

Troubleshooting Procedure

DC Motor Replacement on DV Models



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Applicable Models:

505 series – GU26DV and GU32DV

Description:

This guide shows step by step instructions on how to remove and replace a fan motor assembly on an Eternal Direct Vent unit.

Fan Motor Disassembly Instructions:

Remove Top Panel:

Make sure the unit is unplugged before service

- Remove 4 Philips head screws from the Exhaust Flange
- Remove 4 Philips head screws from the Intake Flange
- Remove 2 Philips head screws from the back of the Top Panel
- Push Top Panel towards the rear to remove



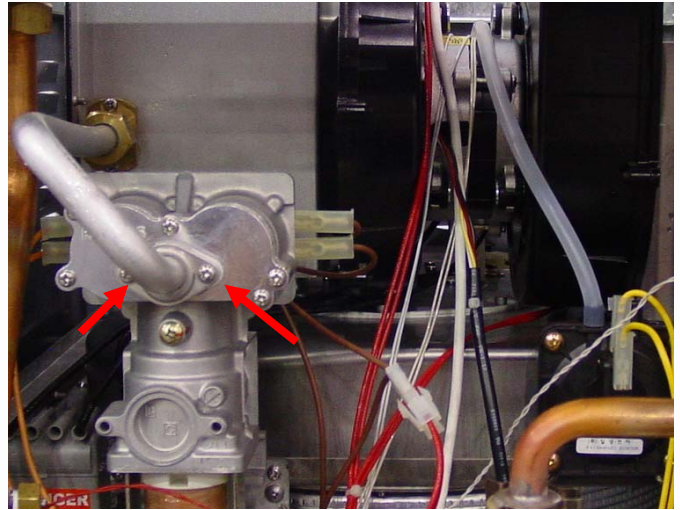
Remove Front Display Panel:

- Remove 2 Philips head screws from the bottom right and left of the plastic Front Display Panel
- Gently pull the panel towards the front to loosen



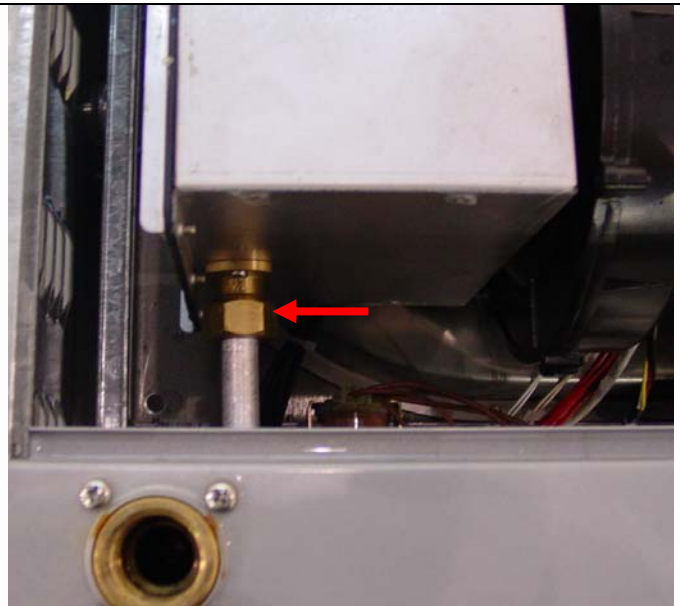
Disconnect Gas Tube From Manifold:

- a. Remove two Philips head screws from the gas valve manifold



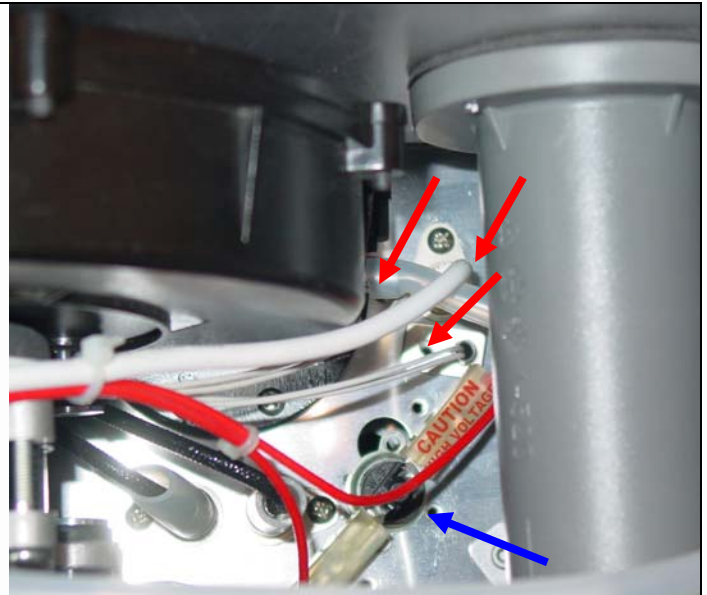
Disconnect Gas Tube From Intake Housing:

