



Replacement parts

⚠WARNING DO NOT SERVICE THE BOILER WITHOUT A WM97+ MAINTENANCE KIT AVAILABLE

The WM97+ 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 123, page 119 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 WM97+ boilers must be converted in order to operate with propane gas.

Figure 122 Propane conversion kits and instructions

Boiler model	Kit part #	Kit location	Installation instructions
WM97+70	540-202-834	Shipped loose with boiler	See page 14
WM97+110	540-202-835	Shipped loose with boiler	See page 14
WM97+155	540-202-836	Shipped loose with boiler	See page 14

⚠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 96 of this manual. Failure to comply could result in severe personal injury.

REINSTALL JACKET DOOR

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.

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

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

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Replacement parts *(continued)*

Figure 123 Miscellaneous parts and kits

Item	Description	Part Number	Item	Description	Part Number
CHEMICALS					
100	Antifreeze, Sentinel X500	592-900-004	170	Sidewall separate pipes vent/air termination kits (includes two cover plates)	
	Corrosion inhibitor, Sentinel X100	592-900-002		Kit for 2" PVC vent and air pipes	383-700-171
	Sentinel X100 Quick Test Kit	592-900-005		Kit for 3" PVC vent and air pipes	383-500-100
	Cleaner, Sentinel X400	592-900-003		Kit for 3" AL29-4C SS vent pipe and PVC air pipe.	383-700-172
BOILER ACCESSORIES					
110	WM97+70/110 maintenance kit — igniter, igniter gasket, venturi gasket, cover plate gasket, venturi-gas valve o-ring, refractory, silicone, inhibitor test kit, clips	383-700-165	180	PVC concentric vent kit — horizontal or vertical (includes components for concentric assembly)	
	WM97+155 maintenance kit — igniter, igniter gasket, venturi gasket, cover plate gasket, venturi-gas valve o-ring, refractory, silicone, inhibitor test kit, clips	383-700-200		Kit for 2" PVC vent and air pipes	383-700-167
				Kit for 3" PVC vent and air pipes	383-500-350
120	Wall-mount kit (supplied with boiler) — wall mount bracket and hardware	383-700-118	190	Bird screens	
130	Condensate trap kit (supplied with boiler) — condensate trap assembly and flexible line	560-907-722		For 2" PVC vent and air pipes	560-907-728
CONDENSATE HANDLING ACCESSORIES					
140	Condensate neutralizer kit	383-500-631	VENT/AIR PARTS AND KITS (POLYPROPYLENE PIPE) available from M&G Simpson-Duravent ONLY		
VENT/AIR PARTS AND KITS (PVC or STAINLESS STEEL) available from Weil-McLain					
150	Weil-McLain sidewall vent/air cap termination kit for PVC vent and air pipes	383-500-397	200	M&G Simpson-Duravent PolyPro SIDEWALL concentric vent/air kit (color: white)	
	Includes W-M sidewall vent/air termination cap, inside and outside cover plates, and mounting hardware; openings are sized for 3" PVC pipe (requires field-installed 3 x 2 adapter if using 2" vent/air pipes)			2" polypropylene pipe	24PPS-HK
				3" polypropylene pipe	35PPS-HK
160	Weil-McLain sidewall vent/air cap termination kit for AL29-4C vent pipe and PVC air pipe	382-200-430	210	M&G Simpson-Duravent PolyPro VERTICAL concentric vent/air kit; color = black (VK suffix) or terra cotta (TC suffix)	
	Includes W-M sidewall vent/air termination cap, inside and outside cover plates, and mounting hardware; openings are sized for 3" PVC pipe (requires field-installed 3 x 2 adapter if using 2" vent/air pipes)			2" polypropylene pipe	24PPS-VK
				3" polypropylene pipe	35PPS-VK
			220	M&G Simpson-Duravent PolyPro SIDEWALL separate air and vent pipes	
				2" polypropylene pipe	2PPS-HTP
				3" polypropylene pipe	3PPS-HTP
VENT/AIR PARTS AND KITS (POLYPROPYLENE PIPE) available from Centrotherm Eco Systems ONLY					
230	Weil-McLain sidewall vent/air cap termination kit for AL29-4C vent pipe and PVC air pipe	382-200-430	240	Centrotherm INNOFLUE SIDEWALL concentric vent/air kit	
				3" polypropylene pipe	ICWT3452
				2" stainless steel pipe	ICWS2413
				3" stainless steel pipe	ICWS3513
				Centrotherm INNOFLUE VERTICAL concentric vent/air kit	
				2" polypropylene pipe	ICRT2439
				3" polypropylene pipe	ICRT3539

