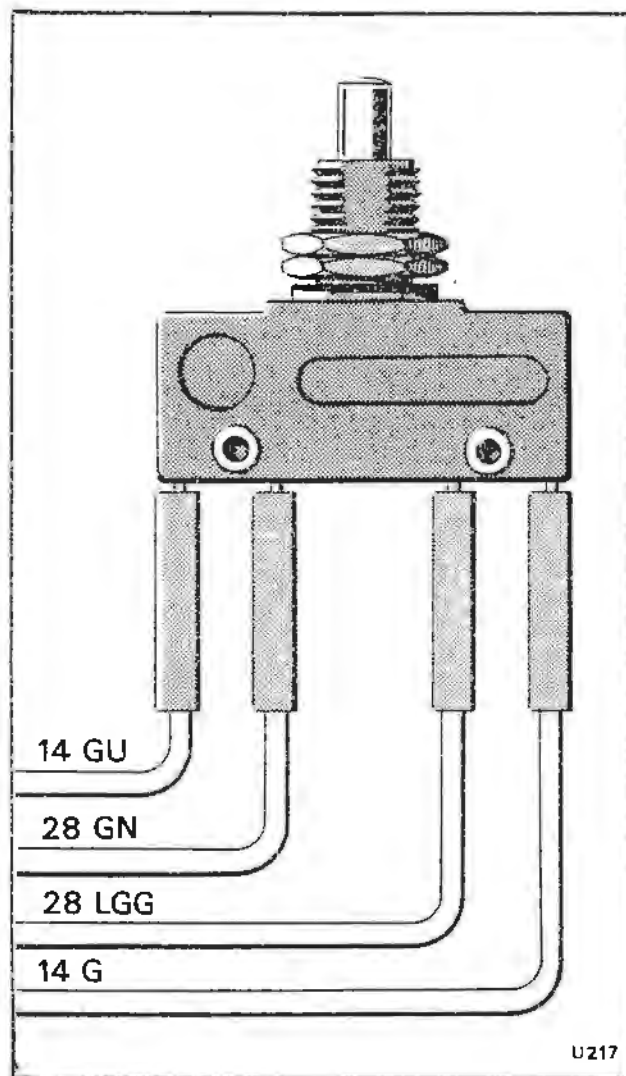


Figure 2. Wiring of stop lamp switch.

Service Bulletin



TSD 4318

Bulletin number	SY/M105 (Issue 2)					Date	19	12	79	Page	1	of	4
Circulation list													

Category C

ALL FRANCHISE HOLDERS AND DEALERS

REPLACEMENT ICE WARNING SENSOR

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II and Camargue cars and all Bentley T2 cars.

All Rolls-Royce and Bentley Corniche cars from car serial numbers, CRH 22648, CRX 22919, DRH 22583 and DRX 22781 (including CRH 21998 and CRX 21729).

INTRODUCTION:

The ice warning panel lamp is operated by a sensor mounted behind the radiator shell and an amplifier mounted on the instrument test board.

The sensor and the amplifier are matched one to the other. Renewal of the sensor necessitates re-calibrating the amplifier.

DESCRIPTION:

Replacement sensors will be supplied with a resistance value of 7000Ω . In effect this resistance is the same value as the sensor at 10°C ambient temperature. The resistor is used to calibrate the amplifier (see Fig. 1).

This Service Bulletin details the procedure for fitting the "new type" sensor and calibrating this new sensor to the existing amplifier, or alternatively calibrating a new amplifier to a new sensor.

PROCEDURE:

1. Remove the radiator shell.
2. Remove the faulty sensor and connect the 7000 Ω resistance supplied between the 14 slate/white and 14 slate/yellow cables (see Fig. 2).
3. Remove the veneered facia panels.
4. To gain access to the amplifier remove the top roll.
5. A hole is provided on the right-hand corner of the amplifier to gain access to the adjustment screw. The screwdriver used for adjusting the amplifier must have a blade which is not in excess of 2 mm. in width (see Fig. 3).
6. Rotate the amplifier adjusting screw fully clockwise.
7. Switch on the ignition with the coil disconnected.
8. The ice warning panel lamp should be illuminated.
9. Very slowly, rotate the amplifier adjusting screw anti-clockwise until the warning panel lamp extinguishes. Rotate the adjusting screw very slowly clockwise and allow the circuit to react. Stop rotating the adjusting screw immediately the warning panel lamp illuminates, then rotate it anti-clockwise extremely carefully until the lamp extinguishes.
10. Switch off the ignition and re-connect the coil.

NOTE:

The previous operations ensure that the amplifier is set exactly at its switching point for the resistance being used.

It is important that the adjusting screw is not rotated beyond the switching point once the warning panel lamp has extinguished.

Operation (9) should be repeated until the operator is completely satisfied that the amplifier is adjusted to ensure that the warning panel lamp extinguishes.

11. Remove the 7000 Ω resistance and fit the "new type" sensor using the original fixing screw and bracket (see Fig. 2).

PARTS REQUIRED:

UD 23154 SENSOR AND LOOM ASSEMBLY

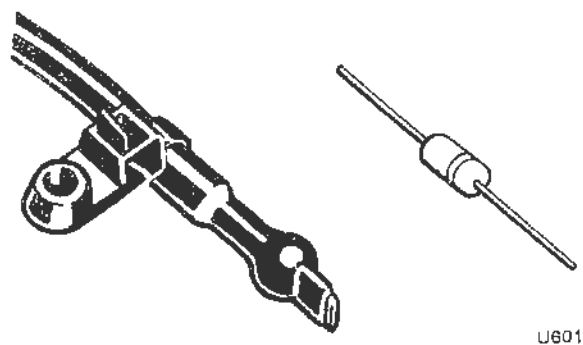


Fig. 1 Replacement sensor and resistor

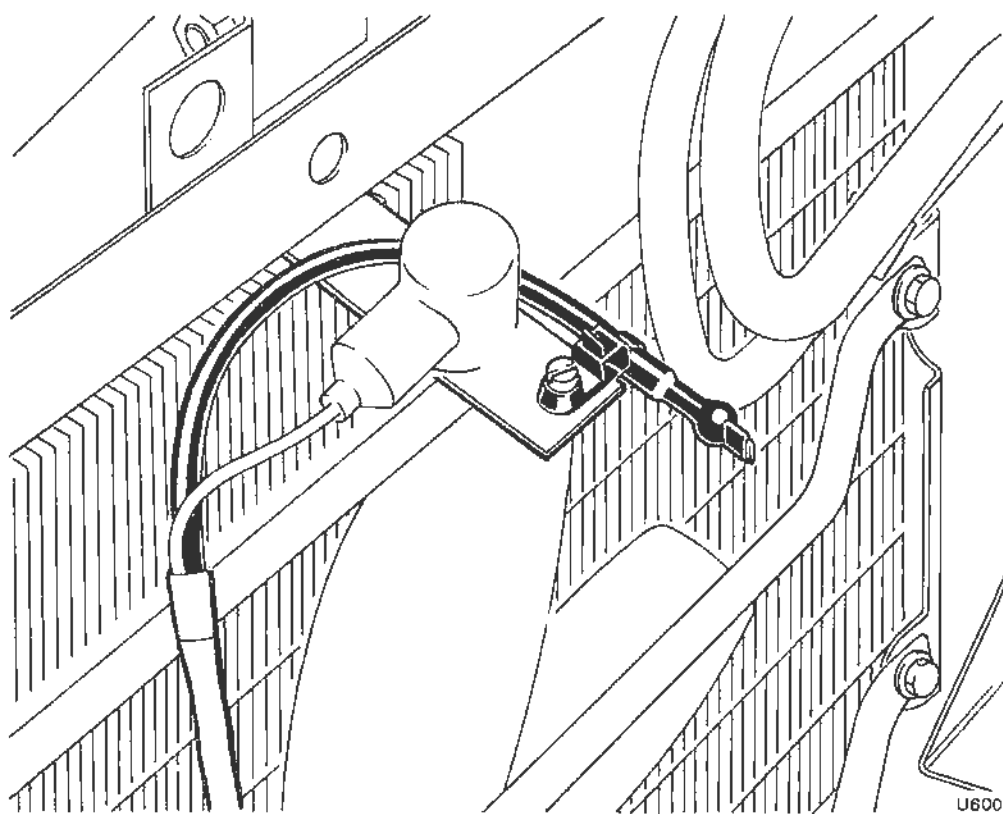


Fig. 2 Sensor in position

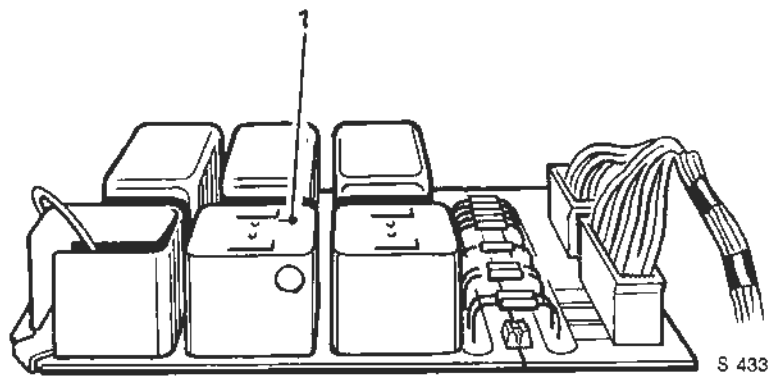


Fig. 3 Amplifier in position.

1. Access hole to adjustment screw

Service Bulletin



Car Division

TSD 4318

Bulletin number	SY/M111					Date	24 1 79					Page	1 of 1				
Circulation list																	

Category C

ALL FRANCHISE HOLDERS

ELECTRONIC SPEEDOMETER WIRING CHANGES

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars.

SRX 33872 - Silver Shadow II and Bentley T2
LRX 33024 - Silver Wraith II
DRX 32635 - Corniche
JRX 31962 - Camargue

INTRODUCTION:

This bulletin describes a change to the positive feed cable of the electronic speedometer.

DESCRIPTION:

On cars prior to the above car serial numbers the positive feed to the electronic speedometer was a green cable from the number 1 fuse (i.e. gauges and warning lights).

This has now been changed to a white cable which is taken from terminal W1 on the petrol pumps relay. The fuse protecting this circuit is fuse number 2 (i.e. ignition, fuel pumps and kickdown).

For the location of the petrol pumps relay refer to T.S.D 4200 - Workshop Manual - Section M3 - Page M3-9.

Service Bulletin



TSD 4318

Bulletin number	SY/M112					Date	20 2 79			Page	1 of 3		
Circulation list													

Category C

ALL FRANCHISE HOLDERS

REPLACEMENT OF EARLY TYPE ELECTRONIC DISTRIBUTOR MODULES

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Corniche and Camargue cars and all Bentley T series and Corniche cars prior to car serial numbers:

SRH 30001 - Silver Shadow, Long Wheelbase and Bentley T series
CRX 32709 - Corniche
JRX 32181 - Camargue

INTRODUCTION:

Early type electronic distributors fitted to the above cars are no longer available.

In the event of a distributor module failure it will be necessary to replace the module by one of a later type. A conversion kit RH2752 will be required. This bulletin has been issued to describe the fitting procedure.

PROCEDURE:

ELECTRONIC MODULE - TO REMOVE

- 1 Disconnect and remove the distributor and ballast resistor from the car to a clean area.
- 2 Remove the rotor arm and anti-flash shield.
- 3 Remove the circlip securing the timing rotor and remove the washer, 'O' ring and timing rotor from the distributor.
- 4 Remove the three screws that secure the electronic module to the distributor body and lift out the module, carefully disengaging the vacuum capsule lever as the module comes away from the distributor body.

ELECTRONIC MODULE - TO REPLACE

NOTE: THE 'E' CORE IS EXTREMELY FRAGILE AND CAN EASILY BE DAMAGED BY THE SLIGHTEST PRESSURE OR KNOCK AND GREAT CARE MUST BE EXERCISED WHEN FITTING AND SETTING THE NEW MODULE.

- 1 Carefully remove the replacement module from its protective packing but leave in place the rubber sleeve protecting the 'E' core pick-up assembly.
- 2 Fit the replacement module to the distributor body taking care to locate the vacuum capsule lever to the peg on the underside of the 'E' core pick-up. Secure the module with the three screws.
- 3 Loosen the 'E' core pick-up adjustment screws and move the 'E' core to its outer limit.
- 4 Remove the rubber sleeve from the 'E' core and re-fit the timing rotor.
- 5 Very carefully set the air gap between the 'E' core and the timing rotor by gently closing the pick-up assembly against a single 0,4mm. (0.015 in.) feeler gauge. Tighten the two adjustment screws and carefully withdraw the feeler gauge.

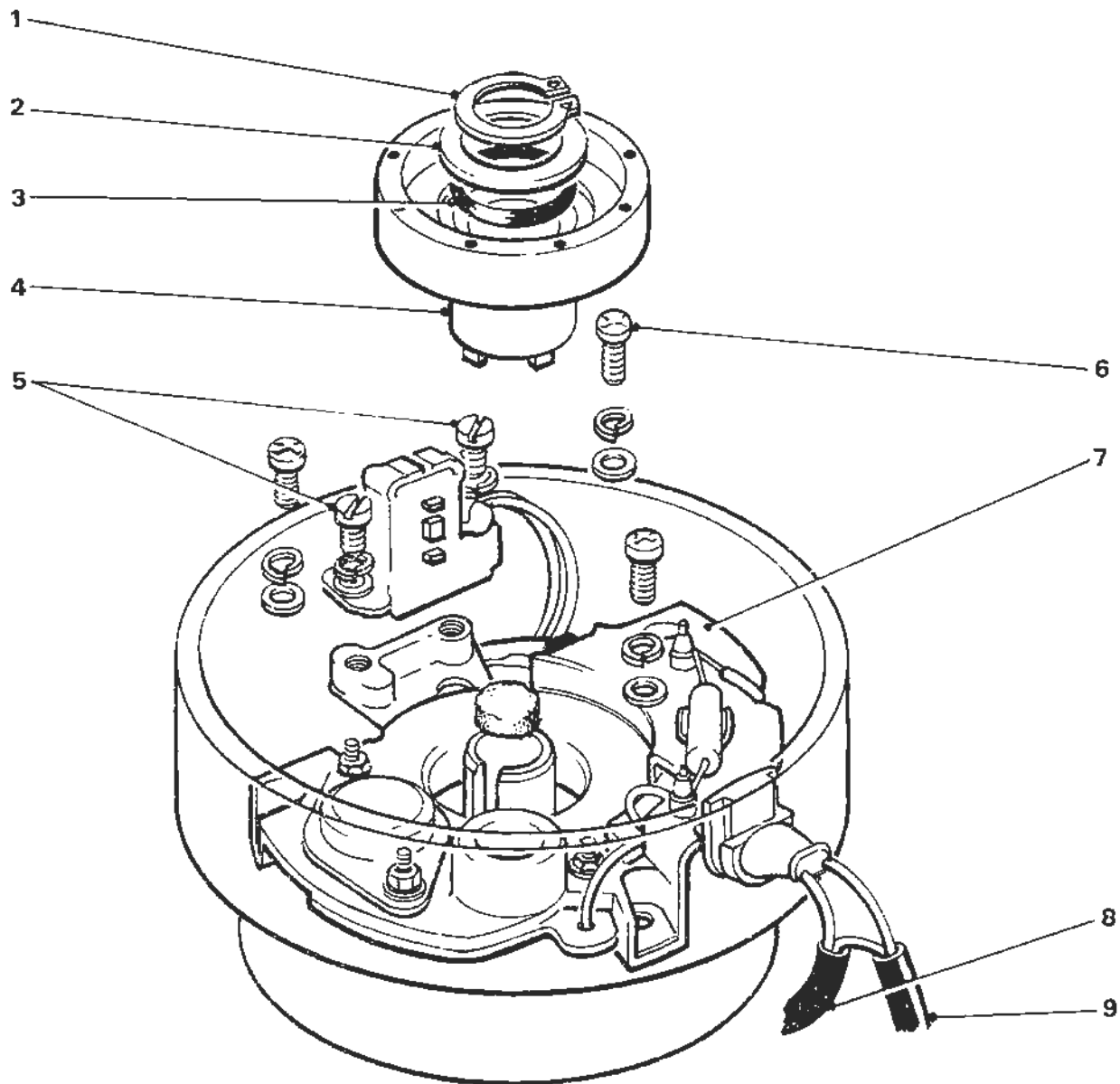
NOTE: The air gap limits are 0,30mm. - 0,43mm. (0.012in. - 0.017 in.) The feeler gauge should be a sliding fit. Do not use oversize feeler gauges to check the gap as the 'E' core sensing heads can easily be damaged. Do not attempt to measure the air gap with the distributor on the car and the ignition switched on.

- 6 Replace the anti-flash shield and rotor arm and re-fit the distributor to the car.
- 7 Fit the new ballast resistor and connect the wiring.
- 8 From RH2752 conversion kit fit the right-angled Lucar connector to the negative terminal of the ignition coil and reconnect the wiring. Ensure that the White/Black wire is connected to the negative terminal of the coil.
- 9 Re-set the ignition timing as instructed in T.S.D. 4200 - Workshop Manual Section M3 - Page M3-4.

PARTS REQUIRED:

PART NO	DESCRIPTION
1 off RH 2752	Distributor conversion kit
Contents:	
1 off CD 5904	Electronic module and right-angled Lucar connector.
1 off UE 40912	Ballast resistor.

TIME ALLOWED: 1 hour 45 minutes



T 678

FIG 1
EXPLODED VIEW - ELECTRONIC MODULE AND TIMING ROTOR ASSEMBLY

- 1 Circlip
- 2 Washer
- 3 'O' ring
- 4 Timing rotor
- 5 'E' core pick-up adjustment screws
- 6 Electronic module securing screws
- 7 Electronic module
- 8 Wiring to coil
- 9 Wiring to ballast resistor

Service Bulletin

TSD 4318

Bulletin number	SY/M113	Date	24 1 79	Page	1 of 3
Circulation list					

Category C

ALL FRANCHISE HOLDERS

REPLACEMENT OF EARLY TYPE ELECTRONIC SPEED CONTROL BELLOWS

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars fitted with electronic speed control prior to car serial numbers:

SRG 34374 - Silver Shadow II and Bentley T2

LRX 34310 - Silver Wraith II

CRG 34396 - Corniche

JRX 32181 - Camargue

INTRODUCTION:

Early type bellows assemblies are no longer available. In the event of a defective bellows assembly it will be necessary to replace the bellows by one of a later type. A conversion kit will be required as follows:

RH 2762 - cars fitted with SU carburetters

RH 2763 - cars fitted with Solex carburetters.

This Bulletin has been issued to describe the fitting procedure.

PROCEDURE:

NOTE: On cars fitted with Solex carburetters carry out operations 1, 4, 5, 6, 7.

- 1 Disconnect and remove the early type bellows.
- 2 Replace the main support and steady brackets with the new ones supplied in the kit.
- 3 Re-fit the relay to the steady bracket and re-connect the wiring (See Fig. 1). Note that it may be necessary to adjust the speed control wiring loom to gain sufficient cable length.
- 4 Fit the new bellows and connect the rubber vacuum pipe. Note: On cars fitted with SU carburetters ensure that the vacuum pipe does not foul the bellows and so impair their operation.
- 5 Cut the Lucar connectors off the Red wire and the Blue/Green wire and solder on the new terminals supplied in the kit.
- 6 Fit the connectors into the new plug so that the Red wire connects to the Yellow/White wire from the bellows and the Blue/Green wire connects to the Yellow/Black wire.
- 7 Connect the plug and socket.
- 8 Re-connect the chain between the bellows and carburetters so that there is one ball of slack in the chain before movement of the carburetter lever occurs.

PARTS REQUIRED:

PART NO	DESCRIPTION
1 off RH 2762	Conversion kit - cars fitted with SU carburetters
Contents:	
1 off UE 42416	Bellows
1 off UE 42417	Bracket
1 off UE 42418	Bracket
1 off UD 22602	Plug
2 off UD 22603	Terminals
<hr/>	
1 off RH 2763	Conversion kit - cars fitted with Solex carburetters.
Contents:	
1 off UE 42416	Bellows
1 off UD 22602	Plug
2 off UD 22603	Terminals

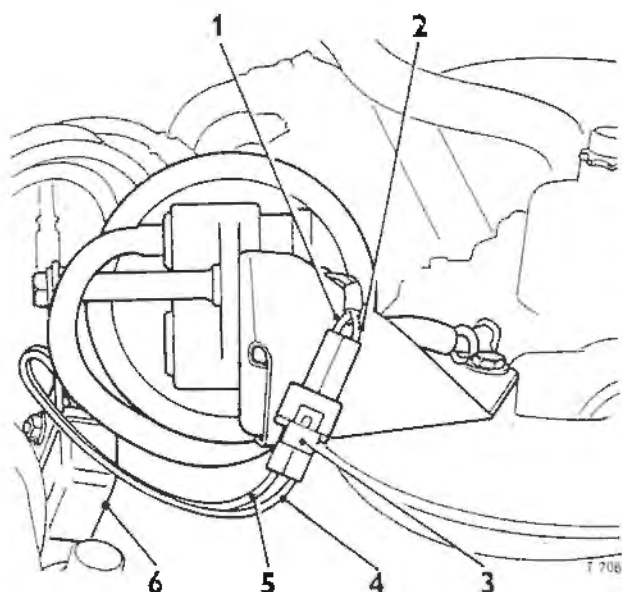
TIME ALLOWED:

Cars fitted with SU carburettors - One hour

Cars fitted with Solex carburettors - 35 minutes

FIG 1

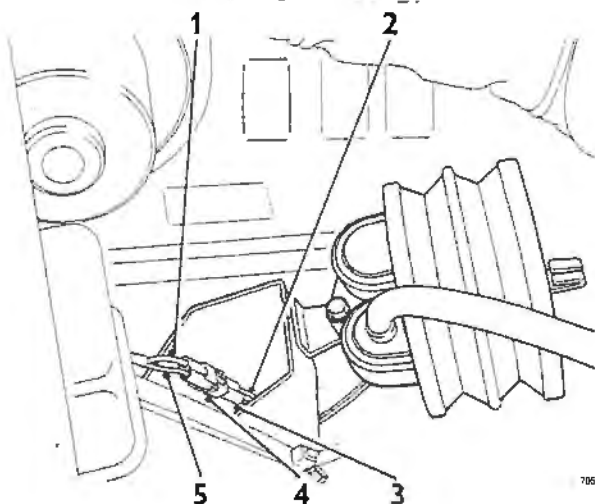
BELLOWS AND RELAY - SU CARBURETTER EQUIPPED CAR



- 1 Yellow/White wire from Bellows
- 2 Yellow/Black wire from Bellows
- 3 Plug supplied in RH 2762 kit
- 4 Blue/Green wire from wiring loom
- 5 Red wire from wiring loom
- 6 Speed Control Relay

FIG 2

BELLOWS - SOLEX CARBURETTER EQUIPPED CAR



- 1 Red wire from wiring loom
- 2 Yellow/White wire from Bellows
- 3 Yellow/Black wire from Bellows
- 4 Plug supplied in RH 2763 kit
- 5 Blue/Green wire from wiring loom

Service Bulletin



TSD 4318

Bulletin number	SY/M 114	Date	8 6 79	Page	1 of 2
Circulation list					
Category	C				

ALL FRANCHISE HOLDERS AND DEALERS

CASSETTE TAPE PLAYER

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II and Corniche cars and all Bentley T2 and Corniche cars from car serial numbers:

SRK 37325 - Silver Shadow II and Bentley T2
LRK 37308 - Silver Wraith II (without division)
LRK 37398 - Silver Wraith II (with division)
DRK 50112 - Corniche

INTRODUCTION:

The Pioneer QP 444 quadrophonic cartridge player has now been replaced by the KP 292 cassette player.

All wiring changes have been made within the loom.

DESCRIPTION:

The following parts have been changed.

Console

UD 22551 Cassette player replaces Cartridge player UD 21593.
UD 22970/1 Assembly mounting brackets replace ZX 11969/770.
UD 22587 Assembly loom replaces UD 22045/UD 22052.
UD 22792 Support panel added.
UW 17401 Facia replaces UW 16707.

Silver Wraith II Cars With Division

UW 17871 Assembly facia panel replaces UW 15647.

UB 38891 Assembly console and padding replaces UB 33289.

UB 38893 Assembly name plate replaces UD 22397.

Service Bulletin



TSD 4318

Bulletin number	SY/M 115	Date	8 6 79	Page	1 of 3
Circulation list					

Category .C

ALL FRANCHISE HOLDERS AND DEALERS

REPLACEMENT OF EARLY TYPE AUTOMATIC AIR CONDITIONING AMBIENT SENSORS

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars fitted with automatic air conditioning prior to car serial numbers:

SRX 37766 - Silver Shadow II and Bentley T2
LRK 37735 - Silver Wraith II
DRK 50043 - Corniche
JRH 50085 - Camargue

INTRODUCTION:

Early type ambient air sensors are no longer available.

In the event of a failure, it will be necessary to replace the sensor by one of a later type.

A conversion kit RH 2766 will be required. This Bulletin has been issued to describe the fitting procedure.

PROCEDURE:

- 1 Remove the rear bumper.
- 2 Disconnect and remove the existing early type sensor.

3 . Re-fit the original fixing screws, spacers and washers to blank off the holes.

4 Remove the original cable grommet from the body and fit the new grommet supplied in the kit.

NOTE: This grommet must be fitted with the sleeve on the outside of the body as shown in Figure 1.

5 Dampen the tip of the new sensor to provide lubrication and push through the grommet from the interior of the car so that the tip of the sensor protrudes through the grommet sleeve by approximately 6mm. (0.250 in.). See Figure 1.

NOTE: Do not completely immerse the sensor.

6 Cut the Lucar connectors off the luggage compartment loom yellow/purple, orange and yellow/blue wires and re-fit the Lucars supplied in the kit.

7 Fit the Lucars in the 3-way socket supplied in the kit, (see Fig. 2) and connect the socket to the sensor plug.

8 Re-fit the rear bumper.

PARTS REQUIRED:

RH 2766 Ambient Sensor Conversion Kit

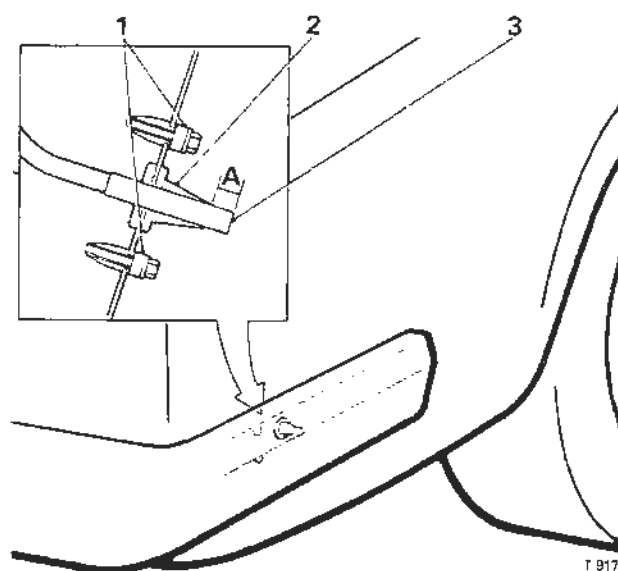
Kit Contents

1 off - UD 22700 Sensor
1 off - UD 11866 Grommet
1 off - UD 11880 3-way Socket
3 off - UD 11874 Lucars

TIME ALLOWED:

1 hour 30 minutes.

Fig. 1 showing new type sensor fitted to the body.

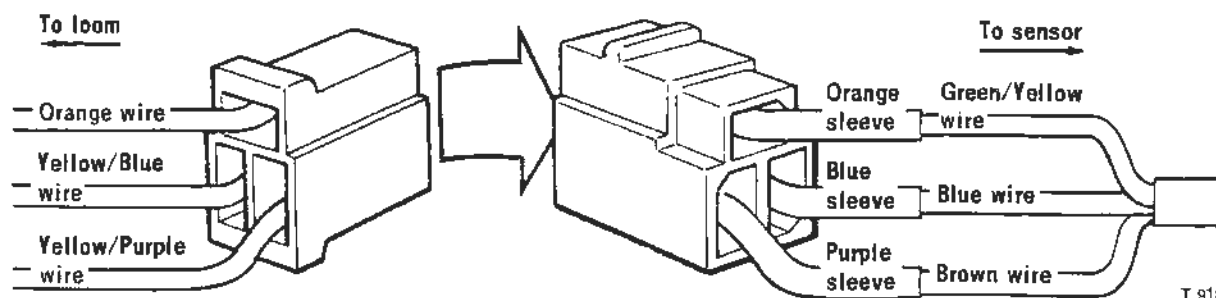


T 917

- 1 Original fixing screws, spacers and washers.
- 2 New grommet supplied in the RH 2766 kit.
- 3 Tip of the new type sensor.

A 6mm. (0.250 in.)

Fig. 2 showing cable positions in loom sensor plug and socket.



T 918

Service Bulletin



TSD 4318

Bulletin number	SY/M116							Date	25	7	79	Page	1 of 3		
Circulation list															

Category C

ALL FRANCHISE HOLDERS AND DEALERS

REPLACEMENT OF THE HEADLAMP DIPSWITCH

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche and Camargue cars and all Bentley T Series, Bentley T2 and Corniche cars prior to the following car serial numbers.

SRH 37170 - Silver Shadow, Silver Shadow II, Bentley T Series and Bentley T2
LRK 37030 - Long Wheelbase and Silver Wraith II
DRK 50100 - Corniche
JRX 33186 - Camargue

INTRODUCTION:

Headlamp dipswitches of the type originally fitted to the above motor cars are no longer used on current production motor cars. When the present parts stock of the earlier dipswitch is exhausted, the new dipswitch will be automatically supplied for replacement purposes on the above cars. A conversion kit RH 2775 will be required. This bulletin has been issued to describe the fitting procedure.

PROCEDURE:

1. Disconnect and remove the failed dipswitch.
2. Remove the existing 'bullet' type connectors from the dipswitch wires and fit the 'Lucar' type connectors from the RH 2775 kit.
3. Connect the dipswitch wires into the 3 way plug supplied in the RH 2775 kit as shown in Figure 1.
4. Using the insulating disc from the old switch and the new screws from the RH 2775 kit fit the new type dipswitch in the same position as the original switch.

5. Connect the 3 way plug to the dipswitch.
6. Ensure that the switch operation will not be restricted by the carpet underlay or the edge of the transmission tunnel carpet. If necessary, trim the material to give adequate clearance.
7. Fit the new rubber protector shoe to the carpet as shown in Figure 1 and replace the carpet making sure that the rubber shoe is pushed firmly onto the dipswitch.

TESTING PROCEDURE:

1. Switch the headlights 'on' and operate the dipswitch several times. Check that the headlights operate correctly.
2. Switch the headlights to 'main beam' and remove both 'head safety dip beam' fuses. Check that:
 - a) On cars fitted with halogen headlights that one outer headlight is extinguished.
 - b) On cars fitted with tungsten headlights that all lamps remain illuminated.
3. Replace both 'head safety dipbeam' fuses.
4. If the headlights do not operate as described in operations 1 and 2 check that:
 - a) The wires are connected to the 3 way plug as shown in Figure 1.
 - b) The new type dipswitch is operating correctly.

PARTS REQUIRED:

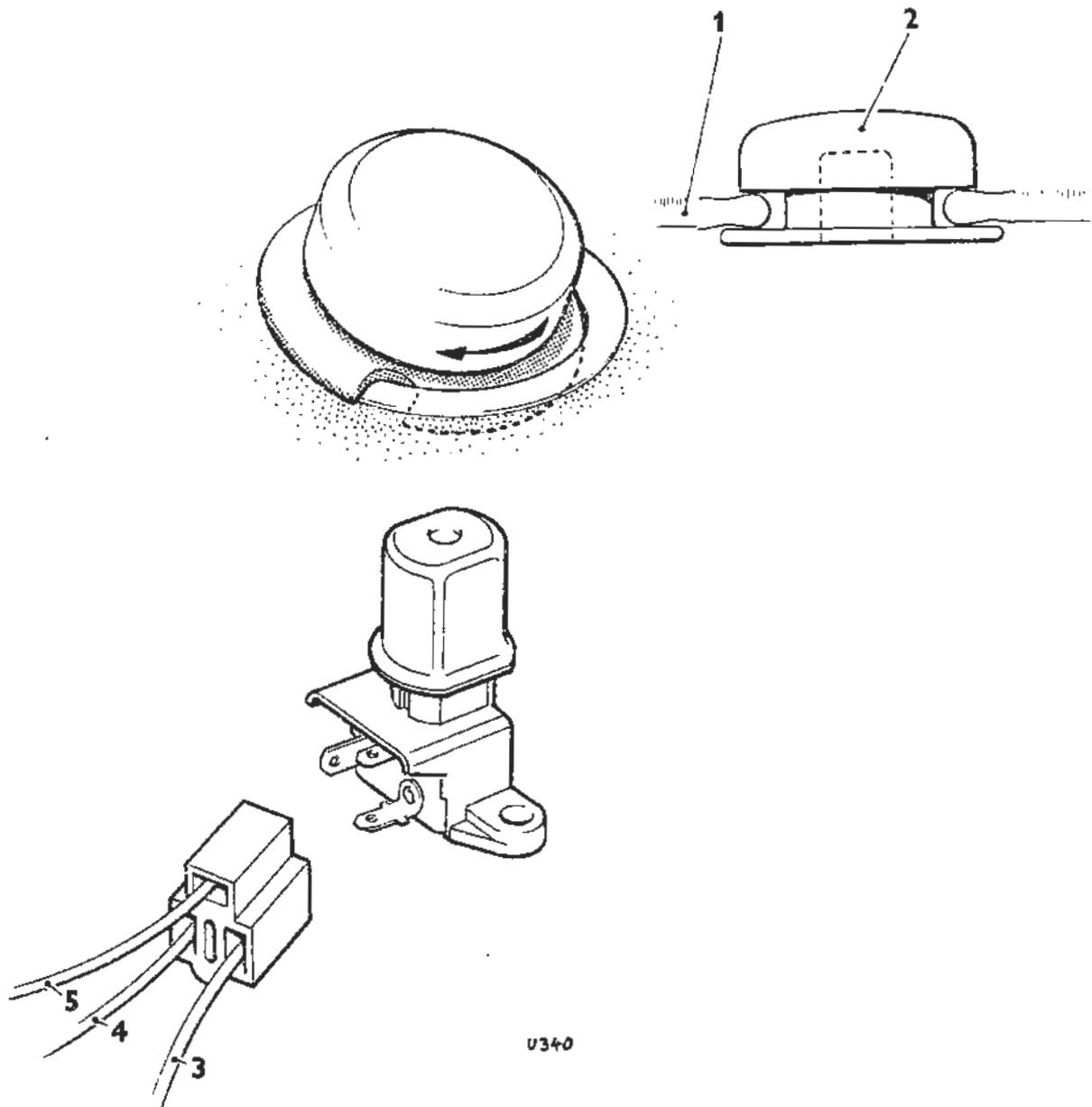
<u>PART NO</u>	<u>DESCRIPTION</u>
1 off RH 2775 Kit	Dipswitch Conversion Kit

CONTENTS:

1 off UD 22560	Headlamp Dipswitch
1 off UD 22563	Shoe-protector
1 off UD 22561	3 Way Plug
2 off CS 30542/Z	Screws
3 off UD 11298	Lucar Connectors

TIME ALLOWED : 1 hour

FIG 1 - SHOWING THE POSITIONS OF THE CABLES IN THE 3 WAY PLUG AND ALSO THE CORRECT FITTINGS OF THE PROJECTOR SHOE TO THE CARPET.



