



Replacement parts

⚠ WARNING Replacement parts must be purchased through a local Weil-McLain distributor. When ordering, specify boiler model and size and include description and part number of replacement part. Results from using modified or other manufactured parts will not be covered by warranty and may damage boiler or impair operation.

NOTICE Weil-McLain part numbers are found in Weil-McLain Boilers and Controls Repair Parts Lists.

⚠ WARNING **The boiler contains ceramic fiber materials.** Use care when handling these materials per instructions on page 78 of this manual. Failure to comply could result in severe personal injury.

Reinstall boiler jacket front door after startup or servicing

⚠ WARNING Inspect boiler jacket front door gaskets and reinstall boiler jacket front door after start or servicing. The boiler front door must be securely fastened to the boiler to prevent boiler from drawing air from inside the boiler room. This is particularly important if the boiler is located in the same room as other appliances. Failure to keep the door securely fastened could result in severe personal injury or death.

Figure 85 Propane conversion kits

⚠ WARNING Propane conversion must follow the instructions in this manual. Refer to page 9 for details.

Natural to propane conversion kits — provided with boiler			
Sea level (up to 5,500 feet) and High altitude (over 5,500 feet)			
Model	Kit part #	Kit includes	Instructions
Ultra-550	383-600-074	550 LP Propane orifice Propane conversion label	See page 9
Ultra-750	383-600-075	750 LP Propane orifice 750 LP Blower orifice plate (2) blower orifice plate gaskets Propane conversion label	



Replacement parts *(continued)*

Figure 86 Miscellaneous parts and kits

Item	Description	Part Number for Ultra 550/750
1	Condensate neutralizer kit (up to 1000 MBH)	383-600-076
2	Heat exchanger cleaning tool	591-706-200
3	Pressure relief valve ASME 30 PSI, 3/4" NPT female ASME 50 PSI, 3/4" NPT female ASME 80 PSI, 3/4" NPT female	383-600-063 383-600-064 383-600-065
4	Bird screen (1 each required for vent and air pipe termination) 6-inch (for 6-inch vent or air pipe) 8-inch (for 8-inch vent or air pipe)	560-907-633 560-907-634
5	CHEMICALS Antifreeze, aluminum-safe, Sentinel X500 (5 liters) Corrosion inhibitor, Sentinel X100 (one tube, 275 ml) Inhibitor quick-test kit Cleaner, Sentinel X400 (one tube, 275 ml).	592-900-004 592-900-002 592-900-005 592-900-003
6	Annual maintenance kit (for Ultra-550 or Ultra-750) consisting of: (1) ignitor (2) washers for ignitor (2) blower connection gaskets (1) ignitor gasket (1) inhibitor test kit (1) length of silicone cord for cleanout (2) screws for ignitor (1) suppressor plate	383-600-079

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Replacement parts *(continued)*