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Replacement parts *(continued)*

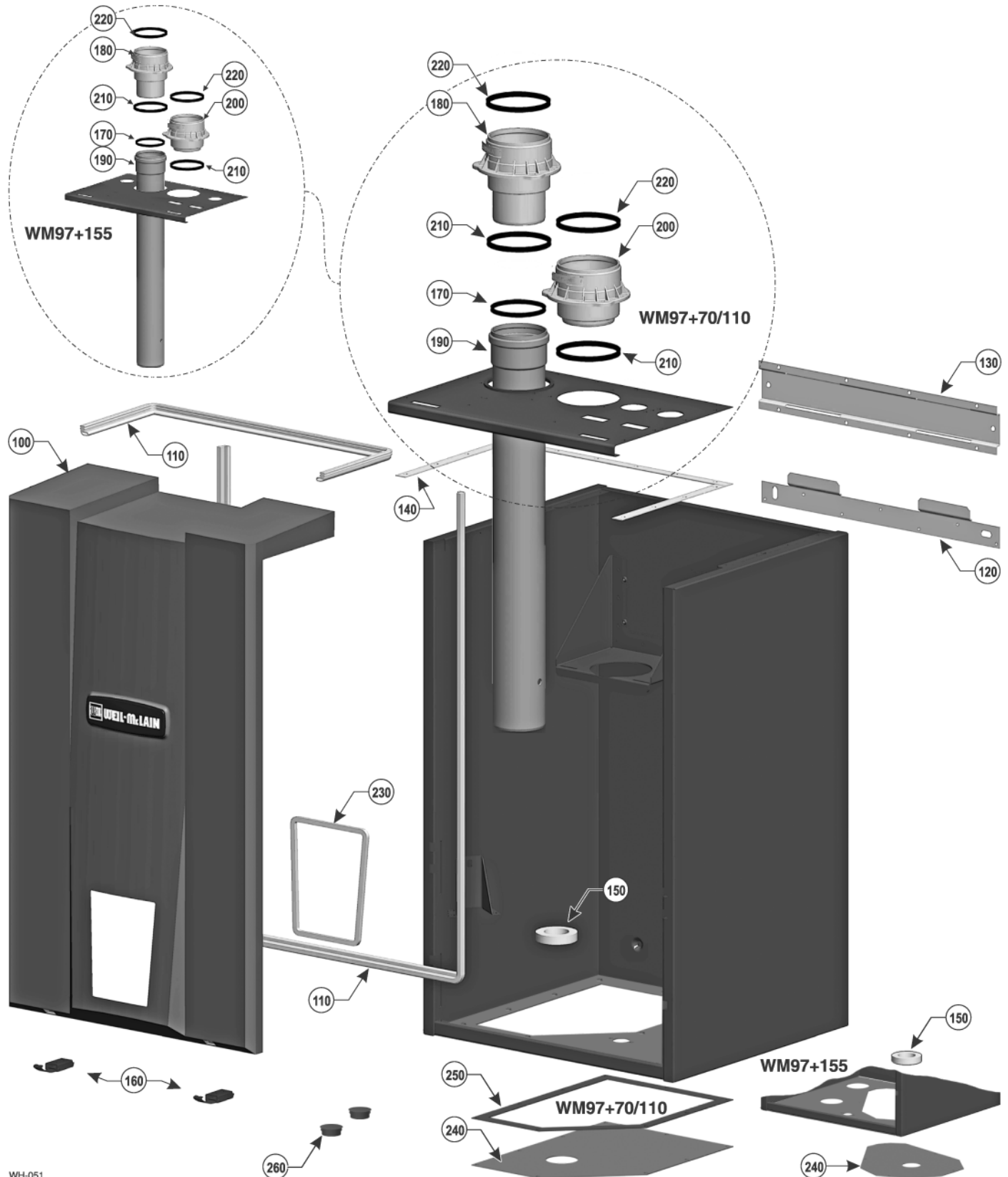
Figure 124 Jacket parts — **WM97+70/110/155** (see Figure 125, page 121 for illustration)

