Component Access and Removal

This section explains how to access and remove components from Wolf Pro Series ventilation products.

An attempt has been made to arrange these procedures in such a way as to simulate which components would need to be removed first in order to gain access to other components. When following a component removal procedure, it may be necessary to reference another component removal procedure listed earlier in this section.

This section is divided into two sections, the first section covers Models CTWH30, CTWH36 and Model IH4227. Section two covers Downdraft Models DD30I/R, DD36I/R and DD45I/R.

NOTE: Before continuing, please take note of the WARNINGS and CAUTIONS below.

⚠ WARNING

TO AVOID ELECTRIC SHOCK, POWER TO A VENTILATION UNIT MUST BE DISCONNECTED WHENEVER ACCESSING AND/OR REMOVING COMPONENTS POWERED BY ELECTRICITY OR COMPONENTS NEAR OTHER ELECTRICAL COMPONENTS.

IF IT IS NECESSARY TO REMOVE A VENTILATION UNIT FROM ITS INSTALLATION, REMEMBER THAT THEY ARE HEAVY AND COULD FALL RESULTING IN SERIOUS INJURY OR DEATH. PULLING A UNIT FROM ITS INSTALLATION SHOULD ONLY BE PERFORMED BY A TRAINED AUTHORIZED SERVICE TECHNICIAN OR INSTALLER.

⚠ CAUTION

Metal edges may be sharp. Use caution when servicing unit to avoid personal injury.

Component Access And Removal for Models Downdraft Units

Filter Removal

NOTE: Refer to all WARNINGS and CAUTIONS at beginning of this section.

The filter assemblies are located in the chimney assembly and are secured in place by spring clips. The filter assemblies consist of two pieces, the filter grille and filter insert.

To remove the filters, (See Figure 26):

1. With chimney in the up position, push down on the filter frame while pulling the filter out away from the downdraft.
2. The filter and filter grille are separated by simply pulling the filter out of the filter grille.

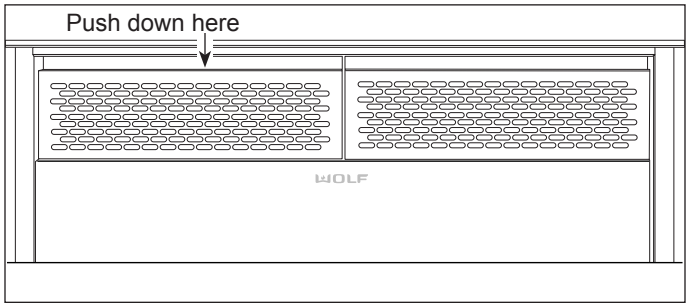

Figure 4-26 Filter Removal

⚠ WARNING

TO AVOID ELECTRIC SHOCK, POWER TO THE VENTILATION UNIT MUST BE DISCONNECTED WHENEVER PERFORMING THE FOLLOWING REPAIR.

Internal Blower Assembly Removal

In order to access the interior components, the blower motor assembly must be removed from its installation position. The blower motor assembly can be removed as a unit.

To remove an internal blower motor assembly, (See Figure 27):

1. Remove 3/8” (9.5) nuts from channel clamps. The channel clamps secure the cover plate and flange of internal blower assembly to the downdraft frame.
2. Extract screws securing motor cover to downdraft frame. Remove motor cover from unit.
3. Extract sheet metal screws from bottom edge of downdraft that secure the internal blower assembly to the downdraft frame.
4. Lift internal blower assembly up until flange is clear of downdraft frame. Turn internal blower assembly to side until the wire harness is accessible. Disconnect wire harness at quick disconnect.
5. Remove internal blower from unit.

