



## Wiring the Isolator Board to the Speed Control

### ⚠ CAUTION

**Before doing any wire connections, be sure that the power is turned off!**

#### Wiring the Isolator Board to the Speed Control

1. On the back of the Sherline/Acorn control housing, there is a 2-pin Molex connector for the Spindle Control.

**NOTE:** On your wire connection, the wire color and connection must be correct or you will cause irreversible damage to the isolator board. The red wire is on the top of the 2-pin connector and the black wire is on the bottom (see Figure 1).

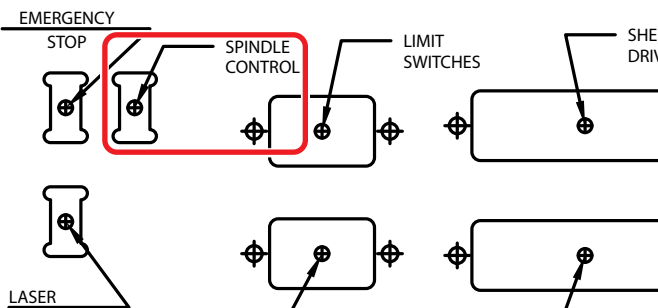
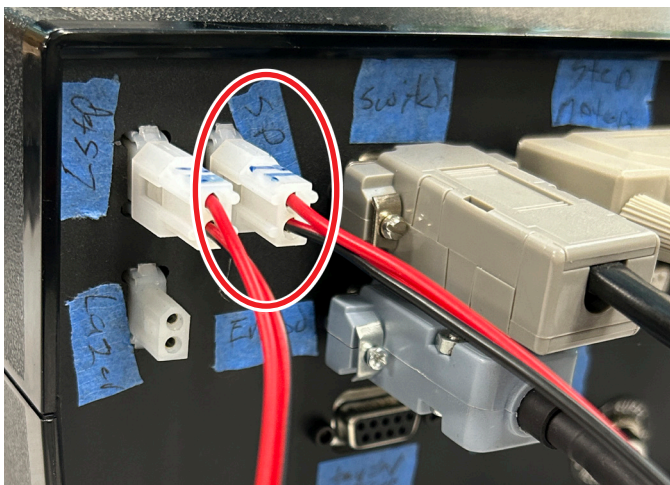


FIGURE 1—See Figure 17 on page 5 for complete details of the wiring connections on the rear-housing panel.

2. You will need to open the spindle speed-control housing.

- A. Unscrew the housing locking screw (see Figure 2).



FIGURE 2—Use the 5/32" Hex T-driver to remove the locking screw from the housing.

- B. Flip the housing up (see Figure 3).

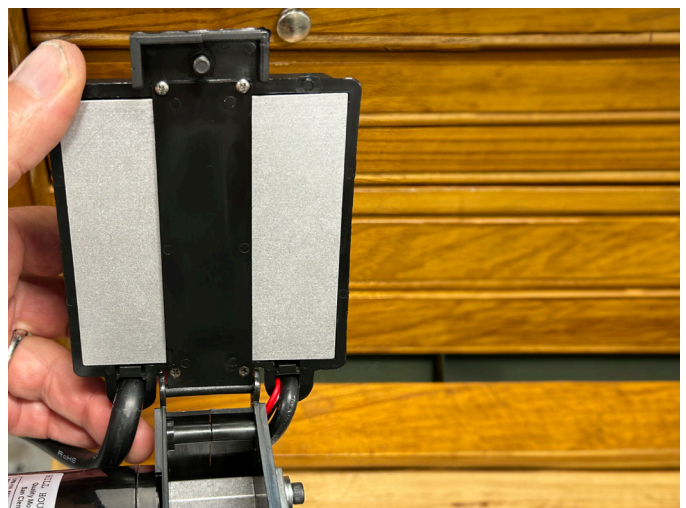


FIGURE 3



C. Force the hinge ears away from the hinge post and pull the post out one side at a time (see Figures 4 and 5).



FIGURE 4—The posts are on the speed control housing and the ears are on the pulley belt guards.



FIGURE 5—Both posts have been removed from their corresponding ears.

D. Flip the control housing over and remove the four Phillips head screws from the retaining bar (see Figure 6). Note that the larger head screws go in the front holes of the retaining bar.



FIGURE 6

E. The easiest way to remove the speed control from the housing is to thread a 10-32 screw into the threaded hole on the bottom of the control. Then use that to help you to wiggle the control free from the housing (see Figure 7).

