

Installation Manual

NPE Condensing Water Heaters

Model

- NPE-180A
- NPE-210A
- NPE-240A
- NPE-150S
- NPE-180S
- NPE-210S
- NPE-240S



* Lead Free

Keep this manual near this water heater for future reference whenever maintenance or service is required.

* The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight.



WARNING

If the information in these instructions is not followed exactly, a fire or explosion may result, causing property damage, personal injury or death.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

What to do if you smell gas

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

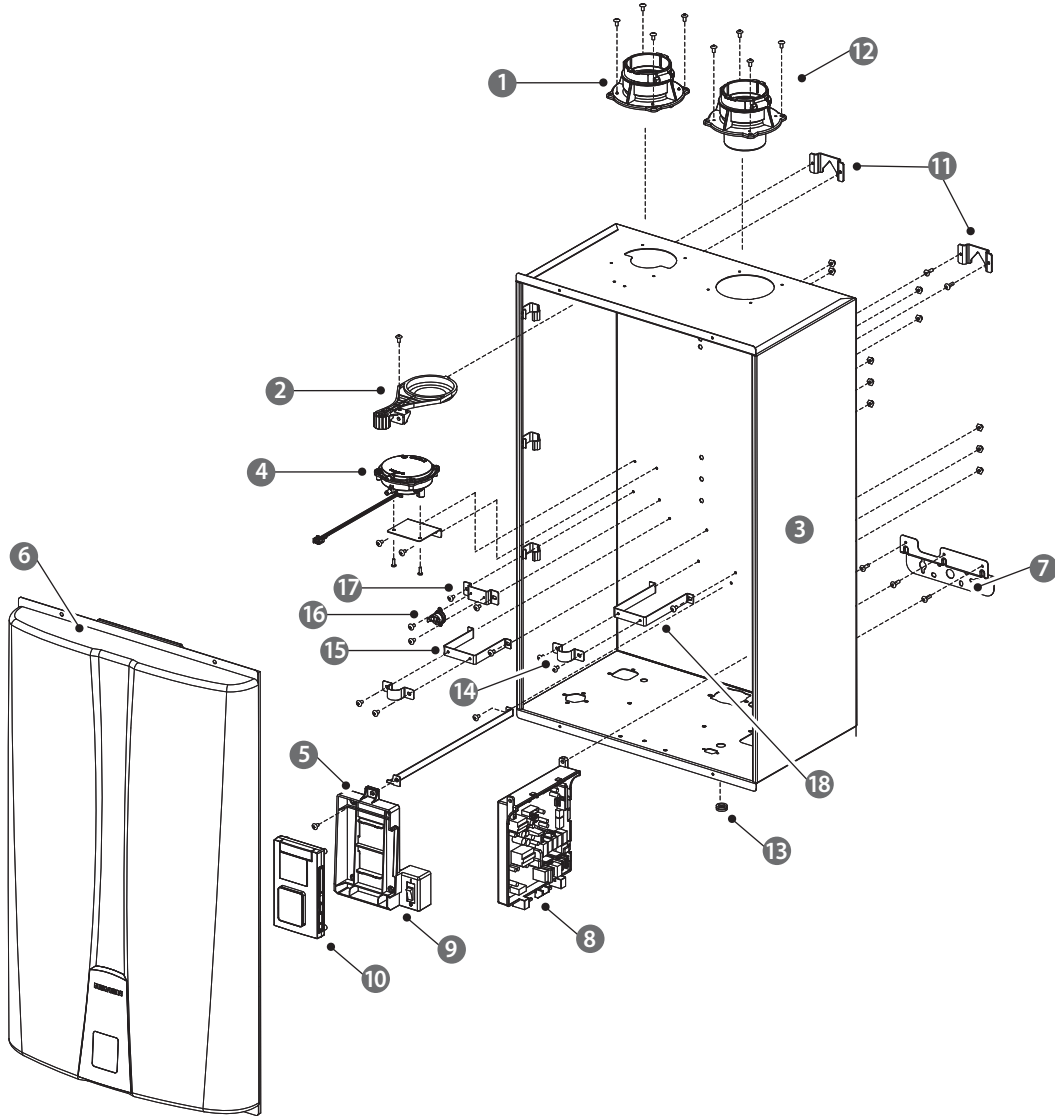
Installation and service must be performed by a qualified installer, service agency or the gas supplier.

