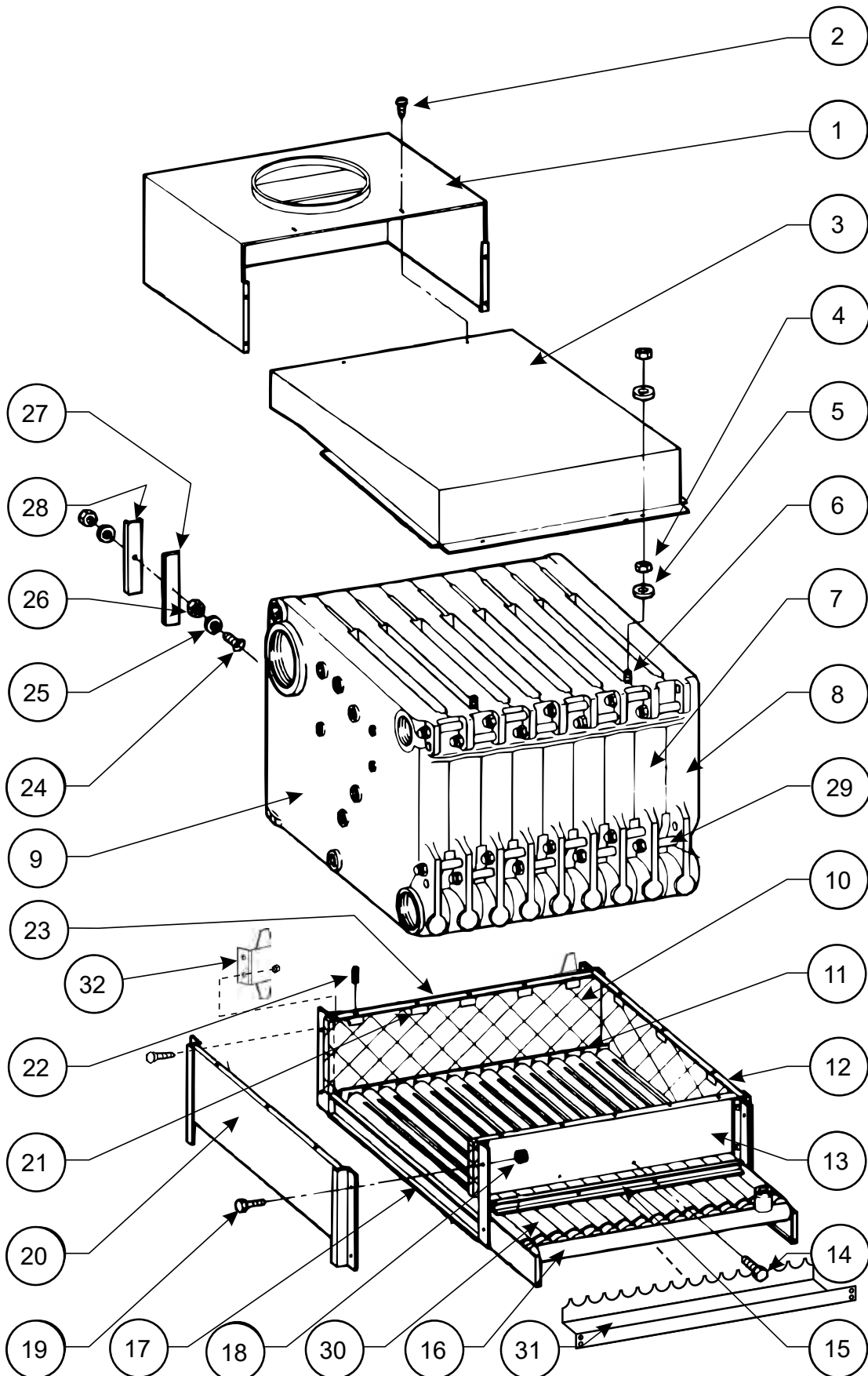


LGB - Series 1 & 2 Section / Base Assembly



GAS

LGB - Series 1 & 2

Section / Base Assembly Parts

Fig. No.	Part No.	Size	Description
N/S	383-300-405		Section Replacement Kit (Includes: Seals, Rope and Sealant For 1 Joint)
1	443-300-098	4	Horizontal Draft Hood, See Table 1 (Page 139)
	443-300-099	5	
	443-300-100	A	
	443-300-101	B	
	443-300-102	C	
	443-300-103	D	
	443-300-104	E	
	443-300-105	F	
	443-300-106	G	
2	Available Locally		Screw, Phillips # 10 X ½"
3	450-019-858	4	Horizontal Collector Hood, See Table 1 (Page 139)
	450-019-859	5	
	450-019-851	A	
	450-019-852	B	
	450-019-853	C	
	450-019-854	D	
	450-019-855	E	
	450-019-856	F	
	450-019-857	G	
4	Available Locally		Hex Nut, Regular ¼" - 20
5	Available Locally		Washer, Plain ¼"
6	Available Locally		Carriage Bolt, ¼" - 20 X 1½"
7	313-300-110		Regular Intermediate Section - 3315 - 80 P.S.I.
8	313-300-111		Right Hand End Section - 3318 - 80 P.S.I.
9	313-300-109		Left Hand End Section - 3314 - 80 PSI
N/S	592-800-005		9" Dia. Top Elastomer Seal (1 Per Joint)
	592-800-007		6" Dia. Bottom Elastomer Seal (1 Per Joint)
	591-706-214		Flue Brush, 123 DMG
10		4	Base Front and Back Insulation, See Tables 1 & 2 (Page 139)
		5	
		A	
		B	
		C	
		J	
		K	

LGB - Series 1 & 2
Section / Base Assembly Parts Continued

Fig. No.	Part No.	Size	Description
11	450-003-600	4	Burner Rest, See Table 1 (Page 139)
	450-003-601	5	
	450-003-560	A	
	450-003-561	B	
	450-003-562	C	
	450-003-563	D	
	450-003-564	E	
	450-003-565	F	
	450-003-566	G	
N/S	450-003-602	4	Burner Stop, See Table 1 (Page 139)
	450-003-603	5	
	450-003-568	A	
	450-003-569	B	
	450-003-570	C	
	450-003-571	D	
	450-003-572	E	
	450-003-573	F	
	450-003-574	G	Burner Stop, Size G, See Table 1 (Page 139)
	450-003-604	4	Combustion Air Baffle For Base, See Table 1 (Page 139)
	450-003-605	5	
	450-003-575	A	
	450-003-576	B	
	450-003-577	C	
	450-003-578	D	
	450-003-579	E	
	450-003-580	F	
	450-003-581	G	
12, 20	383-300-165		Base End Panel - (Includes 2 Panels With Insulation)
N/S	591-221-126		Insulation End Panels, Left and Right
	450-003-589		Right Hand Base Leg
	450-003-590		Left Hand Base Leg
13	450-003-543	4	Base Front Panel, See Table 1 (Page 139)
	450-003-544	5	
	450-003-545	A	
	450-003-546	B	
	450-003-547	C	
	450-003-548	D	
	450-003-549	E	
	450-003-550	F	
	450-003-551	G	
14	Available Locally		Screw, Hex Washer Heat Slotted 10-32 x 3/8"

LGB - Series 1 & 2
Section / Base Assembly Parts Continued

Fig. No.	Part No.	Size	Description
15	450-003-606	4	Base Access Shield, See Table 1 (Page 139)
	450-003-607	5	
	450-003-582	A	
	450-003-583	B	
	450-003-584	C	
	450-003-585	D	
	450-003-586	E	
	450-003-587	F	
	450-003-588	G	
16	591-125-908	4	Manifold, See Table 1 (Page 139)
	591-125-909	5	
	591-125-910	A	
	591-125-911	B	
	591-125-912	C	
	591-125-913	D	
	591-125-914	E	
	591-125-915	F	
	591-125-916	G	
17	450-003-567		Base Cross Tie
18	Available Locally		Nut, Flange Whiz-Lock ¼" -20
19	Available Locally		Screw, Hex Heat Cap ¼" - 20 x ¾"
21	562-650-104		Support Clip For Base Insulation
22	562-930-236		Roll Pin ⅛" x 2"
23	450-003-598	4	Base Back Panel, See Table 1 (Page 139)
	450-003-599	5	
	450-003-553	A	
	450-003-554	B	
	450-003-555	C	
	450-003-556	D	
	450-003-557	E	
	450-003-558	F	
	450-003-559	G	
N/S	591-602-913		Retort Cement (Collector Hood and Base Seal) (1 Quart)
24	Available Locally		Carriage Bolt, ¼" - 20 x 1¾"
25	Available Locally		Washer, Plain ¼"
26	Available Locally		Hex Nut, Regular ¼" - 20

LGB - Series 1 & 2

Section / Base Assembly Parts Continued

Fig. No.	Part No.	Size	Description
27	591-221-115		Cleanout Plate Insulation 3" x 10½" x ½" (1 Per Joint)
28	450-029-549		Cleanout Plate (1 Per Joint)
N/S	591-706-214		Flue Brush - 42" Long
29	560-134-480		⅝ -11 x 8" Draw Rod Without Nut (3 Required Per Joint)
N/S	561-928-224		⅝-11" Nut (2 Per Draw Rod)
	562-248-710		⅝" Washer (1 Per Draw Rod)
	590-735-140		Rope Fiberglass ½" Diameter x 10' Per Joint
	591-641-850		Construction Adhesive For Sealing Rope (11 oz. Tube)
30	512-200-050		Burner, Tubular Steel, Regular
N/S	512-200-055		Burner, Tubular Steel, For Pilot
	560-528-976		Main Burner Orifice, Propane Gas, 2.4 mm
	560-528-979		Main Burner Orifice, Natural Gas, 3.95 mm
	423-300-420		Flame Sensor Bracket
	460-005-624		Pilot Bracket
31	450-003-350	4	Burner Shield, See Table 1 (page 139)
	450-003-352	5	
	450-003-354	A	
	450-003-356	B	
	450-003-358	C	
	450-003-360	D	
	450-003-362	E	
	450-003-364	F	
	450-003-366	G	
32	450-003-614		Base Bracket - Right Or Left - Require 2 Per Boiler
N/S	592-002-030	All	Touch Up Paint - Blue/Gray - Low E 4.5oz Can

Boiler Size	Number Of Burner Tubes		Boiler Size	Number Of Burner Tubes	
	Regular	For Pilot		Regular	For Pilot
LGB-4	5	1	LGB-14	22	4
LGB-5	7	1	LGB-15	24	4
LGB-6	8	2	LGB-16	26	4
LGB-7	10	2	LGB-17	28	4
LGB-8	12	2	LGB-18	30	4
LGB-9	14	2	LGB-19	32	4
LGB-10	16	2	LGB-20	34	4
LGB-11	18	2	LGB-21	36	4
LGB-12	20	2	LGB-22	38	4
LGB-13	20	4	LGB-23	40	4

Note: For Propane Boilers; LGB 4-12, Add Additional Pilot Burner And Remove One Regular Burner

For LGB 13-23, Add Two Additional Pilot Burners, And Remove Two Regular Burners

LGB - Series 1 & 2

Section / Base Assembly Parts Continued

Table 1
Size Designator According To Boiler Size

Boiler Size	Size Designator		Boiler Size	Size Designator	
	Left Base	Right Base		Left Base	Right Base
LGB-4	4	-	LGB-14	B	C
LGB-5	5	-	LGB-15	C	C
LGB-6	A	-	LGB-16	C	D
LGB-7	B	-	LGB-17	D	D
LGB-8	C	-	LGB-18	D	E
LGB-9	D	-	LGB-19	E	E
LGB-10	E	-	LGB-20	E	F
LGB-11	F	-	LGB-21	F	F
LGB-12	G	-	LGB-22	F	G
LGB-13	B	B	LGB-23	G	G

Table 2
Base Front and Back Insulation According To Size Designator

Size Designator	Base Front and Back Insulation	
	Designator	Designator
4	4	-
5	5	-
A	A	-
B	B	-
C	C	-
D	A	E
E	B	E
F	A	D
G	B	D

Note: Refer to Table 1 to Key Size Designator According to Boiler Size

LGB base insulation part numbers have changed. The front and back insulation set, Item 9, is replaced with the following part numbers.

Note: Both a front and a rear insulation piece must be ordered now, instead of a set.

On the larger bases, 2 pieces make up the front insulation and 2 pieces make up the rear insulation.