Item	Name	Description / contents	Part Number	
			70 / 110	155
100	Front door	Front door, seals, logo, and labels	383-700-116	383-700-116
110	Front door to jacket seals	Seals for front door to jacket	383-700-117	383-700-117
120	Wall-mount bracket (wall side)	Bracket and hardware	383-700-118	383-700-118
130	Wall-mount bracket (boiler side)	Bracket and hardware	383-700-119	383-700-119
140	Gaskets - upper panel to cabinet	Gaskets - top panel to cabinet (riveted top)	383-700-120	N/A
		Gaskets - top panel to cabinet (screwed top)	383-700-188	383-700-188
150	Gasket - heat exchanger to bottom panel	Gasket - condensate trap to bottom panel	383-700-121	383-700-121
160	Door latch	Latch and hardware	383-700-122	383-700-122
170	Gasket internal flue pipe to adapter	Gasket fits inner diameter of boiler flue pipe	590-318-051	590-318-051
180	Flue pipe adapter	Top flue adapter with internal gasket	560-907-719	560-907-719
190	Boiler flue pipe	Internal flue pipe and gasket	560-907-720	560-907-720
200	Air inlet adapter	Top air inlet adapter with internal gasket	560-907-718	560-907-718
210	Gasket - pipe adapter to cabinet	Gasket - flue adapter to cabinet	590-300-031	590-300-031
220	Gasket - pipe adapter to system pipe	Gasket fits inner diameter of top adapter	590-318-052	590-318-052
230	Front door to display seal	One seal (attached to control housing)	590-300-028	590-300-028
240	Jacket bottom access panel kit	Jacket access panel, gasket (item 250) and screws	383-700-204	383-700-201
250	Bottom access panel gasket	Gasket only	590-318-059	N/A
260	CWH wire harness opening plugs (not shown)	One plug	561-444-190	561-444-190



Replacement parts *(continued)*

Figure 125 Jacket assembly — **WM97+70/110/155** (see Figure 124, page 120 for part numbers)