U340

1. CARPET
2. RUBBER PROTECTOR SHOE
3. CABLE COLOUR - BLUE/PINK OR BLUE/RED
4. CABLE COLOUR - BLUE/WHITE
5. CABLE COLOUR - BLUE

Service Bulletin



TSD 4318

Bulletin number	SY/M117								Date	16 7 79				Page	1 of 3			
Circulation list																		

Category C

ALL FRANCHISE HOLDERS AND DEALERS

DIGITAL INSTRUMENTS

APPLICABLE TO:

Rolls-Royce and Bentley Corniche motor cars from car serial number DRK 50112.

INTRODUCTION:

This bulletin describes the new digital instrument display unit fitted to the above motor cars and incorporating an outside temperature gauge, clock and elapsed time indicator.

DESCRIPTION:

The digital display unit is situated in the fascia where previously the outside temperature gauge and clock were fitted (see Fig. 1).

The whole display is in blue-green and is illuminated only when the ignition is switched on or the key is in the ACC position. The illumination is of dual intensity which means it will automatically dim on switching the side or headlamps on for night time conditions.

The display presents the following features

OUTSIDE TEMPERATURE GAUGE

The outside temperature gauge is now in digital form with a range from -35°C to $+70^{\circ}\text{C}$.

There is a sensor behind the radiator shell which performs both the functions of the ice warning and outside temperature sensors previously fitted.

The ice warning light in the warning panel cluster will illuminate when the outside temperature gauge reads $+1^{\circ}\text{C}$. or less, as this is triggered from within the digital display unit.

CLOCK

The digital 12 hour clock has two small recessed buttons. Adjustment is made as follows.

1. Depress the button marked 'Hrs' using a pointed instrument such as a ball point pen. This will cause the hour counter to advance rapidly.
2. Release when the desired setting is reached.
3. Adjust the minutes figure by the same procedure pressing the button marked 'Min'.

Depressing both push buttons simultaneously will zero the clock and stop the counter system.

Releasing the buttons to a predetermined time signal will allow the time to be set to the exact second.

Re-adjust the hours and minutes as described above.

ELAPSED TIME INDICATOR

The elapsed time indicator (ETI) will record an elapsed time of up to 24 hours and has three push button controls which are:

1. 'HS' - this enables the display to be switched between readings showing hours, minutes or seconds.
2. 'R' reset to zero.
3. 'ST' start and stop.

NOTE

When the ignition is switched off, the clock and elapsed time indicator will be energised but not illuminated. The outside temperature gauge is only energised when the ignition is switched on or the key is in the ACC position.

SERVICING PROCEDURE

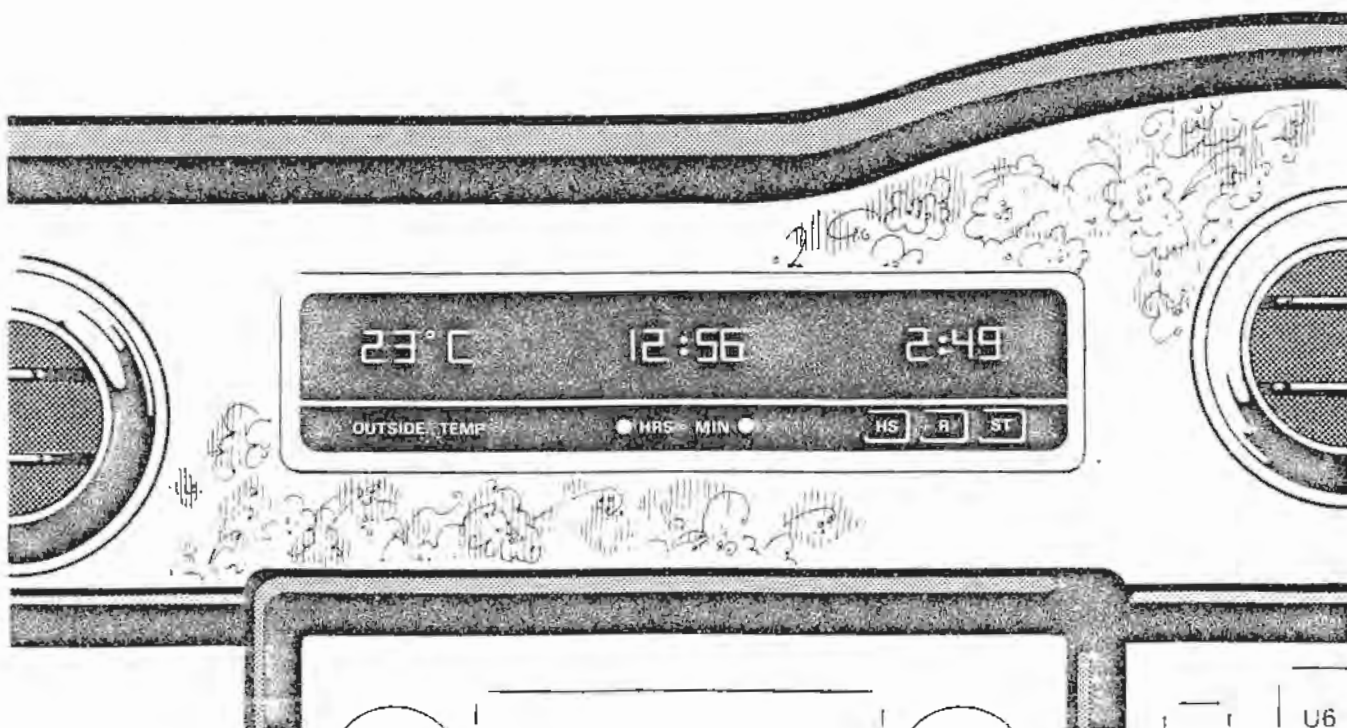
The digital display unit is a sealed unit, therefore if a fault occurs within it the complete unit must be changed.

However, if a fault is confirmed with the outside temperature gauge or ice warning light first check the function of the sensor (do this by substitution). The new sensor will not need any calibration and can be fitted independently of the digital display unit.

To remove the digital display unit proceed as follows.

1. Remove the instrument facia panel.
2. Remove the four screws securing the unit to the instrument board.
3. Carefully withdraw the unit and disconnect the six-way plug.

To fit the digital display unit reverse the procedure given for removal.



Service Bulletin



TSD 4318

Bulletin number	SY/M118										Date	16 7 79			Page	1 of 3		
Circulation list																		

Category C

ALL FRANCHISE HOLDERS AND DEALERS

GEAR CHANGE ACTUATOR

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue and all Bentley T2 and Corniche cars from car serial numbers:

SRK 36832 - Silver Shadow II and Bentley T2
LRH 36718 - Silver Wraith II
CRX 50050 - Corniche Saloon
DRK 50047 - Corniche Convertible
JRX 32716 - Camargue

INTRODUCTION:

In line with Rolls-Royce Motors Limited policy of continuous improvement, changes have been made to the relay arrangement in the Gear Change Actuator.

DESCRIPTION:

The Lucas Dual Relay part number UG 13111, has been replaced with a pair of Bosch 'mini-relays' part number UD 22452. This has necessitated changes to the wiring of the relays as shown in Figure 1.

The wiring connections to the relays are now achieved by means of 'Lucar' spade connectors, which are fitted into moulded plastic sockets. The correct location of the wires in the plastic sockets are shown in Figure 2. The plastic sockets are made so that they cannot be fitted incorrectly on to the relay terminals. It should be noted that the Bosch relays are not directly interchangeable with the Lucas type.

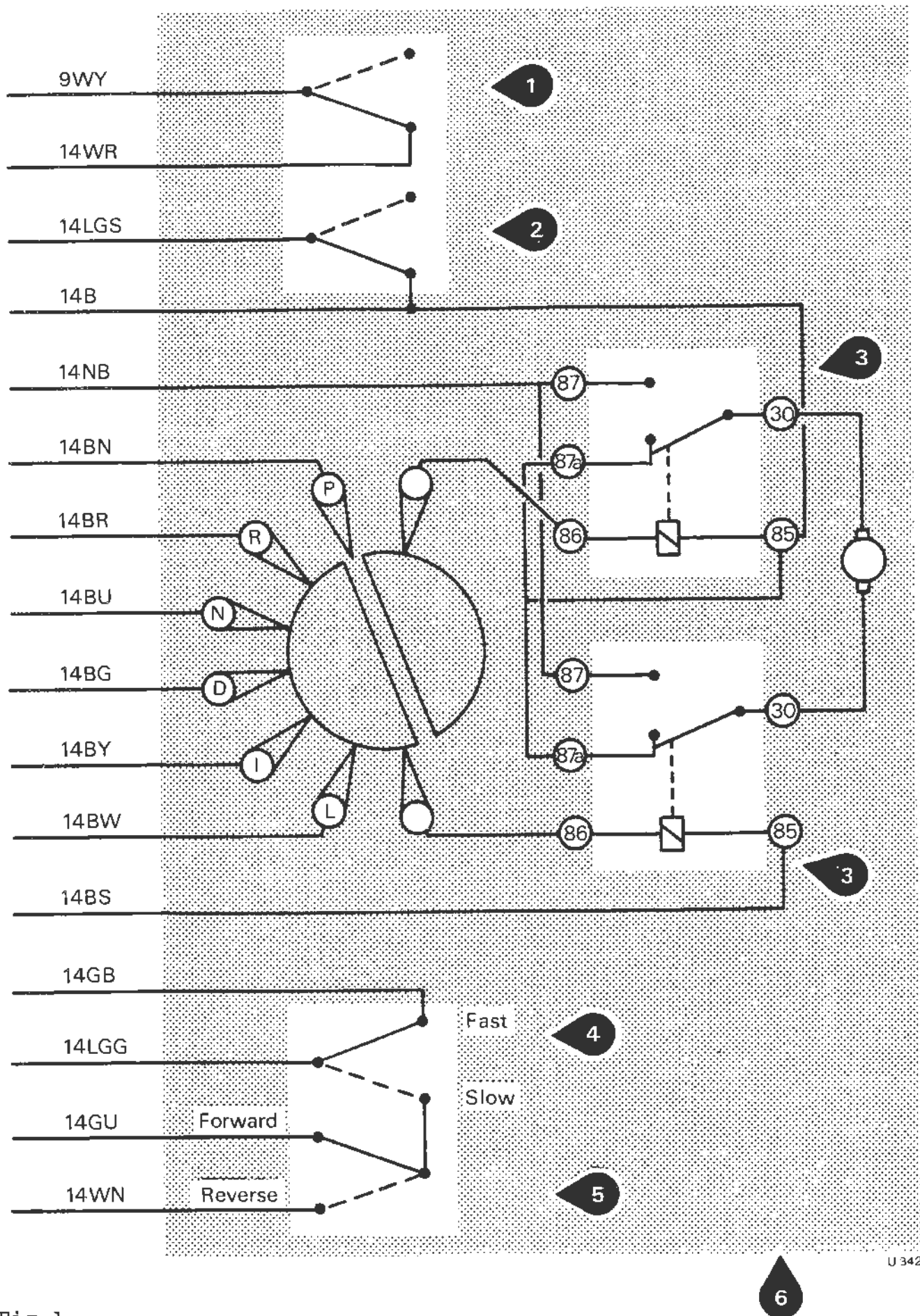


Fig 1

1. Gear neutral start switch
2. Park microswitch
3. Bosch Relays

4. Height control switch
5. Reversing switch
6. Gear change actuator

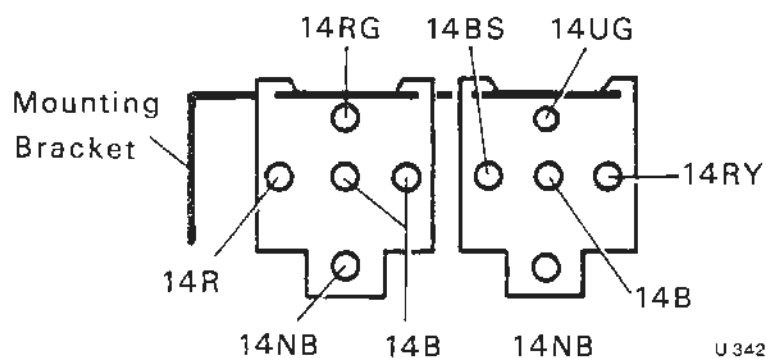


Fig 2 VIEW OF UNDERSIDE OF
MOULDED CONNECTOR SOCKETS
SHOWING CABLE COLOURS

COLOUR CODES

R	-	Red
RG	-	Red, Green
RY	-	Red, Yellow
BS	-	Black Slate
B	-	Black
NB	-	Brown Black
UG	-	Blue Green

Service Bulletin



TSD 4318

Bulletin number	SY/M119					Date	25 7 79					Page	1 of 4				
Circulation list																	

Category C

ALL FRANCHISE HOLDERS AND DEALERS

POSITIVE DRIVE WIPER ANTI-STREAK MECHANISM

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II and Corniche cars and all Bentley T Series, Bentley T2 and Corniche cars fitted with a 16W wiper motor prior to the following car serial numbers.

- SRK 36958 - Silver Shadow, Silver Shadow II, Bentley T Series, and Bentley T2.
- LRK 37537 - Long Wheelbase and Silver Wraith II.
- CRX 50168 - Corniche.

INTRODUCTION:

A new type of anti-streak mechanism has been introduced for use with the 16W wiper motor. This bulletin describes its use on cars in service.

DESCRIPTION:

The positive drive anti-streak mechanism mechanically 'drives' the wiper blades out of and into their parking position, whereas the existing mechanism relies on friction to drive the blades out of their parking stroke and mechanically drives them into their parking stroke. The following procedure describes how to fit a positive drive anti-streak mechanism in place of the existing mechanism fitted to the Lucas 16W windscreen wiper motor.

PROCEDURE:

- 1 Remove the wiper motor from the car as instructed in TSD 4200 - Workshop Manual - Chapter M - Section M6 - Page M6-4 ('Lucas' 16W wiper motor - To remove).
- 2 Fit the new gear and Positive Drive Anti-streak mechanism assembly into the wiper motor, locating the drive rack on the peg of the connecting rod and ensuring that the parking switch slide is fitted to the drive rack and is facing the correct way. This is diagrammatically shown in Figure 1.
- 3 Using grease from the motor gearbox, lubricate the gear teeth.
- 4 Fit the dished washer, plain washer and circlip to the outer end of the gearshaft (see Fig. 1).
- 5 Fit the cover plate and the cover to the wiper motor.
- 6 Fit the motor and rack assembly to the car by reversing the procedure given for removal. Ensure that when the motor securing clip is tightened, the alignment between the motor and the rack tubing is not destroyed.
- 7 Connect the loom socket to the wiper motor and operate the wiper motor for a few seconds and then switch off. This will ensure that the wiper wheel boxes are in the parked position.
- 8 Fit the wiper arms and blades in the parked position to the wheelboxes.

NOTE:

The parking switch of this motor is provided with an adjustment to allow for different angles of park. When replacing a drive gear assembly it may be necessary to readjust the parking switch to suit the new assembly. Failure to do this may result in one of the following faults.

- 1 With the wiper switch in the intermittent position and the blades parked on the screen, moving the switch to the off position does not cause the blades to move to the off screen position.
- 2 When moving the wiper switch from off to intermittent there is a 7 to 8 second delay before the wiper motor operates.

If a new gear assembly has been fitted and the wiper motor exhibits one of the above faults refer to TSD 4200 - Workshop Manual - Chapter M - Section M6 - Page M6-6 for parking switch adjustment procedure.

PARTS REQUIRED:

	PART NUMBER	DESCRIPTION
LHD CARS	CD 6012	Output gear connecting rod parking mechanism and circlip
RHD CARS	CD 6013	As above

The above parts displace part numbers CD 5951 and CD 5952 respectively.

Hly/Per

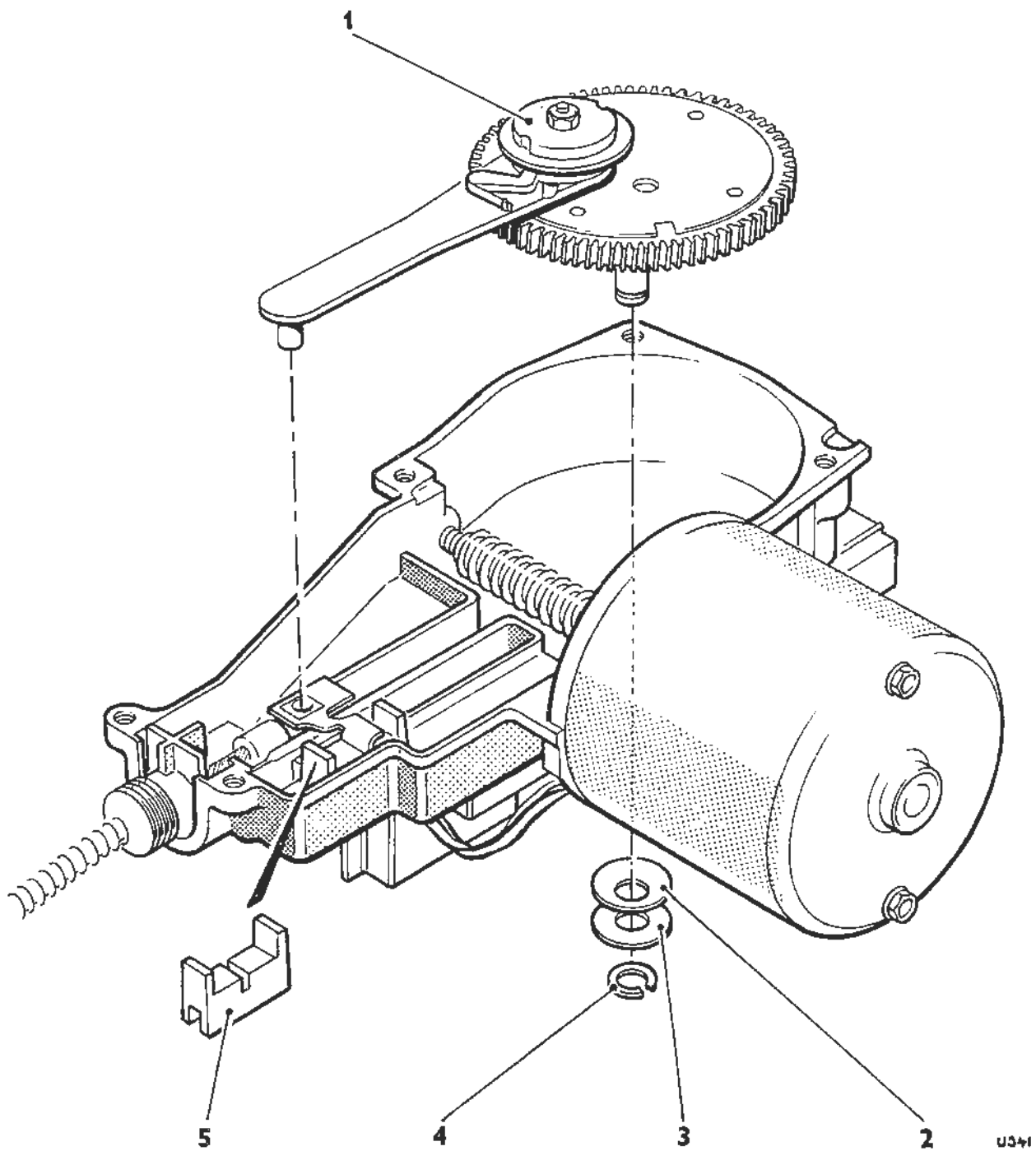


FIG. 1

- 1 Positive drive wiper anti-streak mechanism
- 2 Cup washer
- 3 Plain washer
- 4 Circlip
- 5 Parking switch slide

Service Bulletin



TSD 4318

Bulletin number	SY/M120							Date	26 7 79			Page	1 of 3		
Circulation list															

Category C

ALL FRANCHISE HOLDERS AND DEALERS

COURTESY LIGHT SWITCH

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II and Corniche cars and all Bentley T Series, Bentley T2 and Corniche cars prior to the following car serial numbers.

SRK 36581 - Silver Shadow, Silver Shadow II, Bentley T Series and Bentley T2.

LRH 36224 - Long Wheelbase and Silver Wraith II

CRX 50004 - Corniche

INTRODUCTION:

A new type of courtesy light switch (UD 22404) has been introduced from the above car serial numbers.

This new switch (UD 22404) will be supplied as a service replacement for the switch (UD 13040) previously used.

A kit of parts has been produced to facilitate the fitting of the new switch.

PROCEDURE:

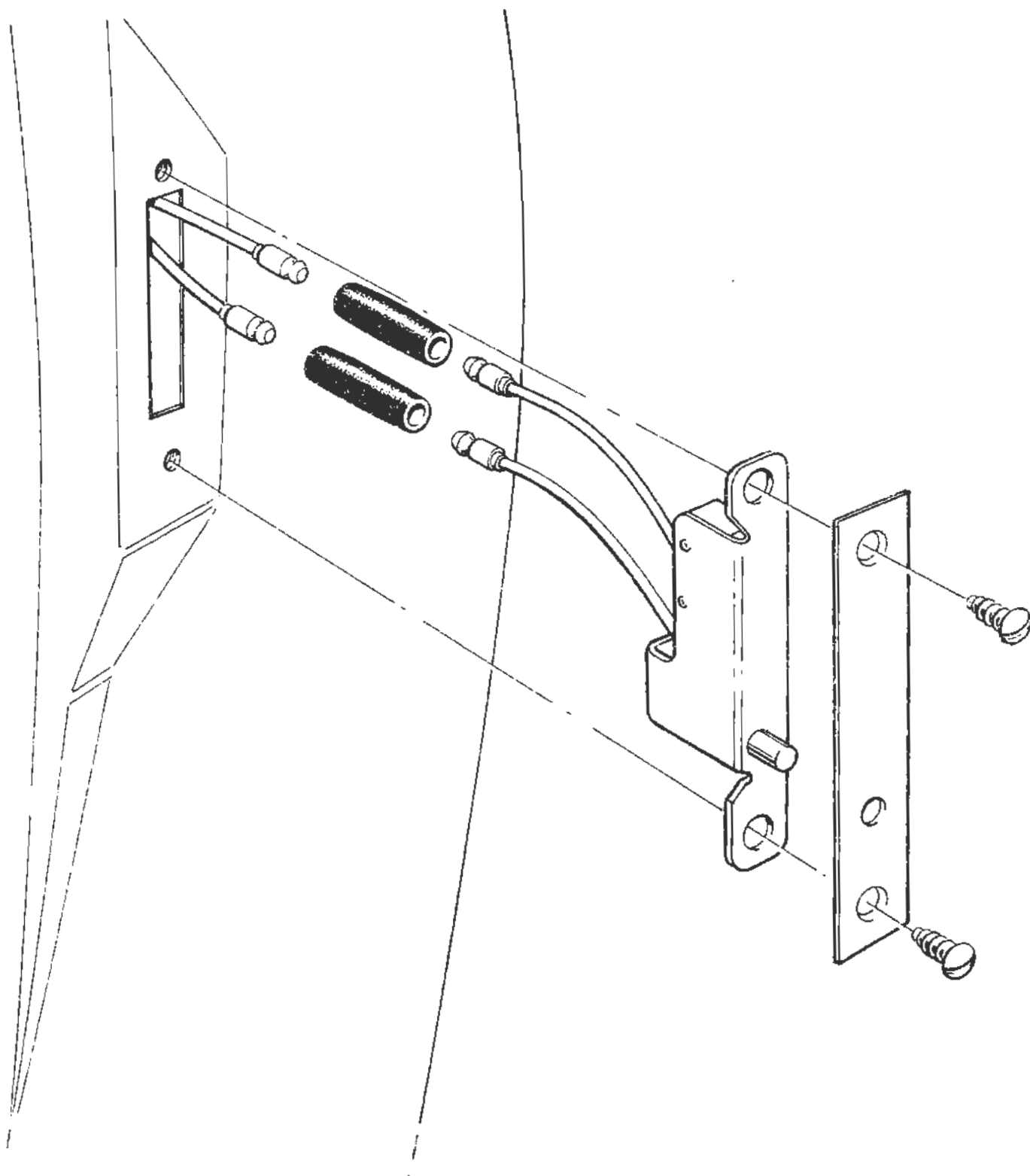
1. Remove the faulty switch (UD 13040) from the door aperture.
2. Disconnect purple and purple/black wires from the switch.
3. Pull the wires through the switch aperture, strip both wires and fit a bullet connector (SPC 1786) to each wire.
4. By use of the snap connectors provided (RD 7050) connect the switch leads to the wires protruding through the switch aperture (See Fig. 1).

5. Push the wires back through the switch aperture and screw the new switch and faceplate into position (See Fig. 1).
6. The buffer, which is fixed to the door to push the switch plunger when the door is closed, will have to be repositioned. This is due to the switch plunger being offset, unlike the previous switch where the plunger was positioned in the middle.
7. To reposition the buffer, drill a 6,35mm. (0.250in.) hole 11,11mm. (0.437in.) below the centre of the original 6,35mm. (0.250in.) hole in the door. Blank the original hole with the grommet supplied in the kit.
8. Check the operation of the new courtesy light switch to ensure that it functions correctly.

PARTS REQUIRED:

PART NUMBER	QUANTITY	DESCRIPTION
RH 2772	1	Courtesy light switch conversion kit
CONTENTS OF KIT		
UD 22404	1	Courtesy light switch and faceplate
UE 10247	1	6,35mm.(0.250in.) blind grommet
RD 7050	2	Snap connector
SPC 1786	2	Male bullet connector

Hly/Per

 FIG 1

Service Bulletin



TSD 4318

Bulletin number	SY/M121							Date	27	8	79	Page	1	of	2
Circulation list															

Category C

ALL FRANCHISE HOLDERS AND DEALERS

NEW PIONEER LOUDSPEAKERS

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II and Camargue cars and all Bentley T2 cars from car serial numbers:

Silver Shadow II and - SRH 38100 (including SRH 38097, SRK 38094, Bentley T2 SRH 38093, SRH 38091, SRH 38069, SRK 38055, SRK 38012 and SRK 38003).

Silver Wraith II - LRK 37747 (including LRH 37741).

Camargue - JRH 50206 (including JRX 50198, JRH 33034, JRX 32559 and JRX 32482).

INTRODUCTION:

A new loudspeaker is being fitted to all production cars from the car serial numbers quoted above. The replacement speaker is manufactured by Pioneer.

DESCRIPTION:

The new speaker is of a free edge single cone type with a metallic centre cap. Visually it is slightly more concave than the Philips speaker previously used and has a smaller diameter. The speaker is located within the existing door apertures, front and rear, on similar mounting boards to those used previously.

The high standards of trim used in Rolls-Royce motor cars has the effect of high frequency absorption. The characteristics of the new Pioneer speaker are such that they compliment those of the car's interior. The Pioneer speaker has a good high frequency range and it compensates for the effect of high frequency absorption.

The Pioneer speaker handling capabilities are such that it cannot be overloaded by the present in-car entertainment equipment. It can accommodate any reasonable increase in equipment power rating that may be required in the future.

SERVICE PROCEDURE:

The procedure for removing and replacing the Pioneer speaker is the same as that of the original speaker. The same Pioneer speaker is used both in the back and in the front of the motor car.

Since the characteristics of the Pioneer speaker are different to the Philips speaker previously used then, in the event that a Philips speaker requires replacement, a matching pair of Pioneer units should be used in the front or the rear of the car in order to maintain a balanced sound.

The following parts have been changed:

UD 19341	Rear Door Speaker)	Have been replaced by UD 22845.
UD 19342	Front Door Speaker)	
UW 15280	Mounting Board (all doors)	Has been replaced by UW 17486.
PW 63349	Mounting Board Rear Parcel Shelf (Camargue)	Has been replaced by UW 17612.
PW 61046	Mounting Board Door (Camargue)	Has been replaced by UW 17596.

Service Bulletin

TSD 4318

Bulletin number	SY/M123					Date	10	7	80	Page	1	of	3
Circulation list													

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

REPLACEMENT OF A WINDOW LIFT MOTOR

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II and all Bentley T series and Bentley T2 cars between car serial numbers, SRH 13754 to 34100.

INTRODUCTION:

Window lift drive motors as fitted to the above cars are no longer available. A new type of motor has been introduced which will directly replace the earlier motor when used with a special coupling and packing washers. The new type motor and coupling are available as a kit of parts, RH 2786 or RH 2787.

This bulletin describes the fitting procedure for the motor and coupling.

PROCEDURE:

1. Remove the door trim panel.
2. Remove the faulty motor and the splined nylon drive coupling from the window lift unit.
3. From the kit of parts take the new nylon drive coupling and packing washers and assemble as shown in Figure 1. Grease applied to the washers will assist in holding them in position during assembly.

4. Apply a multi purpose grease to the motor shaft and peg drive.
Fit the motor and assembled coupling to the window lift unit.
Ensure that the two drain holes in the motor body are positioned on the underside when the motor is in position.

Care must be taken to avoid damaging the plastic waterproofing tape that is positioned between the body and the end plate of the motor.

5. Replace the door trim panel.

PARTS REQUIRED

For cars from and including chassis numbers 13754 upto and including 30 000.

PART NO	DESCRIPTION
1 off RH 2786	Window lift motor conversion kit.
Contents	
1 off UB 38552	Window lift motor
1 off RH 9610	Drive coupling
1 off RB 1077	Metal washer
1 off UB 13667	Rubber washer

For cars from and including chassis numbers 30001 upto and including 34100.

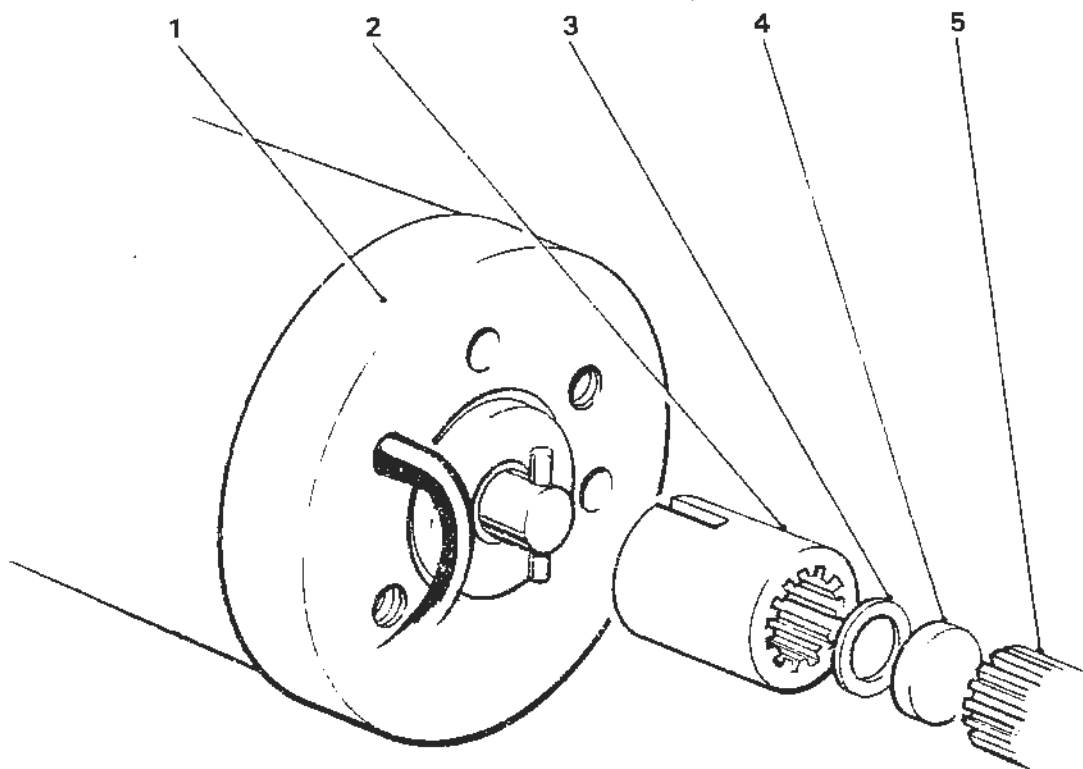
PART NO	DESCRIPTION
1 off RH 2787	Window lift motor conversion kit.
Contents	
1 off UB 32341	Window lift motor
1 off RH 9610	Drive coupling
1 off RB 1077	Metal washer
1 off UB 13667	Rubber washer

TIME ALLOWED

1.50 Hours

Figure 1

Showing the Motor, Coupling, Packing washer and the Window lift drive-shaft.



U870

1. Window lift motor
2. Drive coupling
3. Metal washer
4. Rubber packing washer
5. Window lift drive-shaft

Service Bulletin

TSD 4318

Bulletin number	SY/M124										Date	25 6 80			Page	1 of 14		
Circulation list																		

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS IN EUROPE

SERVICE REPLACEMENT BATTERIES

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche, Camargue and all Bentley T Series, Bentley T2 and Corniche cars.

INTRODUCTION:

'Varta' batteries have been approved for service replacement purposes. A 'Varta' battery maybe used as a replacement in service, whenever a battery of the original equipment type is unobtainable.

The 'Varta' name is well known throughout Europe, although France is serviced by 'Baroclem', whilst Sweden, Norway, Denmark and Finland are serviced by 'Noak', both are members of the 'Varta' group of companies. In these instances either a 'Baroclem' or 'Noak' battery maybe fitted.

This bulletin contains a complete list of all 'Varta', 'Baroclem' and 'Noak' companies and their sales offices and depots. In addition to the depots listed each company operates a network of agents and wholesalers who can also provide a service.

The correct Varta battery for the above cars is Varta type 57024.

The 'Baroclem' equivalent of 'Varta' type 57024 is 12H70Bop, whilst the 'Noak' equivalent is CM11G.

The 'Baroclem' and 'Noak' type numbers are for added convenience whilst the 'Varta' type numbers are known throughout Europe.

PROCEDURE

COMMISSIONING A NEW BATTERY

Under normal circumstances a battery supplied by either a 'Varta', 'Baroclem' or 'Noak' agent will be in a full state of charge and ready for immediate use without any further preparation.

However, batteries can be obtained 'dry charged' and when this is the case the following procedure must be adopted.

1. Fill the dry charged battery to just cover the plates with battery acid of between 1.270 to 1.290 - specific gravity.
2. Provided that the ambient temperature is above 10° centigrade the battery will be fully charged and ready for use when a period of approximately 20 minutes has elapsed after adding the battery acid. If the ambient temperature is below 10° centigrade the battery will require a short period of charge at 1/10 the rated capacity of the battery.
3. For further information on the care and maintenance of the battery refer to the workshop manual TSD 4200 M1-3.