D Base = A front and rear plus an E front and rear

E Base = B front and rear plus an E front and rear

F Base = A front and rear plus a D front and rear

G Base = B front and rear plus a D front and rear

Fig.No.	Part No.	Size	Description
9	591-221-330	4	Base Insulation Front
	591-221-331	4	Base Insulation Rear
	591-221-332	5	Base Insulation Front
	591-221-333	5	Base Insulation Rear
	591-221-334	A	Base Insulation Front
	591-221-335	A	Base Insulation Rear
	591-221-336	B	Base Insulation Front
	591-221-337	B	Base Insulation Rear
	591-221-338	C	Base Insulation Front
	591-221-339	C	Base Insulation Rear
	591-221-340	D	Base Insulation Front
	591-221-341	D	Base Insulation Rear
	591-221-342	E	Base Insulation Front
	591-221-343	E	Base Insulation Rear

LGB - Series 2 Main Gas Control Train Parts Natural Gas

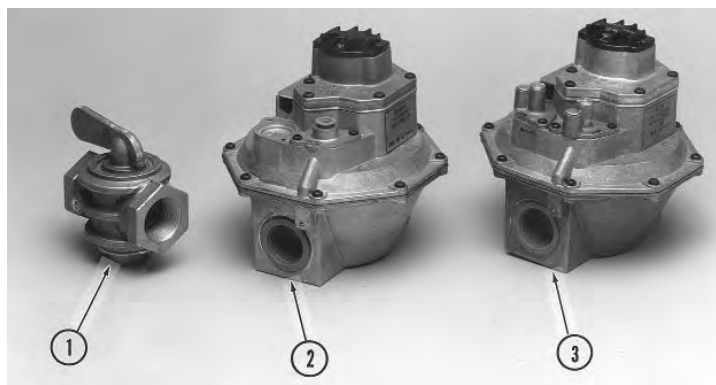


Table 1 – LGB Main Gas Control Trains Arrangement

LGB Series 1 Boiler Size	Main Gas Control Trains		LGB Series 1 Boiler Size	Main Gas Control Trains	
	7.0" W.C. Natural Gas Supply Pres- sure	5.0" W.C. Natural Gas Supply Pressure		7.0" W.C. Natural Gas Supply Pressure	5.0" W.C. Natural Gas Supply Pressure
LGB-6	AB	AB	LGB-15	J	J
LGB-7	AB	AB	LGB-16	J	J
LGB-8	CD	CD	LGB-17	J	J
LGB-9	CD	CD	LGB-18	K	K
LGB-10	EF	E	LGB-19	L	M
LGB-11	EF	F	LGB-20	L	N
LGB-12	EF	F	LGB-21	*L	*O
LGB-13	H	H	LGB-22	*L	*O
LGB-14	I	I	LGB-23	*L	*O

*With Special Control Carton (Includes Gas Pressure Switch, Switch Bracket, Connecting Tubing)

Table 2 – LGB Main Gas Control Trains Individual Components

Fig. No.		MAIN GAS CONTROL TRAINS																							
		7" W.C. Natural Gas Supply Pressure										5" W.C. Natural Gas Supply Pressure													
		A	B	C	D	E	F	H	I	J	K	L	A	B	C	D	E	F	H	I	J	K	M	N	O
1	Manual Main Shut-Off Gas Valve, 1" N.P.T.	X	X				X	X	X	X															
	Manual Main Shut-Off Gas Valve, 1¼" N.P.T.				X					X	X	X	X				X	X	X	X					
	Manual Main Shut-Off Gas Valve, 1½" N.P.T.															X						X	X	X	
	Manual Main Shut-Off Gas Valve, 2" N.P.T.																X							X	X
2	Safety Gas Valve 1" N.P.T.	X	X				X	X	X	X															
	Safety Gas Valve 1¼" N.P.T.				X						X	X	X				X	X	X	X					
	Safety Gas Valve 1½" N.P.T.															X	X					X	X	X	X
3	Combination Gas Control Valve, 1" N.P.T.	X	X				X	X	X	X															
	Combination Gas Control Valve, 1¼" N.P.T.				X						X	X	X				X	X	X	X					
	Combination Gas Control Valve, 1½" N.P.T.																X	X				X	X	X	X

LGB - Series 2
Main Gas Control Parts - Natural Gas
Universal Control System

Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.
Manual - Main Shut-Off Gas Valves				
1	511-246-325	Manual - Main Shut-Off Gas Valve, 1" N.P.T., With Downstream Pressure Tapping, 1/8" N.P.T.	Conbraco	50-403-02
			Key	223-142111
	511-246-330	Manual - Main Shut-Off Gas Valve, 1 1/4" N.P.T., With Downstream Pressure Tapping, 1/8" N.P.T.	Conbraco	50-503-06
			Key	224-142111
	511-246-300	Manual - Main Shut-Off Gas Valve, 1 1/2" N.P.T., With Downstream Pressure Tapping, 1/8" N.P.T.	Conbraco	50-603-06
	511-246-305	Manual - Main Shut-Off Gas Valve, 2" N.P.T., With Downstream Pressure Tapping, 1/8" N.P.T.	Conbraco	50-703-02
Safety Gas Valves				
2	511-044-191	Gas Valve, Without Regulator, 1"	Honeywell	V8934A-1103
	511-044-192	Gas Valve, Without Regulator, 1 1/4"	Honeywell	V8943A-1111
	511-044-193	Gas Valve, Without Regulator, 1 1/2"	Honeywell	V8943A-1129
	383-300-425	1" LGB Conversion To V8943A Kit (To Convert From V88 or V8843P To V8943A)	Weil-McLain	
	383-300-426	1 1/4" LGB Conversion To V8943A Kit (To Convert From V88 or V8843P To V8943A)	Weil-McLain	
	383-300-427	1 1/2" LGB Conversion To V8943A Kit (To Convert From V88 or V8843P To V8943A)	Weil-McLain	
Combination Gas Control Valves				
3	511-044-214	Combination Gas Control Valve, 1" N.P.T., 24 Volt, With Low Fire Operator, High fire Operator, Main Pressure Regulator and 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V8944N1053
	511-044-215	Combination Gas Control Valve, 1 1/4" N.P.T., 24 Volt, With Low Fire Operator, High Fire Operator, Main Pressure Regulator and 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V8944N1061
	511-044-216	Combination Gas Control Valve, 1 1/2" N.P.T., 24 Volt, With Low Fire Operator, High Fire Operator, Main Pressure Regulator and 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V8944N1079
LGB 4-5 Gas Valve				
N/S	511-044-287	Gas Valve 1" x 1" N.P.T Natural Gas Intermittent Pilot Slow Opening	Grayson	5N6-501-723
Gas Pressure Switch and Accessories				
N/S	511-624-555	High Gas Pressure Switch, SPDT, Manual Reset, Lockout on Pressure Rise, Diaphragm Type 3.0-21.0" W.C. Range, 1.0-3.0" W.C. Differential, 1/4" N.P.T. Female Vent Connector, With Switch Position Indicator (2 Required For LGB-21 Through LGB-23)	Honeywell	C645B1013
	561-643-451	Union, 1/8" Male N.P.T. x 1/4" CC (4 Required For LGB-21 Through LGB-23) (Purchase Locally)	Weil-McLain	
	560-742-915	Aluminum Tubing, 1/4" O.D. x 100" Roll	Weil-McLain	

LGB - Series 2 Pilot / Fame Sensor

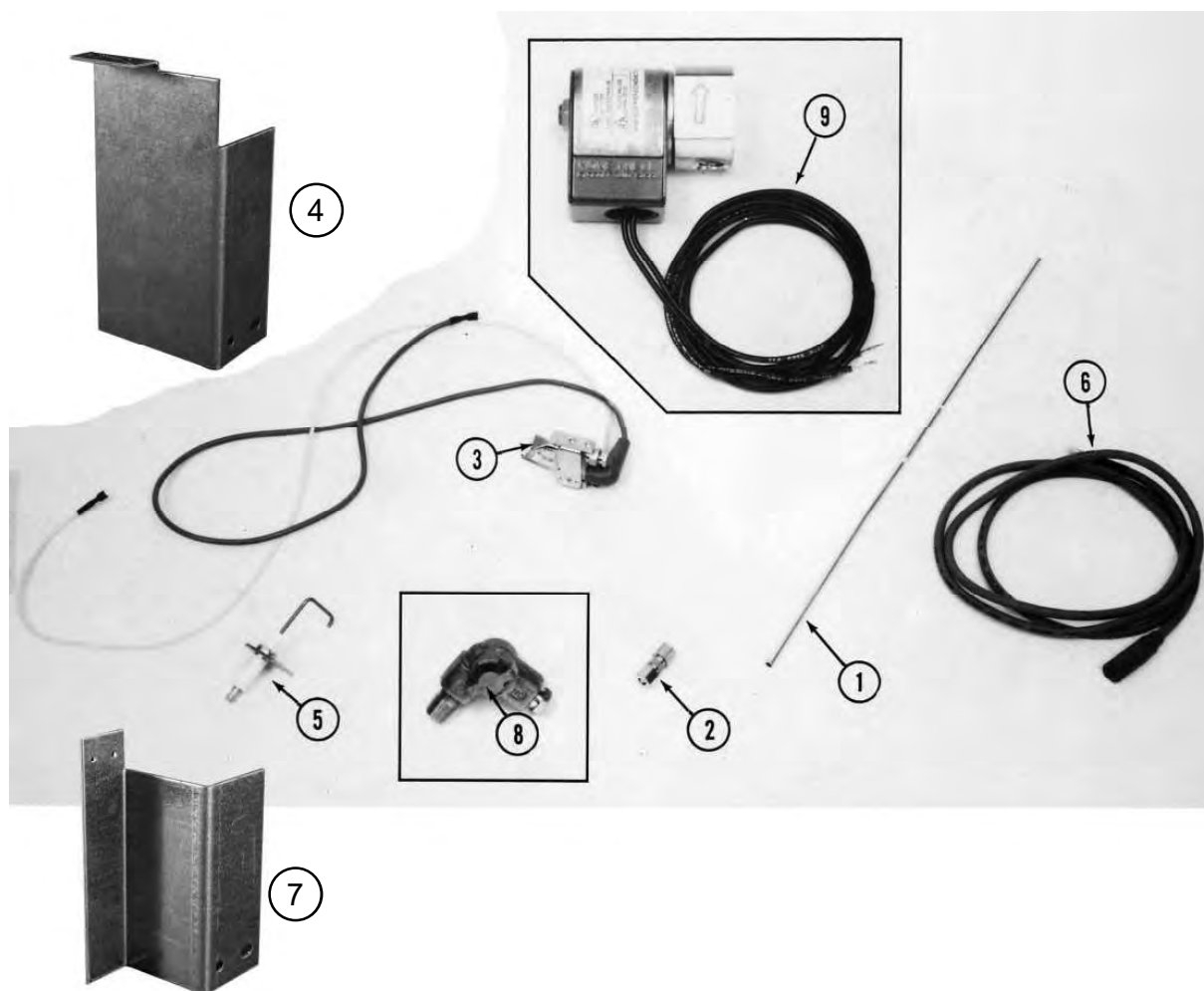


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	4-5	6-12	13-23
LGB Pilots and Fame Sensor							
1	560-742-880	Pilot Line Aluminum Tubing, 2 Pieces Required, ¼" Dia. X 20" Long	Weil-McLain			1	2
2	561-643-450	Pilot Line Union, ¼" CC (Purchase Locally)	Weil-McLain			1	2
3	511-330-221	N/G PIN Pilot Burner Assembly With Pilot Burner, Orifice, Sensing Lead and Ignition Cable	PSE	PSE-NA16	1	1	2
4	460-005-624	Pilot Burner Mounting Bracket	Weil-McLain			1	2
5	511-724-274	Main Fame Sensor	Honeywell	MH 392956		1	2
6	591-391-790	Sensing Cable For Main Fame Sensor, 72" Long	Ristance	180749		1	2
7	423-300-420	Main Fame Sensor Mounting Bracket	Weil-McLain			1	2
8	511-246-340	Manual Shut-Off Pilot Gas Valve, ⅛" N.P.T. X ¼" CC	Conbraco	56-603-01		1	2
			Key	P2R			
			Honeywell	V8046C1014		1	2
9	511-044-039	Pilot Line Solenoid Gas Valve, ¼" N.P.T., 24 Volt	Johnson Controls	H91ABG-5C			

