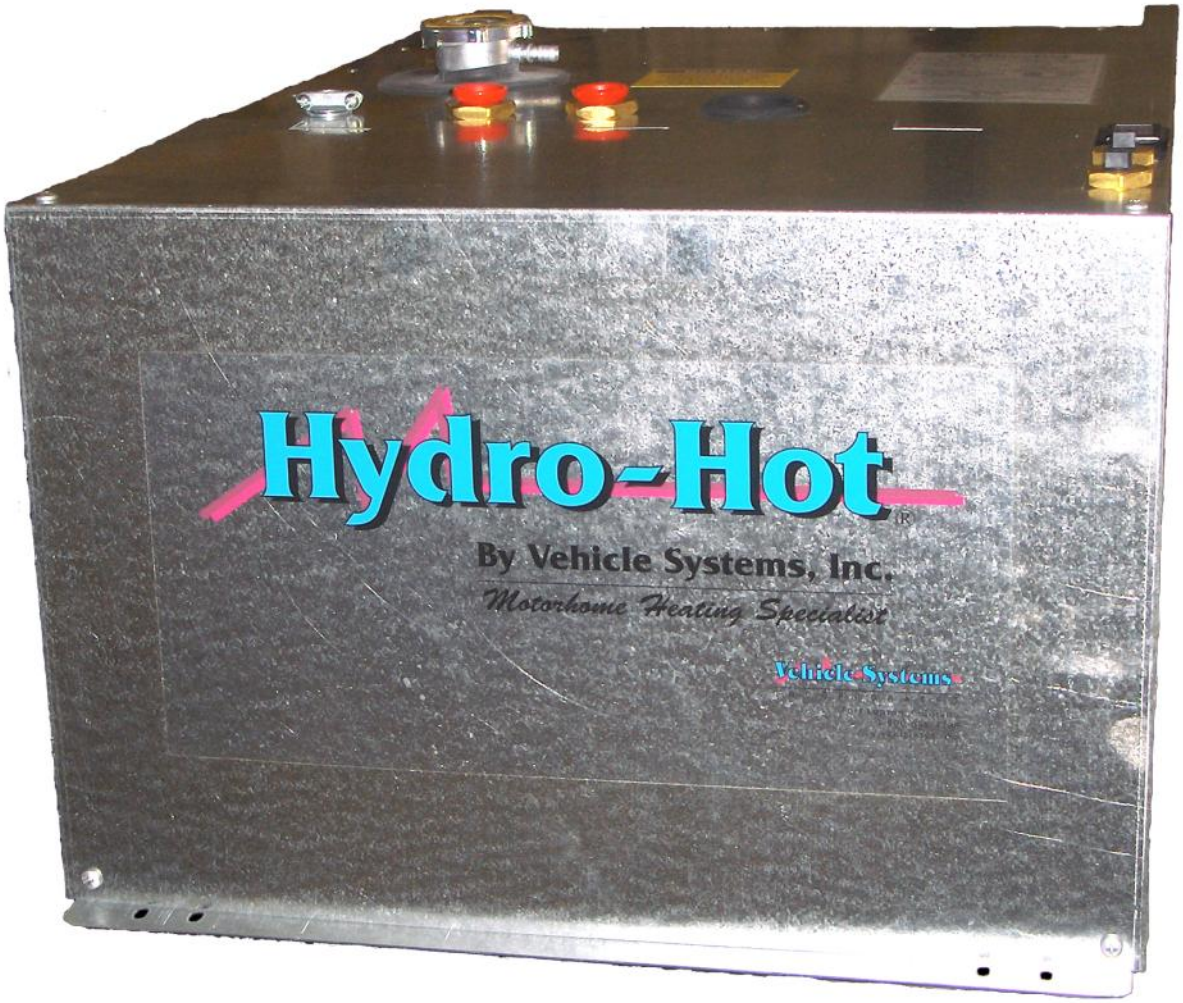
Aqua-Hot®

HYDRONIC HEATING SYSTEM



HHE-200-09E

PARTS MANUAL

© 2010 Aqua-Hot Heating Systems Inc.

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A

Table of Contents

Section 1: Heater Overview

General ..... Page 5
Top ..... Page 6
Front ..... Page 7-10
Rear ..... Page 11-12

