



WASHGUARD®

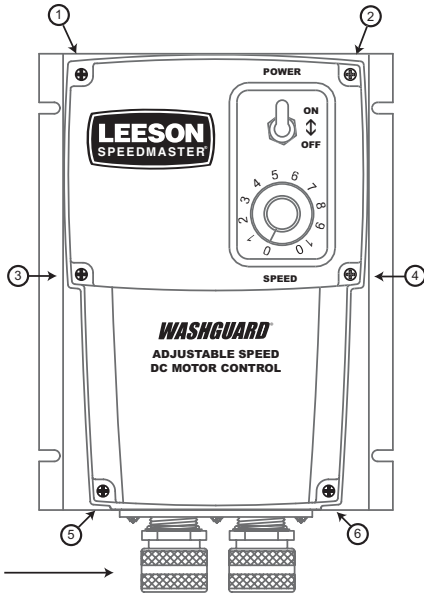
QUICK START GUIDE

174102 & 174107 NEMA4X SCR MOTOR CONTROLS

STEP # 1

REMOVE THE SIX (6) PHILLIPS SCREWS ON THE FRONT CASE.

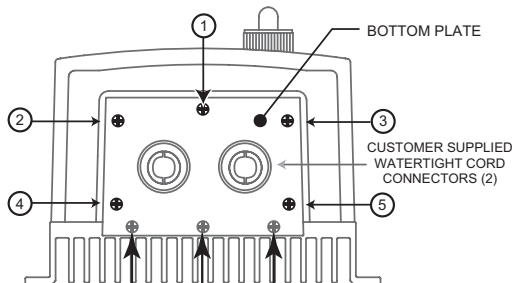
NOTE: THE TWO SHORTER SCREWS (#6 - 32 x 2 1/2) ON THE FRONT CASE ARE USED AT HOLE LOCATIONS 5 & 6.



CUSTOMER SUPPLIED WATERTIGHT CORD CONNECTORS (2)

STEP # 2

REMOVE THE FIVE (5) PHILLIPS SCREWS ON THE BOTTOM PLATE.

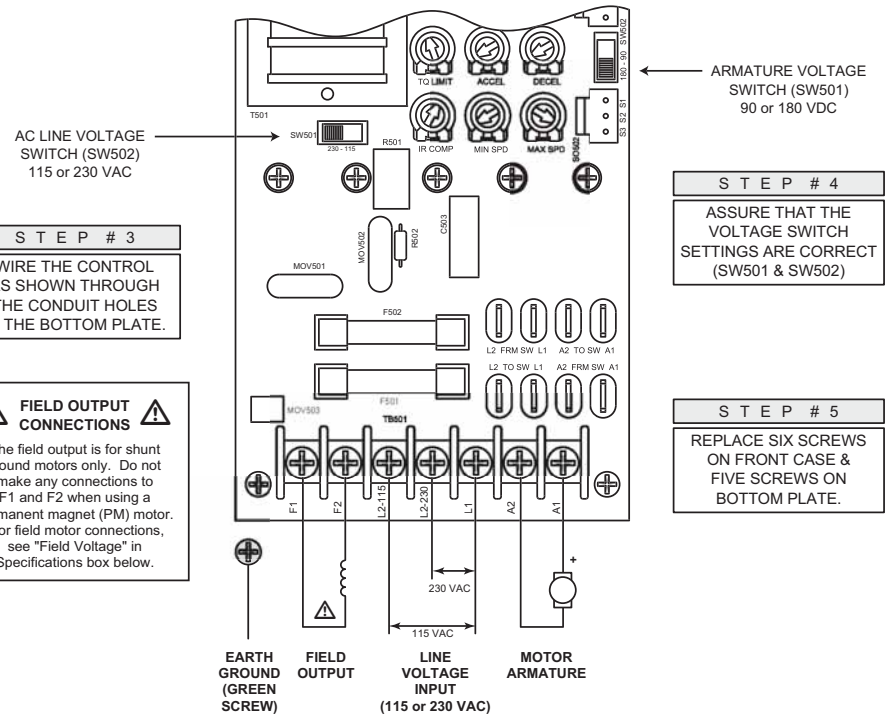


DO NOT REMOVE
THE THREE (3) SCREWS SECURING
THE BOTTOM PLATE TO THE HEATSINK

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CONNECTIONS



STEP # 3

WIRE THE CONTROL AS SHOWN THROUGH THE CONDUIT HOLES IN THE BOTTOM PLATE.

FIELD OUTPUT CONNECTIONS

The field output is for shunt wound motors only. Do not make any connections to F1 and F2 when using a permanent magnet (PM) motor. For field motor connections, see "Field Voltage" in Specifications box below.

ARMATURE VOLTAGE SWITCH (SW501)
90 or 180 VDC

STEP # 4

ASSURE THAT THE VOLTAGE SWITCH SETTINGS ARE CORRECT (SW501 & SW502)

STEP # 5

REPLACE SIX SCREWS ON FRONT CASE & FIVE SCREWS ON BOTTOM PLATE.

OPERATION

174102 Non-Reversing Speed Control

1. Set the speed adjust dial to "0" (full CCW).
2. Apply AC line voltage.
3. Set the POWER switch to the ON position.
4. Slowly advance the speed adjust potentiometer CW. The motor slowly accelerates as the potentiometer is turned CW. Continue until the desired speed is reached.
5. To coast the motor to a stop, turn the speed adjust potentiometer to "0" or set the POWER switch to the OFF position.

174107 Reversing Speed Control

1. Set the FORWARD/OFF/REVERSE switch to the OFF position.
2. Set the speed adjust potentiometer to "0" (full CCW).
3. Apply AC line voltage.
4. Set the FORWARD/OFF/REVERSE switch to the desired direction of rotation.
5. Slowly advance the speed adjust potentiometer CW. The motor slowly accelerates as the potentiometer is turned CW. Continue until the desired speed is reached.
6. To coast the motor to a stop, turn the speed adjust potentiometer to "0" or set the FORWARD/OFF/REVERSE switch to the OFF position.

SPECIFICATIONS

AC Line Voltage	... 115 VAC or 230 VAC, ±10%, 50/60 Hz, single phase
Horsepower Range with 115 VAC applied	... 1/8 - 1 HP
Horsepower Range with 230 VAC applied	... 1/4 - 2 HP
Maximum Armature Current	... 10 ADC
Maximum Field Current	... 1 ADC
Field Voltage	
for 115 VAC Input50 VDC (F1 to L1); 100 VDC (F1 to F2)
for 230 VAC Input	... 100 VDC (F1 to L1); 200 VDC (F1 to F2)
Form Factor1.37 at base speed
Analog Input Voltage Range (signal must be isolated; S1 to S2):	
for 0 - 90 VDC Armature Voltage	... 0 - 1.4 VDC
for 0 - 180 VDC Armature Voltage	... 0 - 2.8 VDC
Input Impedance (S1 to S2)3M ohms
Load Regulation1% base speed or better
Style	... NEMA 4X

7. To reverse direction:
 - a. Set the FORWARD/OFF/REVERSE switch to the OFF position.
 - b. After the motor comes to a complete stop, set the FORWARD/OFF/REVERSE switch to the desired direction of rotation.

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