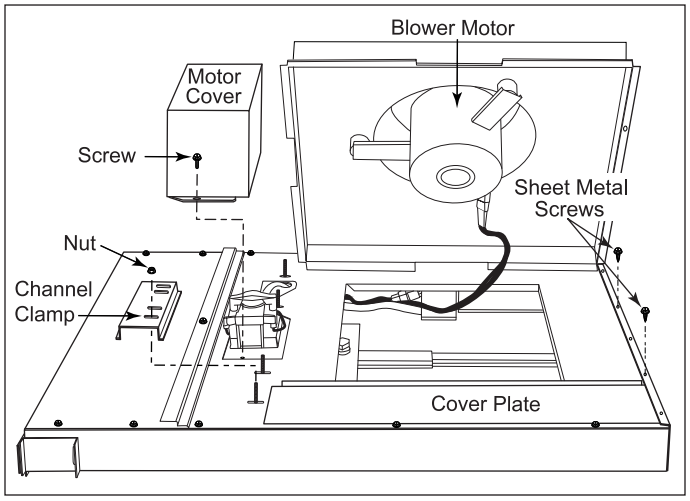

Figure 4-27 Internal Blower Assembly Removal

⚠ WARNING

TO AVOID ELECTRIC SHOCK, POWER TO THE VENTILATION UNIT MUST BE DISCONNECTED WHENEVER PERFORMING THE FOLLOWING REPAIRS.

Blower Motor Removal

NOTE: Refer to all WARNINGS and CAUTIONS at beginning of this section.

The blower motor is mounted to the scroll box assembly on three isolators and is secured with nuts. It will be necessary to remove the internal blower assembly from its installation position to remove the blower motor.

To remove the blower motor, (See Figure 28):

1. Extract screws from outside edge of scrollbox cover. Extract screws and 3/8" (9.5) nut from scroll box weldment and remove from unit.
2. Remove blower wheel by extracting setscrew securing the blower wheel to blower motor shaft.
3. From opposite side of assembly, extract 7/16" (11) nuts securing blower motor to isolators.
4. Lift motor off of isolators.
5. To remove isolators, from blower wheel side of assembly, use a 3/8" socket or wrench to extract the bolts securing the isolators to scroll box frame.

Capacitor Removal

NOTE: Refer to all WARNINGS and CAUTIONS at beginning of this section.

The capacitor is located in the lower left hand corner of the scroll box assembly and is secured in position by a bracket and screws.

To remove the capacitor, (See Figure 29):

1. Extract screws from outside edge of scrollbox cover. Extract screws and 3/8" (9.5) nut from scroll box weldment and remove from unit.
2. Extract bolts securing capacitor bracket to scroll box assembly. Lift bracket off of capacitor.
3. Remove rubber cover from capacitor and disconnect wire leads.