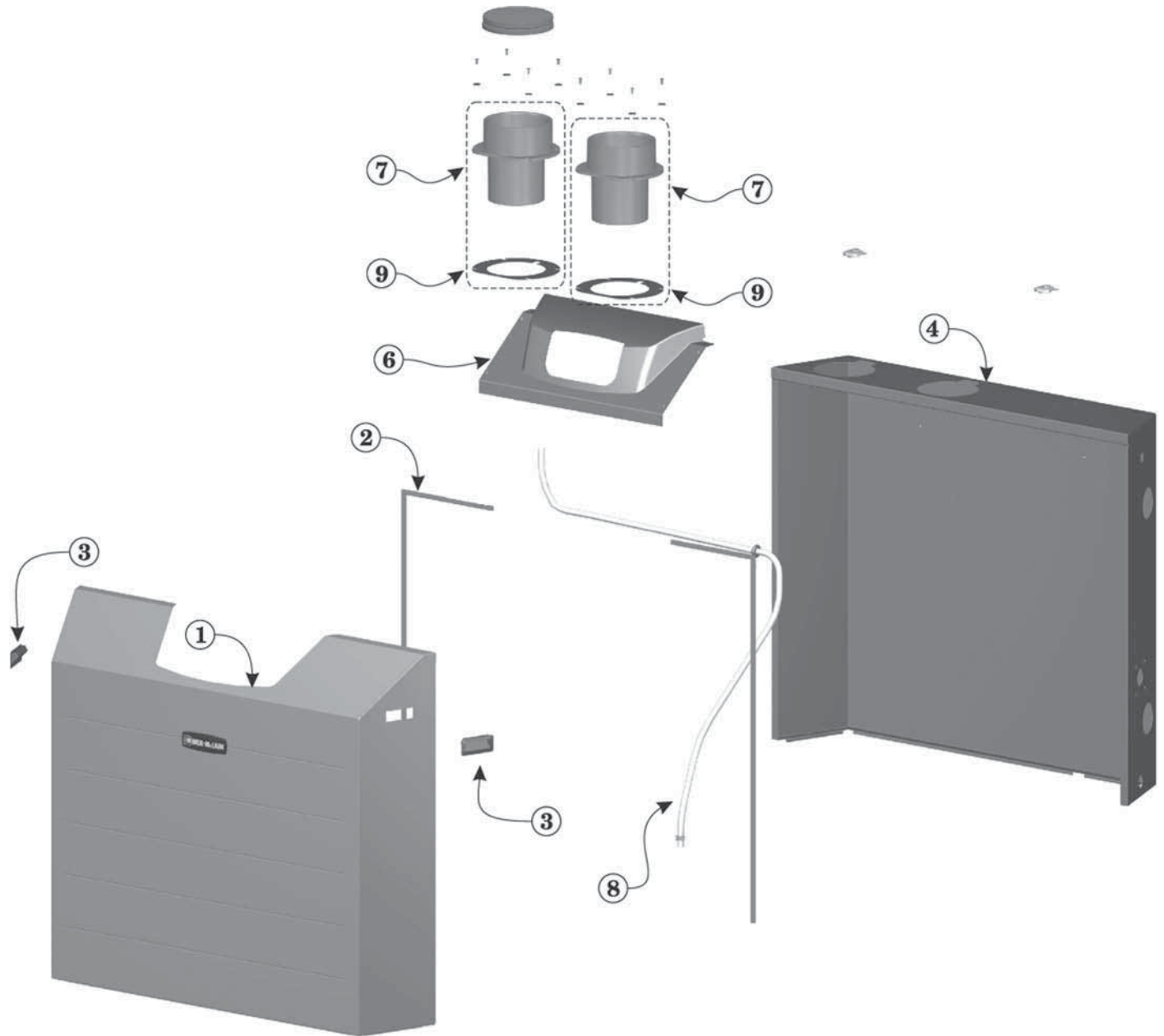
Figure 87 Jacket parts

Item	Description	Part Number for Ultra 550/750
1	Jacket front door	383-600-052
2	Door seal	383-600-022
3	Handle (2 required)	383-500-611
4	Back Jacket	383-600-050
5	Jacket seal kit (base seal, door seal, grommets and gaskets)	383-600-053
6	Plastic top cover (includes cover, gaskets and hardware)	383-600-054
7	Inlet/outlet adapter kit (includes adapter for flue or air, gasket, and hardware)	383-600-051
8	Flue pipe drain hose kit (includes hose from flue adapter to heat exchanger condensate outlet and hose clamp)	383-600-023
9	Flue pipe adapter gasket	590-300-016

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Replacement parts *(continued)*

Figure 88 Jacket parts



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Replacement parts *(continued)*

