



**MODELS L33-37-39
FURNACE ASSEMBLY INSTRUCTIONS**

This Thermo Pride furnace is shipped disassembled, however it was completely assembled at the factory first - then disassembled for packaging. Holes were drilled into the various casing parts during assembly. If the furnace is installed on a level surface and all parts put together properly, the holes will line up for metal screws. Do not redrill any holes. Check for incorrect alignment of parts if holes do not line up.

Assemble furnace as follows: (Figs. 1, 2, and 3).

1. Set base pan on level floor where furnace is to be installed. (Fig. 1).
2. Set furnace heat exchanger (1) on base pan. Make certain heat exchanger is centered on base (side to side) and pushed forward until the pouch front (2) of the heat exchanger is tight against base angle. (See Fig. 1).
3. Assemble rear side casings to furnace (7). Set rear side casing on clip over base pan .
4. Install white crane glass gasket on flue flange of heat exchanger. (See Fig. 2).
5. Install rear separator (11) (See Fig. 1). Make certain angle on bottom of separator is engaged in base separator clip. Rear separator must be installed over gasket on heat exchanger flue flange sandwiching the separator between the heat exchanger flange and flue extensions flange. (See Fig. 2). Fasten to rear side casings with hex head sheet metal screws in holes provided. (Rear flue models only).
6. Assemble flue pipe extension on flue flange of heat exchanger making certain the rear separator is installed between the flue flanges. (See Fig. 2). No trim ring is provided for this location. Secure flanges securely using 5/16" brass nuts provided.
7. Install front side casings (4) on base and lock into clip on base and join front and rear casing using the pocket seam between casings, then fasten casings together with hex head sheet metal screws in holes provided. (See Fig. 1).
8. Insert lower front separator panel (3) around pouch in between base angle and pouch front , clip on lower front separator panel (3). (See Figure 1.)
9. Fasten lower front separator panel (3) at bottom using #10x3/4" sheet metal screws. (See Fig. 1).
10. Install top front separator panel (6) and fasten to front side casings (4) with hex head sheet metal screws in the holes provided. (See Fig. 1).
11. Install center front separator panel (5) aligning predrilled holes and fastening to the front side casings (4) with hex head sheet metal screws. (See Fig. 1).
12. Install front bottom panel (8) on front of base between front side casings with hex head sheet metal screws in holes provided. (See Fig. 1).
13. Carefully inspect combustion chamber to insure the chamber ears around upper perimeter of the fiber chamber are inserted under the metal ears of the heat exchanger pouch.
14. Install upper (9) and lower (10) burner mounting plates with gaskets onto pouch front using 9/16" brass nuts. (See Fig. 1).

15. The L37 and L39 blower must be assembled (the L33 blower is pre-assembled) and then installed into unit. (See Fig. 3 for L33 or Fig. 4 & 5 for L37 and L39). Assemble legs to blower with (4) 5/16-18 X 5/8 hex head self tapping machine screws, (4 per side).

16. The motor (3/4 HP for L37 or 1HP for L-39) must be mounted to the motor mounting plate then mounted to the mounting plate support angles on the furnace base, (Refer to Fig. 4).

Notice: The motor provided is a dual voltage 230/115V motor. Ensure motor is wired for your application.

17. Install filter rack (12) into clips on rear side casings and rear separator making certain rack engages all clips on separator and side casings. (See Fig. 1).

18. Install one trim ring with gasket (20) over flue on inside of top rear panel then install top rear panel (18) with the other trim ring (20) on outside of the top rear panel. (See Fig.1)

19. Set rear bottom panel (16), access door (17), top rear panel (18) and top rear section (19) in place. Align factory drilled holes and metal screw panels in place. Assemble door handles on door. Make certain door can be readily removed and replaced. (See Fig. 1).

