

INDUCED DRAFT BOILER DIRECT VENT CONVERSION KIT ASSEMBLY INSTRUCTIONS

These instructions must be affixed on or adjacent to the boiler.

Part Numbers:

- 110019-03
- 110019-04
- 110019-05
- 110019-06
- 110019-07
- 110019-08

The following terms are used throughout this manual to bring attention to the presence of hazards of various risk levels, or to important information concerning product life.

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death, serious injury or substantial property damage.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury or property damage.

WARNING

Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury or property damage.

NOTICE: Indicates special instructions on installation, operation, or maintenance which are important but not related to personal injury hazards.

This kit allows combustion air to be piped directly from outdoors to certain induced draft boilers. This feature is useful when an adequate source of clean combustion air is not available in the boiler room as required by Section 5 of the boiler installation manual. Table 2.2 in the boiler installation manual shows compatible direct vent conversion kits for each boiler model. Appendix A in the boiler installation manual describes the method for locating the air intake terminal and routing combustion air piping to the boiler.

WARNING

Before attempting to install this kit:

- Refer to Table 2.2 in the boiler installation manual to confirm that this kit is the correct one for the boiler model on which it is being installed.
- Refer to Appendix A in the boiler installation manual to confirm that it will be possible to locate the air intake terminal, and route the combustion air piping, in accordance with Appendix A.

To avoid risk of personal injury or death due to carbon monoxide (CO) poisoning do not do not attempt to install this kit if both of these conditions are not met.

A complete list of components provided with this kit, as well as nominal air intake sizes, are shown in Table 1.

Table 1: Direct Vent Conversion Kit Intake Pipe Sizes and Components

Kit Part Number	110019-03	110019-04	110019-05	110019-06	110019-07	110019-08
Nominal Air Intake Size	3"	3"	4"	4"	4"	4"
Air Box Assembly	110228-03	110228-04	110228-05	110228-06	110228-07	110228-08
18" Zip Tie	80860964					
Intake Collar/Hose Assy.	102644-01		102644-02		102644-03	
Air Distributer Screen	N/A	71807049	71807059	71807069	71807079	71807089
Gas Valve Hose Barb Fitting	104635-01					
Gas Valve Reference Tube (3/16 ID x 7" Long)	110302-01					
Air Intake Terminal	6116045			6116044		
1/2" Sheet Metal Screws	[8 Req.]	[10 Req.]		[13 Req.]		
5" x 4" Reducer	N/A				110150-01	

- On natural gas boilers remove and discard the burner cover shown in Figure 2.
- Attach the distributor screen to the front of the base as shown in Figure 2. (This screen is not required on all boilers – see Table 1). Secure with two of the 1/2" sheet metal screws provided. When locating this screen on the base, make sure that the screws pass through the marked holes in the screen.
- Mount the air box assembly on the boiler as shown in Figure 3. Secure with the 1/2" sheet metal screws provided. Depending on the boiler size, this will either require 4 or 7 screws (See Table 1). The easiest way to install these screws is to start all of them before tightening any.
- Depending on the exact boiler model, the intake hose is either routed through the top panel or the RH side panel:
 - 4" and 5" hose (kits 110019-05 through 110019-08) are always routed through the top panel.
 - 3" hose is routed through the top panel when the boiler has an external temperature and pressure gauge (Figure 4a).
 - 3" hose is routed through the right side panel when the boiler has an internal temperature and pressure gauge (Figure 4b). In this case the intake hose must be shortened to 16" prior to installation. Cut the embedded steel wire, and use a utility knife to cut through the rubber at this location.
- Remove the knockout for the air intake hose assembly from the top or side panel as appropriate. The flange of the intake collar is located in the inside of the jacket as shown in Figure 5. Secure with four 1/2" sheet metal screws.
- Slip the intake hose over both the air box collar and intake collar.
- Secure intake hose with the 18" zip tie provided (Figure 6).
- Pry off the white plastic cover from the regulator reference port and replace with the hose barb provided with this kit as shown in Figure 6. Screw this barb into the gas valve so that it is hand tight and then gently "snug" with a 5/16" box wrench. **DO NOT APPLY SEALANT TO THIS THREAD.**
- Connect the black reference tube provided between this hose barb on the gas valve and the hose barb on the air box (Fig. 6).
- If the boiler is equipped with a 5" intake collar, it is reduced to 4" using the reducer supplied. Slip the reducer over the collar and secure it with sheet metal screws provided by the installer. Seal the joint between the reducer and the intake collar with RTV ("silicone") sealant.
- Refer to Appendix A in the boiler installation to complete the direct vent installation.

