

Installation Instructions

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


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, protective clothing, and work gloves. Have a fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit. Consult local building codes, the current editions of the National Fuel Gas Code (NFGC) NFPA 54/ANSI Z223.1 and the National Electrical Code (NEC) NFPA 70.

In Canada, refer to the current editions of the National Standards of Canada CAN/CSA-B149.1 and .2 Natural Gas and Propane Installation Codes, and Canadian Electrical Code CSA C22.1

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

FIRE, EXPLOSION, ELECTRICAL SHOCK HAZARD

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

Before installing or servicing unit, always turn off main electrical and gas supplies to unit and tag with appropriate lockout. There may be more than one disconnect switch.

CAUTION

UNIT OPERATION HAZARD

Failure to follow this caution may result in equipment damage.

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. 340793-762 on all models of 355MAV, 355AAV, 355BAV, 355CAV, 58MVP, 58MVB, 58MVC, 58UVB and PG9UAA 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:

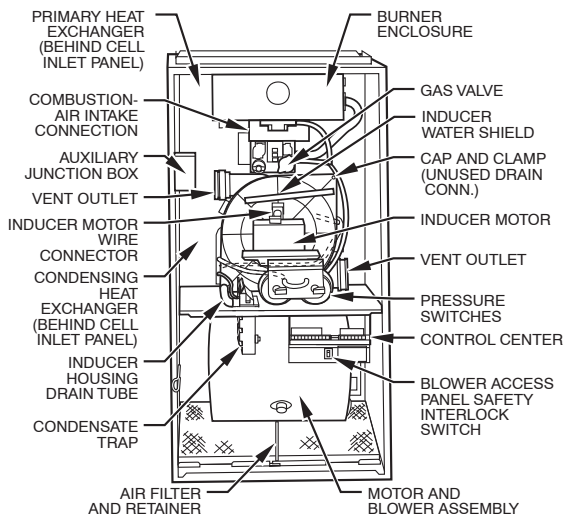
Inducer Assembly	1
Installation Instructions	1
Inducer Spacer Kit	1

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.



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Fig. 1 - Inducer Motor Assembly in Upflow Furnace Orientation

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.

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

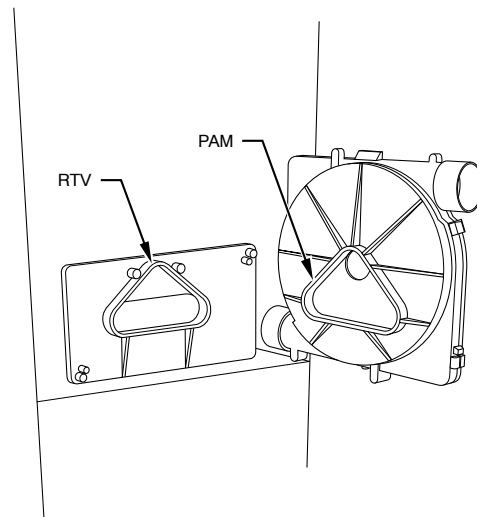
2. Remove 4 mounting spacers from OLD inducer housing and install in new inducer housing.
3. Install NEW inducer housing assembly by reinstalling 4 bolts removed earlier.
4. Reconnect pressure switch tube.
5. Secure pressure switch assembly to inducer motor mount bracket using 2 screws removed earlier.
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 and 355BAV/58UVB/PG9UAA 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.



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Fig. 2 - Inducer Motor Assembly in Upflow Furnace Orientation

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.

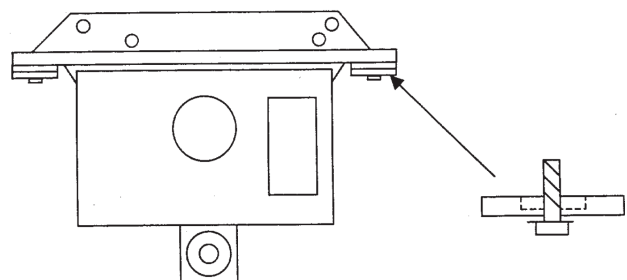
USE INDUCER SPACER KIT FOR DOWNFLOW CONFIGURATION

The inducer spacers can be found in KGACC0101SPC, which is supplied in this kit. These Inducer Spacers are primarily intended to be installed in the downflow position but may also be used in other positions if they are found to correct any objectionable inducer noise or vibration issues. In the downflow position, the inducer motor grommets may sag. Installing the spacers will help maintain the grommets' integrity and prevent the interference of the wheel with the housing and / or noise related issues.

NOTE: Before installing spacers, make sure all brackets are properly formed and inducer assembly is properly assembled.

To install the spacers in the unit:

1. Remove the upper right-hand screw from the grommet.
2. Insert screw through the spacer and reinstall in the furnace grommet. See Fig. 3.
3. Repeat Step 2 for the upper left-hand screw.
4. Repeat Step 2 for the lower screw.



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Fig. 3 - Inducer Spacers