LGB - Series 2 - Propane Gas Thermally Supervised Pilot to Standard Controls

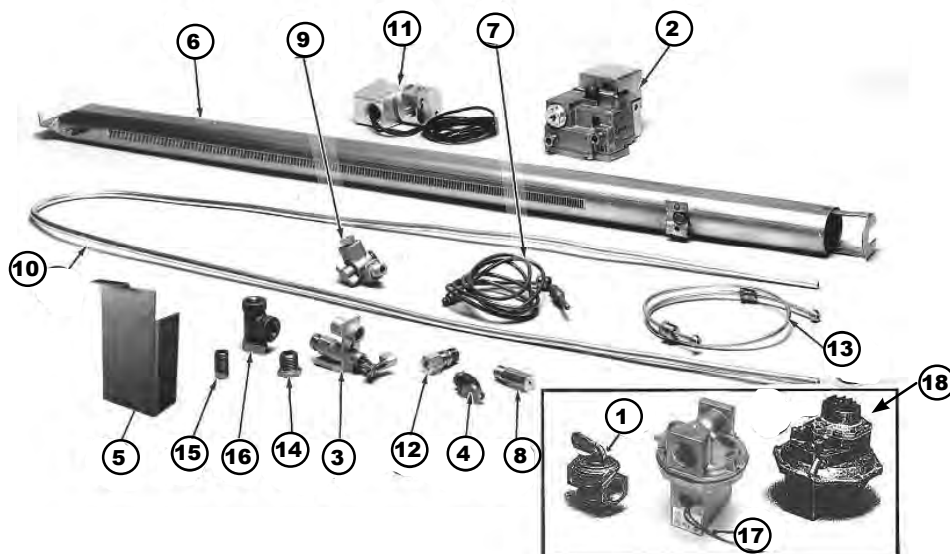


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.
1	511-246-325	Manual Main Shut-Off Gas Valve, 1" N.P.T.	Conbraco	50-403-02
			Key	223-142111
	511-246-330	Manual Main Shut-Off Gas Valve, 1¼" N.P.T.	Conbraco	50-503-06
			Key	224-142111
2	511-330-229	Pilot Switch Box With Built In Pilot Filter, ¼" CC Inlet and Outlet	Johnson Controls	L62GB-3C
3	511-330-186	Pilot Burner, Constant Burning, Thermally Supervised	Honeywell	Q327A1642
	383-300-410	Standing Pilot Burner Repair Kit, Propane Includes Pilot Burner & Orifice		
N/S	511-330-222	Electronic Pilot Burner With Spark and Sense Rod, Propane	PSE	LP-16
4	560-528-957	Propane Pilot Orifice, .010 Dia., For Q327A	Honeywell	388146KR
5	460-005-624	Pilot Mounting Bracket For Both Pilot Burners	Weil-McLain	
6	512-200-055	LGB Main Burner With Pilot Bracket	Weil-McLain	
7	511-724-245	Thermocouple, 48" Long, For Q327A Pilot	Honeywell	Q309A2010
8	560-528-976	LGB Main Burner Orifice, 2.40mm For Propane	Weil-McLain	
9	511-246-340	Manual Shut-Off Pilot Gas Valve, ⅝" N.P.T. x ¼" CC	Conbraco	
			Key	P2R
10	560-742-880	Pilot Line Aluminum Tubing, ¼" O.D. x 20" (2 Pieces Required)	Weil-McLain	
11	511-044-039	Pilot Line Solenoid Gas Valve, ¼" O.D. x 22¾" Long	Honeywell	V8046C1014
			Johnson	H91ABG-5C
12	561-643-450	Union, ¼" CC, Brass (Purchase Locally)	Weil-McLain	
13	560-742-860	Bleed Line Aluminum Tubing, ⅝" O.D. X 22¾" Long	Weil-McLain	
14	560-807-360	Bushing, Black ¼" N.P.T. x ⅝" (Purchase Locally)	Weil-McLain	
15	561-326-200	Nipple, Black ⅝" N.P.T. Close (Purchase Locally)	Weil-McLain	
16	561-541-199	Tee, Black ⅝" N.P.T. (Purchase Locally)	Weil-McLain	
17	383-300-425	1" Conversion To V8943A Kit (Convert From V88/V8843P To 8943A)	Weil-McLain	
	383-300-426	1¼" Conversion V8943A Kit (Convert From V88 or V8843P To V8943A)	Weil-McLain	
18	511-044-346	Combination Gas Valve, 1" N.P.T., Propane	Honeywell	V8944C1017
	511-044-218	Combination Gas Valve, 1¼" N.P.T., Propane	Honeywell	V8944C1025
N/S	511-044-279	Combination Gas Valve, 1" N.P.T. Propane 7000DERHC-LP, LGB 4-5	Robertshaw	5N6-502-789

LGB - 5 - Series 2 CSD - 1 Common Parts

Part No.	Description	Mfr.	Mfr.'s Part No.
511-246-290	Manual Gas Valve, 1" N.P.T	Watts	FBV3-06
511-246-325	Manual Gas Valve, 1" with 2 1/8" taps	Conbraco	
511-246-339	Leak Test Valve	Crescent Metal	
511-044-039	Pilot Gas Valve	Johnson Controls	H91ABG
		Honeywell	V8046C-1014
510-933-195	Pilot Gas Shut Off Valve, 3/4"	Maxitrol	RV20VL-2
511-246-345	Pilot Tubing, Aluminum, 1/4" x 20", 2 Pieces Required	Conbraco	53300-01
560-742-880	Pilot Line Union, 1/4"	Linderme Tube	
510-933-195	Pilot Regulator	Maxitrol	RV20L
561-643-450	Pilot Tubing, 1/4" (Purchase Locally)		
511-330-086	Ignition Control Module - With 2 Alarm Terminals	United Technologies	1003-615
510-350-226	Impulse Relay	Tyco	S89R-11ABD1-24
511-624-580	Push-Button Switch	Eaton	221K11810
511-624-581	Lens Cover (Push-Button Switch)	Caddo	
Purchase Locally	Light Bulb (Push Button Switch)	Texas Instruments	3/4 #85
511-842-364	Transformer, 120/24 Volt, 75 VA, Foot Mounted With Circuit Breaker	Johnson Controls	Y66T13-0
Natural Gas Parts			
511-044-287	Combination Gas Valve, 1"	Robertshaw	7000ERHC-S7C
511-330-221	Electronic Pilot Burner, With Orifice, Spark and Sense Connections	Weil-McLain	
Propane Gas Parts			
511-330-222	Electronic Pilot Burner With Spark and Sense Connections	Weil-McLain	
383-300-410	Standing Pilot Burner	Weil-McLain	
511-330-245	Thermocouple, 48"	Honeywell	Q309A
511-330-229	Pilot Switch Box	Johnson Controls	L62GB-3C
511-246-340	Pilot Shut Off Valve-Standing Pilot Line	Weil-McLain	
511-044-279	Combination Gas Valve, 1"	Robertshaw	7000ERHC-LP

LGB - Series 2
CSD - 1 Controls
Universal Control System

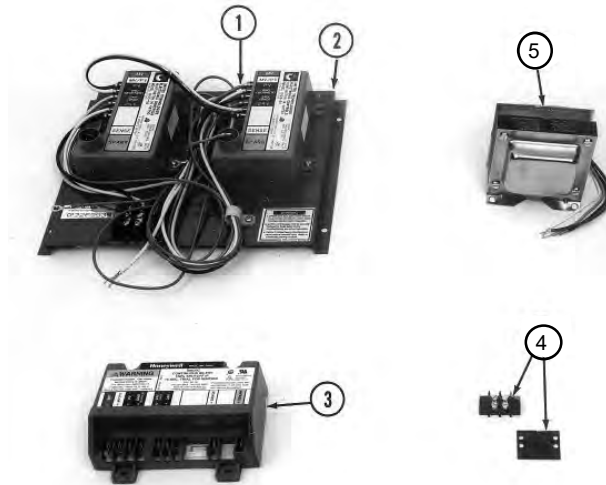
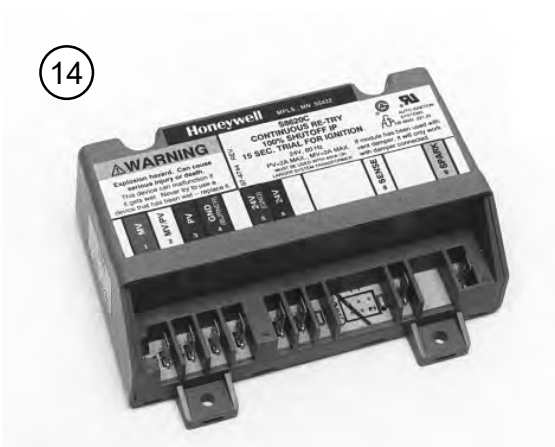
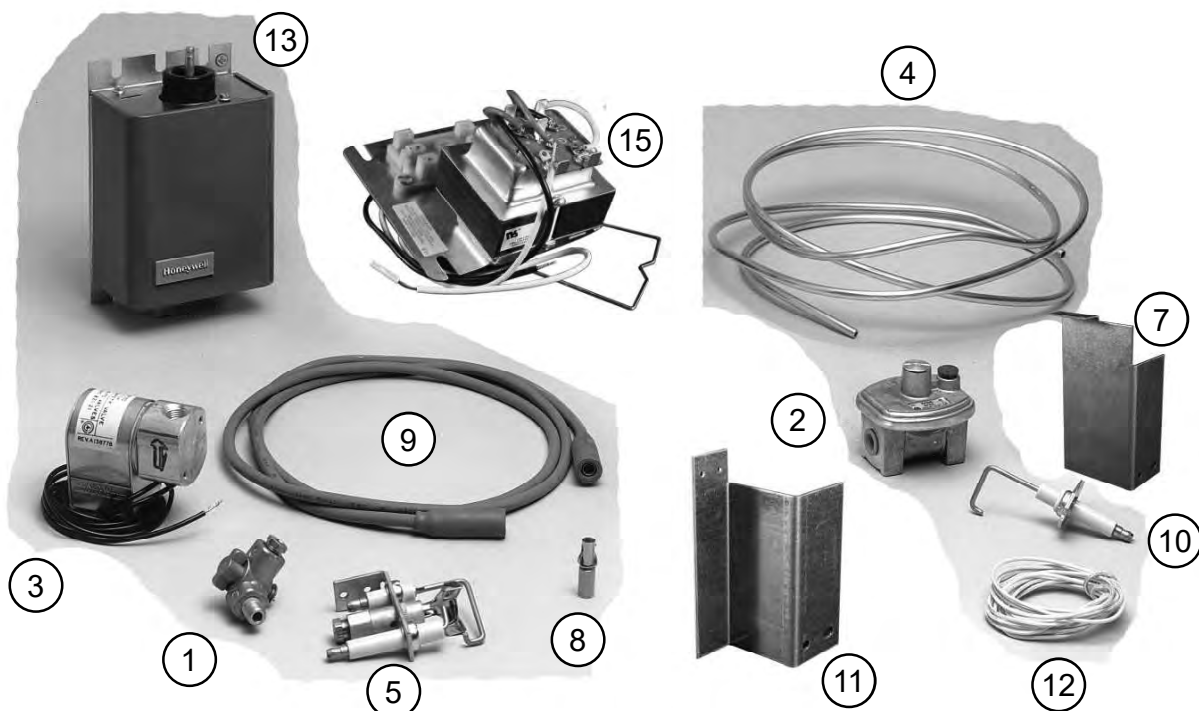


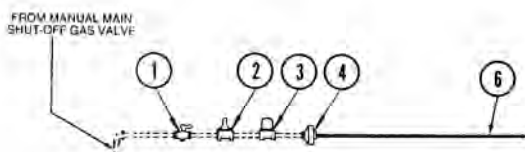
Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Qty Per Boiler Size		
Universal Controls Ignition/Sensing Control Modules					4-5	6-12	13-23
1	511-330-097	Flame Sense Module, 24 Volt	United Technologies	1003-611	1	1	2
2	510-811-456	Universal Control System-(Includes Panel With Modules,Pilot Assembly, Wiring,Hardware and Instructions)	Weil-McLain				
3	511-330-097	Intermittent Pilot Ignition Module, 24 Volt	United Technologies	1003-611		1	2
4	512-050-013	Terminal Block	Weil-McLain		1	1	2
5	511-842-364	Control Transformer, 120/24 Volt, 75 VA Foot Mounted With Circuit Breaker	Honeywell	AT175C1004	1	1	2
			Johnson Controls	Y66ACD-1C			
CSD-1 Controls					5	6-12	13-20
N/S	511-330-086	Pilot Proving Module	United Technologies	1003-615A	1	1	2
	511-330-085	Main Flame Proving Module	United Technologies	1003-60A	1	1	2
	510-350-226	Impulse Relay	Potter Brumfield	S89R-11	1	1	2
				ABD1-24	1	1	2
	511-624-580	Push Button Switch	Honeywell	AML-21CBA2AA	1	1	2
			Eaton Controls	ZZ1K11810K	1	1	2
	511-624-581	Lens Cover	Honeywell	AML51-C10R	1	1	2
			Eaton Controls	ZZ0PM0ZA	1	1	2
		Light Bulb	Texas Instruments	3/4 #85	1	1	2
	510-933-195	Pilot Regulator Set At 6.0" W.C.					