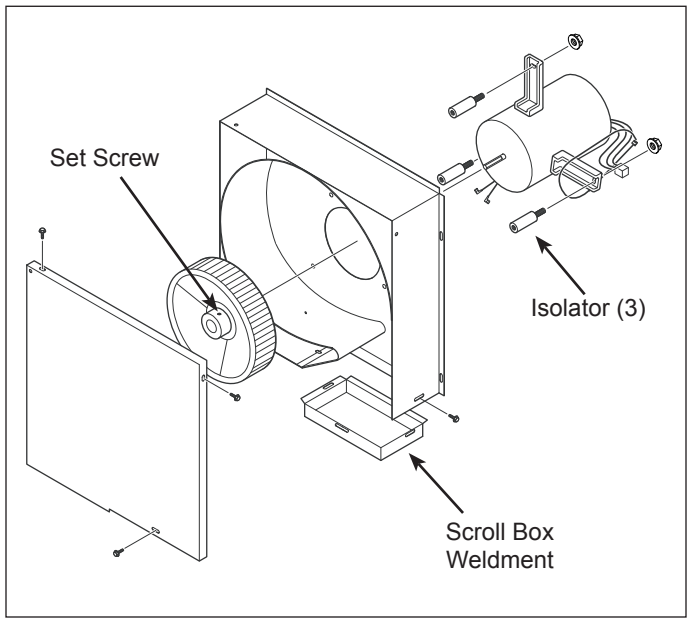

Figure 4-28 Blower Motor Removal

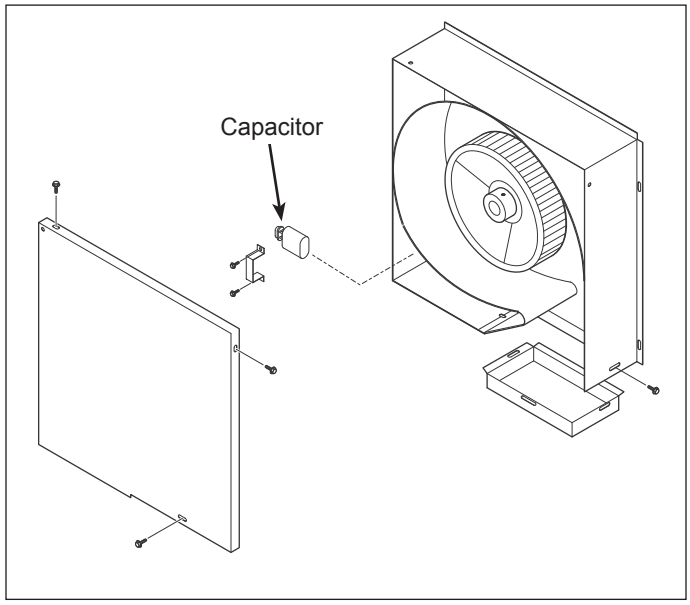

Figure 4-29 Capacitor Removal

⚠ WARNING

TO AVOID ELECTRIC SHOCK, POWER TO THE VENTILATION UNIT MUST BE DISCONNECTED WHENEVER PERFORMING THE FOLLOWING REPAIRS.

Micro-switch Removal

NOTE: Refer to all WARNINGS and CAUTIONS at beginning of this section.

The micro-switches are located on the front of the gear motor and are secured to the gear motor bracket with two screws. The set of two micro-switches control the operation of the chimney assembly.

Depending on installation and cabinet size, the internal blower assembly may not have to be removed to access the micro-switches.

To remove the micro-switches, (See Figure 24):

1. If the internal blower has not been removed, remove the 3/8" (9.5) nuts from channel clamps. Lift channel clamps off threaded studs.
2. Extract screws from gear motor cover. Lift cover off of unit.
3. Disconnect electrical leads from micro-switches.

NOTE: The micro-switch electrical connections must be hooked up in the proper order. Take note or tag wire leads before disconnecting to assure correct location for re-assembly.

4. Extract screws from micro-switches and lift off of gear motor assembly.

Front Air box Panel Removal

The internal blower assembly must be removed to access the upper and lower front air box panels. Bolts secure the panels to the downdraft frame. The upper air box panel covers the f lter assemblies, while the bottom air box panel covers the chimney slide assembly and electrical components.

To remove the front air box panels, remove internal blower assembly f rst, then (See Figure 31):

1. Extract bolts from lower air box panel.
2. Pull lower air box cover up and away from downdraft frame and remove from unit.
3. Extract bolts from upper air box panel, and remove panel from unit.