The installation must conform with local codes or, in the absence of local codes, the National Fuel Gas Code, ANSI Z223.1/NFPA 54 and/or CSA B149.1, Natural Gas and Propane Installation Code.

When applicable, the installation must conform with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 and/or CAN/CSA Z240 MH Series, Mobile Homes.

6.5 Component Assembly Diagrams and Parts Lists

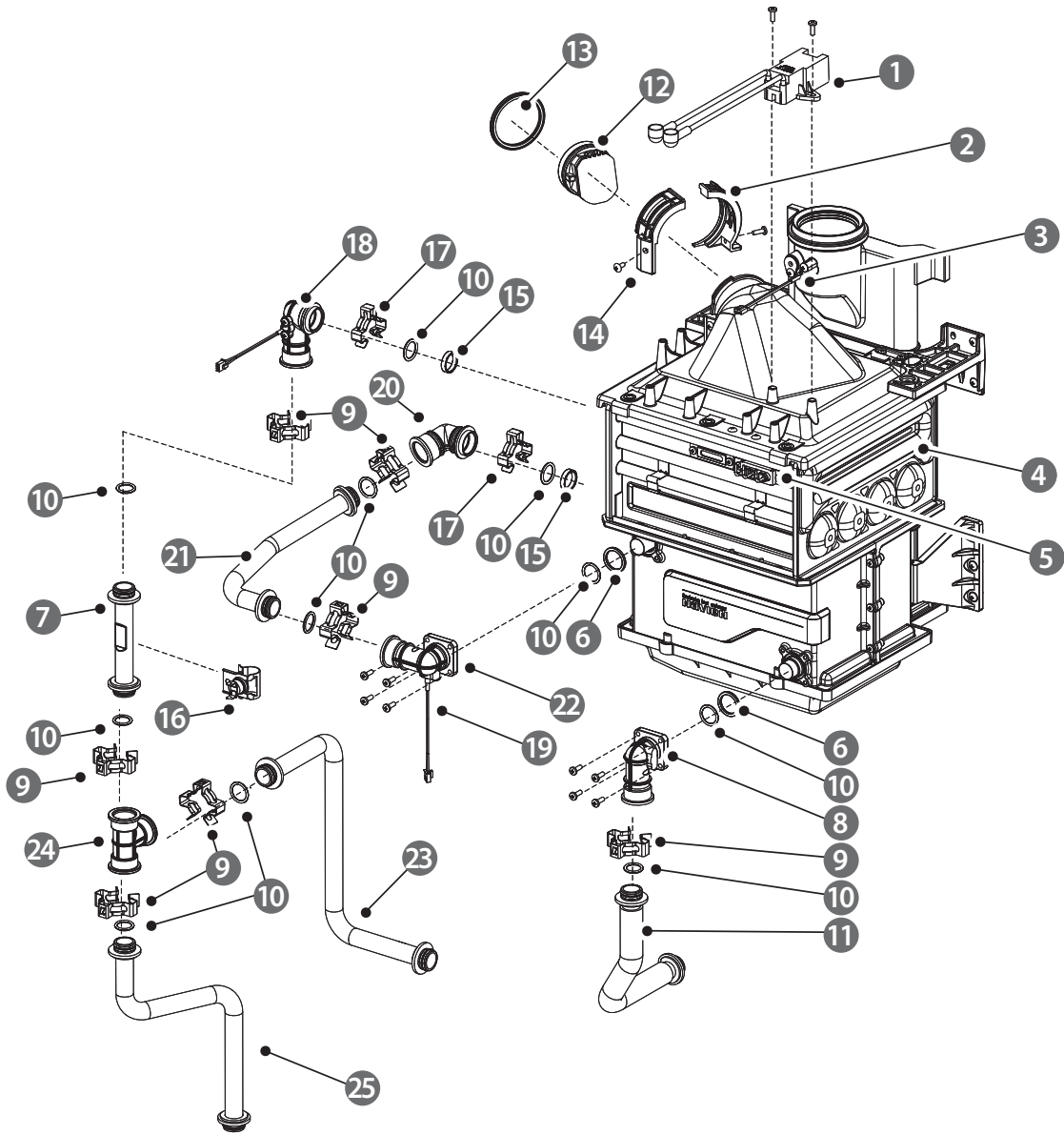
6.5.1 Case Assembly



#	Description	Part #	Remark
1	Intake Air Duct Assembly	30008662B	
2	Intake Air Filter	20007667A	
3	Case	20019078C	NPE-180A/210A/240A
		20026559B	NPE-150S/180S/210S/240S
4	Air Pressure Sensor	30010346A	
5	Panel Bracket	20018388A	
6	Cover	30008678B	NPE-180A/210A/240A
		30011694A	NPE-150S/180S/210S/240S
7	Case Lower Bracket	20007643B	
8	PCB	30011969A	
9	Power Switch	30009482A	
10	Front Panel	30008333A	
11	Case Bracket	20007609A	
12	Exhaust Pipe Assembly	30008673A	
13	Rubber Ring	20025127A	
14	Saddle	20013508A	NPE-150S/180S/210S/240S
15	Saddle Bracket 1	20026170A	NPE-150S/180S/210S/240S