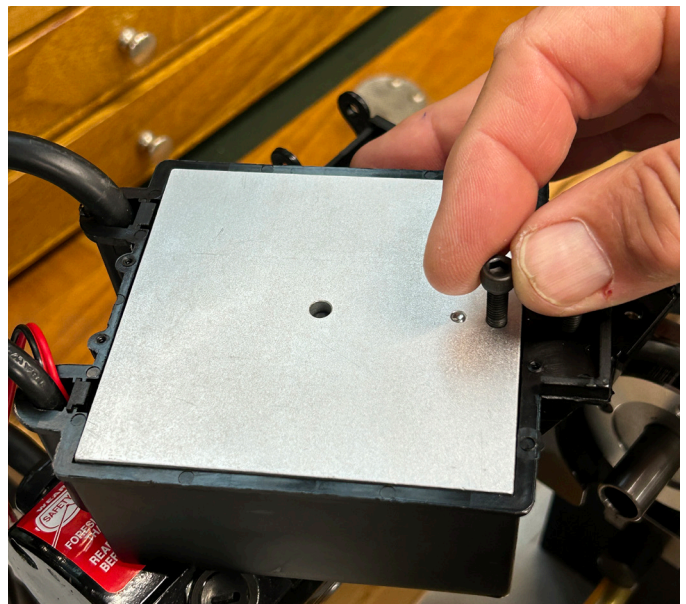


FIGURE 7



F. Pull the speed control board free from the housing (see Figure 8).

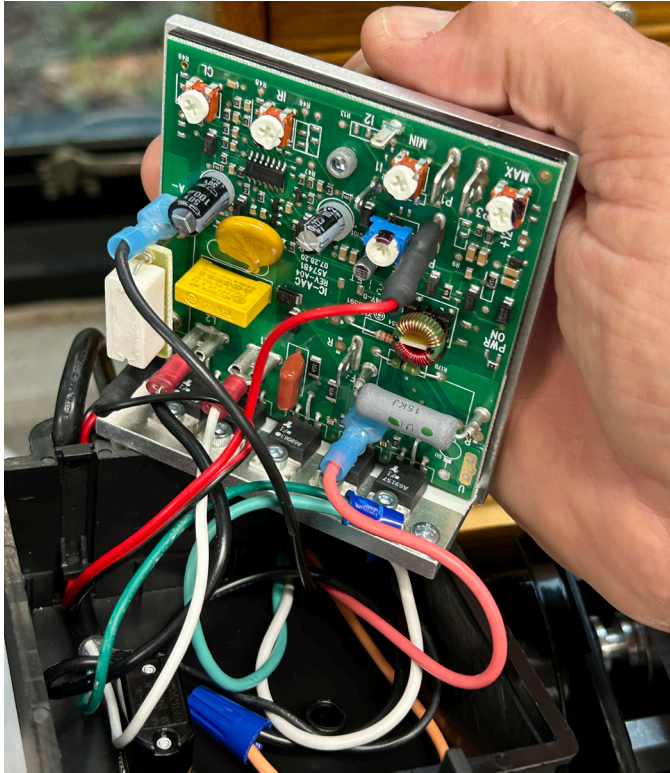


FIGURE 8

G. The speed control that we used for these instructional pictures already had the red and black two-wire installed. What you will need to do is remove the cord keeper from the housing by pulling it up (see Figure 9).



FIGURE 9—The cord keeper is indicated by the red rectangle.

H. Then install your wires next to the power cord with enough lead on the inside to connect your wires to the speed control board (see Figure 10).

