

Figure 4-52. Muffler cross section and gas flow diagram (S50, S65)

(Caution during assembly)

- a. Do not forget to install the joint collar and pipe gasket when joining the muffler.

5. ELECTRICAL SYSTEM

The type of electrical equipment used on motor-cycles and their method of installation will, depending upon the type of wiring system, vary with the electrical requirements.

The ignition system used on the C50, C65 are ignition coil and contact breaker with the electricity generated by a special A.C. generator to produce the starting ignition. Further, together with the use of the selenium rectifier and battery, charging, transmission of power to the various connected loads (horn, winker, neutral lamp), discharging are performed. The C50M, C65M are equipped with an electrical starting motor to facilitate the starting function. In the following sections the electrical equipment are divided into the starting, ignition, generating systems and described separately.

5.1 STARTING SYSTEM

C50M, C65M

When the main switch is turned on and the starter button depressed, the electric current flows through the coil in the magnetic switch, energizing the coil and causing the plunger core to be drawn in to close the main contact.

This permits over 100A of current to flow from the battery direct to the starter to produce the necessary torque to turn over the engine for starting.

The starter armature speed is reduced by the planetary gear enclosed within the starter. The chain further reduces the speed and transmits the power to drive the crankshaft. In this way, the starter torque is made to rotate the crankshaft. To prevent the starter from being motorized after the engine starts, an overrunning clutch is incorporated into the A.C. generator rotor.

Starter Specifications

- (1) Operating voltage 6 V
- (2) Rated output 1.5 Kw
- (3) Reduction ratio 5.45
- (4) Direction of rotation L-H rotation (viewing the sprocket)
- (5) Weight 1.7 kg (3.74 lb)

Starter Characteristics

At the sprocket shaft	Without load	With load	Stalling
Voltage	5.5V	4.5V	3.3V
Current	28A max.	80A	220A max.
RPM	2,000-rpm min.	450 rpm max.	
Torque		0.13kg-m min.	0.6kg-m min.



Figure 5-1. Starting motor

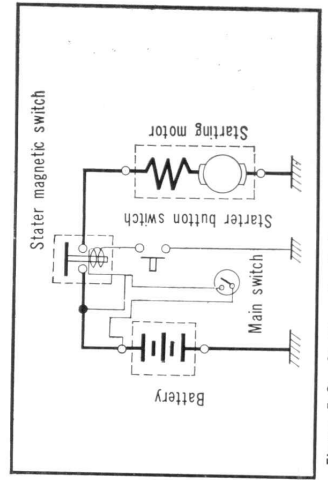


Figure 5-2. Starting circuit diagram