

Chapter 2 Fuel system and lubrication

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Specifications

Petrol tank

Capacity	17 litres (4.5/3.8 US/Imp galls)
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Carburettors

Make	Mikuni
Type	BS 34, IJ 701
Main jet	145
Jet needle	4H11-3
Needle jet	Y-2
Starter jet	45
Pilot jet	17.5
Float height	26.6 mm
Pilot air screw, no of turns out	2½
Main air jet	1.0 mm
Pilot air jet	1.6 mm

Oil capacity

Dry	3.5 litres (7.4/6.1 US/Imp pts)
Without filter change	2.8 litres (6/5 US/Imp pts)
With filter change	3.2 litres (6.8/5.6 US/Imp pts)

Oil pump

Type	Trochoid
Outer rotor/housing clearance	0.090 - 0.015 mm (0.0035 - 0.0059 in)
Outer rotor/inner rotor clearance	0.03 - 0.09 mm (0.0011 - 0.0035 in)

1 General description

The fuel system comprises a petrol tank, from which petrol is fed by gravity to the carburettors, via two diaphragm type fuel cocks. There are three positions, ON, RESERVE and PRIMING. Before starting the engine, turn the fuel tap to the ON position this enables the fuel to flow to the carburettors when the engine has started.

If the fuel in the tank is too low to be fed to the carburettors in the ON position, turn the lever to RESERVE position, which provides a small quantity of fuel after the main supply is exhausted. Only when there is no fuel in the carburettors is it necessary to turn to the PRIMING position, which will allow fuel to flow to the carburettors even with the engine stopped. Once the engine has started be sure to return the lever to the ON or reserve position.

For cold starting, a hand operated choke lever attached to the left-hand carburettor is linked to the centre and right-hand instruments, so that the mixture on all three carburettors can be enriched temporarily. Throttle control is effected by the means of a standard cable arrangement which operate a butterfly valve in each carburettor.

Lubrication is by the wet sump principle in which oil is delivered under pressure, from the sump, through a mechanical pump to the working parts of the engine. The pump is of the trochoid type and is driven from a pinion on the left-hand end of the crankshaft via a pinion and shaft integral with the starter motor clutch. Oil is supplied under pressure via a release valve and a full flow oil filter fitted with a paper element. The engine oil supply is also shared by the primary drive and the gearbox.

The middle gear casing which contains the 90° bevel gear, holds its own reservoir of oil, which is remote from that of the engine. The requirement of the bevel gear dictates the use of a high pressure hypoid type gear oil.