# Installation Instructions Part No. SM4753

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

This symbol → indicates a change since the last issue.

#### **SAFETY CONSIDERATIONS**

Installing and servicing 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.

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 would result in minor personal injury or produce and property damage. NOTE is used to highlight suggestions which will result in enhanced installation, reliability, or operation.

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

#### INTRODUCTION

→ This instruction covers the installation of the inducer motor replacement kit Part No. SM4753 in models 373LAD/LAV, 376AAW/BAW/CAV, 383KAD/KAV, 393AAV, 394HAD, 395AAW/BAW/CAV, 396HAD, 480BAV, 481BAV, 58DHB/DHC, 58DFA/GFA, 58PAP/RAP, 58PAV/RAV, 58SC/SSB/SSC, 58WAV/ZAV, 58YAV, GA1AAD, GA2AAD, GB1AAV, GB3AAV, PG8DAA, and PG8UAA Gas Furnaces.

#### **DESCRIPTION AND USAGE**

The inducer motor replacement kit can be used for repairs (or upgrades) to the inducer motor assembly on ONLY the models listed in Step 2, item 6.

The inducer motor replacement kit contains the following items:

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## **INSTALLATION**

#### Step 1-Remove Inducer Motor Assembly

- 1. Set room thermostat to OFF and allow system to complete any blower off delay.
- 2. Turn off gas and electrical supplies to unit.
- 3. Remove blower and control access doors.
- 4. Unplug inducer motor.

- Remove 3 assembly mounting screws and remove inducer motor assembly (motor, wheel, and mount) from inducer housing. Be careful not to damage inducer wheel during removal.
- 6. Measure location of wheel to motor support to use when reassembling. Using an allen wrench, loosen inducer wheel setscrew, and remove wheel from motor shaft. (See Fig. 1.)

**NOTE**: If it is difficult to remove the wheel, lightly sand any scale or rust buildup from end of moto shaft. Apply a small amount of penetrating oil to shaft and hub. Tap lightly on hub only. Do not tap or pry on any other areas of wheel. If the wheel cannot be removed without damage, a replacement wheel is required.

- 7. Remove 3 motor grommet screws securing motor plate to motor support.
- 8. Remove 2 screws securing motor to motor plate.

### Step 2-Install New Inducer Motor Assembly

- Attach new inducer motor assembly provided in kit to motor plate using original screws.
- 2. Attach motor support to motor plate through 3 grommets using 3 original screws. (See Fig. 2.) If there was a shaft seal between the plate and support, be certain it is moved to the new assembly. Tighten original screws firmly, but avoid stripping.
- 3. Reinstall inducer wheel. Wheel must be located as shown in Fig. 1. Align flat on shaft to line up with setscrew, then firmly tighten setscrew.
- 4. Install inducer motor assembly in inducer housing and fasten with 3 original mounting screws. Ensure that inducer motor ground wire is reinstalled under 1 of mounting screws.

**NOTE**: The 3 original mounting screws are shorter in length than the other screws. Use of longer screws may result in interference between the screws and the inducer wheel.

- 5. After all screws are tightened, spin black plastic cooling fan to ensure assembly moves freely. If assembly does not spin freely, remove inducer motor assembly from inducer housing and verify correct location of inducer wheel on motor shaft.
- Connect inducer motor to wiring harness. Adapters are included for all applications. Use adapter (if needed) according to type of connector on original main wiring harness.
  For 376AAW/BAW, 395AAW/BAW, 58SC, 58SSB, and 58DHB Furnaces, use adapter with 1/4-in. quick connects and AMP connector. (See Fig. 3.)

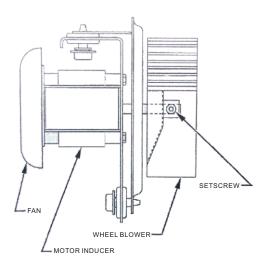
Use the quick Molex adapter for the following models: (See Fig. 4.)

373LAD Series A and B 373LAV Series A 376CAV Series A and B 383KAD Series A and B 383KAV Series A 394HAD Series A



395CAV Series A and B 396HAD Series A GA1AAD Series A GA2AAD Series A 58DFA Series 101 58DHC All series 58GFA Series 101 58PAP Series 101 and 111 58PAV Series 101 58RAP Series 101 and 111 58RAV Series 101

58SSC All series No adapter is required for all other models. Connect the



**NOTE:** Fan appearance may be different on same furnaces.

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Fig. 1--Wheel and Setscrew Location

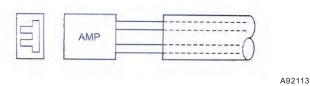
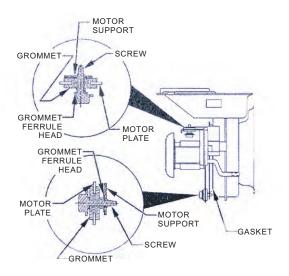


Fig. 3--AMP Connector

harness directly to the motor. When the connection is complete, discard any unused adapters.

- 7. Turn on gas and electrical supplies to furnace.
- 8. Replace blower door to close door interlock switch. With no call for heat from thermostat, perform sel-test on control board. See instructions on control box or on diagnostic code label. This will ensure that all components are operational including the inducer assembly.
- 9. Operate furnace through 1 complete heating cycle to check for proper operation.



**NOTE:** Fan appearance may be different on same furnaces.

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Fig. 2--Proper Grommet Position

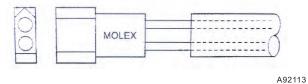


Fig. 4--Molex Connector

