

Pacific

Parts and Service Manual

390748 Rev K 3-11-2024

1-800-732-0717

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PENNER

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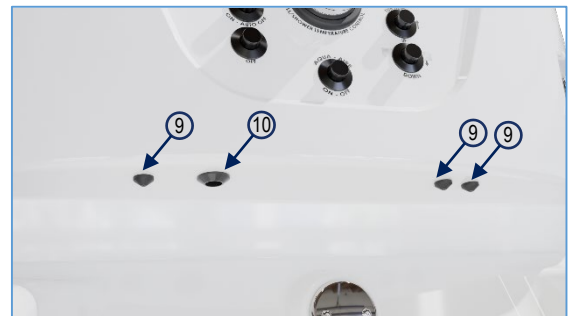
Front Left Controls



Front Right Controls



Front Controls



Front Bottom Dispensers

- | | | | |
|-----|-------------|---|----------------------------|
| 1. | 140106R | Hand Shower W/ Trigger-Yellow | |
| 2. | 140104 | Swivel Chrome Elbow (Qty 3) | |
| 3. | 350192CH | Shower Hose Chrome- 96" (Qty 3) | |
| 4. | 140106 | Hand Shower W/ Trigger (Qty 2) | |
| 5. | 350495 | Raised Push Button Air Transmitter (Qty 9) | |
| 6. | 350200 | Dispenser Pump-Complete (Qty 2) | |
| | 1. | 350201 | "O"Ring for Dispenser Pump |
| | 2. | 350204 | Spring-Replacement |
| | 3. | 350210 | Nut-Pump White |
| | 4. | 350215 | Cap- Dispenser Pump |
| | 5. | 350205 | Spacer- Pump Mount |
| 7. | 350535M-SER | Thermometer (F° or C°) | |
| 8. | 350151 | Rada Mixing Valve (Page X for parts) | |
| 9. | 390403 | Dispenser Spout Oil and Shampoo, Air Outlet | |
| 10. | 390220 | Spigot-9700 | |



Rada Valve Service Video

Pacific Spa Components

Bottle Tray-Mixing Valve

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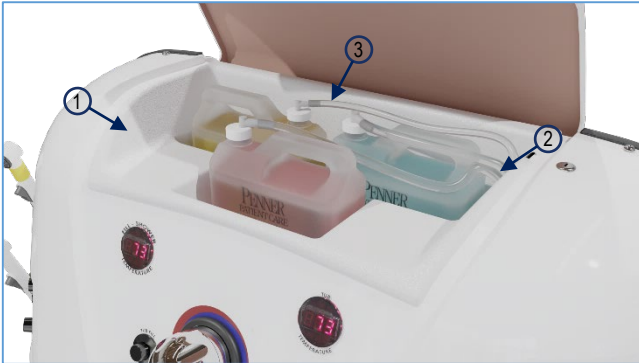
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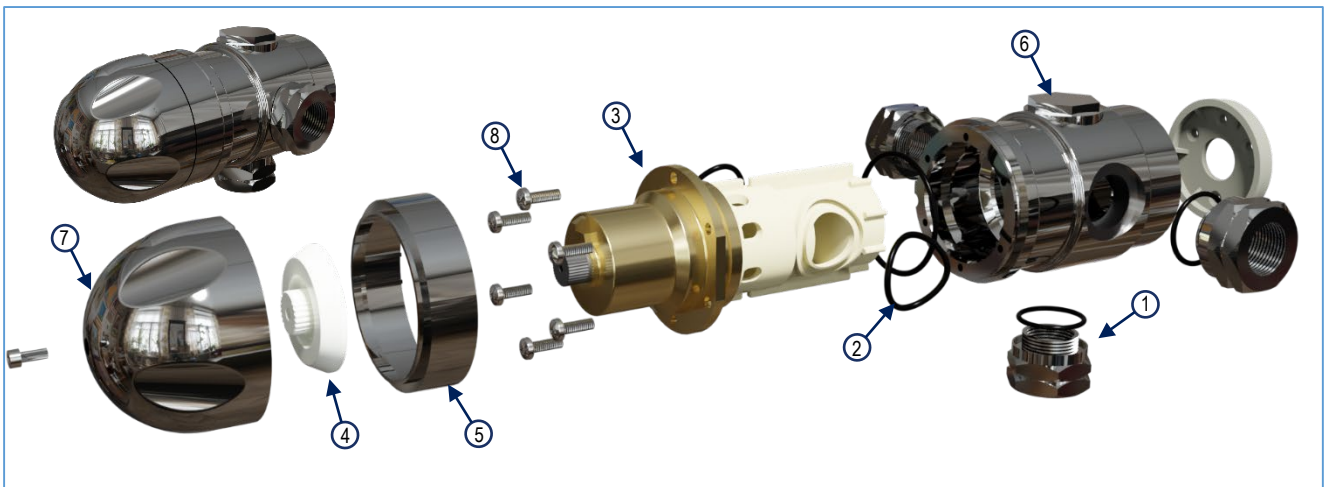
Components of spa are referenced in relation to the front of the spa. The front of the spa is as a person sits/lays in the spa facing the controls.

