

Replacement Fan Cage for EPF-SM-30 Series Explosion Proof Air Chillers Instruction Guide

Please follow the steps below in order to properly replace parts on EPF-SM-30-SP1107 series Explosion Proof Air Chillers.

IMPORTANT

READ CAREFULLY BEFORE OPERATING THIS FIXTURE. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

WARNING: TO PREVENT IGNITION OF A HAZARDOUS ATMOSPHERE, THE SUPPLY CIRCUIT SHOULD BE DISCONNECTED WHEN INSTALLING OR PERFORMING ANY MAINTENANCE ON THIS UNIT.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT USE ANY SOLID-STATE SPEED CONTROL DEVICE WITH THESE FANS.

WARNING: SUBSTITUTE COMPONENTS MAY IMPAIR EXPLOSION PROOF SAFETY.

WARNING: BEFORE SERVICING OR CLEANING THE UNIT, SWITCH THE POWER OFF AT THE SERVICE PANEL AND LOCK SERVICE PANEL TO PREVENT POWER FROM BEING SWITCHED ON ACCIDENTALLY.

FAN CAGE REPLACEMENT

1. Disconnect power to fan.
2. Remove water hose from front nozzle array. Push the tab up on the quick disconnect while simultaneously pulling hose to release.
3. Cut zip ties holding water nozzle array to fan cage. Set this aside.
4. Remove front half of guard. Use a screwdriver or other tool to remove the spring wire tabs holding this in place.
5. Remove propeller from motor. Loosen the two set screws and slide propeller out.
6. Loosen the bolts holding the rear half of guard to motor.
7. Remove old rear half of guard and set aside.
8. Install new rear half of guard and secure with bolts removed earlier.
9. Attach propeller to motor. Align the two motor flats and tighten the two set screws. Allow 3/4" clearance between propeller hub and motor so there is no rubbing while fan is operating.

NOTE: Handle the propeller carefully as it is factory balanced and aligned to ensure smooth operation. Do not use a hammer to force the propeller onto shaft. It should fit snugly, but not so tight that it will not slide on by the pressure of your hand.

10. Clean fan blades (if necessary). Vacuum or wipe with a damp cloth. Do not use harsh chemicals or cleaners to clean any part of the fan. Pressure washing the unit will void the warranty.
11. Attach front half of guard. Spring wire tabs to hold in place using a screwdriver or other tool.
12. Replace water nozzle array with zip ties. Cut zip ties once tight to prevent them from hitting the fan blades during operation causing excess noise.
13. Replace water hose. Push hose into quick connector all the way. Give a quick tug to ensure tightness.
14. Test for proper function and make sure there are no leaks. If leaks are present, check water hose connection and make sure the water nozzle array is not damaged.

Note: For best fit, position the hooks on the front guard midway between the radial wires of the rear guard.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Excessive noise	<ol style="list-style-type: none"> 1. Fan blade contacting housing 2. Defective motor bearings 3. Loose guards 	<ol style="list-style-type: none"> 1. Realign fan blade in fan housing 2. Repair or replace motor 3. Tighten guard fasteners
Excessive vibration	<ol style="list-style-type: none"> 1. Damaged fan blade 2. Motor shaft bent 3. Motor loose 	<ol style="list-style-type: none"> 1. Replace fan blade 2. Repair or replace motor 3. Realign if necessary and tighten fasteners