



SERVICE BULLETIN

Subject: 23XL Motor Rework Procedure

Models Affected: 23XL

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Number: C9512

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Supersedes: New

Purpose:

To provide the field with information on motor replacement.

Filing Instructions: Compressor

Parts:

Parts required to replace a 23XL Frame 1 & 2 motor are listed below. For Frame 4 the part number is listed in () if the number is different. Item no. refers to the 23XL specified parts dated (7-92) for fr 1 & 2 and (2-95) for Frame 4.

Item	Quantity	Part Number	Part Number (Frame 4)	Description
11	1	5T2?????		Motor assy. (stator & rotor). Contact RCD. Have the correct machine s/n.
12	6	HY85AA062		Terminal pins (required)
2	2	8TC0114C	(8TD0080C)	O-Ring- end bell & motor housing
228 (232)	3	P502-8415		Refrigerant filter. 5/8 SAE male

Item	Quantity	Part Number	Part Number (Frame 4)	Description
239 (241)	1	23XL660-009	(23XL660-016)	Oil filter/O-Ring package.
284 (295)	1 (2)	PP23BZ-104		Oil, 5 gal.
NI	3	LF33MM-112		Tubing, heat shrink 2" i.d. x 12" lg (req 6" lg.)
New	1	EP71BA-201		Ball valve, 5/8 ODS

PROCEDURE: Refer also to 23XL Stop Major Workbook, catalog no. 039-292.

CAUTION



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Follow the proper procedures and safety precautions.

1. Lock-out and tag the starter and main disconnect.
2. Transfer the refrigerant into the condenser (if supplied with optional discharge isolation valve). Otherwise a storage tank will be required. Make sure the proper voltage and circuit breaker is available for pumpout compressor.

3. Cut the wobble foot with a saw or bend it back.
4. Remove the motor cooling line. Move the control panel.
5. Move the starter if equipped with Unit Mounted Starter.
6. Remove end bell cover.

Note: Metric Allen sockets will be required. Disconnect the leads and megger the motor. Check the p/n of the stator and rotor and compare to the new one.

7. Turn the rotor by hand, if the rotor turns freely it can be assumed that the roller bearing has not been damaged.

Note: Service tool kit (Major overhaul) is required to replace damaged bearings.

8. Rig the stator using a nylon strap. The balancing point is approximately 1" away from hollow hex plug.

Note: Do not use the rigging hole to lift motor with an eye bolt.

9. Remove the hollow hex plug located on top of the motor housing and back off the set screw.
10. Drive the rounded key from terminal end & remove the stator from the housing.
11. Remove the plate washer at the end of rotor using a 17MM socket.
12. Tap two holes using 1/2-13 UNC (FR 4 9/16-12 UNC) tap and pull the rotor using H type puller. Remove spacer and inspect visually the roller bearing.

13. Polish inside the new rotor with a rotary tool to remove burrs. Apply heat into I.D. of the new rotor and install it. Install the plate washer and tighten the bolt. Do not torque it more than 15 ft-lbs. Check the runout on the rotor with a dial indicator (max. T.I.R. is .003"). If greater loosen the bolt and reduce the torque value down to 10 ft-lbs.
14. Inspect the new stator, vacuum clean the windings making sure there are no metal chips and inspect the crimp on motor lugs. There should be a depression in the center of the barrel. Install stator into the housing.
15. Install the motor and check the air gap. Install new terminals & end bell.
16. Replace the motor cooling filter dryer and add an isolation valve (5/8") between the dryer and the motor for ease of future filter change out.
17. Do not change oil and oil filter at this time.
18. Leak test, evacuate, charge and place the chiller back into service.
19. After one day of operation change oil, oil filter, and refrigerant filter
20. After one to two weeks of operation change the refrigerant filter.

The above items 19 and 20 are guidelines. The jobsite conditions may dictate recycling/reclaiming the refrigerant, and a different schedule of filter change outs.

If the compressor is open for a period time action must be taken to prevent rusting of the compressor rotors. Coat the parts liberally with oil, place rags soaked in WD-40 inside the compressor. Cover parts and compressor with plastic and seal openings with duct tape.