

# 95M-200 GAS-FIRED DIRECT VENT MODULATING HOT WATER BOILER

**REPAIR PARTS MANUAL**



P/N 240006107, Rev. 1.4 [03/07]

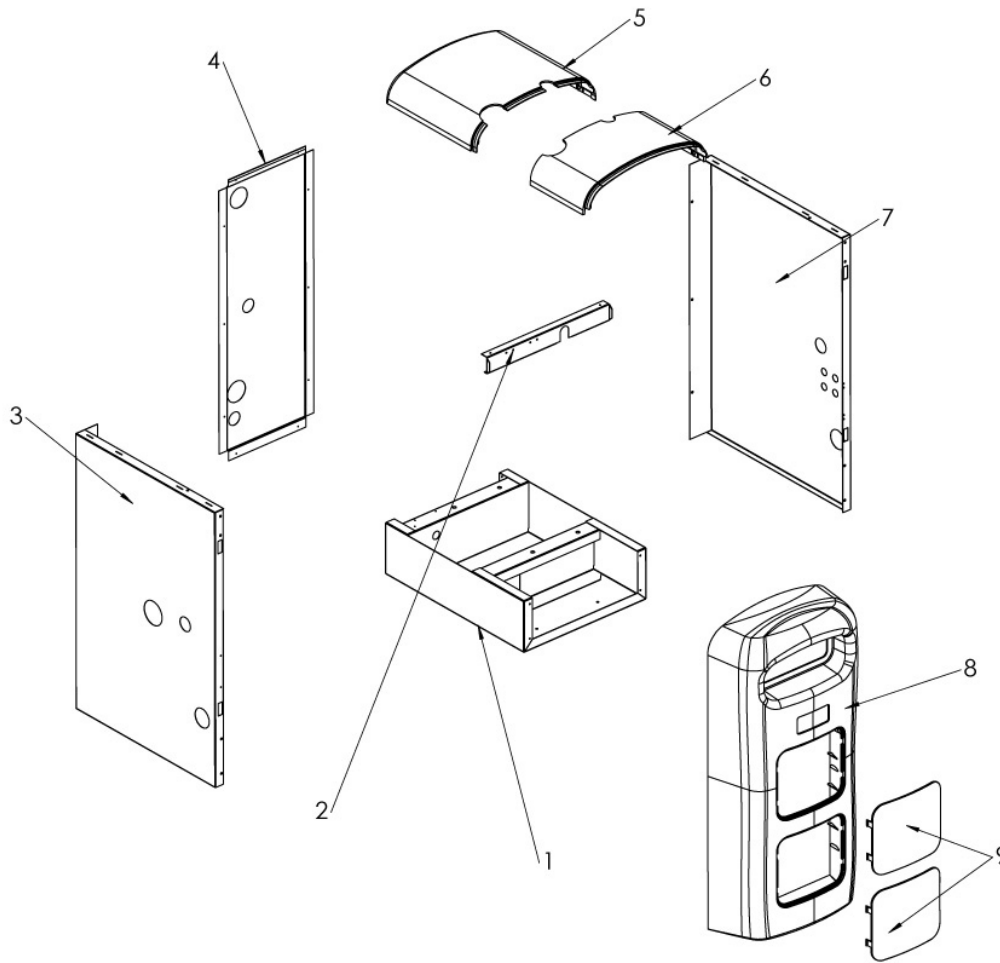


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**Keep this manual near boiler  
and retain for future reference.**

## I - JACKET AND BASE ASSEMBLY



ITEM	PART NO.	DESCRIPTION	QTY.
<b>COMMON PARTS</b>			
2	109005906	Support, Cross Bar	1
*	1263021	Harness, Wire HW	1
*	240005127	Harness, Wire	1
<b>KIT# 550001473 (95M-200 BASE REPLACEMENT KIT) INCLUDES:</b>			
1	2032004	Base, 95M-200	1
*	1425001	Rivnut, Base $\frac{3}{8}$ -16, Large Flange	4
*	14631091	Glide	4
<b>KIT# 550001478 (95M-200 JACKET LEFT SIDE METAL PANEL KIT (BLUE)) INCLUDES:</b>			
3	2370022AC	Panel Left Side (Blue)	1
*	240005103	Label, Wire Diagram	1
*	240004853	Label, Installation Warning (Eng/Fr)	1
*	1275123	Label, PVC Shaving Warning	1
*	240004852	Label, Antifreeze/Corrosion Warning (Eng/Fr)	1
*	14680007	Label, IBR	1
<b>KIT# 550001479 (95M-200 JACKET LEFT SIDE METAL PANEL KIT (GREY)) INCLUDES ALL ITEMS IN KIT# 550001478 WITH THE FOLLOWING CHANGE:</b>			
3	2370022AD	Panel Left Side (Grey) <i>(replaces 2370022AC)</i>	1

## I - JACKET AND BASE ASSEMBLY

### KIT# 550001470 (95M-200 JACKET FRONT PLASTIC PANEL KIT (BLUE UNITS-US)) INCLUDES:

8	108000087AC	Panel Plastic Front (Blue)	1
9	108000088AC	Panel Plastic Insert (Blue)	2
*	1275110	Label, Lighting/Operating Instruction Location (Eng/Fr)	1
*	1275121	Label, Lighting/Operating Instructions	1
*	240004867	Label, Logo	1
*	1450014	Screw 10 x 3/8" Pan Phil Hi/Lo Zinc	14
*	1225012	Latch and Clip Kit	2
*	2370024	Panel Bracket C Front Left	1
*	2370034	Panel Bracket C Front Right	1

