spirax sarco

INSTALLATION AND MAINTENANCE INSTRUCTIONS

IM-12-002-US **March 2018**

RediHeat

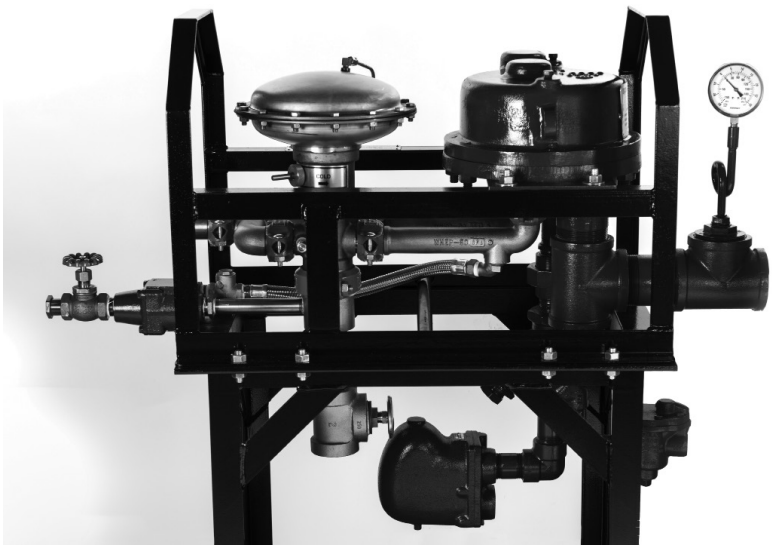


Table Of Contents

Safety Information

Safe operation of these products can only be guaranteed if they are properly installed, commissioned, used and maintained by qualified personnel (see Section 1.11) in compliance with the operating instructions. General installation and safety instructions for pipeline and plant construction, as well as the proper use of tools and safety equipment must also be complied with.

1.1 Intended use

Referring to the Installation and Maintenance Instructions, name-plate and Technical Information Sheet, check that the product is suitable for the intended use / application.

i) The products have been specifically designed for use on steam, air or water/condensate. The products' use on other fluids may be possible but, if this is contemplated, Spirax Sarco should be contacted to confirm the suitability of the product for the application being considered.

ii) Check material suitability, pressure and temperature and their maximum and minimum values. If the maximum operating limits of the product are lower than those of the system in which it is being fitted, or if malfunction of the product could result in a dangerous overpressure or overtemperature occurrence, ensure a safety device is included in the system to prevent such over-limit situations.

iii) Determine the correct installation situation and direction of fluid flow.

iv) Spirax Sarco products are not intended to withstand external stresses that may be induced by any system to which they are fitted. It is the responsibility of the installer to consider these stresses and take adequate precautions to minimise them.

v) Remove protection covers from all connections and protective film from all name-plates, where appropriate, before installation on steam or other high temperature applications.

1.2 Access

Ensure safe access and if necessary a safe working platform (suitably guarded) before attempting to work on the product. Arrange suitable lifting gear if required.

1.3 Lighting

Ensure adequate lighting, particularly where detailed or intricate work is required.

1.4 Hazardous liquids or gases in the pipeline

Consider what is in the pipeline or what may have been in the pipeline at some previous time. Consider: flammable materials, substances hazardous to health, extremes of temperature.

1.5 Hazardous environment around the product

Consider: explosion risk areas, lack of oxygen (e.g. tanks, pits), dangerous gases, extremes of temperature, hot surfaces, fire hazard (e.g. during welding), excessive noise, moving machinery.

1.6 The system

Consider the effect on the complete system of the work proposed. Will any proposed action (e.g. closing isolation valves, electrical isolation) put any other part of the system or any personnel at risk?

Dangers might include isolation of vents or protective devices or the rendering ineffective of controls or alarms. Ensure isolation valves are turned on and off in a gradual way to avoid system shocks.

1.7 Pressure systems

Ensure that any pressure is isolated and safely vented to atmospheric pressure. Consider double isolation (double block and bleed) and the locking or labelling of closed valves. Do not assume that the system has depressurised even when the pressure gauge indicates zero.

1.8 Temperature

Allow time for temperature to normalise after isolation to avoid danger of burns.

1.9 Tools and consumables

Before starting work ensure that you have suitable tools and / or consumables available. Use only genuine Spirax Sarco replacement parts.

1.10 Protective clothing

Consider whether you and / or others in the vicinity require any protective clothing to protect against the hazards of, for example, chemicals, high / low temperature, radiation, noise, falling objects, and dangers to eyes and face.

1.11 Permits to work

All work must be carried out or be supervised by a suitably competent person. Installation and operating personnel should be trained in the correct use of the product according to the Installation and Maintenance Instructions.

Where a formal 'permit to work' system is in force it must be complied with. Where there is no such system, it is recommended that a responsible person should know what work is going on and, where necessary, arrange to have an assistant whose primary responsibility is safety.

Post 'warning notices' if necessary.

1.12 Handling

Manual handling of large and/or heavy products may present a risk of injury. Lifting, pushing, pulling, carrying or supporting a load by bodily force can cause injury particularly to the back. You are advised to assess the risks taking into account the task, the individual, the load and the working environment and use the appropriate handling method depending on the circumstances of the work being done.