GAS

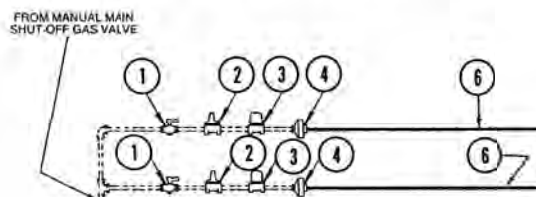
LGB - Series 2 IRI / FM Control System



**IRA AND FM
PILOT TRAIN GAS PIPING DIAGRAM
LGB-6 THROUGH LGB-12 BOILERS**



**IRA AND FM
PILOT TRAIN GAS PIPING DIAGRAM
LGB-13 THROUGH LGB-23 BOILERS**



LGB - Series 2

IRI / FM Control System Parts

Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Qty Per Boiler Size	
					6-12	13-23
IRI and FM Pilot Line Gas Train Components						
1	511-246-345	Pilot Line Manual Shut-Off Gas Valve, ¼" N.P.T. Male x ¼" N.P.T. Female	Conbraco	53-300-01	1	2
2	510-933-195	Pilot Line Gas Pressure Regulating Valve, 3.5-7.0" W.C. Outlet Adjustment Range, ¼" N.P.T.	Maxitrol	RV20VL-22	1	2
3	511-044-040	Pilot Line Solenoid Gas Valve, Quick Opening, 120 Volt, ¼" N.P.T.	Johnson	H91ABA-12C	1	2
4	560-742-915	Pilot Line Aluminum Tubing, ¼" O.D. x 100" Coil	Weil-McLain		1	2
IRI and FM Pilots, Flame Sensing and Ignition Components						
5	511-330-181	Combination Pilot Burner With Flame Rod, Ignition Electrode, and Natural Gas Orifice, 0.026" Dia.	Honeywell	Q179C1009	1	1
6	511-330-221	N/G PIN Pilot Burner Assembly With Pilot Burner, Orifice, Sensing Lead and Ignition Cable	PSE	NA-16		1
7	460-005-624	Combination Pilot Burner Mounting Bracket	Weil-McLain		1	2
8	591-850-140	Rajah Connector, Female, Connects Sensing Cable To Q179C Pilot	Weil-McLain		1	1
9	591-391-798	Ignition Cable, 36" Long, For Q179C Pilot	Weil-McLain		1	1
10	511-724-274	Main Flame Sensor	Honeywell	MH 392956	1	1
11	423-300-420	Main Flame Sensor Mounting Bracket	Weil-McLain		1	1
12	590-849-236	Flame Rod Cable For Main Flame Sensor and Q179C Pilot (Feet Required)	Honeywell	R129 8020	4	4
13	511-802-625	Ignition Transformer, 120 Volt, 6,000 Volt Output	Dongan	A06-SA6		
14	511-330-097	Pilot Proving Ignition/Sensing Control Module, 24 Volt, Q348A Pilot	Honeywell	S8620 C1003	-	1
			United Technologies	1003-611A	-	1
15	510-312-166	Control Transformer/Relay Receptacle 120/24 Volt, 40 VA, Plate Mounted, For Universal Control System (UCS) Ignition Sensing Control	Honeywell	AT72 H1002	-	1
			White-Rodgers	599-9002	-	1

GAS

LGB - Series 2

IRI / FM Main Gas Control Train Components

7" W.C. Natural Gas Supply Pressure

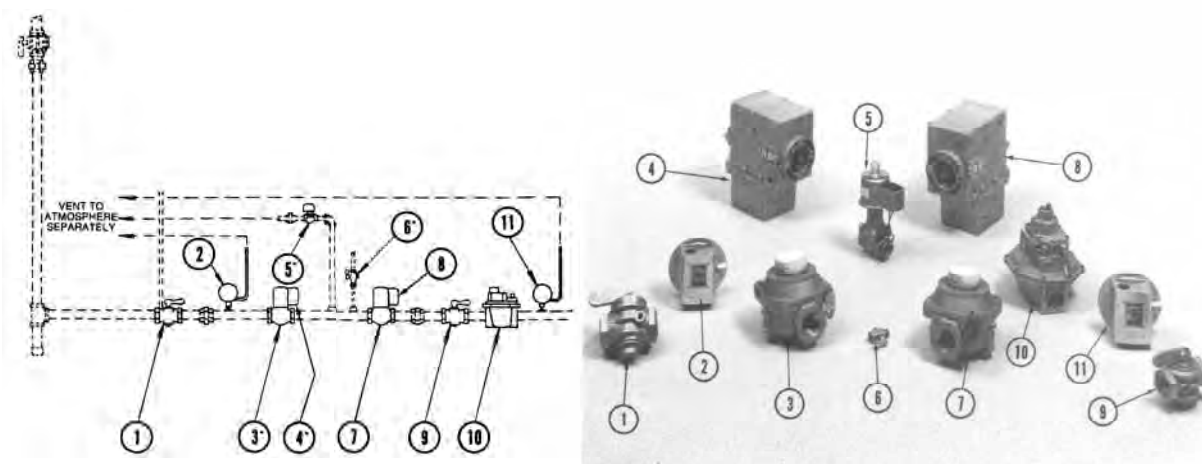


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Boiler Size
1,9	511-246-325	Manual Main Shut-Off Gas Valve, 1" N.P.T., With 1/8" N.P.T. Female Pilot Take-Off Tapping and 1/4" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-503-02	5,6,7
	511-246-330	Manual Main Shut-Off Gas Valve, 1 1/4" N.P.T., With 1/8" N.P.T. Female Pilot Take-Off Tapping and 1/4" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-503-06	8,9,10
			Key	224-142111	
	511-246-300	Manual Main Shut-Off Gas Valve, 1 1/2" N.P.T., With 1/8" N.P.T. Female Pilot Take-Off Tapping and 1/4" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-603-06	11-18
	511-246-305	Manual Main Shut-Off Gas Valve, 2" N.P.T., With 1/8" N.P.T. Female Pilot Take-Off Tapping and 1/4" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-703-06	19-23
2	511-624-550	Low Gas Pressure Switch, SPDT, Manual Reset, Lockout on Pressure Fill, Diaphragm Type, 3.0-21.0" W.C. Range, 1.0-3.0" W.C. Differential, 1/4" N.P.T. Female Connector, 1/8" N.P.T. Female Vent Connector, With Switch Position Indicator	Honeywell	C645A1030	All Sizes
3,7	510-744-315	Motorized Gas Valve Small Body, With 1/4" N.P.T. Female Downstream Pressure Tapping	Honeywell	V5097A1004	5 - 17
N/S	511-044-170	1" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000109-002	5,6,7
	511-044-171	1 1/4" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000109-003	8,9,10
	511-044-172	1 1/2" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000109-004	11-18
	511-044-173	2" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000109-005	19-23
4,8	510-744-317	Fluid Power Gas Valve Actuator, On/ Off, 120 Volt	Honeywell	V4055A1098	5 - 23
N/S*	511-044-176	Adapter For Solenoid Vent Valve (Fits Small Valve Body)	Honeywell	32002513	All sizes

LGB - Series 2
IRI / FM Main Gas Control Train Components
7" W.C. Natural Gas Supply Pressure

5*	511-046-340	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, 3/4" N.P.T.	ASCO	S262SA02 N3EG5	5 - 13
			Honeywell	V4295S1005	
	511-046-342	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, 1" N.P.T.	ASCO	S262SA02 N3F5	14-23
			Honeywell	V4295S1013	
			Honeywell	V4295S1021	
6	511-210-415	Test Cock, 1/4" N.P.T.	Conbraco	41-560-05	All Sizes
10	511-048-503	Combination Gas Control Valve, 1" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V4944N1011	5,6,7
	511-048-502	Combination Gas Control Valve, 1 1/4" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V4944N1029	8 - 10
	511-048-501	Combination Gas Control Valve, 1 1/2 " N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V4944N1037	11-13
	511-048-500	Combination Gas Control Valve, 2" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V4944N1045	14-23
11	511-624-555	High Gas Pressure Switch, SPDT, Manual Reset, Lockout on Pressure Rise, Diaphragm Type, 3.0- 21.0" W.C. Range, 1.0-3.0" W.C. Differential, 1/4" N.P.T. Female Connector, 1/8" N.P.T. Female Vent Connector, With Switch Position Indicator	Honeywell	C645B1013	All Sizes

LGB - Series 2
IRI / FM Main Gas Control Train Components
5.5" W.C. Natural Gas Supply Pressure

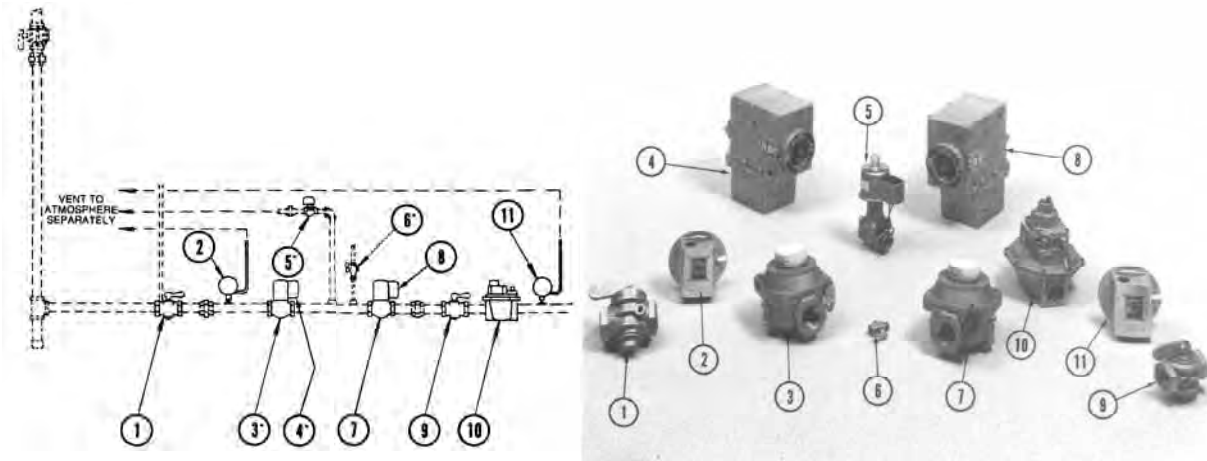


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Boiler Size
1,9	511-246-330	Manual Main Shut-Off Gas Valve, 1½" N.P.T., With ⅛" N.P.T. Female Pilot Take-Off Tapping and ¼" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-503-06	5,6,7
			Key	224-142111	
	511-246-300	Manual Main Shut-Off Gas Valve, 1½" N.P.T., With ⅛" N.P.T. Female Pilot Take-Off Tapping and ¼" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-603-06	8
	511-246-305	Manual Main Shut-Off Gas Valve, 2" N.P.T., With ⅛" N.P.T. Female Pilot Take-Off Tapping and ¼" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-703-06	9 - 17
	511-246-310	Manual Main Shut-Off Gas Valve, 2½" N.P.T., With ¼" N.P.T. Female Pilot Take-Off Tapping and ¼" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-803-02	18 - 20
	511-210-431	Manual Main Shut-Off Gas Valve, 3" N.P.T., With ¼" N.P.T. Female Pilot Take-Off Tapping and ¼" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Weil-McLain	R-1430	21-23
2	511-624-550	Low Gas Pressure Switch, SPDT, Manual Reset, Lockout on Pressure Fill, Diaphragm Type, 3.0-21.0" W.C. Range, 1.0-3.0" W.C. Differential, ¼ " N.P.T. Female Connector, ⅛" N.P.T. Female Vent Connector, With Switch Position Indicator	Honeywell	C645A1030	All Sizes
3,7	510-744-315	Motorized Gas Valve Small Body, With ¼" N.P.T. Female Downstream Pressure Tapping	Honeywell	V5097 A1004	5 - 17
N/S	511-044-171	1¼" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000 109-003	5,6,7
	511-044-172	1½" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000 109-004	8
	511-044-173	2" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000 109-005	9 - 17
3,7	510-744-316	Motorized Gas Valve Large Body, With ¼" N.P.T. Female Downstream Pressure Tapping	Honeywell	V5097 A1012	18 - 23
N/S	511-044-174	2½" Pipe Flange Adapter For Gas Valve Body	Honeywell	32001 605-002	18 - 20

LGB - Series 2
IRI / FM Main Gas Control Train Components
5.5" W.C. Natural Gas Supply Pressure

N/S	511-044-175	3" Pipe Flange Adapter For Gas Valve Body	Honeywell	32001 605-003	21 - 23
4,8	510-744-317	Fluid Power Gas Valve Actuator, On/Off, 120 Volt	Honeywell	V4055 A1098	5 -23
N/S*	511-044-176	Adapter For Solenoid Vent Valve (Fits Small Valve Body)	Honeywell	32002513	5 - 17
	511-044-177	Adapter For Solenoid Vent Valve (Fits Large Valve Body)	Honeywell	32002512	18 - 23
5*	511-046-340	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, ¾" N.P.T.	ASCO	S262SA02 N3EG5	5 - 8
			Honeywell	V4295 S1005	
	511-046-342	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, 1" N.P.T.	ASCO	S262SA02 N3F5	9 -17
			Honeywell	V4295 S1013	
	511-046-344	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt , 1¼" N.P.T.	ASCO	S262SA02 N3GJ7	18 - 23
			Honeywell	V4295 S1021	
6	511-210-415	Test Cock, ¼" N.P.T.	Conbraco	41-560-05	All Sizes
10	511-048-502	Combination Gas Control Valve, 1¼" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, ⅛" N.P.T. Downstream Pressure Tapping	Honeywell	V4944 N1029	5 - 7
	511-048-501	Combination Gas Control Valve, 1½ " N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, ⅛" N.P.T. Downstream Pressure Tapping	Honeywell	V4944 N1037	8
	511-048-500	Combination Gas Control Valve, 2" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, ⅛" N.P.T. Downstream Pressure Tapping	Honeywell	V4944 N1045	9 - 23
11	511-624-555	High Gas Pressure Switch, SPDT, Manual Reset, Lockout on Pressure Rise, Diaphragm Type, 3.0-21.0" W.C. Range, 1.0-3.0" W.C. Differential, ¼" N.P.T. Female Connector, ⅛" N.P.T. Female Vent Connector, With Switch Position Indicator	Honeywell	C645B1013	All Sizes

