

RIH3000R KEYPAD OVERLAY REPLACEMENT

A step-by-step procedure for replacing the keypad overlay assembly on a Fleetwatch RIH 3000R Remote Island Head at the workbench.

EQUIPMENT	ASSEMBLY	STEPS	EST. TIME
RIH 3000R	Keypad Overlay	15	30-45 min

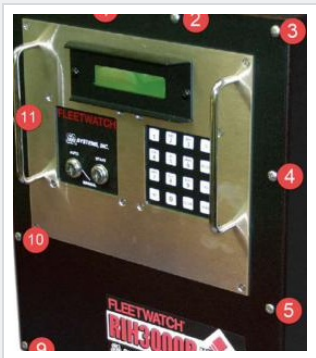


FIG 01 — RIH 3000R KEYPAD FACE

WHAT YOU'RE REPLACING

The keypad overlay is the sealed button membrane mounted over the KB circuit board on the RIH 3000R faceplate. Replace it when buttons stick, stop registering, or the seal has failed. The swap happens at a workbench with the front cover removed — the display and motherboard stay wired in place.

TOOLS & SUPPLIES REQUIRED

- Phillips screwdriver — removes the RIH front cover
- 5/16" nut-driver, socket, or wrench — removes the keypad assembly
- RTV silicone — reseals the keypad assembly after installation

BEFORE YOU BEGIN

De-energize the RIH before opening the case. **Step 1** walks you through locking out power at breaker **CB1** in the JB20 junction box — do not skip it. Once the cover is open, watch the display ribbon cable closely: if it comes off the display, it's difficult to realign.

PROCEDURE AT A GLANCE

PHASE 1 · STEPS 1-3

POWER DOWN & OPEN

Lock out CB1, remove the RIH from its mount, and open the front cover.

PHASE 2 · STEPS 4-6

ACCESS THE KEYPAD

Disconnect the display and keypad ribbon cables and note nut/washer orientation.

PHASE 3 · STEPS 7-11

SWAP THE OVERLAY

Remove the KB circuit board and old overlay, clean the plate, and set the new one.

PHASE 4 · STEPS 12-15

RESEAL & TEST

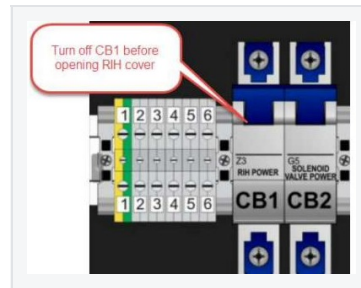
Silicone the seal, reassemble the cover, and test every button.

PHASE 1 — POWER DOWN & OPEN

1

LOCK OUT POWER AT THE JUNCTION BOX

Turn off breaker **CB1** in the JB20 electrical box connected to the RIH. Confirm the unit is fully de-energized before continuing.

FIG 02

Turn off CB1 to power down the RIH.

2

REMOVE THE RIH FROM ITS MOUNT

Remove the cannon plugs from the back of the RIH along with the 4 nuts securing it to the stand or wall bracket, then carry the unit to a workbench.

3

OPEN THE FRONT COVER

Remove the screws around the RIH cover, then carefully take off the front cover to expose the inside of the faceplate. You may need to gently pry the cover from the bottom of the case.

Insert a flathead screwdriver no more than ¼ inch between the cover and case — just enough to pry the seal loose. Forcing it further can damage internal components.

Remove the cover slowly and watch the display ribbon cable. Don't let it come off the display — it's difficult to realign.

FIG 03

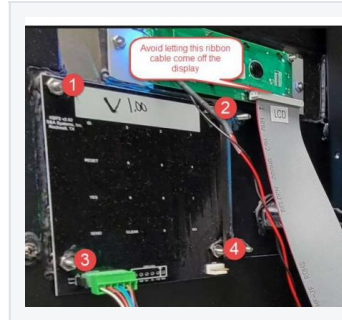
Remove these screws to access the keypad.

PHASE 2 — ACCESS THE KEYPAD

4

DISCONNECT THE DISPLAY RIBBON CABLE

Disconnect the display ribbon cable from the motherboard after noting where it goes. Do not remove the ribbon cable from the display itself.

FIG 04*Backside of the keypad assembly.***5**

DISCONNECT THE KEYPAD RIBBON CABLE

Disconnect the keypad ribbon cable from the keypad itself. Leave the keypad cable connected to the motherboard — do not disconnect it there.

6

NOTE NUT & WASHER ORIENTATION

Before removing the 4 nuts from the keypad, note the orientation of the washers and nuts. They must go back on exactly the same way for the buttons to depress properly on reassembly.

Take photos of the nut and washer stack-up before disassembly — it's the easiest way to get reassembly right.

PHASE 3 — SWAP THE OVERLAY

7**REMOVE THE KB CIRCUIT BOARD**

Use a 5/16" tool to remove the 4 nuts holding the KB circuit board. Do not disconnect any wires from the circuit board.

8**REMOVE THE OLD OVERLAY'S MOUNTING NUTS**

Use a 5/16" tool to remove the 4 nuts securing the keypad overlay assembly.

9**LIFT OFF THE OLD OVERLAY**

Remove the keypad overlay assembly from the front plate.

10**CLEAN THE FRONT PLATE**

Clean any excess silicone from the front plate surface so the new overlay can seat flush.

11**SET THE NEW OVERLAY**

Place the new keypad overlay assembly in position and fasten it tight.

PHASE 4 — RESEAL & TEST

12

RESEAL THE OVERLAY

Apply RTV silicone around the keypad overlay assembly to re-establish a waterproof seal.

13

REINSTALL THE KB CIRCUIT BOARD

Place the KB circuit board back over the keypad overlay assembly and fasten it tight.

14

REINSTALL THE FRONT PLATE

Place the RIH front plate back on the RIH case and tighten the Phillips head screws.

15

POWER UP & TEST

Turn **CB1** back on and test each button to confirm they all register correctly.

FIG 05

Fully reassembled RIH — this is how the wiring and cover should look whether you're at the bench or back in the field.

NEED A HAND?

If a button doesn't register after reassembly, or the seal doesn't look right, call S&A Systems, Inc.

(972) 722-1009 x32**ASK FOR TECHNICAL SUPPORT**