1.13 Residual hazards

In normal use the external surface of the product may be very hot. If used at the maximum permitted operating conditions the surface temperature of some products may reach temperatures in excess of 300°C (572°F).

Many products are not self-draining. Take due care when dismantling or removing the product from an installation (refer to 'Maintenance instructions').

1.14 Freezing

Provision must be made to protect products which are not self-draining against frost damage in environments where they may be exposed to temperatures below freezing point.

1.15 Disposal

Unless otherwise stated in the Installation and Maintenance Instructions, this product is recyclable and no ecological hazard is anticipated with its disposal providing due care is taken.

1.16 Returning products

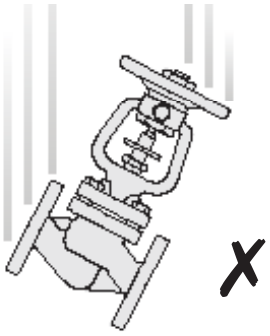
Customers and stockists are reminded that under EC Health, Safety and Environment Law, when returning products to Spirax Sarco they must provide information on any hazards and the precautions to be taken due to contamination residues or mechanical damage which may present a health, safety or environmental risk. This information must be provided in writing including Health and Safety data sheets relating to any substances identified as hazardous or potentially hazardous.

1.17 Working safely with cast iron products on steam

Cast iron products are commonly found on steam and condensate systems. If installed correctly using good steam engineering practices, it is perfectly safe. However, because of its mechanical properties, it is less forgiving compared to other materials such as SG iron or carbon steel. The following are the good engineering practices required to prevent waterhammer and ensure safe working conditions on a steam system.

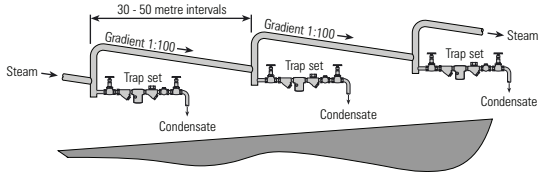
Safe Handling

Cast Iron is a brittle material. If the product is dropped during installation and there is any risk of damage the product should not be used unless it is fully inspected and pressure tested by the manufacturer.

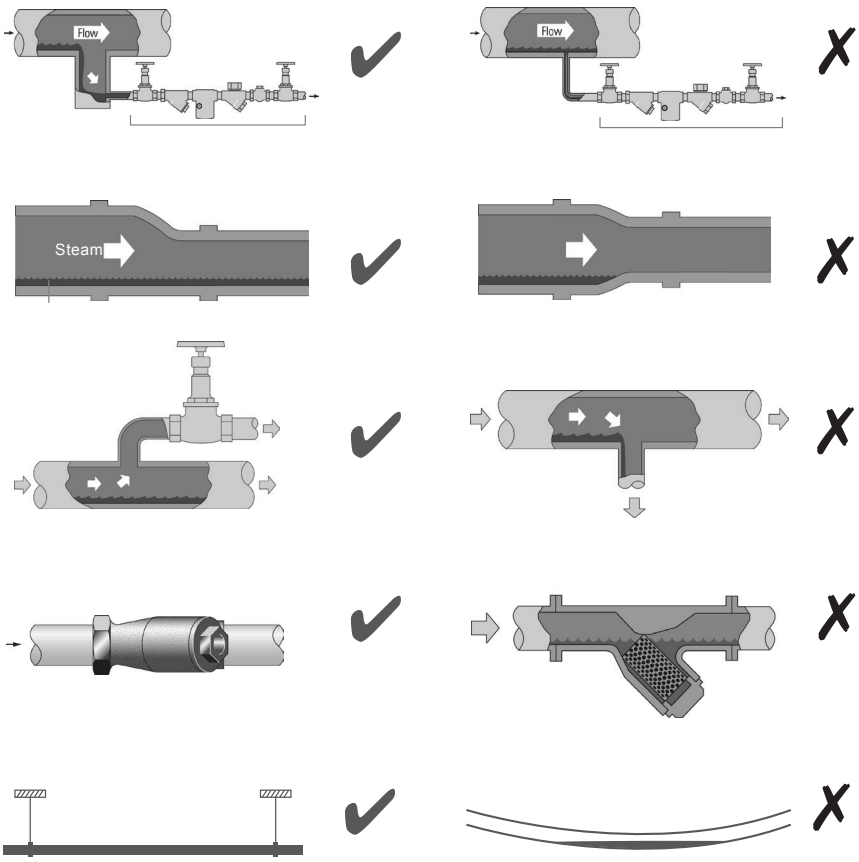


Prevention of water hammer

Steam trapping on steam mains:



Steam Mains - Do's and Dont's:



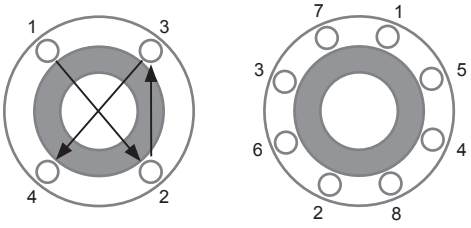
Prevention of tensile stressing

Pipe misalignment:

Installing products or re-assembling after maintenance:

