

1. FEATURES

1.1 ENGINE

The engines used on the HONDA 90 series are basically identical with the major difference in that the S 90, CL 90, CL 90 L and CD 90 are equipped with a manually operated clutch and the C 90 and CT 90 having an automatic clutch.

A. Chain driven overhead camshaft

The camshaft is driven by a constant tension chain, assuring quiet operation and precise valve timing. Further, it enables greater power output due to availability of higher operating RPM.

B. OHV and semi-spherical combustion chamber

The overhead valve design provides greater air intake into the cylinder and a consequent higher volumetric efficiency.

The semi-spherical combustion chamber assures a smooth flame propagation which is further enhanced by the incorporation of a special squish area.

C. Double oil filter

The oil system incorporates a fine mesh screen filter and a centrifugal filter to supply the engine with a highly clean oil. This minimizes the wear to the engine components, reducing maintenance and extending the life of the engine.

D. Clutch

Right action clutch lever is employed on the S 90, CL 90, CL 90 L and CD 90, with automatic clutch installed on the C 90 and CT 90.

E. Transmission

All speeds are constant meshed to provide smooth gear changes. The S 90, CL 90, CL 90 L and CT 90 have four forward speeds whereas the C 90 has three speeds. Further, the CT 90 is equipped with a posi-torque mechanism for selecting the low speed (1 $\frac{1}{2}$ reduction) range.

1.2 FRAME

A. Rigid lightweight frame

The frame of the S 90, CL 90, CL 90 L and CD 90 are made of pressed steel sheet of monocoque design. Frame of the C 90 and CT 90 is a combination of pressed steel sheet with a large diameter steel pipe supporting the steering head. These designs give rigid lightweight frame of high strength.

B. Rear suspension

Swing arm suspension is provided with a two stage cushion oil damper to provide comfortable riding under various loading and road conditions.

C. Front suspension

Telescoping type front cushions are employed on the S 90, CL 90, CL 90 L and CT 90 models (from frame serial No. 000001A). Bottom link types are used on the C 90, CD 90 and CT 90 models (from frame serial No. 100001).

D. Brake

Trailing leading type no fade brakes are used on both the front and rear wheels. The right handle lever operates the front brake and the right foot pedal operates the rear brake. The CT 90 is equipped in addition with a left hand lever to operate the rear brake.