

# ICM Inducer Motor Assembly Kit

Cancels: IIK 320A-60-2

IIK 320A-60-5  
8-15-93

## Installation Instructions Part No. 319346-752

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

### INTRODUCTION

This instruction covers installation of the ICM (Integrated Commutated Motor) inducer motor kit Part No. 319346-752 in intermittent (spark) igniting, variable-speed, upflow and downflow condensing gas furnaces.

### 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 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.

### DESCRIPTION AND USAGE

Use this ICM motor kit to repair an inducer motor assembly. This kit is also used to replace a failed inducer controller since the controller is integrated to the back of the motor.

This kit contains the following items:

Motor, wheel, and motor assembly	1
Cover plate gasket	1
Stainless steel screw	5
Screws for plastic (wide-pitch thread)	12
Wire harness adapter	1
Installation Instructions	1

### WARNING

Turn off gas and electrical supplies to the unit before beginning any installation or modification. Follow the operating instructions on the label attached to the furnace. Failure to follow this warning could result in electrical shock, fire, personal injury, or death.

### INSTALLATION

#### Step 1—Removal of Old Motor Assembly and Inducer Controller

1. Turn electrical supply to furnace off.
2. Remove blower access door on downflow units only.
3. Remove control access door.

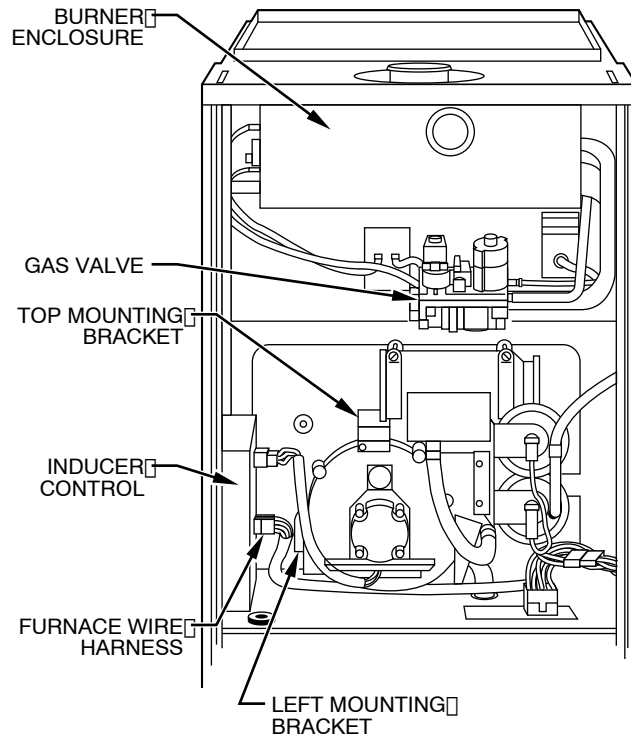
4. Loosen hose clamp and disconnect drain tube from bottom of inducer outlet box/elbow.
5. Disconnect motor connector from inducer controller. (See Fig. 1.)
6. Remove screws securing left mounting bracket to collector box and plastic inducer housing. Retain left mounting bracket.
7. Remove screw securing top mounting bracket to coupling box.
8. Remove 8 screws securing plastic cover plate to inducer housing. Retain top mounting bracket.
9. Carefully remove motor assembly from inducer housing.
10. Remove and discard old cover plate gasket located in groove on inducer housing.
11. Remove inducer controller.
  - a. Disconnect main furnace wire harness from inducer controller.
  - b. Remove 3 screws from outside of casing.
  - c. Discard inducer controller.

**NOTE:** New motor has the controller integrated to the back of the motor.

#### Step 2—Installation of New Motor Assembly

1. Install new cover plate gasket in groove on inducer housing.
2. Position new motor assembly on inducer housing. Ensure gasket is properly seated.
3. Using wide-pitch threaded screws (provided in kit), secure cover plate to housing. DO NOT install screw in top hole at this time.
4. Install left mounting bracket on inducer housing with 2 wide-pitch threaded screws.
5. Install top mounting bracket with wide end against cover plate onto top of inducer housing with 1 wide-pitch threaded screw.
6. Using 1 stainless steel screw (provided in kit), secure top mounting bracket to coupling box.
7. Using 2 stainless steel screws (provided in kit), secure left mounting bracket to collector box.
8. Connect wire harness adapter (provided in kit) to inducer motor.
9. Connect wire harness adapter to furnace wire harness.
10. Reconnect drain tube to bottom of inducer outlet box/elbow.
11. Reinstall blower access door on downflow units only.
12. Turn electrical supply to furnace on.
13. Check furnace operation through 2 complete operating cycles. Ensure there is no water leakage around cover plate gasket.
14. Reinstall control access door.

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



**Fig. 1—Inducer Motor Assembly in Upflow Furnace**

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