



3313470.000 COOLING UNIT KIT

REPLACEMENT INSTRUCTIONS

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WARNING

This manual must be read and understood before installation, adjustment, service, or maintenance is performed. This unit must be installed by a qualified service technician. Modification of this product can be extremely hazardous and could result in personal injury or property damage.

AVERTISSEMENT

Lire et comprendre ce manuel avant de procéder à l'installation, à des réglages, de l'entretien ou des réparations. L'installation de cet appareil doit être effectuée par un réparateur qualifié. Toute modification de cet appareil peut être extrêmement dangereuse et entraîner des blessures ou dommages matériels.

SERVICE INSTRUCTIONS

3313470.000
COOLING UNIT KIT

SAFETY INSTRUCTIONS

This manual has safety information and instructions to help users eliminate or reduce the risk of accidents and injuries.

RECOGNIZE SAFETY INFORMATION



This is the safety-alert symbol. When you see this symbol in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating instructions.

UNDERSTAND SIGNAL WORDS

A signal word, **WARNING** OR **CAUTION** is used with the safety-alert symbol. They give the level of risk for potential injury.

⚠ WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION used without the safety alert symbol indicates, a potentially hazardous situation which, if not avoided, may result in property damage.

Read and follow all safety information and instructions.

GENERAL INSTRUCTIONS

⚠ WARNING

These instructions must be read and understood before installation of this kit. This kit must be installed by a Dometic, LLC Service Center or a qualified service technician. Modification of this product can be extremely hazardous and could result in personal injury or property damage.

All field wiring modifications should be made in compliance with the latest edition of ANSI/NFPA70 NEC and ANSI/A119.2 for recreational vehicles.

These instructions apply to:

| DM2652 Refrigerator Product Numbers | DM2662 Refrigerator Product Numbers |
|--|--|
| 958525542 | 958527822 |
| 958525546 | 958527823 |
| 958527787 | 958527824 |
| 958527788 | 958527825 |
| 958527791 | 958528012 |
| 958527792 | 958528013 |
| 958527980 | 958528014 |
| 958527981 | 958528015 |
| 958528010 | |
| 958528011 | |

The cooling unit replacement requires the removal of the refrigerator from its alcove.

Important: Keep these instructions with refrigerator owner's manual for future reference.

This kit consists of:

- (1) Installation Instructions
- (1) Thermal Mastic Instruction Sheet
- (1) Cooling Unit
- (1) Thermodisc
- (1) Fan Bracket
- (1) Retainer, Solenoid Valve (Bracket)
- (1) Cover, Heating Element (Large)
- (4) Screws, Thermodisc / Fan Bracket
- (4) Screws, Fan
- (2) Screws, Solenoid Valve Retainer (Bracket)
- (2) Flag Terminals

⚠ CAUTION

Wear protective gloves while handling or working near sheet metal components to avoid personal injury.

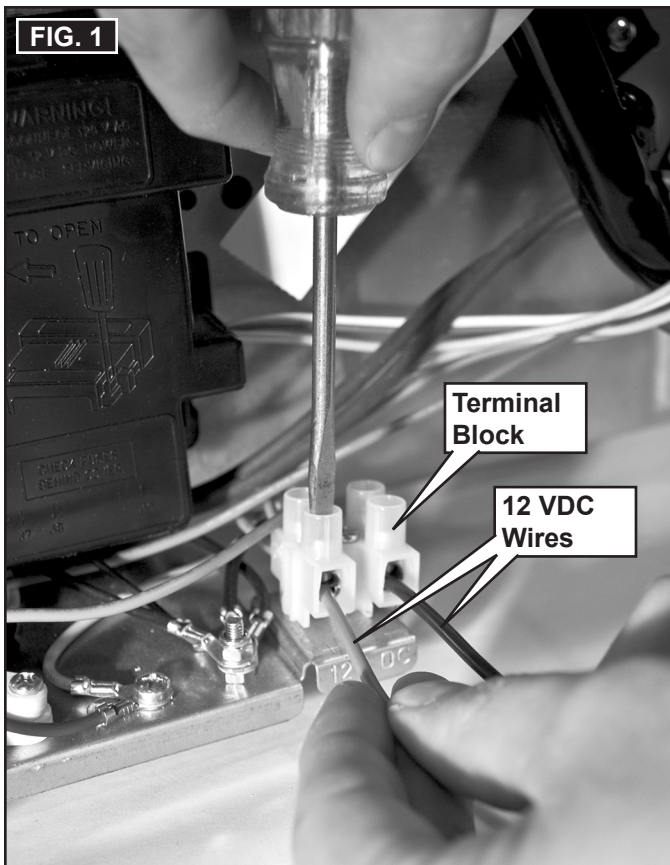
PROCEDURE

⚠ WARNING

FIRE OR EXPLOSION HAZARD. Turn propane OFF at tank. Failure to follow this instruction may create a fire or explosion hazard. Disconnect all power supplies. Failure to follow this instruction may create a shock hazard.

A. Removal Of Refrigerator From Alcove

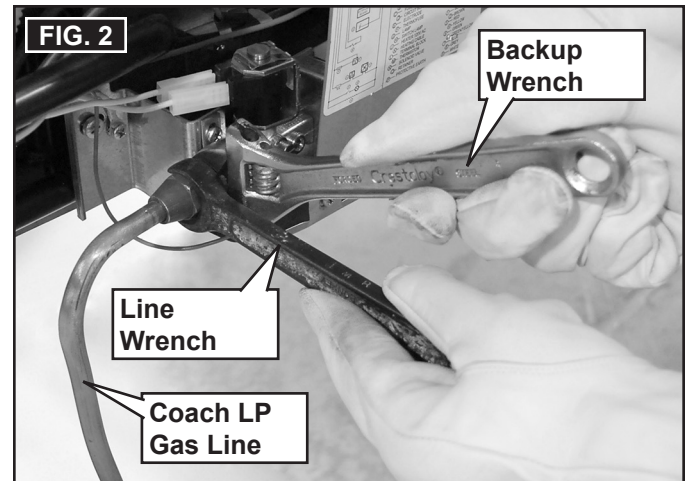
1. Unplug refrigerator from 120 VAC receptacle.
2. Disconnect 12 VDC wires from terminal block (if equipped), and tape or cap ends of wiring. See FIG. 1.



3. Make sure propane is OFF at tank, then remove coach LP gas line from LP gas cock on refrigerator and cap coach LP gas line. See FIG. 2.

CAUTION

Use backup wrench to avoid damaging equipment.



4. For models equipped with **ice maker**: Turn water supply to refrigerator OFF, then disconnect coach's water line from refrigerator's water solenoid and cap ends.
5. Remove refrigerator from alcove.
6. Remove freezer shelf and upper cabinet shelf from refrigerator compartments.

B. Identification Of Correct Cooling Unit

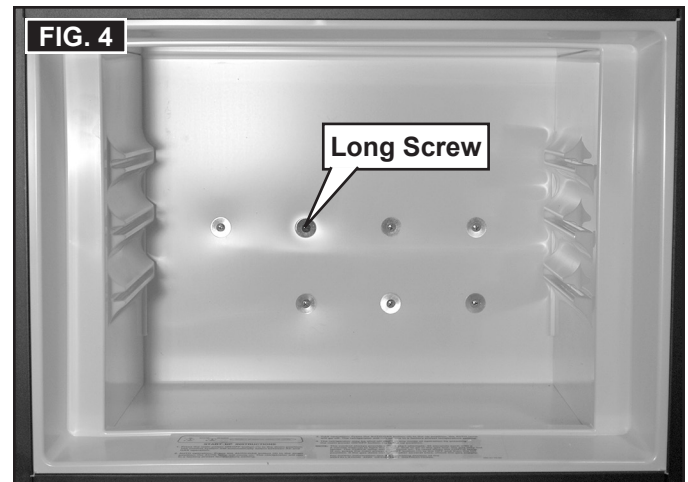
1. Check the refrigerator's installed cooling unit to make sure it matches the "Type A" cooling unit (pictured) before proceeding with replacement.
 - a. The "Type A" cooling unit will NOT have the dimpled piping along the top, and the coil will be more centered on the refrigerator. Use this cooling unit kit to replace a "Type A" cooling unit. See FIG. 3.
 - b. The "Type B" cooling unit will have dimpled piping along the top, and the coil will align with the left side of the refrigerator. Do NOT use this cooling unit kit to replace a "Type B" cooling unit. See FIG. 3.

Note: Although this kit contains a "Type B" cooling unit, it also contains parts and instructions that are unnecessary for replacing a "Type B" cooling unit.