Section 2: Diesel-Burner

Overview ..... Page 13-15

Section 3: Misc. Parts

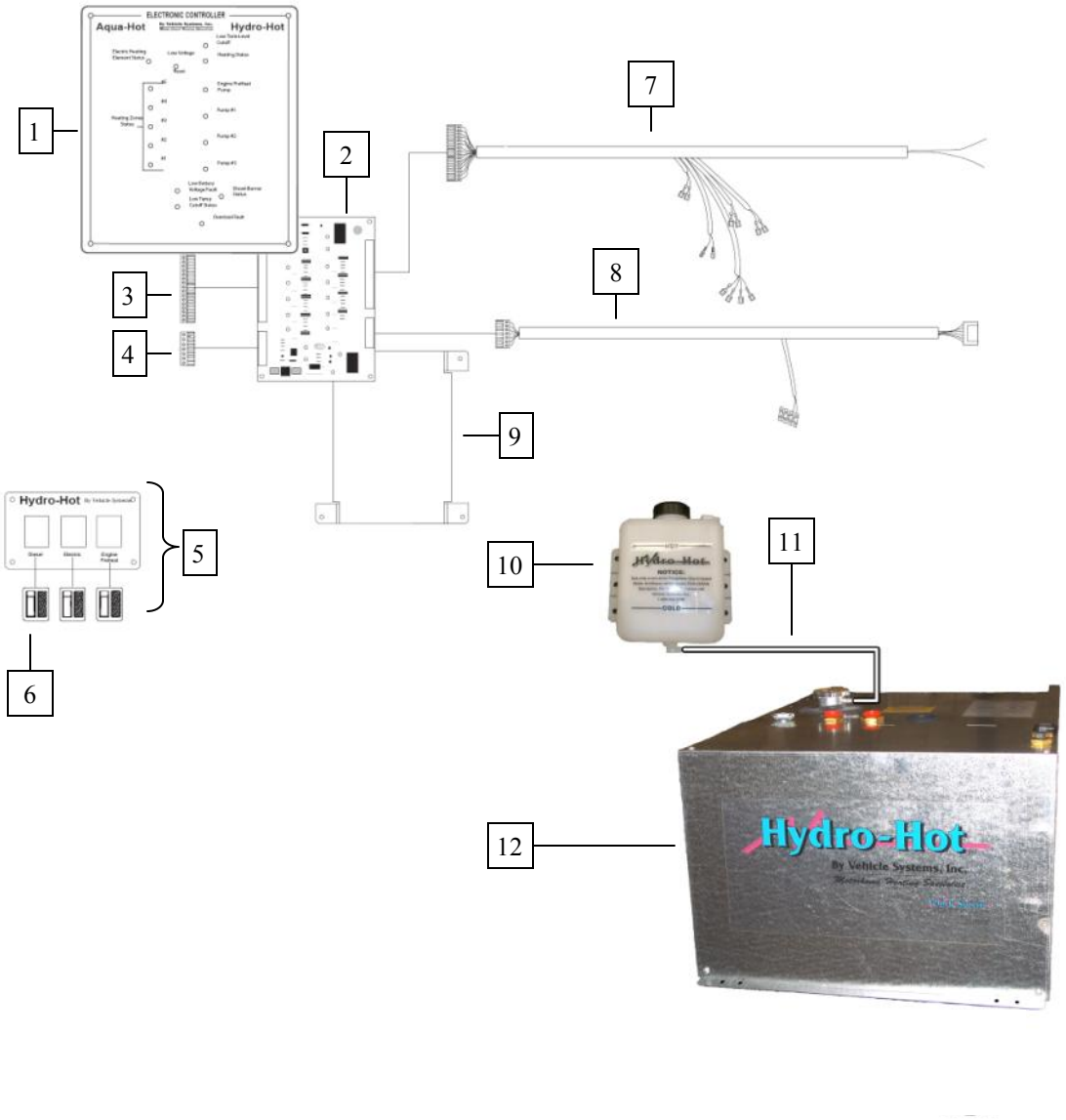
Misc. Parts ..... Page 16

Section 4: Tools

Tools ..... Page 17

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A

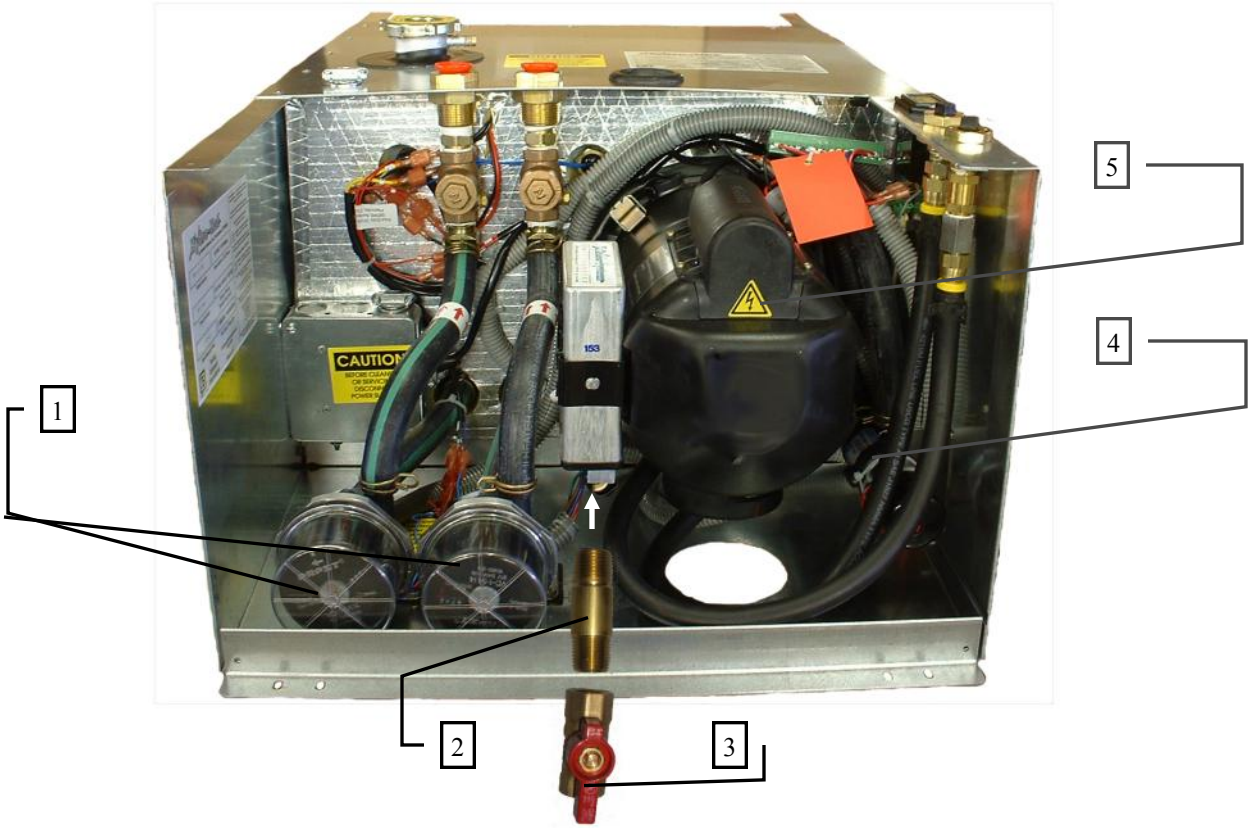


Key	Part Number	Description
1	SME-200-501	Faceplate, Electronic Controller, Assembly
2	ELE-PC4-010-AA	Controller, Electronic, 12 VDC
3	ELX-312-491	Plug, Electronic Controller, 20-Position
4	ELX-312-499	Plug, Electronic Controller, 8-Position
5	ELE-000-507	Panel, Switch, Assembly, 12 VDC
6	ELX-283-284	Switch, Rocker, w/LED
7	ELE-100-422	Harness, B-Plug, JP4, 12 ft
8	ELE-100-453	Harness, Circulation Pump Standard Control 12ft
9	SME-EN4-008	Back, Electronic Controller, Enclosure
10	PLE-070-400	Tank, 3 QT, Expansion assembly
11	PLX-210-092	Tubing, Clear 5/16 in. x 6 ft
12	SME-C23-500	Cover, Access Main

