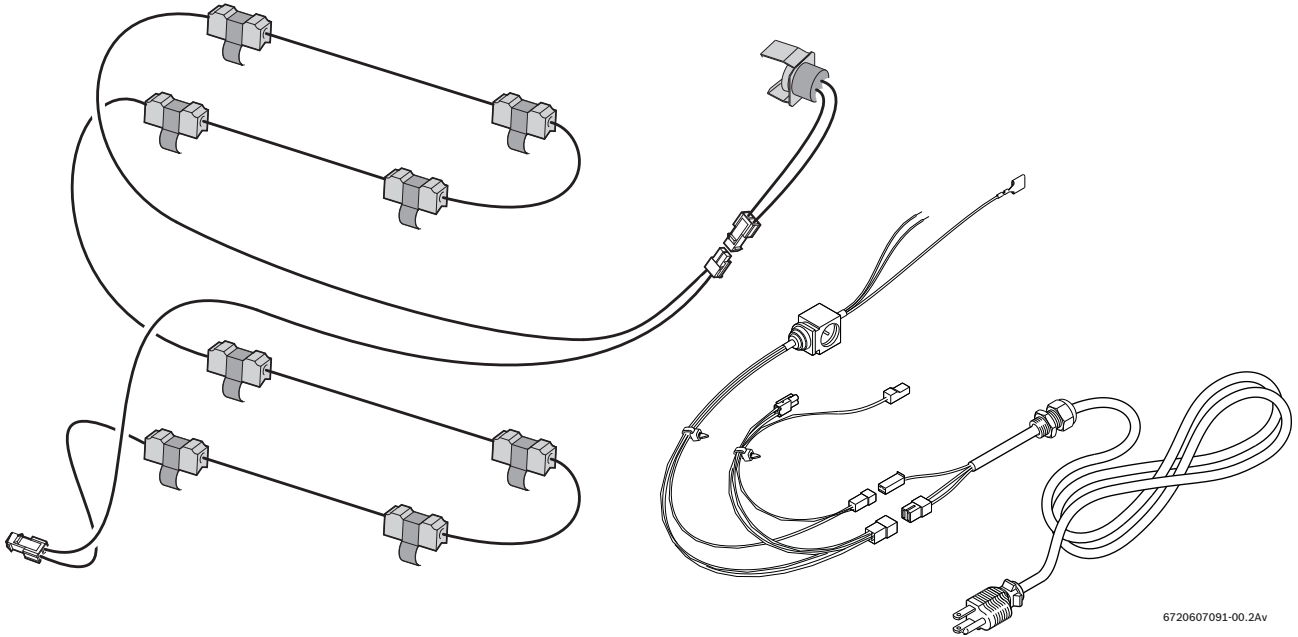


Freeze Prevention Kit



Spare part for models: 250SX, 250SXO, 2400E, 2400EO, 635ES, 635ESO

Part no. 1124



Warning: This kit must be installed by a qualified installer in accordance with these instructions and all applicable codes and requirements of the authorities having jurisdiction.

1 Installing freeze prevention kit

Preparation



Warning: The freeze prevention kit is designed to provide protection for the water heater down to approximately 5°F for short term conditions only. It will not protect the appliance in areas where the temperature is routinely expected to be below freezing.

- ▶ The freeze prevention kit will not protect plumbing outside the appliance from freezing. Precautions should be taken.
- ▶ Always drain the water heater if it will be exposed to long term freezing conditions. See Section Winterizing for seasonal use of the water heater installation manual.
- ▶ In order for the freeze prevention kit to provide adequate protection, 120V AC must always be supplied to the water heater.



The heater must be mounted on an inside wall or, if installed on an outside wall, make sure to use an air gap of at least 2" between the heater and the wall.

- ▶ **1.** Disconnect power supply to heater.
- ▶ **2.** Remove plastic decals on front panel.
- ▶ **3.** Loosen two Philips head screws located behind plastic decals.
- ▶ **4.** Lift front cover upward and remove.

