



# Replacement parts

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

The 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 145, page 159](#) 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 ECO Tec boilers must be converted in order to operate with propane gas.**

**Figure 144** Propane conversion kits and instructions

Boiler model	Kit part number	Installation instructions
80/110	510-811-415	See <a href="#">page 14</a> .
150	510-811-416	See <a href="#">page 14</a> .
199	510-811-417	See <a href="#">page 14</a> .

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

## OBTAIN PARTS ONLY THROUGH WM Technologies

Replacement parts must be purchased through a local WM Technologies 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 128](#) of this manual. Failure to comply could result in severe personal injury.

## REINSTALL Jacket door

Inspect boiler jacket door gaskets on front of cabinet and reinstall boiler jacket door after start or servicing. The boiler jacket 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 jacket 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 145 Miscellaneous service parts and kits

Description	Part Number
<b>CHEMICALS</b>	
Antifreeze, Sentinel X500, 1 Gallon . . . . .	592-900-029
Corrosion inhibitor, Sentinel X100 . . . . .	592-900-002
Sentinel X100 Quick Test Kit. . . . .	592-900-005
<b>BOILER ACCESSORIES</b>	
<b>ECO Tec Quick start kit - Heating only</b> (System Temp Sensors, Inhibitor-Sentinel, LWCO Probe, Easy-Up Manifold, Condensate Neutralizer, 3" Vent Termination)	383-700-395
<b>ECO Tec Quick start kit - Combi</b> (System Temp Sensors, Inhibitor-Sentinel, LWCO Probe, Easy-Up Manifold, Combi-Valve Set, Condensate Neutralizer, 3" Vent Termination)	383-700-396
<b>ECO Tec 80/110 maintenance kit</b> (Igniter, igniter gasket, venturi gasket, cover plate gasket, venturi-gas valve o-ring, refractory, inhibitor test kit, clips, and instructions)	383-700-265
<b>ECO Tec 150 maintenance kit</b> (Igniter, igniter gasket, venturi gasket, cover plate gasket, venturi-gas valve o-ring, refractory, inhibitor test kit, clips, and instructions)	383-700-266
<b>ECO Tec 199 maintenance kit</b> (Igniter, igniter gasket, venturi gasket, cover plate gasket, venturi-gas valve o-ring, refractory, inhibitor test kit, clips and instructions)	383-700-267
Condensate trap kit - supplied with boiler (condensate tube, barb polypropylene 3/16, and hose clamps)	383-700-268
<b>ECO Tec Pedestal - floor stand</b>	383-700-339
Adjustable floor stand	383-800-102
Wall-mount kit - wall mount bracket and hardware	383-700-406
<b>ECO Tec Easy Up Manifold</b>	383-700-343
Combi service valve	383-700-346
Low Water Cut-Off	511-100-005
System sensor (2)	383-700-371
Seismic bracket kit	383-700-394
Multi-boiler wiring kit (RS-485 communication harness) - one kit needed per boiler	383-700-272
ECO Tec ModBus wiring harness - supplied with boiler	383-700-401

**CONDENSATE HANDLING ACCESSORIES**

Condensate neutralizer kit	383-500-631
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**VENT/AIR PARTS AND KITS (PVC or STAINLESS STEEL)  
Available from WM Technologies**

Weil-McLain Direct Exhaust Venting Kit Includes interior/exterior intake/exhaust plates, 2" & 3" vent screens, templates & mounting hardware	383-500-778
Weil-McLain sidewall vent/air cap termination kit for PVC vent and air pipes Includes 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)	383-500-397
Weil-McLain sidewall vent/air cap termination kit for AL29-4C vent pipe and PVC air pipe Includes sidewall vent/air termination cap, inside and outside cover plates, and mounting hardware; openings are sized for 3" SS vent pipe and 3" PVC air pipe (requires field-installed 3 x 2 adapter if using 2" vent/air pipes)	382-200-430