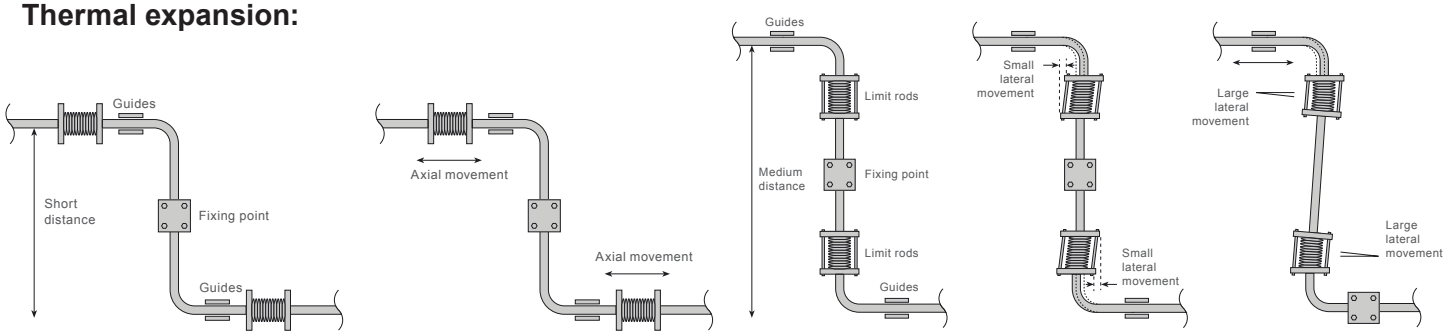
Do not over tighten.

Use correct torque figures.



Flange bolts should be gradually tightened across diameters to ensure even load and alignment.

Thermal expansion:



Section 1
Installation

1. Heater may be wall or floor stand mounted or can be suspended from the ceiling. Approximately 3' clearance from the floor is required to allow room for steam and condensate connections and the hot water outlet.
2. For optimal heater performance, the steam trap should discharge to 0 psig, below the level of the trap. If lift of condensate is required or the trap must discharge to a back pressure, an automatic pump trap (APT) should be fitted for correct operation. Contact Spirax Sarco for details.
3. Install a pressure relief valve set at 75 PSIG (for RH-30 & RH-60) or 50 PSIG (for RH-90 & RH-120) in the steam inlet pipe downstream of the pressure reducing valve if steam pressure to the heat exchanger can exceed these limits.

   Note: The Heliflow® heat exchanger can be supplied with a steel shell to accommodate higher design pressures if required.
4. The heater incorporates an integral pressure relief valve (located on side of the RediHeat valve) to relieve excess water pressure caused by thermal expansion.
5. Install the temperature gauge provided in the hot water outlet piping.
6. Install the pressure gauge and pigtail fitting on the steam supply line, either directly on the heat exchanger or in close proximity.
7. Standard operating steam pressure to the exchanger is 15 PSIG or less. The pressure reducing valve should be set at 15 PSIG if furnished.
8. The water pressure must exceed the steam pressure by 15 PSI at all times for proper operation.
9. Check tightness of all connections.
10. See typical installation drawings in Section 7. It is also advisable to install a drain/test valve close to the heater. This valve can be used to assist in initial temperature adjustment of the unit.

Section 2
RediHeat Start-Up Procedure

2.1 Initial Start-up

1. Check all joints for tightness. If a recirculation system will be used, initial temperature adjustment of the RediHeat should be performed with the circulating pump turned "off." After the RediHeat is set at the correct temperature, the circulator may be operated.
2. Turn on the cold water supply. Set flow at approximately 50% of the heater capacity. (Maximum water pressure 150 PSIG.)
3. Loosen the compression fitting on the sensing line at the upper diaphragm cover. Permit water to flow until free of any air. Retighten fitting.
4. A steam side vent valve should be installed on either of the vent connections located on top of the heat exchanger casing. Then slowly turn on the steam supply to the heat exchanger. Adjust the pressure regulator (if equipped) so steam pressure to the exchanger is 15 PSIG.

   Note: Carefully vent any trapped air using the vent valve.
5. By loosening the setscrew and locking ring, the desired outlet temperature can be calibrated by sliding the control rod from left to right (hotter to colder).
6. The valve also features a temperature stabilizer which will fine-tune the proportion of hot and cold water through all rated flows. The stabilization adjustment is performed by rotating the control rod from vertical to 30 degrees. To rotate the control rod, insert a nail or similar object into the hole drilled in the rod. Then rotate to the approximate position as indicated in Table 1 or 1A.

   Vary the flow to simulate high and low usage and note any variations in temperature based on flow rate.

   If the outlet temperature increases with increased flow, rotation should be decreased (toward 0 degrees, the 12:00 o'clock position).

   If the outlet temperature decreases with increased flow, the rotation of the stabilizer should be increased (toward 30 degrees, the 2:00 o'clock position). Correct adjustment will yield stable temperature output throughout the heater's flow capacities. Once the correct adjustments have been made, tighten the locking ring and set screw.
7. The RediHeat water heater should now be adjusted and operating. No further adjustments are required, unless there is a large fluctuation in the inlet water temperature. In climates with large seasonal temperature changes, a felt tip marker may be used to mark the summer and winter control rod positions.

   Note: Every 3°F change in supply water temperature will yield approximately a 1°F change in the outlet water temperature.
8. Tighten all casing bolts on the heat exchanger after 2 to 3 hours of operation and check after 24 hours.

