



Replacement parts

⚠ WARNING DO NOT SERVICE THE BOILER WITHOUT A Evergreen® MAINTENANCE KIT AVAILABLE

The Evergreen® maintenance kit includes components that may have to be replaced when accessing or disassembling parts of the boiler. Failure to replace damaged components and to use only the parts specifically intended for the boiler can result in severe personal injury, death or substantial property damage. See [Figure 111, page 117](#) for part number.

REPLACEMENT PART NUMBERS

Weil-McLain part numbers are found in this manual and in *Weil-McLain Boilers and Controls Repair Parts Lists*.

WHEN OPERATING THE BOILER ON PROPANE GAS

⚠ WARNING ALL Evergreen® boilers must be converted in order to operate with propane gas.

Figure 110 Propane conversion kits

Boiler model	Kit part number	Installation instructions
EVG 220	540-202-849	See page 12
EVG 299/300	540-202-841	See page 12
EVG 399	540-202-842	See page 12

⚠ WARNING Failure to adhere to these guidelines can result in severe personal injury, death or substantial property damage.

OBTAIN PARTS ONLY THROUGH WEIL-McLAIN

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.

THE BOILER CONTAINS CERAMIC FIBER MATERIALS

The boiler contains ceramic fiber materials. Use care when handling these materials per instructions on [page 94](#) of this manual. Failure to comply could result in severe personal injury.

REINSTALL JACKET DOOR

Inspect boiler jacket door gaskets and reinstall boiler jacket front door after start or servicing. The boiler 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.

BEFORE SERVICING or MAKING CONNECTIONS —

ALWAYS TURN POWER OFF TO THE BOILER TO PREVENT ELECTRICAL SURGES, WHICH CAN DAMAGE BOILER COMPONENTS.

LABEL WIRES BEFORE REMOVING

⚠ CAUTION Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.



Replacement parts *(continued)*

Figure 111 Miscellaneous parts and kits

Description	Part Number	Description	Part Number
Antifreeze, Sentinel X500 (1 gal)	592-900-029	Sidewall separate pipes vent/air termination kits (includes two cover plates) Kit for 3" or 4" PVC vent and air pipes	383-500-100
Antifreeze, Sentinel X500 (5 gal)	592-900-006		
Corrosion inhibitor, Sentinel X100	592-900-002		
Sentinel X100 Quick Test Kit.	592-900-005		
Cleaner, Sentinel X400	592-900-003		
Evergreen® Inspection kit — igniter gasket, flame sense gasket, burner gasket, burner access cover seal, and hardware	383-900-097	PVC concentric vent kit — horizontal or vertical (includes components for concentric assembly) Kit for 3" PVC vent and air pipes. Kit for 4" PVC vent and air pipes.	383-500-350 383-900-075
Evergreen® 220 maintenance kit — flame sense rod, flame sense gasket, igniter, igniter gasket, venturi gasket, cover plate gasket, venturi-gas valve o-ring, refractory, silicone, inhibitor test kit, burner access cover seal, and hardware	383-900-071	IPEX PVC concentric vent kit — available from IPEX Kit for 3" PVC vent and air pipes. Kit for 4" PVC vent and air pipes.	196006(L=20") 196106(L=32") 196116(L=44") 196021
Evergreen® 299/300 maintenance kit — flame sense rod, flame sense gasket, igniter, igniter gasket, venturi gasket, cover plate gasket, venturi-gas valve o-ring, refractory, silicone, inhibitor test kit, burner access cover seal, and hardware	383-900-072	Bird screens (2 required) For 3" PVC vent and air pipes For 4" PVC vent and air pipes	383-500-105 383-500-110
Evergreen® 399 maintenance kit — flame sense rod, flame sense gasket, igniter, igniter gasket, venturi gasket, cover plate gasket, venturi-gas valve o-ring, refractory, silicone, inhibitor test kit, burner access cover seal, and hardware	383-900-088	M&G Simpson-Duravent PolyPro VERTICAL concentric vent/air kit; — available from vent manufacturer 3" polypropylene pipe (Black) (Terra Cotta) 4" polypropylene pipe (Black) (Terra Cotta)	3PPS-VKL 3PPS-VK-TCL 4PPS-VKL 4PPS-VK-TCL
Wall-mount kit — wall mount bracket and hardware	383-900-074	PP Appliance Adapters; — available from vent manufacturer 4" M&G Simpson-Duravent 4" Centrotherm INNOFLUE.	4PPS-04PVC-4PPF ISAAL040Y
Condensate drain tube - EVG 220 Condensate drain tube - EVG 299/300/399	560-907-767 560-907-768	Centrotherm INNOFLUE VERTICAL concentric vent/air kit; — available from vent manufacturer 3" polypropylene pipe 4" polypropylene pipe	ICRT3539 ICRT4679
Low water cut-off w/test button, Kit	383-500-643	System Immersion Temperature Sensor (2 required)	511-724-299
Relief Valve (80 psi) and P&T Gauge Kit	383-900-082	Protonode Conversion Kit –Bacnet	383-600-322
Condensate neutralizer kit	383-500-631		
Direct Exhaust Kit (Includes mounting plates for intake and exhaust for inside and outside, vent screen 3 & 4 Inch, Template vent/air termination hole, and mounting hardware)	383-500-769		
Weil-McLain sidewall vent/air cap termination kit for PVC vent and air pipes (Includes W-M sidewall vent/air termination cap, inside and outside cover plates, and mounting hardware) (EVG 220) – 3" Kit (EVG 220, 299, 300 & 399) – 4" Kit	383-500-397 383-500-398		

