

ENVIRONMENTALLY FRIENDLY CONDENSATE NEUTRALIZER KIT INSTRUCTIONS

050/075/100/150 Kit #550003006

200/299 Kit #550003005

Kit installation shall be completed by qualified agency.

⚠ WARNING

Fire, explosion, asphyxiation and electrical shock hazard. Improper installation could result in death or serious injury. Read this instruction and understand all requirements, including requirements of authority having jurisdiction, before beginning installation. Installation not complete until appliance operation verified per Installation, Operation & Maintenance Manual provided with boiler.

Condensate Neutralizer kit:

1. Follow instructions TO TURN OFF GAS TO APPLIANCE found on Operating Instructions label on boiler or in Installation, Operation & Maintenance Manual. Verify all electrical power to boiler is turned off.

⚠ WARNING

Electrical shock hazard. Turn OFF electrical power supply at service panel.

2. Remove front jacket panel(s).

⚠ WARNING

Burn hazard. Verify heat exchanger has cooled or use appropriate personal protection equipment.

3. Inspect combustion chamber through sight glass. Verify flame is not present. See figures 1 & 2.

Figure 1 - Sight Glass 050/075/100/150/200

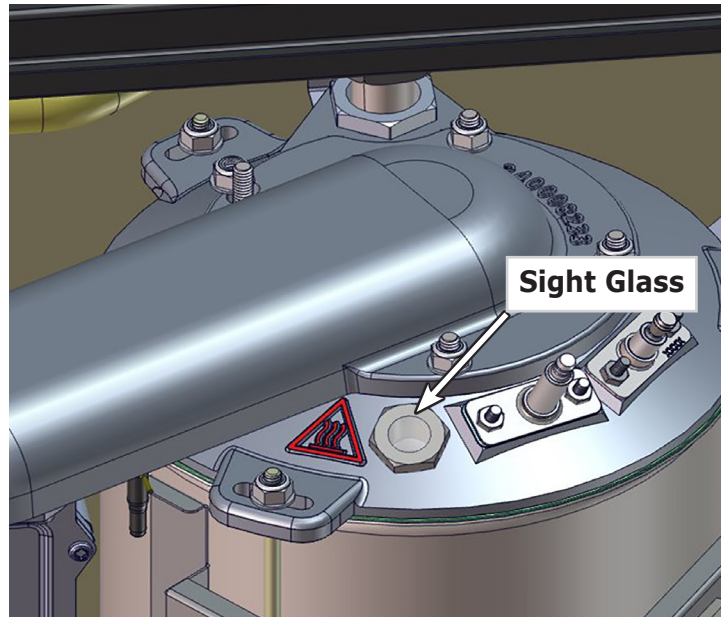
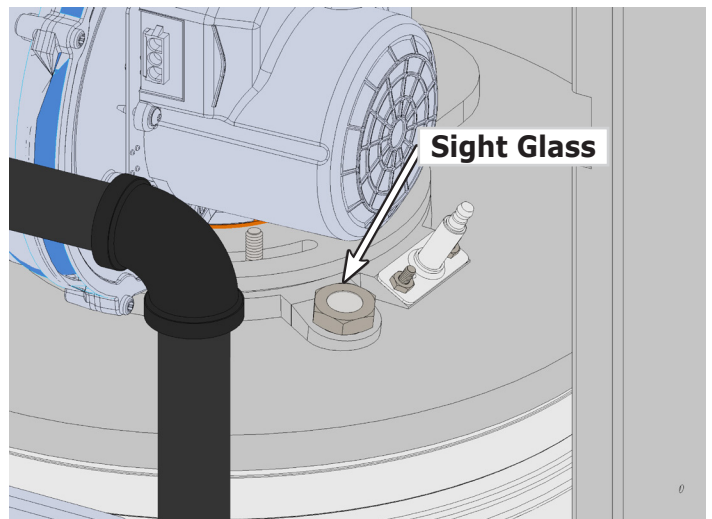


Figure 2 - Sight Glass 299



Mount Condensate Neutralizer

NOTICE

Do not attach condensate neutralizer directly to a condensate drain.

NOTICE

Condensate Neutralizer shall not be installed without installation of an air vent as shown in figures 3, 4 and 5.

1. Find a suitable area below boiler to place supplied clamps:
 - on the wall in a horizontal or vertical position
 - or
 - on the floor

NOTICE

Important: When mounting in the vertical or horizontal position place condensate neutralizer inlet at a lower elevation than condensate neutralizer outlet. This will force condensate upward through the neutralizer material preventing condensate from bypassing the neutralizer material.

2. When mounting in vertical or horizontal position outlet must be higher than the inlet. See Figures 3 & 4.
3. Manufacturer recommends mounting horizontally. See Figure 3.
4. Condensate Neutralizer for 50-150 sized boilers - place supplied clamps between 6 to 7 inches apart.
5. Condensate Neutralizer for 200 & 299 sized boilers - place supplied clamps between 15 to 16 inches apart.
6. Use field sourced screws to secure supplied plastic clamps to wall or floor.
7. Place Condensate Neutralizer into mounted clamps.

