Giant®

Enhancing everyday living

REPLACEMENT PARTS

enercare™

Avril 2021

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Plant 40, Lesage Avenue, Montréal-East (Québec) H1B 5H3 CANADA **T** 514-645-8893 **Toll free** 1-800-363-9354

NOTES:

NOTES

STORAGE TANKS | REPLACEMENT PARTS

30 Imp. gallons
142ETE-9G7M-EC

40 Imp. gallons
152ETE-9G7M-EC

60 Imp. gallons
172ETE-9G7M-EC

I.D.	Part #	Description	Use with Models
1	TH30X006	Thermostat / High limit assembly	All
1a	TH3ZX001	High limit with manual reset	All
1b	TH3ZX004	Thermostat	All
2	99001204-A	Twist-Lock Flange	All
3	18G0003	Square flange gasket	All
4	16000011-A	Inlet nipple	All
5	DV3Z5000	Brass combination inlet / Drain valve	All
6	18G0001	Thermostat bracket	All
7	45000026-A	Hexagonal head screw	All
8	99000061-A	Access doors	All
9	99001203-A	Chrome plated Square flange	All
10	DT005280 DT005410 22001525-A	Dip tube	142 152 172
11	MS145280 MS145410 MS145510	Magnesium anode	142 152 172
12	NP022241 16000015-A	Outlet nipple (2 ½") Outlet nipple (3 ½")	152 142-172
13	18G0022 SV0Z4220	Temperature and pressure relief valve	152 142-172
14	19000009-A	Overflow tube with elbow (90°)	All

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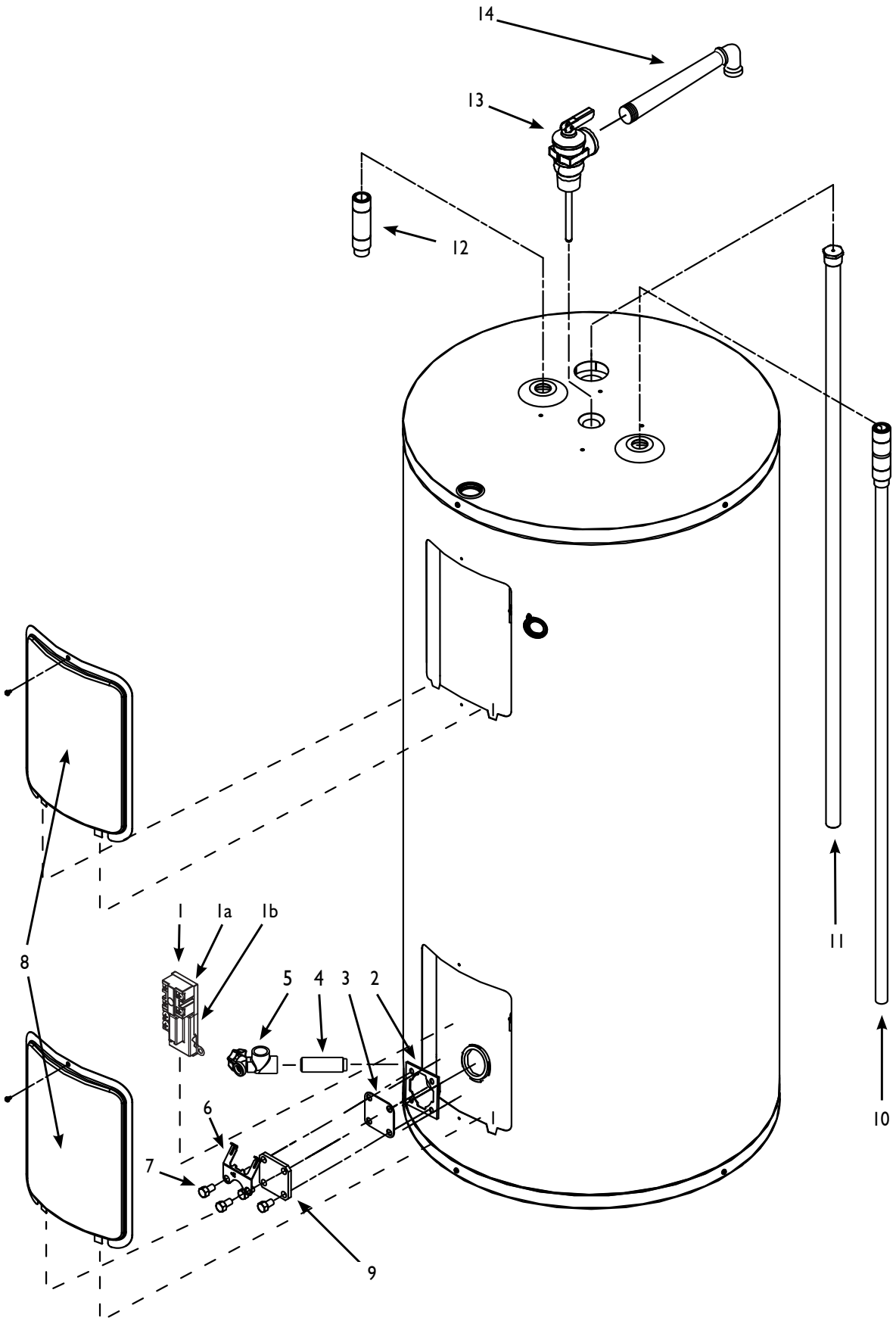
STORAGE TANKS | REPLACEMENT PARTS



RESIDENTIAL ELECTRIC

EXPERT PLUS | REPLACEMENT PARTS

40 Imp. gallons
152STE-3S8M-EC

60 Imp. gallons
172STE-3S8M-EC

I.D.	Part #	Description	Use with Models
1	TH3ZX006	Thermostat and high limit assembly	All
1a	TH3ZX001	High limit with manual reset	All
1b	TH3ZX002	Upper thermostat	All
2	18G0005	Screw-in element gaskets	All
3*	04G30/80 04G45/80	Upper screw-in element (240V)	152 172
4	15000028-A	Brass drain valve (since January 2012)	All
5	TH3ZX004	Lower thermostat	All
6	18G0011	Thermostat brackets	All
7	99000061-A	Element and thermostat access doors	All
8	04G30/80 04G45/80	Bottom screw-in element (240V)	152 172
9*	22001406-A 22001526-A	Dip tube with heat trap	152 172
10	MS145410 MS145510	Magnesium anode	152 172
11	16001115-A	Outlet nipple with heat trap (since March 2011)	All
12	SV0Z4220	Temperature and pressure relief valve	All
13	19000009-A	Overflow tube with elbow (90°)	All

*For 208V element, change 04Gxx /80 for 3AGxx /80
*For 120V element, change 04Gxx /80 for 03G15 /80

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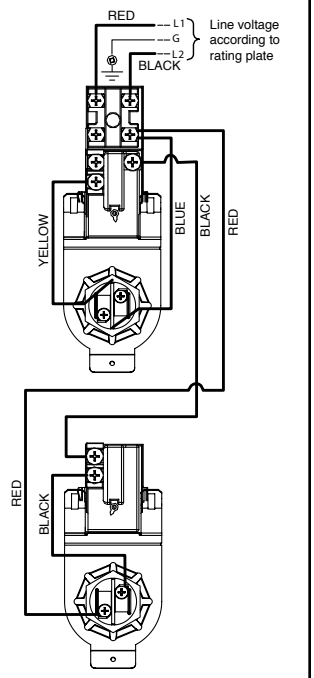
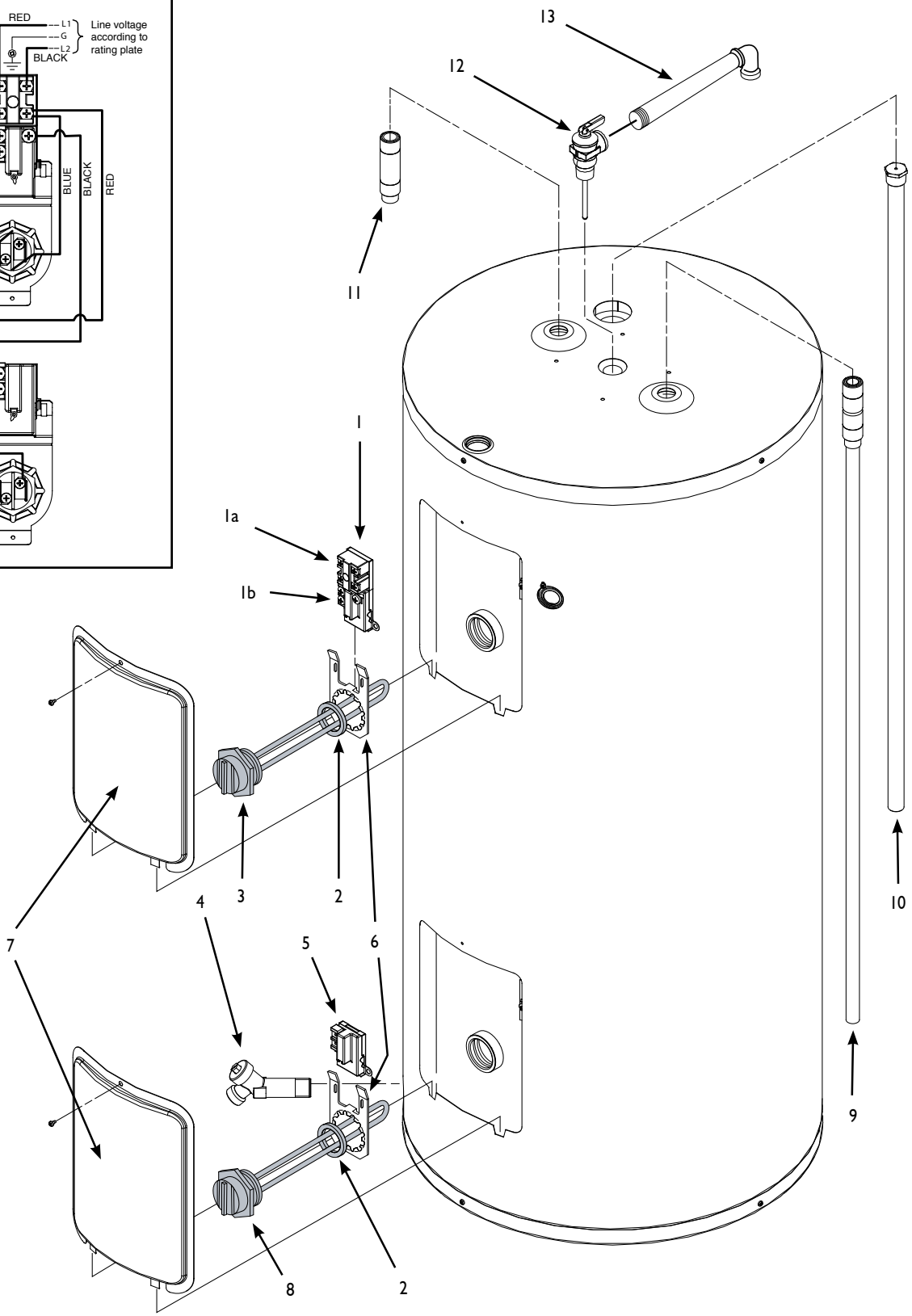
Models with two (2) elements (screw-in type)





EXPERT PLUS | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
No hot water.	Dry-fired element.	Replace with new element.
	Main power supply is "OFF".	Turn "ON" main power supply.
	Burnt fuse.	Replace with new fuse.
	Circuit breaker has tripped.	Reset circuit breaker.
	High limit with manual reset has tripped.	Reset high limit control by pushing the red reset button.
	Circuit breaker is defective.	Replace with new circuit breaker.
	Defective thermostat.	Replace with new thermostat.
	Defective element.	Replace with new element.
Not enough hot water.	Water heater is undersized.	Install size of water heater that meets demand.
	High hot water demand.	Increase the temperature of the thermostat.
	Very cold water supply.	Increase the temperature of the thermostat.
	Wrong piping connections.	Correct piping.
	Sediment or lime accumulation at bottom of water heater.	Drain water heater. Check to see if water treatment is necessary.
	Hot water plumbing system leaks.	Check hot water plumbing system for leaks and repair.
	Thermostat adjusted too low.	Increase the temperature of the thermostat.
	Defective thermostat.	Replace with new thermostat.
	Defective element.	Replace with new element. In 90% of all cases it is the bottom element.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
	Defective dip-tube.	Replace with new dip-tube.
Boiling hot water.	Thermostat temperature set too high.	Lower the temperature on the thermostat.
	Thermostat not in contact with water heater.	Position properly. Be sure insulation is not interfering with thermostat.
	Element attacked by CO_2.	Replace with new element.
	Defective thermostat.	Replace with new thermostat.
Continuous operation.	Water heater is undersized.	Install size of water heater that meets demand.
	Element wattage too small.	Replace with higher element wattage.
	Thermostat not in contact with water heater.	Position properly. Be sure insulation is not interfering with thermostat.
	Thermostat temperature set too low.	Increase the temperature of the thermostat.
	Defective thermostat.	Replace with new thermostat.
	Defective high limit with manual reset.	Replace with new high limit with manual reset.
Element failure.	Wiring connections are wrong.	See Wiring Diagram for correct wiring.
	Wiring connections are loose.	Locate, clean carefully, reconnect properly.
	Lightning/Power surge.	Inspect/replace fuse, element, and thermostat.
	High voltage.	Check with electrical utility and correct.
	Short circuit.	Locate short circuit and repair.
Thermostat failure.	No power.	Inspect fuse/circuit breaker, replace/reset.
	Loose wiring connection.	Locate, clean carefully, reconnect properly.
	Lightning/Power surge.	Inspect/replace fuse, element, and thermostat.
	Low/High voltage.	Check with electrical utility and correct.
	Short circuit.	Locate short circuit and repair.
Blown fuse/circuit breaker.	Wiring connections are wrong.	See Figure 2 for correct wiring.
	Wiring connections are loose.	Locate, clean carefully, reconnect properly.
	Lightning/Power surge.	Inspect/replace fuse, element, and thermostat.
	High voltage.	Check with electrical utility and correct.
	Short circuit.	Locate short circuit and repair.
	Power supply wiring undersized.	See Table 1 for correct wiring size.
Fuse burns instantly.	Short-circuit.	Locate short circuit and repair.

For all page and graphic references, use the installation manual provided with each water heater.

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EXPERT PLUS | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
Fuse burns often.	Fuse contacts oxidized or fuse not screwed in tight enough.	Clean contacts and tighten fuse.
	Power supply wiring is undersized.	See Table 1 for correct wiring size.
Smoking wiring.	Lightning/Power surge.	Inspect/replace fuse, element, and thermostat.
	Low/High voltage.	Check with electrical utility and correct.
	Power supply wiring undersized.	See Table 1 for correct wiring size.
Service wires charred or hot.	Wiring connections are wrong.	See Figure 2 for correct wiring.
	Water heater not properly grounded.	Properly ground the water heater.
	Lightning/Power surge.	Inspect/replace fuse, element, and thermostat.
	High voltage.	Check with electrical utility and correct.
	Short circuit.	Locate short circuit and repair.
	Power supply wiring undersized.	See Table 1 for correct wiring size.
Drain valve leaks.	Drain valve is open.	Close the drain valve.
	Defective drain valve.	Replace with new drain valve.
Water drips from the relief valve.	Excessive water pressure.	Install a pressure reducing valve.
	Thermal expansion in a closed water system.	Install a suitable expansion tank on the cold water supply line.
	Improperly seated relief valve.	Check relief valve works properly and replace, if necessary.
	Defective thermostat.	Replace with new thermostat.
	Defective relief valve.	Replace with new relief valve.
Water on the floor/drain pan.	Water discharge from the relief valve.	See Pressure build-up in a water system (installation manual).
	Element leaks.	Replace with new element.
	Water heater leaks.	Replace with new water heater
Condensation.	Water heater filled for the first time.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Heavy draws of hot water with very cold refill water.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Water heater is undersized.	Install size of water heater that meets demand.
Wet insulation.	Leaking plumbing connections.	Locate leak and repair.
	Leaking around heating element.	Tighten, clean, and smooth face of tank flange and element gasket.
	Water discharge from the relief valve.	See Pressure build-up in a water system (installation manual).
Singing element.	Build up of mineral deposits on element.	Clean element, replace with new element if necessary.
Singing thermostat.	Thermostat not flush with tank.	Install thermostat properly.
	Wiring connections are loose.	Locate, clean carefully, reconnect properly.
Traces of rust in the hot water.	Anode has been eaten away.	Replace new anode.
Rusty water.	Water corrosion.	Replace with new water heater.
Rotten egg smell.	High sulfate or mineral content in water.	Change magnesium anode to an aluminum anode and bleach water heater.
Tank bulged.	No relief valve installed.	Install proper relief valve.
	Excessive water pressure.	Install a pressure reducing valve.
	Thermal expansion in a closed water system.	Install a suitable expansion tank on the cold water supply line.

For all page and graphic references, use the installation manual provided with each water heater.

