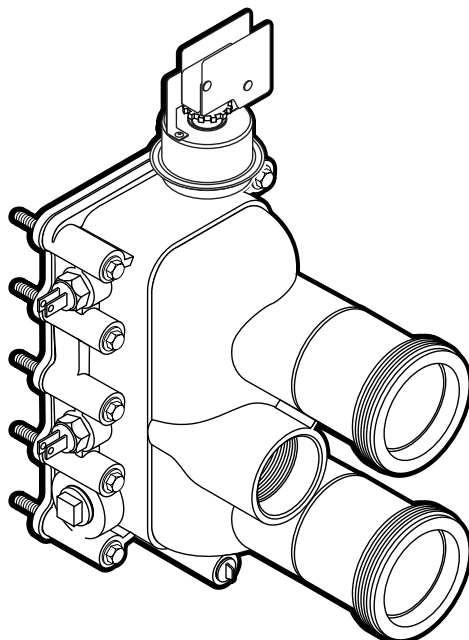


STA-RITE®

Heater Manifold



REPLACEMENT INSTRUCTIONS



Sta-Rite Pool/Spa Group

293 Wright Street, Delavan, WI 53115

International: 262-728-5551, FAX: 262-728-7550

www.starite.com

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S570 (Rev. 8/27/04)

O-Ring
No. U9-226

Connector Tube Kit
No. 77707-0017

SR/SRC200 Manifold Conversion Kit
No. 77707-0014

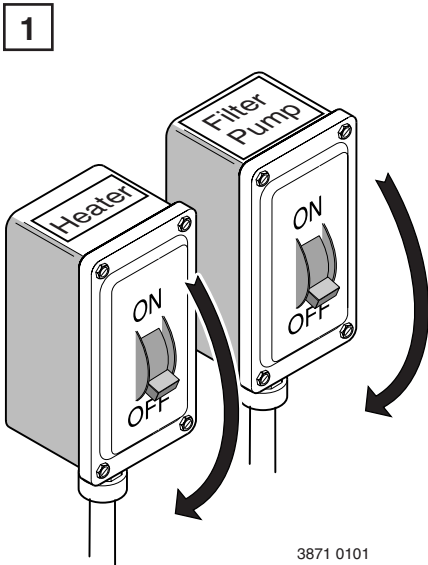
SR/SRC333 Manifold Conversion Kit
No. 77707-0015

SR/SRC400 Manifold Conversion Kit
No. 77707-0016

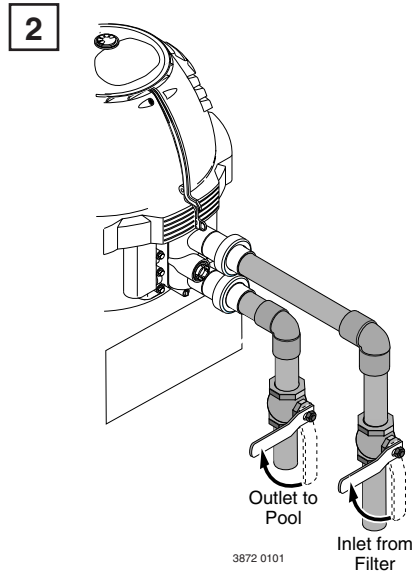
Safety Precautions:

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

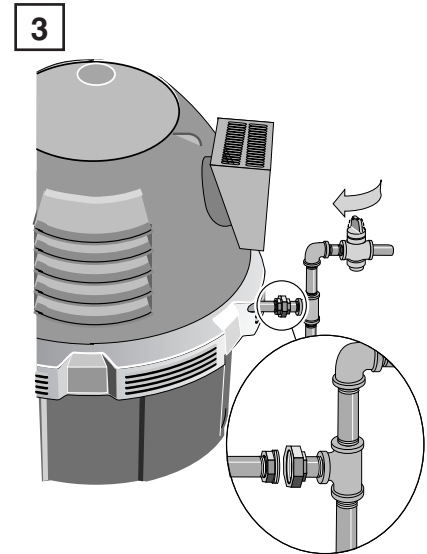
▲ CAUTION Compressed spring hazard. The Thermal Regulator plug has a spring behind it. Restrain it when removing it from the Manifold to prevent it from flying and possibly injuring persons nearby (see Picture No. 8, Page 3).



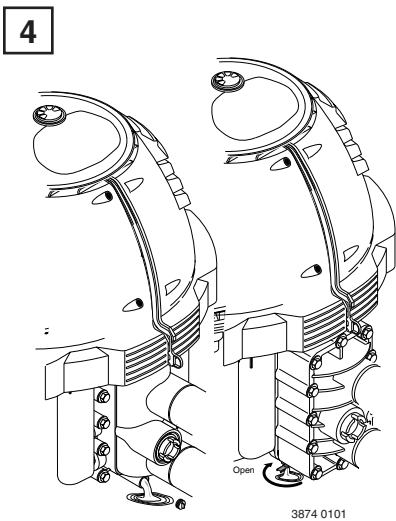
Turn off the power to the heater and the filter pump.