### KIT# 550001476 (95M-200 JACKET FRONT PLASTIC PANEL KIT (BLUE UNITS-CAN)) INCLUDES ALL ITEMS IN KIT# 550001470 WITH THE FOLLOWING CHANGE:

*	240004868	Label, Logo ( <i>replaces 240004867</i> )	1
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### KIT# 550001477 (95M-200 JACKET FRONT PLASTIC PANEL KIT (BLUE/GREY UNITS)) INCLUDES ALL ITEMS IN KIT# 550001470 WITH THE FOLLOWING CHANGE:

*	240004865	Label, Logo ( <i>replaces 240004867</i> )	1
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### KIT# 550001471 (95M-200 JACKET TOP FRONT PLASTIC PANEL KIT) INCLUDES:

6	108000090AC	Panel Plastic Top Front (Blue)	1
*	1450014	Screw 10 x 3/8" Pan Phil Hi/Lo Zinc	8
*	2370032	Panel Bracket Top Front Left	1
*	2370035	Panel Bracket Top Front Right	1

### KIT# 550001472 (95M-200 JACKET TOP BACK PLASTIC PANEL KIT) INCLUDES:

5	108000089AC	Panel Plastic Top Back (Blue)	1
*	1450014	Screw 10 x 3/8" Pan Phil Hi/Lo Zinc	8
*	2370033	Panel Bracket Top Back Left	1
*	2370036	Panel Bracket Top Back Right	1

### KIT# 550001321 (95M-200 FULL JACKET REPLACEMENT KIT (BLUE UNITS - US)) INCLUDES KIT #S 550001470, 550001471, 550001472, AND:

4	2370023AC	Panel Back, Metal (Blue)	1
7	2370021AC	Panel Right Side, Metal (Blue)	1
*	14695074	Screw 10 x 1/2" SL HWH Type AB ZP SC	18
*	1250017	Gasket Material w/PSA 1/2" x 1/8"	2 ft

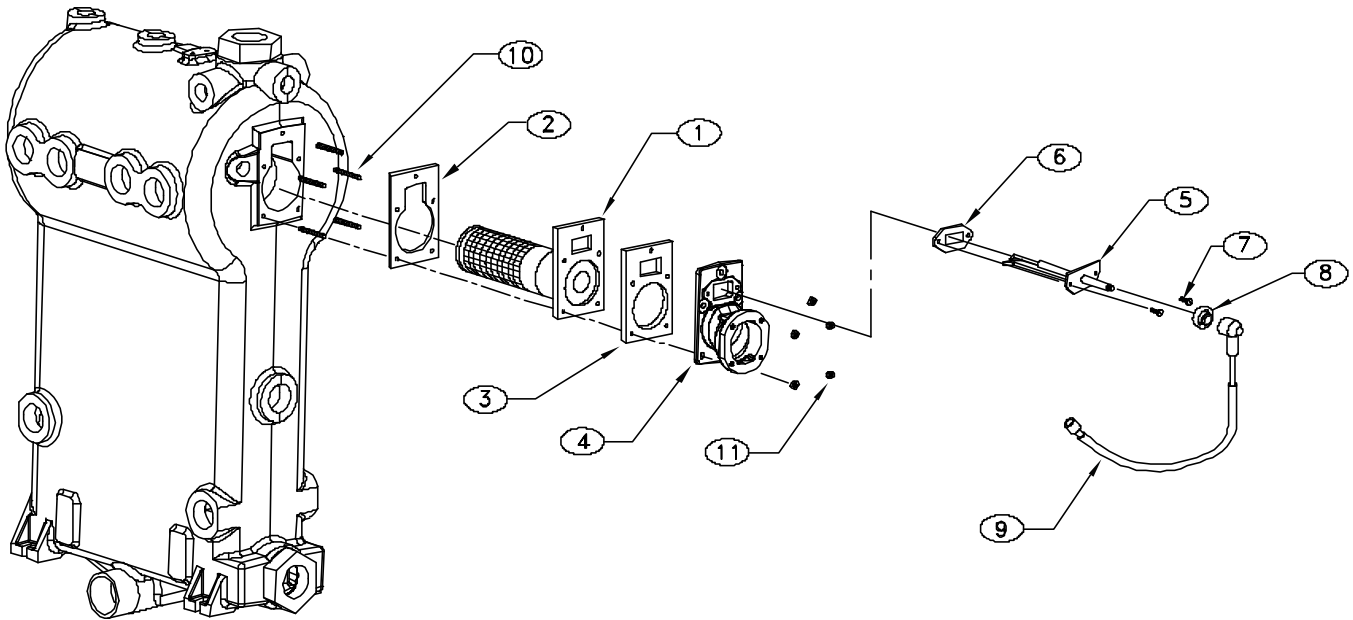
### KIT# 550001322 (95M-200 FULL JACKET REPLACEMENT KIT (BLUE/GREY UNITS)) INCLUDES KIT #S 550001471, 550001472, 550001477, AND ALL ITEMS IN KIT# 550001321 WITH THE FOLLOWING CHANGES:

7	2370021AD	Panel Right Side, Metal (Grey) ( <i>replaces 2370021AC</i> )	1
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### KIT# 550001482 (95M-200 FULL JACKET REPLACEMENT KIT (BLUE UNITS - CAN)) INCLUDES KIT #S 550001471, 550001472, AND 550001476, AND ALL ITEMS IN KIT# 550001321.

