



## Heat Exchanger Replacement

EZ98 (EZTR50) [GQ-C2859WX-FF US]

EZ111 (EZTR75) [ GQ-C3259WX-FF US]

NCC199CDV [GQ-C3259WZ-FF US]

NRCB180DV [GHQ-C2801WX-FF US]

NRCB199DV [GHQ-C3201WX-FF US]

This instructional manual is only intended for use by a qualified service professional or authorized Noritz Service Representative. Any unauthorized use of this manual may result in voiding the warranty.

Contact Noritz Technical Support (866-766-7489) for additional support.

## Noritz America Corporation

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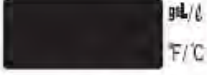



Procedure

1. Drain the unit as shown in following procedure for EZ111DV/EZ98DV or NCC199CDV








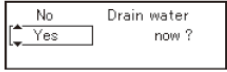

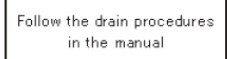
(Refer to page 3 for NRCB199DV/NRCB180DV.)

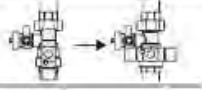

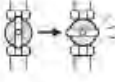
**Drainage using the Remote Controller**

\* RC-7651M

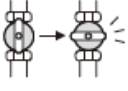

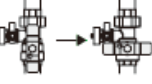

- 1** (1) Turn the power on/off button "off". 
- (2) Press the flow meter alarm set button for about two seconds until the alarm sounds. The maximum hot water temperature will flash. 
- (3) Press the flow meter alarm set button again. 
- (4) Press the setting button marked "oF". The display will change from "oF" to "on" after the button is pushed. 

\* RC-9018M

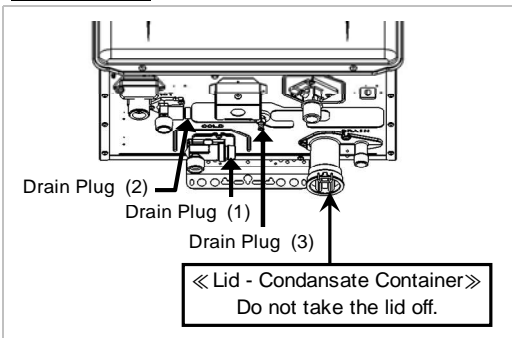
- 1** (1)  button is "OFF".
- (2) Press the  button inside the cover, Select **Misc settings** using the  buttons. Press the  button. The "Misc settings" screen appears.
- (3) Select **Drain water** using the  buttons, and then press  button.
- (4) Select "YES" using the  buttons,  Press  button. 

- 2** Close the water supply valve. 
- 3** Fully open all hot water fixtures/faucets. 
- 4** 1) Open the drain plug (1)  
2) Open the drain plug (2) and (3), and then drain the water out of the unit.
- 5** When the water is completely drained, replace all drain plugs and close the hot water fixtures/faucets.
- 6** Close the gas valve and disconnect the electrical power supplied to the unit.   
**Do not touch with wet hands.**

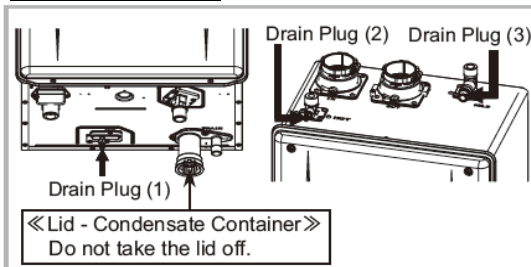
**Manual Draining**

- 1** Close the gas valve. 
- 2** (1) Turn the power on/off button "On".  
(2) Turn and leave open the hot water fixtures for more than 2 minutes and close.   
\* If multiple units are being used, drain two minutes for each unit.  
\* An 11 Error Code may appear on the remote controller.  
This is not a malfunction of the unit.  
Do not turn Power ON/OFF Button OFF.
- 3** Close the water supply valve and disconnect the electrical power supplied to the unit.   
**Do not touch with wet hands.**
- 4** Fully open all hot water fixtures. 
- 5** 1) Open the drain plug (1)  
2) Open the drain plug (2) and (3), and then drain the water out of the unit.
- 6** When the water is completely drained, replace all drain plugs and close the hot water fixtures.

**NCC199CDV**



**EZ111DV / EZ98DV**










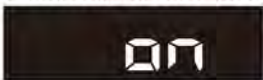
**Drain Plugs**

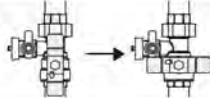
Each drain plug might not be visible if insulation is installed around the piping.


Procedure

1. Drain the unit as shown in following procedure for NRCB199DV/NRCB180DV  
(Refer to page 2 for EZ111DV/EZ98DV or NCC199CDV.)

**Drainage using the Operation Panel**

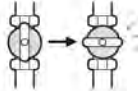
- 1** (1) Press the  button OFF.  
The Operation Panel must be off.
- (2) Press the  button, Select **U:5** using the  buttons. Press the  button.  
The "User Mode" screen appears.
- (3) Select **U:05** using the  buttons, After 1 sec  
**d-r** (Drain Open The Water) and then press the  button.
- (4) Press and hold the  button approximately 2 seconds to turn "ON".  


- 2** Close the water supply valve and the auto feeder shutoff valve. 

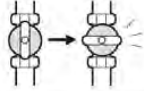
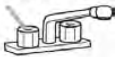
- 3** Fully open all hot water fixtures/faucets. 

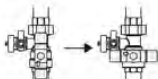
- 4** Open all drain plugs and drain the water out of the unit.


- 5** When the screen display turns off, replace all drain plugs and close the hot water fixtures/faucets.

- 6** Close the gas valve and disconnect the electrical power supplied to the unit.   
**Do not touch with wet hands.**

**Manual Draining**

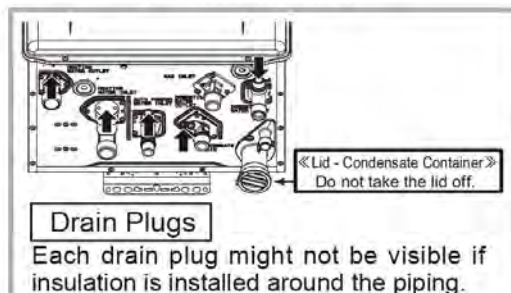
- 1** Close the gas valve. 
- 2** (1) Turn the power button on.  
(2) Turn and leave open the hot water fixtures/faucets for more than 2 minutes and close.   
\* If multiple units are being used, drain two minutes for each unit.  
\* An 11 Error Code may appear on the Operation Panel. This is not a malfunction of the unit. Do not turn the power button off.

- 3** Close the water supply valve and disconnect the electrical power supplied to the unit.   
**Do not touch with wet hands.**



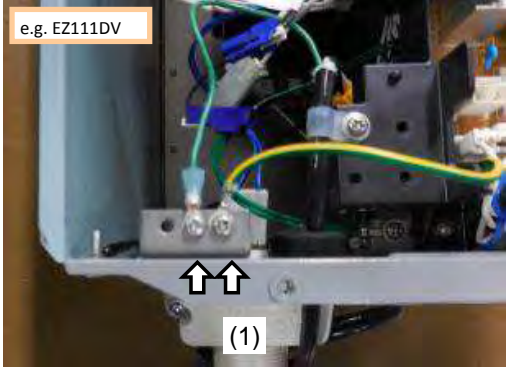
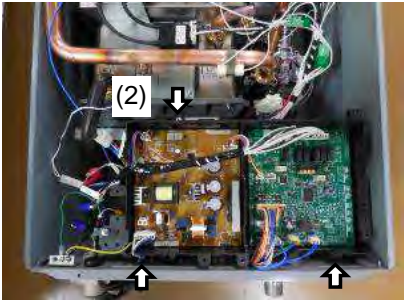
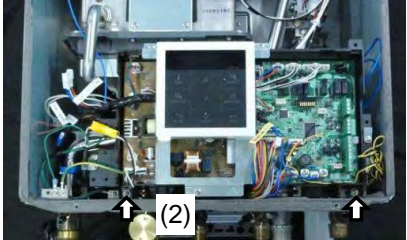
- 4** Fully open all hot water fixtures/faucets. 