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Replacement parts *(continued)*

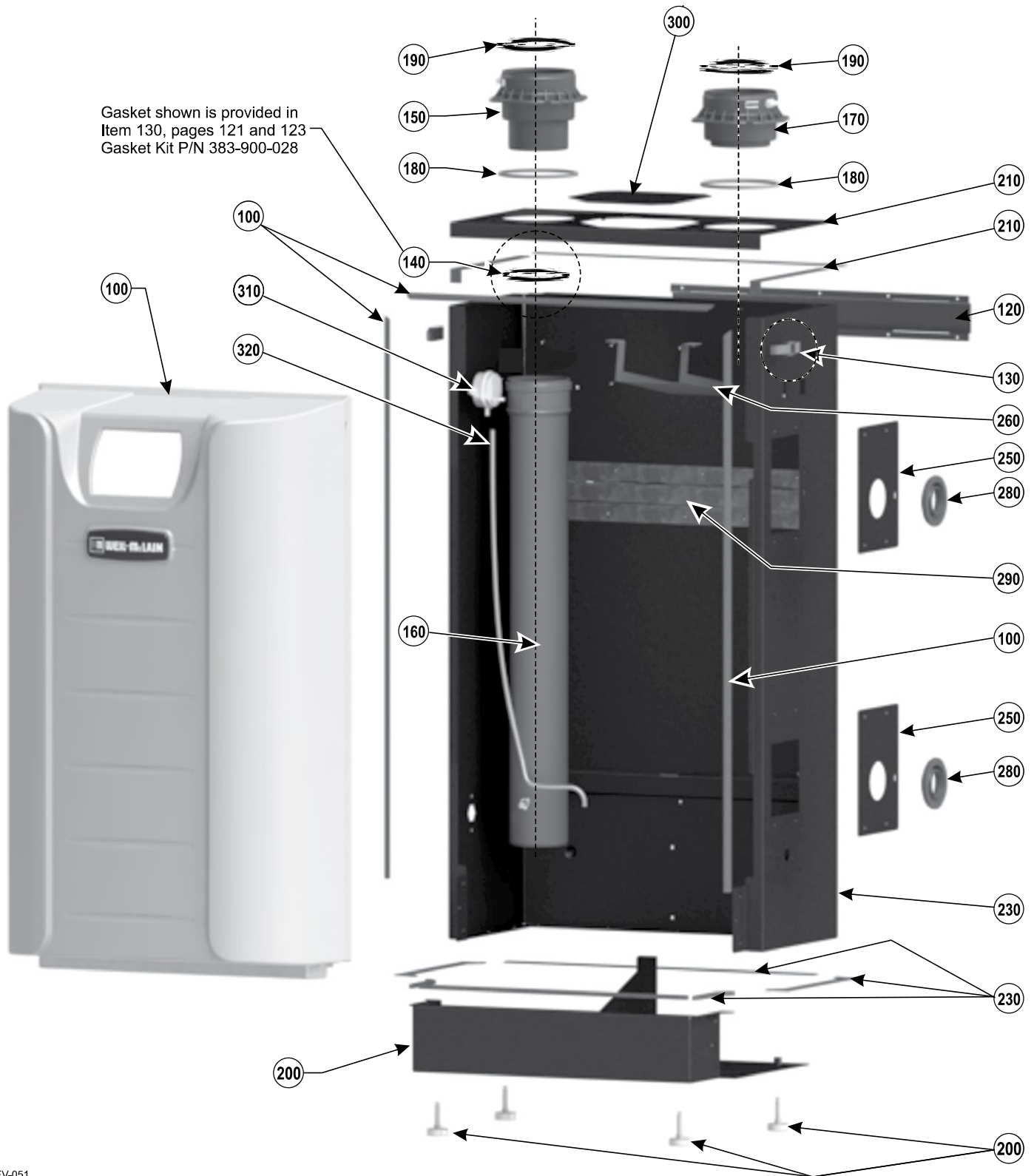
Figure 112 Jacket parts — Evergreen[®] 220/299/300/399 (see Figure 113, page 119 for illustration)

