No. S2/L1

FOR INFORMATION

FLUSHING THE COOLING SYSTEM

S1 AND S2 CARS

The coolant should be drained and the cooling system flushed out annually, adopting the following procedure:-

Remove the radiator cap and open the drain taps situated on the cylinder block and on the bottom tank of the radiator. On S1 cars one tap is fitted on the right-hand rear corner of the cylinder block; on S2 cars two taps are provided, one on each side of the cylinder block.

To flush the radiator, remove the hoses, fit a waste pipe to the upper connection and apply water pressure through the lower connection. Mains water pressure should remove any sediment in approximately half an hour.

To flush the engine, remove the drain tap(s) from the cylinder block, remove the thermostat cover and withdraw the thermostat, then refit the cover; on S1 cars note the position of the thermostat in the body to ensure correct refitting.

Connect a suitable waste pipe and apply water pressure to each drain tap aperture in turn; continue flushing for approximately half an hour or until the water runs clear.

Refit the drain tap(s) to the cylinder block and refit the thermostat, ensuring that a new gasket is fitted to the cover.

Examine the rubber hoses and refit if in a serviceable condition; if they show signs of deterioration new hoses should be fitted.

Refill the system with an anti-freeze mixture to the recommended specification given in Service Bulletin CB.32: the capacity of the cooling system is, S1 cars 28 Imperial pints, S2 cars 21 Imperial pints. Care should be taken when filling the system to avoid air locks.

To ensure uniform distribution of the anti-freeze mixture throughout the system, start the engine and allow time for it to reach normal operating temperature. Examine all hose connections for leaks.

On no account must strong alkaline compounds be used to clean the cooling system, owing to the detrimental chemical action they have on aluminium alloys. Do not use detergents when flushing the system.

No.

S2/L3

CATEGORY 3a

COOLING, HEATING AND DE-MISTING SYSTEM

S2 CARS.

In the event of inefficiency in the heating and de-misting systems on Bentley Continental S2, Phantom V, L.W.B. Silver Cloud II and L.W.B. Bentley S2 cars, the filters located in the winter and summer taps should be examined for the presence of foreign matter.

Also, the actuator water tap, fitted to Bentley S2 and Silver Cloud II cars should be examined if its operation is found to be faulty.

		CHASSIS NO.
SILVER CLOUD II	prior to	STB.166
BENTLEY S2	prior to	B.79.LBR
L.W.B. SILVER CLOUD II	prior to	LCA.33
L.W.B. BENTLEY S2	prior to	LBA.4
PHANTOM V	prior to	5.AS.89
BENTLEY CONTINENTAL S2	prior to	BC.75.AR.

The cooling, heating and de-misting systems should be dismantled and reverse flushed if any trace of foreign matter is found.

PROCEDURE FOR REVERSE FLUSHING

LONG WHEELBASE AND COACHBUILT CARS.

a) Cooling System - To Drain

Remove the radiator filler cap and drain the coolant from the complete system. Three drain taps are provided for this purpose; one at the base of the radiator matrix and one on each side of the engine crankcase. The anti-freeze should be drained into a suitable container and stored in readiness for use again.

b) Radiator Matrix - To Flush

Refit the radiator filler cap and disconnect the top and bottom hoses from the radiator. Fit a suitable waste-pipe to the header tank outlet and connect the lower end of the radiator to the mains water supply. Flush the radiator for approximately half an hour.

c) Heating and De-misting Matrices - To Flush

Remove the two winter and summer water taps and the two vacuum operated water taps. The taps on the 'A' bank side of the car are located at the rear of the cylinder head and the taps on 'B' bank side at the rear of the valance. Remove the filters from the summer and winter taps and dismantle the vacuum operated taps. Thoroughly cleanse the filters and taps. Fit a waste pipe to the inlet of the heating system matrix and connect the mains water supply to the outlet of the matrix. Thoroughly flush the matrix for about half an hour, then repeat the operation for the matrix in the de-misting system.

d) Engine - To Flush

Remove the thermostat from its housing, then refit the thermostat cover. Fit waste pipes to the following points:-

The heating and de-misting take-off pipes at the rear of the cylinder heads.

The heating and de-misting return pipe from the water pump.

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The inlet side of the water pump.

Open both drain taps and connect the mains water supply to the thermostat cover. Thoroughly flush the engine for approximately half an hour.

e) The Cooling, Heating and De-misting System - To Assemble.