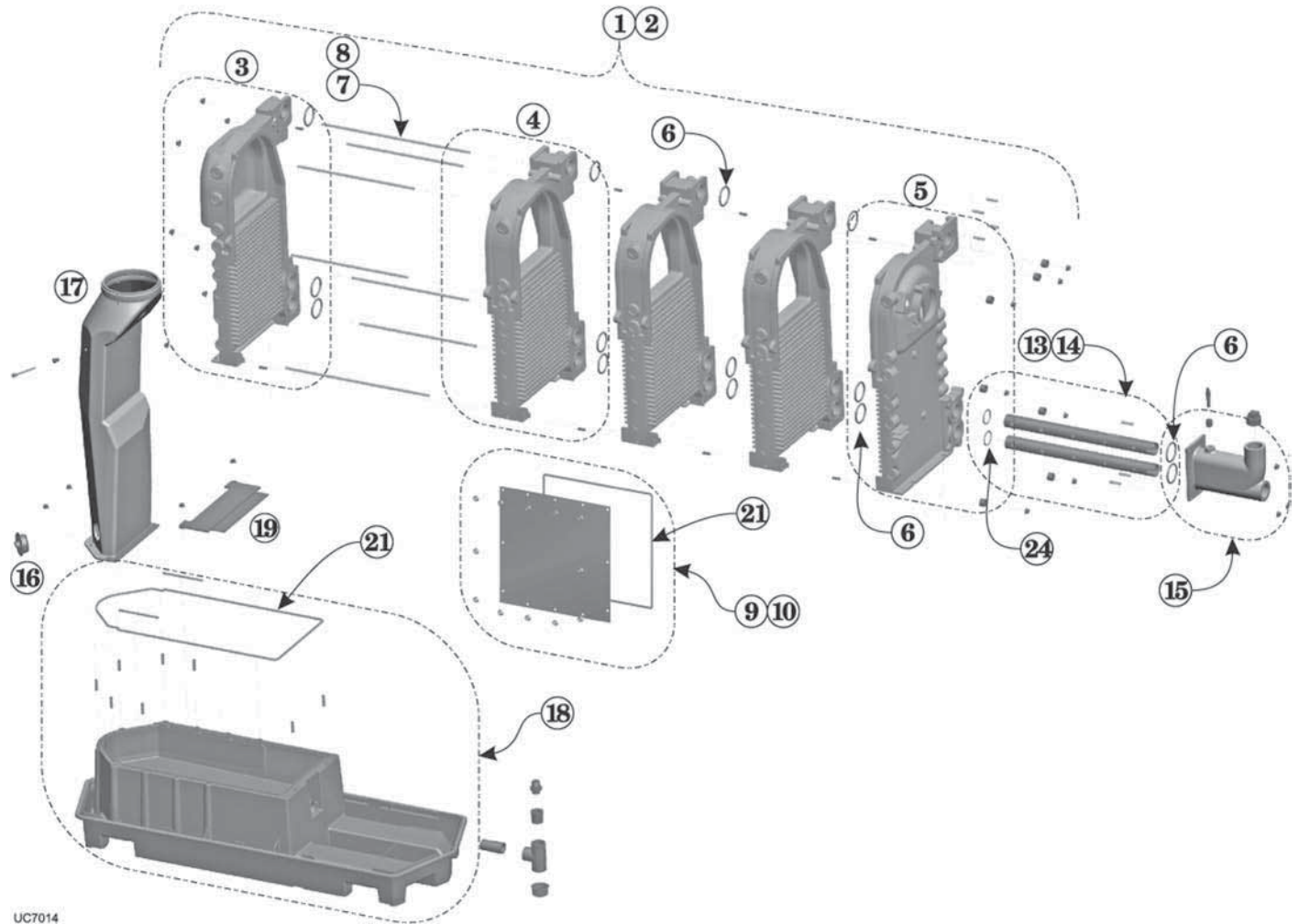
Figure 89 Heat exchanger

Item	Description	Boiler Models	Part Number
1	5 section heat exchanger assembly kit (includes sections, o-rings, sealing cord & hardware)	550	383-600-029
2	6 section heat exchanger assembly kit (includes sections, o-rings, sealing cord & hardware)	750	383-600-028
3	Left end section replacement kit (includes section, o-rings, sealing cord and hardware)	550 / 750	383-600-036
4	Intermediate section replacement kit (includes section, o-rings, sealing cord and hardware)	550 / 750	383-600-037
5	Right end section replacement kit (includes section, o-rings, sealing cord and hardware)	550 / 750	383-600-038
6	Section/manifold o-ring, 60-mm (single o-ring only)	550 / 750	590-318-039
7	5 section draw rod kit	550	560-134-510
8	6 section draw rod kit	750	560-134-511
9	5 section heat exchanger cover plate kit (includes plate, nuts, sealing cord and silicone RTV sealant)	550	383-600-040
10	6 section heat exchanger cover plate kit (includes plate, nuts, sealing cord and silicone RTV sealant)	750	383-600-041
11	5 section supply distribution tube kit (distribution tube, o-ring and nuts)	550	383-600-033