Item	Name	Description / contents	Part Number
100	Front door	(Includes W-M badge and door gaskets)	383-900-171
120	Wall-mount bracket (jacket side)	(Includes screws)	383-900-086
130	Door latch (2 required)	(Includes rivets)	383-700-122
140	Gasket kit	(Includes flue pipe gaskets and condensate dish gasket)	See P.120 for 220 see P.122 for 299/300/399
150	Flue pipe adapter	Top flue adapter with internal gasket	383-900-014
160	Boiler flue pipe	Internal flue pipe and gasket	383-900-015
170	Air inlet adapter	Top air inlet adapter with internal gasket	383-900-013
180	Gasket - pipe adapter to cabinet	Gasket - flue adapter to cabinet	383-900-058
190	Gasket - pipe adapter to system pipe	Gasket fits inner diameter of top adapter	590-318-106
200	Jacket panel bottom	(Includes bottom gasket, leveling legs and screws)	383-900-042
210	Jacket panel top	(Includes top gasket and screws)	383-900-043
230	Jacket panel back	(Includes brackets, gaskets, door latches and screws)	383-900-044
250	Bracket piping (2 required)	(Includes screws)	383-900-085
260	Air baffle	(Includes screws)	383-900-084
280	Grommet sealing (2 required)	Sealing water pipes to cabinet	562-248-762
290	Bracket mounting heat exchanger	(Includes screws)	383-900-087
300	Panel - burner access	(Includes hardware)	383-900-041
310	Pressure switch	Set point 3.25 W.C.	383-900-080
320	Tube - pressure switch		590-300-056



Replacement parts *(continued)*

Figure 113 Jacket assembly — Evergreen[®] 220/299/300/399 (see Figure 112, page 118 for part numbers)



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Replacement parts *(continued)*