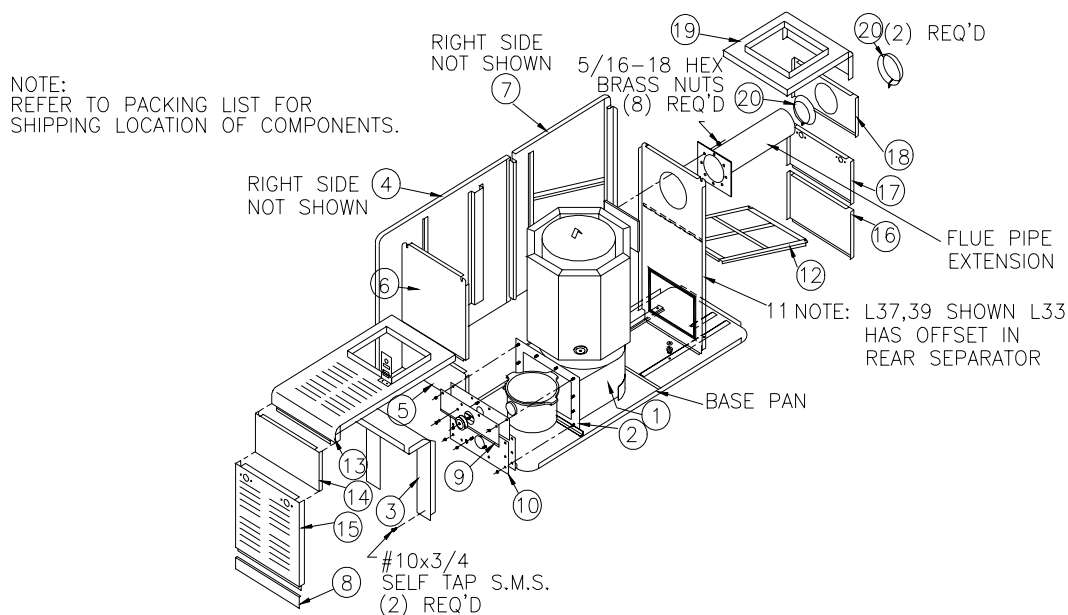
20. Install top front section (13) and top front panel (14) then fasten with hex head sheet metal screws. (See Fig. 1).

21. Assemble door handles on door and install front access door (15). Make certain door can be readily removed and replaced. (See Fig. 1).

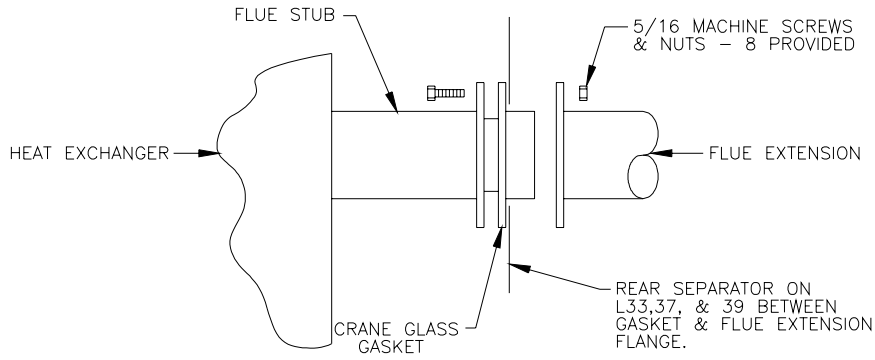
22. Fasten the external wire harness to the right side casing of the furnace in the pre punched holes provided. Use the machine screws and nuts provided to fasten the 4 X 4 junction box with the attached 60" greenfield (for fan & limit switch) to the front of the right side casing. Fasten the remaining box to the rear of the right side casing in the pre punched holes with the screws provided. Fasten the shortest piece of greenfield with the straight connector through the side casing into the rear box. The 90° connector is then used to connect to the blower motor. Fasten the remaining mid sized greenfield through the front junction box. The free end of this greenfield piece is to attach to the burner motor. Consult the oil service manual for wiring schematics to wire the external harness.

23. After properly positioning the chamber for burner insertion depth, (face of burner head recessed ¼ inch back from inside chamber wall) carefully place loose fill insulation in front of chamber to above burner tube.

