



Models

P90-50

P90-75

P90-100

P90-50/75/100 Series 4

**GAS-FIRED, DIRECT VENT,
CONDENSING,
HOT WATER BOILER**

**PARTS, KITS
AND OPTIONAL ACCESSORIES**

Ordering Instructions

Order Parts through your nearest supplier.

When ordering parts, obtain Model Number and Serial Number from data plate on your boiler.

Include following information when ordering.

Part Number _____

Part Description _____

Boiler Model Number _____

Boiler Serial Number _____

Manufactured by:

ECR International, Inc.

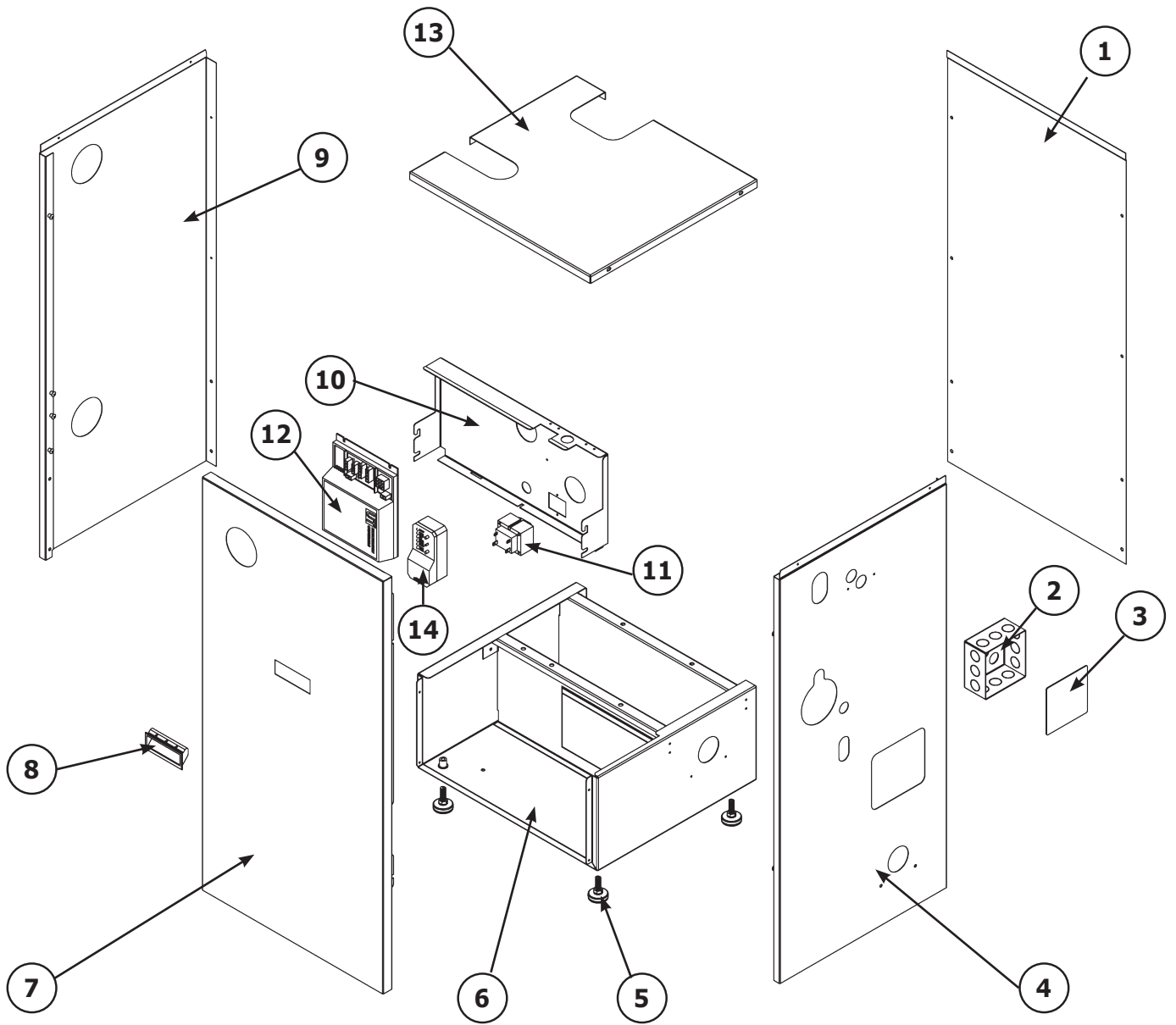
2201 Dwyer Avenue, Utica NY 13501

web site: www.ecrinternational.com



An ISO 9001-2008 Certified Company

Jacket and Base Assembly



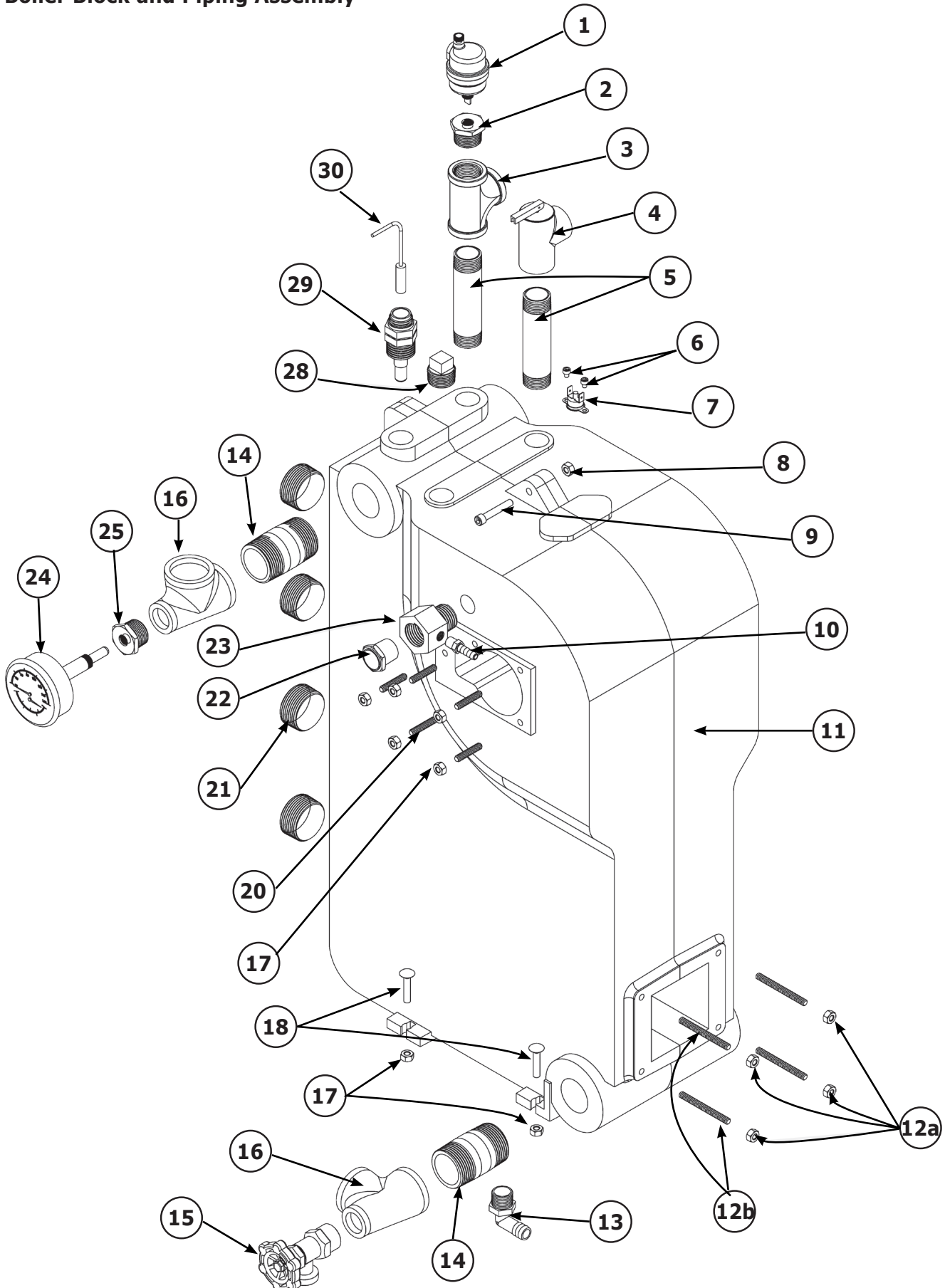
REPAIR PARTS