- 5** Open all drain plugs and drain the water out of the unit.

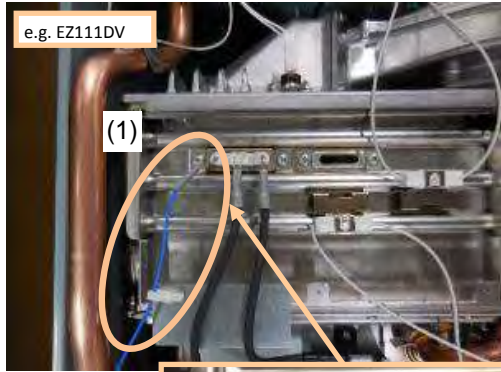

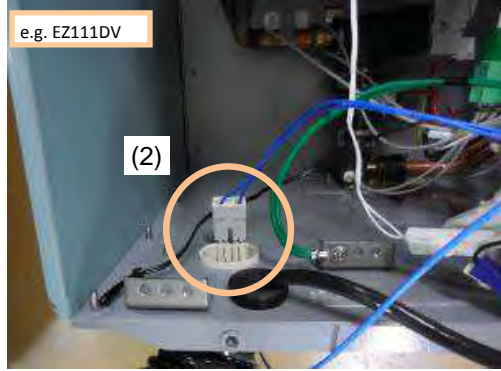
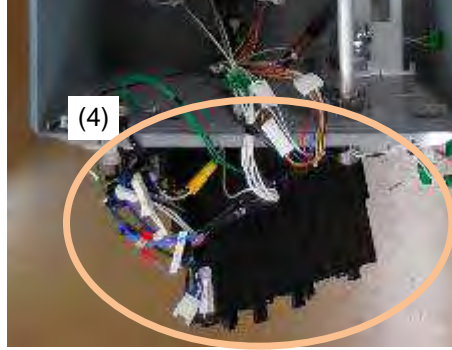
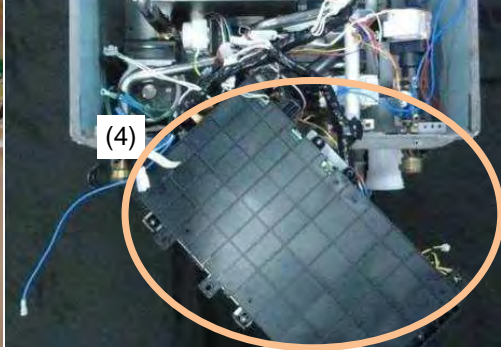
- 6** When the water is completely drained, replace all drain plugs and close the hot water fixtures/faucets.



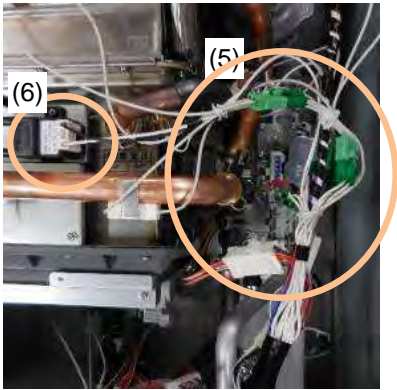
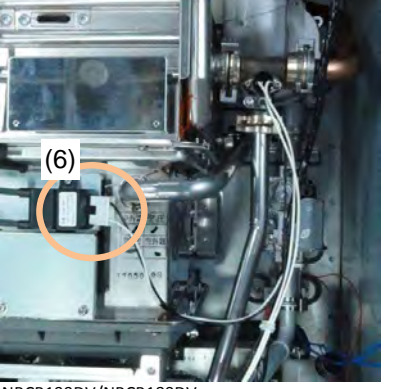

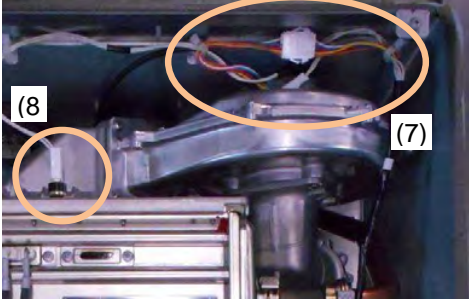

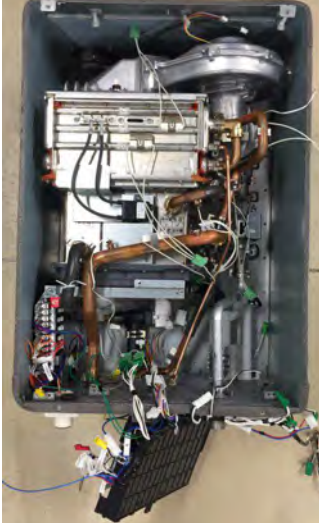

Heat Exchanger Replacement Procedure

| Procedure  | Diagram   |
|--|---|
| <p>2. Remove Front Cover</p> <p>(1) Disconnect electrical power to the unit.</p> <p>(2) Remove 4 screws w/ washer(M4x12).</p>  | <p><u>EZ111DV/EZ98DV or NCC199CDV</u></p>  <p><u>NRCB199DV/NRCB180DV</u></p>    |
| <p>3. Remove ground wires</p> <p>(1) Remove 2 ground wires.</p> <p>(2) Remove the screws(M4x12)* that hold Circuit Board.</p> <p>* EZ111DV/EZ98DV or NCC199CDV: 3 screws<br/>NRCB199DV/NRCB180DV: 2 screws</p> | <p>e.g. EZ111DV</p>   <p><u>EZ111DV/EZ98DV or NCC199CDV</u></p>  <p><u>NRCB199DV/NRCB180DV</u></p> |