Piping the Condensate Neutralizer:

1. Piping of condensate flow depends on mounting position of the Neutralizer tube horizontal or vertical. See Figure 3 or Figure 4 based on mounting method.
2. Both PVC, CPVC pipe and Silicone flexible hose can be used.
3. Provided Y fitting is for optional overflow bypass in the event the neutralizer drain becomes clogged.
4. If the supplied Y fitting is not used, install an air vent. See Figure 3.
5. A loose cap may be placed over the air vent to prevent dust build up. Do not permanently attach the cap with glue or other means.
6. Do not route or place condensate line in an area that may be exposed to freezing temperatures.

Figure 3 - Condensate Neutralizer Mounted in Horizontal Position

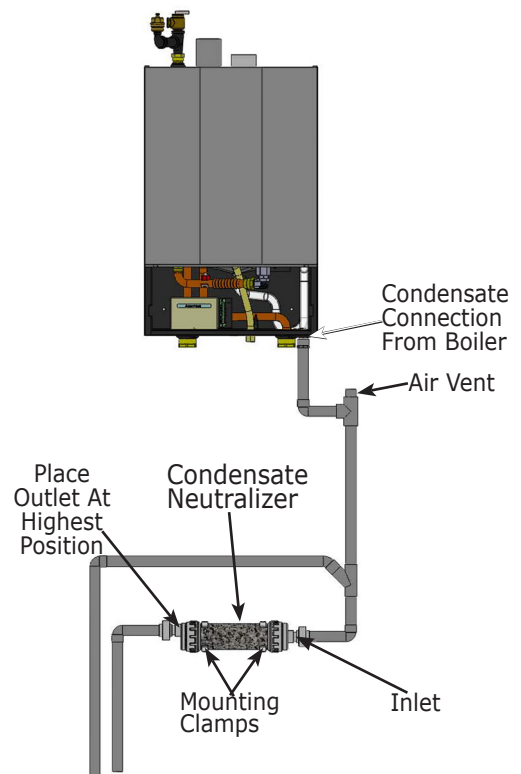


Figure 4 - Condensate Neutralizer Mounted in Vertical Position

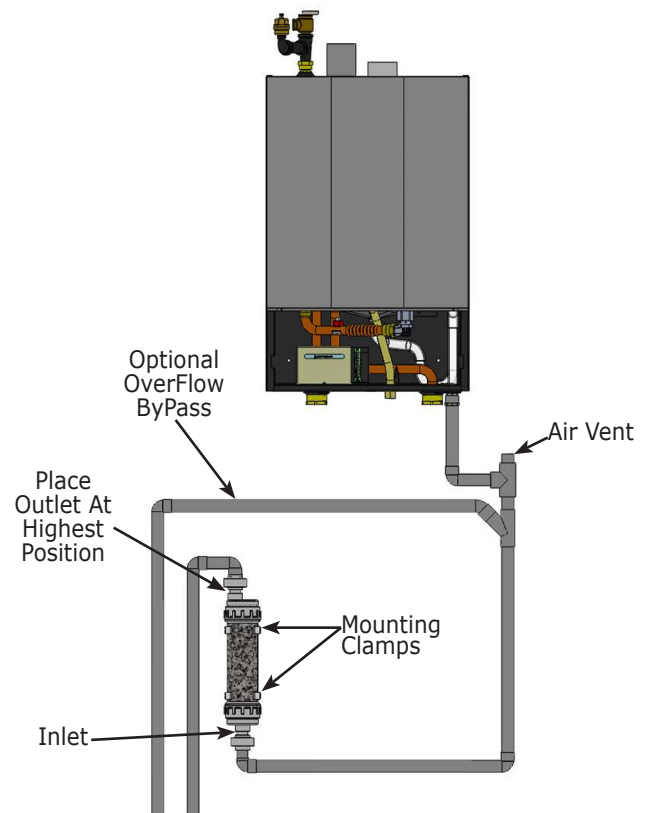
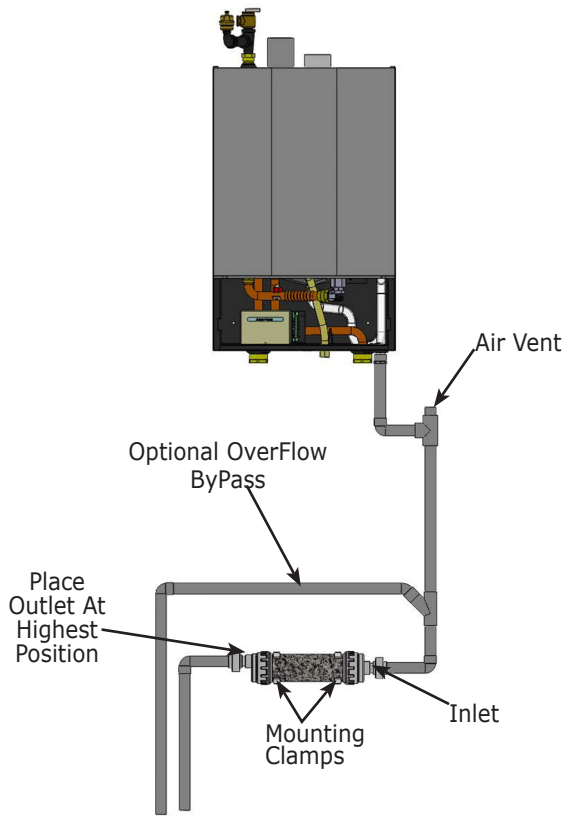