RESIDENTIAL ELECTRIC

STANDARD | REPLACEMENT PARTS

100 Imp. gallons

1122A-1-5 1124B-1-9
1122B-1-6 1126A-3-30

I.D.	Part #	Description	Use with Models
1	CM586001 CM586002	Magnetic contactor 42CF35AG (Replaced by HCC-3XU04CG) Magnetic contactor 42DF35AG (Replaced by HCCY3XU05CJ)	1126 (208/240 volts) with less than 40 amps/contactor 1126 (208/240 volts) with greater than 40 amps/contactor
2	TB587000 TB587001	Terminal block end	Three phases Single phase
3	FH588000	Fuse holder with 0.5 A fuse	All except 1122, 1124
4	TH38X007	Thermostat and high limit assembly	All
4a	TH3ZX001	High limit reset control	All
4b	TH38X003	Upper thermostat with reset (180°F)	All
5	TH38X005	Lower thermostat (180°F)	All
6	45000006-A	Hexagonal washer head screws	All
7	18G0001	Thermostat brackets	All
8	See table below	Square flange element	All
9	18G0002	Square flange element gaskets	All
10	DV3Z0070	Brass drain valve	All
11	99001204-A	Twist-Lock element flanges	All
12	NP032400	Inlet/outlet nipple	All
13	MS166530	Magnesium anodes (2)	All
14	17000017-A	Temperature and pressure relief valve (supplied, not installed)	All

SQUARE FLANGE ELEMENTS

Part #	Watts	Volts
9AG30/80	3,000 W	208V
9AG40/80	4,000 W	
9AG45/80	4,500 W	
9AG50/80	5,000 W	
9AG60/80	6,000 W	
10G30/80	3,000 W	240V
10G40/80	4,000 W	
10G45/80	4,500 W	
10G50/80	5,000 W	
10G60/80	6,000 W	

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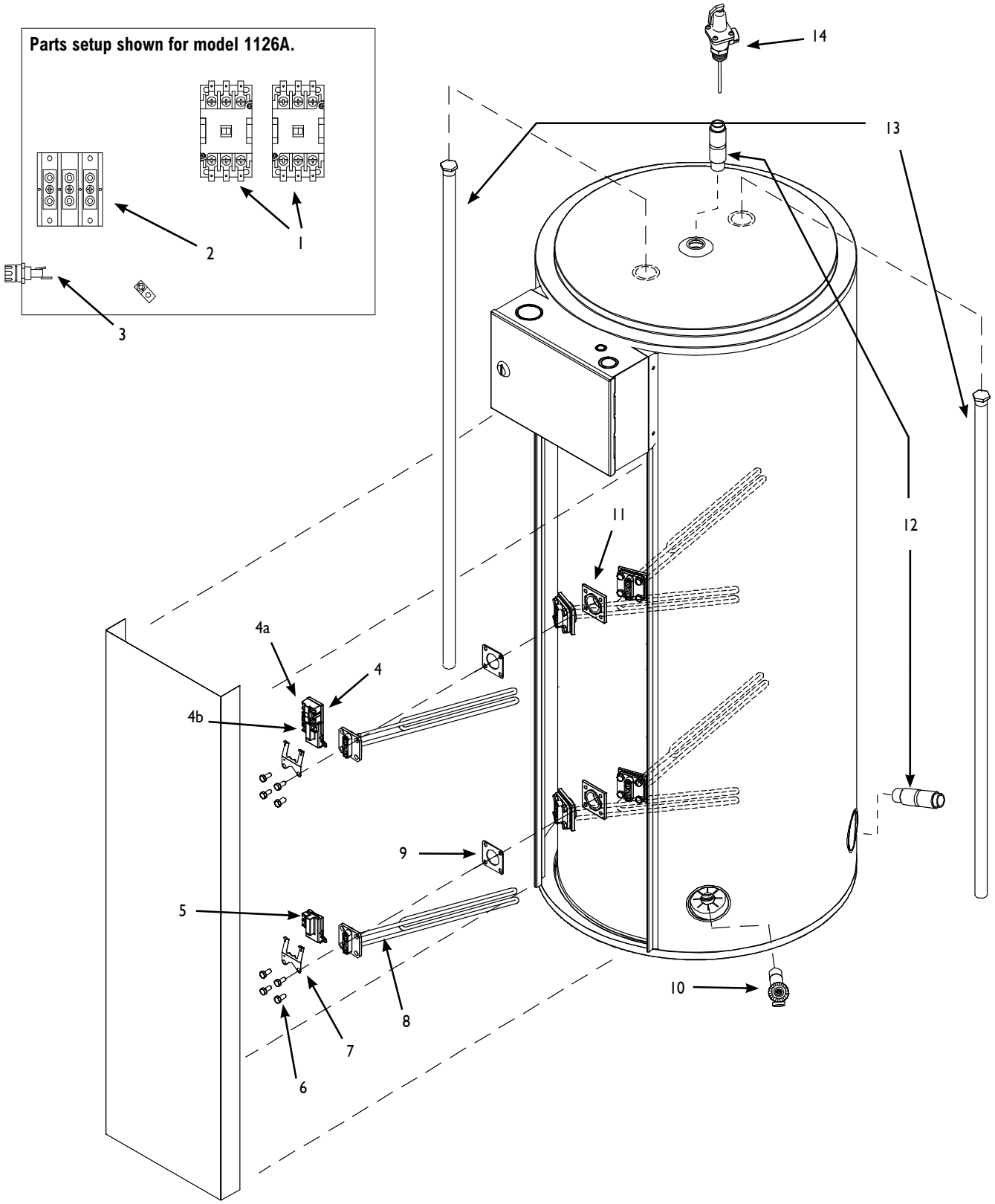
STANDARD | REPLACEMENT PARTS

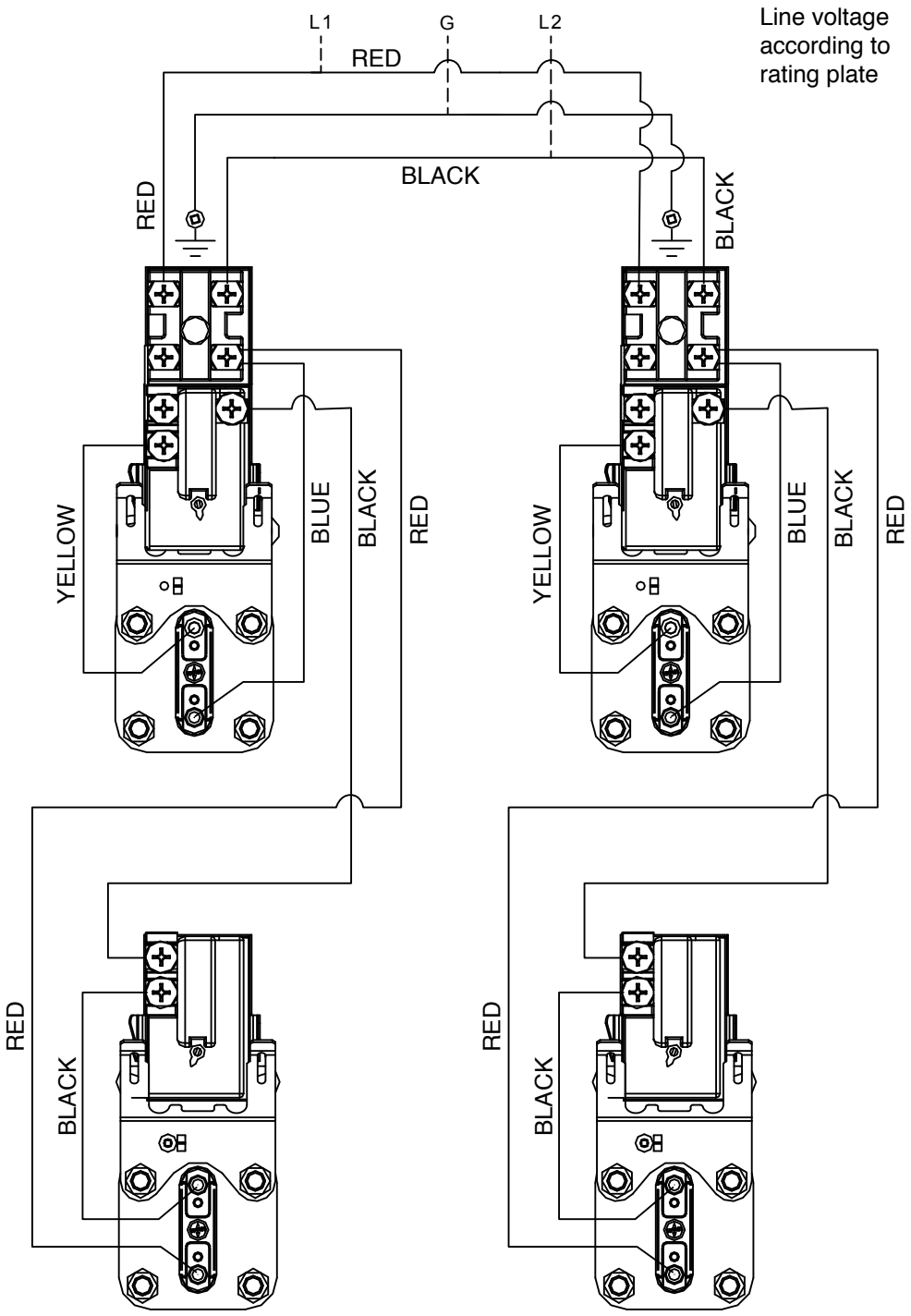


COMMERCIAL ELECTRIC

STANDARD | WIRING DIAGRAM

WIRING DIAGRAM (208V/240V, 1-PHASE)

MODELS WITH SQUARE FLANGE AND TWIST-LOCK ELEMENT TYPE



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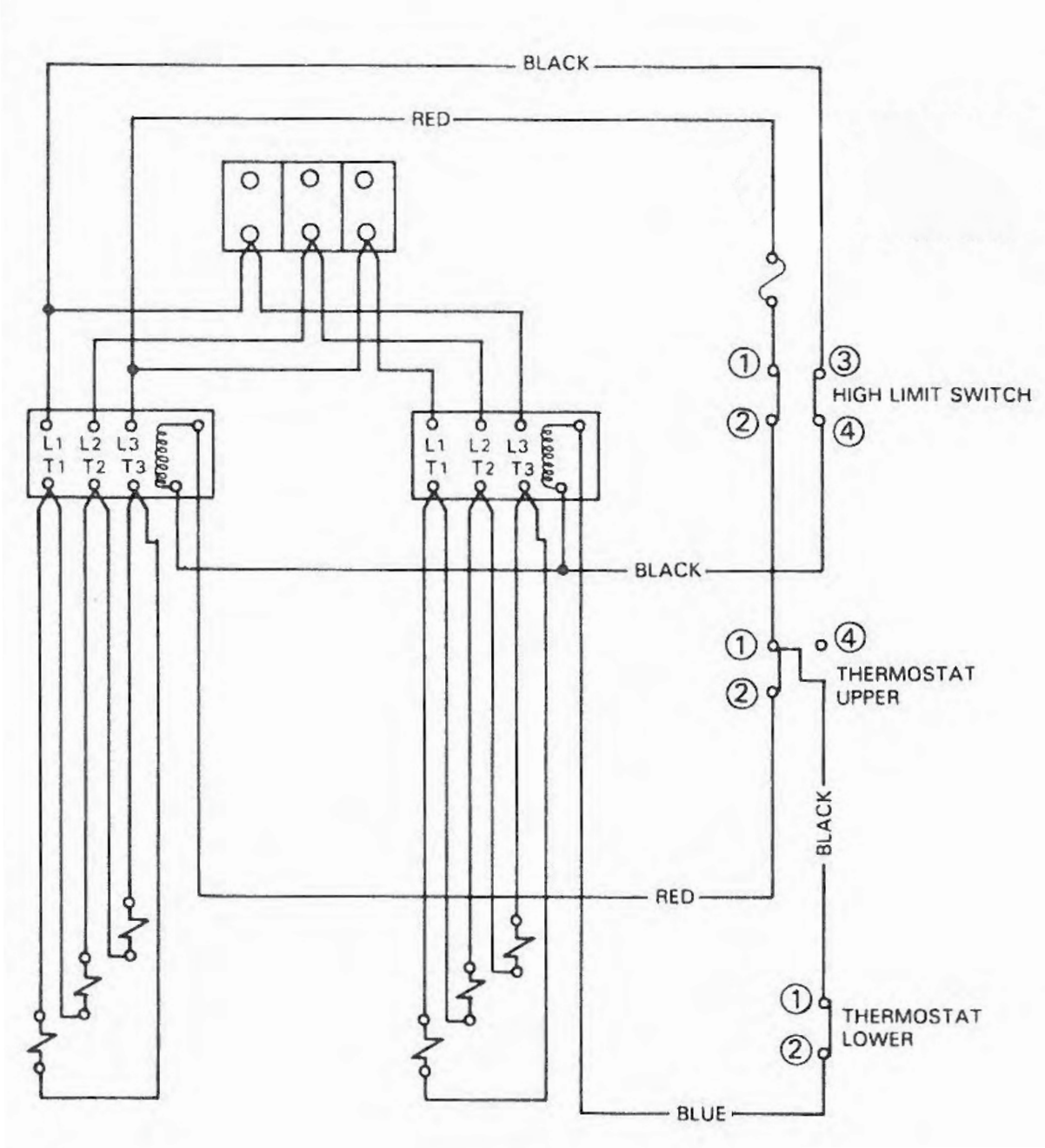
WIRING DIAGRAM (208V/240V, 3-PHASE)

NOTE: THESE MODELS ARE NORMALLY SHIPPED FROM THE FACTORY WIRED FOR SIMULTANEOUS OPERATION. TO CONVERT TO FLIP-FLOP OPERATION, MOVE BLACK WIRE FROM TERMINAL 1 ON UPPER THERMOSTAT AND CONNECT TO TERMINAL 4.



STANDARD | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
No hot water.	Dry-fired element.	Replace with new element.
	Main power supply is “OFF”.	Turn “ON” main power supply.
	Burnt fuse.	Replace with new fuse.
	Circuit breaker has tripped.	Reset circuit breaker.
	High limit reset control has tripped.	Reset high limit control by pushing the reset button.
	Circuit breaker is defective.	Replace with new circuit breaker.
	Defective thermostat.	Replace with new thermostat.
	Defective element.	Replace with new element.
Not enough hot water.	Water heater is undersized.	Install size of water heater that meets demand.
	High hot water demand.	Increase the temperature of the thermostat.
	Very cold water supply.	Increase the temperature of the thermostat.
	Wrong piping connections.	Correct piping.
	Sediment or lime accumulation at bottom of water heater.	Drain water heater. Check to see if water treatment is necessary.
	Hot water plumbing system leaks.	Check hot water plumbing system for leaks and repair.
	Thermostat adjusted too low.	Increase the temperature of the thermostat.
	Defective thermostat.	Replace with new thermostat.
	Defective element.	Replace with new element.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
Boiling hot water.	Thermostat temperature set too high.	Lower the temperature on the thermostat.
	Thermostat not in contact with water heater.	Position properly. Be sure insulation is not interfering with thermostat.
	Element attacked by CO_2.	Replace with new element.
	Defective thermostat.	Replace with new thermostat.
Continuous operation.	Water heater is undersized.	Install size of water heater that meets demand.
	Element wattage too small.	See Conversion Guide.
	Thermostat not in contact with water heater.	Position properly. Be sure insulation is not interfering with thermostat.
	Thermostat temperature set too low.	Increase the temperature of the thermostat.
	Defective thermostat.	Replace with new thermostat.
	Defective high limit reset control.	Replace with new high limit reset control.
Element failure.	Wiring connections are wrong.	See Figures 11 to 24 for correct wiring.
	Wiring connections are loose.	Locate, clean carefully, reconnect properly.
	Lightning/Power surge.	Inspect/replace fuse, element, and thermostat.
	High voltage.	Check with electrical utility and correct.
	Short circuit.	Locate short circuit and repair.
Thermostat failure.	No power.	Inspect fuse/circuit breaker, replace/reset.
	Loose wiring connection.	Locate, clean carefully, reconnect properly.
	Lightning/Power surge.	Inspect/replace fuse, element, and thermostat.
	Low/High voltage.	Check with electrical utility and correct.
	Short circuit.	Locate short circuit and repair.
Blown fuse/circuit breaker.	Wiring connections are wrong.	See Figures 11 to 24 for correct wiring.
	Wiring connections are loose.	Locate, clean carefully, reconnect properly.
	Lightning/Power surge.	Inspect/replace fuse, element, and thermostat.
	High voltage.	Check with electrical utility and correct.
	Short circuit.	Locate short circuit and repair.
	Power supply wiring undersized.	See Table 1 and consult electrical code for correct wire size.
Fuse burns instantly.	Short-circuit.	Locate short circuit and repair.
Fuse burns often.	Fuse contacts oxidized or fuse not screwed in tight enough.	Clean contacts and tighten fuse.
	Power supply wiring is undersized.	See Table 1 and consult electrical code for correct wire size.

For all page and graphic references, use the installation manual provided with each water heater.

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STANDARD | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
Smoking wiring.	Lightning/Power surge.	Inspect/replace fuse, element, and thermostat.
	Low/High voltage.	Check with electrical utility and correct.
	Power supply wiring undersized.	See Table 1 and consult electrical code for correct wire size.
Service wires charred or hot.	Wiring connections are wrong.	See Figures 11 to 24 for correct wiring.
	Water heater not properly grounded.	Properly ground the water heater.
	Lightning/Power surge.	Inspect/replace fuse, element, and thermostat.
	High voltage.	Check with electrical utility and correct.
	Short circuit.	Locate short circuit and repair.
	Power supply wiring undersized.	See Table 1 and consult electrical code for correct wire size.
Drain valve leaks.	Drain valve is open.	Close the drain valve.
	Defective drain valve.	Replace with new drain valve.
Water drips from the relief valve.	Excessive water pressure.	Install a pressure-reducing valve.
	Thermal expansion in a closed water system.	Install a suitable expansion tank on the cold water supply line.
	Improperly seated relief valve.	Check relief valve works properly and replace, if necessary.
	Defective thermostat.	Replace with new thermostat.
	Defective relief valve.	Replace with new relief valve.
Water on the floor/drain pan.	Water discharge from the relief valve.	See Pressure build-up in a water system.
	Element leaks.	Replace with new element and gasket.
	Water heater leaks.	Replace with new water heater.
Wet insulation.	Leaking plumbing connections.	Locate leak and repair.
	Leaking around heating element.	Tighten, clean, and smooth face of tank flange and replace element gasket.
	Water discharge from the relief valve.	See Pressure build-up in a water system.
Singing element.	Build up of mineral deposits on element.	Clean element, replace with new element if necessary.
Singing thermostat.	Thermostat not flush with tank.	Install thermostat properly.
	Wiring connections are loose.	Locate, clean carefully, reconnect properly.
Traces of rust in the hot water.	Anode rods has been eaten away.	Replace new anode rods.
Rusty water.	Water corrosion.	Replace with new water heater.
Rotten egg smell.	High sulfate or mineral content in water.	Change magnesium anodes to an aluminum anodes and bleach water heater.
Tank bulged.	No relief valve installed.	Install proper relief valve.
	Excessive water pressure.	Install a pressure-reducing valve.
	Thermal expansion in a closed water system.	Install a suitable expansion tank on the cold water supply line.

For all page and graphic references, use the installation manual provided with each water heater.