16	Freeze Protector Sensor	30002587A	NPE-150S/180S/210S/240S
17	Freeze Protector Sensor Bracket	20007671A	NPE-150S/180S/210S/240S
18	Saddle Bracket 2	20026172A	NPE-150S/180S/210S/240S

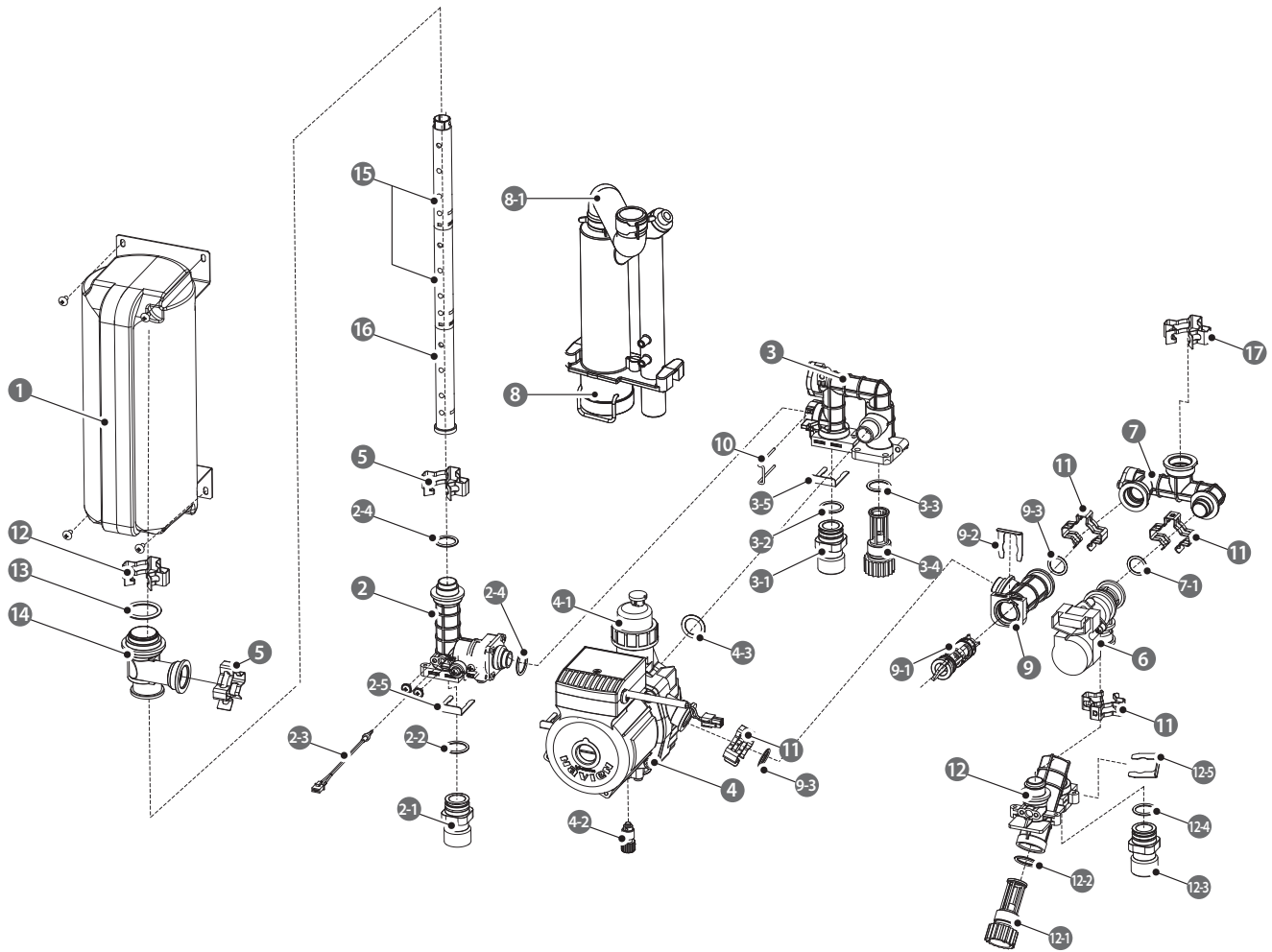
#	Description	Part #	Remark
1	Heat Exchanger Assembly	30009189A	NPE-180A
		30010812A	NPE-210A/240A
2	Fan Packing	20022744A	
3	Fan Bracket(F)	20022095A	
4	Flow Sensor Assembly	30008571A	
4-1	Thermistor	30008366A	
5	Fan Bracket(R)	20022096A	
6	Cold Inlet Pipe	30009166D	NPE-180A
		30010805D	NPE-210A/240A
6-1	O-Ring (Φ17.5x2.7t)	20006947A	
7	WPA-A (Clip)	20018344A	
7-1	Thermistor	30008366A	
8	WPA-B	20018343A	
9	H-Ex Middle Pipe	30009126A	NPE-180A
		30010803C	NPE-210A/240A
10	Hot Water Outlet Pipe	30009145A	NPE-180A
		30008442A	NPE-210A/240A
11	WPA-A (Screw)	30008569A	
11-1	Thermistor	30008366A	
12	Fastner	20017726A	
13	Ignition Transformer	30010455A	
14	Fastner	20007853A	
15	Ignitor	30008591A	
16	Damper	30008825A	
17	Buffer Tank Inlet Adapter	20018346A	
17-1	O-Ring (P16)	30009478A	
18	Thermistor	30009478A	

