



#### **ORDERING NOTE:**

If you are buying a Sherline/MASSO controller from us and you have purchased an MPG, let us know at the time of purchase, and we will do the wiring changes to your controller board for you.



# **Controller Wiring Changes for the MPG Pendant**

#### **About Adding the MASSO MPG Pendant**

If you have the Sherline/MASSO CNC controller, and you have chosen to use the optional MASSO MPG pendant, you will need to modify the controller in order for the MPG (manual pulse generator) to work correctly.

- 1. Once this change has been made, the MPG must remain connected to the controller.
- 2. If this change is made and the MPG is removed, the E-stop on the top of our controller box will not work. This means that you can't use the controller without the MPG connected unless you change the wiring back to its original factory configuration.

#### The Reason for the Wiring Change

The rewiring of the E-stop is done for two reasons:

- 1. To make both E-stops active and working as stated above.
- To allow the controller board to accurately switch between the MPG and the Jog/MDI functions on the controller. Without this change, the increments that the machine moves when using the MPG, Jog, or MDI will NOT be accurate.

### Wiring Changes for the MPG Pendant E-Stop

These instructions show how to wire the Sherline/MASSO CNC controller to enable the E-Stop button on the MASSO MPG pendant. After the re-wiring, both E-Stop buttons on the Sherline box and MPG pendent will work.

**NOTE:** If the MPG pendent E-Stop is not connected or used, then the changes are not required. If the changes are done, then the E-Stop button on the Sherline box will not work if the MPG pendent is not connected.

## **ACAUTION**

Make sure the controller power is off, and the unit is unplugged before attempting any wiring modifications. Failure to do so will damage the entire controller!

1. Remove the cover from the Sherline controller to gain access to the wiring module.

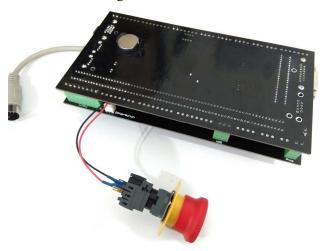


FIGURE 1—The complete wiring module.

2. Cut the red wire as close to the white, E-stop button connector as possible (see Figure 2).

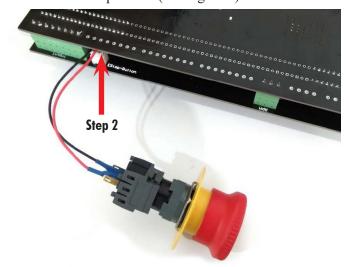


FIGURE 2—The red wire is on the right of the white, E-stop connector.

3. Solder the red wire that was cut from the E-Stop switch to the contact point shown in Figures 3 and 4.

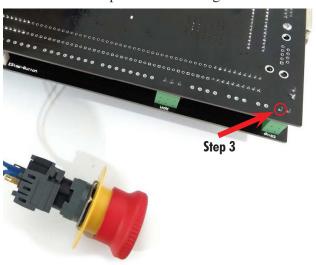


FIGURE 3—The red circle shows where to solder the red wire located above the green, E-stop riser.

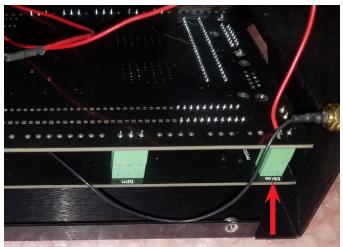


FIGURE 4—The red arrow is pointing to the green, E-stop riser. The red wire has been soldered in place.

4. Reinstall the controller cover and reconnect the power cords.

Thank you, Sherline Products Inc.