- a. Gently loosen the nut connected to the orifice with a small wrench



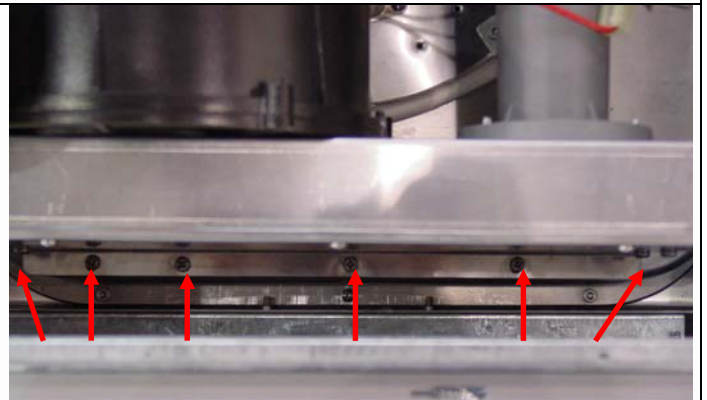
Disconnect Air Pressure Tube and Remove Thermostat Flame and Air Hole Thermistor:

- a. Unplug rubber tube from the rear nipple of the fan
- b. Unplug Flame Rod sensor wire (thick white wire)
- c. Cover the flame observation hole with tape to prevent screws from falling into the combustion chamber
- d. Remove 2 Philips head screws from Thermostat Flame (connected by red wires)
- e. Remove 1 Philips head screw from Air Hole Thermistor (connected by thin white wires)



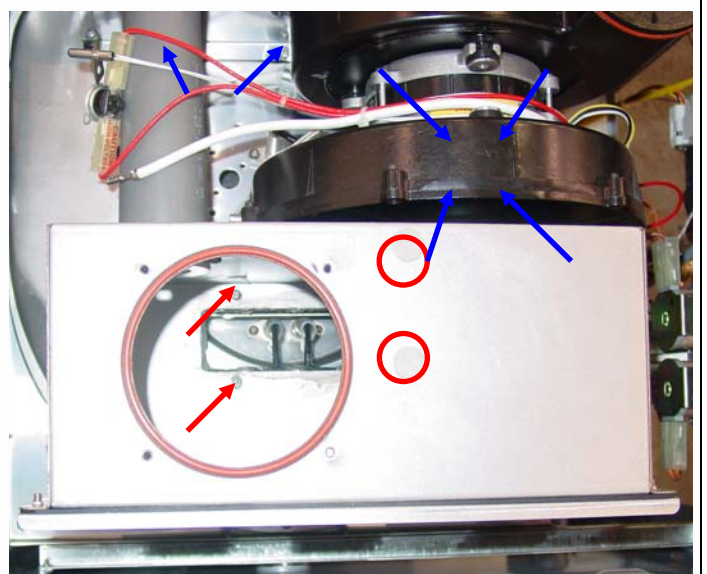
Remove Fan Motor:

- a. Remove 6 Philips head screws from the exhaust flange outer side



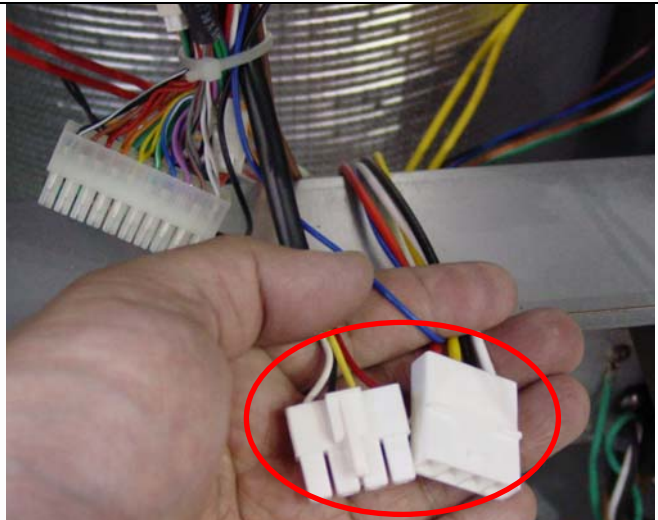
Fan Removal Continued:

- a. Remove 2 Philips head screws from the exhaust flange inner side
- b. Remove 4 Philips head screws holding the injection fan on top of the burner
- c. Remove 2 rubber plugs covering screw access holes on the intake box
- d. Remove 4 Philips head screws securing the intake box