ATMOSPHERIC VENT | REPLACEMENT PARTS

40 U.S. gallons
UG40-38LF-N2U-EC

50 U.S. gallons
UG50-40LF-N2U-EC

60 U.S. gallons
UG60-50MF1-N2U-EC

I.D.	Part #	Description	Use with Models
1	58000003-A	Piezo ignitor (after October 2013)	All
2	56000090-A 56000095-A	Gas control	UG40, UG50 UG60
3	57000016-A	Pilot / Thermocouple assembly	All
4	06000810-A BRA05001 06001528-A	Burner assembly	UG40 UG50 UG60
5	N/A	Manfold spring	On some models
6	ADA03001 ADA05001	Inner access door kit	UG40 UG50, UG60
7	ADA04002	Outer access door	All
8	56001006-A 56001000-A 56001005-A	High limit switch (250°F) High limit switch (240°F) High limit switch (230°F)	UG40 UG50 UG60
9	15000028-A	Brass drain valve	All
10	19000005-A 19000007-A	Overflow tube	UG40, UG50 UG60
11	22000417-A 22000418-A 22001490-A	Dip tube with heat trap	UG40 UG50 UG60
12	MS145320 MS145410	Magnesium anodes (2)	UG40, UG50 UG60
13	SVOZ4220	Temperature and pressure relief valve	All
14	06000039-A 06000046-A	Power Twist™ baffle	UG40, UG50 UG60
15	99000501-A	Flue reducer	All
16	DH9A3500 DH6A3500	Draft hood	UG40 UG50, UG60
17	16001111-A 16001150-A	Outlet nipple with heat trap	UG40, UG50 UG60

N = Natural gas

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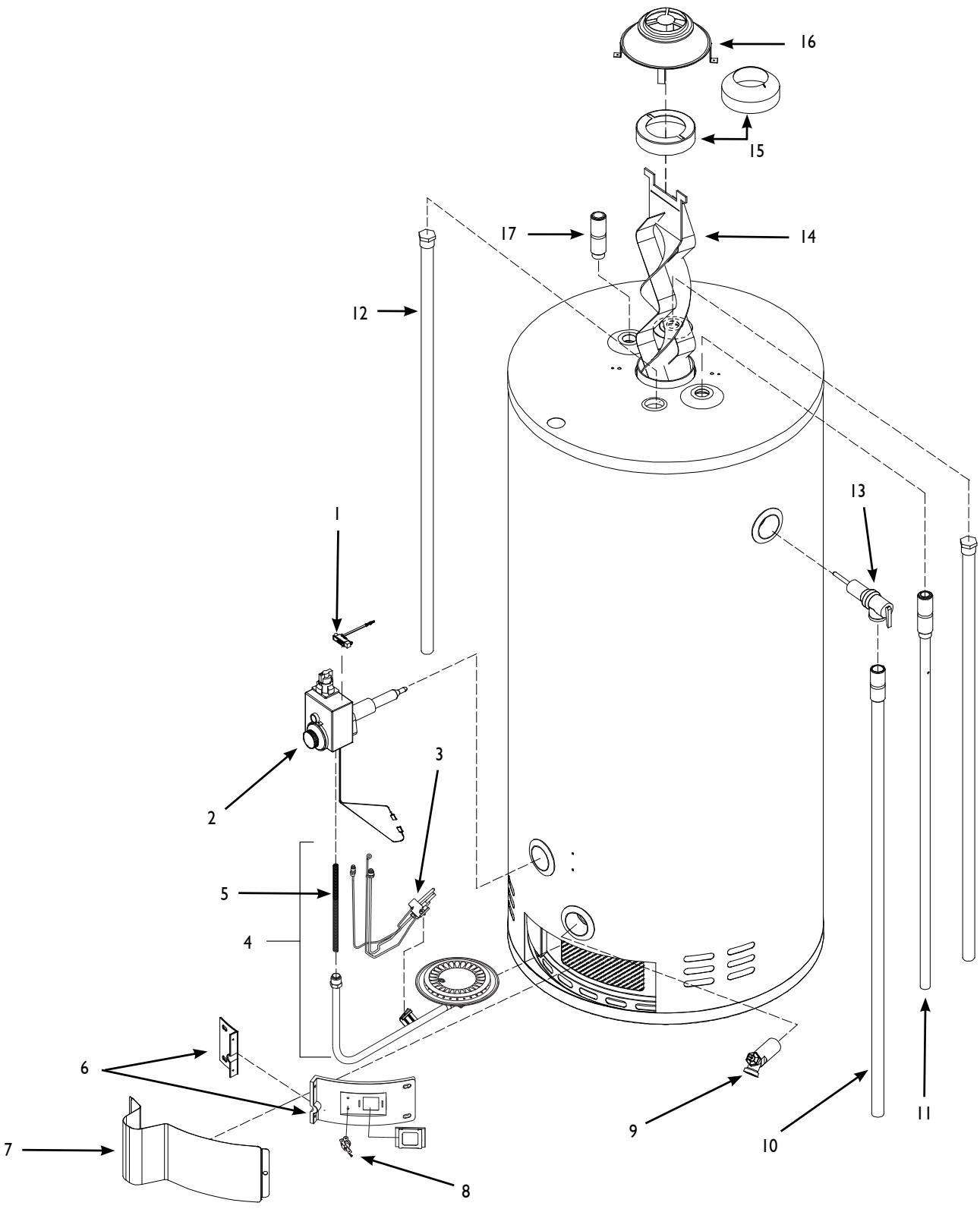
ATMOSPHERIC VENT | REPLACEMENT PARTS



RESIDENTIAL GAS-FIRED

ATMOSPHERIC VENT | TROUBLESHOOTING

CONDITION	CAUSE	SOLUTION
The burner will not ignite.	No gas.	Check with gas utility company.
	Dirt in gas line.	Notify utility. Install drip leg in gas line.
	Pilot line clogged.	Clean. Check for source of trouble and correct.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Flame arrestor openings blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Defective thermocouple.	Replace with new thermocouple.
	Defective gas control.	Replace with new gas control.
	Gas control set too low.	Turn temperature dial to desired temperature.
	Heater installed in a confined area.	Provide fresh air ventilation.
The burner flame floats and lifts off ports.	High gas pressure.	Check with gas utility company.
	Orifice too large.	Replace with correct orifice.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Flame arrestor openings blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Heater installed in a confined area.	Provide fresh air ventilation.
	Cold drafts (downdraft).	Locate source and correct.
The burner flame is yellow and lazy.	Insufficient secondary air.	Provide fresh air ventilation.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Flame arrestor openings blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Heater installed in a confined area.	Provide fresh air ventilation.
The burner flame is too high.	Insufficient secondary air.	Provide fresh air ventilation.
	Orifice too large.	Replace with correct orifice.
	Defective gas control.	Replace with new gas control.
The flame burns at the orifice.	Low gas pressure.	Check with gas utility company.
	Defective gas control.	Replace with new gas control.
The pilot will not light or remain lit.	No gas.	Check with gas utility company.
	Dirt in gas line.	Notify utility. Install drip leg in gas line.
	Pilot line clogged.	Clean. Check for source of trouble and correct.
	Loose thermocouple connection.	Tighten with fingers then take 1/4 turn with wrench.
	Defective thermocouple.	Replace with new thermocouple.
	Cold drafts (downdraft).	Check source and correct.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Flame arrestor openings blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Gas control high limit switch has tripped.	Replace with new gas control.
	Resettable thermal switch on inner access door has tripped.	Reset thermal switch on inner access door and re-light burner.
	Flammable vapours incident.	Contact Enercare Home Services at 1-800-266-3939.
	Defective igniter.	Replace igniter assembly.
The access door temperature high limit switch is tripping.	Not enough draft from the chimney.	Check for any obstruction in the chimney. Ensure that the chimney is sized and installed according to proper installation codes.
	Not enough fresh air for the combustion.	Supply make-up air. Refer to the proper installation codes.
	Ambiant air temperature is too high.	Reduce ambiant air temperature.
	Excessive dirt, dust or other debris accumulation on the flame arrestor.	Clean the flame arrestor in the combustion chamber using a stiff brush, compressed air and/or a vacuum cleaner.
High operating costs.	Gas control set too high.	Turn temperature dial to desired temperature.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Leaking faucets.	Repair faucets.
	Gas leaks.	Check with gas utility company, fire department and Enercare Home Services at 1-800-266-3939

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ATMOSPHERIC VENT | TROUBLESHOOTING

CONDITION	CAUSE	SOLUTION
High operating costs (Continued)	Wasted hot water.	Advise consumer.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
Insufficient hot water.	Low gas pressure.	Check with gas utility company.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install the size of water heater that meets the demand.
	Gas control set too low.	Turn temperature knob to desired temperature.
	Leaking faucets.	Repair faucets.
	Wasted hot water.	Advise consumer.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
Slow hot water recovery.	Insufficient secondary air.	Provide fresh air ventilation.
	Low gas pressure.	Check with gas utility company.
	Gas control set too low.	Turn temperature dial to desired temperature.
	Improper calibration.	Replace gas control.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connection.	Correct piping, dip tube must be in cold inlet.
	Wasted hot water.	Advise consumer.
Leaking water.	Poorly sealed, hot or cold water connections, gas control threads, relief valve, or drain valve.	Tighten threaded connections.
	Leakage from plumbing system or other appliances.	Inspect plumbing system and other appliances.
	Condensation.	Refer to Condensation.
Water drips from the relief valve.	Heater stacking.	Lower gas control setting.
	Excessive water pressure.	Install a pressure-reducing valve.
	Thermal expansion in a closed water system.	Install an expansion tank.
	Improperly seated valve.	Check relief valve works properly and replace if necessary.
The gas control fails to shut off.	Defective gas control.	Replace with new gas control.
	Improper calibration.	Replace gas control.
Condensation.	Water heater filled for first time.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Heavy draws of hot water with very cold refill water.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Water heater is undersized.	Install size of water heater that meets demand.
Combustion odours.	Insufficient secondary air.	Provide fresh air ventilation.
	Heater installed in a confined area.	Provide fresh air ventilation.
	Flue clogged.	Clean. Check for source of trouble and correct.
Smoking and carbon	Insufficient secondary air.	Provide fresh air ventilation.
	Low gas pressure.	Check with gas utility company.
	Burner flame yellow, lazy.	Refer to The burner flame is yellow and lazy.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Defective gas control.	Replace with new gas control.
	Heater installed in a confined area.	Provide fresh air ventilation.
The pilot flame is too small.	Low gas pressure.	Check with utility.
	Pilot line or orifice clogged.	Clean. Check for source of trouble and correct.
Smelly water.	High sulfate or mineral content in water.	Change magnesium anode to an aluminum anode and bleach tank.

For all page and graphic references, use the installation manual provided with each water heater.

DISCONTINUED MODELS

ATMOSPHERIC VENT | REPLACEMENT PARTS

40 U.S. gallons
UG40-38LF-N1U-EC

50 U.S. gallons
UG50-40LF-N1U-EC

60 U.S. gallons
UG60-52MF-N2U-EC

I.D.	Part #	Description	Use with Models
1	58000003-A	Piezo ignitor (after October 2013)	All
2	56000090-A 56000095-A	Gas control	UG40, UG50 UG60
3	57000016-A	Pilot / Thermocouple assembly	All
4	06000810-A BRA05001 06001516-A	Burner assembly	UG40 UG50 UG60
5	ADA03001 ADA05001	Inner access door kit	UG40 UG50, UG60
6	ADA04002	Outer access door	All
7	56001006-A 56001000-A 56001001-A	High limit switch (250°F) High limit switch (240°F) High limit switch (270°F)	UG40 UG50 UG60
8	15000028-A	Brass drain valve	All
9	19000005-A 19000007-A	Overflow tube	UG40, UG50 UG60
10	22000417-A 22000418-A 22000415-A	Dip tube with heat trap	UG40 UG50 UG60
11	MS145320 MS145410	Magnesium anodes (2)	UG40, UG50 UG60
12	18G0022 SVOZ4220	Temperature and pressure relief valve	UG40, UG50 UG60
13	06000041-A 06000039-A	Power Twist™ baffle	UG40 UG50, UG60
14	99000501-A 99000502-A	Flue reducer	UG40, UG50 UG60
15	DH9A3500 DH6A3500	Draft hood	UG40 UG50, UG60
16	16001111-A 16001110-A	Outlet nipple with heat trap	UG40 UG50, UG60

N = Natural gas

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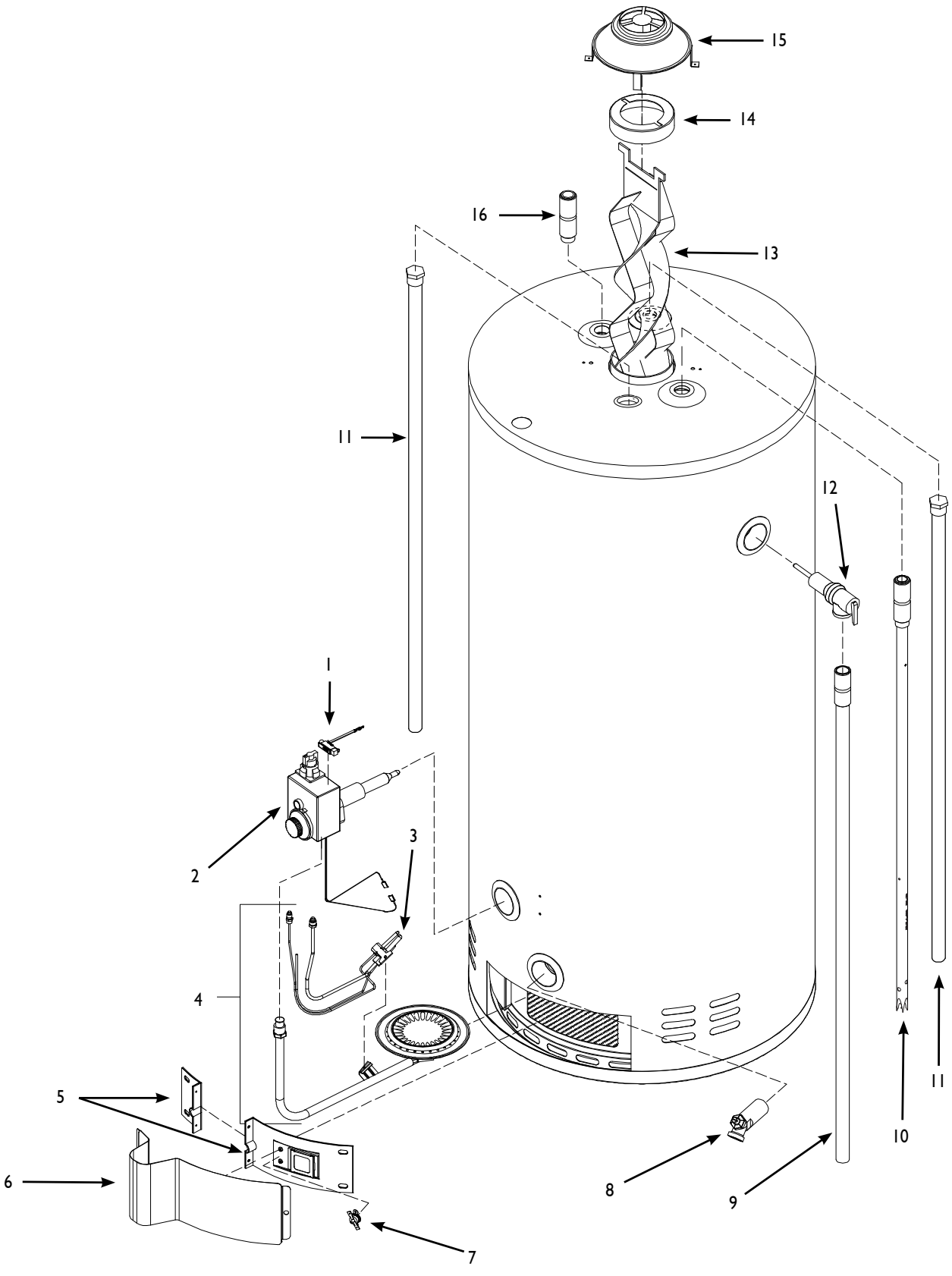
ATMOSPHERIC VENT | REPLACEMENT PARTS



POWER VENT | REPLACEMENT PARTS

40 U.S. gallons
UG40-40LFPV2-N1U-EC
UG40-40LFPV2-N2U-EC

50 U.S. gallons
UG50-40LFPV2-N1U-EC
UG50-40LFPV2-N2U-EC

60 U.S. gallons
UG60-40MFPV2-N2U-EC

I.D.	Part #	Description	Use with Models
1	56000160-A	Gas control assembly	All
1a	56000162-A	Gas control electronic module	All
1b	N/A	Gas control body	All
2	56001004-A	Flammable vapour sensor	All
3	14000006-A	Protective cover	All
4	58000157-A	Ignitor assembly	All
5	06100820-A 06101237-A 06101522-A	Burner assembly	UG40 UG50 UG60
6	KITPV001 KITPV002	Inner access door kit	UG40 UG50, UG60
7	99000155-A	Outer access door	All
8	56001001-A	Resettable high limit switch (270°F)	All
9	15000028-A	Brass drain valve	All
10	19000005-A 19000007-A	Overflow tube	UG40, UG50 UG60
11	22000417-A 22000418-A 22000415-A	Closed end dip tube with heat trap	UG40 UG50 UG60
12	MS145320 MS145410	Magnesium anodes (2)	UG40, UG50 UG60
13	18G0022 SV0Z4220	Temperature and pressure relief valve	All N1U All N2U
14	99000066-A 99000063-A	Flue baffle	UG40, UG50 UG60
15	60000010-A 60000011-A 60000014-A	Vacuum switch (-0.50” w.c.) Vacuum switch (-0.55” w.c.) Vacuum switch (-0.65” w.c.)	UG40 UG50 UG60
16	56001011-A	High limit switch (155°F)	All
17	84000017-A	Rubber transition fitting (2”)	All
18	06801501/A-A 06801502-A 80000012-A	Blower assembly	UG40 UG50 UG60
19	16001111-A 16001110-A	Outlet nipple with heat trap	UG40 UG50, UG60
20	14010001-A 14010004-A	Black Restrictor screen (2”) - PVC/CPVC Grey Restrictor screen (2”) - PP	(*2U) (Ventilation length 0-30ft) (*2U) (Ventilation length 0-30ft)

