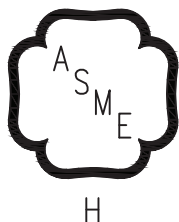


# INSTALLATION, OPERATING AND SERVICE INSTRUCTIONS FOR

# ALPINE™ CONDENSING HIGH EFFICIENCY DIRECT VENT GAS - FIRED HOT WATER BOILER



As an ENERGY STAR® Partner, U.S. Boiler Company has determined that the Alpine™ Series meets the ENERGY STAR® guidelines for energy efficiency established by the United States Environmental Protection Agency (EPA).

**WARNING:** Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury, or loss of life. For assistance or additional information, consult a qualified installer, service agency or the gas supplier. This boiler requires a special venting system. Read these instructions carefully before installing.

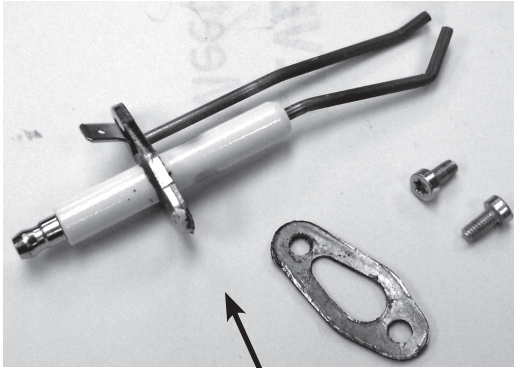
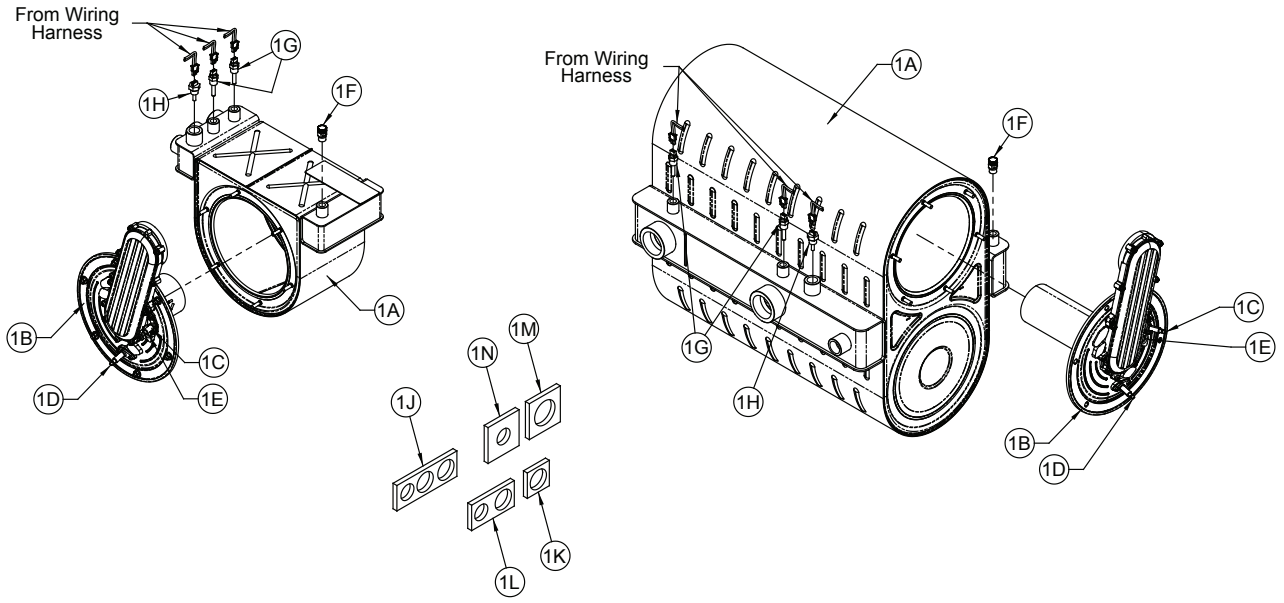
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### **XIII. Repair Parts**

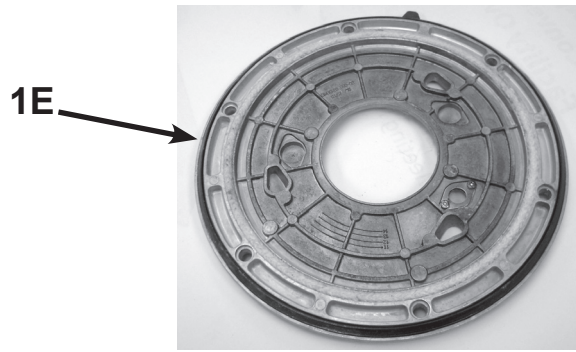
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All Alpine™ Series Repair Parts may be obtained through your local U.S. Boiler Wholesale distributor. Should you require assistance in locating a U.S. Boiler distributor in your area, or have questions regarding the availability of U.S. Boiler products or repair parts, please contact U.S. Boiler Customer Service at (717) 481-8400 or Fax (717) 481-8408.

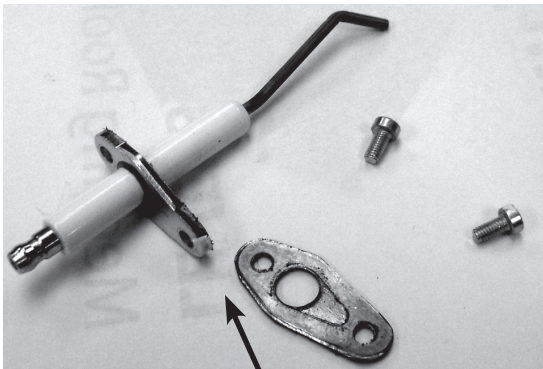
### XIII. Repair Parts (continued)