Jacket And Base Assembly

KEY #	DESCRIPTION	QUANTITY	ITEM NUMBER
1	BACK PANEL	1	109008720AD
2	RACO 232 4x4x2 ¹ / ₈ BOX	1	14631316
3	COVER PLATE BLANK 4" SQUARE	1	212000009
4	RIGHT PANEL	1	109008718AD
5	CO-2366 GLIDE	4	14631091
6	REPLACEMENT BASE ASSEMBLY (Includes item 5)	1	550002650
7	FRONT PANEL	1	109008717AD
8	DOOR PULL	1	28673
9	LEFT PANEL	1	109008719AD
10	CONTROL PANEL	1	109009096
11	120VAC/24VAC 40VA TRANSFORMER	1	240005330
12	UT CONTROL	1	14662803
13	TOP PANEL	1	109008732AD
14	HYDROLEVEL CONTROL	1	240010103
‡	TACO CIRCULATING PUMP	1	CI-001.03
‡	GRUNDFOS CIRCULATING PUMP	1	C1-006.01
‡	CIRCULATING PUMP HARNESS	1	240009427
‡	JACKET COMPLETE (Includes 1, 4, 8, 9, 13)	- - - -	550002589
‡	3" CONCENTRIC VENT KIT	1	29571
‡	2" CONCENTRIC VENT KIT	1	29570