Bottle Tray Components



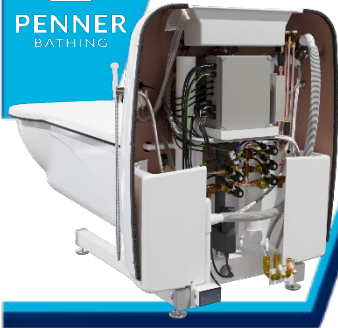
- | | | | |
|----|--------|----------------------|--------------------|
| 1. | 390390 | Bottle Tray | |
| 2. | 350198 | Shampoo/Oil line Kit | |
| | 1. | 350276 | 3/8" Tubing Clear |
| | 2. | 201900 | Snap Clamp Size 8 |
| | 3. | 140299 | Plastic Elbow |
| 3. | 350196 | Disinfect Line Kit | |
| | 1. | 140261 | 1/4" Tubing Clear |
| | 2. | 106351 | Snap Clamp Size 6 |
| | 3. | 140277 | 1/4" Plastic Elbow |
| | 4. | 140489 | Foot Strainer |

Rada 320 Breakdown-Mixing Valve

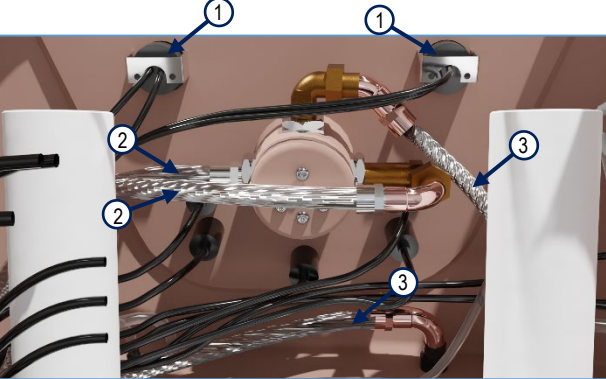


- | | | |
|----|--------|-------------------------------------|
| 1. | 350157 | Inlet/Outlet Adapter, 3/4" Female |
| 2. | 350158 | Seal Pack (includes all O-rings) |
| 3. | 350151 | Cartridge- with O-rings Rada 320 |
| 4. | 350154 | Hub |
| 5. | 350152 | Temperature Indicating Ring |
| 6. | 350163 | Cap (with O-ring) |
| 7. | 350162 | Knob Pack (Knob, screw, and wrench) |
| 8. | 350159 | Screw Pack (Includes all screws) |

Note: Scan QR code in upper left corner for video on adjustment and removal of the Rada 320 Mixing Valve.

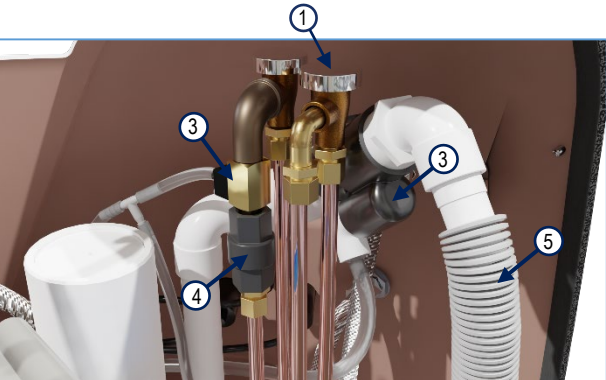


Mixing Valve-Rear Plumbing



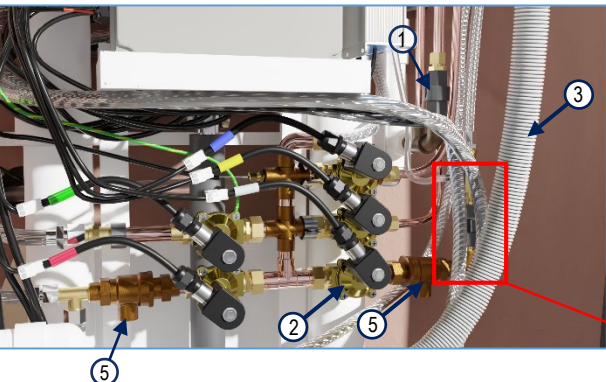
- | | | |
|----|---------|-------------------|
| 1. | 350535M | Thermometer F°/C° |
| 2. | 390100 | Hose 72" Braided |
| 3. | 350185 | Hose 36" Braided |