N = Natural gas

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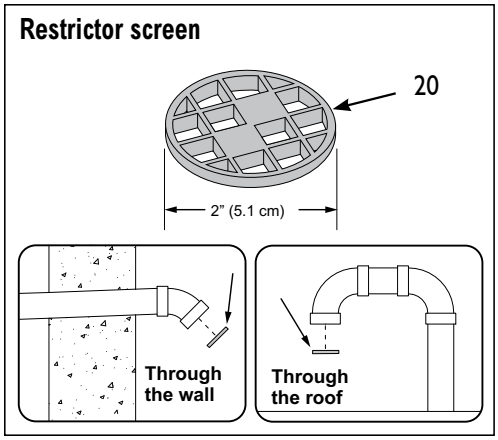
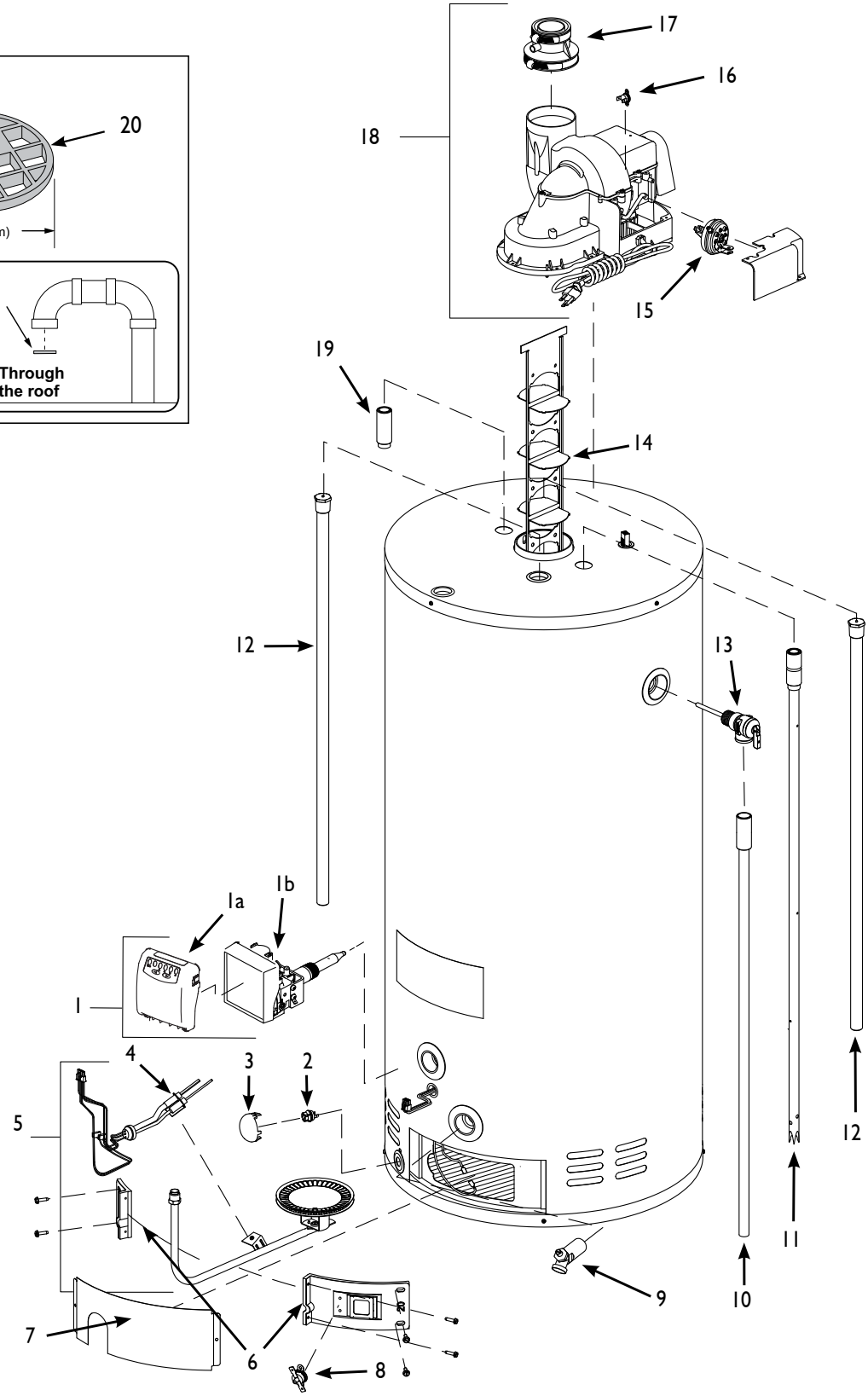

Restrictor screen
20
2" (5.1 cm)
Through the wall
Through the roof


17
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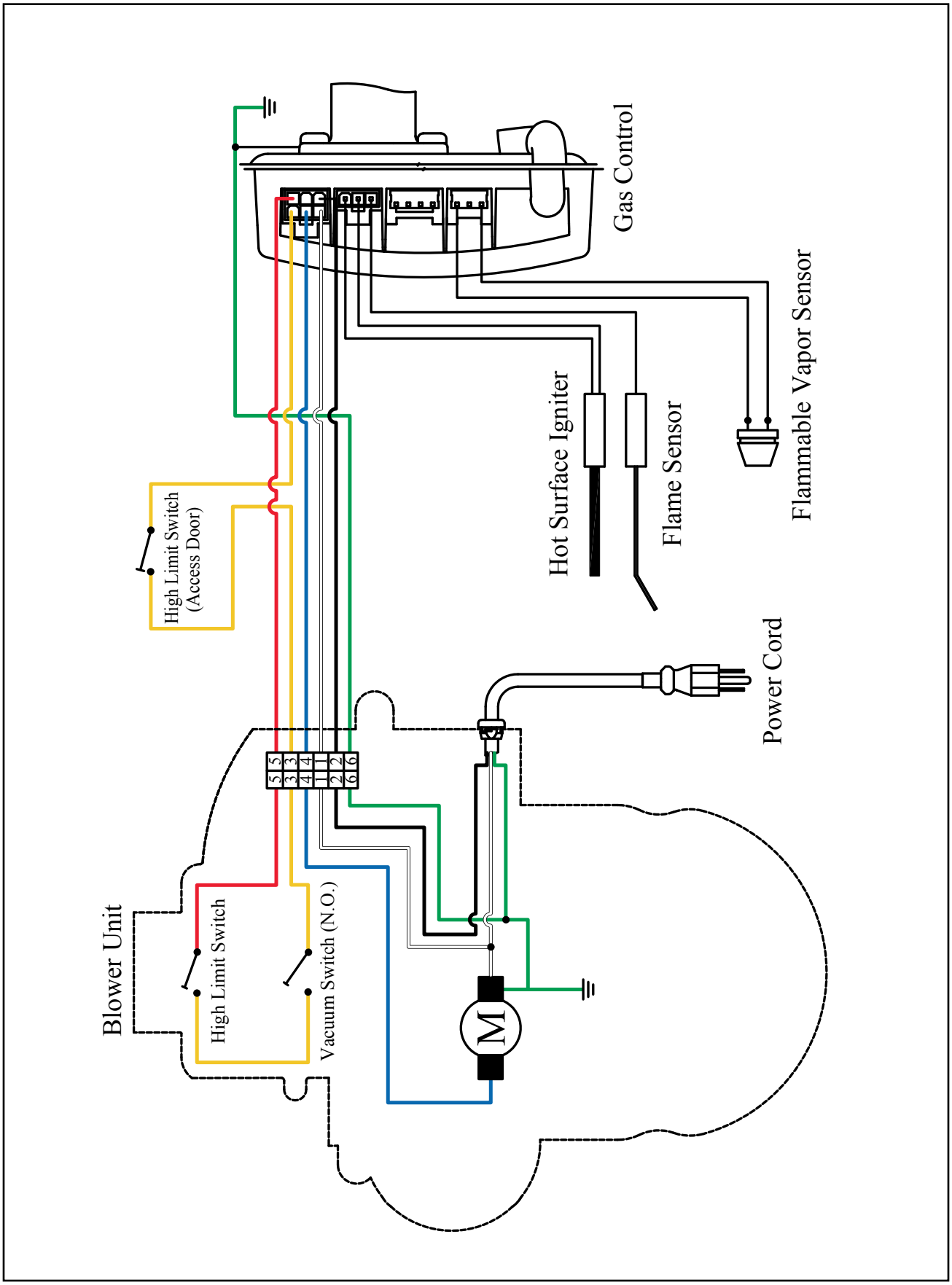
POWER VENT | WIRING DIAGRAM



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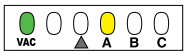
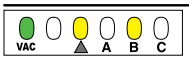
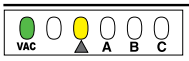
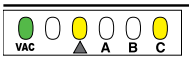
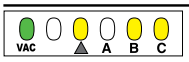
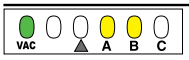
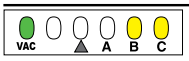
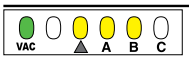
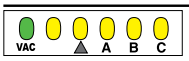
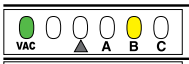
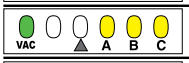
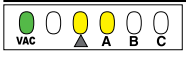
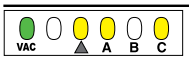
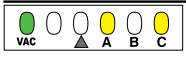
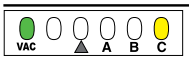
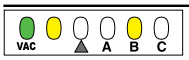
POWER VENT | ERROR CODE GUIDE

⚠ WARNING

Disconnect the electrical power before servicing the water heater. Service should only be performed by Enercare. Failure to follow these instructions can result in personal injury or death.

CONDITION (code#)	CAUSE	SOLUTION
 **1**	An open earth ground circuit to the ignition.	1) Check that the earth ground conductor is properly connected at the fuse box or breaker panel and the water heater. 2) Check that the grounding conductors on the water heater are properly connected and secure.
 **2**	A wiring error or a high resistance to earth ground.	1) Check for proper connection of the line neutral and line hot wires. 2) Check that the water heater is securely connected to earth ground.
 **3**	The pressure switch remained closed longer than five (5) seconds after the call for heat began.	1) The pressure switch wiring is incorrect. 2) The pressure switch is defective and must be replaced.
 **4**	The pressure switch remained open longer than five (5) seconds after the power venter was energized. (see note at the bottom of the page)	1) The pressure switch wiring is incorrect. 2) The pressure switch tubing is not properly connected. 3) There are obstructions or restrictions in the water heater air intake or exhaust flue.
 **5**	The self-diagnosing test has detected an error in the hot surface ignitor circuit.	1) Check the wiring is correct and secure. 2) Disconnect the ignitor connector and measure the ignitor resistance with an accurate ohmmeter between pins 1 and 2. Resistance should be between 11.5 and 18.8 ohms. If the reading is incorrect, replace the hot surface ignitor. 3) If the above checks are good, replace the gas control. 
 **6**	The maximum number of ignition retries or recycles has been reached and the system is in lock-out mode.	1) Check if the gas supply is off or too low to operate. 2) Check the flame sensor rod to see if it is located properly and free from contamination. Reposition the flame sensor rod or lightly clean it with an abrasive cloth. 3) The hot surface ignitor may not be positioned correctly. Reposition as necessary. 4) Check that the hot surface ignitor and flame sensor rod are wired correctly and in good working condition. 5) Low voltage to the water heater. Check and repair.
 **7**	The gas valve driver circuit.	1) Turn off the power to the water heater for ten (10) seconds and then back on. 2) If the above step did not clear the error, replace the gas control.
 **8**	The internal microcomputer.	1) Turn off the power to the water heater for ten (10) seconds and then back on. 2) If the above step did not clear the error, replace the gas control.
 **9**	The internal circuit.	1) Turn off the power to the water heater for ten (10) seconds, verify the polarity and then back on. 2) If the above step did not clear the error, replace the gas control.
 **10**	Flame signal sensed out of proper sequence.	Replace the gas control.
 **11**	The high temperature thermal cut-off is open.	Replace the gas control.
 **12**	One of the temperature adjust buttons is stuck closed.	1) Make sure that there are no objects leaning against the front of the control. 2) Lightly press and release each of the buttons once. 3) If the above actions do not clear the error, the control will continue to regulate the water temperature at the last setting, but you will not be able to change settings unless you replace the gas control.
 **13**	The water temperature sensor is either open or short-circuited.	1) Check that all of the wiring is correct and that there are no open or short circuits. 2) If no wiring problems are found, the gas control must be replaced.
 **14**	The self-diagnosing test found a problem with the flammable vapour sensor.	1) Check that all wiring is correct and that there are no open or short circuits. 2) If no wiring problems are found, the flammable vapour sensor must be replaced.
 **15**	The control detected the presence of flammable vapours near the appliance and entered lock-out mode.	1) Identify the source of the flammable vapours and remove it from the area surrounding the water heater. 2) Contact an Enercare service technician to have the water heater inspected immediately.
 **16**	Weak Flame Current.	1) Check that the flame sensor rod to see if it is properly located and free from contamination. Reposition the flame sensor rod or lightly clean with an abrasive cloth. 2) Low voltage to the water heater. Check and repair.

RESIDENTIAL GAS-FIRED

Giant

POWER VENT | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
The burner will not ignite.	No gas.	Check with gas utility company.
	Dirt in gas line.	Notify utility company. Install drip leg in gas line.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Defective flame sensor.	Replace with new flame sensor.
	Defective gas control.	Replace with new gas control.
	Gas control set too low.	Turn temperature dial to desired temperature.
	Heater installed in a confined area.	Provide fresh air ventilation.
The burner flame floats and lifts off ports.	High gas pressure.	Check with gas utility company.
	Orifice too large.	Replace with correct orifice.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Heater installed in a confined area.	Provide fresh air ventilation.
	Cold drafts (downdraft).	Locate source and correct.
Vacuum switch located in the blower assembly remain open.	One of the potential causes is excessive dirt, dust, and other debris accumulation on the flame arrestor and on the blower impeller.	Clean the flame arrestor in the combustion chamber using a stiff brush, compressed air and/or a vacuum cleaner. In no circumstances, the blower assembly should be removed for cleaning or replaced without contacting Enercare.
The burner flame is yellow and lazy.	Insufficient secondary air.	Provide fresh air ventilation.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Heater installed in a confined area.	Provide fresh air ventilation.
The burner flame is too high.	Insufficient secondary air.	Provide fresh air ventilation.
	Orifice too large.	Replace with correct orifice.
	Defective gas control.	Replace with new gas control.
The flame burns at the orifice.	Low gas pressure.	Check with gas utility company.
	Defective gas control.	Replace with new gas control.
High operating costs.	Gas control set too high.	Turn temperature dial to desired temperature.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Leaking faucets.	Repair faucets.
	Gas leaks.	Check with gas utility company. Repair at once.
	Wasted hot water.	Advise consumer.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
Insufficient hot water.	Low gas pressure.	Check with gas utility company.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install the size of water heater that meets the demand.
	Gas control set too low.	Turn temperature knob to desired temperature.
	Leaking faucets.	Repair faucets.
	Wasted hot water.	Advise consumer.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
Slow hot water recovery.	Insufficient secondary air.	Provide fresh air ventilation.
	Low gas pressure.	Check with gas utility company.
	Gas control set too low.	Turn temperature dial to desired temperature.
	Improper calibration.	Replace gas control.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connection.	Correct piping, dip tube must be in cold inlet.
	Wasted hot water.	Advise consumer.

For all page and graphic references, use the installation manual provided with each water heater.

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POWER VENT | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
Leaking water.	Poorly sealed, hot or cold water connections, gas control threads, relief valve, or drain valve.	Tighten threaded connections.
	Leakage from plumbing system or other appliances.	Inspect plumbing system and other appliances.
	Condensation.	Refer to Condensation.
Water drips from the relief valve.	Heater stacking.	Lower gas control setting.
	Excessive water pressure.	Install a pressure-reducing valve.
	Thermal expansion in a closed water system.	Install an expansion tank.
	Improperly seated valve.	Check relief valve works properly and replace, if necessary.
The gas control fails to shut off.	Defective gas control.	Replace with new gas control.
	Improper calibration.	Replace gas control.
Condensation.	Water heater filled for the first time.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Heavy draws of hot water with very cold refill water.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Water heater is undersized.	Install size of water heater that meets demand.
Combustion odours.	Insufficient secondary air.	Provide fresh air ventilation.
	Heater installed in a confined area.	Provide fresh air ventilation.
	Flue clogged.	Clean. Check for source of trouble and correct.
Smoking and carbon formation (sooting).	Insufficient secondary air.	Provide fresh air ventilation.
	Low gas pressure.	Check with gas utility company.
	Burner flame yellow, lazy.	Refer to The burner flame is yellow and lazy.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Defective gas control.	Replace with new gas control.
	Heater installed in a confined area.	Provide fresh air ventilation.
Smelly water.	High sulfate or mineral content in water.	Change magnesium anode to an aluminum anode and bleach tank.
The access door temperature high limit switch is tripping.	Not enough draft from the venting system.	Check for any obstruction in the chimney. Ensure that the chimney is sized and installed according to installation instructions provided in this manual.
	Not enough fresh air for the combustion.	Supply make-up air. Refer to installation instructions provided in this manual.
	Ambiant air temperature is too high.	Reduce ambiant air temperature.
	Excessive dirt, dust, or other debris accumulation on the flame arrestor.	Clean the flame arrestor in the combustion chamber using a stiff brush, compressed air and/or a vacuum cleaner.

For all page and graphic references, use the installation manual provided with each water heater.