Hly/Brn

AUSTRIA

WIEN/OSTERREICH

Verkaufshaus (Head Office)
Geschäftsleitung
Tel No: 004 32 22/86 96 61
Twx No: 0047 131 644

WIEN

Verkaufshaus
Embelgasse 1-5
1050 Wien
Tel No: 55 27 70

LINZ

Verkaufshaus
Wiener Strasse 153
4021 Linz
Tel No: 0732/43 194

SALZBURG

Verkaufshaus
Morzgerstrasse 21
5020 Salzburg
Tel No: 06222/41655

INNSBRUCK

Verkaufshaus
Neuhauserstrasse 10
6020 Innsbruck
Tel No: 05222/227 14

KLAGENFURT

Verkaufshaus
Ehrentalerstrasse 27
9020 Klagenfurt
Tel No: 04222/41302

GRAZ

Verkaufshaus
Munzgravenstrasse 168
8010 Graz
Tel No: 993/43 36 74

BREGENZ

Verkaufshaus
Firma Kretschma
Arlbergstrasse 109
6900 Bregenz
Tel No: 05574/31810

BELGIUM

BRUSSELS

Varta SA (Head Office)
Rue Uyttenhove 49-51
B-1090 Bruxelles
Belgien
Tel No: 003 22/4 27 42 10
Twx No: 0046 23 165

BRUSSELS

Varta Depot
Avenue F Lecharlier 143/147
1090 Bruxelles
Tel No: (02) 427 42 10 (51)
427 98 10 (21)

BELGIUM
(Continued)

ANTWERPEN

Varta Depot
Vincottestraat 67
2200 Gorgerhout
Tel No: (031) 35 51 40

GENT

Varta Depot
Brusselsesteenweg 792
9001 Gentbrugge
Tel No: (091) 30 84 17

CHARLEROI

Varta Depot
Avenue de Philippeville 213
6001 Marcinelle
Tel No: (071) 43 40 53

LIEGE

Varta Depot
Rue Branch Planchard 288
4300 Ans
Tel No: (041) 63 36 86

KORTRIJK

Varta Depot
Deerlijksestraat 40
8500 Kortrijk
Tel No: (056) 22 54 82

CHANNEL ISLANDS

Varta Batteries Limited
9/10 Grand Union Industrial Estate
Abbey Road
Park Royal
London
NW10 7UL
Tel No: 01-965 7991
Twx No: 8951658

DENMARK - NOACK
(Varta Group Company)

Nordisk Ackumulator Fabrik NOACK A/S
Frydensbergvej 17-19
DK - 3660 Stenlose
Denmark
Tel No: 03/17 27 00
Twx No: 42517 Khas dk

FINLAND - SALAMA
(Varta Group Company)

ESBO

Huvudkontor (Head Office, Postal Address)
Akkuteollisuus OY - Ackumulatorindustri AB
Box 60
02631 Esbo 63

Gatusdress (Office Address)
Vavarsvagen 1
02630 Esbo 63
Tel No: 90 52501
Twx No: 12 1385 start sf

KOUVOLA

Akkuteollisuus OY
Kappelikatu 13
45130 Kouvola 13
Tel No: 951 14380 or 15519

KUOPIO

Akkuteollisuus OY
Maaherrankatu 22
70110 Kuopio 10
Tel No: 971 116 653 or 114 595

VAASA

Akkuteollisuus OY
Kellosepankatu 5
65100 Vaasa 10
Tel No: 962 115 661 or 116 371

FRANCE - BAROCLEM
(Varta Group Company)

PARIS

Baroclem (Head Office)
Region Parisienne et Normandie
Centre
88 Ave Marceau 92400
Courbevoie
Paris
Tel No: (1) 334 30 30

TURKU

Akkuteollisuus OY
Sorsantie 4
20300 Turku 30
Tel No: 921 337 400

TAMPERE

Akkuteollisuus OY
Messukylantie 23
33700 Tampere 70
Tel No: 931 632 115 or 632 116

JYVASKLA

Akkuteollisuus OY
Tanhauntie 4
40720 Jyväskylä 72
Tel No: 941 19512 or 12499

OULU

Akkuteollisuus OY
Ilmarinkatu 5
90120 Oulu 12
Tel No: 981 221 908 or 12573

EAST FRANCE

Baroclem Depot
Rue G Faure
'La Californie' 54140
Jarville la Malgrange
Tel No: (16) 83 51 03 29

FRANCE - BAROCLEM
(Varta Group Company)
(Continued)

RHONE - ALPES

Baroclem Depot
35-37 Chemin du Marais
69100 Villeurbanne
Tel No: (16) 78 80 86 83

SOUTH EAST FRANCE

Baroclem Depot
Quartier de la Moutte
13220 Chateauneuf Les-
Martigues
Tel No: (16) 42 07 30 07

TOULOUSE

Baroclem Depot
1 Rue Clement Ader
31770 Colomiers
Tel No: (16) 61 78 26 83

BORDEAUX

Baroclem Depot
118 Avenue Thiers
33100 Bordeaux-Bastide
Tel No: (16) 56 86 23 48

NANTES

Baroclem Depot
55 Rue Leon Jost
44100 Nantes
Tel No: (16) 40 40 10 40/
40 40 03 95

GERMANY

HANNOVER

Varta Batterie AG (Head Office &
Factory)
Am Leineufer 51
3000 Hannover 21
Postfach 210540
Tel: 0511/79031
Telegram: VARTA Hannover
Telex: 0921175

AACHEN

Varta Verkaufsburo
Alexanderstrasse 69-71
5100 Aachen
Tel: 0241/30609, 20925

AUGSBURG

Varta Verkaufsburo
Eichleitner Str 3
8900 Augsburg
Tel: 0821/578097-98

BERLIN

Varta Verkaufshaus
Askanischer Platz 3
1000 Berlin 61
Tel: 030/2611721
Telex: 0184850

FRANKFURT/MAIN

Varta Verkaufshaus
Frankfurter Allee 77-81
6236 Eschborn 1
Postfach 6160
Tel: 06196/43022
Telex: 0415679

GERMANY
(Continued)

BIELEFIELD

Varta Verkaufsburo
Herforder Strasse 210
4800 Bielefeld
Tel: 0521/323061-63

BREMEN

Varta Verkaufsburo
Birkenstrasse 15
2800 Bremen 1
Tel: 0421/314365/66

DORTMUND

Varta Verkaufsburo
Rathenaustrasse 12
Postfach 300508
4600 Dortmund 30
Tel: 0231/436014-15

DUSSELDORF

Varta Verkaufsburo
Krefelder Strasse 85
4000 Dusseldorf 11
Tel: 0211/507066-68

ESSEN

Varta Verkaufshaus
Bamlerstrasse 122
Postfach 1831
4300 Essen 1
Tel: 0201/311071
Telex: 08579015

KOLN

Varta Verkaufshaus
Engelbertstr 16-26
5000 Koln 1
Postfach 100105
Tel: 0221/210291-98
Telex: 08882554

FREIBURG I BR

Varta Verkaufsburo
Tukheimer Strasse 1
Postfach 1570
7800 Freiburg i Br
Tel: 0761/81055

HAMBURG

Varta Verkaufshaus
Suderstrasse 79
2000 Hamburg 1
Postfach 106324
Tel: 040/24182-28
Telex: 02162685

HANNOVER

Varta Verkaufshaus
Marienstrasse 47
3000 Hannover
Postfach 6120
Tel: 0511/16501-08
Telex: 0922885

KASSEL

Varta Verkaufsburo
Weserstrasse 4-6
3500 Kassel
Tel: 0561/13855-56

MANNHEIM

Varta Verkaufshaus
Seckenheimer Landstr 238-240
6800 Mannheim 25
Postfach 6
Tel: 0621/444096
Telex: 0462524

NURNBERG

Varta Verkaufshaus
Kleinreuther Weg 124-128
8500 Nurnberg
Postfach 4242 Nurnberg 1
Tel: 0911/36761-65
Telex: 0622202

GERMANY
(Continued)

MUNCHEN

Varta Verkaufshaus
Nymphenburger Strasse 128
8000 Munchen 19
Postfach 321
Tel: 089/181091
Telex: 0523100

STUTTGART

Varta Verkaufshaus
Kesselstr 3
7000 Stuttgart 60
Postfach 567
Tel: 0711/400111
Telex: 0723831

SAARBRUCKEN

Varta Verkaufsburo
Meerwiesertalweg 23
6600 Saarbrucken 3
Tel: 0681/34736

HOLLAND

AMSTERDAM

Accu Service
1091 G S Amsterdam
Wibautstraat 212
Tel No: 020 920773

DEN HAAG

Accu Service
2525 J L Den Haag
Marktweg 14
Tel No: 070 886200

EINDHOVEN

Accu Service
5611 S R Eindhoven
G Metsulaan 54A
Tel No: 040 123083

GRONINGEN

Accu Service
9731 A C Groningen
Rijksweg 38B
Oosterhogebrug
Tel No: 050 412444

HEERLEN

Accu Service
6414 E S Heerlen
Anjelierstraat 137
Tel No: 045 213204

DEN BOSCH

Accu Service
5212 N K Den Bosch
Hennequinststraat
Tel No: 2073 138234

MIDDELBURG

Accu Service
4331 K T Middelburg
Vlissingsestr 9-11
Tel No: 01180 14663

NIJMEGEN

Accu Service
6511 S M Nijmegen
3E Walstraat 47
Tel No: 080 221510

HOLLAND
(Continued)

ROTTERDAM

Accu Service
3087 B G Rotterdam - Zuid
Apuikade 23C
Tel No: 010 293455

UTRECHT

Accu Service
3582 G E Utrecht
Koningsweg 2A
Tel No: 030 520303

IRELAND

The Equipment Company of Ireland Ltd
Ballymount Road
Walkinstown
Dublin 12
Tel No: Dublin 50023
Twx No: 30299

ITALY

MILANO

Varta S p A (Head Office)
Sede: 20137
Milano
Via Tertulliano No 70
Tel No: (02) 546 33 51 -
546 36 41

BOLOGNA

Varta Depot
Via Don G
Fornasini 9
40128 Bologna
Tel No: (051) 335 319

CATANIA

Varta Depot
Via Tolmezzo 8/16
Catania 95129
Tel No: (095) 240 389

FIRENZE

Varta Depot
Via Cittadella 4
Firenze 50144
Tel No: (055) 473 048 -
499 601

MILANO

Varta Depot
Via Marco d'Agrate 41
Milano 20139
Tel No: (02) 56 91 344 -
53 98 673

PADOVA

Varta Depot
Via Romoio Fowst 7
Padova 35100
Tel No: (049) 610 139 -
203

ITALY

(Continued)

VOGHERA

Varta Depot
Via XX Settembre 26
Voghera 27058
Tel No: (0383) 35 143

ROMA

Varta Depot
Via Guglielmotti 45/59
Roma 00154
Tel No: (06) 513 80 87 -
512 08 49

NAPOLI

Varta Depot
Via Chieti 18/20/22
Napoli 80143
Tel No: (081) 335 654

NORWAY - NOACK

(Varta Group Company)

OSLO

Noak A S (Head Office)
Hovedkontor
Bernhard Getzgate 3 B
Postboks 6828
St Olavs plass
Tel No: 02 206690
Twx No: 18118

OSLO

Noack A S
Lager og ekspedisjon
Avdeling Nydalen
Gjerdrums vei 12
Tel No: 02 213455

GJOVIK

Gjovik Batterisentral
Avdeling av Noack A S
Industrigaten 1
2300 Gjovik
Tel No: 061 71198

BERGEN

Batterilageret Bergen
Avdeling av Noack A S
Sandviksveien 18
5000 Bergen
Tel No: 05 231058
05 231059

TROMSO

Noack A S
Avdeling Nord-Norge
Strandveien 50
9000 Tromso
Tel No: 083 83647

TRONDHEIM

Noack A S
Avdeling Trondheim
Omkjoringsveien - Nardo
7000 Trondheim
Tel No: 075 40943
075 40946

NORWAY - NOACK
(Varta Group Company)
(Continued)

HALDEN

Noak A S
Sykehusgaten 6
Fabrikk, Industri
Marine, Ekspedisjon og Lager
1750 Halden
Tel No: 031 82786 031 95288
Twx No: 18108

SPAIN

MADRID

Varta Baterias S A (Head Office)
Administracion Central
Serrano 16
Madrid 1
Tel No: 446 04 00

BARCELONA 11

Sucursales
Valencia 166
Tel No: 254 53 06 &
254 53 07

BILBAO 14

Sucursales
Chacoli 1 & 2
Tel No: 447 80 93 & 447 80 94

LA CORUNA

Sucursales
Camino del Pinar 62
Tel No: 25 77 00 & 26 54 72

MADRID 5

Surcursales
Eugenio Selles 5
Tel No: 473 82 00 & 473 80 96

MALAGA

Sucursales
Martin de la Plaza 19
Tel No: 39 04 76 & 39 65 99

ALICANTE

Sucursales
Casiopea 56
Tel No: 28 27 12 &
28 97 50

BARCELONA 13

Sucursales
Espronceda 357
Tel No: 251 70 82

JEREZ DE LA FRONTERA

Sucursales
Ma Antonia Jesus Tirado 4
Tel No: 34 91 51 & 34 27 68

LEON

Sucursales
Avda Fernandez Ladreda 25
Tel No: 20 17 64 &
20 34 46

MADRID 27

Sucursales
Sambara 96
Tel No: 408 39 65 & 408 39 67

MURCIA

Sucursales
Ayda Ibanez Martin 13
Tel No: 23 28 72 & 23 05 14

SPAIN
(Continued)

OVIEDO

Sucursales
Tenderina Baja 199
Tel No: 28 67 49 & 28 92 37

VALENCIA

Sucursales
Castan Tobenas 22-24
Tel No: 79 60 23 & 79 95 56

VIGO

Sucursales
Garcia Barbon 39
Tel No: 21 79 06 & 21 12 47

SWEDEN - NOACK
(Varta Group Company)

STOCKHOLM

Filialer
Kommendorgatan 17 (Head Office)
Box 5317
102 46 Stockholm
Tel No: 08 67 08 20
Twx No: 10193

STOCKHOLM

Filialer
Nordenflychtsvagen 68
Box 30038
104 25 Stockholm
Tel No: 08 13 03 90

MALMO

Filialer
Baragatan 11
212 28 Malmo
Tel No: 040 93 51 45

NORRKOPING

Filialer
Fredriksdalsgatan 16
601 02 Norrkoping
Tel No: 011 10 86 90

KARLSTAD

Filialer
Lantvarnsgatan 10
652 21 Karlstad
Tel No: 054 11 89 66

SEVILLA

Sucursales
S Juan de Ribera 6
Tel No: 37 29 53 & 37 43 46

ZARAGOZA

Sucursales
San Roque 18
Tel No: 32 20 68 & 33 00 17

HULTSFRED

Filialer
Box 170 (Factory)
577 00 Hultsfred
Tel No: 0495 120 80
Twx No: 3914

HISINGS BACKA

Filialer
Importgatan 12
422 46 Hisings Backa
Tel No: 031 58 02 90
(Gothenburg)

JONKOPING

Filialer
Hammarvagen 128
552 76 Jonkoping
Tel No: 036 751 00

OREBRO

Filialer
Argongatan 41
703 74 Orebro
Tel No: 019 13 02 75

BORLANGE

Filialer
Skomakargatan
781 50 Borlange
Tel No: 0243 279 01

SWEDEN - NOACK
(Varta Group Company)
(Continued)

SUNDSVALL

Filialer
Ostermovagen 41
Box 22
851 02 Sundsvall
Tel No: 060 15 19 40

SKELLEFTEA

Filialer
Svedjevagen 8 J
931 22 Skelleftea
Tel No: 0910 154 33

SWITZERLAND

BASEL

E S A
Zufahrtstrasse 32
4002 Basel
Tel No: 061 46 70 60
Twx No: 62 454

BELLINZONA

E S A
Via Murate 7
6500 Bellinzona
Tel No: 092 25 99 55/88
Twx No: 73 525

GENEVE

E S A
10 Rue Jean-Jaquet
1201 Geneve
Tel No: 022 31 69 35
Twx No: 23 156

BUSSIGNY

E S A
26 Chemin due Bosquet
1030 Bussigny
Tel No: 021 89 35 11
Twx No: 24 380

LUZERN

E S A
Weggismattstrasse 23
6000 Luzern
Tel No: 041 36 78 80
Twx No: 78 198

ST GALLEN

E S A
Adlergasse 10
9000 St Gallen
Tel No: 071 22 14 95/96
Twx No: 71 406

ZURICH'

E S A
Badenerstrasse 621
8048 Zurich
Tel No: 01 54 48 90
Twx No: 53 235

BELLACH SO

(Depot)
Max Ziegler AG
Gurzelenfeld
4512 Bellach SO
Tel No: 065 38 34 41

SWITZERLAND
(Continued)

LA CHAUX-DE-FONDS

(Depot)
Garage des Entilles SA
146 av L-Robert
2300 La Chaux-de-Fonds
Tel No: 039 23 64 64

HAUTERIVE NE

(Depot)
Garage du Roc
25 Rouges-Terres
2068 Hauterive NE
Tel No: 038 33 40 33

SAMEDAN

Gebruder Pfister AG
Autogarage
7503 Samedan
Tel No: 082 6 56 66

SCHAAN

H Weilenmann AG
Autogarage
9494 Schaan
Tel No: 075 2 18 35/255 73

E S A - Einkaufsgenossenschaft des Autogewerbeverbandes der
Schweiz. This company represent Varta in Switzerland.

Service Bulletin

TSD 4318

Bulletin number	SY/M125					Date	14 8 80			Page	1 of 2		
Circulation list													

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

AUTOMATIC RETRACTION OF THE RADIO AERIAL ON OPERATING THE IGNITION SWITCH

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II and Corniche cars and all Bentley T2 and Corniche cars from car serial numbers.

34573 - Silver Shadow II
34601 - Silver Wraith II
34775 - Bentley T2
34830 - Corniche Saloon
33029 - Corniche Convertible

INTRODUCTION:

A number of requests have been received for a modification to the radio aerial control circuit that, with the radio switched on, would cause the aerial to retract and raise when the ignition switch is turned to and from the OFF position. This modification must still allow normal control of the aerial from the radio on/off switch.

This bulletin describes the method of fitting such a modification:

PROCEDURE:

a) Left-hand drive cars.

1. Locate the aerial relay as shown in the Workshop Manual, Section M9, Fig. M3-supplement 1 and disconnect the light green/brown cable from terminal C2 of the relay. Tape this cable back into the loom.

2. Connect a 14s brown/purple cable to the C2 terminal of the aerial relay and connect the other end of this cable to the 28s brown/purple cable which comes from the 7-way fuseboard socket immediately behind fuse No. 12.
- b) Right-hand drive cars.
1. Remove the right-hand side lower knee roll trim and the top roll.
 2. Locate the aerial relay as shown in the Workshop Manual, Section M9, Fig. M3-supplement 1 and disconnect the light green/brown cable from terminal C2 of the relay. Tape this cable back into the loom.
 3. Connect a 14s brown/purple cable to the C2 connection of the aerial relay. Tape this cable to the main distribution loom and run the cable across the dashboard to the fuseboard.
 4. Connect the cable to the 28s brown/purple cable which comes from the 7-way fuseboard socket immediately behind fuse No. 12.

Note

When this modification has been carried out the radio aerial will be protected by fuse No. 12 and NOT fuse 20 as shown on the fuseboard identification plate.

The radio itself however, will be unaffected and still be protected by fuse No. 20 as shown on the fuseboard identification plate.

Hly/Brn

Service Bulletin

ROLLS-ROYCE
MOTORS

Car Division

TSD 4318

Bulletin number	SY/M126							Date	18 2 81			Page	1 of 3		
Circulation list															

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

REPLACEMENT ICE WARNING SENSOR

APPLICABLE TO:

All Rolls-Royce Camargue cars prior to car serial number JRX 50558 (except JRX 50504 and JRL 50516).

INTRODUCTION:

A new ice warning sensor has been introduced on all Rolls-Royce Camargue cars from serial number JRX 50558 (including JRX 50504 and JRL 50516).

This new ice warning sensor will be supplied for all service replacements.

The ice warning lamp is operated by the sensor, which is mounted behind the radiator shell, and an amplifier which is mounted on the instrument test board.

The sensor and the amplifier are matched one to the other. Renewal of the sensor necessitates re-calibrating the amplifier.

DESCRIPTION:

A resistor having a resistance value of 7000Ω , will be supplied with each replacement sensor. This resistor has the same resistive value as the sensor at an ambient temperature of 1°C . The resistor is used to calibrate the amplifier (see figs 1 and 2).

This Service Bulletin details the procedure for fitting and calibrating the new type sensor to the existing amplifier, or alternatively calibrating a new amplifier to a new sensor.

PROCEDURE:

- 1 Remove the radiator shell.
- 2 Remove the faulty sensor and connect the 7000 Ω resistance supplied between the 14 slate/white and 14 slate/yellow cables
- 3 Remove the centre facia from the dashboard.
- 4 Remove the seat belt warning lamp cluster. (To gain access to the amplifier).
- 5 A hole is provided on the right-hand corner of the amplifier (see fig.3 to gain access to the adjustment screw. The screwdriver used for adjusting the amplifier must have a blade which is not in excess of 2mm (0.078in) in width.
- 6 Rotate the amplifier adjusting screw fully clockwise.
- 7 Switch on the ignition.
- 8 The ice warning panel lamp should illuminate.
- 9 Very slowly, rotate the amplifier adjusting screw anti-clockwise until the warning panel lamp extinguishes. Rotate the adjusting screw very slowly clockwise; stop rotating the screw immediately the warning panel lamp illuminates. Finally, using extreme care, rotate the screw anti-clockwise until the lamp extinguishes.

This operation should be repeated until the technician is completely satisfied that the amplifier is adjusted correctly.
- 10 Switch off the ignition.

Note

The previous operations ensure that the amplifier is set exactly at its switching point for the resistance being used. It is important that the adjusting screw is not rotated beyond the switching point once the warning panel lamp has extinguished.

- 11 Remove the 7000 Ω resistance and fit the new type sensor using the original fixing screw and bracket.

PARTS REQUIRED:

UD 23154 Sensor and Loom assembly.

Hly/Per

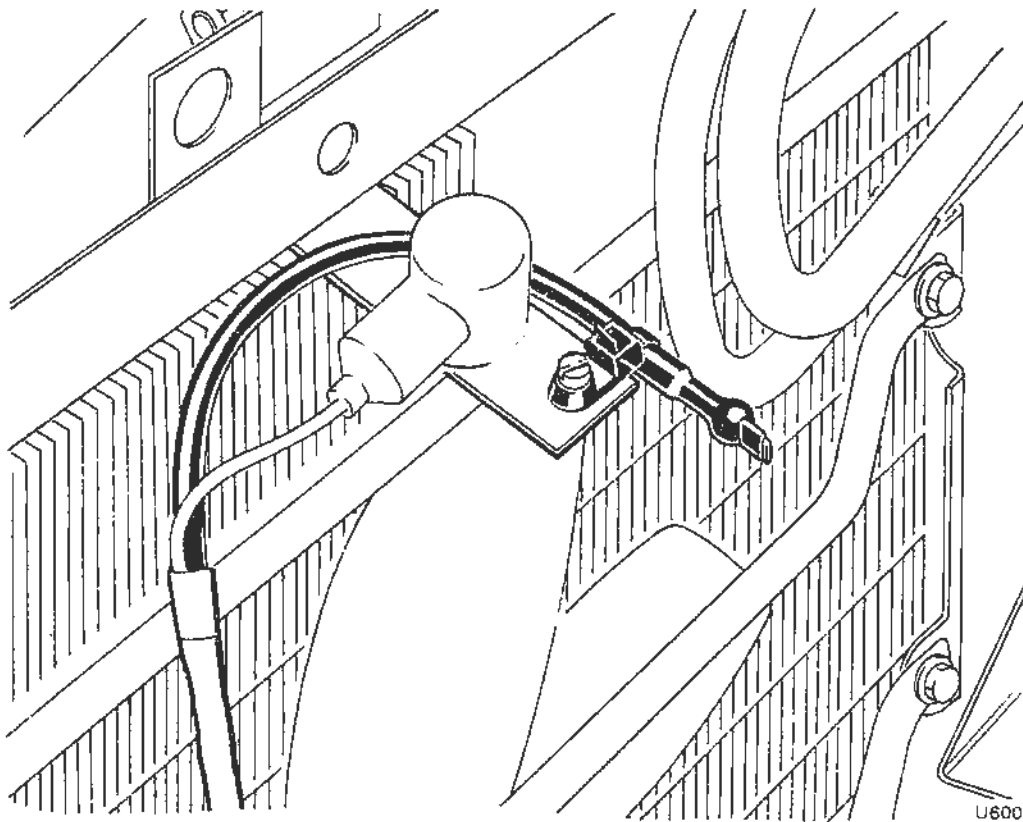


Figure 1 Sensor in position behind the radiator

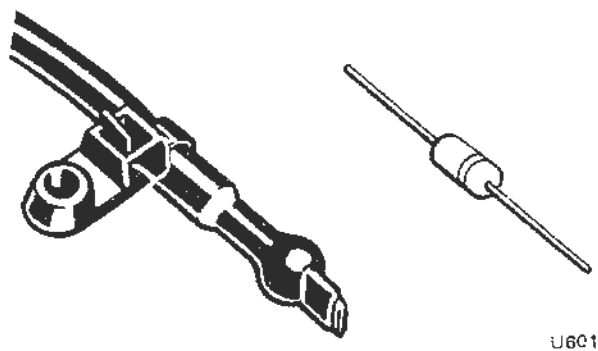


Figure 2 Sensor and Resistor

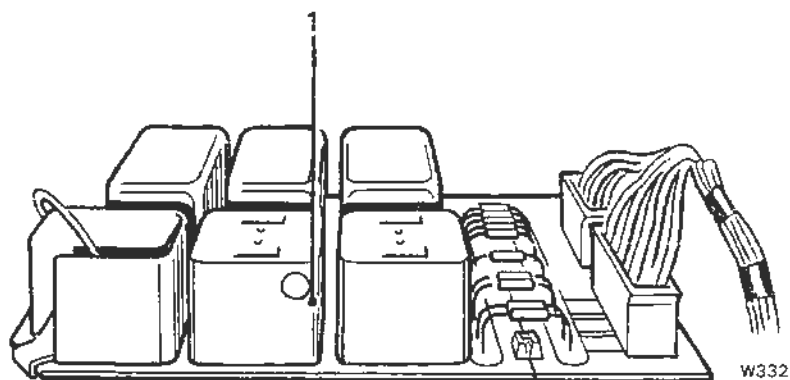


Figure 3 Printed circuit board
1. Amplifier with access hole

Service Bulletin

TSD 4318

Bulletin number	SY/M127 Issue 2								Date	3 12 80				Page	1 of 3		
Circulation list																	

Category

C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

NEW LONGER BOSCH FRANKFURT SIX BUTTON RADIO

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche, Camargue, Bentley Corniche and T2 series from and including the following car serial numbers:

Silver Shadow II and Bentley T2

SBX 40527 SRL 40619 SBL 40622 SRL 40663
SRL 40667 SRL 40683 SRX 40690 SRL 40692
SRL 40719 - and onwards with the exception of cars supplied to the UK Market.

Silver Wraith

LRL 40463 LRL 40567 LRX 40570 LRH 40572
LRL 40628 LRH 40695 LRL 40698 LRL 40700
LRH 40771 LRL 40773 - and onwards with the exception of
LRL 40778.

Corniche

CRL 50400 CPX 50422 DRL 50423 CRX 50428
DRL 50438 DRL 50439C DRL 50440 DRL 50442
DRL 50443 DBX 50444 CRX 50448 - and onwards with
the exception of DRL 50485 and DRL 50486.

Camargue

JRX 50433 JRL 50456C JRX 50470 JRL 50479
JRX 50481 JRH 50491 JRL 50492 JRX 50504
and onwards.

INTRODUCTION

A new Bosch Frankfurt six push button radio has been introduced to replace the Bosch Frankfurt four push button radio. The reason for the change is that Bosch have stopped production of the four push button radio. The six push button radio will not be fitted to any UK specification Rolls-Royce Silver Shadow or Bentley T2 motor cars.

DESCRIPTION

The new Bosch Frankfurt six push button radio is not directly interchangeable with its predecessor the four push button radio. This is due to the six button radio being slightly longer than the discontinued radio.

In the event that a six push button radio is to be fitted in place of the original four push button radio. A new modified stop and support bracket along with new radio speaker lead plugs, will have to be fitted in conjunction with the new radio set.

PROCEDURE

This procedure should be read in conjunction with Workshop Manual TSD 4200, Chapters M and S.

1. Disconnect the battery.
2. Remove the console.
3. Remove the six self-tapping screws securing the mounting bracket. Withdraw the bracket and radio.
4. Disconnect the aerial leads and power supply.
5. Remove the top roll.
6. Remove the warning light test board.
7. Remove the existing radio stop and support bracket UD 22196.
8. Fit the new radio stop and support bracket UD 23065.
9. Remove the radio stop grommet and plastic insert from the stop and support bracket UD 22196. Fit to the new stop and support bracket UD 23065.
10. Cut off the existing plugs on the end of the speaker leads and fit in line Din Plugs UD 23997 in their place.
11. To fit new radio, reverse operations 1-6 ensuring that the radio is not obstructed by cables.
12. Adjust the aerial trimmer for the best reception.

3 12 80

3 of 3

SY/M127
Issue 2

PARTS REQUIRED

PART NUMBER	DESCRIPTION	QUANTITY REQUIRED
UD 23065	Stop and support bracket	1 off
UD 23997	In line din plugs	2 off

Hly/Per

Service Bulletin

TSD 4318

Bulletin number	SY/M128 (Issue 2)										Date	28 9 82			Page	1 of 3		
Circulation list																		

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

4 IN 1 INSTRUMENTS

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Phantom VI cars and all Bentley T2 and Corniche cars from car serial numbers

- 30001 - Silver Shadow II, Silver Wraith II
and Bentley T2
- 30009 - Corniche
- 114 - Phantom VI

INTRODUCTION:

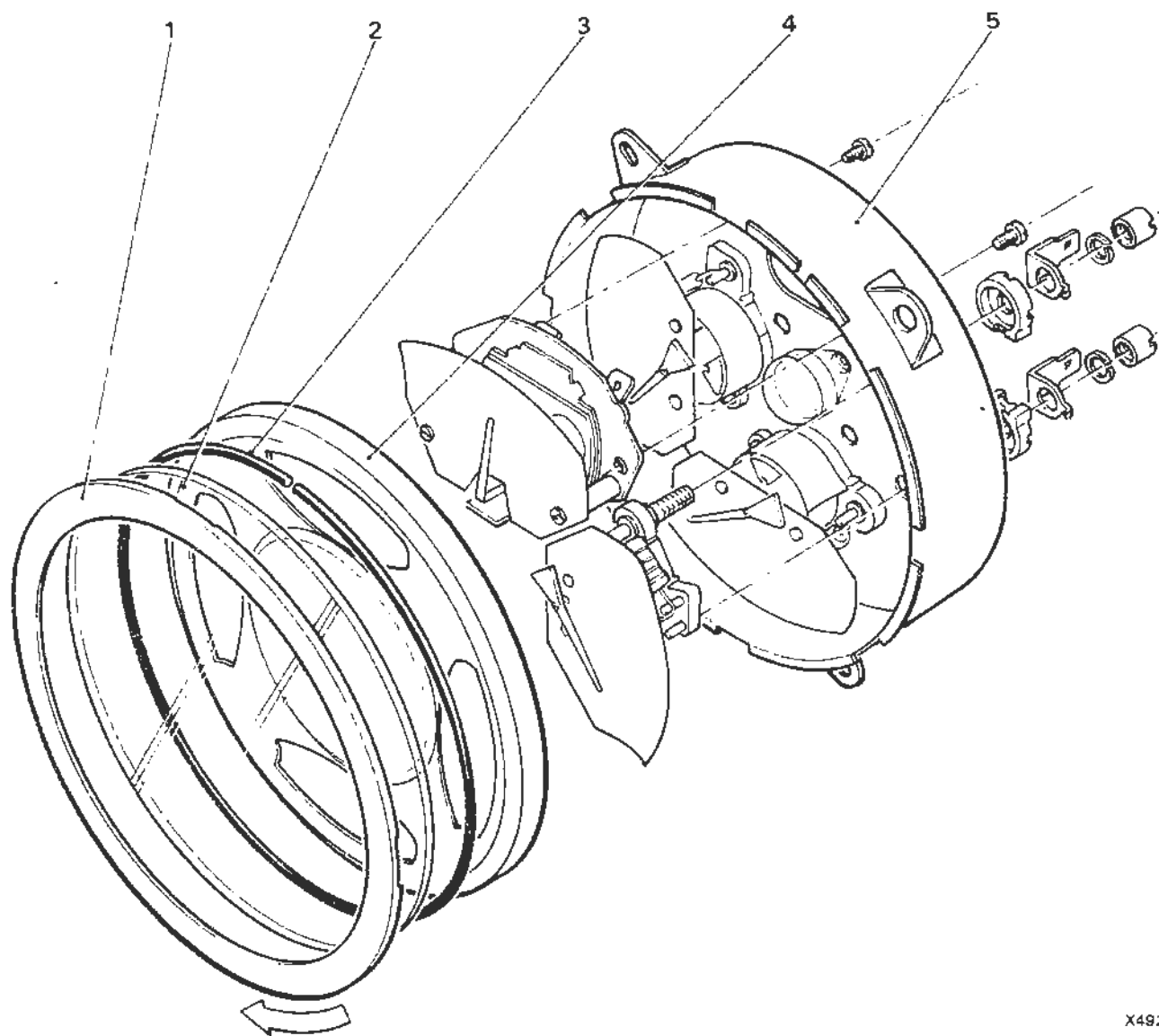
This service bulletin cancels SY/M128 Issue 1.

Replacement gauges are now available for the repair of 4 in 1 instruments. Complete 4 in 1 instruments renewed under warranty will NOT be accepted if the instrument could have been repaired by replacing one or more of the individual gauges.

This service bulletin gives the part numbers of the individual gauges and the method of replacement.

PROCEDURE:

- 1 Remove the bezel by rotating it clockwise until the metal tongues align with the cut-outs in the case.
- 2 Remove the glass, 'O' ring seal, and the face plate from the 4 in 1 instrument.
- 3 Remove the appropriate gauge by releasing either screws or nuts from the rear of the 4 in 1 instrument case as shown in figure 1.
- 4 Carefully fit the new gauge.



X492

Fig. 1

- 1 Bezel
- 2 Glass
- 3 'O' ring seal
- 4 Face plate
- 5 4 in 1 instrument case

- 5 Ensure that no dirt or foreign bodies are present in the 4 in 1 instrument case or on the inner face of the glass and the face plate.
- 6 Replace the face plate, 'O' ring seal, glass, and bezel.

PARTS REQUIRED:

Description	Part Numbers
Coolant Gauge	CD 6193
Fuel Gauge	CD 6194
Oil Pressure Gauge	CD 6195
Ammeter	CD 6196
Voltmeter	CD 6230

MAN HOUR SCHEDULE ALLOWANCE:

The following times are allowed for the removal of one gauge and include the removal and replacement of the 'Four-in-one' instrument.

CODE	DESCRIPTION	TIME
37 19 01 A	Oil Pressure Gauge	0.5 hours
37 19 11 A	Coolant Temperature Gauge	0.5 hours
37 19 21 A	Ammeter and Voltmeter	0.5 hours
37 19 31 A	Fuel Gauge	0.5 hours

Where more than one gauge is replaced, the time allowed is for one gauge plus 0.1 hour for each additional gauge.

Hly/Brn

Service Bulletin

TSD 4318

Bulletin number	SY/M129					Date	25 5 81			Page	1 of 8		
Circulation list													

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

AUTOMATIC RADIO AERIAL

APPLICABLE TO:

All Rolls-Royce Silver Shadow II and Silver Wraith II cars and all Bentley T2 cars from car serial numbers.

34573 - Silver Shadow II
34601 - Silver Wraith II
34775 - Bentley T2

All Rolls-Royce and Bentley Corniche cars between car serial numbers

34830 to 50694 - Corniche Saloon
33029 to 50772 - Corniche Convertible

INTRODUCTION:

The automatic radio aerial, fitted as original equipment to the above cars, is no longer available.

This bulletin describes the procedure for fitting the replacement 'Hirschmann' automatic radio aerial. The procedure for replacing a damaged aerial mast is also described, as this is possible with the 'Hirschmann' aerial.

FITTING PROCEDURE FOR THE COMPLETE AERIAL:

1. Remove the right-hand scuttle side carpet and the top roll. The radio console should be released and lowered on to the transmission tunnel.
2. Remove the right-hand wing undersheet sufficient to gain access to the radio aerial.

3. Remove the existing aerial and brackets then refit the screws and washers to blank off the holes in the body.
4. Cut out the appropriate drilling template from the sheet provided in the kit of parts (see Fig. 1) and locate and fix the template to the scuttle panel as shown in Figure 2.
Note
It is important that the template is positioned accurately, as the location of the aerial and the angular position of the aerial mast when raised, is dependent upon this.
5. Drill the aerial bracket fixing holes marked on the template. Clean the metal around the holes on the inside of the car to provide a good 'earth' for the aerial.
6. Fit the new aerial as shown in Figure 3 for Silver Shadow II cars or Figure 3A for Corniche cars.
7. Connect the aerial to the existing wiring as follows.