Assemble the complete system, at the same time fitting a new gasket to the thermostat cover. Examine all hosing and pipes; if they show signs of deterioration they should be renewed.

New Part Required

UE.6127	Joint. Thermostat housing to cover	1 off

f) The Cooling System - To Fill

Filter the coolant and check its specific gravity. Only anti-freeze to the recommended specification given in Service Bulletin S2/L2 should be used. Fill the system taking care to avoid air locks. Run the engine until it reaches normal operating temperature then examine for leaks all hose and pipe connections.

CARS FITTED WITH THE UNDERWING HEATING AND DE-MISTING UNIT

a,b) Drain the cooling system and reverse flush the radiator matrix as described in paragraphs a and b in the instructions for L.W.B. and coach-built cars.

c) Heating and De-misting Matrix - To Flush

Detach the inlet and outlet hoses of the heating and de-misting matrix at the actuator water tap and the water pump respectively. Fit a waste pipe to the inlet of the matrix and connect the mains water supply to the outlet. Flush the matrix for approximately half an hour. Remove the actuator and water tap mounting plate from the right-hand valance. Remove the tap from the mounting plate and drill out the rivet holding the two halves of the tap body in position. Make correlation marks on both halves of the body before separating them to ensure that they are assembled in the

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correct position. Clean the tap and examine for damage, the diaphragm, valve and valve seat. If any parts are damaged, the tap must be replaced as an assembly. Assemble the tap, ensuring that the body halves are assembled in the correct position, then lock them together with a 6 BA. nut and bolt in place of the rivet.

New Parts Required

UD.4020	Water Tap	1 off
or the following:-		
KB.7752/Z	Bolt. 6 BA.	1 off
K.4002/Z	Nut. 6 BA.	1 off
K.4401/Z	Washer. Plain.	1 off

d,e,f) Flush the engine, assemble the cooling, heating and de-misting system and re-fill the cooling system as described in paragraphs d,e and f, in the instructions for L.W.B. and coachbuilt cars.

On no account must strong alkaline compounds be used to clean the cooling system, owing to the detrimental chemical action they have on aluminium alloys. Do not use detergents when flushing the system.

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FOR INFORMATION

AIR CONDITIONING

DAMAGE TO THE 'UPPER' AIR BLOWER MOTORS ON S2 CARS.

Damage to the 'Upper' air blower motor can be caused if dirt or other foreign matter becomes lodged between the fan blades and the fan housing.

The clearance between the fan blades and the fan housing is very small and if dirt or grit is allowed to find a way into the housing, it may cause the blades to jam and stall the motor.

Stalling of the motor, even for a short period, is sufficient to cause failure of the motor armature windings.

A fine gauze filter, provided at the inlet end of the ducting, is adequate to prevent the ingress of foreign matter during normal use, but unless great care is taken during servicing, dirt and grit can find a way into the housing.

Before attempting to remove the air conditioning unit and the ducting, all dirt or grit must be removed from the ducting, particularly on top and where it joins the fan housing.

If it is necessary to remove the air conditioning unit and the ducting, and if the blower unit is to remain in position, it is essential that a protective cover is placed over the housing in order to prevent dirt from entering the housing.

Before refitting the parts which have been removed examine the housing to ensure that it is free from any obstructions.

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CATEGORY 2

This Bulletin cancels Service Bulletin S2/L5 dated 13.7.60.

RADIATOR FILLER CAP SEAL

There is a tendency for the present filler cap seal to distort due to swelling, thereby causing a poor seal at the base of the filler cap, and if this seal is badly deteriorated, coolant may be lost, causing subsequent overheating of the engine.

In the near future a redesigned seal will be introduced, but until this seal is available Retailers should examine the condition of the filler cap seal each time a car is brought in for service, and where necessary the seal should be renewed.

The part number of the radiator filler cap seal is UE.3083.

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CATEGORY 2

ADDITIONAL CLIP FOR HEATER PIPES.

It has been decided to fit an additional clip to the underwing heater unit ducting in order that the heater pipes may be satisfactorily restrained, thus eliminating any possibility of contact between the heater pipes and the offside front tyre.

APPLICABLE TO :

All non-refrigerated S2 Standard Steel Saloons.

METHOD OF FITTING NEW CLIP

Drain the coolant into a suitable container.

Jack up the front end of the car and place it on suitable stands.

Remove the offside (right-hand) front wheel.