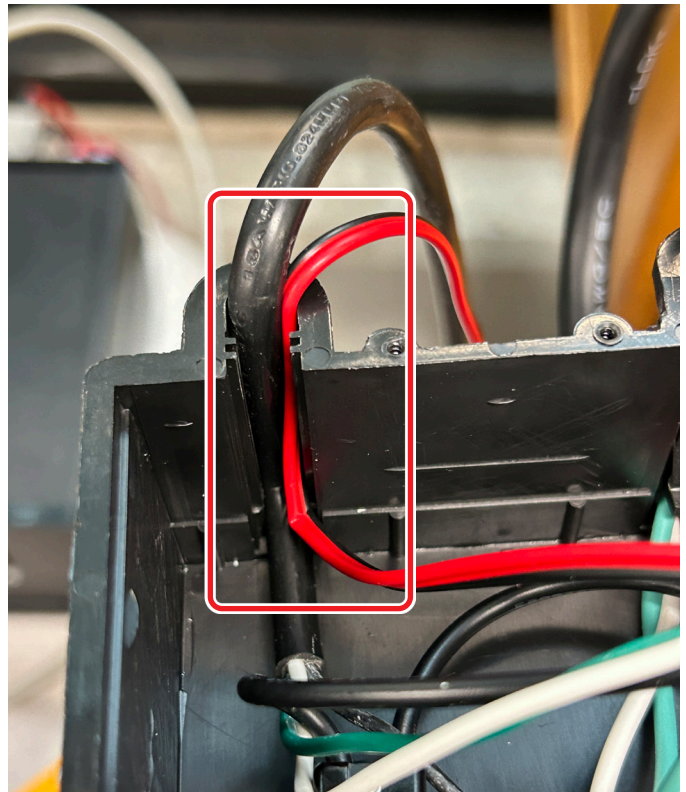


FIGURE 10

I. Reinstall the cord keeper with the large end inserted first and the small end flush with the bottom of the control housing (see Figure 11).

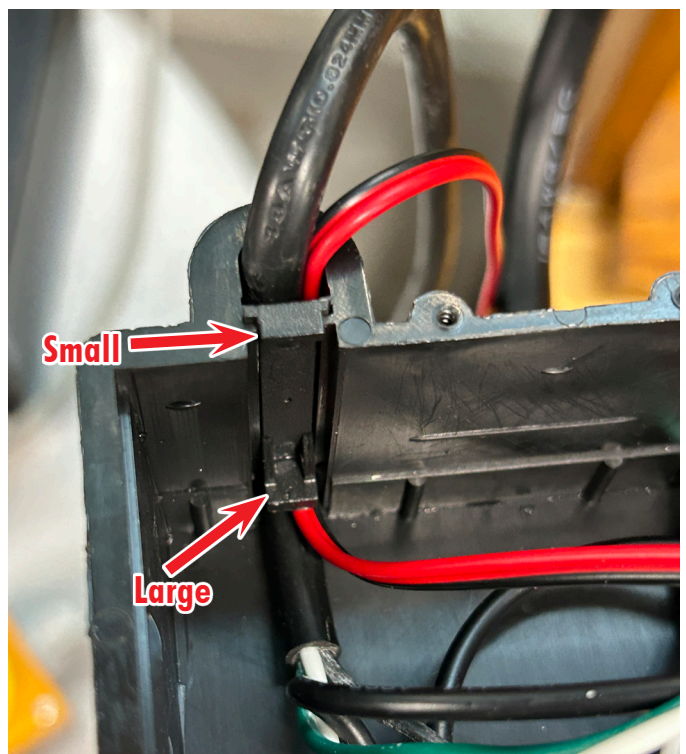


FIGURE 11



J. Each of your wires should have push-on connectors for a spade connector on them. The black wire connector is pushed onto the spade post “F-” (see Figure 12).

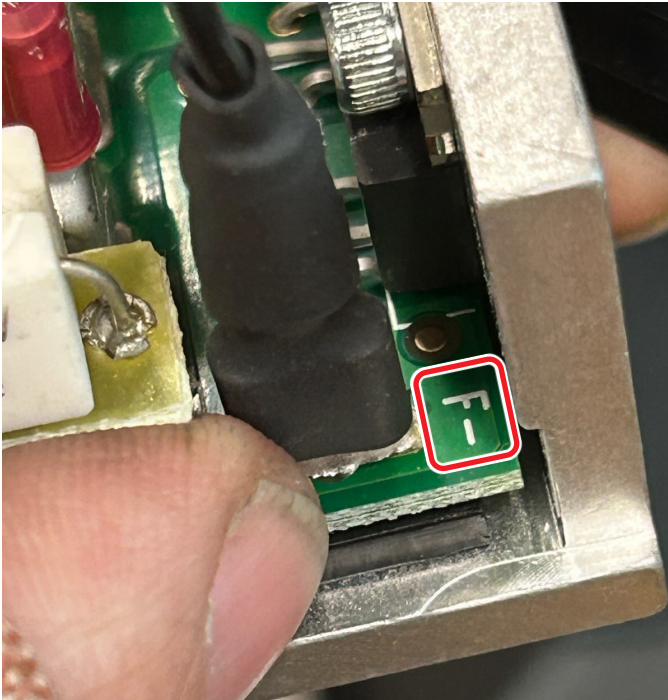


FIGURE 12—F- is indicated by the red rectangle.