Connect the red wire from the aerial to the light green and blue (LGU) wire on the car. Connect the white wire from the aerial to the light green and red (LGR) wire on the car. The black wire from the aerial should be fitted with a cable eye from the kit of parts and connected to one of the aerial bracket fixing bolts.
8. Locate the aerial relay as shown in the Workshop Manual TSD 4200 Section M9-7. Remove the light green and blue (LGU) cable from terminal C3 of the relay. Using the UD 15211 connector from the kit of parts, reconnect the (LGU) cable to terminal C2 of the relay.
Note
This aerial can be made to retract by operation of the ignition switch, if the changes described in Service Bulletin SY/M125 are carried out, in addition to those listed in this bulletin.
9. Replace the coaxial aerial lead with the new type from the kit of parts. When running the aerial lead across the instrument board, keep the lead as far away from the main wiring looms as possible.
10. Replace the radio console and trim the radio to the new aerial following the radio manufacturer's recommended instructions.
11. Replace the top roll and scuttle side carpet.
12. Refit the wing undersheet.

PARTS REQUIRED:

For Silver Shadow II, Silver Wraith II and Bentley T2 cars

PART NUMBER	DESCRIPTION
1 off RH 2814 kit	Radio aerial conversion kit

CONTENTS

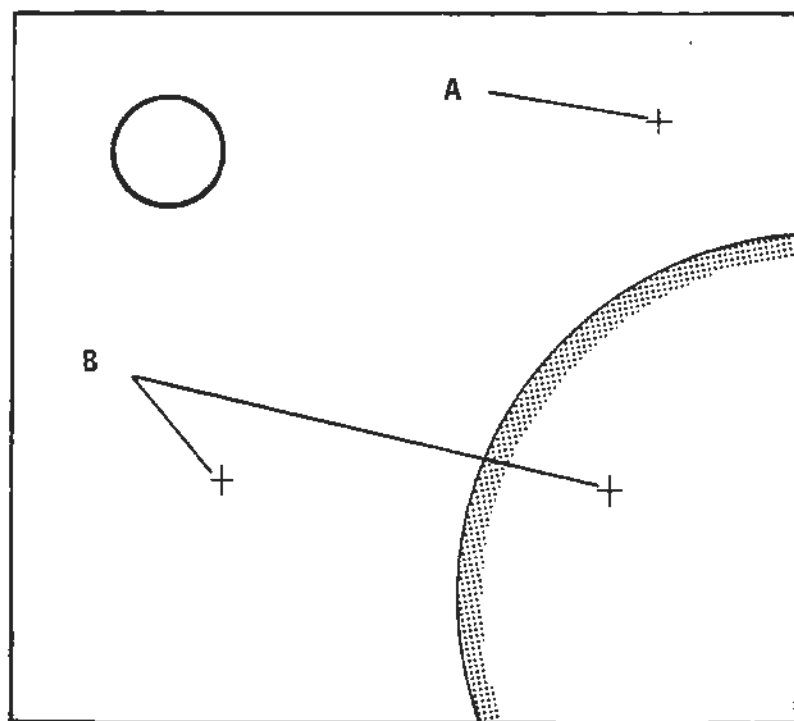
1 off UD 23871	Aerial
1 off UD 12908	Cable eye
1 off UD 22739	Earth lead
1 off UA 105/ZP	Bolt
1 off UA 104/ZP	Bolt
2 off UA 1251/ZP	Washer
1 off UA 301/Z	Nut
1 off UD 23937	Bracket
1 off UD 23939	Spacer
1 off UD 23867	Distance piece
1 off UD 23868	Crown nut
1 off UD 23869	Rubber seal
1 off UD 15211	Connector

For Corniche cars

PART NUMBER	DESCRIPTION
1 off RH 2815 Kit	Radio aerial conversion kit

CONTENTS

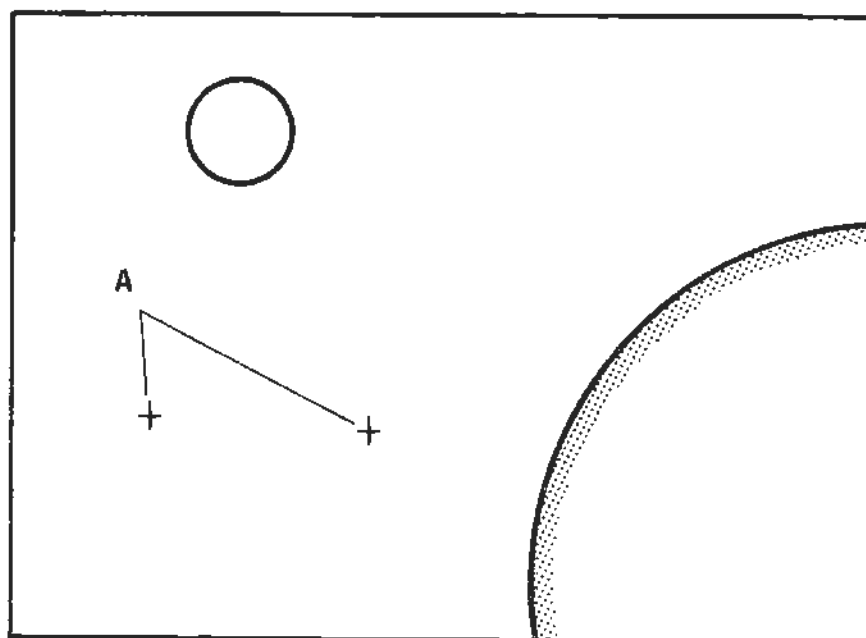
1 off UD 23871	Aerial
1 off UD 12908	Cable eye
1 off UD 15211	Connector
1 off UD 22739	Earth lead
1 off UA 105/ZP	Bolt
1 off UA 104/ZP	Bolt
2 off UA 1251/ZP	Washer
1 off UA 301/Z	Nut
1 off PW 59903	Bracket
1 off UD 12439	Spacer
1 off UD 14750	Washer
1 off SPC 2177	Rubber seal
1 off UD 23868	Crown nut
1 off UD 23869	Rubber seal



Template for Silver Shadow II, Silver Wraith II and Bentley T2 cars

A 1 hole 14 mm. (0.550 in) dia.

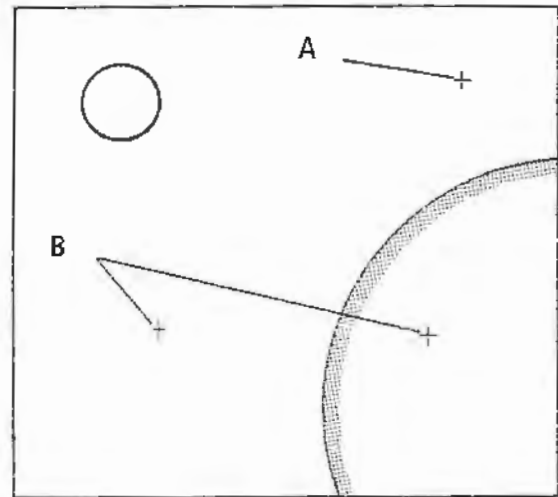
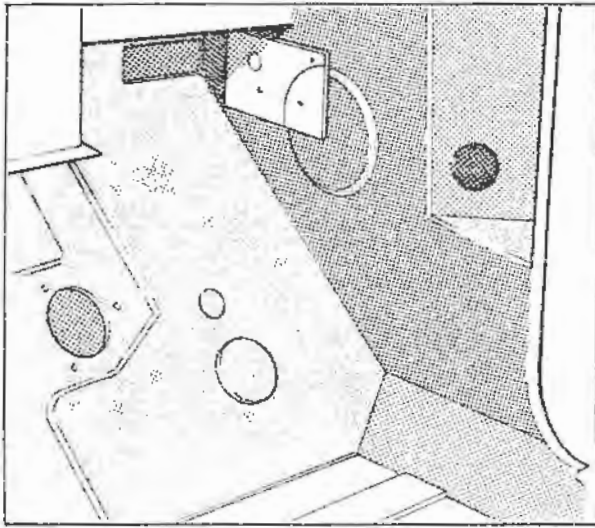
B 2 holes 8 mm. (0.312 in) dia.



Template for Corniche cars

A 2 holes 8 mm. (0.312 in) dia.

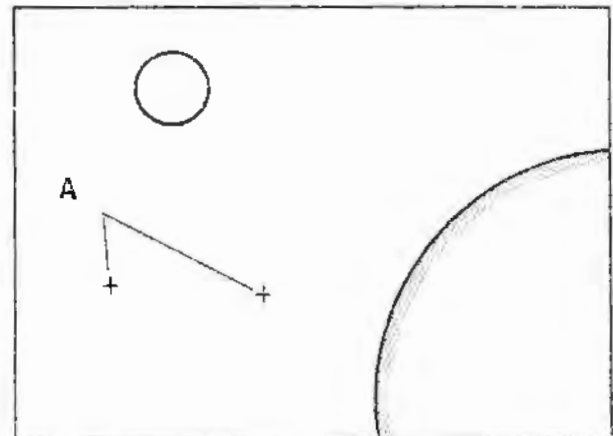
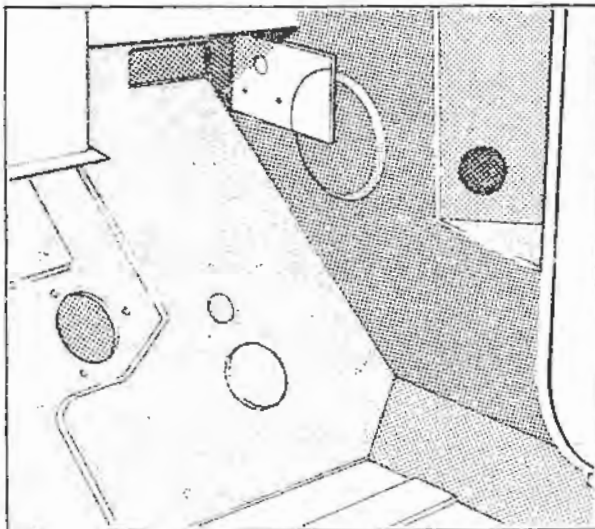
Fig. 1



Template position for Silver Shadow II, Silver Wraith II
and Bentley T2 cars

A 1 hole 14 mm. (0.550 in.) dia.

B 2 holes 8 mm. (0.312 in.) dia.



Template position for Corniche cars

A 2 holes 8 mm. (0.312 in.) dia.

Fig. 2

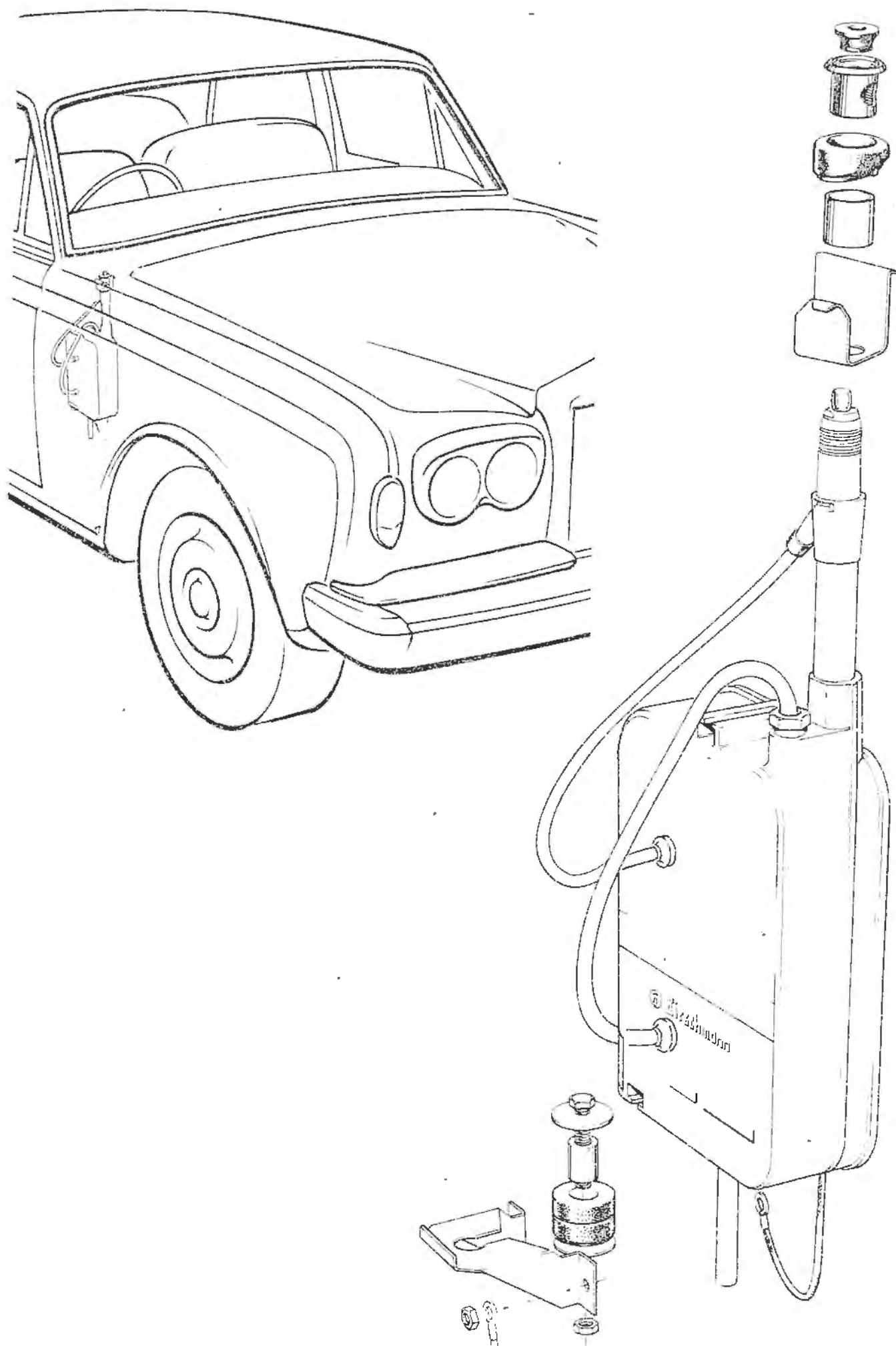


Fig. 3 Assembly of aerial for Silver Shadow II, Silver Wraith II and Bentley T2 cars

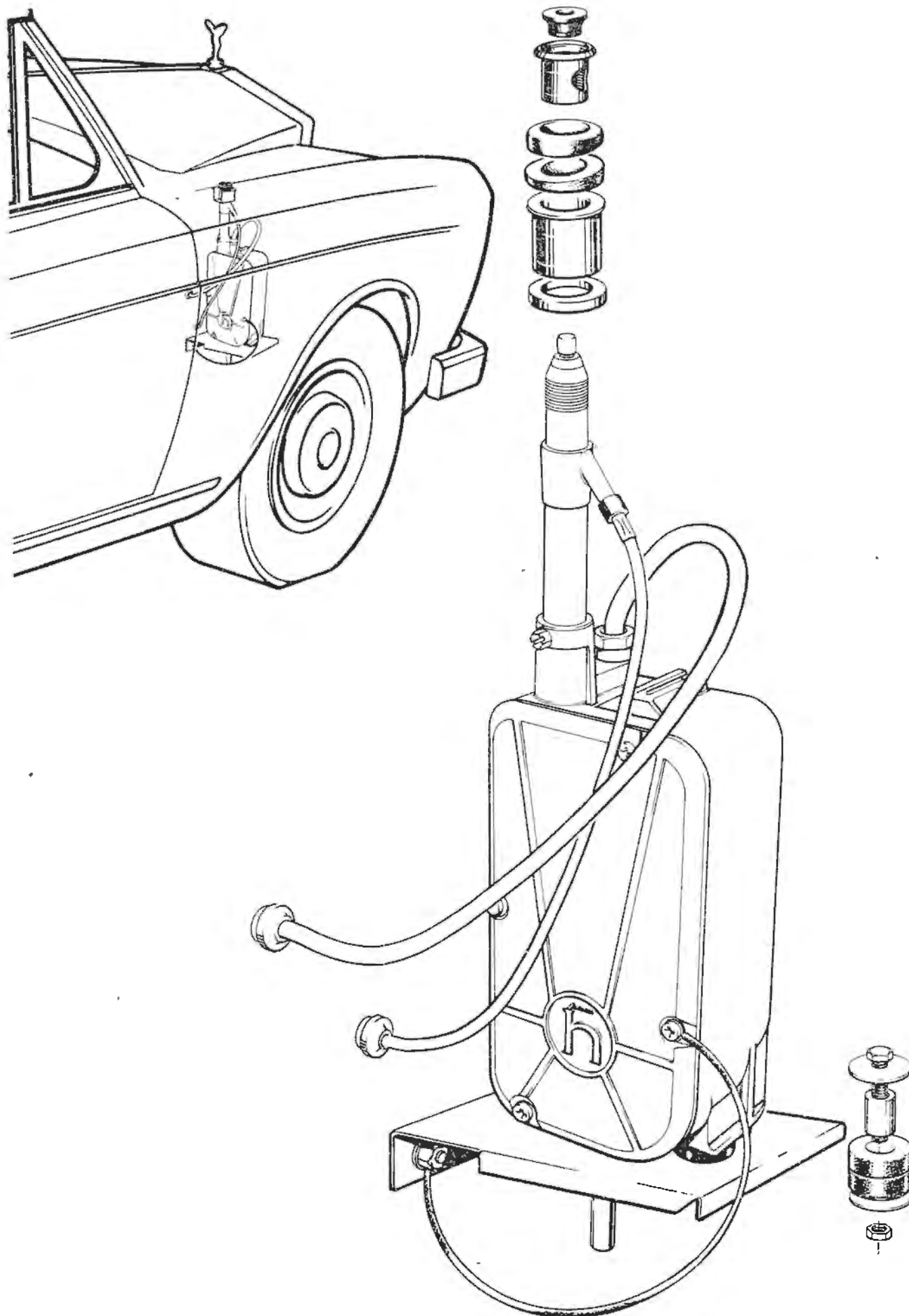


Fig. 3A Assembly of aerial for Corniche cars

PROCEDURE FOR REPLACING A DAMAGED AERIAL MAST:

Tool required - RH 9653 spanner.

1. Ensure that the aerial is in the fully extended position.
2. Cut off the damaged mast approximately 25 mm.(1.0 in.) from the wing crown nut to enable the RH 9653 spanner to be fitted.
3. Remove the crown nut and rubber finisher.
4. Insert the RH 9653 tool through the hole in the wing and fully release the aerial mast retaining nut.
5. Pull out the remaining portion of the aerial mast and the nylon drive cord that is attached to the mast.
Note
Considerable force is required to do this.
6. Insert the nylon drive cord of the new mast down into the aerial until resistance is felt. Maintain pressure on the drive cord and operate the aerial in the downwards direction until the drive cord is being pulled into the aerial. Continue to operate the aerial until the mast can be guided into the aerial and the mast retaining nut can be screwed down.
7. Fully raise and then fully lower the aerial mast and, if necessary, further tighten the mast retaining nut. Repeat this operation several times to ensure that the nut is fully secured.
8. Replace the wing crown rubber finisher and nut.

Hly/Brn

Service Bulletin

TSD 4318

Bulletin number	SY/M130					Date	27 5 82					Page	1 of 9				
Circulation list																	

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

MANUALLY SWITCHED RADIO AERIAL

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Wraith and Bentley T series cars prior to car serial numbers.

Silver Shadow - SRX34573

Silver Wraith - LRG34601

Bentley T - SBH34775

All Rolls-Royce and Bentley Corniche cars prior to car serial numbers.

Corniche Saloon - CRH34830

Corniche Convertible - DRX33029

INTRODUCTION:

The radio aerial, fitted as original equipment to the above cars, is no longer available.

This bulletin describes the procedure for fitting the replacement 'Hirschmann' radio aerial.

The procedure for replacing a damaged aerial mast is also described, as this is possible with the 'Hirschmann' aerial.

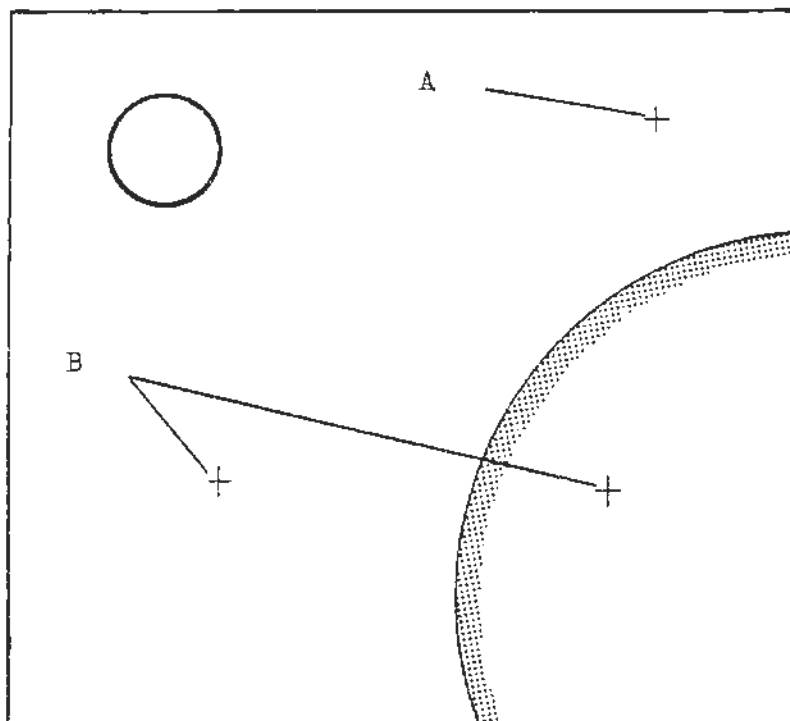
FITTING PROCEDURE FOR THE COMPLETE AERIAL:

1. Disconnect the battery.
2. Remove the right-hand scuttle side carpet and sufficient trim to enable the aerial lead to be replaced.
3. Remove the right-hand wing undersheet sufficiently to gain access to the radio aerial.
4. Remove the existing aerial and brackets then refit the screws and washers to blank off the holes in the body.
5. Cut out the appropriate drilling template from the sheet provided in the kit of parts (see fig.1) and locate and fix the template to the scuttle panel as shown in Figure 2.

NOTE:

It is important that the template is positioned accurately, as the location of the aerial and the angular position of the aerial mast when raised, is dependent upon this.

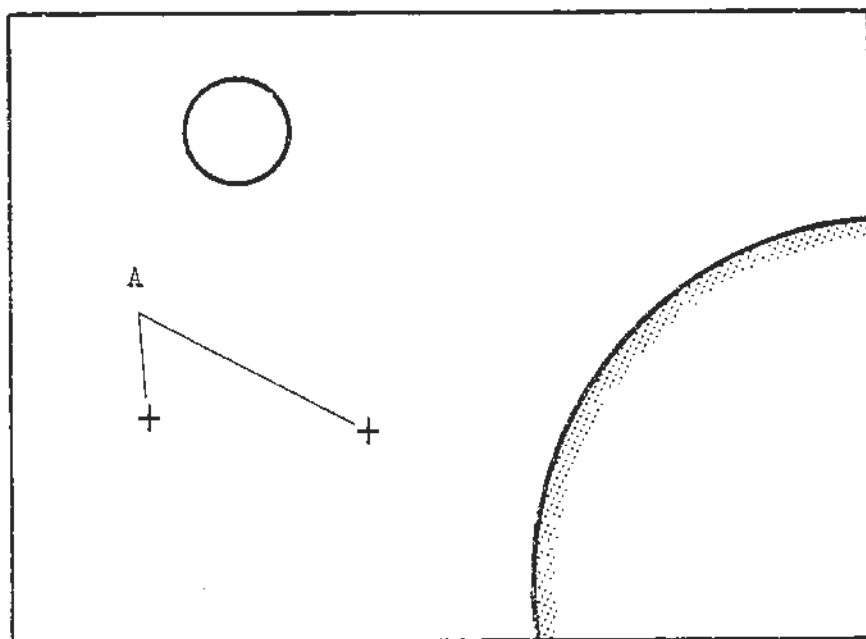
6. Drill the aerial bracket fixing holes marked on the template. Clean the metal around the holes on the inside of the car to provide a good 'earth' for the aerial.
7. Fit the new aerial, as shown in Figure 3 for four door cars or Figure 3A for two door cars.
8. Connect the new aerial to the existing wiring.
9. Replace the coaxial aerial lead with the new type from the kit of parts.
10. Remove the radio aerial switch.
11. Ensure that the micro switches that make up the aerial switch are of the three terminal type, as shown in Figure 4. If not, replace the micro switches with the three terminal type from the kit of parts.
12. Make up a length of 14s Black cable to run from the aerial switch to a convenient earth point.
13. Reconnect the aerial switch wiring including the new length of Black cable, as shown in Figure 4.
14. Reconnect the battery.
15. Operate the aerial switch and ensure that the aerial rises when the switch is pressed 'Up' and retracts when the switch is pressed 'Down'. If the aerial movement is reversed, the two aerial wires should be interchanged at the aerial switch.
16. Trim the radio to the new aerial following the radio manufacturers recommended instructions.
17. Replace the interior trim and the wing undersheet.



Template for Silver Shadow, Silver Wraith and Bentley T series cars - ie 4 door cars.

A 1 hole 14 mm (0.550 in) dia.

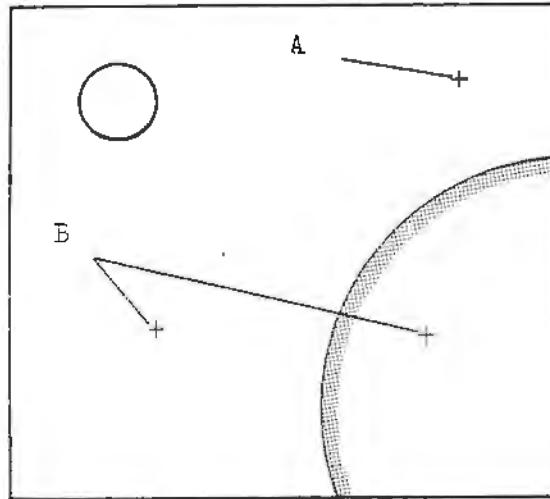
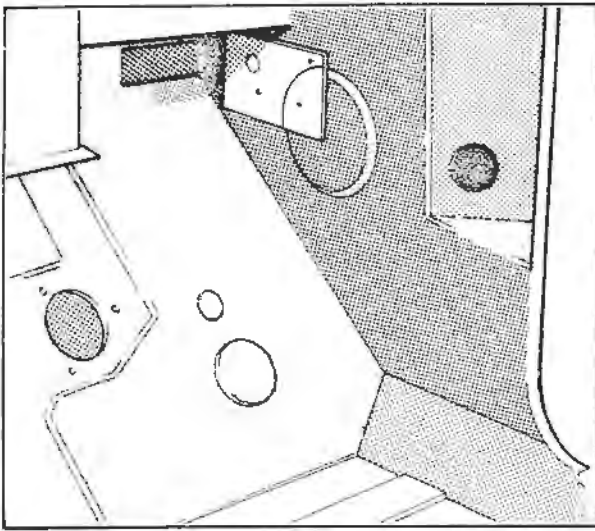
B 2 holes 8 mm (0.312 in) dia.



Template for Corniche cars - ie 2 door cars

A 2 holes 8mm (0.312 in) dia.

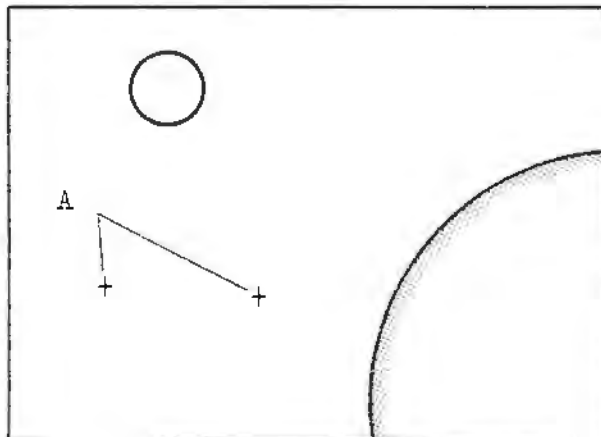
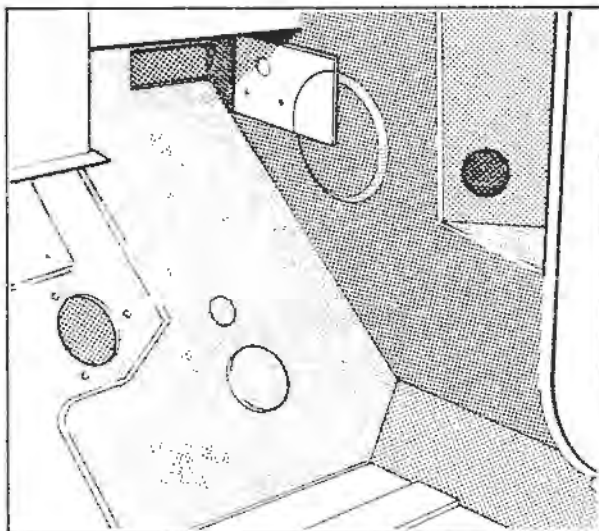
Fig. 1



Template position for Silver Shadow, Silver Wraith
and Bentley 'T' series cars

A 1 hole 14 mm (0.550 in) dia.

B 2 holes 8 mm (0.312 in) dia.



Template position for Corniche cars

A 2 holes 8mm (0.312 in) dia.

Fig. 2

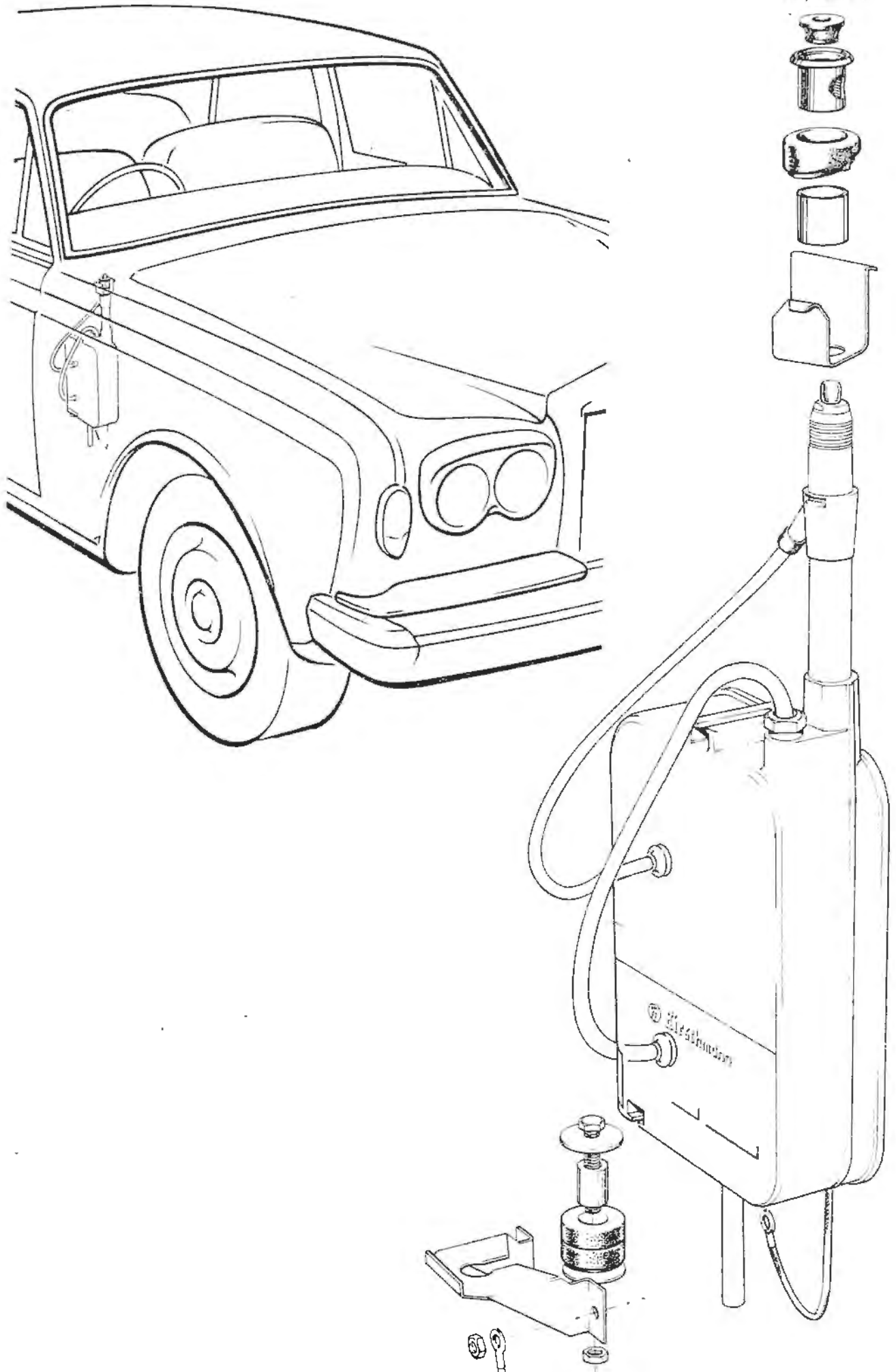


Fig. 3 Assembly of aerial for Silver Shadow, Silver Wraith and Bentley 'T' series cars

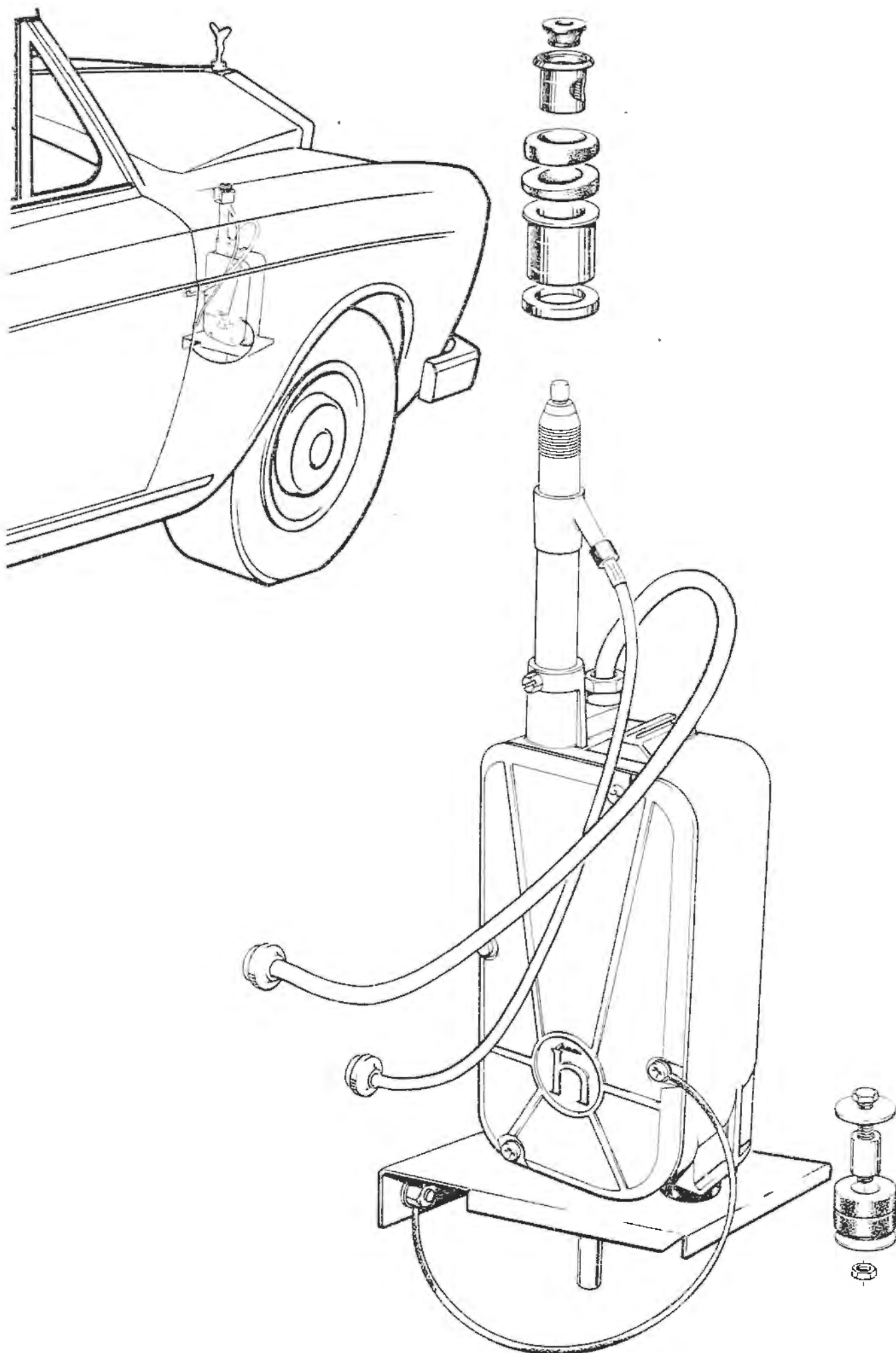
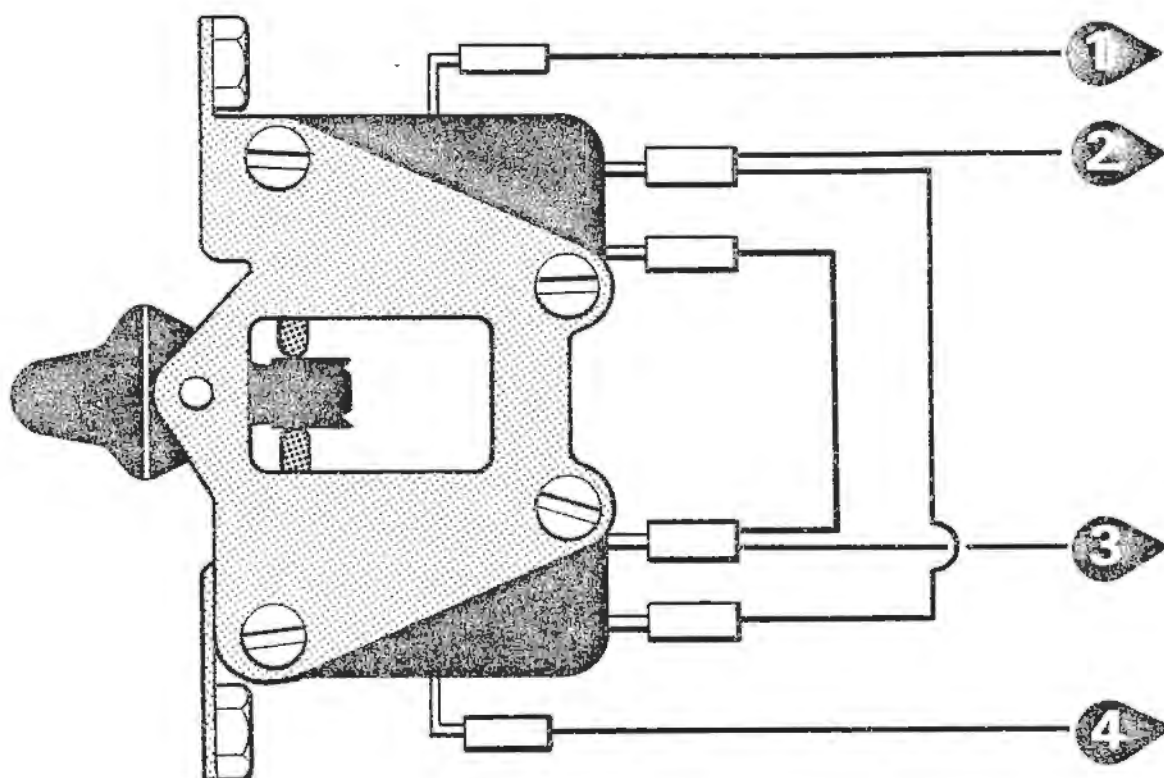


Fig 3A Assembly of aerial for Corniche cars

FIG 4

Radio aerial switch and wiring



X322

1. Cable to aerial - colour will be either LGR, GB or GR
2. 12 volt supply from fuse
3. Cable to earth point - see fitting procedure 11 and 12
4. Cable to aerial - colour will be either LGU or GU

NOTE - The cable colour at points 1 and 4 above will vary as shown depending on the car serial number.