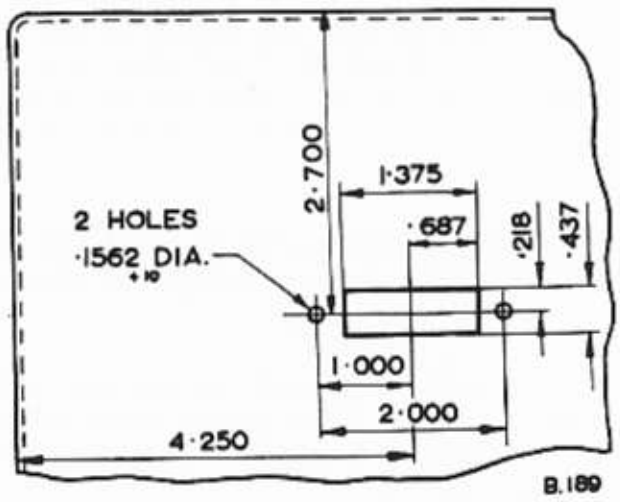

Fig.1. Dimensions for Cutting Slot.

Remove the clip retaining the two heater pipes to the valance plates.

Disconnect the two heater pipes from the underwing heater unit.

In order to fit the new clip it is necessary to cut a slot in the transfer duct to allow the back plate assembly to be inserted. This slot should be cut out of the duct working to the dimensions given in Figure 1. When cutting this slot, great care should be taken to ensure that nothing falls inside the transfer duct. Drill two holes, 156 in. diameter, one on either side of the slot, to the dimensions given in Figure 1; these holes are for self-tapping screws. When drilling the holes, a small amount of grease should be smeared on the drill to prevent any swarf falling inside the ducting.

Pass a length of flexible copper wire through the nut on the back plate assembly, then bend back the wire over the outside of the backing plate; twist the two ends of the wire together so that the backing plate is held in a loop.

Holding the plate by means of the wire, carefully feed it through the slot in the duct. Great care must be taken to ensure that the plate does not fall inside the ducting, as this will necessitate removal of the air conditioning unit.

Draw the plate forward against the inside of the ducting with the aid of the copper wire; then thread the front plate over the wire and lightly secure the plates with two No.6 self-tapping screws. It is possible to manoeuvre the back plate with the aid of the wire until the holes line up.

Ensure that the self tapping screws are securing the back plate to the ducting and then untwist the copper wire and draw it out of the ducting.

Fit the pipe clip, washer and screw to the back plate, then tighten the self-tapping screws. Pass the two heater pipes through the clip, and tighten the .250 in. bolt, positioning the clip in a vertical plane so that it is above the bolt (see Fig 2).

Seal the plate and clip to the ducting with Bittac Sealing Compound.

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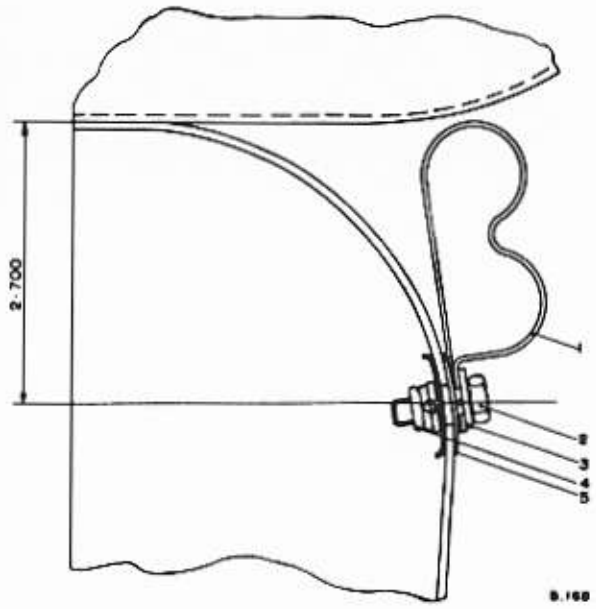

Fig 2. Heater Pipe Clip Assy.

1. Clip.
2. Bolt.
3. Washer.
4. Back Plate Assy.
5. Front Plate.

Connect the hoses to the heater matrix.

Fit the road wheel.

Finally fill the cooling system and check that the two heater pipes are not leaking.

Parts Required

UE.7957	Clip	1 off
UD.5897	Front Plate	1 off
UD.5783	Assy Back Plate	1 off
UA.104/Z	Bolt	1 off
UA.1251/Z	Washer	1 off
CS.31041/Z	S.M.Screw	2 off

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24.8.60.

