

P-851 Bypass Valve Replacement Kit - SFT 199 and SFC 199



Warning

This replacement kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, an explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life.

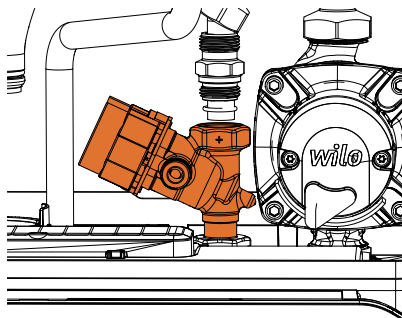
The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.

Bypass pipe kit - Superflow SFT 199, SFC 199			
	Part #	Description	Quantity
	240-121	Bypass valve assembly fitting	1
	251-069	UNF 7/8"x 15 mm	1
	150-368	UNF fitting O-ring 15.0 x 2.0 EPDM 70	1
	150-248	UNF fitting O-ring 19.3 x 2.4 EPDM	1
	255-032	Bypass pipe gasket	2
	150-366	O-ring 25.3 x 2.4 EPDM	1
	150-365	Heat exchanger domestic hot water spring clamp 15 mm	1

When to Install the P-851 Bypass Valve Replacement Kit

Install the P-851 bypass valve replacement kit if the motor fails or debris is caught in the impeller.

SFT 199 SFC 199 Bypass Valve



**Caution**

Before servicing, ensure that incoming water source to the water heater has been shut down to avoid water damage.

Note

A ladder or step may be required to have a clear vertical view of the work area.

Do not attempt to remove the assemblies without a clear view, as damage to the connectors, screws or refractory may occur.

Removing the bypass valve

Preparing the water heater for service

1. Remove call(s) for heat.
2. Remove power to the water heater at a wall switch or a breaker.
3. Shut off water supply to the water heater.
4. Shut off gas supply to the water heater.
5. Allow the water heater to cool down to the ambient temperature.

Removing the bypass valve

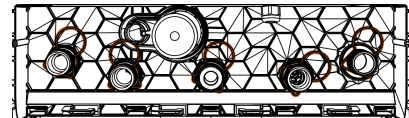
1. Open and remove the front cover by removing the two hex Allen key bolts at the bottom of the cover.

Note

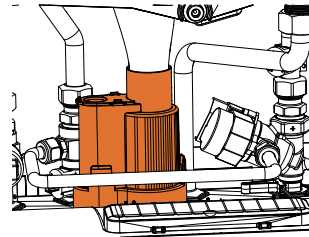
If additional space is needed, use a flat head screwdriver to remove the left and right-hand side bottom edge panels.

Use a Phillips head screwdriver to remove the screws from the left and right-hand side bottom/back panels and gently push these panels to the outside of the water heater.

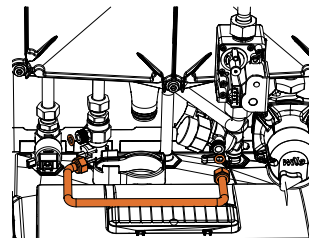
2. Remove all locking springs from the inlet and outlet ports at the bottom of the water heater.



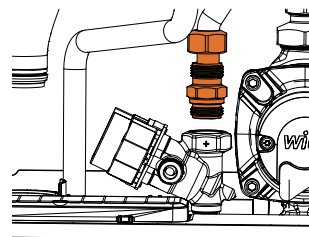
3. Remove the condensate trap by pressing on the white retaining tabs and pulling it out of the water heater.



4. Disconnect all wiring obstructing the service area.
5. Remove the bypass pipe by using a 19 mm wrench to loosen the nuts, discard the gaskets.



6. Remove wiring from the bypass valve body.
7. To disconnect the bypass valve body:
 - a. Use a 27 mm wrench to release the union nut;
 - b. Use a 24 mm wrench to loosen the nut of the bypass valve body until the o-ring is visible or released and discard the o-ring;
 - c. Slide the union nut upwards towards the heat exchanger;
 - d. Release the bypass valve body from the nut.



Reassembly and Start-up Procedure

Installing the bypass valve

1. Insert the supplied o-rings into the new bypass valve unit, ensure o-rings are seated correctly.
2. Connect wiring to the bypass valve body.
3. Connect the bypass valve body to the water heater:
 - a. Secure the nuts to the bypass valve body and ensure o-rings are seated correctly.
4. Reinstall the bypass pipe with supplied gaskets.
5. Reconnect all wiring.
6. Reinstall the condensate trap.
7. Reattach all locking springs.
8. Reattach and secure all bottom/edge and side panels.

Start-up

1. Turn on water supply to the water heater.
2. Turn on gas supply to the water heater.
3. Turn on power to the water heater.
4. Check connections for leaks during operation.
5. Turn on call(s) for heat.
6. Reinstall front cover.