

VALVES AND FITTINGS

BENTLEY S2 SILVER CLOUD II PHANTOM V

The following are chassis numbers of cars which are fitted with the new valves.

'C' Series

Bentley S2 (Standard Steel Cars)

Chassis

B.371.CT, 377 to 399, 403 to 417, 421 to 445 Onwards
B.2.CU to B.756.CU Onwards.

'C' Series

Silver Cloud II (Standard Steel Cars)

Chassis

SWC.636, 640 to 672, 676 to 682, 686 to 712, 716 to
730 Onwards.
SXC.1. to SXC.671 Onwards.

'A' Series

Bentley S2 (Long Wheelbase)

Chassis

LBA.22 to 26 Onwards

'B' Series

Silver Cloud II (Long Wheelbase)

Chassis

LCB.43 to LCB.101 Onwards

'B' Series

Bentley S.2. Continental

Chassis

BC.43.BY, 44, 46 to 101 Onwards

'B' Series
Phantom VChassis

5.BV.19 to 5.BV.101 Onwards
5.BX.2 to 5.BX.100 Onwards

The following are chassis numbers of cars which are fitted with the new cylinder head assemblies and valves etc.

'C' Series
Bentley S.2. (Standard Steel Cars)Chassis

B.22.CU to B.48.CU 52 to 756 Onwards

'C' Series
Silver Cloud II (Standard Steel Cars)Chassis

SXC.19 to SXC 671 Onwards.

'A' Series
Bentley S.2. (Long Wheelbase)Chassis

LBA.23 to LBA.26 Onwards.

'B' Series
Silver Cloud II (Long Wheelbase)Chassis

LCB.48 to LCB.101 Onwards

'B' Series
Bentley S.2. ContinentalChassis

BC.47.BY, 48, 49, 51 to 101 Onwards

'B' Series
Phantom VChassis

5.BV.21, 25, 29 to 101 Onwards
5.BX.2 to 5 BX.100 Onwards

Addendum to 2.E.14.

VALVES AND FITTINGS

BENTLEY S2 SILVER CLOUD II PHANTOM V.

The modification to the valve guide notified in this information sheet has necessitated a modified guide block for the RH.7116/7 valve guide tools. Part number is RH.7272.

A universal tool has been designed for both inlet and exhaust valve guides which replace RH.7116/7, part no. RH.7207.

RH.7272 will still be necessary for use on RH.7207.

VALVES AND FITTINGS

BENTLEY S2, SILVER CLOUD II, PHANTOM V.

The bottom washer of both the inlet and exhaust valves has been modified so that a packing gland can be introduced around the valve stem.

The top of the valve guide is chamfered to provide adequate seating for the conical gland and the valve stem itself has been modified to prevent damage to the gland.

A cap for the gland, fits inside the modified bottom washer the two being separated by a spring. The spring maintains pressure of the cap on the gland.

The following changes of part number have been made necessary:-

<u>Displaced</u>		<u>New</u>
UE. 5462	Cylinder head assy 'A' bank	UE. 7437
UE. 5462	Cylinder head assy 'B' bank (on all standard bodied cars)	UE. 7437
UE. 6656	Cylinder head assy 'B' bank	UE. 8398
UE. 5938	Valve guide inlet	UE. 7432
UE. 7280	Valve guide inlet (.002 o/s)	UE. 8477
UE. 7281	Valve guide inlet (.005 o/s)	UE. 8478
UE. 8367	Valve guide inlet (.010 o/s)	UE. 8479
UE. 5670	Valve guide exhaust	UE. 7431
UE. 7282	Valve guide exhaust (.002 o/s)	UE. 8480
UE. 7283	Valve guide exhaust (.005 o/s)	UE. 8481
UE. 8368	Valve guide exhaust (.010 o/s)	UE. 8482
	Grommet	UE. 7428
	Housing, grommet	UE. 7427
UE. 6380	Bottom washer	UE. 7426
	Spring, grommet	UE. 391
UE. 5939	Valve, inlet	UE. 8605
UE. 6020	Valve, inlet	UE. 8606
UE. 6806	Valve, exhaust	UE. 8607

The only difference between cylinder head assemblies is the valve guides. They are therefore interchangeable if a complete set of valves, grommets, housings, bottom washers and springs is also supplied.

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Valve guides and washers are not interchangeable. The new valves can be used for all replacements but the early type should be used up on engines not fitted with the new grommet.

Valve Rockers and Shafts

Bentley S.2. Silver Cloud II Phantom V

The following are chassis numbers of cars which are fitted with the new hardened rockers.

'C' Series

Bentley S.2. (Standard Steel Cars)

Chassis

B.238.CU 278 to 316, 320 to 394, 398 to 756. Even numbers only.

