

JOBS YOU SHOULD LOOK AFTER ON YOUR CAR YOURSELF

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NO apology is offered in these notes for returning to a subject that has been previously dealt with, viz. the necessity for draining the oil at frequent intervals and making sure that the sludge which is bound to accumulate in any internal combustion engine is removed.

Owners of Magnoste models will have been familiar with the Tecalemit filter fitted in the oil delivery circuit. As all the new models will be so fitted it may be as well to describe the functioning of this filter and what the owner is called upon to do from time to time.

It will be remembered that emphasis was placed on the necessity of the pump unions being tight on the oil suction pipe, which is situated on the front end of the engine and by which oil is delivered to the pump, which is of the gear type.

Fluctuations of the oil gauge may arise from any of several causes: one, of course, being that there is not sufficient oil in the engine, another from the fact that there is an air leak. Presuming that the oil gauge shows that there is a steady pressure, oil is forced by the pump to the body of the Tecalemit filter.

Reference to the illustration shows what this looks like when removed from the engine. It is a cylindrical body provided with a cover held in position by four nuts. Removal of this cover will disclose what is known as the element, which is a corrugated metal-lined filter made of

special felt unaffected by boiling oil. Through this, oil has to pass and

the delivery takes place from the interior.

It will be noted that the element fits into a metal base which is marked No. 5 in the illustration, and above the element there is a large metal disc (1), a relief valve (2) and spring (3). The spring resting against the lid causes the two metal discs to seal the element top and bottom, and if through inadvertence the filter becomes clogged the upper valve allows the oil to by-pass to the interior of the element and so into the base of the body of the filter, whence it is delivered to the engine.

It will be noted that towards the front of the filter there is a pipe leading to the front main bearing, branching off the pipe leading to the overhead valve gear. This vertical pipe terminates in a flange behind which there is what is known as a "metering pin." Under no circumstances should this metering pin ever be filed

or damaged, because in point of fact it is a restriction in the flow of oil to reduce its pressure, before the oil reaches the valve rockers.

On the opposite of the filter there is a union with a tap which couples up to the pressure gauge on an instrument board. The tap should never be shut off unless there is a broken pipe or a defective pressure gauge.

The oil is delivered to the centre and rear main bearings through a channel-way drilled in the base-chamber registering with a hole on the back of the filter body. It should be pointed out that the crankshaft is completely drilled and each big-end bearing is fed from two ways so that it is always certain that the big-ends will receive sufficient oil.

It is most important when "running in" an engine not to over rev. it on the gears nor to maintain too great a speed on top gear, but no matter how an engine is cleaned on assembly before delivery, a certain amount of metallic particles is bound to get into the oil stream; therefore, after the first 500 miles, the element should be changed for a new one.

This can be carried out by removing the lid and extracting the element, but it is better to remove the filter completely to take out the element and wash

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