Igniter Bracket Kit

Cancels: IIK 340M-40-73

IIK 340M-40-85 4-04

Installation Instructions \rightarrow Part No. 329494–751

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

This symbol \rightarrow indicates a change since the last issue.

SAFETY CONSIDERATIONS

Installing 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 coils or 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 $\underline{\land}$. 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, CAUTION and NOTE. 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.

ELECTRICAL SHOCK AND FIRE HAZARD

Failure to follow this warning could result in personal injury or death.

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

INTRODUCTION

→ This instruction covers installation of the igniter bracket kit Part No. 329494–751 in 40–in. tall, condensing gas furnaces.

DESCRIPTION AND USAGE

Use this igniter bracket kit when replacement of factory-installed igniter bracket is required.

This igniter bracket kit contains the following items:

| Igniter Bracket Igniter Bracket Gasket | 1 1 |
|---|--------|
| Screw (#8 x 3/4LG) | 3 |
| Installation Instructions | 1 |

INSTALLATION

Step 1—Remove Complete Burner Box Assembly

NOTE: Instructions written for upflow orientation. Some modifications may be required for other orientations.

See Fig. 1 for furnace component locations. See Fig. 3 for exploded view of heat system components.

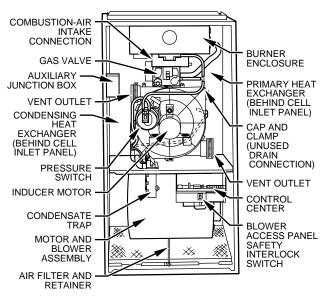
- 1. Turn off gas and electrical supplies to furnace.
- 2. Remove furnace door.
- 3. Disconnect combustion-air intake pipe from intake housing. Move pipe out of furnace casing.
- 4. Disconnect gas supply pipe from gas valve using backup wrench.
- 5. Remove 2 screws securing top filler panel and rotate panel upwards to remove.
- 6. Remove flame sensor leads, hot surface igniter, gas valve, auxilary and main limit switch wires and lay harness on blower shelf. Identify wires for proper reconnection.
- 7. Remove 2 screws securing black plastic air intake housing to burner enclosure, and rotate intake housing away from burner enclosure for removal.
- 8. Remove pressure switch tube from intake housing.
- 9. Remove screws securing burner box cover with sight glass.
- 10. Remove screws securing gas manifold to burner box removing from burner box.
- 11. Remove screws in burner box flange to remove burner box and gasket assembly from center cell panel.

Step 2—Install Igniter

- 1. Remove original igniter bracket with igniter.
- 2. Modify new igniter bracket (supplied in this kit). Bend 3/8 inch angled tab flat to match horizontal surface of bracket that mounts flush to the burner box. (See Fig. 4)
- 3. Install igniter in bracket passing igniter molex plug and wire leads through bracket and gasket. Rest igniter in bracket.
- 4. Attach igniter to bracket using one #8 x 3/4 LG screw.

NOTE: Do not overtighten screw or ceramic may break.

- 5. Insert igniter assembly into burner box igniter hole.
- → INSTALLATION TIP: Do not allow igniter to hit or bump objects while installing. Do not touch or handle igniter element. Igniter may develop micro-cracks and cause it's life to be shorter.
 - 6. Mark screw holes at both ends of igniter bracket.
 - 7. Remove igniter assembly and drill screw holes with 1/8 in. drill bit.
 - 8. Reinstall igniter assembly into burner box and attach with two #8 x 3/4 LG sheet metal screws.



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Fig. 1–Furnace Component Location in Upflow Orientation

$\rightarrow \quad \text{FURNACE DAMAGE HAZARD}$

FURNACE DAMAGE HAZARD

Failure to follow this caution may result in personal injury or death.

DO NOT allow any foreign materials such as screws, gasket, etc., to fall inside cell.

Step 3—Reinstall Burner Enclosure Assembly

1. Position burner enclosure gasket between the burner enclosure and inlet cell panel and secure burner enclosure on inlet cell panel using screws removed earlier.

A CAUTION

FURNACE MAY NOT OPERATE

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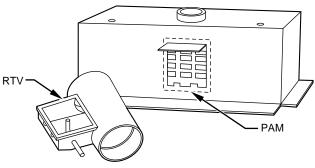
Failure to follow this caution may result in improper operation of furnace operation.

The ground wire from the gas valve MUST be attached to the burner box attachment screw to ensure adequate casing grounding or furnace control will lock out.

2. Reinstall gas manifold with gas valve to burner box aligning orifices into burners and securing manifold flange with two screws.

- 3. Replace burner box cover with sight glass with screws removed earlier.
- 4. Connect pressure tube to gas valve. Refer to tube routing label for proper tube connection.
- 5. Inspect gasket, then install black intake housing on burner box enclosure.

NOTE: Inspect combustion-air intake housing. If foamed gasket was removed, check for any damage. If gasket is damaged in any way, it must be repaired. To repair, remove damaged gasket section, apply sealant releasing agent such as PAM cooking spray or equivalent (must not contain corn or canola oil, aromatic or halogenated hydrocarbons or inadequate seal may occur) to burner box and apply a small bead of G.E. RTV 162, G.E. RTV 6702, or Dow-Corning RTV 738 sealant to edge of combustion-air intake housing. (See Fig. 2.)



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Fig. 2–Combustion-Air Intake Housing Gasket Repair

6. Replace wire harness leads to flame sensor, hot surface igniter, gas valve, and auxilary and main limit switch.

NOTE: Be sure burner box gasket is installed between burner box and cell panel. If gasket is damaged, replace it.

- 7. Reinstall top filler panel.
- 8. Reconnect gas supply piping using a backup wrench on gas valve.
- 9. Reconnect combustion-air intake pipe to black intake housing, moving pipe into furnace casing.
- 10. Turn on gas and electrical supplies to furnace.
- 11. Check furnace operation through 2 cycles.
- 12. Check for condensate leaks.
- 13. Replace furnace door.

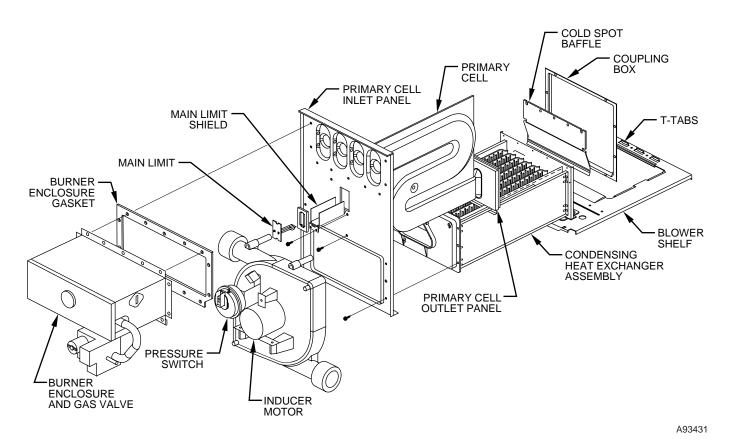
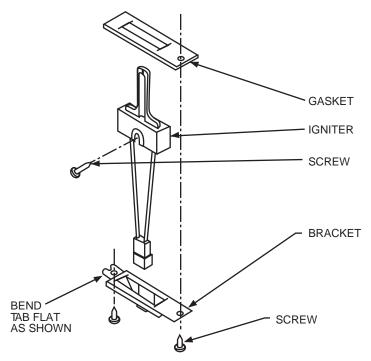


Fig. 3–Exploded View of Heat System Components in Upflow Orientation



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Fig. 4–Referencing New Igniter Assembly Exploded View Added

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