



WHITE-RODGERS

**Open on Rise
Well Immersion
Hot Water Controls
INSTALLATION INSTRUCTIONS**

Operator: Save these instructions for future use!

**FAILURE TO READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY
BEFORE INSTALLING OR OPERATING THIS CONTROL COULD CAUSE
PERSONAL INJURY AND/OR PROPERTY DAMAGE.**

These controls are designed for use on hot water heating installations. They have open-on-rise switch action and are available with either fixed or adjustable differential.

Models are available with either horizontal or vertical well. Some of these models also have excess capillary stored within the enclosure, permitting them to be used with wells having either a standard or extended shank.

Another model, ideal for replacement purposes, has a slotted case and excess capillary stored within the enclosure. This control can be used with either a standard or extended shank well, on either horizontal or vertical well installations.

CONVERTIBLE CONTROLS

Controls having the case slotted between the back and bottom knockouts may be converted to use on vertical wells as follows:

1. Remove control cover. Then remove bottom knockout.
2. Remove well mounting screw. This screw has normal threads. Turn counterclockwise to remove.
3. With the well mounting screw removed, swing capillary through slot into bottom knockout.

THESE CONTROLS MUST BE INSTALLED BY A QUALIFIED INSTALLER

Do not exceed the specification ratings.

All wiring must conform to local and national electrical codes and ordinances.

This control is a precision instrument, and should be handled carefully. Rough handling or distorting components could cause the control to malfunction.

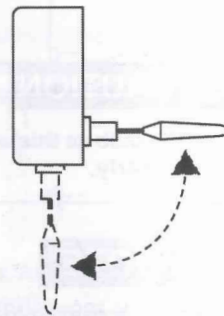
This control has been accurately calibrated at the factory. Any attempt to calibrate this control will void the White-Rodgers warranty.

WARNING

Do not use on circuits exceeding specified voltage. Higher voltage will damage control and could cause shock or fire hazard.

DESCRIPTION

4. Insert well mounting screw into bottom knockout and tighten in place.



EXTENDING CAPILLARY

Some controls have excess stored capillary which may be extended for use with an **extended** shank well. Use reasonable care when straightening and forming the capillary.

With the capillary fully extended, the bulb should slide all the way to the end of the well.

PRECAUTIONS

CAUTION

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

Following installation or replacement, follow appliance manufacturer's recommended installation and/or service instructions to insure proper operation.

CAUTION

To prevent electrical shock and/or equipment damage, disconnect electric power to system at main fuse or circuit breaker box until installation is complete.

Shut off main gas to heating system until installation is complete.



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PART NO. 37-1044C

Replaces 37-1044B

9545

INSTALLATION

If the boiler manufacturer recommends a control location, follow such recommendations. If none is offered, the following information gives suggested locations.

When used for **high limit service**, the control should be installed in the riser close to the boiler, or in a boiler tapping that is near the top or hottest section of the boiler. If the boiler is also used to heat domestic hot water, make sure that the high limit control is **not** located in the section of the boiler that contains the heat exchanger or piping for domestic hot water.

When used for **low limit or operator service**, the control should be located near that section of the boiler that contains the heat exchanger or piping for domestic hot water.

To remove the well from the control, loosen the set screw in the large nut, then slide the well off to expose the bulb. Screw the well into the proper tapping. Slide the bulb back into the well, making sure that the bulb enters the well as far as it will go and tighten the set screw.

CAUTION

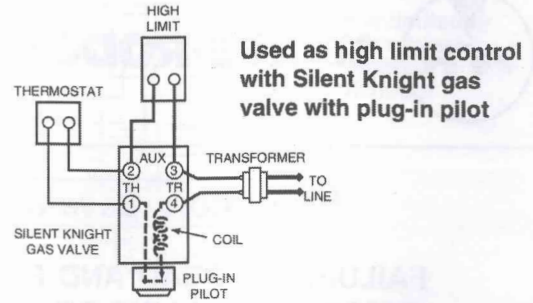
Do not dent or bend the bulb as this will prevent it from fitting into the well properly.

NOTE

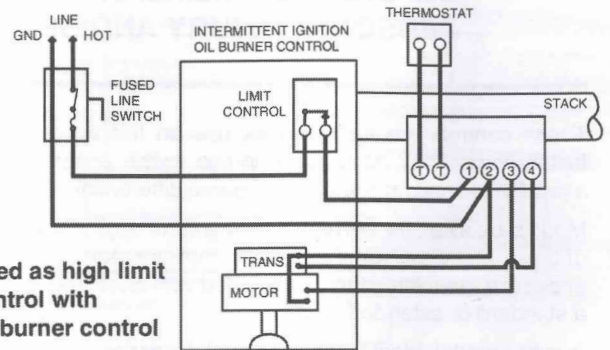
All wiring should be done according to local and national electrical codes.

If the boiler or burner manufacturer recommends a wiring diagram, then follow such recommendations.

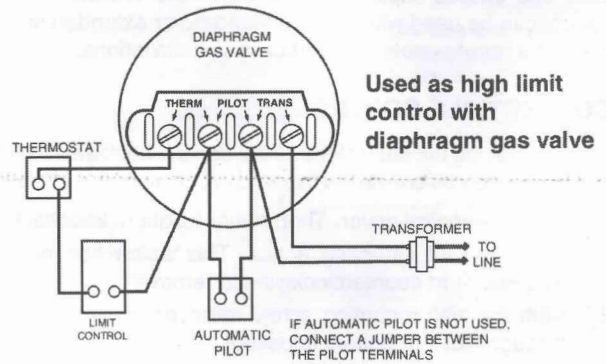
If none is offered, these diagrams show suggested circuits.



Used as high limit control with Silent Knight gas valve with plug-in pilot



Used as high limit control with oil burner control

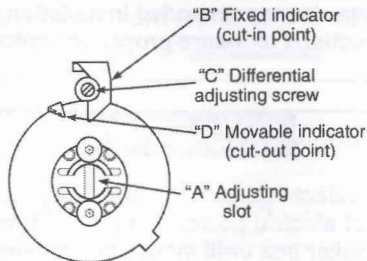


Used as high limit control with diaphragm gas valve

SETTING THE CONTROL

CONTROLS WITH ADJUSTABLE DIFFERENTIAL

The movable indicator points to the temperature at which the contacts open. The fixed indicator points to the temperature at which the contacts close. The difference between these two indicators is the differential.

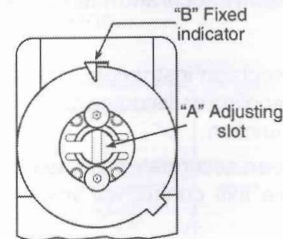


To set the control:

1. Use a screwdriver in the adjusting slot (A) on the front of the control to turn the dial so that the fixed indicator (B) points to the temperature at which the contacts will close.
2. Turn the differential adjusting screw (C) until the movable indicator (D) points to the temperature at which the contacts will open.

CONTROLS WITH A FIXED DIFFERENTIAL

The indicator (B) points to the temperature at which the contacts open.



To set the control:

Use a screwdriver in the adjusting slot (A) on the front of the control to rotate dial until the desired temperature at which the contacts will open is positioned directly under the indicator (B).