Pre-war car servicing

A useful protocol for some time saving.

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Based on the 20hp. Variations apply to other models but the principles apply.

The aim of this article is to recommend a sequence of work for minimizing time spent on the service.

This article is a supplement to "Instructions for the care and running of the 20hp Rolls Royce car" and "Service Instruction leaflets" and must be used in conjunction with them to access the full list of requirements for the particular service being carried out.

Those Instructions will not be repeated here, so the following sequence is **not** a comprehensive list of everything that needs to be done.

The engine compartment is not time critical and access is always available so this article does not cover this area.

The Instruction book and Instruction leaflets outline systems separately, eg brakes, clutch, engine, tuning, but in reality it is much more efficient to mix the systems together when tackling each geographical area of the car. The proviso is that at the end of the service the complete lists in the Instruction book should be assiduously cross checked before replacing the wheels and dropping off the axle stands to make sure nothing has been left out, as inevitably it will have been. Recently after a five day service I checked the book too late and found five items that were not done which would have been much easier when the car was jacked up.

First check that any likely consumables, eg, engine oil, gearbox oil, axle oil, filters, gaskets, antifreeze in sufficient quantity, that are required for the particular service as far as possible are in stock. In particular remember the amount of oil needed for the Enots nipples and gaiters. Also think of gaskets for the tappet side covers. Ring fence a minimum of two days for a basic annual service, five days or more if preparing for concours.

If the car is running, choose drying weather (low humidity) and if necessary hose, pressure hose or steam clean the underneath as thoroughly as possible outside the garage. Check that this is allowed for the model without waterlogging any electrical circuits. Allow to dry. Use any proprietary degreasing wipes of your choice or paraffin to remove any caked oil deposits.

Ensure there is a fire extinguisher in the garage and that there is a trolley jack, axle stands and/or solid wooden blocks, disposable plastic sheets and old newspapers.

Move the car into the garage, if space is limited it might help to remove the back box (trunk) before entering the garage. Disconnect the battery. Although a simple service is possible single handed, if there is a second person it is easier to remove the bonnet since timing and other tasks are easier if it's removed. Using the wheel brace take the tightness out of the wheels on the ground a quarter of a turn rather than attempting to loosen them on a rotating wheel when jacked up. Jack up the car and fit axle stands and/or sturdy blocks. Never go under the car when the only support is the jack. Drain the engine oil and leave overnight as at least a further cupful of the dirtiest oil will have drained out by the next morning. Remove all four wheels. Remove the front and rear floorboards. Inspect all the Enots lubricators and note for later which are more easily accessible through the floor, wheel arches or underneath.

Make notes of what has been done by ticking off a checklist as you go along at the very least at the end of each day.

Having all four wheels off will save time since brakes, wheels, gaiters, oilers, shock absorbers and linkages can all done at the same time. Having to re jack the car because one service item has been forgotten will be very time consuming. It is easier to start doing the Enots nipples from under the wheel arches then mop up any that have to be reached another way.

Wheel arches. Inspect both sides of wheels and tyres for cracks or bulges and spokes for tightness. Clean the wheels whilst off the car. Clean off all grease and dirt before opening filler holes. I use Jizer with a long bent paint brush and Evostik grip filth wipes – other cleansers are available. Dry off with compressed air if available. Clean and apply leathercare balm to accessible gaiter parts, check fluid in the shock absorbers and use the Enots gun on easily accessible lubricators. Use the oil can on all accessible jaws, joints and levers.

Under the front floorboards is a classic area where the boards go back then something else is required which was omitted. Check the gearbox oil. If a modern overdrive is fitted this will not show up in the Instruction book. The substituted prop shafts may need greasing and a periodic oil change is required according to the model.

Look for accessible Enots lubricators that were unreachable from the wheel arches (including propshafts). Apply oil to holes N and K on the servo and all accessible jaws, joints and levers.

Clutch inspection cover: Very well described in the Instruction book. Check clutch pedal is free of the floorboards and adjust the four levers in the clutch pit if not. Lubricate these as directed. Don't put the inspection cover back as there is more to do in there. Oil hole L and hole N, the latter is difficult to find as the engine may need to be rotated to find it. Even then it may be elusive unless the clutch pedal is depressed to reveal it. There is more to do here. If the timing (including magneto) needs checking or correcting, divert to this job whilst the clutch inspection pit is open and the front floorboards are up.

Under the back floorboards. The rear axle oil level can be checked with a straightened metal coat hanger or similar marked at 38mm (20hp) and dipped through the top nut. Look for any remaining Enots lubricators not reached from the wheel arches. Remember not to over oil near the brake back plates. Apply oil to all accessible jaws, joints and levers. Clean and apply leathercare balm to accessible gaiter parts. Check wiring, fuel line, exhaust condition, battery condition, including acid levels, and connections. Check remaining travel on foot brake and handbrake adjusting rods (but read how to see if adjustment is required). Remember that if the rear foot or hand brake pads have been renewed it is important to also reset the jaws and rods back to their start position.

Underneath. Complete any remaining Enots lubricators and jaws joints and levers not already accessed from elsewhere. Complete leathercare balm to gaiters not reached from previous access.

Make a list of:

Items that have been done at this service and any adjustments that were required. Parts that are required for the next service. Order straight away and store. Tasks revealed at this service that you know may require attention at the next service.

Summary

The Instruction book is extremely comprehensive and contains the definitive list of tasks to be carried out. This article, only covering work outside the engine compartment, describes how to carry them out in a time efficient way.

References.

All letters above, eg L and N, apply to the Instruction book text and figures.