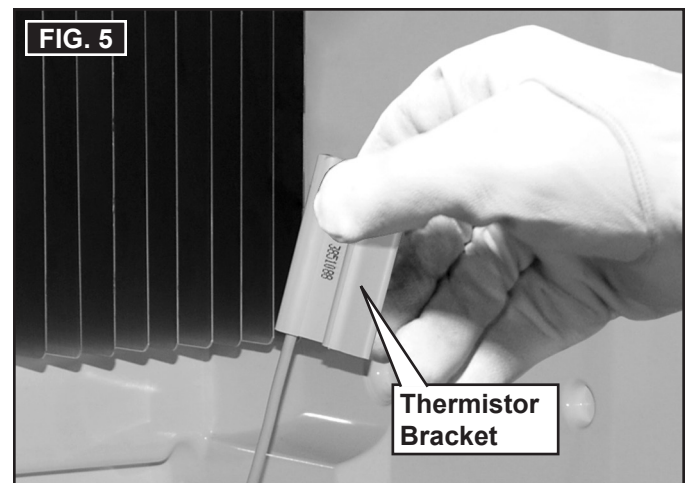


C. Removal Of "Type A" Cooling Unit

1. Remove seven screws with washers from inside the freezer compartment, and save for reinstallation. Note location of long screw. See FIG. 4.



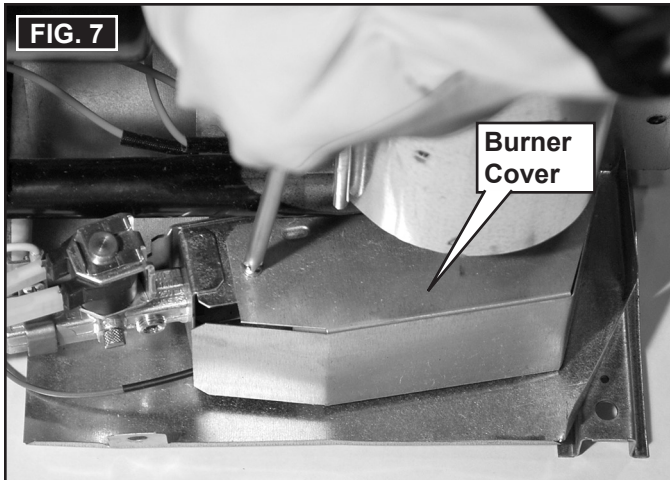
2. Remove thermistor bracket (with thermistor attached) from the cooling fins inside the food compartment, and allow thermistor bracket to hang freely. See FIG. 5.



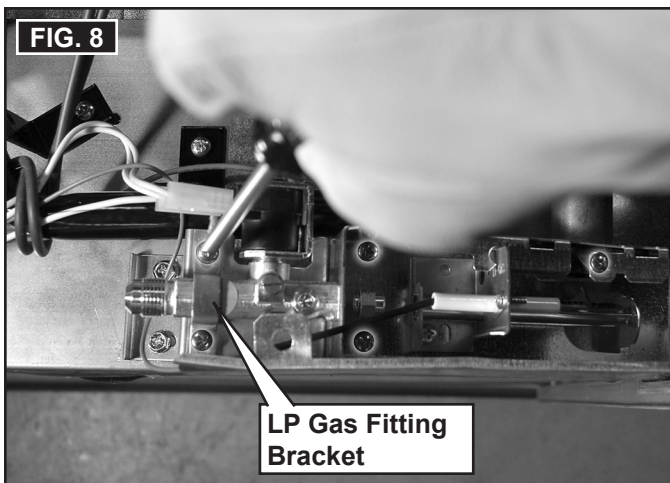
3. Protect refrigerator doors and handles from abrasion, then lay the refrigerator face down.
4. Remove cover plate (burner shield) assembly with its three mounting screws, and save for reinstallation. See FIG. 6.



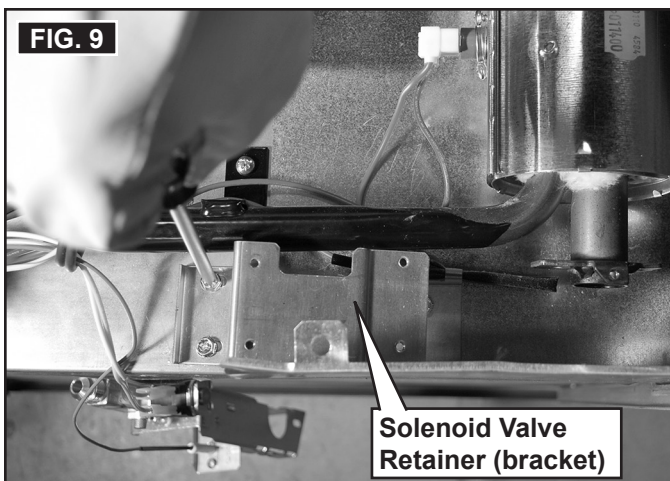
5. Remove burner cover with its mounting screw, and save for reinstallation. See FIG. 7.



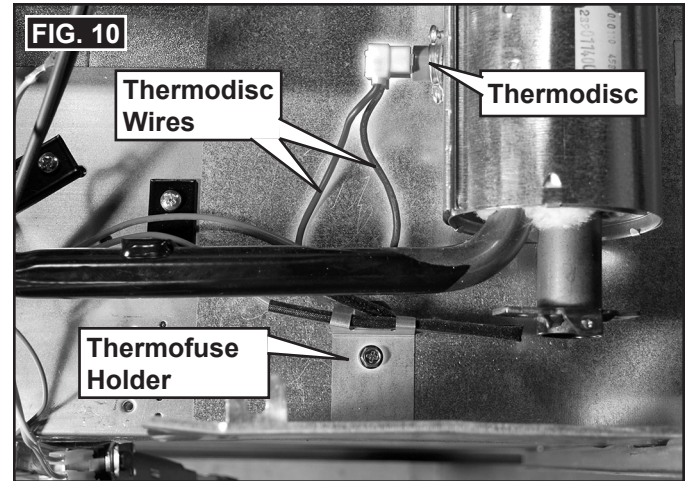
6. Remove LP gas fitting bracket with its two mounting screws, and save for reinstallation. See FIG. 8.
7. Remove burner housing with solenoid valve and complete burner (as assembly) with its three mounting screws, and allow assembly to hang freely out of the way. Save mounting screws for reinstallation. See FIG. 8.



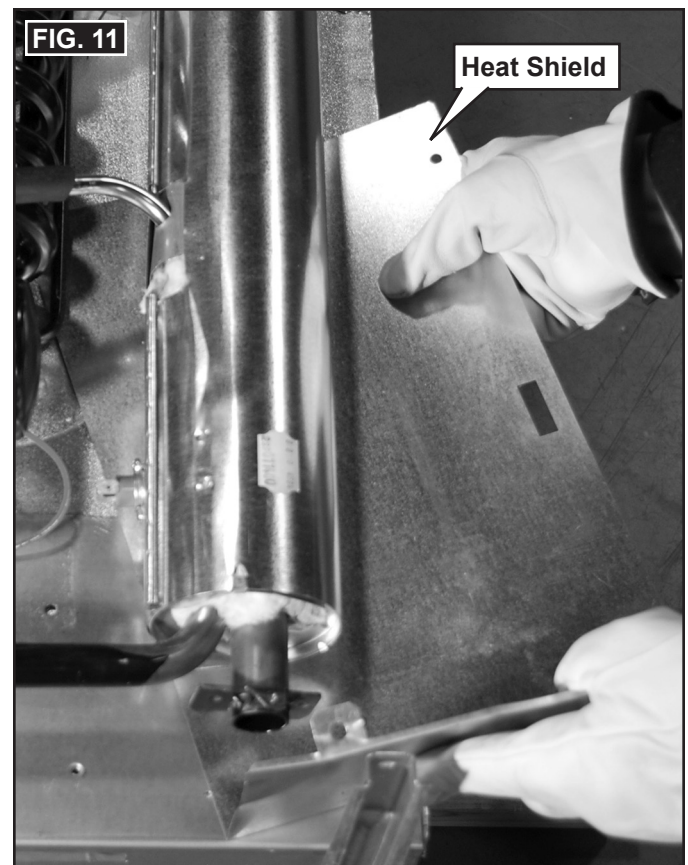
8. Remove solenoid valve retainer (bracket) with its two mounting screws, and discard. See FIG. 9.