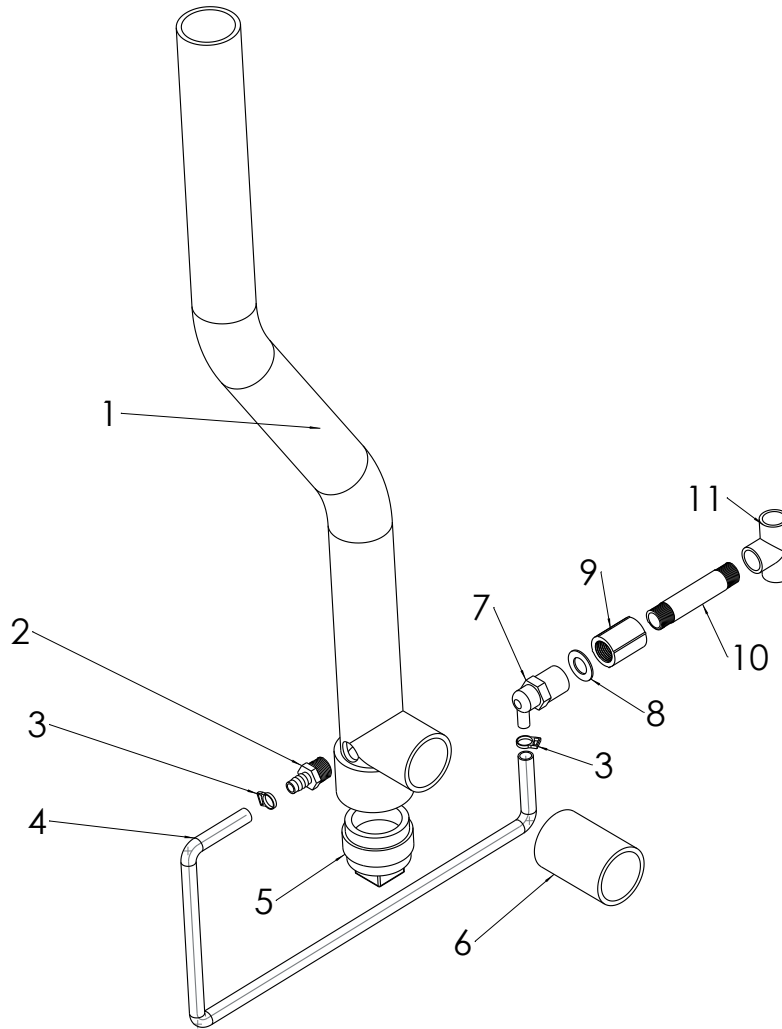
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## II - BURNER/IGNITER ASSEMBLY



ITEM	PART NO.	DESCRIPTION	QTY.
<b>COMMON PARTS</b>			
4	12101022	Flue Adapter	1
<b>KIT# 550001324 (95M-200 MODULATING BURNER REPLACEMENT KIT) INCLUDES:</b>			
1	1050039	Burner, Modulating	1
2	1250016	Grafoil Burner/Casting Gasket	1
3	1250015	Grafoil Burner/Flue Adapter Gasket	1
10	1450011	Stud Threaded 1/4"-20 x 1 1/2"	5
11	14695810	Nut Hex w/Serrated Wash 1/4"-20	5
<b>KIT# 550001325 (95M-200 DIRECT SPARK IGNITER REPLACEMENT KIT) INCLUDES:</b>			
5	240005171	Igniter, Direct Spark	1
6	1250014	Grafoil Igniter/Mixer Gasket	1
7	14695004	Screw 8-32 x 3/8" Slot HWH Self-Tap	2
<b>KIT# 550001329 (95M-200 MODULATING IGNITER CABLE REPLACEMENT KIT) INCLUDES:</b>			
8	1240006	Grommet Igniter	1
9	1070001	Cable Igniter	1

