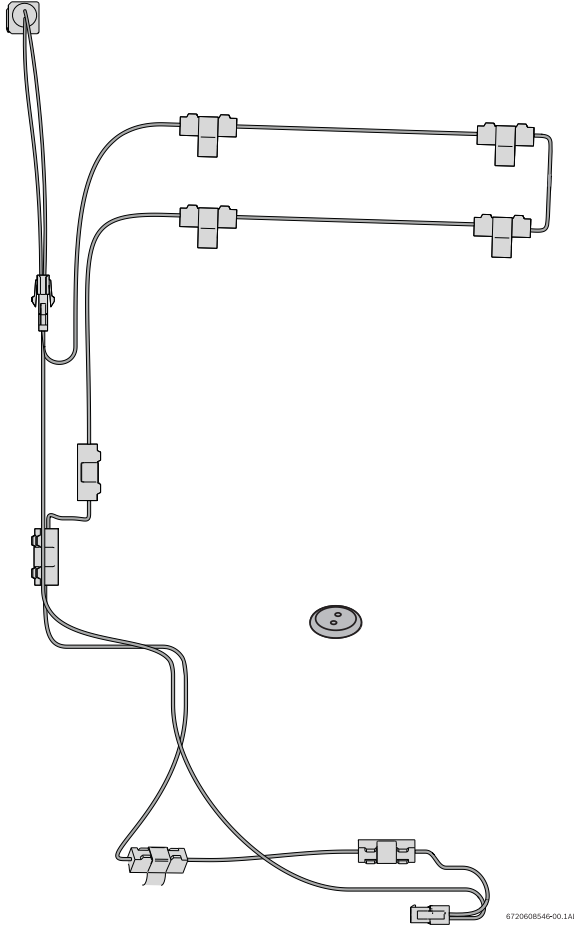


Freeze Prevention Kit



Spare part for models: 1210 ES/ESC, C1050ES, C 950 ES, 940ES, 830ES, 2400 ES, 2700 ESC, Evolution 500, Integra 500

Part no. 7 709 003 665



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 anti freeze 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 anti freeze 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 6.2 Winterizing for seasonal use of the water heater installation manual.

- ▶ **1.** Disconnect power supply to heater.
- ▶ **2.** Remove plastic controls shield from front cover (outdoor installations only).
- ▶ **3.** Loosen two Phillips head screws located on the bottom rear of the appliance, see Fig. 1.
- ▶ **4.** Loosen two screws on the top of the appliance and remove outdoor vent cap (outdoor installations only), see Fig. 2.
- ▶ **5.** Lift front cover outward then upward to remove, see Fig. 3.
- ▶ **6.** Remove combustion cover, see Fig. 4.

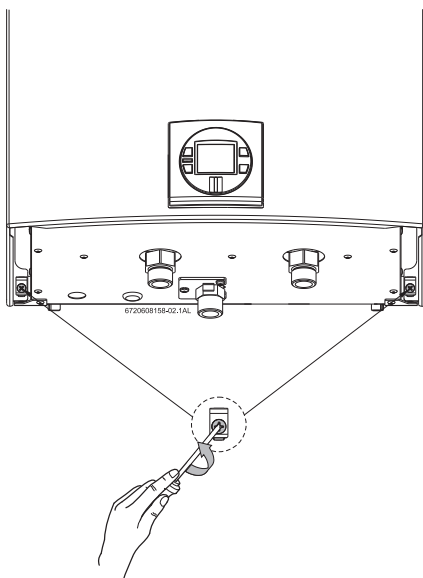


Fig. 1 Loosen two Phillips head screws

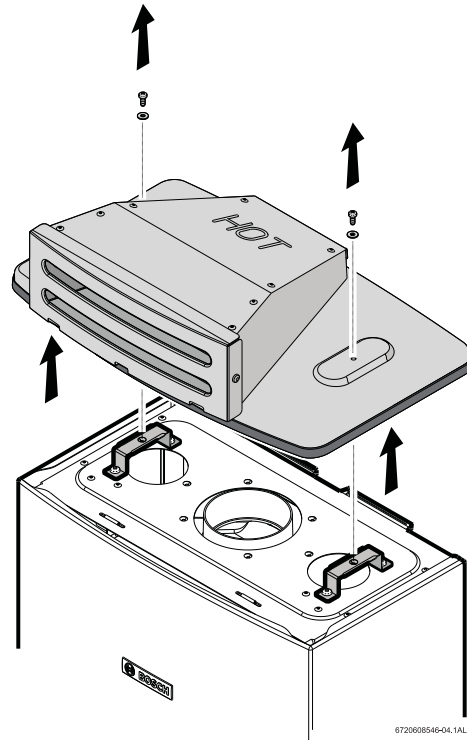


Fig. 2 Removing outdoor vent cap (outdoor installations only)

