

Mark IX Fluids

Every 1,250 miles (2,000 kilometres) check Transmission Oil Level as follows:

1. With the car on a level floor, set the handbrake firmly, set the selector lever at L, and raise the transmission oil temperature by idling the engine to normal engine operating temperature.
2. Remove the cover plate located on top of the floor carpet to expose the dipstick (Plate 60). Clean area around the dipstick hole. Remove the dipstick, and wipe it dry.
3. Stop the engine. **Immediately** insert and withdraw the dipstick and check the oil level. The space between the FULL and LOW on the dipstick represents approximately one pint.
4. If the addition of oil is required, repeat the above checking procedure after adding oil. **DO NOT OVERFILL.**

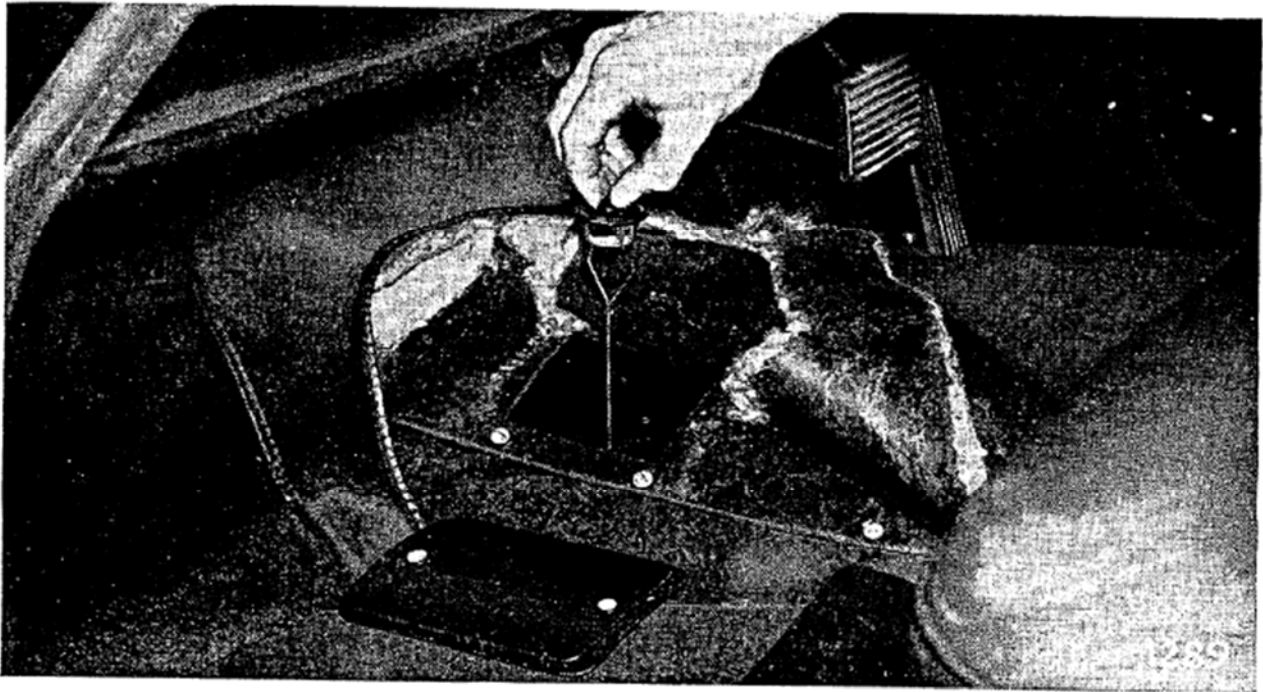


Plate 60. Dipstick Removal.

BRAKING SYSTEM

WEEKLY

Brake Fluid Level. The fluid reservoir for the hydraulic brakes is attached to the wing valance on the driver's side of the car.

At the recommended intervals check the level of fluid in the reservoir which should be $1\frac{1}{4}$ " (31.5 mm.) below the top of the filler neck.

First, disconnect the two electrical cables from the "snap on" terminals. Unscrew the filler cap and "top up" if necessary to the recommended level. Insert the combined filler cap and float slowly into the reservoir to allow for displacement of fluid and screw down the cap. Wipe off any fluid from the top of the cap and connect the cables to either of the two terminals.