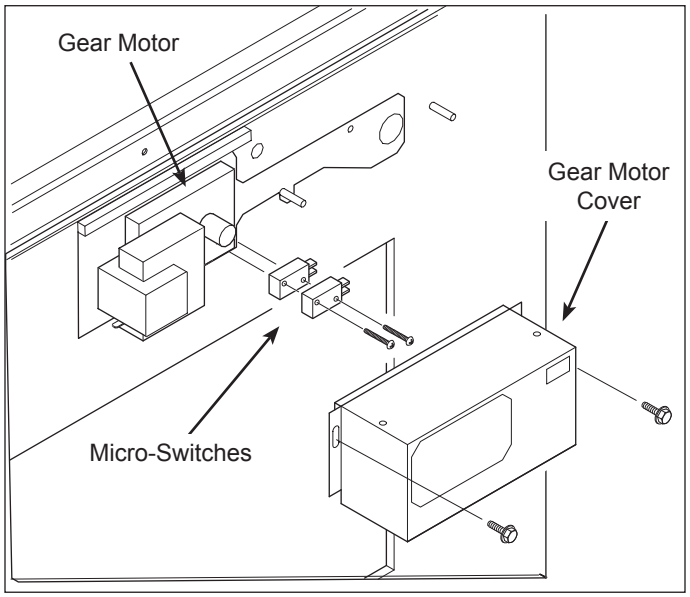

Figure 4-30 Micro-Switch Removal

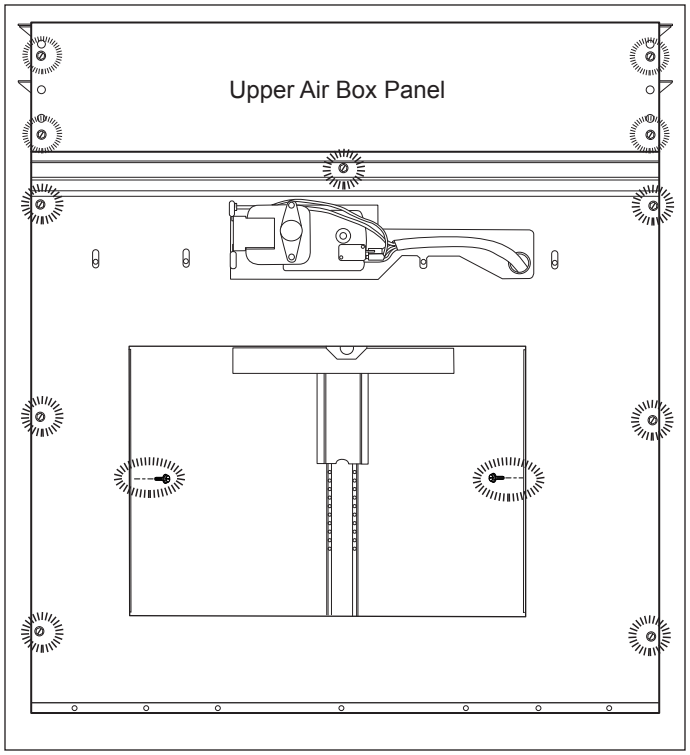

Figure 4-31 Air Box Panels Removal

⚠ WARNING

TO AVOID ELECTRIC SHOCK, POWER TO THE VENTILATION UNIT MUST BE DISCONNECTED WHENEVER PERFORMING THE FOLLOWING REPAIR.

Gear Motor Removal

NOTE: Refer to all WARNINGS and CAUTIONS at beginning of this section.

The gear motor is secured with screws that pass through the back side of the gear motor bracket and fasten into the gear motor assembly. The crank assembly, which is located on the back side of the gear motor bracket, is secured to the gear motor shaft by a threaded U-shaped clamp and two nuts. The gear motor bracket is then mounted to threaded studs pressed into the unit frame and secured with 3/8" (9.5) nuts.

To remove the gear motor, the internal blower assembly and the lower air box panel must be removed f rst, then (See Figure 32):

1. Disconnect all wire leads from left side of gear motor and from micro-switches. Remove wire harness from hold down clamp then feed wire harness through gear motor bracket.
2. Extract screw securing ground wires to side of gear motor bracket.
3. With 3/8" (9.5) wrench or socket, remove nuts from both ends of gear motor bracket.
4. Lift gear motor bracket off of threaded studs.
5. From back side of bracket, remove 3/8" (9.5) nuts from U-shaped clamp securing crank assembly to motor shaft.
6. From same side of bracket, extract the screws that pass through the gear motor bracket and fasten to gear motor assembly.
7. Extract screws securing micro-switches to gear motor assembly.

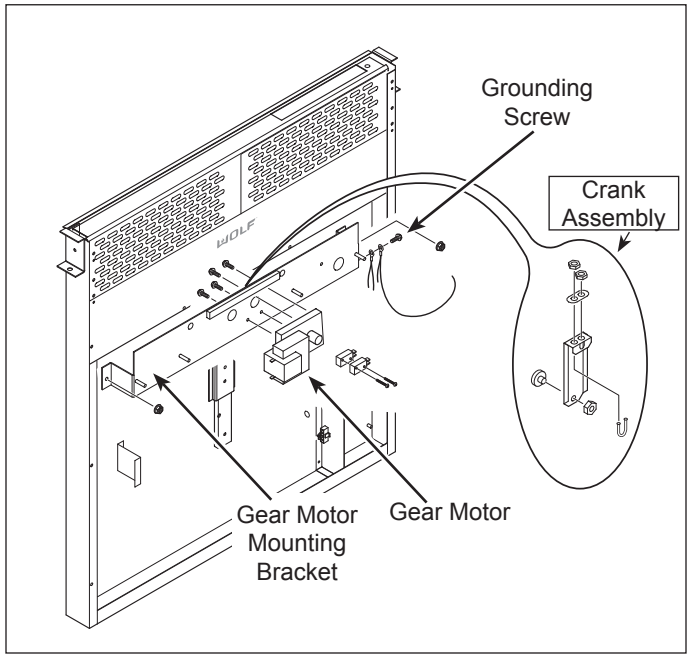

Figure 4-32 Gear Motor Removal

⚠ WARNING

TO AVOID ELECTRIC SHOCK, POWER TO THE VENTILATION UNIT MUST BE DISCONNECTED WHENEVER PERFORMING THE FOLLOWING REPAIRS.