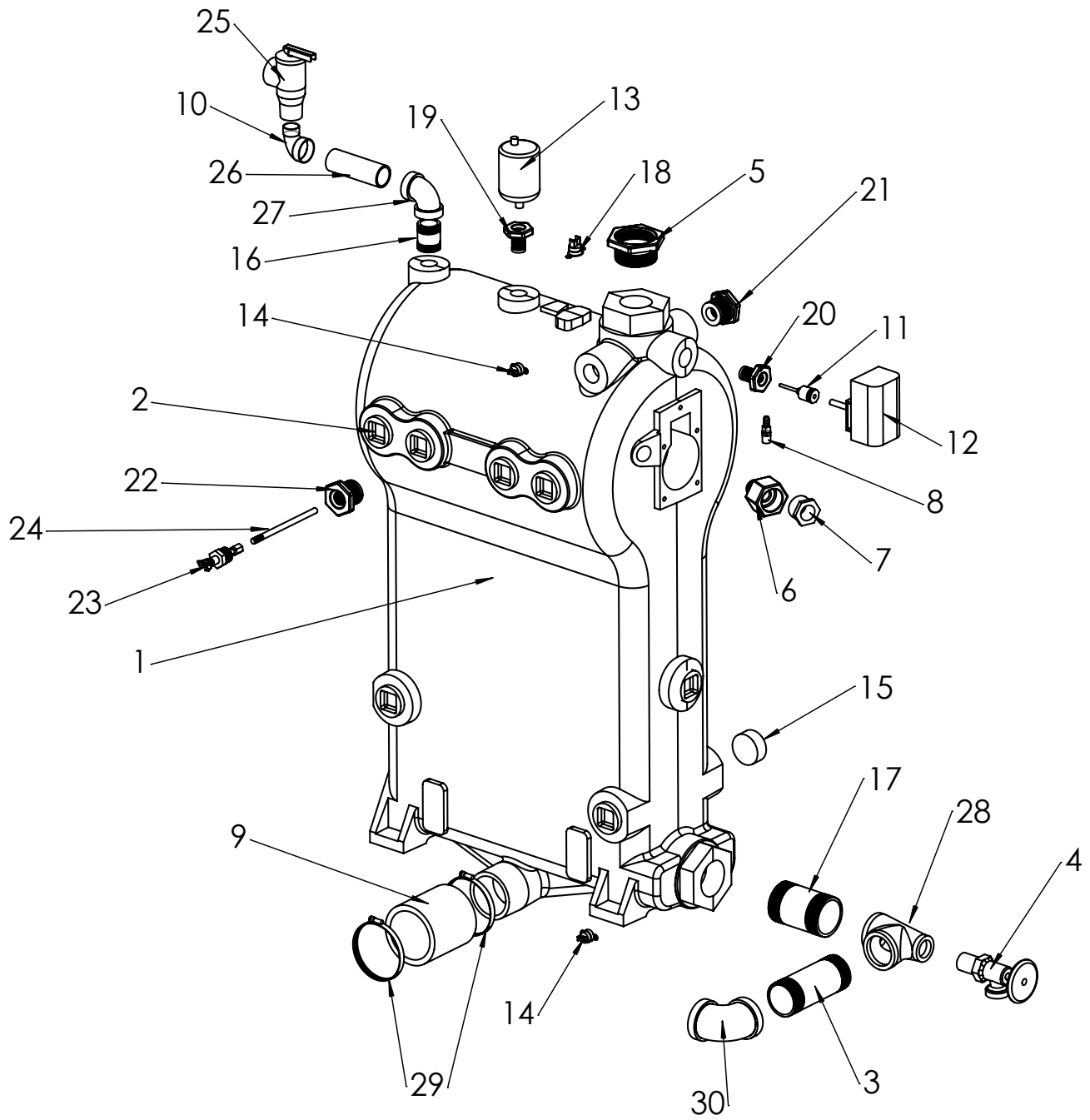
### III - EXHAUST TEE/CONDENSATE TRAP ASSEMBLY



ITEM	PART NO.	DESCRIPTION	QTY.
<b>KIT# 550001465: 95M-200 EXHAUST TEE/CONDENSATE TRAP REPLACEMENT KIT INCLUDES:</b>			
1	1400012	Pipe Vent 2" CPVC Pre-Formed	1
2	14631101	Hose Adapter, 1/2" NPT x 1/2" ID	1
3	14631141	Clamp Snap Grip 3/4"	2
4	14631035	Tubing Vinyl 1/2" ID x 1/8"	1.83 ft
5	240005852	Cleanout, 2" PVC	1
6	1400008	Pipe CPVC 2" x 3/8"	1
7	14631103	Tube Elbow 1/2" NPT x 1/2" ID	1
8	1600004	Washer, Flat 2" OD x 13/16" ID	1
9	14631306	Coupling 1/2" NPT PVC SCH 80	1
10	14631322	Nipple 1/2" x 4" PVC SCH 80	1
11	14631020	Tee PVC 1/2" SL x 1/2" SL x 1/2" NPT	1
*	240005853	Strap, Cable, Push Mount	1

