

Micro Control Systems

APPLICATION NOTE

APP-022

Installation of LCD Insulator

Revision History

Date	Author	Description
10-10-99	BWW	Created document.

Theory

This Application Note outlines how to install a Mylar insulator on the LCD display of the MCS-8. A Mylar insulator is used to electrically isolate the frame of the LCD display from the enclosure. This insulator is needed to stop electrical spikes from getting into the LCD display and ribbon cable. These spikes can cause the LCD display not to function properly.

Installation Directions

1. Turn off the run/stop switch to the unit.
2. After all the compressors are off turn off the power to the unit.
3. Remove the LCD ribbon cable from the MCS-8 connector J2 (old style) or J28 (new style). Pay attention to how the cable is oriented to the connector.
4. If the unit is using a door mount enclosure then:
 - Remove the keypad ribbon cable from the MCS-8 connector J5. Pay attention to how the cable is oriented to the connector.
 - Remove the six metal nuts securing the panel enclosure to the back of the door and then remove the panel enclosure from the door.
5. Remove the four nylon nuts holding the LCD display on.
6. Remove the LCD display.
7. Remove all the nylon standoffs and nuts used to separate the LCD display from the enclosure. Pay attention to the order and position of the standoffs and nuts.
8. Insert the Mylar insulator over the four pem studs used to mount the LCD display.
9. Replace all the nylon standoffs and nuts used to separate the LCD display from the enclosure.
10. Replace the LCD display and attach the nylon nuts to secure the display. The Mylar insulator should now be between the LCD frame and the enclosure.
11. If the unit is using a door mount enclosure then
 - Replace the panel enclosure to the back of the door and secure with the six metal nuts.
 - Replace the keypad ribbon cable to the MCS-8 connector J5. Pay attention to how the cable is oriented to the connector.
12. Replace the LCD ribbon cable to the MCS-8 connector J2 (old style) or J28 (new style). Make sure that pin one on the ribbon cable is connected to pin one of the connector. There will be an arrow indented on the ribbon cable plug. The older style LCD ribbon cables are not keyed, so they can be missed plugged. Be carefully!
13. Double check that all cables are connected properly.
14. Apply power to the unit.
15. Make sure the LCD display and keypad are functioning correctly.
16. Turn on the run/stop switch and make sure the unit is functioning correctly.

MCS-8 Diagram