WH-051

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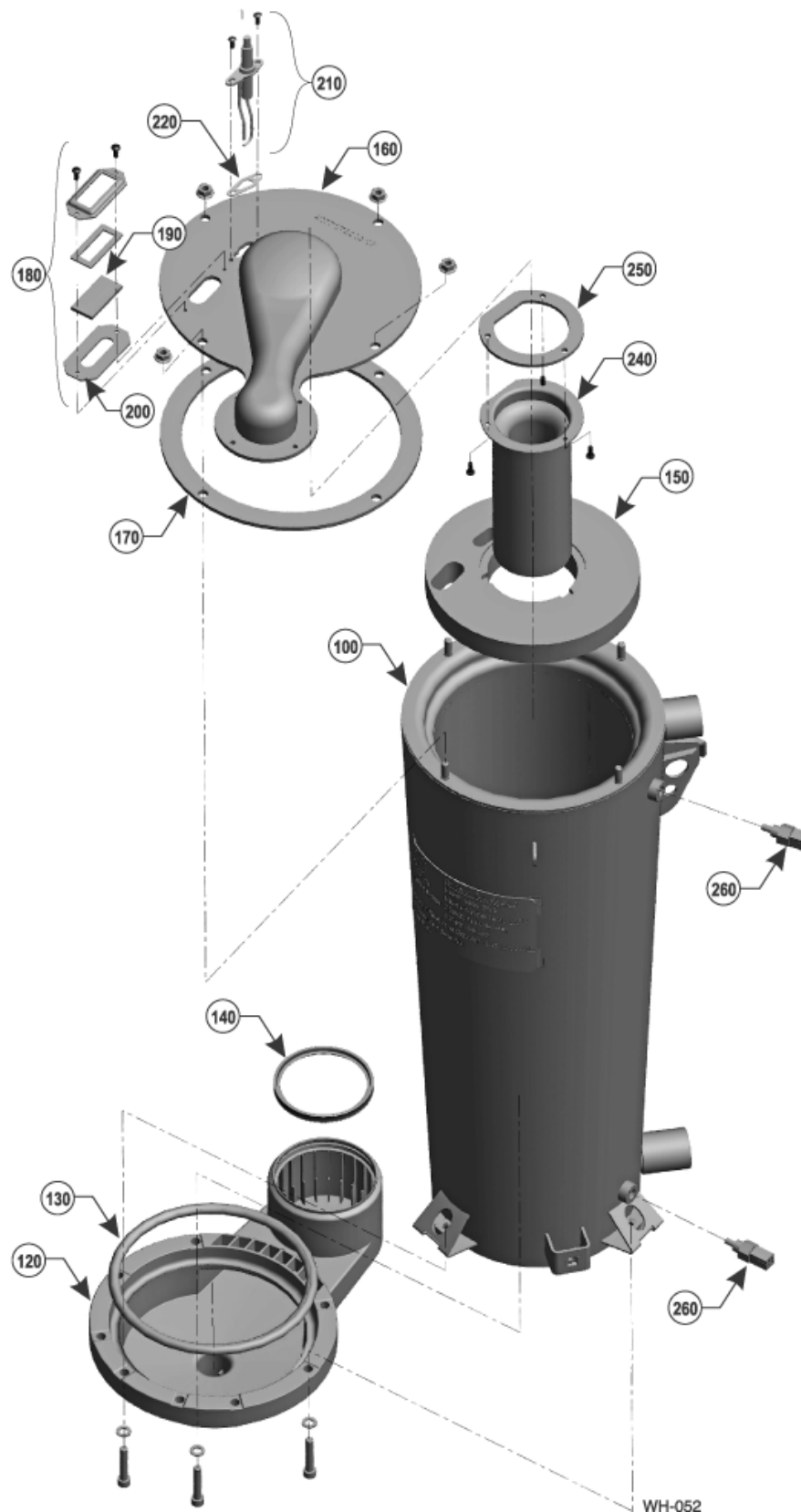
Replacement parts *(continued)*

Figure 126 Heat exchanger parts **WM97+70/110** (see Figure 127, page 123 for illustration)

Item	Name	Part Number
100	Heat exchanger	319-100-000
105	Heat exchanger with condensate dish, assembled (includes items 100, 120, 130 and 140)	383-700-175
110	Heat exchanger, condensate dish, cover plate, burner, igniter, sight glass, refractory, water sensors, gaskets, silicone, and hardware (includes items 120 through 240)	383-700-101
120	Condensate dish, gaskets, and hardware	383-700-102
130	Gasket to seal heat exchanger to condensate dish	383-700-103
140	Gasket to seal condensate dish to internal flue pipe	383-700-104
150	Refractory insulation & silicone sealant	383-700-105
160	Heat exchanger cover plate, refractory, silicone, and gaskets	383-700-108
170	Cover plate gasket (exchanger to gasket)	383-700-109
180	Sight glass kit (bracket, glass, gaskets, and hardware) (includes items 190 and 200)	383-700-185
190	Sight glass	591-419-202
200	Sight glass gaskets, upper and lower	383-700-112
210	Igniter kit (igniter, gasket and screws)	383-700-113
220	Igniter to cover plate gasket	590-300-034
240	Burner, gasket, and hardware (includes item 250)	383-700-106
250	Burner gasket	383-700-107
260	Heat exchanger water temperature sensor (one sensor for either boiler inlet or outlet water temperature)	511-724-296

Replacement parts *(continued)*

Figure 127 WM97+70/110 heat exchanger assembly (see Figure 126, page 122 for part numbers)



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Replacement parts *(continued)*

Figure 128 Heat exchanger parts **WM97+155** (see Figure 129, page 125 for illustration)