‡ - Not Shown

Boiler Block and Piping Assembly



REPAIR PARTS

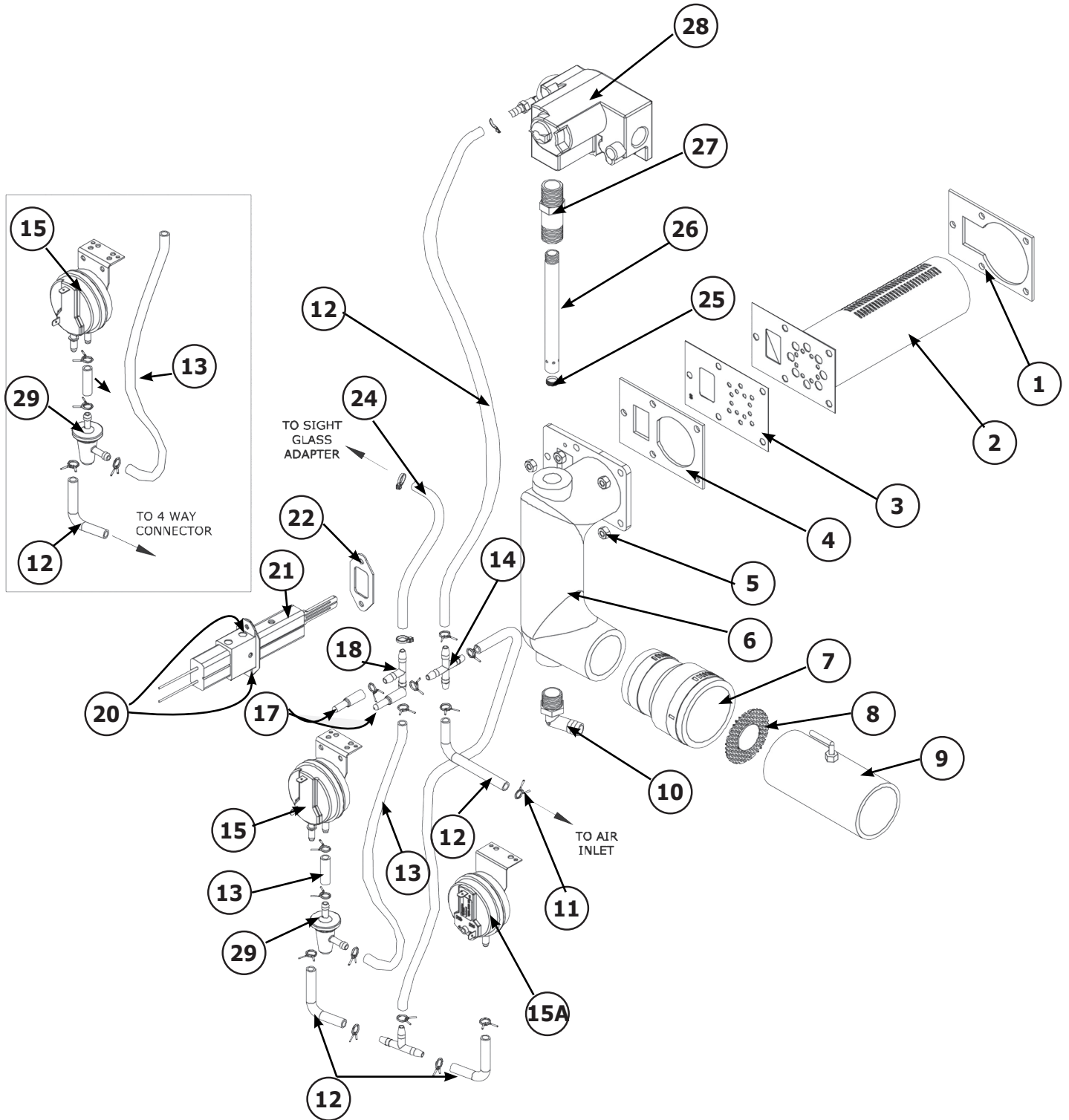
Boiler Block and Piping Assembly

	KEY #	ITEM NUMBER	DESCRIPTION	QTY	
550002627 INCLUDES ITEMS LISTED HERE	11	550002627	KIT BLOCK REPLACEMENT	1	
	5	14607202	NPL,3/4X4½,BI,STD	2	
	6	14695802	SCR,8-32 X 3/16,RH,ALH,CAP	2	
	7	14631000	SWITCH CASTING TEMP Q90 36T26-42930 300	1	
	10	14631005	FITTING, 125HBL-4-2 ¹ / ₈ " X 1/4" BR.B+	1	
	12a	14695810	NUT, ¼-20,HWS	4	
	12b	240009021	STUD, THREADED, ¼-20 X 2-¼	4	
	13	240009285	ELB,TBE, ½"NPT X 5/8" ID,HB, 62044	1	
	14	14607044	NPL,1-1/4X2-1/2,BI,STD	2	
	16	1510001	TEE,RDCR,1-1/4" X 3/4" X 1-1/4"	2	
	17	14695810	NUT, 1/4-20, HWS	13	
	18	14695040	BOLT, 1/4-20 X 1-1/4", CARRIAGE	4	
	20	14695805	STUD, THREADED, 1/4-20 X 1 1/4"	5	
	22	14619002	OBSERVATION GLASS, 3/4"	1	
	23	14631004	ADAPTER, SIGHT GLASS	1	