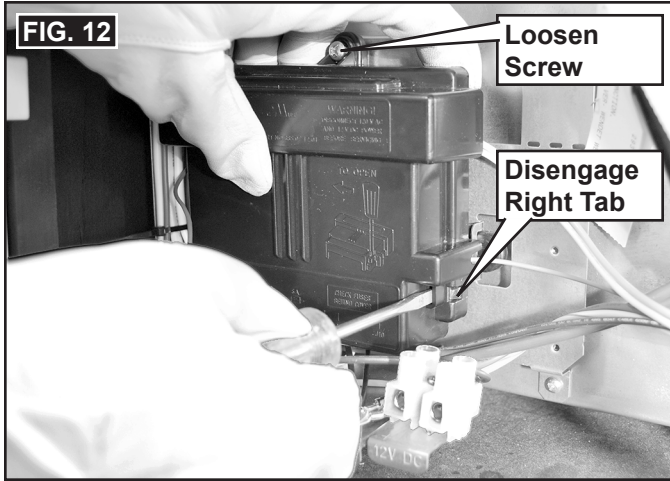
9. Remove wires from thermodisc. See FIG. 10.
10. Remove thermofuse holder with its mounting screw, and save for reinstallation. See FIG. 10.



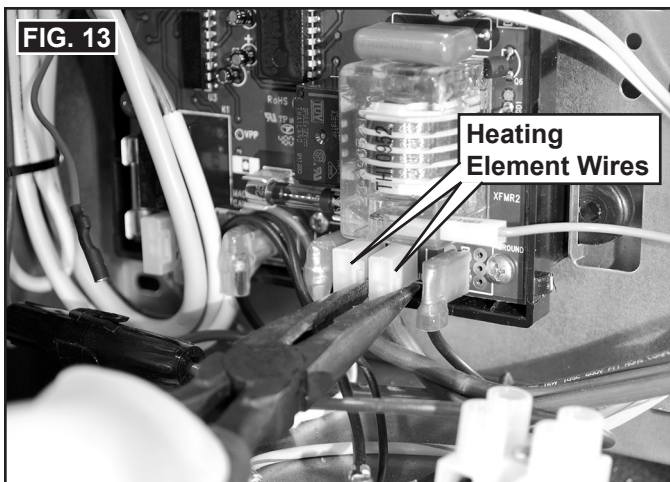
11. Remove all zip-ties securing wiring harnesses to cooling unit and power module's bracket. Also remove zip-ties securing drain hose and heating element to cooling unit.
12. Remove heat shield and save for reinstallation. See FIG. 11.



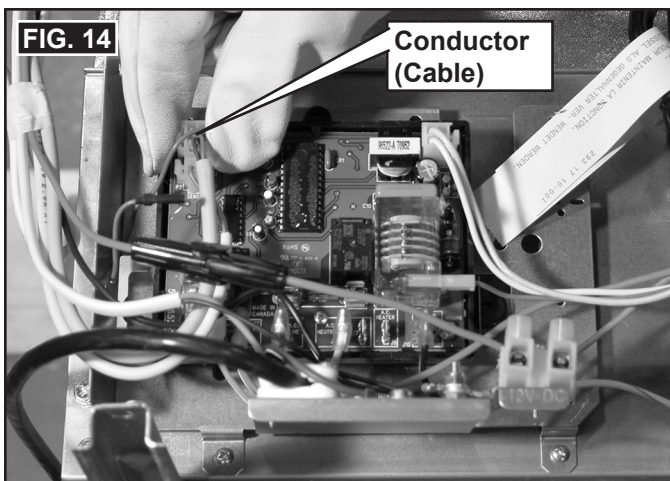
13. Loosen screw securing power module's cover. Disengage right tab by inserting screwdriver into pry hole, and lift off cover. It may be necessary to swing cover to the left to disengage left tab. See FIG. 12.



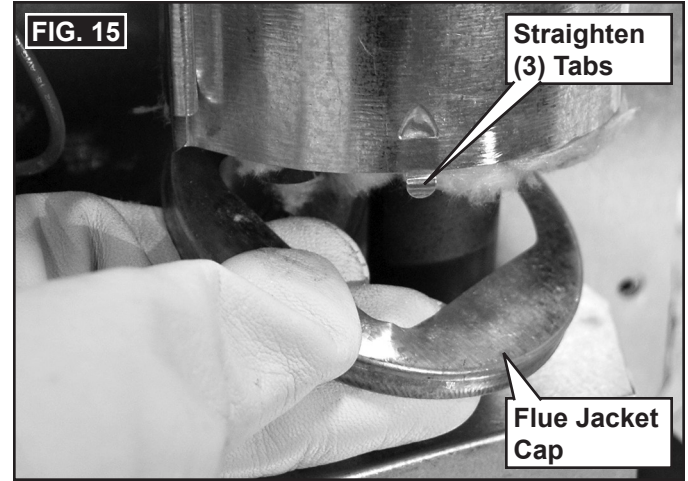
14. Disconnect heating element wires from J7 and J8 terminals on power module's circuit board, and unwrap from lower cooling unit pipe. See FIG. 13.



15. Disconnect conductor (cable) from P1 terminal on power module's circuit board (top left plug). See FIG. 14.



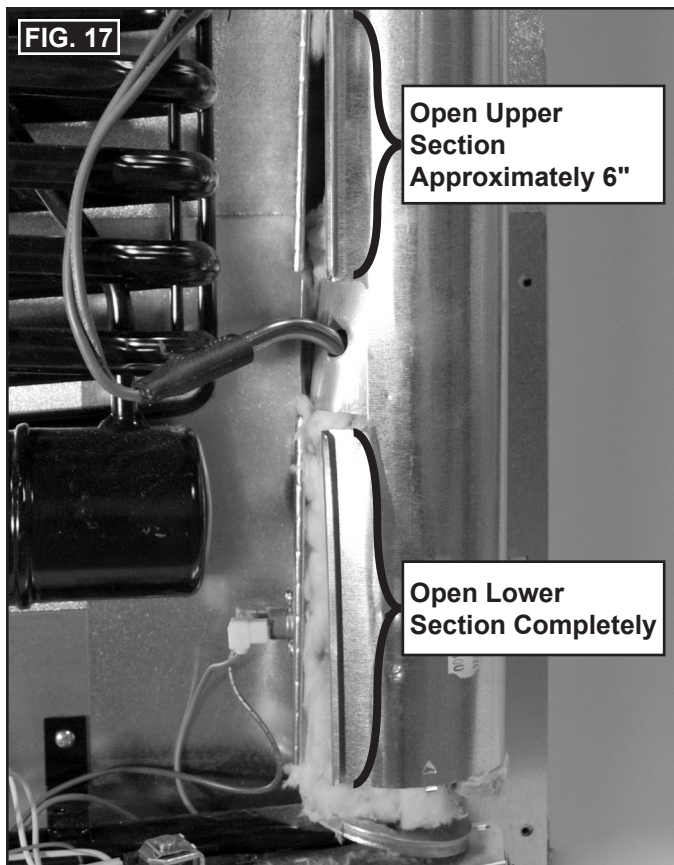
16. Lift flue jacket upwards approximately 2".
17. Locate and straighten the three tabs holding the bottom flue jacket cap. Remove bottom flue jacket cap. See FIG. 15.



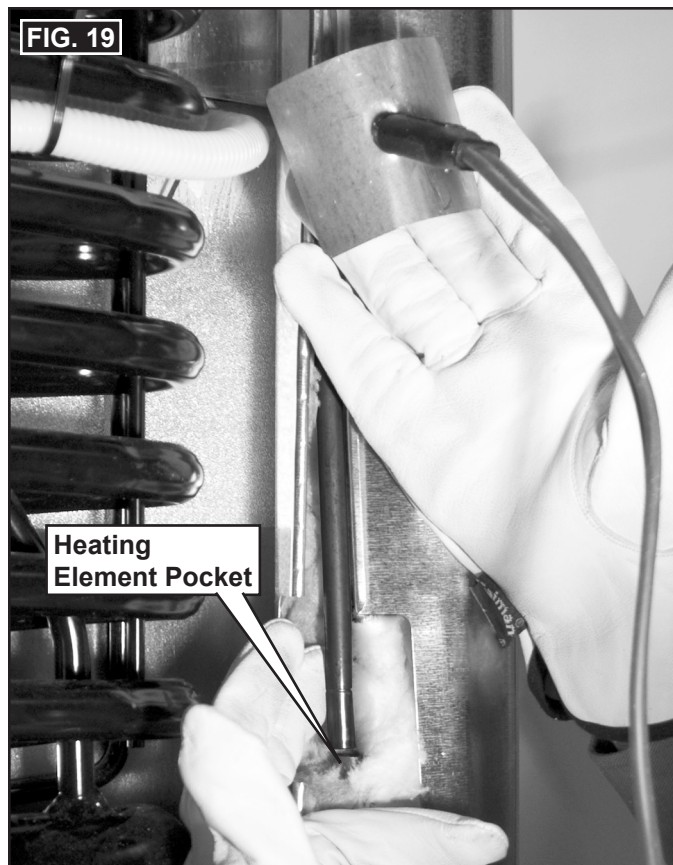
18. Starting at the bottom, disengage flue jacket seam by grasping the flue jacket and squeezing it together. See FIG. 16.



