

ECM Inducer Motor Assembly Kit

Cancels: IIK 355M-40-6 IIK 355M-40-15
8-05

Installation Instructions Part No. 320727-755

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


This symbol → 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 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 word 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 that **will** result in enhanced installation, reliability, or operation.

WARNING

ELECTRICAL SHOCK HAZARD

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

Before beginning any installation or modification, be sure the main electrical disconnect switch is in the OFF position.

CAUTION

UNIT OPERATION HAZARD

Failure to follow this caution may cause improper and dangerous operation.

Label all wires prior to disconnection when servicing controls.

INTRODUCTION

→ This instruction covers installation of the electronically commuted motor (ECM) inducer motor kit Part No. 320727-755 on all models of 355MAV, 355AAV, 58MVP, and 58MVB Condensing Gas Furnaces (40,000 through 120,000 Btuh inputs).

DESCRIPTION AND USAGE

Use this ICM inducer motor kit to replace a failed inducer motor assembly.

This kit contains the following items:

Inducer assembly	1
Installation Instructions	1

NOTE: Inducer assembly consists of motor, wheel, motor mount, motor weight, inducer cover, inducer housing, vent cap, and vent clamp.

INSTALLATION

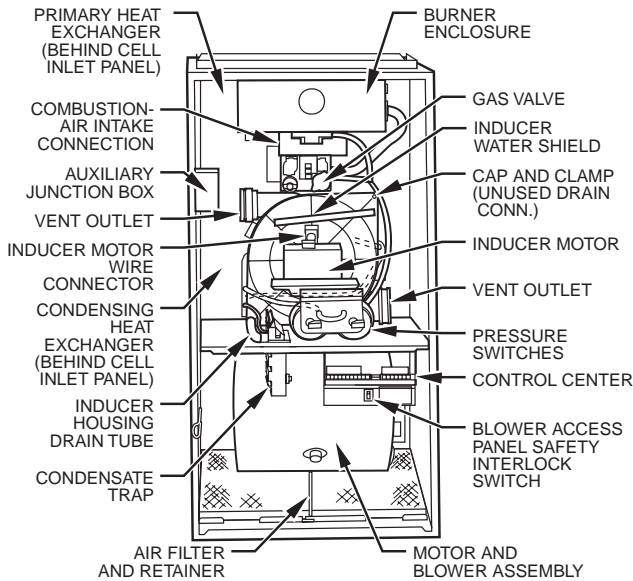
Step 1—Remove Old Motor Assembly

1. Turn electrical supply to unit to OFF position.
2. Remove main furnace door.
3. Remove lower drain tube from inducer housing cover.
4. Remove pressure switch assembly by removing 2 screws. (See Fig. 1.)
5. Remove pressure switch tube at tee leading to burner box and gas valve.
6. Move pressure switch assembly to side.
7. Remove combustion vent pipe by loosening clamp on rubber connector and remove from housing.
8. Remove Inducer Water Shield (if present) by removing 2 screws. (See Fig. 1.)
9. Disconnect wire harness connector from inducer motor.
10. Remove 4 bolts securing inducer housing to cell inlet panel.

Step 2—Install New Motor Assembly

1. Inspect seal on collector box where new inducer housing will mate to ensure no damage has occurred. (See Fig. 2.)

→ **NOTE:** If collector box seal is damaged in any way, it must be repaired. To repair, apply sealant releasing agent such as PAM cooking spray or equivalent (must not contain corn nor canola oil, halogenated hydrocarbons nor aromatic content to prevent inadequate sealing) to inducer housing. Apply a small bead of GE RTV 162, G.E. 6702, or Dow-Corning RTV 738 sealant to groove in collector box. G.E. 162 (P771-9003) is available through RCD in 3-oz. tubes.



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

Fig. 1—Inducer Motor Assembly in Upflow Furnace Orientation

2. Remove 4 mounting spacers from OLD inducer housing and install in new inducer housing.
3. Install NEW inducer housing assembly by reinstalling 4 bolts removed earlier.
4. Reconnect pressure switch tube.
5. Secure pressure switch assembly to inducer motor mount bracket using 2 screws removed earlier.
6. Reconnect combustion vent pipe to inducer housing assembly and tighten clamp.
7. Remove Inducer Water Shield by removing 2 screws. (See Fig. 1.)
8. Reconnect inducer motor wire harness connector.

→ **NOTE:** On Models 355MAV/58MVB Series A/101 and B/111 models the WIRE TIE closest to the gas valve and around both the

gas valve and inducer wires **MUST BE REMOVED** to allow re-installation of the Inducer Water Shield in Step 9.

NOTE: See wiring diagram on furnace for proper wire connection.

9. Reinstall Inducer Water Shield and position wires to inducer motor under front flange.

10. Reconnect drain tube to inducer housing cover.

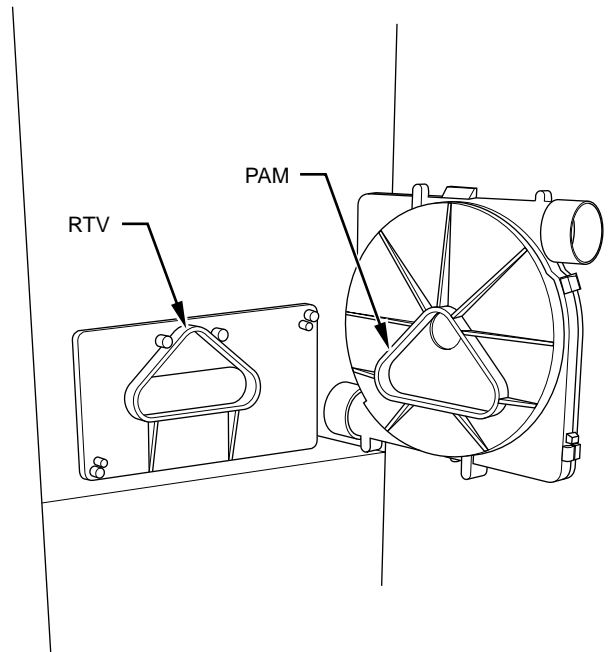
NOTE: See tube routing and connection label on furnace for proper tube location.

11. Remove cap and clamp from unused drain connection on OLD inducer housing cover and install on unused drain connection of NEW inducer housing cover.

12. Turn electrical supply to unit to the ON position.

13. Check furnace operation through 2 complete cycles.

14. Reinstall main furnace door.



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Fig. 2—Inducer Housing to Collector Box Gasket

SERVICE TRAINING

Packaged Service Training programs are an excellent way to increase your knowledge of the equipment discussed in this manual, including:

- Unit Familiarization • Maintenance
- Installation Overview • Operating Sequence

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