	**	240009284	EXHAUST SPACER BUSHING 1/4X3/8X7/8 LONG	4	
	**	240009583	GASKET, EXHAUST SPACER	4	
	**	1250010	GASKET IGNITER	1	
	**	14631023	GASKET BURNER	1	
	**	14631025	GASKET MIXER	1	
	**	14695809	SCREW, 10-32 X 3/8"	2	
	--- * NOTE: #8, 9, 21, AND 28 INSTALLED IN HEAT EXCHANGER ---				
		8*	14695810	NUT, 1/4-20,HWS	5
		9*	14695801	SCR, 1/4-20 X 1-1/2",RH,ALH,CAP	5
		21*	1395002	1-1/4 HEX SOCKET PLUG	8
		28*	1395001	3/4" SQ HD PLUG	1
		1	1580006	VENT AIR PURGE Q SERIES	1
		2	14693001	BSHG, 3/4" X 1/8",BLK	1
	3	14693076	TEE,BLK, 3/4"	1	
	4	14622011	VLV,SAFETY,RLF,30PSI,3/4,10-408-05	1	
	15	240009323	VLV,DRN,3/4,	1	
	24	1260006SP	GAUGE,TEMP/PRESS,2" SHANK	1	
	25	1060002	BUSHING, 3/4" x 1/4" BLK	1	
	29	240009283	WELL, SHORT, 1½" INSRT, HL, 48-205	1	
	30	240007708	SENSOR, HIGH LIMIT, 48"	1	
	**	240008013	SENSOR MOUNTING CLIP, HW 32002656	1	

