

Installer's Guide

18-CH100D1-1A-EN



BAYBURNERSS

Stainless Steel Burner Kit for S9 & A9 Condensing Furnaces

ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES

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

NATURAL GAS ONLY

This kit is intended to prevent rust and its effects on burners and crossovers due to high moisture that may accumulate in S9 & A9 condensing furnaces when installed as a direct vent appliance. Although the kit will work with other models or applications, it is not intended for use with nondirect vent or 80% furnaces.

EACH KIT CONTAINS:

Qty	Description	Part Number
6	Burner - All Stainless Steel	D345196P07
1	Installer's Guide	18-CH100D1-1A-EN

⚠ WARNING

This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects of other reproductive harm. For more information go to www.p65Warnings.ca.gov.

B. INSPECTION

1. Unpack all components of the kit.
2. Check carefully for any shipping damage. If any damage is found, this must be reported immediately and a claim made against the transportation company.
3. Check to be sure all components are in the package. Any missing components should be reported to your supplier at once and replaced with authorized components only.

⚠ WARNING

Replace and/or tighten all plugs removed or loosened when adjusting gas pressure. Leak check the fittings before placing the furnace into regular service. Failure to follow this warning could result in fire, explosion or property damage.

C. KIT INSTALLATION INSTRUCTIONS: S9 & A9 Condensing Furnaces

⚠ WARNING

INSTALLATION WARNING – HIGH VOLTAGE MOVING PARTS
Bodily injury can result from high voltage electrical components, fast moving fans, and combustible gas. For protection from these inherent hazards during installation and servicing, the main gas valve must be turned off and the electrical supply must be disconnected. If operating checks must be performed with the unit operating, it is the technician's responsibility to recognize these hazards and proceed safely.
Failure to follow this Warning could result in property damage, severe personal injury, or death.

⚠ CAUTION

The gas supply shall be shut off prior to disconnecting the electrical power, before proceeding with the kit installation.

1. Turn off the gas supply and electrical power. Set the thermostat to off position.
2. Remove the electrical connector from the gas valve. **Note: Failure to disconnect the connector could lead to premature failure of the gas valve due to damage to the connection terminals.**
3. Remove screws and detach manifold pipe (item 1) from burner box. See Figure 1 for references.
4. Remove screws and detach burner plate (item 2) from burner box.
5. Remove screws and detach burner clamp (item 3) from burner box.

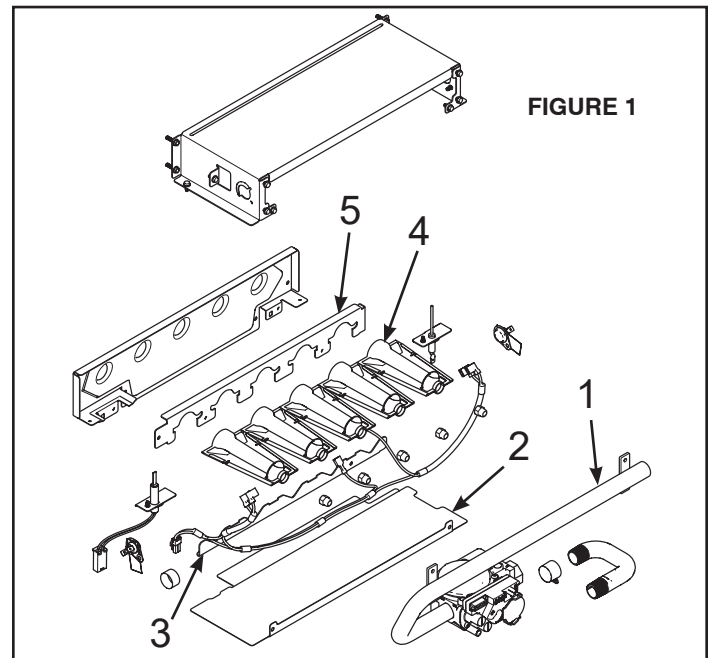


FIGURE 1

⚠ CAUTION

When removing extreme right and left burners, use caution not to break the ignitor and flame sensor.

6. Remove all burners (item 4) from the burner holder (item 5). Discard burners.

⚠ CAUTION

Check the ignitor and flame sensor alignments when replacing extreme right and left burners, use caution not to break the ignitor and flame sensor.

7. Install stainless steel burners supplied with kit.
8. Re-install burner clamp to burner box.
9. Re-install burner plate to burner box.
10. Re-install manifold pipe to burner box.
11. Turn on gas supply and electrical power.
12. For complete detailed sequence of operation, refer to the installation instructions or Service Facts with the furnace.

Installer's Guide

13. Set the thermostat to call for operation.
14. Check the complete operation of the unit. Check the manifold gas pressure as specified in the installation instructions of the furnace Installer's Guide.