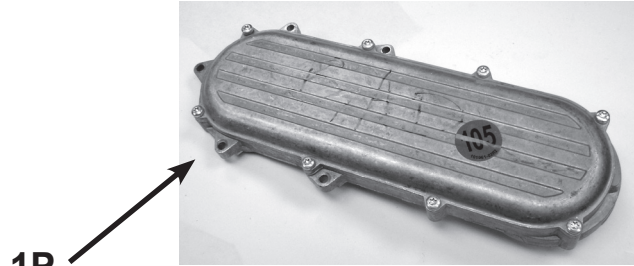
1C



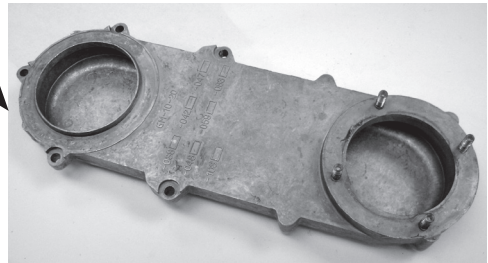
1E



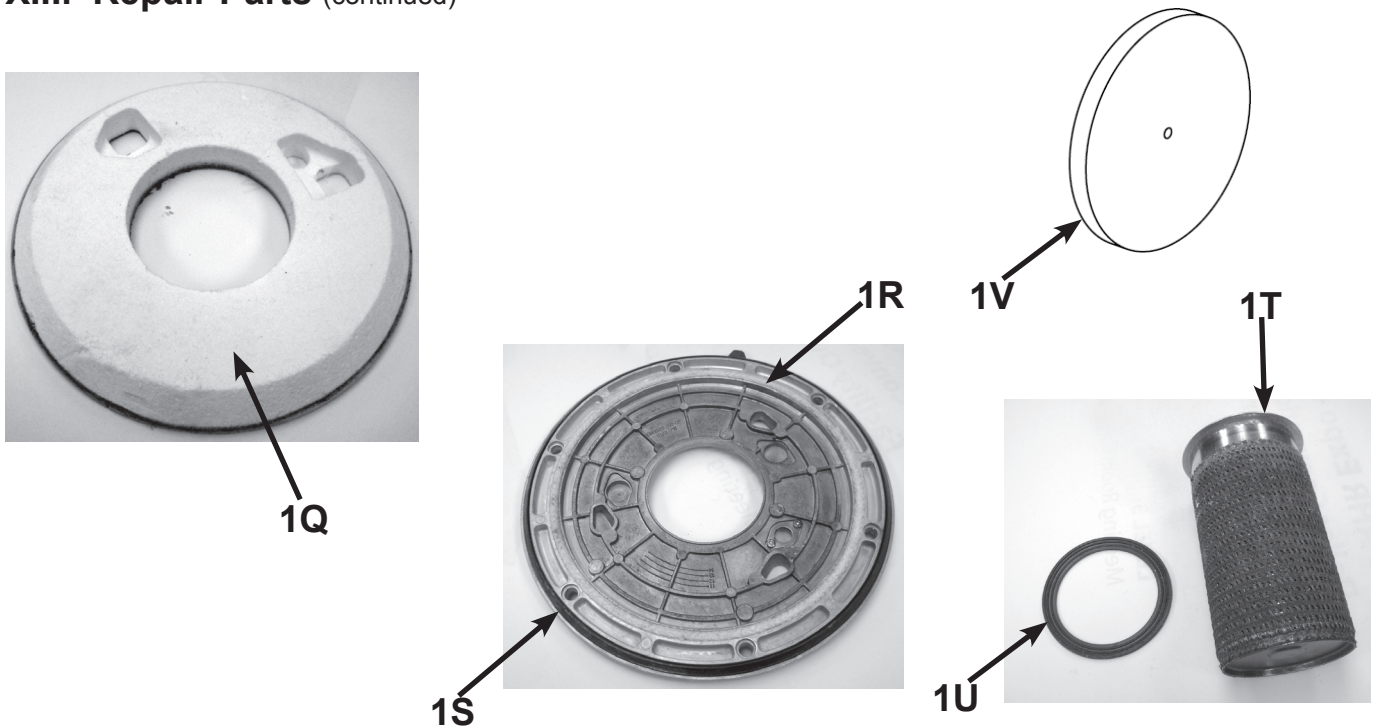
1D



1P

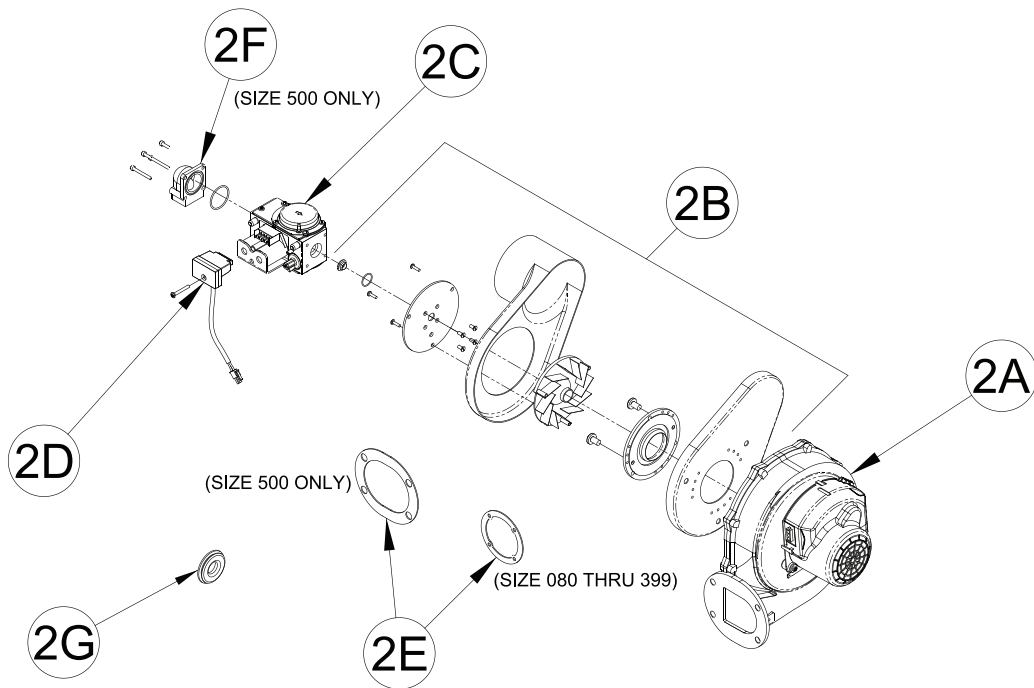


### XIII. Repair Parts (continued)



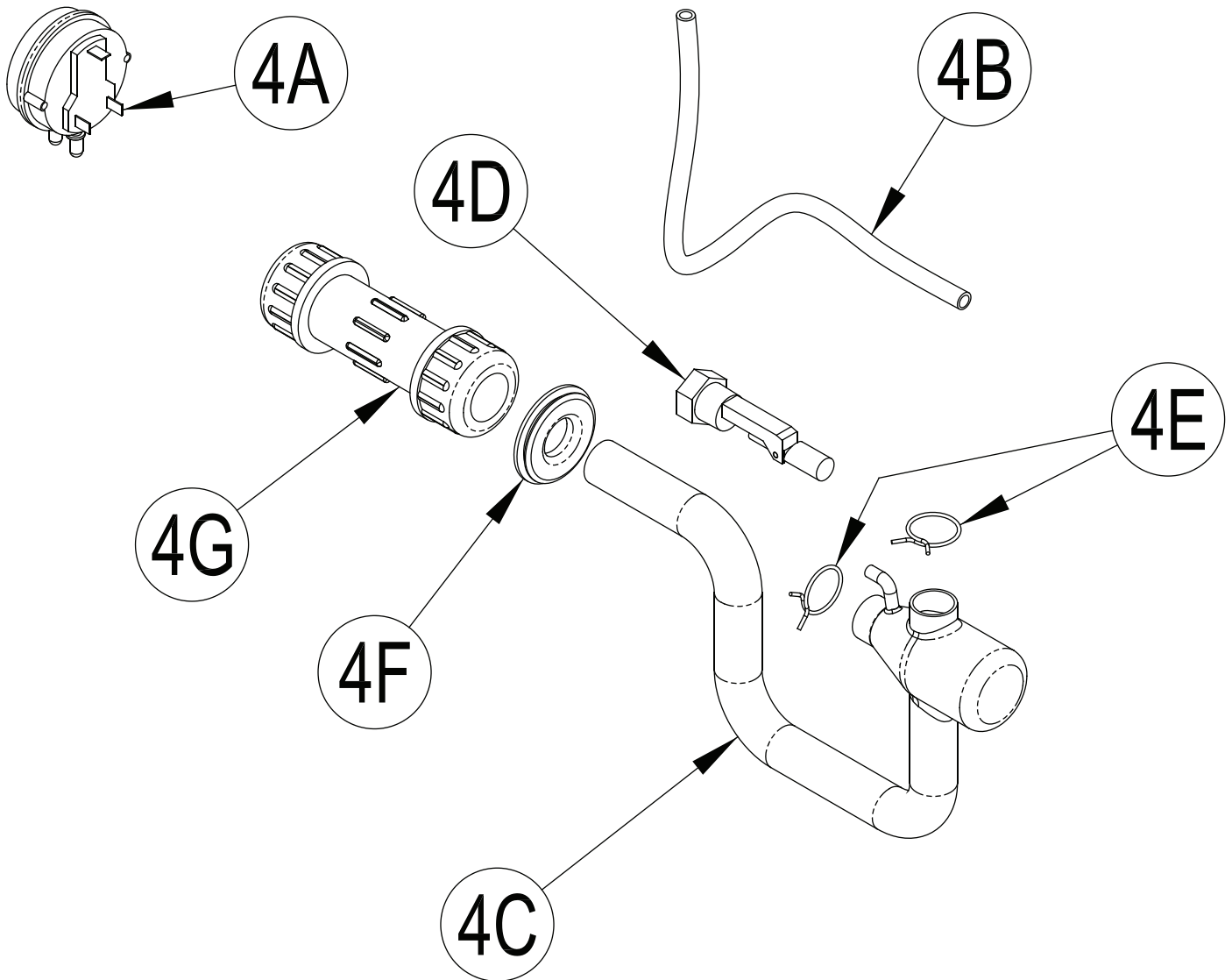
Key No.	Description	(Quantity) Part Number					
		ALP080B	ALP105B	ALP150B	ALP210B	ALP285B	ALP399
1A	Bare Heat Exchanger	101931-01	101931-02	101931-03	101931-04	101931-05	101931-06
1B	Burner Head Assembly	101933-01	101933-02	101933-03	101933-04	101933-05	101933-06
1C	Replacement Igniter Kit	103005-01					
1D	Replacement Flame Sensor Kit	103339-01					
1E	Replacement Partially Assembled Burner Door	102696-01					
1F	Air Vent Valve	101586-01					
1G	Water Temp Sensor	(2) 101685-01					
1H	High Limit	101653-01					
1J	Gasket, Header (All Three)	101240-01	N/A				
1K	Gasket, Header, 1" NPT	N/A	101243-01			N/A	
1L	Gasket, Header, 1" & 3/4" NPT	N/A	101252-01			N/A	
