



## Engine

Cylinder disposition Bore

«V» 90°

80 mm

4 stroke

Stroke

Twin cylinder

64 mm 643.4 cc

Displacement Compression ratio

10 to 1

Revs at maximum

engine speed

7050 rpm

Horse power

52 HP

# Valve gearing

O.H.V. push rod operated

Timing data:

Inlet:

- opens 18° before TDC

- closes 50° after BDC

Outlet:

opens 53° before TDC

closes 15° after BDC

Valve clearance for timing: 1 mm (.039")

Valve rocker clearance:

- inlet: 0.15 mm (.0059")

- outlet: 0.20 mm (.0079")

Lubrication	Forced by lobe type pump Oil pressure warning light of Oil filters: wire gauze in oil s cartridge type	
Ignition	Coil battery ignition with double contact breaker and automatic advance with centrifugal masses Ignition data:  - ignition advance (fixed) 7°  - automatic advance 26°  - full advance (fixed + aut.) 33° ± 3°  - contact breaker gap 0.35 to 0.45 mm  Spark plugs: Marelli CW 8 LP - Lodge 2 HL  Plugs points gap: 0.6 mm (0.0023")	
Carburation	on No. 2 carburettors «Dell'Orto» type PHBH 3 (right) and PHBH 30 BS (left).	
Standard carburettor se		ngs
	Choke Throttle valve Atomizer Main jet Idling jet Starter jet Needle	30 mm dia. 40 268 T 105 40 60 X8 (2nd notch)

	Floater Idling screw adjustment:	11 gr open 1 1/2 turns.
Exhaust system	No. 2 exhaust pipes and No. 2 connected silencers.	
Generator-alternator	Situated at the front end of crankshaft (14V-20A)	
Starting	Electric starter (12V-0.7 KW) with electromagnetic ratchet control.	
Transmission		
Clutch	Dry type, single plate with diaphragm spring; hand controlled, lever on the L/H side of handlebar.	
Primary drive	By gears: ratio 1 to 1.466 (2	Z = 15/22)
Gearbox	5 speeds, constant mesh general. Foot controlled with lever of machine. Gear ratios: low gear = 1 to 2.3636 (Zend gear = 1 to 1.6428 (Zend gear = 1 to 1.277 (Zend gear = 1 to	on the L/H side of the = 11/26) = 14/23)

4th gear = 1 to 1.0555 (
$$Z = 18/19$$
)  
high gear = 1 to 0.900 ( $Z = 20/18$ )

### Secondary drive

By cardan shaft and bevel gear set. Ratio 1 to 3.875 (Z = 8/31). Overall gear ratios (engine-wheel):

low gear = 1 to 13.433 2nd gear = 1 to 9.336 3rd gear = 1 to 7.262 4th gear = 1 to 5.999 high gear = 1 to 5.115

## Frame

Duplex cradle, tubular structure.

### **Suspensions**

Front: telescopic fork incorporating oil pneumatic

dampers.

Rear: swinging fork and rear oil pneumatic damp-

ers with adjustable external springs.

#### Wheels

Light alloy casting with rims:

- front: 2.15 x 18" - rear: 2.50 x 16"

#### Tires

Front: 100/90 H 18"

Rear 130/90-V16" or 5.10-V16"

## Fuel and oil capacities

Group of part	Quantities	Recommendations
Fuel tank (reserve 2 I about)	15 I (3.42 Imp. gal.) (4.15 US gal.)	Supergrande gasoline (97 NO - RM min.)
Oil sump	2 l (0.44 lmp. gal.) (0.53 US gal.)	Oil «Agip Sint 2000 SAE 10 W/50»
Gear box	0.900 l (0.19 lmp. gal.) (0.24 US gal.)	Oil «Agip Rotra MP SAE 85 W/140»
Rear drive box	0.170 I (.037 Imp. gal. 0.044 US gal.) of which: 0.160 I (0.141 qt) (.170 US qt) 0.010 I (.008 qt)	Oil «Agip Rotra MP SAE 85 W/140» Oil «Agip Rocol ASO/R» or
	(.010 US qt)	«Molykote» type «A»
Front fork (each leg)	0.090 I (0.079 qt) (0.095 US qt)	Fluid «Agip F.1 ATF Dexron»
Braking circuit (front and rear)		Fluid «Agip F.1 Brake Fluid SAE J 1703 B»

The bike is equipped with a wide windshield that grants a confortable riding and with capable removable side bags.

All these volumes limit the aerodynamics of the

motorcycle. It is advisable, consequently, specially in max load

conditions not to pass the speed of 120 km/h about