D. GAS VALVE ADJUSTMENT

To adjust the manifold pressure:

1. Turn off all electrical power to the system.
2. Attach a manifold pressure gauge with flexible tubing to the outlet pressure boss marked "OUT P" on White-Rodgers gas valve model 36J.
3. Loosen (Do Not remove) the pressure tap test set screw one turn with 3/32" hex wrench.
 - a. The pressure tap adjustment kit (KIT07611) contains a 3/32" hex wrench, a 5/16" hose and a connector and can be ordered through Global Parts.
4. Turn on system power and make a call for 2nd stage heating. Insure that the unit is in second stage heating by verifying 24VAC is measured between C and HI on the gas valve.

5. Adjust 2nd stage gas heat by removing the high (HI) adjustment regulator cover screw.

Note: Energizing W2 3–5 seconds after W1 will shorten the time required to get 2nd stage operational.

- a. To increase outlet pressure, turn the regulator adjust screw clockwise.
- b. To decrease outlet pressure, turn the regulator adjust screw counterclockwise.
- c. Adjust regulator until pressure shown on manometer matches the pressure specified in the table.

Fuel Manifold Pressure Settings (inches w.c.)			
Models	Fuel	2nd Stage/ Single Stage	1st Stage Max.
S9	Natural Gas	3.5" W.C.	1.7" W.C.

Note: Maximum pressure to the gas valve for natural gas is 13.8" W.C. Minimum pressure is 5.0" W.C.

The input of no more than nameplate rating and no less than 93% of the nameplate rating, unless the unit is derated for high altitude. See high altitude kit for de-rating instructions when installing above 2000 ft.

- d. Replace and tighten the regulator cover screw securely.
- e. Remove the call for second stage heat. First stage heat is now running.

Adjust 1st stage gas heat by removing the low (LO) adjustment regulator cover screw.

- a. To increase outlet pressure, turn the regulator adjust screw clockwise.
- b. To decrease outlet pressure, turn the regulator adjust screw counterclockwise.
- c. Adjust regulator until pressure shown on manometer matches the pressure specified in the table.

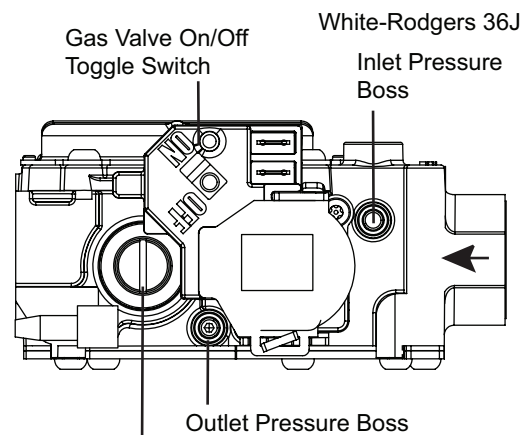
Note: Maximum pressure to the gas valve for natural gas is 13.8" W.C. Minimum pressure is 5.0" W.C.

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Trane
6200 Troup Highway
Tyler, TX 75707

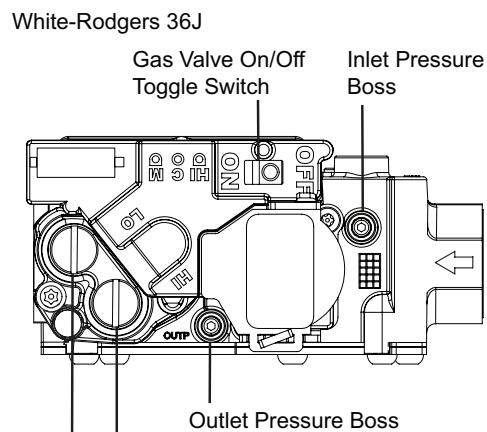
For more information contact
your local dealer (distributor)

**FIGURE 2
SINGLE STAGE GAS VALVE ONLY**



1st Stage (LO) Manifold Pressure Adjustment

**FIGURE 3
TWO STAGE GAS VALVE ONLY**



2nd Stage (HI) Manifold Pressure Adjustment

1st Stage (LO) Manifold Pressure Adjustment

- d. Replace and tighten the regulator cover screw securely.
6. Cycle the valve several times to verify regulator setting.
 - a. Repeat steps 5-7 if needed.
7. Turn off all electrical power to the system.
8. Remove the manometer and flexible tubing and tighten the pressure tap screw.
9. Using a leak detection solution or soap suds, check for leaks at the pressure outlet boss and pressure tap test screw.
10. Turn on system power and check operation of the unit.

E. AIRFLOW ADJUSTMENT

1. Check inlet and outlet air temperatures to make sure they are within the ranges specified on the furnace rating nameplate. If the airflow needs to be increased or decreased, see the Installer's Guide for information on changing the speed of the blower motor.