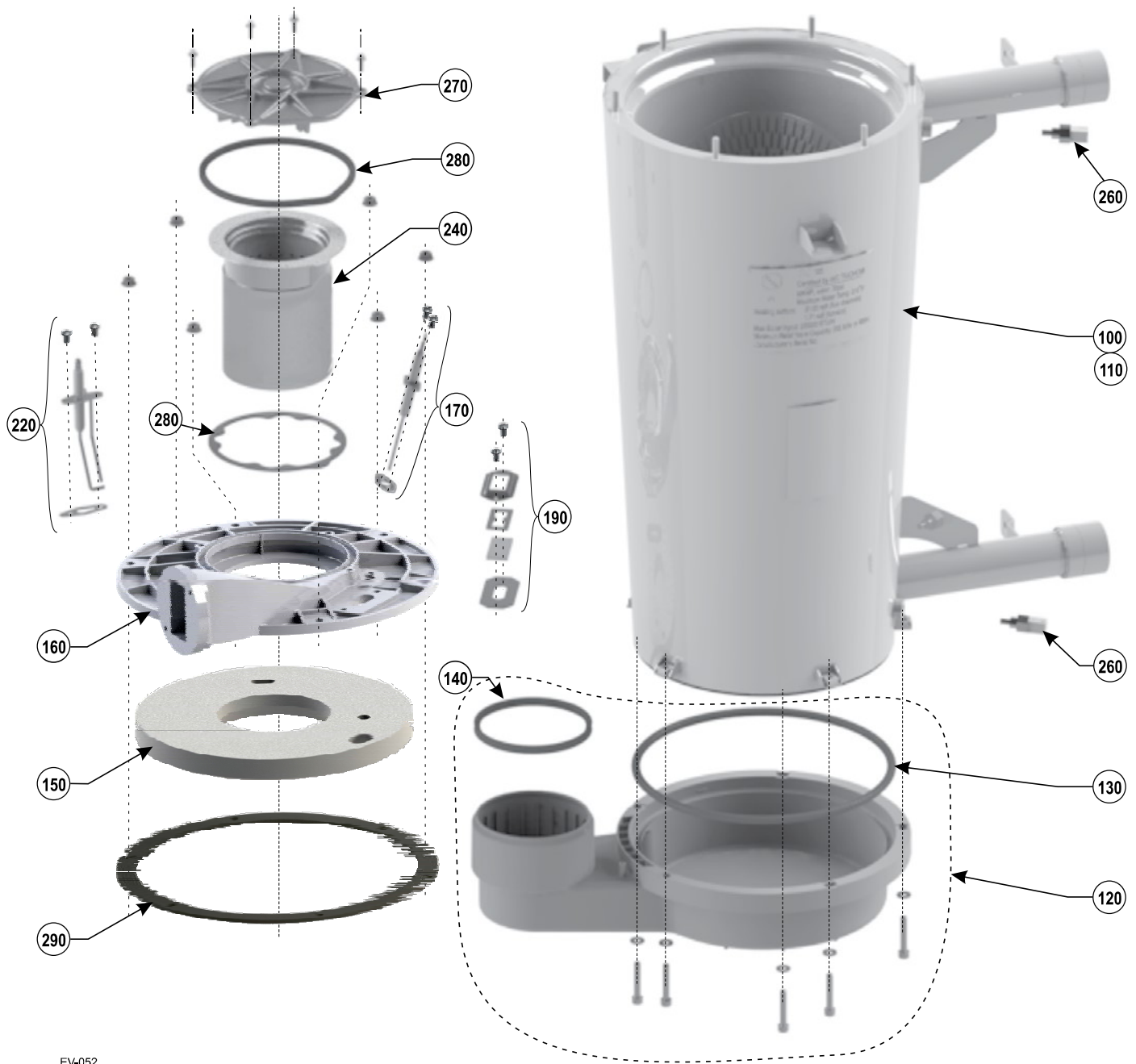
Figure 114 Heat exchanger parts Evergreen[®] 220 (see [Figure 115, page 121](#) for illustration)

Item	Name	Description / contents	Part Number
100	Heat exchanger, gaskets and hardware	(Includes items 130 and 150)	383-900-025
110	Heat exchanger, condensate dish, cover plate, burner, igniter, sight glass, refractory, water sensors, gaskets, silicone, and hardware	(Includes items 120 through 280)	383-900-069
120	Condensate dish, gaskets, and hardware	(Includes item 130)	383-900-012
130	Gasket to seal heat exchanger to condensate dish	(Includes flue pipe gaskets)	383-900-028
150	Refractory insulation & silicone sealant, igniter gasket, flame rod gasket and burner gasket		383-900-032
160	Heat exchanger cover plate, refractory, silicone, gaskets and hardware	(Includes items 150, 190, and 270)	383-900-016
170	Flame sense rod kit	(Includes flame sense rod, gasket and screws)	383-900-094
190	Sight glass kit	(Includes bracket, glass, gaskets, and hardware)	383-900-099
220	Igniter kit	(Includes igniter, gasket and screws)	383-900-033
240	Burner kit	(Includes item 280, burner, gaskets and screws)	383-900-022
260	Heat exchanger water temperature sensor (2 required)	(One sensor for either boiler inlet or outlet water temperature)	511-724-296
270	Burner access cover, seal and hardware	(Includes item 280)	383-900-019
280	Burner access cover seal, burner gasket and hardware		383-900-010



Replacement parts *(continued)*

Figure 115 Evergreen[®] 220 heat exchanger assembly (see Figure 114, page 120 for part numbers)



