

INSTALLATION INSTRUCTIONS

for 482493 DEFROST TIMER KIT



⚠ WARNING

Electrical Shock Hazard

Disconnect power before servicing.
Replace all panels before operating.
Failure to do so can result in death or electrical shock.

Unplug refrigerator or disconnect power.

Before installing timer, check wiring diagram or Tech Sheet in product to determine type of timer application.

Continuous run application

Installation instructions for replacing a 12-hour or 24-hour continuous run timer.

If wiring schematic looks like this, you have a continuous run timer application. See Figure 1.

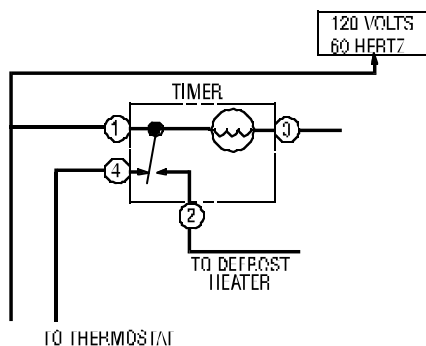


Figure 1

NOTE: The wiring harness coming into the timer has a white wire; this will be a continuous run hookup. See Procedure 1.

"Version 1" Cumulative compressor run application

Installation instructions for replacing 8-hour or 10-hour cumulative compressor run timer.

If wiring schematic looks like this, you have a Version 1 cumulative compressor run timer application. See Figure 2.

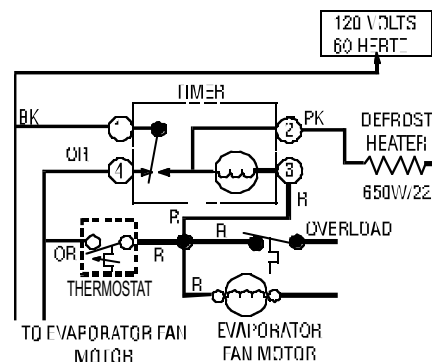


Figure 2

NOTE: The wiring harness coming into the timer has a red wire; this will be a cumulative run hookup. See Procedure 2.

"Version 2" Cumulative compressor run application

If wiring schematic looks like this, you have a Version 2 cumulative compressor run timer application. See Figure 3.

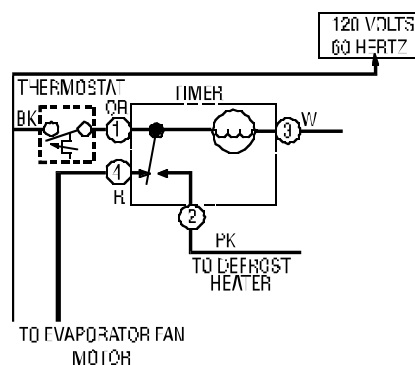


Figure 3

(continued)

Make sure timer is not in defrost cycle. Unit will not run in this cycle.

NOTE: 10-hour timer must be replaced with 8-hour timer. See Procedure 3.

This timer substitutes for all 24-, 12-, 10-, or 8-hour timers. Therefore, these instructions must be followed closely to assure proper installation. The timer in this kit has a loose wire lead that must be connected to a terminal on the timer prior to installing on a unit. Follow the instructions below to install the wire on the correct terminal.

IMPORTANT: The replacement timer terminals are identified by numbers. Always connect cabinet leads to the same numbered terminal as defective timer. Check wiring diagram label on the back of the cabinet or the Tech Sheet found in the unit compartment.

Procedure 1

1. Remove plastic insulator from loose black timer motor lead. See Figure 4.

2. Connect loose wire to terminal #1 . (Use numbers only. Disregard any letter designation on timer cover.) See Figure 5.

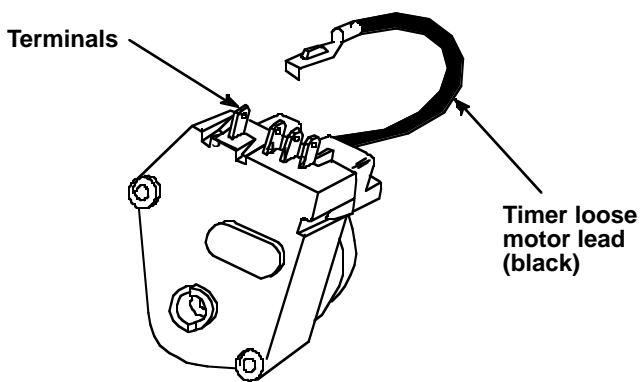


Figure 4

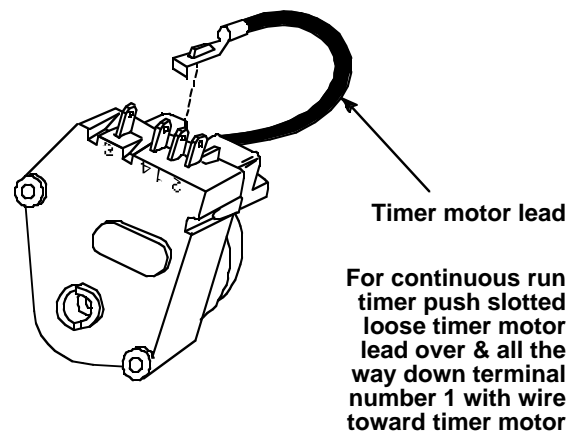


Figure 5

NOTE: When wired correctly to a refrigerator's continuous run defrost clock, replacement timer will provide defrost every 8 hours.