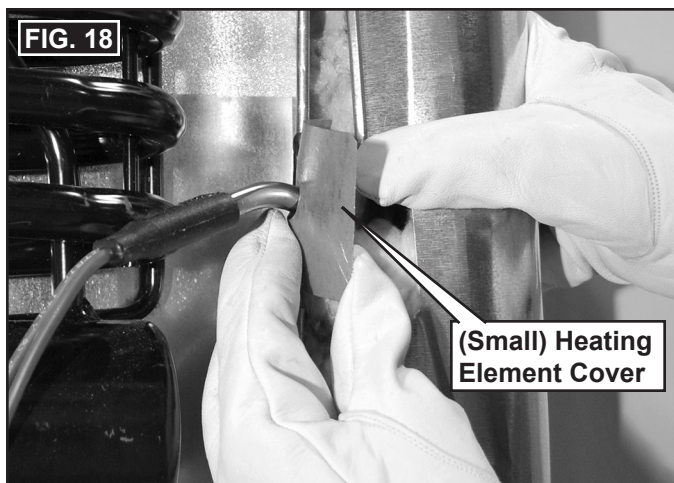
19. Continue to separate seam approximately 6" above heating element. See FIG. 17.



21. Remove heating element with (small) heating element cover by lifting up through the flue jacket's separated seam until it clears heating element pocket. Save heating element and heating element cover for reinstallation. See FIG. 19.



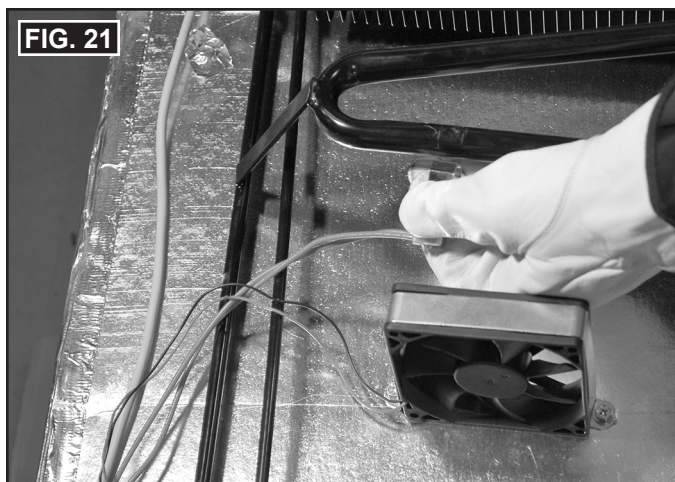
20. Pull (small) heating element cover through flue jacket's side opening until it clears the seam. Allow the heating element cover to hang freely on the heating element. See FIG. 18.



22. Remove flue baffle, and save for reinstallation. See FIG. 20.

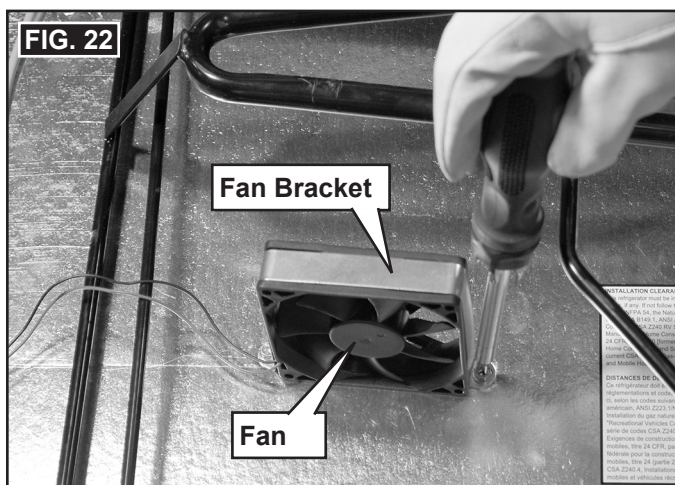


23. Remove OLD thermodisc from cooling unit. Then remove OLD thermodisc from wires and discard. See FIG. 21.

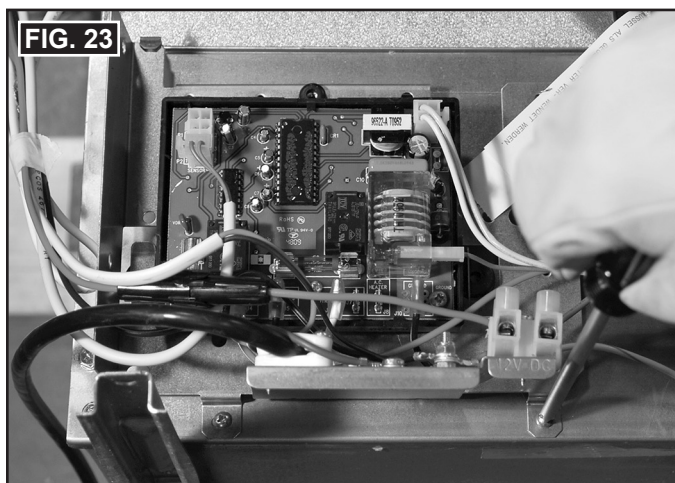


24. Remove fan from back of cabinet, and allow to hang freely out of the way. Discard fan bracket with its two mounting screws. See FIG. 22.

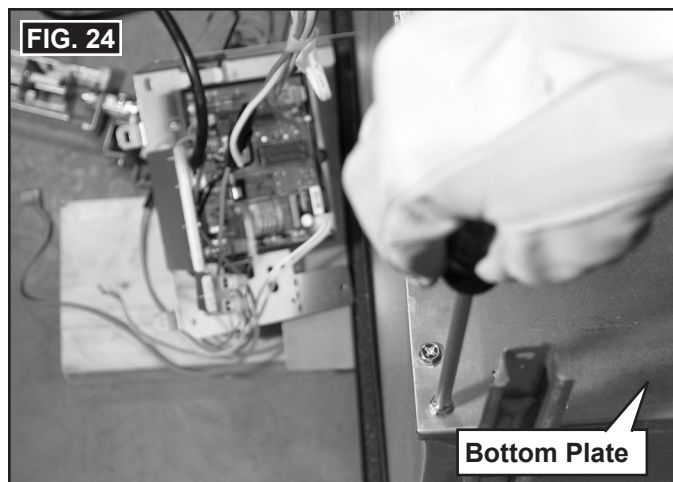
Note: Some refrigerators may have two fans. If so, follow this step for both fans.



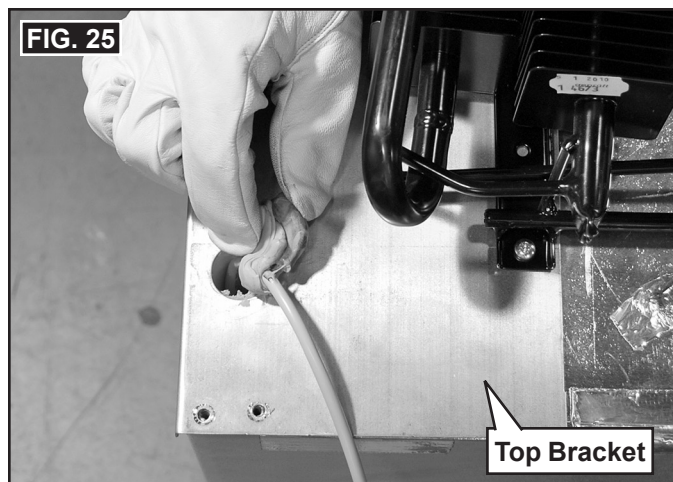
25. Remove lower power module mounting plate, with circuit board attached, and allow assembly to hang freely out of the way. Save the two mounting screws for reinstallation. See FIG. 23.



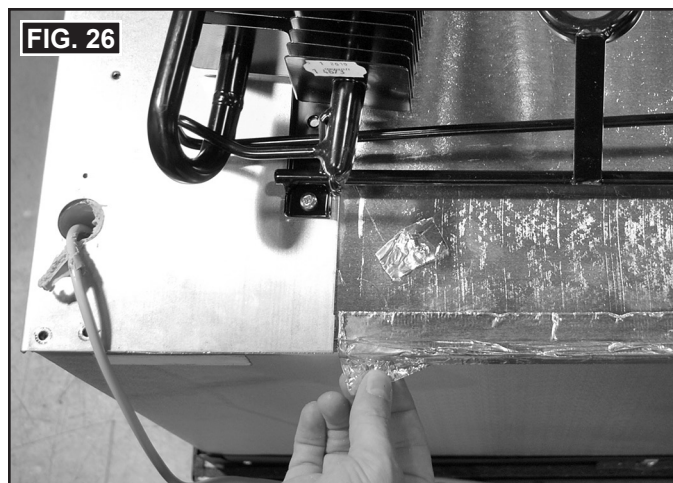
26. Remove four frame screws from top bracket and remaining two screws from bottom plate. Save screws for reinstallation. See FIG. 24.