Item	Name	Part Number
100	Heat exchanger	383-700-197
105	Heat exchanger with condensate dish, assembled (includes items 100, 160, 170 and 180)	383-700-198
110	Heat exchanger, condensate dish, cover plate, burner, igniter, sight glass, refractory, water sensors, gaskets, silicone, and hardware (includes items 120,)	383-700-180
120	Cover plate/heat exchanger gasket	590-318-054
130	Boiler inlet temperature sensor	511-724-296
140	Boiler outlet temperature sensor (same as item 130)	
150	Blower gasket	590-318-006
160	Condensate dish and hardware	383-700-181
170	Gasket to seal heat exchanger to condensate dish	590-300-039
180	Gasket to seal condensate dish to internal flue pipe	383-700-104
190	Heat exchanger cover plate, refractory and gaskets (includes items 200, 230, 260, 290 and 300)	383-700-184
200	Refractory insulation & silicone sealant	383-700-182
210	Burner, gasket, and hardware (includes item 220)	383-700-183
220	Burner gasket	590-318-055
230	Burner access cover, gasket and hardware (includes item 240)	383-700-202
240	Burner access cover gasket	590-318-053
250	Igniter kit (igniter, gasket and screws) (includes item 260)	383-700-187
260	Igniter gasket	383-700-107
270	Sight glass kit (bracket, glass, gaskets, and hardware) (includes items 280 and 290)	383-700-185
280	Sight glass	591-419-202
290	Sight glass gaskets, upper and lower	383-700-112

Replacement parts *(continued)*

Figure 129 WM97+155 heat exchanger assembly (see Figure 128, page 124 for part numbers)



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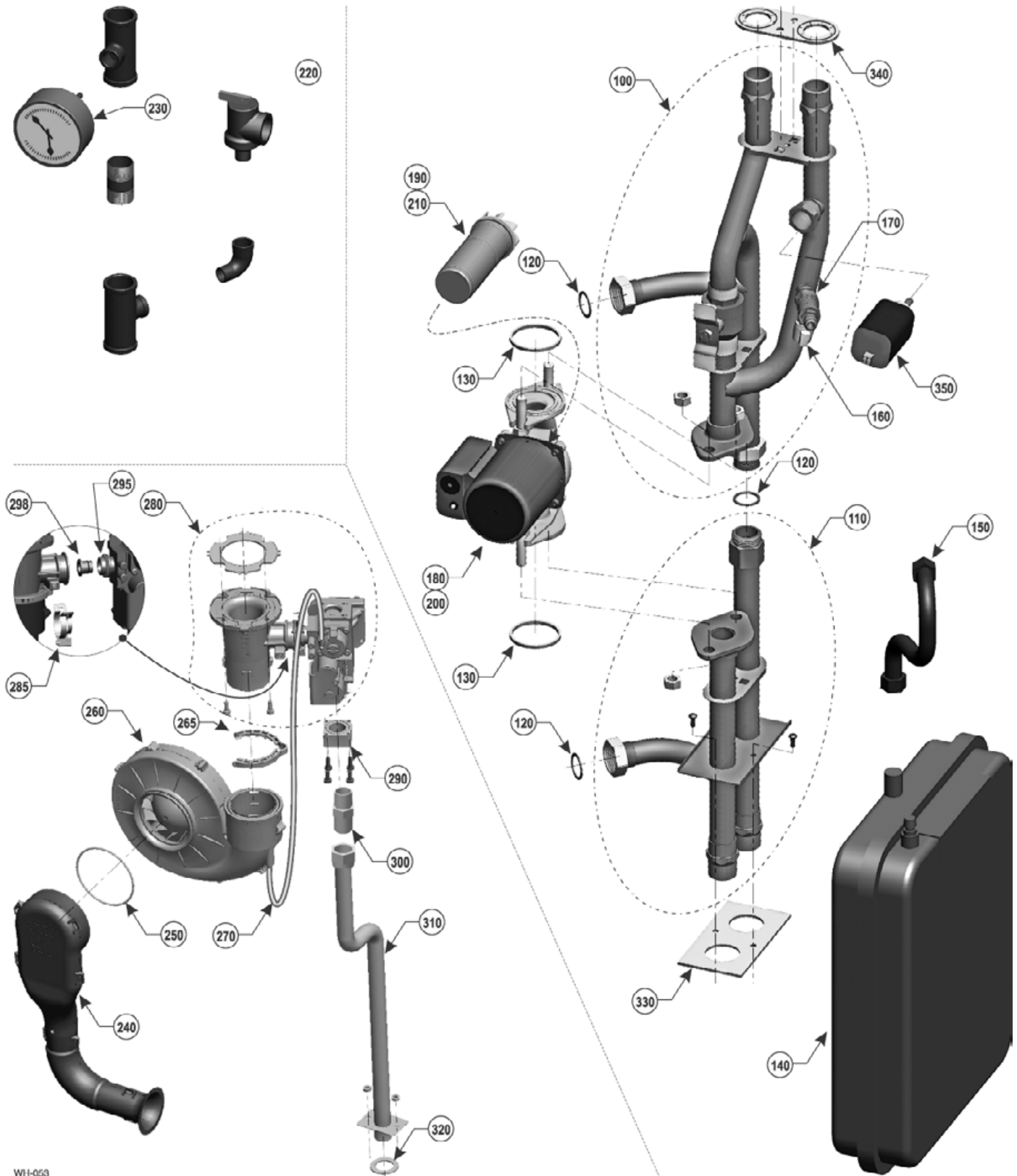
Replacement parts *(continued)*