24. Follow instructions in the furnace installation manual for burner installation and burner set-up.



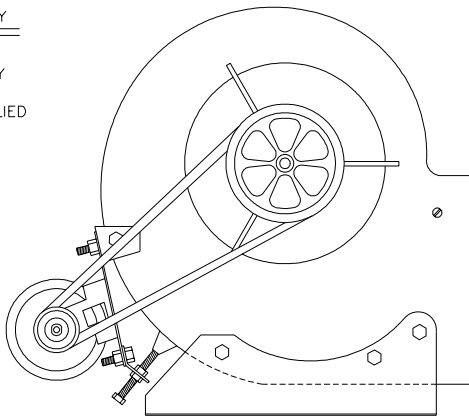
(FIG. 1)



(FIG. 2)

L33 BLOWER ASSEMBLY

15" BLOWER
 10 x 1 BLOWER PULLEY
 53" LONG "V" BELT
 L33 SHIPPED ASSEMBLED



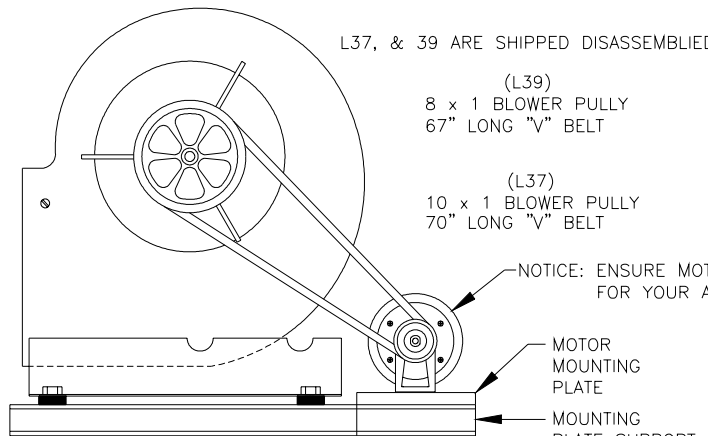
(FIG. 3)

L37, & 39 ARE SHIPPED DISASSEMBLED

(L39)
 8 x 1 BLOWER PULLEY
 67" LONG "V" BELT

(L37)
 10 x 1 BLOWER PULLEY
 70" LONG "V" BELT

NOTICE: ENSURE MOTOR IS WIRED FOR YOUR APPLICATION.



(FIG. 4)

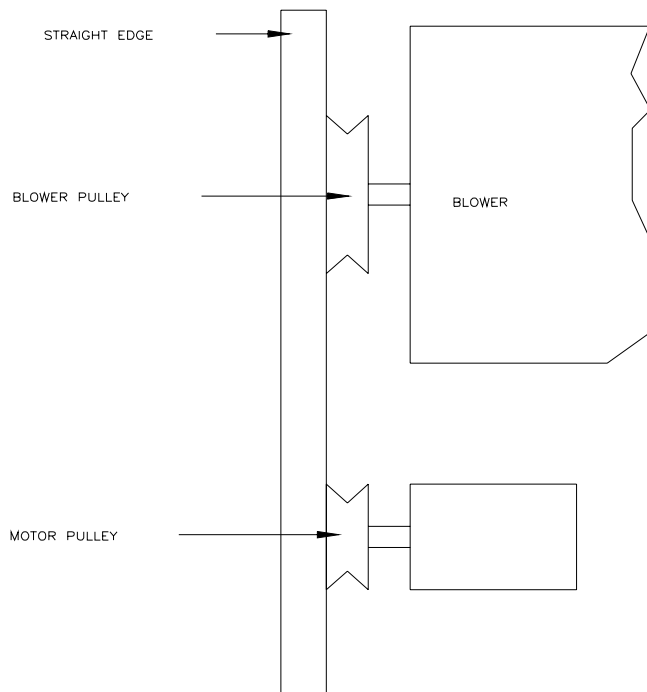


FIG. 5

ASSEMBLY NOTES:

1. LEVEL MOTOR PULLEY.
2. ADJUST SO THAT MOTOR PULLEY IS PARALLEL WITH BLOWER PULLEY. CHECK WITH STRAIGHT EDGE.
3. INSTALL BELT AND ADJUST FOR PROPER TENSION. PULLEYS MUST REMAIN PARALLEL AFTER TENSIONING.