Description	Part Number
Bird screens (1 screen each) For 2" PVC vent and air pipes . . . . .	560-907-728
For 3" PVC vent and air pipes . . . . .	383-500-105
Sidewall separate pipes vent/air termination kits (includes two cover plates) Kit for 2" PVC vent and air pipes. . . . . Approved for 80/110/150 models only	383-700-171
Kit for 3" PVC vent and air pipes. . . . .	383-500-100
Kit for 3" AL29-4C SS vent pipe and PVC air pipe	383-700-172
PVC concentric vent kit — horizontal or vertical (includes components for concentric assembly) Kit for 2" PVC vent and air pipes. . . . . Approved for 80/110/150 models only	383-700-167
Kit for 3" PVC vent and air pipes. . . . .	383-500-350

**VENT/AIR PARTS AND KITS (PVC IPEX)  
Available from IPEX ONLY**

PVC concentric vent kit — horizontal or vertical (includes components for concentric assembly) 2" PVC concentric . . . . . Approved for 80/110/150 models only	196005
3" PVC concentric . . . . .	196006

**VENT/AIR PARTS AND KITS (POLYPROPYLENE PIPE)  
Available from M&G Simpson-Duravent ONLY**

M&G Simpson-Duravent PolyPro VERTICAL concentric vent/air kit; color = black (part number shown) or terra cotta (add -TC suffix) 2" polypropylene pipe . . . . .	2PPS-VK
3" polypropylene pipe . . . . .	3PPS-VK
M&G Simpson-Duravent PolyPro SIDEWALL separate air and vent pipes 2" polypropylene pipe . . . . .	2PPS-HTP
3" polypropylene pipe . . . . .	3PPS-HTP
M&G Simpson-Duravent PolyPro 3" PP to 2" PP Adapter polypropylene . . . . .	3PPS-R2L
3" PVC to 2" PP Adapter Stainless Steel . . . . .	3PPS-03PVC-M-2PPF

**VENT/AIR PARTS AND KITS (POLYPROPYLENE PIPE)  
Available from Centrotherm Eco Systems ONLY**

Centrotherm INNOFLUE SIDEWALL concentric vent/air kit 3" polypropylene pipe . . . . .	ICWT352
2" polypropylene pipe . . . . .	ICWT242
Centrotherm INNOFLUE VERTICAL concentric vent/air kit 2" polypropylene pipe . . . . .	ICRT2439
3" polypropylene pipe . . . . .	ICRT3539
Centrotherm INNOFLUE 3" to 2" Adapter Polypropylene . . . . .	ISR0302

**Stainless Steel Vent/Flue & Air Adapter Connections**

Heat Fab, Inc. – Saf T Vent	9301PVC
Z Flex, Inc. – Z Vent	2SVSAFNS03
Metal Fab, Inc. – CORR/Guard	3CGPVA

Go to [www.weil-mclain.com](http://www.weil-mclain.com) to locate WM Technologies distributors



# Replacement parts (continued)

**Figure 146 Jacket parts — ECO Tec 80/110/150/199** (see [Figure 147, page 161](#) for illustration)

Item	Name	Description / contents	Part Number
100	Jacket door	Jacket door, gaskets and labels	383-700-269
110	Gasket bottom, top & sides for jacket door	Seals for door bottom, sides and top of cabinet	383-700-363
120	Flue pipe 80mm Polypropylene	Offset flue pipe	383-700-273
130	Adapter Vent-Air Inlet	Top air inlet adapter with internal gasket	383-700-274
140	Adapter Vent-Air Outlet	Top air outlet adapter with internal gasket	383-700-275
150	Air baffle and screws	Air baffle and screws	383-700-276
160	Display/bracket gasket	Display gasket	383-700-361
	Display/door gasket	Display housing to door gasket	
170	Panel control bracket/cover	Control bracket, cover and hardware	383-700-280
180	Display board bracket and gaskets	Mounting for the display to inside of cabinet	383-700-281
190	Wall-mount bracket (jacket side)	(includes screws)	383-700-386
200	Dome plug (Not shown)	Hole plug, 1-3/8" Dia. Black, for sealing Combi pipe holes	383-700-362
	Pipe grommet seal (for 2" I.D. hole)	Seals top water pipe to cabinet	
	Pipe grommet seal (for 1-5/8" I.D. hole)	Seals condensate tube to bottom of cabinet	
210	Kit-Service Gasket Flue/Adapter	(Quantity 2)	383-700-384
220	Kit-Service Cabinet Top		383-700-390
230	Kit-Service Cabinet Door Top		383-700-391
240	Kit-Service Water pipe bracket		383-700-393

