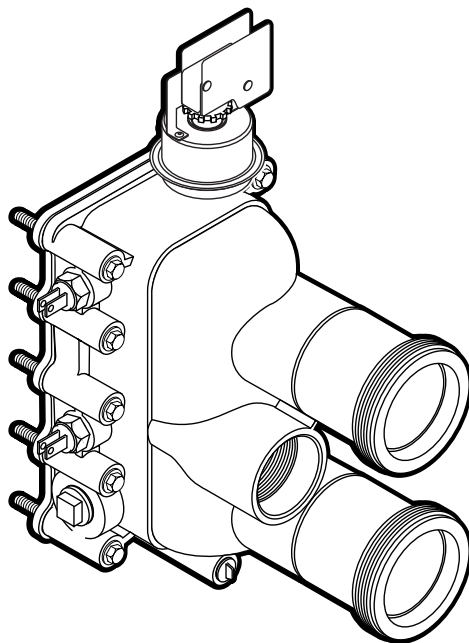


STA-RITE®

Heater Manifold



REPLACEMENT INSTRUCTIONS



Sta-Rite Pool/Spa Group

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S570 (Rev. 8/21/03)

O-Ring
No. U9-226

Connector Tube Kit
No. 77707-0017

SR/SRC200 Manifold Conversion Kit
No. 77707-0014

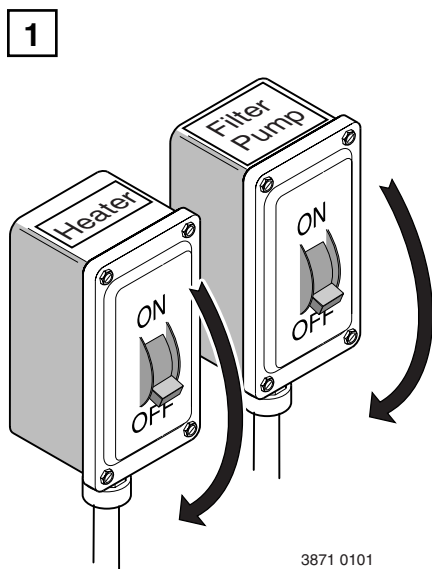
SR/SRC333 Manifold Conversion Kit
No. 77707-0015

SR/SRC400 Manifold Conversion Kit
No. 77707-0016

Safety Precautions:

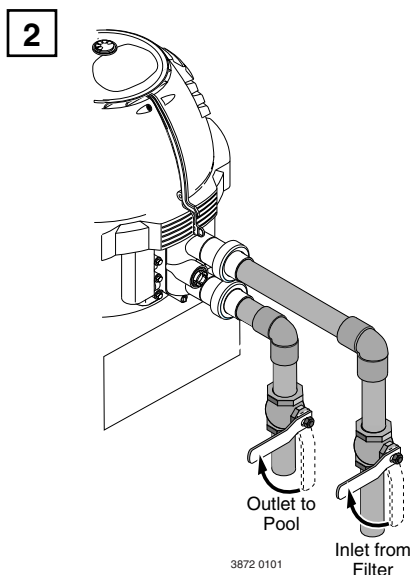
⚠ WARNING Fire or explosion hazard. Disconnect all power to the heater and close the External Manual Gas Valve before starting this procedure.

⚠ CAUTION Compressed spring hazard. The Thermal Regulator plug has a spring behind it. Restrain it when removing it from the Manifold to prevent it from flying and possibly injuring persons nearby (see Picture No. 8, Page 3).



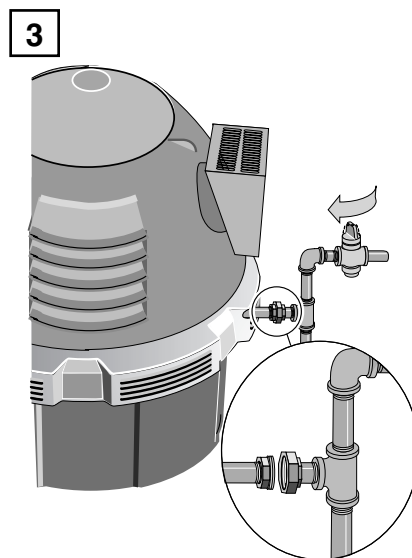
3871 0101

Turn off the power to the heater and the filter pump.

