

# MOTOR INSTALLATION KIT #100791

Please read complete instructions before replacing components.

## Parts Included

This is a universal motor replacement kit for all Polar Bear residential 26 & 42 model distillers. Please note that all parts will not be used!

<u>Part #</u>	<u>Qty</u>	<u>Description</u>
100087	1	MOTOR, 120VAC 1550 RPM
60010	2	RECEPTACLE,250,18-22AWG,NORML
60012	1	SPADE,#10,16-14AWG
60013	1	RECEPT,PIGG,250,18-22AWG,NORML
60031	1	RECEPT,FLAG,250,18-22AWG,NORML
80169	4"	SLEEVE,FIBERGLASS,1/2"
80025	1	TIE WRAP, PLASTIC, 4"
15505	2	NUT,KEP,#8-32

## Parts Assembly Chart

This chart lists the parts required for your distiller (refer to the attached diagram).

	26-M	26-E1	26-CT	26D-8	26-14	26C-8	42D10/25
1 - Motor	100087	100087	100087	100087	100087	100087	100087
2 - Insulation	80169	80169	80169	80169	80169	80169	80169
3 - Terminal End	60031	60010	60010	60010	60010	60010	60010
4 - Terminal End	60012	60012	60010	60010	60010	60013	60010
5 - Tie Wrap	80025	80025	80025	80025	80025	80025	80025
6 - Kep Nuts	2 - 15505	2 - 15505	2 - 15505	2 - 15505	2 - 15505	2 - 15505	2 - 15505
DIMENSIONS							
A - Insulation Length	2"	2"	4"	4"	0"	3"	4"
B - Wire Lengths	5"(FLAG) 13.5"(SPADE)	16"(F250) 11"(SPADE)	6" both	6" both	16" both	16"(F250) 15"(PIGG)	7" both

## Assembly Tools

Electrical Terminal Crimping Pliers  
Wire Cutters  
#2 Phillips Screwdriver  
Red Robertson Screwdriver  
11/32" Nut Driver or small Adjustable Wrench (Crescent Wrench)  
1/8" Hex wrench (Allen Key)  
Needle Nose Pliers  
Flat Head Screwdriver

## Assembly Instructions

1. Ensure that all of the parts that you require as listed in the Parts Assembly Chart are included in your replacement kit.
2. Turn main power switch on distiller off and drain the boiler tank. **CAUTION: DRAIN VALVE MAY BE VERY HOT.** Unplug cord from wall plug and wait at least 1 hour for distiller to cool.
3. Using the Robertson and Phillips screwdrivers (or 7/16" socket on a 26C-8 or 26-14), remove the Distiller covers. This will require disconnecting the water feed line and removing the brass reducer fitting on 26-CT, 26D-8, 26C-8 and 26-14 models. **ENSURE THE SADDLE VALVE IS CLOSED BEFORE DISCONNECTING WATER FEED LINE.**
4. Using the wire cutters, cut the new motor wires to the appropriate length (refer to the Parts Assembly Chart, Dimension B). Double check length against old motor before cutting!
5. Using the wire cutters, cut the fiberglass insulation to the appropriate length (refer to the Parts Assembly Chart, Dimension A). Slide insulation over both wires and inside motor housing approximately 1/4".
6. Using the wire strippers on the crimping pliers, remove about 3/8" of insulation from the end of each wire.
7. Slide the appropriate terminal connector (refer to Parts Assembly Chart, #3 & #4) on the end of the wire. The wire should be inserted far enough so that the wire insulation is butted against the inside of the connector. Using the crimping pliers, squeeze the neck of the connector until it is firmly attached to the wire.
8. Using the hex (allen) wrench, remove the set screw attaching the fan blade to the motor and slide blade up & over motor shaft. This may require GENTLY lifting the condensor coil. **BE CAREFUL NOT TO BEND THE FAN BLADE OR COIL.** Keep the fan blade and screw for reassembly.
9. Disconnect the fan wires from the distiller. Use the needle nose pliers for F250, Flag and Pigg connectors (see main diagram) and use the flat screwdriver to undo the screws for Spade connections. Note where each wire was removed from and the routing of each wire before removing.
10. Using the wire cutters, cut the plastic tie strap attaching the old motor wires to the distiller body and note location of this tie.

11. Using the nut driver or adjustable wrench, remove the kep nuts on the bottom of the distiller attaching the old motor to the distiller body. Remove the motor.
12. Insert the new motor in the distiller body and reattach with the new kep nuts.
13. Connect the wires to the locations where the old wires were removed from using the same wire routes. If you are unsure of where they should be connected, refer to the electrical schematic in your manual. Ensure the wires do not interfere with fan blade motion.
14. Using the plastic tie wrap, secure the wires over the fiberglass insulation to the base of the distiller where the old strap was attached. Cut the excess strap using the wire cutters.
15. Reattach the fan blade to the motor. Blade height must be adjusted so that there are no obstructions during rotations. Turn blade by hand to check for obstructions. Reattach covers. Ensure impurities drain valve is closed. Reattach water feed line if it was removed and open saddle valve.

The distiller should now operate properly. If it does not, confirm that the wires are connected to the proper location by referring to your electrical schematic. If they appear correct, we suggest you take your distiller to an authorized service representative.

