

# Primary Cell Inlet Panel Kit

Cancels: IIK 340M-40-71 IIK 340M-40-95  
9-05

## Installation Instructions Part No. 320720-751, -753, -754, -755, -756, -757, -758, and -760

**NOTE:** Read the entire instruction manual before starting the installation.


This symbol → indicates a change since the last issue.

### SAFETY CONSIDERATIONS

Installation and servicing of heating equipment can be hazardous due to gas and electrical components. Only trained personnel should install or service heating equipment.

Untrained personnel can perform basic maintenance functions such as cleaning and replacing filters. All other operations should be performed by trained service personnel. When working on heating equipment, observe precautions in the literature, on tags, and on labels attached to the unit.

Follow all safety codes. Wear safety glasses and work gloves. Have a fire extinguisher available.

Recognize safety information. This is the safety-alert symbol . When you see this symbol on the furnace and in instructions or manuals, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies a hazard which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

#### WARNING

##### **ELECTRICAL SHOCK AND FIRE HAZARD**

Failure to follow this warning could result in fire, explosion, electrical shock, personal injury, death and/or property damage.

Turn off gas and electrical supplies to unit before beginning any installation or modification. Follow operating instructions on label attached to furnace.

#### CAUTION

##### **UNIT DAMAGE HAZARD**

Failure to follow this caution may result in improper operation.

Label all wires prior to disconnection when servicing controls.

### INTRODUCTION

This instruction covers installation of the primary cell inlet panel kit Part No. 320720-751, -753, -754, -755, -756, -757, -758, -760 in 40-in. tall, condensing gas furnaces.

→ **NOTE:** A releasing agent such as PAM cooking spray or equivalent (must not contain corn nor canola oil, halogenated hydrocarbon or aromatic content to prevent inadequate sealing) and RTV sealant (G.E. 162, G.E. 6702, or Dow-Corning 783) are needed before starting installation. DO NOT substitute any other type of RTV sealant. G.E. 162 (P771-9003) is available through RCD in 3-oz tubes.

### DESCRIPTION AND USAGE

Use this primary cell inlet panel kit when replacement of a factory-installed primary cell inlet panel is required.

This primary cell inlet panel kit contains the following items:

Primary cell inlet panel	1
Burner box gasket	1
Cell mounting screw (No. 8D X 3/8-in.)	25 maximum
Installation Instructions	1

### INSTALLATION

#### Step 1—Remove Whole Cell Panel Assembly

See Fig. 1 and Fig. 2 for furnace component locations. See Fig. 3 for expanded view of heating system components.

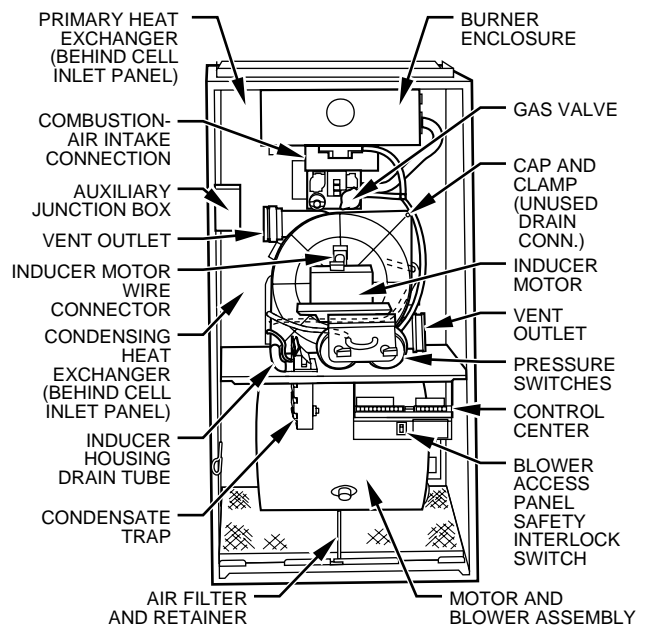
**NOTE:** Actual component locations may vary depending on model and series.