1M	Gasket, Header, 1-1/2" NPT	N/A				101372-02	101372-03
1N	Gasket, Header, 3/4" NPT	N/A				101372-01	
1P	Gas/Air Intake Duct Assembly	101725-01			101725-02		
1Q	Burner Plate Insulation (Warning: Contains RCF)	101728-01					
1R	Burner Plate Inner Seal	101729-01					
1S	Burner Plate Outer Seal	101730-01					
1T	Burner Head	101731-01	101731-02	101731-03	101731-04	101731-05	101731-06
1U	Burner Head Seal	101732-01					
1V	Insulation Disc (Warning: Contains RCF)	101996-01				101996-02	
	M6x1 Hex Flange Nut (Not Shown)	(6) 101724-01					
	M5x14 mm Pan Hd Thread Forming Screw, T25 Drive (Not Shown)	(4) 101742-01					
	M5x10mm Pan Hd Thread Forming Screw, Phillips Drive (Not Shown)	N/A					
	Thermal Link Switch (Backside of Duo Heat Exchanger) (Not Shown)	N/A				103321-01	
	Burner Door Thermostat with Manual Reset (Not Shown)	N/A				104569-01	
	Flue Exit Gasket Kit (Gasket is Inside of Vent Termination of Heat Exchanger), (Not Shown)	104500-01				104501-01	