\* Not Shown

# IV - BOILER BLOCK AND PIPING ASSEMBLY



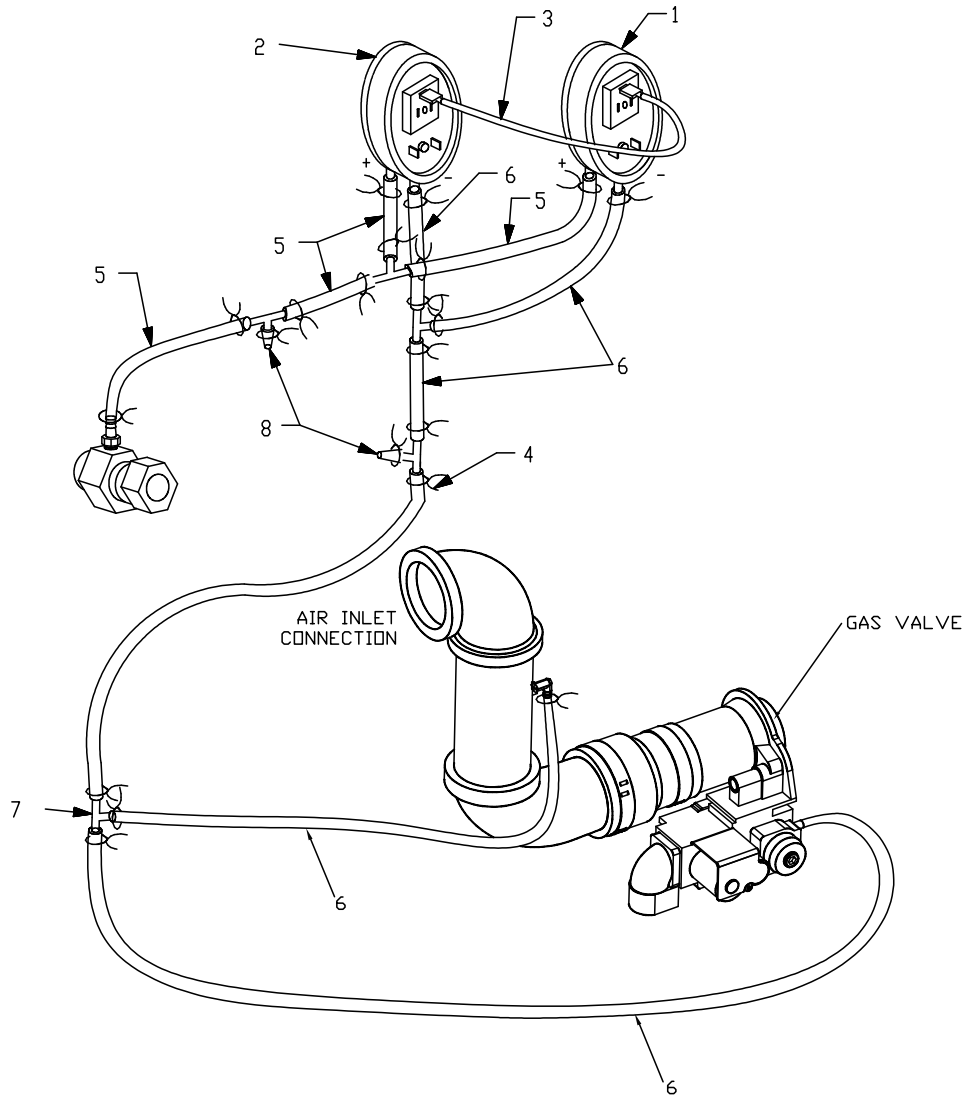


## IV - BOILER BLOCK AND PIPING ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY.
<b>KIT# 550001326 (95M-200 BLOCK REPLACEMENT KIT) INCLUDES:</b>			
1	12101013	Block, Machined/Tested	1
2	1395002	Plug, 1¼" Cast Iron Sq. Head Solid	16
3	1310002	Pipe, Nipple 1¼" x 4½" Black Iron	1
4	14622000	Valve, Boiler Drain ¾"	1
5	14693204	Bushing 1½" x 1¼" Std. Black	1
6	14631004	Adapter, Sight Glass	1
7	14619002	Observation Port ¾"	1
8	1230010	Fitting ⅛" NPT x ⅜", Barb Straight	1
9	14631301	Hose 3" Long 2⅜" ID x 2¾" OD	1
10	14693040	Elbow, Street Mall ¾" x 90°	1
11	14662804	Well Control ½"	1
12	14631324	Aquastat	1
13	1580006	Vent Air Purge	1
14	1530003	Sensor 12k Ohms	2
<b>PIPING ASSEMBLY PARTS</b>			
15	1395004	Plug, 1" Cast Iron Sq. Head Solid	1
16	1230012	Fitting, Pipe, Black ¾" x 2½"	1
17	1310015	Nipple, Black 1½" x Close	1
18	1500005	Casting Temperature Switch	1
19	14693001	Bushing ¾" x ⅛" Black	1
20	14693004	Bushing ¾" x ½" Black	1
21	1060012	Bushing 1" x ¼" Black	1
22	1060013	Bushing 1" x ⅜" Black	1
23	1280012	LWCO Well	1
24	1280014	LWCO Probe Rod	1
25	14622011	Relief Valve ¾"	1
26	14607202	Nipple, Std. Black ¾" x 4½"	1
27	1190001	Elbow ¾" x 90°	1
28	240004863	Reducing Tee, Black 1½" x ¾" x 1¼"	1
29	14631302	Clamp, Stainless Steel #44	2
30	1190002	Elbow 1¼" x 90°	1
*	14695802	Screw, Soc Hd Cap 8-32 x ⅜"	6
*	240004804	Outdoor Sensor	1
*	EF-003.03	Electric Anti-Short #1 - Insr. ⅝"	1
*	1330001	Nut, Whizlock FLG PL ⅝"-18	4
*	1040004	Bolt, Carriage ⅝" X 1½"	4
*	14634012	Connector, Romex ½" K.O.	1
*	43300826	Wiring Harness, Circulator	1
*	CI-006.01	Circulator, Grunfos	1
*	CI-001.03	Circulator, Taco	1