1. Turn off gas and electrical supplies to furnace.
2. Remove main furnace door.
3. Remove blower access panel.
4. Disconnect field power supply wires from J-box.
5. Remove 2 screws securing J-box.
6. Remove 2 screws securing top filler panel and rotate panel upwards to remove or allow the heat exchanger to be removed from front of furnace.
7. Disconnect combustion-air intake pipe from intake housing and move pipe out of furnace casing.
8. Disconnect gas supply pipe from gas valve using backup wrench.
9. Disconnect vent pipe from inducer housing by loosening coupling clamp on inducer outlet. If coupling has 2 clamps, loosen clamp on vent pipe side. Move pipe out of furnace casing.
10. If control center is located in burner compartment of furnace, remove blower motor leads, transformer wires, door switch wires, and auxiliary limit switch wires (if present) from control center and pull wires through blower shelf.
11. If control center is located in blower compartment of furnace, disconnect wires from flame sensor, hot surface ignitor, overtemperature switch, gas valve, pressure switch(es), inducer motor, limit switch, and J-box, then pull wires through blower shelf.

→ **Table 1—Kit Usage**

KIT PART NO.	UNIT										
	340MAV 350MAV 490AAV 340AAV 350AAV	345MAV	351DAS	352MAV 352AAV	355MAV 355AAV	58MCA 58MXA 58MCB 58MXB	58MSA	58MTA 58MTB	58MVP 58MVB	PG9MAA PG9MAB	
<b>320720-751</b>	024040 036040	024040 036040	—	—	—	040-08 040-12	040-08 040-12	—	—	024040 036040	
<b>320720-753</b>	024060 036060 048060	024060 036060 048060	—	036060	042060	060-08 060-12 060-16	060-08 060-12 060-16	060-12	060-14	024060 036060 048060	
<b>320720-754</b>	036080 048080	036080 048080	036080 048080	036080 048080	—	080-12 080-16	080-12 080-16	080-12 080-16	—	036080 048080	
<b>320720-755</b>	—	—	—	—	042080 (Series A)	—	—	—	080-14 (Series 100)	—	
<b>320720-756</b>	048100 060100	048100 060100	—	048100 060100	060100	100-16 100-20	100-16 100-20	100-16 100-20	100-20	048100 060100	
<b>320720-757</b>	060120 060140	060120	—	060120	060120	120-20 140-20	120-20	120-20	120-20	060120 060140	
<b>320720-758</b>	—	—	—	—	042040	—	—	—	040-14	—	
<b>320720-760</b>	060080	060080	060080	—	042080 (Series B and later) 060080	080-20	080-20	—	080-14 (Series 110 and later) 080-20	060080	

12. Remove 2 screws securing blower to blower shelf (4 screws on 120 and 140 sizes).
13. Remove 2 screws next to blower mounting screws that secure blower shelf to cell panel.
14. Remove 3 screws from each side of cell panel.
15. If control center is located in burner compartment of furnace, remove control center by removing screw and pressing tabs inward.
16. If control center was removed from furnace casing, secure control center (and J-box) to manifold for removal purposes only.
17. Disconnect field drain connection from condensate trap.
18. Disconnect drain and relief port tube from condensate trap.
19. Remove condensate trap from furnace casing or blower shelf.
20. Remove whole cell panel assembly with heat exchanger, burner box, inducer assembly, J-box (if applicable), and control center (if applicable) attached through front of furnace.



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**Fig. 2—Variable-Speed Model in Upflow Orientation**

**CAUTION**

**PERSONAL INJURY HAZARD**

Failure to follow this caution may result in personal injury. Whole cell panel assembly is heavy. Get help to remove and lift assembly.

**Step 2—Remove Burner Box Assembly**

1. If not previously disconnected, disconnect wires or connectors to overtemperature switch, gas valve, ignitor, and flame sensor.
2. Remove pressure switch tube from intake housing.
3. Remove 2 screws attaching intake housing to burner box, and rotate intake housing away from burner box for removal.
4. Disconnect pressure tubing from gas valve.
5. Remove screws attaching burner box to cell panel.