12	6 section supply distribution tube kit (distribution tube, o-ring and nuts)	750	383-600-032
13	5 section return distribution tube kit (distribution tube, o-rings and nuts)	550	383-600-031
14	6 section return distribution tube kit (distribution tube, o-rings and nuts)	750	383-600-030
15	Return manifold casting kit (includes manifold, o-ring and nuts)	550 / 750	383-600-034
16	Inspection plug	550 / 750	561-444-101
17	Aluminum flue pipe	550 / 750	383-600-025
18	Plastic base assembly kit (includes base, sealing cord, silicone RTV sealant and hardware)	550 / 750	383-600-026
19	Base cover plate (5-section only)	550 / 750	383-600-027
20	Base seal kit (base sealing gasket cord)	550 / 750	383-600-021
21	Red silicone cord kit (cover plate and base)	550 / 750	383-600-020
22	Tube of silicone RTV, high temperature, red	550 / 750	513-000-001
23	Tube of silicone RTV, high adhesive, black	550 / 750	513-000-000
24	Return distribution tube o-ring, 45 mm	550 / 750	590-318-040
25	Heat exchanger o-ring replacement kit (Not shown) [includes (18) 60-mm o-rings (Item 6); (2) 45-mm o-rings (Item 24); sealing cord; and silicone RTV sealant]	550 / 750	383-600-039

