



BASO Gas Products LLC

Installation Instructions
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L62AA
September 14, 2017

L62AA BASO® Safety Shutoff Device

Installation



WARNING: Risk of Fire or Explosion.
Do not use the L62AA in Liquefied Petroleum (LP) gas applications. The L62AA is for use with natural gas **only**. Pilot gas is not 100% shut off and will continue to flow with the loss of pilot flame. Use of LP gas may cause gas accumulation and may result in severe personal injury or death.

IMPORTANT: Only qualified personnel should install or service BASO® Gas Products. These instructions are a guide for such personnel. Carefully follow all instructions in this document and all instructions for the appliance.



WARNING: Risk of Explosion or Fire.
Shut off the gas supply at the main manual shutoff valve before installing or servicing the L62AA. Failure to shut off the gas supply can result in the release of gas during installation or servicing, which can lead to an explosion or fire, and may result in severe personal injury or death.



CAUTION: Risk of Electric Shock.
Disconnect power supply before making electrical connections to avoid electric shock.

IMPORTANT: Make all gas installations in accordance with applicable local, national, and regional regulations.

IMPORTANT: Do not loosen or tighten the brass hex nut that fastens the brass terminal bushing to the switch housing. The machined flats on the terminal bushing must be parallel to the flats on the switch housing. If not, the switch power unit may distort and cause the safety switch to fail.

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 (not the brass hex nut).
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 (do not loosen the brass hex nut).
7. Attach 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 that this connection is clean. Tighten the thermocouple lead nut finger tight plus a maximum of 1/8 turn. **Do not overtighten.**



WARNING: Risk of Explosion or Fire.
Do not attach both wires to one terminal on the L62AA. Doing so bypasses and eliminates all safety features provided by the L62AA, can lead to an explosion or fire, and may result in severe personal injury or death.



WARNING: Risk of Explosion or Fire.
Verify that this device is wired in series electrically with thermostats and other appliance operating controls. Wiring the device in parallel with such controls will defeat the safety features of this device and may result in severe personal injury or death.