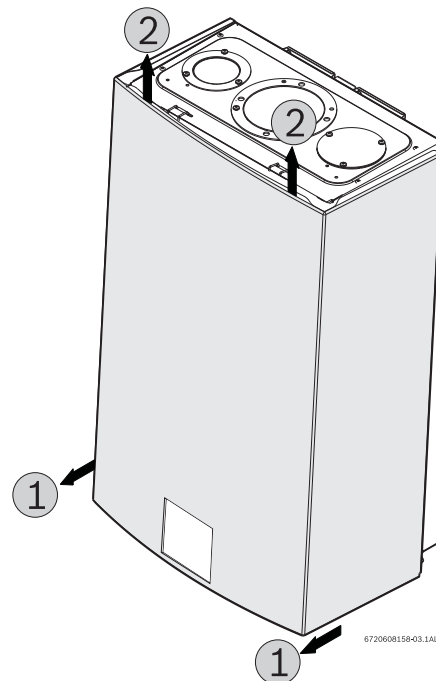


Fig. 3 Removing front cover

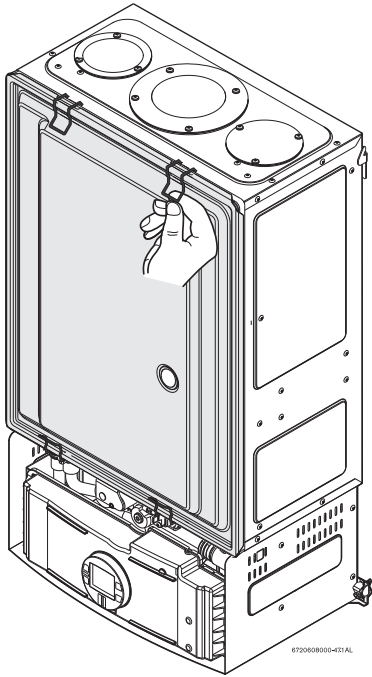


Fig. 4 Removing combustion cover

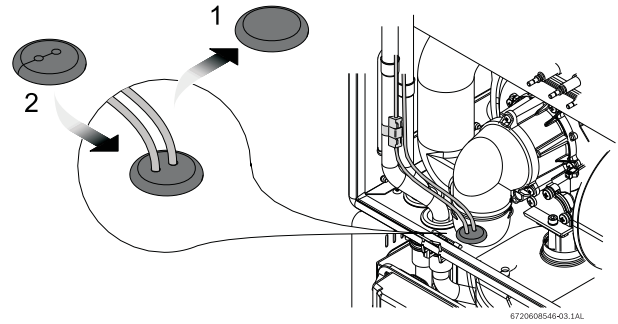


Fig. 5 Replacement of rubber grommet

Installing freeze prevention kit

- ▶ **1.** Clip ceramic heating elements to heater as shown in Fig. 8 , 9 and 10, pos. 3.



Note: Loosen three screws on control unit so it can be moved for easy access to lower piping.

- ▶ **2.** Replace existing rubber grommet with one supplied in the kit, see Fig. 5. Position two heating elements on piping in lower box by passing cables through supplied grommet. (See Fig. 8, 9 and 10, pos. 2).
- ▶ **3.** Attach temperature sensor to the cold water pipe as shown in Fig. 8, pos. 1, for models 830 ES, 940 ES, 2400 ES and 2700 ES, Fig. 9, pos. 1, for model C 950 ES, C 1050 ES and Fig. 10, pos. 1, for model C 1210 ES/ESC.
- ▶ **4.** Attach female connector from temperature sensor to male connector on heating circuit. (See Fig. 8, 9 and 10, pos. 4).
- ▶ **5.** Attach male connector from power supply cord to the female connector on heating circuit (See Fig. 8, 9 and 10, pos. 5).