27. Remove insulating putty around the conductor (cable) going through the top bracket. See FIG. 25.



28. Peel aluminum tape off completely from both sides of refrigerator frame around the frame block. See FIG. 26.

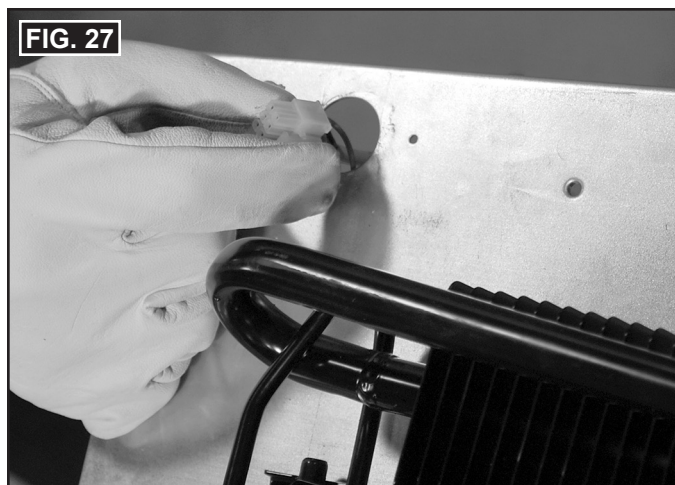


29. Lift the OLD cooling unit and carefully guide the conductor (cable) through the top bracket hole. Allow conductor (cable) to hang freely from the refrigerator cabinet. See FIG. 27.

Note: The OLD cooling unit may fit tightly. If you cannot remove by hand, try applying slow / careful leverage on the cooling unit pipe where it enters the refrigerator cabinet. Use a block on the cabinet frame to protect the refrigerator. See FIG. 28.

⚠ CAUTION

Be careful not to fracture or puncture the cooling unit. The cooling unit is under pressure and contains ammonia and other chemicals. Failure to follow this instruction may create a hazardous situation that could cause personal injury.

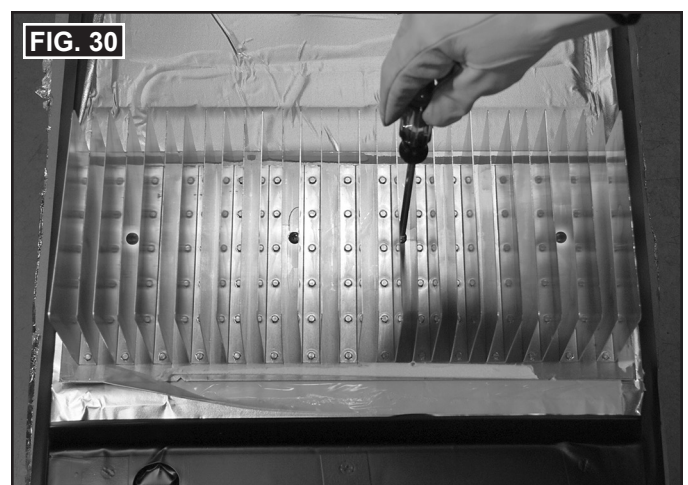


30. Continue to lift off the OLD cooling unit completely. See FIG. 29.



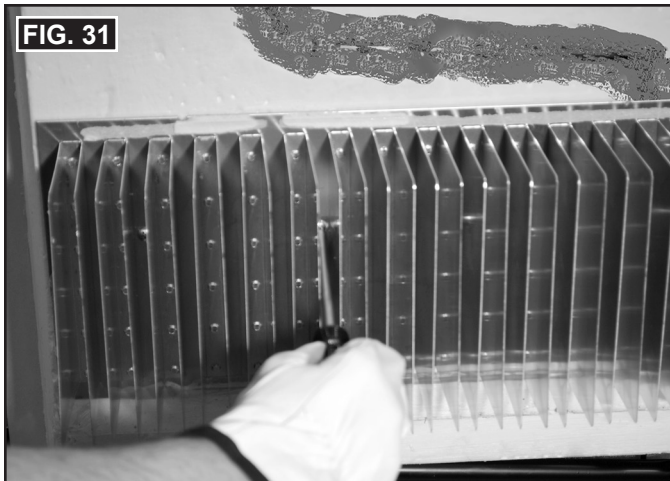
31. Remove cooling fins with its four mounting screws from the OLD cooling unit, and save for reinstallation. Discard OLD cooling unit. See FIG. 30.

Note: Disposal of OLD cooling unit should adhere to all applicable procedures, ordinances, and codes for your jurisdiction.

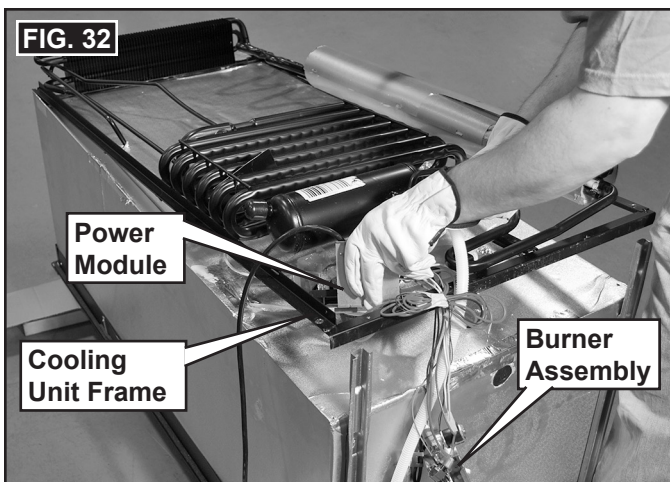


D. Installation Of “Type B” Cooling Unit

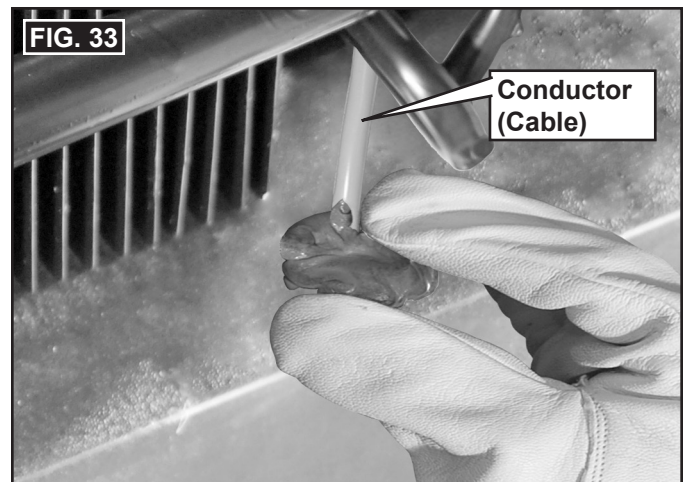
1. Apply thermal mastic to cooling unit following the instruction sheet provided with this kit.
2. Mount cooling fins onto the NEW cooling unit. See FIG. 31.



3. Place power module and LP gas solenoid valve with complete burner (assembly) on the lower left corner of the refrigerator cabinet.
4. Place NEW cooling unit onto refrigerator while routing power module and LP gas solenoid valve with complete burner (assembly) through the lower left corner of the cooling unit frame, and continue to lower cooling unit into place. See FIG. 32.



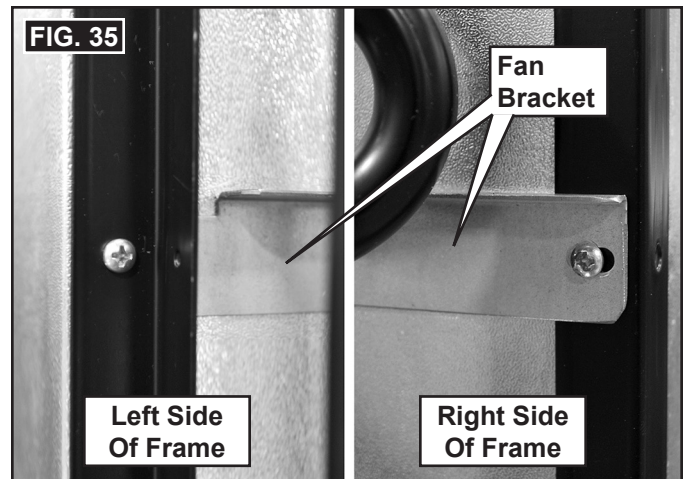
5. Route the conductor (cable) near the top of the refrigerator behind the cooling unit piping, and re-apply insulating putty around cable and fill hole. See FIG. 33.