\* Not Shown

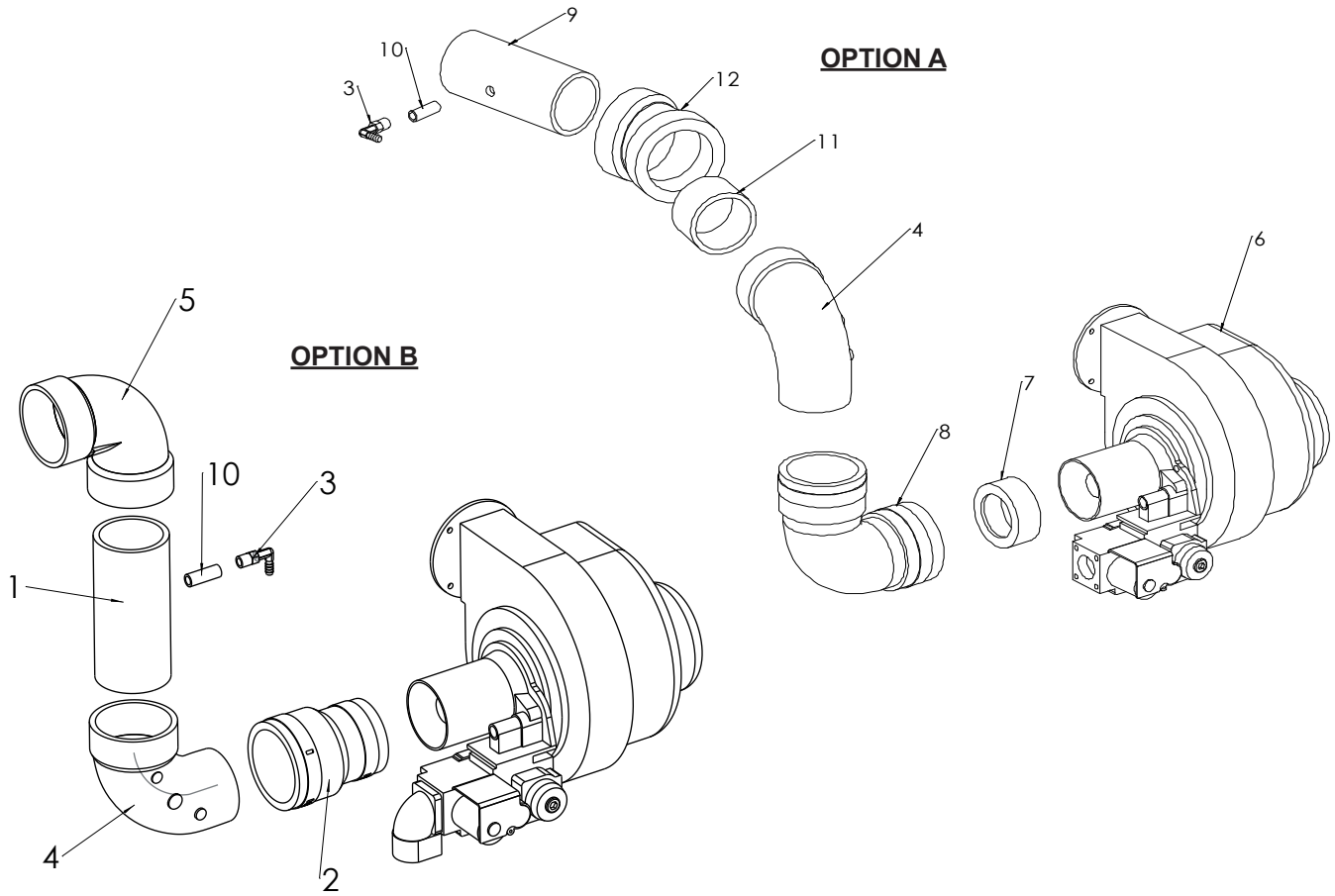
## V - AIR PRESSURE SWITCH ASSEMBLY



ITEM	PART NO.	DESCRIPTION	QTY.
<b>KIT# 550001466 (95M-200 AIR PRESSURE SWITCH REPLACEMENT KIT) INCLUDES:</b>			
1	1500010	Pressure Switch, .04" N.O. Set Point	1
2	1500011	Pressure Switch, 3½" N.C. Set Point	1
3	1640008	Wire Jumper Pressure Switch	1
4	1110001	Rotor Clamp	22
5	1552014	Silicone Tubing, 3/16" ID	Lengths Vary
6	1552004	Silicone Tubing, Orange 3/16" ID	
7	1510009	Tee, Plastic, Barbed Hose 3/16" ID	5
8	1230006	Cap, Vinyl, Black 3/16"	2
*	PB-002.-02	Pilot Orifice	1