Prevent possible problems with pinched electrical cable.

In order to avoid any functional problem with the assembly of the anti-freeze kit, during any intervention following procedure shall be used:

- ▶ Ensure a correct electrical earth connection.
- ▶ Ensure the correct electrical polarization, especially in outlet installations.
- ▶ Avoid loosening the cable is pinched, especially on critical position, as indicated on Fig. 6. If yes, replace the anti-freeze kit.
- ▶ Use a plastic tie for fixing the cables, see example below for models C1050ES, C950ES, 940ES, 830ES, 2700ES, 2400ES.

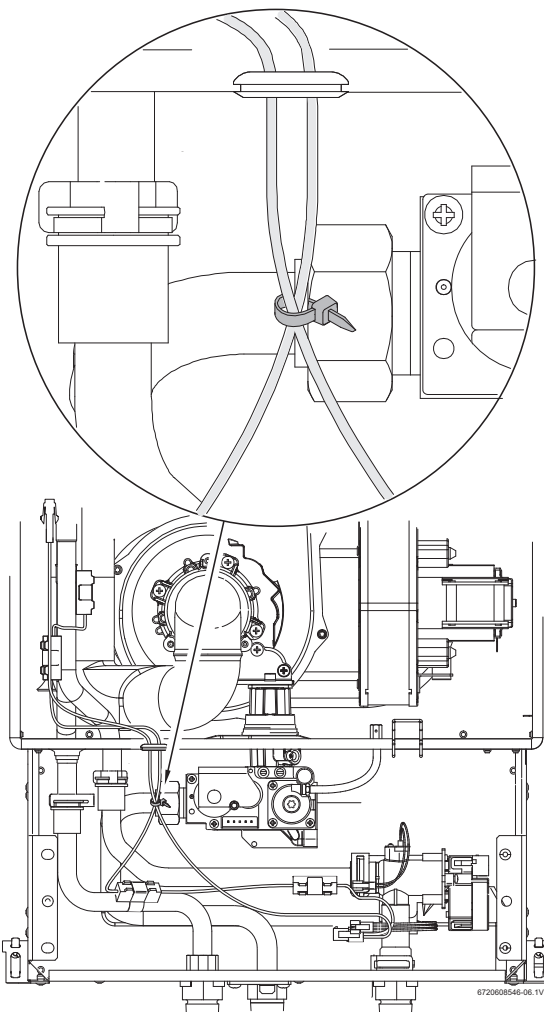


Fig. 6 Fixing cable with plastic tie

- ▶ Use a plastic tie for fixing the cables, see example below for models C1210ES.