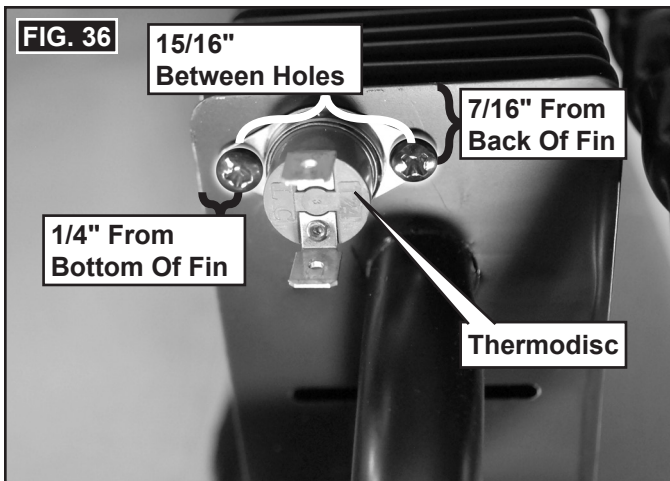
6. Mount fan(s) onto NEW fan bracket with the two NEW screws provided for each fan. Make sure the fan's label is facing up. See FIG. 34.



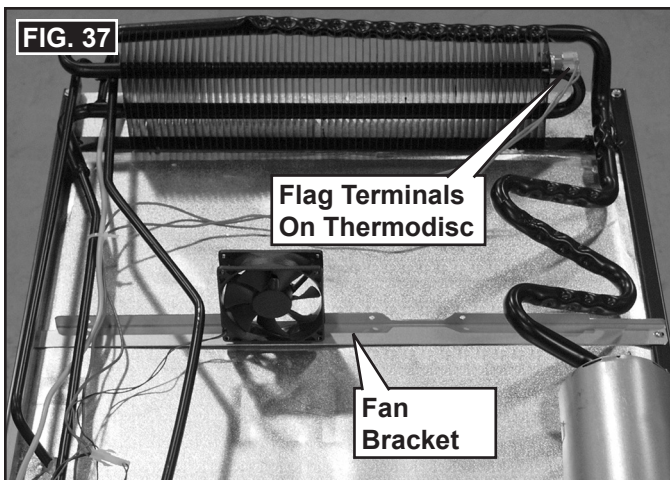
7. Place NEW fan bracket (with fan(s) mounted) under left side of cooling unit frame (near cooling fins) and over right side of frame. Align the mounting holes of the fan bracket to the cooling unit frame, and place and tighten the two mounting screws. See FIG. 35.



8. If the last fin on right side of cooling unit has no mounting holes for thermodisc, you'll need to drill two .106" holes. Both holes are 7/16" from back of fin. Drill first hole 1/4" from bottom of fin, and second hole 15/16" from first. Mount NEW thermodisc with two screws provided. See FIG. 36.



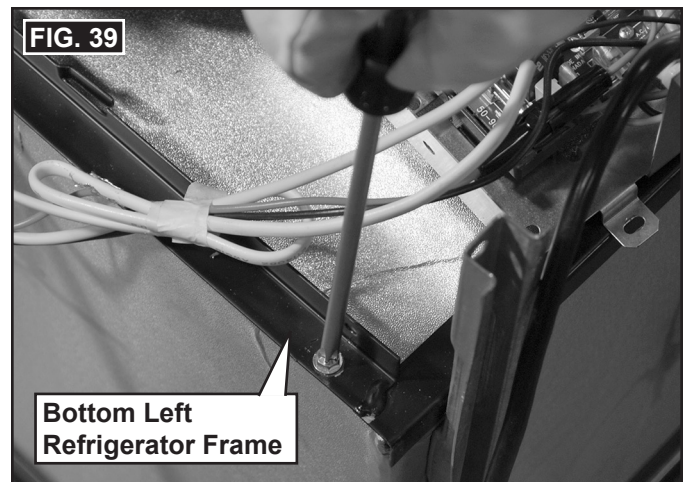
9. Cut the OLD 3/16" flag terminals off the thermodisc wiring, and replace with NEW 1/4" flag terminals. Connect the wiring to the thermodisc. This connection is not polarity sensitive. See FIG. 37.



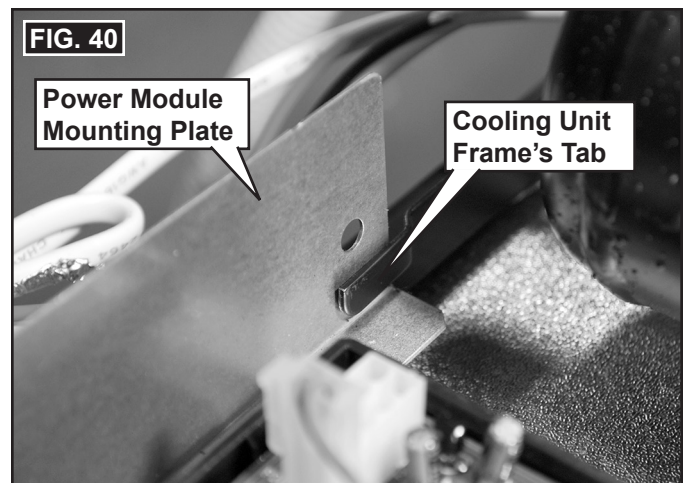
10. Reinstall heat shield behind the flue jacket. See FIG. 10.
11. Reinstall thermofuse holder onto heat shield, and place and tighten mounting screw. See FIG. 38.



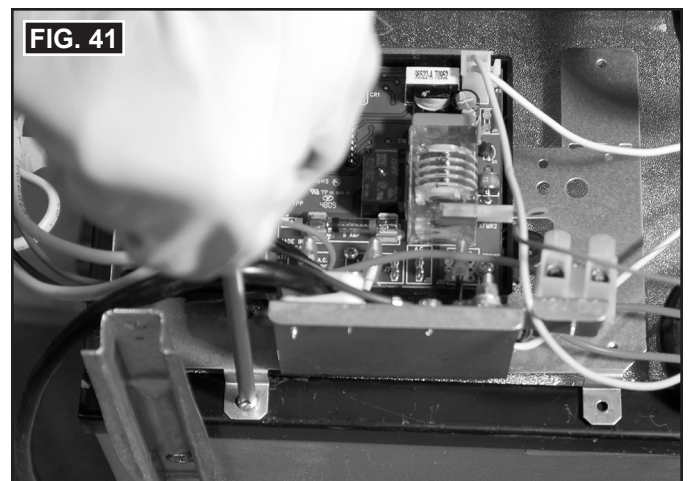
12. Reinstall three hex head drill point screws attaching cooling unit frame to refrigerator. Two screws at top, and one screw at bottom left. See FIG. 39.



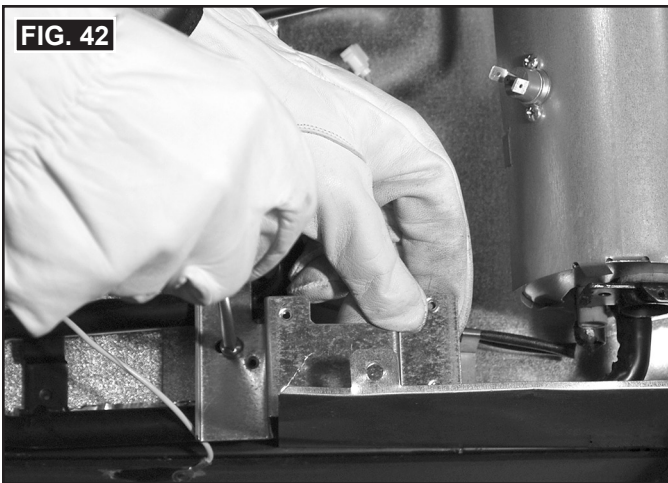
13. Reinstall lower power module mounting plate, with circuit board attached, and engage cooling unit frame's tab. See FIG. 40.



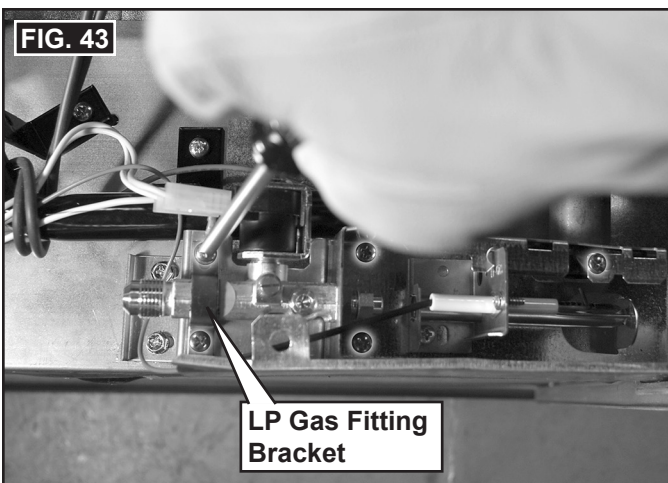
14. Replace and tighten the two mounting screws on the lower power module mounting plate. See FIG. 41.