# Replacement parts (continued)

Figure 147 Jacket assembly — ECO Tec 80/110/150/199 (see Figure 146, page 160 for part numbers)



ECO Tec-051



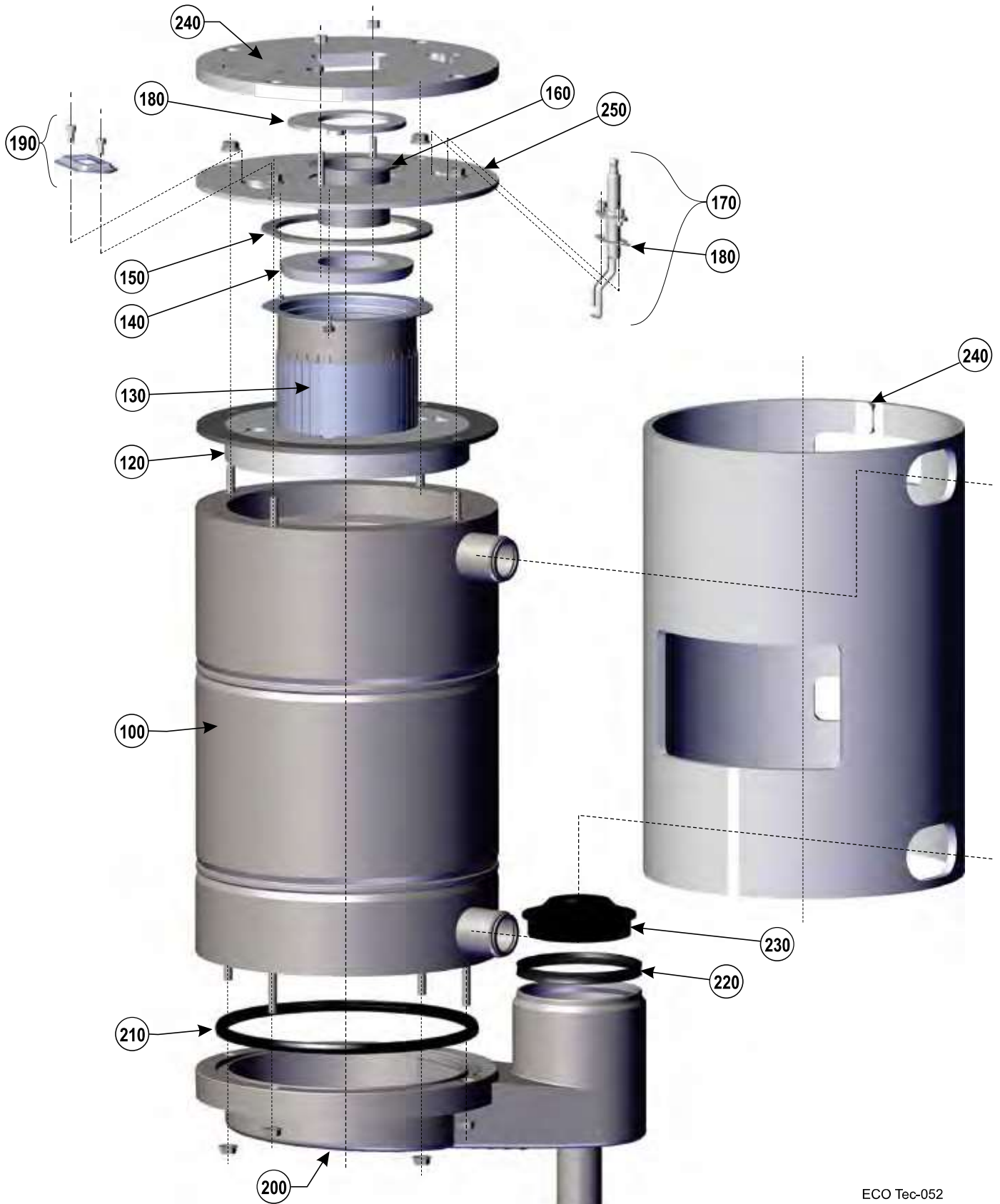
# Replacement parts (continued)