No. S2/L7

This Bulletin cancels all previous Service Bulletins numbered S2/L7 and S2/L5.

FOR INFORMATION

RADIATOR FILLER CAP SEAL

Before the modified filler cap sealing washer (UE.8546) was introduced, a number of radiators were modified so that the flat sealing washer (UE.3083) could be used satisfactorily.

This modification consisted of a brass ring sweated into position in the header tank to give a firmer seating for the washer. The brass ring can be readily seen when the filler cap and seal are removed. Due to the additional thickness of the ring the modified sealing washer (UE.8546) cannot be used as its lip is too narrow, and consequently a further sealing washer (RH.7284) with a wider lip has been introduced for use on cars with the modified header tank.

Retailers should ensure that all flat sealing washers (UE.3083) are removed and replaced either with washer UE.8546 or washer RH.7284 as necessary.

Standard Radiators	-	Fit washer UE.8546
Radiators with brass ring in header tank	-	Fit washer RH.7284

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No. S2/L8

This cancels all previous S2/L8 Service Bulletins.

Circulated to all countries except America.

ANTI-FREEZE MIXTURES - S2 CARS

On leaving the factory car radiators are filled with a 25% mixture of anti-freeze to British Standards Specification 3150 : 1959 (previously known as British Ministry of Supply Specification D.T.D. 779). Anti-freeze Mixtures to this specification can be identified by the specification number which will be marked on the container.

Only anti-freeze mixtures conforming to the above specification are approved by Rolls-Royce Ltd. and should the cooling system require replenishment an anti-freeze mixture to this specification should be used.

IMPORTANT: Under no circumstances should different brands of anti-freeze be mixed.

In addition to providing protection against frost, anti-freeze mixtures contain inhibitors to prevent corrosion in the cooling system; it is therefore essential to use an anti-freeze mixture all the year round in all parts of the world; water only must never be used. In hot climates, the anti-freeze mixture acts as a corrosion inhibitor and has the advantage of raising the boiling point of the coolant.

A satchet of 'NaMBT' inhibitor is supplied with each new car: this should be added to the coolant when the car has completed 1,500 miles, or as soon after as possible. If any part of the cooling system is changed, a fresh satchet of 'NaMBT' should be added to the coolant.

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The coolant should be renewed annually, and the cooling system flushed out, in accordance with the Service Bulletin No. S2/L1 : use plain water only for flushing. Do not use detergents.

Anti-freeze mixture to the above specification can be obtained from:-

Rolls-Royce Limited,
Spares Department,
Pym's Lane,
Crewe.

Rolls-Royce Limited,
Repair Department,
Hythe Road,
Willesden,
London. N.W.10.
(Counter Service only)

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FOR INFORMATION

S.2. COOLING SYSTEM - THERMOSTATS

A thermostat, with a higher initial opening temperature, is now available for fitting to S.2 engines which are running cold. The thermostat (Part No. RE.23713) should replace the existing thermostat (Part No. UE.6847) in the event of a Customer's complaint of poor heating inside the car.

Operating Temperatures of Thermostats

	Commences Opening	Fully Open
Existing S.2 thermostat (UE.6847)	66° C-70° C	90° C
New thermostat (RE.23713)	70° C-75° C	90° C

The thermostat RE.23713 is to be used all the year round and must not be replaced by thermostat UE.6847 in the summer.

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FOR INFORMATION

S2 COOLING SYSTEM - PRESSURE RELIEF VALVE - UE. 3087

Further to Service Bulletin S2/L9, Service experience has shown that complaints concerning the inefficiency of the heating system may also be attributed to leaks in the pressure relief valve (UE. 3087), situated in the matrix header tank. It is essential for optimum efficiency of the heating system that the relief valve should maintain the system between pressures of $6\frac{1}{4}$ lb./sq.in. and $7\frac{3}{4}$ lb./sq.in. when the engine is hot, and accordingly, any leaks in the system will reduce the pressure causing the temperature of the heated air to fall.

Two methods are available for checking the pressurization of the system and are as follows:-

1. A visual examination of the system, including the seating of the relief valve in the header tank and the sealing of the filler cap, when the engine is hot.