Table 1
Temperature Stabilization Adjustment Table
(Approximate setting in degrees of rotation - see illustration below)
*** Steam pressure measured at heat exchanger inlet**

Inlet water temp	Set Point (ºF)	RH-30				RH-60			
	*	2 psig	5 psig	10 psig	15 psig	2 psig	5 psig	10 psig	15 psig
40ºF	120	25	24	23	22	15	14	13	12
	140	30	30	30	30	30	28	25	20
	150	30	30	30	30	30	30	27	25
	160	-	-	-	30	30	30	30	30
	180	-	-	-	30	30	30	30	30
60ºF	120	22	21	20	19	12	11	10	9
	140	25	24	23	22	15	14	13	12
	150	28	27	27	26	23	21	18	16
	160	-	-	-	30	30	28	25	20
	180	-	-	-	30	30	30	30	30

Blending Valve

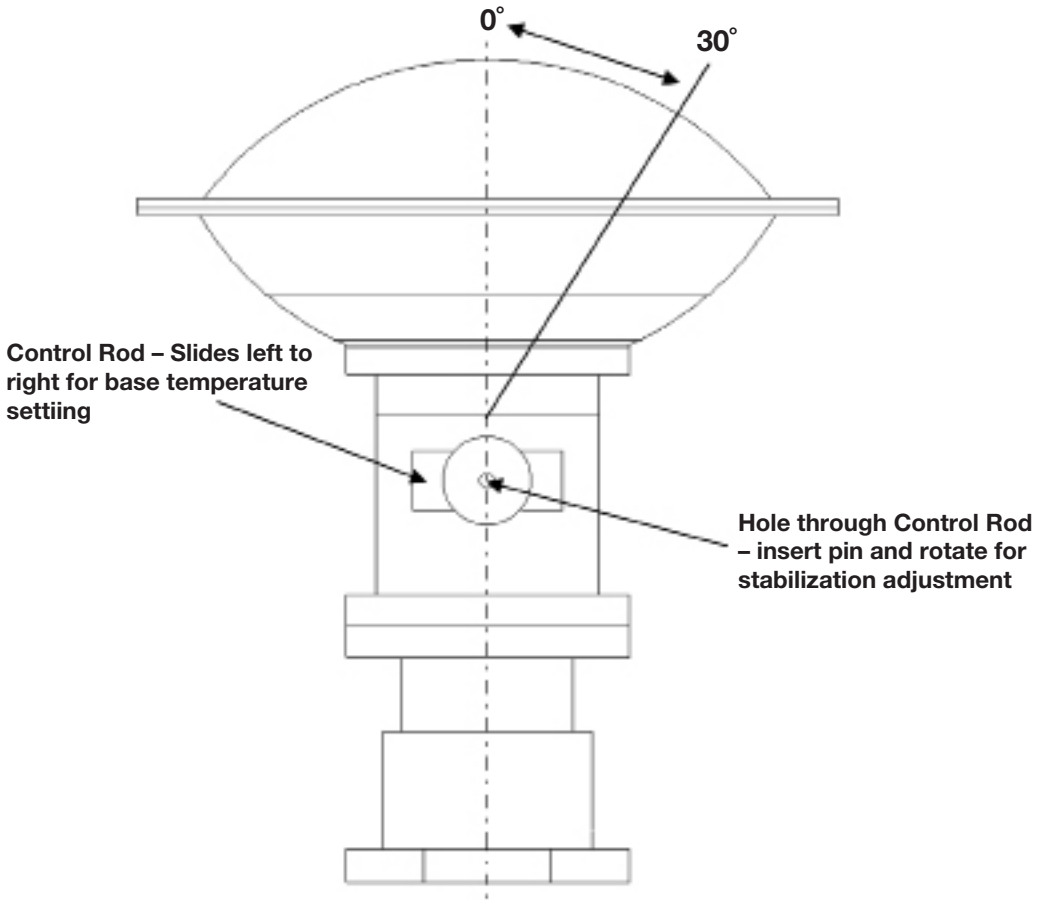
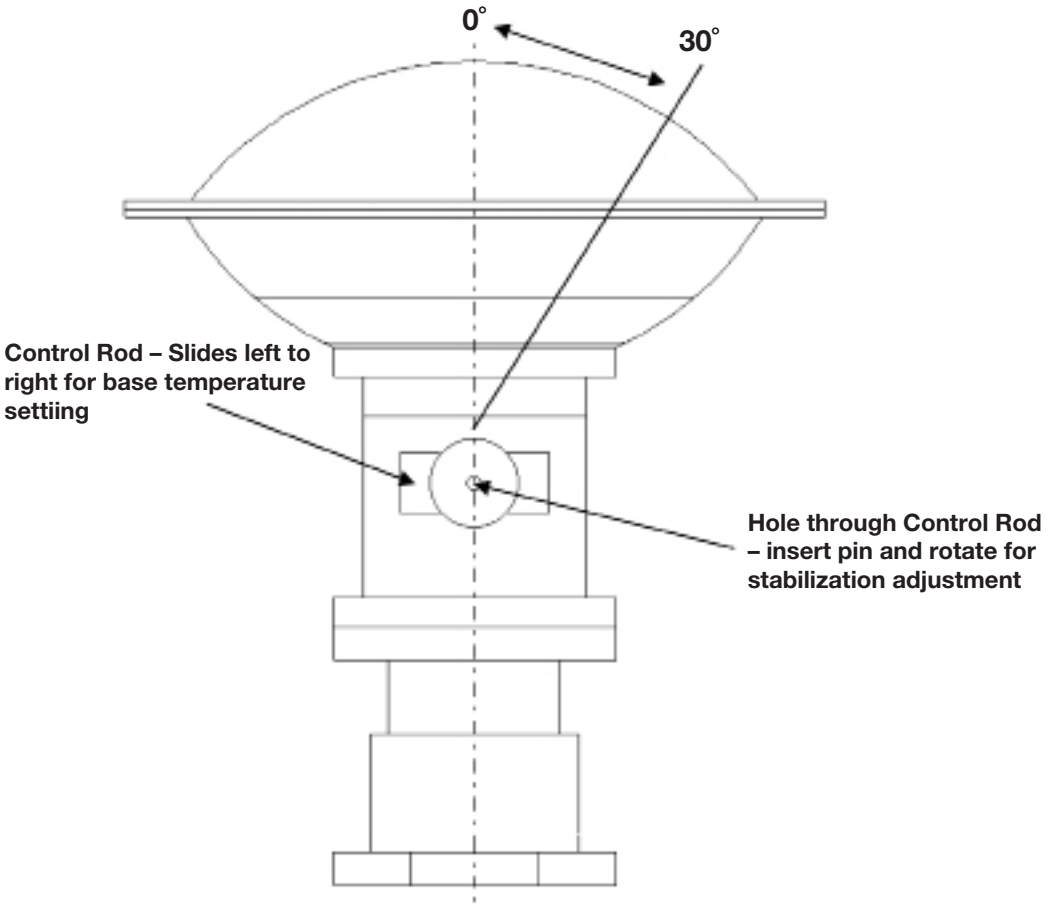