(continued)

Procedure 2

1. Remove plastic insulator from loose black timer motor lead. See Figure 6.

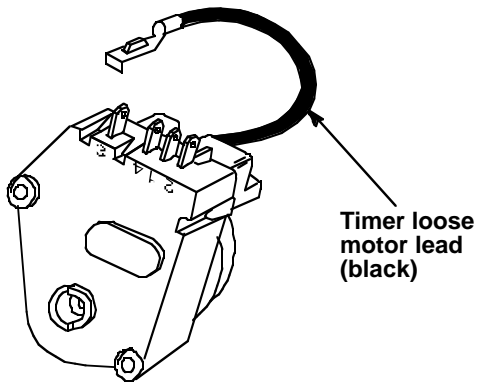


Figure 6

2. Connect loose wire to terminal #2. (Use numbers only. Disregard any letter description on timer cover.) See Figure 7.

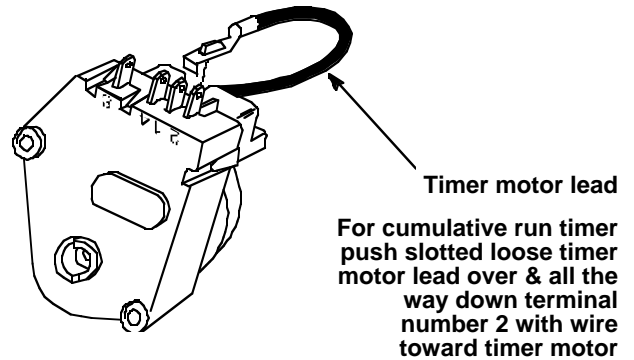


Figure 7

NOTE: When wired correctly to a refrigerator's accumulated run clock, replacement timer will provide defrost every 8 hours of compressor run time after the bimetal closes.

- 1 – Black Wire
- 2 – Pink Wire
- 3 – Red Wire
- 4 – Orange Wire

Procedure 3

1. Remove plastic insulator from loose black timer motor lead.

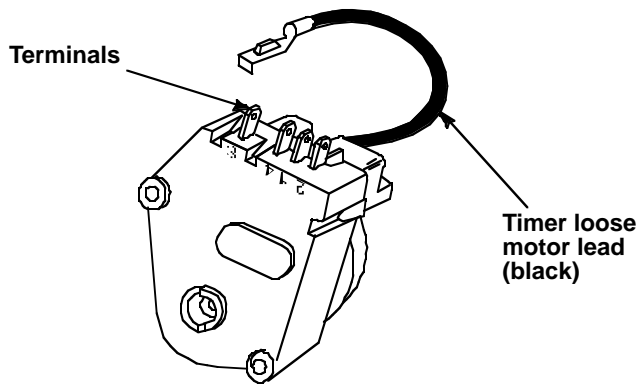


Figure 8

2. Connect loose wire to terminal #1. (Use numbers only. Disregard any letter description on timer cover.) See Figure 9.

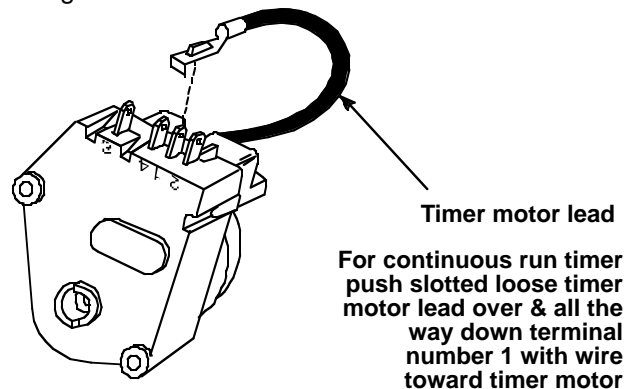


Figure 9

NOTE: When wired correctly to a refrigerator's accumulated run clock, replacement timer will provide defrost every 8 hours of compressor run time after the bimetal closes.

- 1 – Orange Wire
- 2 – Pink Wire
- 3 – White Wire
- 4 – Red Wire

(continued)

The following instructions are general in nature and can apply to any application.

