

Section C (Fuel System)

Page 15

Ensure that the centrifugal and vacuum advance mechanisms are working correctly.

Check ignition timing. Only small variations from the correct static timing are permissible.

Fuel system

Ensure that an adequate supply of fuel is being delivered to the float chamber.

Check that fuel pump output pressure is correct to the figures given under "Fuel System" in Data Section of this manual.

Examine induction manifold and carburettor flange for air leaks.

Ensure that air cleaner is fitted correctly and not restricting air supply to carburettor due to the element being dirty.

Compression

Check valve clearances and compressions.

Make sure valves are not sticking.

Exhaust system

Check that exhaust pipe has not become damaged or blocked.

If the carburettor has been proved faulty a systematic check should be carried out in order to locate the exact source of the trouble. Random adjustment on the carburettor is useless and harmful and must never be attempted. Figs. 5, 16 and 17 show the locations of jets and passageways.

Excessive fuel consumption (See Fig. 5)

Ensure that the complaint is genuine and not caused by heavy traffic conditions.

Check the whole fuel system for leakage particularly at the short plastic connector between the float chamber and carburettor main body.

Ensure that the carburettor is not flooding intermittently due to dirt under the needle valve or faulty needle valve, seat, or float. If the needle valve is suspect a new needle valve seat assembly or float should be fitted.

Check that main jet (32) is not loose in its holder, or the main jet (38) loose in the carburettor body.

Check that main jet (32) or (38) and air correction jet (13) (13A) or (13B) are to the sizes given in the Data Section.

Automatic choke

Check that the automatic choke is operating correctly.

This is done by removing the air cleaner connection from the carburettor intake and watching the movement of the choke valve as the engine warms up from cold.

Directly the engine starts the choke valve (12) should open a small amount by the action of the vacuum kick piston (4). It should then gradually open to its full open position as the engine warms up, and remain in this position while the engine is hot.

As the engine cools down, after being stopped, the choke valve should gradually close and be fully closed when the engine becomes cold.

The short white or scribed line on the automatic choke black cover must be in the position shown in Fig. 14.

Incorrect positioning of the white line on the black cover, from its correct position, alters the action of the automatic choke.

The action of the automatic choke can be upset by insufficient hot air being drawn through the automatic choke heat chamber. This would be caused by serious air leaks in the hot air flow system which is shown by arrows in Fig. 5. Sticking of the vacuum kick piston (4) or choke spindle (5) will also prevent the choke valve from fully opening.

Manual choke

Check that the choke control mechanism is operating correctly and that the control cable is adjusted so that the choke (strangler) valve is fully open when the operating lever is in the fully forward position.

Check that the strangler valve return spring is anchored in the weak (normal) position shown in Fig. 13A. This does not apply when operating under extremely cold conditions.

Insufficient top speed

Check that the throttle is opening fully when the accelerator pedal is fully depressed from the driving position.

Incorrectly fitted carpets can prevent full pedal movement.

Check for fuel obstruction in the econostat circuit.

Change the air cleaner element if it is in any way suspect.

Check fuel supply to float chamber and pump output pressure.

Dirt from the fuel system can block up the fuel pump. Also a worn pump can reach a condition when it will not supply enough fuel for maximum engine output requirements.