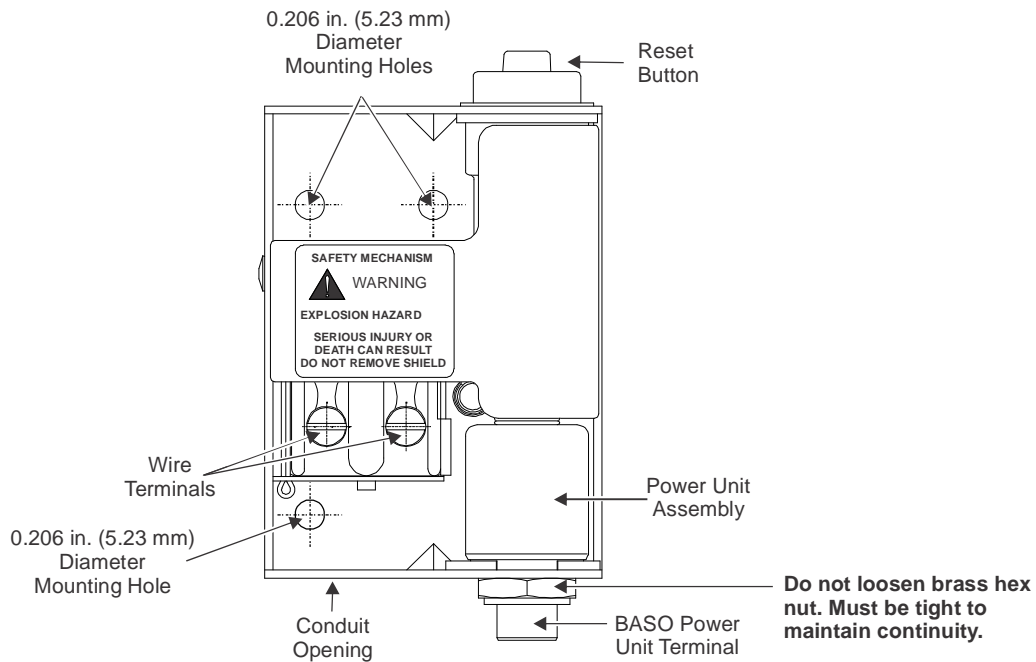


Figure 1: View of the L62AA Without the Cover

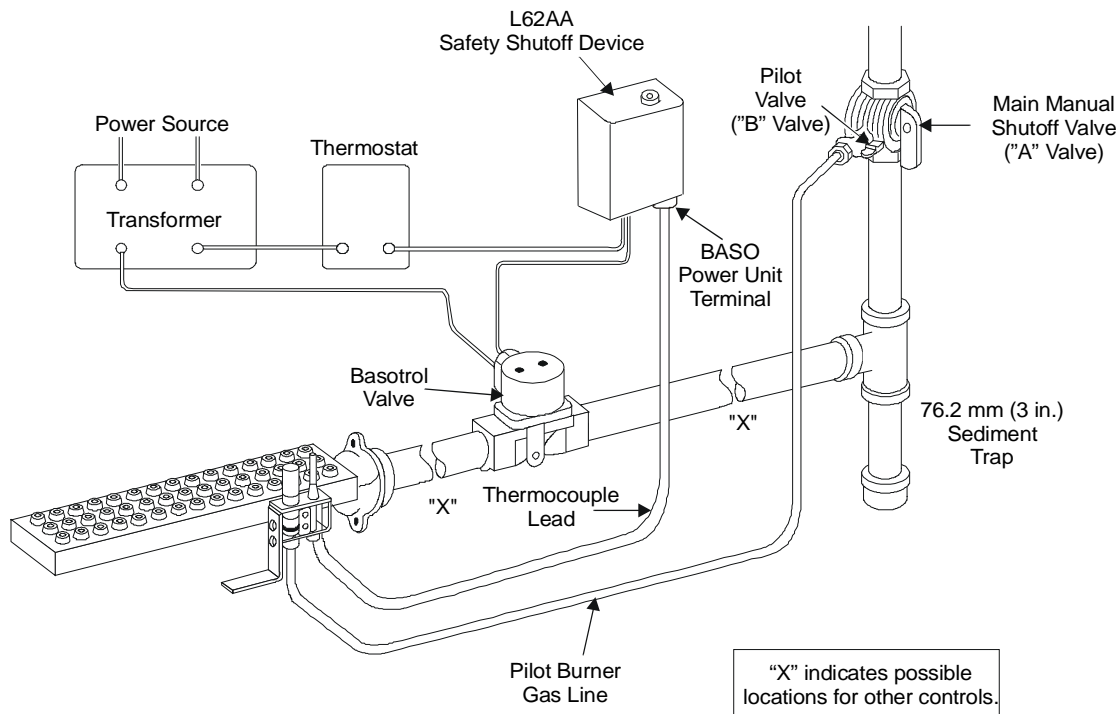


Figure 2: Typical L62AA Installation

Setup and Adjustments

Checkout

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

Follow this or an equivalent checkout procedure after installation. Before leaving the installation, verify that the L62AA functions properly and that the system has no gas leaks. Gas leaks can lead to an explosion or fire, and may result in severe personal injury or death.

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. Make sure the brass hex nut is tight for good continuity. Do not over tighten.
9. 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.
10. Re-light the pilot.
11. Observe at least three complete operating cycles to make sure that all components are functioning correctly.
12. Reset the thermostat to a normal temperature setting before leaving the installation.

Note: BASO recommends only BASO thermocouples that come from the original equipment manufacturer to provide optimum performance for you safety shutoff device.

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 |
| K17 | 4 mV | 30-40 | 25 |
| K19 | 4 mV | 25-35 | 17 |

Note: In high temperature locations, use K15 or K16 Series.

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.

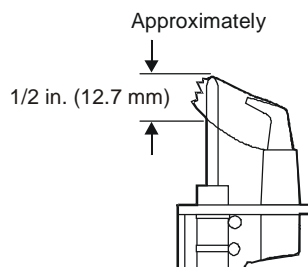


Figure 3: Flame Position

Replacement Procedure



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Shut off the gas supply at the main manual shutoff valve before installing or servicing the L62AA. Failure to shut off the gas supply can result in the release of gas during installation or servicing, which can lead to an explosion or fire, and may result in severe personal injury or death.



WARNING: Risk of Electrical Shock.

Disconnect power supply before making electrical connections to avoid electrical shock.



WARNING: Risk of Explosion, Fire, or Electric Shock. Label all wires before they are disconnected when replacing the L62AA. Wiring errors can cause improper or dangerous operation and may result in an electric shock, fire, or explosion leading to severe personal injury or death.

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 from the old safety shutoff device.
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 Steps 3 through 7 in the *Installation* section to complete the installation.
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 Specifications

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