Vacuum Breakers-Air and Disinfect

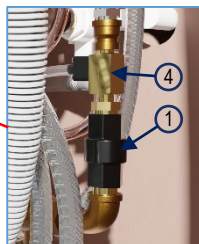


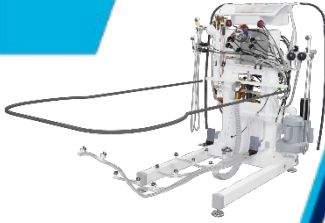
- | | | | |
|----|---------|---------------------------------------|---------------------------------|
| 1. | 144105 | Vacuum Breaker | |
| | 1. | 144110 | Service Kit-Vacuum Breaker 3/8" |
| 2. | 1404804 | Dema Injectors (Jets) | |
| 3. | 390406 | Check Valve Assembly Complete | |
| 4. | 140474 | Check Valve Plastic Black Check Valve | |
| 5. | 390409 | Vacuum Hose 1 1/4" ID | |

Disinfect Sprayer Parts



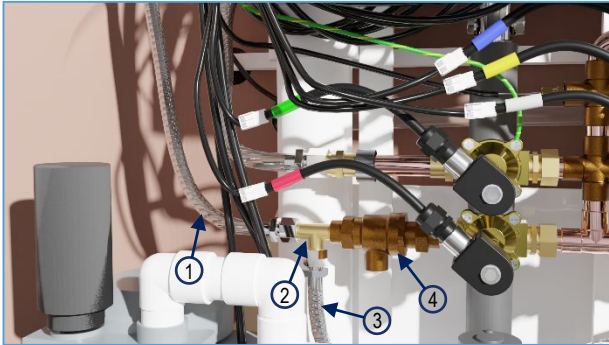
- | | | |
|----|--------|--|
| 1. | 140474 | Check Valve-Plastic |
| 2. | 140124 | Solenoid Valve (See Solenoid Parts, pg8) |
| 3. | 390409 | Hose Vac 1 1/4" ID |
| 4. | 390302 | Dema Injector (Disinfect Sprayer) |
| 5. | 140478 | Backflow preventer 1/2" 9D-M3 |





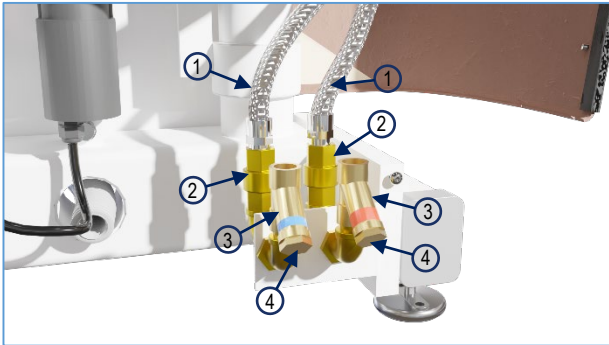
Hand Shower Supply Parts

- | | |
|-----------|-------------------------------|
| 1. 360496 | Hose-30"x3/8" |
| 2. 360441 | Tee-3/8x3/8 male run |
| 3. 360491 | Hose-48"x3/8" |
| 4. 140478 | Backflow Preventer 1/2" 9D-M3 |



Water Supply Hook-up

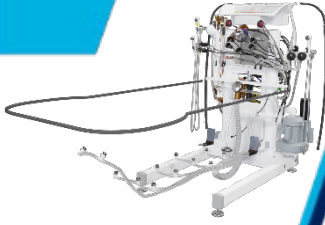
- | | |
|-----------|-----------------------------|
| 1. 390100 | Hose-72" Braided |
| 2. 350320 | Check Valve 1/2" Brass |
| 3. 350315 | Screen 1/2" 40 mesh In-line |
| 4. 350316 | Replacement Screen Only |



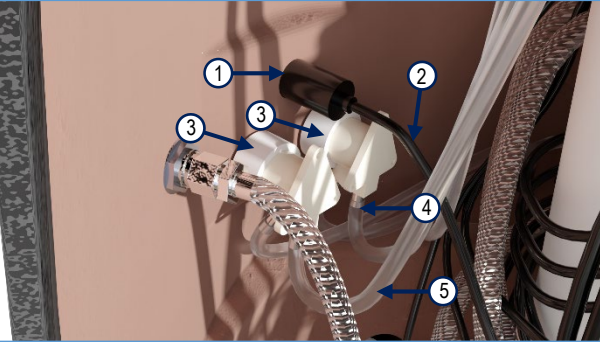
Water Trap Assembly-Blower-Actuator

- | | |
|-------------|---------------------|
| 1. 3901761 | Water Trap Assembly |
| 2. 390409 | Hose Vac 1 1/4" ID |
| 3. 350602 | Blower-Air motor |
| 4. 3911221B | Actuator |