### XIII. Repair Parts (continued)



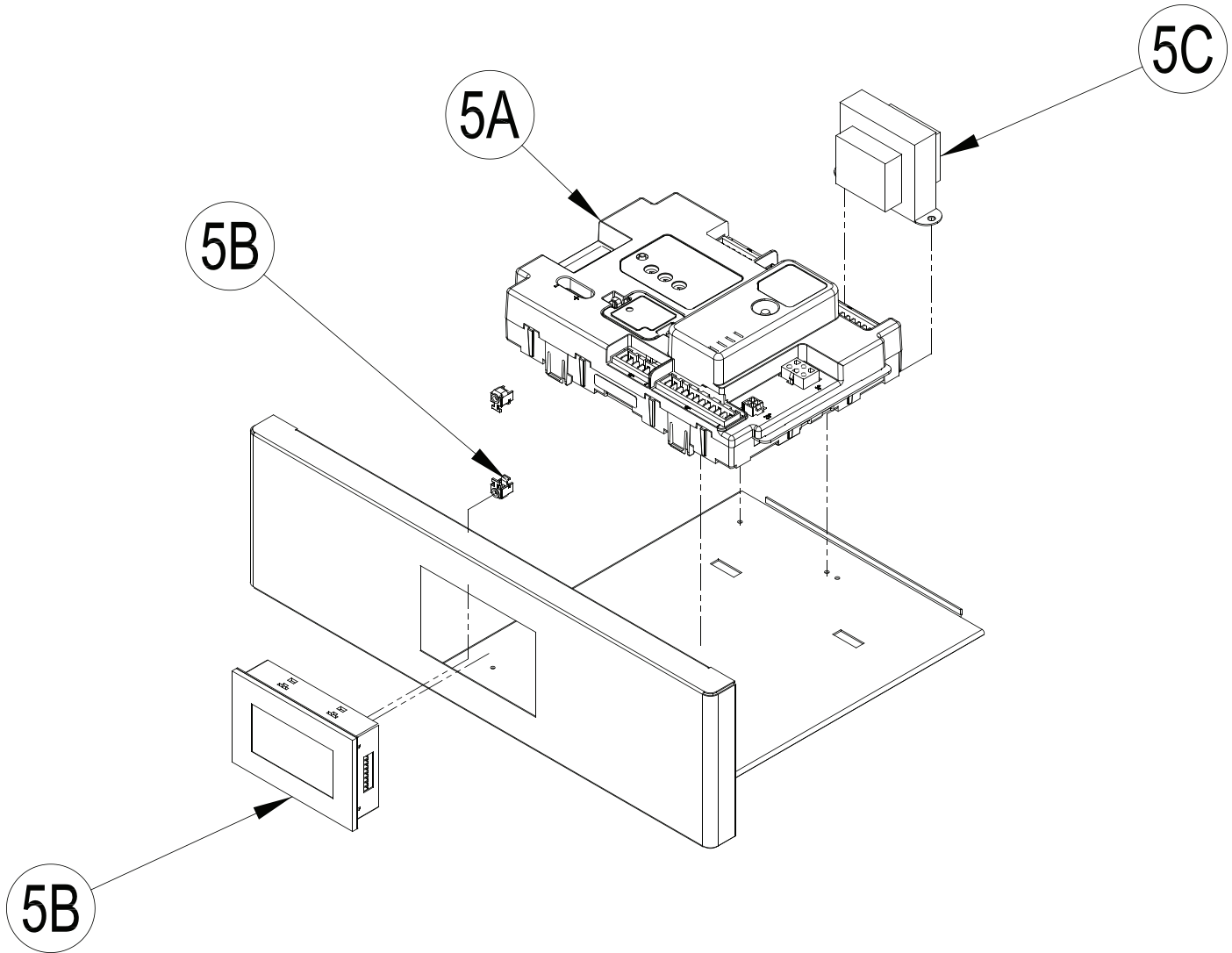
Key No.	Description	Part Number					
		ALP080B	ALP105B	ALP150B	ALP210B	ALP285B	ALP399
2A	Blower	101527-01		101528-01	101529-01	101530-01	
2B	Blower Inlet Shroud Assembly [includes Gas Orifice; Gas Orifice O-Ring; (3x) M4x20 mm or (3x) M4x25 mm self-threading screws; Injector Plate; (4x) M4 x 10 mm flat head screws; Air Intake Adapter - Air Connection Side; Swirl Plate; (2x) M5 x 16 mm Phillips flat head screws; Blower Adapter Plate; Air Intake Adapter - Blower Side; Spacer Plate (for size 080 through 150 only)].	101704-01	101704-02		101704-03	101704-04	
2C	Gas Valve	102975-01	102975-02		102975-04	102975-05	102975-06
2D	Gas Valve Harness with Plug	MCBA Control		102971-02			
		Sage2.1 Control		102971-01			
2E	Blower Outlet Gasket	101345-01					
2F	Gas Valve Flange Kit	N/A					
2G	Rubber Grommet, Gas Line	820SOL0001				101638-01	

### XIII. Repair Parts (continued)



Key No.	Description	(Quantity) Part Number					
		ALP080B	ALP105B	ALP150B	ALP210B	ALP285B	ALP399
4A	Air Pressure Switch	104425-01		104426-01			
4B	Air Pressure Switch Tubing, Black	7016039			7016041	103473-01	
4C	Condensate Trap, Blow Molded	101239-01					
4D	Blocked Condensate Drain Switch	101587-01					
4E	Spring Clip, Condensate Trap	(2) 101632-01					
4F	Rubber Grommet, Condensate Trap	101595-01					
4G	Condensate Comp. Fitting	101546-01					