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Replacement parts *(continued)*

Figure 90 Heat exchanger



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Replacement parts *(continued)*

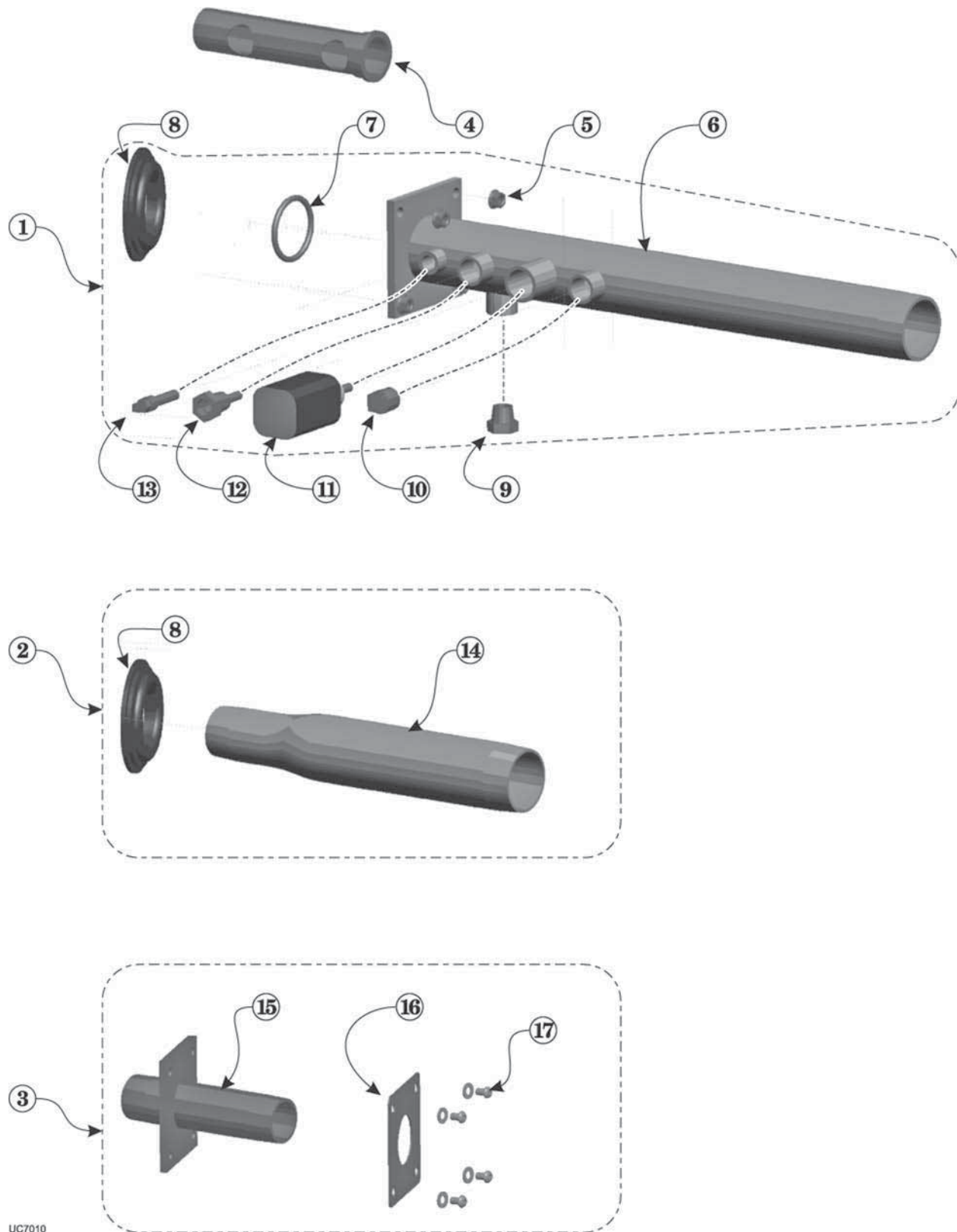
Figure 91 Piping

Item	Description	Boiler Models	Part Number
1	Supply manifold kit (Includes items 5 through 8 and 10 through 14)	550 / 750	383-600-055
2	Return pipe kit (includes items 9 and 14)	550 / 750	383-600-035
3	Inlet gas pipe kit (includes items 16, 17, and 18)	550 / 750	383-600-056
4	Supply distribution pipe	See Figure 90, page 101	
5	Serrated-flange nut, M8-1.25 (four required)	550 / 750	In Item 1
6	Supply distribution manifold, 2" NPT	550 / 750	In Item 1
7	Section/manifold o-ring, 60 mm (included in Item 1; also see Item 6, Figure 90, page 101)	550 / 750	590-318-039
8	Supply/return pipe grommet, 2" NPT x 3½" diameter (included in Item 1)	550 / 750	562-248-747
9	P/T gauge pressure sensor line check valve	550 / 750	383-500-275
10	Plug, ½" NPT	550 / 750	In Item 1
11	Low water cut-off	550 / 750	383-600-069
12	P/T gauge temperature sensor well	550 / 750	383-500-270
13	Supply temperature sensor	See Figure 96, page 107	
14	Return pipe, 2" NPT	550 / 750	In Item 2
15	Inlet gas pipe with flange	550 / 750	In Item 3
16	Inlet gas pipe gasket (included in Item 3)	550 / 750	590-300-017
17	Screws, 3/8-16 x ½", button head; washers, 3/8" SAE (4 of each required)	550 / 750	In Item 3