\* Not Shown

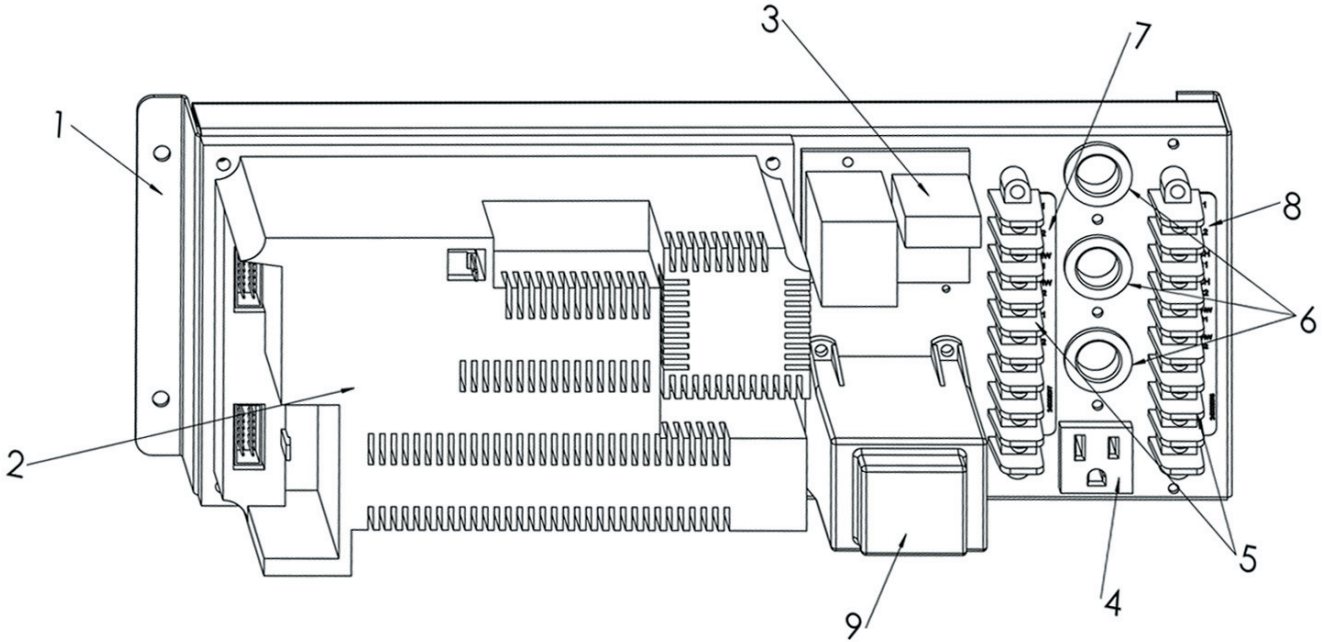
## VI - AIR INTAKE ASSEMBLY



ITEM	PART NO.	DESCRIPTION	QTY.
<b>COMMON PARTS</b>			
1	1400007	Vent Pipe 2" PVC x 8" Long	1
2	14631311	Flex Coupling 2" x 1½"	1
3	1230011	Fitting ⅛" NPT x ⅜" Barb 90°	1
4	1190007	Elbow 2" Street 90° PVC	1
5	240004834	Elbow 2" PVC 90°	1
7	240006120	Bushing 1½" x 2" Flex	1
8	240006119	Elbow 2" Flex	1
9	14631304	Vent Pipe 2" CPVC SCH 40 x 29½" Long	19½"
10	MS-003.05	Pilot Tube ¼" x 24¼" AL	1½"
11	1400007	Vent Pipe 2" PVC x 2" Long	1
12	240006147	Elbow 2" PVC 22.5°	1
<b>KIT# 550001475 (95M-200 BLOWER REPLACEMENT KIT) INCLUDES:</b>			
6	1035002	Blower, Modulating	1
*	1250021	Gasket, Cork, Venturi	1
*	1250007	Gasket, Fan/Flue Adapter	1
*	1450009	Screw, 10-24 x ½" SSTL Hex Head Cap	4

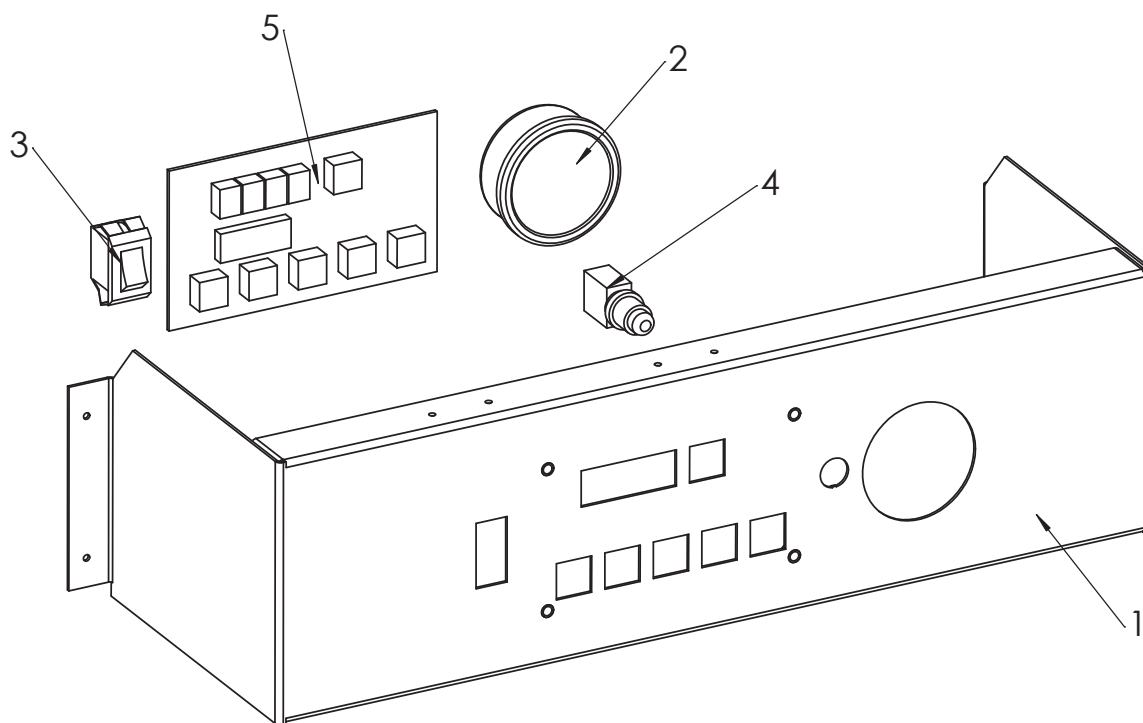
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## VII - CONTROL PANEL ASSEMBLY



ITEM	PART NO.	DESCRIPTION	QTY.
<b>COMMON PARTS</b>			
1	109005907	Bracket, Control	1
3	1280013	LWCO, Panel Mounted	1
4	1407001	Receptacle	1
5	EF04001	Elec Beau 9 Term Strip	2
6	14693011	Bushing	3
7	240005097	Label, Control Panel, Low Voltage	1
8	240005098	Label, Control Panel, High Voltage	1
9	240004795	Transformer	1
*	14631097	Rivet, Stainless Steel 1/4" x 1/8"	8
*	14631098	Hinge Slip, Lower	2
*	14631099	Hinge Slip, Upper	2
*	HW09001	Ground Screw 10-32 x 5/16"	3
*	14695074	Screw #10 x 1/2"	4
*	EF04101	Pop Rivet 1/8"	4
*	201000100	Screw #6 x 3/8"	4
<b>KIT# 550001464 (95M-200 MCBA CONTROL REPLACEMENT KIT) INCLUDES:</b>			
2	1140010	Control, Modulation 95M Programmed	1
*	240006054	Fuse, 4A, Slow Blow	2
*	240006055	Fuse, 5A, Fast Blow	2
*	240006101	Label, Control, MCBA	1

