

Lock out the power source before the installation of all accessories.

Fan electrical power can now be applied and special attention should be given to determine if motor is working properly. At this time, with air system in full operation, with guards attached, it is well for the electrician to measure the operating amperage of the motor and compare with the nameplate rating to determine that the motor is operating under safe load conditions.

The fan should not need balancing, as it was balanced at the factory to meet stringent vibration levels before shipment. However, there are several things that may cause vibration, such as rough handling in shipment and erection, weak foundations, and alignments.

MAINTENANCE:

1. Before performing any maintenance on the fan, be sure power is turned off and locked in the OFF position at the service entrance before servicing the fan.
2. Ventilators should be carefully checked at least once a year. For critical or rugged applications, a routine check every two or three months is suggested.
3. All motors supplied with Soler & Palau USA ventilators carry a one (1) year warranty from date of shipment. For repairs within the warranty period, the motor must be taken to the motor manufacturer's authorized service dealer. Contact your representative for additional warranty details.
4. A periodic motor check should consist of spinning the motor shaft with the power off to be sure the motor turns freely.
5. Check sheave set screws to ensure tightness. Proper keys must be in keyways.
6. Do not readjust blade pitch or fan RPM. If sheaves are replaced, use only sheaves of identical size and type.
7. During the first few months of operation, it is recommended that the setscrews be checked to assure they are tight.
8. The rotating wheel or propeller requires particular attention in most applications since materials in the air being handled can build up on the blades to cause destructive vibration; and may also corrode and/or erode the blade metal to weaken the structure of the propeller. Regular inspection and corrective action at intervals determined by the severity of each application are essential to good service life.

MOTORS:

The fundamental principle of electrical maintenance is **KEEP THE MOTOR CLEAN AND DRY**. This requires periodic inspection of the motor. The frequency depends upon type of motor and the service.

We recommend periodic checks of voltage, frequency, and current of a motor while in operation. Such checks assure the correctness of frequency and voltage applied to the motor, and yield an indication of the fan load. Comparison of this data with previous data will give an indication of the fan performance. Any serious deviations should be investigated and corrected.

Lubricate integral horsepower motors per the motor manufacturer's recommendations. Lubrication frequency depends on the motor horsepower, speed, and service. Use compatible greases.

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REPAIR PARTS:

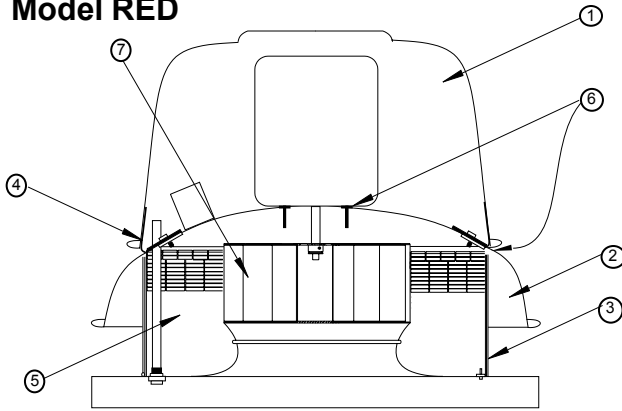
3. Fan Blades – Repair of individual fan blades or propeller assemblies is not recommended. Contact factory with blade size, number of blades, bore size, motor HP, air flow direction, rotation, fan RPM or sheave sizes and any order/tag information that is available for replacement.
4. Misc. Parts – Not available from local trade channels should be returned for repair or replacement. Be sure to obtain return tags or authorization before shipment.
5. Electric Motors – Repair or replacement of motors is normally performed by a repair station authorized by the manufacturer. Contact your representative or the factory for locations nearest to you. **DO NOT** ship motor to the factory without specific authorization.