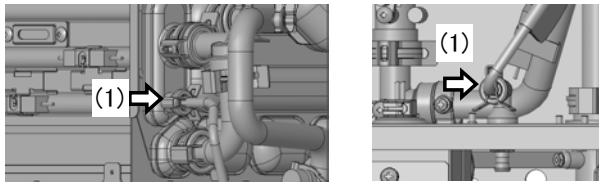
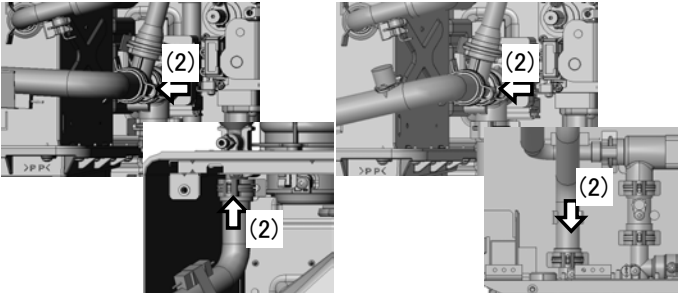
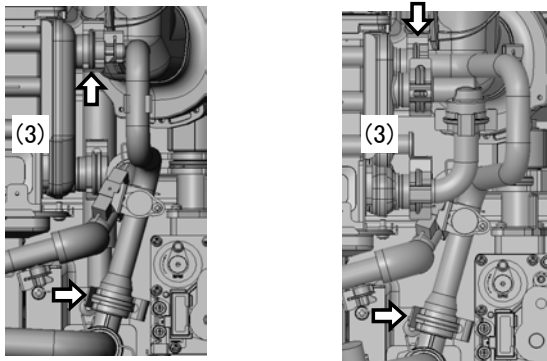
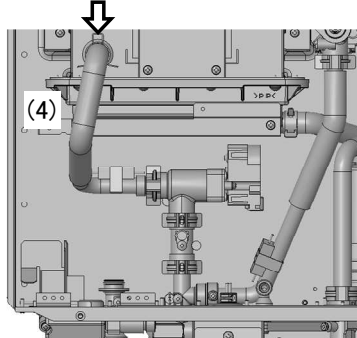
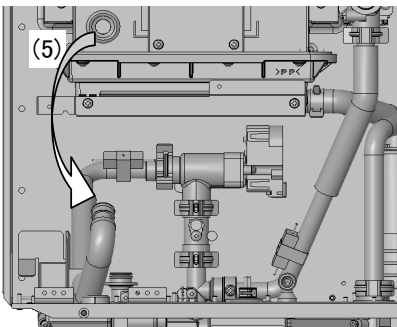
Heat Exchanger Replacement Procedure

| Procedure   | Diagram   |
|---|---|
| <p>4. Unplug all wires that attach to Wiring Harness</p> <p>(1) Unplug Flame Rod.<br/>Hold this part of the figure by the finger and remove the plug.</p> <p>(2) <u>Only EZ111DV/EZ98DV or NCC199CDV</u><br/>Unplug remote control connector.</p> <p>(3) <u>Only EZ111DV/EZ98DV or NCC199CDV</u><br/>Unplug Thermistor.</p> <p>(4) Remove Circuit Board to the outside of the unit.</p> |    |
|  <p><u>EZ111DV/EZ98DV or NCC199CDV</u></p>   |  <p><u>NRCB199DV/NRCB180DV</u></p>  |

Heat Exchanger Replacement Procedure

| Procedure   | Diagram  |
|---|--|
| <p>(5) <u>Only EZ111DV/EZ98DV or NCC199CDV</u><br/>                     Remove Cable Ties,<br/>                     unplug 6 Freeze Prevention Heaters,<br/>                     Water Servo - Bypass,<br/>                     Gas Valve<br/>                     Thermistor - Primary Heat Exchanger Inlet,<br/>                     High Limit Switch. (EZ111DV/EZ98DV)<br/>                     (NCC199CDV : 2 High Limit Switches. )</p> <p>(6) Unplug Igniter.</p> <p>(7) <u>For EZ111DV/EZ98DV or NCC199CDV</u><br/>                     Detach the Wiring Harness from the clips.<br/>                     Unplug 4 Freeze Prevention Heaters<br/>                     (NCC199CDV : 1 Freeze Prevention Heater. ),<br/>                     Fan Motor,<br/>                     Thermistor - Primary Heat Exchanger Outlet,<br/>                     Thermistor - Exhaust.<br/> <u>For NRCB199DV/NRCB180DV</u><br/>                     Detach Wiring Harness from Wire Clamps.<br/>                     Unplug Fan Motor and Thermistor - Exhaust.</p> |  <p><u>EZ111DV/EZ98DV or NCC199CDV</u></p>  <p><u>NRCB199DV/NRCB180DV</u></p>   |
| <p>(8) Unplug High Limit Switch.</p>  |  <p><u>EZ111DV/EZ98DV or NCC199CDV</u></p>  <p><u>NRCB199DV/NRCB180DV</u></p> |
| <p>Overall view</p>  <p><u>EZ111DV/EZ98DV</u></p>  <p><u>NCC199CDV</u></p>  <p><u>NRCB199DV/NRCB180DV</u></p>   |  |

Heat Exchanger Replacement Procedure

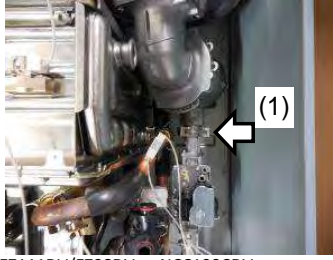
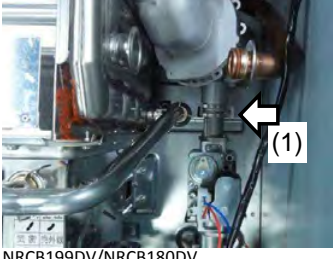
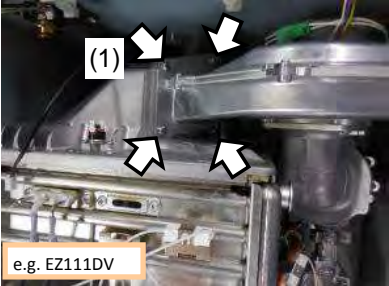
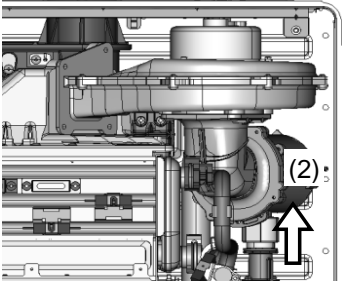
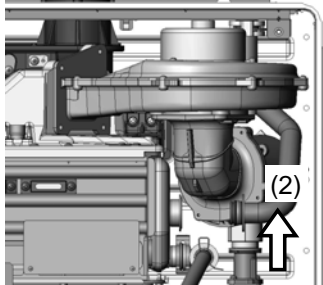

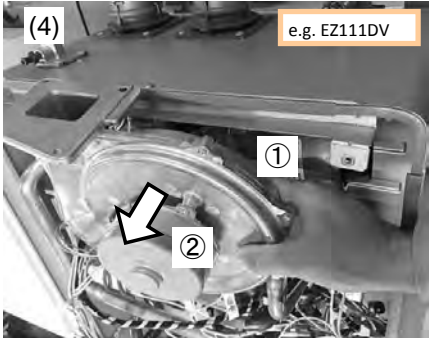
| Procedure  | Diagram   |
|--|---|
| <p>5. Remove Pipes for EZ111DV/EZ98DV or NCC199CDV<br/>(Refer to page 8 for NRCB199DV/NRCB180DV.)</p> <p><u>NCC199CDV ONLY</u></p> <p>ONCC199CDV ONLY</p> <p>(1) Remove 2 "C" Clamps,<br/>Pipe - Primary SS HEX to Drain Water Connection.</p> | <p><u>NCC199CDV ONLY</u></p>    |
| <p>OEZ111DV/EZ98DV &amp; NCC199CDV</p> <p>(2) Remove 2 "C" Clamps,<br/>Pipe - T-Elbow to Outlet Water Connection.</p>  | <p><u>EZ111DV / EZ98DV</u>                      <u>NCC199CDV</u></p>  |
| <p>(3) Remove 2 "C" Clamps,<br/>Pipe - Primary SS HEX to T-Elbow.</p>  |    |
| <p>(4) Remove "C" Clamp,<br/>Pipe - Primary SS HEX Connection.</p>   | <p><u>EZ111DV / EZ98DV &amp; NCC199CDV</u></p>                      |
| <p>(5) Tilt Pipe - Water Servo - Main<br/>to the bottom of the unit.</p>   |   |