Figure 148 Heat exchanger parts ECO Tec 80/110/150/199 (see Figure 149, page 163 for illustration)

Item	Name	Part Number	Model 80	Model 110	Model 150	Model 199
100	Heat exchanger	383-700-284	●	●	—	—
		383-700-285	—	—	●	—
		383-700-286	—	—	—	●
110	Heat exchanger, condensate dish, cover plate, burner, igniter, sight glass, refractory, water sensors, gaskets, silicone, and hardware (includes Items 100, 120, 130, 140, 150,160,170,180, 210, 220, and 230)	383-700-287	●	●	—	—
		383-700-288	—	—	●	—
		383-700-289	—	—	—	●
120	Insulation with integrated seal - bottom cover plate	383-700-291	●	●	—	—
		383-700-292	—	—	●	—
		383-700-293	—	—	—	●
130	Burner	383-700-297	●	●	—	—
		383-700-298	—	—	●	—
		383-700-299	—	—	—	●
140	Disc burner refractory	383-700-372	●	●	—	—
		383-700-373	—	—	●	●
150	Burner gasket	383-700-300	●	●	—	—
		383-700-301	—	—	●	●
160	Burner tube	383-700-290	●	●	—	●
170	Kit-Ignition electrode (Includes: igniter, gasket and screws)	383-700-295	●	●	●	●
180	Kit-Service Gaskets/O-Ring ECO Tec (Includes: Silencer gasket, blower gasket, blower O-ring (80-150 boilers), blower O-ring (199 boiler), gas flex line to cabinet gasket, garlock washer, and igniter gasket) (Also see Item 110 on page 165)	383-700-360	●	●	●	●
190	Sight glass kit ( bracket, glass, gaskets, and hardware)	383-700-185	●	●	●	●
200	Condensate dish	383-700-331	●	●	—	—
		383-700-332	—	—	●	—
		383-700-333	—	—	—	●
210	Condensate dish gasket	383-700-381	●	●	—	—
		383-700-382	—	—	●	—
		383-700-383	—	—	—	●
220	Flue gasket	383-700-384	●	●	●	●
230	Flue restrictor	383-700-364	●	●	—	—
240	Top cover insulation & heat exchanger insulation wrap	383-700-366	●	●	—	—
		383-700-367	—	—	●	—
		383-700-368	—	—	—	●
250	Cover plate	383-700-326	●	●	—	—
		383-700-327	—	—	●	—
		383-700-328	—	—	—	●

# Replacement parts (continued)

Figure 149 Heat exchanger assembly ECO Tec 80/110/150/199 (see Figure 148, page 162 for part numbers)



