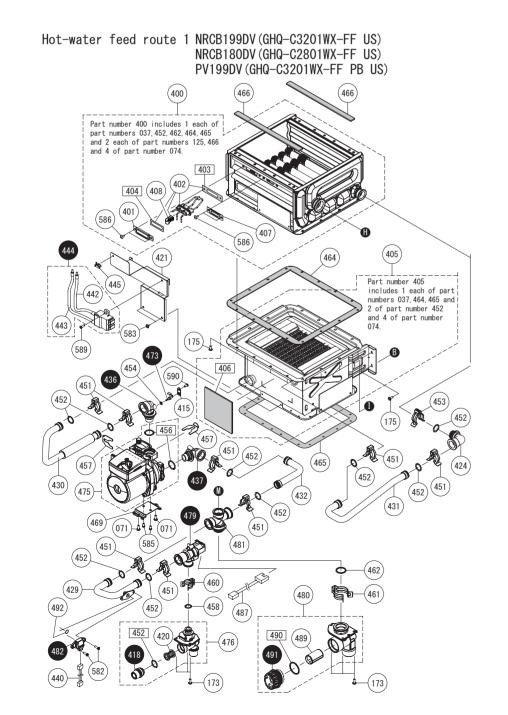
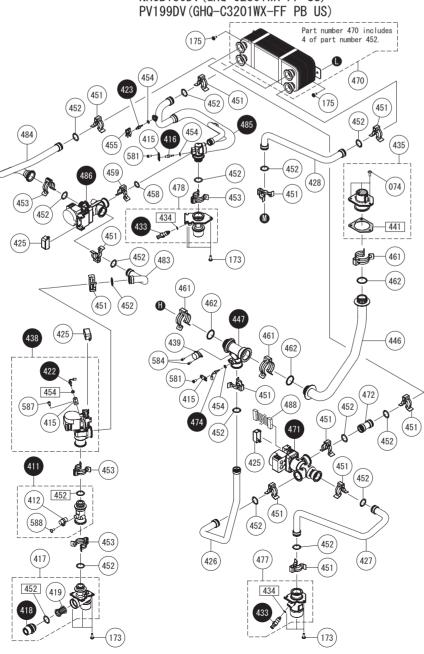


art Nos.	Part Names	Order Nos.	Q'ty/unit
001	Front Cover - GHQ-C2801WX-FF US / GHQ-C3201WX-FF US	SKJ72FU	1 <nrcb series=""></nrcb>
002	Front Cover - GHQ-C3201WX-FF PB US Gasket - Front Cover Top	SKJ72Z6 FABL011	1 <pv series=""> 1</pv>
002	Gasket - Front Cover Top Gasket - Front Cover Sides	CVAL004	2
003	Gasket - Front Cover Top and Bottom	AAPL015	1
005	Label - Outside Front Cover Caution Label	ELVK003	1
006	Label - Inside Front Cover Caution Label	EYSK006	1
007	Label - Terminal Block	FADK011	1
800	Label - Rating Plate DV	FADK151	1
009	Parts List/Technical sheet	FADK251	1
010	Label - Energy Guide 199kbtuh - LP	FADK006	1 <nrcb199dv lp=""></nrcb199dv>
	Label - Energy Guide 199kbtuh - NG Label - Energy Guide 199kbtuh - LP	FADK007 FDAK036	1 <nrcb199dv ng=""></nrcb199dv>
	Label - Energy Guide 199kbtuh - LP Label - Energy Guide 199kbtuh - NG	FDAK030	1 <pv199dv lp=""> 1<pv199dv ng=""></pv199dv></pv199dv>
	Label – Energy Guide 180kbtuh – LP	FAEK006	1 <nrcb180dv lp=""></nrcb180dv>
	Label - Energy Guide 180kbtuh - NG	FAEK007	1 <nrcb180dv lf=""></nrcb180dv>
011	Wiring Diagram	FADK002	1
012	Gasket - Operation Panel	FADL001	1
024	Wire Clamp	7559402	3
031	Intake Flue w/ O-Ring and Gasket (SET)	SKJ71W1	1
032	Exhaust Flue w/ O-Ring and Gasket (SET)	SKJ71W2	1
033 034	Filter - Intake Air Clamp - Exhaust Pipe	FABF101 FABF108	1
034 035	Gasket - Exhaust Flue	FABL101	2
035	O-Ring - Exhaust Pipe	FABL101	2
037	O-Ring - Exhaust Flue	FABL102	1
040	Case - GHQ-C32 (28) 01WX-FF US	SKJ721P	1
042	Wire Grommet - Rubber	7355009	2
071	Screw - Front Cover with washer M4X12 S410		
071	Screw - Front Gover with Washer M4X12 S410 Screw - Pre-Coated Machined M4X12 S410		
074	Screw - Remote Terminal M4X10 S430		