Removing power cord

- ▶ **1.** Remove control box auxiliary cover (Fig. 1, pos. 4).
- ▶ **2.** Remove the 5 screws on the front retaining bar (see Fig. 1, pos. 1 and 2). Be careful not to damage the foam sealant material.

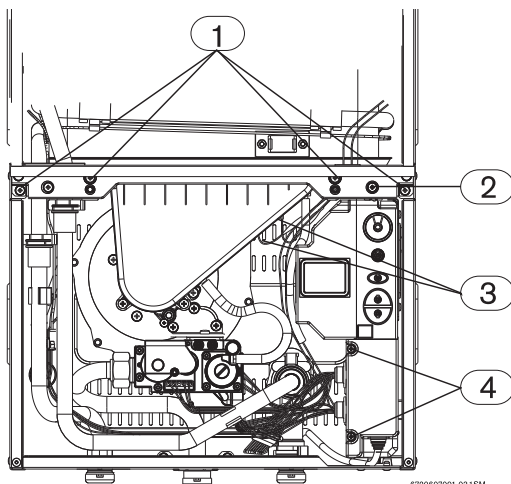


Fig. 1

- ▶ **3.** Remove the two electrical strip connectors inside the unit (Fig. 2) and then loosen the 110V power supply cord retaining nut located underneath the heater. Once loosened, the power supply cord can be pulled up through the heater to provide sufficient slack.



Once auxiliary cover is off, pull off the two electrical strip connectors inside the board. Once off, the wiring strands can be removed from the area of the board by pulling their rubber seals outward.

Fig. 2

- ▶ **4.** At the ignition electrodes, pull off the 2 yellow igniter wires that come from the top of the control unit (Fig. 1 pos. 3). Then pull the complete control unit forward and out of the heater, pull up the power supply cord further if more slack is needed.
- ▶ **5.** While holding the control unit in one hand or resting it on a flat surface, remove the front cover of control unit by removing it's 4 screws.
- ▶ **6.** Locate power supply cord electrical connections and ground inside control unit, disconnect, taking notice of black and white wire location. Remove power supply cord from control unit and pull down and out of unit.

Installing new power cord

- ▶ **1.** Feed new power supply cord up through old power cord opening.
- ▶ **2.** Replace power supply cord and reinstall black, white and ground wires to appropriate locations.
- ▶ **3.** Replace the front cover of control unit.
- ▶ **4.** Slide control unit in place being cautious not to damage yellow wires.
- ▶ **5.** Reconnect the electrical strip connectors to the control unit. Be sure to connect the larger (2") connector to the lower position on the circuit board and the smaller (15/8") connector to the upper position. Reinstall rubber seals and auxiliary control box cover.
- ▶ **6.** Reconnect 2 yellow igniter wires.
- ▶ **7.** Replace retaining bar and 5 screws.