Power Control Board Removal

NOTE: Refer to all WARNINGS and CAUTIONS at beginning of this section.

The power control board is located inside a compartment of the bottom right hand corner of the unit interior. The board sits upon nylon spacers and is secured by nuts to the threaded studs pressed into the unit frame. Screws pass through the left compartment sidewall and fasten into an aluminum bracket riveted to the power control panel.

To remove the power control board, the internal blower assembly and the lower airbox panel must be removed first, then (See Figure 33):

1. From the left side of the power control board compartment, depress retaining clip and disconnect wire harness from power control board.
2. From same side of compartment sidewall, extract screws that fasten into the aluminum bracket of the power control board.
3. From inside compartment, using an 11/32" (8.75) socket with extension, remove nuts from corners of power control board.
4. Lift power control board off of threaded studs.

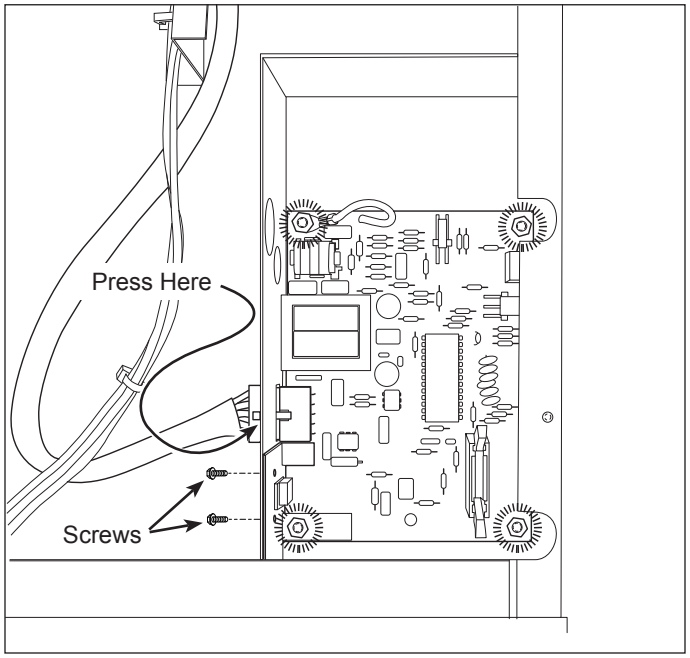

Figure 4-33 Power Control Board Removal

Power Cord Removal

NOTE: Electrical shock hazard. Refer to WARNING at beginning of section.

The power cord enters the unit from the right side and is held in place by a strain relief located in the right sidewall of the unit.

To remove the power cord, the internal blower assembly and lower airbox panel must be removed, then (See Figure 34):

1. Disconnect power cord from wire harness at quick disconnect.
2. From inside of unit with flat bladed screwdriver, compress and push strain relief through opening in sidewall. Pull power cord out of unit.

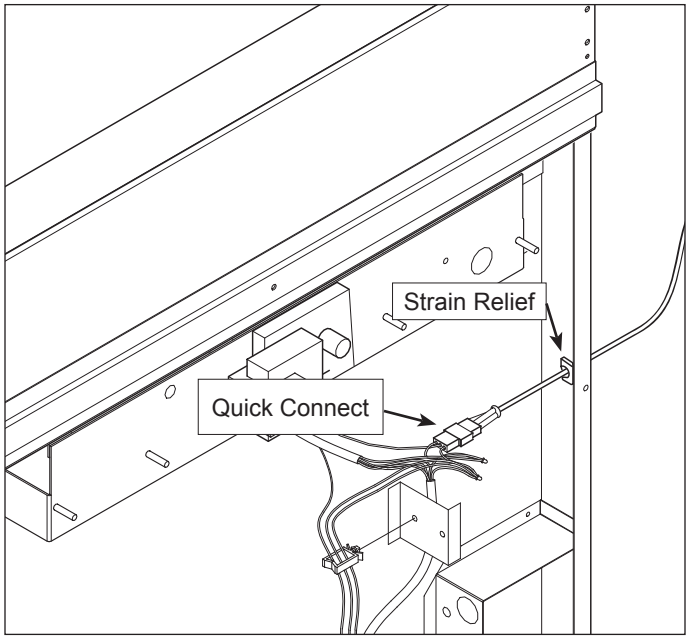

Figure 4-34 Power Cord Removal