Figure 130 Piping components for **WM97+70/110** (see Figure 131, page 127 for illustration)

Item	Name	Description / contents	Part Number	Model	
				70	110
100	Upper water pipes	Upper pipe assembly and gaskets (1 pump, 2 water)	383-700-144	●	●
110	Lower water pipes	Lower pipe assembly and gaskets (1 pump, 2 water)	383-700-145	●	●
120	Water gaskets	Seal pipe to heat exchanger or upper pipe to lower pipe	590-300-036	●	●
130	Pump gasket	Gasket to seal pump flange to pipe flange	590-317-543	●	●
140	Expansion tank	12 Liter (3.2 gallons) expansion tank - pre-charged to 12 psi	383-700-148	●	●
150	Expansion tank line	Flared fitting stainless steel flex line	560-900-022	●	●
160	Expansion tank shutoff valve	Female NPT to flare manual ball valve	511-246-399	●	●
170	Expansion tank adapter	Female NPT to male flare	562-302-577	●	●
180	WM97+70 boiler circulator	Taco 007 & gaskets	383-700-152	●	
190	WM97+70 boiler circulator cartridge	Replacement cartridge for wet-rotor 007 circulator	511-405-142	●	
200	WM97+110 boiler circulator	Taco 0015 & gaskets	383-700-153		●
210	WM97+110 boiler circulator cartridge	Replacement cartridge for wet-rotor 0015 circulator	511-405-143		●
220	Relief valve	30 PSIG relief valve — shipped loose for field installation	383-500-095	●	●
230	Pressure & temperature gauge	Shipped loose for field installation	380-000-000	●	●
240	Air inlet silencer	Silencer	383-700-155	●	●
250	Silencer o-ring	O-ring	590-318-049	●	●
260	Blower	Blower & clip	383-700-157	●	●
265	Blower retainer clip	Clip	562-650-115	●	●
270	Reference tube	Tube to connect blower to gas valve	590-300-001	●	●
280	Valve/venturi assembly	Gas valve, venturi (027), gasket, o-ring, clip, and screws	383-700-159	●	
		Gas valve, venturi (040), gasket, o-ring, clip, and screws	383-700-160		●
285	Gas valve retainer clip	Clip	562-650-116	●	●
290	Gas valve adapter block	Threaded block, o-ring, and screws	563-910-031	●	●
295	Gas valve outlet o-ring	O-ring	590-318-045	●	●
298	Propane orifice — boilers converted to propane ONLY — available only with propane conversion kit — see Figure 122, page 118 for information		—	—	—
300	Gas flex line adapter	NPT to flare adapter	562-302-576	●	●
310	Gas flex line	Gas line, seal, and hardware	383-700-163	●	●
320	Gas flex line gasket	Gasket gas flex line to cabinet	590-300-027	●	●
330	Gasket - lower pipe	Gasket - lower pipe to cabinet	590-300-037	●	●
340	Gasket - upper pipe	Gasket - upper pipe to cabinet	590-318-050	●	●
350	Low water cutoff	Low water cutoff	571-100-006	●	●