**NOTE:** Burner box cover, manifold, gas valve, and burner assembly should be removed as 1 assembly.

**Step 3—Remove Inducer Assembly**

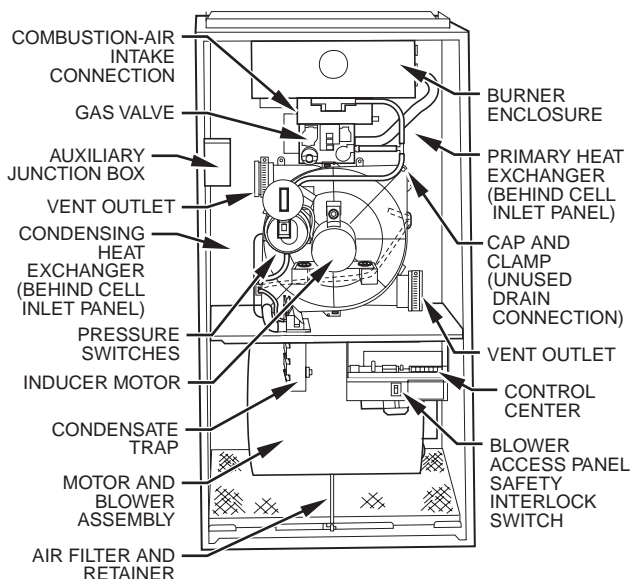
1. If not previously disconnected, disconnect inducer motor wire connector at quick-connect.
2. If not previously disconnected, disconnect pressure switch wires.
3. Remove collector box pressure switch tube from pressure switch.
4. Remove 4 screws attaching inducer housing to cell panel.