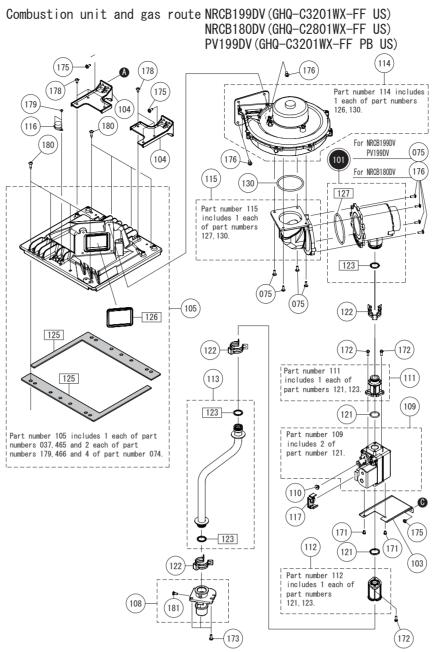




Hot-water feed route 2 NRCB199DV (GHQ-C3201WX-FF US) NRCB180DV (GHQ-C2801WX-FF US) PV199DV (GHQ-C3201WX-FF PB US)







Combustion unit and gas route NRCB199DV (GHQ-C3201WX-FF US) NRCB180DV (GHQ-C2801WX-FF US) PV199DV (GHQ-C3201WX-FF PB US)

rt Nos.	Part Names	Order Nos.	Q'ty/unit
101	Venturi 199kbtuh - LP (SET)	SKJ724Q	1 <nrcb199dv, lp<="" pv199dv="" td=""></nrcb199dv,>
	Venturi 199kbtuh - NG (SET)	SKJ724R	1 <nrcb199dv, ng<="" pv199dv="" td=""></nrcb199dv,>
		SKJ724S	1 <nrcb180dv lp=""></nrcb180dv>
	Venturi 180kbtuh - LP (SET)		
	Venturi 180kbtuh - NG (SET)	SKJ724T	1 <nrcb180dv ng=""></nrcb180dv>
103	Mounting Plate - Gas Valve Mounting Plate - Chamber	FABA101	1
104	Mounting Plate - Chamber	FABC031	2
105	Burner Chamber (SET)	SKJ724U	1
108	Inlet Gas Connection w/ Screw (SET)	ELVE021	1
109	Gas Valve (SET)	SKJ71W8	1
110	Cover - Offset Adjustment	FABE011	1
111	Gas Valve Outlet Connector (SET)	SKJ71UY	1
112	Gas Valve Inlet Connector (SET)	SKJ71VX	1
	Gas Pipe (SET)		1
113		SKJ71VY	
114	Fan Motor w/ Housing	SKJ724V	1
115	Gas Elbow Connector 199kbtuh (SET)	SKJ71WA	1 <nrcb199dv, pv199dv=""></nrcb199dv,>
	Gas Elbow Connector 180kbtuh (SET)	SKJ71WB	1 <nrcb180dv></nrcb180dv>
116	High Limit Switch - 320	FABH002	1
117	Cover - Gas Valve Connector	FABJ032	1
121	O-Ring - P20	2192004	2
122	"C" Clamp -16B	6340407	3
123	0-Ring - P18	2110903	3
125	Gasket - Burner	FABL002	2
126	Gasket - Chamber Inlet	FABL003	1
127	O-Ring - Venturi φ71	FABL016	1 <nrcb199dv, pv199dv=""></nrcb199dv,>
	O-Ring - Venturi ¢71 O-Ring - Venturi ¢60	FABL017	1 <nrcb180dv></nrcb180dv>
130	$0-\text{Ring} - \text{Venturi} \phi 60$	FABL017	1
075	Screw - Long Mounting Machine M4X12 S430		
171	Screw - Short Mounting Machine M4X6 S430		
172	Screw - Long Mounting Machine with Spring Washer M4X12 S430		
173	Screw - Long Machine M4X12 S410		
175	Screw - Medium Machine 4X10 S410		
176	Screw - Mounting Machine M5X12 S430		
178	Screw - Medium Machine M4X10 S410 for Aluminum		
179	Screw - Short Machine M3X5 S410 for Aluminum		
180	Screw - Truss Head Self Drilling Tapping M4X18 S410		
181	Screw - Inlet and Manifold Gas M4X8	SAC6082	1