Table 1A
Temperature Stabilization Adjustment Table
(Approximate setting in degrees of rotation - see illustration below)
*** Steam pressure measured at heat exchanger inlet**

Inlet water temp	Set Point (°F)	RH-90				RH-120			
	*	2 psig	5 psig	10 psig	15 psig	2 psig	5 psig	10 psig	15 psig
40°F	120	25	24	23	22	15	14	13	12
	140	27	27	25	24	22	22	23	20
	150	30	30	30	30	27	27	27	25
	160	30	30	30	30	30	30	30	30
	180	30	30	30	30	30	30	30	30
60°F	120	22	21	20	19	12	11	10	9
	140	25	24	23	22	15	14	13	12
	150	28	27	27	26	23	21	18	16
	160	30	30	30	30	30	28	25	20
	180	30	30	30	30	30	30	30	30

Blending Valve



2.2 Start-up Procedure for RediHeat Water Heaters with Recirculation Systems

The following procedure should be used when starting the RediHeat fitted with a forced recirculation loop system. This procedure will be applicable in systems with either a fixed thermostatic element diverting valve, or the adjustable thermostat diverting valve.

Note: Before starting up a RediHeat incorporating a recirculation system, carefully read: **SECTION 5 - RECIRCULATION SYSTEMS.** This section covers how the recirculation system should be correctly piped up.

1. With the circulating pump "off", set the RediHeat water outlet temperature as described in 5 & 6 of section 2.1 Initial start-up.
2. Check that the temperature indicator has been placed in the correct position to measure the temperature in the return line to the users. Now start the circulating pump. With all faucets "off", observe the temperature of the recirculated water.
3. Typically the diverting valve is set 10ºF below the normal set temperature of the RediHeat. Because diverting valves are less accurate than the water heater, temperature variations up to 10ºF may be experienced in the loop temperature.
4. If an adjustable diverting valve has been fitted, the recirculated temperature should be adjusted with all faucets "off", after the piping system has had time to stabilize.

Section 3
Maintenance

3.1 Blending Valve Disassembly

Refer to Section 4 of this manual for troubleshooting. Disassembly of the blending valve need only be undertaken if problems in performance or instability of temperature is linked to the blending valve. Be sure all work is performed in a clean environment to prevent the introduction of foreign matter into the valve mechanism. Part numbers below refer to the cross sectional drawings found on pages 31 and 32 in Section 7 Drawings, of this manual.

Procedure

1. Close all steam and water supply lines.
2. Disconnect the sensing tube (46) from the lower valve body (42 or 43) and diaphragm cover (5). (Note position of notch in cover relative to the valve body.)
3. Disconnect Victaulic couplings at all valve connections and remove the valve.
4. Loosen and remove casing bolts (14) and lift off the diaphragm cover.
5. Hold the upper stem (1) by placing wrench on flats. Remove jam nuts (7) taking care not to turn the stem. Remove shouldered washer (8) and O-ring (9) along with diaphragm (13), diaphragm plate (11), spring (10) and guide washer (16).
6. Inspect diaphragm for any cracks or tears.
7. Remove retaining clip (19) from the temperature control rod (18). Unscrew the locking ring (21) and remove cover plate (22).
8. Compress the circlip (23) and remove from adjusting sleeve (27). Remove temperature control rod (18) and adjustor key cylinder (25).
9. **Caution:** Do not permit valve plug to drop from lower valve body. Hold valve stem (1) from above.
10. Unscrew retaining screw (35), remove spring (36), and spacer washers (37 & 38).
11. Remove the valve plug assembly through lower housing.
12. Remove socket head cap screws (12) and lift off lower diaphragm case (5) Remove O-ring (15) taking care not to damage groove.
13. Unscrew cap screws (49) and remove lower valve body (42 or 43).
14. Push black teflon coated temperature-adjusting sleeve (27) out of upper valve body (17).
15. Remove main valve stem (1).