POWER VENT, High Input | REPLACEMENT PARTS

50 U.S. gallons

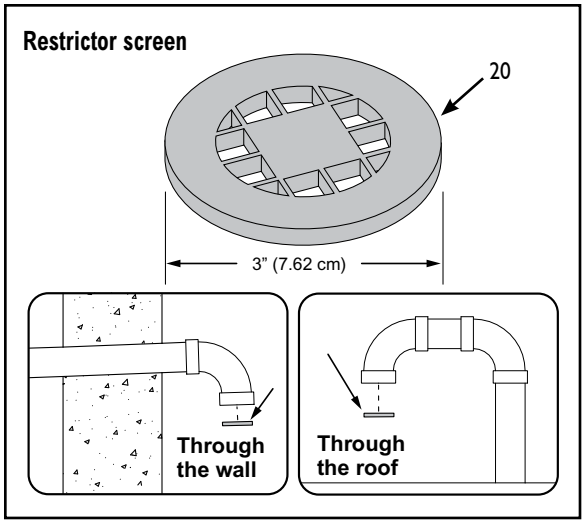
UG50-62LFPV1-N2U-EC
(Since April 1st, 2016)

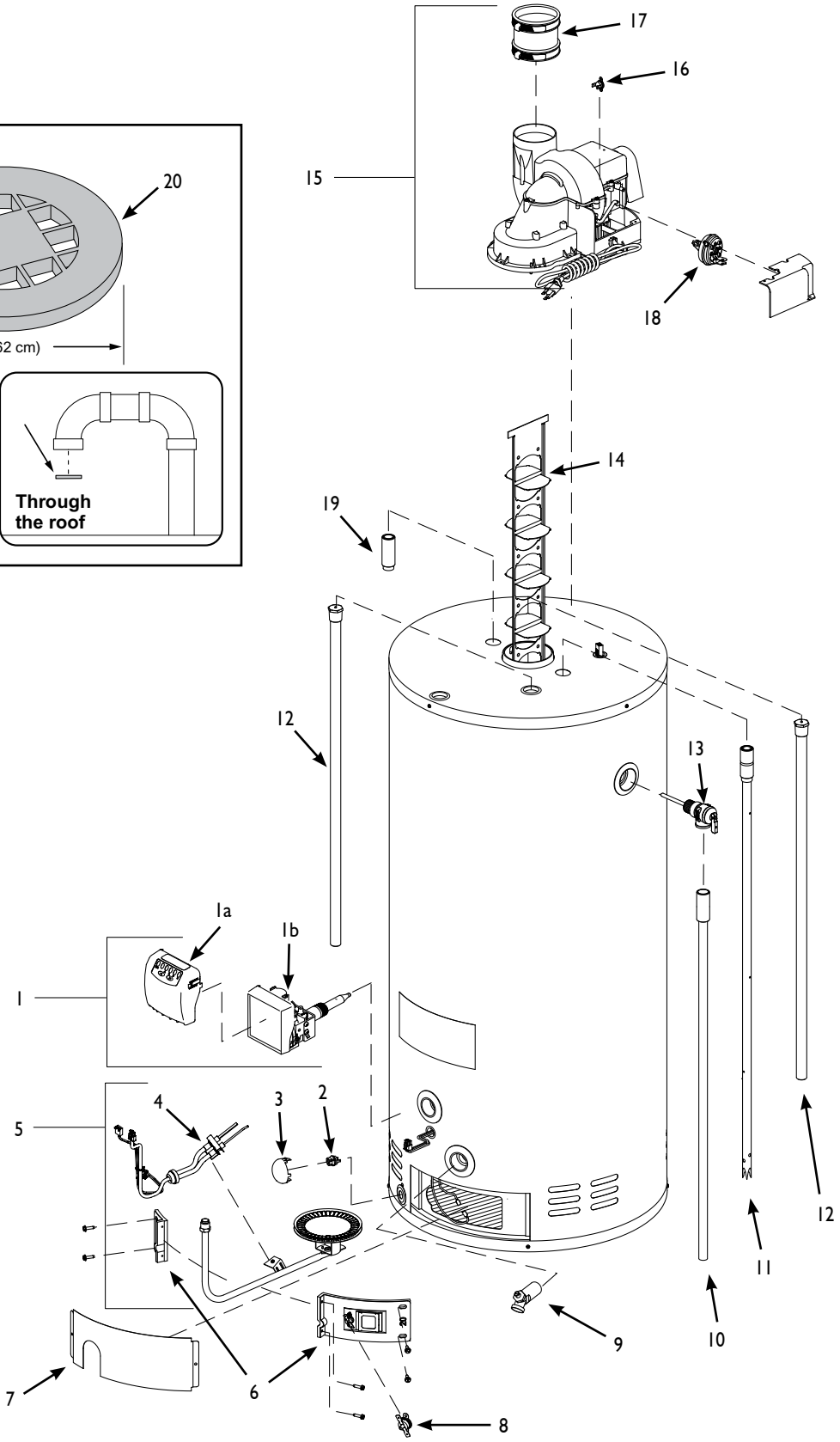
I.D.	Part #	Description	Use With Models
1	56000160-A	Gas control assembly	All
1a	56000162-A	Gas control electronic module	All
1b	N/A	Gas control body	All
2	56001004-A	Flammable vapour sensor	All
3	14000006-A	Protective cover	All
4	58000157-A	Ignitor assembly	All
5	06101246-A	Burner assembly	All
6	KITPV003	Inner access door kit	All
7	99000155-A	Outer access door	All
8	56001013-A	Resettable high limit switch (310°F)	All
9	15000028-A	Brass drain valve	All
10	19000005-A	Overflow tube	All
11	22000420-A	Closed end dip tube with heat trap	All
12	MSI45320	Magnesium anodes (2)	All
13	SV0Z4220	Temperature & pressure-relief valve	All
14	99000070-A	Flue baffle	All
15	06801801-A	Blower assembly	All
16	56001012-A	High limit switch (150°F)	All
17	84000002-A	Rubber transition fitting (3")	All
18	60000016-A	Vacuum switch (-1.15" w.c.)	All
19	16001114-A	Outlet nipple with heat trap	All
20	14010007-A 14010008-A	Black Restrictor screen (3") - PVC/CPVC Grey Restrictor screen (3") - PP	All (Ventilation length 0-25ft) All (Ventilation length 0-25ft)

N = Natural gas

Plant 40, Lesage Avenue, Montréal-East (Québec) H1B 5H3 CANADA **T** 514-645-8893 **Toll free** 1-800-363-9354

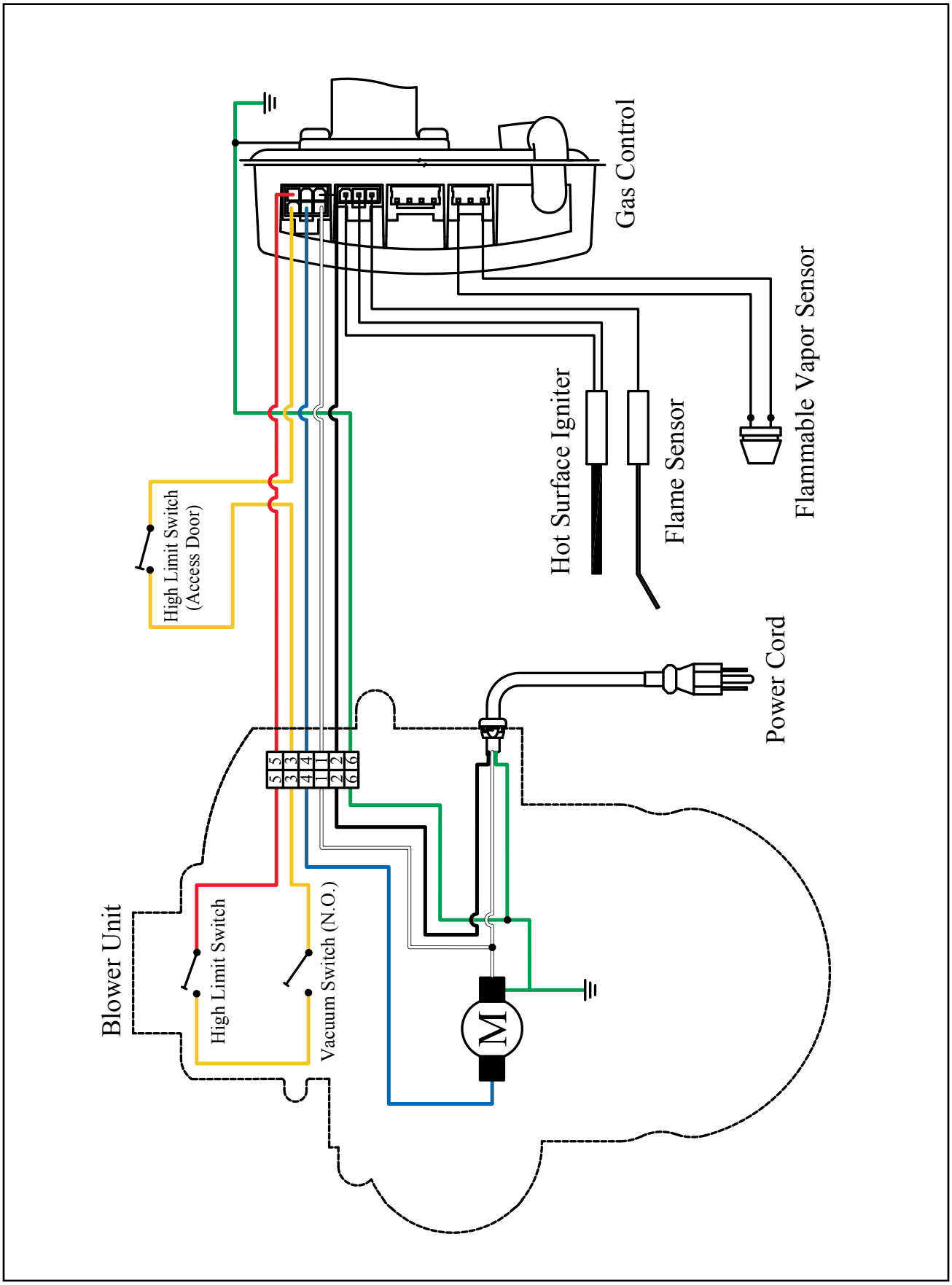
POWER VENT, High Input | REPLACEMENT PARTS





RESIDENTIAL GAS-FIRED

POWER VENT, High Input | WIRING DIAGRAM



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POWER VENT, High Input | ERROR CODE GUIDE

CONDITION (code#)	CAUSE	SOLUTION
VAC ▲ A B C — 1	An open earth ground circuit to the ignition.	1) Check that the earth ground conductor is properly connected at the fuse box or breaker panel and the water heater. 2) Check that the grounding conductors on the water heater are properly connected and secure.
VAC ▲ A B C — 2	A wiring error or a high resistance to earth ground.	1) Check for proper connection of the line neutral and line hot wires. 2) Check that the water heater is securely connected to earth ground.
VAC ▲ A B C — 3	The pressure switch remained closed longer than five (5) seconds after the call for heat began.	1) The pressure switch wiring is incorrect. 2) The pressure switch is defective and must be replaced.
VAC ▲ A B C — 4	The pressure switch remained open longer than five (5) seconds after the power venter was energized. (see note at the bottom of the page)	1) The pressure switch wiring is incorrect. 2) The pressure switch tubing is not properly connected. 3) There are obstructions or restrictions in the water heater air intake or exhaust flue.
VAC ▲ A B C — 5	The self diagnosing test has detected an error in the hot surface ignitor circuit.	1) Check the wiring is correct and secure. 2) Disconnect the ignitor connector and measure the ignitor resistance with an accurate ohmmeter between pins 1 and 2. Resistance should be between 11.5 and 18.8 ohms. If the reading is incorrect, replace the hot surface ignitor. 3) If the above checks are good, replace the gas control.
VAC ▲ A B C — 6	The maximum number of ignition retries or recycles has been reached and the system is in lock-out mode.	1) Check if the gas supply is off or too low to operate. 2) Check the flame sensor rod to see if it is located properly and free from contamination. Reposition the flame sensor rod or lightly clean it with an abrasive cloth. 3) The hot surface ignitor may not be positioned correctly. Reposition as necessary. 4) Check that the hot surface ignitor and flame sensor rod are wired correctly and in good working condition. 5) Low voltage to the water heater. Check and repair.
VAC ▲ A B C — 7	The gas valve driver circuit.	1) Turn off the power to the water heater for ten (10) seconds and then back on. 2) If the above step did not clear the error, replace the gas control.
VAC ▲ A B C — 8	The internal microcomputer.	1) Turn off the power to the water heater for ten (10) seconds and then back on. 2) If the above step did not clear the error, replace the gas control.
VAC ▲ A B C — 9	The internal circuit.	1) Turn off the power to the water heater for ten (10) seconds, verify the polarity and then back on. 2) If the above step did not clear the error, replace the gas control.
VAC ▲ A B C — 10	Flame signal sensed out of proper sequence.	Replace the gas control.
VAC ▲ A B C — 11	The high temperature thermal cut-off is open.	Replace the gas control.
VAC ▲ A B C — 12	One of the temperature adjust buttons is stuck closed.	1) Make sure that there are no objects leaning against the front of the control. 2) Lightly press and release each of the buttons once. 3) If the above actions do not clear the error, the control will continue to regulate the water temperature at the last setting, but you will not be able to change settings unless you replace the gas control.
VAC ▲ A B C — 13	The water temperature sensor is either open or short-circuited.	1) Check that all of the wiring is correct and that there are no open or short circuits. 2) If no wiring problems are found, the gas control must be replaced.
VAC ▲ A B C — 14	The self-diagnosing test found a problem with the flammable vapour sensor.	1) Check that all wiring is correct and that there are no open or short circuits. 2) If no wiring problems are found, the flammable vapour sensor must be replaced.
VAC ▲ A B C — 15	The control detected the presence of flammable vapours near the appliance and entered lock-out mode.	1) Identify the source of the flammable vapours and remove it from the area surrounding the water heater. 2) Contact an Enercare service technician to have the water heater inspected immediately.
VAC ▲ A B C — 16	Weak Flame Current.	1) Check that the flame sense rod to see if it is properly located and free from contamination. Reposition the flame sense rod or lightly clean with an abrasive cloth. 2) Low voltage to the water heater. Check and repair.

Note for models with a manual reset only: Since the high limit switch on the blower is in series with the pressure switch, the problem could be that the high limit switch tripped. Reset the high limit switch by pressing on the red button in the middle of the switch.

POWER VENT, High Input | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
The burner will not ignite.	No gas.	Check with gas utility company.
	Dirt in gas line.	Notify utility company. Install drip leg in gas line.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Defective flame sensor.	Replace with new flame sensor.
	Defective gas control.	Replace with new gas control.
	Gas control set too low.	Turn temperature dial to desired temperature.
	Heater installed in a confined area.	Provide fresh air ventilation.
The burner flame floats and lifts off ports.	High gas pressure.	Check with gas utility company.
	Orifice too large.	Replace with correct orifice.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Heater installed in a confined area.	Provide fresh air ventilation.
	Cold drafts (downdraft).	Locate source and correct.
Vacuum switch located in the blower assembly remain open.	One of the potential causes is excessive dirt, dust and other debris accumulation on the flame arrestor and on the blower impeller.	Clean the flame arrestor in the combustion chamber using a stiff brush, compressed air, and/or a vacuum cleaner. In no circumstances, the blower assembly should be removed for cleaning or replaced without contacting Enercare.
The burner flame is yellow and lazy.	Insufficient secondary air.	Provide fresh air ventilation.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Heater installed in a confined area.	Provide fresh air ventilation.
The burner flame is too high.	Insufficient secondary air.	Provide fresh air ventilation.
	Orifice too large.	Replace with correct orifice.
	Defective gas control.	Replace with new gas control.
The flame burns at the orifice.	Low gas pressure.	Check with gas utility company.
	Defective gas control.	Replace with new gas control.
High operating costs.	Gas control set too high.	Turn temperature dial to desired temperature.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Leaking faucets.	Repair faucets.
	Gas leaks.	Check with gas utility company. Repair at once.
	Wasted hot water.	Advise consumer.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
Insufficient hot water.	Low gas pressure.	Check with gas utility company.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install the size of water heater that meets the demand.
	Gas control set too low.	Turn temperature knob to desired temperature.
	Leaking faucets.	Repair faucets.
	Wasted hot water.	Advise consumer.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
Slow hot water recovery.	Insufficient secondary air.	Provide fresh air ventilation.
	Low gas pressure.	Check with gas utility company.
	Gas control set too low.	Turn temperature dial to desired temperature.
	Improper calibration.	Replace gas control.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connection.	Correct piping, dip tube must be in cold inlet.
	Wasted hot water.	Advise consumer.

For all page and graphic references, use the installation manual provided with each water heater.

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POWER VENT, High Input | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
Leaking water.	Poorly sealed, hot or cold water connections, gas control threads, relief valve, or drain valve.	Tighten threaded connections.
	Leakage from plumbing system or other appliances.	Inspect plumbing system and other appliances.
	Condensation.	Refer to Condensation.
Water drips from the relief valve.	Heater stacking.	Lower gas control setting.
	Excessive water pressure.	Install a pressure-reducing valve.
	Thermal expansion in a closed water system.	Install an expansion tank.
	Improperly seated valve.	Check relief valve works properly and replace, if necessary.
The gas control fails to shut off.	Defective gas control.	Replace with new gas control.
	Improper calibration.	Replace gas control.
Condensation.	Water heater filled for the first time.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Heavy draws of hot water with very cold refill water.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Water heater is undersized.	Install size of water heater that meets demand.
Combustion odours.	Insufficient secondary air.	Provide fresh air ventilation.
	Heater installed in a confined area.	Provide fresh air ventilation.
	Flue clogged.	Clean. Check for source of trouble and correct.
Smoking and carbon formation (sooting).	Insufficient secondary air.	Provide fresh air ventilation.
	Low gas pressure.	Check with gas utility company.
	Burner flame yellow, lazy.	Refer to The burner flame is yellow and lazy.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Defective gas control.	Replace with new gas control.
	Heater installed in a confined area.	Provide fresh air ventilation.
Smelly water.	High sulfate or mineral content in water.	Change magnesium anode to an aluminum anode and bleach tank.
The access door temperature high limit switch is tripping.	Not enough draft from the venting system.	Check for any obstruction in the chimney. Ensure that the chimney is sized and installed according to installation instructions provided in this manual.
	Not enough fresh air for the combustion.	Supply make-up air. Refer to installation instructions provided in this manual.
	Ambiant air temperature is too high.	Reduce ambiant air temperature.
	Excessive dirt, dust or other debris accumulation on the flame arrestor.	Clean the flame arrestor in the combustion chamber using a stiff brush, compressed air and/or a vacuum cleaner.

For all page and graphic references, use the installation manual provided with each water heater.