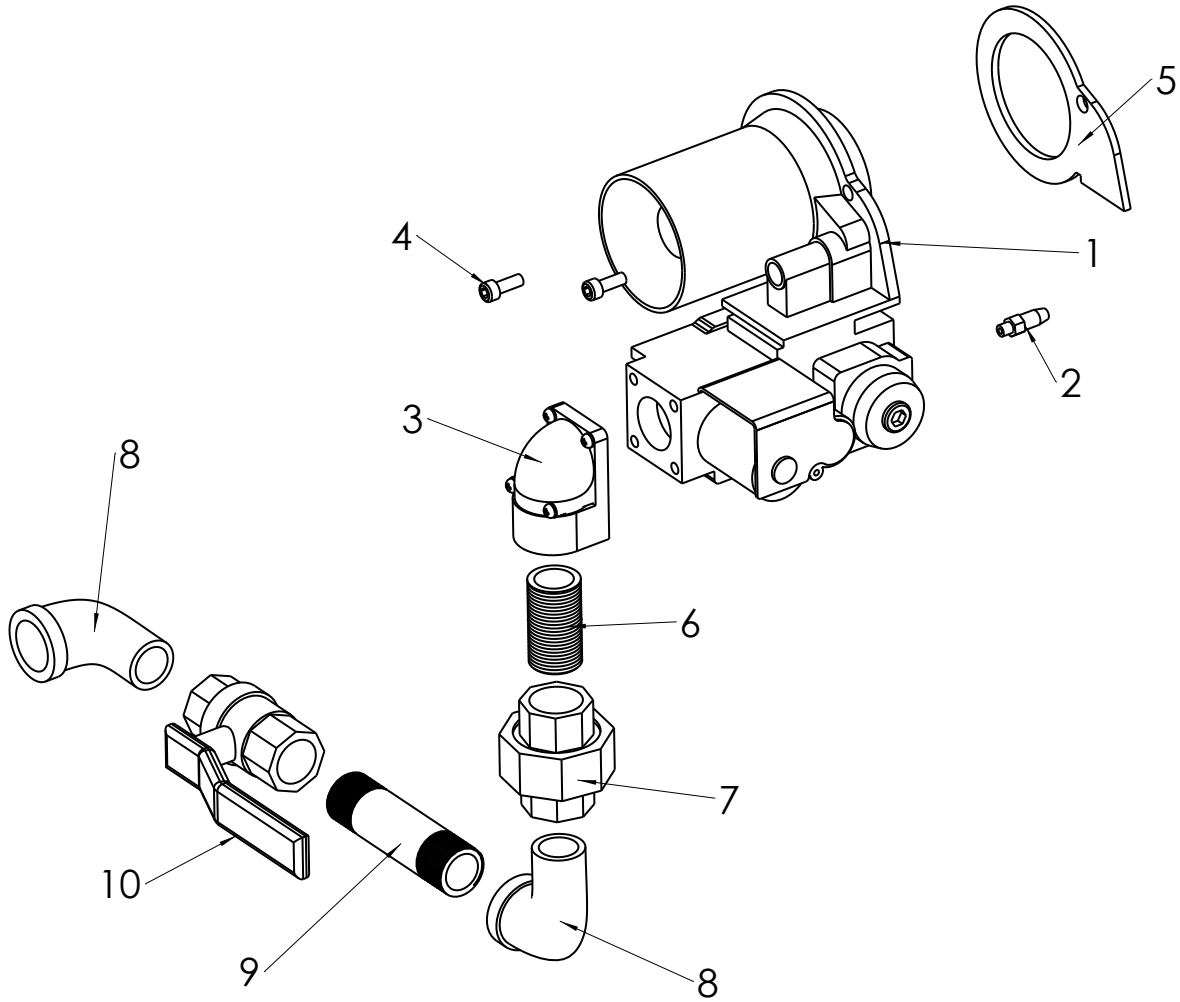
## VIII - DISPLAY PANEL ASSEMBLY



ITEM	PART NO.	DESCRIPTION	QTY.
1	109005739	Display Panel	1
2	1260007	Pressure Gauge w/Capillaries	1
3	1500012	Main Power Rocker Switch	1
4	1500013	LWCO Push Button Reset Switch	1
5	240004792	Display Panel User Interface	1
*	240004793	Ribbon Cable	1

\* Not Shown

## IX - GAS VALVE PIPE ASSEMBLY



ITEM	PART NO.	DESCRIPTION	QTY.
<b>COMMON PARTS</b>			
6	14607030	Nipple, Std., Black, Close 1/2"	1
7	14693043	Union, Std., Black 1/2"	1
8	14693801	Elbow, Street Mall, 1/2" x 90°	2
9	14607301	Nipple, Std., Black 1/2" NPT x 3"	1
10	1570038	Valve, Ball 1/2" (Blue)	1
<b>KIT# 550001474 (95M-200 GAS VALVE REPLACEMENT KIT) INCLUDES:</b>			
1	240004794	Gas Valve, Modulating, Venturi	1
2	1230005	Fitting, Pressure Feedback	1
3	240005020	Adapter, 90° NPT w/Gasket and Screws	1
4	1450012	Screw T25 Torx	2
5	1250021	Gasket, Cork, Venturi	1

**X - CONVERSION KITS / MISCELLANEOUS**

<b>KIT NO.</b>	<b>DESCRIPTION</b>
550001314	Honeywell AM (HAM) Accessory Module
550001315	Gas Conversion Kit (Natural To LP)
550001327	GCI PC Interface Kit
29571	3" Concentric Vent Kit

