

Installation Guide

TS11 Series for J or K Versions

Automatic Safety Valves

The Robertshaw TS11 Series Thermo-magnetic Safety Valve is a control used to cut off the flow of gas to the burner in the event of a pilot outage. The magnet assembly is manually operated and held open by the voltage generated by a thermocouple when it is heated by the pilot flame. When this flame is extinguished, the thermocouple voltage decreases until the valve closes both the pilot and main gas. This control can be used for commercial and residential ovens, infrared heaters, chicken and pig brooders, fryers and many more applications requiring automatic safety valves.

The TS11K shares the same inlet with the pilot. The TS11J requires an inlet connection for the main inlet and the pilot inlet connection to the gas, since the J version inlets operate independently.

Installation Instructions



CAUTION

THIS DEVICE SHOULD BE INSTALLED BY A QUALIFIED PERSON WITH DUE REGARD FOR SAFETY AS IMPROPER INSTALLATION COULD RESULT IN A HAZARDOUS CONDITION.

WARNING: Turn off all gas supply to the equipment being serviced.

When connecting the inlet and outlet(s) to pipe or tubing, always support the valve casting ends next to the fitting being tightened. If the control is panel mounted, do not depend on the mounting bracket to support this operation to avoid distortion of bracket and/or panel.

For the TS11J version, the inlet for the main valve and the inlet for the pilot are independent, both will need to be connected to the gas supply, and normally a gas pressure regulator. For the TS11K version, it will only have one inlet that is shared for the main valve and for the pilot.

The outlet of the main gas is regularly connected to the thermostat or another valve that will control the temperature in the appliance.

Fittings

Install fittings/plugs with NPT threads into the casting body using a small amount of thread compound. Do not use thread compound for the tube installations using tube compression fittings since they are straight threads.

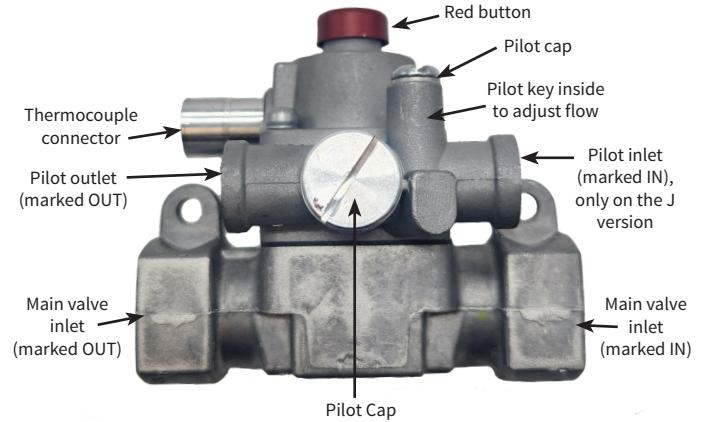
The thermocouple connector is where the thermocouple will be attached and threaded in place. This will require the thermocouple nut to be screwed into the connector until the connection feels firm and the thermocouple can't be rotated by its capillary. Do not over-tighten this connection.

Once the thermocouple, inlet(s) and outlet(s) for main gas valve and pilot are connected in the appliance, turn on the gas and leak test installation.

Before testing, make sure either the thermostat or the valve downstream (after) the TS11 is OFF. This prevents gas flow to the main burner when the TS11 activates, ensuring only the pilot ignites and avoids a large flame.

With the main gas valve downstream of the TS11 confirmed OFF, press and hold the red button for at least 8 seconds to ignite the pilot. Ensure the flame reaches the thermocouple tip. Release the button; the pilot should remain lit. This completes the TS11 installation.

TS11J version



TS11K version