Heat Exchanger Replacement Procedure

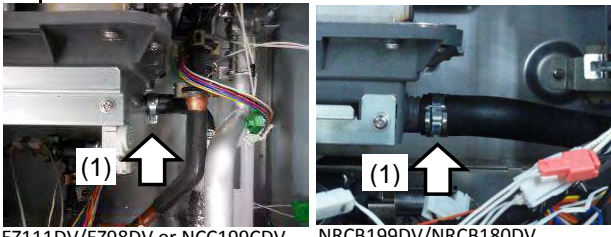
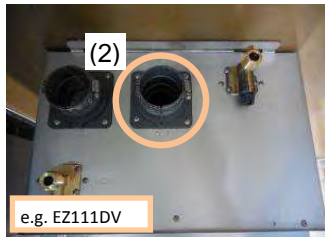
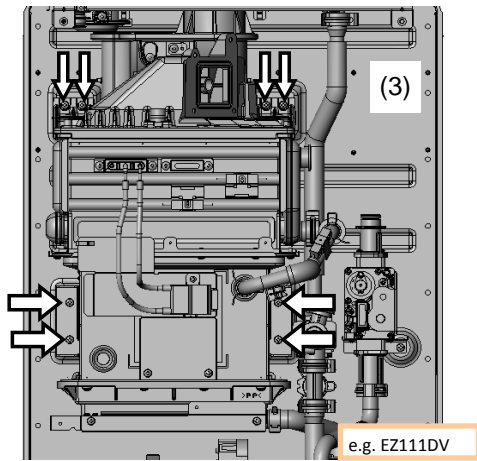
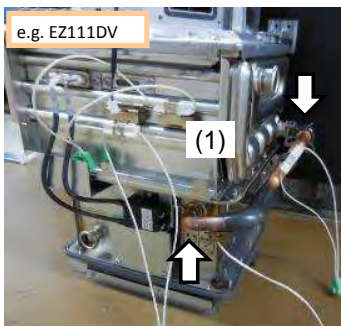
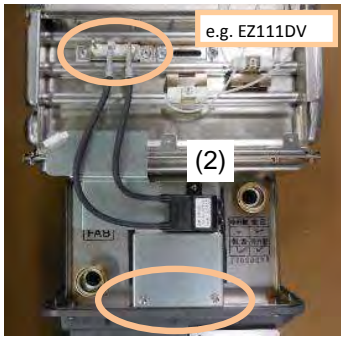
| Procedure  | Diagram   |
|--|---|
| <p>5. Remove Pipes for NRCB199DV/NRCB180DV<br/>(Refer to page 7 for EZ111DV/EZ98DV or NCC199CDV.)</p> <p>(1) Remove 4 "C" Clamps,<br/>Pipe - T-Elbow to Relief Valve Connection,<br/>Pipe - T-Elbow to Distribution Valve - Heating and<br/>T-Elbow.</p> <p>(2) Tilt T-Elbow to the bottom of the unit.</p> <p>(3) Remove 2 "C" Clamps and<br/>Pipe - Pump Outlet - Elbow to Secondary SS HEX.</p>  |     |



Heat Exchanger Replacement Procedure

| Procedure   | Diagram  |
|---|--|
| <p>6. Remove Fan Motor and Venturi assembly</p> <p>(1) Remove "C" Clamp.<br/>Then remove the 4 screws(M5x12) with a Long Philips screwdriver.<br/>Do not use a power drill.</p> <p>(2) Pull up Fan Motor and Venturi assembly.</p> <p>(3) Tilt Fan Motor and Venturi assembly.</p> <p>(4) Rotate and detach Fan Motor and Venturi assembly.</p> |  <p><u>EZ111DV/EZ98DV or NCC199CDV</u></p>  <p><u>NRCB199DV/NRCB180DV</u></p>  <p>e.g. EZ111DV</p>  <p><u>EZ111DV/EZ98DV or NCC199CDV</u></p>  <p><u>NRCB199DV/NRCB180DV</u></p>  <p>e.g. EZ111DV</p>  <p>e.g. EZ111DV</p> |

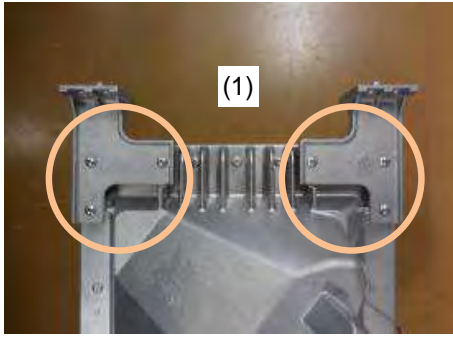
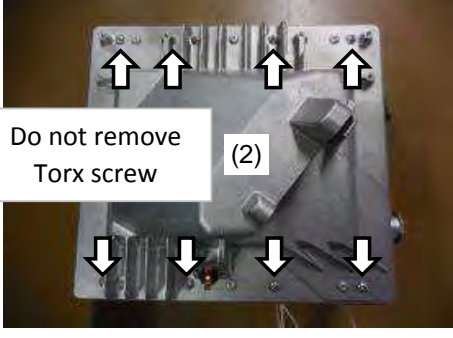
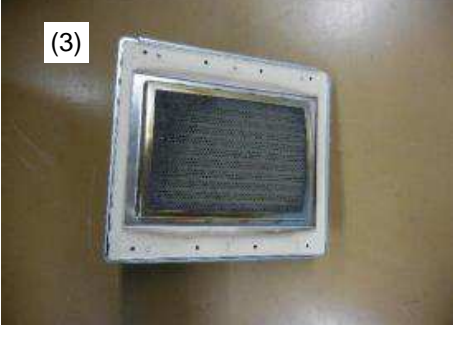
Heat Exchanger Replacement Procedure

| Procedure   | Diagram   |
|---|---|
| <p>7. Remove the heat exchanger assembly from Case</p> <p>(1) Remove Hose Clamp,<br/>pull Drain Hose - SS HEX off.</p> <p>(2) Remove 4 screws(M4x12),<br/>pull Exhaust Flue off.<br/>Discard these screws.</p> <p>(3) Remove 8 screws(M4x10) fixing heat exchanger assembly.</p> <p>(4) Lift up and remove the heat exchanger assembly<br/>from the case.</p> |  <p>EZ111DV/EZ98DV or NCC199CDV      NRCB199DV/NRCB180DV</p>  <p>e.g. EZ111DV</p>  <p>e.g. EZ111DV</p> |
| <p>8.Remove parts from the heat exchanger</p> <p>(1) Remove 2 "C" Clamps,<br/>Pipe - Secondary SS HEX to Primary SS HEX.</p> <p>(2) Remove 2 screws(M4x8),<br/>unplug Ignition Plug.</p> <p>(3) Remove Mounting Plate - Igniter</p>   |  <p>e.g. EZ111DV</p>  <p>e.g. EZ111DV</p>   |

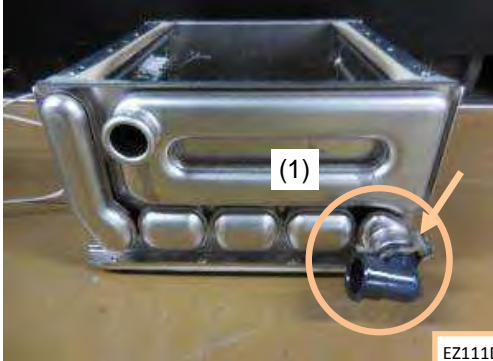
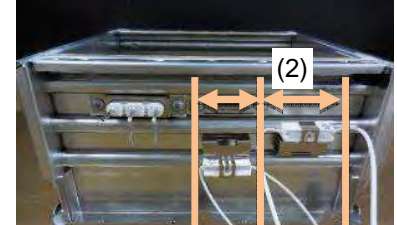