⚠ WARNING

- Failure to remove the burner cover shown in Figure 2, or to install the distributor screen when called for in Table 1, could result in personal injury or death due to carbon monoxide poisoning.
- Failure to install the reference tube as described could result in personal injury or death due to carbon monoxide poisoning.

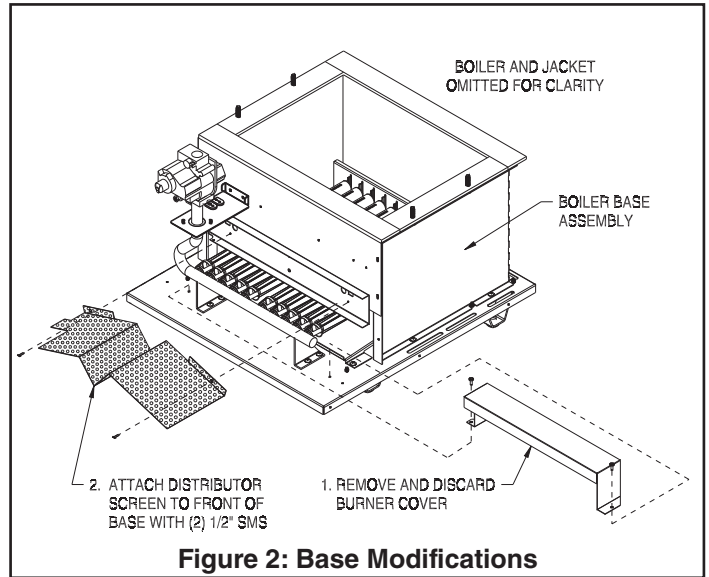


Figure 2: Base Modifications

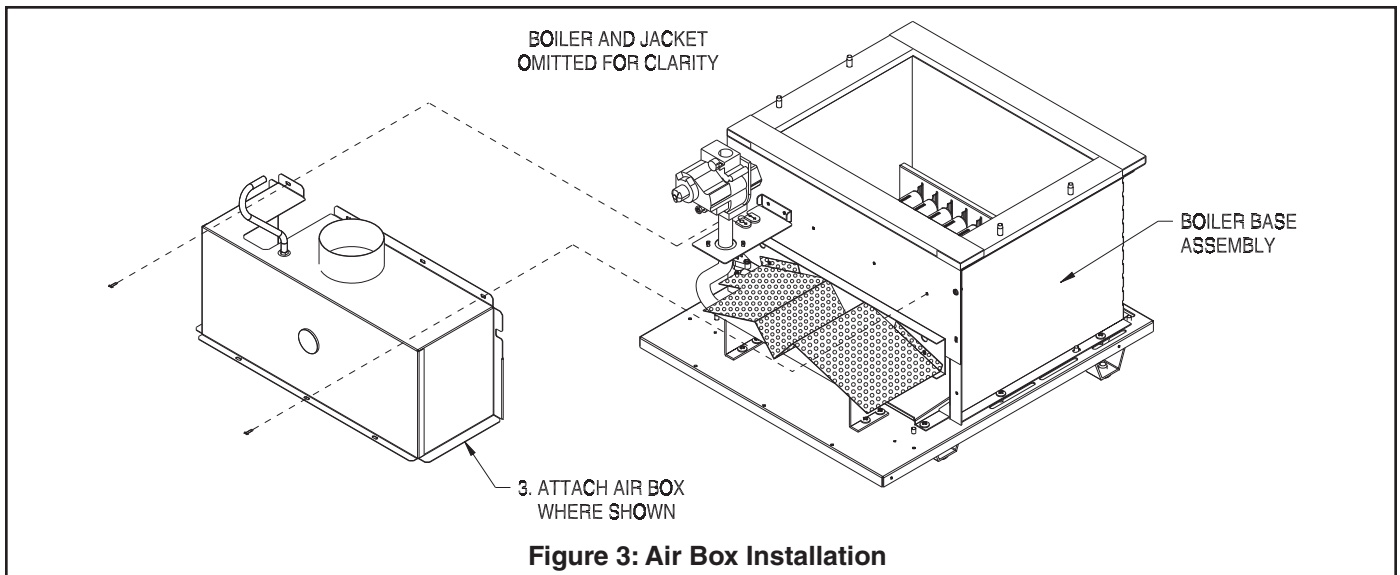


Figure 3: Air Box Installation