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A

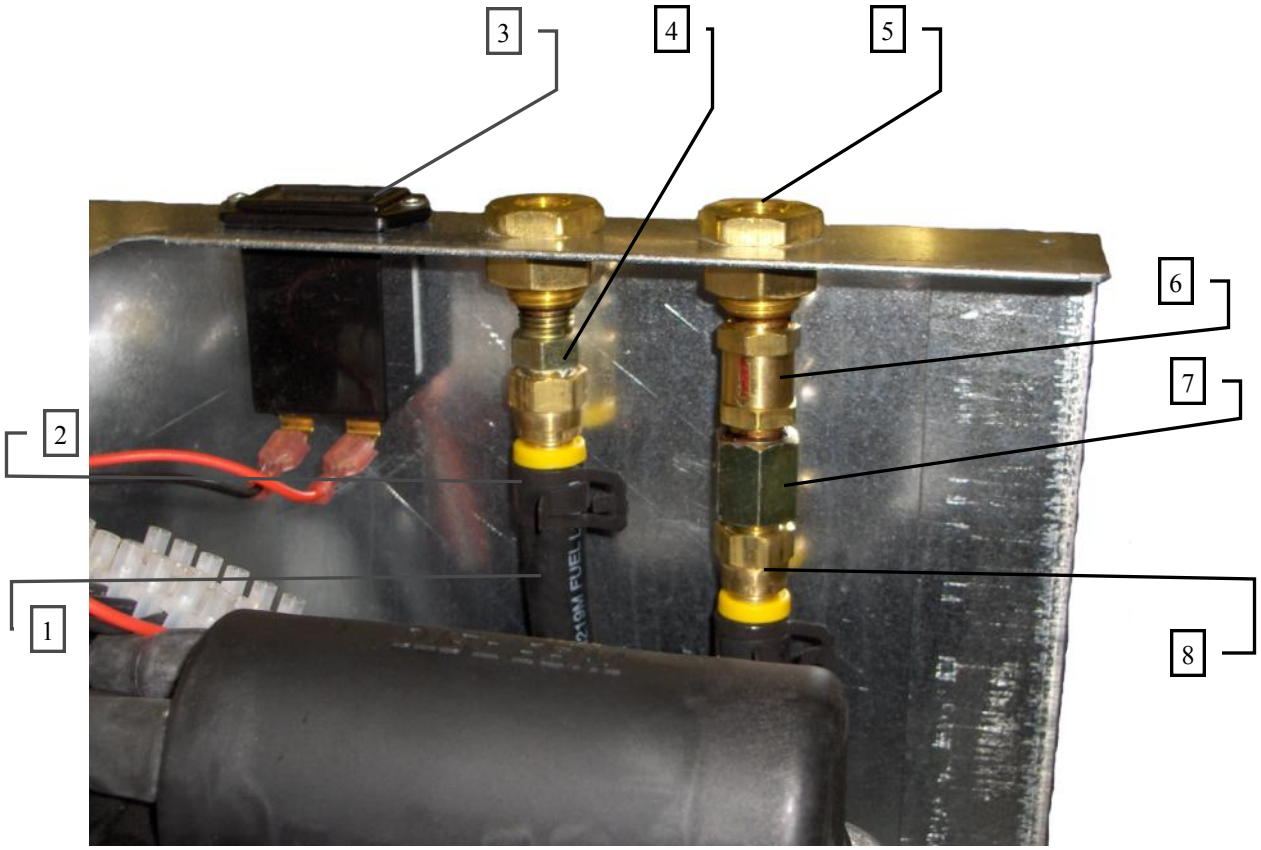
Key	Part Number	Description
1	HDX-REG-623	Clamp, Romex, 3/8
2	PLE-102-229	Cap, Radiator, 13lb Asm w/Warning Label
3	PLX-105-810	Fitting, Brass, Bulkhead 1/2 x 1/2 (F)NPT
4	ELX-002-100	Meter, Hour
5	PLX-105-800	Fitting, Bulkhead, 1/4 x 1/4 in (F) NPT Brass

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A



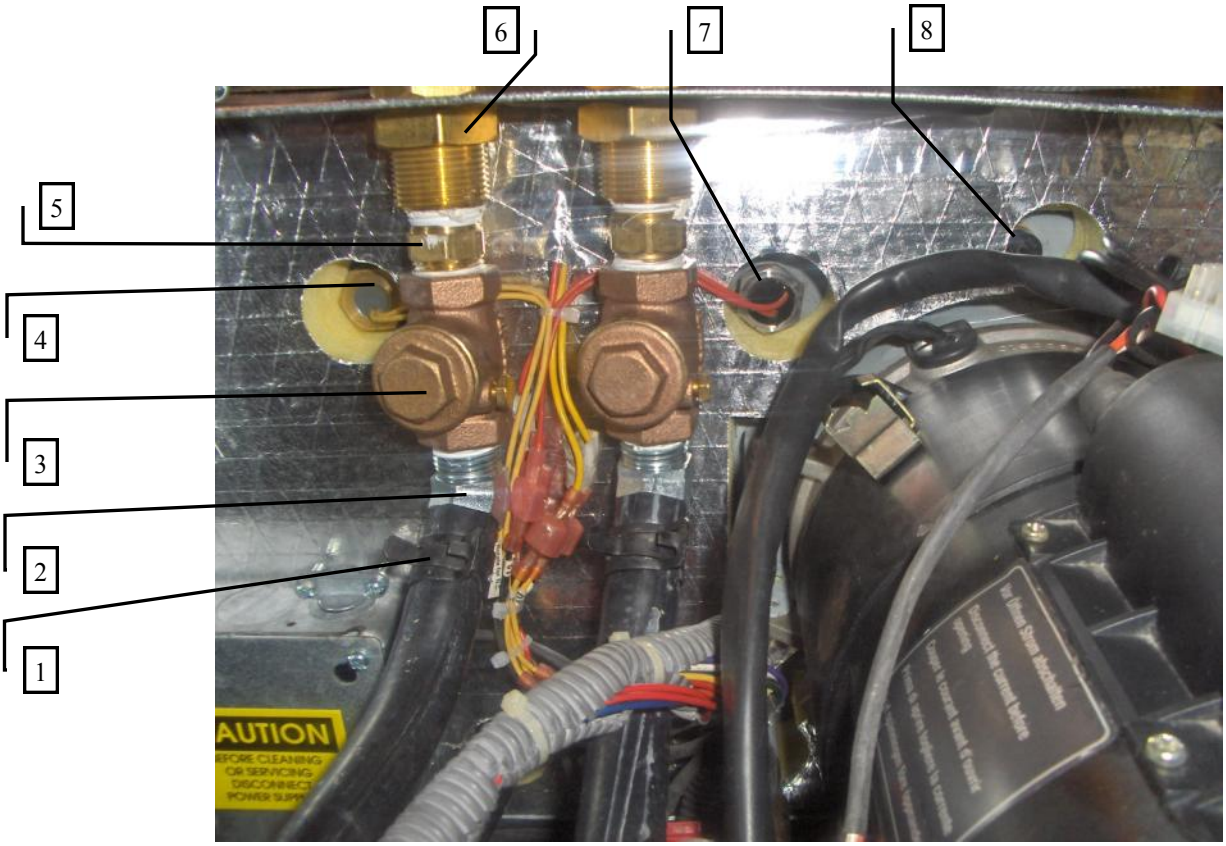
Key	Part Number	Description
1	PLE-100-821	Pump, Kit, Brushless, Replacement
2	PLX-113-086	Fitting, Nipple, 1/2 in. (M)NPT x 3 1/2 in Brass
3	PLX-BV1-200	Valve, Ball, 1/2 (F)NPT
4	PLE-100-830	Pump, Assembly, Stir, w/Connectors
5	WPE-905-835	Burner, Diesel, Webasto DBW 2010 Modified