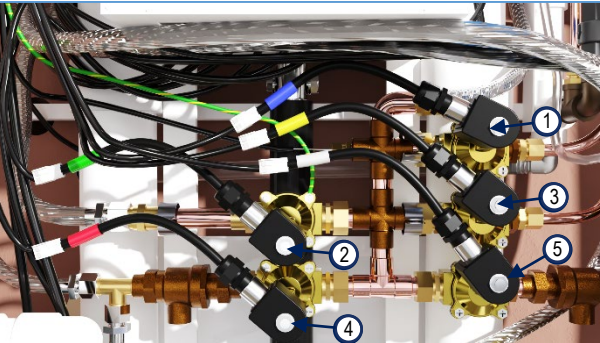
Dispensing Pumps



1. 350495
2. 040955
3. 350200
4. 201900
5. 350276

- Air Transmitter
- Tube 1/8" ID
- Dispenser Pump (Includes Mounting Parts)
- Snap Clamp Size 8 (Qty 2 per pump)
- Clear hose 3/8" ID

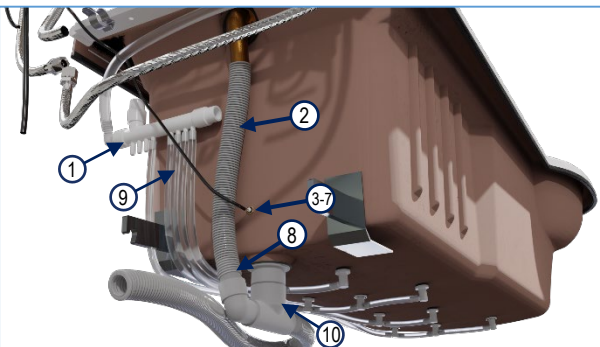
Solenoid Valve Locations



1. 140124
2. 140124
3. 140124
4. 140124
5. 140124

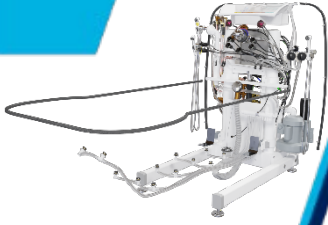
- Solenoid Valve-Rinse Jets-Blue
- Solenoid Valve-Tub Fill-Green
- Solenoid Valve-Disinfect Jets-Yellow
- Solenoid Valve-Hand Shower-Red
- Solenoid Valve-Disinfect Sprayer-Grey

Spa Tub Plumbing



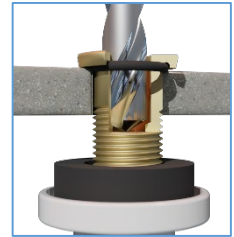
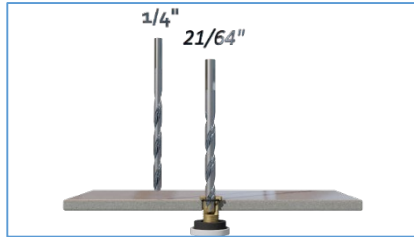
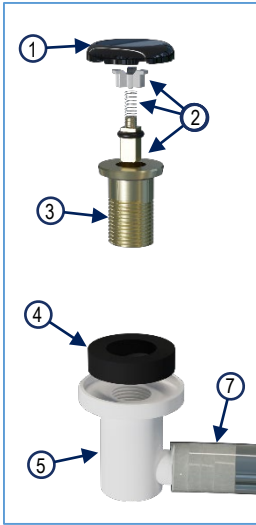
1. 360605
2. 390409
3. 360630
4. 360637
5. 360638
6. 360633
7. 350255
8. 590758
9. 350276
10. 390176

- Manifold
- Hose 1 1/4" ID
- Temp Probe Adapter
- Temp Probe Lock Nut
- O-ring Buna #108
- O-ring Buna #218
- Nut 1 1/4"x16 Brass
- Hose Clamp 24
- Tubing Clear 3/8" ID
- Drain Replacement Kit (Includes Base Shoe, Basket, Washer, and Tee)



Aqua-Aire Jets

1. 360646 Cap-Black
 1. 360644 Cap-White
2. 350134 Kit-Internal Jet Replacement
3. Jet Body
4. Rubber Washer Included with Elbow or Tee
5. 360655 Elbow-3/8" Barb Air Jet
 1. 360650 Tee-3/8" Barb Air Jet
6. 201900 Snap Clamp for 3/8" ID Tubing (not shown)
7. 350276 Tubing-Clear 3/8"ID



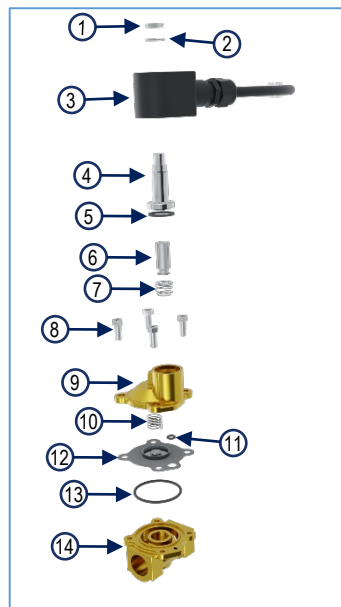
Air Jets can be cleaned from hard build up by using a 21/64 drill bit and a 1/4 drill bit. Run the bits through the jet body after removing the cap and internal check valve components. The 21/64 bit will bottom out on a shoulder in the jet body. The 1/4 bit will run all the way through to the tee fitting. **DO NOT USE POWER TOOLS.** Run drill bits by hand.