PROCEDURE FOR REPLACING A DAMAGED AERIAL MAST:

Tool required - RH 9653 spanner - Replacement aerial mast - RH 9652

1. Ensure that the aerial is in the fully extended position.
2. Cut off the damaged mast approximately 25,0 mm (1.0 in) from the wing crown nut to enable the RH 9653 spanner to be fitted.
3. Remove the crown nut and rubber finisher.
4. Insert the RH 9653 tool through the hole in the wing and fully release the aerial mast retaining nut.
5. Pull out the remaining portion of the aerial mast and the nylon drive cord that is attached to the mast.
Note
Considerable force is required to do this.
6. Insert the nylon drive cord of the new mast down into the aerial until resistance is felt. Maintain pressure on the drive cord and operate the aerial in the downwards direction until the drive cord is being pulled into the aerial. Continue to operate the aerial until the mast can be guided into the aerial and the mast retaining nut can be screwed down.
7. Fully raise and then fully lower the aerial mast and, if necessary, further tighten the mast retaining nut. Repeat this operation several times to ensure that the nut is fully secured.
8. Replace the wing crown rubber finisher and nut.

PARTS REQUIRED:

For Silver Shadow, Silver Wraith and Bentley 'T' series cars

PART NUMBER	DESCRIPTION
1 off RH 2837 Kit	Radio aerial conversion kit

CONTENTS

1 off UD 24152	Aerial
1 off UD 12908	Cable eye
1 off UD 22739	Earth lead
1 off UA 105/ZP	Bolt
1 off UA 104/ZP	Bolt
2 off UA 1251/ZP	Washer
1 off UA 301/Z	Nut
1 off UD 23937	Bracket
1 off UD 23939	Spacer
1 off UD 23867	Distance piece
1 off UD 23868	Crown nut
1 off UD 23869	Rubber seal
1 off UD 15211	Connector
2 off UD 16580	Micro switch

For Corniche cars

PART NUMBER	DESCRIPTION
1 off RH 2838 Kit	Radio aerial conversion kit

CONTENTS

1 off UD 24152	Aerial
1 off UD 12908	Cable eye
1 off UD 15211	Connector
1 off UD 22739	Earth lead
1 off UD 105/ZP	Bolt
1 off UA 104/ZP	Bolt
2 off UA 1251/ZP	Washer
1 off UA 301/Z	Nut
1 off PW 59903	Bracket
1 off UD 12439	Spacer
1 off UD 14750	Washer
1 off SPC 2177	Rubber seal
1 off UD 23868	Crown nut
1 off UD 23869	Rubber seal
2 off UD 16580	Micro switch

Service Bulletin



TSD 4318

Bulletin number	SY/M 131					Date	11 3 82			Page	1 of 12		
Circulation list													

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

SPEED CONTROL SYSTEM TEST PROCEDURES

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars from car serial number SRH 30001.

INTRODUCTION:

A simple to use test box is now available to enable the speed control systems of the above cars, and also those of the Silver Spirit series motor cars, to be simply and quickly tested.

The test box can be purchased from the Parts Distribution Centre by following the normal procedure for purchasing workshop tools and by submitting a parts order form reference number 703602.

The part number of the speed control test box is RH 9689.

This service bulletin describes the use of the test box and a fault diagnosis and road test procedure for the complete testing of the speed control system of Silver Shadow II series motor cars.

The procedure for testing the speed control system of Silver Spirit series motor cars can be found in the workshop manual TSD 4400 section M8.

PROCEDURE:

ELECTRICAL TEST

If having carried out an operation in the test procedure the required result is not obtained, reference must be made to the same operation number in the fault diagnosis procedure. This will give suggested correction procedures which should be carried out before the test is continued.

Successful completion of the test proves the correct electrical operation of the system with the following exceptions.

The electrical test and fault diagnosis procedures do not cover; the mechanical operation of the bellows actuator, the operation of the TCS (Top gear) switch, the speedometer generator system, or the memory erase at switch-on of the electronic unit. The operation of these functions are dealt with in the Road Test and Functional Test procedure sections of this service bulletin.

It is essential that the electrical system of the car is capable of providing 12.5 volts throughout the test procedure. To achieve this the car battery must be in a good state of charge and connected to a low current type battery charger. Do not disconnect the battery from the car.

Connecting the test box (see fig.1).

- 1 Ensure that the parking brake is firmly applied.
- 2 Remove the interior lamps fuse from the fuseboard.
- 3 Disconnect the positive connection from the ignition coil.
- 4 Disconnect the black/green cable from the speed control safety relay.
- 5 Disconnect the cars electronic speed control unit from the car wiring loom and connect the test box as shown in figure 1.
- 6 On the test box, select the SY position on the SY/SZ switch; also the RUN position on the LSLO (low speed lock out)/RUN switch.

TEST PROCEDURE

- 1 Ensure that the gear selector lever is in P and the speed control switch is in the OFF position. Switch on the ignition.

Ensure that none of the lamps on the speed control test box illuminate.
- 2 Move the gear range selector lever from Park through Neutral to the Drive position.

Ensure that the STOPLAMP CCT (Stoplamp Circuit) lamp illuminates. All other lamps should remain extinguished.
- 3 Move the speed control switch to the ON position. Ensure that on the test box, the supply, STOPLAMP CCT and ACT lamps illuminate and that the input lamp either illuminates or flashes and the speedometer registers approximately 80 km/h (50 mile/h).

- 4 Press and hold the SET button on the speed control switch.

Ensure that the SET lamp on the test box illuminates and that the RESUME lamp does not illuminate.

- 5 Release the SET button.

The ACT lamp should commence flashing and the SET lamp should be extinguished.

- 6 Press and hold the SET button.

The ACT lamp should be extinguished.

- 7 Release the SET button.

The ACT lamp should recommence flashing.

- 8 Select and hold the RES position on the speed control switch.

The RESUME lamp on the test box should illuminate.

Note

If a black coloured speed control box is fitted to the car the ACT lamp should illuminate but not flash.

If a blue speed control box is fitted, the ACT lamp should continue to flash.

- 9 Release the RES switch.

Ensure that the RESUME lamp is extinguished.

Note

If a black coloured speed control box is fitted to the car the ACT lamp should not flash.

If a blue coloured speed control box is fitted the ACT lamp should continue to flash.

Note

Complete operations 10,11 and 12 if a black coloured speed control box is fitted to the car.

If a blue coloured control box is fitted, ignore operations 10,11 and 12 and complete the remaining operations which are valid for blue and black control boxes.

- 10 Select and hold the RES position on the speed control switch for a minimum of a quarter of a second and then release.

The ACT lamp should flash.

- 11 Repeat Operation 10.
The ACT lamp should illuminate but not flash.
- 12 Repeat Operation 10.
The ACT lamp should flash.
- 13 Depress the footbrake pedal.
Ensure that the STOPLAMP CCT and ACT lamps are extinguished and the STOPLAMP indicator lamp illuminates.
- 14 Release the footbrake pedal.
Ensure that the STOPLAMP CCT indicator lamp illuminates and the STOPLAMP indicator lamp is extinguished. The ACT lamp should illuminate but not flash.
- 15 Operate the RES switch.
The ACT lamp should commence flashing.
Select the LSLO position on the LSLO/RUN switch.
The speedometer reading should fall to approximately 30 km/h (20 mile/h). The ACT lamp should stay on but not flash.
Select the run position on the LSLO/RUN switch.
- 16 Press and hold the BRAKE TEST switch throughout this operation.
Operate and release the RES switch.
The ACT lamp should flash.
Depress the footbrake pedal.
The ACT lamp should extinguish.
Release the brake pedal.
The ACT lamp should recommence flashing.
Release the BRAKE TEST switch.
- 17 Reconnect the black/green cable to the speed control safety relay. The ACT lamp should extinguish.
- 18 Switch off the ignition. Disconnect the test box and reconnect the electronic unit plug and socket. Replace the interior lamps fuse and the positive connection to the ignition coil.

Note

Should the rectification time for the speed control system electrical test procedure become protracted, it is recommended that the speedometer fuse should be removed to prevent an excessively high reading being recorded on the odometer. With the fuse removed however, some test box lamps may glow very dimly during operation number 2. This is acceptable.

FAULT DIAGNOSIS PROCEDURE

- 1 If any lamp on the test box illuminates there are faults in both the gearbox actuator micro-switch and the speed control switch. Alternatively, the blue/green supply cable from the speed control switch to the electronic control unit is picking up a supply from another source.
- 2 If any lamp illuminates the on/off contacts of the speed control switch are short-circuited; therefore replace the switch.
- 3a If no lamp on the test box illuminates and the speedometer is inoperative, first check fuse number 9 and then check that there is an earth on the 14 blue/black cable at the speed control box. If the ACT lamp is still not illuminated, check the continuity of the speed control bellows winding.
- 3b If the BRAKE CCT lamp is not illuminated, check that the stop lamps bulbs and stop lamps failure unit are correct, then check the continuity of the 14 green/brown cable connecting the speed control to the stop lamps circuit.
- 3c If the INPUT lamp is not illuminated and the speedometer is inoperative, first check the fuse controlling the speedometer. This could be either fuse number 1 or 2 dependent upon the serial number of the car. Then check the continuity of the 14 red/green cable between the speedometer and the speed control circuit.
- 4a Should no lamp on the test box illuminate and the relay clicks, check the 14 blue/brown, 14 blue/purple and 14 blue/yellow speed control to relay wiring and then the relay.
- 4b If the relay does not click, check the continuity of the 14 blue/white speed control switch to relay cable and the 14 green/blue relay to reverse lamps switch cable. Then check the relay and also the speed control switch.
- 5 If the ACT lamp does not flash, ensure that the supply voltage is at least 12.5 volts. Then check the speed control electronic unit by substitution.

- 6 If the ACT lamp continues flashing, the electronic control unit is faulty.
- Replace with a proven unit.
- 7 If the ACT lamp remains off the speed control switch is faulty and must be renewed.
- 8a If the RESUME lamp does not illuminate and the relay clicks, check the blue/yellow cable from the electronic control unit to the relay.
- 8b If the RESUME lamp does not illuminate and the relay does not click, change the speed control switch.
- 8c Note
- This operation only applies if the car is fitted with a black coloured electronic control unit.
- If the RESUME lamp does not illuminate but the ACT lamp continues to flash, replace the electronic control unit.
- 9 If the ACT lamp commences flashing when resume is released check the fitting and operation of the diode connected across the relay coil.
- 10) If the operation of the ACT lamp differs from that
11) given in the test procedure, check that the RESUME
12) lamp is illuminated with every operation of the RES switch then change the electronic control unit.
- 13 If no response is obtained, ensure that the stop lamps circuit operates correctly.
- 14 If the ACT lamp recommences flashing check the continuity of the green/brown cable between the electronic control unit and the stop lamps switch.
- 15 If the ACT lamp is not extinguished, the LSLO (low speed lock out) function of the electronic control unit is faulty and the unit must be renewed.
- 16 If the ACT lamp is not extinguished when the footbrake pedal is depressed, either the stop lamps micro-switch is faulty or a short-circuit exists between the green and green/blue cables to the switch.
- 17 If the ACT lamp does not extinguish, a short-circuit exists between the 14 green and 14 red cables at the speed control safety relay.

ROAD TEST PROCEDURE

The following road test procedure is recommended to enable both a safety and functional check of the speed control system to be carried out. When carrying out the test procedure select an open stretch of road and ensure that the road is free from any potential hazard.

Safety Inhibit Systems

- 1 Ensure that the speed control switch is in the OFF position and that the gear range selector lever is in the Park position. Firmly apply the parking brake.
- 2 Start and run the engine until normal operating temperature is attained. Switch off the ignition.
- 3 Disconnect the actuator bellows chain.
- 4 Ensure that the vacuum hoses are in good condition and the connections secure. Also, ensure that the operation of the actuator bellows is not obstructed.
- 5 When checking the operation of the actuator bellows it is essential that the following procedures are observed.

Although the footbrake should not be applied during operations 6 and 7, it is essential that no one stands in front of the car. The driver should be prepared to apply the footbrake immediately, should any forward movement of the car occur.

- 6 Ensure that the parking brake is firmly applied.

Raise the bonnet of the car. Start the engine and move the gear range selector lever to the Drive range position.

Ensure that no compression of the bellows occurs.

- 7 Move the speed control switch to the ON position and again check that no compression of the bellows occurs.
- 8 Move the gear range selector lever to the Park position, the speed control switch to the OFF position, and switch off the ignition.
- 9 Open and close the throttle to ensure that the operation of the throttle linkage is not obstructed, then connect the actuator bellows to the throttle linkage chain as shown in figure 2. Adjust the chain by pulling it taut across the gap between the throttle linkage connection and the bellows actuator connection, then release it by one ball.

- 10 Firmly apply the footbrake. Start the engine and move the gear range selector lever to the Drive range position. Move the speed control switch to the ON position, then slowly release the footbrake; ensure that the engine revs do not increase.
- 11 Release the parking brake and accelerate to approximately 70 km/h (45 mile/h). BRIEFLY DEPRESS THE SET BUTTON.

Ensure that the speed control system engages and that the speed is maintained at approximately 70 km/h (45 mile/h).
- 12 Move the gear range selector lever to the Intermediate position.

Ensure that the system disengages.
- 13 Allow the speed of the car to decrease without applying the footbrake to approximately 60 km/h (35 mile/h) and then move the gear range selector lever back to the Drive range position.
- 14 The memory within the control unit should automatically function to return the speed of the car to approximately 70 km/h (45 mile/h). Should the system not respond automatically, select RES on the speed control switch to activate the memory function of the unit.
- 15 Apply the footbrake.

Ensure that the system disengages.
- 16 Switch off the speed control system.

Functional Test Procedure

- 1 With the car travelling at a steady speed of 50 km/h (30 mile/h) move the speed control switch to the ON position. Briefly depress the SET button.

Ensure that the car cruises at a constant speed of $50 \text{ km/h} \pm 3 \text{ km/h}$ ($30 \text{ mile/h} \pm 2 \text{ mile/h}$).
- 2 Accelerate the car to 80 km/h (50 mile/h) and holding the speed steady for three to four seconds, briefly depress the SET button.

Ensure that the car cruises at $80 \text{ km/h} \pm 3 \text{ km/h}$ ($50 \text{ mile/h} \pm 2 \text{ mile/h}$).
- 3 Increase the speed of the car by depressing the SET button. Release the button when the car speed has reached 100 km/h (60 mile/h).

Ensure that the car cruises at $100 \text{ km/h} \pm 3 \text{ km/h}$ ($60 \text{ mile/h} \pm 2 \text{ mile/h}$).

The car may slightly exceed the selected speed when the button is released, but should then settle down to the set cruising speed.

- 4 Apply the footbrake to reduce the speed of the car to approximately 80 km/h (50 mile/h) and then briefly move the speed control switch to the RES position.

Ensure that the car accelerates to, and cruises at, 100 km/h \pm 3 km/h (60 mile/h \pm 2 mile/h).

Note

Operations 5 and 6 only apply to the latest type of black coloured electronic control unit (UD 23343). This unit can be used as a replacement for both the earlier blue and black coloured control units (UD 20811). If this is done, the speed control system should then comply with operations 5 and 6.

The latest type black coloured control unit (UD 23343) is larger than the blue and the earlier black units (UD 20811). The dimensions of the latest type control unit are 108mm x 76mm x 32mm (4.25in x 3in x 1.25in).

If earlier type control units are being tested, ignore operations 5 and 6 and complete the remaining operations.

- 5 Briefly move the speed control switch to the RES position,

Ensure that the speed control system is disengaged and the car decelerates.

- 6 Briefly move the speed control switch to the RES position.

Ensure that the car accelerates to and cruises at 100 km/h \pm 3 km/h (60 mile/h \pm 2 mile/h).

- 7 Move the speed control switch to the OFF position. Reduce the speed of the car to approximately 80 km/h (50 mile/h) and then briefly press the SET button.

Ensure that the system does not engage.

- 8 Move the speed control switch to the ON position and then briefly to the RES position.

Ensure that the system does not engage.

- 9 With the speed of the car at 65km/h (40 mile/h) briefly press the SET button to engage the system. Then apply the footbrake to reduce the speed of the car to 25km/h (15 mile/h). Briefly operate the RES switch and then the SET button.

Ensure that the system does not engage.

- 10 Stop the car. Move the gear range selector lever to the Neutral position and then back to the Drive range position. Accelerate to 60 km/h (35 mile/h) then briefly operate the RES switch.

Ensure that the system does not engage.

- 11 Accelerate the car to 80 km/h (50 mile/h) and then briefly press the SET button to engage the system. Apply the footbrake to reduce the speed of the car to 65 km/h (40 mile/h), then briefly operate the RES switch.

Ensure that the car accelerates to 80 km/h (50 mile/h) within ten seconds.

- 12 Move the speed control switch to the OFF position.

Hly/Brn

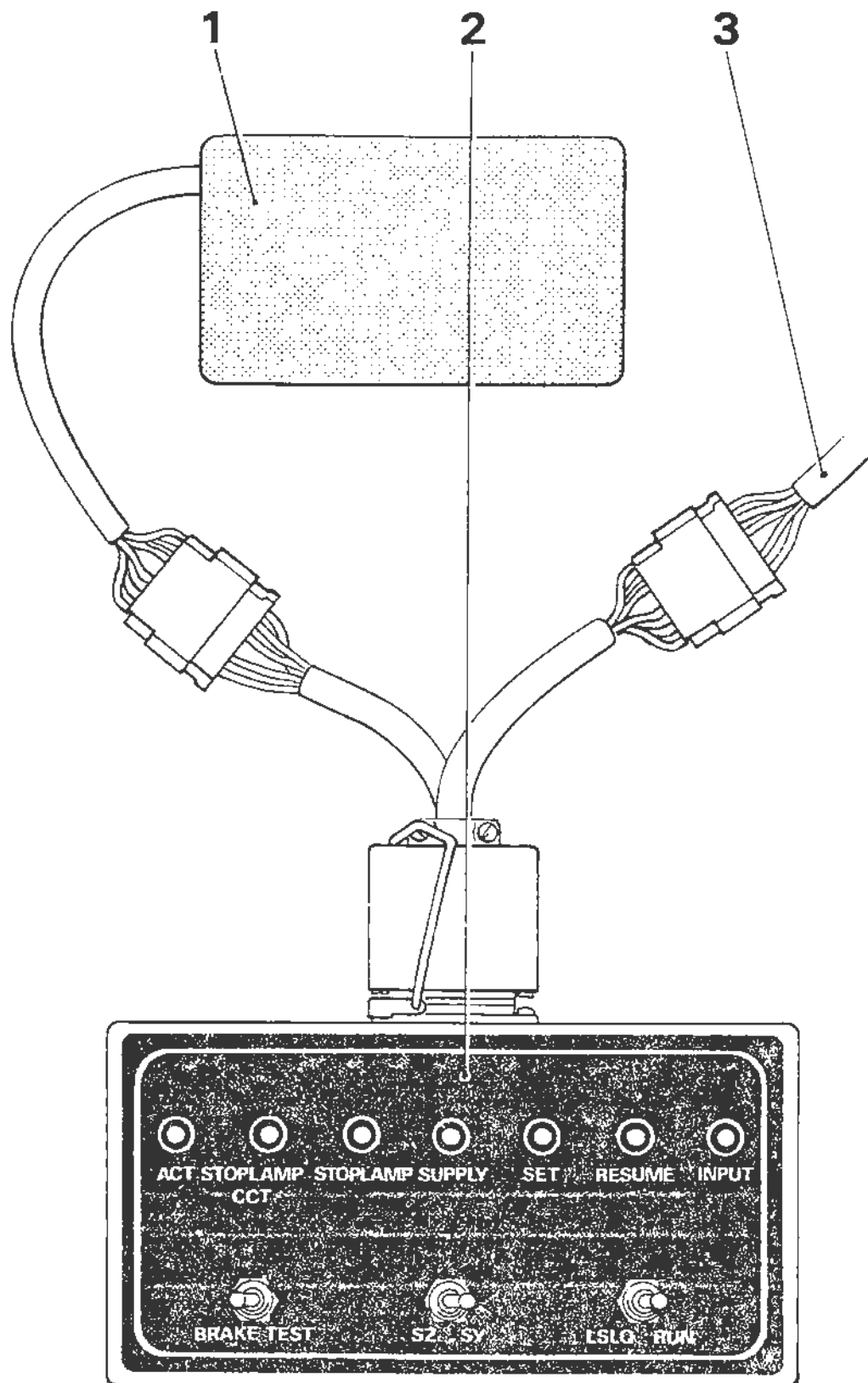
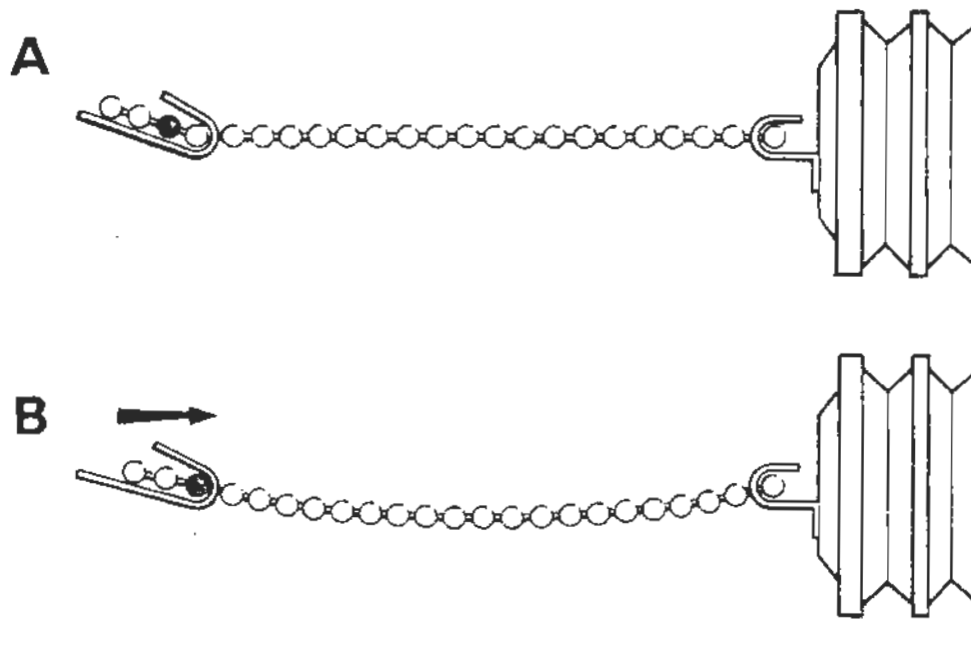


FIG.1

X285

- 1 Electronic speed control unit
- 2 RH 9689 speed control test box
- 3 Car speed control wiring loom.



W753

FIG.2

Actuator bellows chain adjustment

- A - Chain pulled taut
- B - Chain correctly set

Service Bulletin



TSD 4318

Bulletin number	SY/M 132					Date	21 7 83			Page	1 of 2		
Circulation list													

Category C

All Rolls-Royce Franchise Holders.

AUTOMATIC SPEED CONTROL SYSTEM (CONTROL BOX)

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, and Corniche and Camargue cars from car serial number SRF 30001. All Bentley T 2 and Corniche cars from car serial number SBX 30046.

INTRODUCTION:

A revised speed control unit has been introduced to replace the previous type.

The new unit can be used for all replacement purposes on the above vehicles.

DESCRIPTION:

The revised control box can be recognised by additional identification labels which have been affixed onto either the black plastic case or the 9-way connector moulding as shown in figure 1.

PARTS REQUIRED:

Displaced Part No.	Description	New Part No.
UD 23343	Control Box	UD 25279

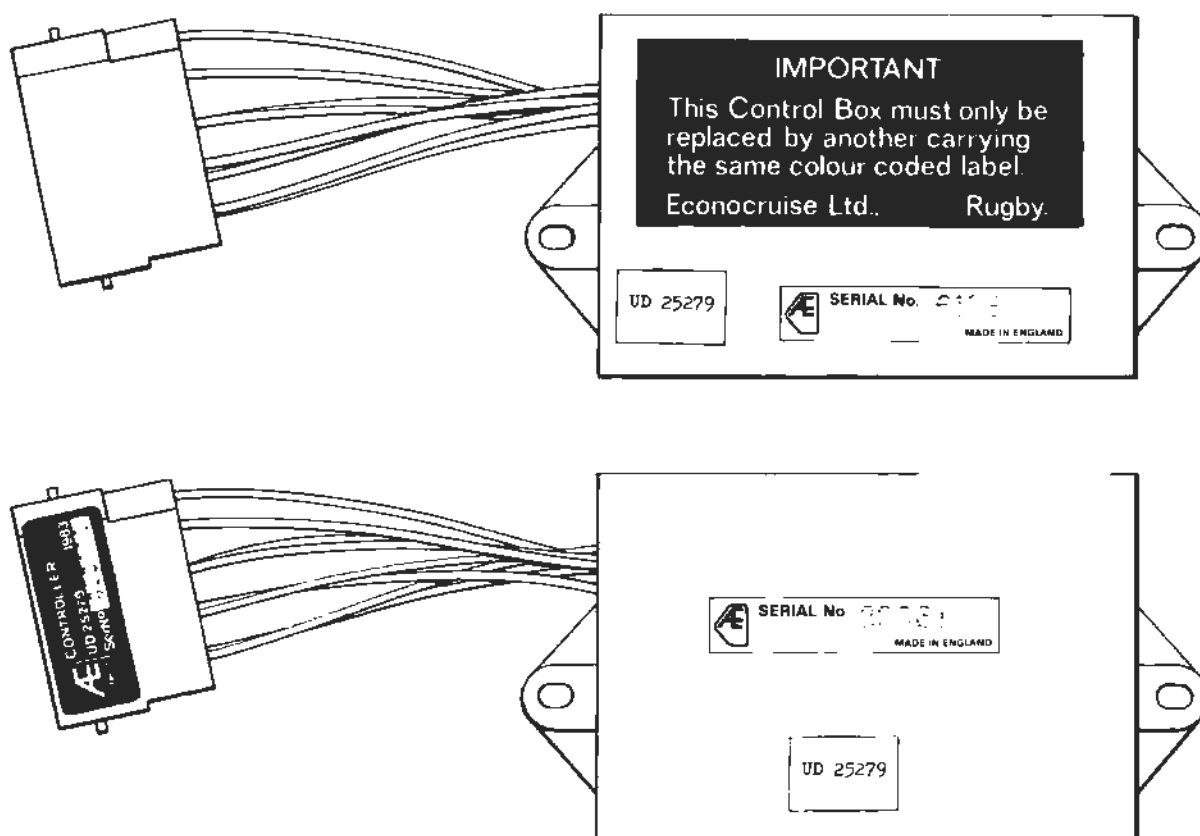


Fig. 1 Revised UD 25279 Control Box

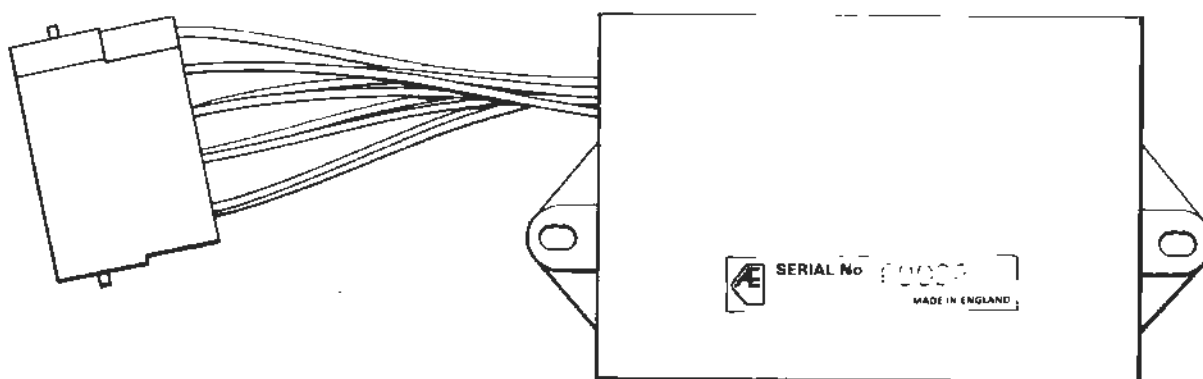


Fig. 2 Early UD 23343 Control Box

X702

Service Bulletins

Chapter N

Power Assisted Steering



Service Bulletin

TSD 4318

Bulletin number	SY/N17 (Issue 2)										Date	5 12 79				Page	1 of 4			
Circulation list																				

Category C

ALL FRANCHISE HOLDERS AND DEALERS

STEERING WHEELS

APPLICABLE TO:

All Rolls-Royce Corniche and Camargue cars and all Bentley Corniche cars from the following car serial numbers.

DRH 22583 - Corniche

JRH 14674 - Camargue

INTRODUCTION:

This bulletin has been issued to explain the changes in specification that have occurred to steering wheels on Corniche and Camargue cars from the above car serial numbers.

DESCRIPTION:

Leather covered steering wheels are fitted to the following:

Corniche cars 22583 to 32632 inclusive
Camargue cars 14674 to 32034 inclusive

Plastic steering wheels, as currently being fitted to Rolls-Royce Silver Shadow II cars, are fitted to the following.

Corniche cars 32633 to 50233 inclusive
Camargue cars 32035 to 50244 inclusive

New style leather covered steering wheels are fitted to the following:

Corniche cars 50234 and onwards
Camargue cars 50245 and onwards

*Re-issued to amend car serial numbers

In the event of the steering wheel needing to be changed, the new leather steering wheel can replace the previous plastic wheel. However, to replace the earlier type leather bound wheel with a new type leather wheel additional work will need to be carried out for which a kit of parts is available, part number (RH 2782).

FITTING PROCEDURES:

IMPORTANT

When renewing a steering wheel, the indicator cancel peg which is attached to the hub of the wheel will have to be shaped so as to avoid a possible foul situation with the gear change lever when LOW is selected on the gear change quadrant.

PROCEDURE 1

In order to replace the earlier type of leather steering wheel with the later type, the following procedure should be adopted.

1. Disconnect the battery.
2. Remove the two piece gear range selector cowling.
3. Unscrew the four nuts located behind the steering wheel and remove the horn button assembly from the steering wheel sector.
4. Withdraw the horn and contact plate. Disconnect the electrical plug.
5. Unlock the tab-washer then unscrew and remove the nut securing the steering wheel to the column.
6. Replace the nut to prevent possible damage to the threaded end of the column then, using the special tool (RH 7870), remove the wheel.
7. Fit the link cable (RH 9290) which is supplied with the kit, to the existing horn push lead.
8. Position the steering wheel onto the column and tighten to the correct torque. With LOW selected on the gear change quadrant check that the indicator cancelling peg does not foul the selector lever. If a foul does occur, remove the wheel and shape the peg as shown in Figure 1 so as to ensure a clearance. Re-fit the wheel and again check that the peg clears the lever.
9. Fit the clip (UR 20352) to the horn support plate (UR 20344) and connect the Lucar connector of the link cable to the plate. Secure the plate to the hub of the wheel with the three screws and washers (UM 20853/Z and UM 20202/Z).

10. Offer the new horn push button (UR 20350) together with the existing spring to the steering wheel and push on.
11. Re-fit the cowl to the steering column and re-connect the battery.

PROCEDURE II

The removal of either the plastic or new leather bound wheels should be carried out as follows.