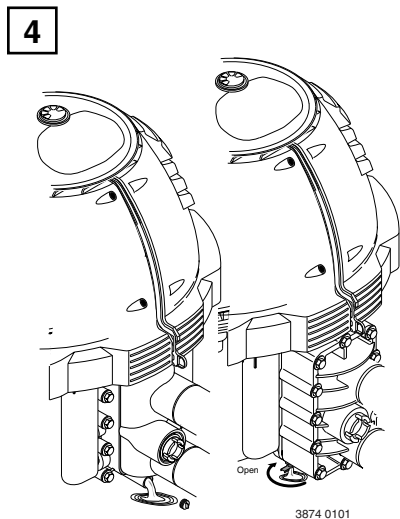


3872 0101

Close water inlet and outlet valves to isolate the heater from the system.

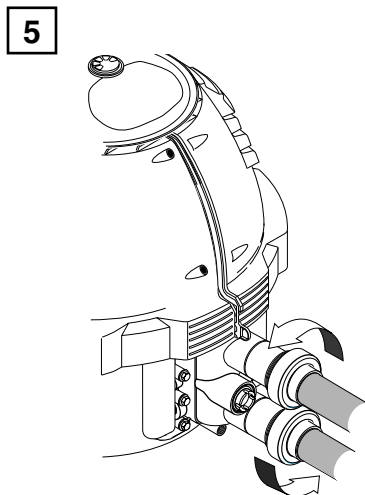


Close the gas valve. If it is necessary to move the heater, disconnect the union.

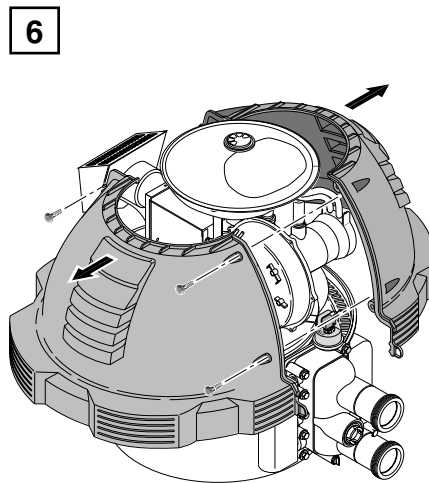


3874 0101

Drain the Heater.

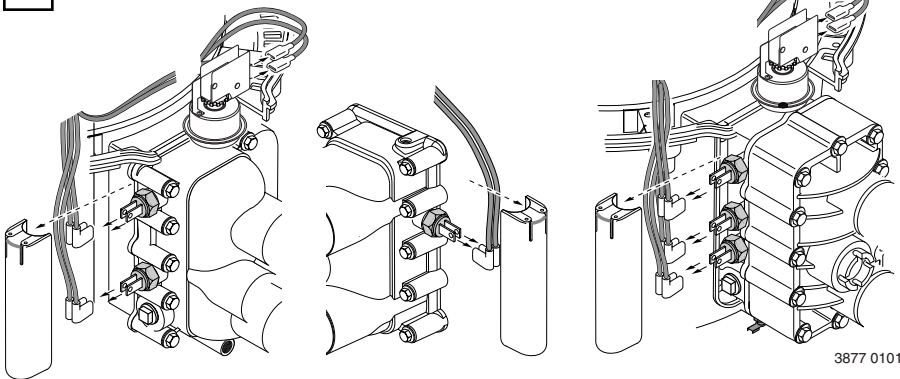


Loosen the union collars. When the heater is empty, disconnect the unions.



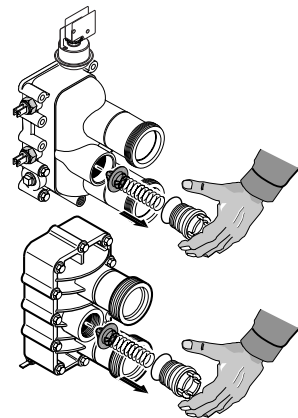
Separate and remove the covers.

