

ATTN: STEPHANIE - 5 PAGES

ACCSY-IN-52
18-CH12D14-1

INSTALLER'S GUIDE

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Literature Type	Installer's Guide
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ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES.

Model:
BAYTWIN200A

Used With:
TUC-B
TUD-B
TUS-B
TUP-B
TUX-B

Twining Kit For Upflow Gas Furnaces

IMPORTANT — This Document is customer property and is to remain with this unit. Please return to service information pack upon completion of work.

A. GENERAL

▲ WARNING: These instructions should be used only by qualified individuals. These individuals should be specifically trained and experienced in the installation of furnaces, related accessories, and comfort conditioning components. Improper installation can create a hazard which could result in damage, injury, or loss of life.

These instructions do not cover all variations in systems or provide for every possible contingency. Further information may be desired or particular problems arise which are not covered sufficiently by this manual. Contact your local distributor or the manufacturer as listed on the furnace nameplate.

B. INSPECTION

Check carefully for any shipping damage. This must be reported to and claims made against the transportation company immediately. Check to be sure all major components are in the unit. Any missing parts should be reported to your supplier at once, and replaced with authorized parts only.

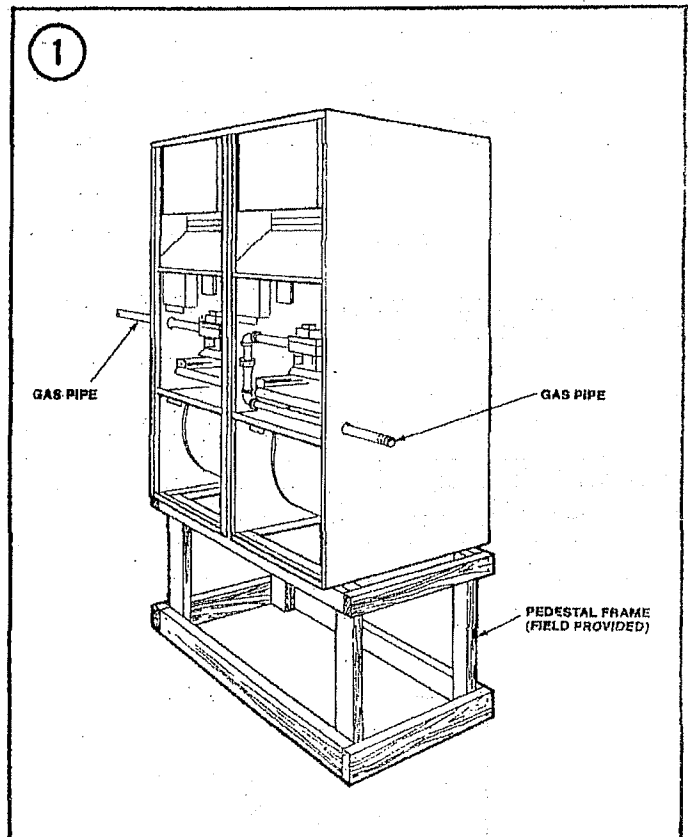
▲ WARNING: Open and lock unit disconnect to prevent injury or death from electrical shock or contact with moving parts.

C. INSTALLATION

1. This installation of a twinning kit (BAYTWIN200A) to accommodate the twinning of two gas furnaces to function as one with a 7 1/2 or 10 ton coil on top of two furnaces requires a field fabricated or field provided pedestal. This pedestal must be of sufficient strength and length to accommodate either two eighteen inch (18") wide furnaces or two twenty-four (24") inch wide furnaces to set on top of the pedestal depending on the application and the equipment to be used. This pedestal must also be of sufficient height to accommodate the return air ducts of adequate size to accommodate required return airflow for either a 7 1/2 or 10 ton application.

In all cases the air must be through the bottom of the furnaces and never returned into the back or side of the furnaces. (Only the bottom return of air to the furnaces is acceptable.) Once the return air ducts are secured to the pedestal, the remaining open portion of the pedestal must be enclosed.