** Not Shown

REPAIR PARTS

Mixer and Air Pressure Switch Assembly



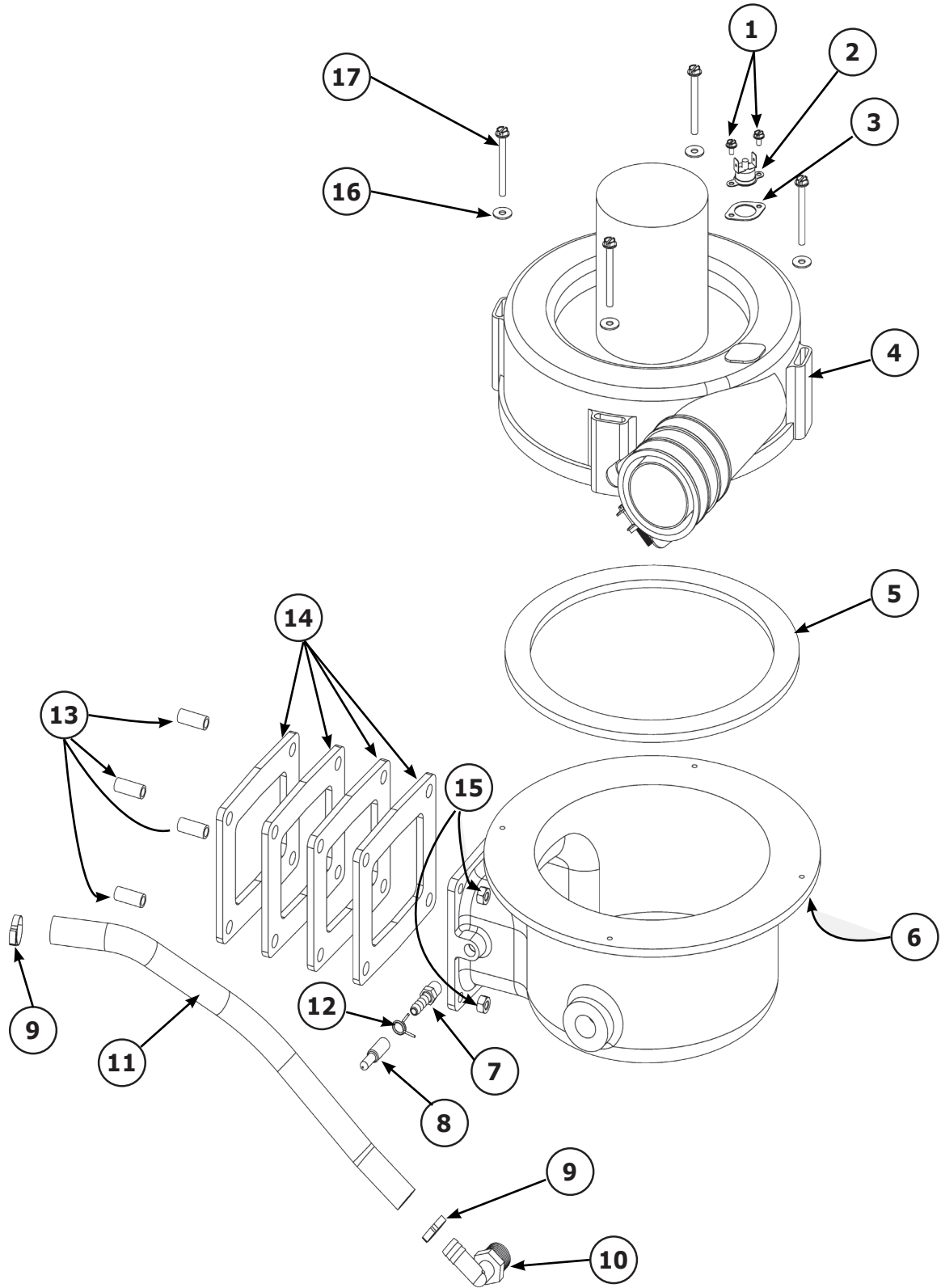
KEY #	DESCRIPTION	QUANTITY	ITEM NUMBER
1	BURNER GASKET	1	14631023
2	BURNER KIT, 90-50/75/100 NAT/LP, 0'-10,000' (Contains: 1, 2, 4,)	1	550002632
3	RESTRICTOR PLATE 90-50	1	109006405
	RESTRICTOR PLATE 90-75 NATURAL GAS	1	109006406
	RESTRICTOR PLATE 90-75 PROPANE	1	109009107
	RESTRICTOR PLATE 90-100	1	109009105