POWER VENT, High Input | REPLACEMENT PARTS

50 U.S. gallons

UG50-65LFPV-N1U-EC
(Before April 1st, 2016)

I.D.	Part #	Description
1	56000152-A	Gas control
2	56001004-A	Flammable vapour sensor
3	14000006-A	Protective cover
4	58000155-A	Ignitor assembly
5	06001224-A	Burner assembly
6	KITPV002	Inner access door kit
7	99000155-A	Outer access door
8	15000028-A	Brass drain valve
9	19000005-A	Overflow tube
10	22000403-A	Dip tube
11	MS145320	Magnesium anodes (2)
12	18G0022	Temperature and pressure relief valve
13	06000044-A	Flue baffle
14	99000508-A	Flue reducer
15	56001009-A	High limit switch (175°F)
16	63000001-A	Rubber transition fitting
17	60000002-A	Vacuum switch (-0.75” w.c.)
18	80000004-A 80000008-A	Blower assembly (replaced by 8000008-A*) Blower assembly
19	NP022241	Outlet nipple

N = Natural gas

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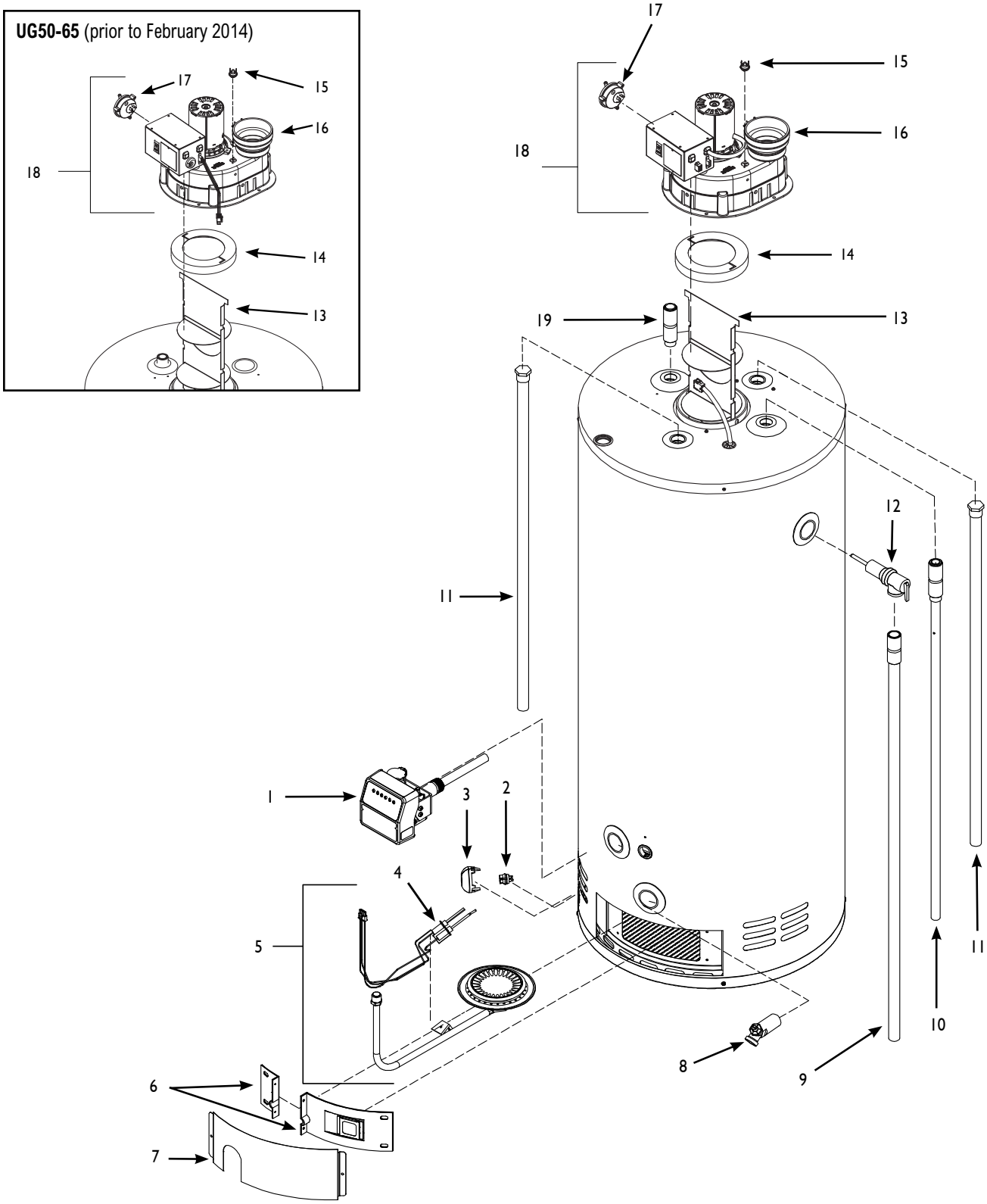
POWER VENT, High Input | REPLACEMENT PARTS



POWER DIRECT VENT | REPLACEMENT PARTS

40 U.S. gallons
UG40-38LFPDV1-N2U-EC

50 U.S. gallons
UG50-38LFPDV1-N2U-EC

I.D.	Part #	Description	Use with Models
1	56000160-A	Gas control assembly	All
1a	56000162-A	Gas control electronic module	All
1b	N/A	Gas control body	All
2	56001004-A	Flammable vapour sensor	All
3	14000006-A	Protective cover	All
4	58000157-A	Ignitor assembly	All
5	06100822-A 06101241-A	Burner assembly	UG40 UG50
6	KITPV001 KITPV002	Inner access door kit[1]	UG40 UG50
7	99000155-A	Outer access door	All
8	15000028-A	Brass drain valve	All
9	19000006-A	Overflow tube	All
10	22000414-A 22000415-A	Closed end dip tube with heat trap	UG40 UG50
11	MS145410	Magnesium anodes (2)	All
12	SV0Z4220	Temperature and pressure relief valve	All
13	99000063-A	Flue baffle	All
14	84000004-A	Inlet rubber transition fitting (2”)	All
15	60000007-A	Vacuum switch - Inlet (-1.15” w.c.)	All
16	60000012-A	Vacuum switch - Outlet (-0.50” w.c.)	All
17	56001010-A	High limit switch (165°F)	All
18	84000017-A	Outlet rubber transition fitting (2”)	All
19	06801701/2A	Blower assembly (Molex connector, starting October 8th, 2013)	All
20	16001110-A	Outlet nipple with heat trap	All
21	14010001-A 14010007-A	Restrictor screen (2”) - PVC/CPVC Restrictor screen (3”) - PVC/CPVC	All low input (Ventilation length 0-30ft) All low input (Ventilation length 0-30ft)

[1]Includes both door and gasket
N = Natural gas

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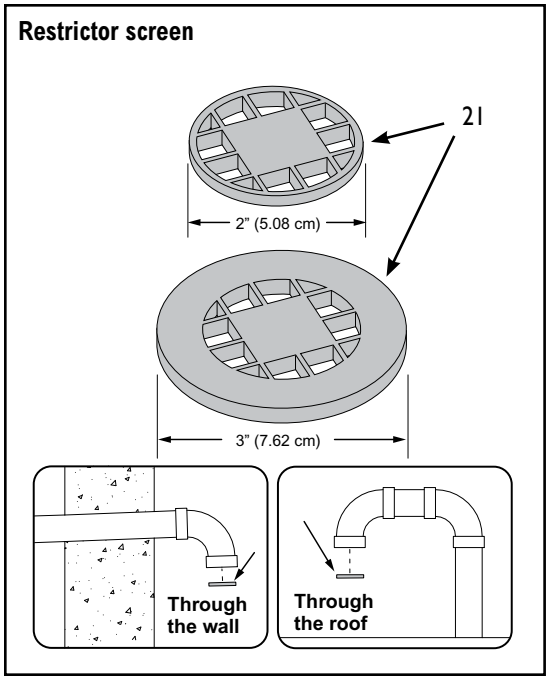
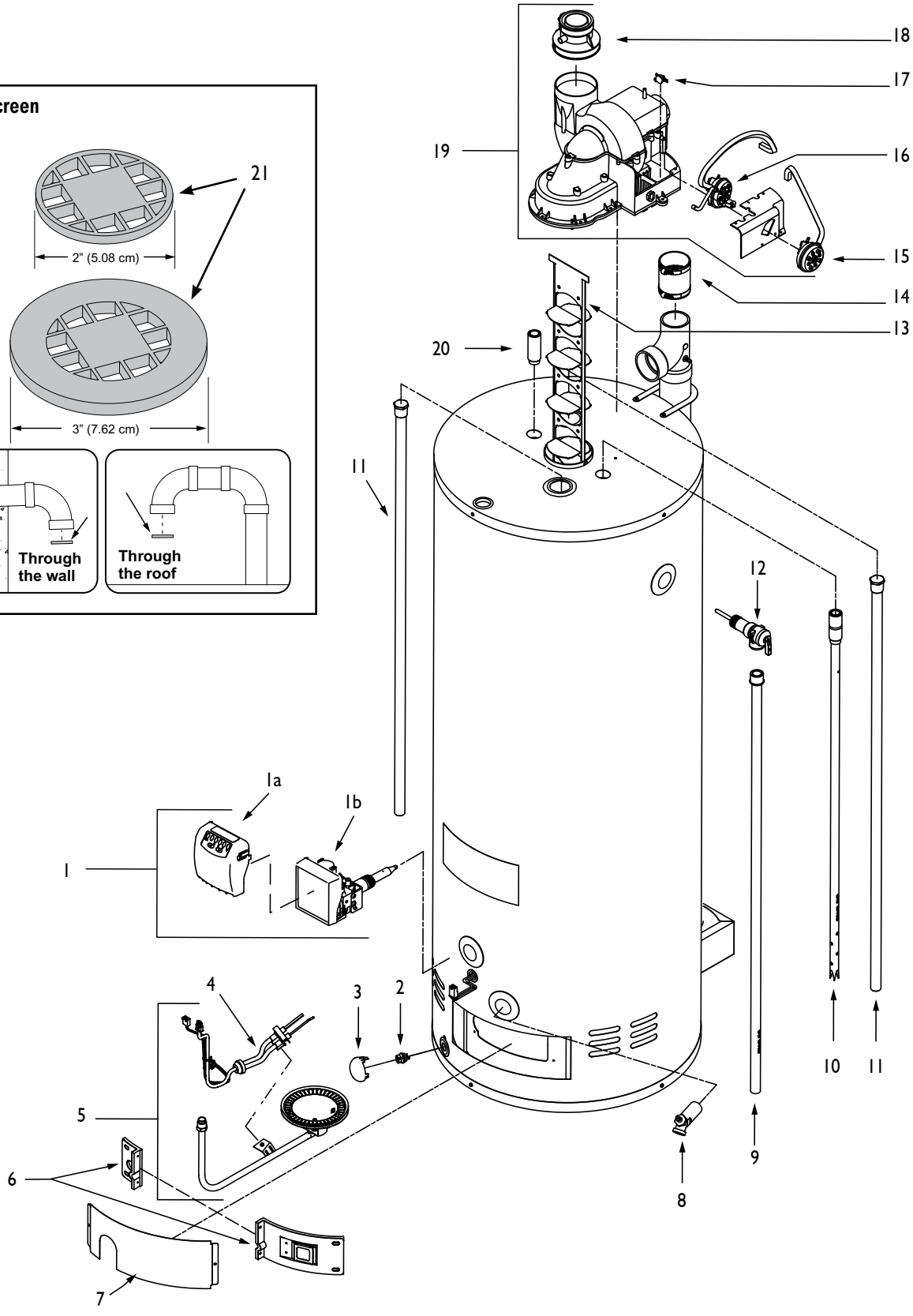
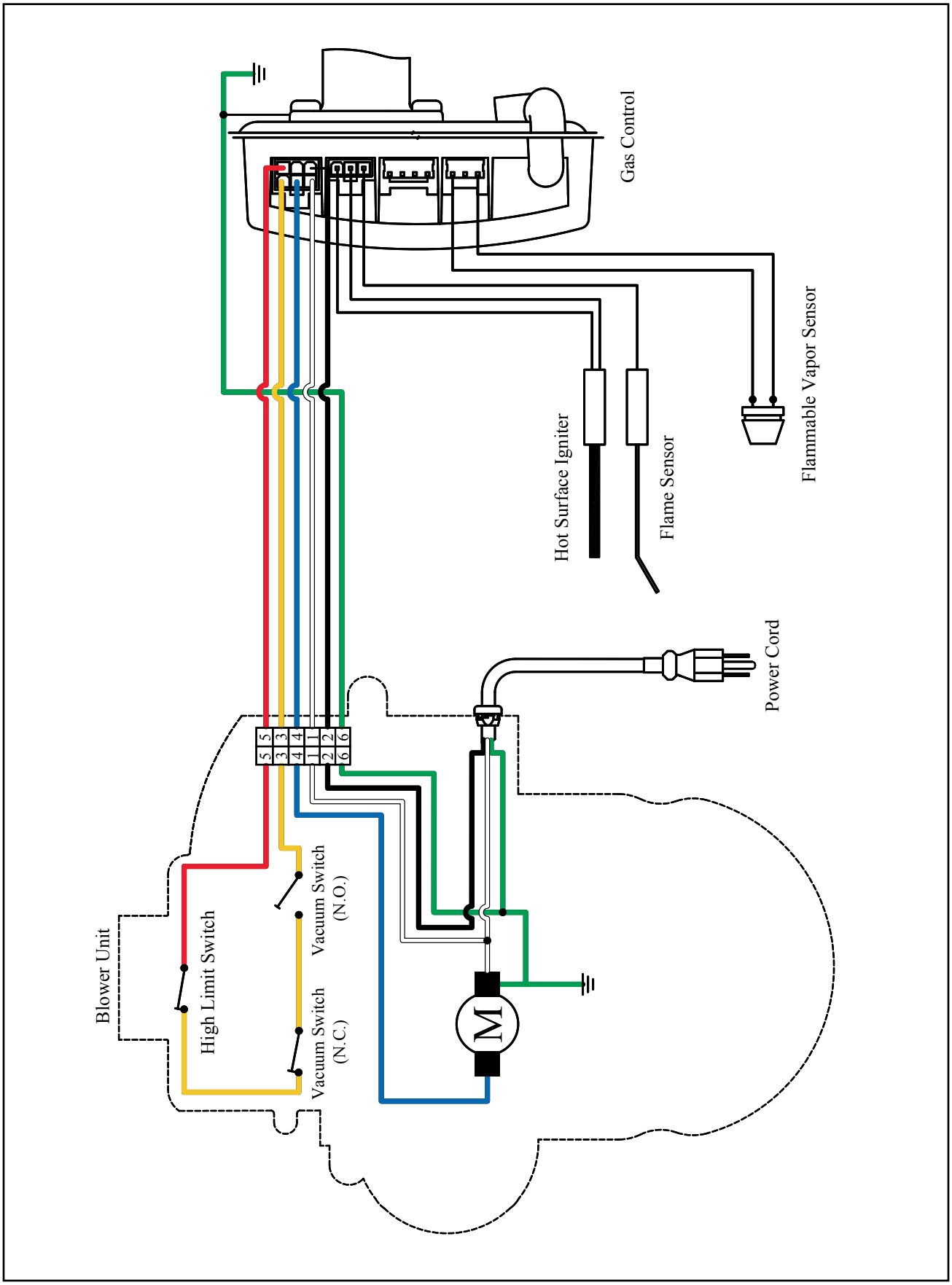
POWER DIRECT VENT | REPLACEMENT PARTS





RESIDENTIAL GAS-FIRED

POWER DIRECT VENT | WIRING DIARAM



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POWER DIRECT VENT | ERROR CODE GUIDE

⚠ WARNING

Disconnect the electrical power before servicing the water heater. Service should only be performed by Enercare. Failure to follow these instructions can result in personal injury or death.

CONDITION (code#)	CAUSE	SOLUTION
VAC ▲ A B C — **1**	An open earth ground circuit to the ignition.	1) Check that the earth ground conductor is properly connected at the fuse box or breaker panel and the water heater. 2) Check that the grounding conductors on the water heater are properly connected and secure.
VAC ▲ A B C — **2**	A wiring error or a high resistance to earth ground.	1) Check for proper connection of the line neutral and line hot wires. 2) Check that the water heater is securely connected to earth ground.
VAC ▲ A B C — **3**	The pressure switch remained closed longer than five (5) seconds after the call for heat began.	1) The pressure switch wiring is incorrect. 2) The pressure switch is defective and must be replaced.
VAC ▲ A B C — **4**	The pressure switch remained open longer than five (5) seconds after the power venter was energized. (see note at the bottom of the page)	1) The pressure switch wiring is incorrect. 2) The pressure switch tubing is not properly connected. 3) There are obstructions or restrictions in the water heater air intake or exhaust flue.
VAC ▲ A B C — **5**	The self diagnosing test has detected an error in the hot surface ignitor circuit.	1) Check the wiring is correct and secure. 2) Disconnect the ignitor connector and measure the ignitor resistance with an accurate ohmmeter between pins 1 and 2. Resistance should be between 11.5 and 18.8 ohms. If the reading is incorrect, replace the hot surface ignitor. 3) If the above checks are good, replace the gas control.
VAC ▲ A B C — **6**	The maximum number of ignition retries or recycles has been reached and the system is in lock-out mode.	1) Check if the gas supply is off or too low to operate. 2) Check the flame sensor rod to see if it is located properly and free from contamination. Reposition the flame sensor rod or lightly clean it with an abrasive cloth. 3) The hot surface ignitor may not be positioned correctly. Reposition as necessary. 4) Check that the hot surface ignitor and flame sensor rod are wired correctly and in good working condition. 5) Low voltage to the water heater. Check and repair.
VAC ▲ A B C — **7**	The gas valve driver circuit.	1) Turn off the power to the water heater for ten (10) seconds and then back on. 2) If the above step did not clear the error, replace the gas control.
VAC ▲ A B C — **8**	The internal microcomputer.	1) Turn off the power to the water heater for ten (10) seconds and then back on. 2) If the above step did not clear the error, replace the gas control.
VAC ▲ A B C — **9**	The internal circuit.	1) Turn off the power to the water heater for ten (10) seconds, verify the polarity and then back on. 2) If the above step did not clear the error, replace the gas control.
VAC ▲ A B C — **10**	Flame signal sensed out of proper sequence.	Replace the gas control.
VAC ▲ A B C — **11**	The high temperature thermal cut-off is open.	Replace the gas control.
VAC ▲ A B C — **12**	One of the temperature adjust buttons is stuck closed.	1) Make sure that there are no objects leaning against the front of the control. 2) Lightly press and release each of the buttons once. 3) If the above actions do not clear the error, the control will continue to regulate the water temperature at the last setting, but you will not be able to change settings unless you replace the gas control.
VAC ▲ A B C — **13**	The water temperature sensor is either open or short-circuited.	1) Check that all of the wiring is correct and that there are no open or short circuits. 2) If no wiring problems are found, the gas control must be replaced.
VAC ▲ A B C — **14**	The self-diagnosing test found a problem with the flammable vapour sensor.	1) Check that all wiring is correct and that there are no open or short circuits. 2) If no wiring problems are found, the flammable vapour sensor must be replaced.
VAC ▲ A B C — **15**	The control detected the presence of flammable vapours near the appliance and entered lock-out mode.	1) Identify the source of the flammable vapours and remove it from the area surrounding the water heater. 2) Contact an Enercare service technician to have the water heater inspected immediately.
VAC ▲ A B C — **16**	Weak Flame Current.	1) Check that the flame sense rod to see if it is properly located and free from contamination. Reposition the flame sense rod or lightly clean with an abrasive cloth. 2) Low voltage to the water heater. Check and repair.