2. Position the two furnaces on top of the pedestal. See Figure 1 which illustrates a field provided pedestal with two furnaces setting on top of the pedestal. Note the gas pipes extending from the outside panels of the furnaces.

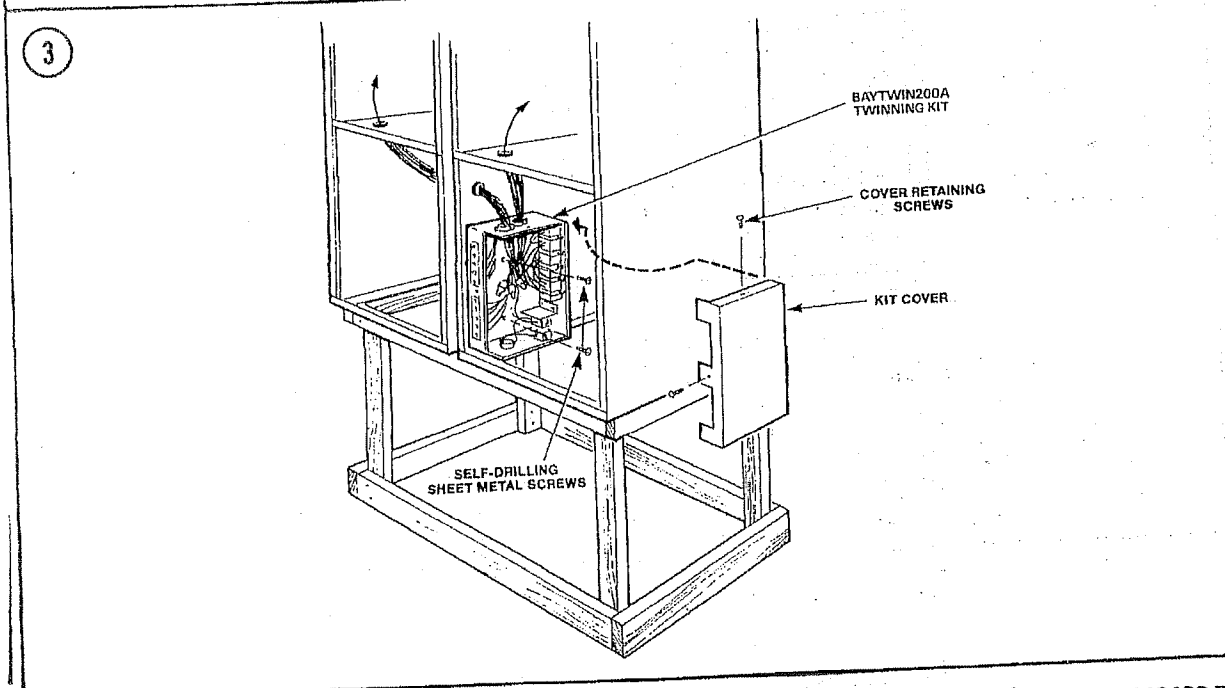
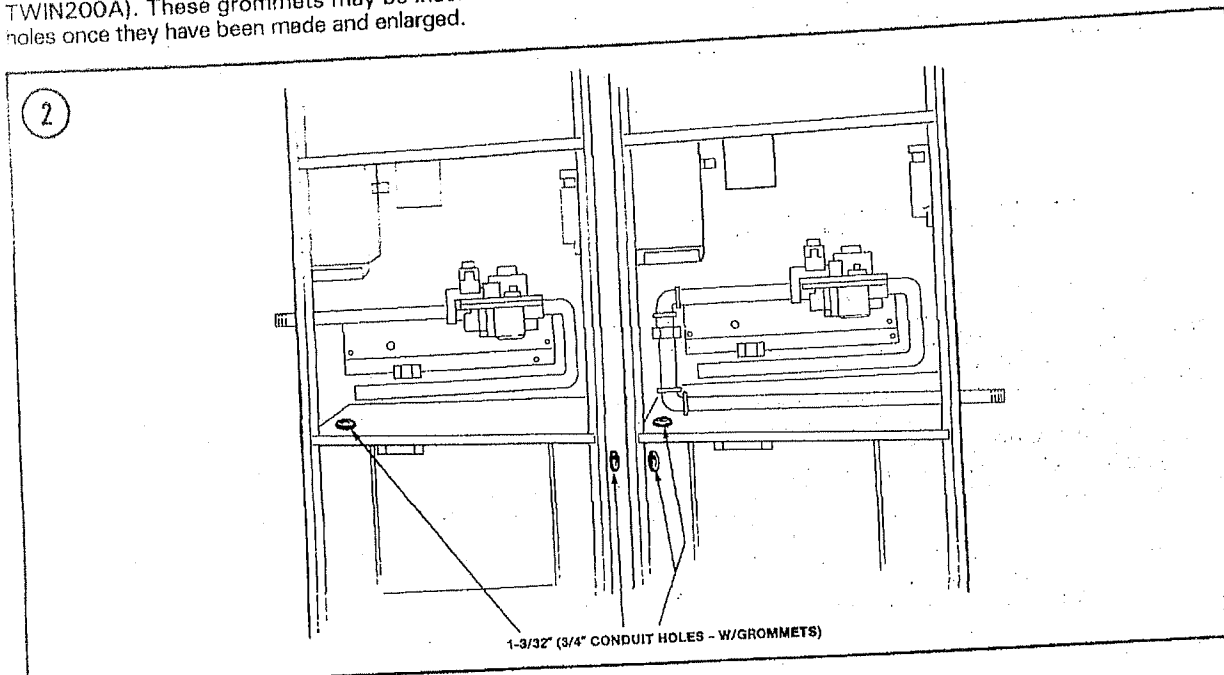