Solenoid Valve Breakdown

140124-Solenoid Valve Complete



1401308-Service Kit for Solenoid Valve (Includes both O-rings, Diaphragm, both springs, flange seal, plunger, and a tool [not shown] to remove the sleeve).



1. Nut
2. Spring Washer
3. Coil
4. Sleeve
5. Flange Seal
6. Plunger
7. Spring
8. Screw (Qty 4)
9. Cover
10. Spring
11. O-Ring
12. Diaphragm
13. O-Ring
14. Body



Pacific Spa Components

Drain Components

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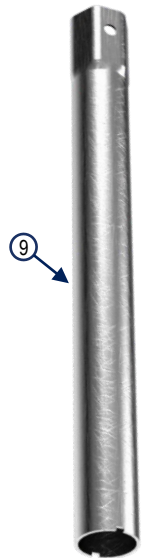
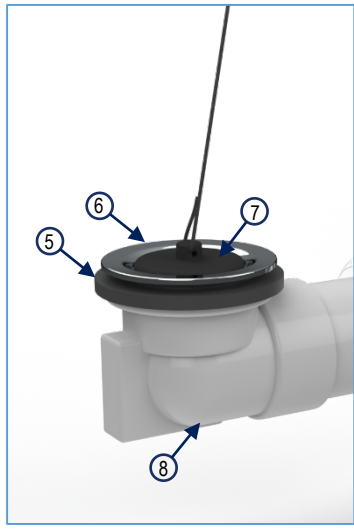
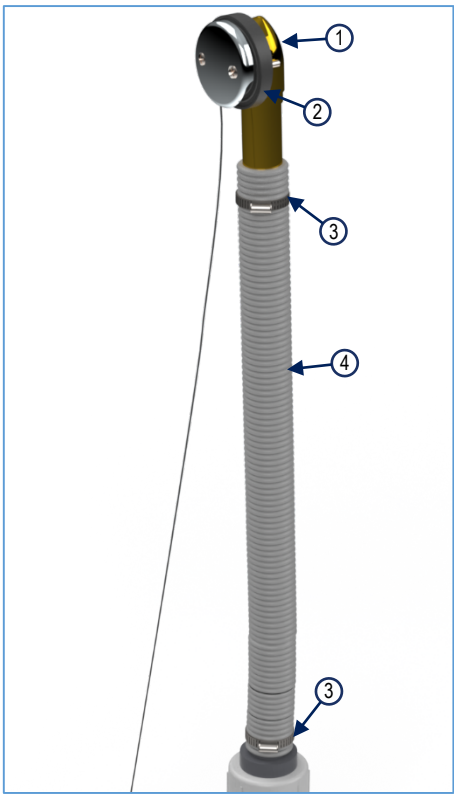
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- 1. 350174 Overflow tube
- 2. 350173 Beveled rubber washer
- 3. 590758 Hose clamp
- 4. 390410 Hose-Grey overfill
- 5. 1050345 Washer 1 7/8"x2" Rubber
- 6. 1050401 Base Shoe Basket, Chrome
- 7. 350169 Drain Plug
- 8. 390176 Base Shoe Assembly-Pacific
- 9. 140370 Removal Tool-Chrome Basket



A removal tool may be ordered to tighten or loosen Base Shoe Basket from Base Shoe Assembly. DO NOT overtighten as this may cause the Base Shoe Assembly to crack and create leaks.