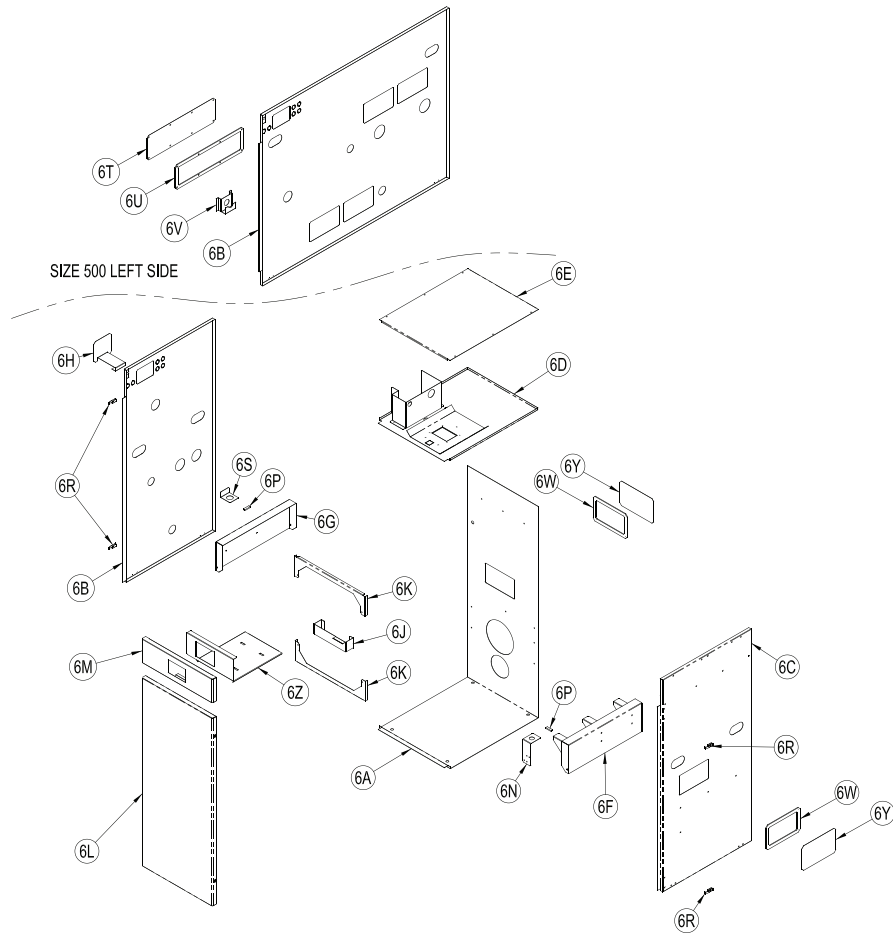
### XIII. Repair Parts (continued)



Key No.	Description	Part Number												
		080-02	080-27	105-02	105-27	150-02	150-27	210-02	210-27	285-07	399-07	150-70	210-70	285-70
5A	Sage2.1 (Programmed) Kit	104472-01									104472-02		104472-03	
5B	Programmed Display (with Mounting Hardware)	104427-01												
5C	Sage2.1 Transformer	102516-01												



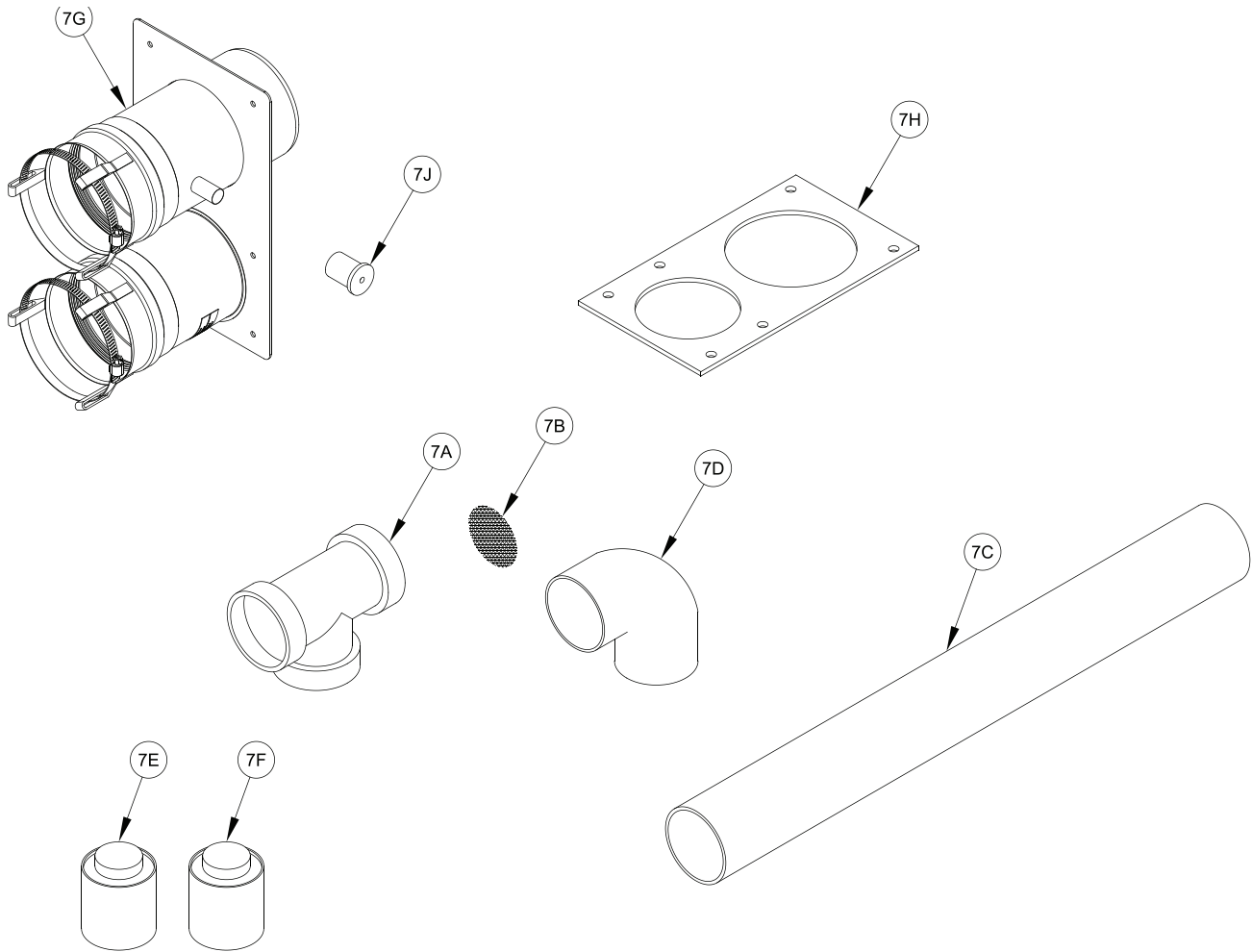
### XIII. Repair Parts (continued)



