INSTALLATION INSTRUCTIONS

EVCON EB 5 TON MOTOR KIT

A WARNING:

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to the unit before performing any maintenance or service. The unit may have more than one electric power supply.

INSTALLATION SEQUENCE

Before Installing this Kit:

- 1. EB furnace must have 10 x 8 blower assembly.
- 2. Make sure all other appropriate approved kits and accessories are obtained for optimal performance.

Motor Installation

NOTE: Retain all screws and fasteners for installation of new motor.

- 1. Remove furnace door.
- 2. Remove inner electrical panel cover.
- 3. Unhook blower wires from blower relay and orange common wire from the capacitor.
- 4. Remove all screws attaching blower assembly to the furnace.
- 5. Slide out the complete blower assembly.
- 6. Loosen the set screw on the blower wheel located in the open side of the blower housing.
- 7. Place the blower assembly with the motor facing up and remove the (3) bolts holding the motor to the blower housing.
- 8. Remove the screw attaching the ground wire to the housing.
- 9. Remove (1) screw from the strap holding the capacitor.
- 10. Slide the motor out of the blower housing.
- 11. Loosen the (2) nuts on the motor mounting bracket and remove the motor from the bracket.
- 12. Place the new motor on a flat surface with the shaft pointing up.
- 13. Slide the motor mounting bracket over the new motor until the flat sides of the 3 "L" shaped bracket legs are flush with the bottom of the motor.

*NOTE: the motor leads should be orientated approximately halfway between 2 of the 3 legs.

- 14. Tighten the 2 nuts on the bracket until the bracket is firmly clamped around the motor.
- 15. Place the new motor assembly in the blower housing assembly with the motor leads coming out towards the front of the blower housing assembly as it would be installed in the furnace.

- 16. Fasten the motor assembly to the blower housing with the 3 bolts removed in step 7.
- 17. Attach the ground lead to the blower housing with the screw removed in step 8.
- 18. Attach the new capacitor to the blower housing with the screw removed in step 9.

***NOTE:** the capacitor strap is adjustable and you may need to use a different attachment hole to insure tightness.

19. Rotate the blower assembly 90° and tighten the blower wheel set screw to the flat part of the motor shaft.

*NOTE: when tightening the set screw make sure the blower wheel is centered in the blower housing to avoid possible rubbing.

- 20. Slide the complete blower assembly back into the furnace and attach to the blower box using the screws removed in step 4.
- 21. Route the red, black, blue and yellow wires through the top hole in the electrical compartment.

***NOTE:** the orange wire from the transformer should still be routed through the hole.

- 22. Connect the appropriate blower leads to the relay based on the desired heating and cooling speeds as designated by the wiring diagram located on the inner electrical compartment cover. There will be 2 unused wires.
- 23. Connect the orange common wire from the transformer to the same pole of the new capacitor as the orange motor lead.
- 24. Attach the electric panel cover with the screws removed in step 2.
- 25. Attach the appropriate furnace door for the 5-ton application.
- 26. Restore power.

*NOTE: Blower speeds may be adjusted as needed, see Table 1. Low blower speed is not recommended.

Motor Speed	External Static Pressure (Inches Water Column)					
	0.1	0.2	0.3	0.4	0.5	0.6
Low	685	675	670	655	635	610
Med Low	905	895	895	890	885	875
Med High	1270	1260	1260	1255	1255	1245
High	1495	1495	1490	1475	1475	1475

Table 1. Blower Performance