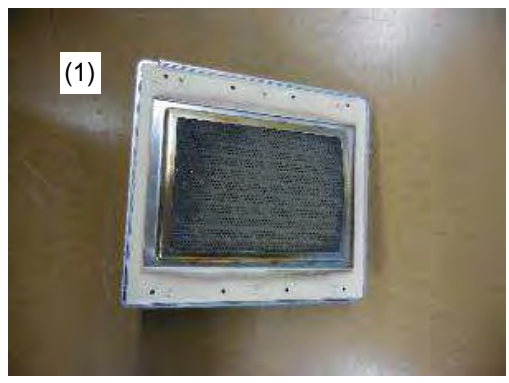
Heat Exchanger Replacement Procedure

| Procedure  | Diagram   |
|--|---|
| <p>(4) <u>Only NRCB199DV/NRCB180DV</u><br/>Remove 2 screws(M4×12) and Mounting Plate-Circuit Board from Exhaust Duct.</p> <p>(5) Remove 2 screws(M4×12) on the back of Exhaust Duct.</p> <p>(6) Remove 15 screws(M4×12) on the bottom of Exhaust Duct.</p> <p>(7) Remove Exhaust Duct.</p> <p>(8) <u>Only EZ111DV/EZ98DV and NCC199CDV</u><br/>Remove "Cover - Exhaust duct", and exchange to new one.</p> |    |
| <p>9. Separate Primary SS HEX and Secondary SS HEX</p> <p>(1) To separate Primary SS HEX and Secondary SS HEX, remove 16 screws(M4×10) from the bottom of Secondary SS HEX.</p>  |   |

# Heat Exchanger Replacement Procedure

| Procedure   | Diagram  |
|---|--|
| <p>10. Separate Primary SS HEX and Burner Chamber</p> <p>(1) Remove 6 screws(M4×10) to remove Mounting Plate - Chamber.</p> <p>(2) Remove 8 screws(M4×18) to separate Primary SS HEX and Burner Chamber.</p> <p>(3) Separate Primary SS HEX and Burner Chamber.<br/>※Put Burner Chamber so that the burner face faces upward.</p> |    |

Heat Exchanger Replacement Procedure

| Procedure  | Diagram   |
|--|---|
| <p>11. Replace Primary SS HEX</p> <p>(1) Attach Water Connector - Elbow and "C" Clamp to new Primary SS HEX.<br/>           In that case, exchange O ring - High Temp P16 of Water Connector - Elbow for a new one.<br/>           (NCC199CDV ONLY)<br/>           Attach Pipe - Primary SS HEX Connection with 2 "C" Clamps to new Primary SS HEX.<br/>           In that case, exchange O rings - High Temp P16 of Pipe - Primary SS HEX Connection for new ones.</p> <p>(2) <u>Only EZ111DV/EZ98DV or NCC199CDV</u><br/>           Attach 2 Freeze Prevention Heaters to new Primary SS HEX with 2 Clamps.</p> <p>(3) Exchange 2 Gasket - Primary Heat Exchangers for new ones.</p> |  <p>EZ111DV</p>  <p>NC199CDV</p>  <p>Attach in the center of the line</p>  <p>e.g. EZ111DV</p> |
| <p>12. Join Primary SS HEX and Burner Chamber</p> <p>(1) Peel off old Gasket- Burners and replace it with new Gasket - Burner.</p>   |  <p>(1)</p>   |

Heat Exchanger Replacement Procedure

| Procedure  | Diagram   |
|--|---|
| <p>(2) Join Primary SS HEX and Burner Chamber with 8 screws(M4x18).<br/>When tightening is over, please check again for looseness of screws</p> <p>(3) Attach Mounting Plate - Chamber to Burner Chamber.</p>      |  <p>e.g. EZ111DV</p> <p>Recheck looseness</p> <p>(2)</p> <p>(3)</p> |
| <p>13.Assemble Primary SS HEX and new Secondary SS HEX</p> <p>(1) Replace new Gasket - Secondary Heat Exchanger with a new one.</p> <p>(2) Join Primary SS HEX and new Secondary SS HEX with 16 screws(M4x10).</p> |  <p>(1)</p> <p>(2)</p> <p>e.g. EZ111DV</p>                        |

Heat Exchanger Replacement Procedure

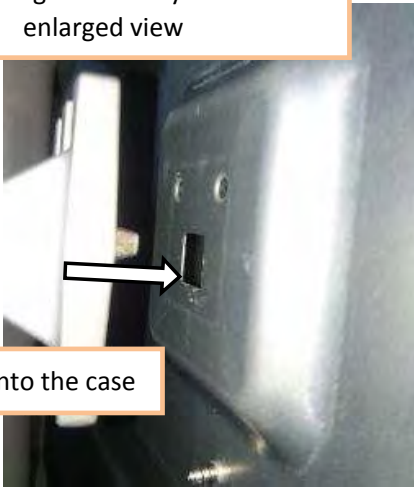
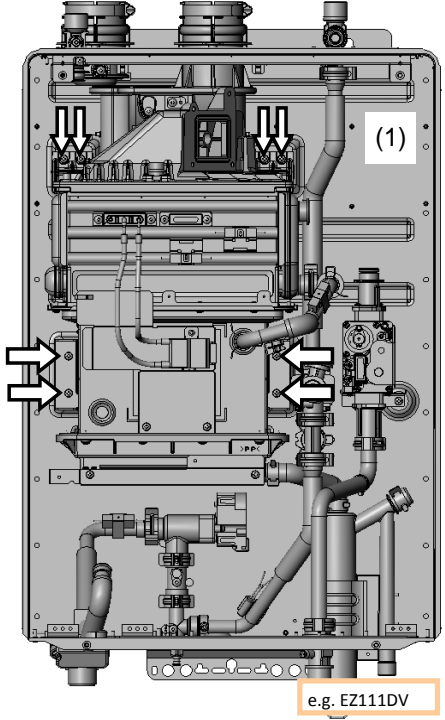
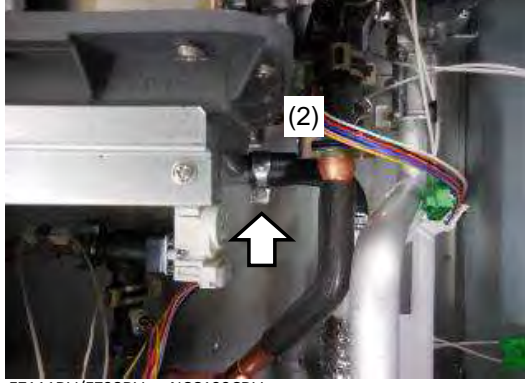
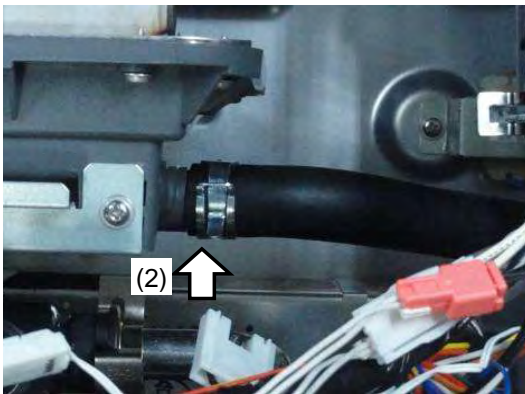
| Procedure   | Diagram  |
|---|--|
| <p>14. Exhaust Duct Replacement</p> <p>(1) Put the heat exchanger assembly upside down on something with the height of 6 inch (150 mm) or more. Without support, the chamber and Exhaust Duct can be damaged.</p> <p>(2) Set Gasket-Exhaust Duct to match the line inside the secondary heat exchanger. At this time, make sure that the black side of Gasket-Exhaust Duct comes to the top as shown in the figure.</p> <p>(3) Attach Exhaust Duct to the secondary heat exchanger and fix with 15 screws(M4x12).</p> <p>(4) <u>Only NRCB199DV/NRCB180DV</u><br/>Attach Mounting Plate-Circuit Board to the new Exhaust Duct and fix 2 screws(M4x12).</p> |  <p>(1)</p> <p>e.g. EZ111DV</p>  <p>6 inch (150 mm) or more</p>  <p>(2)</p>  <p>(3)</p> <p>e.g. NRCB199DV</p>  <p>(4)</p> <p>Mounting Plate-Circuit Board</p> |
|  <p>e.g. EZ111DV</p> <p>Attach Exhaust Duct</p>  |  |