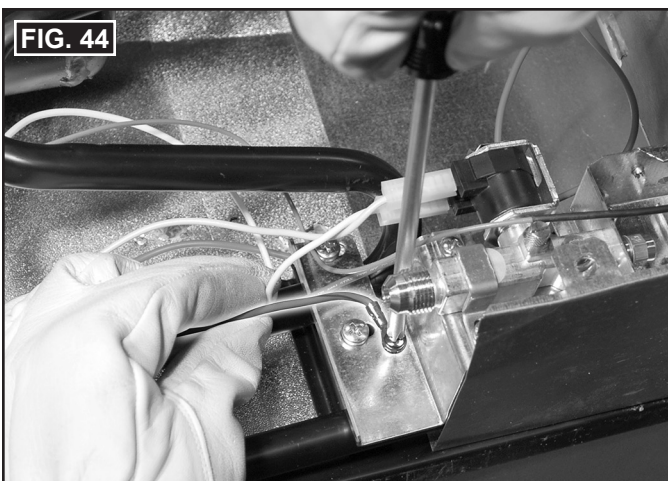
15. Install NEW solenoid valve retainer (bracket) with the two NEW screws provided. Do not tighten screws to allow slack. See FIG. 42.



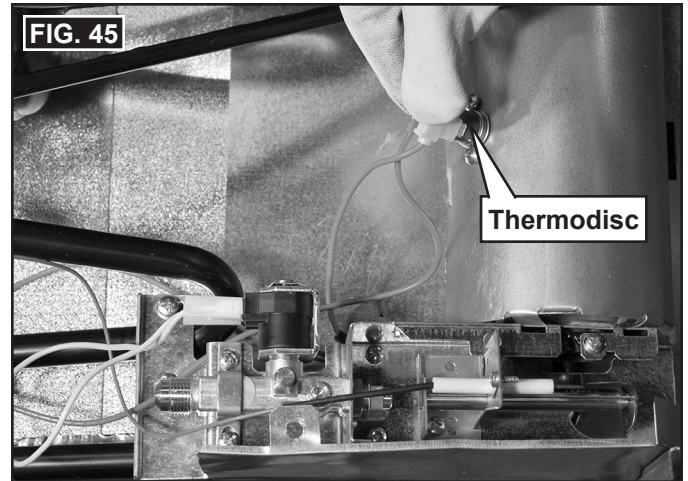
16. Reinstall burner housing with solenoid valve and complete burner with its three mounting screws. Then reinstall LP gas fitting bracket with its two mounting screws. See FIG. 43.



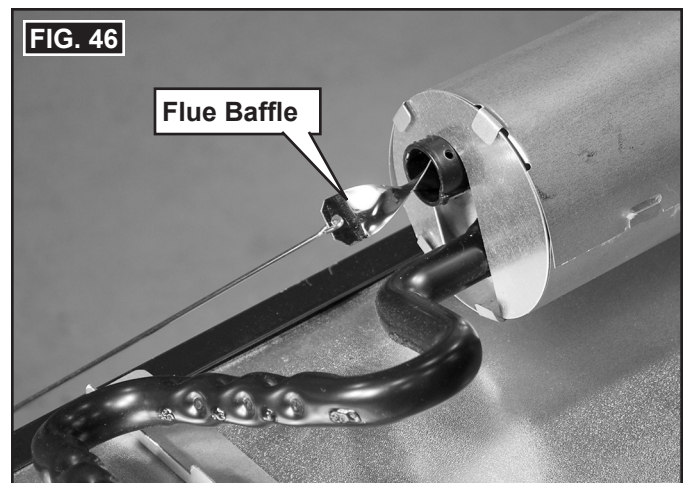
17. Tighten the two screws on the solenoid valve retainer (bracket). See FIG. 42.
18. Connect wire to solenoid valve retainer (bracket) with star washer and screw. See FIG. 44.



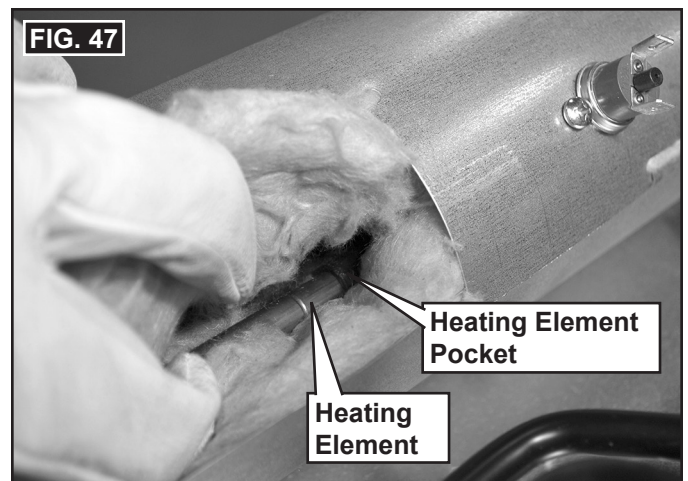
19. Connect wiring to the thermodisc on the flue jacket. This connection is not polarity sensitive. See FIG. 45.



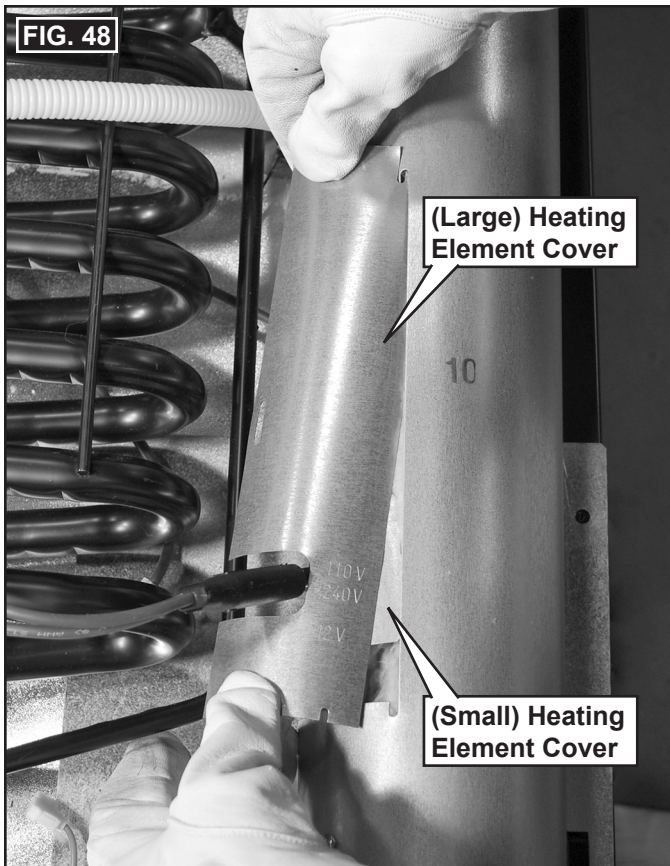
20. Reinstall flue baffle. See FIG. 46.



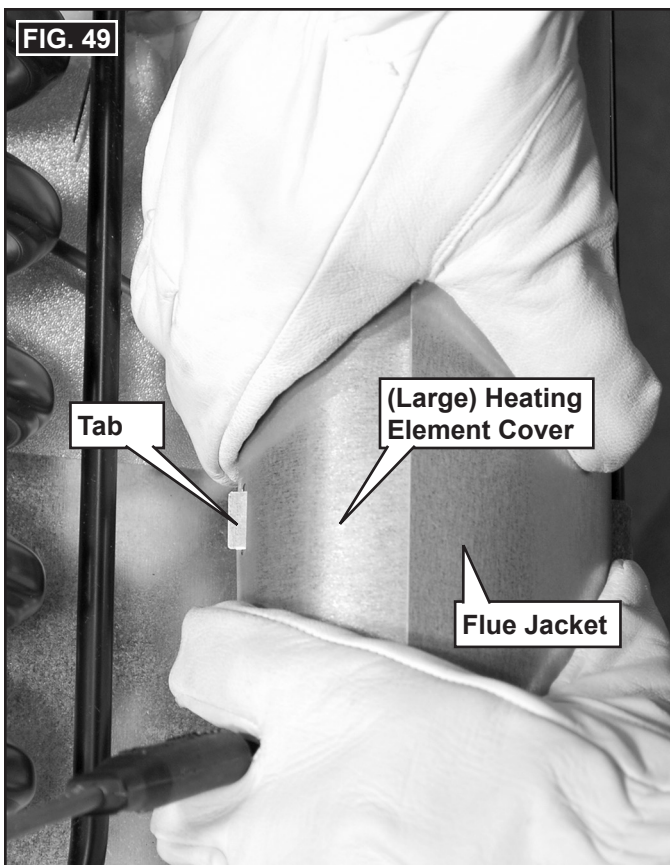
21. Align heating element (with (small) heating element cover still attached) with heating element pocket, and insert heating element until it bottoms out. See FIG. 47.



