



## L62AA BASO® Safety Shutoff Device

### Installation

**IMPORTANT:** This bulletin is intended as a guide for authorized service personnel installing or servicing BASO® Gas Products. Carefully follow all instructions in this bulletin and all instructions on the appliance. Limit repairs, adjustments, and servicing to the operations listed in this bulletin or on the appliance.



**WARNING: Risk of Fire or Explosion.**

The system must meet all applicable codes. Improper installation may cause gas leaks, explosions, property damage, and injuries.



**WARNING: Risk of Fire or Explosion.**

To prevent leakage of upstream gas, shut off the gas supply at the main manual shutoff valve before installing or servicing the L62AA safety shutoff device.



**WARNING: Risk of Shock.**

Avoid electrical shock and equipment damage by disconnecting the electrical power before wiring the L62AA.

To install the L62AA.

1. Turn off power to the appliance.
2. Turn off gas at the main manual shutoff valve adjacent to the appliance.
3. Remove the L62AA cover by loosening the screws at the side of the device.
4. Mount the L62AA in any convenient position using the mounting holes provided. See Figure 1 for mounting hole locations.
5. Push the circuit wires through the conduit opening on the bottom of the L62AA, strip the ends of the wires just enough to put the bare wire under the terminal screws, and attach them to the two wire terminals (see Figure 1).
6. Replace the cover.
7. Attache the thermocouple securely to the pilot burner, and screw the terminal end to the BASO power unit terminal on the L62AA (see Figure 1 and Figure 2). Make sure tat this connection is clean. Tighten the thermocouple lead nut finger tight plus a maximum of 1/8 turn. **Do not overtighten.**



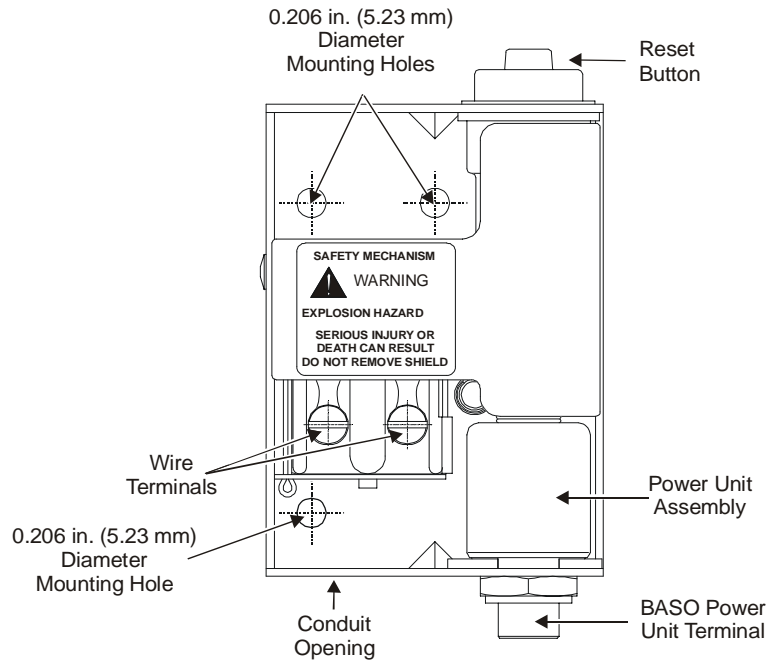
**WARNING: Risk of Fire or Explosion.**

Never attach both wires to one terminal. Doing so eliminates all safety features provided by the L62AA device.