Key No.	Description	(Quantity) Part Number					
		ALP080B	ALP105B	ALP150B	ALP210B	ALP285B	ALP399
6A	Jacket, Rear/Bottom Panel	101217-01	101217-02	101217-03	101217-04	103406-01	103406-02
6B	Jacket, Left Side Panel	102776-01	102776-02	102776-03	102776-04	102776-05	102776-06
6C	Jacket, Right Side Panel	101216-01	101216-02	101216-03	101216-04	103406-01	103406-02
6D	Partition Shelf Assembly	102831-01	102831-02	102831-03	102831-04	102831-05	102831-06
6E	Jacket, Top Panel	101218-01	101218-02	101218-03	101218-04	101218-05	101218-06
6F	Heat Exchanger Support Assembly, Right Side	101232-01	101232-02	101232-03	101232-04	101232-05	101232-06
6G	Heat Exchanger Support, Left Side	101224-01	101224-02	101224-03	101224-04	101224-05	101224-06
6H	Bracket, High Voltage Terminal	102780-01					
6J	Bracket, Rear HX Support	101381-01					
6K	Jacket Support Bracket	(2) 101593-01					
6L	Lower Front Door Assembly	101227-01			101227-02		
6M	Jacket, Upper Front Panel	101509-01					
6N	Bracket, Right Clip	101508-01					
6P	Rubber Pad, Right Clip	101245-01					
6R	Draw Latch	101037-01					
6S	Bracket, Left Clip	101507-01				101507-02	
6T	Access Panel (5' x 16')	N/A					
6U	Gasket, Access Panel (5' x 16')	N/A					
6V	Bracket, Gas Train	N/A					
6W	Gasket, Access Panel (5' x 8')	N/A				(1) 102877-01	
6Y	Access Panel (5' x 8')	N/A				(1) 102873-01	
6Z	Control, Slide Tray	102777-01					
	Nylon Glide	(4) 8186006					