7



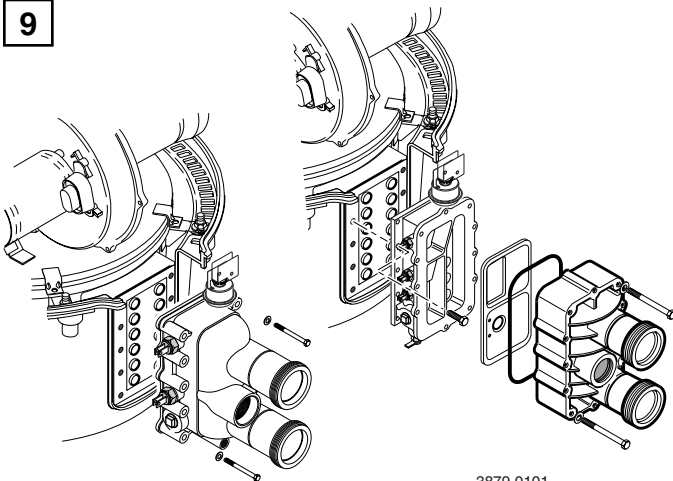
Remove the switch covers and disconnect the wires from the safety switches. The wires are color coded and marked for the switches they serve.

8



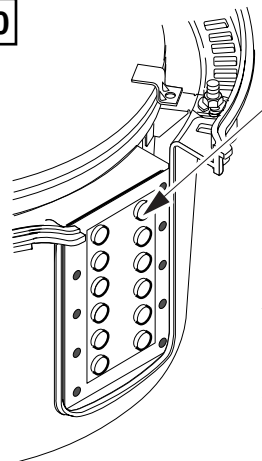
Carefully remove the spring-loaded thermal regulator.

9



Remove the manifold and adapter.

10

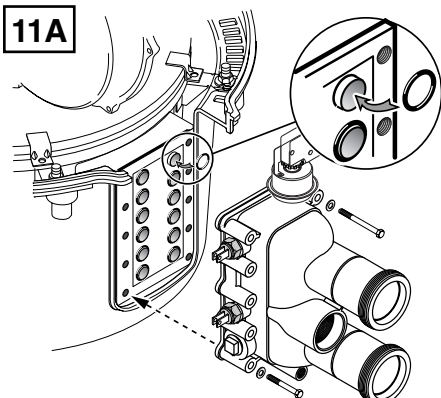


1. Clean the tube sheet and O-ring sealing surface with a nylon brush, then brighten the tube sheet surface with 320 grit emery cloth.
NOTE: When cleaning, be careful not to push the tube sheet into the combustion chamber. If you do, thread a couple of bolts into it and pull it back in place.
2. Brush off all dust and debris with a brush and wipe it down with a cloth.
3. Apply silicone grease (supplied) to O-Rings.

4067 0901

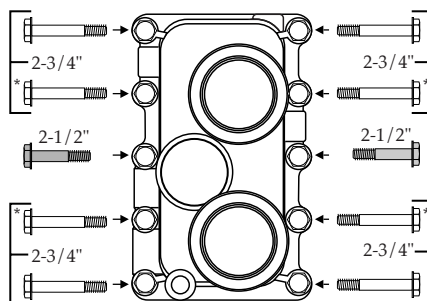
Clean the tube sheet and O-Ring sealing surfaces thoroughly as described above.

11A

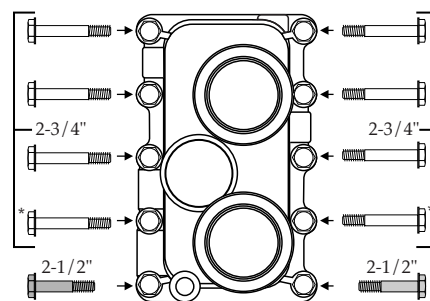


11B

Models SR200/SRC200□
Short Bolt Placement



Models SR400/SRC400□
Short Bolt Placement



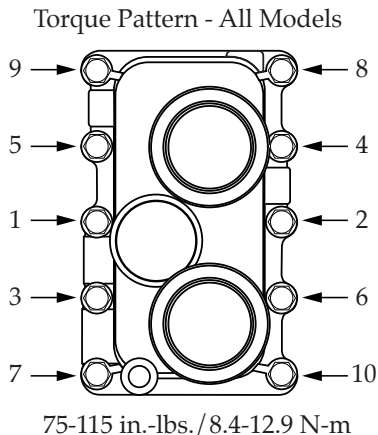
***Hand-tighten all long bolts; then tighten indicated bolts enough to allow short bolts to engage.**

