

ENGINE

Two-cylinder with 4 speeds
 Cylinder arrangement at "V" of 90°
 Bore 92 mm
 Stroke 80 mm
 Total displacement 1064cc
 Compression ratio 9.3:1
 Maximum torque Kgm 9.6(94 Nm) at 6000 r.p.m.
 Maximum capacity CV 91 (Kw 67) at 7800 r.p.m.

TIMING SYSTEM

With rods and equalizers and 2 valves per cylinder.
 A camshaft in the crankcase is driven by a duplex chain with automatic chain tightener.

FUEL SUPPLY SYSTEM

MAGNETI MARELLI IAW 15M indirect electronic injection, sequential and timed type, "Alfa-N" system, no.2 ø40 mm throttle bodies with Weber IW031 injectors, electric pump with pressure adjuster, digital management for optimized injection times.

EXHAUST SYSTEM

In stainless steel - 2 two tubes connected to an expansion chamber and to two silencers.

LUBRICATION

Pressure system with gear pump. Mesh and cartridge filters fitted in the crankcase sump.
 Normal lubrication pressure Kg/cm² 3.8-4.2 (regulated by a special valve) thermostatic valve and cooling radiator.
 Electrical transmitter for indicating insufficient pressure in the crankcase.

ALTERNATOR GENERATOR

Installed on the front part of the crankshaft.
 Output capacity 350 W at 5000 r.p.m./min. (14 V - 25 A)

IGNITION

"MAGNETI MARELLI" digital electronic ignition with inductive output
 spark plugs NGK BPR 6ES
 Distance between the spark plugs electrodes mm 0.7
 no. 2 ignition coils fitted on the chassis

START-UP

Electric start-up through a starter motor (12V – 1.2 Kw) equipped with an electromagnetically controlled coupling.
 Ring gear fixed onto the motor.
 Button control (START) located on the RH side of the handlebar.

CLUTCH

Dry type clutch with two driven disks. Located on the engine flywheel.
 Hydraulic control through the handlebar lever (LH side).

PRIMARY TRANSMISSION

With helical gearings, ratio 1:1.6842 (z=19/32)

SECONDARY TRANSMISSION

Shaft with universal joint and gearings.
 Ratio 1: 2.9091 (11/32)

GEARBOX

Six gears with gearings always driven by a front engagement.
 Incorporated couplings.
 Control with pedal lever positioned on the LH side of the vehicle.

<i>Gear ratio</i>	<i>Total ratio (engine-wheel)</i>
1st gear = 1: 2.4000 (15/36)	1st gear = 1: 11.7589
2nd gear = 1: 1.7778 (18/32)	2nd gear = 1: 8.7103
3rd gear = 1: 1.3636 (22/30)	3rd gear = 1: 6.6812
4th gear = 1: 1.1111 (27/30)	4th gear = 1: 5.4439
5th gear = 1: 0.9655 (29/28)	5th gear = 1: 4.7306
6th gear = 1: 0.8519 (27/23)	6th gear = 1: 4.1737



California

ENGINE

4-stroke, twin cylinder
 Cylinder configuration 90° V-twin
 Bore: 92 mm
 Stroke: 80 mm
 Capacity: 1064 cc
 Compression ratio: 9.8:1

TIMING SYSTEM

With rods and rockers taking automatically up clearance by means of hydraulic valve tappets and 2 valves per cylinder. A camshaft positioned inside engine block is driven by a duplex chain with automatic chain tensioner.

FEED SYSTEM

Indirect electronic injection, timed sequential MAGNETI MARELLI, 2 throttle valves Ø 40 mm with Weber IW031 injectors, electric pump with pressure regulator, digital control of optimised injection times.

EXHAUST SYSTEM

In stainless steel - 2 tubes equipped with balancing bar, connected to an expansion chamber and two silencers catalytic converter.
 Lambda probe for exhaust gas control is fitted in the expansion chamber.

LUBRICATION

Pressure fed by gear pump.
 Wire mesh and cartridge filters on oil sump.
 Normal lubrication pressure 3.8÷4.2 kg/cm² (pressure valve on oil sump).
 Low oil pressure sensor (electrical) on crankcase.

GENERATOR / ALTERNATOR

On front of crankshaft.
 Output power: 350W at 5000 rev./min. (14V - 25A).

IGNITION

"MAGNETI MARELLI" Inductive discharge digital electronics.
 Spark plugs: NGK BPR 6 ES.
 Spark plug gap: 0.7 mm
 2 ignition coils mounted on frame

STARTER

Electric starter motor 12V-1.2 Kw with electromagnetic ratchet control.
 Ring gear on the flywheel. START push-button on right handlebar.

CLUTCH

Dry type clutch with two driven disks. Located on the engine flywheel.
 Hydraulic control through the handlebar lever (LH side).

PRIMARY DRIVE

With helical gears, 1:1.2353 (Z=17/21).

FINAL DRIVE

Cardan shaft with gears
 Ratio: 1:4.125 (Z=8/33)

GEARBOX

5-speed, front engaging, constant mesh.
 Incorporated Cush drive
 Control pedal on left side of machine.

Gear ratio	Total ratio (engine-wheel)
1st 1:2 (Z=14/28)	1st gear = 1:10.1912
2nd 1:1.3889 (Z=18/25)	2nd gear = 1: 7.0772
3rd 1:1.0476 (Z=21/22)	3rd gear = 1: 5.3382
4th 1:0.8696 (Z=23/20)	4th gear = 1: 4.4309
5th 1:0.7500 (Z=28/21)	5th gear = 1: 3.8217