Heat Exchanger Replacement Procedure

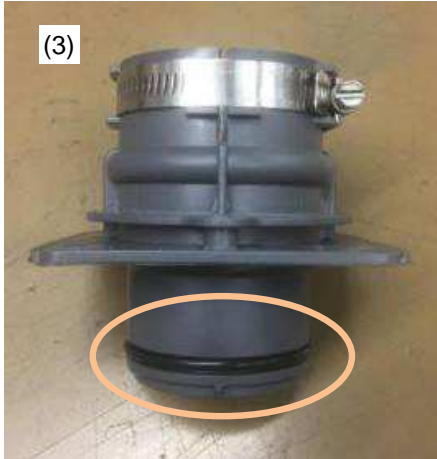
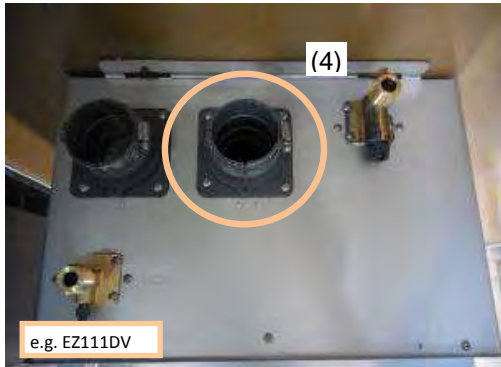
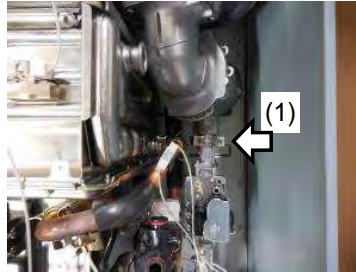
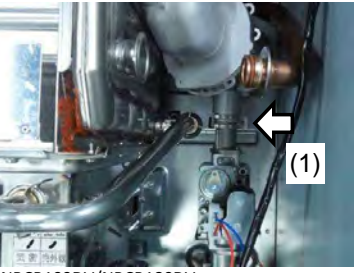
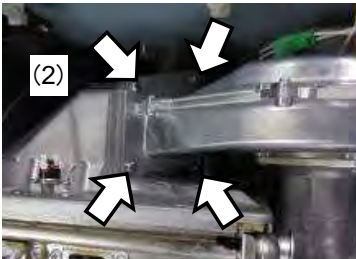
| Procedure   | Diagram   |
|---|---|
| <p>(5) Fix the secondary heat exchanger and Exhaust Duct with 2 screws(M4×12) from the backside.</p>  |   |
| <p>15. Attach parts to heat exchanger</p> <p>(1) Attach Mounting Plate - Igniter with 2 screws(M4×8).</p> <p>(2) Plug Ignition Plug.<br/>In that case, replace new Plug Cover of Ignition Plug with a new one.</p> <p>(3) Attach Pipe - Secondary SS HEX to Primary SS HEX with 2 "C" Clamps.</p> | <br> |



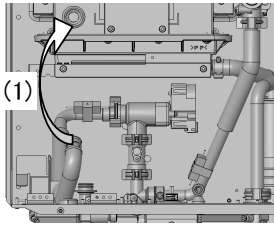
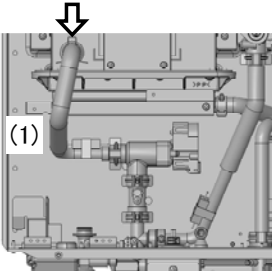
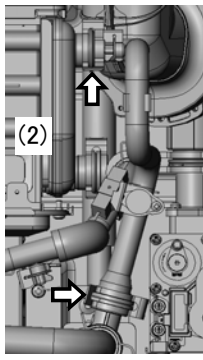
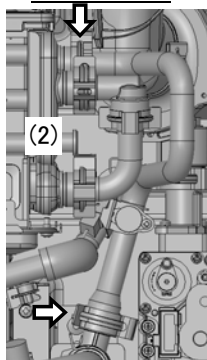
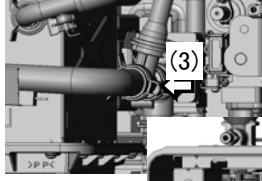
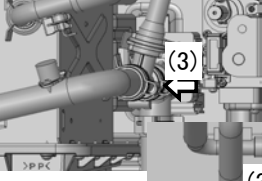
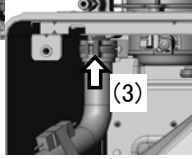
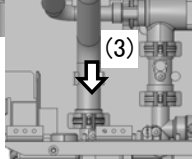
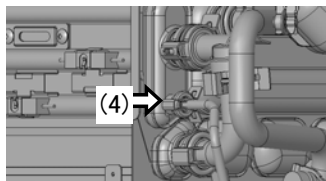
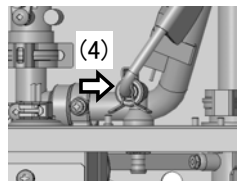
Heat Exchanger Replacement Procedure

| Procedure  | Diagram  |
|--|--|
| <p>16. Fix the heat exchanger assembly in the case</p> <p>(1) Fix the heat exchanger assembly in the case with 8 screws(M4x10).</p> <p>(2) Put Drain Hose - SS HEX into the drain outlet of Exhaust Duct and fix it with Hose Clamp.</p> <div data-bbox="204 734 702 840" style="border: 1px solid orange; padding: 5px; margin: 10px 0;"> <p>Heat exchanger assembly connection enlarged view</p> </div>  <div data-bbox="263 1124 513 1191" style="border: 1px solid orange; padding: 5px; margin: 10px 0;"> <p>Put into the case</p> </div> |  <p style="text-align: right;">e.g. EZ111DV</p>  <p style="text-align: center;">EZ111DV/EZ98DV or NCC199CDV</p>  <p style="text-align: center;">NRCB199DV/NRCB180DV</p> |