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A



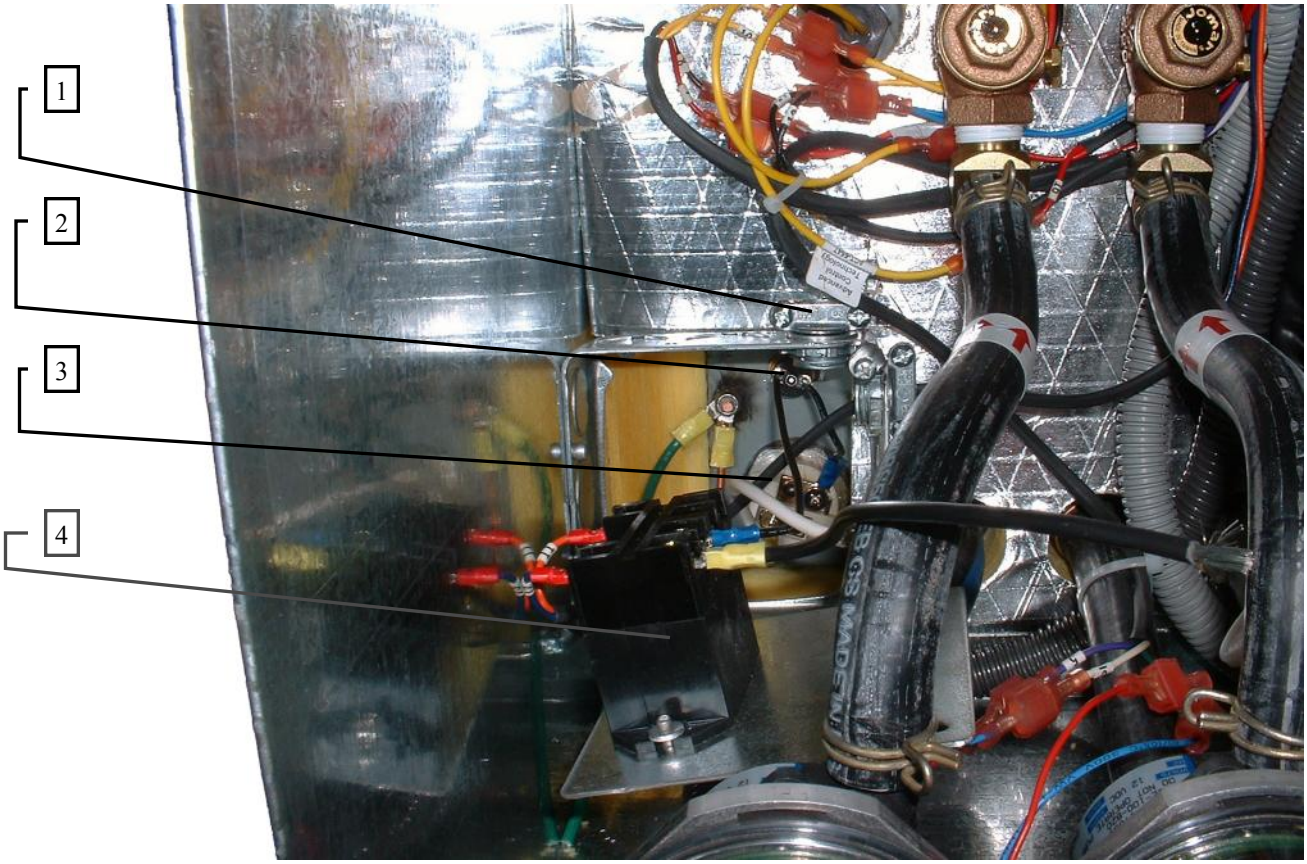
Key	Part Number	Description
1	FLX-421-941	Fuel Line, 1/4, USCG, per/inch
2	PLX-CTB-17T	Clamp, Hose, Constant Tension 1/4 in.
3	ELX-002-100	Meter, Hour
4	FLX-038-204	Fitting, Steel, #6 (M) JIC X 1/4 (M)NPT
5	PLX-105-800	Fitting, Bulkhead, 1/4 x 1/4 in (F) NPT Brass
6	FLX-751-CVL	Fitting, Valve, Fuel, Check 1/4 X 1/4 (M)NPT
7	FLX-184-604	Fitting, Steel, #6 (M)JIC X 1/4 (F)NPT
8	FLX-380-406	Fitting, (F) #6 JIC X 5/16 Barb

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A



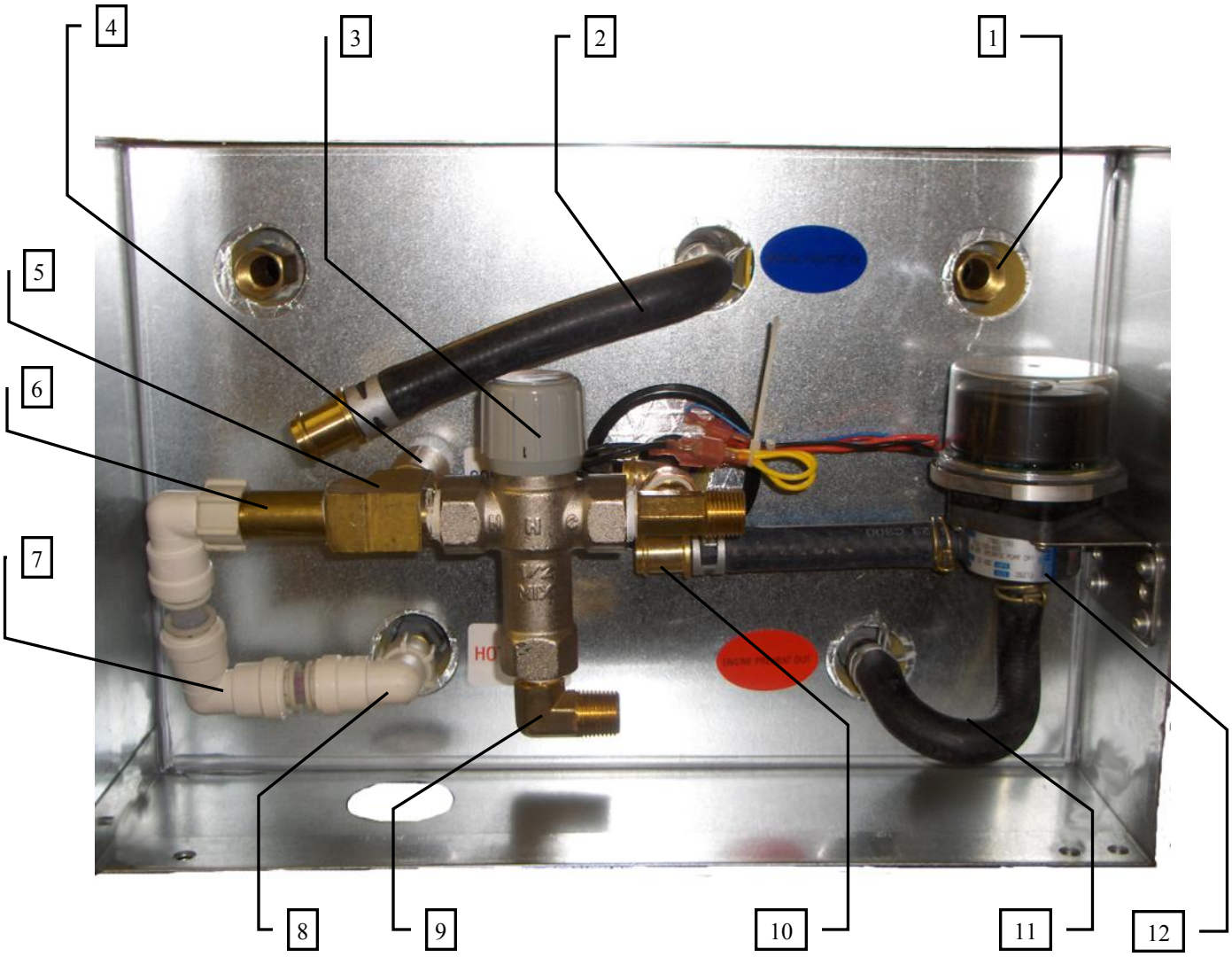
Key	Part Number	Description
1	PLX-CTB-240	Clamp, Hose, Constant Tension, 57/64 in.
2	PLX-114-080	Fitting, Elbow 45° Barb, 1/2 X 1/2 (M)NPT Steel
3	PLX-2A1-300	Valve, Brass, Check 1/2 X 1/2 (F) NPT
4	ELE-800-002	Switch, Fluid Level, Brass w/Connectors
5	PLX-122-000	Fitting, Brass, Close Nipple, 1/2 (M)NPT w/Hex
6	PLX-105-810	Fitting, Brass, Bulkhead, 1/2 X 1/2 (F)NPT
7	ELE-800-100	Thermostat, Assembly, Control, 190°F, w/Connectors
8	ELE-HLT-322	Thermostat, High Limit, 220°F