Note for models with a manual reset only: Since the high limit switch on the blower is in series with the pressure switch, the problem could be that the high limit switch tripped. Reset the high limit switch by pressing on the red button in the middle of the switch.

POWER DIRECT VENT | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
The burner will not ignite.	No gas.	Check with gas utility company.
	Dirt in gas line.	Notify utility. Install drip leg in gas line.
	Air intake terminal is blocked.	Check outside for debris in the terminal or frozen air intake terminal and remove.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Defective flame sensor.	Replace with new flame sensor.
	Defective gas control.	Replace with new gas control.
	Gas control set too low.	Turn temperature dial to desired temperature.
The burner flame floats and lifts off ports.	High gas pressure.	Check with gas utility company.
	Orifice too large.	Replace with correct orifice.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Air intake terminal is blocked.	Check outside for debris in the terminal and remove.
	Cold drafts (downdraft).	Locate source and correct.
The burner flame is yellow and lazy.	Insufficient secondary air.	Check that the air intake terminal is not blocked.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Air intake terminal is blocked.	Check outside for debris in the terminal and remove.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
The burner flame is too high.	Insufficient secondary air.	Check that the air intake terminal is not blocked.
	Orifice too large.	Replace with correct orifice.
	Defective gas control.	Replace with new gas control.
The flame burns at the orifice.	Low gas pressure.	Check with gas utility company.
	Defective gas control.	Replace with new gas control.
High operating costs.	Gas control set too high.	Turn temperature dial to desired temperature.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Leaking faucets.	Repair faucets.
	Gas leaks.	Check with gas utility company. Repair at once.
	Wasted hot water.	Advise consumer.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
Insufficient hot water.	Low gas pressure.	Check with gas utility company.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install the size of water heater that meets the demand.
	Gas control set too low.	Turn temperature knob to desired temperature.
	Leaking faucets.	Repair faucets.
	Wasted hot water.	Advise consumer.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
Slow hot water recovery.	Insufficient secondary air.	Check that the air intake terminal is not blocked.
	Low gas pressure.	Check with gas utility company.
	Gas control set too low.	Turn temperature dial to desired temperature.
	Improper calibration.	Replace gas control.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connection.	Correct piping, dip tube must be in cold inlet.
	Wasted hot water.	Advise consumer.

For all page and graphic references, use the installation manual provided with each water heater.

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POWER DIRECT VENT | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
Leaking water.	Poorly sealed, hot or cold water connections, gas control threads, relief valve, or drain valve.	Tighten threaded connections.
	Leakage from plumbing system or other appliances.	Inspect plumbing system and other appliances.
	Condensation.	Refer to Condensation.
Water drips from the relief valve.	Heater stacking.	Lower gas control setting.
	Excessive water pressure.	Install a pressure-reducing valve.
	Thermal expansion in a closed water system.	Install an expansion tank.
	Improperly seated valve.	Check relief valve works properly and replace, if necessary.
The gas control fails to shut-off.	Defective gas control.	Replace with new gas control.
	Improper calibration.	Replace gas control.
Condensation.	Water heater filled for first time.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Heavy draws of hot water with very cold refill water.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Water heater is undersized.	Install size of water heater that meets demand.
Combustion odours.	Insufficient secondary air.	Check that the air intake terminal is not blocked.
	Flue clogged.	Clean. Check for source of trouble and correct.
Smoking and carbon formation (sooting).	Insufficient secondary air.	Check that the air intake terminal is not blocked.
	Low gas pressure.	Check with gas utility company.
	Burner flame yellow, lazy.	Refer to The burner flame is yellow and lazy.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Defective gas control.	Replace with new gas control.
Smelly water.	High sulfate or mineral content in water.	Change magnesium anode to an aluminum anode and bleach tank.

For all page and graphic references, use the installation manual provided with each water heater.

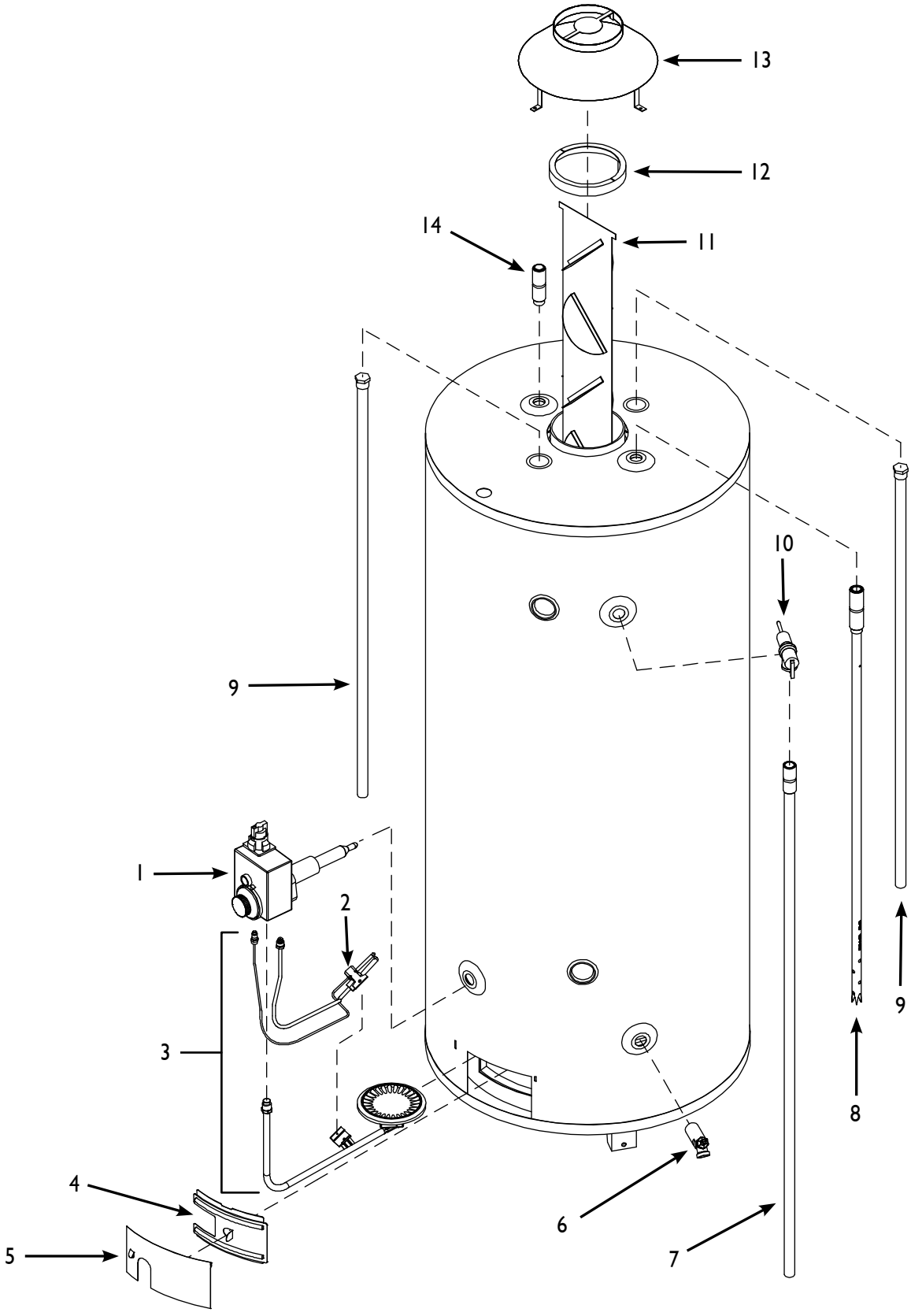
ATMOSPHERIC VENT, Light Duty | REPLACEMENT PARTS

75 U.S. gallons

UG75-76ME-N2U-EC

I.D.	Part #	Description	Use with Models
1	GCA32601	Gas control	All
2	PT2A2001	Pilot / Thermocouple assembly	All
3	06001608-A	Burner assembly	All
4	AD2A4150	Inner access door	All
5	AD2A4200	Outer access door	All
6	DV3Z0070	Brass drain valve	All
7	19000006-A	Overflow tube	All
8	22000412-A	Closed end dip tube with heat trap	All
9	MS145410	Magnesium anodes (2)	All
10	SV0Z4220	Temperature and pressure relief valve	All
11	SB9A3300 06000049-A	Flue baffle	All (prior to July 2007) All (after June 2007)
12	99000507-A 99000510-A	Flue reducer	All (prior to July 2007) All (after June 2007)
13	06000003-A	Draft hood	All
14	16000015 16001115-A	Outlet nipple with heat trap	All (prior to November 2016) All (after November 2016)

Plant 40, Lesage Avenue, Montréal-East (Québec) H1B 5H3 CANADA **T** 514-645-8893 **Toll free** 1-800-363-9354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ATMOSPHERIC VENT, Light Duty | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
The burner will not ignite.	No gas.	Check with gas utility company.
	Dirt in gas line.	Notify utility. Install drip leg in gas line.
	Pilot line clogged.	Clean. Check for source of trouble and correct.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Defective thermocouple.	Replace with new thermocouple.
	Defective gas control.	Replace with new gas control.
	Gas control set too low.	Turn temperature dial to desired temperature.
	Heater installed in a confined area.	Provide fresh air ventilation.
The burner flame floats and lifts off ports.	High gas pressure.	Check with gas utility company.
	Orifice too large.	Replace with correct orifice.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Heater installed in a confined area.	Provide fresh air ventilation.
	Cold drafts (downdraft).	Locate source and correct.
The burner flame is yellow and lazy.	Insufficient secondary air.	Provide fresh air ventilation.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Heater installed in a confined area.	Provide fresh air ventilation.
The burner flame is too high.	Insufficient secondary air.	Provide fresh air ventilation.
	Orifice too large.	Replace with correct orifice.
	Defective gas control.	Replace with new gas control.
The flame burns at the orifice.	Low gas pressure.	Check with gas utility company.
	Defective gas control.	Replace with new gas control.
The pilot will not light or remain lit.	No gas.	Check with gas utility company.
	Dirt in gas line.	Notify utility. Install dirt leg in gas line.
	Pilot line clogged.	Clean. Check for source of trouble and correct.
	Loose thermocouple connection.	Tighten with fingers then take 1/4 turn with wrench.
	Defective thermocouple.	Replace with new thermocouple.
	Cold drafts (downdraft).	Check source and correct.
	Gas control high limit switch has tripped.	Replace with new gas control.
High operating costs.	Gas control set too high.	Turn temperature dial to desired temperature.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Leaking faucets.	Repair faucets.
	Gas leaks.	Check with gas utility company. Repair at once.
	Wasted hot water.	Advise consumer.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
Tripping high limit switch.	Excessive dirt, dust or other debris accumulation on the flame arrestor and on the blower impeller.	Clean the flame arretor in the combustion chamber using a stiff brush, compressed air and/or a vaccuum cleaner. In no circumstances, the blower assembly should be removed for cleaning before contacting the manufacturer.
Insufficient hot water.	Low gas pressure.	Check with gas utility company.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install the size of water heater that meets the demand.
	Gas control set too low.	Turn temperature knob to desired temperature.
	Leaking faucets.	Repair faucets.
	Wasted hot water.	Advise consumer.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.

For all page and graphic references, use the installation manual provided with each water heater.

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ATMOSPHERIC VENT, Light Duty | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
Slow hot water recovery.	Insufficient secondary air.	Provide fresh air ventilation.
	Low gas pressure.	Check with gas utility company.
	Gas control set too low.	Turn temperature dial to desired temperature.
	Improper calibration.	Replace gas control.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connection.	Correct piping, dip tube must be in cold inlet.
	Wasted hot water.	Advise consumer.
Leaking water.	Poorly sealed, hot or cold water connections, gas control threads, relief valve, or drain valve.	Tighten threaded connections.
	Leakage from plumbing system or other appliances.	Inspect plumbing system and other appliances.
	Condensation.	Refer to Condensation.
Water drips from the relief valve.	Heater stacking.	Lower gas control setting.
	Excessive water pressure.	Install a pressure-reducing valve.
	Thermal expansion in a closed water system.	Install an expansion tank.
	Improperly seated valve.	Check relief valve works properly and replace if necessary.
The gas control fails to shut-off.	Defective gas control.	Replace with new gas control.
	Improper calibration.	Replace gas control.
Condensation.	Water heater filled for first time.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Heavy draws of hot water with very cold refill water.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Water heater is undersized.	Install size of water heater that meets demand.
Combustion odours.	Insufficient secondary air.	Provide fresh air ventilation.
	Heater installed in a confined area.	Provide fresh air ventilation.
	Flue clogged.	Clean. Check for source of trouble and correct.
Smoking and carbon formation (sooting).	Insufficient secondary air.	Provide fresh air ventilation.
	Low gas pressure.	Check with gas utility company.
	Burner flame yellow, lazy.	Refer to The burner flame is yellow and lazy.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Defective gas control.	Replace with new gas control.
	Heater installed in a confined area.	Provide fresh air ventilation.
The pilot flame is too small.	Low gas pressure.	Check with utility.
	Pilot line or orifice clogged.	Clean. Check for source of trouble and correct.
Smelly water.	High sulfate or mineral content in water.	Change magnesium anode to an aluminum anode and bleach tank.

For all page and graphic references, use the installation manual provided with each water heater.

POWER VENT, Light Duty | REPLACEMENT PARTS

75 U.S. gallons

UG75-76MEPV1-N2U-EC

I.D.	Part #	Description
1	56000160-A	Gas control assembly
1a	56000162-A	Gas control electronic module
1b	N/A	Gas control body
2	56001004-A	Flammable vapour sensor
3	14000006-A	Protective cover
4	58000157-A	Igniter assembly
5	06101610-A	Burner assembly
6	KITPV004	Inner access door kit
7	99000155-A	Outer access door
8	DV3Z0070	Brass drain valve
9	19000006-A	Overflow tube
10	22000412-A	Closed end dip tube with heat trap
11	MS145410	Magnesium anodes (2)
12	SV0Z4220	Temperature and pressure relief valve
13	99000071-A	Flue baffle (5”)
14	06801901-A	Blower assembly
15	56001014-A	High limit switch (145°F)
16	84000002-A	Rubber transition fitting (3”)
17	60000017-A	Vacuum switch (-0.70” w.c.)
18	16001115-A	Outlet nipple with heat trap

