

6712FR Compressor Capacitor/Relay Kit



60-9002-126

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Instruction Sheet

Overview

The refrigerator compressor relay and capacitor are components of the Teledyne ISCO 6712FR refrigerated sampler. These instructions cover the removal and replacement.

Before attempting to remove and replace a module, observe the following precautions:

WARNING

Removing a module exposes you to electrical and mechanical hazards. Always disconnect the AC power cord before attempting to remove any module. Only trained service personnel may remove or replace these modules.

CAUTION

Removing the sealed modules will expose the internal components. Wet or corrosive atmospheres may attack the exposed refrigerator components. Always service modules in a dry, corrosion-free environment.

CAUTION

Modules contain circuit boards and sensitive electronics that can be damaged by a discharge of static electricity. Avoid touching the internal components. Only handle the module by the edges or exterior surfaces.

CAUTION

Electrical connectors and wires can be damaged if improperly handled. Electrical connectors must only be handled by the connector body. Never grasp the wires or use tools to disconnect a connector. Never allow a module to hang by its wiring.

CAUTION



Earth ground bonding conductor. Do not remove or disconnect. If this conductor must be disconnected to remove a module, it must be reconnected when installing the replacement module.

Required Parts and Tools

- Replacement cap & relay kit:
 - 60-5804-198; 115 VAC serial numbers 219K02629 or newer.
 - 60-5804-199; 230 VAC serial numbers 220C00686 or newer.
 - 60-4707-002; 115 VAC serial numbers 218J00423 to 219K02628.
 - 60-4707-004; 230 VAC serial numbers 216M00047 to 220C00685.

If your serial number is not in this range contact Teledyne ISCO Product Support.

- #2 & #3 Phillips screwdrivers
- $\frac{5}{16}$ " socket wrench

6712FR Models - Replacing the Capacitor/Relay

1. Unplug the line cord to remove AC power.
2. Remove the grille and the filter from the front of the refrigerator, beneath the door. The grille is held in place by six thumbscrews.

A: 6712FR Models - Replacing the One-piece Capacitor/Relay

1. For serial number 219K02629 (115 VAC) or 220C00686 (230 VAC) or newer, remove the screw and lock washer holding the green/yellow wire on the compressor.
2. Remove the cover from the compressor terminal box. If needed, use a screwdriver to release the locking tab.

3. Unplug the black connector with the orange and white wires from the bottom 2 pins on the compressor. *Figure 3.*
4. Disconnect the blue wire from the capacitor/relay assembly from the white wire from the heater. *Figure 3.*
5. Disconnect the black wire from the capacitor/relay assembly from the ribbed black fan wire. Remove the capacitor/relay assembly. *Figure 3.*
6. Remove and discard the metal adapter plate on the new assembly by removing the included hardware. *Figure 1.*

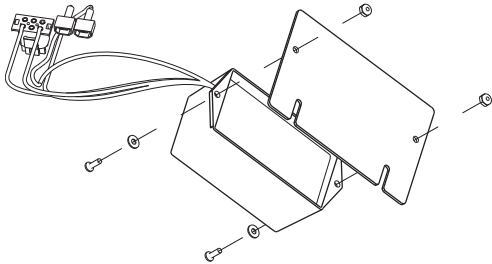


Figure 1: Remove the adapter plate

7. Remove the old assembly with a 5/16-inch socket wrench and a #2 Phillips screwdriver. Mount the new assembly through the same holes which held the old assembly. *Figure 2.*

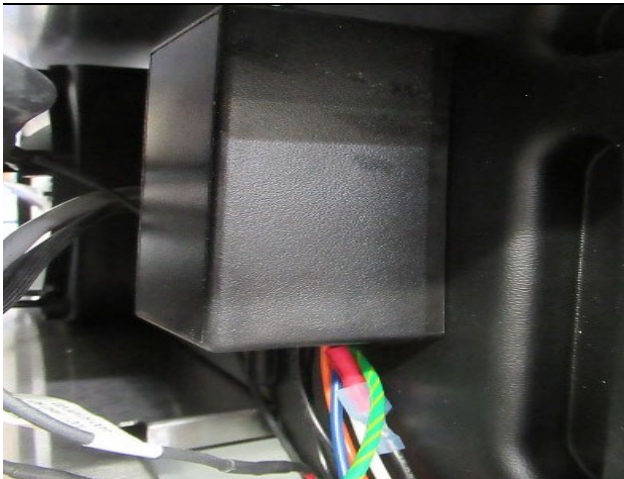


Figure 2: Mount the new assembly

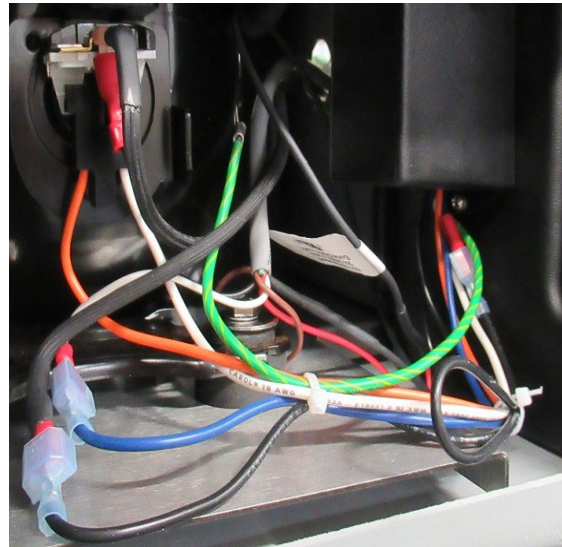


Figure 3: 115 VAC wiring connections

8. Plug the black connector from the new assembly onto the compressor pins below the overload. Be sure the black connector is oriented so the orange wire is on the left side. *Figure 3.*
9. Connect the loose black wire from the capacitor/relay assembly to the ribbed black fan wire. *Figure 3.*
10. Connect the blue wire from the capacitor/relay assembly to the white wire from the heater. *Figure 3.*
11. Route all wire connections inside the compressor terminal box and replace the cover.
12. For serial number 219K02629 (115 VAC) or 220C00685 (230 VAC) or newer, reinstall the green/yellow wire onto the compressor using the screw and lock washer.
13. Replace the filter in the front of the refrigerator. Reinstall the grille using the six thumbscrews. Make sure the warning symbol on the grill faces out.
14. Reconnect the refrigerator to AC power. After at least 10 minutes, check the temperature of the evaporator plate with your hand. If the plate is cold, the new capacitor/relay assembly is working correctly.

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