MIXER AND AIR PRESSURE SWITCH ASSEMBLY - CONTINUED

KEY #	DESCRIPTION	QUANTITY	ITEM NUMBER
4	MIXER GASKET	1	14631025
5	¼"-20 HEX NUT W/SERRATED WASHER HEAD	5	14695810
6	MIXER CASTING MACHINED	1	12101008
7	2" x 1½" FLEXIBLE COUPLING	1	14631311
8	90-100 AIR BAFFLE 1.00" DISC	1	109008977
	90-75 AIR BAFFLE 1.17" DISC	1	109008915
	90-50 AIR BAFFLE 1.55" DISC	1	109008916
9	AIR INLET	1	43800007
10	62043 ½" NPT 1/2"ID TUBE ELBOW	1	14631103
11	3/8" HOSE CLAMP HC-6ST	AS REQUIRED	14631143
12	59006 1/4" ID X 3/8" OD VINYL TUBING	AS REQUIRED	14631033
13	1/4"ID 3/8"OD VINYL TUBING (RED)	AS REQUIRED	14631314
14	¼"ID TUBE 4-WAY CONNECTOR	1	14631313
15	075/100 DIFFERENTIAL AIR PRESSURE SWITCH 1.80"	1	240010151
	50 DIFFERENTIAL AIR PRESSURE SWITCH 2.10"	1	240009613
15A	075/100 NEGATIVE PRESSURE SWITCH -0.50"	1	240009793
17	PC250-12 VINYL CAP	2	14631151
18	62064 ¼"ID TUBE TEE	AS REQUIRED	14631104
20	10-32"x 3/8" MACHINE SCREW	2	14695809
21*	HOT SURFACE IGNITER KIT	1	43800013
22	IGNITER GASKET	1	1250010
24	3/16" ID SILICONE TUBING	AS REQUIRED	1552014
25	1/8" NPT BRASS PLUG - 3/16" HEX SOCKET	1	14693805
26**	GAS ORIFICE NATURAL, 100N (0.0860, #44) 0-10,000'	1	43331090
	GAS ORIFICE NATURAL, 75N (0.0760, #48) 0-10,000'	1	43331092
	GAS ORIFICE NATURAL, 50N (0.0615) 0-10,000'	1	43331094
	GAS ORIFICE PROPANE, 100P (0.0670, #51) 0-10,000'	1	43331091
	GAS ORIFICE PROPANE, 75P (0.0531) 5,000-10,000'	1	43331096
	GAS ORIFICE PROPANE, 75P (0.0605) 0-5,000'	1	43331093
	GAS ORIFICE PROPANE, 50P (0.0492) 0-10,000'	1	43331095
27	BUSHING WITH HEX, Q90 MIXER	1	240009289
28	HONEYWELL GAS VALVE VR8205	1	14631307
29	WATER TRAP	1	240010139
Not Shown	NATURAL TO PROPANE CONVERSION KIT, 90-50, 0'-10,000'	1	550002631
	NATURAL TO PROPANE CONVERSION KIT, 90-75, 0'-5,000'	1	550002630
	NATURAL TO PROPANE CONVERSION KIT, 90-75, 5,000'-10,000'	1	550002629
	NATURAL TO PROPANE CONVERSION KIT, 90-100, 0'-10,000'	1	550002700
	PROPANE TO NATURAL CONVERSION KIT, 90-50, 0-10,000'	1	550002635
	PROPANE TO NATURAL CONVERSION KIT, 90-75, 0-10,000'	1	550002634
	PROPANE TO NATURAL CONVERSION KIT, 90-100, 0-10,000'	1	550002701