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3. Note that Figure 2 illustrates four 1-3/32" or 3/4" conduit holes with grommets inserted in the holes. The panel that separates the blower and the gas burner compartment contains a hole. It will be necessary to use a hole punch to enlarge the holes to 1-3/32" to accommodate a 3/4" conduit. The holes in the furnace side panels must be made. Use a drill to make a pilot hole and then insert a hole punch to enlarge these holes to 1-3/32". Grommets are included in the kit (BAY-TWIN200A). These grommets may be inserted into the holes once they have been made and enlarged.

4. Secure the furnaces to the top of the pedestal to insure the stability of the furnaces as the installation continues. This will also serve to prevent any possible future accidents or misalignment of the furnaces.

5. At this point remove the twinning kit (BAYTWIN200A) from its packaging. Remove the cover from the twinning kit. Secure the twinning kit to the inside right hand furnace as illustrated in Figure 3.



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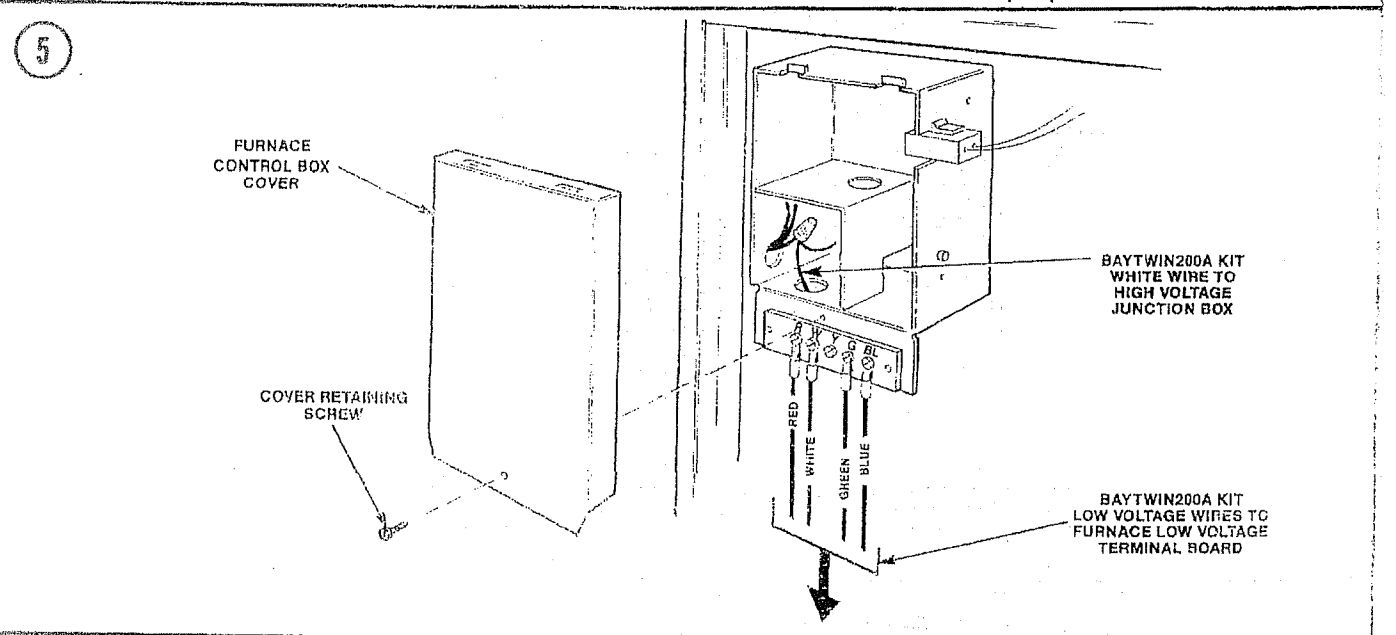
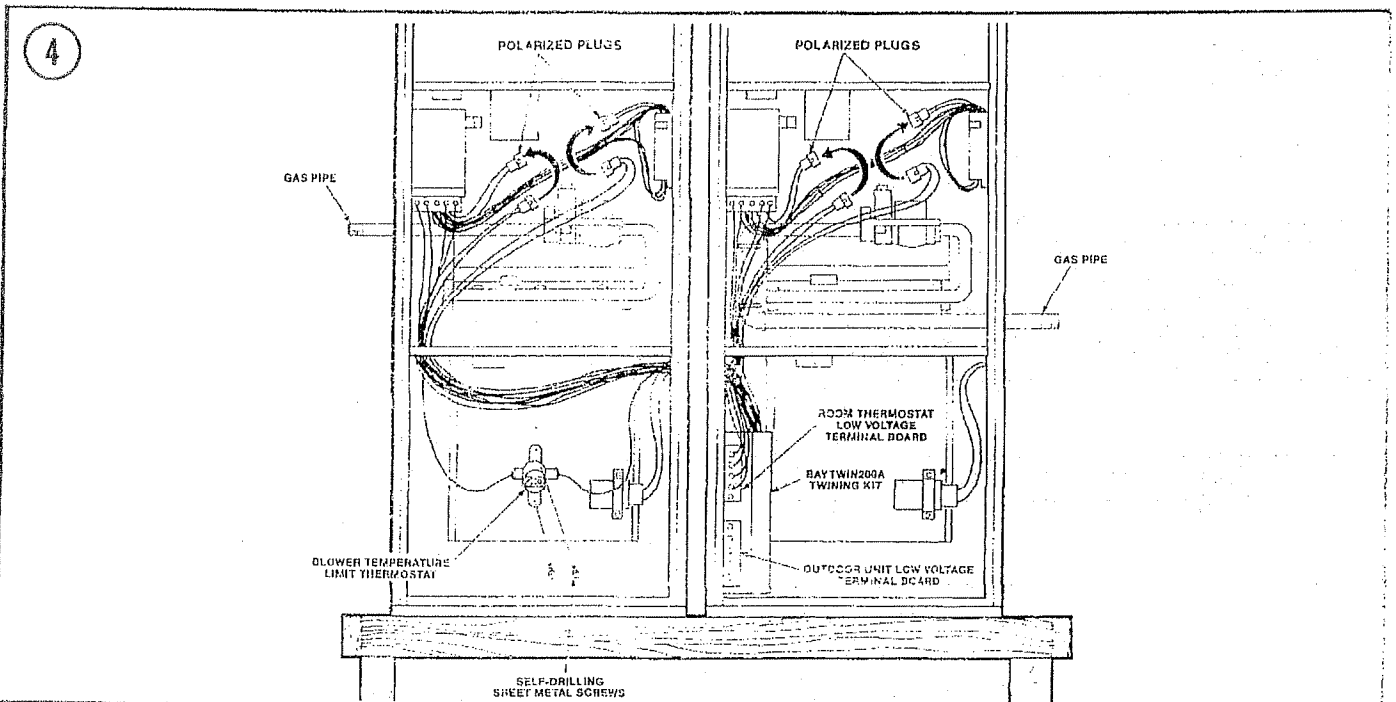
6. Note there are two bundles of wire coming out of the twinning kit. Take the bundle without the temperature limit thermostat. Feed it through the grommet that is in the panel between the blower and the gas burners of the right hand furnace as illustrated. Take the other bundle which contains the temperature limit thermostat. Feed this bundle through the hole that goes through the outside panel of each furnace and feed it into the left hand furnace. It will be necessary to unplug this temperature limit thermostat to feed the wires through the grommets. After the wires have been fed through these grommets, reconnect the temperature limit thermostat. Also feed the wires through the panel with the grommet between the blower and gas burners. This is illustrated in Figure 3.