Notes:

a) Inspect all parts for wear or damage. Replace all gaskets and O-rings.

b) Clean, flush and dry with clean cloth.

c) See parts list for recommended overhaul parts. Gaskets and O-rings should be replaced during any repair procedure.

3.2 Blending Valve Re-assembly

Procedure

1. Install the temperature adjusting sleeve (27) into the upper valve body (17).
2. Assemble upper valve body (17) to lower valve body (42 or 43) and secure cap screws. Note the cold water inlet will be on same side as the control rod opening.
3. Insert main valve stem (1) into bottom of temperature adjusting sleeve (27) and push until the collar washer seats against upper valve body.
4. Insert valve assembly into adjusting sleeve (27) and push until it is fully seated.
5. On lower end of valve stem install spacer (2), washer (37), bearing washer (38), spring (36), and tighten retaining screw (35).
6. Install O-ring (15) in groove on upper valve body and

install lower diaphragm case (5) securing it with cap screws (14) tightening in a sequential manner (note location of notch in relation to valve body).

7. Install adjustor key cylinder (25) on the pin located on the valve shaft. Replace O-ring on temperature control rod (18) and insert so adjustor key is centered in slot and notch on control rod fits with groove pin in adjusting sleeve (27). Install circlip (23) and locking ring (21).
8. Install, in order, the control valve spring (10), spring guide washer (16), diaphragm plate (11), diaphragm (13), O-ring (9), shouldered washer (8), and jam nuts (7), on main valve stem. Position diaphragm over holes and notch on lower case prior to tightening the jam nuts.
9. Install upper cover (6) and be sure notches in lower cover, diaphragm and upper cover line up. Install bolts and tighten sequentially.
10. Install valve on frame.
11. Install sensing tube (46) and Victaulic fittings. Check all fittings for tightness.
12. Refer to start-up procedures for temperature adjustment.

3.3 Heat Exchanger Inspection Disassembly

The heat exchanger coil is readily accessible for inspection and cleaning without disturbing the steam or water piping.

Procedure

1. Remove plug to drain the casing.
2. Remove all base plate nuts (93 or 94).
3. Lift off the casing (80 or 81), being careful not to damage the gasket (84 or 85).
4. If a leak in the tubing is suspected, water pressure can be turned on. Any leaks should be easily seen with the unit still in place.

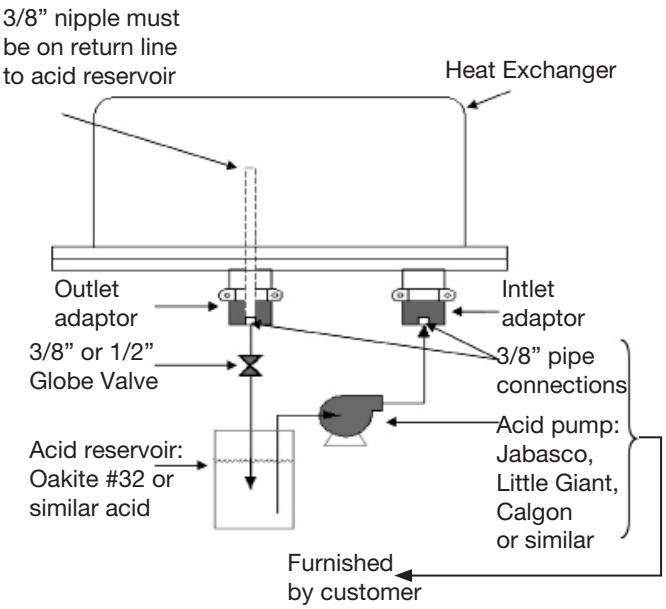
To Clean the Coil

Depending on local water conditions, scale deposits from hard water can form inside the heat exchanger coil. The coil can be cleaned in place using an acid pump cleaning system employing the following procedure:

1. Remove the two cast bronze elbow manifolds from the heat exchanger by disassembling the four Victaulic couplings.
2. Attach the 3/8" nipple supplied with the acid cleaning system adaptor kit to one of the adaptors.
3. Insert this adaptor into the heater connection closest to the center of the exchanger.

   Note: the 3/8" nipple must extend up into the exchanger.
4. Secure the adaptor with one of the Victaulic couplings removed in Step 1.
5. Connect the other adaptor to the remaining exchanger connection with a Victaulic coupling.
6. Connect the acid hoses, pump and reservoir.
7. For proper cleaning, the acid must be pumped through the exchanger in the direction shown in Fig 1 below. The 3/8" nipple avoids gas pockets in the top of the exchanger coil and must be on the outlet connection of the cleaning system.

FIG. 1



8. After cleaning is complete, the coil should be flushed with water before reconnecting the manifolds.

   Note: For acid preparation, cleaning and safety procedures, refer to the instructions supplied by the acid manufacturer.

