

New Furnace Blower Motor FAQs



November 11, 2024

What changes are coming to the furnace motor?

The Regal Beloit and Nidec motors in variable speed & modulating, communicating, upflow furnaces will be replaced with a proprietary design for the inverter and Welling Brushless DC motor combo. The module will be removed from the end of the motor and relocated next to the furnace IFC.

Which models will have this motor change?

A80US2V, A97US2V, A98USMV

Ultra LowNOx furnaces will not be impacted.

Downflow furnaces will have this change at a later date.



Current blower



New Blower Motor & Drive

When will this change take place?

This will be a running change on November 11, 2024.

How will I know which furnaces in my inventory have the new motor and inverter?

There will be a dash (-) nomenclature identifier. There will not be a CAT # change. Serial #s before November 11, 2024 are existing, after this date are the new inverter & motor. A PIB will be sent with Serial #s which will indicate the date of the change.



Why is this change being made?

Improved serviceability:

- The motor and control are easier and more accurate to diagnose reducing time to perform maintenance.
- If there is a need to check the motor, it can be done by removing a harness rather than pulling out the full assembly.
- All components are up front.
- Can access connections for the motor on the board.
- Save time and effort when service is required. By separating the motor and inverter dealers can service or replace only the component that needs attention.
- Easier to service in space constrained areas.
- Designed for improved reliability and lower warranty rates.
- LED on control to aid in troubleshooting.

Repair parts:

- Parts are simplified to ½ HP, ¾ HP and 1 HP motors for all models and 3 blower drive modules.

New Furnace Blower Motor FAQs



Do I need to stock both the new and old motors?

Yes, the new motors are not backwards compatible. Allied will stock existing parts for 10 years to uphold our warranty obligation.

How do I know which motor is needed for a repair?

Reference the model and dash number or serial number on Allied Connect. Serial #s after November 11, 2024 will require the new inverter & motor.

What are the new repair parts?

	Motor		Blower Drive	
	Cat #	Part #	Cat #	Part #
1/2 HP	20U01	620617-01	24M90	620616-04
3/4 HP	20U02	105793-02	27J51	105940-01
1 HP	20U03	620617-03	24K06	620616-03

How is installation for the furnace different?

No changes for unit installation.

What can I use to troubleshoot the motor and drive?

You can use a TechMate available where service equipment is sold.

Where can I access updated tech docs?

Service manual and troubleshooting guide will be updated on AlliedConnect.

How does this new motor compare to incumbent motors?

This motor has spent years in development and has passed all the qualification testing that all LII motors are subjected to.

Will this affect ratings?

Ratings will be unchanged.

Will the IFC change?

The IFC will be unchanged.

Will low GWP furnaces released in 2025 have this change?

The A80US2VK, A97US2VK, A98USMVK furnaces will have the new motor and inverter combination. It will not impact motors in other furnace families.