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A



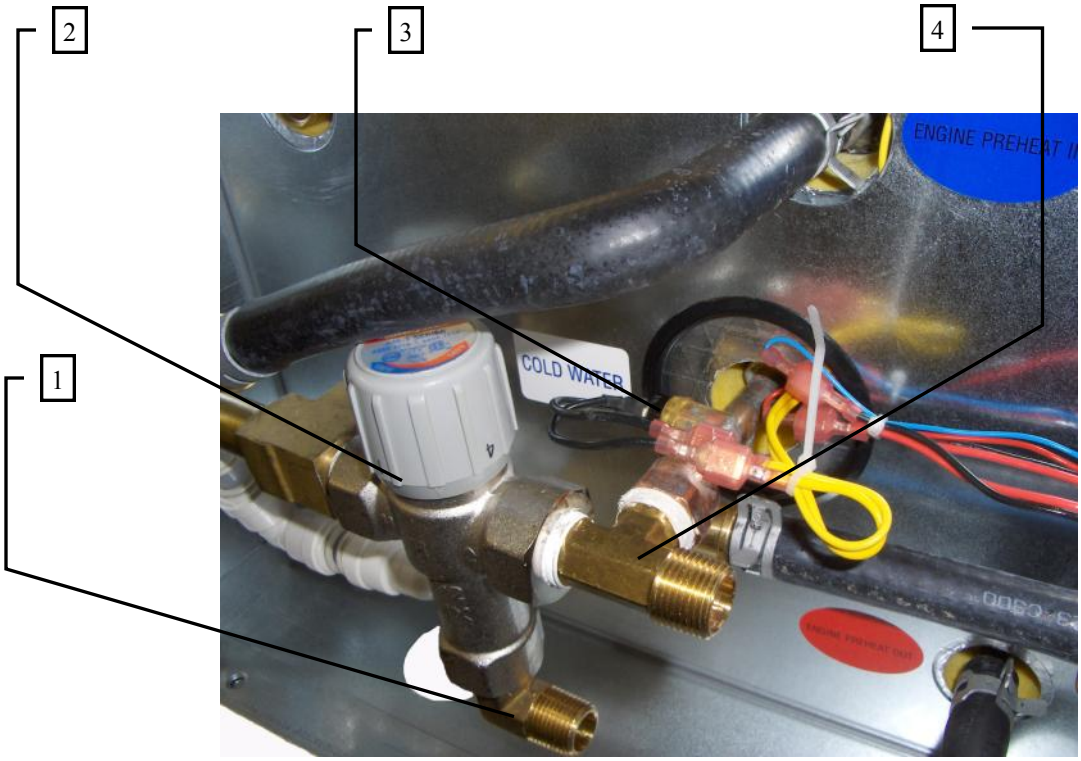
Key	Part Number	Description
1	HDX-REG-623	Clamp, Romex, 3/8
2	ELE-ASY-200-FRU	Thermostat, High Limit VAC Kit 220°F
3	ELX-2E7-540	Element, Electric Heating, 120 VAC/1650 Watt
4	ELX-630-001	Relay, 30A 277 VAC 12VDC Coil