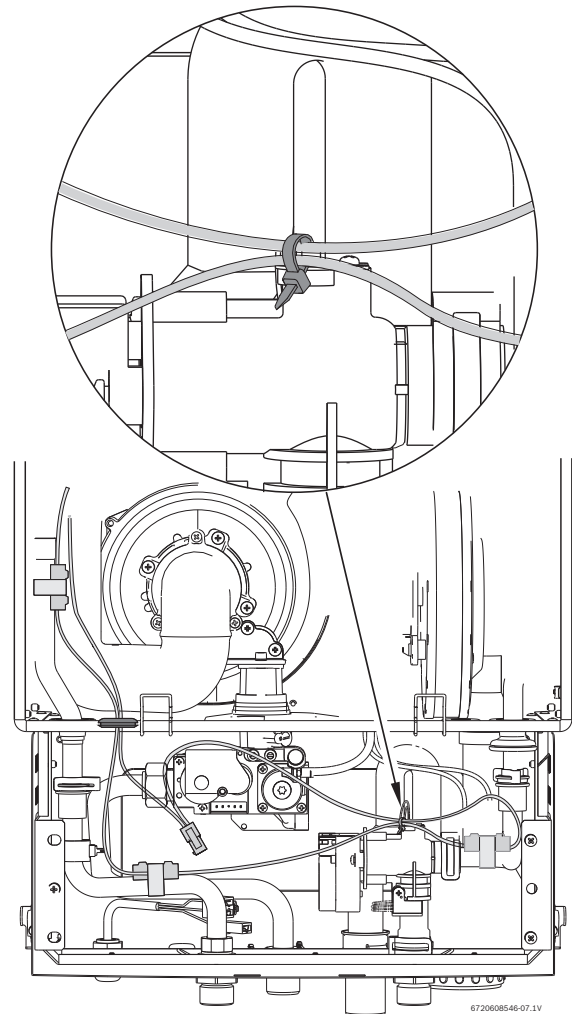


Fig. 7 Fixing cable with plastic tie

Returning to Service

- ▶ 1. Replace combustion cover.
- ▶ 2. Replace front cover and fasten the two Phillips head screws.
- ▶ 3. Replace outdoor vent cap with screws (outdoor installations only).
- ▶ 4. Replace the plastic controls shield on front cover (outdoor installations only) and reconnect power supply.



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



Warning: In order for the freeze prevention kit to provide adequate protection, 120V AC must always be supplied to the water heater.