LGB-6 Through LGB-12 - Series 2
IRI / FM Flame Guardian WMBC-1A Control System
Pilot Proving / Main Flame Proving System

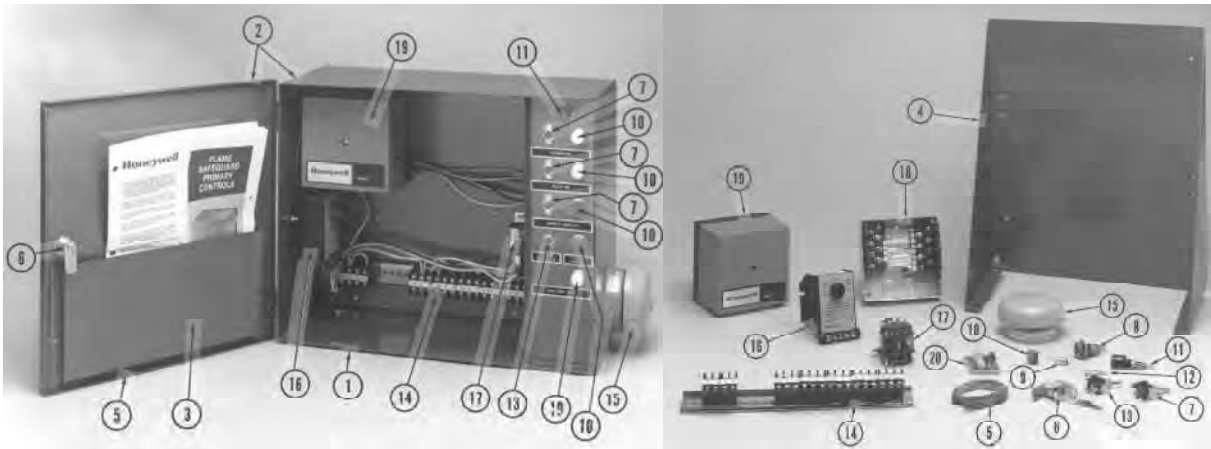


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Qty Per System
6	591-850-003	Door Lock and Key set (Two keys)			1 Set
7	511-624-575	Power on Manual Toggle Switch, SPST, 24 Volt or 120 Volt	McGill	3190-0003	1
8	591-850-205	Indicating Lamp Holder, 24 Volt or 120 Volt			2
9	591-850-370	Indicating Lamp Bulb, 24 Volt, Incandescent		120MB	2
10	591-850-200	Indicating Lamp Lens, Lexan, Screw-On White, Power On			1
	591-850-200	Indicating Lamp Lens, Lexan, Screw-On White, Call For Heat			1
	591-850-201	Indicating Lamp Lens, Lexan, Screw-On Blue, Gas Valve On			1
	591-850-202	Indicating Lamp Lens, Lexan, Screw On Yellow, Pilot On			1
	591-850-203	Indicating Lamp Lens, Lexan, Screw-On Red, Flame Failure			1
11	591-850-180	Fuse Holder Panel, 24 Volt or 120 Volt	Buss	HKP-HH	1
12	591-850-183	Fuse, 24 Volt, 6 Amps	Buss	MTH-6	1
13	511-624-576	Manual Toggle Switch, SPDT, 24 Volt or 120 Volt, Used For Alarm Silencing	McGill	3192-0003	1
14	512-050-027	Terminal Block Set	Curtis	WT-19	1
15	511-802-615	Alarm Bell, 4" Dia., 120 Volt, Designed For Cabinet Mounting	Weil-McLain		1
16	510-350-430	Purge Timer Kit, 120 Volt, 0-5 Min., Adjustable Delay, Provides 5 Minute Enforced Wait-Purge In The Event of Flame Failure	SSAC	ERDM427	1
17	510-311-012	Control Relay, DPDT, 120 Volt Holding Coil	Honeywell	R4222D1013	1
18	510-350-433	Flame Safeguard Control Mounting and Wiring Sub-base, Four Sides	Honeywell	Q7800B1003	1
19	510-350-431	Flame Safeguard Burner Primary Control, Flame Rectification, 120 Volt, 3 sec. Nominal Flame Response Timing, 10 sec. Timed Trial For Pilot, 10 sec. Timed Trial For Main Flame, Lock-Out on interlocking Contact Failure	Honeywell	RM7895C-1012	1
20	510-350-432	Flame Safeguard Control Plug-in Pre-Purge Timer, 2 Sec. Purge	Honeywell	ST800A-1005	1

LGB-6 Through LGB-12 - Series 2
 IRI / FM Flame Guardian WMBC-1A Control System
 Pilot Proving / Main Flame Proving System Continued

Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Qty Per System
N/S	510-350-434	Flame Amplifier	Honeywell	R7847A-1033	
	510-350-435	Display Module	Honeywell	7800	
	590-216-501	Corcom, 10VS1	Honeywell	F7248	
	590-216-502	T-Filter, With Instructions	Honeywell	32005301-001	

LGB-13 Through LGB-23 - Series 2
IRI / FM Flame Guardian WMBC-2A Control System
Pilot Proving / Main Flame Proving System

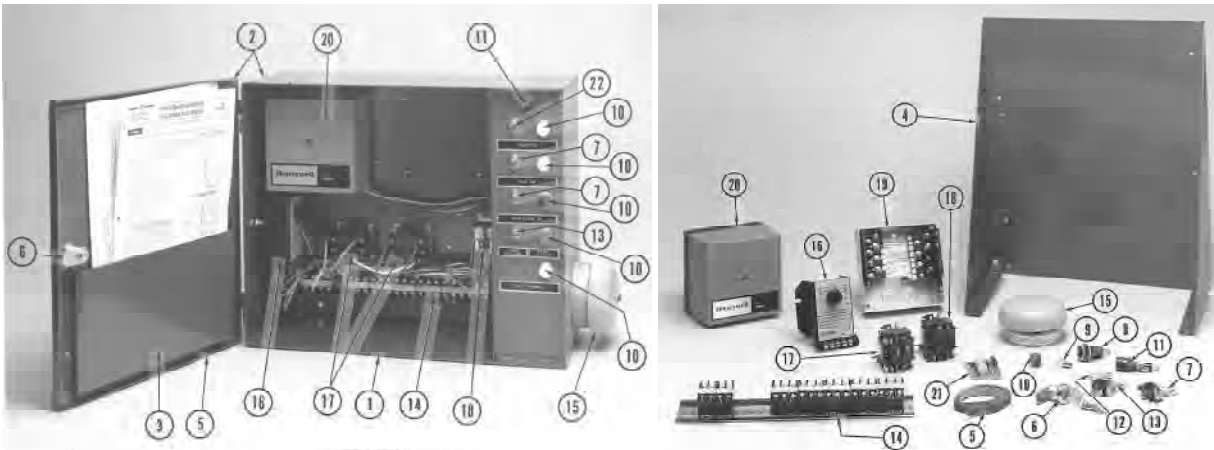


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Qty Per System
6	591-850-003	Door Lock and Key Set (Two keys)			1
7	511-624-575	Power on Manual Toggle Switch, SPST, 24 Volt or 120 Volt	McGill	3190-0003	3
8	591-850-205	Indicating Lamp Holder, 24 Volt or 120 Volt			5
9	591-850-370	Indicating Lamp Bulb, 24 Volt, Incandescent		120MB	5
10	591-850-200	Indicating Lamp Lens, Lexan, Screw-On White, Power On			1
	591-850-200	Indicating Lamp Lens, Lexan, Screw-On White, Call For Heat			1
	591-850-201	Indicating Lamp Lens, Lexan, Screw-On Blue, Gas Valve On			1
	591-850-202	Indicating Lamp Lens, Lexan, Screw-On Yellow, Pilot On			1
	591-850-203	Indicating Lamp Lens, Lexan, Screw-On Red, Flame Failure			1
11	591-850-180	Fuse Holder Panel, 24 Volt or 120 Volt	Buss	HKP-HH	2
12	591-850-183	Fuse, 24 Volt, 6 Amps	Buss	MTH-6	2
13	511-624-576	Manual Toggle Switch, SPDT, 24 Volt or 120 Volt, Used For Alarm Silencing	McGill	3192-0003	1
14	512-050-026	Terminal Block Set	Curtis	WT-19	1
15	511-802-615	Alarm Bell, 4" Dia., 120 Volt, Designed For Cabinet Mounting			1
16	510-350-430	Purge Timer Kit, 120 Volt, 0-5 Min., Adjustable Delay, Provides 5 Minute Enforced Wait-Purge In The Event of Flame Failure	SSAC	ERDM427	1
17	510-311-012	Control Relay, DPDT, 120 Volt Holding Coil	Honeywell	R4222D1013	1
18	510-350-221	Control Relay, SPST, 24 Volt Holding Coil	Honeywell	R8222A1002	2
19	510-350-433	Flame Safeguard Control Mounting and Wiring Sub-base, Four Sides	Honeywell	Q7800B1003	1
20	510-350-431	Flame Safeguard Burner Primary Control, Flame Rectification, 120 Volt, 3 sec. Nominal Flame Response Timing, 10 sec. Timed Trial For Pilot, 10 sec. Timed Trial For Main Flame, Lock-Out on interlocking Contact Failure	Honeywell	RM7895C-1012	1
21	510-350-432	Flame Safeguard Control Plug-in Pre-Purge Timer, 2 Sec. Purge	Honeywell	ST800A-1005	1
22	511-624-578	Manual Toggle Switch, Used For Power On, Reset	McGill	1121-0009	1

LGB-13 Through LGB-23 - Series 2
 IRI / FM Flame Guardian WMBC-2A Control System
 Pilot Proving / Main Flame Proving System Continued

Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Qty Per System
N/S	510-350-434	Flame Amplifier	Honeywell	R7847A-1033	
	510-350-435	Display Module	Honeywell	7800	
	590-216-501	Corcom, 10VS1	Honeywell	F7248	
	590-216-502	T-Filter, With Instructions	Honeywell	32005301-001	

LGB-6 Through LGB-12 - Series 2
Flame Guardian WFFP-1 Control System
Pilot Proving / Main Flame Proving System

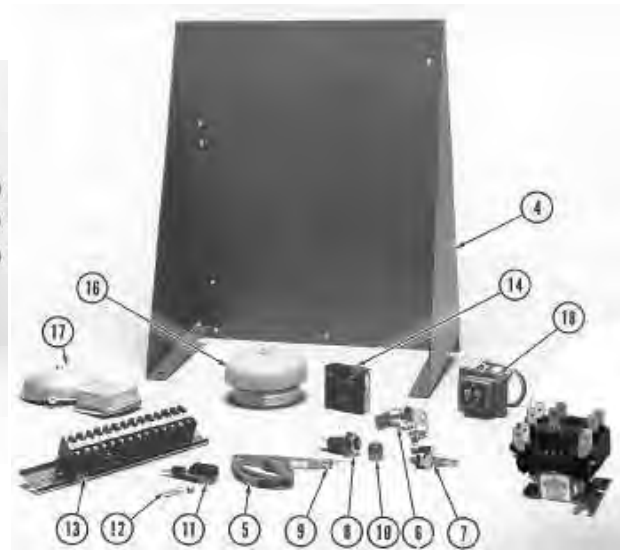
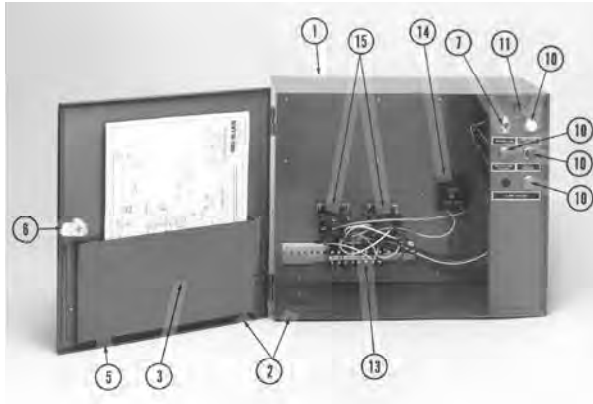


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Qty Per WFFP-1 System
6	591-850-003	Door Lock and Key Set (Two Keys)	Weil-McLain		1 Set
7	511-624-575	Power In Manual Toggle Switch, SPST, 24 Volt or 120 Volt	McGill	3190-0003	1
8	591-850-205	Indicating Lamp Holder, 24 Volt or 120 Volt	Weil-McLain		4
9	591-850-365	Indicating Lamp Bulb, 24 Volt, Incandescent	Weil-McLain		4
10	591-850-200	Indicating Lamp Lens, Lexan, Screw-On Type-white, Call For Heat	Weil-McLain		
	591-850-201	Indicating lamp Lens, Lexan, Screw-On Type-Blue, Pilot Proven	Weil-McLain		1
	591-850-210	Indicating Lamp Lens, Lexan, Screw-On Type-Green, Main Flame Proven	Weil-McLain		
	591-850-203	Indicating Lamp Lens, Lexan Screw-On Type-Red, Flame failure	Weil-McLain		1
11	591-850-180	Fuse Holder Panel, 24 Volt or 120 Volt	Buss	HKP-HH	1
12	591-850-183	Fuse, 24 Volt, 6 Amps	Buss	MTH-6	1
13	512-050-026	Terminal Block Set	Curtis	WT-14	1
14	570-350-370	Delay Timer, 24 Volt, 5 Min. Delay	SSAC	TS121360	1
16	511-802-615	Alarm Bell, 4" Dia., 120 Volt, Designed For Cabinet Mounting	Weil-McLain		
17	511-802-621	Alarm Bell, 2" Dia., 12 Volt, Designed For Remote Mounting	Weil-McLain		
18	511-802-620	Transformer, 120/12 Volt, For Use With 2" Dia. Alarm Bell	Weil-McLain		