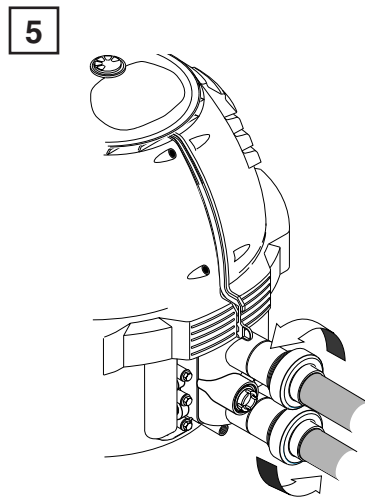
Close water inlet and outlet valves to isolate the heater from the system.



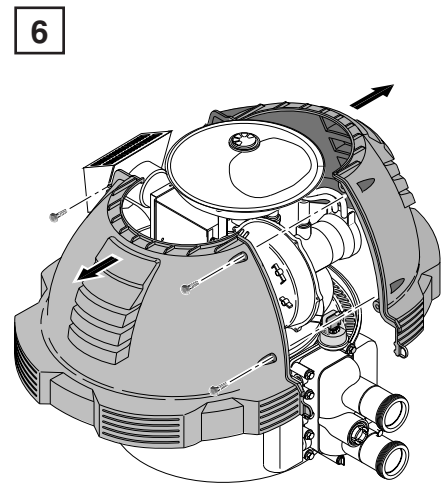
Close the gas valve. If it is necessary to move the heater, disconnect the union.



Drain the Heater.

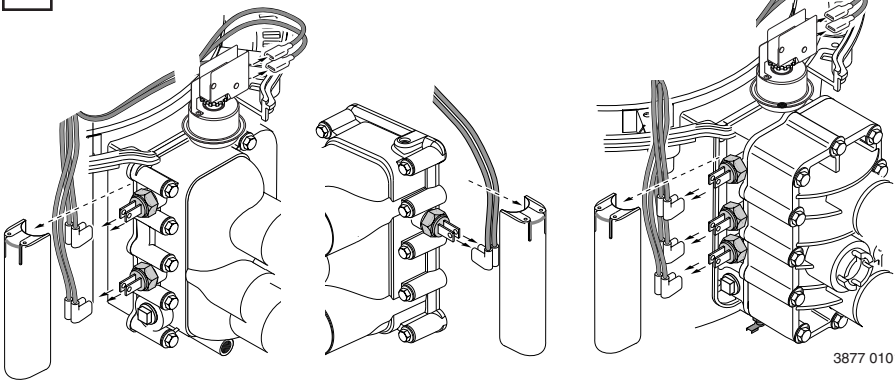


Loosen the union collars. When the heater is empty, disconnect the unions.



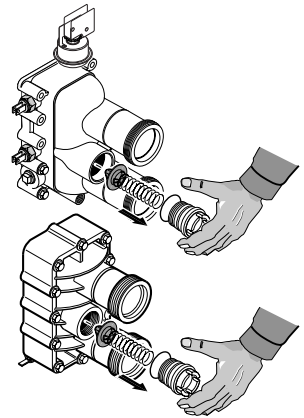
Separate and remove the covers.

7



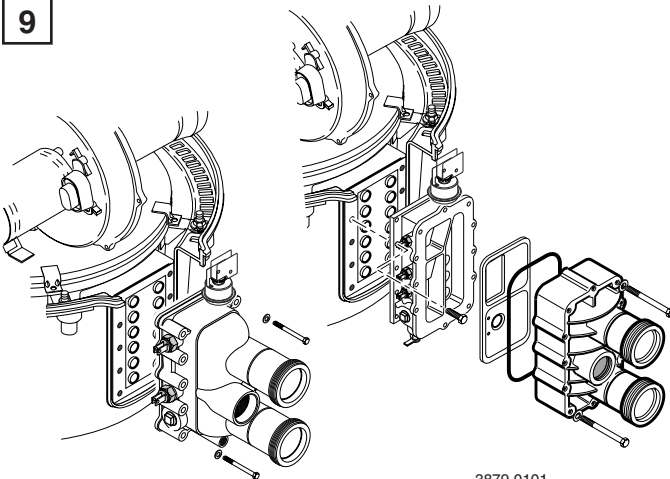
Remove the switch covers and disconnect the wires from the safety switches. The wires are color coded and marked for the switches they serve.