1. If timer is mounted in the fresh food compartment, be sure wires are routed in a manner that prevents them from being jammed between the timer, mounting case and thermostat.
2. If timer is mounted in the unit compartment on old models, the replacement timer requires new fastening parts and terminal separation for electrical safety. Kit includes a terminal multiplier for use on some models. The following information covers detailed installation and wiring procedures.

A. Electrical terminal separation

Replacement timer terminals are straight for connection to a multiple lead wiring plug. Manually bend terminals 2, 3, and 4 with pliers. See Figure 10.

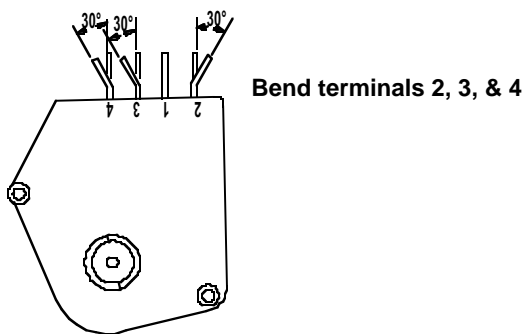


Figure 10

B. Insulate metal cover

Place a strip of plastic electrical tape inside the metal cover next to the terminal location to prevent accidental terminal contact with cover. See Figure 11.

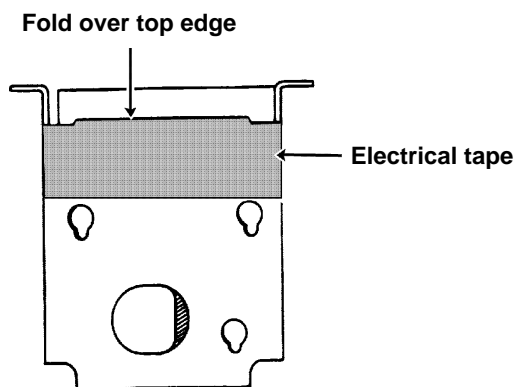


Figure 11

C. Connect cabinet wires to timer terminals

The replacement timer terminals are identified by numbers. Always connect cabinet leads to the same numbered terminal as defective timer. Check wiring diagram label on the back of the cabinet or the Tech Sheet found in the unit compartment.

Some models require two (2) cabinet lead connectors for timer terminal 3. Attach terminal multiplier and reform. Adjust so connector does not touch cabinet or other metal parts. See Figure 12.

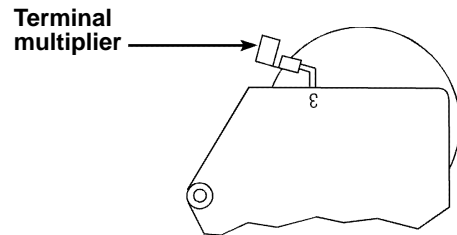


Figure 12

D. Modify metal cover for knob adjustment

To install in 1960, 61 or 62 models with large, box- type cover, see Figure 13.

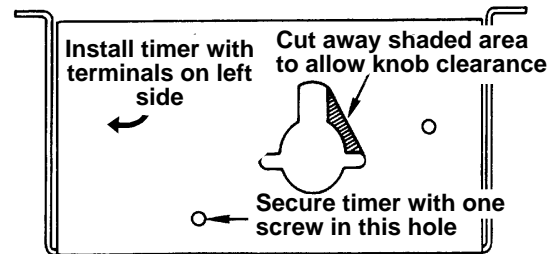


Figure 13

To install in 1963 models where the timer (with small diameter knob) was mounted vertically, see Figure 14.

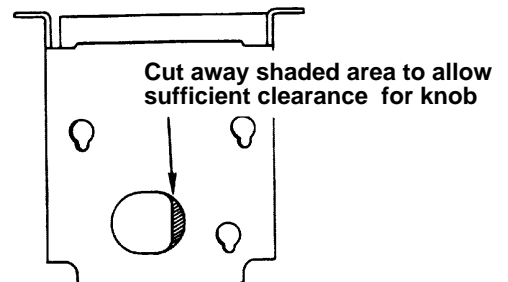


Figure 14

(continued)

When installing in 1962 models with large, box-type cover of this style, see Figure 15. Also, note that the replacement does not have a dummy terminal L and you must use Part No. 75614 line connector to connect these two (2) leads. See Figure 15.