Installing freeze prevention device

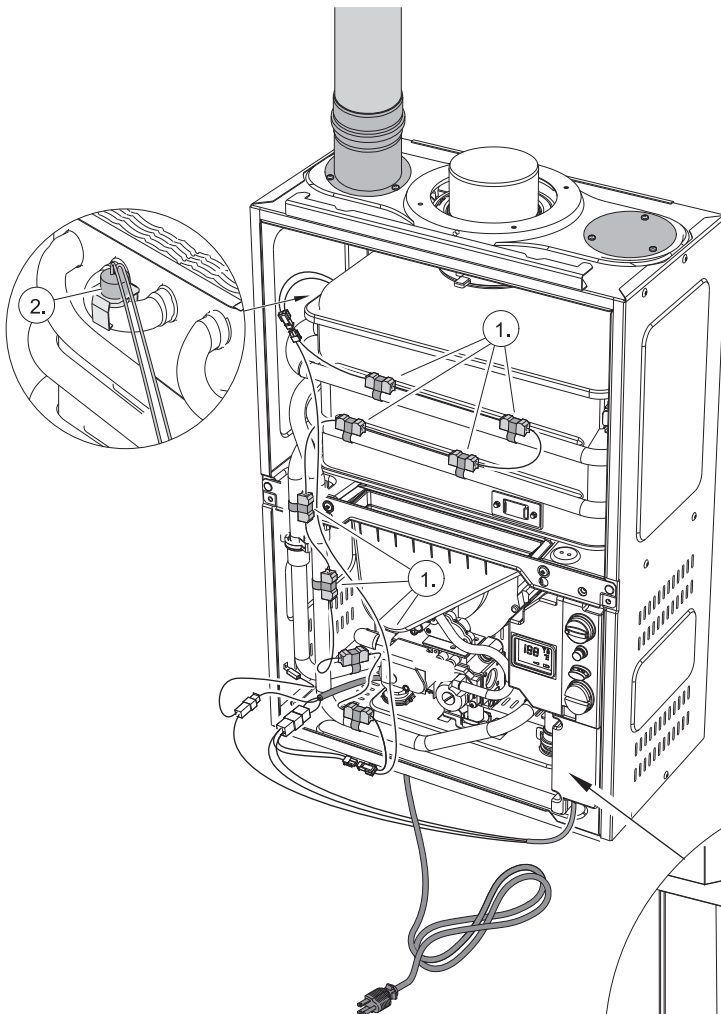
- 1. Clip ceramic heating units to heater as shown in Fig. 3, pos.1.
- 2. Attach temperature sensor on the copper piping directly below the air intake connection on top of the water heater Fig. 3, pos. 2.
- 3. Attach female connector from temperature sensor to male connector on heating circuit.

- 4. Attach male connector from power supply cord to the female connector on heating circuit.