8



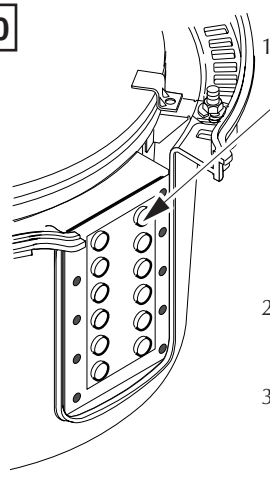
Carefully remove the spring-loaded thermal regulator.

9



Remove the manifold and adapter.

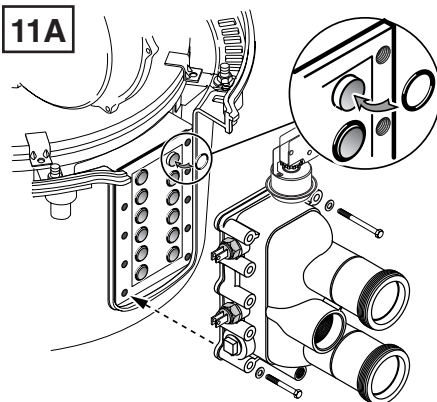
10



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.

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

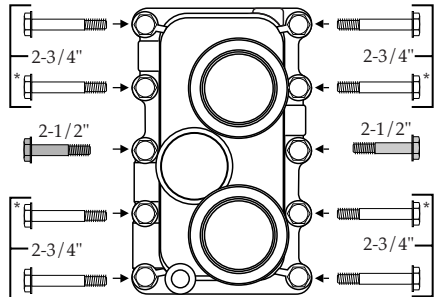
11A



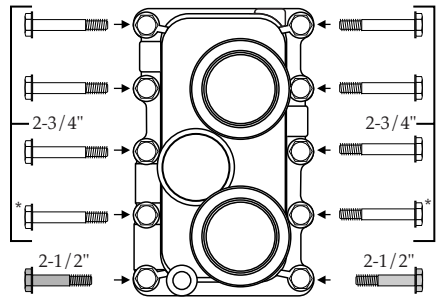
4068 0901

11B

Models SR200/SRC200□
Short Bolt Placement



Models SR400/SRC400□
Short Bolt Placement



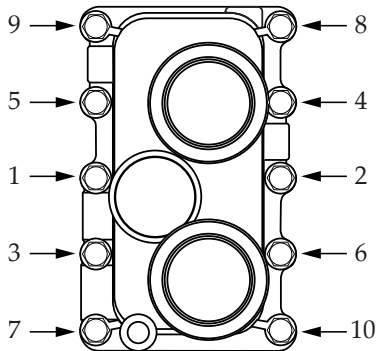
***Hand-tighten all long bolts; then tighten indicated bolts enough to allow short bolts to engage.**

- 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

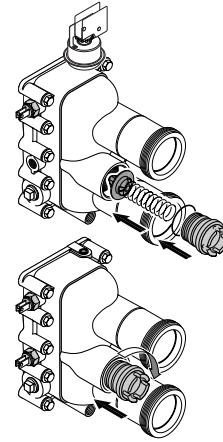
Torque Pattern - All Models



75-115 in.-lbs. / 8.4-12.9 N-m

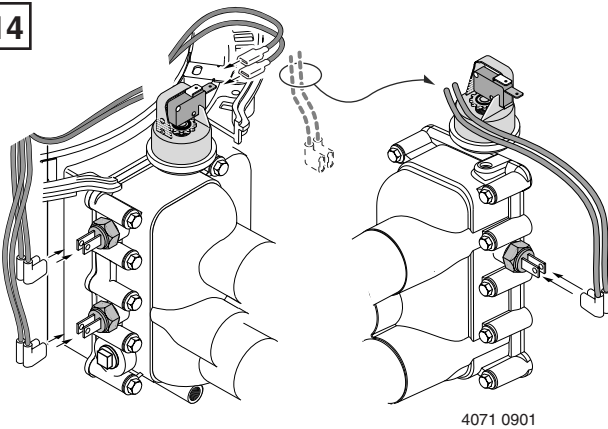
1. Make sure that all bolts are engaged and hand tight.
2. Torque the bolts **in sequence** as shown. Some noise (popping, etc.) is normal as you tighten.
3. Go around the manifold and retighten the bolts as needed to 75-115 in.-lbs. (8.4-12.9 N-m) (you may have to do this several times).

13



Install the Thermal Regulator in the Manifold.