1. Disconnect the battery.
2. Feed a 31 cm. (12.0 in.) length of strong thin string in a loop into the gap between the push button and the steering wheel surround.
3. Grip the two free ends of the string and with a sharp pull release the push button and withdraw the assembly. Retain the coil spring.
4. Unscrew and remove the support plate taking care to disconnect the cable attached to the underside of the plate.
5. Remove the steering wheel centre nut and washer using a 7/8 in. A/F, deep body, hexagon socket spanner.
6. To fit the new wheel reverse the removal procedure ensuring that the indicator cancel peg on the new wheel has been shaped so as not to cause a foul situation with the gear change lever when in the LOW position.

JC1/JH

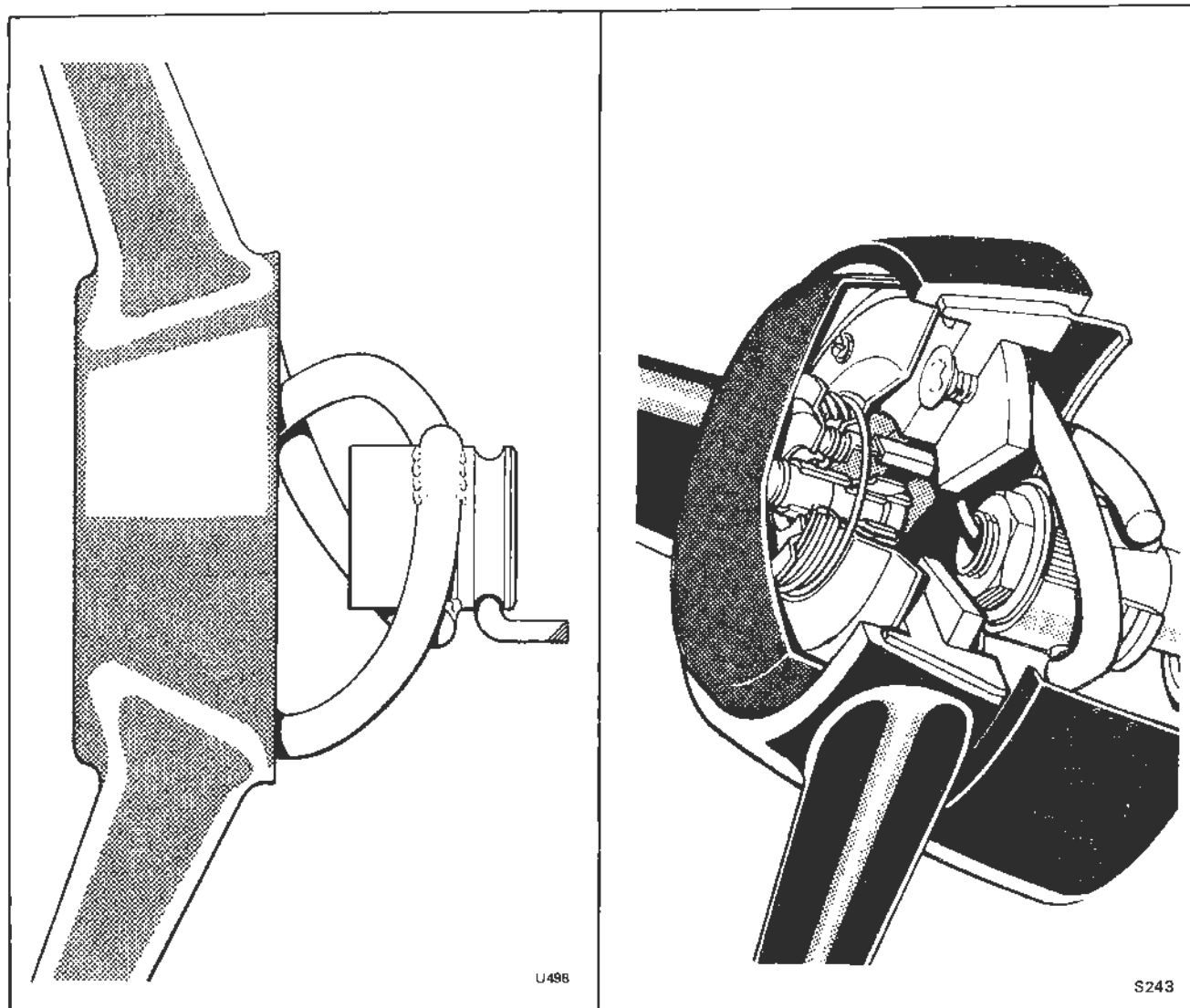


Fig. 1 Shaping the peg

Fig. 2 Steering wheel components on later cars

Service Bulletin

TSD 4318

Bulletin number **SY/N18** Date **13 3 80** Page **1 of 2**
Circulation list

Category **C**

ALL FRANCHISE HOLDERS AND DEALERS

STEERING RACK INTERNAL LOCK STOPS

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars from car serial numbers:

Left-hand cars

SILVER SHADOW II BENTLEY T2	SILVER WRAITH II	CORNICHE	CAMARGUE
SRX 39376	LRK 38627	DRK 50285	JRL 50348
SRX 39451	LRX 38642	DRK 50303	
SRX 39458	LRK 38654	DRK 50311	
	LRK 38758		
	LRK 38762		
	LRX 38768		
	LRK 38833		

Right-hand cars

SILVER SHADOW II BENTLEY T2	SILVER WRAITH II	CORNICHE	CAMARGUE
SRH 39572	LRH 38847	DRH 50333	JRH 50298

INTRODUCTION:

From the above car serial numbers, the steering rack incorporates internal lock stops. This bulletin is to advise on the correct fitting of replacement racks.

DESCRIPTION:

On the above cars there are no lock stop packings on the hubs, because the lock stops are incorporated inside the steering rack. If the steering rack has to be replaced on one of the above cars, then it must be replaced with a steering rack of the internal lock stop type.

Note

An earlier type of rack without internal lock stops must not be fitted as this could allow the wheels to foul.

Racks have internal lock stops from rack serial number Q11915 with the following exceptions

Q11916
Q11923
Q11933
Q11937
Q11941 to Q12043 inclusive

This number is found on the pinion housing.

Racks with internal lock stops can be fitted to cars prior to the above car serial numbers.

Displaced rack part numbers	UR 21760
	UR 21761

New rack part numbers	UR 22074
	UR 22075

Hly/SJ

Service Bulletin

ROLLS-ROYCE
MOTORS

Car Division

TSD 4318

Bulletin number	SY/N19										Date	30 9 80			Page	1 of 2	
Circulation list																	

Category ^C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

METRIC STEERING PUMP

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars. From and including the car serial numbers listed.

SILVER SHADOW II
AND BENTLEY T2

SILVER WRAITH II

CORNICHE

CAMARGUE

SRH 39524

LRH 38655
LRH 38757
LRK 38758
LRK 38761 to LRK 38767
LRK 38769
LRK 38771
LRH 38829
LRX 38830
LRK 38833
LRH 38834
LRK 38836
LRK 38837
LRH 38839 to LRK 38844
LRK 38905 to LRK 38907
LRK 38909
LRK 38912 to LRH 38914
LRK 38916

CRX 50334
JRH 50298
JRH 50350
JRH 50352

INTRODUCTION:

The Saginaw steering pumps fitted to cars with the above car serial numbers and all subsequent numbers, feature metric thread size fittings, instead of imperial. The new pump can be identified by the word "Metric" cast in the side of the housing. Metric threaded pumps will be supplied for all replacement purposes in future.

DESCRIPTION:

The following components are now metric, consequently their numbers have changed. The displaced components are not interchangeable with the new components. However, it should be noted that UE 42696 and UE 42694 the front and rear pivot plates can be used with imperial threaded pumps to replace UE 34564 and UE 37321 respectively.

		DISPLACED	NEW
Assemble Steering Pump and Pulley	1 off	UE 39652	UE 42700
Steering Pump	1 off	UE 39653	UE 42692
Assembly Rear Pivot Plate	1 off	UE 37321	UE 42694
Front Pivot Plate	1 off	UE 34564	UE 42696
Distance Piece	3 off	UE 33042	UE 42693
Setscrew	1 off	UE 5650	SPM 1371
Setscrew	2 off	UE 35243	SPM 1370
Washer	1 off	UA 1253/Z	UM 20207
Nut	2 off	RE 24992	SPM 1364
Hose-High Pressure Steering Pump	1 off	UR 20310	UR 21832

PROCEDURE:

The procedure for removal; refitting and servicing is the same as that for the previous Saginaw Pump and is described in Chapter N of the Workshop manual TSD 4200.

JCI/TMB

Service Bulletin



TSD 4318

Bulletin number	SY/N20							Date	30 6 81			Page	1 of 3		
Circulation list															

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

STEERING PULL

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche and Camargue cars and all Bentley T Series, Bentley T2 and Corniche cars.

INTRODUCTION:

A significant number of steering racks are being returned under warranty with a complaint of steering pull. Subsequent examination has not revealed any faults and it is therefore clear that the cause of complaint did not lie in the steering rack.

This service bulletin has been issued to assist in the diagnosis of steering pull, and to prevent unnecessary work being performed.

DESCRIPTION:

Steering pull can be caused by the following items

- 1 Road camber
- 2 Tyres
- 3 Suspension
- 4 Steering gear

Although it is not generally realised, tyres are the major source of steering pull and therefore attention should initially be focused in this area.

Incorrect steering geometry can cause steering pull, although the error in the geometry settings would have to be quite substantial to cause it.

Although steering pull can be caused by imbalance in the power

steering rack, it is a very rare occurrence.

It is important that the various areas are eliminated in a logical manner if unnecessary work is to be avoided. Therefore, it is suggested that the following procedure be used as a guideline.

PROCEDURE:

1. Before road testing the vehicle to determine the nature of the complaint, check the following items.
 1. Tyre pressure.
 2. Ensure that the steering pump drive belts are adequately tightened.
2. Steering pull can be caused by the road camber. This pull can be confirmed by driving the car on the opposite camber, whereupon the car should pull in the opposite direction. If the vehicle always pulls down the camber, it can be seen that the steering pull is due to the road camber and as such is quite normal.
3. If the steering has a definite bias to one side or the other ie, it climbs the camber in a positive manner, then the cause may be in one of the following areas.
 1. Tyres
 2. Suspension
 3. Power steering
4. In order to ascertain in which area the fault lies, jack up the front of the car. Ensure that the brakes are not binding. Place the steering in the straight ahead position, remove the gearbox isolator and start the engine. If there is a bias in the steering system, the steering rack will traverse to the full lock position in the same direction as that of the steering pull.

If there is no positive movement of the steering rack to either full lock position then the fault must lie in one of the following areas.

 1. Tyres
 2. Suspension
5. To determine in which of the above areas the fault lies, remove both front wheel/tyre assemblies and substitute two wheel/tyre assemblies from a vehicle which does not have steering pull. Ensure that the wheels are fitted in the same positions as on the vehicle from which they were removed.

If it is found during the road test that the steering pull is still evident, then the fault lies in the suspension. However, if there is no evidence of steering pull, then the fault lies in the two displaced wheel/tyre assemblies and could possibly be caused by.

1. Camber wear on the tyre.
 2. A fault in the breaker positioning within the tyre.
6. In order to determine which is the cause, replace both original wheel/tyre assemblies, interchanging side to side and then road test. If there is steering pull in the opposite direction then the fault is probably caused by camber wear on the tyre. Therefore, with the wheels in the interchanged positions, the pull due to camber wear of the tyre will probably be balanced by the pull due to road camber, thus the pull condition is eliminated or reduced to a satisfactory level.

If pull is still evident, the fault is caused by faulty positioning of the breakers or plys of the tyres. Excessive movement of the breakers during the moulding of the tyre can cause this problem. If this fault is diagnosed, it is stressed that the tyres be fitted symmetrically opposed so that the tyre markings such as date codes etc., on the tyres are either both facing inwards or both facing outwards.

This practice is used, because any pull due to slight movement of the breakers during moulding of the tyres may be balanced out by the pull in the opposite tyre.

If after symmetrically opposing the tyres, the pull is still evident, then there is abnormal bias in one or both tyres and either or both tyres should be replaced with the permission of the local tyre supplier or manufacturers representative.

7. On conforming that the fault does not lie in the steering rack or tyres, then the steering geometry can be checked as all other probable sources of pull have now been eliminated.

Hly/AEB

Service Bulletin



TSD 4318

Bulletin number	SY/N21										Date	18 11 82			Page	1 of 1		
Circulation list																		

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

STEERING RACK END CAP SEALING

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars, fitted with steering racks.

DESCRIPTION:

To improve the sealing performance, the Loctite used on the end caps of the steering rack assembly has been changed from "225" to "542" grade.

In the event of steering rack overhaul or repair, ensure that Loctite 542 is always used.

JC1/Per/PJR

Service Bulletin



TSD 4318

Bulletin number	SY/N22	Date	23 5 85	Page	1 of 2
Circulation list					

Category **C**

ALL ROLLS-ROYCE FRANCHISE HOLDERS

POWER STEERING LOW PRESSURE HOSES

APPLICABLE TO:

All Rolls-Royce Silver Shadow II; Silver Wraith II, Corniche and Camargue cars and all Bentley T2 and Corniche cars.

INTRODUCTION:

A revised set of flexible hoses have been introduced on the low pressure return line of the power assisted steering system.

The new hoses provide an improved seal between themselves and the metal pipes.

They will be supplied for all replacement purposes.

DESCRIPTION:

The improved sealing is achieved by reducing the internal diameter of the flexible hose to 8,7 mm (previously 9,5 mm) which gives an improved fit over the metal pipes.

The new type hoses have a patterned outer cover, with a single green stripe running lengthwise, and are marked - P.E.D. 8,7 mm. The new hoses should be fitted using an improved worm drive type securing clip (refer to PARTS AFFECTED).

PROCEDURE:

- a) The new type hoses are fitted in the normal manner. Ensure that the hoses are routed correctly and that no kinks or twisting is present.
- b) Replenish the power assisted steering system reservoir using only approved steering fluids.

NOTE: Should a large quantity of fluid be lost during fitting of the hoses, care must be taken not to allow the fluid level in the reservoir to drop sufficiently for air to be drawn into the system.

23 5 85

2 of 2

SY/N22

PARTS AFFECTED:

Displaced Part	Description	New Part
UE 34328	Hose pipes to cooler feed and return - 2 off	UR 27328
UR 19391	Hose return pipe to pump 1 off	UR 27332
UE 34330	Hose return rack to cooler (Right-hand) - 1 off	UR 27330
UE 34331	Hose return rack to cooler (Left-hand) - 1 off	UR 27331
RE 9393	Clip worm drive	SPC 3253

Hly/MS

Service Bulletins



Chapter P

Torque Tightening Figures

Service Bulletins



Chapter Q Exhaust System

Service Bulletins

Chapter R

Wheels and Tyres



Service Bulletin



TSD 4318

Bulletin number	SY/R42				Issue 2				Date	9 9 81				Page	1 of 6			
Circulation list																		

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

CURRENTLY APPROVED TYRES

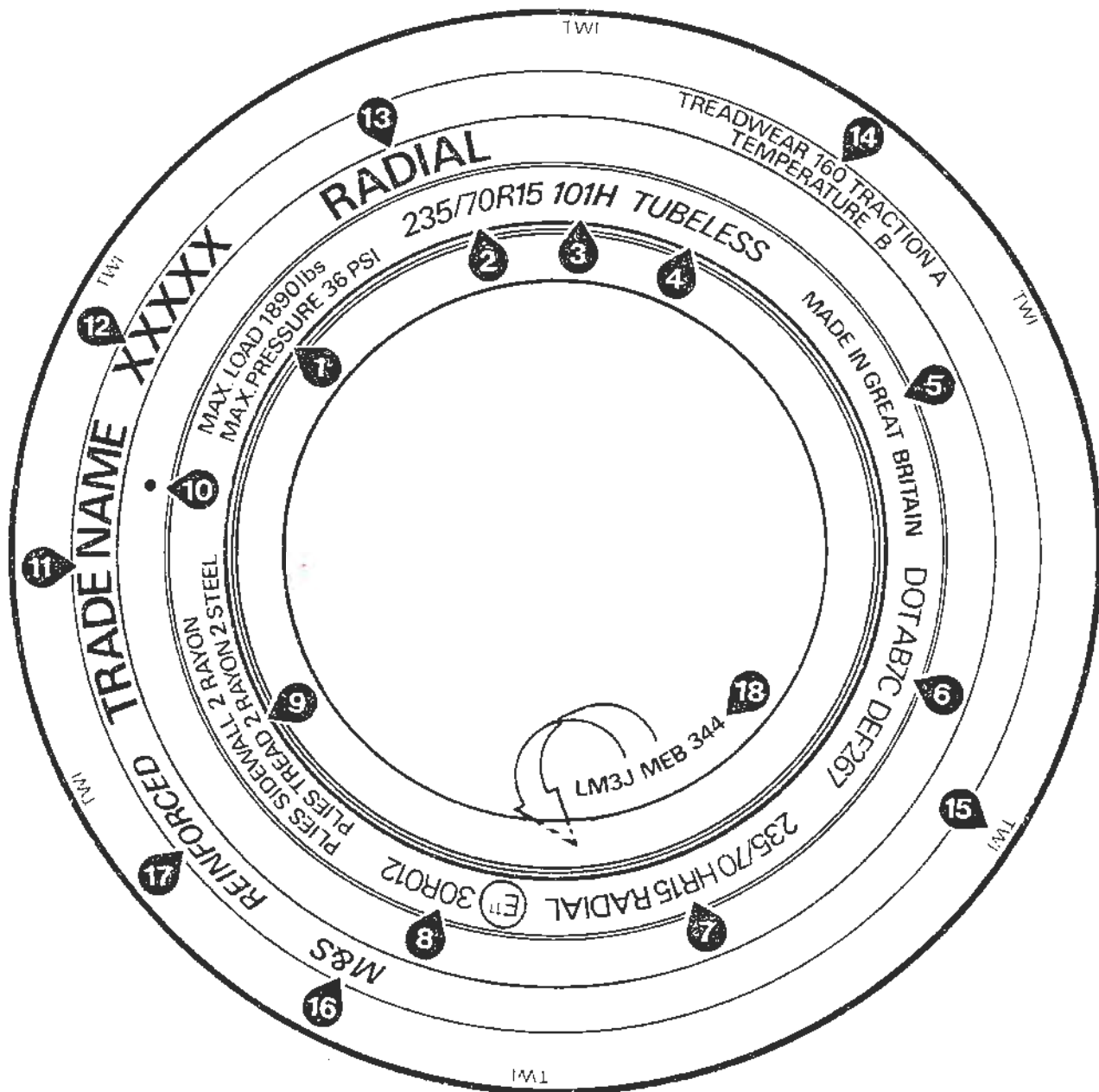
APPLICABLE TO:

All Rolls-Royce and Bentley motor cars from 1945 up to and including Silver Shadow II, Silver Wraith II and Bentley T2 series cars.

INTRODUCTION:

This bulletin details currently approved tyres available for fitment to Rolls-Royce and Bentley motor cars from 1945 and supersedes all other tyre availability bulletins.

Car Type	Manufacture	Construction	Side wall	Size	Tyre Marking	Remarks
All Rolls-Royce and Bentley motor cars from and including the following car serial numbers Silver Shadow SRC 18269 Bentley T SBH 18265 Long Wheelbase LRH 19577 Corniche Convertible DRH 18563 Corniche Saloon CRH 18564 Camargue JRH 14674	Avon	Radial-ply steel	Black/White	235/70 HR 15	RR Turbosteel 70 235/70 HR 15 101 H	Not for use in USA and Canada
	Dunlop	Radial-ply steel	Black/White	235/70 HR 15	Dunlop SP Sport D7 235/70 HR 15 101 H	
	Dunlop	Radial-ply steel	Black/White	HR 70 15	Dunlop Elite HR 70 15	Only for use in USA and Canada
	Dunlop	Radial-ply rayon	Black	205 R 15	Weathermaster SP44TT/L	Winter specification*
	Michelin	Radial-ply steel	Black/White	235/70 HR 15	Michelin XVS	
	Michelin	Radial-ply steel	White	HR 70 15	Wide X HR 70 15	Only for use in USA and Canada (speed restricted)
All Rolls-Royce and Bentley motor cars from and including the following car serial numbers up to the serial numbers quoted above. Silver Shadow and Bentley T SRH 13485 (including SRH 13066, SRH 12853, SRX 12687, and SRH 12586) Long Wheelbase LRX 13201 (including LRH 13084) Corniche Convertible DRX 12734 Corniche Saloon CRH 12735	Avon	Radial-ply rayon	Black	205 VR 15	Radial T rayon	Not for use in USA or Canada
	Dunlop	Radial-ply rayon	Black/White	205 HR 15	SP68 rayon T/L	
	Dunlop	Radial-ply rayon	Black	205 R 15	Weathermaster SP44TT/L	Winter specification*
	Firestone	Radial-ply rayon	Black	205 SR 15	F100 rayon	
All Rolls-Royce and Bentley motor cars prior to the following car serial numbers Silver Shadow and Bentley T SRH 13485 (except SRH 13066, SRH 12853, SRX 12687 and SRH 12586) Long Wheelbase LRX 13201 (except LRH 13084) Corniche Convertible DRX 12734 Corniche Saloon CRX 12735 (see Note 2) Rolls-Royce Phantom V and Phantom VI	Avon	Cross-ply nylon	Black	8.15 V 15	R/R B Nylon 6PR	Not for use in USA or Canada
	Avon	Radial-ply rayon	Black	205 VR 15	Radial T rayon	
	Dunlop	Cross-ply nylon	Black	8.15 H 15	Roadspeed RS5 Nylon 4 PR T/L	
	Dunlop	Radial-ply rayon	Black/White	205 HR 15	SP68 Rayon T/L	
	Dunlop	Radial-ply rayon	Black	205 R 15	Weathermaster SP44TT/L	Winter specification*
	Firestone	Radial-ply rayon	Black	205 SR 15	F100 rayon	
	Dunlop	Cross-ply nylon	Black	8.90 S 15	Fort Nylon 8PR WH4 T/L	



The above drawing identifies the codes or markings that appear on the sidewall of a tyre. The following key applies.

1. Load and pressure marking requirement (not applicable in the United Kingdom).
2. Tyre size designation. New Economic Commission for European Standards form followed by load index and speed symbol.
3. Load index and speed symbol.
4. The word tubeless where applicable.
5. Country of manufacture.
6. North American Department of Transportation compliance symbol, followed by the identification number.
7. Tyre size designation (earlier form) incorporating speed symbol (H), followed by the letter R which denotes the type of construction i.e. RADIAL.
8. Economic Commission for European Standards type approval mark and number.
9. Tyre construction details (not required in the United Kingdom).
10. Radial force variation low spot (see note at the end of this section).

The position of this coloured spot will vary from tyre to tyre due mainly to the fact that each tyre is partially assembled by hand.

11. Manufacturer's name or brand name.
12. A commercial name or identity.
13. Denotes type of construction.
14. Uniform tyre quality grading markings required by USA consumer information regulations (not required in the United Kingdom).
15. Location of tread wear indicator (markings not on all tyres).
16. M & S (Mud & Snow) markings where applicable, indicating that the tyre has winter type tread pattern.
17. Reinforced marking where applicable.
18. Manufacturer's Coding: LM factory; MEB type code, 3J size code; 344 date code. The tyre is normally fitted to the wheel rim with this code on the inside sidewall (as opposed to the kerb side) to prevent damage.

POINT OF FIRST HARMONIC OF RADIAL FORCE VARIATION - SEE ITEM NO. 10

AVON

Avon tyres supplied for service replacement are marked with a GREEN spot to indicate the force variation low spot. When fitting the tyre to a wheel rim, the GREEN spot must be positioned adjacent to the letter 'H' stamped in the well of the wheel rim to ensure optimum harmonisation of the wheel and tyre assembly.

MICHELIN

To be fitted as above if supplied with a GREEN spot. If the tyre is supplied with a WHITE spot, the tyre should be fitted to the wheel rim with the WHITE spot 180° opposite to the letter 'H' stamped in the well of the wheel rim.

DUNLOP

The radial force variation low spot colour has changed from RED to GREEN from November 1978. The same fitting procedure should be adopted as that instructed above for AVON tyres.

Hly/Per

Service Bulletin



TSD 4318

Bulletin number	SY/R43										Date	31	1	79	Page	1	of	2
Circulation list																		

Category . C

ALL FRANCHISE HOLDERS

DUNLOP SP SPORT FORMULA 70T/L 235/70 HR15 101H TYRE

APPLICABLE TO:

All Rolls-Royce and Bentley motor cars from the following car serial numbers:

Silver Shadow and Bentley T Series	SRC 18269 and onwards
Silver Shadow Long Wheelbase	LRH 19577 and onwards
Corniche	DRH 18563 and onwards
Camargue	JRH 14674 and onwards

INTRODUCTION:

From the following car serial numbers, cars leaving the factory equipped with Dunlop tyres will have a new type of Dunlop tyre fitted.

Silver Shadow II and Bentley T2	SRH 35550 and onwards
Silver Wraith II	LRX 35522 and onwards
Corniche	CRH 34836 and onwards
Camargue	JRX 32483 and onwards

DESCRIPTION:

The new tyre is of a steel construction and offers several advantages over its textile equivalent.

The main advantages are:

- 1 Potential improvement of tyre life.
- 2 More consistent uniformity of construction.
- 3 More responsive handling.

The new tyres are marked 'SP SPORT FORMULA 70T/L 235/70 HR15 101H'. The marking '101H' conforms with the new European standards. '101' is the load index referring to the maximum tyre loading and the 'H' mark confirms the speed rating of 130 mph.

FITTING INSTRUCTIONS:

The radial force variation low spot colour on the Dunlop SP SPORT FORMULA 70T/L tyre is GREEN. When fitting these tyres the green spot should be aligned with the highest point of the wheel, marked with the letter 'H' on the wheel rim.

The new tyre may be used as a service replacement on all cars originally equipped with either HR70 HR15 or 235/70 HR15 tyres. (All cars after the car serial numbers listed at the beginning of this bulletin under the heading 'APPLICABLE TO').

IT IS RECOMMENDED THAT THESE TYRES ARE FITTED IN COMPLETE CAR SETS (WHEN CHANGING THE CAR FROM THE ORIGINAL TEXTILE TYRES TO STEEL BRACED TYRES).

However, tyres of steel braced construction may be mixed with tyres of textile construction provided they are fitted in pairs, with the pair of steel braced tyres being fitted to the rear wheels.

TYRE PRESSURES:

Tyre pressures remain unchanged.

Hly/Per

Service Bulletin



TSD 4318

Bulletin number	SY/R44	Date	4 5 79	Page	1 of 2
Circulation list					

Category C

ALL FRANCHISE HOLDERS AND DEALERS.

CURRENTLY APPROVED TYRES

APPLICABLE TO:

All Rolls-Royce Corniche and Camargue cars, and all Bentley Corniche cars from Car Serial Number 50001.

INTRODUCTION:

This bulletin details tyres approved for use on the above Rolls-Royce and Bentley motor cars. (For cars prior to the above Serial Number refer to bulletin SY/R42).

DESCRIPTION:

The following tyres are approved for use on Rolls-Royce and Bentley cars from and including Car Serial Number 50001.

The Dunlop SP Sport formula 70T/L 235/70 HR 15 101H MUST NOT under any circumstances be fitted to the above cars.

MANUFACTURER	CONSTRUCTION	SIDEWALL	SIZE	TYRE/MARKING	NOTE
Avon	Radial-Ply Rayon	Black/White	HR70 HR15	HR70 HR15 Radial T or 235/70 HR15 101H	Not for use in Kuwait South Africa USA or Canada
Avon	Radial-Ply Steel	Black/White	235/70 HR15	RR Turbo Steel 70 235/70 HR15 101H	
Dunlop	Radial-Ply Rayon	Black/White	HR70 HR15	SP Sport Dunlop Formula 70 T/L	
Dunlop	Radial-Ply Rayon (Winter)	Black	205 R 15	Weathermaster SP44TT/L	
Firestone	Radial-Ply Rayon	Black/White	HR70 HR15	Cavallino Wide Oval	Not for use in Australia, New Zealand or West Germany
Michelin	Radial-Ply Steel	White	HR70 15	Wide 'X' HR70 15	Only for use in USA and Canada
Michelin	Radial-Ply Steel	Black/White	235/70 HR15	XVS HR70 HR15	
THE FOLLOWING TYRE MUST NOT BE USED					
Dunlop	Radial-Ply Steel	Black/White	235/70 HR15	SP Sport Dunlop Formula 70T/L 235/70 HR15 101H	

Service Bulletin



TSD 4318

Bulletin number	SY/R45										Date	25 7 79				Page	1 of 3			
Circulation list																				

Category C

ALL FRANCHISE HOLDERS AND DEALERS

MICHELIN 235/70 - HR15 XVS TYRES

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Long Wheelbase, Corniche and Camargue cars and all Bentley T series and Corniche cars from car serial numbers:

SRC 18269 - Silver Shadow and Bentley T Series
LRH 19577 - Long Wheelbase
CRH 18564 - Corniche Saloon
DRH 18563 - Corniche Convertible
JRH 14674 - Camargue

Also all Rolls-Royce Silver Shadow II, Silver Wraith II and Bentley T2 cars.

INTRODUCTION:

Rolls-Royce Motors has tested and approved the Michelin 235/70 - HR15 XVS tyres for fitting to its current range of motor cars in all territories where these cars are currently sold.

DESCRIPTION:

Since Firestone ceased to supply a tyre for use on the above vehicles, Michelin have developed a tyre which is compatible with Rolls-Royce Motors requirements.

CONSTRUCTION

This new tyre is of a rayon/steel construction, employing 2 rayon body (casing) plys, 2 rayon tread plys and 2 steel tread plys. It is also an asymmetrical tyre which means it must only be fitted one way round on the rim. The outer face of the tyre is marked with the words "cote exterieur voiture - side facing outward".

Note XVS tyres MUST be fitted in pairs across an axle, since the tread asymmetry develops a residual force which is balanced by an equal force from the partnered tyre.

RADIAL FORCE VARIATION HIGH/LOW SPOT

XVS tyres may be marked with either a white or green spot denoting the point of highest or lowest value of radial force.

The white spot, denoting the point of highest value of radial force, must be positioned 180° away from the encircled H mark on the wheel when the tyre is mounted.

The green spot, denoting the point of lowest value of radial force, must be positioned adjacent to the encircled H mark on the wheel.

TYRE LIFE

It has been found during development testing that the life of this tyre is sufficiently long for it to be enhanced by changing the position of the tyres every 6,000 miles. In fact this procedure will improve the overall life of a set of any of the steel braced radial-ply tyres approved by Rolls-Royce Motors Limited.

The procedure is to alternate the tyres front to rear on the same side of the car every 6,000 miles.

Thus the left-hand front tyre is interchanged with the left-hand rear tyre and the right-hand front tyre is interchanged with the right-hand rear tyre.

TYRE NOISE

There is one feature of the Michelin XVS tyre which some customers may object to and that is tyre noise. At speeds below 65 Kph (40 mph) the tyre emits a tread noise, in the form of a moan, particularly on smooth tarmac surfaces. Customers should be made aware of this before having the tyres fitted to their cars.

WHITEWALL VARIANT

The tyre is initially available in blackwall form only. However, a whitewall specification will become available in due course. Because of this until further notice the Michelin Wide X HR 70-15 tyre will continue to be fitted to North American cars only.

TYRE PRESSURES

Tyre pressures to be used are identical to those for the Avon 235/70 HR 15 Turbosteel and Dunlop 235/70 HR 15 SP Sport.

TYRE SUPPLY AND SERVICE SUPPORT

Michelin supply their tyres through agencies and depots to the franchise trade in all markets where Rolls-Royce vehicles are sold. Any problem or query that arises regarding the supply of or performance of Michelin tyres should be referred by the Rolls-Royce Franchise Holder back to his local Michelin tyre supplier.

Service Bulletin

TSD 4318

Bulletin number	SY/R46					Date	26 6 80			Page	1 of 2	
Circulation list												

Category A

A

ALL ROLLS-ROYCE FRANCHISE HOLDERS IN THE UNITED KINGDOM

AVON 235/ 70 HR15 RR. TURBOSTEEL WHITE SIDEWALL TUBELESS TYRES
FEDERAL/ECE DATE CODE 419

APPLICABLE TO:

The following car serial numbers:

LRH 38655	SRH 39219	SRH 39316	SRH 39470	SRH 39912
LRH 38842	SBH 39221	SRH 39318	SRH 39474	SRH 40139
SRH 38925	SRH 39226	SRH 39321	SRH 39482	SRH 40347
SRH 39034	SRH 39229	SRH 39327	SBH 39489	SBH 40396
SRH 39137	SRH 39253	SRH 39331	SRH 39503	SRH 40433
SRH 39140	SRH 39256	SRH 39364	SRH 39514	SRH 40446
SRH 39146	SRH 39260	SBH 39411	SRH 39521	SRH 40466
SRH 39165	SRH 39288	SRH 39412	SRH 39531	JRH 50244
SRH 39215	SRH 39311	SRH 39461	SRH 39543	JRH 50295
SRH 39217	SRH 39313	SRH 39468	SRH 39554	JRH 50296

INTRODUCTION:

We have been informed by the Avon Tyre Company Limited that a small quantity of tyres within a batch of tyres of the above size, type and date code (white sidewall only) have been manufactured with a possible bonding defect. Although not all tyres of this date code are affected, it has been decided to recall all cars to which these tyres were fitted as original equipment and replace the wheel/tyre assemblies with new wheel/tyre assemblies.

An indication of the problem is that within several hundred miles the tyre may change shape in the tread area resulting in severe vibration and/or local distortion of the tread pattern. If this vibration and/or local distortion is not attended to, tyre failure could eventually occur.

Replacement wheel/tyre assemblies will be supplied by the Avon Tyre Company Limited direct to your premises. These new assemblies will be finished and balanced to Rolls-Royce Motors original equipment standards.

The removed assemblies must be clearly marked with the car serial number from which they were removed. The valve must also be removed to prevent inadvertent use and then the assemblies retained for collection by Avon.

In addition to those tyres fitted as original equipment by Rolls-Royce Motors, a number of similar tyres have been supplied to the replacement market. Avon Tyre Company Limited are recalling these tyres through their normal distribution channels, but it is recommended that you check any cars entering your workshops, or tyres you may have in your replacement stocks for the date code 419. In the event of such a unit being found, contact your local Avon supplier who will provide a replacement tyre. The labour involved in replacing these tyres should be claimed from Rolls-Royce Motors via the normal warranty claim system.

PROCEDURE:

Drive the car concerned onto a ramp, or over a pit, to enable the date code to be checked on all five tyres. The spare wheel may have to be rotated in its carrier to enable the date code to be seen. The date code will be located on the inboard sidewall of the tyres. See Service Bulletin SY/R42 for the exact location of this code.

Remove the wheel(s) concerned (see Workshop Manual TSD 4200 Chapter R for the correct removal and refitting procedure) and replace it/them with a new wheel/tyre assembly as supplied by the Avon Tyre Company Limited. Ensure that the wheel nuts are correctly torque tightened to between 6,2 kgf.m. and 6,9 kgf.m. (45 lbf.ft. and 50 lbf.ft.). The wheel/tyre assembly will be correctly balanced but the tyre pressure should be checked (see Workshop Manual TSD 4200 Chapter R for the correct tyre pressures).

Where the car is already in use and a replacement wheel/tyre assembly is fitted, the opposite tyre on the same axle should be checked for wear. If the opposite tyre is significantly worn, then it is permissible to change this wheel/tyre assembly for a new assembly supplied by the Avon Tyre Company Limited.

The displaced wheel/tyre assemblies should be suitably marked to prevent inadvertent fitting to a motor car e.g. the words "NOT TO BE USED" written in large letters on each sidewall with yellow waterproof chalk. They MUST also be marked with the serial number of the car from which they have been removed. In addition to this, the valve should be removed as a secondary precaution. These wheel/tyre assemblies should then be retained for collection by the Avon Tyre Company Limited.