EV-052



Replacement parts *(continued)*

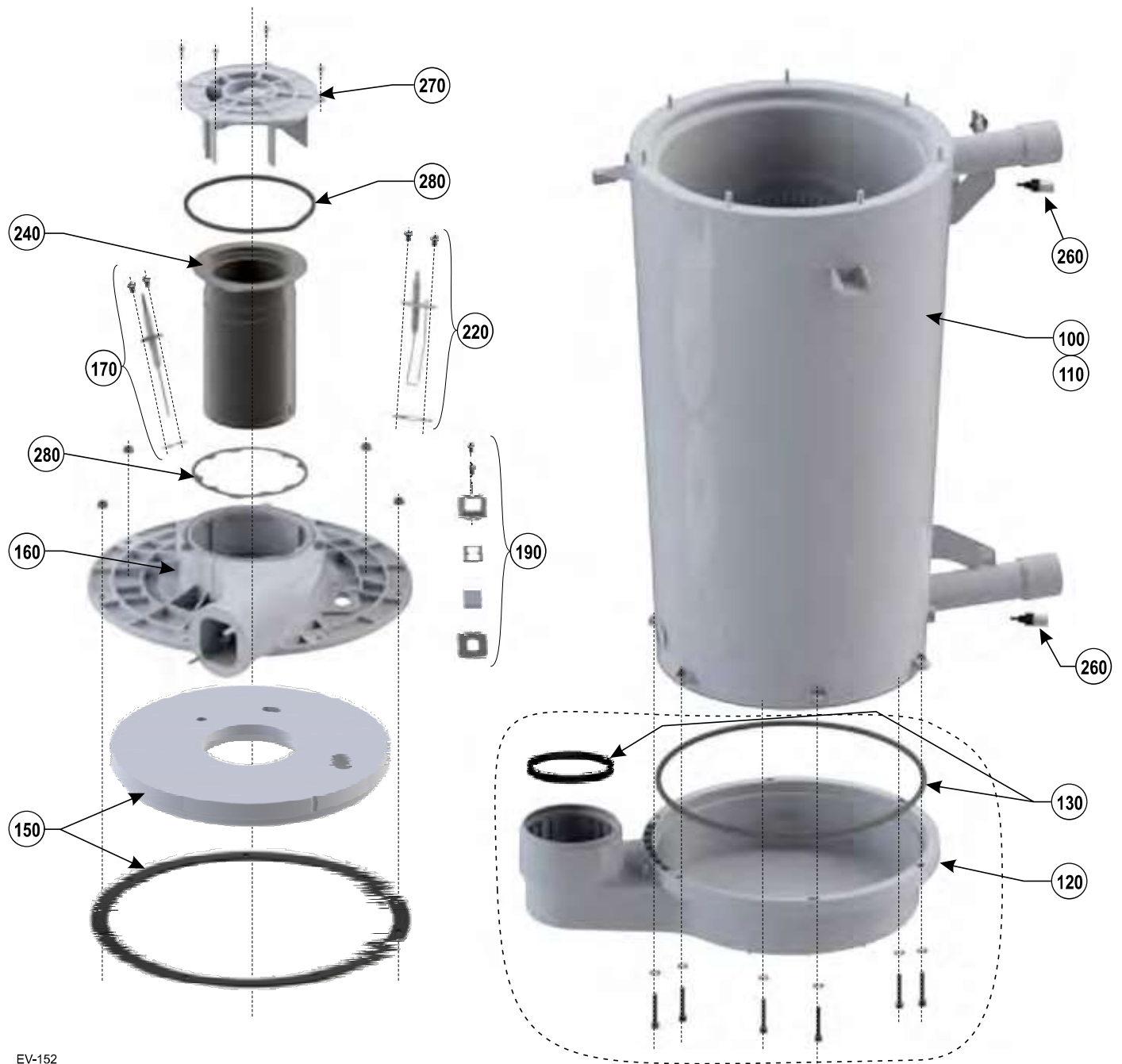
Figure 116 Heat exchanger parts Evergreen® 299/300/399 (see [Figure 117](#), [page 123](#) for illustration)

Item	Name	Description / contents	Part Number	Model 299/300	Model 399
100	Heat exchanger, gaskets and hardware	(Includes items 130, and 150)	383-900-024	●	—
			383-900-023	—	●
110	Heat exchanger, condensate dish, cover plate, burner, igniter, sight glass, refractory, water sensors, gaskets, silicone, and hardware	(Includes items 120 through 280)	383-900-068	●	—
			383-900-067	—	●
120	Condensate dish, gaskets, and hardware	(Includes item 130)	383-900-011	●	●
130	Gasket to seal heat exchanger to condensate dish	(Includes flue pipe gaskets)	383-900-030	●	●
150	Refractory insulation & silicone sealant, igniter gasket, flame rod gasket and burner gasket		383-900-031	●	—
			383-900-096	—	●
160	Heat exchanger cover plate, refractory, silicone, gaskets, and hardware	(Includes items 150, 190, and 270)	383-900-017	●	—
			383-900-095	—	●
170	Flame sense rod kit	(Includes flame sense rod, gasket and screws)	383-900-094	●	●
190	Sight glass kit	(Includes bracket, glass, gaskets, and hardware)	383-900-099	●	●
220	Igniter kit	(Includes igniter, gasket and screws)	383-900-033	●	●
240	Burner kit	(Includes item 280, burner, gaskets and screws)	383-900-021	●	—
			383-900-020	—	●
260	Heat exchanger water temperature sensor (2 Required)	(one sensor for either boiler inlet or outlet water temperature)	511-724-296	●	●
270	Burner access cover, gaskets and hardware	(Includes item 280)	383-900-018	●	●
280	Burner access cover seal, burner gasket and hardware		383-900-010	●	●