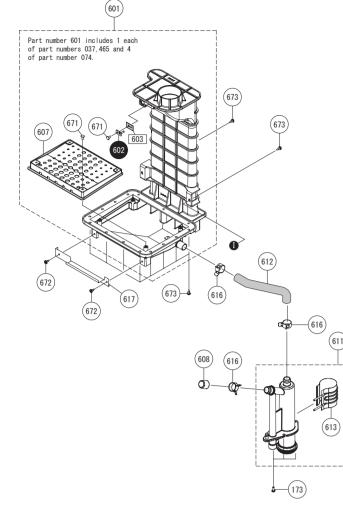
Hot-water feed route NRCB199DV (GHQ-C3201WX-FF US) NRCB180DV (GHQ-C2801WX-FF US) PV199DV (GHQ-C3201WX-FF PB US)

Part Names	Order Nos.	Q'ty/unit
at Exchanger Kit - Primary SS (SET)	SKJ70LZ	1
nting Plate - Ignition Plug	FABB045	1
nition Plug w/ Gasket	SKJ71VZ	1
sket - Ignition Plug (HEX)	FADL004	1
ket - Ignition Plug (Mounting Plate)	FABL010	1
t Exchanger Kit – Secondary SS (SET) ket – Secondary SS (Front)	SKJ72FW FABL015	1
ner Window (SET)	FABLOTS FABB042	1
icon Sleeve	SKJ7334	1
er Flow Sensor (SET)	EPAD001	1
netic Sensor - Flow Sensor	BWCD093	1
rmistor Holding Plate	ALSD088	4
rmistor - White - Q64	BWCD098	1
et Water Connection (SET)	EHVD001	1
er Filter Cap	DTJD006	2
er Filter	EGBD032	1
er Filter	EGBD032	1 <for after="" sales="" service<="" td=""></for>
nting Plate - Igniter	FABA015	1
rmistor - White - M64	BWCD096	1
rmistor - White - Q63	BWCD097	1
er Connector - Elbow	DYTD002	1
e Cover - Servo	EBTD023	3
e - T-Elbow to 3-Way Valve - Heating	FADD121	1
e - 3-Way Valve - Heating to Heating Supply Connection	FADD123	1
e - Plate Heat Exchanger to Heating Return Connector	FADD126	1
e - Auto Feeder to Heating Return Connector	FADD128	1
e - Pump Outlet - Elbow to Secondary SS HEX	FADD130	1
e - Secondary SS HEX to Primary SS HEX	FADD133	1
e - Heating Return Connector to Pump Inlet - Elbow	FADD135	1
in Plug	CRUD003	2
ing - High Temp P3	SAD6633	2
ief Valve Connection	SKJ7229	1
p Outlet - Elbow	FADD261	1
p Inlet - Elbow	FADD262	1
er Servo - Main (SET)	JEBD051	1
h Limit Switch - 201	ELVH002 FADJ017	1
ing Harness - Heating Water Pressure Sensor ket - Relief Valve Connection	FADL002	1
h Voltage Igniter Wire L175	ALSJ078	1
	ALSJ078 ALSJ084	1
h Voltage Igniter Wire L220 iter(SET)	SKJ730E	1
	SAE6367	1
e - T-Elbow to Relief Valve Connection	FADD145	1
Ibow	FADD143	1
Clamp - Water Pipe 16-25	SAD6593	20
ing - High Temp P16	3223302	27
Clamp - Water Pipe 16A	6340300	5
ing - Thermistor High Temp P4	1323709	5
Clamp - Thermistor	CRUD055	1
ing – High Temp P20	3059502	2
p Clip	FADD002	2
ing - High Temp P12.5	3359808	2
Clamp - Water Pipe 13-22	SAD6537	1
Clamp - Water Pipe 12.7	6340202	1
Clamp - Water Pipe 22.22	6340504	4
ing - High Temp P22	7573308	4
ket - Secondary Heat Exchanger	FABL004	1
ket - Exhaust Duct	FABL005	1
ket - Primary Heat Exchanger	FABL013	2
nting Plate - Pump	FADA023	1
te Heat Exchanger (SET)	SKJ724X	1
ay Valve - Heating (SET)	ERBD210	1
e - 3-Way Valve - Heating to Plate Heat Exchanger	EXMD069	1
mistor - Blue	EZMD001	1
rmistor - Pink	EZMD003	1

