

For the last 2 years, J&D has partnered with a Midwest motor manufacturer to develop the JD-Drive. The JD-Drive is featured on the Magnum 58" Exhaust Fan, the AirBlaster, and our PM Panel Fans. Below we will compare the JD-Drive to a standard (non-J&D) induction motor.



## What is the JD-Drive?

The JD-Drive is a permanent magnet, direct drive, electronically commutated motor with an onboard driver. It is a smart, software-driven, variable speed motor with soft starts. No VFD is required!

VS.

A Standard AC Induction Motor's technology has been around for 130+ years. An electric supply is connected to the stator and a rotating magnetic field is created. The rotor starts turning and the motor starts. The speed can be varied with the addition of a VFD (variable frequency drive).

## **MAINTENANCE**



**NONE** 



## Recommended:

- Clean out and re-grease
- Clean out magnetic dirt
- Check bearings and windings
- Test running temperature

This maintenance is only for the motor, not whatever the motor is running, for example, a fan. If a fan is being run by a standard induction motor, additional maintenance could be required.

## ADDITIONAL BENEFITS

- Efficient at peak speed and across multiple speeds
- The JD-Drive doesn't use rare earth magnets, making the manufacturing process much more environmentally friendly than other permanent magnet motors
- Temperature Handling is much greater than a standard induction motor. There is no waste heat because the JD-Drive's rotor doesn't generate heat due to no windings in the rotor. In a standard induction motor, currents induced in rotors generate heat.
- Runs cool to the touch. Even if the motor/fan was not installed correctly, added internal safety features will shut off the motor before burning it up, rendering it unusable.