**LGB-13 Through LGB-23 - Series 2
Flame Guardian WFFP-2 Control System
Pilot Proving / Main Flame Proving System
With Prewired Control Cabinet**

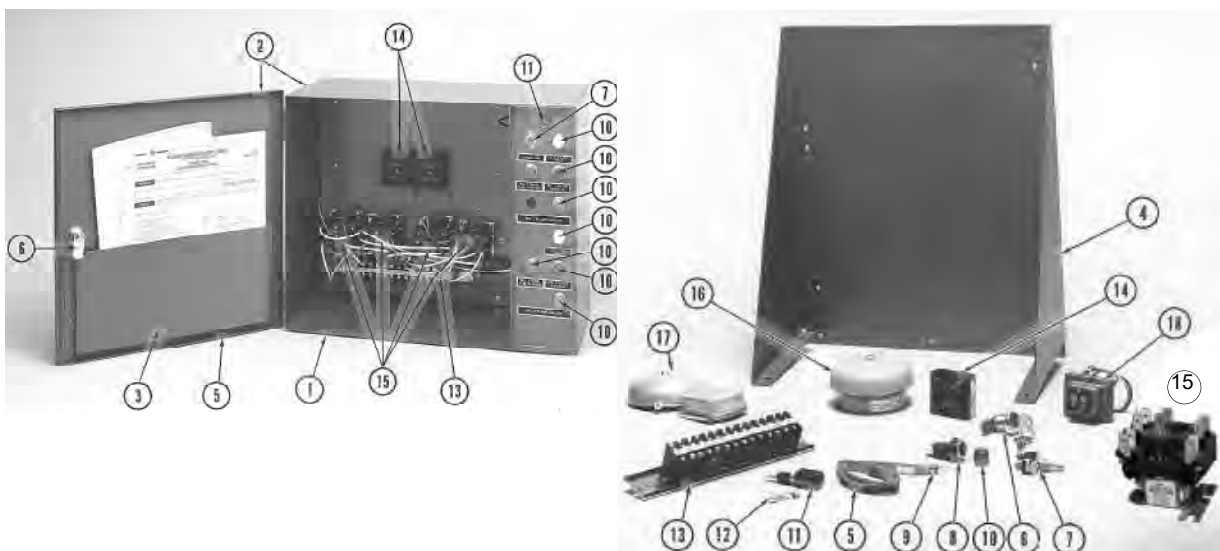


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Qty Per WFFP-2 System
1	383-300-190	WFFP-2 Flame Guardian Control System - Complete With Cabinet, Internal Components, and Mounting Bracket			1
6	591-850-003	Door Lock and Key Set (Two Keys)			1 Set
7	511-624-575	Power On Manual Toggle Switch, SPST, 24 Volt or 120 Volt	McGill	3190-0003	1
8	591-850-205	Indicating Lamp Holder, 24 Volt or 120 Volt			8
9	591-850-365	Indicating Lamp Bulb, 24 Volt, Incandescent			8
10	591-850-200	Indicating Lamp Lens, Lexan, Screw-On White, Power On			2
	591-850-201	Indicating Lamp Lens, Lexan, Screw-On Blue, Gas Valve On			2
	591-850-210	Indicating Lamp Lens, Lexan, Screw-On Blue, Pilot Proven			2
	591-850-203	Indicating Lamp Lens, Lexan, Screw-On Red, Flame Failure			2
11	591-850-180	Fuse Holder Panel, 24 Volt or 120 Volt	Buss	HKP-HH	1
12	591-850-183	Fuse, 24 Volt, 6 Amps	Buss	MTH-6	1
13	512-050-026	Terminal Block Set	Curtis	WT-14	1
14	570-350-370	Delay Timer, 24 Volt, 5 Min. Delay	SSAC	TS121360	2
15	510-311-019	Control Relay, DPDT, 24 Volt Holding Coil	Honeywell	R8222D1014	4
19	511-802-615	Alarm Bell, 4" Dia., 120 Volt, Designed For Cabinet Mounting	Weil-McLain		
17	511-802-621	Alarm Bell, 2" Dia., 120 Volt, Designed For Cabinet Mounting	Weil-McLain		
18	511-802-620	Transformer, 120/12 Volt, For Use On 2" Dia. Alarm Bell	Weil-McLain		

LGB - Series 2 Water Trim

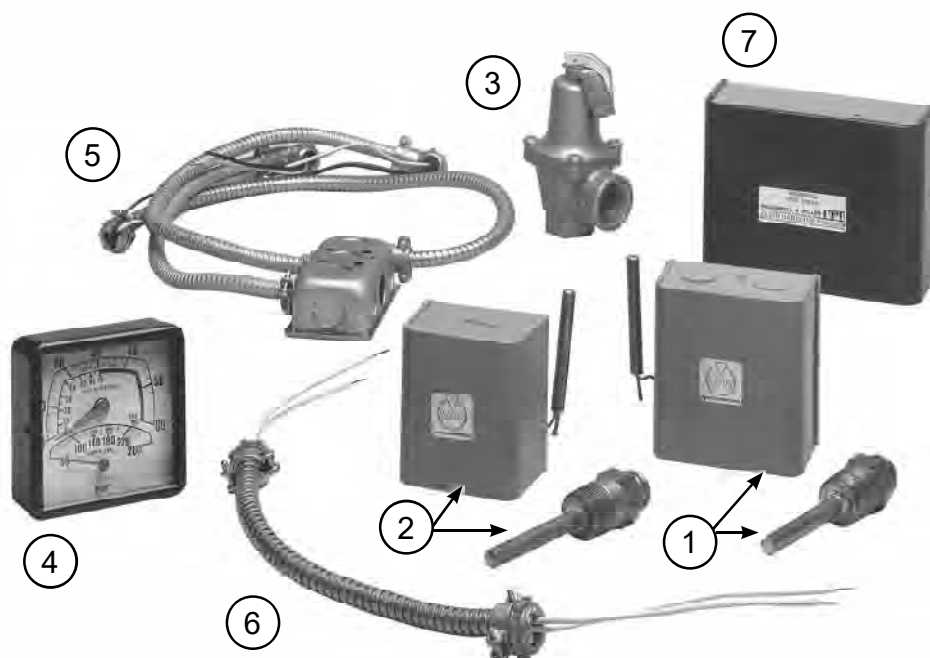


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Boiler Size
1	510-312-065	Combination Operating and High Limit Control, DPST, Automatic Recycle, Less Well. Operating Limit: 100 - 220° Range With 10-35°F Adjustable Subtractive Differential. High Limit: 140-240°F Range With 10°F Fixed Subtractive Differential.	Honeywell	L4081A1023	4 - 20
			White-Rodgers	11C30-3	
2	510-312-209	High Limit Temperature Control, SPST Automatic Recycle, 140-240°F Range, 10°F Fixed Subtractive Differential With ¾" N.P.T. Control Well (Separate Controls Used For Operating and High Limit Function For LGB-21 Through LGB-23 Boilers)	Honeywell	L4080B1311	21 - 23
			White-Rodgers	11B83-16	
3	383-600-091	ASME Pressure Relief Valve, Set To Relieve At 30 PSIG, ¾" N.P.T. Male Inlet x ¾" N.P.T. Female Outlet; Side Outlet Type	Conbraco	10-408-05	4 - 5
	383-600-063	ASME Pressure Relief Valve, Set To Relieve At 30 PSIG, ¾" N.P.T. Male Inlet x 1" N.P.T. Female Outlet; Side Outlet Type	Watts	335	4 - 5
	383-600-092	ASME Pressure Relief Valve, Set To Relieve At 30 PSIG, 1" N.P.T. Male Inlet x 1¼" N.P.T. Female Outlet; Side Outlet Type	Watts	740	6 - 9
	383-600-093	ASME Pressure Relief Valve, Set To Relieve At 30 PSIG, 1¼" N.P.T. Male Inlet x 1½" N.P.T. Female Outlet; Side Outlet Type	Watts	740	10 - 13
	383-600-094	ASME Pressure Relief Valve, Set To Relieve At 30 PSIG, 1½" N.P.T. Male Inlet x 2" N.P.T. Female Outlet; Side Outlet Type	Watts	740	14 - 20
4	510-218-065	Combination Pressure-Temperature Gauge, 0-50 PSIG, 60-260°F Back Connection, ½" N.P.T.	ENF	#4104-3.25	All Sizes
			Marshall-town	13HJ	
5	591-319-793	Temperature Control Wiring Harness			21 - 23
6	591-319-801	Water Trim Wiring Harness			4-23
7	511-114-528	Electrode Type Low Water Cut-Off, 120 Volt, SPDT, Automatic Recycle, 160 PSIG Rated, ½" N.P.T. Male Electrode	McDonnell-Miller	PS-851-120	All Sizes
N/S	592-300-006	Well, ¾" N.P.T			

LGB - Series 2 Steam Trim



Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Boiler Size
1	510-312-135	High Limit Steam Pressure Control, SPST, Automatic Recycle, 0-9 PSIG Range, 0-5 PSIG Adjustable Additive Differential, Bottom Connection, 1/4" N.P.T. Male	Honeywell	PA404A1009	All
	510-312-106	High Limit Steam Pressure Control, SPST, Automatic Recycle, 0-9 PSIG Range, 0-5 PSIG Adjustable Additive Differential, Bottom Connection, 1/4" N.P.T. Male	Johnson Controls	P47AA-25D	All
2	383-600-107	ASME Steam Safety Relief Valve, Set To Relieve At 15 PSIG, Side Outlet, 1" N.P.T. Male Inlet x 1" N.P.T. Female Outlet, 643 Lbs/Hr Capacity	Conbraco	13-202-08	4 - 7
	383-600-108	ASME Steam Safety Relief Valve, Set To Relieve At 15 PSIG, Side Outlet, 1 1/4" N.P.T. Male Inlet x 1 1/2" N.P.T. Female Outlet, 1200 Lbs/Hr Capacity	Conbraco	13-213-08	8 - 12
	383-600-109	ASME Steam Safety Relief Valve, Set To Relieve At 15 PSIG, Side Outlet, 1 1/2" N.P.T. Male Inlet x 2" N.P.T. Female Outlet, 1900 Lbs/Hr Capacity	Conbraco	13-214-08	13 - 19
	383-600-110	ASME Steam Safety Relief Valve, Set To Relieve At 15 PSIG, Side Outlet, 2" N.P.T. Male Inlet x 2" N.P.T. Female Outlet, 2500 Lbs/Hr Capacity	Conbraco	12-205-08	20 - 23
3	510-218-100	Combination Pressure-Vacuum Gauge, 0-30 PSIG, 0-30" Hg., 4 1/2" Dial, Bottom Connection, 1/4" N.P.T. Spec 04459	Ametek	USC500-5549	All
4	383-600-002	Water Gauge Glass Kit, 5/8" x 10 5/8" With Gaskets and Brass Washers	Weil-McLain		All
5	563-334-595	Water Gauge Glass Guard, 3/16" Dia. X 12 1/2" Long (2 Per Gauge Glass)	Weil-McLain		All
6	510-218-145	Water Gauge Glass Cocks, Set 1/2" N.P.T. Male Inlet	Conbraco	21-205-03W	All
7	511-114-474	Float Type Low Water Cut-Off, SPCT, Automatic Recycle, 14 PSIG Rated, 1" N.P.T.	McDonnell Miller	61	All
8	591-319-800	Steam Trim Wiring Harness	Weil-McLain		All