'C' Series

Silver Cloud II (Standard Steel Cars)

Chassis

SXC.389, 397 to 461, 465 to 575, 579 to 631, 635 to 671 Odd numbers only.

'A' Series

Bentley S.2. (Long Wheelbase)

Chassis

LBA.26

'B' Series

Silver Cloud II (Long Wheelbase)

Chassis

LCB.67, 68, 69, 71 to 78, 80 to 101 Inclusive.

'B' Series

Bentley S2 Continental

Chassis

BC.76.BY, 78 to 101 Inclusive.

2.E.15.
Addendum

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'B' Series
Phantom V.

Chassis

5.BV.63 to 5.BV.75, 79 to 101 Odd numbers only
5.BX.2, 4, 6.

VALVE ROCKERS AND SHAFTS

BENTLEY S2 SILVER CLOUD II PHANTOM V

Certain modifications have been made to counter the heavy wear which has sometimes been experienced on the rocker shafts and rockers.

The detachable bearing, which was fitted into the rocker, has been deleted and the rocker is now hardened all over including the bore. Flats have been cut on the rocker shaft to improve the flow of oil to the rockers. The new rockers must never be fitted as a replacement without the flatted rocker shaft; equally the flatted rocker shaft cannot be fitted without the new hardened rockers.

In order to use up stocks of the early rockers these are being fitted with hardened steel bushes and these too must be fitted only with the new shafts.

Part numbers are as follows: -

<u>Displaced</u>	<u>New</u>
UE. 5970 Rocker shaft assy	UE. 8767
UE. 5973 Rocker inlet	UE. 5698
UE. 5976 Rocker Exhaust	UE. 5699
UE. 5972 Rocker Assy Inlet (with Bush)	
UE. 5975 Rocker Assy Exhaust (with Bush)	
UE. 6429 Bush Inlet)	
UE. 5926 Bush Inlet) Alternatives	
UE. 5927 Bush Exhaust)	
UE. 6430 Bush Exhaust) Alternatives	
Rocker Assy with Bush (temporary)	UE. 8760
Rocker Assy with Bush (temporary)	UE. 8762
Bush Inlet (temporary)	UE. 8759
Bush Exhaust (temporary)	UE. 8761

Continued. . . .

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The hardened bushes can be used to convert any of the old type rockers, in stock or remove from engines, to the temporary type. The fitting of these bushes is however a specialised operation, and can only be carried out in Rolls-Royce factories.

VALVES

BENTLEY S. 2. SILVER CLOUD II PHANTOM V

The inlet and exhaust valve collet is fitted with a rubber seal.

The adhesion of the seal to the collet has not been satisfactory and they are now being bonded; for this reason the rubber seals can no longer be supplied as separate items.

2.E.17

INDUCTION MANIFOLD

BENTLEY S2, SILVER CLOUD II, PHANTOM V

The present induction manifold cylinder head joint has not proved entirely satisfactory and a new material is now being issued.

All joints at present in stock should be returned to Crewe for free of charge replacement.

Part number of the joint affected is UE.4394. S.2. Schedule Page A.9. Item 14.

IGNITION

BENTLEY S.2. SILVER CLOUD II, PHANTOM V.

The rubber sparking plug adaptors which have recently been fitted on production cars have not proved entirely satisfactory.

Any stocks of the rubber adaptors should be returned to Crewe.

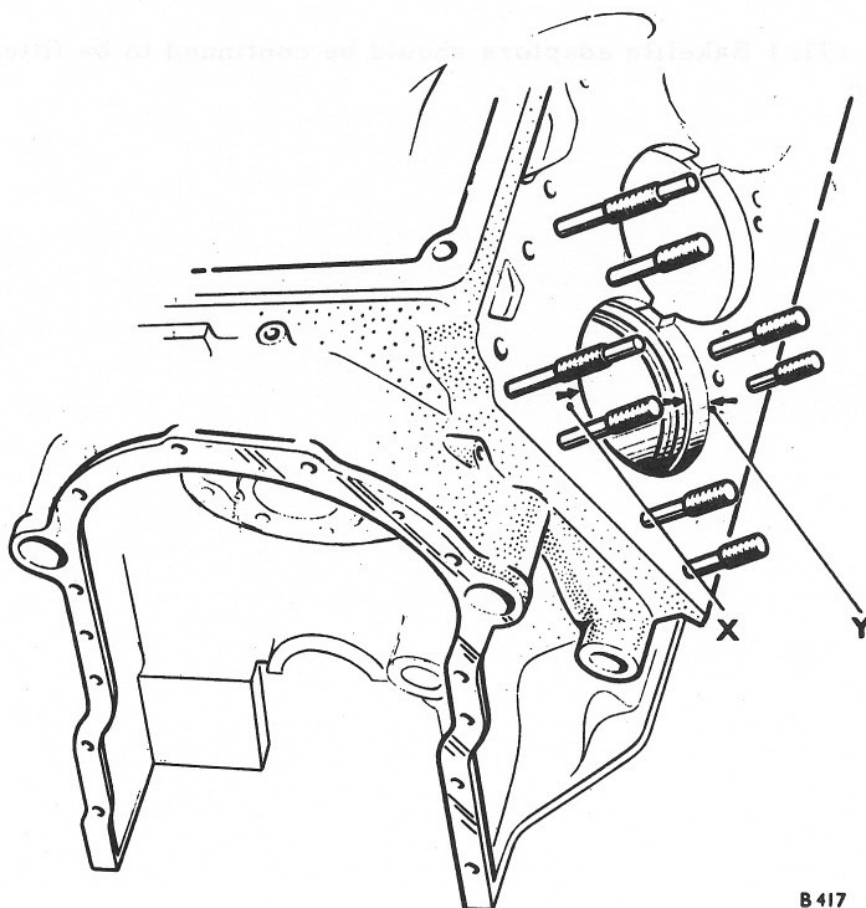
RE.17121 Bakelite adaptors should be continued to be fitted for the time being.