7. The temperature limit thermostat that was disconnected and reconnected may now be secured to the blower housing

on the left hand furnace. Use self-drilling sheet metal screws as shown in Figure 4.

8. With the polarized plugs from the twinning kit now located in the gas burner compartment on both furnaces, unplug the top two polarized plugs shown in Figure 4 and connect a mating polarized plug from the twinning kit to each of them as shown in Figure 4. It is impossible to make an incorrect connection. These plugs are mating polarized plugs. They will only connect to the appropriate complimentary mating plug.

9. Note the low voltage wires that are shown in Figures 4 and 5. These are to be connected to the low voltage terminal board on each furnace as shown in Figure 5.



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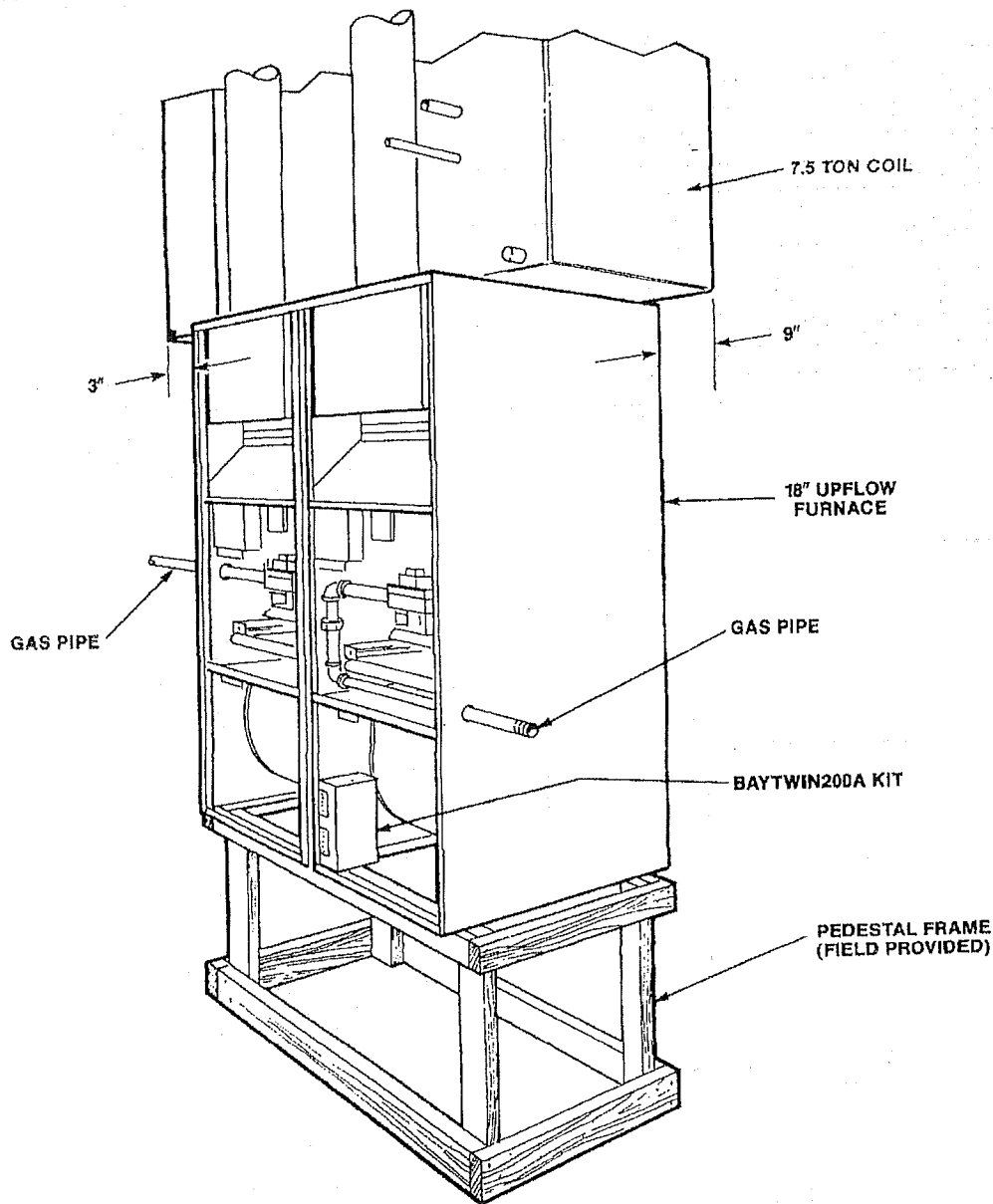
10. A white high voltage wire is shown in the furnace junction box in Figure 5. Knock out the hole in the bottom of the junction box. Bring this white wire from the twinning kit in through the bottom of the junction box. Connect this white wire to a white wire from the field wiring and a white wire from the furnace high voltage wire.