- Install O-rings on tube ends; install manifold.
- **SR/SRC200 and SR/SRC400:** Tighten all long bolts **HAND TIGHT**; then tighten the bolts next to the short bolts a little more with a wrench.
- Insert and start the two short bolts until they engage three

or four threads, then tighten all bolts according to the normal torque pattern shown on Page 4.

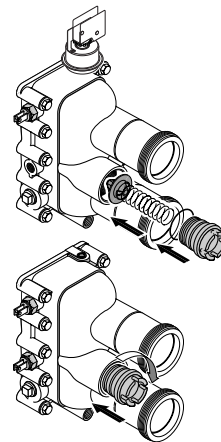
- **SR/SRC300:** These models use long bolts only. Tighten all bolts **HAND TIGHT**; then tighten according to the normal torque pattern shown on Page 4.

12



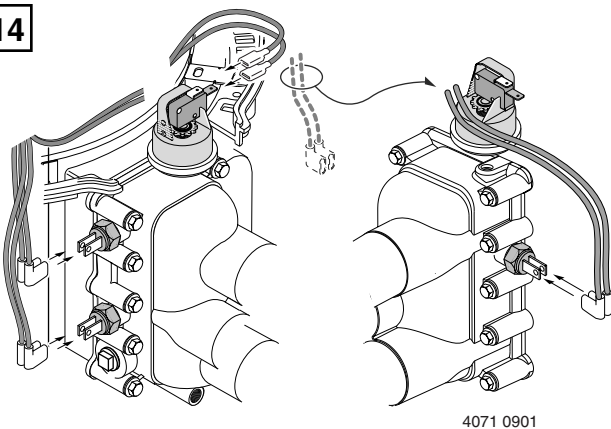
1. Make sure that all bolts are engaged and hand tight.
2. Torque the bolts **in sequence** as shown. Some noise (popping, etc.) is normal as you tighten.
3. Go around the manifold and retighten the bolts as needed to 75-115 in.-lbs. (8.4-12.9 N-m) (you may have to do this several times).

13



Install the Thermal Regulator in the Manifold.

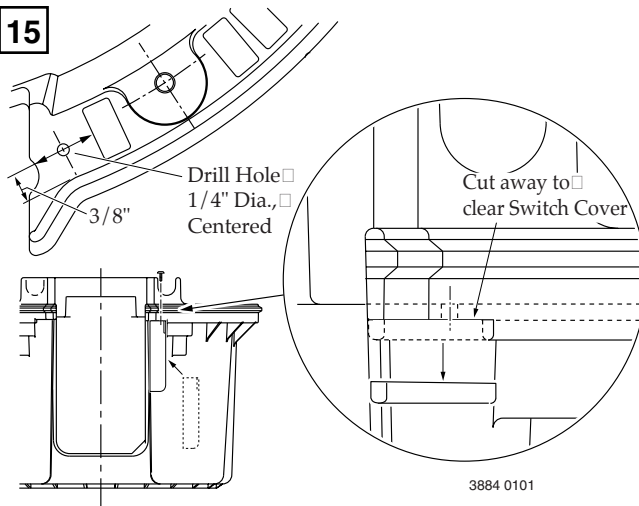
14



Reconnect wires to switches.

NOTE: You may have to reroute the AGS wire to the opposite side of the manifold (depending on your heater's production date). If so, be sure that the wire crosses ahead of the Water Pressure Switch as shown and *does not* touch the Combustion Chamber.