Replacement parts *(continued)*

Figure 92 Piping



UC7010



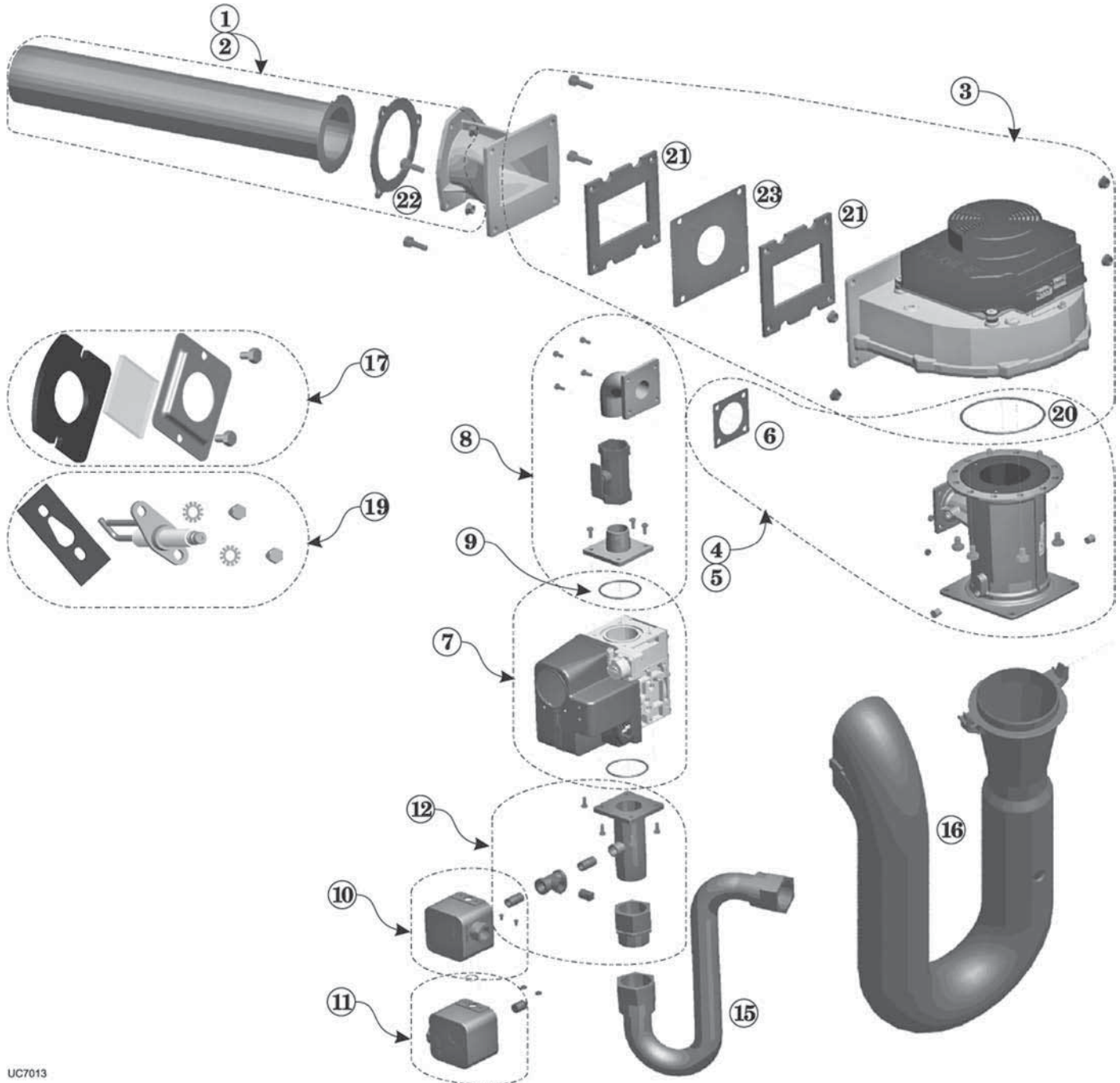
Replacement parts *(continued)*

Figure 93 Burner, blower, venturi and gas train

Item	Description	Part Number for Ultra 550/750
1	5 section burner replacement kit (includes burner, gasket and nuts)	383-600-044
2	6 section burner replacement kit (includes burner, gasket and nuts)	383-600-043
3	Blower assembly kit (includes blower, gasket, o-ring and hardware)	383-600-045
4	5 section venturi replacement kit (includes venturi, o-ring and gasket)	383-600-067
5	6 section venturi replacement kit (includes venturi, o-ring and gasket)	383-600-068
6	Venturi to gas pipe gasket	590-300-022
7	Gas valve replacement kit (includes gas valve only)	383-600-066
8	Gas valve to venturi piping kit (includes piping, gasket, o-ring and hardware)	383-600-046
9	O-Ring, gas valve to adapter pipe	590-318-042
10	High gas pressure switch replacement kit (includes switch and nipple)	383-600-048
11	Low gas pressure switch replacement kit (includes switch and nipple)	383-600-049
12	Gas pressure switch piping	383-600-047
13	Gas pressure switch harness (not shown)	383-600-059
14	Gas valve harness (not shown)	591-391-960
15	Flexible gas line	560-900-021
16	Air silencer	560-900-020
17	Inspection glass kit (includes retainer, glass, gasket and screws)	383-500-020
18	Ignition cable kit (not shown)	383-500-619
19	Ignition electrode kit (includes ignitor, gasket and hardware)	383-600-070
20	Venturi-to-blower o-ring (included in item 4 and item 5)	590-318-041
21	Blower outlet gasket (included in item 3)	590-300-018
22	Burner gasket (included in item 1 and item 2)	590-300-011
23	Blower orifice plate for Ultra-550 (used for both natural gas and propane)	383-600-078
	Blower orifice plate for Ultra-750 (used only on Ultra-750 propane)	See propane conversion kit (Figure 85, page 96)