2. Fit a modified filler cap to the header tank, which incorporates a pressure gauge and Schrader type tyre valve. Pressurise the system when cold and check for loss of pressure over a set period of time

Method 1

Examine the system for leaks, between the pressure relief valve and its seating in the radiator, the header tank, the coolant hose connections and the filler cap seal, when the system is hot.

Fit a suitable length of hose to the steam escape pipe on the header tank and place the other end in a jar of water. If air can be seen continually bubbling into the water then the relief valve is faulty.

Note

The pressure relief valve steam escape pipe is also connected to the overflow pipe of the filler cap, which is not sealed to atmosphere. Therefore care should be taken to ensure that steam is not escaping through the filler cap. The cap can be readily sealed for the purpose of this test with plasticine or some other suitable material

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Method 2

To carry out this test it is necessary to incorporate a pressure gauge and a Schrader tyre valve into a filler cap. It is important to ensure that the sealing around the gauge and the valve is leak free.

With the cooling system COLD fit the modified filler cap. Pressurise the system through the Schrader valve to 5 lb./sq.in.

For the system to work satisfactorily the pressure must not fall more than 1 lb./sq.in. in 2 hours.

If the pressure does fall more than 1 lb./sq.in. it should not be immediately assumed that the relief valve is faulty as the system may be leaking at one or more of the following points:-

1. In the pressure relief valve UE.3087.

2. Between the valve and its seating in the header tank.

3. At some other part of the cooling system. This point would most probably be in the header tank or any other point normally above the level of the coolant in the system as other leakages in the system would be associated with loss of coolant.

Identification

All reworked pressure relief valves supplied from Crewe Spares Department will be marked with either a yellow or green spot of paint for the purposes of identification.

Applicable to:-

All cars prior to the following chassis numbers:-

Silver Cloud II	SAE 149
Bentley S2	B 42 DW
Bentley Continental S2	BC 86 CZ

No. S2/L11

Re-issue

FOR INFORMATION

COOLANT AND HEATER HOSES - STANDARD S2 CARS

On modern cars with pressurised cooling systems and in the presence of inhibited antifreeze mixtures it is generally advisable to change coolant and heater hoses annually, at the same time as the cooling system is drained, flushed, and refilled.

Rolls-Royce have however, developed an improved type of reinforced hose which has a life in excess of two years. This hose is now being fitted to all production cars and it is recommended that existing hoses on cars at present in service should be changed immediately for the improved hose.

A recommendation to change hoses once every two years is being added to the Periodic Lubrication and Maintenance Schedules and retailers are requested to make arrangements to change the present type of hoses on cars in their territory for the improved hose. Hoses should be considered as a consumable item and replacements are therefore chargeable to the owner, but in cases where cars are less than one year old this work should be carried out on a free of charge basis and a guarantee claim submitted accordingly.

Two different heating systems have been fitted to Rolls-Royce and Bentley cars; the first system on earlier cars consisted of a single heater matrix, the second system fitted to later series cars consists of two heater matrices and an additional water tap involving a considerable number of additional hoses. The new type of reinforced hose can be identified by the part number.

Single Matrix Heater System

This system is applicable to all Standard S2 cars prior to the following chassis numbers.

Rolls-Royce Silver Cloud II	123 in. Wheelbase	SZD.347.
Bentley S2	123 in. Wheelbase	B.415.DV.

On the above cars six hoses require replacement: they are the top and bottom coolant hoses from the radiator matrix to the crankcase, the two heater hoses fitted to the crankcase and water tap and the two heater matrix feed and return hoses.

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Material Required

Part No.	Description	Quantity
UR.5488	Hose - Heater, Feed and Return	2
UR.5489	Hose - Crankcase to Intermediate Pipe	1
UR.5490	Hose - Water Tap to Intermediate Pipe	1
UR.5486	Hose - Top Water Connection	1
UR.5485	Hose - Bottom Water Connection	1
RH.7358	Hose - Bottom Water Connection	1

RH.7358 and UR.5485 Bottom Hoses are not interchangeable. Bottom hose UR.5485 replaces UE.8446 which was introduced on S2 cars when the fan extension cone was shortened. (See Information Sheet No. 2.L.1.).

RH.7358 should be fitted to all chassis prior to the following numbers:-

Bentley S2

B.81.CT except B.3.CT to B.77.CT and B.104.BS, 180-416, 420-500.

Silver Cloud II

SWC.246 except SWC.20, 38, 42, 46, 116, 146, 148, 216 and 230 to 242.

and SVB.17, 239, 373 to 401, 405 to 501.