Pacific Spa Components

Electrical Kit 390599

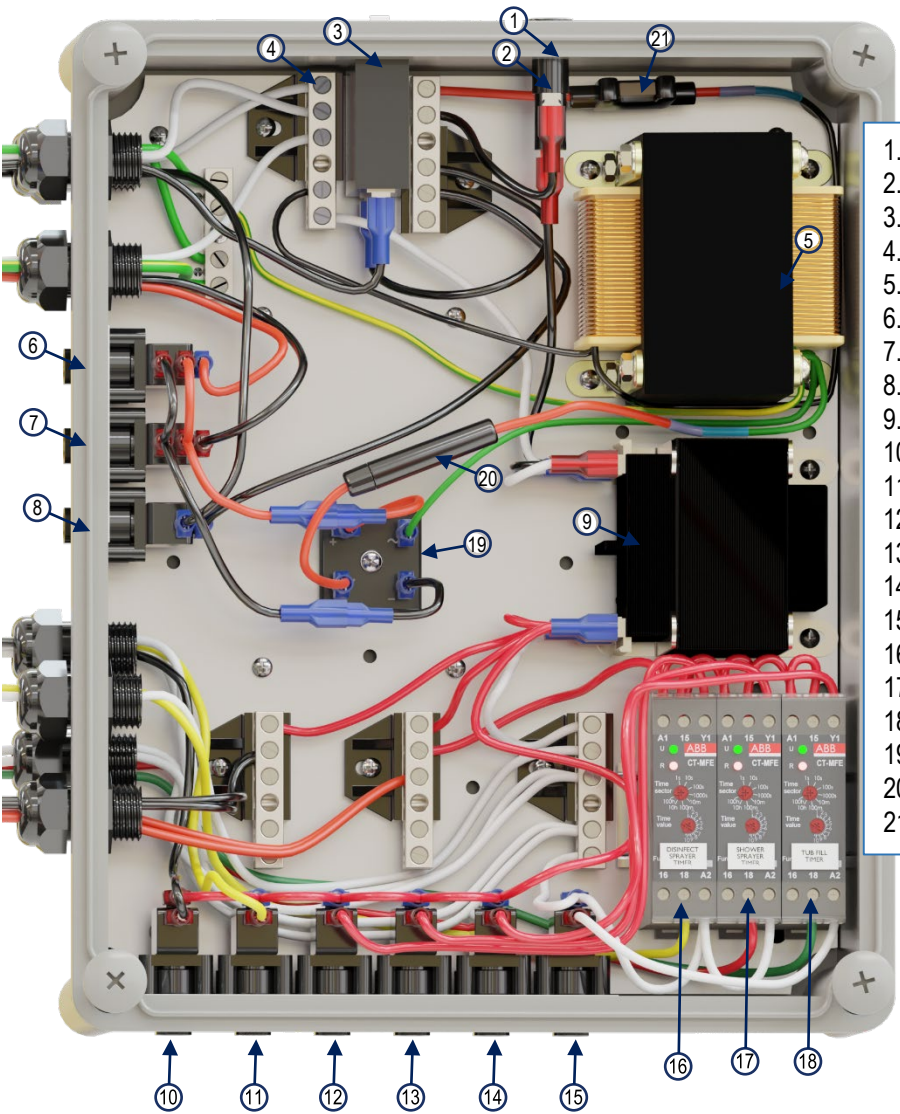
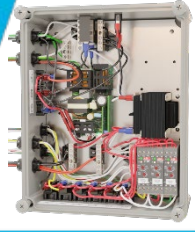
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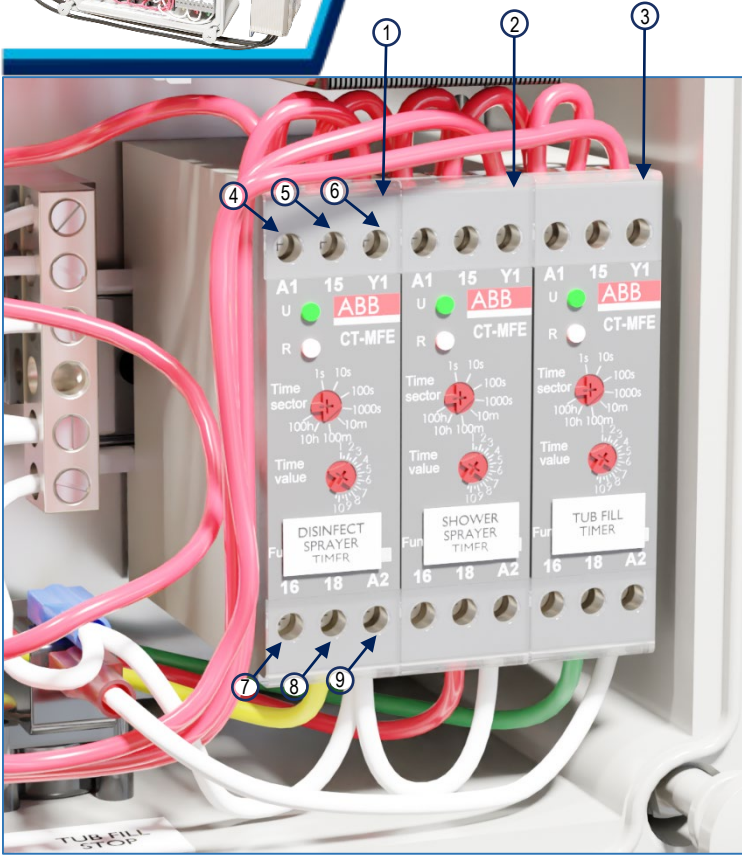
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Electrical Kit can be accessed easily by opening the lid of the Front Panel, removing the bottle tray, and carefully lifting the kit upward to an accessible position. (The first time the electrical kit is removed, a zip tie that secures the kit for shipping must be removed)