FAN TROUBLE-SHOOTING CHART

PROBLEM	POSSIBLE CAUSES
Excessive Vibration	Propeller, wheel or sheaves loose on shaft Out of balance propeller Excessive buildup of dirt/dust on propeller Bent shaft Weak mounting base for fan Fan mounting bolts loose Loose or worn bearings Bearing or drive misalignment Structures not crossbraced (wall fans) Curb not flat and level
Excessive Horsepower	Static pressure higher than design Wheel or propeller rotating in wrong direction Fan speed higher than design
Too Little Air	Restricted fan inlet or outlet Filters are dirty or clogged Wheel or propeller rotating in the wrong direction System is more restrictive (more static pressure) than expected Fan speed lower than design Inlet or Outlet screens clogged
Too Much Air	Filters not in place Fan speed higher than design System is less restrictive (less static pressure) than expected
Fan Does Not Operate	Wrong voltage Electricity turned off or note wired properly Blown fuses Overload protector has broken circuit
Excessive Noise	Propeller, wheel or sheaves loose Accumulation of material on propeller Worn or corroded propeller Wheel or propeller out of balance Wheel or propeller hitting housing Bent shaft Loose fan mounting bolts Rattle of components in high velocity airstream Electrical noise Noise from high velocity air system Vibrating parts not isolated from building Vibrating duct work

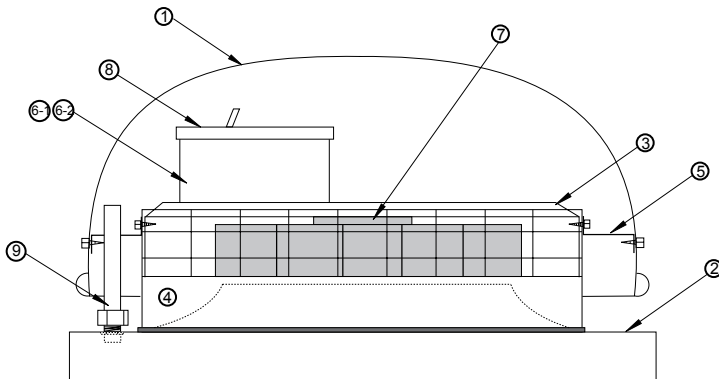
Replacement Parts

Model RED



Model RED	Motor Cover ①	Skirt ②	Support Legs (4 Required per unit) ③	Motor Cover Brackets (4 Required per unit) ④	Windband Birdscreen ⑤	Rubber Grommets ⑥		Wheel ⑦
						4 Required per unit	1 Required per unit	
	Part #	Part #	Part #	Part #	Part #	Part #	Part #	Part #
6	100460	100453	100441	100452	100445	100359	92106810	600008
810/812	100460	100453	100442	100452	100446	100359	92106810	600010
825	100454	100453	100442	100452	100446	100359	92106810	600009
10	100454	100453	100451	100452	100457	100459	92106810	600003
12	100480	100498	100471	100452	100473	100459	92106810	600004
15	100480	100498	400471	100452	100473	100459	92106810	600005

Model LPD



Model LPD	Cover Dome ①	Welded Base ②	Motor Bracket w/ Isolators (2 Required) ③
	Part #	Part #	Part #
6	101101	101107	101103 & 105744
8	101101	101102	101103 & 105744

Model LPD	Windband, Birdscreen, Edging, Trim Lok ④	Cover Brackets (2 Required) ⑤
	Part #	Part #
6	101124	101105
	X1010	
8	101124	101105
	X1010	

Model LPD	Disconnect Switch ⑥-1	Speed Control ⑥-2	Motor (115V or 230V - 50/60Hz) & Wheel 1 PC Assembly ⑦	Capacitor ⑧	Conduit Assembly Conduit, compression fitting & sealing nut ⑨
	Part #	Part #	Part #	Part #	Part #
6	2507.2.GE	2525.5UL	605410 (115V)	605414 (115V)	101108, 609159 & 610022
			or 605411 (230V - 50/60Hz)	or 605415 (230V - 50/60Hz)	
8	2507.2.GE	2525.5UL	605412 (115V)	605416 (115V)	101108, 609159 & 610022
			or 605413 (230V - 50/60Hz)	or 605415 (230V - 50/60Hz)	