**NOTE:** Inducer housing, inducer motor, and pressure switch(es) should be removed as 1 assembly.

**Step 4—Install Primary Cell Inlet Panel**

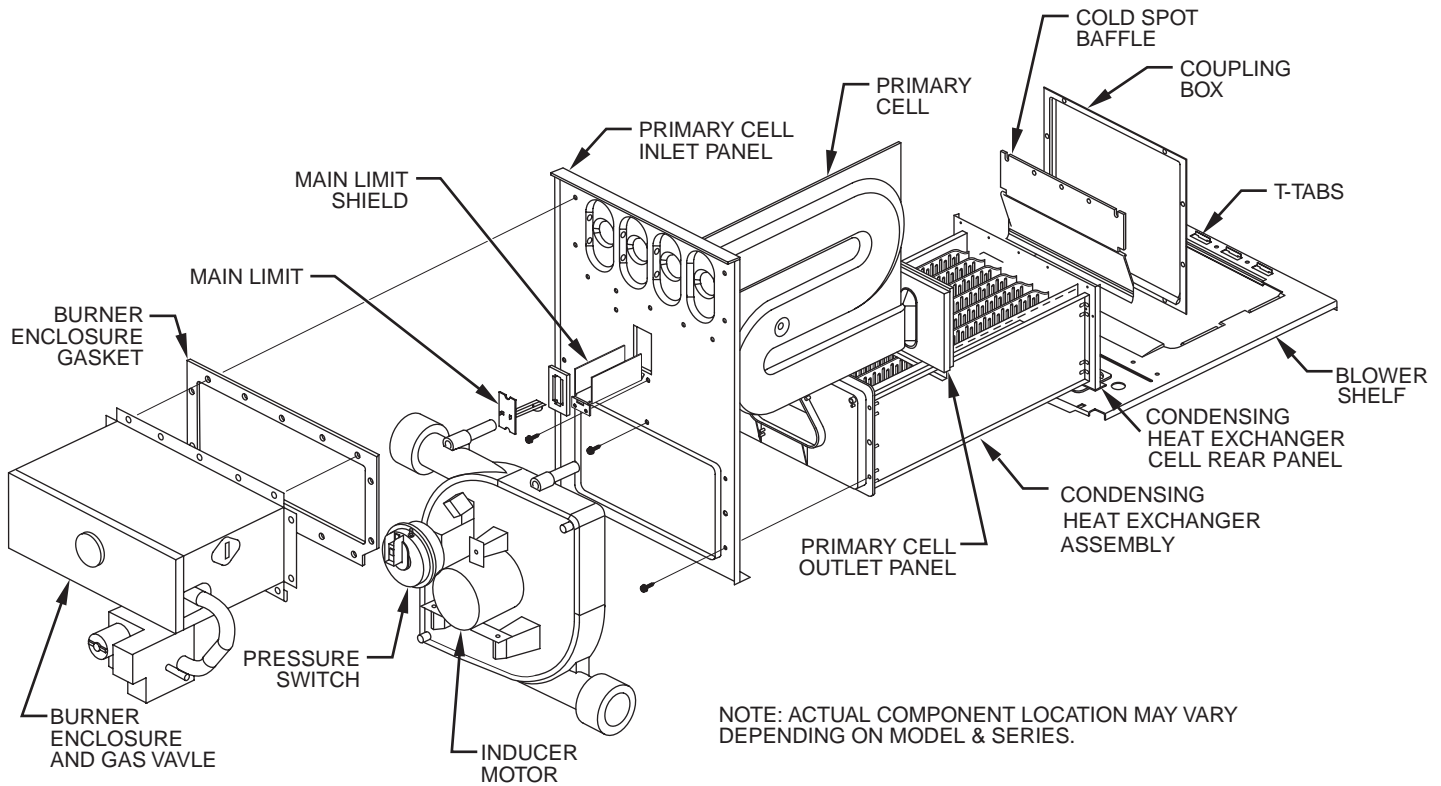
1. Remove 4 screws attaching condensing heat exchanger assembly to primary cell inlet panel.
2. Remove screws attaching primary cells to primary cell inlet panel.
3. Remove main limit and shield from primary cell inlet panel. Note orientation of shield and direction of main limit for reassembly.
4. Remove primary cell inlet panel by lifting panel off condensing heat exchanger collector box.
5. Slide new inlet cell panel over condensing heat exchanger collector box.
6. Attach primary cell inlet panel to primary cells by doing the following:
  - a. Center primary cell inlet panel over primary cell openings.
  - b. Use an awl to align holes and start ALL screws (provided in kit) in primary cells.
  - c. After all screws are started, check position of fiberglass gasket and tighten screws in cells.
7. Install main limit and shield in primary cell inlet panel.

**NOTE:** Visually check location of main limit and shield to ensure shield is not touching primary cells. If shield is touching, short cycling of limit will occur.



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**Fig. 1—Two-Stage, Two-Speed and Fixed-Capacity Model(s) in Upflow Orientation**



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**Fig. 3—Expanded View of Heat System Components in Upflow Orientation**

8. Reinstall condensing heat exchanger assembly to primary cell inlet panel.

**Step 5—Reinstall Inducer Assembly**

1. Inspect collector box gasket where inducer housing will mate.

→ **NOTE:** If gasket is damaged in any way, it must be repaired. To repair, apply a small bead of G.E. RTV 162, G.E. 6702, or Dow-Corning RTV 738 to damaged gasket area. Apply sealant releasing agent such as PAM cooking spray or equivalent (must not contain corn nor canola oil, halogenated hydrocarbons or aromatic content to prevent inadequate sealing) to inducer housing mating surface.

2. Attach inducer assembly to cell panel by aligning 4 screws through inducer housing spacers. Tighten screws to secure.
3. Attach collector box pressure switch tube to pressure switch. See tubing diagram of furnace for proper location attachment.
4. If control was removed from furnace with whole cell panel assembly, reconnect inducer motor wire connector at quick-connect.
5. If control was removed from furnace with whole cell panel assembly, reconnect pressure switch wires. Refer to wiring diagram on furnace for proper attachment.