6.5.3 Burner Assembly(NPE-150S/180S/ 210S/ 240S)



#	Description	Part #	Remark
1	Ignition Transformer	30010455A	
2	Fan Bracket (R)	20022096A	
3	Thermistor	30009478A	Exhaust
4	Heat Exchanger Assembly	30214351A	NPE-150S
		30011706A	NPE-180S
		30011705A	NPE-210S/240S
5	Ignitor	30214183A	NPE-150S
		30012226A	NPE-180S/210S/240S
6	Packing (Φ26.5x2.4t)	20006868A	
7	Heat Exchanger Outlet Pipe	30014326A	NPE-150S
		30011519A	NPE-180S
		30011515A	NPE-210S/240S
8	WPA-C (Screw)	20026780A	
9	Fastner	20017726A	
10	O-Ring (Φ17.5x2.7t)	20006947A	
11	Cold Inlet Pipe	30214751A	NPE-150S
		30011521A	NPE-180S
		30011665A	NPE-210S/240S
12	Fan Damper	30008825A	
13	Fan Packing	20022744A	
14	Fan Bracket (F)	20022095A	
15	Backup Ring	20018744B	
16	High Limit Switch	30002577A	
17	Fastner	20007853A	
18	WPA-A (Clip)	20018344A	
19	Thermistor	30008366A	Water
		20033191A	NPE-150S
20	WPA-B	20018343A	NPE-180S/210S/240S
		30014330A	NPE-150S
21	H-Ex Middle Pipe	30009126A	NPE-180S
		30010803C	NPE-210S/240S
		30008569A	
22	WPA-A (Screw)	30014327A	NPE-150S
		30011518A	NPE-180S
		30011514A	NPE-210S/240S
23	Mixing Pipe	20025960A	
24	WPA-T	30014328A	NPE-150S
		30011520A	NPE-180S
		30011516A	NPE-210S/240S
25	Hot Water Outlet Pipe	30014328A	NPE-150S
		30011520A	NPE-180S
		30011516A	NPE-210S/240S