If Removal of the Coil is Necessary

1. Disconnect water piping and remove the manifold nuts and lock rings.
2. Lift off the coil assembly (78 or 79), being careful not to damage the manifold gaskets.

3.4 Re-assembly

Procedure

1. Replace manifold and baseplate gaskets.
2. Check that the tabs on the manifold lock rings fit into the base plate slots. These keep the manifold-coil assembly from turning when tightening the manifold nuts.
3. Be sure the bottoms of the manifolds are seated in pockets located inside the casing.
4. Install and tighten manifold nuts.
5. Install casing and tighten bolts sequentially.
6. Check nuts for tightness after an hour or two and again after 24 hours of operation.

Section 4
Troubleshooting

Observations regarding any problems should be recorded.

1. Does the problem present itself during no flow, low flow, or high flow conditions, etc?
2. High temperature or low temperature? Note the RediHeat is designed to prevent high temperature failures, however, recirculation system failures may lead to overtemperature situations during low flow conditions.
3. Unsteady temperature?
4. Is the unit new or what is length of service?
5. What is the local water hardness?
6. Is the problem repeatable, sporadic?

The first step in resolving a problem with a RediHeat water heater system should be to determine the source of the problem:

- The recirculation system
- The RediHeat blending valve
- The RediHeat heat exchanger

1. Check the position of the water outlet temperature gauge. Has it been installed according to the recommended Piping & Instrumentation Diagram? The gauge should be downstream relative to the point where the recirculated water returns to the unit.
2. For facilities with recirculation systems, the circulating pump should be turned off to start the troubleshooting analysis.

Water Temperature Is Too High

1. Has inlet water temperature changed since the valve temperature setting was adjusted?
2. Is the RediHeat temperature adjustment set correctly?
3. Has steam pressure changed since the RediHeat temperature was adjusted?
4. If fitted with a recirculation system, turn the circulating pump off. If the problem is eliminated, the trouble is with the recirculation system.
5. For a new installation with a recirculation loop, check the setting of the thermostatic valve. The thermostatic element setting should be approximately 10°F below the normal operating temperature of the RediHeat. For example, if 120°F is the desired loop temperature, the thermostatic element should be set for 110°F.
6. If the problem developed in an existing system, the thermostatic element should be replaced.

See Section 5 “Recirculation Systems” for thermostatic diverting valve piping instructions. Because this valve is used in a non-typical manner, it is important to install the valve as recommended in this manual.

Water Temperature Is Too Low

1. Is the problem in the RediHeat valve or the RediHeat heat exchanger? The easiest method to answer this question is to check the temperature of the pipe which runs from the heat exchanger to the blending valve. At low flows and when the unit is idle, this pipe should be at a temperature about 200°F. At higher flow rates, check the surface temperature of the pipe which should remain above 150°F. If this pipe goes cold when water demand increases, the problem lies in the heat exchanger. Otherwise, the source of the problem is in the RediHeat blending valve.

Heat Exchanger Is Source of Problem

1. Has air been vented from the shell side of the heat exchanger?
2. Is steam supply at constant pressure? During high demand?
3. Is the condensate drain trap functioning correctly?
4. Is the coil fouled due to hard water?

RediHeat Blending Valve Is Source of Problem

1. Is temperature adjustment correct?
2. Disassemble valve - is the plug stuck in the open position?
3. Is the seal plate assembly and gasket in need of repair?

Restricted Water Flow

1. Is the valve diaphragm ruptured?
2. Is the sensing tube plugged?
3. Are there any restrictions in the water piping?

Section 5
Recirculation Systems

A problem many hot water systems encounter is the delayed supply of hot water to fixtures that are a substantial distance from the heater. During idle periods, heat loss in the piping system will result in cool water at the tap until hot water produced from the heater is able to reach that point. Delays in providing hot water at the tap can result in user dissatisfaction.

The compactness of the RediHeat permits installation close to the point of use in many cases. However, in systems with long pipe runs, conditions may exist where the supply of hot water at the faucet will be delayed.

To provide instantaneous hot water on demand in systems with long pipe runs, various methods can be utilized. The appropriate system will be influenced by site conditions, plan requirements, and user preference.

The following describes several systems and their interaction with the RediHeat instantaneous heater:

A. Heat Tape Systems

Many building systems avoid the costly pipe runs of conventional loop or return systems. Instead, electrical resistance heat is applied to the pipe in tape form to replace heat lost from the system. This method can be very effective and the RediHeat will function perfectly with this type of system. Heat tape installed up to the hot water outlet of the control valve will assure maximum performance.

B. Bleed System

This system consists of a single line distribution pipe with a thermostatically operated bleed valve. A temperature switch is set to open the bleed valve if the line temperature falls below the system set point. Upon opening, water in the line is dumped to drain until heated water from the RediHeat fills the line and signals the valve to close. This cycle will continue to hold the water temperature within set limits.

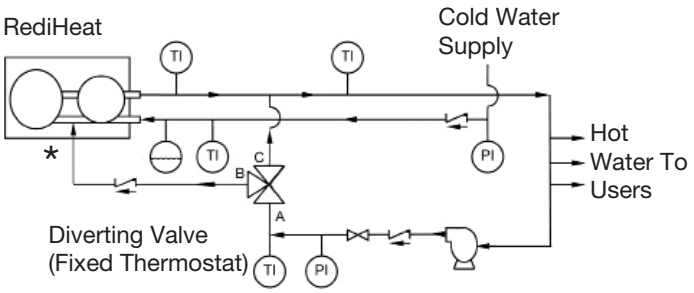
This system eliminates the costs of return piping and circulation pumps, however the cost of water consumption may prove too high for many installations.