K. The Red wire connector is pushed onto the spade post “P2” (see Figures 13 and 14).

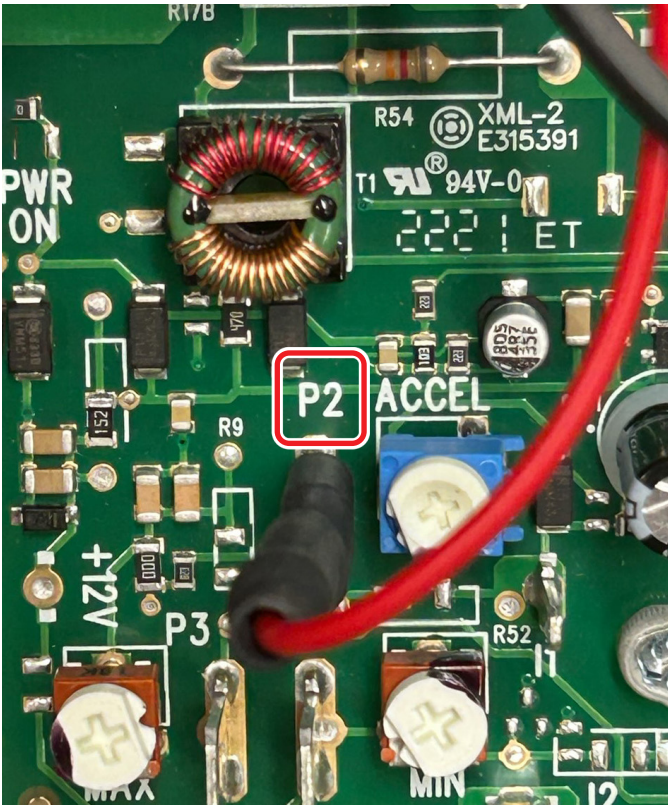


FIGURE 13—P2 is indicated by the red rectangle.

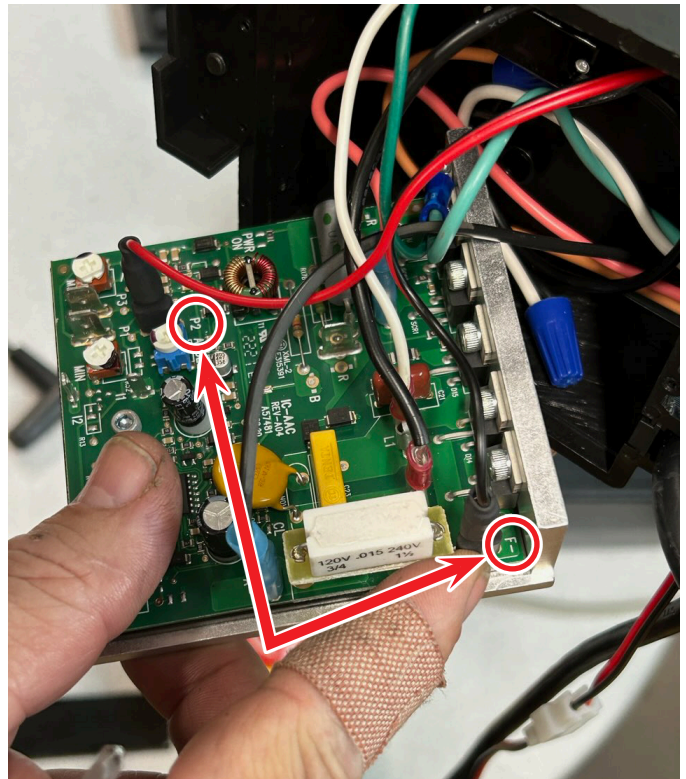


FIGURE 14—Here is a full-view picture of the board for easier spade-pin location.

L. With the two wires installed, flip the control board back over so the leg is towards the side of the housing that has all of the incoming wires on it. Then gently push the wires and the control board back into the housing (see Figure 15).