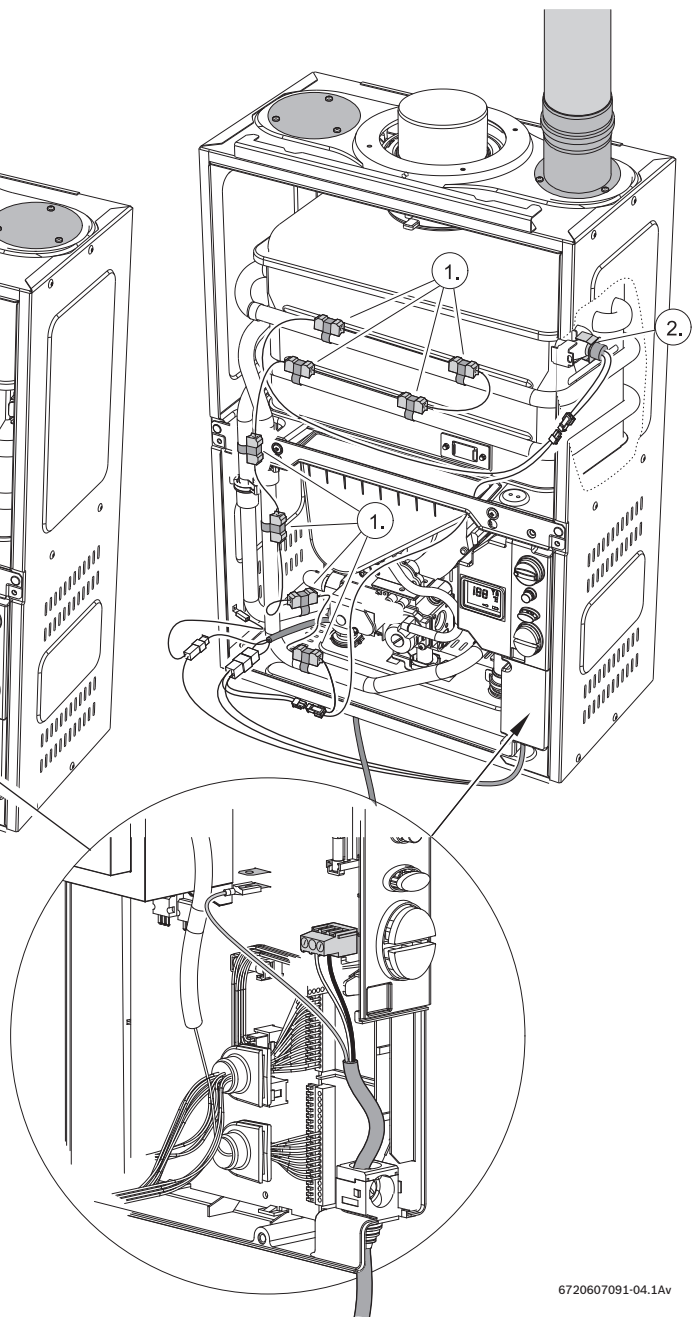


Warning: MOUNT THE TEMPERATURE SENSOR OF THE FREEZE KIT ON THE COPPER PIPING DIRECTLY BELOW THE AIR INTAKE CONNECTION ON TOP OF THE WATER HEATER. SEE PICTURE BELOW.

Freeze prevention positioning when air intake attached to left of exhaust.



Freeze prevention positioning when air intake attached to right of exhaust.



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Fig. 3

Installing freeze prevention device in appliances with Outdoor kit



Warning: MOUNT THE TEMPERATURE SENSOR OF THE FREEZE KIT ON THE INLET COPPER PIPING. SEE PICTURE BELOW.

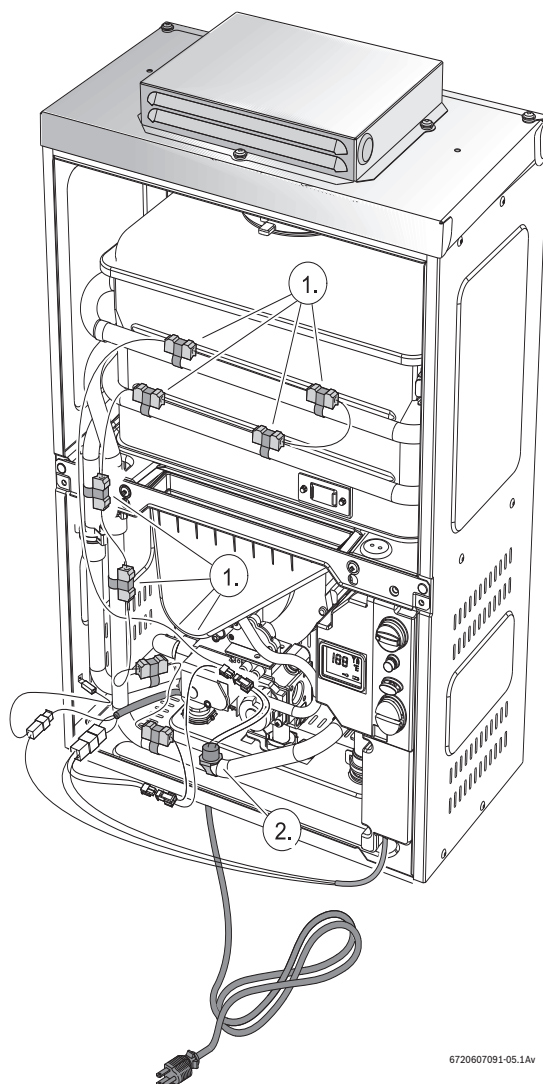


Fig. 4

Returning to Service

- 1. Replace front cover panel and plastic decals.
- 2. Connect power to heater, display will cycle and 122 will show on display.



Warning: Do not leave power connected to heater if heater is drained. Damage may occur to heating circuit.

Replacement Parts available from:

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