**Step 6—Reinstall Burner Enclosure Assembly**

1. Position burner enclosure gasket between the burner box and inlet cell panel and secure burner box on inlet cell panel using screws removed earlier.
2. Connect pressure tube to gas valve.
3. Inspect gasket, then install intake housing on burner enclosure.

→ **NOTE:** If gasket is damaged in any way, it must be repaired. To repair, apply a small bead of G.E. RTV 162, G.E. 6702, or Dow-Corning RTV 738 to damaged gasket area. Apply sealant releasing agent such as PAM cooking spray or equivalent (must

not contain corn nor canola oil, halogenated hydrocarbons or aromatic content to prevent inadequate sealing) to burner enclosure mating surface.

4. Connect pressure tube to intake housing.

**Step 7—Reinstall Whole Cell Panel Assembly**

**⚠ CAUTION**

**PERSONAL INJURY HAZARD**

Failure to follow this caution may result in personal injury. Whole cell panel assembly is heavy. Get help to lift and install.

1. Install whole cell panel assembly with heat exchanger, burner box, inducer assembly, J-box (if applicable), and control center (if applicable) through front of furnace.

**⚠ CAUTION**

**UNIT AND PROPERTY DAMAGE HAZARD**

Failure to follow this caution may result in property damage. DO NOT cut or tear foil face insulation. If cuts or tears occur, repair insulation with foil tape.

2. Secure whole cell panel assembly to blower shelf by installing 2 screws through blower housing (4 screws on 120 and 140 sizes) and 2 screws next to blower housing.

→ **NOTE:** When re-installing condensing heat exchanger assembly, the lower flange of the condensing heat exchanger cell rear panel must engage on the T-tabs in rear blower shelf. (See Fig. 3.)

3. Install 3 screws to each side of inlet cell panel and into cell panel supports.
4. If previously removed, reinstall control center in casing flange.

5. If control center is located in burner compartment or furnace, reinstall blower motor leads, transformer wires, door switch wires, and auxiliary limit switch wires (if present) through blower shelf and grommet.
  6. If control is located in blower compartment of furnace, pull wires to flame sensor, hot surface ignitor, overtemperature switch, gas valve, pressure switch(es), inducer motor, limit switch, and J-box through blower shelf.
  7. Install J-box.
  8. Reattach wires to control center or components. See wiring diagram on furnace for proper attachment.
  9. Reinstall condensate trap where previously installed furnace casing or blower shelf.
  10. Reconnect condensate trap drain tubes. See tubing diagram on furnace for proper tube location.
  11. Connect field drain to condensate trap.
- NOTE:** Ensure tubes are not kinked or pinched, as this will affect operation.
- 12. Connect vent pipe by inserting pipe into coupling, elastomeric (rubber) coupling, and then fully into inducer housing outlet.
  13. Connect combustion-air intake pipe to intake housing and install screw to secure. Do not use RTV unless previously used.
  14. Install top filler panel.
  15. Install gas supply pipe to gas valve using backup wrench.

**NOTE:** Use propane gas resistant pipe dope to prevent gas leaks. DO NOT use Teflon tape.

**⚠ WARNING**

→ **EXPLOSION AND FIRE HAZARD**

Failure to follow this warning could result in personal injury, death and/or property damage.  
For upflow or downflow applications, gas valve knob or switch must be facing forward or tipped to the UP position.

16. Connect field power supply to J-box.
17. Install blower access panel.
18. Turn on gas and electrical supplies to furnace.
19. Check for gas leaks.

**⚠ WARNING**

→ **EXPLOSION AND FIRE HAZARD**

Failure to follow this warning could result in personal injury, death, and/or property damage.  
Never use matches, candles, flame, or other soap sources of ignition to check for gas leakage. Use a soap-and water solution.

20. Check furnace operation through 2 cycles.
21. Check for condensate leaks.
22. Replace main furnace door.





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**Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.**