Replacement parts *(continued)*

Figure 94 Burner, blower, venturi and gas train



UC7013



Replacement parts *(continued)*

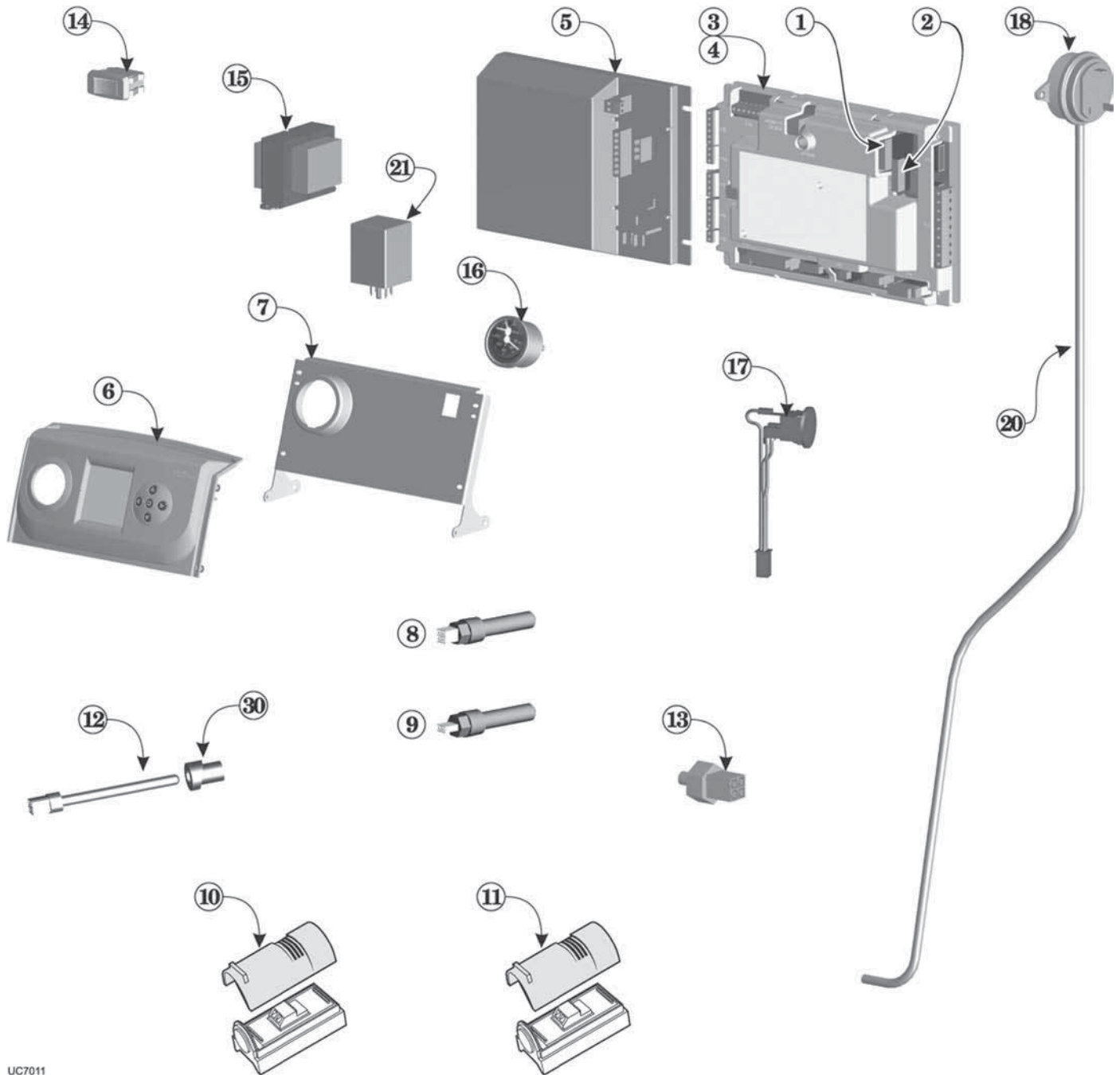
Figure 95 Controls

Item	Description	Part Number for Ultra 550/750
1	3-amp, fast-blow ATO (5 fuses)	383-500-603
2	12-amp, slow-blow AG (5 fuses)	383 500 604
3	CSD1 U-control module	383-600-062
4	NON-CSD1 U-control module	383-500-658
5	Expansion module	383-600-060
6	Display board assembly	383-500-659
7	Display bracket kit	383-600-042
8	Supply temperature sensor replacement kit, dual sensor (sensor only)	383-600-072
9	Return temperature sensor replacement kit, single sensor (sensor and bushing)	383-600-071
10	Outdoor temperature sensor	510-312-218
11	System temperature sensors	383-500-601
12	Flue Temperature sensor replacement kit (sensor and grommet)	383-500-600
13	Heat exchanger temperature sensor	383-500-602
14	On/off power switch	383-500-205
15	Transformer, 120v/24v	383-500-628
16	Pressure/temperature gauge assembly	570-218-054
17	120 volt, 3-wire receptacle, pre-wired	591-391-959
18	Air pressure switch kit (includes switch, tube and mounting screws)	383-600-073
19	Hose barb for air pressure switch sensing tube connection (not shown)	562-302-525
20	Air pressure switch sensing tube (included in item 18)	In Item 18
21	Blower power relay	570-350-230
22	Ultra U-control terminal block kit (not shown)	383-500-642
23	Display to U-control wire harness, RS485 (not shown)	383-500-633
24	Expansion module to display harness (not shown)	591-391-961
25	Upper line voltage wire harness (EP2, EP4, power input and blower relay) (not shown)	383-600-057
26	Low line voltage wire harness (not shown)	591-391-958
27	Upper low voltage wire harness (not shown)	383-600-058
28	Lower low voltage wire harness (P4 through P9 and other) (not shown)	591-391-956
29	Jumper for low voltage terminal blocks (5 jumpers) (not shown)	383-500-641
30	Flue temperature sensor gasket	590-318-011

