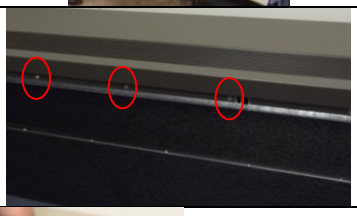
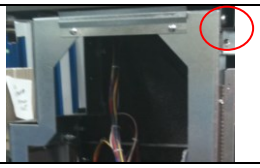
Blower Wheel Replacement Instructions

Note: Replacing a Blower Section will take less time than replacing a blower wheel. If interested in replacing entire factory build up blower section, contact rep for quote. If replacing blower wheel, follow all steps. If replacing entire blower section, follow A steps (pages 1-2) and then skip to C steps (pages 5-6).

Blower Section Removal Instructions:

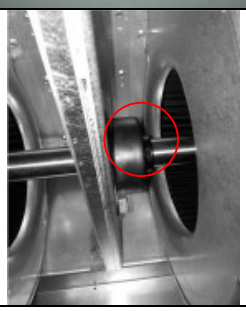
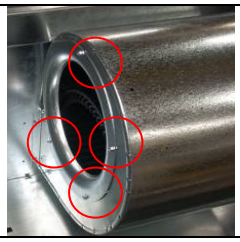
1A	5/32" hex (Allen) tool 3/8" nut driver	Remove all remaining front UVF panels. Remove end panels if possible.	
2A	¼" nut driver	Remove screws along length of unit that secure the unit top to the blower section.	
3A	¼" nut driver	Remove screws along length of unit that secure coil baffle to blower section. Remove (4) screws that connect the blower section sides to the coil section sides.	 
4A	¼" nut driver	Remove (1) screw from the center of the blower deck that attaches the blower deck to the pipe chase.	
5A	-	Remove the harness connector(s) from the motor.	-
6A	¼" nut driver	Remove the ¼" head screw from the green ground wire that connects the motor to the back frame if unit has a PSC motor. ECMs are grounded through the harness.	
7A	½" socket	Remove the (2) carriage bolts retaining the front brace to the frame sides.	

8A	½” socket	Remove the (4) nuts retaining the blower section to the back	
9A	½” socket w/ 12” extension	Remove the (2) nuts retaining the inboard bearing bracket to the pipe chase (UVF5 units only). Remove blower section from frame.	-

The assembly order of the blower & shaft installation is critical. Be careful with all components during removal and installation.

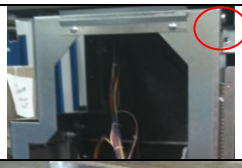
If replacing entire blower section, skip to C instructions on page 5.

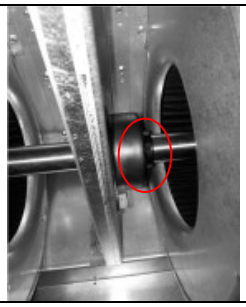
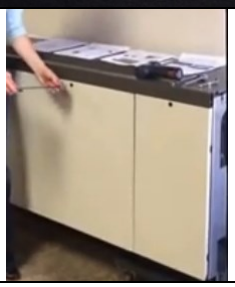
Blower Wheel Replacement Instructions:

1B	5/32" Allen Wrench	The blower wheel being replaced will need to be slide off the motor end of the shaft. Loosen setscrews on the wheel or wheels being replaced and all of the other wheels on the motor end of the shaft (2 per wheel).	
2B	1/8" Allen Wrench	Loosen inboard/center bearing setscrews (UV5 only)	
3B	7/16" Deep Socket w/ 12" extension and swivel	If unit has ECM Motor, remove motor shroud (sheet metal cover) by removing two hex nuts. Do not discard cooling shroud. The shroud must go back on motor or it could be damaged during operation.	
4B	7/16" socket 7/16" wrench	Loosen motor mount red nut and bolt until motor moves freely. You will not need to remove the motor mount.	
5B	-	Slide shaft-coupling-motor assembly out of wheels and unit until shaft clears blower wheel(s) being replaced.	-
6B	¼" nut driver	Remove (4) screws securing blower housing(s) to blower deck and remove blower and wheel assembly.	
7B	¼" nut driver	Remove (5) screws securing blower inlet ring to blower housing and remove inlet ring and remove blower wheel(s).	

8B		Install new blower wheel(s). Ensure that the fan blades are installed in the correct orientation (cup of blade towards discharge)	
9B	¼" nut driver	Install inlet ring and install screws securing blower inlet ring to blower housing.	
10B	¼" nut driver	Install (4) screws securing blower housing(s) to blower deck.	
11B		Slide shaft-coupling-motor assembly back into bearing(s) and wheels. DO NOT USE EXCESSIVE FORCE! Damage to wheels may occur.	
12B		Insert shaft-coupling-motor assembly into wheels until motor clearance is as specified for motor type (PSC needs ½" space and ECM needs 1 ½" space).	
13B	7/16" socket 7/16" comb. wrench	Ensure that motor shaft is perpendicular to motor blower endplate. Tighten 5/16" motor mount, hex nut and bolt until motor is secure.	
14B	7/16" Deep Socket w/ 12" extension and swivel	Install motor shroud using two 5/16" hex nuts if using ECM motor. Align "window" with receptacles on motor. **Shroud must be placed back over Motor or it could fail if operated without cooling shroud.**	

Blower Section Installation Instructions:

1C		Install new blower section into frame assembly (or section with new wheel).	-
2C	½" socket	Tighten the (4) nuts retaining blower section to frame.	-
3C	½" socket	Tighten the (2) nuts retaining the inboard bearing bracket to the pipe chase (UVF5 only)	-
4C	½" socket	Reinstall (2) carriage bolts that attach the front brace to the frame sides.	
5C	¼" nut driver	Re-attach green ground wire that connects the motor to the frame with screw if unit has a PSC motor. ECMs are grounded through the harness.	
6C	-	Connect harness connector(s) to motor.	-
7C	5/32" Allen Wrench	If replacing wheels instead of entire blower section, center each wheel in its respective housing and tighten wheel setscrews (2 per wheel).	
8C	¼" nut driver	Reinstall (1) screw at center of blower deck attaching blower deck to pipe chase.	
9C	¼" nut driver	Reinstall the (4) screws holding the blower section sides to the coil section sides.	
10C		Rotate the fan shaft by hand to ensure that fans are unrestricted and can rotate freely. Check for any fan obstructions.	
11C		If replacing wheels instead of entire blower section, Remove lockout and operate unit for approximately 60 seconds to let inboard/center bearing mount self-adjust (UVF5).	

12C	1/8” hex (Allen) tool	If replacing wheels instead of entire blower section, Lockout and Tag-out all power supplies to equipment and controls. Tighten the two bearing setscrews (UVF5).	
13C	¼” nut driver	Reinstall screws along length of unit securing coil baffle to the blower section.	
14C	5/16” nut driver	Reinstall Top	
15C	5/32” hex (Allen) tool 3/8” nut driver	Reinstall front and end panels. Ensure that tag on each right front panel matches unit tag. Panels have electrical information specific to each unit.	

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