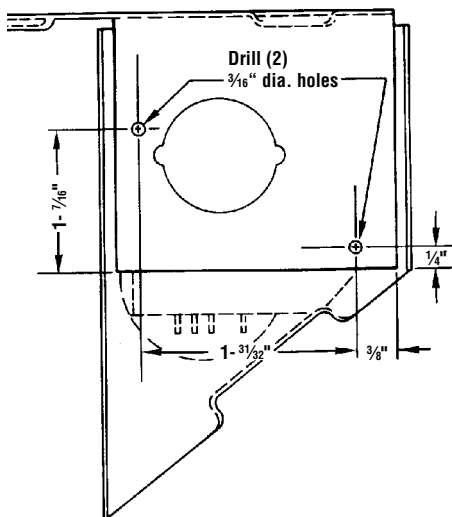


Figure 15

E. Fasten timer to metal cover

Use nuts and bolts supplied in kit to fasten timer to metal cover. Mounting screws must be located in bottom of cover holes before tightening nuts. See Figure 16.

NOTE: On 1960, 61 and 62 models with large box, install timer as illustrated in Figure 13.

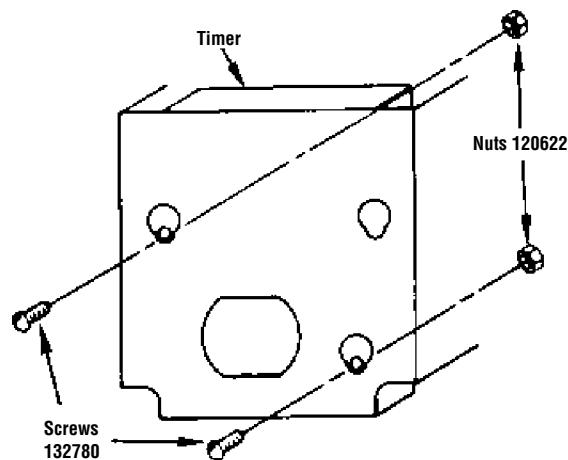


Figure 16

Continuous run application Problems & Effects of Miswiring This Universal Timer

Replacement timer applied to a refrigerator wired for continuous run defrost clock incorrectly wired will not advance clock unless manually placed in defrost. Clock will only run during defrost cycle.

An incorrectly wired continuous run timer application would have the loose wire connected to terminal #2.

“Version 1” Cumulative compressor run application

Replacement timer applied to a refrigerator wired for accumulated run time (Version 1) wired correctly will provide defrost and will give a normal defrost once initiated. Run time will only accumulate when the cabinet thermostat is open (satisfied). Diagnosis can be difficult and symptoms tend to cause misdiagnosis. When refrigerator heat load is heavy, it could take up to a week to initiate a defrost, creating a heavily frosted evaporator and complaints of poor refrigeration. The problem may become severe enough to cause frost back to the compressor, creating complaints of noise, overloading and possible compressor damage.

A technician may even diagnose the frosted suction line as an overcharge. Heavy frost accumulation at the evaporator may also be diagnosed as vapor leaks at the cabinet, defective bimetal, bad timer, failed defrost heater, etc.

Under light load conditions the defrost system may appear to be normal, depending on the amount of time the cabinet thermostat is open (satisfied).

An incorrectly wired cumulative run application would have the loose wire connected to terminal #1.

(continued)

“Version 2” Cumulative compressor run application

Replacement timer applied to a refrigerator wired for accumulated run time (Version 2) wired incorrectly will not provide defrost but will give a normal defrost once initiated manually. Run time will not accumulate creating a heavily frosted evaporator and complaints of poor refrigeration. The problem may become severe enough to cause frost back to the compressor, creating complaints of noise, overloading, and possible compressor damage.

A technician may even diagnose the frosted suction line as an overcharge. Heavy frost accumulation at the evaporator may also be diagnosed as vapor leaks at the cabinet, defective bimetal, bad timer, failed defrost heater, etc.

Under light load conditions the defrost system may appear to be normal, depending on the amount of time the cabinet thermostat is open (satisfied).

An incorrectly wired cumulative run application (Version 2) would have the loose wire connected to terminal #2.

Refrigerators with front-mounted controls

For refrigerators with front-mounted controls see Figure 17.

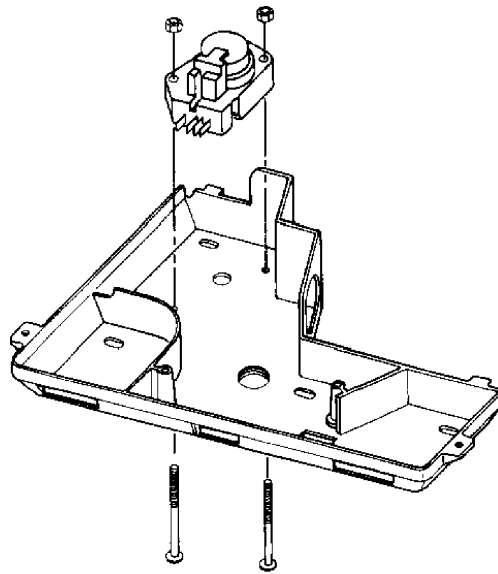


Figure 17

Plug in refrigerator or reconnect power.