ECO Tec-052



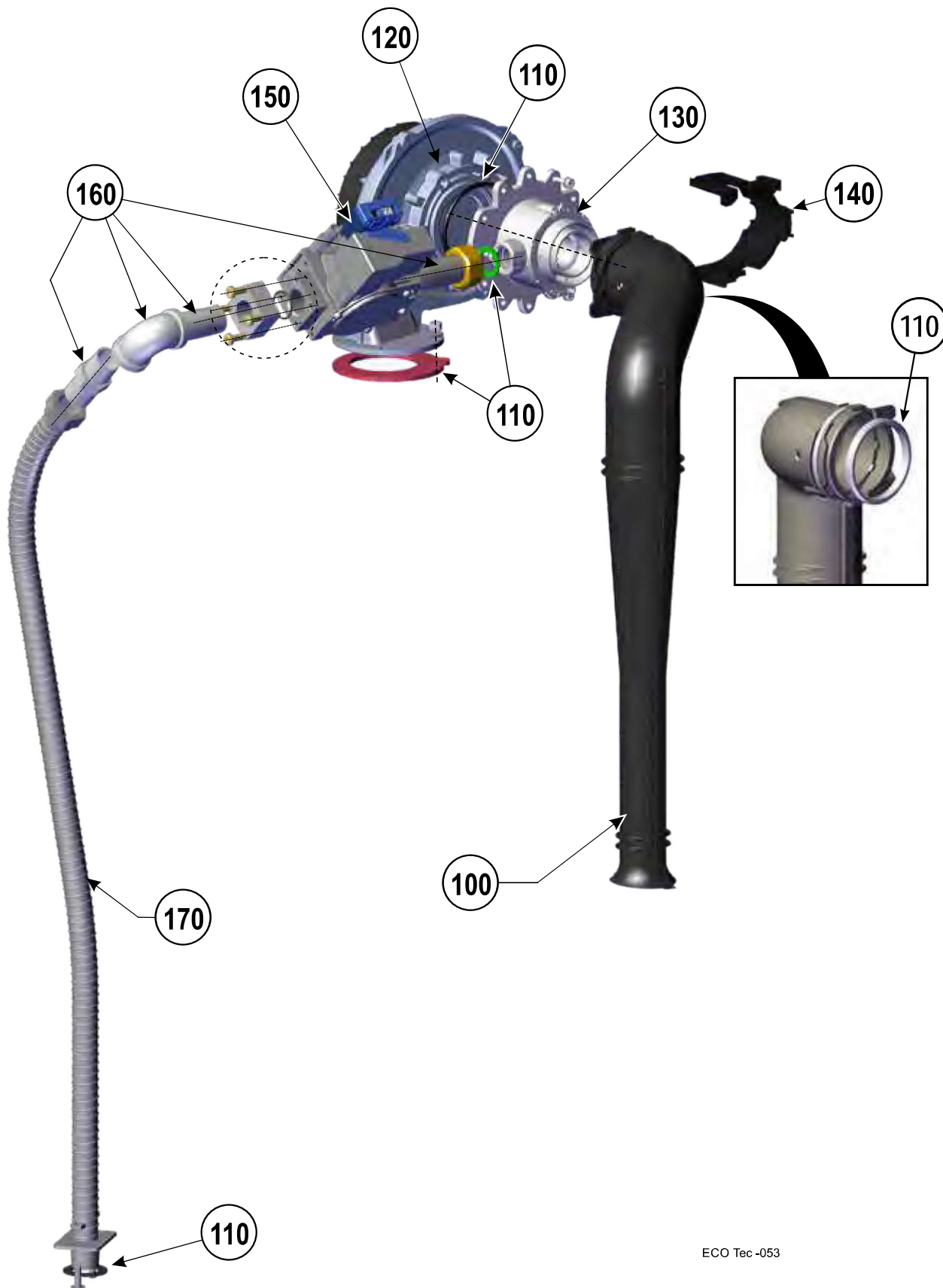
# Replacement parts (continued)

Figure 150 Combustion components parts ECO Tec 80/110/150/199 (see Figure 151, page 165 for illustration)

Item	Name	Part Number	Model 80/110	Model 150	Model 199
100	Air silencer, clip and gasket	383-700-294	●	●	●
110	Kit-Service Gaskets/O-Ring ECO Tec (Includes: Silencer gasket, blower gasket, blower O-ring (80-150 boilers), blower O-ring (199 boiler), gas flex line to cabinet gasket, garlock washer, and igniter gasket) (Also see Item 180 on page 162)	383-700-360	●	●	●
120	Blower, gasket and hardware	383-700-303	●	●	—
		383-700-304	—	—	●
130	Venturi - NG	383-700-305	●	—	—
		383-700-306	—	●	—
		383-700-307	—	—	●
	Venturi - LP	510-811-415	●	—	—
		510-811-416	—	●	—
		510-811-417	—	—	●
140	Air silencer clip	383-700-308	●	●	●
150	Gas valve assembly	383-700-313	●	●	●
160	Adapter gas flex line, elbow, gas valve flange with hardware and the gas pipe	383-700-283	●	●	●
170	Gas flex line	383-800-224	●	●	●

# Replacement parts (continued)

Figure 151 Combustion components parts ECO Tec 80/110/150/199 (see Figure 150, page 164 for part numbers)