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A



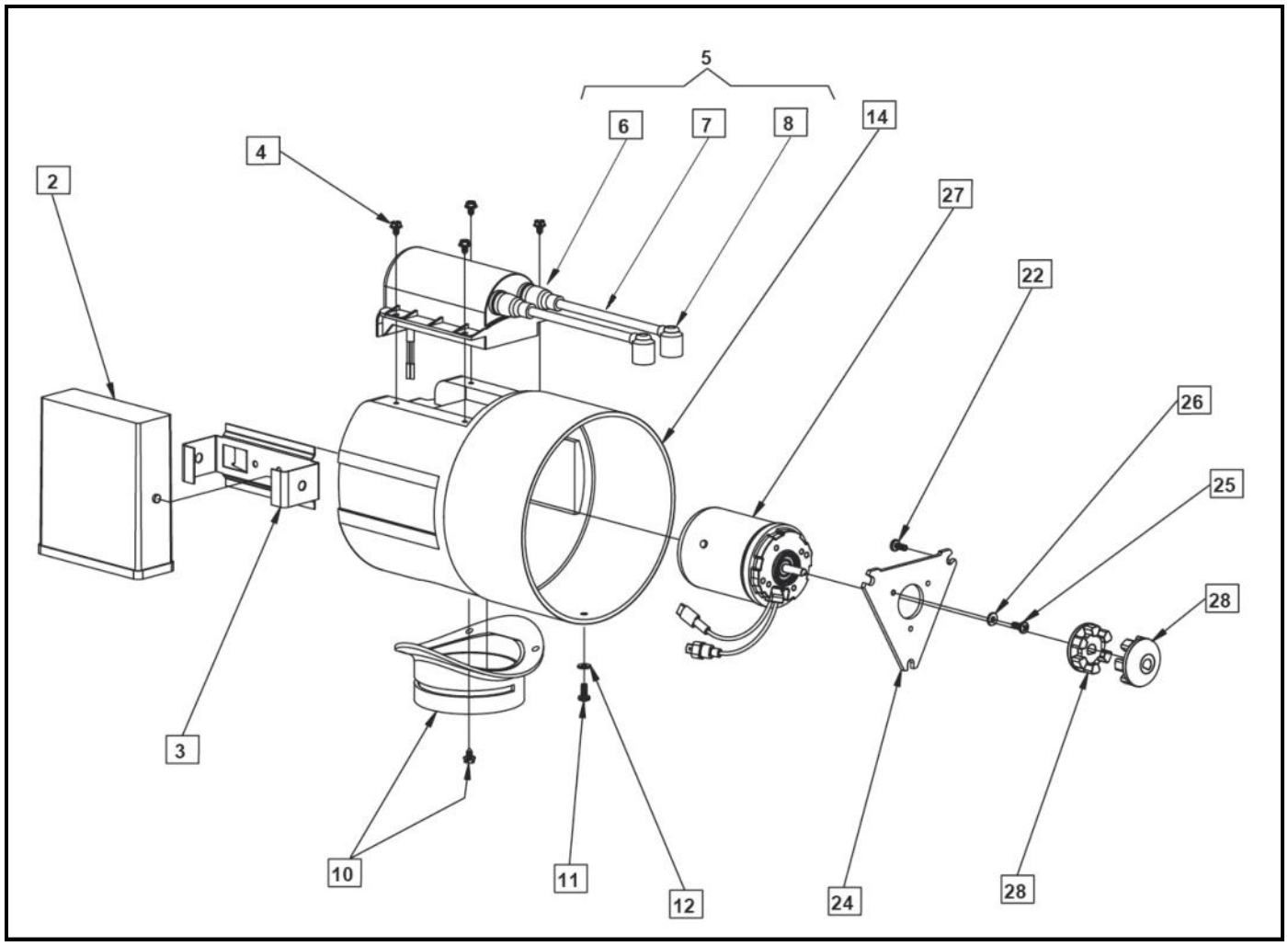
Key	Part Number	Description
1	PLE-200-008	Fitting, Extension 1.5 in lg. 1/2 in. (M)NPT x 1/2 in
2	PLE-285-050	Hose, heater Asm hook-Up Engine Preheat
3	PLX-09P-100	Valve, Tempering 145°F
4	PLX-111-125	Valve, Pressure Relief 125 PSI
5	PLX-0X1-07D	Fitting, Tee 1/2 NPT (M) (F) Brass
6	PLX-113-250	Fitting, Nipple 1/2 in NPT x 2-1/2 in Brass
7	PLX-803-ELB	Fitting, Elbow, 90° 1/2 Pex X 1/2 in PSF
8	PLX-803-FSE	Fitting, Elbow, 90° 1/2 Pex X 1/2 in (F)-NPT PSF
9	PLX-99D-90A	Fitting, 90° Elbow, Brass, 1/2 in (M) NPT
10	PLX-000-835	Fitting,, Reducer 3/4 in to 5/8 in Black Nylon
11	PLX-GAT-700	Hose, Formed Engine Preheat, 7.25 in
12	PLE-100-821	Pump, Engine Preheat Assembly

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A



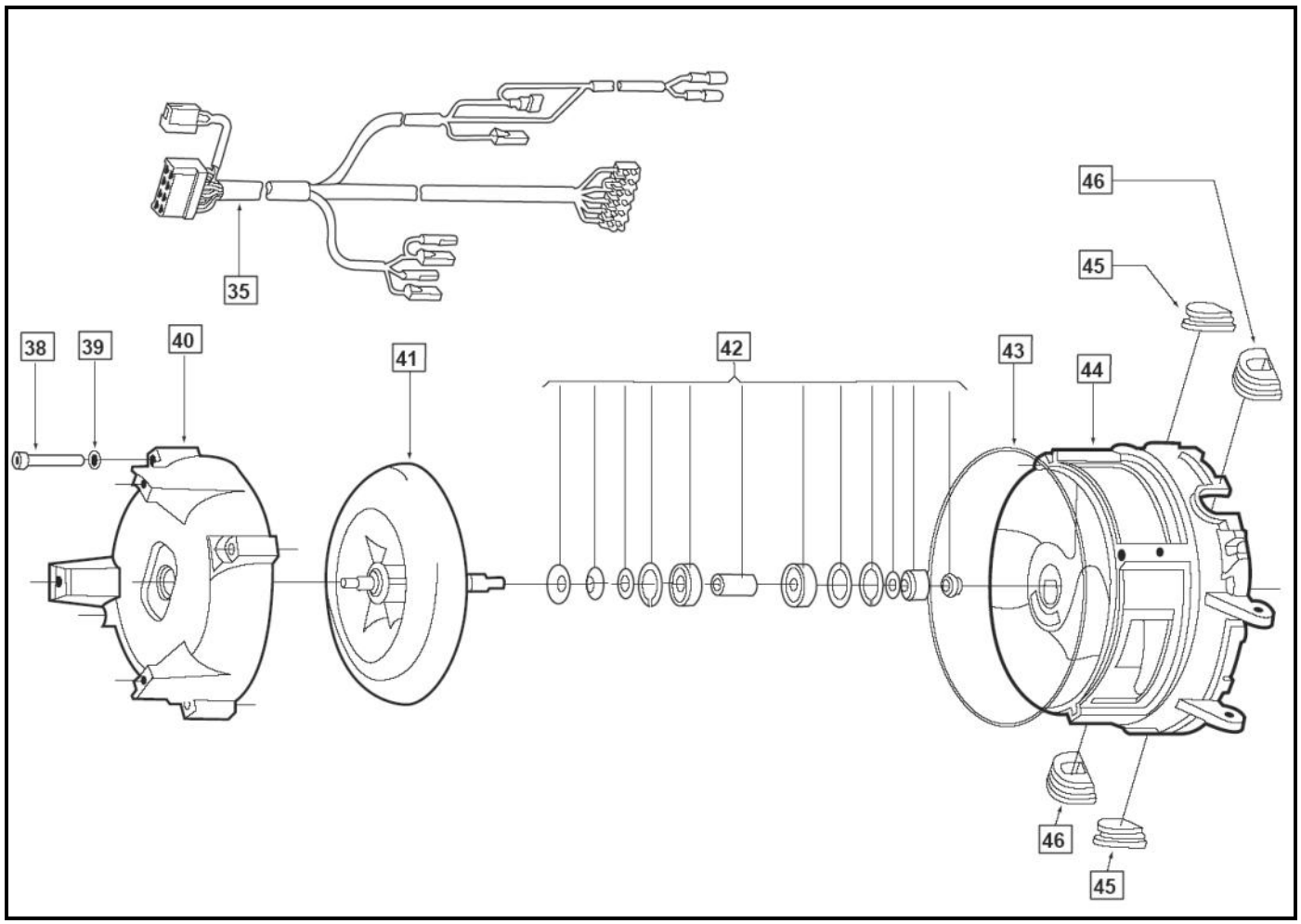
Key	Part Number	Description
1	PLX-99D-90A	Fitting, 90° Elbow, Brass, 1/2 in (M) NPT
2	PLX-09P-100	Valve, Tempering 145°F
3	ELE-000-606	Thermostat, Low Temp Cut-Off
4	PLX-M10-1DA	Fitting, Tee Forged, 1/2 Male NPT