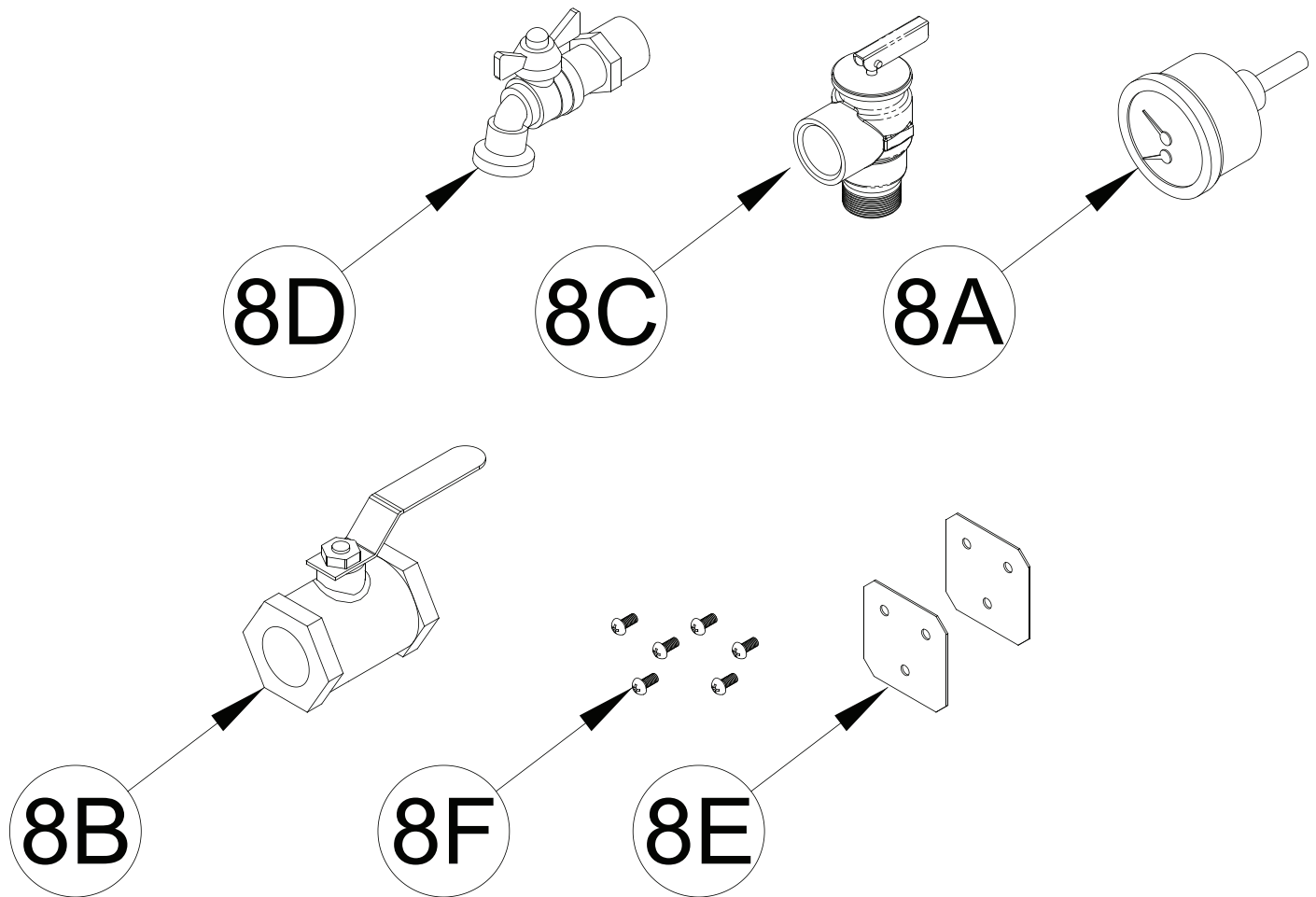


### XIII. Repair Parts (continued)



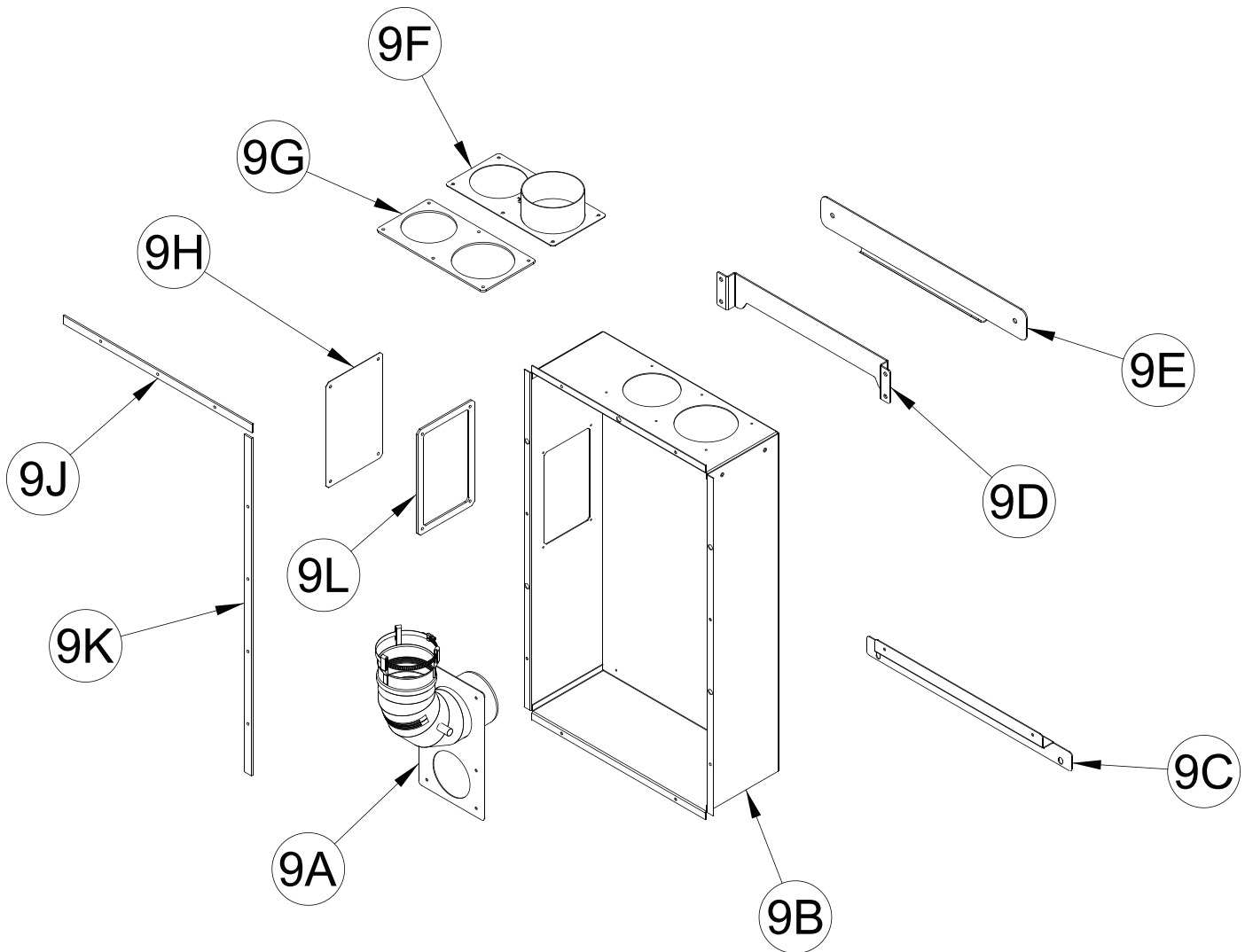
Key No.	Vent System Components	Part Number	Quantity		
			ALP080B & ALP105B	ALP150B & ALP210B	ALP285B thru ALP399
7A	3" Schedule 40 PVC Tee Vent/Combustion Air Terminal	102190-01	2	1	N/A
	4" Schedule 40 PVC Tee Vent/Combustion Air Terminal	102190-02	N/A	1	2
7B	3" Stainless Steel Rodent Screens	102191-01	2	1	N/A
	4" Stainless Steel Rodent Screens	102191-02	N/A	1	2
7C	3" x 30" Schedule 40 CPVC Pipe	102193-01	1		N/A
	4" x 30" Schedule 40 CPVC Pipe	102193-02	N/A		1
7D	3" Schedule 80 CPVC 90° Elbow	102192-01	1		N/A
	4" Schedule 80 CPVC 90° Elbow	102192-02	N/A		1
7E	8 oz. Bottle of Transition Cement	102195-01	1		
7F	8 oz. Bottle of Primer	102194-01	1		
7G	3" x 3" CPVC/PVC Vent System Connector	102183-01	1	N/A	
	3" x 4" CPVC/PVC Vent System Connector	102183-02	N/A	1	N/A
	4" x 4" CPVC/PVC Vent System Connector	102183-03	N/A		1
7H	3" x 4" CPVC/PVC Vent System Connector Gasket	102185-01	1		N/A
	4" x 4" CPVC/PVC Vent System Connector Gasket	102185-02	N/A		1
7J	Flue Temperature Sensor Cap	102153-01	1		
	Flue Temperature Sensor (Not Shown)	101687-01	1		

