## MAINTENANCE

Please take a few moments each year to perform the following preventive maintenance inspection on your fan to ensure its safe and efficient operation using the Annual Maintenance Checklist.

## **Annual preventive maintenance**

- 1. Check the upper safety cable and shackle. The cable should be wrapped tightly around the building structure, leaving as little slack as possible. The shackle should be securely tightened and located on the topside of the structure.
- 2. Check the two lower safety cables. The cables should be attached from the main fan unit to the bottom of the extension tube (or to the angle irons for fans mounted directly to angle irons). Ensure all bolts securing the lower safety cables are torqued to 40 ft·lb (54.2 N·m).
- 3. Make sure all mounting bolts are present and torqued to 40 ft·lb (54.2 N·m).
- 4. Inspect motor terminations inside the motor junction box and tighten if necessary.
- 5. Check the gear reducer for oil leakage. If leakage is present, contact Customer Service.
- 6. Remove the airfoils and inspect the hub, hub tabs, airfoil retainers, and airfoils for signs of damage or cracks.
- 7. Reinstall the airfoils using the airfoil retainers, ensuring all bolts are torqued to **29 ft·lb (39.3 N·m)**. *Note: If the hardware is stainless steel, ensure all bolts are torqued to* **10 ft·lb (13.6 N·m)**.
- 8. Ensure the bolts securing the winglets to the airfoils are securely tightened.
- 9. Inspect the whole fan for signs of corrosion, discoloration, pitting, or flaking of metal.
- 10. Check guy wires (if installed) for fraying or damage.

## **General preventive maintenance**

- □ Check all connections at the VFD and tighten as needed. Using a vacuum, remove all dust and debris from the inside and outside of the VFD.
- □ Verify proper fan rotation. The fan should be rotating counterclockwise when viewed from the floor.
- □ Remove the airfoils and inspect the hub, hub tabs, airfoil retainers, and airfoils for signs of damage or cracks.
- Reinstall the airfoils using the airfoil retainers, ensuring all bolts are torqued to 29 ft·lb (39.3 N·m). Note: If the hardware is stainless steel, ensure all bolts are torqued to 10 ft·lb (13.6 N·m).
- Dust the airfoils, motor, and motor housing. If desired, use a gentle cleaner or degreasing agent to polish the airfoils. Do *not* use Clorox<sup>®</sup> or other chlorine-based cleaners! This could result in the release of toxic/fatal fumes.
- Observe the motion of the fan during operation. The fan should not wobble or gyrate. If any wobble is noticed, ensure the mounting structure is rigid enough to support the fan. If guy wires were used, make sure they are sufficiently taut. If guy wires were not used, installing them is recommended. Contact Customer Service if wobbling persists.

For questions or help with maintenance, call Customer Service at 1-877-BIG-FANS.



\*If the hardware is stainless steel, ensure bolts are torqued to **10 ft·lb (13.6 N·m)**.



## **ANNUAL MAINTENANCE CHECKLIST**

Fan Model:		Fan Model:		Fan Model:	
Serial #:		Serial #:		Serial #:	
Location:		Location:		Location:	
Date	Initials	Date	Initials	Date	Initials



