15) Fuel System

Schematic arrangement, 1 carburetor version

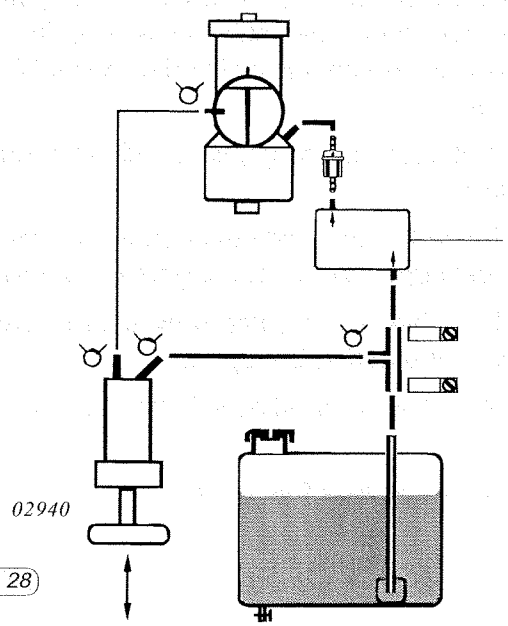

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fig. 28

Schematic arrangement, 2 carburetor version

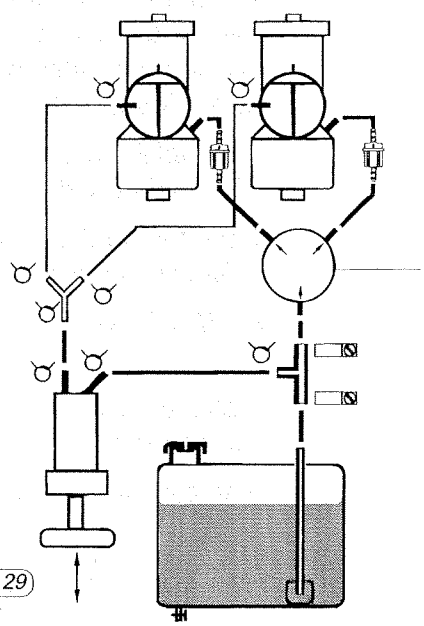

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fig. 29

Fuel contamination is a major cause of engine failure. The best place to avoid contamination is at the source. Once fuel is in your container, a very harzardous potential exists.

Use a clean safety approved storage container. Filter all fuel entering and leaving this container. Do not over-fill container, allow for expansion.

▲ WARNING: Gasoline is flammable and explosive under certain conditions. Always perform fueling procedures in a well ventilated area. Do not smoke or allow open flames or sparks in the vicinity. Never add fuel while engine is running.

The carburetor(s) is (are) supplied with fuel by the fuel pump provided with the engine.

The pump is actuated pneumatically via an ,impulse line leading from the nipple on the crankcase to the fuel pump. This line should not be longer than 500 mm (20 in.) and must be of stiff and fuel-resistant material.

The fuel pump should be installed in a cool place (not on the engine itself),with the small drain hole near the impulse connection towards the bottom. This hole drains oil condensate from the pump diaphragm chamber.

If possible, the pump should be located below the fuel tank level.

If the fuel tank is considerably lower than the engine, an electric pump should be used. This pump is to be connected in parallel as in case of series-connection the fuel pressure would be excessive.

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The electric pump must produce a pressure of minimum 0,2 bar (3 psi), and together with the pneumatic pump max. 0,5 bar (7 psi) resp. max. 0, 4 bar (6 psi) in case of a diaphragm carburetor, and must allow free flow-through, even when switched off.

A suitable fuel filter of 0,15 mm mesh size must be fitted between pump and carburetor. Do not use paper filters. The fuel tank must have a drain cock for condensed water. A screen of 0,3 mm mesh size should be fitted to the fuel line in the tank. Never restrict the normal fuel flow.

The fuel lines and impulse line must be of a type to comply with national regulations. The minimum diameter is 5 mm (0,2 in.).

If the fuel tank is placed higher than the carburetor, the tank connection must have a fuel cock (with filter) to shut off the fuel supply when the engine is not running.

▲ WARNING: The carburetor needle valve is not sufficiently tight to seal for a prolonged period of time and during transport.

National regulations may require a fuel cock to be fitted even if the fuel tank is below the carburetor.

The carburetor needle valve is not to be used as a fuel cock.

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