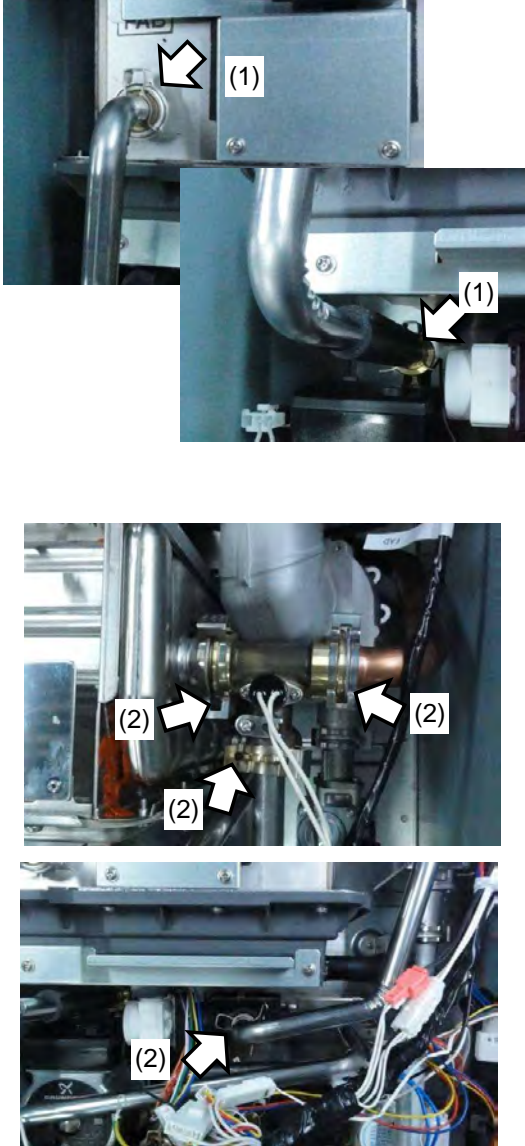
Heat Exchanger Replacement Procedure

| Procedure  | Diagram  |
|--|--|
| <p>(3) Replace the O-Ring of Exhaust Flue with new one.</p> <p>(4) Attach Exhaust Flue to the case with 4 new screws(M4x12).</p>   |     |
| <p>17. Attach Fan Motor and Venturi assembly</p> <p>(1) Attach the Fan Motor and Venturi assembly. Attach "C" Clamp at the bottom of Venturi.</p> <p>(2) Secure the Venturi to the Burner Chamber by tightening the 4 screws(M5x12) removed in Step 6. The screws need only to be hand tightened and should not be tightened using a drill. First, insert and tighten 4 screws, but do not fully tighten these screws. Once all screws are inserted, proceed to completely tighten 4 screws.</p> <p>NOTE: When tightening the screws, be certain to not apply excess force. Excess force can strip out the original holes and screws. Keep the Fan motor in horizontal. It makes easier to tighten the screws correctly.</p> |    |

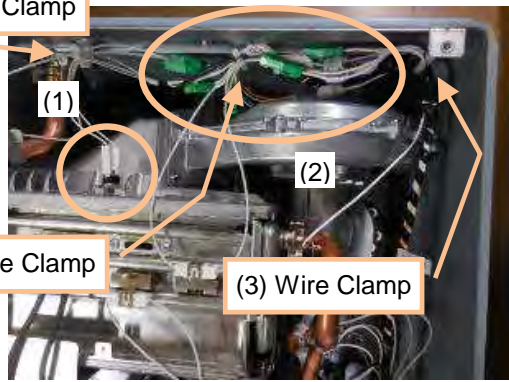
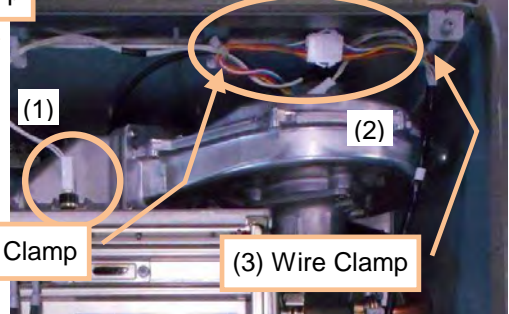
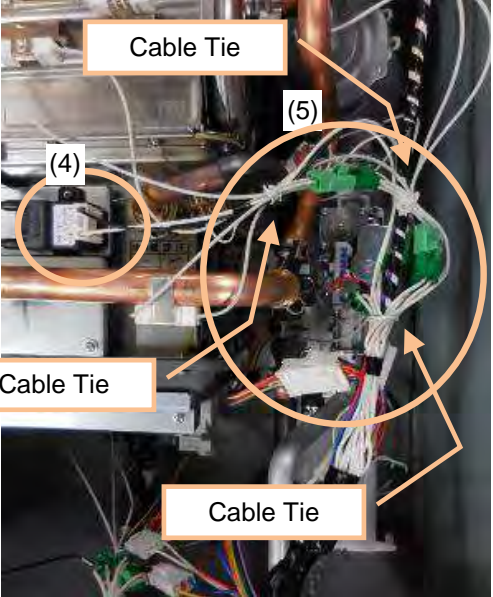
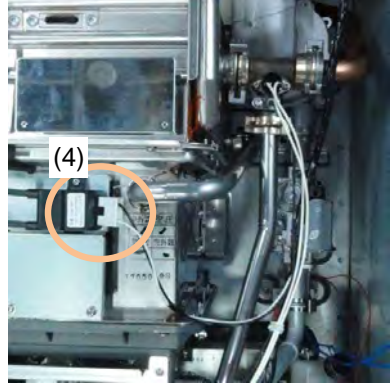
Heat Exchanger Replacement Procedure

| Procedure   | Diagram  |
|---|--|
| <p>18. Attach Pipes for EZ111DV/EZ98DV or NCC199CDV<br/>(Refer to page 17 for NRCB199DV/NRCB180DV.)</p> <p>OEZ111DV/EZ98DV &amp; NCC199CDV<br/>(1) Put Pipe - Water Servo - Main in Secondary SS HEX and fix it with "C" Clamp.</p> | <p><u>EZ111DV / EZ98DV &amp; NCC199CDV</u></p>     |
| <p>OEZ111DV/EZ98DV &amp; NCC199CDV<br/>(2) Attach Pipe - Primary SS HEX to T-Elbow with 2 "C" Clamps.</p>   | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p><u>EZ111DV / EZ98DV</u></p>  </div> <div style="text-align: center;"> <p><u>NCC199CDV</u></p>  </div> </div>  |
| <p>(3) Attach Pipe - T-Elbow to Outlet Water Connection with 2 "C" Clamps.</p>  | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> |
| <p>ONCC199CDV ONLY<br/>(4) Attach Pipe - Primary SS HEX to Drain Water Connection with 2 "C" Clamps.</p>  | <p><u>NCC199CDV ONLY</u></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>   |

