

5800 Pump Assembly

Replacement Instructions

Instruction Sheet #60-4702-050
 Revision C, January 19, 2016

Overview

For complete information about inspection and maintenance of the Model 5800 Refrigerated Sampler pump assembly, refer to the *5800 Service Guide*.

Note that these instructions also apply to the Model 4700 Refrigerated Sampler.

 **WARNING**

Remove power from the 5800 before opening the pump housing! The pump is extremely powerful. It can injure you severely if the sampler activates during servicing.



(old latch)

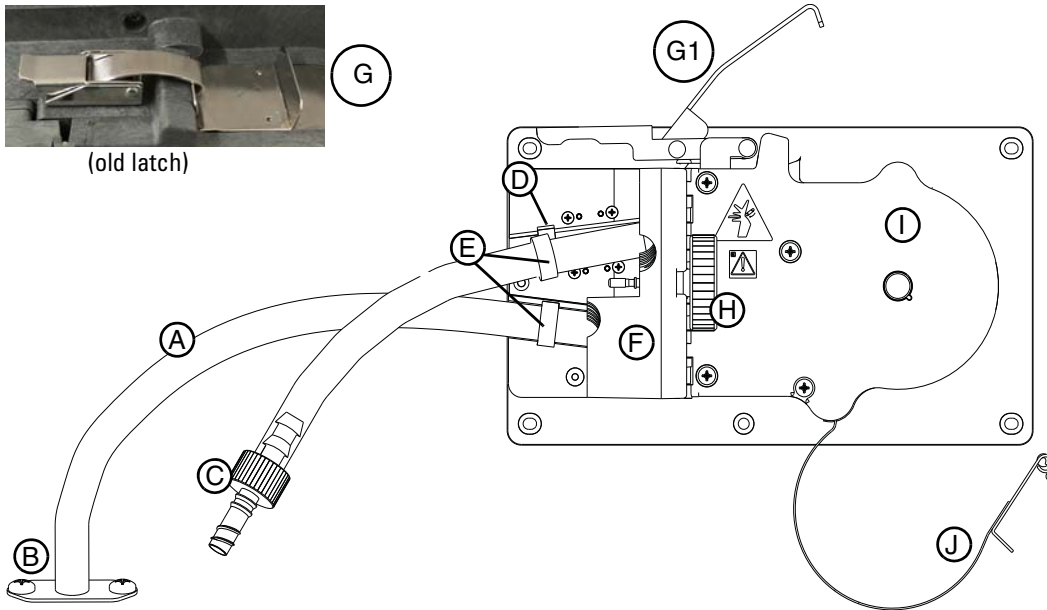


Figure 1: 5800 Pump

A.	Pump Tube	F.	Liquid Detector Cover
B.	Bulkhead Fitting	G.	Latch (old)
C.	Tubing Coupler	G1	Latch (new)
D.	Alignment Notches	H.	Knob
E.	Alignment Collars	I.	Pump Housing
		J.	Pump Housing Band

Tools

- #2 Phillips screwdriver

Pump Removal

1. Remove the latch (G or G1).
- For G1 (new latch), place the pump paddle in a vertical position to allow clearance to remove the two latch screws.

Remove Pump Tube

1. Disconnect power from the sampler.
2. Loosen the Liquid Detector Cover (F) by unscrewing the large black knob (H).
3. Unlatch the Pump Housing Band (J).
4. Pull the tube (A) away from the bulkhead fitting (B) and disconnect the tubing coupler and suction line.
5. Pull the tube out through the pump.

Pump Module Removal

1. Place the pump paddle in a vertical position to allow access to the 2 self tapping pump latch screws.
1. Remove the latch G or G1 and discard the screws.
2. Beginning with the three bottom screws, remove the six mounting screws (see Figure 2), holding

the module in place to avoid pull or strain on the wires.