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Replacement parts *(continued)*

Figure 96 Controls

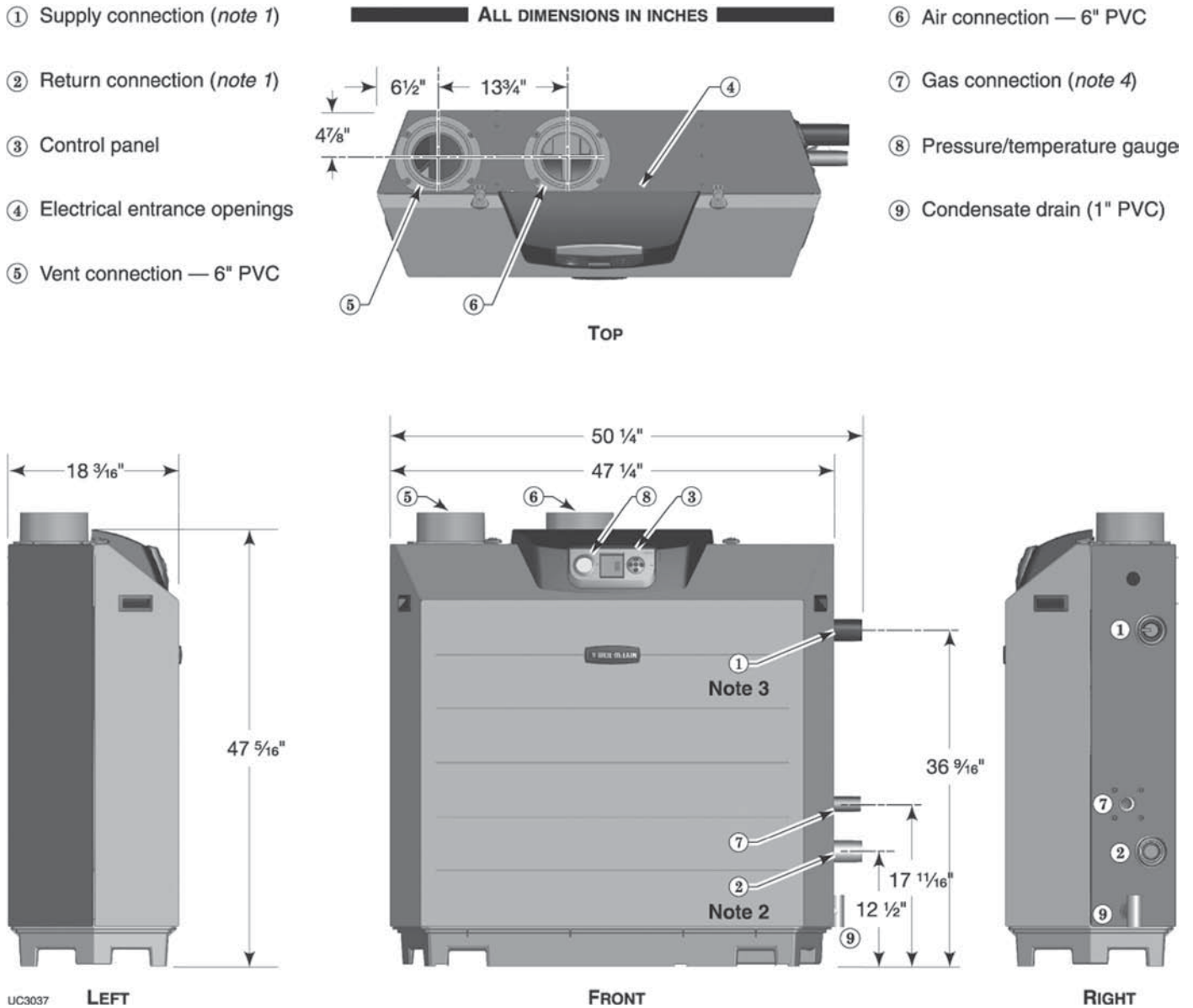


UC7011



Dimensions

Figure 97 Dimensional data



UC3037

Notes	
1	Boiler supply and return connections are both 2" NPT.
2	Circulator must be mounted in the return piping.
3	Relief valve is shipped loose. See page 13 for mounting details. Relief valve mounts on supply pipe off of supply tee as shown.
4	Boiler gas connection, 1/4" NPT.