Hot-water feed route NRCB199DV (GHQ-C3201WX-FF US) NRCB180DV (GHQ-C2801WX-FF US) PV199DV (GHQ-C3201WX-FF PB US)

Part Nos.	Part Names	Order Nos.	Q'ty/unit
475	Circulation Pump (SET)	SKJ724W	1
475	Auto Feeder Inlet Water Connection (SET)	FADD021	1
476	Heating Supply Connection (SET)	FADD021 FADD025	1
477		FADD025 FADD027	1
478	Outlet Water Connection (SET)		1
	Auto Feeder	FADD031	
480	Heating Return Connection (SET)	FADD032	1
481	Heating Return Connector	FADD234	1
482	Heating Water Pressure Sensor	FADD041	1
483	Pipe - Water Servo -Main to Bypass Valve - DHW	FADD099	1
484	Pipe - Bypass Valve - DHW to Plate Heat Exchanger	FADD101	1
485	Pipe - Plate Heat Exchanger to Outlet Water Connection (SET)	FADD105	1
486	Bypass Valve - DHW (SET)	JLRD015	1
487	Wiring Harness - Auto Feeder	ERBJ035	1
488	Wiring Harness - 3-Way Valve - Heating	EHSJ026	1
489	Water Filter	EMMD041	1
490	O-Ring - Inlet Water Connection Cap	SAB4190	1
491	Inlet Water Connection Cap	FADD228	1
491	0-Ring - High Temp P6	3264408	1
492	U-King - High Temp Po	3204408	I
581	Screw - Short Machined M4X8 S410		
582	Screw - Long Machined M4X12 S410		
583	Screw - Short Tapping M4X8 S410		
584	Screw - Short Mounting Machine with Spring Washer M3X8 S430		
585	Screw - Round Head Short Tapping M5X8 S410		
586	Screw - Medium Machine M4X10 PS550		
587	Screw - Round Head Medium Tapping M4X10 S410		
588	Screw - Round Head Medium Tapping M4X10 S305		
589	Screw - Long Mounting Machine M4X12 S430		
590	Screw - Round Head Long Tapping M4X12 S410		

Condensate feed route NRCB199DV(GHQ-C3201WX-FF US) NRCB180DV (GHQ-C2801WX-FF US) PV199DV (GHQ-C3201WX-FF PB US)



Part Nos.	Part Names	Order Nos.	Q'ty/unit
601	Exhaust Duct (SET)	SKJ721N	1
602	Thermistor - Exhaust	ETHH002	1
603 607	Gasket - Exhaust Thermistor Condensate Drainage Plate	ETHL004 FABF035	1
608	Drain Cap	FABF055	
611	Condensate Container (SET)	SKJ722C	1
612	Drain Hose - Exhaust Duct	FADF001	1
613	Freeze Prevention Heater - Condensate Container	ETHH004	1
616 617	Clamp - Condensate Hose NO.45 Mounting Plate - Circuit Board	SAD6536 FADA024	3
017	mounting Flate - Gircuit Board	FADA024	
671	Screw - Medium Tapping M4X10 S410		
672 673	Screw - Remote Terminal Cover M4X12 S410 Screw - Long Tapping M4X12 S410		