Note. An indication that the fluid level is becoming low is provided by an indicator pin situated between the two terminals. First, press down the pin and allow it to return to its normal position; if the pin can then be lifted with the thumb and forefinger the reservoir requires topping up immediately.

absorbers.

STEERING

EVERY 1,250 MILES (2,000 KILOMETRES)

Checking the Oil Level. The oil reservoir is attached to the left-hand wing valance and a dipstick is connected to the filler cap. It is **important** that absolute cleanliness is observed when replenishing with oil as any foreign matter that enters may affect the hydraulic system.

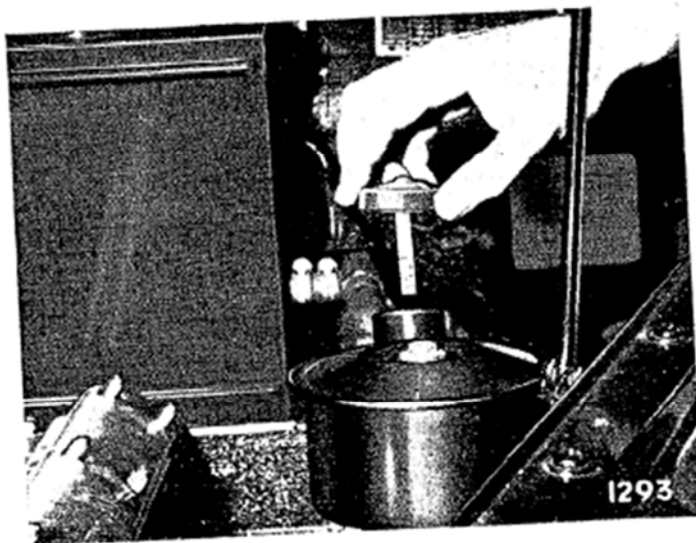
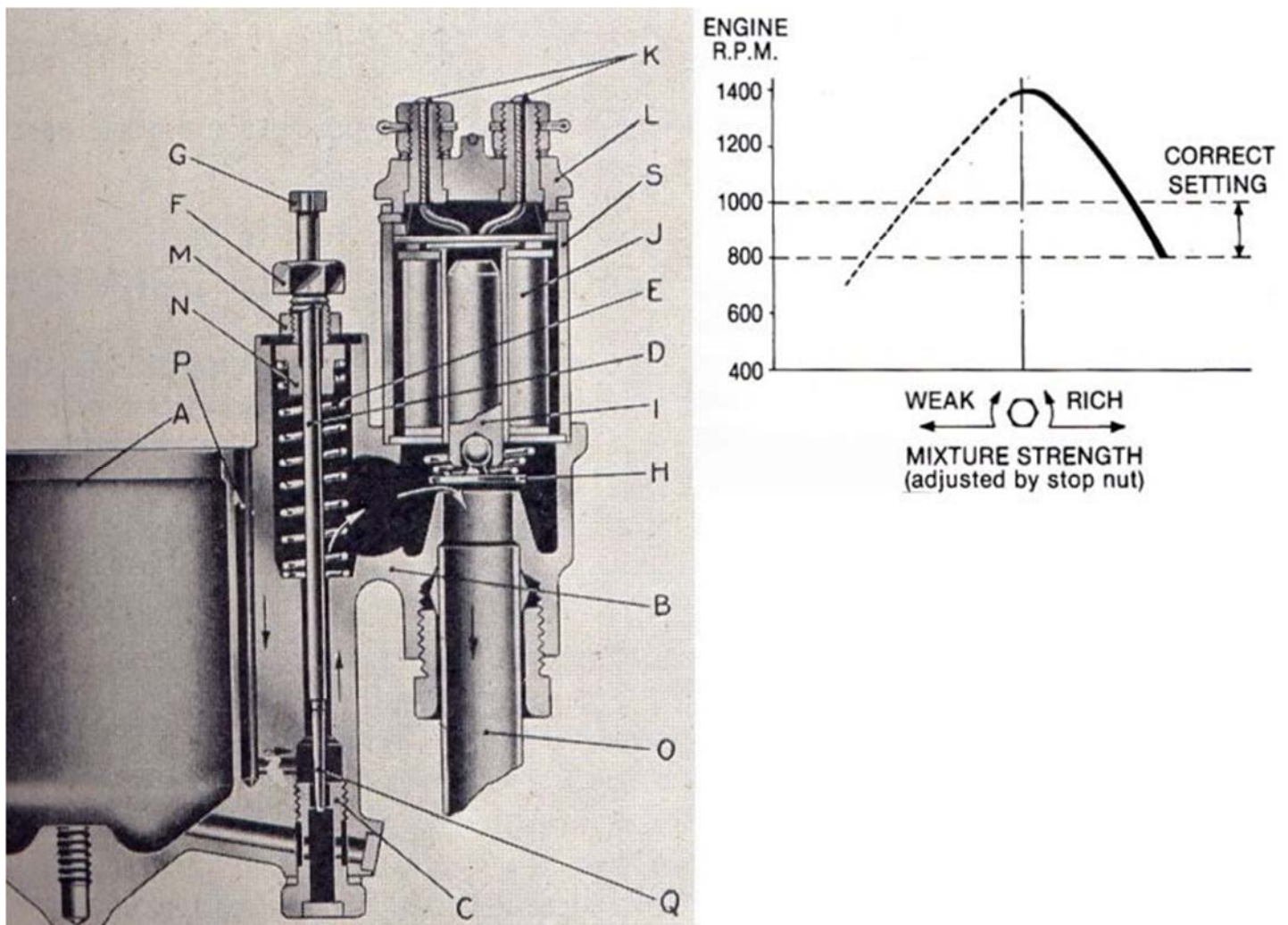