- 1. 350533 Fuse-1 Amp SloBlo
- 2. 350530 1/4"x1-1/4" Fuse Holder Circuit
- 3. 350525 Breaker-20Amp Neutral Bar w/Insulator (Qty5)-Inverter-Actuator Power Air Switch-UP
- 4. 140926 Air Switch-Down
- 5. 140955 Air Switch-Blower On/Off
- 6. 370505 Transformer-115-24V
- 7. 370505 Air Switch-Jets Rinse
- 8. 350510 Air Switch-Jets Disinfect Air Switch-Disinfect Sprayer Air Switch-Shower Sprayer Air Switch-Tub Fill Start
- 9. 140952 Air Switch-Tub Fill Stop
- 10. 350505
- 11. 350505
- 12. 350505
- 13. 350505
- 14. 350505
- 15. 370505
- 16. 350545-09 Timer-Tub Fill
- 17. 350545-09 Timer Shower Sprayer
- 18. 350545-09 Timer Disinfect Sprayer
- 19. 140957 Diode Rectifier
- 20. 12 amp 1/4x1-1/4 glass fuse
- 21. 5 amp mini spade fuse



1. 350545-09 Timer-Tub Fill
 2. 350545-09 Timer-Timer Shower Sprayer
 3. 350545-09 Timer-Disinfect Sprayer
 4. A1 (24VAC) Power to run timer
 5. 15 (24VAC) Power to Relay Switch
 6. Y1 (24VAC) Momentary power-Timer Start
 7. 16 Not used (voltage when 18 is off)
 8. 18 Power out when timer on
 9. A2 (24VAC) Neutral to run timer
 10. Time Sector
 11. Time Value
 12. Function Setting
- Always set at 3 o'clock position

Timer is adjusted by setting the timer sector and value. An example is the timer sector setting of 100S- 100 seconds and with the time value set at 5, the timer is now set at 50 seconds. Another example is the timer sector setting at 1000S- 1000 seconds, and with the timer value set 5, the timer is now set for 500 seconds. The time value is a percentage of the timer sector, going from 10%-100%.



Correct Dilution of Disinfectant Check

1. Check to see if a container of disinfectant has been installed. Assure that the disinfectant tube is inserted into the container and connected to the Injector with black metering tip. See the drawing of the square injector below for location of the metering tip.
2. Visually check if disinfectant is in the hose all the way to the injector. If not, the disinfectant can be brought to the injector by pushing the "Disinfect Jets" button on the spa until disinfectant fills the hose all the way to the injector.
3. With the drain open, push the fill button on the spa to check the water temperature. Adjust the temperature control to read 60 degrees to 65 degrees (F°). When the temperature remains in the above range, turn off the fill button.
4. Allow the water to drain from the spa.
5. Close the spa drain, push and hold the disinfect button long enough to bring the disinfectant mixture into the spa then release the disinfect button.
6. Test the solution in the foot-well of the spa with the Dilution Check Kit (140481). A dispenser of test paper (part number 219201) is included in this kit.
7. Tear off a strip of test paper from the dispenser and immerse in the solution for at least (10) seconds. Compare the color that the test paper turns with the chart on the dispenser. If the test paper matches the green in the range of 600-800, the disinfecting solution is the correct strength.
8. If the color of the test paper matches a color on the dispenser chart in the 800-1000 range, install the next smaller metering tip. See metering tip chart for color reference. The injector is furnished with a black metering tip installed (part number 1404824). The Metering tips listed below are included in the Dilution check kit, (Part number 140481). In a Pacific spa there is a hand sprayer for disinfectant. The injector (273.8) for this is fitted with a red metering tip. A white metering tip, (part number 404823), is included in the Dilution Check Kit (part number 140481).
9. If the color of the test paper matches a color on the dispenser chart in the 0-400 range, contact Penner MFG for metering troubleshooting instructions.

METERING TIP CHART APPLICABLE TO THE AQUA-AIRE JET DISINFECTION INJECTOR

Color	Part Number	Metering Tip Size	Solution Strength
Black	1404824	Large	Preferred Strength
Blue	1404822	Medium	Less Strength

METERING TIP CHART APPLICABLE TO THE PACIFIC HAND SPRAY DISINFECTION INJECTORS

Red	1404825	Medium	More Concentrate
White	1404823	Small	Least Concentrate



Maintenance and Adjustments

Routine Maintenance

Suggested maintenance to be performed on unit. Contact your Authorized Penner Spa Distributor for periodic updates to this revision.

