

Item #1041730R, 1040403R, and 1020003R
 (Core Blower Assembly and Components Replacement)

THIS PROCEDURE MUST BE PERFORMED BY A QUALIFIED TECHNICIAN

KIT INCLUDES

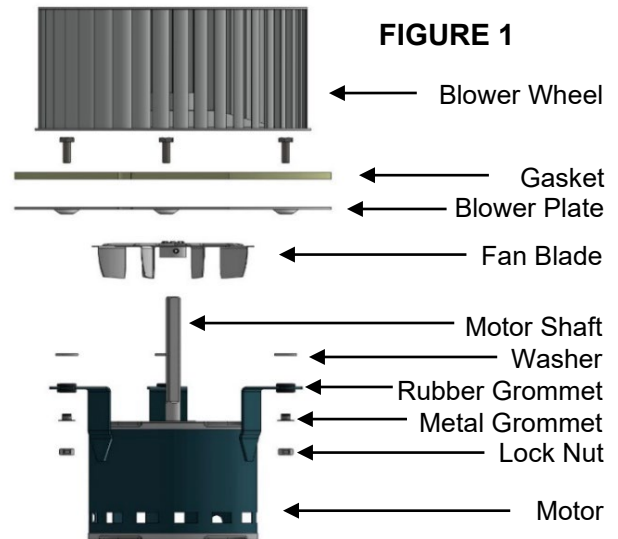
Item #1041730R includes both kits listed below.

Replacement Motor Kit (1040403R) Includes:

- 16-14 Q/D Female Terminal
- 16-14 Q/D Male Terminal
- 1/4 HP Motor 1700 RPM
- Core Blower Plate with Gasket
- Capacitor Assembly
- Capacitor Boot
- Fan Blade
- Hardware Kit
- Label Fan Motor Direction

Replacement Wheel Kit (1020003R) Includes:

- Blower Wheel 9 1/8" X 4 1/4"



INSTALLATION



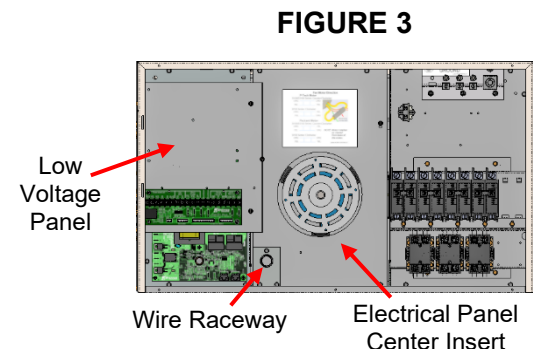
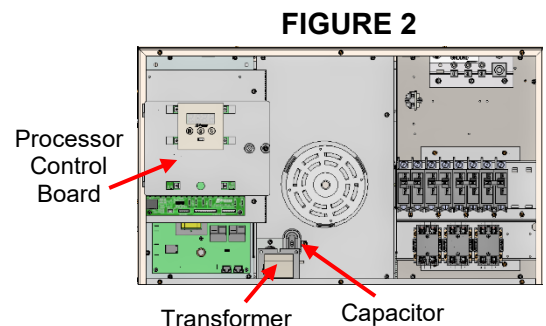
WARNING

HAZARDOUS VOLTAGE: Risk of electric shock. Can cause injury or death. System may be connected to more than one branch circuit. Disconnect power to all circuits before servicing. Equipment must be installed and serviced by a qualified technician.

1. De-energize the system and remove the electrical panel cover to gain access to the electrical compartment.
2. Remove the two (2) screws from the 75VA transformer (Figure 2) in the base and set it to the side.

NOTE: Use caution when working inside the electrical compartment of the system as the wiring harnesses can be damaged by sharp edges and mishandling.

3. Cut tie wraps securing the black and white wires to core blower and disconnect.
4. Remove the capacitor (Figure 2) from the electrical panel center insert and disconnect the brown wires on the capacitor. Set the capacitor to the side.
5. Unhinge the processor control board (Figure 2) to gain access to the low voltage panel (Figure 3).
6. Remove the low voltage panel (Figure 3) by taking out the four (4) screws and set aside.
7. Remove the wire raceway (Figure 3) by taking out the three (3) screws and set aside.



Core Blower Replacement Procedure continued...

8. Remove the six (6) screws on the electrical panel center insert (Figure 3) and remove the panel.
9. Remove the screws securing the core blower assembly (Figure 4). Remove the motor assembly by turning to the side. Make sure the element wires do not get damaged in the process.

NOTE: If replacing components of the assembly, perform steps as called out in Table 1. If replacing the entire assembly, go to Step 12.

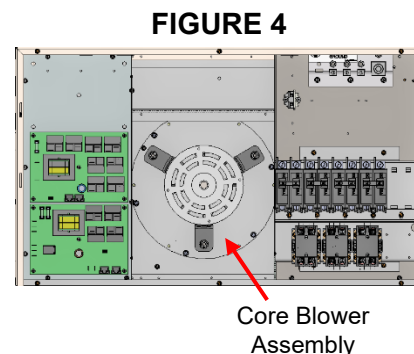
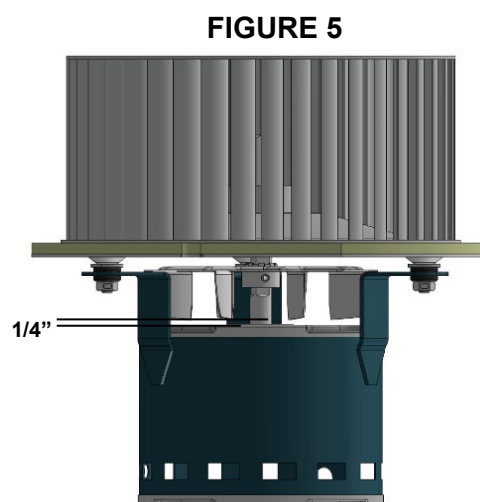