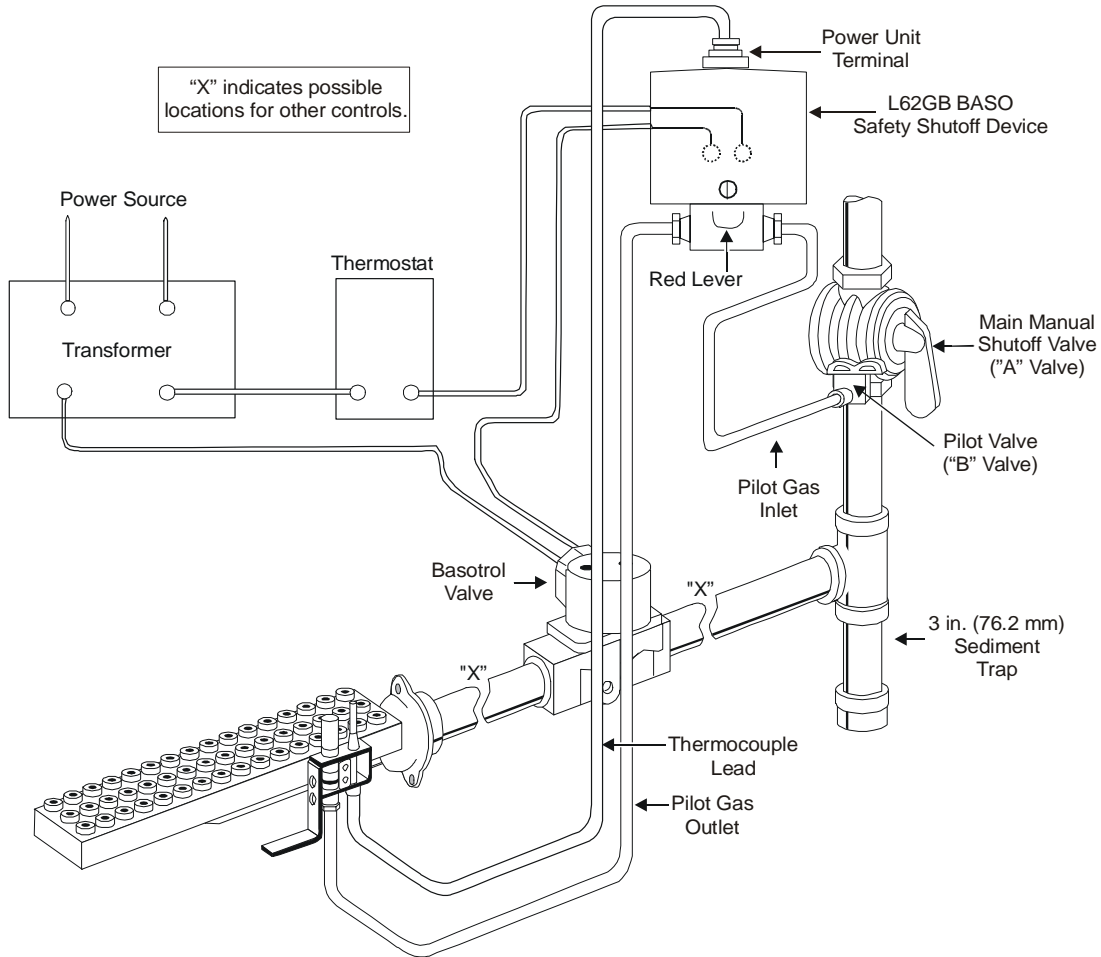


**WARNING: Risk of Fire or Explosion.**

Always wire the safety shutoff device in series with a thermostat or other such control. Wiring it in parallel defeats the safety features of the L62AA device.



**Figure 1: View of the L62AA Without the Cover**



**Figure 2: Typical L62AA Installation**

## Setup and Adjustments

### Checkout



**WARNING: Risk of Fire or Explosion.**

Avoid personal injury or property damage by making sure the safety shutoff device functions properly and there are no gas leaks. Follow this checkout procedure before leaving the installation.

Make sure all components are functioning properly by performing the following test.

1. Test all joints and connections for leaks with a soap solution.
2. Set the thermostat to the lowest setting.
3. Close the main manual shutoff valve ("A" valve) and the pilot valve ("B" valve [see Figure 2]) and wait at least five minutes for unburned gas to escape from the appliance.
4. Reopen the "B" valve and ignite pilot gas. Wait for 30 to 45 seconds.
5. Push down the red indicator and aluminum reset button to its full limit of travel and release. If the red indicator remains depressed, the unit is operative. If the red button does not stay depressed, wait an additional 30 seconds and try again. If the second attempt is not successful, check that the thermocouple output meets the value in Table 1.
6. Open the "A" valve after the red indicator button remains in the depressed position. The main burner will ignite from the pilot burner when the thermostat calls for heat.
7. Disconnect the thermocouple from the L62AA. The main valve should close immediately. If it does not close, check for wiring errors. Reconnect the thermocouple to the L62AA when it is operating correctly.
8. Check the millivoltage output of the thermocouple and milliampere dropout range at the BASO power unit terminal to see that they meet the values in Table 1 and Table 2. Step-by-step procedures for these checks are included with the Y99AB BASO Test Kit.
9. Re-light the pilot.
10. Observe at least three complete operating cycles to make sure that all components are functioning correctly.
11. Reset the thermostat to a normal temperature setting before leaving the installation.