ECO Tec -053



# Replacement parts (continued)

**Figure 152** Combi water piping for ECO Tec 80/110/150/199 (see [Figure 154, page 167](#) for illustration)

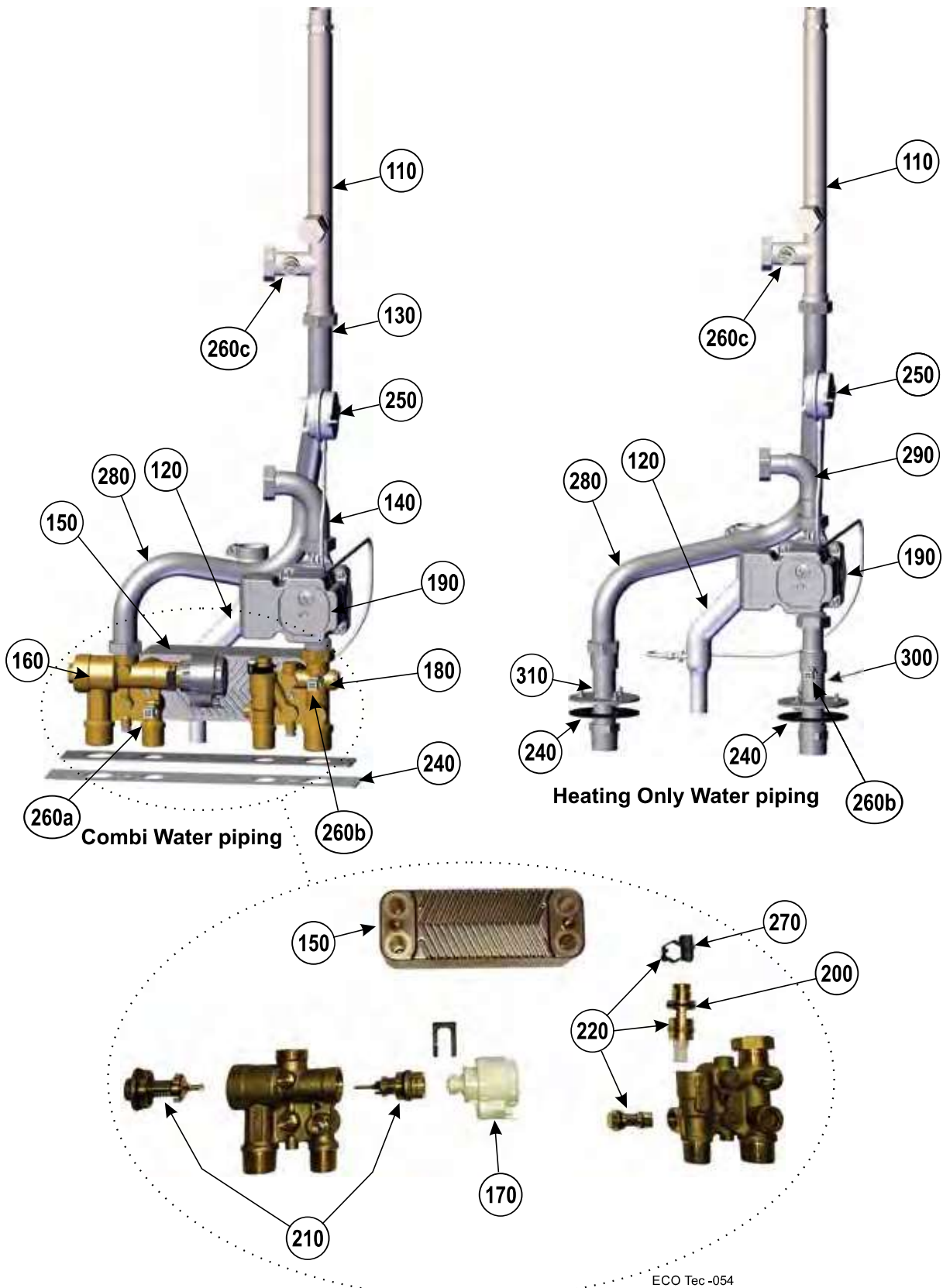
Item	Name	Description / contents	Part Number
110	Pipe - water top		383-700-377
120	Condensate drain tube	With hose nipple	383-700-268
130	Pipe - water flex 1"		383-700-378
140	Pipe - water return		383-700-375
150	Brazed plate heat exchange	Includes Item 230	383-700-355
160	Domestic Outlet Manifold with Components	Includes Item 210	383-700-356
170	Actuator - 3-way valve	Includes retaining clip	383-700-358
180	DHW Inlet Manifold with Components	With sensor tapping, includes Item 220	383-700-357
190	Circulator		383-700-379
200	Flow transducer/turbine		383-700-380
210	Domestic flow manifold components	Includes 3-way valve components,	383-700-349
220	DHW return manifold components	Flow sensor electronic pickup Item 270, Flow transducer/turbine, and Bypass with filter	383-700-350
230	Brazed plate gaskets	(Not shown here, can be seen in <a href="#">Figure 140, page 156</a> )	383-700-359
240	DHW, return & supply gaskets		383-700-392
250	Pressure switch		383-700-329
260	Water temperature sensor (Qty 1)	a) DHW out temp. sensor, b) boiler in temp. sensor, c) boiler out temp. sensor	383-700-319
270	Flow sensor electronic pickup		383-700-389
280	Pipe - water flex 1"		383-700-378

