M303-13(D)

E4000 LOCK

Junction Box Hardware Installation and Wiring

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
SENSITIVE DEVICES.

Caution - This electronic device is sensitive to damage from ESD (electrostatic discharge). Observe the following precautions when servicing this device.

Electronic devices with exposed connectors are highly susceptible to damage by electrostatic discharge (ESD). Anyone performing field service on Red Seal Measurement electronic devices must observe the following precautions.

1. **Always use a static-dissipative wrist strap. Connect the strap to a grounded, conductive surface or to the metal chassis of the equipment under repair. Use only wrist straps that incorporate a resistor for user safety. The resistance between the user and ground should be between 800K ohms to 10M ohms. Do not wear a wrist strap around exposed electrical hazards of more than 250 volts.**
2. **If a wrist strap is not available, ground yourself before touching electronics by touching the metal chassis of the equipment or another grounded surface. Repeat frequently while working.**
3. **If available, use a static-dissipative work mat. Connect the mat to ground and the wrist strap to the mat.**
4. **Avoid contacting the connectors or any exposed electronic component.**
5. **Work away from materials that may contribute to the generation of static electricity, such as synthetic carpeting.**
6. **Minimize your movements to avoid building up static charge.**
7. **Avoid working on electronics in areas with very low humidity.**
8. **Do not work on electronics during periods of lightning activity.**
9. **Do not ship or store this device near strong electrostatic, electromagnetic, magnetic, or radioactive fields.**

LOCK Firmware

The LOCK security features are available in the following E4000 firmware versions

US	EA.01.22.E or higher
International	EA.02.09.X or higher

If the firmware in your E4000 is an earlier version, it must be upgraded before the LOCK features can be used.

Upgrading the firmware requires a flash programming kit (RSM part number 600957-000) and the firmware files for the version you wish to install.

A link to the firmware files is available on the product page for the E4000 at www.*redsealmeasurement.com*. The direct URL is:

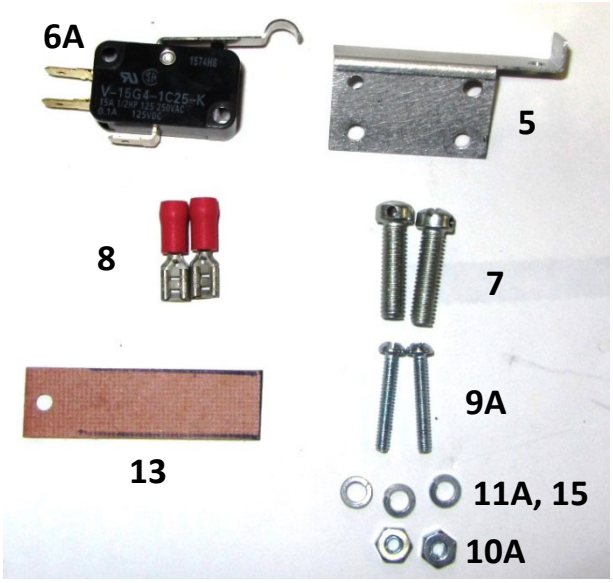
http://www.redsealmeasurement.com/e4000-firmware/.

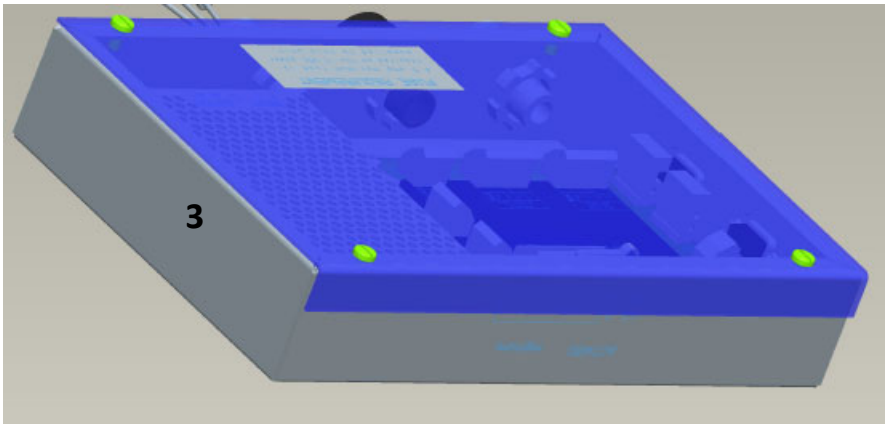
For retrofit kits, start here. If the LOCK hardware was installed into the E4000 at the factory, proceed to section 2.