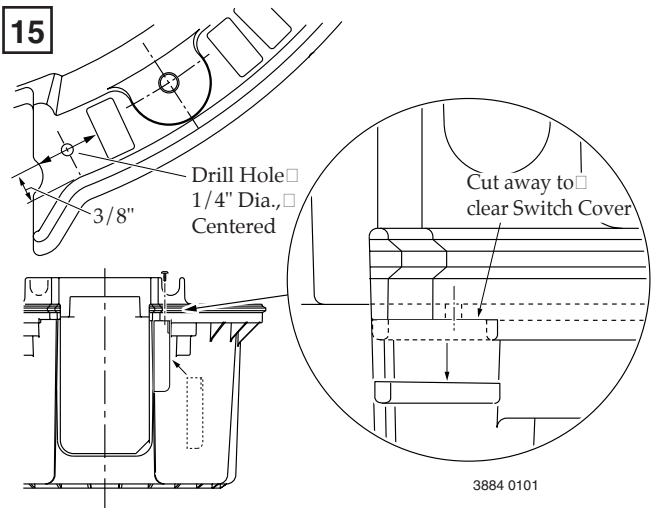
14



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



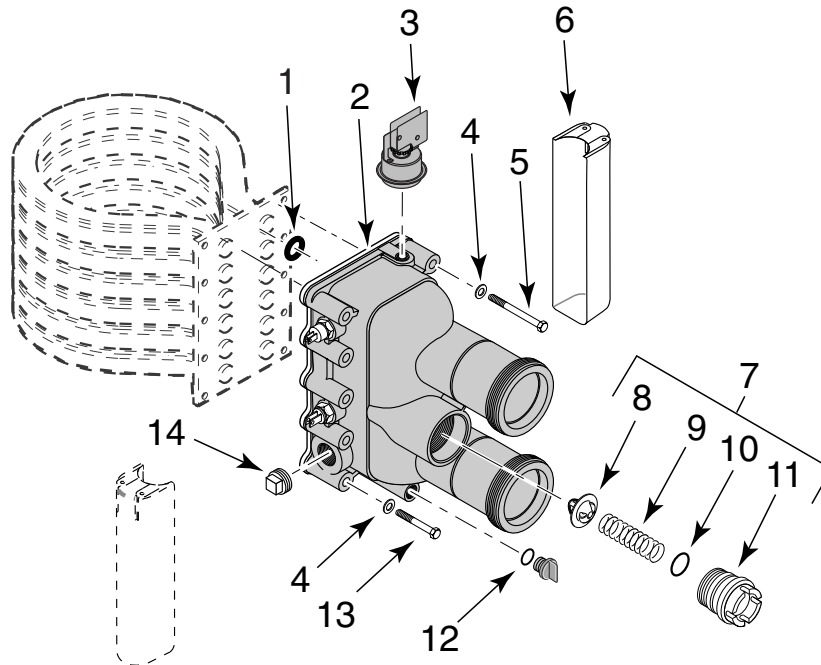
Install the second switch cover as shown when retrofitting a new manifold.

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 (excluding bulbs), accessories and fittings manufactured by Sta-Rite are warranted to be free of defects in material and/or workmanship for one (1) year from the original date of installation.

The foregoing warranties relate to the original consumer purchaser ("Purchaser") only. Sta-Rite Industries shall have the option to repair or replace the defective product, at its sole discretion. 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. Failure to have product installed by a professional in compliance with local codes will void any and all manufacturers warranty.

This warranty sets forth Sta-Rite's 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.

Product Specific Warranties (from date of installation)

Product Family	Limited Warranty	Exceptions
Filters	1 Year	System 3 Tank Bodies - 10 Yrs
Filter Valves	1 Year	
Pumps	1 Year	
Heaters	2 Years	*Commercial Application - 1 Yr
Controls	1 Year	
Above Ground Systems	1 Year	
Lights and Niches	1 Year	Lamps and Bulbs - 90 Days
White Goods	1 Year	
Maintenance Equipment	90 Days	
Drainer/Utility Pumps	90 Days	
Replacement Parts	90 Days	
Cleaners: Lil Shark	1 Year	
Cleaners: Calypso	1 Year	
Cleaners: Pool Shark	2 Years	Footpad and Seal Flaps - 1 Yr
Cleaners: Great White	2 Years	

* Commercial and multi-family application.

Retain this warranty certificate in a safe and convenient location for your records.

For technical information about this product, contact the installer or call Sta-Rite at 262-728-9181.

Visit www.staritepool.com

- for more information about Sta-Rite products listed above
- to locate a Sta-Rite dealer near you

CREATE A RECORD OF YOUR WARRANTY AT STA-RITE:

- Complete a warranty registration at www.staritepool.com by clicking on "Register Products" and selecting Sta-Rite Pool **OR**
- Complete bottom portion completely and mail within 10 days of installation to Sta-Rite, Attn.: Pool Warranty Dept., 293 Wright St., Delavan, WI 53115



Warranty Registration Card

Name _____

New installation Replacement

Address _____

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

City _____ State _____ Zip _____

This product was purchased from:

Installation (or Purchase) Date _____

Company name _____

Product Purchased _____

Address _____

Model Number _____

City _____ State _____ Zip _____