**Figure 153** Heating Only water piping for ECO Tec 80/110/150/199 (see [Figure 154, page 167](#) for illustration)

Item	Name	Description / contents	Part Number
110	Pipe - water top		383-700-377
120	Condensate drain tube	With hose nipple	383-700-268
190	Circulator		383-700-379
240	DHW, return & supply gaskets		383-700-392
250	Pressure switch		383-700-329
260	Water temperature sensor (Qty 1)	a) DHW out temp. sensor, b) boiler in temp. sensor, c) boiler out temp. sensor	383-700-319
280	Pipe - water flex 1"		383-700-378
290	Pipe - water return		383-700-375
300	Pipe - water return bottom	With sensor tapping	383-700-376
310	Pipe - water supply bottom		383-700-374

# Replacement parts (continued)

Figure 154 Combi and Heating Only water piping for ECO Tec 80/110/150/199  
 (see Figure 152, page 166 or Figure 153, page 166 for part numbers)



ECO Tec-054



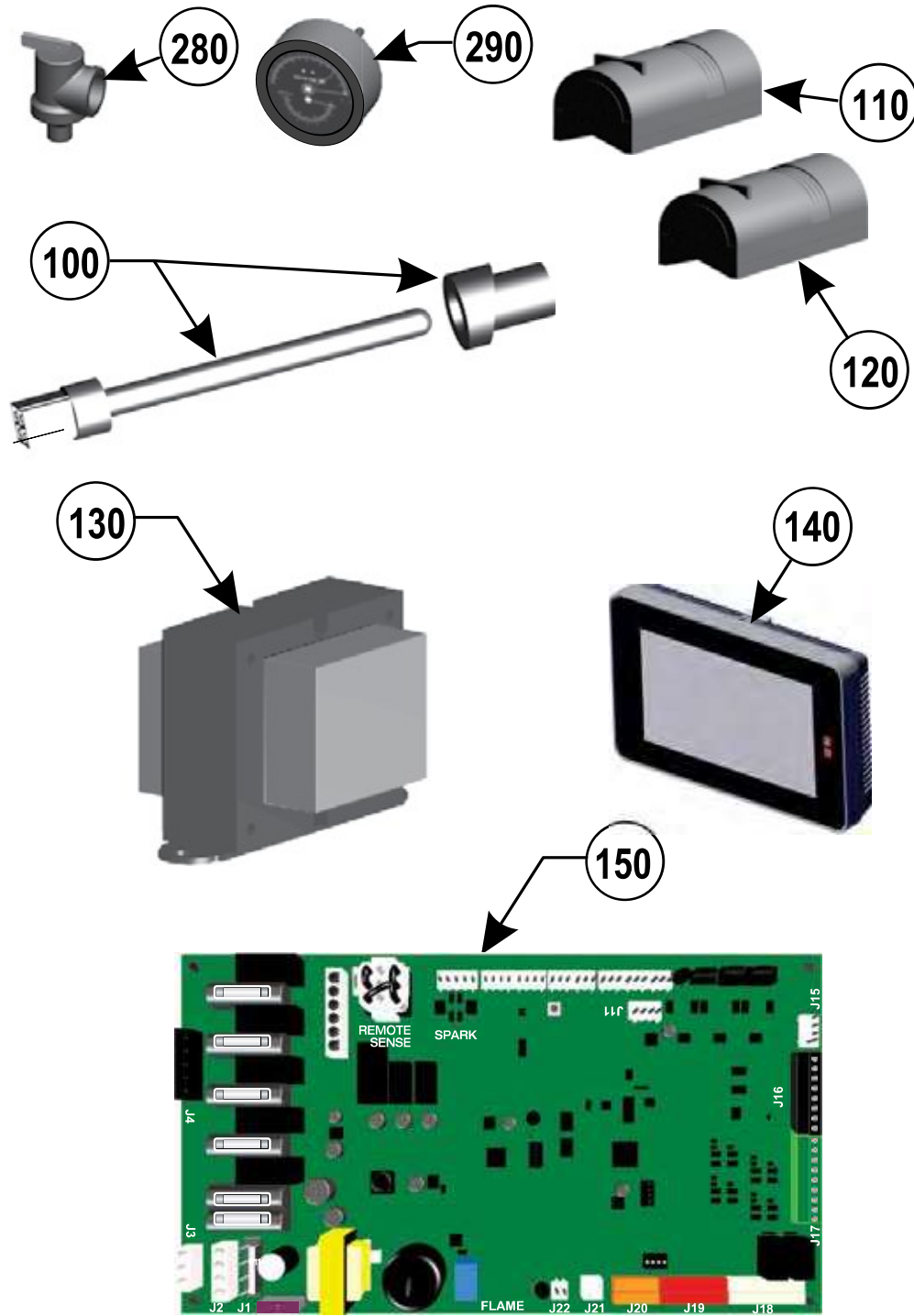
# Replacement parts (continued)

Figure 155 Controls and electrical components - ECO Tec 80/110/150/199 (see [Figure 156, page 169](#) for illustration)

Item	Name	Description / contents	Part Number
100	Flue temperature sensor & grommet	One (1) sensor & grommet	383-500-600
110	Outdoor temperature sensor		383-500-125
120	System temperature sensor	Two (2) sensors	383-700-371
130	Transformer 120V/50V/24V	50 VA transformer	383-700-320
140	Display board assembly	Includes circuit board and plastic housing	383-700-400