## Repairs and Replacement

Check the millivoltage output of the thermocouple and milliampere dropout range at the BASO power unit terminal to see that they meet the values in Table 1 and Table 2. If the readings do not meet these values, replace the thermocouple and/or the safety shutoff device.

Table 1: Thermocouple Output

Thermocouple		mV Range	
Lead Type	Turn Down	Normal	Not Less Than
K15	4 mV	20-28	15
K16	4 mV	25-35	17
K19	4 mV	25-35	17

Table 2: L62AA Dropout Range

mA Range of Power Unit Assembly	
Low	High
100	300

### Pilot Servicing

If pilot flame problems occur, check the following:

- If the pilot flame burns yellow it may be due to dirt or lint covering the lower portion of the pilot burner. Remove dirt and lint using a soft brush or a vacuum.
- A flame approximately 1/2 in. (12.7 mm) high must surround the thermocouple tip (see Figure 3)
- Because this is an electrical connection, the thermocouple lead connection to the BASO power unit must be clean and free of grease.

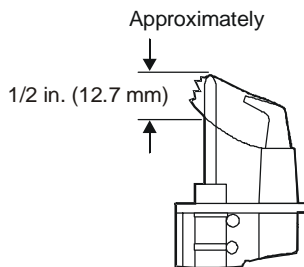


Figure 3: Flame Position

## Replacement Procedure



### WARNING: Risk of Shock.

Avoid electrical shock and equipment damage by disconnecting the electrical power before replacing or rewiring the safety shutoff device.



### WARNING: Risk of Fire or Explosion.

Turn off the gas at the main manual shutoff valve next to the appliance before loosening any gas connections.



### WARNING: Risk of Fire or Explosion.

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

When necessary, replace the safety shutoff device as follows:

1. Turn off power to the appliance.
2. Close the main manual shutoff valve and the pilot valve.
3. Disconnect the thermocouple lead from the safety shutoff device.
4. Remove the cover.
5. Disconnect and label the wires from the two wire terminals and remove the device from the appliance.
6. Replace with the new BASO L62AA according to the instructions in the *Installation* section.
7. Perform the *Checkout* section before leaving the installation.

### Repairs

Field repairs **must not** be made to the L62AA safety shutoff device. If the thermocouple meets the output listed in Table 1 and the valve does not function, replace the entire device. Any attempt to repair this assembly voids the manufacturer's warranty. For a replacement safety shutoff device, contact the nearest BASO Gas Products distributor.

## Technical Data

<b>Product</b>	L62AA BASO Safety Shutoff Device				
<b>100% Shutoff</b>	No				
<b>Conduit Opening</b>	1 or 2 as Special				
<b>Switch Contacts</b>	24/25 VAC	125 VAC	250 VAC	230 VDC	Motor Rating 125/250 VAC
<b>Electrical Specifications</b>	*	8 A	3 A	0.06 A	1/4 hp
<b>Ambient Temperature Range</b>	-40 to 150°F (-40 to 66°C)				
<b>Reset</b>	Manual				
<b>Switch Action</b>	SPST				
<b>Type of Gas</b>	Natural				
<b>Packaging</b>	Bulk pack supplied to original equipment manufacturer (individual pack optional).				
<b>Bulk Pack Quantity</b>	30				
<b>Weight</b>	24 lb (10.9 kg)				
<b>Agency Listings</b>	CSA Certificate Number 229521-1656085 UL File Number MH2926				
<b>Specification Standards</b>	ANSI Standard Z21.20 CAN1-6.4 UL Standard 372				

\*Switch can be used on 24/25 VAC installation.

*Performance specifications are nominal and conform to acceptable industry standards. All agency certification of BASO products is performed under dry and controlled indoor environmental conditions. Use of BASO products beyond these conditions is not recommended and may void the warranty. Product must be protected if exposed to water (dripping, spraying, rain, etc.) or other harsh environments. The original equipment manufacturer or end user is responsible for the correct application of BASO products. Consult BASO Gas Products LLC for questionable applications. BASO Gas Products LLC shall not be liable for damages or product malfunctions resulting from misapplication or misuse of its products.*

Refer to the L61, L62 Series BASO Safety Shutoff Device Product Bulletin (BASO-PB-L61/L62) for necessary information on operating and performance specifications of this product.



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