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A



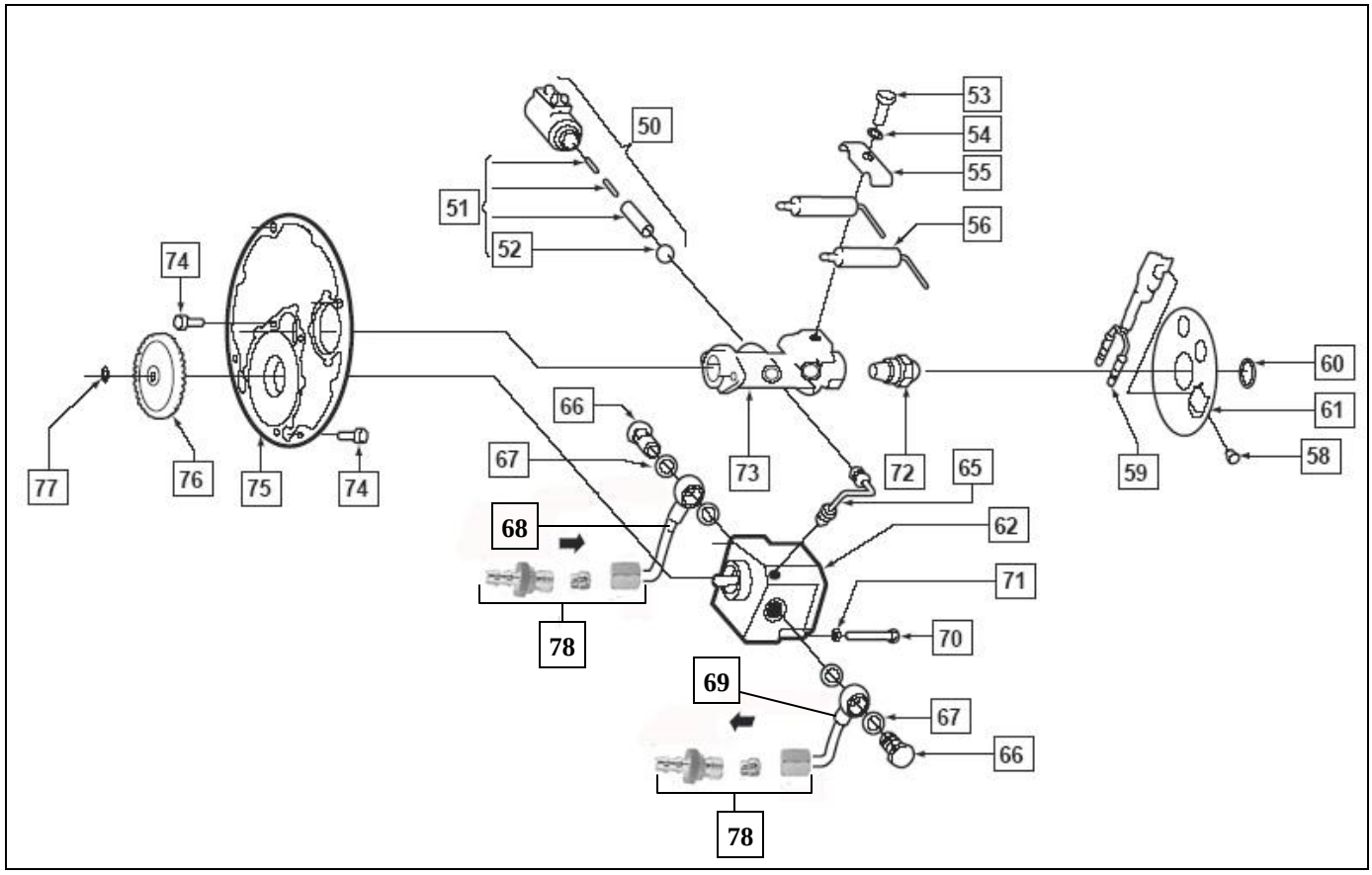
Key	Part Number	Description
2	WPX-287-962	Controller, Diesel Burner, 12 VDC
3	WPX-362-107	Bracket, Controller Mounting
4	WPX-470-562	Screw, Coil Mounting
5	WPX-101-838	Coil, Ignition, 12 VDC
6	WPX-404-918	Boot, Ignition Wire
7	WPX-178-624	Wire, Ignition
8	WPX-176-494	Boot, Ignition Wire, Elbow
10	WPX-350-427	Shutter, Combustion Air Intake
11	WPX-432-377	Screw, Protection Housing
12	WPX-152-269	Washer, Star, Protection Housing
14	WPX-436-216	Cap, Protection, Motor
22	WPX-147-834	Screw, Flange, Blower Housing
24	WPX-425-05A	Plate, Motor Mounting
25	WPX-432-377	Screw, Motor Plate
26	WPX-152-269	Washer, Star, Motor Plate
27	WPX-425-060	Motor, Combustion Air/Fuel Pump, 12 VDC
28	WPX-350-516	Clutch, Half, 6mm