* - Includes item numbers 20, 21 & 22. ** - Includes item number 25

Flue Adapter and Exhaust Assembly



REPAIR PARTS

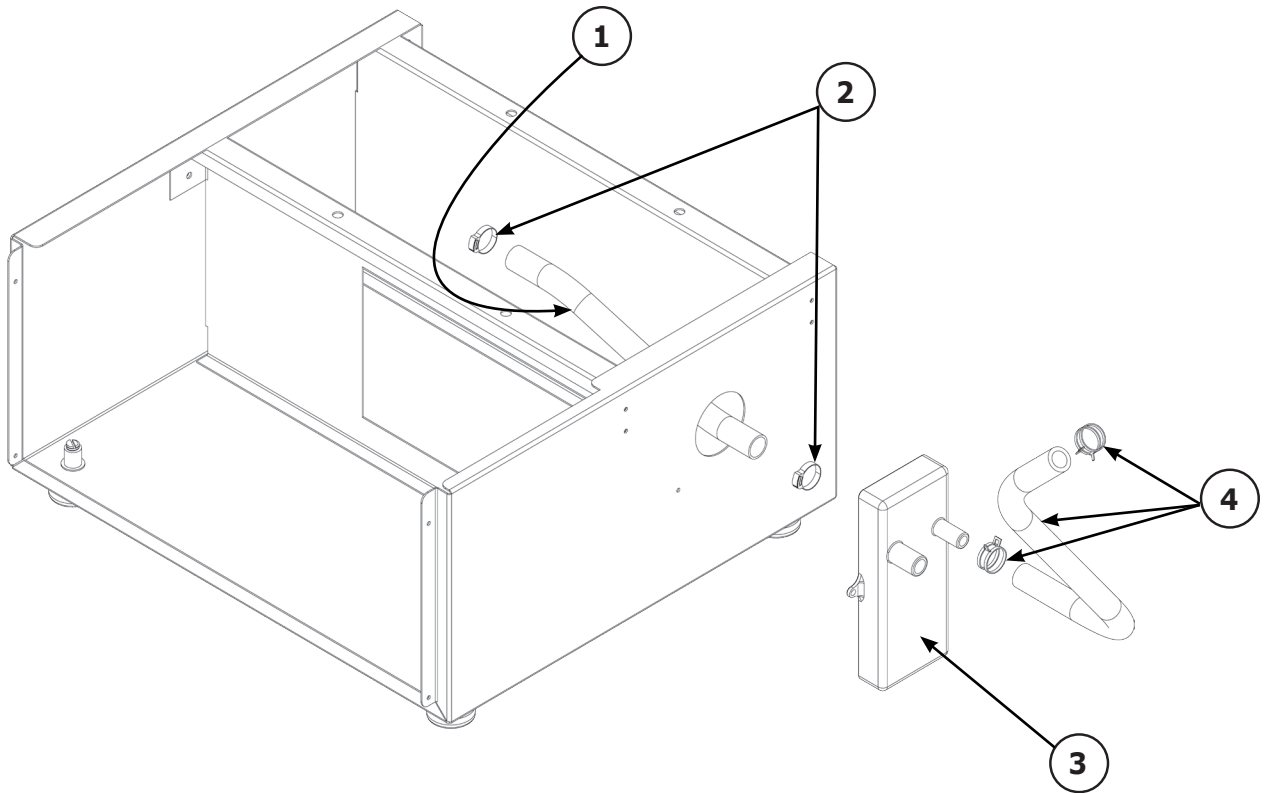
Flue Adapter and Exhaust Assembly

	KEY #	DESCRIPTION	QTY.	ITEM NUMBER
Kit 550002628 Includes		INDUCED DRAFT BLOWER KIT FOR MODELS 50/75 [INCLUDES items 1,2,3,4,5,16,17]	1	550002628
	1	SCREW, 6 X 1/4, SLT, HH	2	HW06501
	2	36T X 11-22491 INDUCER TEMP SAFETY SWITCH	1	14631303
	3	VENT SWITCH GASKET	1	14631028
	4	FLUE GAS BLOWER WITH VENT PIPE CONNECTOR	1	240009288
	5	BLOWER GASKET	1	14631026
	16	WASHER, #10 X 1/2" OD	4	240006203
	17	SCREW, 10-24X3" SLT HWH SZN	4	240007745
Kit 550002699 Includes		INDUCED DRAFT BLOWER KIT FOR MODEL 100 [INCLUDES items 1,2,3,4,5,16,17]	1	550002699
	1	SCREW, 6 X 1/4, SLT, HH	1	HW06501
	2	36T X 11-22491 INDUCER TEMP SAFETY SWITCH	1	14631303
	3	VENT SWITCH GASKET	1	14631028
	4	FLUE GAS BLOWER WITH VENT PIPE CONNECTOR	1	240009791
	5	BLOWER GASKET	1	14631026
	16	WASHER, #10 X 1/2" OD	4	240006203
	17	SCREW, 10-24X3" SLT HWH SZN	4	240007745
	6	FLUE ADAPTER	1	12101021
	7*	1/8" NPT 1/4" HOSE ID BRASS BARB FITTING	1	14631005
