

B.S.A. CYCLES Ltd.

(Proprietors: The Birmingham Small Arms Co. Ltd.)

SERVICE SHEET No. 3.

"SERVICE."

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OIL CONSUMPTION.

Question. Can you give me any hints with regard to excessive oil consumption on my sump engine model?

Answer. Providing that oil leakages are not in evidence, heavy consumption can generally be traced to over-oiling of the engine.

For all normal running the oil delivery should be set by opening the control valve spindle an appreciable amount, and then gradually closing the same down until such a position is reached that when the tell-tale on the side of the crankcase is depressed by means of the finger, it rises steadily and gradually until protruding from threequarters to its fullest extent. With this setting there should be a faint puff of smoke momentarily from the exhaust pipe when the engine is accelerated, i.e., if when the machine is being driven along the level, say, at 30 miles per hour, the throttle be closed and the machine allowed to coast for a short distance, a faint puff of smoke should be emitted from the tail pipe when the throttle is opened up sharply.

If heavy consumption be obtained when the control valve spindle is almost closed or screwed down tightly, then the spindle itself should be removed and the seating cleaned, and the seating in the oil pump control valve spindle bush should be thoroughly swilled with petrol to dislodge grit, fluff, or other foreign matter that may prevent the valve spindle from seating correctly.

Also on machines other than the 1930 light weight group remove the pump plate from the base of the crankcase, then the pump gauze, and finally the pump itself. Examine the hallite washer fitted at the base of the pump, and if necessary replace this washer, shellacing the new one in position. Take care in handling this washer, since it is easily damaged, particularly across the narrow section.

This hallite washer is not fitted to 1930 2.49 h.p. S.V., 2.49 h.p. O.H.V., and 3.49 h.p. S.V. machines, a different pump being accommodated on these models.

In all cases make sure that the oil pump control valve spindle bush is screwed right home in the crankcase.