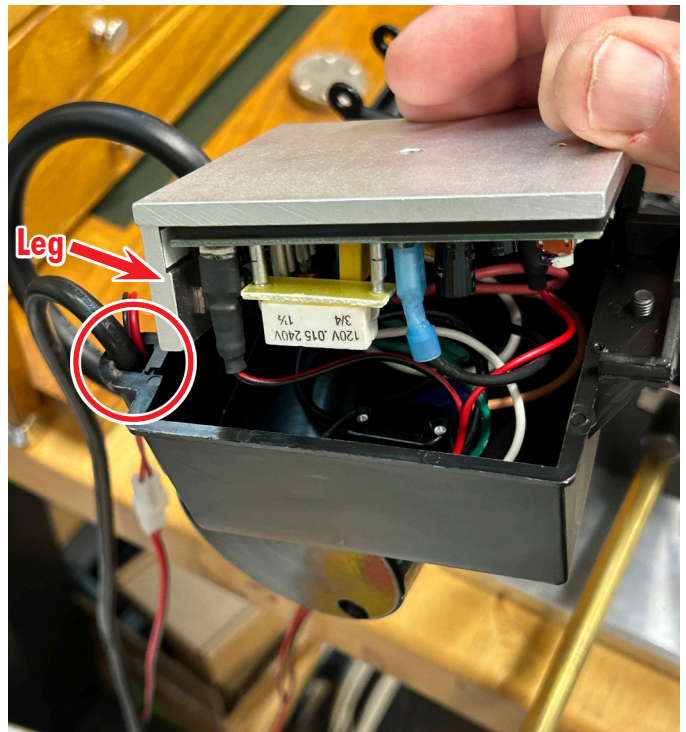


FIGURE 15

M. The rest of the assembly is done in the reverse of the disassembly. Flip the control housing over, snap one ear post at a time into the two ears, then secure the housing in the closed position with the locking screw (see Figure 16).



FIGURE 16

### Helpful Speed-Control Wiring Instructions

After wiring the isolator board to the speed-control unit, you may find that your maximum RPM needs to be adjusted.

[CLICK HERE](#) for the *Acorn Speed Control-Isolator Board RPM Adjustment* instructions.

Thank you,  
Sherline Products Inc.

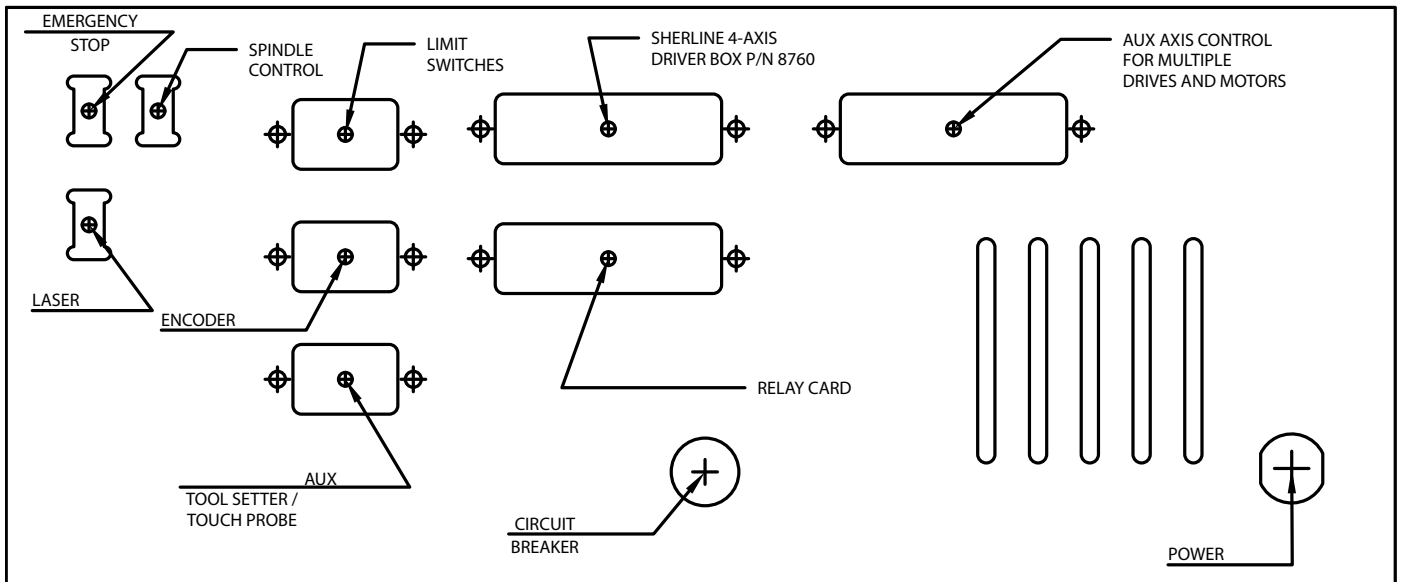


FIGURE 17—The rear-housing panel diagram.