Replacement parts *(continued)*

Figure 117 Evergreen® 299/300/399 heat exchanger assembly (see Figure 116, page 122 for part numbers)



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Replacement parts *(continued)*

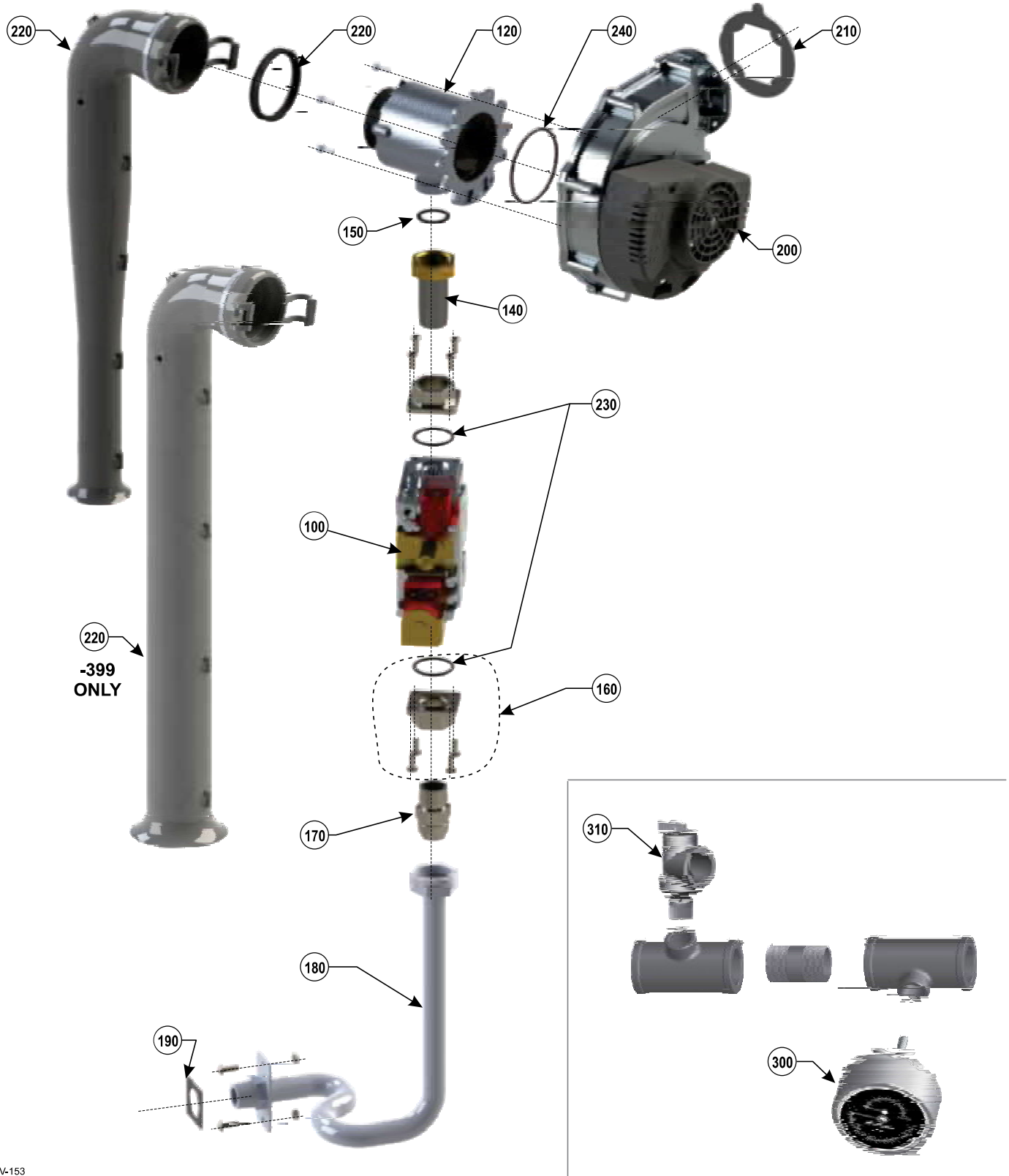
Figure 118 Piping components for Evergreen[®] 220/299/300/399 (see Figure 119, page 125 for illustration)