Replacement parts *(continued)*

Figure 131 Piping components for **WM97+70/110** (see Figure 130, page 126 for part numbers)



WH1-053



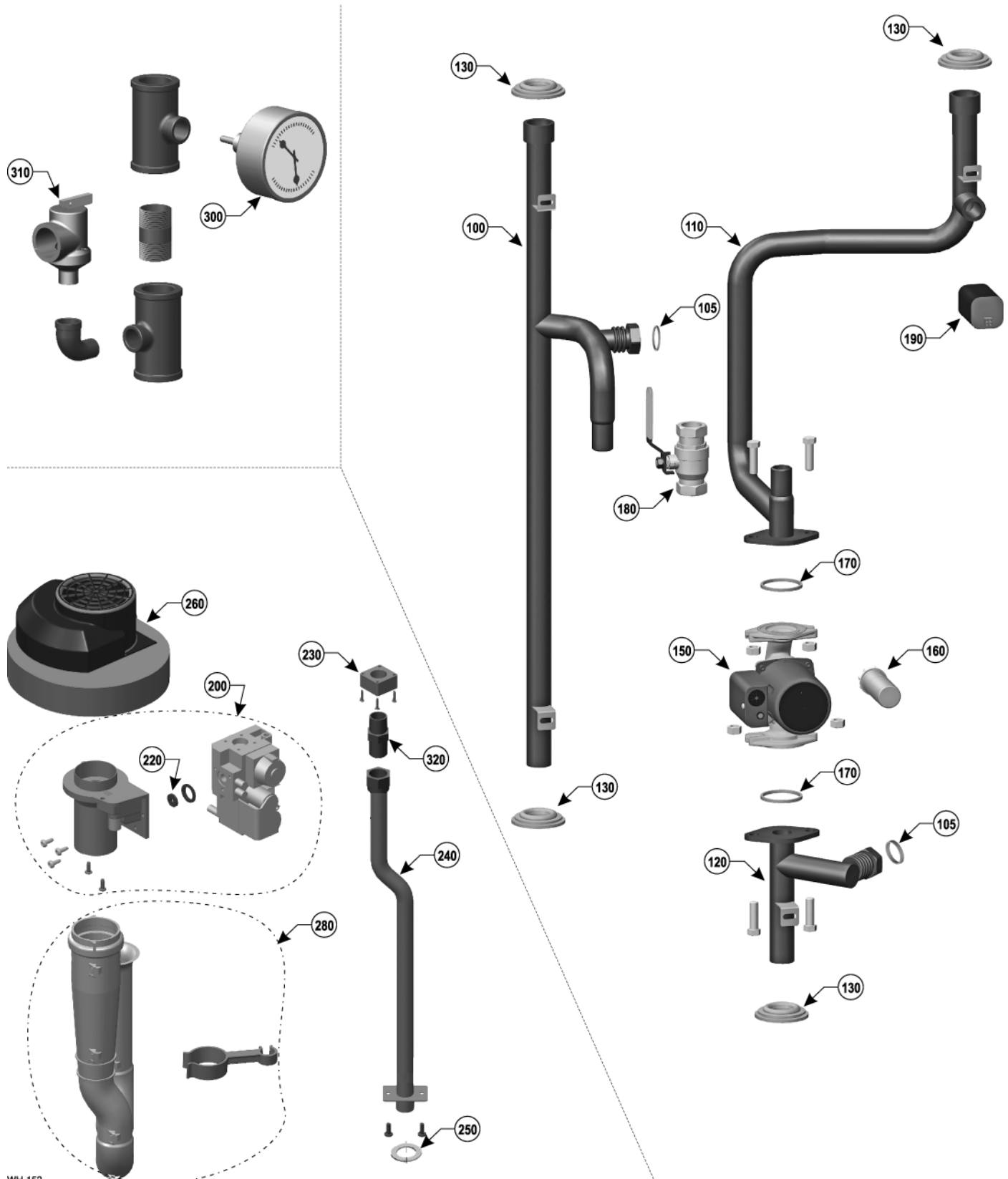
Replacement parts *(continued)*

Figure 132 Piping components for **WM97+155** (see Figure 133, page 129 for illustration)