Twin Matrix Heater System

This system is applicable on all **Standard** S2 cars to the following chassis numbers only.

Rolls-Royce Silver Cloud II

SZD.347 to SZD.551 and SAE.1 to SAE.85.

Bentley S2

B.415.DV to B.501.DV and B.2.DW to B.22.DW.

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On the above cars twelve hoses require replacement: they are the top and bottom coolant hoses from the radiator matrix to the crankcase, the heater elbow hoses fitted to the crankcase and water taps and the hoses connecting the water taps to the heater and demister matrices.

Material Required

Part No.	Description	Quantity
UR.5563	Hose - Return - Upper Heater to Dash	1
UR.5564	Hose - Return - Upper Heater to L.H. Valance Plate	1
UR.5566	Hose - Feed - R.H. Water Tap to Lower Heater	1
UR.5565	Hose - Return - Lower Heater to Engine	1
UR.5560	Hose - Feed - L.H. Water Tap to Dash	1
UR.5562	Hose - Feed - Upper Heater - Dash to R.H. Valance	1
UR.5561	Hose - Feed - Upper Heater to R.H. Valance Plate	1
UR.5567	Hose - Cylinder Head to Water Tap - L.H. Valance	1
UR.5489	Hose - Crankcase to Intermediate Pipe	1
UR.5490	Hose - Water Tap to Intermediate Pipe	1
UR.5485	Hose - Bottom Water Connection	1
UR.5486	Hose - Top Water Connection	1

NOTE: When fitting the hose UR.5489 between the intermediate pipe and the cylinder head, on either the single or twin heater matrix systems care should be taken to position and fix the intermediate pipe so that the hose does not foul on the micro-switch fitted to the steering column. Failure to do this may result in the hose chafing on the switch, eventually causing a complete failure of the hose and loss of engine coolant.

Heater Pipes and Hose Connections

As the coolant system on the S2 Car is pressurised care should be taken to ensure that good connections are secured. If the pipes to which the hoses are fitted are not swaged the opportunity should be taken to carry out this operation. Care should be taken to ensure that any sharp edges produced during swaging are removed.

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Time Allowance

Single Matrix Heater System - 3 hours.
Twin Matrix Heater System - 5 hours.

FOR INFORMATION

COOLANT AND HEATER HOSES - L.W.B. AND COACHBUILT 123 in. WHEELBASE CARS

On modern cars with pressurised cooling systems and in the presence of inhibited antifreeze mixtures it is generally advisable to change coolant and heater hoses annually, at the same time as the cooling system is drained, flushed, and refilled.

Rolls - Royce have however, developed an improved type of reinforced hose which has a life in excess of two years. This hose is now being fitted to all production cars and it is recommended that existing hoses on cars at present in service should be changed immediately for the improved hose.

A recommendation to change hoses once every two years is being added to the Periodic Lubrication and Maintenance Schedules and retailers are requested to make arrangements to change the present type of hoses on cars in their territory for the improved hose. Hoses should be considered as a consumable item and replacements are therefore chargeable to the owner, but in cases where cars are less than one year old this work should be carried out on a free of charge basis and a guarantee claim submitted accordingly.

APPLICABLE To :-

All cars prior to the following chassis numbers :-

Rolls-Royce Silver Cloud II L.W.B. Saloon	LCC.83
Bentley S2 L.W.B. Saloon	LBB.25

On the above cars eleven hoses require replacement: they are the top and bottom coolant hoses from the radiator matrix to the crankcase, the feed and return hoses from the heater and demister matrices to the coolant pump and vacuum taps and the hoses connecting the water taps to the vacuum taps and cylinder heads.

The new type of reinforced hose can be identified by the part number.

Material Required

	Part No.	Description	Quantity
*	UR.5498	Hose - Vacuum Tap to Demister Matrix	1
+	UR.5497	Hose - Vacuum Tap to Demister Matrix	1
	UR.5492	Hose - Demister Matrix to Pump	1
	UR.5496	Hose - Cylinder Head to Demister Water Tap	1
	UR.5493	Hose - Connecting - Demister Matrix to Pump	1
	UR.5491	Hose - Heater Matrix to Pump	1
	UR.5494	Hose - Water Tap to Vacuum Tap	1
	UR.5506	Hose - Elbow - Vacuum Tap to Heater Matrix	1
	UR.5505	Hose - Elbow - Vacuum Tap to Water Tap - Heater and Demister	2
	UR.5486	Hose - Top Water Connection	1
	UR.5485	Hose - Bottom Water Connection	1
	RH.7358	Hose - Bottom Water Connection	1

* UR.5498 is only to be used on Rolls-Royce and Bentley long wheelbase cars with coachwork by Park Ward.