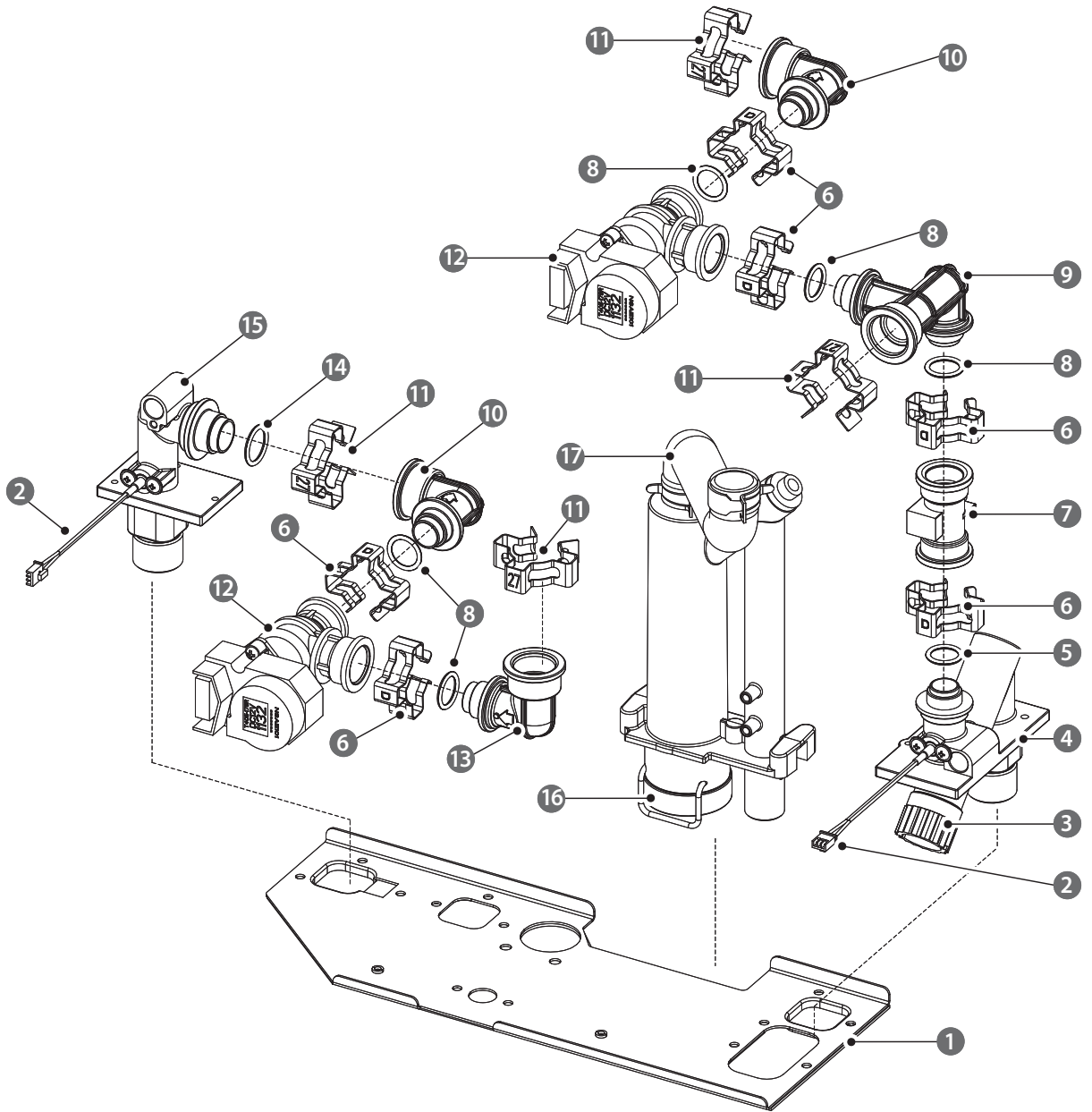
6.5.4 Waterway Assembly(NPE-180A/210A/240A)