Condensate feed route NRCB199DV (GHQ-C3201WX-FF US)



(751)-6

- 4. Turn on the circulating pump to circulate the flushing solution through the Combi Boiler for 1 hour at a rate of 1.5 gallons per minute or more. 5. The code "C60" is displayed on the Operation Panel when the Combi Boiler detects the flow of the flushing solution.

Electronic control unit and Included Accessories NRCB199DV (GHQ-C3201WX-FF US) • NRCB180DV (GHQ-C2801WX-FF US) PV199DV (GHQ-C3201WX-FF PB US)

Part Nos.	Part Names	Order Nos.	Q'ty/unit
700	Circuit Board	SHC71JS	1
702	Power Supply Cord	ERUJ001	1
703	Wiring Harness - GHQ-C32(28)01WX-FF US	SKJ725D	1
704	Wire Clamp - Nylon #4	7287909	3
705	Mounting Plate - Operation Panel Wiring Harness - Operation Panel	FADA022	1
706	Wiring Harness - Operation Panel	FADJ018	1
707	Transformer	FADJ051	1
101		1760001	
731	Screw - Small Tapping w/o collar M4X8 S410		
	seren emarri rapping n/o corrai mino erre		
750	Operation Panel - RC-B201M (SET)	QNCJ035	1
751	Operation Panel Top Cover	QNCA003	1
761	Screw - Round Head Machine M3X6 S430		
800	Box - GHQ-C32 (28) 01WX-FF US	SKJ71XG	1 <nrcb series=""></nrcb>
	Box – GHQ-C3201WX-FF PB US	SKJ72Z8	1 <pv series=""></pv>
802	Wall Mounting Plate	FABA103	1
803	Wood Screw Set7	SAD2028	1
804	Screw - Round Head Wood 4.8X38 S305		
805	Outdoor Temperature Sensor	FADM001	1
806	Screw Package - Remote(SET)	QQUA100	1
807	Screw - Round Head Wood M4.1X25 S305		
808	Dry Wall Anchors6X25		
809	Pressure Relief Valve for Heating	FADM002	1
888	Owner's Guide - GHQ-C32(28)01WX-FF US	SBB80U9	1 <nrcb series=""></nrcb>
	Owner's Guide - GHQ-C3201WX-FF PB US	SBB819H	1 <pv series=""></pv>
889	Installation Manual - GHQ-C32(28)01WX-FF US	SBB80UB	1 <nrcb series=""></nrcb>
	Installation Manual - GHQ-C3201WX-FF PB US	SBB819J	1 <pv series=""></pv>
961	Quick Connect Cord - QC-2	0706377	1
963	Wire Clamp - Nylon #3	7223901	2
964	Installation Manual - QC-2	SAQ8992	1
981	Screw Kit	SKJ72N0	1
982	O-Ring Kit	SKJ72N1	1
990	Wall Mounting Plate - Operation Panel	QNCA020	1
996	Screw - Round Head Machine M3X6		
997	Screw - Flat Head Wood M4.1X20		
			1

Procedure for Flushing the Plate Heat Exchanger

This procedure is only intended for use by a qualified service professional or authorized Service Representative. Any unauthorized use of this procedure may result in voiding the warranty. Reach out to our customer care for additional support. Contact details are available on the rating plate of the appliance.

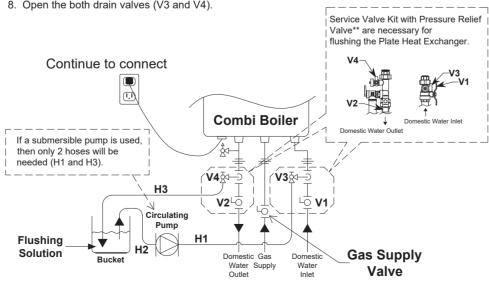
To prevent damage to the Plate Heat Exchanger from Scale Build-up, the Plate Heat Exchanger needs to be flushed* to remove the Scale Build-up.