REIMBURSEMENT FOR WORK COMPLETED:

Time Allowed - 0.15 hours per wheel.

Labour expended must be claimed for by warranty claim in the normal way quoting the following MHS Op. number in box 15 of the claim form.

RE 80 02

It is important that this number is quoted

Hly/Per

Service Bulletin

ROLLS-ROYCE
MOTORS

Car Division

TSD 4318

Bulletin number	SY/R47							Date	14	4	81	Page	1	of	2
Circulation list															

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

DUNLOP SP SPORT D7 235/70 HR15 RADIAL FORMULA 70 TYRES

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche, and Camargue cars and all Bentley T Series, Bentley T2 and Corniche cars from the following car serial numbers

SRC 18269 - Silver Shadow, Silver Shadow II, Bentley T Series and Bentley T2
LRH 19577 - Long Wheelbase and Silver Wraith II
CRH 18564 - Corniche Saloon
CRH 18563 - Corniche Convertible
JRH 14674 - Camargue

INTRODUCTION:

Rolls-Royce Motors have extensively tested and approved the Dunlop SP Sport D7 235/70 HR15 Radial Formula 70 tyre for use on the above motor cars, in all territories where these cars are sold.

DESCRIPTION:

The Dunlop SP Sport D7 tyre has a distinctive six rib tread pattern and utilizes a number of features to improve its overall performance. In order to ensure that high speed stability is not sacrificed at the expense of comfort, a belt of nylon overlays the tyre's steel tread breakers, with two additional pieces of nylon on the extremities of the breakers. When the tyre reaches its operating temperature this nylon reinforcement contracts, counteracting the centrifugal stresses in the area of the breaker edge. The construction of the tyre also allows the use of a slightly softer compound to improve the ride characteristics. Cornering performance has been improved by the

tread pattern's special configuration in the areas of the tread and sidewalls. A continuous channel separates the tread elements in the area of the shoulder and acts as a pivot, effectively de-coupling the tread and sidewall actions, enabling them to work more independently during cornering. Therefore, deformations of the casing in the region of the contact patch are not transmitted to the tread, which is allowed to remain flat and in close contact with the road surface.

PROCEDURE:

It is strongly recommended that the Dunlop SP Sport D7 tyre is fitted in sets. It must not be mixed with any other type or make of tyre on the same axle.

The 10mm (0.393in) green spot denotes the point of lowest value of radial force variation and must be positioned adjacent to the encircled H mark on the wheel rim.

As with all steel braced radial ply tyres approved by Rolls-Royce Motors, the overall tyre life will be extended if the tyres are alternated front to rear on the same side of the motor car every 6000 miles.

This tyre is available in both blackwall and whitewall variations.

TYRE PRESSURES:

Tyre pressures to be used are identical to those for the Avon 235/70 HR15 Turbosteel and Michelin 235/70 HR15 XVS tyres.

Hly/Per

Service Bulletin

ROLLS-ROYCE
MOTORS

Car Division

TSD 4318

Bulletin number	SY/R48	Date	22 4 81	Page	1 of 2
Circulation list					
Category	C				

ALL ROLLS-ROYCE FRANCHISE HOLDERS

DELETION OF THE AVON RADIAL 235/70 HR15 T TEXTILE TUBELESS OR
235/70 HR15 101 H TEXTILE BRACED TYRES FROM THE CURRENTLY
APPROVED TYRE RANGE

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche and Camargue cars and all Bentley T Series, Bentley T2 and Corniche cars from car serial numbers.

SRC 18269 - Silver Shadow and Silver Shadow II
SBH 18265 - Bentley T Series and Bentley T2
LRH 19577 - Long Wheelbase and Silver Wraith II
CRH 18564 - Corniche Saloon
DRH 18563 - Corniche Convertible
JRH 14674 - Camargue

INTRODUCTION:

Since the Avon Tyre Company Limited have ceased production of the Avon Radial 235/70 HR15 101 H Textile Braced Tyre, it has been deleted from the currently approved tyre range. This bulletin is issued to advise the precautions to be observed when replacing any of these tyres on the above cars.

PROCEDURE:

When a motor car has been fitted with a complete set of the above tyres, because of the different wear rates of tyres fitted in different positions on the car, it is likely that one or two tyres will need to be replaced before the rest.

If only one replacement tyre is needed and an Avon Radial 235/70 HR15 T tyre cannot be obtained, then in order to maintain the correct handling balance of the car, it is recommended that a pair of tyres of a different make or specification be fitted to the same axle.

Suitable alternative tyres are given in the following service bulletins

PRE 50000 series motor cars SY/R42
POST 50000 series motor cars SY/R44

The following rules MUST ALWAYS be observed when mixing different types of tyres.

1. Radial tyres with a steel bracing MUST ALWAYS be fitted in pairs on the same axle.
2. In the event that radial textile braced and radial steel braced tyres are to be mixed on a car, then the steel braced pair of tyres MUST ALWAYS be fitted to the rear and the textile braced tyres MUST ALWAYS be fitted to the front.

Hly/Per

Service Bulletin



TSD 4318

Bulletin number	SY/R49										Date	22	11	82	Page	1	of	3
Circulation list																		

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

CURRENTLY APPROVED WINTER TYRES

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow LWB, Silver Shadow II, Silver Wraith II, Corniche and Camargue cars, and all Bentley T, Bentley T2 and Corniche cars.

INTRODUCTION:

This service bulletin details currently approved winter specification tyres for use on the above motor cars.

Car Type	Manufacturer	Construction	Side Wall	Size	Tyre Marking	Tyre Pressures (Cold)		Maximum Speed		Snow Chains (see Note 1)	Type of Snow Chain
						Front	Rear	km/h	mile/h		
All Rolls-Royce and Bentley motor cars from and including the following car serial numbers	B F Goodrich	Radial-ply steel	White	P225/75-R15	BF Goodrich Trailmaker M S *	1,66 bar (24 lbf/in ²)	1,93 bar (28 lbf/in ²)	121	75	Snow chains can only be used with this tyre when fitted to Camargue cars	2
Silver Shadow SRC 18269	Dunlop	Radial-ply rayon	Black	205 R15	Weather-master SP44TT/L *	1,93 bar (28 lbf/in ²) 2,20 bar (32 lbf/in ²)	1,93 bar (28 lbf/in ²) 2,20 bar (32 lbf/in ²)	137 153	85 95	Snow chains can be used on all cars with this tyre fitted	1&2
Bentley T SBH 18265											
Long Wheelbase LRH 19577	Firestone	Radial-ply steel	White	P225/75 - R15	Town & Country Snowbiter *	1,66 bar (24 lbf/in ²)	1,93 bar (28 lbf/in ²)	121	75	Snow chains can only be used with this tyre when fitted to Camargue cars	2
Corniche Convertible DRH 18563											
Corniche Saloon CRH 18564	Goodyear	Radial-ply polyester aramid mixture	Black/White	P235/70 R15 HR70-15	All Winter Radial	1,66 bar (24 lbf/in ²)	1,93 bar (28 lbf/in ²)	137	85	Snow chains can only be used with this tyre when fitted to Camargue cars	2
Camargue JRH 14674											
	Michelin	Radial-ply steel	White	HR 78-15	Michelin XM-S *	1,66 bar (24 lbf/in ²)	1,93 bar (28 lbf/in ²)	160	100	Snow chains can only be used with this tyre when fitted to Camargue cars	2
All Rolls-Royce and Bentley motor cars prior to the above car serial numbers (see Note 2)	Dunlop	Radial-ply rayon	Black	205 R15	Weather-master SP44 TT/L *	1,93 bar (28 lbf/in ²) 2,20 bar (32 lbf/in ²)	1,93 bar (28 lbf/in ²) 2,20 bar (32 lbf/in ²)	137 153	85 95	Snow chains can be used on all cars with this tyre fitted	1&2

Notes

1. Type 1 Snow chain - Union S2 3081
Type 2 Snow chain - Union S2 3082,
Rud Kantenspur 07-745,
Rud Kantenspur 06-237,
Rud Super Griefsteg S8143,
Pewag Austro S/A77S,
Thiele Nordland Eifelspur,
Gruppe 351. See Workshop Manual TSD 4200 - Chapter R, for details of fitting snow chains to road wheels.
- 2 Prior to the following car serial numbers only tubed radial tyre equipment should be fitted Silver Shadow SRX 6752, Bentley T SBH 5572, Coachbuilt CRH 6760, Long Wheelbase LRX 6744 (except LRX 6712, LRX 6714 and LRX 6720).
3. Tyres marked * indicates tread pattern suitable to accept ice studs.

USE OF STUDS

Some countries already have regulations on the use of studded tyres. It is therefore necessary to respect these legal requirements before fitting this type of tyre, particularly with regard to.

- a) number of studs.
- b) the height of protrusion of studs in the new tyres.
- c) the maximum permitted speed.

In countries where there is no legislation on the use of studded tyres, it is recommended that on new tyres stud protrusion from the tread should be between 1,0mm and 2,5mm (0.039 in and 0.098 in).

In view of the fact that road holding can be reduced when studded tyres are used on roads clear of ice and snow, it is advisable not to exceed 120 kph (75 mph).

The following points should be noted and adhered to.

- i) new studded tyres MUST be run in for approximately 320 kilometres (200 miles) at a moderate speed.
- ii) when studs are fitted they MUST be fitted to all four wheels.
- iii) heavy braking and rapid acceleration should be avoided.
- iv) when a used studded tyre, is removed and refitted, it is important that the original direction of rotation is observed.

JC1/Per

Service Bulletins



Chapter S

Body

Service Bulletin

ROLLS-ROYCE
MOTORS

Car Division

TSD 4318

Bulletin number	SY/S49							Date	16 2 79			Page	1 of 7		
Circulation list															

Category A

A

ALL FRANCHISE HOLDERS IN THE U.S.A. ONLY

REPLACEMENT OF THE KANGOL REAR SEAT BELT CENTRE ANCHOR BRACKETS

APPLICABLE TO:

All Rolls-Royce Silver Shadow II, Silver Wraith II and Bentley T2 series cars listed on page 7 of this bulletin.

INTRODUCTION:

As a result of normal Rolls-Royce inspection procedures a fault has been confirmed in a batch of the brackets supplied by Kangol which are used to attach rear seat belt stalks to the above motor cars. The fault, which concerns the heat treatment processes the bracket underwent during manufacture, could result in the bracket cracking when installed in the car. A possibility therefore exists that the rear seat belt stalk could become detached when in use, so that in the event of an accident a rear seat occupant would not be properly restrained.

No such incident has occurred to our knowledge at the time of writing this bulletin.

Rolls-Royce Motors fit rear seat belts as standard equipment to North American motor cars and offer them as an optional extra in most other countries of the world. As a result of the very low rate of requirement for this optional extra in the other countries, almost all of the cars affected by this fault are in the U.S.A. The few cars affected in other territories have been dealt with individually.

It has been decided to replace all of the potentially affected brackets on the above cars by conducting a recall campaign in the U.S.A. only.

A kit of parts, RH 2768, will be required and this bulletin describes the fitting procedure.

PROCEDURE:

- 1 Contact the customer and arrange for the following work to be carried out.
- 2 Remove the rear seat cushion.
- 3 Remove the seat belt stalks, washers and spacers from the two centrally positioned anchor brackets shown in Figure 1.

NOTE: This will be made easier if the armrest is partially lowered.
- 4 Remove the two anchor brackets.
- 5 Fit the replacement anchor brackets ensuring that they are positioned at the correct angle as shown in Figure 3.
- 6 Using the new nuts and bolts and the plain washer, provided in the RH 2768 kit, loosely reassemble the seat belt stalks, spacers and washers etc., in the positions shown in Figure 1 or 2 as applicable.
- 7 Set the positions of the seat belt stalks in the right-hand bracket as shown in Figure 4. Ensure these positions are maintained and torque tighten the nut to between 25-30 lbf.ft. (3,4-4,1 Kgf.m.).
- 8 Set the position of the seat belt stalk in the left-hand bracket as shown in Figure 4 and position the lap belt anchor plate to the correct angle as shown in Figure 4.

Ensure these positions are maintained and torque tighten the nut to between 25-30 lbf.ft. (3,4-4,1 Kgf.m.). If after torque tightening the lap belt anchor plate is free to turn this is permissible.
- 9 Replace the rear seat cushion.
- 10 On completion of this work submit a Warranty Claim ensuring that box '13A' (Warranty Class) is marked with the letter 'E' and box '15A' (Manhour Schedule Operation) is marked SYS049. It is essential that this is done as the Warranty Claim forms the basis of the recording system for completion of the campaign.

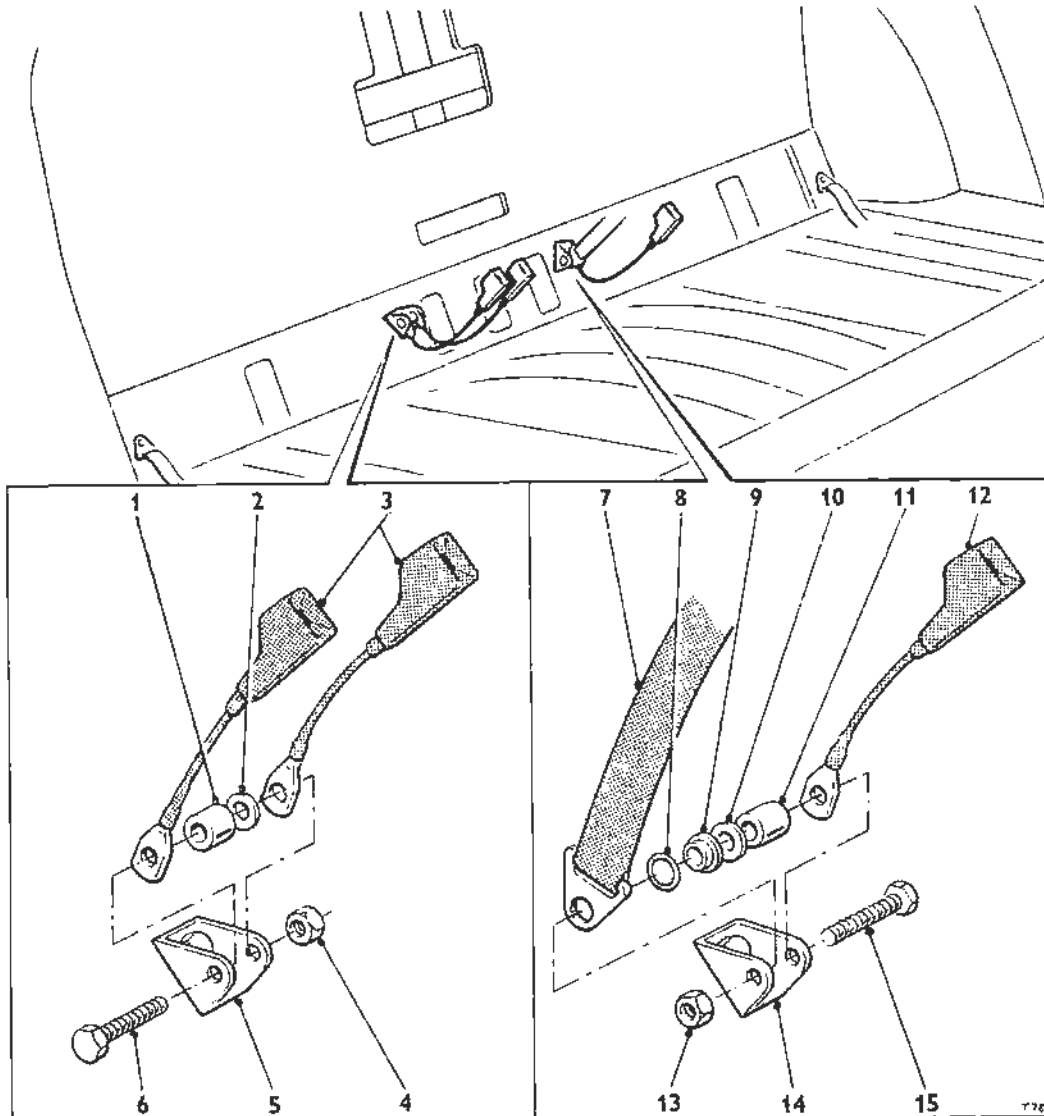
IMPORTANT

THE TWO ORIGINAL BRACKETS, NUTS AND BOLTS REMOVED FROM THE CAR MUST BE RETURNED WITH THE SERVICE LABEL CLEARLY MARKED WITH THE CAR SERIAL NUMBER AND THIS BULLETIN NUMBER.

- 11 The time allowed to complete the work described in this bulletin is one hour.

FIGURE 1

POSITION OF ANCHOR BRACKETS AND PARTS DISPOSITION FOR CARS EQUIPPED WITH SEAT BELTS FOR THREE PERSONS



RIGHT-HAND ANCHOR POINT

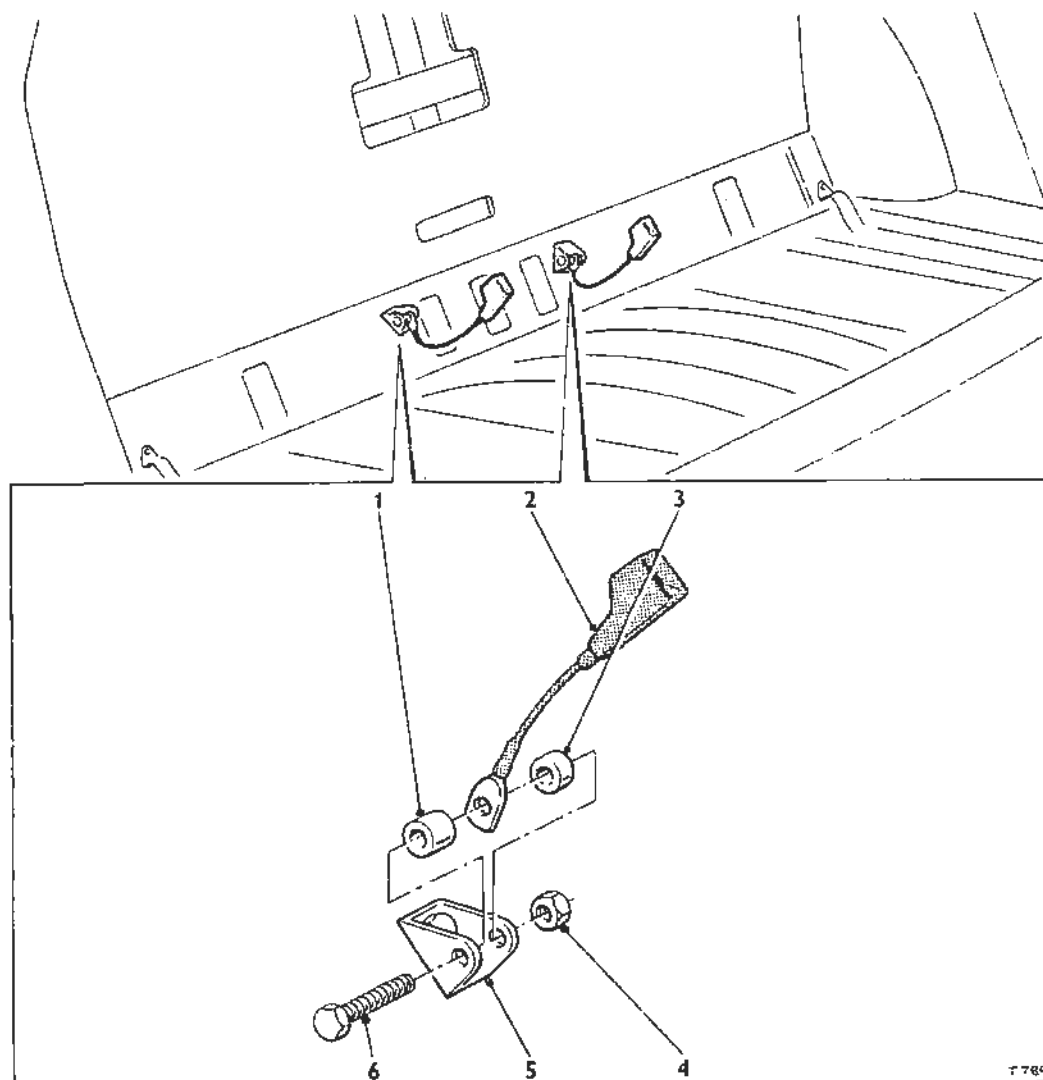
- 1 Spacer 12,5mm (0.500 in.)
- 2 Plain washer
- 3 Seat belt stalk
- 4 Nut
- 5 Anchor bracket
- 6 Bolt

LEFT-HAND ANCHOR POINT

- 7 Lap belt
- 8 Wave washer
- 9 Shouldered spacer
- 10 Plain washer
- 11 Spacer 12,5mm (0.500 in.)
- 12 Seat belt stalk
- 13 Nut
- 14 Anchor bracket
- 15 Bolt

FIGURE 2

POSITION OF ANCHOR BRACKETS AND PARTS DISPOSITION FOR
CARS EQUIPPED WITH SEAT BELTS FOR TWO PERSONS



RIGHT AND LEFT HAND ANCHOR POINTS

- 1 Spacer 12,5mm (0.500 in.)
- 2 Seat belt stalk
- 3 Spacer 9,0mm (0.360 in.)
- 4 Nut
- 5 Anchor bracket
- 6 Bolt

FIGURE 3

ANGULAR POSITION OF THE SEAT BELT ANCHOR BRACKETS

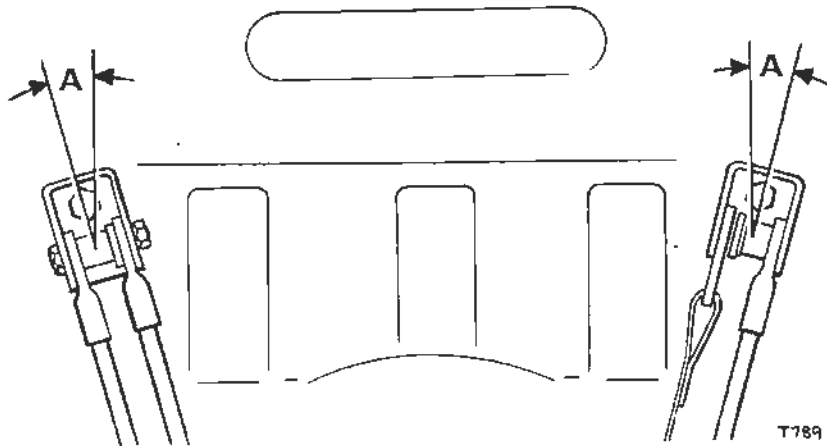
ANGLE 'A' = 15° - 20° 

FIGURE 4

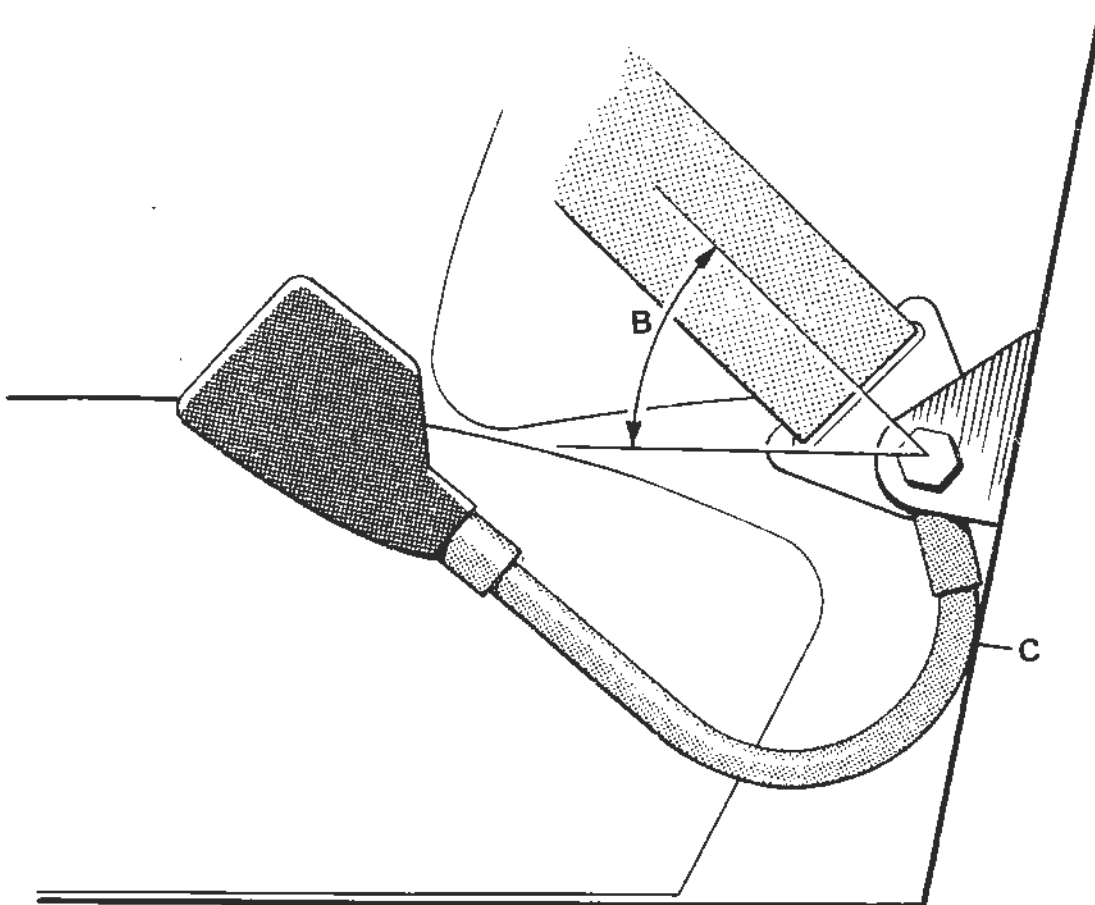
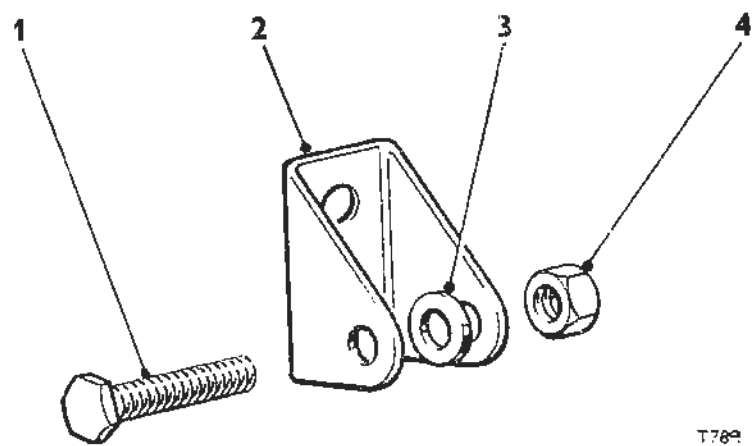
POSITION OF THE SEAT BELT STALKS 'C' AND THE ANGULAR POSITION OF THE LAP BELT ANCHOR PLATE, ANGLE 'B' = 45° 

FIGURE 5
PARTS PROVIDED IN THE RH 2768 KIT



PART DESCRIPTION	QUANTITY
1 Bolts	2
2 Anchor brackets	2
3 Plain washer	1
4 Nuts	2

ROLLS-ROYCE SILVER SHADOW II AND
BENTLEY T2ROLLS-ROYCE
SILVER WRAITH II

SRK 35594	SRK 35824	SRK 35966	SRK 36106	LRK 35535	LRK 35875
SRK 35604	SRK 35826	SRK 35968	SRK 36108	LRK 35536	LRK 35933
SRK 35608	SRK 35828	SRK 35970	SRK 36113	LRK 35580	LRK 35937
SRK 35612	SRK 35831	SRK 35972	SRK 36115	LRK 35582	LRK 35940
SRK 35616	SRK 35835	SRK 35975	SRK 36117	LRK 35585	LRK 35944
SRK 35620	SRK 35837	SRK 35977	SRK 36120	LRK 35587	LRK 35945
SRK 35627	SRK 35840	SRK 35981	SRK 36124	LRK 35588	LRK 35947
SRK 35633	SRK 35842	SRK 35984	SRK 36126	LRK 35590	LRK 36012
SRK 35640	SRK 35844	SRK 35986	SRK 36129	LRK 35592	LRK 36016
SRK 35663	SRK 35846	SRK 35988	SRK 36131	LRK 35648	
SRK 35673	SRK 35850	SRK 35990	SRK 36135	LRK 35650	
SRK 35679	SRK 35853	SRK 35994	SRK 36138	LRK 35652	
SRK 35680	SRK 35857	SRK 36000	SRK 36163	LRK 35654	
SRK 35686	SRK 35879	SRK 36020	SRK 36165	LRK 35657	
SRK 35692	SRK 35881	SRK 36022	SRK 36167	LRK 35659	
SBK 35697	SRK 35883	SRK 36024	SRK 36176	LRK 35661	
SRK 35701	SRK 35885	SRK 36027	SRK 36179	LRK 35717	
SRK 35707	SRK 35887	SRK 36030	SRK 36190	LRK 35718	
SRK 35714	SRK 35892	SRK 36032	SRK 36192	LRK 35720	
SRK 35733	SRK 35895	SRK 36035	SRK 36198	LRK 35721	
SRK 35737	SRK 35897	SRK 36037	SRK 36200	LRK 35723	
SRK 35742	SRK 35903	SRK 36040	SRK 36202	LRK 35725	
SRK 35746	SRK 35908	SRK 36044	SRK 36204	LRK 35726	
SRK 35751	SRK 35910	SRK 36046	SRK 36210	LRK 35728	
SRK 35755	SRK 35912	SRK 36050	SRK 36231	LRK 35785	
SRK 35760	SRK 35914	SRK 36052	SRK 36233	LRK 35788	
SRK 35765	SRK 35917	SRK 36054	SRK 36235	LRK 35790	
SRK 35770	SRK 35921	SRK 36057	SRK 36244	LRK 35792	
SRK 35774	SRK 35923	SRK 36059	SBK 36253	LRK 35794	
SRK 35779	SRK 35925	SRK 36061	SRK 36261	LRK 35796	
SRK 35810	SRK 35928	SRK 36064	SRK 36263	LRK 35799	
SRK 35812	SRK 35951	SRK 36070	SRK 36267	LRK 35863	
SBK 35814	SRK 35953	SRK 36091	SRK 36307	LRK 35864	
SRK 35815	SRK 35955	SRK 36093	SRK 36310	LRK 35866	
SRK 35817	SRK 35957	SRK 36095	SRK 36322	LRK 35868	
SRK 35819	SRK 35959	SRK 36102	SRK 36399	LRK 35870	
SRK 35822	SRK 35961	SRK 36104		LRK 35871	

Service Bulletin



TSD 4318

Bulletin number	SY/S50	Date	21 9 /9	Page	1 of 1
Circulation list					

Category C

ALL FRANCHISE HOLDERS AND DEALERS

NEW ELECTRIC DOOR MIRRORS

APPLICABLE TO:

All Rolls-Royce Camargue cars from the following car serial number.

JRH 32560

INTRODUCTION:

A new electric remote control door mirror has been introduced to replace the mechanically controlled door mirror.

DESCRIPTION:

- © New door mirrors are now being fitted to both doors of Camargue motor cars. They offer the driver finer control of adjustment and both mirrors are controlled from the driving position by means of a control panel mounted on the driver's door finishing rail.

The control panel incorporates two switches; a changeover switch for left or right-hand mirrors and a four-way control stick. The mirrors can be moved separately in an upward, downward, forward and rearward direction. They also incorporate a swivel facility which enables the mirror to turn through an angle in the event of impact

SERVICING REQUIREMENTS:

The new mirror is available as a complete unit and in the event of a malfunction it should be replaced as such. However, it is possible to change the mirror glass without having to renew the complete assembly.

To do this, prise off the broken glass and after cleaning the mounting plate fit the new glass which is supplied with a self-adhesive backing.

JC1/PGH

Service Bulletin

TSD 4318

Bulletin number	SY/S52							Date	5	3	81	Page	1	of	2
Circulation list															

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

LEATHER UPHOLSTERY

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase and Silver Wraith II cars and all Bentley T Series and Bentley T2 cars built from November 1972 onwards and fitted with black leather upholstery.

INTRODUCTION:

Where black leather upholstery has been specified, the above cars have been trimmed using material carrying the Connolly reference number FG/PAC3726. However, for historical reasons, within Rolls-Royce Motors this leather has been referred to as VM8500/3726 and the trim code stamped on the underbonnet plate quotes only the first part of this reference, not the whole reference. Consequently, quoting VM8500 when ordering replacement leather could cause confusion and result in incorrect leather being supplied if it is not obtained from Rolls-Royce Motors.

DESCRIPTION:

Cars built prior to November 1972.

These cars were normally trimmed in VM8500 leather where black leather upholstery was specified.

When ordering black leather or upholstery for these cars the reference VM8500 should normally be quoted.

Cars built from November 1972 onwards.

These cars were normally trimmed in VM8500/3726 leather where black leather upholstery was specified.

When ordering black leather or upholstery for these cars the reference FG/PAC3726 should normally be quoted.

It should be noted that Corniche and Camargue cars are not normally affected, but care should be taken to ensure that a special requirement was not called for on the original specification.

In any event, great care should always be taken to ensure that any materials utilized in the repair of upholstery match the original before the work is carried out.

Hly/DW

Service Bulletin



TSD 4318

Bulletin number	SY/S53										Date	12 2 82			Page	1 of 4		
Circulation list																		

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

MODIFICATION TO CORNICHE DOOR SHUTS

APPLICABLE TO:

All Rolls-Royce Corniche motor cars with the following Vehicle Identification Numbers (VIN), and all subsequent motor cars with Vehicle Identification Numbers from DRX50751 and DRH50753.

DRX 50715	DRH 50748
DRX 50722	DRH 50753
DRX 50739	
DRX 50751	

INTRODUCTION:

Reports have been received of cracks occurring in the top of the door shut face, adjacent to the window frame on some of the above cars.

Although this is not a general problem on coachbuilt motor cars, and does not affect the operation of sealing of the window or door, it is an undesirable cosmetic feature. Therefore, Mulliner Park Ward have taken steps to overcome the problem as described below.

DESCRIPTION:

The first stage of this strengthening modification has been to Tungsten Inert Gas (TIG) weld an aluminium strengthening fillet into the top of the shut face.

Secondly, to improve the strength even more in these areas a stainless steel capping finisher is also being fitted as shown in Figure 1.

In the event of a problem arising on an early motor car already in Service, Franchise Holders can obtain the stainless steel capping finishers for fitment

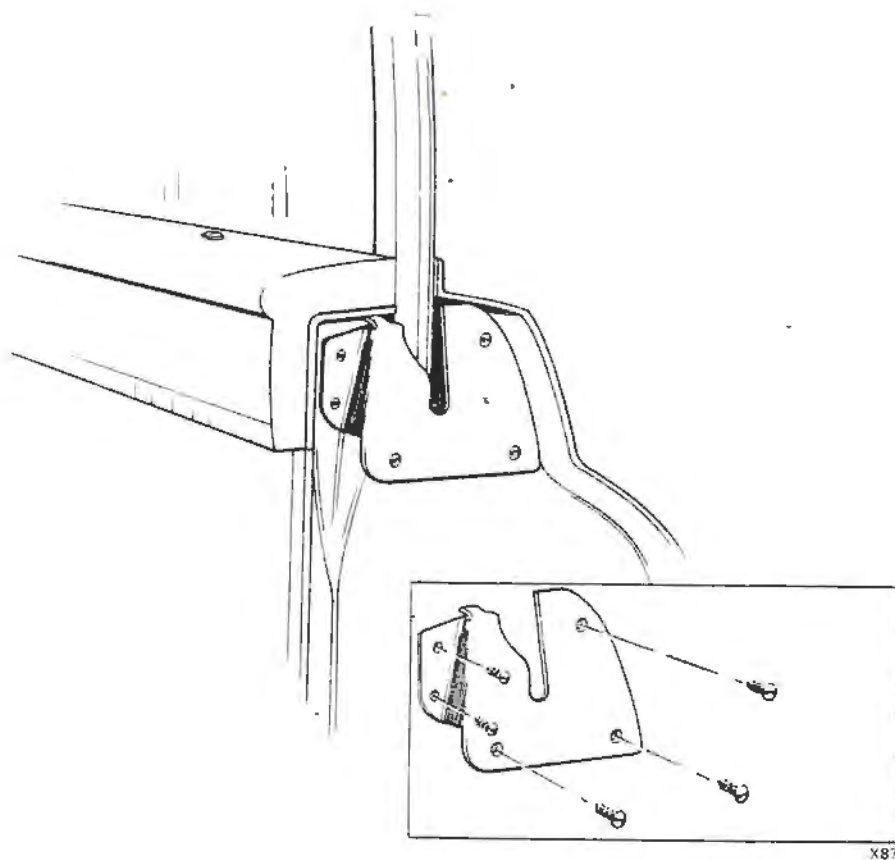
The following is recommended as a suitable repair procedure for door shut face top and fixing for the finishers.