#	Description	Part #	Remark
1	Buffer Tank	30010953A	
2	Hot Water Outlet Pipe Assembly	30008338A	
2-1	Pipe Adapter	30008349A	
2-2	O-RING (P20)	20017212A	
2-3	Thermistor (Red)	30008366A	
2-4	O-RING (P16)	20006947A	
2-5	Pipe Clip	20007733A	
3	Return Pipe Assembly	30008350A	
3-1	Pipe adapter	30008349A	

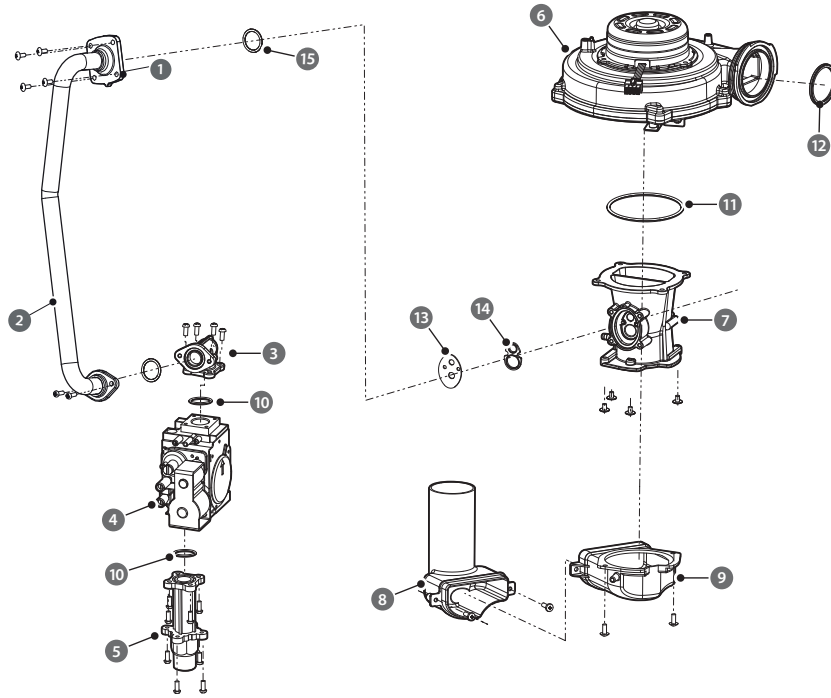
#	Description	Part #	Remark
3-2	O-RING (P20)	20017212A	
3-3	O-RING (P19)	20017211A	
3-4	Water Filter	30008351A	
3-5	Pipe Clip	20007733A	
4	Circulation Pump	30010780B	
4-1	Pump Air Separator	30006831A	
4-2	Drain Plug	30003550B	
4-3	O-RING (P18)	20006947A	
5	Fastner	20017726A	
6	Water adjustment valve (WAV)	30008245A	
7	WAV Outlet Pipe Assembly	30008624B	
7-1	O-Ring (P16)	20011438A	
8	Syphon	30009756B	
8-1	Syphon Hose	20018429A	
9	Pump Outlet Pipe Assembly	30008361A	
9-1	Check Valve	30008360A	
9-2	Pipe Clip	20017722A	
9-3	O-Ring (P16)	20017210A	
10	Return Pipe clip	20017767A	
11	Fastner	20007859A	
12	Cold Water Inlet Pipe Assembly	30009437A	
12-1	Water Filter	30008351A	
12-2	O-RING (P19)	20017211A	
12-3	Pipe adapter	30008349A	
12-4	O-RING (P20)	20017212A	
12-5	Pipe Clip	20007733A	
13	O-RING (P29)	20017923A	
14	Buffer Tank adapter	20017757A	
15	Buffer tank pipe A	20017759A	
16	Buffer tank pipe B	20017760A	
17	Fastner	20017724A	