Damage to the Combi Boiler due to Scale Build-up is not covered by the Combi Boiler's warranty. Connect the blue connector marked "FLUSH" for flushing near the Circuit Board when flushing the Plate Heat Exchanger.

> The Combi Boiler must remain connected to electrical power when flushing the Plate Heat Exchanger.

Basic Procedure

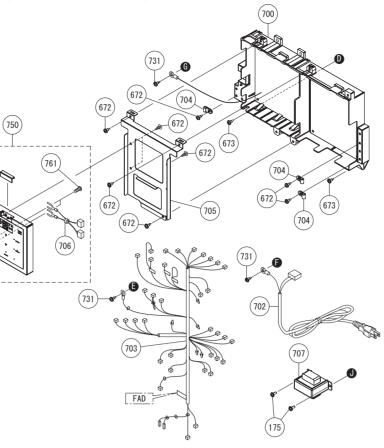
- ≪Procedure 1. The preparation of the flushing system≫
- 1. Close the gas supply valve.
- 2. Close the Domestic Water Inlet valve (V1) and the Domestic Water Outlet valve (V2). 3. Connect the one drain hose (H1) to the drain valve (V3), and then the other to the circulating pump.
- 4. Connect the drain hose (H2) to the circulating pump.
- 5. Connect the drain hose (H3) to the drain valve (V4).
- 6. Pour 1 gallon of "Calcium, Lime and Rust Removal Product" and 1 gallon water into the bucket. Recommend "Calcium, Lime and Rust Removal Product" for flushing.
- 7. Place the both drain hoses (H2 and H3) into the bucket filled with the flushing solution.

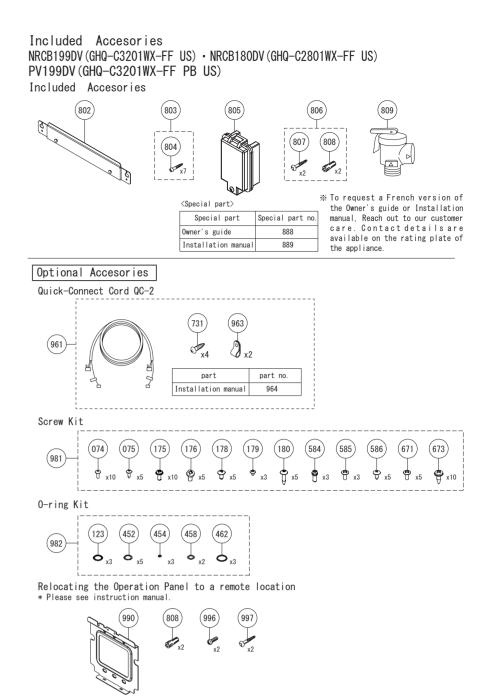


** Service Valve Kit with Pressure Relief Valve may be purchased as an accessory from an authorized wholesaler. They allow for full diagnostic testing and easy flushing of the system. Refer to appliance's installation manual or reach out to our customer care, if more information is needed for flushing. Contact details are available on the rating plate of the appliance.

If a submersible then only 2 hose needed (H1 and	es will be	
L	H3	
Flushing Solution	Bucket H2	H1 Domestic Gas Water Supply Outlet

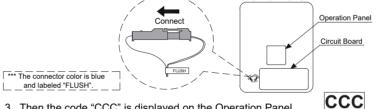
Electronic control unit NRCB199DV (GHQ-C3201WX-FF US) • NRCB180DV (GHQ-C2801WX-FF US) PV199DV (GHQ-C3201WX-FF PB US)





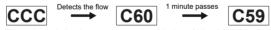
≪Procedure 2. Flushing the Heat Exchanger - For Single Unit≫ 1. Open the Front Cover.