150	Control module assembly	Control module and housing	383-700-399
160	Wire harness — line voltage (not shown)		383-700-323
170	Wire harness — low voltage (not shown)		383-700-324
180	Ignition cable (not shown)		383-500-619
190	Fuse 2.5 amp, (qty. 5) fast blow Ato 4 amp, fast blow Fuse 3 amp, (qty. 1) fast blow Ato 4 amp, fast blow Fuse 4 amp, (qty. 1) fast blow Ato 4 amp, fast blow	(Not shown — see <a href="#">Figure 122, page 137</a> )	383-700-369
200	Jumper for low voltage terminal blocks (not shown)	Five (5) Jumpers	383-500-641
210	Connector electrical control (not shown)	Includes Eight (8) connectors	383-900-111
220	Low voltage sealed wire grommet (not shown)	Seals thermostat wire at entrance to cabinet	383-700-385
230	Harness - Blower jumper (not shown)		383-700-351
240	Harness - Display to control module (not shown)		383-700-352
250	Harness - Actuator (Combi only) (not shown)		383-700-353
260	Harness - Flow sensor (Combi only) (not shown)		383-700-354
270	Harness - Modbus wiring (not shown)		383-700-401
280	Relief valve	30 PSIG relief valve — shipped loose for field installation	383-500-095
290	Pressure & temperature gauge	Shipped loose for field installation	380-000-000

# Replacement parts (continued)

Figure 156 Controls and electrical assemblies - ECO Tec 80/110 /150/199 (see Figure 155, page 168 for part numbers)



ECO Tec-154