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A



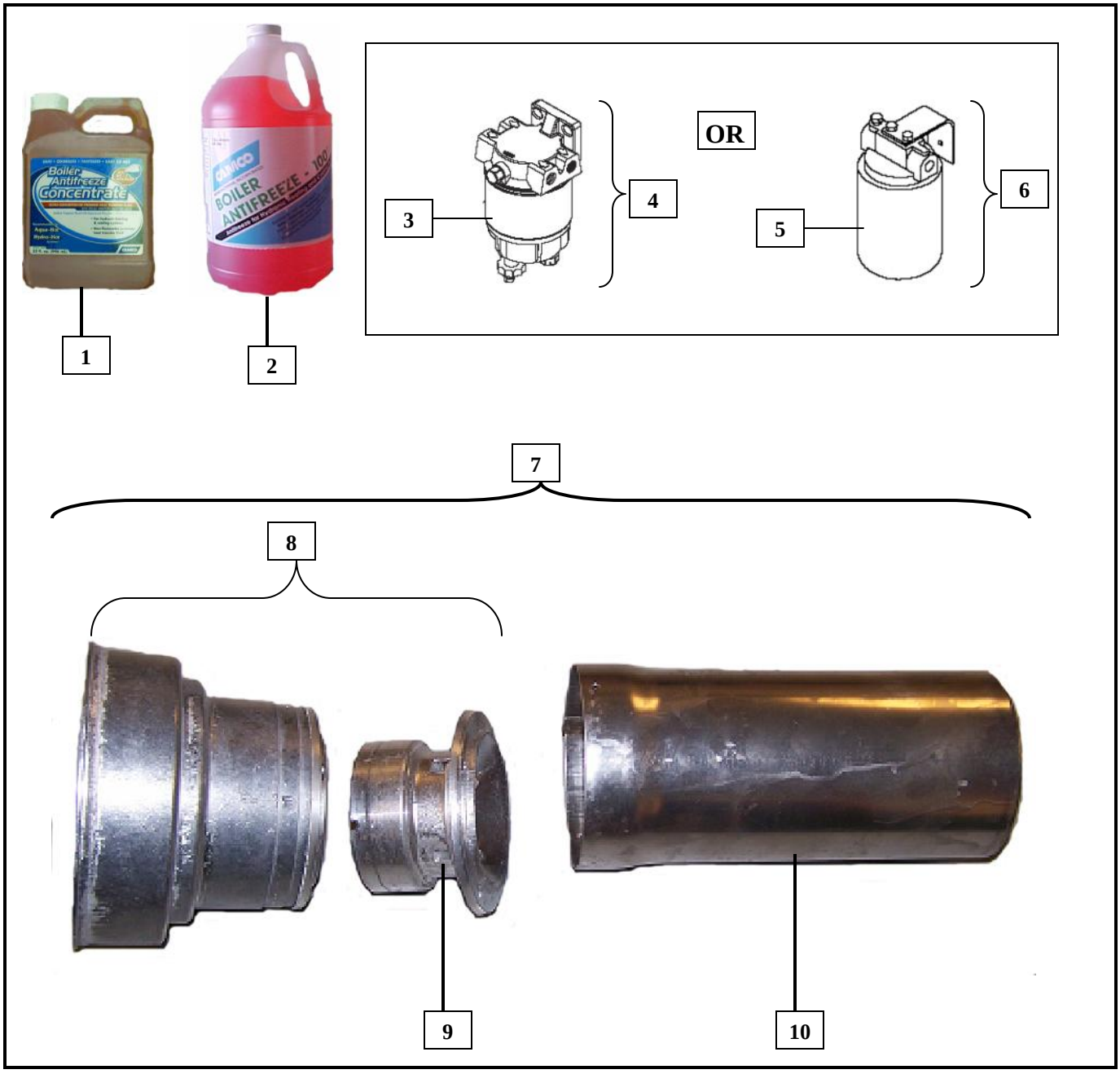
Key	Part Number	Description
35	WPX-434-795	Harness, C-Plug
38	WPX-148-210	Screw, Blower Casting
39	WPX-152-552	Washer, Lock, Blower Casting
40	WPX-301-841	Housing, Blower
41	WPX-373-001	Blower, Wheel, w/Shaft
42	WPX-378-313	Bearing Kit
43	WPX-412-244	O-Ring, Blower Casting
44	WPX-225-67A	Casting, Blower
45	WPX-298-964	Grommet, Blower Casting, Left
46	WPX-299-995	Grommet, Blower Casting, Right

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A



Key	Part Number	Description
50	WPX-322-083	Valve, Fuel Solenoid, 12 VDC
51	WPX-386-650	Valve, Fuel Solenoid, Kit
52	WPX-260-487	O-Ring, Fuel Solenoid Valve
53	WPX-267-279	Bolt, Electrode
54	WPX-152-560	Washer, Lock, Electrode
55	WPX-278-971	Clamp, Electrode
56	WPX-274-313	Electrode, Ignition
58	WPX-147-699	Screw, Flame Sensor
59	WPX-638-78A	Sensor, Flame
60	WPX-453-048	Clip, Retaining, Photo Disc
61	WPX-887-71A	Disc, Photo
62	WPX-503-03A	Pump, Fuel, Kit
65	WPX-665-49A	Tube, Fuel, High Pressure
66	WPX-150-754	Bolt, Banjo
67	WPX-151-157	Gasket, Ring, Copper
68	WPX-661-002	Pipe, Fuel, Banjo, Supply, DBW 2010 (w/Straight Tube)
69	WPX-661-001	Pipe, Fuel, Banjo, Return, DBW 2010 (w/Straight Tube)
70	WPX-277-282	Screw, Mounting, Fuel Pump
71	WPX-152-544	Washer, Lock, Fuel Pump
72	WPX-886-41A	Nozzle, Fuel, 0.35 GPH
73	WPX-412-198	Manifold, Fuel Nozzle, Brass
74	WPX-277-150	Screw, Plate, Nozzle Stand
75	WPX-102-861	Plate, Manifold
76	WPX-371-289	Gear, Fuel Pump, Nylon
77	WPX-152-390	Snap, Ring, Gear
78	FLE-FUL-100	Fuel Kit, JIC, Male, w/Nut & Ring, Complete

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A



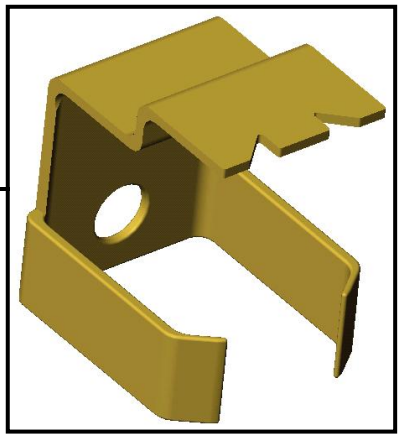
Key	Part Number	Description
1	MSX-300-275	Antifreeze, Boiler, P.G., 1 qt, Concentrate, (Camco)
2	MSX-300-270	Antifreeze, Boiler, P.G, 1 Gallon (Camco)
3	FLX-R12-TRA	Filter, Fuel, Racor Spin-On, 10 Micron
4	FLX-120-VS1	Filter System, Fuel, 10 Micron, Racor
5	FLE-120-100	Filter, Cannister, Replacement, Garber
6	FLX-120-000	Filter, Fuel, Garber
7	WPX-265-53A	Combustion Chamber, DBW 2010
8	WPX-303-051	Swirler, Combustion Chamber Air Assembly Cast Aluminum
9	WPX-302-651	Air Swirler, DBW 2010
10	WPX-303-050	Tube, Combustion Chamber, DBW 2010

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A

1

2

3



4

Key	Part Number	Description
1	WPX-440-280	Tester, Controller
2	WPE-600-190	Gauge, Fuel Pressure
3	MSX-907-162	Tester, Refractometer, Battery/Coolant
4	WPX-310-646	Gauge, Adjustment, Electrode

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A

© 2010 Aqua-Hot® HHE-200-09E Hydronic Heating System Parts Manual—Rev. A

Aqua-Hot®
HYDRONIC HEATING SYSTEM

HHE-200-09E

PARTS MANUAL

Aqua-Hot® HEATING SYSTEMS INC.

15549 East Highway 52 | Fort Lupton, CO 80621
Toll free: 800.685.4298 | phone: 303.659.8221 | fax:303.857.7881
www.aquahot.com