6.5.5 Waterway Assembly(NPE-180S/ 210S/ 240S)

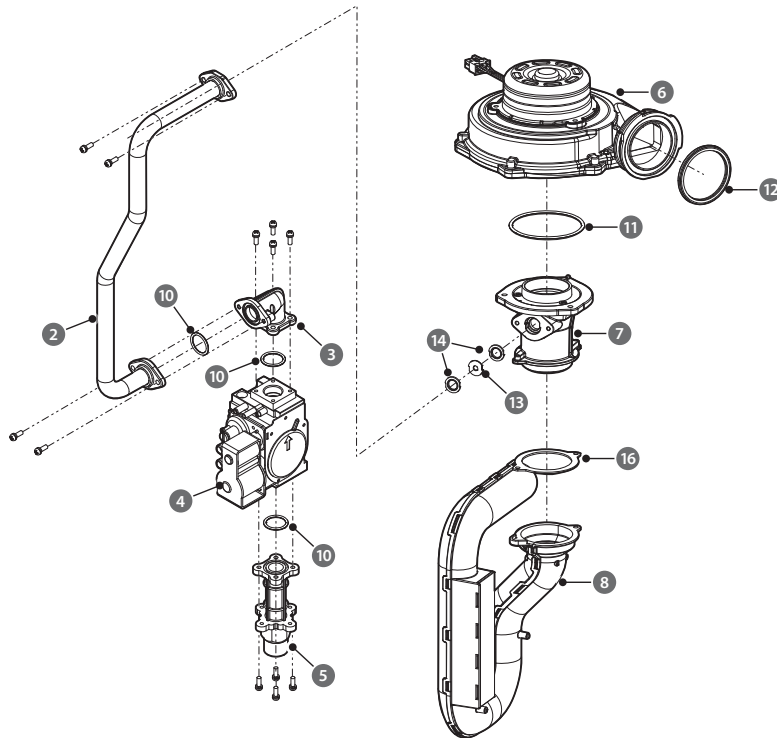


#	Description	Part #	Remark
1	Bracket	20026489A	
2	Thermistor	30008366A	
3	Water Filter	30008171A	
4	Cold Water Inlet Adapter	30011597A	
5	O-Ring (P15)	20017217A	
6	Fastner	20007859A	
7	Flow Sensor	30011534A	
8	O-Ring (P16)	20017210A	
9	Flow Sensor Outlet Adapter	20025959A	
10	Outlet Adapter	20025961A	
11	Fastner	20017726A	
12	Water Adjustment Valve (WAV)	30011532A	
13	Inlet Adapter	20025962A	
14	O-Ring (P18)	20006947A	
15	How Water Outlet Adapter	30011601A	
16	Siphon	30009756B	
17	Siphon Hose	20018429A	

6.5.6 Fan(Gas) Assembly



[NPE-180S/180A/210S/210A/240S/240A]



[NPE-150S]

#	Description	Part #	Remark
1	Gas Adapter	30009921A	NPE-180S/180A
		30009922A	NPE-210S/210A/240S/240A
2	Gas Pipe	30014329A	NPE-150S
		30013323A	NPE180S/180A
		30008431A	NPE-210S/210A/240S/240A
3	Gas Connector	20018430A	
4	Gas Valve	30008429A	
5	Gas Inlet Adapter	20023809A	
6	Fan Assembly	30015421A	NPE-150S
		30008834A	NPE-180S/180A/210S/210A/240S/240A
7	Single Venturi	30014688A	NPE-150S
	Dual Venturi	30009219A	NPE-180S/180A
		30008909A	NPE-210S/210A/240S/240A
8	Silence	30015322A	NPE-150S
		20019142A	NPE-180S/180A
		20023829A	NPE-210S/210A/240S/240A
9	Silence Adapter	20023861A	NPE-180S/180A
		20019141A	NPE-210S/210A/240S/240A
10	O-Ring (P20)	20006934A	
11	O-Ring (G70)	20007001A	NPE-150S
	O-Ring (G75)	20018079A	NPE-180S/180A/210S/210A/240S/240A
12	Fan Packing	20022744A	
13	Gas Orifice	20029420B	NPE-150S (NG)
		20034178A	NPE-150S (LP)
		20024159A	NPE-180S/180A (NG)
		20024190A	NPE-180S/180A (LP)
		20019144A	NPE-210S/210A/240S/240A (NG)
		20024189A	NPE-210S/210A/240S/240A (LP)
14	Venturi Packing	20030893A	NPE-150S
		20022660A	NPE-180S/180A/210S/210A/240S/240A
15	O-Ring (P34)	20019090A	NPE-180S/180A/210S/210A/240S/240A
16	Silence Packing	20032129A	NPE-150S