

BLOWER FAN BLADE 3-20-502221

INSTALLATION INSTRUCTIONS

Replaces MPNs: 3-20-502221

Before Installing

- **ALWAYS** unplug the unit before beginning any work
 - Allow the unit to cool completely if recently used
 - Work in a well-lit area with proper tools
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Installation Steps

1. Disconnect Power

- Ensure the unit is completely cooled down and drained of power.
- Unplug the stove from the powersource

2. Access the Unit

- Locate both the exhaust blower motor and the fan blade in the stove. The blower motor is typically mounted near or in the exhaust port on the inside of the stove, directly to the back of the stove, or on a removable steel plate or hub. The blade may be connected to the motor separated by the chassis which may require the ash pan to be removed in some units.
- Carefully remove the wiring access panel on the unit by removing the screws and setting them aside to access the motor
- Remove the ash pan to gain access to the fan blade.

3. Disconnect Wiring

- Before disconnecting anything, take clear photos of all wiring connections from multiple angles. This is the single best way to avoid mistakes during reassembly.

- Label each connector with masking tape and a marker as you remove it.
- Unplug all blower wiring leads from the wiring harness, including the grounding wire if available.
 - **Note:** Always pull on the connector body, never on the wires themselves, pulling on wires can damage the connector or break the crimp.

4. Remove Old Fan Blade

- For models that require removing the motor to access the blade, remove the bolts holding the blower motor to the stove mount and set them aside and gently pull the old blower and mounting gasket out of the stove.
- For models with the fan blade separated from the motor by the a sealing, remove the fan blade cover plate in the ash pan area and loosen the set screw holding the fan blade to the motor rod to free the fan blade.
 - You will need to jam a screwdriver or wedge between the impeller and stove wall in the fire box to keep the shaft from spinning as you loosen the set screw. This same process may need to be done for stoves that use a removable hub.
 - If the impeller is seized on the motor shaft, the shaft of the motor must be cut to remove and replace the motor. This will require a new impeller and new motor to be mounted to the stove. Refer to your owner's manual for the part number of the impeller replacement needed.
 - If you need to cut the shaft of the motor, a hand-held hacksaw blade is recommended. The shaft needs to be long and narrow because it needs to fit between the motor's cooling fan and the stove wall from behind the stove. Removal of the motor in this case will require removal of the bolts holding the blower motor to the stove mount and carefully pulling the motor out from the mounting area.

5. Install New Blower Motor

- Ensure the fan blade matches to your model before installation.
- If you removed the old fan blade **after** pulling the motor out of the stove, install the fan blade to the blower motor drive rod and secure the blade by tightening the set screw.
 - Carefully insert the blower and gasket into the blower mount after installing the blade and secure the blower with the screws removed in Step 4.
- If you removed the old fan blade **before** or **without** pulling the motor out of the stove, ensure the blower motor is secured to the blower mount and install the impeller to the blower motor drive rod. Secure the impeller by tightening the set screw.
 - If the motor was removed due to the original fanblade being seized to the motor, install a new blower motor to the blower mount and secure the motor using the nuts removed in Step 4. This should be done before installing the impeller in this case.

6. Connect Wiring

- Using the reference photos and labels from Step 3, plug all new blower wire leads into the wiring harness.
- Ensure each connector is fully seated, you should feel or hear it click into place. A loose connection is the most common cause of post-installation issues.

7. Connect Power

- Replace the wiring access panel and secure it with the screws removed in Step 2.
- Replace the ash pan if removed for access.
- Plug the stove's power cord into the power source.
- Your new blower is installed and ready to use.



Post-Installation Check

- Verify all connections are secure

- Test motor operation before closing panels
- Check for any unusual noises or vibrations

Support

If you encounter any issues during installation, consult your owner's manual or contact technical support via our contact form.