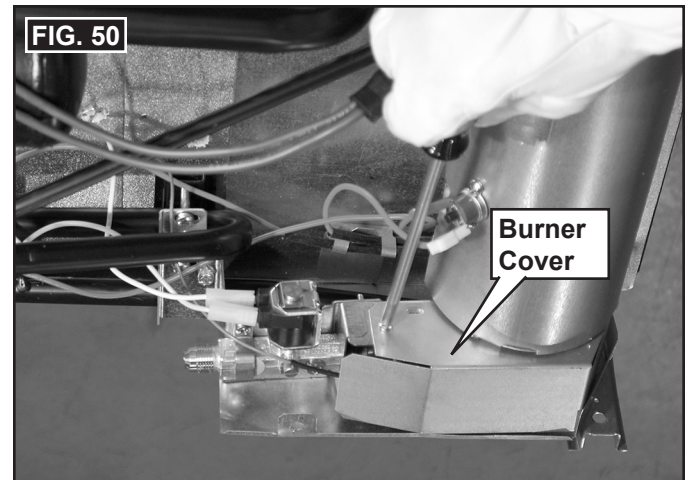
22. If necessary, reshape (small) heating element cover to flue jacket profile. Install (large) heating element cover. See FIG. 48.



23. Lock (large) heating element cover to the flue jacket tab. See FIG. 49.

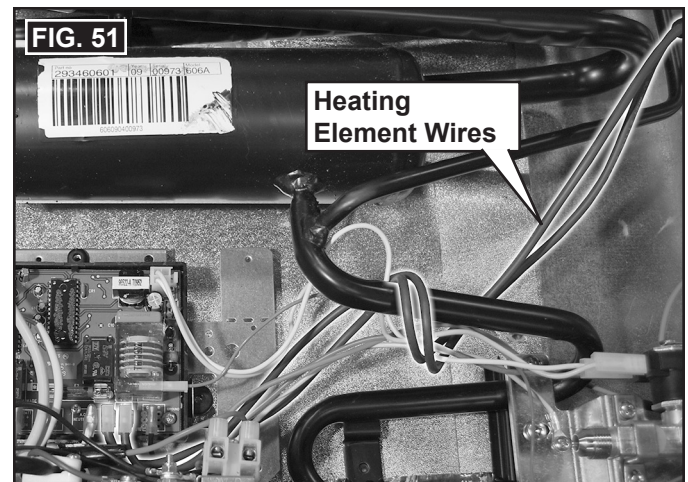


24. Reinstall burner cover with its mounting screw.
See FIG. 50.

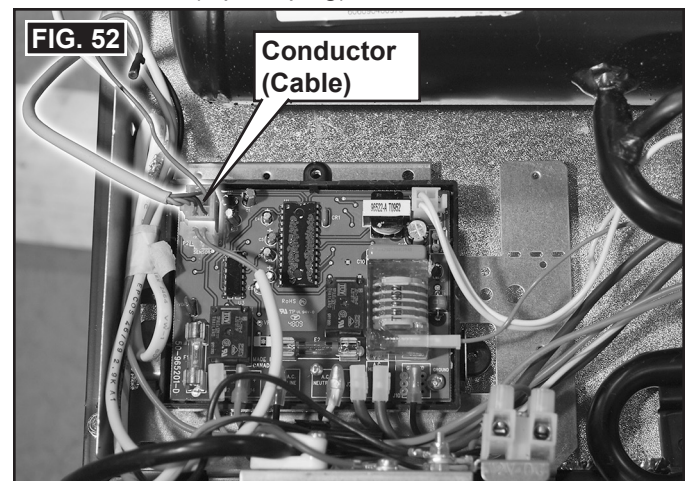


25. Wrap heating element wires one rotation around lower cooling unit pipe and connect wires to the power module's circuit board terminals J7 and J8. This connection is not polarity sensitive. See FIG. 51.

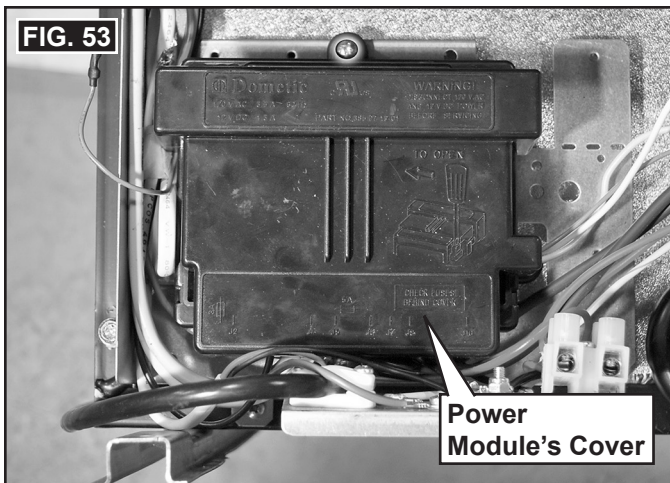
26. Using supplied zip-tie, secure heating element wires to cooling unit.



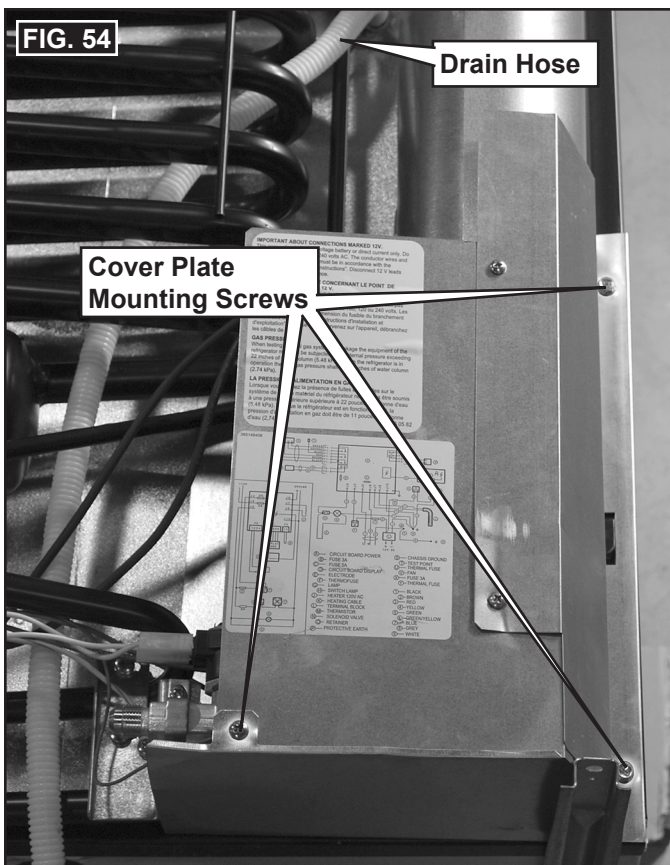
27. Route conductor (cable) under cooling unit and reconnect to power module's circuit board terminal P1 (top left plug). See FIG. 52.



28. Using supplied zip-ties, secure wiring harnesses and loose wiring to cooling unit and power module's bracket.
29. Reinstall power module's cover being careful not to pinch any wires. Engage tabs and tighten screw. See FIG. 53.



30. Route drain hose between cooling unit coil, and zip tie to cooling unit. See FIG. 54.
31. Reinstall cover plate (burner shield) assembly with its three mounting screws on bottom right hand side of refrigerator. See FIG. 54.



32. Set refrigerator upright, and reinstall seven screws with washers inside the freezer compartment. Make sure long screw is in appropriate place. See FIG. 4.
33. Reinstall thermistor bracket to cooling fins inside the food compartment. See FIG. 5.
34. Reconnect LP gas supply. See FIG. 2.

CAUTION

Use backup wrench to avoid damaging equipment.

35. Check LP gas line and all fittings for leaks using an approved solution. Repair leaks as necessary.

WARNING

FIRE OR EXPLOSION HAZARD. Failure to check and repair LP gas leaks may create a fire or explosion hazard.

36. Restore power and test operation.