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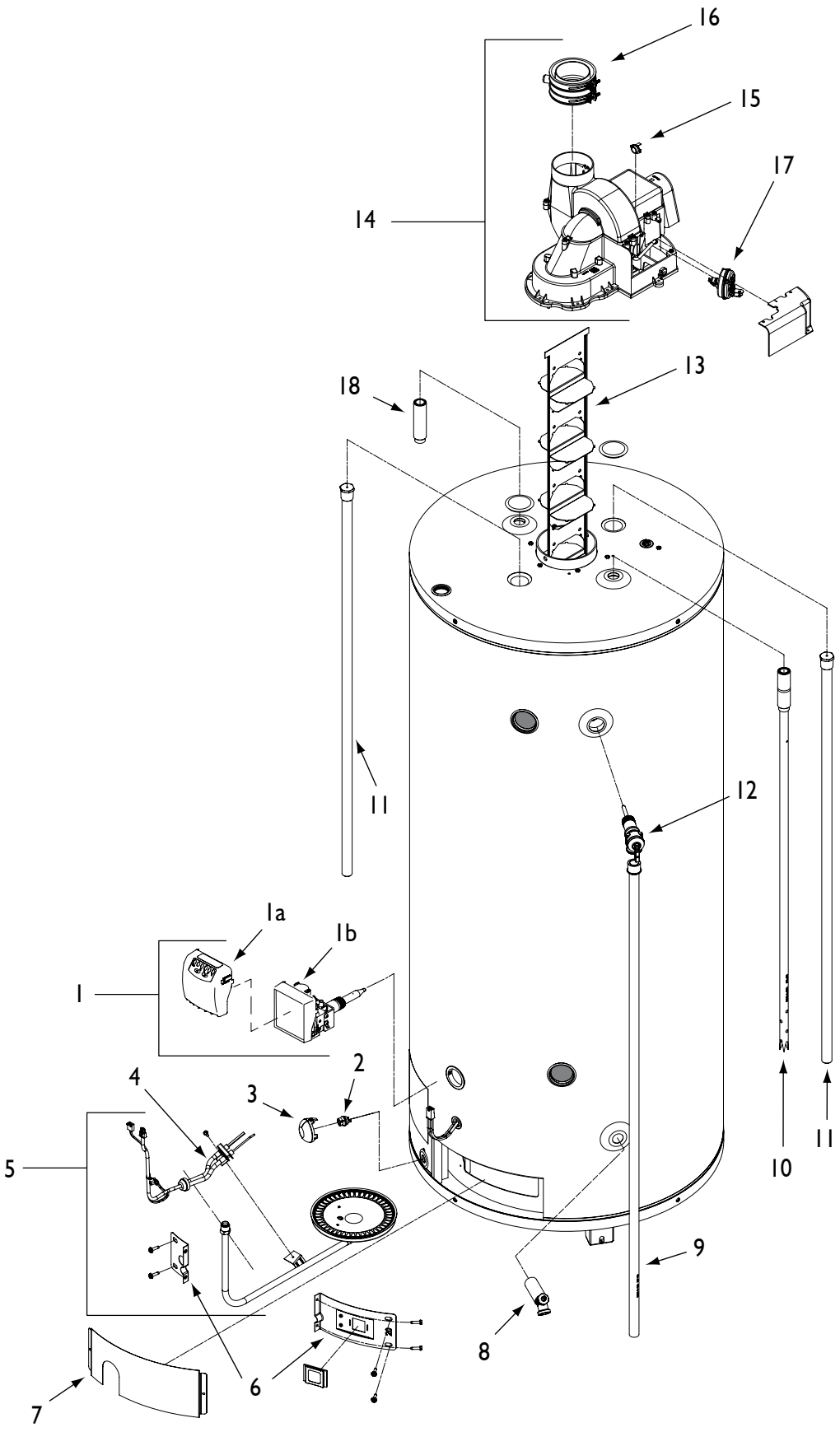
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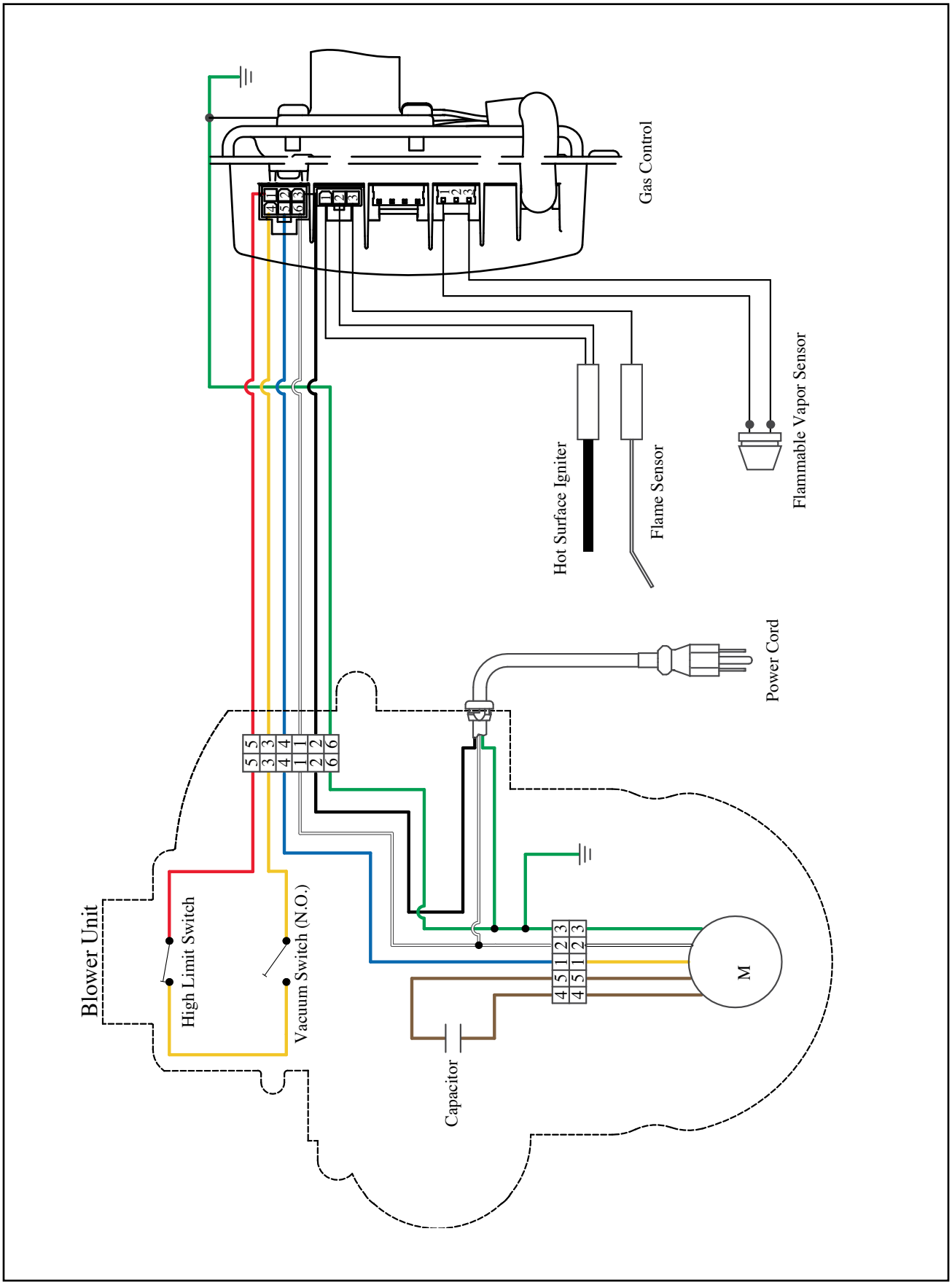
POWER VENT, Light Duty | WIRING DIAGRAM



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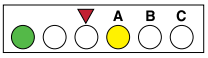
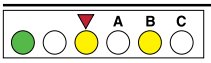
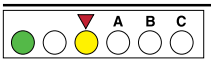
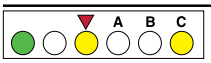
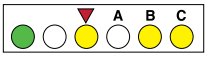
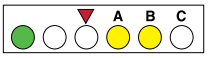
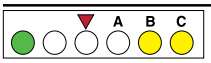
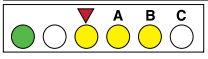
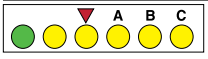
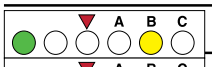
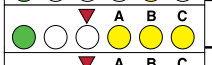
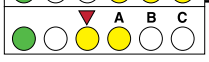
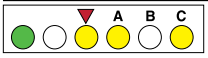
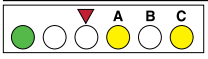
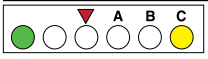
POWER VENT, Light Duty | ERROR CODE GUIDE

⚠ WARNING

Disconnect the electrical power before servicing the water heater. Service should only be performed by Enercare. Failure to follow these instructions can result in personal injury or death.

CONDITION (code#)		CAUSE	SOLUTION
	1	An open earth ground circuit to the ignition.	1) Check that the earth ground conductor is properly connected at the fuse box or breaker panel and the water heater. 2) Check that the grounding conductors on the water heater are properly connected and secure.
	2	A wiring error or a high resistance to earth ground.	1) Check for proper connection of the line neutral and line hot wires. 2) Check that the water heater is securely connected to earth ground.
	3	The pressure switch remained closed longer than five (5) seconds after the call for heat began.	1) The pressure switch wiring is incorrect. 2) The pressure switch is defective and must be replaced.
	4	The pressure switch remained open longer than five (5) seconds after the power venter was energized. (see note at the bottom of the page)	1) The pressure switch wiring is incorrect. 2) The pressure switch tubing is not connected correctly. 3) There are obstructions or restrictions in the water heater air intake or exhaust flue.
	5	The self diagnosing test has detected an error in the hot surface ignitor circuit.	1) Check if the wiring is correct and secure. 2) Disconnect the ignitor connector and measure the ignitor resistance with an accurate ohmmeter between pins 1 and 2. Resistance should be between 11.5 and 18.8 ohms. If the reading is incorrect, replace the hot surface ignitor. 3) If the above checks are good, replace the gas control. 
	6	The maximum number of ignition retries or recycles has been reached and the system is in lock-out mode.	1) Check if the gas supply is off or too low to operate. 2) Check the flame sensor rod to see if it is properly located and free from contamination. Reposition the flame sensor rod or lightly clean it with an abrasive cloth. 3) The hot surface ignitor may not be properly positioned. Reposition as necessary. 4) Check if the hot surface ignitor and flame sensor rod are properly wired and in good working condition. 5) Low voltage to the water heater. Check and repair.
	7	The gas valve driver circuit.	1) Turn off the power to the water heater for ten (10) seconds and then back on. 2) If the above step did not clear the error, replace the gas control.
	8	The internal microcomputer.	1) Turn off the power to the water heater for ten (10) seconds and then back on. 2) If the above step did not clear the error, replace the gas control.
	9	The internal circuit.	1) Turn off the power to the water heater for ten (10) seconds and then back on. 2) If the above step did not clear the error, replace the gas control.
	10	Flame signal sensed out of proper sequence.	Replace the gas control.
	11	The high temperature thermal cut-off is open.	Replace the gas control.
	12	One of the temperature adjust buttons is stuck closed.	1) Make sure that there are no objects leaning against the front of the control. 2) Lightly press and release each of the buttons once. 3) If the above actions do not clear the error, the control will continue to regulate the water temperature at the last setting, but you will not be able to change settings unless you replace the gas control.
	13	The water temperature sensor is either open or short-circuited.	1) Check if the wiring is correct and that there are no open or short circuits. 2) If no wiring problems are found, the gas control must be replaced.
	14	The self-diagnosing test found a problem with the flammable vapour sensor.	1) Check if all wiring is correct and that there are no open or short circuits. 2) If no wiring problems are found, the flammable vapour sensor must be replaced.
	15	The control detected the presence of flammable vapours near the appliance and entered in lock-out mode.	1) Identify the source of the flammable vapours and remove it from the area surrounding the water heater 2) Contact Enercare Home Services at 1-800-266-3939 to have the water heater inspected immediately.

Note: Since the high limit switch on the blower is in series with the pressure switch, the problem could be that the high limit switch tripped.

POWER VENT, Light Duty | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
The burner will not ignite.	No gas.	Check with gas utility company.
	Dirt in gas line.	Notify utility. Install drip leg in gas line.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Defective gas control.	Replace with new gas control.
	Gas control set too low.	Turn temperature dial to desired temperature.
	Heater installed in a confined area.	Provide fresh air ventilation.
The burner flame floats and lifts off ports.	High gas pressure.	Check with gas utility company.
	Orifice too large.	Replace with correct orifice.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Heater installed in a confined area.	Provide fresh air ventilation.
	Cold drafts (downdraft).	Locate source and correct.
The burner flame is yellow and lazy.	Insufficient secondary air.	Provide fresh air ventilation.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Heater installed in a confined area.	Provide fresh air ventilation.
The burner flame is too high.	Insufficient secondary air.	Provide fresh air ventilation.
	Orifice too large.	Replace with correct orifice.
	Defective gas control.	Replace with new gas control.
The flame burns at the orifice.	Low gas pressure.	Check with gas utility company.
	Defective gas control.	Replace with new gas control.
High operating costs.	Gas control set too high.	Turn temperature dial to desired temperature.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Leaking faucets.	Repair faucets.
	Gas leaks.	Check with gas utility company. Repair at once.
	Wasted hot water.	Advise consumer.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
Insufficient hot water.	Low gas pressure.	Check with gas utility company.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install the size of water heater that meets the demand.
	Gas control set too low.	Turn temperature knob to desired temperature.
	Leaking faucets.	Repair faucets.
	Wasted hot water.	Advise consumer.
	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
Slow hot water recovery.	Insufficient secondary air.	Provide fresh air ventilation.
	Low gas pressure.	Check with gas utility company.
	Gas control set too low.	Turn temperature dial to desired temperature.
	Improper calibration.	Replace gas control.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connection.	Correct piping, dip tube must be in cold inlet.
	Wasted hot water.	Advise consumer.

For all page and graphic references, use the installation manual provided with each water heater.

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POWER VENT, Light Duty | TROUBLESHOOTING GUIDE

CONDITION	CAUSE	SOLUTION
Leaking water.	Poorly sealed, hot or cold water connections, gas control threads, relief valve,or drain valve.	Tighten threaded connections.
	Leakage from plumbing system or other appliances.	Inspect plumbing system and other appliances.
	Condensation.	Refer to Condensation.
Water drips from the relief valve.	Heater stacking.	Lower gas control setting.
	Excessive water pressure.	Install a pressure-reducing valve.
	Thermal expansion in a closed water system.	Install an expansion tank.
	Improperly seated valve.	Check relief valve works properly and replace, if necessary.
The gas control fails to shut-off.	Defective gas control.	Replace with new gas control.
	Improper calibration.	Replace gas control.
Condensation.	Water heater filled for the first time.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Heavy draws of hot water with very cold refill water.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Water heater is undersized.	Install size of water heater that meets demand.
Combustion odours.	Insufficient secondary air.	Provide fresh air ventilation.
	Heater installed in a confined area.	Provide fresh air ventilation.
	Flue clogged.	Clean. Check for source of trouble and correct.
Smoking and carbon formation (sooting).	Insufficient secondary air.	Provide fresh air ventilation.
	Low gas pressure.	Check with gas utility company.
	Burner flame yellow, lazy.	Refer to The burner flame is yellow and lazy.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Defective gas control.	Replace with new gas control.
	Heater installed in a confined area.	Provide fresh air ventilation.
Smelly water.	High sulfate or mineral content in water.	Change magnesium anode to an aluminum anode and bleach tank.

For all page and graphic references, use the installation manual provided with each water heater.

DISCONTINUED MODELS

POWER VENT, Light Duty | REPLACEMENT PARTS

75 U.S. gallons

UG75-76MEPV-N2U-EC

I.D.	Part #	Description
1	56000152-A	Gas control
2	42000023-A	Electric connector
3	56000149-A	Ignitor assembly
4	06001609-A	Burner assembly
5	AD2A4150	Inner access door
6	AD2A4200	Outer access door
7	15000022-A	Brass drain valve
8	19000006-A	Overflow tube
9	DT006377	Closed end dip tube
10	SV0Z4220	Temperature and pressure relief valve
11	99000062-A	Flue baffle
12	63000001-A	Rubber transition fitting (3”)
13	56001009-A	High limit switch (175°F)
14	60000002-A	Vacuum switch (-0.75” w.c.)
15	80000008-A	Blower assembly (Replaced by 8000008-A*)
16	16001115-A	Outlet nipple
17	MS145410	Magnesium anodes (2)

* Must be installed with wire connector 42000067-A on heaters built prior to February 2014

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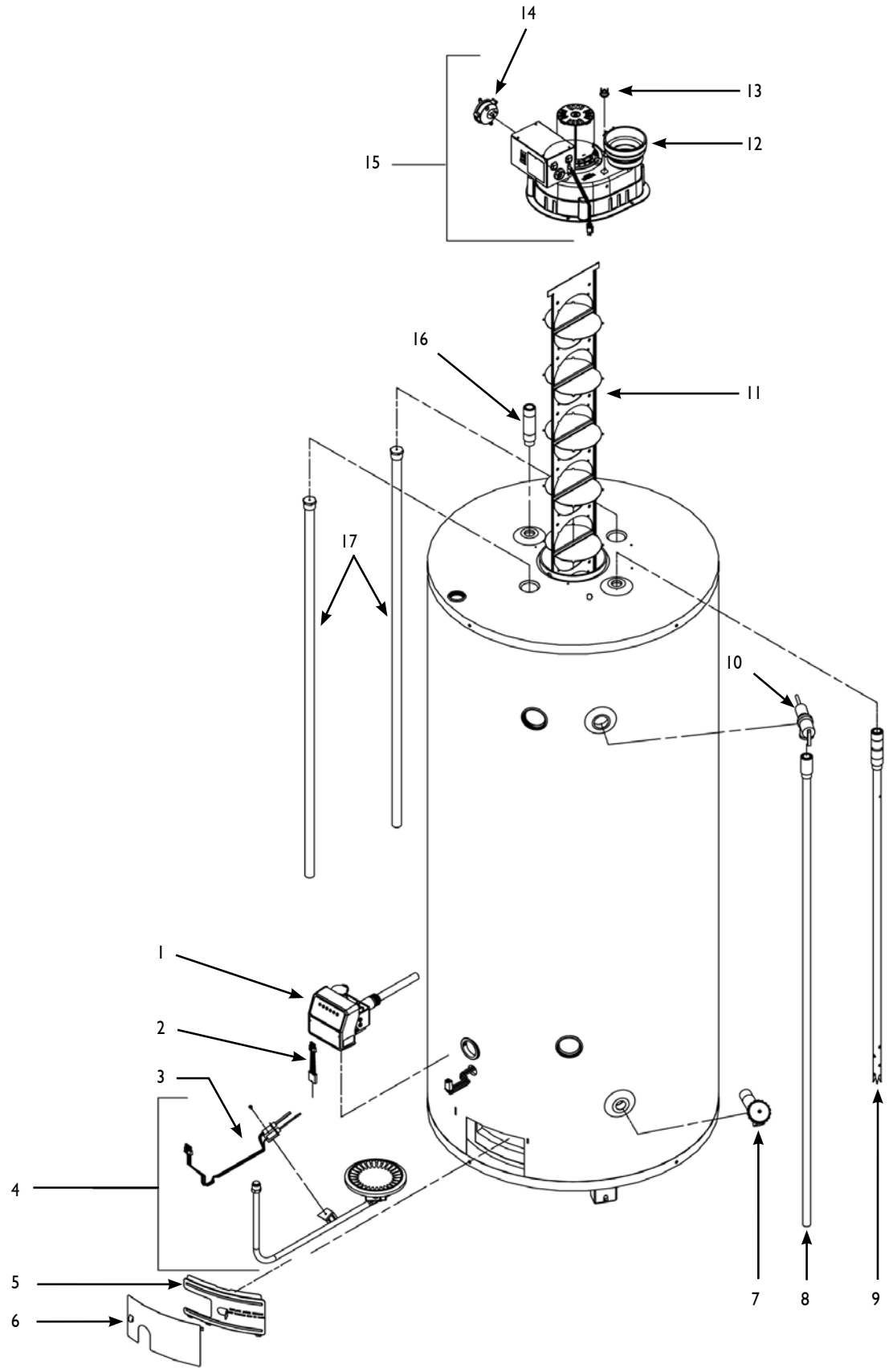
POWER VENT, Light Duty | REPLACEMENT PARTS



WATER HEATER INDEX

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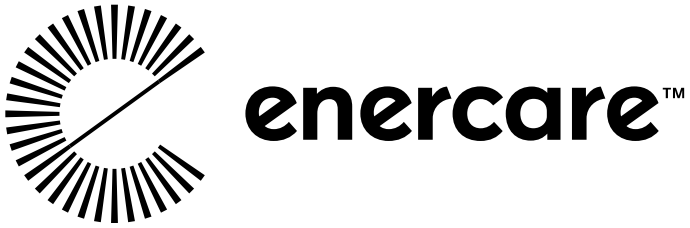
NOTES:



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