Note: The high voltage is 115- 120.

11. Also note there are two field wiring diagrams. One of these diagrams illustrates the circuitry necessary for making connections as shown for furnaces equipped with polarized plugs. There is also a second field wiring diagram that shows the connections to be made on furnaces not equipped with polarized plugs. A polarized pigtail kit is included in the twinning kit for these furnaces. They are to be wired using this second field wiring diagram. When all field wiring and polarized connections are made, replace the furnace control box cover and secure with a screw.

12. At this point prepare to use either a 7 1/2 ton coil on two 18" wide furnaces or a 10 ton coil on two 24" wide furnaces. In either case, the units are to be spaced 1" apart. This 1" space between the units **must** be sealed air tight. This seal **must** remain durable for the life of this equipment. When a 7 1/2 ton coil is mounted on two 18" furnaces there is a 3" overhang on one end and a 9" overhang on the opposite end. See Figure 6. These overhangs are not sealed, and, therefore, they also **must** be made airtight at the bottom of the coil enclosure. It is preferable to use aluminum tape to seal both between the furnaces and the overhangs at the bottom of the coil. After the bottom of the coil is sealed, continue by sealing around the entire perimeter of the coil wherever it comes into contact with the furnaces.

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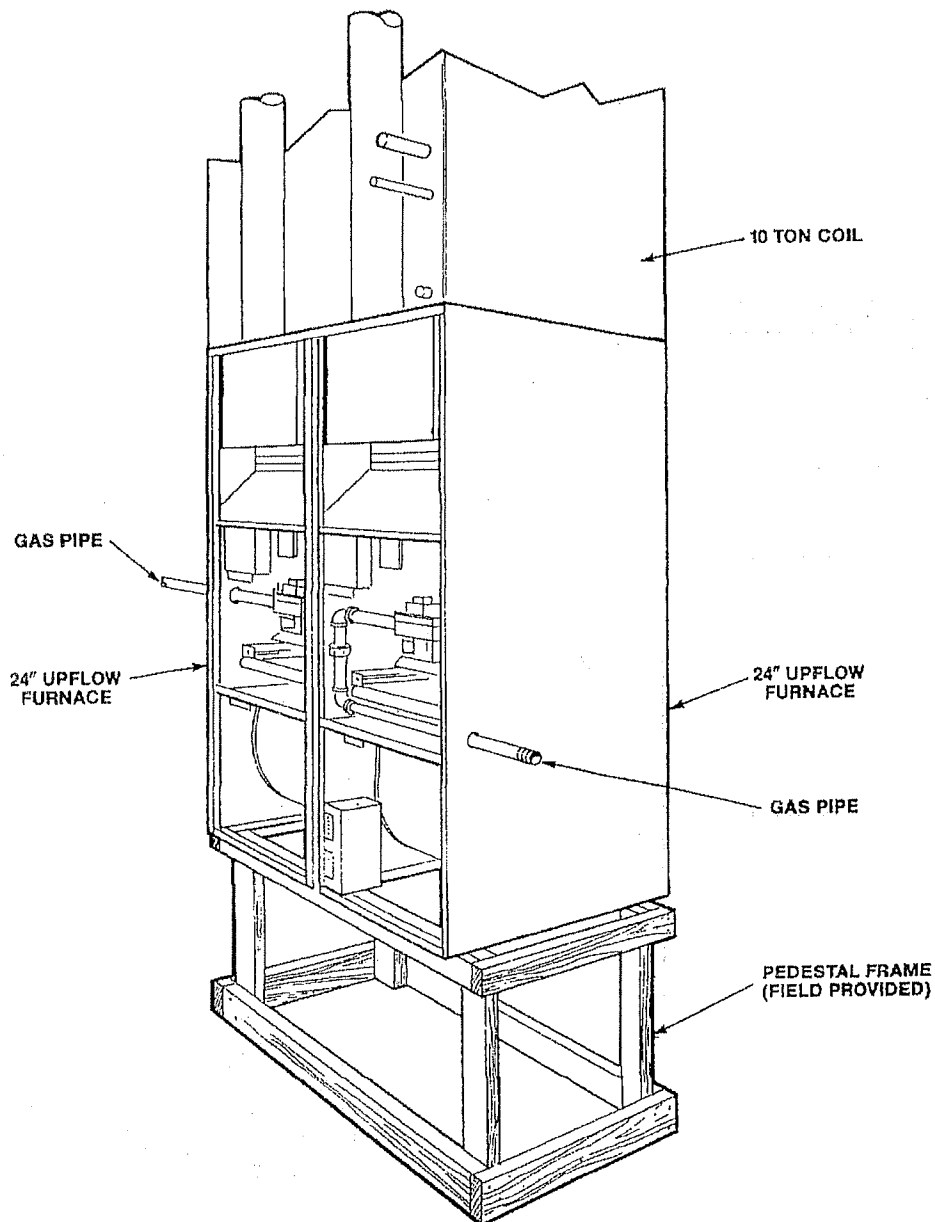
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3. With the 24" wide furnace cabinets and a 10 ton coil, the coil is flush with the outer perimeter of the furnaces. See Figure 7. With the 1" space between the furnaces sealed airtight, continue by making an airtight perimeter seal between the 10 ton coil and the two 24" furnace cabinets.

14. The field low voltage wiring connections may now be made. Use the field wiring diagram for connecting the outdoor unit and the indoor thermostat to operate this equipment.

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CHECKOUT PROCEDURE FOR TWINNING KIT 3AYTWIN200A

1. Make sure furnaces are identical models and installed in upflow position with bottom return.
2. Position room thermostat in the heating mode and increase temperature selection 10F above room temperature (energize **R** to **W** at room temperature) and verify that the ignition systems in both furnaces fire together. After ignition, verify that both blowers turn on simultaneously when the fan and limit controls are energized.

3. Lower temperature selection by 15 F on the room thermostat (de-energize **W**) and verify that the fan limit switches turn off both blowers together.

4. Position the room thermostat in the cooling mode and make sure that the temperature selection is 10 F below room temperature (energize **R** to **G**) and verify that both furnace blowers come on in the cooling mode. Make sure blower speed taps in both furnaces are identical in heating and cooling.