+ UR.5497 is an alternative piece to UR.5498 and is only to be used on Rolls-Royce and Bentley long wheelbase cars with coachwork other than by Park Ward, or on coachbuilt Rolls-Royce and Bentley 123 in. wheelbase cars.

RH.7358 and UR.5485 Bottom Hoses are not interchangeable. Bottom hose UR.5485 replaces UE.8446 which was introduced on S2 cars when the fan extension cone was shortened. (See Information Sheet No. 2.L.1) RH.7358 should be fitted to all chassis prior to the following numbers.

Bentley S2 L.W.B. Saloon	LBA.16 except LBA.9
Rolls-Royce Silver Cloud II L.W.B.	LCB.14 except LCB.4 and 11 and LCA.67 to 76

Heater Pipes and Hose Connections

As the coolant system on the S2 Car is pressurised care should be taken to ensure that good connections are secured. If the pipes to which the hoses are fitted

are not swaged the opportunity should be taken to carry out this operation. Care should be taken to ensure that any sharp edges produced during swaging are removed.

Time allowance

L.W.B. Cars	5 hours.
Coachbuilt 123 in. Cars	5 hours.

No. S2/L13
Circulation - All Distributors and Retailers

CATEGORY C

COOLANT PUMP OVERHAUL

APPLICABLE TO:

All Rolls-Royce Silver Cloud II cars including L.W.B.
All Bentley S2 cars including L.W.B. and Continental.
All Rolls-Royce Phantom V cars prior to Chassis No. 5.VA.1.

DESCRIPTION

The purpose of this Service Bulletin is to advise Distributors and Retailers that a special adaptor is available for separating the bearing housing from the main casing of the coolant pump on the above cars.

By using this adaptor, in conjunction with a slide hammer, the bearing housing and pump casing can be separated without risk of damage, thereby eliminating the necessity for Distributors and Retailers to return these units to Rolls-Royce Limited for overhaul.

It is intended that the following should be read in conjunction with Chapter L Section L5 of the Workshop Manual (T.S.D. Publication 729).

OVERHAUL PROCEDURE

1. Remove the coolant pump complete with the main casing from the engine as described on Pages L12 and L13 of the Manual.

2. Remove the coolant pump driving spider using the extractor tool (part No. RH 7099) as shown in Figure L18 of the Manual.

3. Remove the eight setscrews securing the coolant pump bearing housing to the main casing.

4. Fit the adaptor (part No. RH 7314)over the bearing spindle and onto the nose end of the bearing housing; locate the two extractor legs of the adaptor into the two gland drain holes in the bearing housing.

Continued...

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5. Tighten setscrews in the extractor legs sufficiently to secure the legs in the drain holes and tighten the adaptor steady screw onto the nose of the bearing housing; it is sufficient just to 'nip' the screws when tightening.

6. Assemble the slide hammer (part No. RH 7313) onto the adaptor.

7. Operate the slide hammer in the approved manner noting that several applications may be necessary to effect separation of the housings.

8. Continue the coolant pump overhaul as detailed on Pages L14 to L18 of the Manual.

TOOLS REQUIRED

Part Number	Description
RH 7099	Spider extractor
RH 7313	Slide hammer
RH 7314	Adaptor

For additional information concerning the slide hammer and the adaptor refer to Spares Information Sheet 2.A.2.

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No. S2/L14
Circulation - United Kingdom Distributors and Retailers only

CATEGORY C

ENGINE COOLANT ANTI-FREEZE

APPLICABLE TO:

All Rolls-Royce Silver Cloud II cars including L.W.B.
All Bentley S2 cars including L.W.B. and Continental.
All Rolls-Royce Phantom V cars prior to chassis No. 5.VA.1.

DESCRIPTION

The Ford Motor Company have recently begun to market a new anti-freeze solution under the trade name 'Ford Anti-freeze'.

Only anti-freeze solutions conforming to British Standard Specification 3150 : 1959 are approved by Rolls Royce Limited and since the Ford anti-freeze solution does not conform to this standard, it should NOT be used in the cooling system of any Rolls-Royce or Bentley manufactured car.

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