TABLE 1

Component Replacement	Disassembly Steps	Reassembly Steps
Blower Wheel	10a - 10b	11h
Motor	10a – 10c	11a – 11g

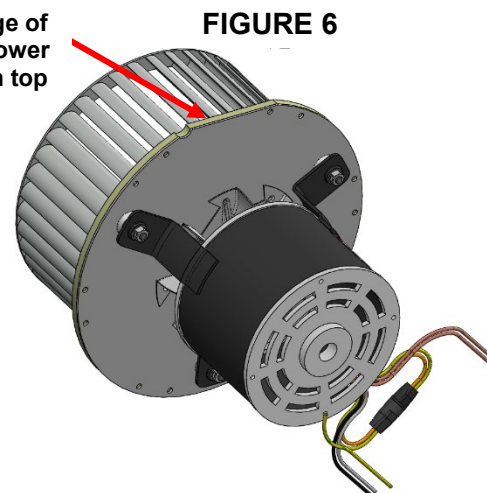
10. Disassemble the core blower assembly:
 - a) Using 5/32" Hex wrench, loosen the two (2) set screws on the blower wheel.
 - b) Remove the blower wheel from motor shaft.
 - c) Remove the three (3) bolts securing the core blower plate to motor mounting brackets and discard the plate.
11. Reassemble core blower assembly (See Figure 1):
 - a) Place 1/4" flat washers on rubber bushings on motor mounting brackets.
 - b) Position the new core blower plate with gasket, countersinks facing the motor, onto the washers on the mounting brackets with the flat edge to the top (Figure 6). Wires must be on the bottom right of the motor.
 - c) Reinstall the three (3) new bolts. Ensure the plate with gasket is adequately centered in respect to the motor shaft so it doesn't interfere with its rotation.
 - d) Install the three (3) new metal motor mount grommets over the bolts and into the rubber bushings of the motor mounts.
 - e) Attach three (3) new lock nuts and tighten bolts until approximately 1/16" of the bolt threads are exposed through the nut. If tightened too much, the grommets are compressed and unable to absorb vibration.
 - f) Slide the new blower wheel onto the motor shaft ensuring the set screws are aligned with the two (2) flat faces of the shaft. Leave 1/4" gap between the wheel and mounting plate. Tighten set screws to 120 in/lbs.
 - g) Crimp provided terminals on black (female) and white (male) wires.



12. Spin the wheel by hand to ensure the wheel is not touching gasketing material.
13. Insert new core blower assembly, rotating it so that the flat edge of the core blower plate (Figure 6) is towards the top. The blower motor wiring should be coming off the lower right side of the motor as shown in Figure 6. Secure in place using previously removed hardware.

NOTE: When securing the blower plate reference Figure 7. Systems built prior to 2007 use a different mounting assembly.

Flat Edge of
Core Blower
Plate on top



14. Secure the wire raceway.
15. Reinstall the electrical panel center insert back inside the system being careful of all wiring.
16. Adhere the Fan Motor Direction label (Figure 8) on the panel center insert (Figure 3). Verify reversing connection (Figure 8) is correctly selected for the motor install.
17. Mount the capacitor and attach the ground (green) wire to the electrical panel center insert with the mounting screw.
18. Slide the rubber capacitor boot onto the brown wires.
19. Attach the brown wires to the capacitor and secure the boot over the capacitor terminals. Make sure the capacitor being used is the correct capacitor for the blower motor installed. Reference Table 2.

TABLE 2

MOTOR MANUFACTURER	CAPACITOR
FASCO	4 mfd, 370V
GENTEQ	4 mfd, 370V
PACKARD	3 mfd, 370V
JAKEL/P-TECH	3 mfd, 370V

20. Connect the blue wire from the system to the white wire on the blower.
21. Connect the black/yellow wire from system to the black wire on blower.
22. Secure the low voltage panel into place, hinge the processor control board back in position, and secure.
23. Secure the 75VA transformer into place on the base of the system. Ensure the transformer jumper ring terminal is secured with the left transformer screw.
24. Route and secure the core blower wiring in a manner that prevents damage once the system is energized.
25. Energize the system and verify motor direction.
26. Reinstall electrical panel cover.

FIGURE 7

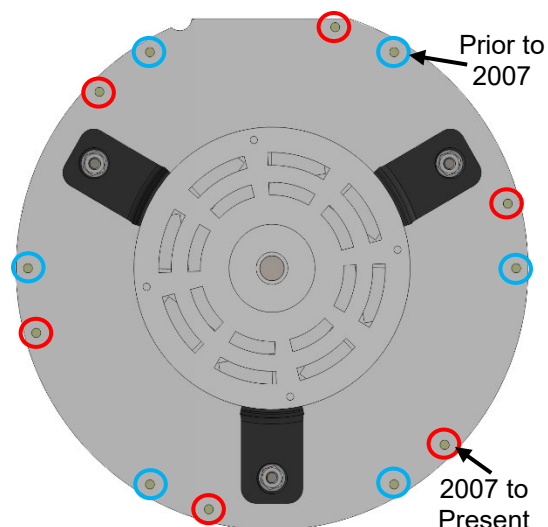


FIGURE 8