1. **Junction Box Switch Assembly**

   Verify that the junction box kit includes the following parts:

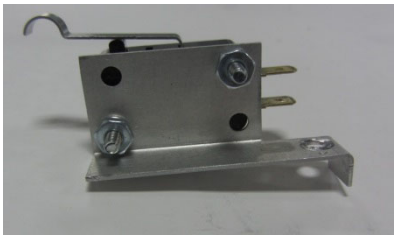
Item	Description	Units	Qty.
3	Cover, J-Box new	Ea.	1
5	Bracket, Junction Box	Ea.	1
6A	Limit Switch, Junction Box	Ea.	1
7	Screws, Sealing 10–32 X 3/4	Ea.	2
8	Terminal Quick Connect, Female Crimp, slide on	Ea.	2
9A	Screws, LS Mounting, J-box	Ea.	2
10A	Nuts, LS Mounting, J-box	Ea.	2
11A	Lock Washer, LS Mounting, J-box	Ea.	2
13	Insulator, bracket Junction Box	Ea.	1
15	Lock Washer #6	Ea.	1

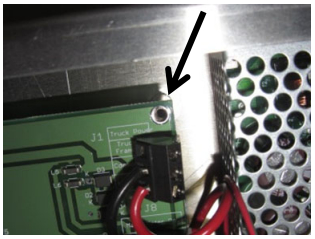




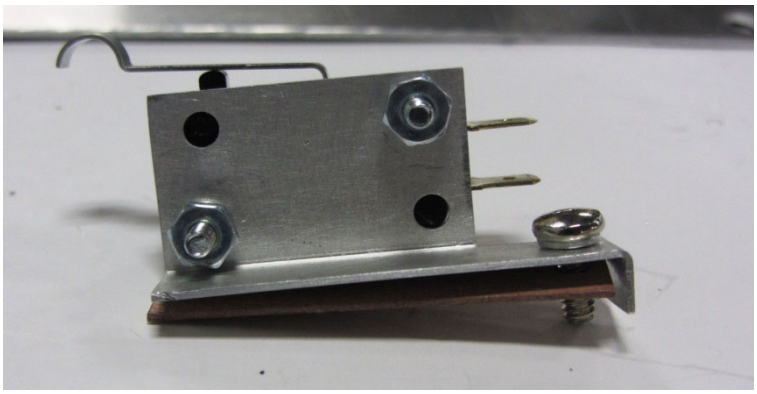
a. Attach the hardware

   i. Attach the bracket (5) to the limit switch (6A), using the screws (9A) washer (10A) and nuts (11A) provided. Remove the (old) cover from the junction box and remove the screw closest to J1 (truck power) on the power board.