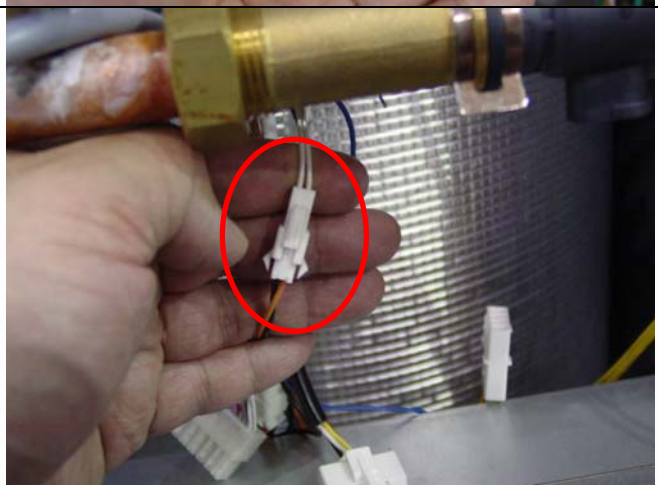
Unplug Fan Control Wiring Harness:

- a. Cut plastic wire-ties to allow easy access to cables
- b. Locate Fan Control Wire leading from the motor and unplug from the 4 pin Molex plug

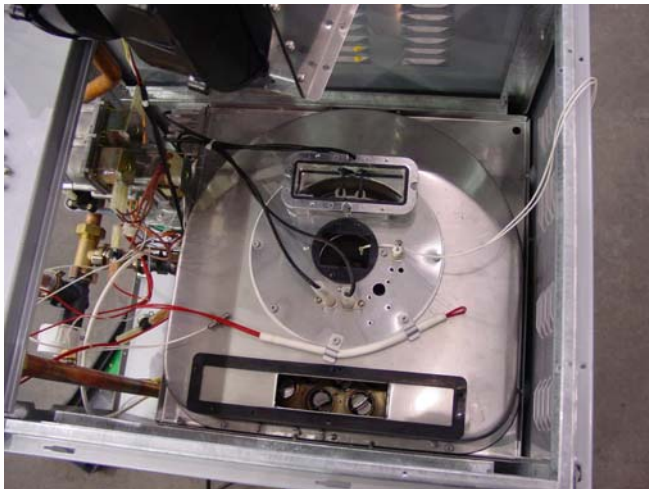


Unplug Burner Thermistor Wiring Harness:

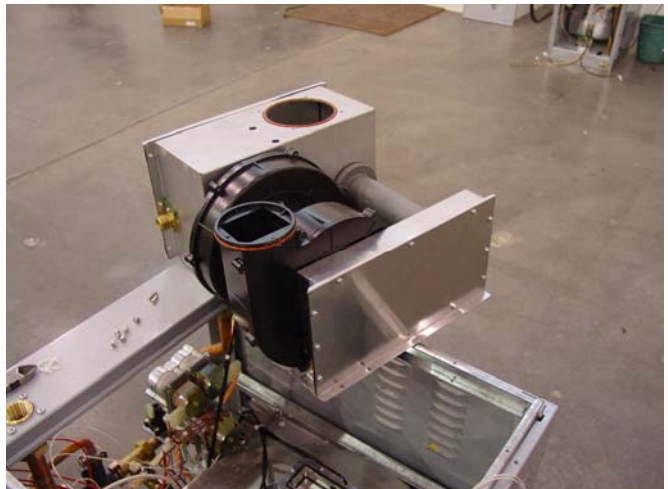
- a. Locate Burner Thermistor wire from the burner until thin black and orange wires are connected to a 2 pin plug



Fan Removed View 1:



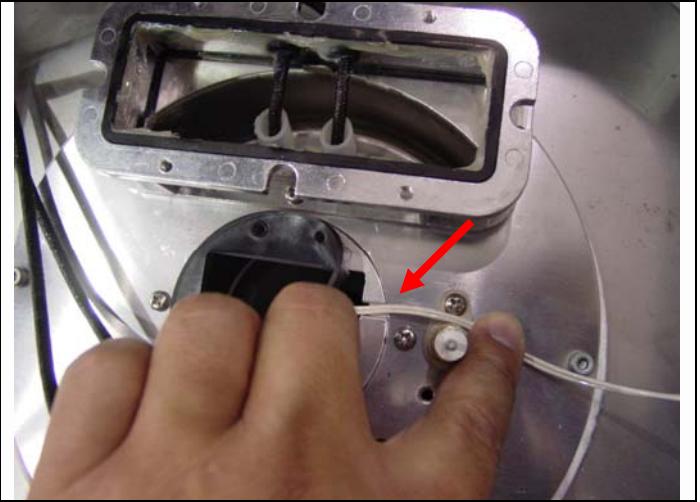
Fan Removed View 2:



Fan Motor Installation Instructions:

To Install Fan Motor Assembly:

- a. Reverse disassembly instructions provided above
- b. Take extreme care to place burner thermistor wire in its designated groove and avoid pinching the wire when reinstalling the fan



Consumer Notice: The information and instruction in this bulletin are intended for use by skilled professionals. These instructions should not be performed by consumers. Call your professional person for help.