Item	Name	Description / contents	Part Number	Model 220	Model 299/300	Model 399	
100	Gas valve	Gas valve, gasket, and o-ring	383-900-027	●	●	—	
			383-900-061	—	—	●	
120	Venturi	Natural gas (Includes 150 and 240)	383-900-054	●	—	—	
			383-900-055	—	●	—	
			383-900-056	—	—	●	
		Liquefied Petroleum (Propane) Gas (Includes 150 and 240)	540-202-849	●	—	—	
			540-202-841	—	●	—	
			540-202-842	—	—	●	
140	Adapter gas pipe 3/4" NPT	Gas pipe adapter between gas valve and venturi	562-302-584	●	●	●	
150	Gas pipe gasket	For sealing between adapter and venturi	562-248-765	●	●	●	
160	Gas valve adapter block	Threaded block, o-ring and screws (2 required)	383-900-026	●	●	●	
170	Gas flex line adapter	Connection between gas valve and gas line	562-302-583	●	●	●	
180	Gas line	Gas line between gas valve and cabinet	560-907-766	●	●	●	
190	Gas line gasket	Gas line seal to cabinet	590-318-085	●	●	●	
200	Blower	Blower	Complete Blower	383-900-039	●	●	●
210	Blower gasket	Blower to cover plate seal	383-900-036	●	●	●	
220	Inlet air silencer	Silencer with gasket	383-900-034	●	●	—	
			383-900-035	—	—	●	
230	O-ring -gas valve	(2 required per assembly)	590-318-043	●	●	●	
240	O-ring -blower	O-ring between blower and venturi	590-318-102	●	●	●	
300	Pressure & temperature gauge	Shipped loose for field installation	380-000-000	●	●	●	
310	Relief valve	30 PSIG relief valve — shipped loose for field installation	383-500-095	●	●	—	
			383-900-076	—	—	●	
320	Condensate drain trap	(not shown)	540-131-075	●	—	—	
			540-131-076	—	●	●	



Replacement parts *(continued)*

Figure 119 Piping components for Evergreen[®] 220/299/300/399 (see Figure 118, page 124 for part numbers)



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Replacement parts *(continued)*

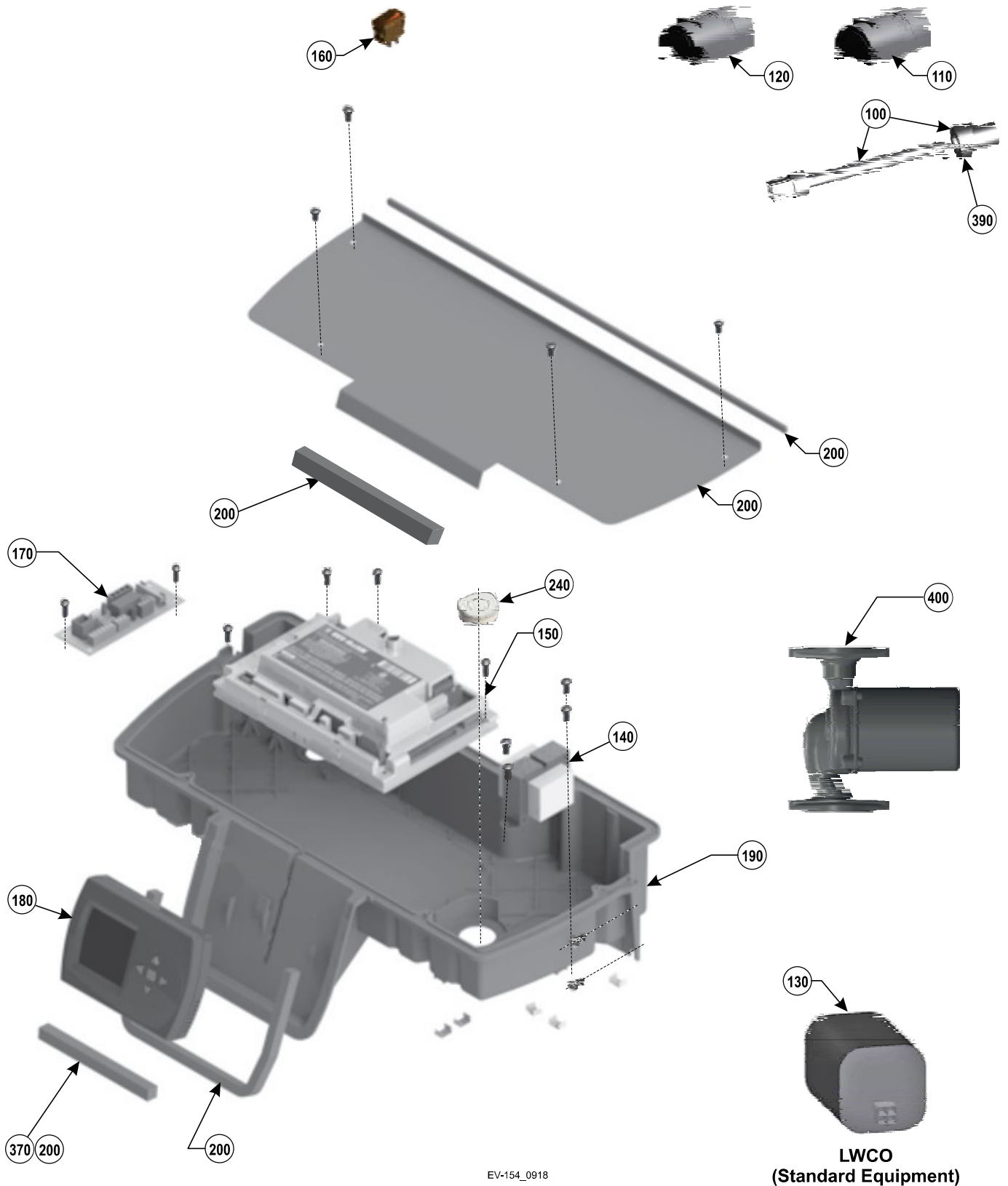
Figure 120 Controls & electrical components — Evergreen® 220/299/300/399 (see Figure 121, page 127 for illustration)