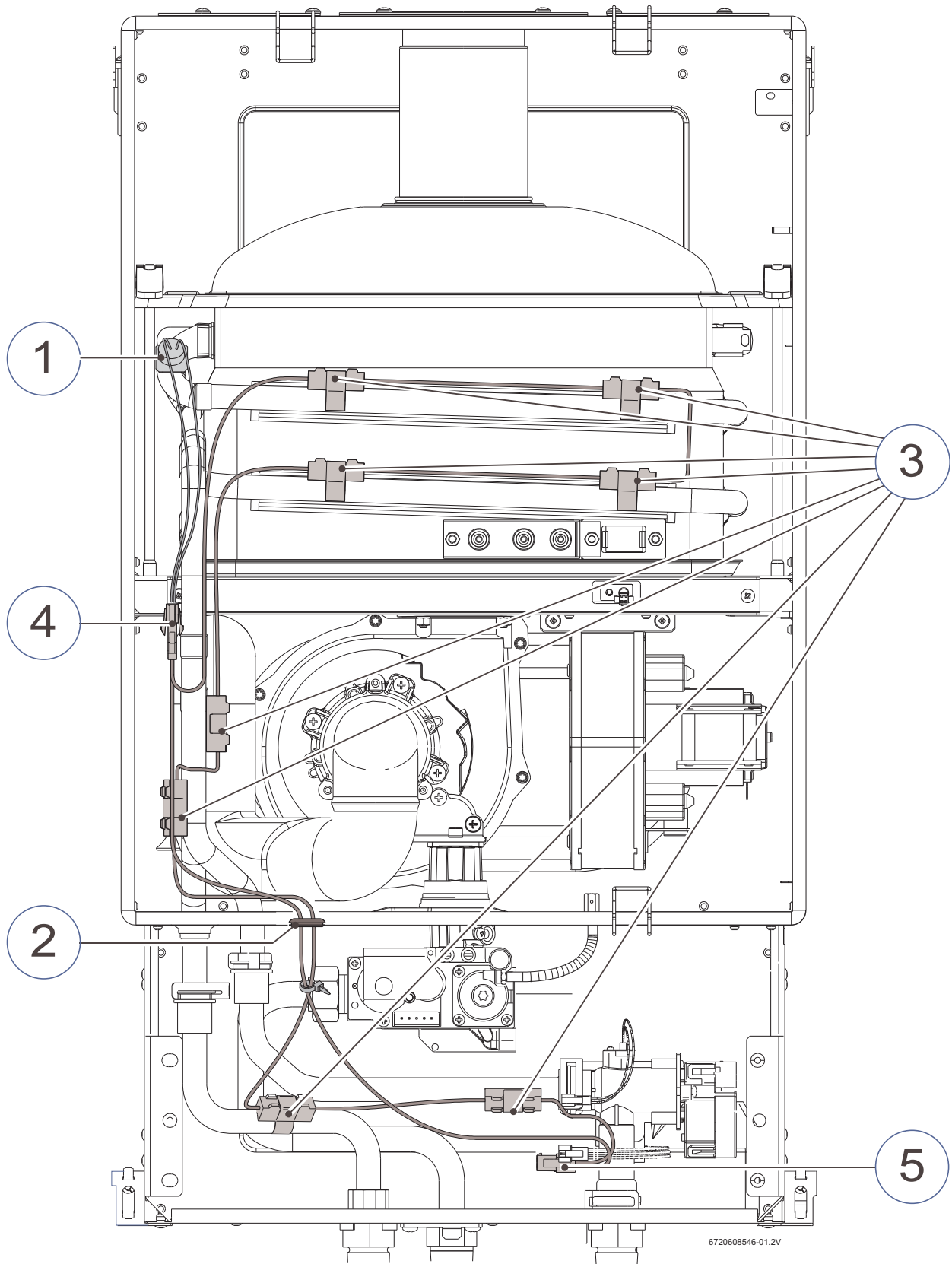


Fig. 8 GWH 715 ES, 2400 ES, 2700 ES, Evolution 500

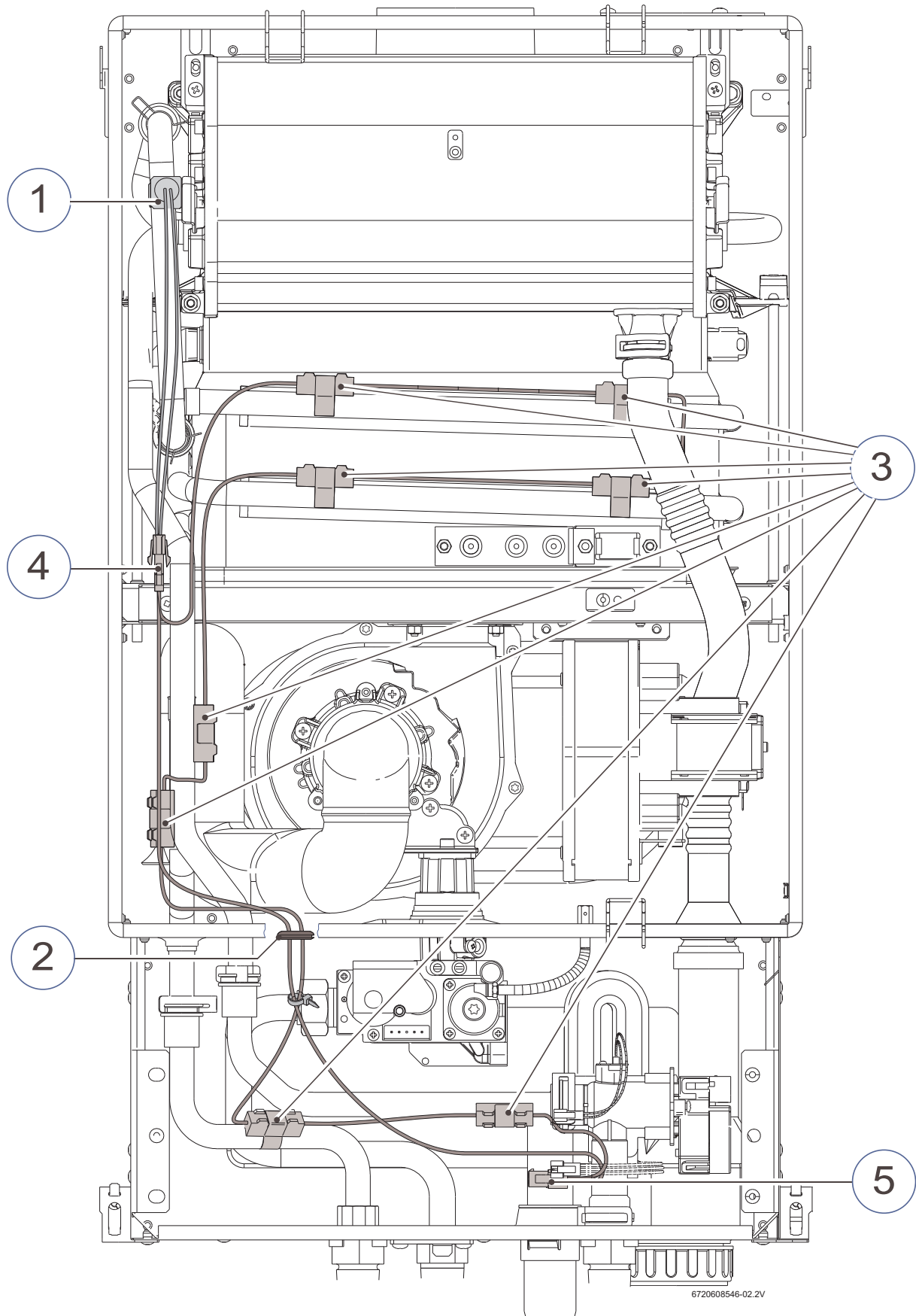


