

**(3) HALF WAVE SYSTEM (TYPE 4 & 5 SWITCHES P#13005003)**  
 (This system is used on ME-125)

The type 4 and 5 switches have TWO Red/White wires soldered to the back of the switch. This system uses wire harness part #13005010. This electrical system was designed to prevent the horn, turn signals and brake lights from working with the key in the "off" position. The electrical wiring diagram for this system is the same as illustration #10, except for the added Red/White wire. Refer to illustration #14 for the wiring harness change.

There are two ignition switches for this wiring system. Both switches function the same and plug in the wire harness the same, but are different inside. Refer to illustration #11 & 12 for type 4 and 5 switches. Refer to illustration #13 for the switch code. This code is the same for the two switches. Both ignition switches, have the same part #13005003 because they are totally interchangeable.

**ELECTRICAL VALUES & TEST PROCEDURES**  
 (for half wave electrical system, using type 3, 4 & 5 switches)

- NOTE: All tests =  $\pm 10\%$   
 NOTE: All tests performed with each part removed from motorcycle  
 NOTE: Test equipment = VOM with .1 ohm scale

**Half Wave Rectifier (P#11115010)**

- (-) test meter lead to Red, and (+) test meter lead to Gray = 72,000 ohms  
 (-) test meter lead to Gray, and (+) test meter lead to Red = 11.9 ohms

**High Tension Coil (P#23001168)**

- Spark plug wire to (+) terminal = 6,500 ohms  
 Spark plug wire to ( $\frac{1}{2}$ ) terminal = 6,500 ohms  
 (+) terminal to ( $\frac{1}{2}$ ) terminal = 1.3 ohms

**Primary Ignition Coil (P#23001162)**

- .528mm (.023) diagram wire to ( $\frac{1}{2}$ ) = 2.25 ohms

**Lighting Coil (33 Watt) (Split Wound) (P#23001163)**

- Small diagram wire (.635mm or .025) to ( $\frac{1}{2}$ ) = .11 ohms  
 Large diagram wire (.939mm or .037) to ( $\frac{1}{2}$ ) = .22 ohms

**Battery (CV 4AH) Charging Rate (#11105058)**

(with battery installed in motorcycle)

Use an ammeter with a 5 amp scale. Disconnect the Green/Red wire from the (-) side of the battery. Plug in one meter test lead into the male connector and the other meter test lead into the female connector. Start the motorcycle and observe the meter reading at each engine speed given in the chart.

R P M	25/25W HEADLIGHT Key in:	
	day position	night position
2,000	0 amps	-.7 amps
3,000	+ .05 amps	-.5 amps
4,000	+ .2 amps	-.4 amps
5,000	+ .3 amps	-.2 amps
6,000	+ .5 amps	0 amps
7,000	+ .8 amps	+ .2 amps
8,000	+1.0 amps	-.3 amps

