

SIGMA 20-3424D-24244 Unipolar (5 leads)  
Stepping Motor 3% step accuracy. 9.5V.,  
0.5A., 1.8 deg./step, 300 steps / sec., 60  
oz.in. holding torque, 45 oz.in. running  
torque. Body 3-3/8" dia. x 2-7/16" long. 3-  
3/8" sq. mounting flange with 4 mounting  
holes. Shaft 0.375" dia. x 1-1/8" long.

**INSPECTION** — Motors should be inspected for visible shipping damage. Note: Because of the strong permanent magnet, the shaft will not turn freely — even on motors without gears.

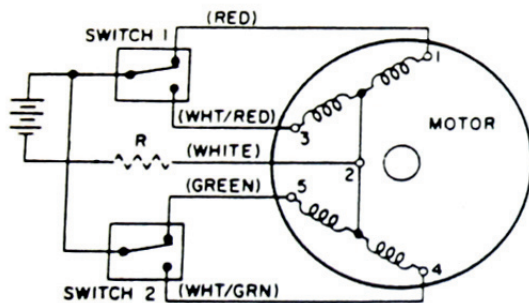
Motors should not be taken apart. Removing the rotor will reduce output torque 5% or more when the motor is reassembled and the permanent magnet will pick up steel chips.

Shielded bearings are used which require no lubrication for the life of the motor.

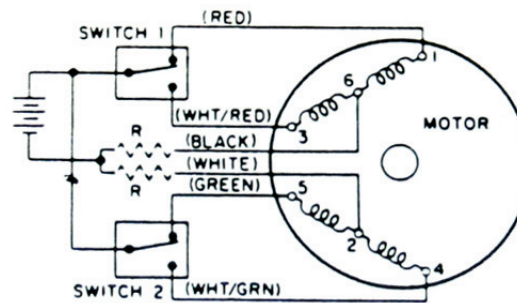
The voltage rating and current per winding are given on the motor nameplate.

Resistors "R" as shown in the diagrams are used to limit current to the value given on the motor nameplate if the supply voltage is higher than the motor rating. Output torque and maximum speed are increased since the L/R time constant is reduced.

**WIRING DIAGRAM  
5-LEAD MOTORS**



**WIRING DIAGRAM  
6-LEAD MOTORS**



	CW ROTATION*	
STEP	SWITCH #1	SWITCH #2
1	1	5
2	1	4
3	3	4
4	3	5
1	1	5

\* Direction of rotation when viewed from name plate end of motor. For CCW rotation read chart up from bottom.