Bentley S3 and Bentley Continental S3

#### PERIODIC LUBRICATION AND MAINTENANCE

#### SCHEDULES FOR

## SILVER CLOUD III, BENTLEY S3, BENTLEY CONTINENTAL S3 AND PHANTOM V

The following periodic service schedules have been drawn up to assist retailers and service personnel with the maintenance of Rolls-Royce and Bentley motor cars.

Retailers are advised to adopt these schedules as normal service procedure and to make appropriate arrangements with any owners wishing to avail themselves of this service.

Should some owners wish to carry out their own maintenance inspections, it should be noted that these schedules do not in any way supersede the instructions given in the Owner's Handbook.

# **INITIAL 3,000 MILE SCHEDULE**

At the completion of the first 3000 miles (5000 Kms.) Engine oil change. Oil level checks, engine and chassis adjustments, electrical system checks and road test.

#### 6000 MILE SCHEDULE

At the completion of every 6000 miles (10,000 Kms.). Repetition of the 3000 mile schedule plus — Engine oil change — engine oil filter change — brake system check — minor engine, chassis and electrical system checks and lubrication.

#### 12,000 MILE SCHEDULE

At the completion of every 12,000 miles (20,000 Kms.).

Repetition of the 6000 mile schedule plus — Complete lubrication of suspension, steering and transmission — further maintenance of engine, chassis and electrical system components.

## 24,000 MILE SCHEDULE

At the completion of every 24,000 miles (40,000 Kms.).

Repetition of the 12,000 mile schedule plus — change of major components — maintenance of power assisted steering unit.

### INITIAL 3000 MILE (5000KM.) SCHEDULE

# Oil changes

1 Drain and refill the crankcase sump. For subsequent oil changes refer to the 6000 mile schedule.

#### Oil level checks and lubrication

- 1 Carburetter air valve damper.
- 2 Steering pump reservoir.
- 3 Brake fluid reservoirs.
- 4 Automatic gearbox. (Check with the engine running as described in the Automatic Gearbox Manual.)
- 5 Lubricate the eight grease nipples on the front suspension.

# Engine and chassis adjustments

- 1 Check the coolant level and if necessary top-up with the correct anti-freeze mixture. Tighten the worm drive clips securing all coolant hoses.
- 2 Check the tension of the belts driving the fan, steering pump, generator and refrigerant compressor (if fitted) and adjust if necessary. If individual belt tension is uneven a new matched pair of belts should be fitted.
- 3 Check and if necessary adjust the rear brakes and servo.
- 4 Check and adjust tyre pressures (including spare).

## Electrical system checks

- 1 Check the level of the battery electrolyte and top-up if necessary.
- 2 Check, and if necessary top-up the windscreen washer reservoir with the correct mixture of distilled water and Rolls-Royce windscreen washer fluid.

# Road test

1 Test the car on the road and adjust the T.V. rod ('A' rod) if necessary.

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# 6000 MILE (10,000 KM.) SCHEDULE

1 Repeat the 3000 mile schedule.

# Oil changes

l Drain and refill the crankcase.

If the car is used regularly for town work and is subjected to a considerable amount of 'stop-start' operation, the engine crankcase should be drained and refilled every 3000 miles (5000 Kms.).

# Engine adjustments and checks

- 1 Renew the oil filter element.
- 2 Clean the air valves in the carburetters.

Check the oil level in the air valve dampers and top-up if necessary to the correct level.

- 3 Lubricate the ignition distributor automatic advance mechanism, shaft bearings, governor spindle and cam.
- 4 Clean the contact breaker points, check the gap and apply one drop of engine oil to the pivot pin of each rocker arm.

Check and if necessary, reset the ignition timing.

- 5 Clean spark plugs and set gaps as necessary.
- 6 Remove, clean and re-oil the wire mesh air filter element.

# Chassis adjustments and checks

- 1 Remove any foreign matter from the refrigerator condenser matrix (if fitted).
- 2 Lubricate the gear range selector controls and accelerator linkage.
- 3 Lubricate the brake system pivot pins and bearings.
- 4 Remove the brake drums and inspect the brake linings for wear. The face of a lining should not be less than \( \frac{1}{16} \) in. above the rivets.
- Interchange the wheels to minimise variations in tyre wear.
- 6 Check and if necessary balance the wheels.

# Electrical system

- l Check that the heater controls are operating satisfactorily.
- 2 Check that all lights, flasher units and instruments are operating satisfactorily.

# 12,000 MILE (20,000 KM.) SCHEDULE

1 Repeat the 6000 mile schedule.

#### Oil level checks

- 1 Check the shock absorbers for signs of leakage: if apparent, inspect the oil level and top-up if necessary with the recommended oil.
- 2 Check and if necessary, top-up the rear axle with oil.

# Engine adjustments and checks

- 1 Renew the sparking plugs.
- 2 Renew the carburetter air filter element this only applies where the paper type air filter element is fitted (certain overseas countries only).
- 3 Clean the gauze filters and the carburetter float chamber feed connections.

# Chassis adjustments and checks

- 1 Lubricate the grease nipple on the master cylinder balance lever.
- 2 Lubricate the thirteen grease nipples on the steering mechanism.
- 3 Lubricate the eight grease nipples on the front suspension.
- 4 Lubricate the three grease nipples on the rear propeller shaft.
- 5 Clean out the main fuel line filter and filter bowl and the filter gauzes in the fuel pump. Clean the electrical contact points and check the functioning of the fuel pumps. (Each pump should be tested independently.)

# Electrical system checks

l Clean, apply vaseline and tighten the battery terminals.

#### Heater (recirculatory)

1 Clean the filter gauze in the intake beneath the right-hand front seat. Test the car on the road.

# 24,000 MILE (40,000 KM.) SCHEDULE

1 Repeat the 12,000 mile schedule.

# Oil changes

- 1 Drain the gearbox and fluid coupling; refill with the recommended fluid.
- 2 Drain and refill the rear axle.

#### Oil level checks

1 Check the oil level in the transfer steering box and top-up if necessary. Bentley S3 and Bentley Continental S3

# Engine adjustments and checks

1 Clean the flame traps in the crankcase breather tube.

## Chassis adjustments and checks

- Renew the filter element in the steering pump reservoir.
- 2 Release, but do not remove the fuel tank drain plug to allow any accumulated water to escape.

# Electrical system checks

1 Inspect the generator commutator and brushes for wear and for freedom in their holders.

#### SEASONAL SCHEDULES

# Every 12 months Engine cooling system

1 Drain the anti-freeze from the radiator and both cylinder blocks. Thoroughly flush out the coolant passages with a continuous flow of water. This should be carried out just prior to the Autumn.

(In the U.K. prior to September 21st.)

Refill the system with the correct anti-freeze mixture.

# Refrigeration system (if fitted)

These operations should only be carried out by an experienced refrigeration engineer.

Check that the refrigeration system is functioning correctly and if necessary top-up the system with refrigerant. If loss of refrigerant is evident, check the system for leaks.

Check the level of oil in the refrigerant compressor. Clean the filter gauze fitted over the evaporator air intake (boot units only).

# Every 24 months

Repetition of 12 months schedule plus — Renewal of heater and coolant hoses.

#### SPECIAL PRECAUTIONS

Should the car be used in constant temperatures of 0°F, and below

#### Carburetters

Drain and refill the carburetter air valve dampers with oil of viscosity S.A.E. 10.

#### Engine

Drain the engine sump when thoroughly warm and refill with oil of viscosity S.A.E. 10.