Item	Name	Description / contents	Part Number
100	Supply manifold	Boiler supply pipe and hardware	383-700-193
105	Supply and return gaskets	Boiler supply and return connection seals	590-300-036
110	Upper return manifold	Boiler return pipe and hardware	383-700-192
120	Lower return manifold	Lower return manifold and hardware	383-700-191
130	Water line sealing grommets	Grommet	562-248-740
150	Boiler circulator	Taco 0015 (with rotated flange)	383-700-194
160	Circulator cartridge	Taco replacement cartridge for Model 0015 wet rotor circulator	511-405-143
170	Circulator gasket	Taco flange gasket	590-317-543
180	Internal primary/secondary by-pass valve	Ball valve, compression fitting connection	511-246-400
190	Low water cut-off	Low water cut-off	571-100-006
200	Gas valve	Gas valve, venturi, gasket and hardware	383-700-196
220	Propane orifice, if used	In propane conversion kit (see Figure 122, page 118 for number)	—
230	Gas valve adapter block	Threaded block, o-ring and screws	563-910-031
240	Gas flex line	Gas pipe and hardware	383-700-163
250	Gas pipe flange gasket	Gasket, gas flex line to cabinet	590-300-027
260	Blower	Blower	383-700-195
280	Inlet air silencer	Silencer with gasket and clip	383-700-203
300	Pressure & temperature gauge	Shipped loose for field installation	383-000-000
310	Relief valve	30 PSIG relief valve — shipped loose for field installation	383-500-095
320	Gas flex line adapter	NPT to flare adapter	562-302-571

Replacement parts *(continued)*

Figure 133 Piping components for **WM97+155** (see Figure 132, page 128 for part numbers)



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Replacement parts *(continued)*

Figure 134 Controls and electrical components — **WM97+70/110/155** (see Figure 135, page 131 for illustration)

Item	Name	Description / contents	Part Number
100	Flue temperature sensor	One sensor	511-724-292
110	Outdoor temperature sensor	One sensor	510-312-218
120	Low water cutoff (not shown here — see Figure 130, page 126)	Low water cutoff	571-100-006
130	Transformer 120v/24v	50 Va transformer	511-802-015
140	Wire harness — line voltage, 12-pin connector (not shown)	Wire harness with terminal strips (WM97+70 or 110)	591-391-969
		Wire harness with terminal strips (WM97+155)	591-391-993
150	Wire harness — low voltage, 16-pin connector (not shown)	Wire harness (WM97+70 or 110)	591-391-968
		Wire harness (WM97+155)	591-391-992
160	Wire harness — low voltage, 22-pin connector (not shown)	Wire harness with terminal strips	591-391-967
165	Ignition cable (not shown)	Ignition cable (WM97+70 or 110)	383-500-619
		Ignition cable (WM97+155)	591-391-997
170	Control assembly	Ignition control, user display, pump control, wire harnesses, plastic, gasket, label	383-700-189
180	Electrical enclosure	Plastic electrical enclosure	595-000-033
190	Line voltage lid (left side)	Lid & label	383-700-173
200	Low voltage lid (right side)	Lid & label	383-700-174
210	On/off power switch		511-624-646
220	F1 - 3 amp, fast blow ato (5 fuses) (not shown here — see Figure 111, page 103)	5 Fuses	383-500-603
230	F2 - 12 amp, slow-blow ag (5 fuses) (not shown here — see Figure 111, page 103)	5 Fuses	383-500-604
240	Ground wire (not shown)	Wire harness ground, igniter to jacket	591-391-991



Replacement parts *(continued)*

Figure 135 Controls and electrical assemblies — **WM97+70/110/155** (see Figure 134, page 130 for part numbers)