Plate 41. Steering Oil Reservoir Filler Cap and Dipstick.



The starting carburettor is a separate unit which draws its fuel from the float chamber of the rear main carburettor. It is activated by the thermal switch mounted in a slot on the water manifold. This is under the front end (as in the engine photo above) in earlier cars and on the side between the two main carburettors in later models.

When the device is operated, air is drawn from the atmosphere through the air intake P and into a chamber at Q and is mixed with fuel passing through the jet C. The mixture then passes upwards past the shank of the needle, through a passage, and so past the aperture provided between the valve H and its seating. From here it passes directly to the main induction manifold within the cylinder head.

When the solenoid J is energised the iron core I is raised carrying with it the ball-jointed disc valve against the load of the conical spring thereby opening the aperture between valve H and its seating. Any leakage between this valve and its seating would allow the device to operate when not required and affect the idling setting of the main carburettors. If the solenoid is energised while the engine is idling the valve will not normally lift owing to the high manifold depression; the act of opening the throttle will reduce manifold depression and allow the device to operate.

The fuel level in the starting carburettor is controlled by the rear main carburettor float chamber A. It can be seen from the illustration that this results in a reservoir of fuel remaining in the well of the starting carburettor. When starting from cold this fuel is drawn into the induction manifold to provide the necessary rich mixture.

When the valve H has lifted, the needle disc chamber is in direct communication with the inlet manifold and the depression, dependent on throttle opening, varies the position of the needle D by exerting a downward force upon the suction disc N and needle assembly.

Thus:

(a) At idling the relatively high depression will draw the needle into the jet until the needle head G abuts against the adjustable stop F.

(b) At larger throttle openings a reduced depression is communicated to the needle disc chamber and the spring will tend to overcome the downward movement of the needle thus increasing mixture strength.

Tuning of the starting carburettor is confined to adjustment of the stop nut F which limits the downward movement of the needle and is carried out with the engine running at normal temperature and with the main carburettors already correctly tuned.

Proceed as follows:

1. Because the engine has reached normal running temperature the thermostat will not be energising the solenoid so you will need to short the thermostat connection with a separate wire to the thermostat mounting screws or some other convenient ground connection.
2. Open the throttle momentarily to allow the valve H to lift.
3. Adjust the stop nut F with reference to the graph as follows:
 - (a) Turn nut F clockwise (to weaken) until the engine begins to run erratically.
 - (b) Then anti-clockwise (to enrich) through the phase where the engine speed has risen markedly to the point where over richness results in the engine speed dropping to between 800 and 1,000 rpm with the exhaust gases noticeably black in colour.