C. Forced Recirculation Loop - Diverting Valve with Fixed Thermostat:

Most systems incorporate a circulating pump to maintain constant flow in a forced recirculation loop. The RediHeat is used to maintain loop temperatures as well as supply demand requirements. The system includes a self contained 3-way thermostatic type diverting valve to direct the recirculated water flow as required. The diverting valves normally are provided with fixed thermostatic elements. Models with adjustable elements are also available (see section D).

Water flow in the system is governed by the temperature of the recirculating loop. When the loop is at the desired temperature, the flow of recirculated water by-passes the RediHeat. As the temperature in the loop decreases due to heat loss through the piping, the thermostatic element responds and causes a portion of the water to be diverted through the RediHeat. Typical recirculated flow rate is 10% of the RediHeat capacity, however more accurate calculation methods should be used in complex systems.

Installation of the diverting valve is as shown. If you have any questions regarding installation, contact Spirax Sarco. Incorrect installation can lead to serious overheating of the water, resulting in dangerous temperatures.



** A Thermal expansion tank may be required when the cold water inlets include check valves.*

D. Forced Recirculation Loop (Diverting valve with adjustable thermostat):

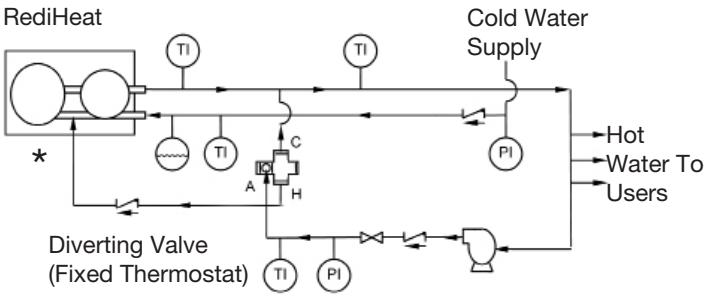
In addition to the fixed thermostatic element diverting valve, Spirax Sarco offers as an option an adjustable diverting valve. The adjustable diverting valve can be used to provide additional flexibility in the temperature of the hot water when the system is in the recirculation mode. The valve supplied is a Lawler Thermostatic Water Controller or equal. As Spirax Sarco uses the valve in a non-typical manner, do not follow the standard installation instructions supplied by the valve manufacturer. The following should be used as a guide for installation of this system.

Connect the Lawler port labeled “outlet” to the recirculating loop return line. This is the flow into the valve from the circulating pump, indicated as “A” below.

Connect the port labeled “H” (hot water inlet) to the cold water supply line feeding the RediHeat. This port will open when the recirculation loop water has cooled, and sends a portion back to the RediHeat for reheating.

Connect the port labeled “C” (cold water inlet) to the hot water supply line feeding the recirculation loop. This port is open when the recirculation loop water is at the desired set point and allows the recirculating water to by-pass the RediHeat.

Installation of the diverting valve is as shown. If you have any questions regarding installation, contact Spirax Sarco. Incorrect installation can lead to serious overheating of the water, resulting in dangerous temperatures.



** A Thermal expansion tank may be required when the cold water inlets include check valves.*

The following procedure should be used when starting the RediHeat fitted with a forced recirculation loop system. This procedure will be applicable in systems with either a fixed thermostatic element diverting valve, or the adjustable thermostat diverting valve.

1. With the circulating pump “off”, set the RediHeat water outlet temperature as described in Section 2 – RediHeat Start-up Procedure.
2. Check that the temperature indicator has been placed in the correct position to measure the temperature in the return line to the users. Now start the circulating pump. With all faucets “off”, observe the temperature of the recirculated water.
3. Typically the diverting valve is set 10ºF below the normal set temperature of the RediHeat. Because diverting valves are less accurate than the water heater, temperature variations up to 10ºF may be experienced in the loop temperature.
4. If an adjustable diverting valve has been fitted, the recirculated temperature should be adjusted with all faucets “off”, after the piping system has had time to stabilize.

Section 6
Ordering Spare Parts

When ordering spare parts, please address your communication to:

Spirax Sarco, Inc
1150 Northpoint Blvd.
Blythewood, South Carolina, 29016

Telephone: 803-714-2000
Fax: 803-714-2222

E-Mail: us.orders@us.spiraxsarco.com
Website: spiraxsarco.com/global/us

IMPORTANT

The following information should be given in order to identify thespare parts required:

- Serial number of unit (stamped on nameplate)
- Name or description of part required

Spirax Sarco presents the information in this manual as good engineering practice. We cannot be held responsible for any damage to equipment that may result from mal-operation nor for any personal injuries should they occur during normal or abnormal operation.

Spirax Sarco Applications Engineering Department
Toll Free at:
1-800-883-4411

SPIRAX SARCO, INC. • 1150 NORTHPOINT BLVD. • BLYTHEWOOD, SC 29016
PHONE 803-714-2000 • FAX 803-714-2200

www.spiraxsarco.com/global/us