15



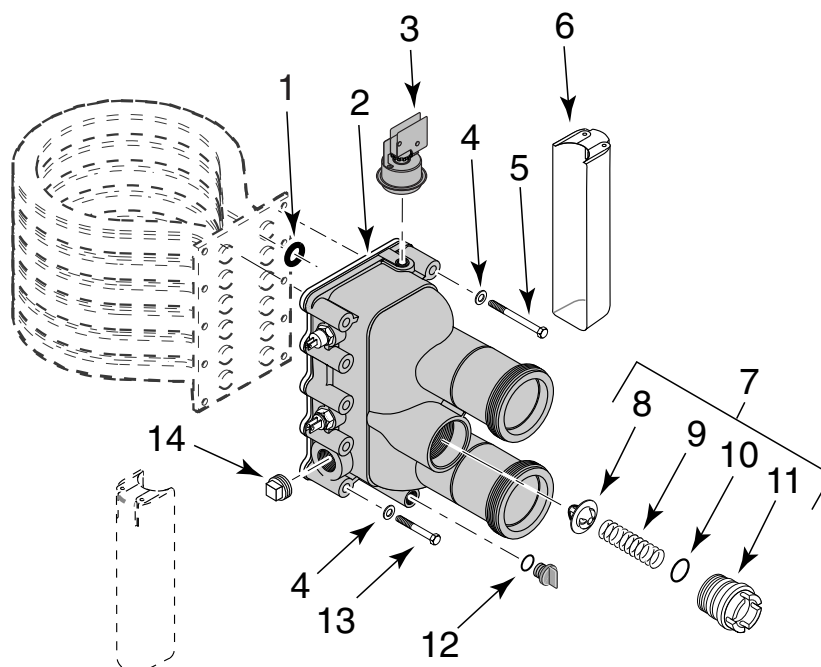
Install the second switch cover as shown when retrofitting a new manifold.

NOTICE

- Start and run the filter pump for several minutes before starting the heater in order to purge all air from the system. Open all air vents in the system (on Filter, Strainer, etc.) while purging the air. Run the pump with the vents open until all vents run a solid stream of water.
- Check gas union(s) for leaks with soapy water before firing the heater.

▲ WARNING Explosion and fire hazard. Be sure that all gas connections are tight and do not leak before attempting to start the heater.

- See Step 15, above, for switch cover installation instructions.
- Have a No. 77707-0008 Insulation Kit on hand in case the heating coil shifts during manifold installation and requires opening the combustion chamber cover to realign it.



4074 1001

Repair Parts List

| Key No. | Part Description | Qty. | 200 Manifold Conversion Kit 77707-0014 | 333 Manifold Conversion Kit 77707-0015 | 400 Manifold Conversion Kit 77707-0016 |
|---------|---|------|--|--|--|
| 1 | Coil/Tube Sheet Seal O-ring | () | 35505-7222 (6) | 35505-7222 (10) | 35505-7222 (12) |
| • | Manifold O-Ring | 1 | 35505-7437 | 35505-7437 | 35505-7437 |
| 3 | Water Pressure Switch | 1 | 42001-0060T | 42001-0060T | 42001-0060T |
| 2 | Manifold/Connector Tube Assembly | 1 | * | * | * |
| 4 | Flat Washer | 10 | U43-41SS | U43-41SS | U43-41SS |
| 5 | 5/16x2-3/4" SS Hx Hd Capscrew | () | 37007-0214(8) | 37007-0214(10) | 37007-0214(8) |
| 6 | Switch Cover | 1 | 42001-0007 | 42001-0007 | 42001-0007 |
| • | Switch Cover Screw | 1 | U30-742SS | U30-742SS | U30-742SS |
| 7 | Thermal Regulator Assembly (Purchase Separately; Includes Key Nos. 8,9,10,11) | 1 | 77707-0010 | 77707-0010 | 77707-0010 |
| 8 | Thermal Regulator | 1 | | | |
| 9 | Thermal Regulator Spring | 1 | | | |
| 10 | Thermal Regulator Cap O-Ring | 1 | | | |
| 11 | Thermal Regulator Cap | 1 | | | |
| 12 | Drain Plug | 1 | U178-920P | U178-920P | U178-920P |
| 13 | 5/16x2-1/2" SS Hx Hd Capscrew | 2 | 37007-0213 | — | 37007-0213 |
| 13 | 3/4" NPT Pipe Plug | 1 | WC78-38AT | WC78-38AT | WC78-38AT |
| • | Relief Valve | † | 38674-0719 | 38674-0719 | 38674-0719 |
| • | Connector Tube Kit (Includes O-Ring) | 2 | 77707-0017 | 77707-0017 | 77707-0017 |
| • | Connector Tube O-Ring | 2 | U9-226 | U9-226 | U9-226 |

• Not illustrated.