### XIII. Repair Parts (continued)



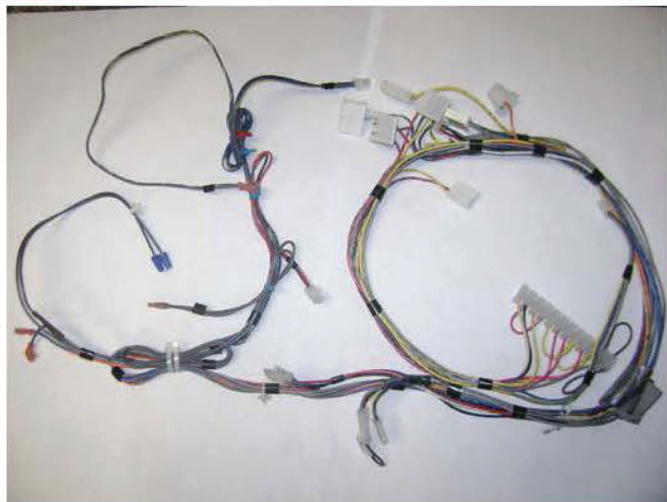
Key No.	Description	(Quantity) Part Number					
		ALP080B	ALP105B	ALP150B	ALP210B	ALP285B	ALP399
<b>MISCELLANEOUS PARTS CARTON</b>		<b>102942-01</b>			<b>102942-02</b>	<b>102942-03</b>	
8A	Temperature/Pressure Gauge	100282-01					
8B	External Gas Shut Off Valve	806SOL0005			101615-01		
8C	Relief Valve	81660363				81660302	
8D	Boiler Drain Valve	806603061					
8E	Boiler Stacking Brackets	(2) 101679-01					
8F	Boiler Stacking Bracket Screws	(8) 80860743					
	Outdoor Temperature Sensor (Not Shown)	102946-01				102439-01	

### XIII. Repair Parts (continued)

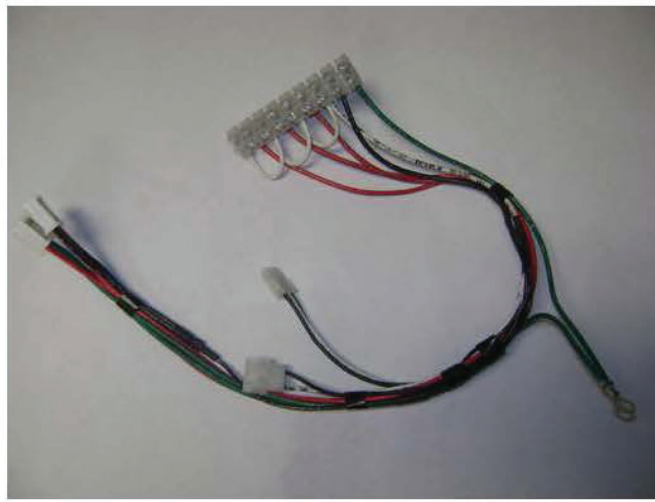


Key No.	Description	(Quantity) Part Number					
		ALP080B	ALP105B	ALP150B	ALP210B	ALP285B	ALP399
9A	Vent Elbow w/Flue Sensor Port		102878-01			N/A	
9B	Rear Air Box		102867-01			N/A	
9C	Bottom Securing Bracket		102870-01			N/A	
9D	Hanging Bracket, Boiler		102868-01			N/A	
9E	Hanging Bracket, Wall		102869-01			N/A	
9F	Air Collar Plate Assembly	102871-02	102871-01		N/A		
9G	Air Collar Plate Gasket		102876-01			N/A	
9H	Access Panel, Rear Air Box		102873-01			N/A	
9J	Horizontal Strip Gasket		(2) 102875-01			N/A	
9K	Vertical Strip Gasket		(2) 102874-01			N/A	
9L	Access Panel Gasket		102877-01			N/A	
	1/4-20 x 5/8 Hex Head Cap Screw (Not Shown)		(4) 80861312			N/A	
	1/4-20 Hex Nut w/Lock (Not Shown)		(4) 80860456			N/A	
	Sheet Metal Screw, #8 x 1/2", Black Oxide (Not Shown)		(16) 80860061			N/A	

### XIII. Repair Parts (continued)



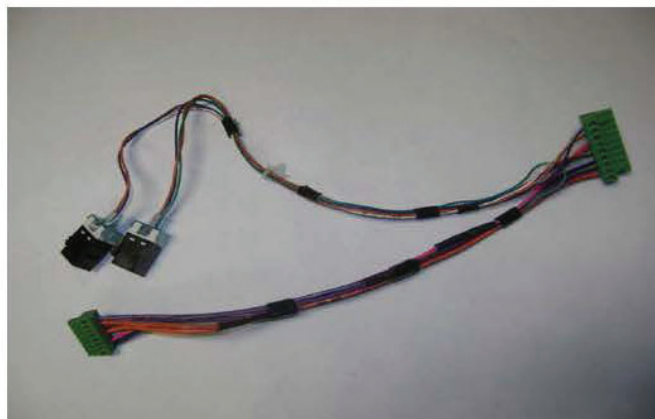
10A



10B



10C



10D



10E



10F

Key No.	Description	Part Number					
		ALP080B	ALP105B	ALP150B	ALP210B	ALP285B	ALP399
---	Complete Wiring Harness (includes 10A, 10B, 10C & 10D)	102701-02					
10A	Main (Low Voltage) Harness	103009-02					
10B	High Voltage Harness	103010-02					
10C	Blower Power Harness	103012-01					
10D	Communication Harness	103011-01					
10E	Igniter Harness	103486-01					
10F	Wiring Harness, Thermal Link & Burner Door Thermostat	N/A				104574-01	