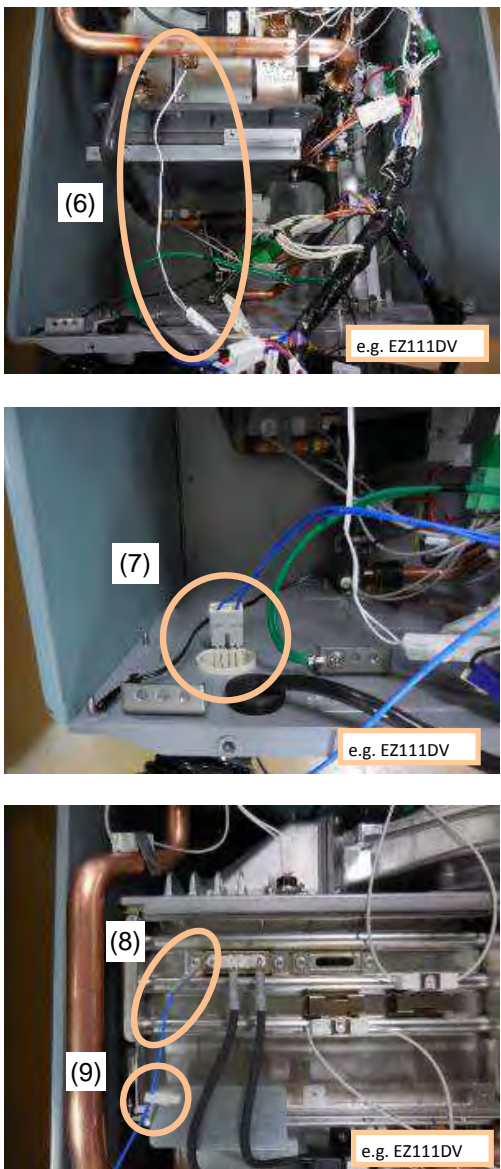
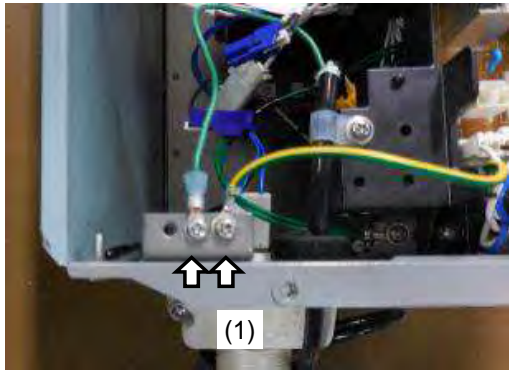
Heat Exchanger Replacement Procedure

| Procedure  | Diagram  |
|--|--|
| <p>18. Attach Pipes for NRCB199DV/NRCB180DV<br/>(Refer to page 19 for EZ111DV/EZ98DV or NCC199CDV.)</p> <p>(1) Put Pipe - Pump Outlet - Elbow to Secondary SS HEX and fix it with 2 "C" Clamps.</p> <p>(2) Attach Pipe - T-Elbow to Relief Valve Connection, T-Elbow and Pipe - T-Elbow to Distribution Valve - Heating with 4 "C" Clamps.</p> |  <p>The diagram section contains three photographs illustrating the pipe installation process. The top-left photo shows a pipe being connected to a metal box with an arrow labeled (1). The top-right photo shows a pipe being connected to a relief valve with an arrow labeled (1). The middle photo shows a pipe being connected to a distribution valve with three arrows labeled (2). The bottom photo shows a pipe being connected to a heating element with an arrow labeled (2).</p> |

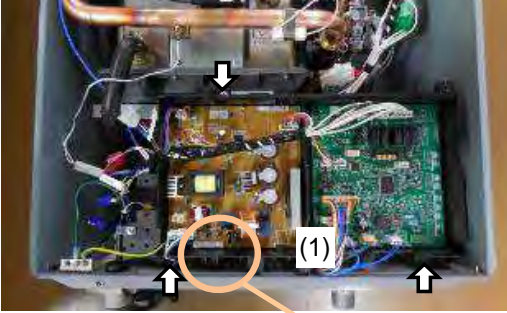
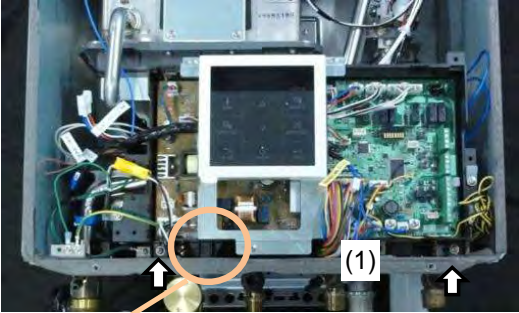
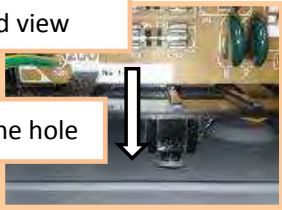


Heat Exchanger Replacement Procedure

| Procedure  | Diagram  |
|--|--|
| <p>19. Plug all wires that attach to Wiring Harness</p> <p>(1) Plug High Limit Switch.</p> <p>(2) For <u>EZ111DV/EZ98DV or NCC199CDV</u><br/>           Plug 4 Freeze Prevention Heaters,<br/>           Fan Motor,<br/>           (NCC199CDV: 1 Freeze Prevention Heater. ),<br/>           Thermistor - Primary Heat Exchanger Outlet,<br/>           Thermistor - Exhaust<br/>           and hook Wiring Harness to 2 Wire Clamps.<br/> <u>For NRCB199DV/NRCB180DV</u><br/>           Plug Fan Motor and Thermistor - Exhaust.<br/>           and hook Wiring Harness to 2 Wire Clamps.</p> <p>(3) Hook Wiring Harness by using Wire Clamps.</p> <p>(4) Plug Igniter.</p> <p>(5) <u>Only EZ111DV/EZ98DV or NCC199CDV</u><br/>           Plug 6 Freeze Prevention Heaters,<br/>           Water Servo - Bypass,<br/>           Gas Valve<br/>           Thermistor - Primary Heat Exchanger Outlet,<br/>           High Limit Switch<br/>           (NCC199CDV: 2 High Limit Switches. )<br/>           and bundle Wiring Harness with 3 Cable Ties.</p> |  <p><u>EZ111DV/EZ98DV or NCC199CDV</u></p>  <p><u>NRCB199DV/NRCB180DV</u></p> |
|  <p><u>EZ111DV/EZ98DV or NCC199CDV</u></p>   |  <p><u>NRCB199DV/NRCB180DV</u></p>  |

Heat Exchanger Replacement Procedure

| Procedure   | Diagram   |
|---|---|
| <p>(6) <u>Only EZ111DV/EZ98DV or NCC199CDV</u><br/>Plug Thermistor.</p> <p>(7) <u>Only EZ111DV/EZ98DV or NCC199CDV</u><br/>Plug remote control connector.</p> <p>(8) Plug Flame Rod.</p> <p>(9) Hook Flame Rod to the Wire Clamp.</p> |  <p>(6) e.g. EZ111DV</p> <p>(7) e.g. EZ111DV</p> <p>(8) e.g. EZ111DV</p> <p>(9) e.g. EZ111DV</p> |
| <p>20. Attach ground wires</p> <p>(1) Attach ground wires.</p>  |  <p>(1)</p>   |

Heat Exchanger Replacement Procedure

| Procedure  | Diagram  |
|--|--|
| <p>21. Attach Circuit Board</p> <p>(1) Attach Circuit Board with the screws(M4×12)*.</p> <p>* EZ111DV/EZ98DV or NCC199CDV: 3 screws<br/>                     NRCB199DV/NRCB180DV: 2 screws</p> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> <p><u>EZ111DV/EZ98DV or NCC199CDV</u></p>  </div> <div style="text-align: center;"> <p><u>NRCB199DV/NRCB180DV</u></p>  </div> </div> <div style="text-align: center; margin-top: 20px;"> <p>Enlarged view</p>  <p>Put into the hole</p> </div> |  |
| <p>22. Attach Front Cover</p> <p>(1) Attach Front Cover with 4 screws w/ washer(M4×12).</p>  | <div style="margin-bottom: 20px;"> <p><u>EZ111DV/EZ98DV or NCC199CDV</u></p>  </div> <div> <p><u>NRCB199DV/NRCB180DV</u></p>  </div> |