Tub Model # _____ **Tub Serial #** _____

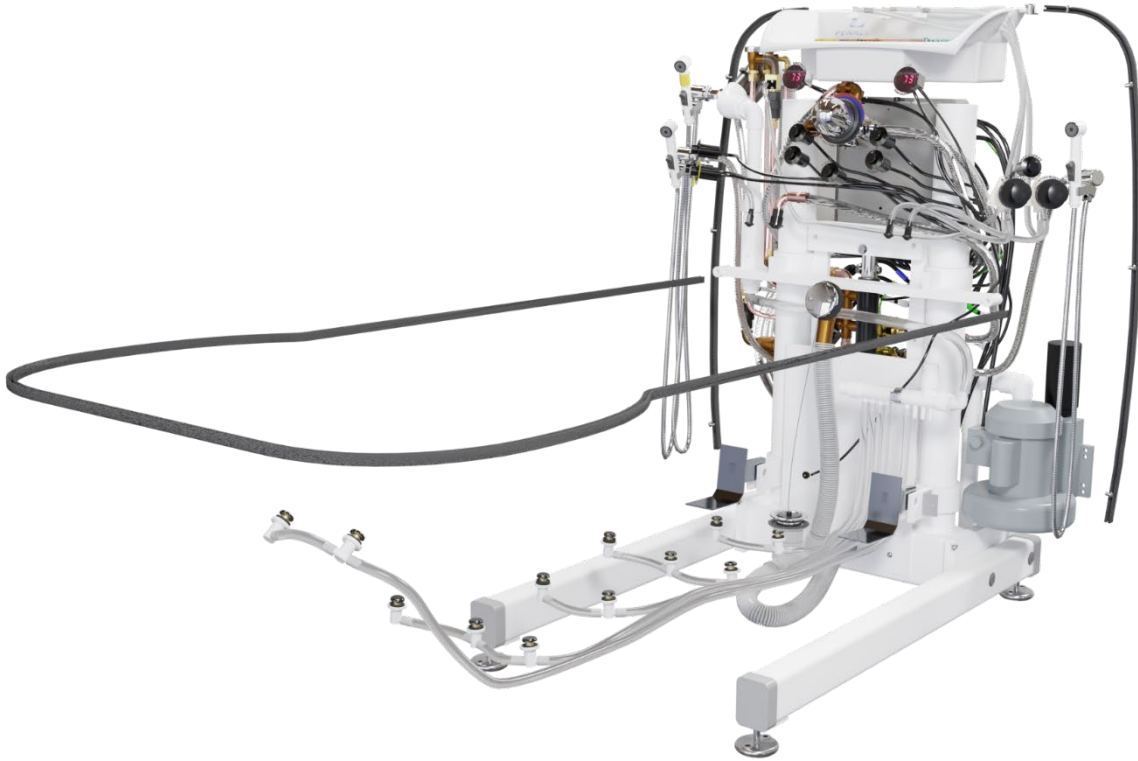
Reservoir Model # _____ **Reservoir Serial #** _____

Transfer Model# _____ **Transfer Serial #** _____

Checklist	Monthly	Quarterly	Semi-Annually	Yearly
Spa				
Check hoses and connections for leaks or damage.			X	
Check Aqua-Aire functions and controls.			X	
Check disinfectant system		X		
Check Thermometers accuracy with calibrated probe thermometer.			X	
Inspect electrical connections. (GFCI, Circuit breakers)	X			
Check mixing valve for proper temperature. Use a calibrated probe thermometer to verify.			X	
Check Screens and water supply connections.			X	
Transfer				
Inspect Batteries for Transfers	X			
Check E-Stop to make sure it functions properly	X			
Check function of Emergency lowering button		X		
Belts for transfers and lifts should be free from tears.	X			
Castors should be kept clean and make sure the brakes hold securely.		X		
Hand control is functioning correctly		X		
Batteries for Scales			X	
Scale is calibrated regularly or when variance are observed. (May be more or less according to Facility regulations) Use a calibrated 25 or (50lb for Bariatric) weight to do calibrations.		X		
Reservoir				
Reservoir Tank- Clean/Disinfect as needed.	X			

The above items should be adjusted if issues occur more frequently. Each facility is different so quality of water plays an important role in many of these checks. Many of the items listed above are in your manuals. The manuals are a great source of information regarding making adjustments to temperatures installing and operating. Also your facility or state and local codes may require more frequent inspections.

If help is needed with checking or making adjustments please call your local distributor or you may also call Penner Manufacturing directly for assistance.





Pacific

Recumbent Height-Adjustable Spa

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Your Penner Distributor and personnel are trained to provide in-service instruction and maintenance on your Pacific Spa. If you have any questions about the operation or maintenance of your Pacific, please contact your Penner Distributor. For you nearest Penner Distributor, Contact:

Penner Patient Care

101 Grant St

Aurora, NE 68818

Service help call 1-800-732-0717 or 1-866-736-6377

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