NOTE:

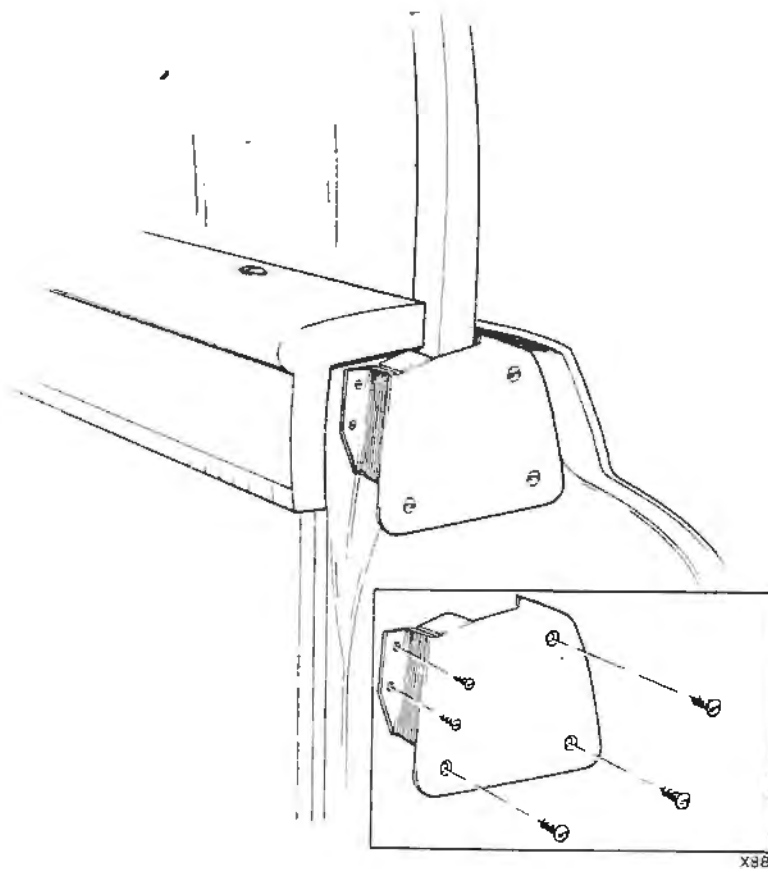
Before commencing any work on motor cars where the work is subsequently charged to Rolls-Royce Motors Ltd, the authority of your local representative must be obtained.

PROCEDURE:

1. Disconnect the battery
2. Remove the waistrail finisher, trim pad, trim retainer, black plastic cover or liner, the existing stainless steel trim on the shut face top, window frame and drop glass.
3. Any splits/cracks should be welded using argon gas, either Metal Inert Gas (MIG) or Tungsten Inert Gas (TIG) welding methods, (oxy-acetylene welding should NOT be used due to flux entrapment in the metal which causes a corrosive action). Check the metal thickness in the offending areas. If the metal appears too thin, a series of weld runs, two or three inches down the shut face, may be necessary to obtain a suitable thickness.
4. Any excessive weld should be filed smooth, ensuring that the contour of the shut top is maintained. Check at this stage that the stainless steel capping finisher fits absolutely flush with the shut face top. A slight trimming or filing of the stainless steel capping finisher may be necessary to obtain this.
5. With the finisher in position mark up the fixing holes.
6. Drill 1,98 mm (5/64") holes in the required areas.
7. Ensure that the areas are thoroughly clean. Repaint the damaged areas using the correct repair procedures.
8. Rebuild the door.
9. Position the stainless steel capping finisher on the shut face. Secure with the self-tapping screws as shown in Figure 1.



CORNICHE CONVERTIBLE DOOR SHUT



CORNICHE SALOON DOOR SHUT
FIG 1

PARTS REQUIRED:

The stainless steel capping finishing plates can be ordered from Rolls-Royce Motors Ltd on part number RH 2834 for Corniche convertible cars and RH 2833 for Corniche saloon cars.

They will be supplied as complete car kits:

TIME ALLOWED - 12.00 HOURS

M.H.S CODE - 52 01 55S 99 14

Hly/DW

Service Bulletin

TSD 4318

Bulletin number	SY/S54 (Issue 2)										Date	21 6 84			Page	1 of 3		
Circulation list																		

Category

ALL ROLLS-ROYCE FRANCHISE HOLDERS IN THE UNITED KINGDOM

LUGGAGE COMPARTMENT LOCK

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II and Long Wheelbase variants including Silver Wraith II.
All Bentley T series, Bentley T2 and Long Wheelbase variants.

INTRODUCTION:

An improved latch for the luggage compartment lock has been introduced on Silver Spirit motor cars.
Since this lock assembly is identical to that used on Silver Shadow series cars the new latch should be used retrospectively on all the above cars.

DESCRIPTION:

It has been found that the design of the lock in its original form does not provide a satisfactory level of security under certain conditions. In particular, the security claw can be distorted when closing the lid rendering it ineffective. Free play of the luggage compartment lid in the closed condition also reduces security.

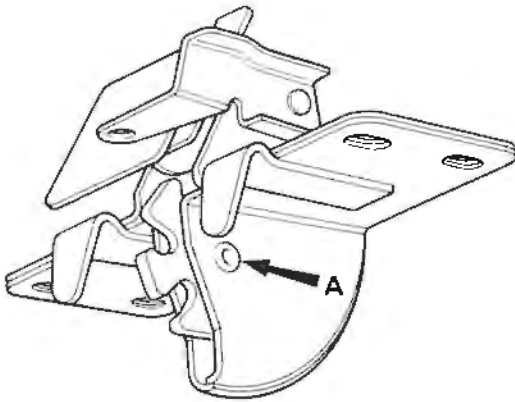
The new design of latch improves these features by providing a deeper engagement for the striker, a more positive engagement when closing the lid, and a better design of catch for the lock release rod.

The new latch can be used retrospectively on all of the above motor cars and should be fitted using the procedure outlined on page 2/3. It is recommended that this is done whenever a car from the above range passes through your workshops.

Material will be supplied in kit form from Rolls-Royce Motors Parts Department through the normal supply channels.

PROCEDURE:

- 1 Before commencing the following procedure check the luggage compartment lock to ensure that it has not previously had a new latch fitted (see figs. 1 and 2).
- 2 If a new latch has not previously been fitted, drill out the peened-over end of the pivot pin on the latch, taking care not to damage the main latch pressings (see fig. 1).

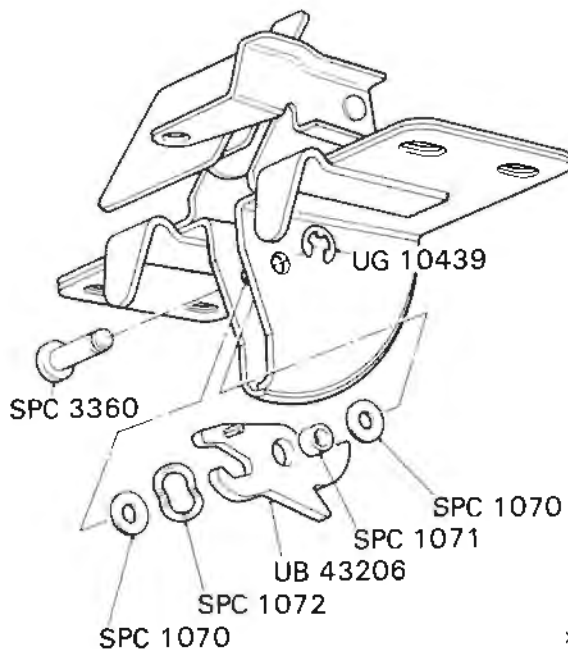


X977

Fig. 1

A - Drill out rivet head

- 3 Remove the pivot pin by drifting from the drilled end. Discard the 'star' wheel and its bush, also the wave washer and plain washers.
- 4 Replace the 'star' wheel with the claw (using a wave washer on the side away from the roll pin on the claw, and plain washers on both sides (see fig. 2).



X977

Fig. 2

Re-issued to amend Fig. 2

- 5 Push the clevis pin through the assembly and retain with a spring circlip, ensuring that it is fully in its slot.
- 6 Ensure that the claw is free to rotate and that it is limited in an upward direction by the roll pin. Also ensure that the claw does not contact the bottom edge of the main pressings.
- 7 Adjust the luggage compartment striker so that:
 - a The luggage compartment lid is flush with the wings (up/down).
 - b The claw does not foul on the striker on release.
- 8 Set the lock adjusting rod. Check that:
 - a There is no free play when the button is depressed.
 - b The rod is not so far engaged that the button becomes 'hair-trigger'.

LIST OF PARTS:

The parts required are supplied as a kit under the following part number.

RH 2885

The kit consists of the following parts.

- | | | | |
|---|--|----------|--------------|
| 1 | Latch - Luggage compartment lock | UB 43206 | 1 off (Claw) |
| 2 | Pivot Pin | SPC 3360 | 1 off |
| 3 | Circlip | UG 10439 | 1 off |
| 4 | Bush | SPC 1071 | 1 off |
| 5 | Plain Washer | SPC 1070 | 2 off |
| 6 | Wave Washer | SPC 1072 | 1 off |
| 7 | Molytone 265 Grease or its equivalent. | | |

MAN-HOUR SCHEDULE TIME:

Code	Time
RE 8451	0.5 hours

Hly/DW

Service Bulletins

Chapter T Transmission



Service Bulletin

TSD 4318

Bulletin number	SY/T1					Date	20 2 79					Page	1 of 1				
Circulation list																	

Category C

ALL FRANCHISE HOLDERS

THREE SPEED TORQUE CONVERTER GEARBOXES

APPLICABLE TO:

All Rolls-Royce and Bentley motor cars fitted with gearboxes of 1979 manufacture.

INTRODUCTION:

Changes have been made to the above gearboxes. This bulletin describes the changes and is for information purposes only.

DESCRIPTION:

FLEXPLATE FIXING SCREWS

The three setscrews holding the flexplate to the torque converter now have metric threads. These setscrews are identified by a letter M on the head of the setscrew. There is a new washer (UM 20207/Z) to suit the new setscrew (SPM 1399).

These setscrews and washers must be used with 1979 gearboxes and must not be interchanged with the setscrews and washers off earlier gearboxes.

SPEEDOMETER DRIVE RETAINING PLATE, SETSCREW AND WASHER

A new metric setscrew (SPM 1387) and washer (UM20205/Z) are used to hold the new speedo drive retaining plate (UG 14548). The new retaining plate differs from the previous plate by having a smaller hole for the setscrew.

The new setscrew, washer and retaining plate must be used on 1979 gearboxes and must not be interchanged with the setscrew washer and retaining plate off earlier boxes.

Service Bulletin



Car Division

TSD 4318

Bulletin number	SY/T2	Date	14 4 80	Page	1 of 1
Circulation list					

Category C

ALL FRANCHISE HOLDERS AND DEALERS

GENERAL MOTORS 400 GEARBOX

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche, Camargue and Phantom VI cars (from and including PGH 101) and all Bentley T Series, Bentley T2 and Corniche cars.

INTRODUCTION:

It has been found, that under conditions of very light throttle acceleration from rest, some cars may emit a slight creaking noise.

This noise has been traced to "fretting" of the convertor pilot spigot in the crankshaft tail bore. The movement of the convertor in an axial fore/aft direction is normal and is due to convertor thrust being reacted to by the engine flex plate.

When "fretting" occurs the engine flex plate amplifies the noise which is similar to exhaust system expansion creaks.

PROCEDURE:

In the event of the gearbox being removed from the motor car (see T.S.D. 2476 Chapter T, Section T9 for gearbox removal and refitting details) the opportunity should be taken to lubricate the torque convertor pilot spigot. A liberal coating of shell Retinax 'A' grease [approximately 0,4 mm. (0.01 in.) deep] should be applied all over the spigot (see T.S.D. 2476 Chapter T, Section T10 for Torque Convertor removal and refitting details).

Hly/Per

Service Bulletin



TSD 4318

Bulletin number	SY/T3	Date	13 3 80	Page	1 of 1
Circulation list					

Category C

ALL FRANCHISE HOLDERS AND DEALERS

GENERAL MOTORS 400 GEARBOX

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche, Camargue and Phantom VI cars (from and including PGH 101) and all Bentley T Series, Bentley T2 and Corniche cars.

INTRODUCTION:

This bulletin has been issued to explain why the 'O' ring (part number 0531917) which is fitted between the dipstick/filler tube and the transmission sump has been deleted.

DESCRIPTION:

This 'O' ring (part number 0531917) is fitted behind the red plastic cap to prevent the ingress of dirt and moisture on new gearboxes during transit from General Motors.

In the event of a new gearbox being fitted to a motor car in service the above 'O' ring must be removed and discarded along with the red cap. The dipstick/filler tube must be fitted directly into the transmission sump without any form of seal whatsoever, as this connection is of the "Dry Flared" type.

Hly/Per

Service Bulletin

ROLLS-ROYCE
MOTORS

Car Division

TSD 4318

Bulletin number	SY/T4	Date	5 2 81	Page	1 of 1
Circulation list					

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

GEARBOX SUN GEAR SHAFT

APPLICABLE TO:

All Rolls-Royce and Bentley Motor Cars fitted with a GM 400 three speed automatic gearbox.

INTRODUCTION:

A new sun gear shaft has been introduced for replacement purposes on gearboxes manufactured from 1972 onwards. This bulletin has been issued to advise the correct application.

DESCRIPTION:

Gearboxes built from the start of production in 1972 will be serviced with the sun gear shaft part number 8626809 instead of 8623177.

Gearboxes built prior to 1972 will continue to be serviced with sun gear shaft part number 8623177.

The gearbox year of manufacture can be determined from the first two numbers of the gearbox serial number stamped on the gearbox identification plate. Gearbox number 71RR3015 denotes a gearbox of 1971 manufacture. Gearbox number 72RR3015 denotes a gearbox of 1972 manufacture.

When ordering parts, refer to the following table for the appropriate part number for the model year.

<u>Part Number</u>	<u>Description</u>	<u>Gearbox Model Year</u>
8623177	Sun Gear Shaft	Prior to 1972
8626809	Sun Gear Shaft	1972 onwards

Hly/AEB

Service Bulletin



TSD 4318

Bulletin number	SY/T5							Date	20	10	83	Page	1	of	2
Circulation list															

Category

ALL ROLLS-ROYCE FRANCHISE HOLDERS

FLUID LOSS FROM TRANSMISSION VENT PIPE

APPLICABLE TO:

All Rolls-Royce and Bentley motor cars fitted with the GM400 Hydramatic 3-speed automatic gearbox.

INTRODUCTION:

There have been a number of cases of the transmission assemblies being renewed due to fluid loss from the vent pipe.

This complaint can usually be rectified without replacing the transmission assembly. The most likely causes of this problem are listed below in the sequence in which they should be checked, to minimise the time and effort in diagnosing the cause of the complaint.

PROCEDURE:

The following items should be checked before removing the transmission from the vehicle.

1. Ensure that the transmission fluid is not above the maximum mark when the transmission is at normal operating temperature.
2. Check that the transmission fluid is not contaminated with coolant from the transmission fluid cooler.
3. Examine the transmission fluid filter and renew it if blocked, or suspected of being restricted.
4. Examine the fluid pick-up pipe and 'O' rings for holes and damage.

If no fault has been found after checking items 1 - 4, remove the transmission and check items 5 - 9.

5. Ensure that the bolts securing the pump to the transmission case have not worked loose.
6. Remove the pump securing bolts and measure their length and the depth of the bolt holes to ensure that the bolts

are not 'bottoming' in the holes, as it is possible for the bolts to be torque tightened without providing the correct clamping load to the pump.

If the bolts are found to be too long, grind sufficient material off the end of the bolts to ensure that they do not bottom. Refit and torque tighten the bolts to 21-27 Nm, 2,1-2,7 kgf m (15-20 lbf ft), after fitting a new pump to case gasket.

7. Examine the pump to case gasket for damage or mispositioning.

Ensure that there is no foreign material trapped between the pump face and case. Check the pump face and case for damage, porosity, improper machining and flatness.

Ensure that the pump breather hole is not blocked or missing.

8. Examine the check ball in the forward clutch housing, to ensure that it is not stuck open or missing.
9. Examine the turbine shaft bushes and journals for scoring or other damage.

If the cause of complaint cannot be identified after checking the above, contact your Rolls-Royce Motors Representative for further advice.

Hly/AEB

Service Bulletin

TSD 4318

Bulletin number	SY/T6										Date	28 3 84				Page	1 of 2			
Circulation list																				

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

TRANSMISSION DIPSTICK

APPLICABLE TO:

All Rolls-Royce Silver Shadow, Silver Shadow II, Long Wheelbase, Silver Wraith II, Corniche, and Camargue cars, and all Bentley T Series, Bentley T2, and Corniche cars from car serial number

SRH 4483 onwards

INTRODUCTION:

Cases of incorrectly filled transmissions, causing fluid loss from the transmission filler tube and vent pipe, continue to be reported to the factory. Therefore, this bulletin has been issued to emphasize the importance of filling transmissions to the correct fluid level and also to advise of the introduction of a revised dipstick.

DESCRIPTION:

Figures 1 and 2 illustrate the difference between the two dipsticks.

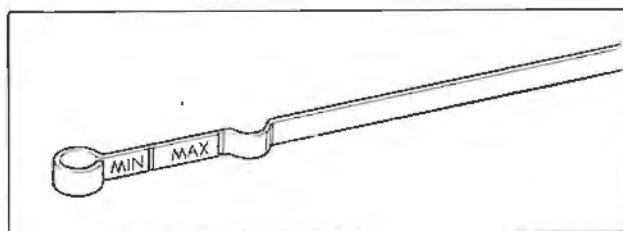


Fig. 1
Early type dipstick

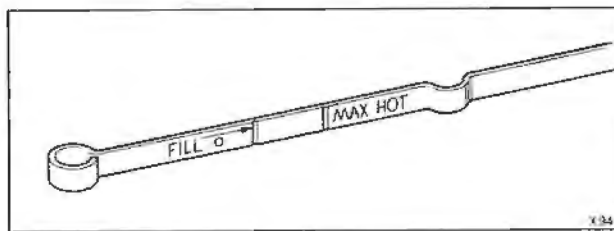


Fig. 2
Revised dipstick

PROCEDURE:

The following initial fluid level check can be made when the car is first started with the transmission cold i.e. at temperatures up to room temperature of approximately 21°C (70°F) or after the transmission has been refilled following normal servicing.

- 1 Apply the parking brake, start the engine, and run at idle speed.

- 2 Apply the footbrake and move the gear selector through each gear position. Return to the PARK position and remove the gearbox thermal cut-out.
- 3 Check the fluid level, which should be 9,5mm (0.375 in) BELOW the MINIMUM mark. On cars equipped with a revised dipstick, the fluid level should be on the indentation dot (centre punch mark).
- 4 Add fluid, if required, in small quantities but DO NOT OVERFILL.
- 5 Refit the thermal cut-out.

To check the fluid level at normal operating temperature, the following procedure should be adopted.

Note

Normal operating temperature of 77°C (170°F) is achieved after 15 miles of highway driving, or after 10 miles of city driving.
- 6 Apply the parking brake, start the engine, and run at idle speed.
- 7 Apply the footbrake and move the gear selector through each gear position. Return to the PARK position, then remove the gearbox thermal cut-out.
- 8 Check the fluid level, which should be between the MINIMUM and MAXIMUM mark. On cars equipped with the revised dipstick, the fluid level should be between the FILL and MAXIMUM HOT marks. Add fluid, if required, but DO NOT OVERFILL.
- 9 Refit the thermal cut-out.

The part number for the revised dipstick remains unchanged.

Hly/AEB

Service Bulletins

Chapter U

Emission Control Systems



Service Bulletins

Chapter P VI Phantom VI



Printed in England

© Rolls-Royce Motors Limited 1979

T.S.D. 4318

Service Bulletin

ROLLS-ROYCE
MOTORS

Car Division

TSD 4318

Bulletin number	PVI/H1				Date				3	12	80	Page	1 of 3		
Circulation list															

Category C

ALL ROLLS-ROYCE FRANCHISE HOLDERS

DELETION OF RIDE CONTROL

APPLICABLE TO:

All Rolls-Royce Phantom V and Phantom VI cars prior to car serial number PGH 120.

INTRODUCTION:

The two-way ride control suspension damping system used on the above cars has been replaced by a fixed ride system from the above car serial number.

This bulletin outlines the procedure which should be followed in the event of it being necessary to replace a damper or its associated parts on a car fitted with the two-way ride control system.

DESCRIPTION:

The rear damper solenoid, slow leak push rod and spring, have been discontinued. A new spring is fitted in place of the push rod and a blanking plate is fitted in place of the solenoid.

In the event of a ride control solenoid or rear damper requiring replacement on cars fitted with the two-way ride control system, it will be necessary to modify the remaining damper and associated ride control wiring. The same procedure should also be followed in the event of a ride control malfunction.

PROCEDURE:

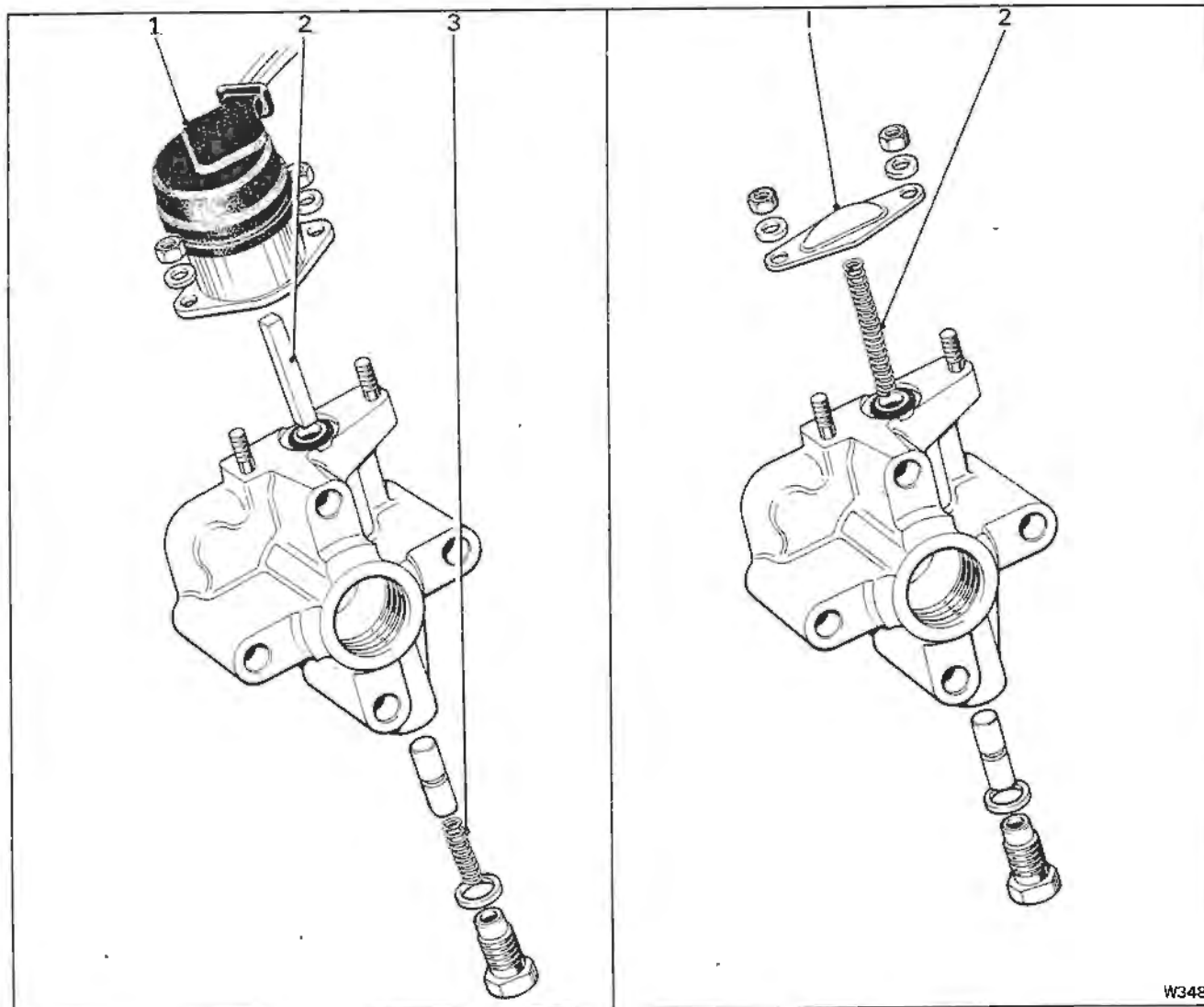
- 1 Disconnect the battery.
- 2 Disconnect the feed wire to the ride control switch and tape back into the loom.
- 3 Disconnect both the wires to each rear damper solenoid and tape them back into the loom.

- 4 Remove the ride control solenoid (see Fig. 1)
- 5 Remove the solenoid spring (see Fig. 1)
- 6 Remove the slow leak push rod (see Fig. 1)
- 7 Fit the new spring in place of the slow leak push rod (see Fig. 2)
- 8 Fit the blanking plate in place of the solenoid (see Fig. 2)

PARTS REQUIRED:

Part No.	Description
UR 1509	Blanking Plate
UB 15301	Spring

Hly/AEB



W348

FIG 1 EARLIER ASSEMBLY

- 1 Solenoid
- 2 Push Rod
- 3 Spring

FIG 2 LATER ASSEMBLY

- 1 Blanking Plate
- 2 Spring

Service Bulletin



TSD 4318

Bulletin number	PVI/R2								Date	26	6	79	Page	1	of	6
Circulation list																

Category A



ALL FRANCHISE HOLDERS OTHER THAN THOSE IN USA AND CANADA

APPLICABLE TO:

All Rolls-Royce Phantom VI series motor cars listed on Page 6 of this Service Bulletin.

INTRODUCTION:

As a result of field experience, it has been determined that a problem can occur on some of the road wheels manufactured by a supplier and fitted to Rolls-Royce Phantom VI series motor cars within the range listed above. Under severe conditions of continuous operation and overloading, the road wheel nave plate can crack causing a failure to occur.

It has therefore been decided to recall all the above motor cars so that the road wheels can be replaced with ones manufactured to the correct specification by the supplier.

This bulletin has been issued to instruct the procedure which must be taken by all Franchise Holders concerned.

IMPORTANT:

It is important that all the road wheels which are removed from cars in service are destroyed and the procedure which outlines how this should be done is shown at the end of this Service Bulletin.

PROCEDURE:

- 1 Notify the Owner.

Each Franchise Holder must contact the owners of the affected cars listed and arrange to have the following

work carried out as soon as possible.

A breakdown of the full list has been forwarded to the Franchise Holders who service these motor cars indicating which particular cars are believed to be in their area.

2 Replace the road wheels.

- 2.1 Apply the parking brake.
- 2.2 Remove all wheel trims using the tommy bar supplied with the car.
- 2.3 Slacken all wheel nuts approximately $\frac{1}{2}$ a turn before raising the car.
- 2.4 Raise the car and support with axle stands.
- 2.5 Mark the original tyre positions on the outside face of each tyre using chalk or crayon. This is to ensure that the tyres are refitted to the car in their original positions, maintaining the original direction of rotation.
- 2.6 Remove the wheel nuts and the wheel and tyre assembly. Also, remove the spare wheel assembly from its location.
- 2.7 Remove each tyre from its road wheel.
- 2.8 Fit a new valve to the new road wheel.
- 2.9 Position, fit and inflate the tyre on the new road wheel so that the crayon or chalk marking is on the outer face of the wheel and tyre assembly.
- 2.10 Balance the wheel and tyre assembly.
- 2.11 Refit the wheel and tyre assembly to its original position on the car and tighten the wheel nuts correctly to 6,2 kgf.m. (45 lbf.ft.). An impact wrench for this operation should NOT be used.
- 2.12 Ensure that all 5 road wheels including the spare have been renewed.
- 2.13 Lower the car and check the torque tightness of

the wheel nuts. This operation should be carried out with a torque wrench.

2.14 Check the tyre pressures.

1 to 4 occupants - Front	- 1,69 kgf/sq.cm. (24 lbf/sq.in.)
Rear	- 2,11 kgf/sq.cm. (30 lbf/sq.in.)
5 to 7 occupants - Front	- 2,11 kgf/sq.cm. (30 lbf/sq.in.)
Rear	- 2,53 kgf/sq.cm. (36 lbf/sq.in.)

IDENTIFICATION:

New wheels can be identified by inspecting the stud pitch circle diameter of the wheel for identification marks as shown in Figure 1. The earlier type of wheel did not have these marks.

3 Disposal of the replaced road wheels.

In the UK:

The 5 road wheels must be returned to:

Rolls-Royce Motors Limited
Service Unit Bond
Pym's Lane
Crewe
Cheshire
CW1 3PL

Each displaced road wheel should be marked with a small label showing a common service label number for all 5 wheels. The service label should be completed in the normal manner and quoting RE 7901 as the reason for removal.

All other territories worldwide:

The road wheels must be retained by the Franchise Holder, clearly marked with the chassis number of the car from which they were removed and stored until they can be destroyed in the presence of a Rolls-Royce Motors International service engineer.

Under NO circumstances must the Franchise Holder retain replaced wheels indefinitely.

4 Notification of Completion.

Rolls-Royce Motors must be notified of completion of the above work by the return of a pink card similar to the sample attached duly completed by the Franchise Holder. Supplies of these cards may be obtained through your Rolls-Royce Motors service representative.

5 Reimbursement of Costs.

Any costs incurred may be claimed through the normal warranty procedure. The claim form must be completed in full, only one car serial number per claim form. When completing the claim form use:

Section on Claim Form

1	Warranty Class	E	13
2	Prime MHS repair OP	RE 7901	15

Time Allowed: 4.0 hours

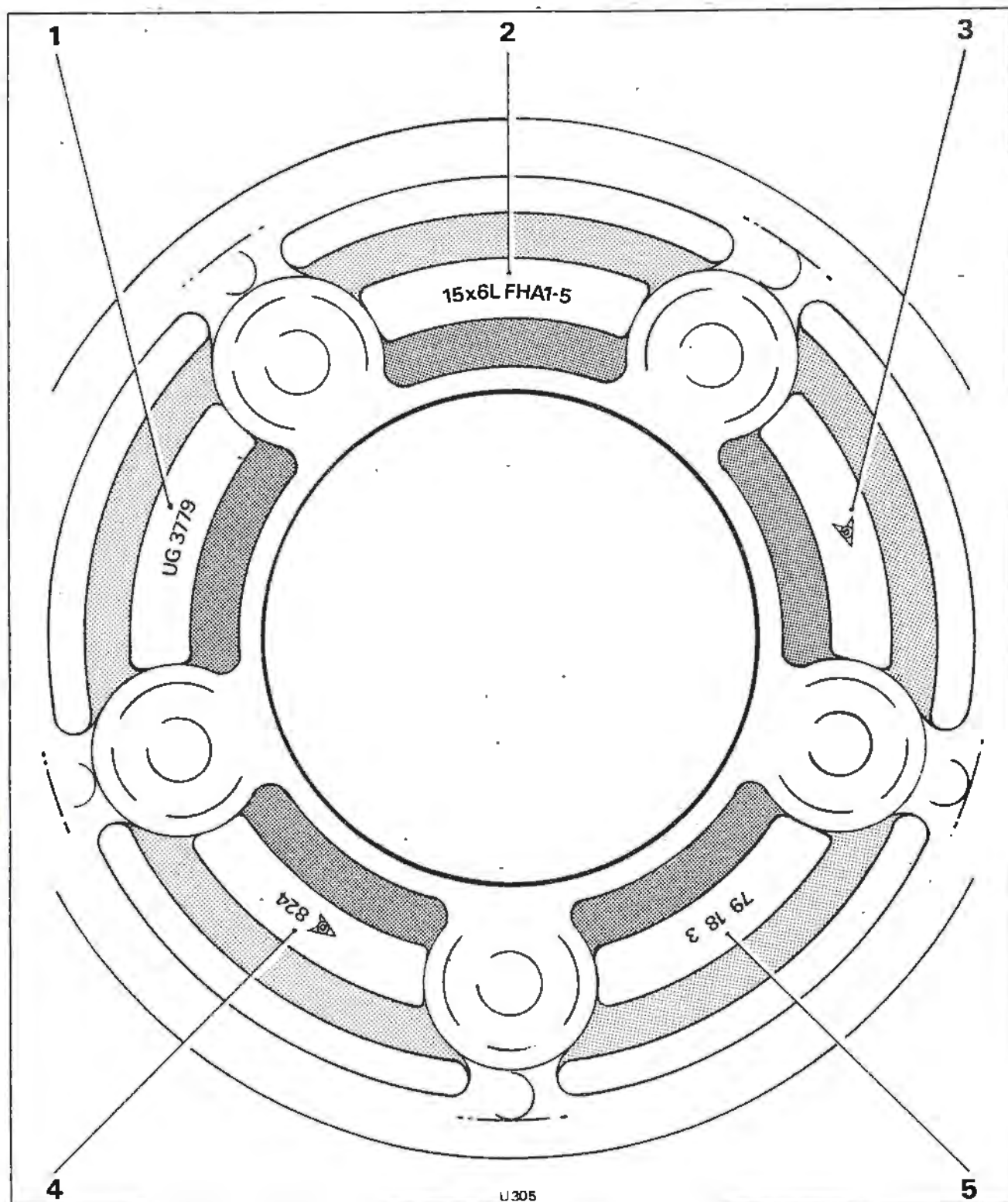


Fig. 1

- 1 Part number.
- 2 Wheel size.
- 3 Dunlop flash.
- 4 Dunlop flash and code.
- 5 Date code.

PRH 4801	PRH 4821	PRH 4840	PRH 4862
PRX 4803	PRH 4822	PRH 4841	PRX 4863
PRH 4804	PRH 4823	PRH 4842	PRH 4864
PRH 4805	PRH 4824	PRH 4843	PRH 4865
PRH 4806	PRH 4825	PRH 4846	PRH 4866
PRH 4807	PRX 4826	PRH 4847	PRX 4867
PRX 4808	PRH 4827	PRH 4848	PRH 4868
PRX 4809	PRH 4828	PRX 4849	PRX 4869
PRH 4810	PRH 4829	PRH 4850	PRH 4870
PRH 4811	PRH 4830	PRX 4851	PRH 4871
PRH 4812	PRH 4831	PRH 4852	PRX 4872
PRH 4813	PRH 4832	PRX 4853	PRH 4873
PRH 4814	PRH 4833	PRH 4854	PRX 4874
PRH 4815	PRH 4834	PRH 4855	PGH 101
PRH 4816	PRH 4835	PRX 4857	PGH 102
PRH 4817	PRH 4836	PRX 4858	PGH 103
PRH 4818	PRH 4837	PRH 4859	
PRX 4819	PRH 4838	PRX 4860	
PRH 4820	PRH 4839	PRX 4861	