Item	Name	Description / contents	Part Number
100	Flue temperature sensor	One sensor with gasket	383-500-600
110	Outdoor temperature sensor	One sensor	510-312-218
120	System temperature sensor	(2 required)	383-500-601
130	Low water cutoff	Low water cutoff	383-500-643
140	Transformer 120v/24v	50-60 Hertz transformer	511-802-011
150	Control assembly	Ignition control module	381-330-020
160	On/off power switch	20 Amp rated	511-624-645
170	Comm circuit board		383-900-089
180	Display board assembly	(Includes circuit board, communication cable and plastic housing)	383-900-078
190	Control tray	Plastic electrical enclosure (Includes gaskets and hardware)	383-900-079
200	Cover	(Includes gaskets and hardware)	383-900-029
240	Inspection window plug		591-491-217
250	F1 - 3 amp 120VDC, fast blow ato (not shown here — see Figure 97, page 103)	5 Fuses (used for boiler circulator)	383-900-081
260	F2 - 3 amp 32VDC, fast blow ato (not shown here — see Figure 98, page 103)	5 Fuses (used for low voltage circuit)	383-500-603
270	F3 - 12 amp 250 Volt, fast-blow ag (not shown here — see Figure 98, page 103)	5 Fuses (used for line voltage circuit)	383-500-604
280	Wire harness — High voltage	Wire harness (not shown)	591-392-007
290	Wire harness — Low voltage	Wire harness (not shown)	591-392-008
300	Wire harness — Communication Ethernet	Wire harness (not shown)	591-392-009
310	Wire harness — Low voltage Comm. board	Wire harness (not shown)	591-392-010
320	Wire harness — Blower	Wire harness (not shown)	591-392-011
330	Wire harness — Control/display comm.	Wire harness (not shown)	383-500-633
340	Wire harness — with receptacle and safety cap	Wire harness (not shown)	383-500-638
350	Ignition cable	Ignition cable (not shown)	591-392-012
360	Terminal block kit	Includes 1 high voltage terminal block, low voltage terminal blocks and screwdriver (not shown)	383-900-083
370	Gasket - display support		590-318-107
380	Cover ground terminal kit	(not shown)	383-900-098
390	Gasket - flue temperature sensor		590-318-011
400	Circulator Evergreen 220/299/300 Circulator Evergreen 399	Taco Pump 0014 Taco Pump 0013	511-405-133 511-405-140



Replacement parts *(continued)*

Figure 121 Controls & electrical assemblies — Evergreen[®] 220/299/300/399 (see Figure 120, page 126 for part numbers)



EV-154_0918

LWCO
(Standard Equipment)