Figure 5 - Condensate Neutralizer Mounted in Horizontal Position with Optional OverFlow Bypass



7. Install a field sourced condensate pump designed for use with condensing boilers if a gravity drain is not available. Condensate pump shall be equipped with overflow switch to protect boiler.

NOTICE

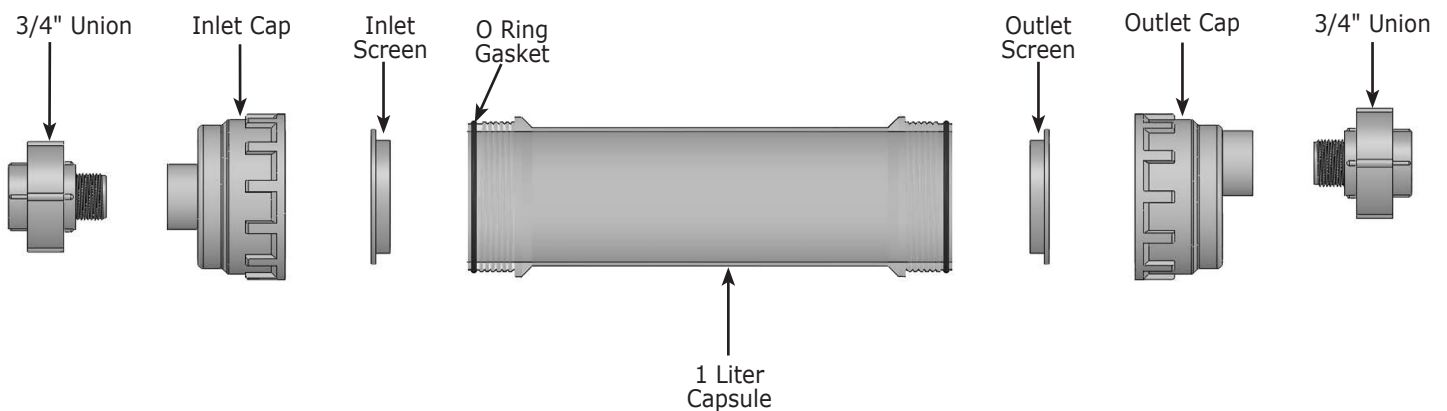
IMPORTANT: Condensate trap must be manually filled with water at initial start up.

8. Turn electrical power to boiler on.
9. Resume operation using OPERATING INSTRUCTIONS found on Operating Instructions label on boiler or in Installation, Operation & Maintenance Manual.
10. Verify proper operation by following START UP PROCEDURE in Installation, Operation & Maintenance Manual.
11. Replace front jacket(s)


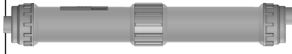
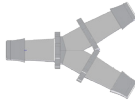




Maintenance of Condensate Neutralizer:

1. Periodically check the amount of neutralizer material in the capsule.
2. Verify pH levels at the outlet of neutralizer with a pH test strip or electronic pH meter.
3. If pH levels fall below minimum level approved by your local water authority, replace neutralizer material. In absence of water authority approved levels you may use 6.5pH as the minimum level.
4. Remove one or both end caps of the Neutralizer tube to refill neutralizer material. See Figure 6.

Figure 6 - Condensate Neutralizer



PARTS LIST

| Condensate Neutralizer Kit Parts List | | | |
|---|---|------------------|------------------|
| DESCRIPTION | Item | Kit # | Kit # |
| | | 550003006 | 550003005 |
| | | 240010862 | 240010863 |
| | | Qty | Qty |
| Single Neutralizer Tube (includes neutralizing material) |  | 1 | - |
| Double Neutralizer Tube (includes neutralizing material) |  | - | 1 |
| 3/4" Barbed Y |  | 1 | 1 |
| 3/4" Union |  | 2 | 2 |
| 3/4" Hose Clamp |  | 6 | 6 |
| 3/4" NPT to 3/4" Barb |  | 3 | 3 |
| Base/Wall Mounting Clamp |  | 2 | 2 |
| Instructions | 2400010861 | 1 | 1 |