	8	PC250-12 VINYL CAP	1	14631151
	9	57134 3/4" SNAP GRIP CLAMP	2	14631141
	10	62043 1/2" NPT' x 1/2" ID TUBE ELBOW	1	14631103
	11	59019 1/2" ID' x 1/8" THK VINYL TUBE	22"	14631035
	12	3/8" HOSE CLAMP HC-6ST	1	14631143
	13	EXHAUST SPACER BUSHING 1/4 ID X 3/8 OD X 7/8 LONG	4	240009284
	14	GASKET, EXHAUST SPACER	4	240009583
	15	1/4"-20 HEX NUT W/SERRATED WASHER HEAD	4	14695810
	**	VENT PIPE 2" CPVC SCH-40 X 29 1/2" LONG S636	2	240006820
	**	VENT PIPE COUPLING 2" CPVC SCH-80 S636	1	240006822
	**	VENT PIPE ELBOW 2" CPVC SCH 40 S636	1	240009663
	**	VENT PIPE 2" CPVC SCH-40 X 2 1/2" LONG S636	1	240006821

* - Combustion Test Port

** - Not shown

Condensate Drain Trap Assembly



KEY #	DESCRIPTION	QUANTITY	ITEM NUMBER
1	59020 TUBE, VINYL, 5/8" ID x 13/16" OD	9.5"	240009291
2	57134 3/4" SNAP GRIP CLAMP	2	14631141
3	CONDENSATE TRAP ASSEMBLY	1	240009287
4	TUBE 1/2" ID EPDM60 WITH CLAMPS	1	240010489

Wiring Harness

DESCRIPTION	QUANTITY	ITEM NUMBER
WIRING HARNESS Q90-100	1	240010102
WIRING HARNESS Q90-50, Q90-75	1	240010101



PENNCO BOILERS
2201 Dwyer Avenue, Utica NY 13501
web site: www.ecrinternational.com