2. Connect the blue connector*** marked "FLUSH" for flushing near the Circuit Board.



3. Then the code <u>"CCC"</u> is displayed on the Operation Panel.

When 1 minute passes, the code "C60" will change to "C59" on the Operation Panel.



lease check whether the reverse connection of the hose (H1) and (H3) if the display number will not change In that case, the flow rate of the flushing solution may be under 1.5 gallons per minute.

- 6. When 1 hour passes, the code "C00" is flashing on the Operation Panel. COO - Flashing Do not disconnect the blue connector marked "FLUSH" for flushing. 7. Turn off the circulating pump.
- ≪Procedure 3. Cleaning the Heat Exchanger≫
- The flushing solution needs to be rinsed and cleaned out of the Combi Boiler.
- Below is the way to rinse and clean the flushing solution.
- 1. Remove both drain hoses (H2 and H3) from the bucket. And then place the drain hose (H3) into the sink or outside to drain.
- 2. Close the drain valve (V3) and then open the Domestic Water Inlet valve (V1).
- Do not open the Domestic Water Outlet valve (V2).
- 3. Clean the Combi Boiler with fresh water for 3 minutes or more.
- (Needs to have enough time to clean the Combi Boiler.)
- 4. Close the drain valve (V4) and then remove the drain hose (H3) from the drain valve (V4).
- 5. Remove the drain hose (H1) from the drain valve (V3).
- 6. Disconnect the blue connector marked "FLUSH" for flushing.
- The code "C00" goes out on the Operation Panel.



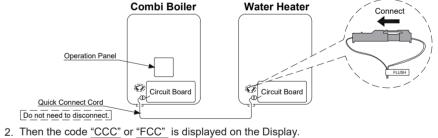
7. Close the Front Cover.

8. Open the gas supply valve and Domestic Water Outlet valve (V2). 9 Check for correct operation of the Combi Boiler.

In case of the "Quick Connect Multi System Procedure"

Note: Refer to the Water Heater's Parts List Sheet for the Water Heater's preparation of the flushing system. 1. Connect the blue connector marked "FLUSH" for unit needing to be flushed.

(The unit is isolated from Quick Connect Multi System when the blue connector marked "FLUSH" for flushing is connected. Not need to disconnect the Quick Connect Cord.)



CCC is displayed when the Combi Boiler's blue connector is connected.

FCC is displayed when the Water Heater's blue connector is connected.

- 3. Turn on the circulating pump to circulate the flushing solution through the units
- for 1 hour at a rate of 1.5 gallons per minute or more.
- 4. When 1 hour passes, the code "C00" is flashing on the Display. Do not disconnect the blue connector marked "FLUSH" for flushing.

	€ flow C60 —	C59 · ·	■ → - COO - Flashing
FCC	C60	C59 · ·	$\blacksquare \longrightarrow -\underbrace{\overbrace{C00}}_{/ }^{/ } - Flashing$
(Ex. : The display when	n the both units are flushed at th	ne same time.)	
Connect	$\boxed{\texttt{CCC}}^{\texttt{Detects the flow}} \xrightarrow{\texttt{C50}}$	-> Water Heater's ->	$FCC \xrightarrow{\text{Detects the flow}} C60 \xrightarrow{\text{1 hour passes}} - [C00]^{-1}$

- The remaining time of flushing gives indication priority to the connector which is connected later.
- 5. Turn off the circulation pump.
- 6. Rinse and clean the flushing solution out of the units in accordance with "Procedure 3". (See the "Step 1 - 5".)

Water Heater's NOTE Water Drain Plug	: For Water Heater, place a bucket under the unit to drain water from the "Water Drain Plug". Carefully unscrew the "Water Drain Plug" to rinse flushing solution out of the unit for about 10 seconds.
765	Then close the "Water Drain Plug".

- 7. Disconnect the blue connector marked "FLUSH" for flushing.
- The Code <u>"C00"</u> goes out on the Operation Panel.
- 8. Close the Front Covers.
- 9. Open the gas supply valves and water outlet valves.
- 10. Check for correct operation of the units.

Refer to appliance's installation manual or reach out to our customer care, if more information is needed for flushing. Contact details are available on the rating plate of the appliance.