CYLINDER LINERS.

BENTLEY S.2. SILVER CLOUD II. PHANTOM V

Section E.5 of the Engine Manual T.S.D. 721 explains that .002 - .003 nip is necessary between cylinder head and liner.

It is not possible to carry a sufficient stock of liners of varying flange thickness for the required nip to be obtained in all circumstances; in view of this, when liners are required, the depth of the crankcase flange, at point X & Y on the illustration, for each cylinder should be taken and an order forwarded to Crewe. It would assist if each set of measurements were identified to a particular cylinder, A1, B1 etc.



B 417

2.E.37

CYLINDER HEADBENTLEY S.2. SILVER CLOUD II PHANTOM V.

Die cast cylinder heads are now being fitted and these are completely interchangeable with the superseded parts the only difference being that only 2 core plugs are required in place of the eight previous; one of these is the standard plug UA.601/N. The other is a hexagon head plug UE.9034.

Part numbers are as follows:

DisplacedNew

UE.7437 Sub-assy cylinder head A & B bank
(Standard Cars)

UE.9329

UE.8398 Sub-assy cylinder head 'B' bank
(Coachbuilt Cars)

UE.9330

UE.5569 Cylinder head

UE.8649

Core plug hexagon head $\frac{3}{8}$ dia.

2.E.39

CRANKCASE ENCLOSED BREATHINGBENTLEY S2 SILVER CLOUD II PHANTOM V

To comply with the latest American legal requirements as regards atmospheric pollution, totally enclosed crankcase breathing is now being fitted on all cars destined for America and also on some home market cars.

This object has been achieved by replacing the original breather pipe and plate assembly with a plain blanking plate. The engine now breathes via the 'B' bank cylinder head push rod bores, and then through an insulated pipe which is connected between the oil filler and steering pump bracket and the butterfly choke housing, both of which incorporate an additional boss onto which the pipe ends are fitted.

A flame trap is fitted at the steering pump bracket end of the pipe.

Parts are not interchangeable and numbers are as follows:-

<u>Displaced</u>		<u>New</u>
UE.5981	Blanking plate, breather facing, crankcase	UE.9463
UE.6198	Assy, oil filler and mounting bracket	UE.9614
UE.5683	Assy, support bracket, steering pump	UE.9615 +
UE.5651	Bracket, steering pump and oil filler	UE.9342 +
	Housing, flame trap, breather pipe	UE.9465
UE.9163	Assy, butterfly housing	UE.9616
	Assy, breather pipe	UE.9458
	Elbow, breather pipe, butterfly housing	UE.9461
	Plug, breather pipe elbow, butterfly housing.	UE.9464
	Assembly, flame trap, gauze, breather	RE.24293
	Clip, manifold drain pipe	UE.9462
UE.6886	Clip, petrol drain pipes	UR.2921
	Setscrew, elbow to plug, butterfly housing	UA.110/Z
	Washer, elbow to plug	UA.1251/Z
	Washer, plug to butterfly housing	KB.1093/Z
	Setscrew, elbow to support bracket	UA.114/Z
	Washer, elbow to support bracket	UA.1251/Z
UA.104/Z	Setscrew, blanking plate and clip	UA.105/Z
	'O' Ring, elbow, flame trap housing	UE.9453
	'O' Ring, elbow to plug housing	CK.540
	'O' Ring, housing, flame trap	CK.610
	'O' Ring, breather pipe to elbow	RE.24667

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