

TOUGH JOBS

A **GROSCHOPP**® CASE STUDY

+ Truck Cabinet Ventilation +

Groschopp's fractional horsepower motors provide the pressurization and ventilation in service truck body cabinets to keep the contents clean and properly ventilated. The manufacturer was experiencing an unacceptable failure rate with its original motor supplier, most likely due to the intense vibration, dust and extreme climates inherent in the typical operating environments, which was causing the wiring connections to fail.

The customer runs the motors continually and they have an exceptionally long duty cycle, causing standard brushes to wear out at fairly high rates. A replaceable brush DC motor with optimized brushes was selected to help improve the serviceability of their system. This motor featured a solid wire crimp connection internal to the motor to ensure solid connections, a primary cause of failure with the original motors.

CHALLENGES:

- ⊗ Needed extended brush life with long duty cycles
- ⊗ High vibration and extreme environments

SOLUTION:

- ⊕ 2100 rpm PM motor
- ⊗ Tested multiple brush grades to find the best for long duty cycles
- ⊕ Improved wire crimping schemes to extend system life
- ⊗ Replaceable brush design provides 200-300% longer life expectancy