Fig. 9 GWH C 800 ES, Integra 500, C 1050ES, C 950 ES

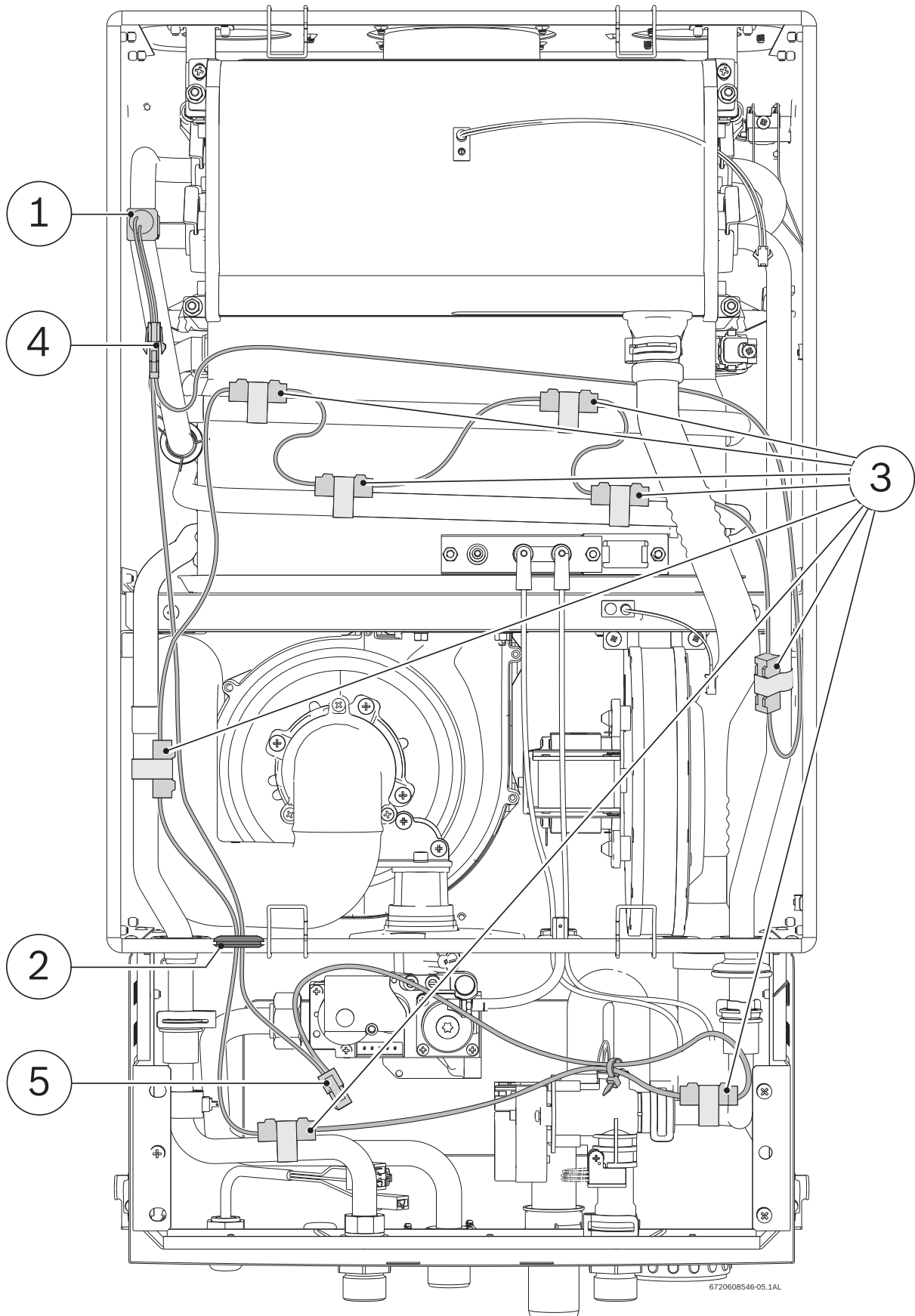


Fig. 10 C 1210 ES/ESC



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