3. Pull the module away from the refrigerator body and disconnect the four wiring connectors.

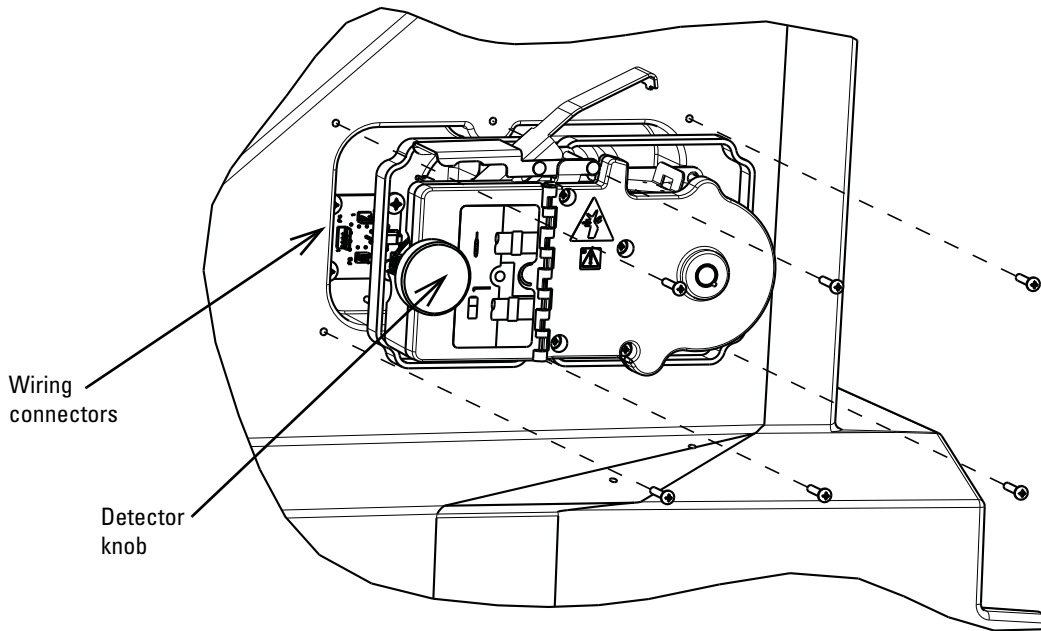


Figure 2: Pump module removal and replacement

Pump Module Replacement

Clean the pump module mounting surface on the refrigerator body. This will help ensure that the gasket on the new module will seal the enclosure.

Note
Do not install the latch on the new pump until the pump has been attached to the side of the refrigerator

1. Attach the four wiring connectors from the new pump module to the pump interface board:
 - a. Yellow → P3 (pump band sensor)
 - b. Red and black twisted → P10 (pump motor)
 - c. Red and black → P8 (detector)
 - d. Red, black, white, green → P4 (optical sensor)

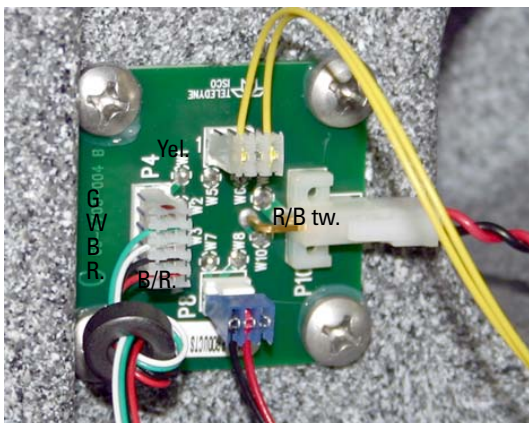
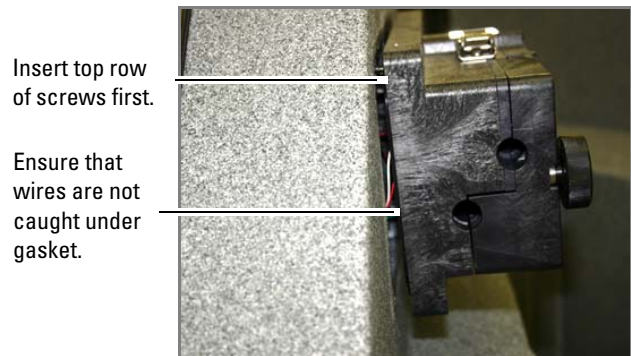


Figure 3: Pump board connections

2. Align the module over the mounting holes and secure it with the mounting screws, inserting the top three first. After all six screws are inserted, torque the screws to 1.8 to 2.0 Nm (16 to 18 in-lbs).

CAUTION

Ensure that all wires are tucked into the pump module compartment and not caught between the gasket and mounting surface.



Insert top row of screws first.

Ensure that wires are not caught under gasket.

Figure 4: Installing the pump module

3. Install the latch.
 - a. For G1, place the pump paddle in a vertical position to allow clearance to install the two new latch screws. Do not overtighten.
4. Install the pump tube.
 - a. Loosen the Liquid Detector Cover (F) by unscrewing the large black knob (H).
 - b. Unlatch the Pump Housing Band (J).

- c. Thread the pump tube through the pump.
Note that the short end (inlet) should extend from the top opening.

☑ Note

When the hinged portion of the pump module is opened, another large screw is revealed (Figure 5). This is a sealed port used solely for factory testing. Do not loosen or remove this screw.

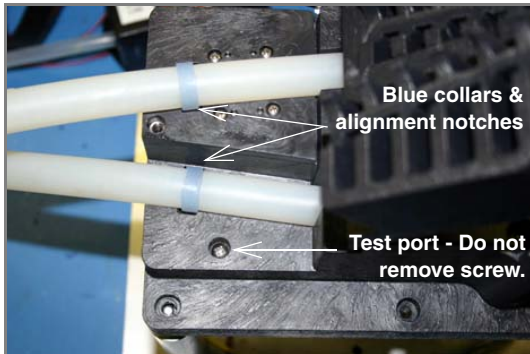


Figure 5: Factory test port screw (do not remove)

- d. Align the blue collars with the alignment notches.
 - e. Close the liquid detector cover and secure it tightly with the knob.
5. Reconnect power and perform all diagnostic tests (refer to the 5800 Service Guide, Section 5.1).

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