* Not available separately. If the manifold body fails, purchase a complete Manifold Conversion Kit, which includes all safety switches and all internal components except the Thermal Regulator (Key No. 7, above). Does not include relief valve.

† Purchase separately; required on Canadian installations.

STA-RITE LIMITED WARRANTY

Pumps, filters, skimmers, underwater lights (except bulbs), accessories and fittings manufactured by Sta-Rite are warranted to be free of defects in material and workmanship for one (1) year from date of installation.

Product specific warranties:

Year from date of installation

HRPB, DEPB, System 3, System 2 and Posi-Clear

Tanks 10 years
Internal filter components and valves 1 year

Max-E-Therm - Pool/Spa Heaters 2 years
Heater Enclosure only (Upper RH & LH;
lower enclosure; and control board enclosure)... 10 years

Automatic Pool Cleaners including Hose 2 years

Cristal-Flo filters - Tanks 10 years pro-rated*
Valve and internal components. 1 year

Posi-Flo II - Tanks 10 years
Elements 1 year

PRC Cartridge -

Filter Tanks 5 years pro-rated (1st 2 years full)
Elements 1 year

System 2 Above Ground Systems - Tanks 10 years
Pumps / Platform and Internals 1 year

Pumps 1 year
When equipped with A.O. Smith
2-compartment motors (Does not include
pumps sold as part of a systems package) 2 years

Traps / In-Line Strainers 1 year

Vertical Commercial Filter - Tanks 10 years
Internals 1 year

Horizontal Commercial Filter

Tanks 5 years
(Years 6-9, Prorated declining 20%/year, Yr. 10 - 10%)
Internals 1 year

* Full warranty coverage is in effect for one year after installation. The pro-rated warranty covers the *tank only* during the 2nd through 10th year after installation. The amount covered decreases by 10% each year. (ie., 2nd year 90% covered, 3rd year 80% covered, etc.).

The foregoing warranties relate to the original consumer purchaser ("Purchaser") only. Sta-Rite shall have the option to repair or replace the defective product, at its sole discre-

tion. Purchasers must pay all labor and shipping charges necessary to replace the product covered by this warranty. Requests for warranty service must be made through the installing dealer. This warranty shall not apply to any product that has been subject to negligence, misapplication, improper installation or maintenance, or other circumstances which are not in Sta-Rite's direct control.

This warranty sets forth Sta-Rite's sole obligation and Purchaser's exclusive remedy for defective products.

STA-RITE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR CONTINGENT DAMAGES WHATSOEVER.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE DURATION OF THE APPLICABLE EXPRESS WARRANTIES PROVIDED HEREIN.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Supersedes all previous publications.

Sta-Rite Industries, Inc.,
293 Wright St., Delavan, WI 53115

▲ Retain Warranty Certificate (upper portion) in a safe and convenient location for your records.

DETACH HERE: Fill out bottom portion completely and mail within 10 days of purchase/installation to:

▼ Sta-Rite, Attn: Warranty Dept., 293 Wright St., Delavan, WI 53115

STA-RITE®

Name _____

Address _____

City _____

State _____

Zip _____

Purchase Date _____

Product Purchased _____

☐ New installation

☐ Replacement

Type of Pool

☐ Inground

☐ Vinyl

☐ Fiberglass

☐ Gunite

Size of Pool _____

Years pool has been in service ☐ less than 1 ☐ 1-3 ☐ 3-5 ☐ 5-10

Purchased from:

Company name _____

Address _____

City _____

State _____

Zip _____

Warranty Registration Card

Please send me more information on these other products from Sta-Rite.

☐ Pumps ☐ Filters ☐ Automatic Pool Cleaners

☐ Maintenance Equipment ☐ Test Strips

☐ Heaters