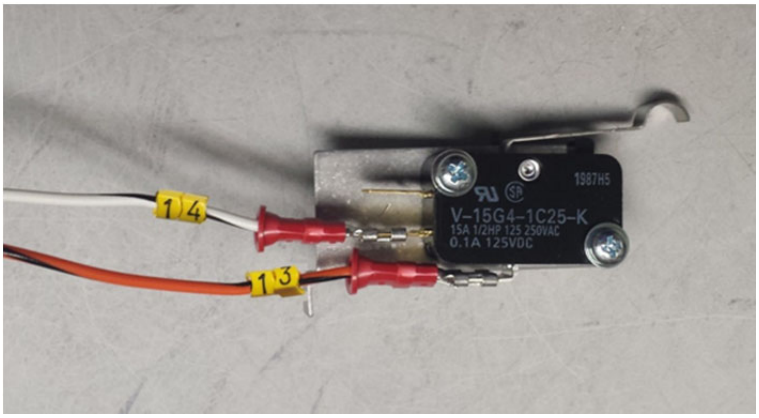




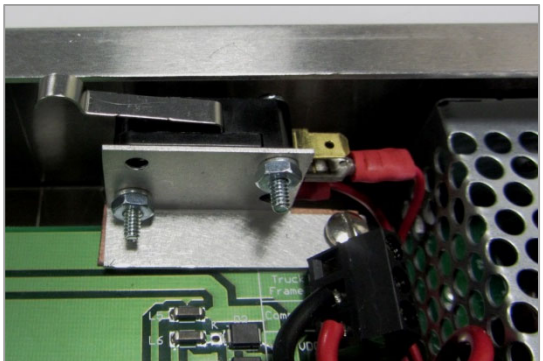
ii. Attach insulator under bracket and insert the screw with lock washer (15) into opening in the bracket.

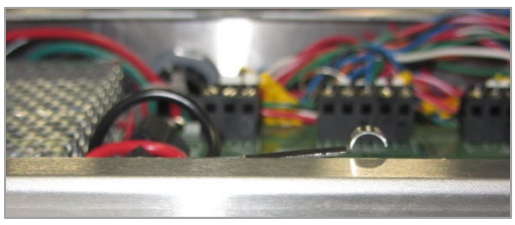


iii. Attach wire #13 (orange/black) to the prong on the bottom of the limit switch. Attach the #14 wire (white/black) to the bottom prong on the left side of the switch.

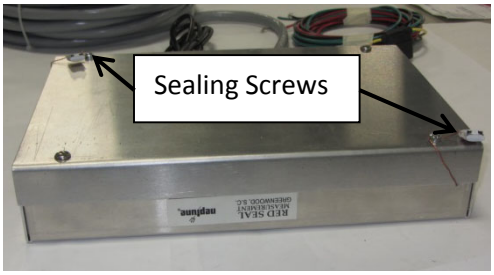


iv. Attach the bracket and limit switch assembly to the power board. The limit switch should rise above the side wall of the junction box.





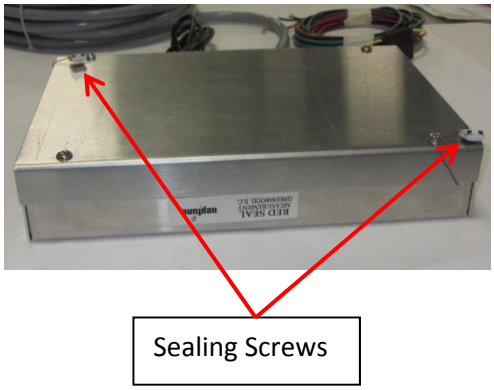
b. Replacing and Securing the Junction Box Lid
    i. The new cover (3) is a one way fit. The 1” flap must be located on the same side as the limit switch.
    ii. The left rear and right front screws will be replaced with sealing screws (7).
    iii. To properly seal the junction box lid, 4 holes are to be drilled into the box (2 holes, 1” below each sealing screw). See photos below for reference. (Note: sealing wires are not installed at the factory.)



2. **Junction Box Switch Installation**

   a. The new cover is a one way fit. The 1” flap must be located on the same side as the limit switch.

   b. The left rear and right front screws will be replaced with sealing screws, as shown below.



   c. To properly seal the junction box lid, a sealing wire must be passed through the two holes at the corners nearest the sealing screws (below left). The wires should be passed through the sealing screws and a seal affixed (below right).