LGB - Series 1 Water Trim Parts

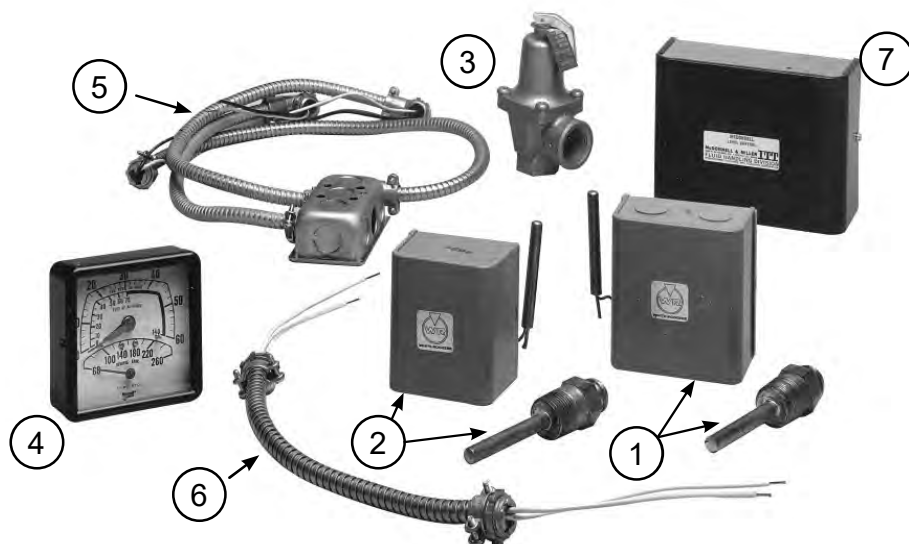


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Boiler Size
1	510-312-065	Combination Operating and High Limit Control, DPST, Automatic Recycle, With 3/4" N.P.T. Control Well. Operation Limit: 100 - 220° Range With 10-35°F Adjustable Subtractive Differential. High Limit: 140-240°F Range With 10°F Fixed Subtractive Differential.	Honeywell	L4081A1189	6 - 20
			White-Rodgers	11C30-3	
2	510-312-209	High Limit Temperature Control, SPST Automatic Recycle, 140-240°F Range, 10°F Fixed Subtractive Differential With 3/4" N.P.T. Control Well (Separate Controls Used for Operating and High Limit Function For LGB-21 Through LGB-23 Boilers)	Honeywell	L4080B1311	21 - 23
			White-Rodgers	11B83-16	
3	383-600-091	ASME Pressure Relief Valve, Set To Relieve At 30 PSIG, 3/4" N.P.T. Male Inlet x 3/4" N.P.T. Female Outlet; Side Outlet Type	Conbraco	10-408-05	4 - 5
			Watts	335	4 - 5
	383-600-063	ASME Pressure Relief Valve, Set To Relieve At 30 PSIG, 3/4" N.P.T. Male Inlet x 1" N.P.T. Female Outlet; Side Outlet Type	Watts	740	6 - 9
	383-600-092	ASME Pressure Relief Valve, Set To Relieve At 30 PSIG, 1" N.P.T. Male Inlet x 1 1/4" N.P.T. Female Outlet; Side Outlet Type	Watts	740	10 - 13
	383-600-093	ASME Pressure Relief Valve, Set To Relieve At 30 PSIG, 1 1/4" N.P.T. Male Inlet x 1 1/2" N.P.T. Female Outlet; Side Outlet Type	Watts	740	14 - 20
	383-600-094	ASME Pressure Relief Valve, Set To Relieve At 30 PSIG, 1 1/2" N.P.T. Male Inlet x 2" N.P.T. Female Outlet; Side Outlet Type	Watts	740	21 - 23
4	510-218-065	Combination Pressure-Temperature Gauge, 0-50 PSIG, 60-260°F Back Connection, 1/2" N.P.T.	ENFM	#4104-3.25	All Sizes
			Ametek	PTA1088	
			Marshalltown	13HJ	
5	591-319-793	Temperature Control Wiring Harness	Weil-McLain		21 - 23
6	591-319-801	Water Trim Wiring Harness			6-23
7	511-114-528	Electrode Type Low Water Cut-Off, 120 Volt, SPDT, Automatic Recycle, 160 PSIG Rated, 1/2" N.P.T. Male Electrode	McDonnell Miller	PS-851-120	All Sizes

LGB - Series 1 Steam Trim Parts



Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	LGB Boiler Size
1	510-312-135	High Limit Steam Pressure Control, SPST, Auto Recycle, 0-9 PSIG Range, 0-5 PSIG Adjustable Additive Differential, Bottom Connection, 1/4" N.P.T. Male	Honeywell	PA404A1009	All Sizes
2	383-600-107	ASME Steam Safety Relief Valve, Set To Relieve At 15 PSIG, Side Outlet, 1" N.P.T. Male Inlet x 1" N.P.T. Female Outlet, 643 lbs/hr Capacity	Conbraco	13-202-08	4 - 7
	383-600-108	ASME Steam Safety Relief Valve, Set To Relieve At 15 PSIG, Side Outlet, 1 1/2" N.P.T. Male Inlet x 1 1/2" N.P.T. Female Outlet, 1200 lbs/hr Capacity	Conbraco	13-213-08	8 - 12
	383-600-109	ASME Steam Safety Relief Valve, Set To Relieve At 15 PSIG, Side Outlet, 1 1/2" N.P.T. Male Inlet x 2" N.P.T. Female Outlet, 1900 lbs/hr Capacity	Conbraco	13-214-08	13 - 19
	383-600-110	ASME Steam Safety Relief Valve, Set To Relieve At 15 PSIG, Side Outlet, 2" N.P.T. Male Inlet x 2" N.P.T. Female Outlet, 2500 lbs/hr Capacity	Conbraco	12-205-08	20 - 23
3	510-218-100	Combination Pressure-Vacuum Gauge, 0-30PSIG, 0-30" HG., 4 1/2" Dial, Bottom Connection, 1/4" N.P.T. Spec 04459	Ametek	USC500-5549	All Sizes
4	383-600-002	Water Gauge Glass Kit, 5/8" x 10 5/8" With Gaskets and Brass Washers	Weil-McLain		All Sizes
5	563-334-595	Water Gauge Glass Guard, 3/16" Dia. X 12 1/2" Long (2 Per Gauge Glass)	Weil-McLain		All Sizes
6	510-218-145	Water Gauge Glass Cocks, Set, 1/2" N.P.T. Male Inlet	Conbraco	21-205-03W	All Sizes
7	511-114-474	Float Type Low Water Cut-off, Automatic Recycle, 14 PSIG Rated, 1" N.P.T.	McDonnell-Miller	61	All Sizes
8	591-319-800	Steam Trim Wiring Harness	Weil-McLain		All Sizes

LGB - Series 1 Main Gas Train Control Parts Natural Gas

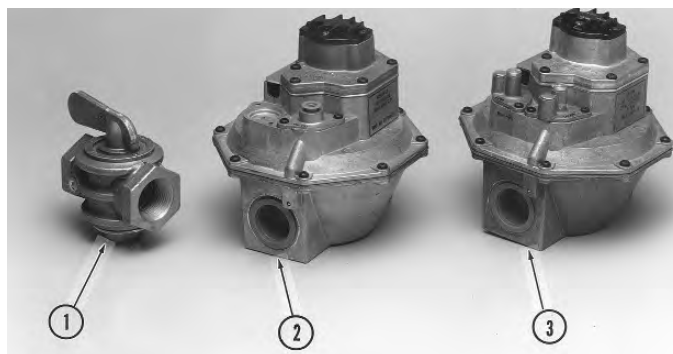


Table 1 – LGB Main Gas Control Trains Arrangement

LGB Series 1 Boiler Size	Main Gas Control Trains		LGB Series 1 Boiler Size	Main Gas Control Trains	
	7.0" W.C. Natural Gas Supply Pres- sure	5.0" W.C. Natural Gas Supply Pressure		7.0" W.C. Natural Gas Supply Pressure	5.0" W.C. Natural Gas Supply Pressure
LGB-6	AB	AB	LGB-15	J	J
LGB-7	AB	AB	LGB-16	J	J
LGB-8	CD	CD	LGB-17	J	J
LGB-9	CD	CD	LGB-18	K	K
LGB-10	EFG	E	LGB-19	L	M
LGB-11	EFG	FG	LGB-20	L	N
LGB-12	EFG	FG	LGB-21	*L	*O
LGB-13	H	H	LGB-22	*L	*O
LGB-14	I	I	LGB-23	*L	*O

***With Special Control Carton (Includes Gas Pressure Switch, Switch Bracket, Connecting Tubing)**

Table 2 – LGB Main Gas Control Trains Individual Components

Fig. No.		MAIN GAS CONTROL TRAINS																				
		7" W.C. Natural Gas Supply Pressure										5" W.C. NATURAL Gas Supply Pressure										
		AB	C	D	E	F	H	I	J	K	L	AB	CD	E	F	H	I	J	K	M	N	O
1	Manual Main Shut-Off Gas Valve, 1" N.P.T.	X	X				X	X	X	X												
	Manual Main Shut-Off Gas Valve, 1¼" N.P.T.				X					X	X	X	X			X	X	X	X			
	Manual Main Shut-Off Gas Valve, 1½" N.P.T.													X					X	X	X	
	Manual Main Shut-Off Gas Valve, 2" N.P.T.														X						X	X
2	Safety Gas Valve 1" N.P.T.	X	X				X	X	X	X												
	Safety Gas Valve 1¼" N.P.T.				X						X	X	X			X	X	X	X			
	Safety Gas Valve 1½" N.P.T.													X	X				X	X	X	X
3	Combination Gas Control Valve, 1" N.P.T.	X	X				X	X	X	X												
	Combination Gas Control Valve, 1¼" N.P.T.				X						X	X	X			X	X	X	X			
	Combination Gas Control Valve, 1½" N.P.T.													X	X				X	X	X	X

LGB - Series 1

Main Gas Train Control Parts

Natural Gas

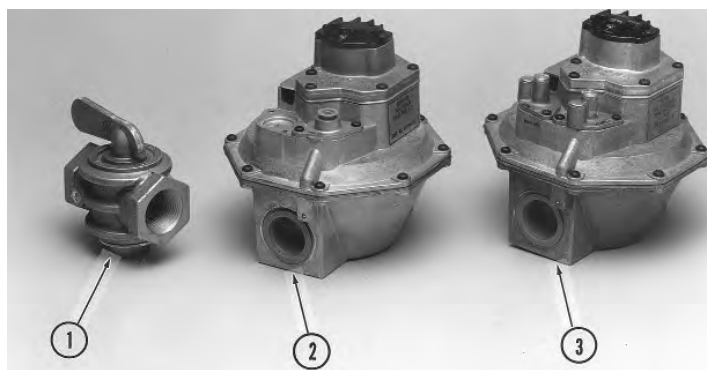
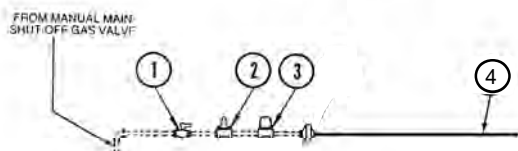


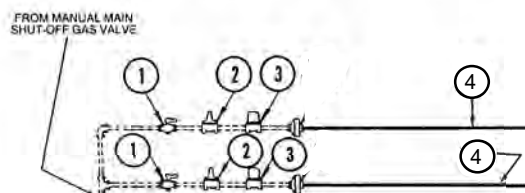
Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.
1	511-246-325	Manual-Main Shut-off Gas Valve, 1" N.P.T., With Downstream Pressure Tapping, 1/8" N.P.T.	Conbraco	50-403-02
			Key	223-142111
	511-246-330	Manual-Main Shut-off Gas Valve, 1 1/4" N.P.T., With Downstream Pressure Tapping, 1/8" N.P.T.	Conbraco	50-503-06
			Key	224-142111
	511-246-300	Manual-Main Shut-off Gas Valve, 1 1/2" N.P.T., With Downstream Pressure Tapping, 1/8" N.P.T.	Conbraco	50-603-06
	511-246-305	Manual-Main Shut-off Gas Valve, 2" N.P.T., With Downstream Pressure Tapping, 1/8" N.P.T.	Conbraco	50-703-02
2	383-300-425	Gas Valve Conversion Kit, 1" N.P.T., 24 Volt, With 1/8" N.P.T. and 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V8943A1103
	383-300-426	Gas Valve Conversion Kit, 1 1/4" N.P.T., 24 Volt, With 1/8" N.P.T. and 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V8943A1111
	383-300-427	Gas Valve Conversion Kit, 1 1/2" N.P.T., 24 Volt, With 1/8" N.P.T. and 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V8943A1129
3	511-044-214	Combination Gas Control Valve, 1" N.P.T., 24 Volt, With Low Fire Operator, High Fire Operator, Main Pressure Regulator and 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V8944N1053
	511-044-215	Combination Gas Control Valve, 1 1/4" N.P.T., 24 Volt, With Low Fire Operator, High Fire Operator, Main Pressure Regulator and 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V8944N1061
	511-044-216	Combination Gas Control Valve, 1 1/2" N.P.T., 24 Volt, With Low Fire Operator, High Fire Operator, Main Pressure Regulator and 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V8944N1079

LGB - Series 1 - Universal Control System - Natural Gas IRI / FM Pilot Gas Control Train / Flame Sensing Parts

**IRA AND FM
PILOT TRAIN GAS PIPING DIAGRAM
LGB-6 THROUGH LGB-12 BOILERS**



**IRA AND FM
PILOT TRAIN GAS PIPING DIAGRAM
LGB-13 THROUGH LGB-23 BOILERS**



LGB - Series 1 - Universal Control System - Natural Gas IRI / FM Pilot Gas Control Train / Flame Sensing Parts

Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Qty Per Boiler Size	
					6-12	13-23
IRI AND FM PILOT LINE GAS TRAIN COMPONENTS						
1	511-246-345	Pilot Line Manual Shut-off Gas Valve, ¼" N.P.T. Male x ¼" N.P.T. Female	Conbraco	53-300-01	1	2
2	510-933-195	Pilot Line Gas Pressure Regulating Valve, 3.5-7.0" W.C. Outlet Adjustment Range, ¼" N.P.T.	Maxitrol	RV20VL-22	1	2
3	511-044-040	Pilot Line Solenoid Gas Valve, Quick Opening, 120 Volt, ¼" N.P.T.	Johnson	H91ABA-12C	1	2
4	560-742-915	Pilot Line Aluminum Tubing, ¼" O.D. x 100" Coil	Weil-McLain		1	2
IRI AND FM PILOTS, FLAME SENSING AND IGNITION COMPONENTS						
5	511-330-181	Combination Pilot Burner With Fame Rod, Ignition Electrode, and Natural Gas Orifice, 0.026" Dia.	Honeywell	Q179C1009	1	1
6	511-330-221	NG PIN Pilot Burner Assembly With Pilot Burner, Orifice, Sensing Lead and Ignition Cable	PSE	NA-16	1	1
7	460-005-624	Combination Pilot Burner Mounting Bracket	Weil-McLain		1	2
8	591-850-140	Rajah Connector, Female (Connects Sensing Cable To Q179C Pilot)	Weil-McLain		1	1
9	591-391-798	Ignition Cable, 36" Long, For Q179C Pilot	Weil-McLain		1	1
10	511-724-274	Main Fame Sensor	Honeywell	MH 392956	1	1
11	423-300-420	Main Fame Sensor Mounting Bracket	Weil-McLain		1	1
12	590-849-236	Fame Rod Cable For Main Fame Sensor and Q179C Pilot (Feet Required)	Honeywell	R129 8020	4	4
13	511-802-625	Solid State Ignition Transformer, 120 Volt/6,0000 Volt,	Dongan	A06-SA6	1	1
14	511-330-097	Pilot Proving Ignition/Sensing Control Module, 24 Volt, Q348A Pilot	Honeywell	S8620 C1003	-	1
			United Technologies	1003-511	-	1
15	510-312-166	Control Transformer/Relay Receptacle 120/24 Volt, 40 VA, Plate Mounted, For Universal Control System (UCS) Ignition Sensing Control	Honeywell	AT72 H1002	-	1
			White-Rodgers	599-9002	-	1

LGB - Series 1
IRI / FM Main Gas Control Train Parts
For 5.5" W.C. Natural Gas Supply Pressure

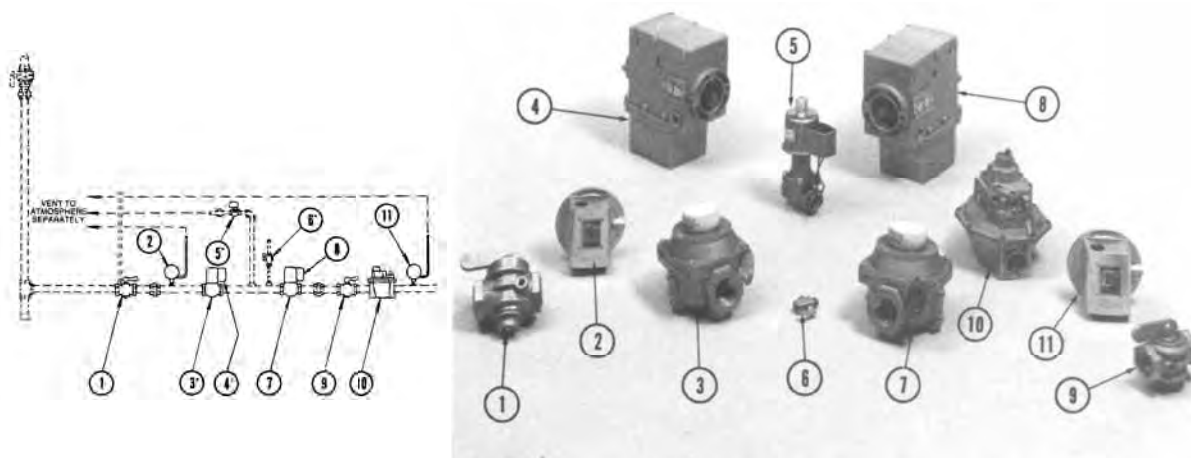


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Boiler Size
1,9	511-246-330	Manual Main Shut-off Gas Valve, 1¼" N.P.T., With ⅛" N.P.T. Female Pilot Take-Off Tapping and ¼" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-503-06	5,6,7
			Key	224-142111	
	511-246-300	Manual Main Shut-off Gas Valve, 1½" N.P.T., With ⅛" N.P.T. Female Pilot Take-Off Tapping and ¼" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-603-06	8
	511-246-305	Manual Main Shut-off Gas Valve, 2" N.P.T., With ⅛" N.P.T. Female Pilot Take-Off Tapping and ¼" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-703-06	9 - 17
	511-246-310	Manual Main Shut-off Gas Valve, 2½" N.P.T., With ¼" N.P.T. Female Pilot Take-Off Tapping and ¼" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-803-02	18 - 20
	511-210-431	Manual Main Shut-off Gas Valve, 3" N.P.T., With ¼" N.P.T. Female Pilot Take-Off Tapping and ¼" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Weil-McLain	R-1430	21-23
2	511-624-550	Low Gas Pressure Switch, SPDT, Manual Reset, Lockout On Pressure Fill, Diaphragm Type, 3.0-21.0" W.C. Range, 1.0-3.0" W.C. Differential, ¼" N.P.T. Female Connector, ⅛" N.P.T. Female Vent Connector, With Switch Position Indicator	Honeywell	C645A1030	All Sizes
3,7	510-744-315	Motorized Gas Valve Small Body, With ¼" N.P.T. Female Downstream Pressure Tapping	Honeywell	V5097 A1004	5 - 17
N/S	511-044-171	1¼" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000 109-003	5,6,7
	511-044-172	1½" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000 109-004	8
	511-044-173	2" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000 109-005	9 - 17
3,7	510-744-316	Motorized Gas Valve Large Body, With ¼" N.P.T. Female Downstream Pressure Tapping	Honeywell	V5097 A1012	18 - 23

LGB - Series 1
IRI / FM Main Gas Control Train Parts Continued
For 5.5" W.C. Natural Gas Supply Pressure

Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Boiler Size
N/S	511-044-174	2½" Pipe Flange Adapter for Gas Valve Body	Honeywell	32001 605-002	18 - 20
	511-044-175	3" Pipe Flange Adapter for Gas Valve Body	Honeywell	32001 605-003	21 - 23
4,8	510-744-317	Fluid Power Gas Valve Actuator, On/Off, 120 Volt	Honeywell	V4055 A1098	5 - 23
N/S	511-044-176	Adapter For Solenoid Vent Valve (Fits Small Valve Body)	Honeywell	32002513	5 - 17
	511-044-177	Adapter for Solenoid Vent Valve (Fits Large Valve Body)	Honeywell	32002512	18 - 23
5	511-046-340	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, ¾" N.P.T.	ASCO	S262SA02 N3EG5	5 - 8
			Honeywell	V4295 S1005	
	511-046-342	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, 1" N.P.T.	ASCO	S262SA02 N3F5	9 - 17
			Honeywell	V4295 S1013	
	511-046-344	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, 1¼" N.P.T.	ASCO	S262SA02 N3GJ7	18 - 23
			Honeywell	V4295 S1021	
6	511-210-415	Test Cock, ¼" N.P.T.	Conbraco	41-560-05	All Sizes
10	511-048-502	Combination Gas Control Valve, 1¼" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, ⅝" N.P.T. Downstream Pressure Tapping	Honeywell	V4944 N1029	5 - 7
	511-048-501	Combination Gas Control Valve, 1½" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, ⅝" N.P.T. Downstream Pressure Tapping	Honeywell	V4944 N1037	8
	511-048-500	Combination Gas Control Valve, 2" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, ⅝" N.P.T. Downstream Pressure Tapping	Honeywell	V4944 N1045	9 - 23
11	511-624-555	High Gas Pressure Switch, SPDT, Manual Reset, Lockout on Pressure Rise, Diaphragm Type, 3.0-21.0" W.C. Range, 1.0-3.0" W.C. Differential, ¼" N.P.T. Female Connector, ⅝" N.P.T. Female Vent Connector, With Switch Position Indicator	Honeywell	C645B1013	All Sizes

LGB - Series 1

IRI / FM Main Gas Control Train Parts

For 7.0" W.C. Natural Gas Supply Pressure

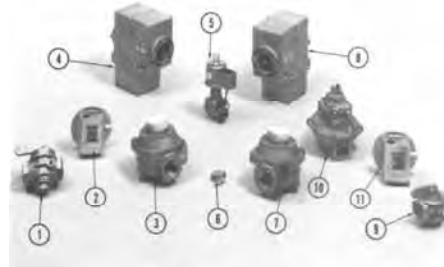
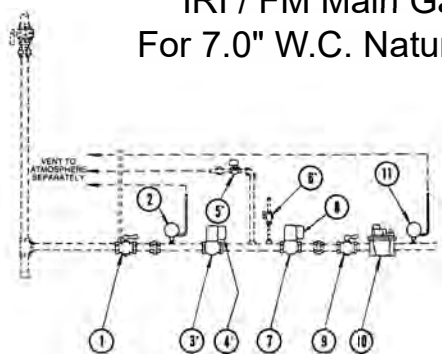


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Boiler Size
1,9	511-246-325	Manual Main Shut-off Gas Valve, 1" N.P.T., With 1/8" N.P.T. Female Pilot Take-Off Tapping and 1/4" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-503-02	5,6,7
	511-246-330	Manual Main Shut-off Gas Valve, 1 1/4" N.P.T., With 1/8" N.P.T. Female Pilot Take-Off Tapping and 1/4" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-503-06	8,9,10
			Key	224-142111	
	511-246-300	Manual Main Shut-off Gas Valve, 1 1/2" N.P.T., With 1/8" N.P.T. Female Pilot Take-Off Tapping and 1/4" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-603-06	11-18
	511-246-305	Manual Main Shut-off Gas Valve, 2" N.P.T., With 1/8" N.P.T. Female Pilot Take-Off Tapping and 1/4" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-703-06	19-23
2	511-624-550	Low Gas Pressure Switch, SPDT, Manual Reset, Lockout On Pressure Fill, Diaphragm Type, 3.0-21.0" W.C. Range, 1.0-3.0" W.C. Differential, 1/4" N.P.T. Female Connector, 1/8" N.P.T. Female Vent Connector, With Switch Position Indicator	Honeywell	C645A1030	All Sizes
3,7	510-744-315	Motorized Gas Valve Small Body, With 1/4" N.P.T. Female Downstream Pressure Tapping	Honeywell	V5097A1004	5 - 17
N/S	511-044-170	1" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000109-002	5,6,7
	511-044-171	1 1/4" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000109-003	8,9,10
	511-044-172	1 1/2" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000109-004	11-18
	511-044-173	2" Pipe Flange Adapter For Gas Valve Body	Honeywell	32000109-005	19-23
4,8	510-744-317	Fluid Power Gas Valve Actuator, On/Off, 120 Volt	Honeywell	V4055A1098	5 - 23
N/S	511-044-176	Adapter For Solenoid Vent Valve (Fits Small Valve Body)	Honeywell	32002513	All sizes
5	511-046-340	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, 3/4" N.P.T.	ASCO	S262SA02 N3EG5	5 - 13
			Honeywell	V4295S1005	
	511-046-342	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, 1" N.P.T.	ASCO	S262SA02N3F5	14-23
			Honeywell	V4295S1013	
			Honeywell	V4295S1021	
6	511-210-415	Test Cock, 1/4" N.P.T.	Conbraco	41-560-05	All Sizes
10	511-048-503	Combination Gas Control Valve, 1" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V4944N1011	5,6,7

LGB - Series 1
IRI / FM Main Gas Control Train Parts Continued
For 7.0" W.C. Natural Gas Supply Pressure

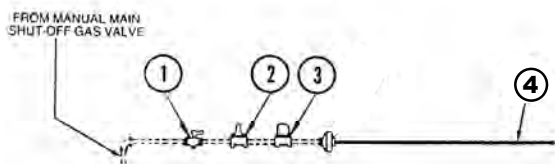
Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Boiler Size
10	511-048-502	Combination Gas Control Valve, 1¼" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, ⅛" N.P.T. Downstream Pressure Tapping	Honeywell	V4944N1029	8 -10
	511-048-501	Combination Gas Control Valve, 1½" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, ⅛" N.P.T. Downstream Pressure Tapping	Honeywell	V4944N1037	11-13
	511-048-500	Combination Gas Control Valve, 2" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, ⅛" N.P.T. Downstream Pressure Tapping	Honeywell	V4944N1045	14-23
11	511-624-555	High Gas Pressure Switch, SPDT, Manual Reset, Lockout On Pressure Rise, Diaphragm Type, 3.0- 21.0" W.C. Range, 1.0-3.0" W.C. Differential, ¼" N.P.T. Female Connector, ⅛" N.P.T. Female Vent Connector, With Switch Position Indicator	Honeywell	C645B1013	All Sizes
3,7	Not Available From Weil Mclain	Hydromotor Gas Valve Body, With Parabolic Guide 1 ¼" N.P.T. Rated For Closure Against 5.0 PSIG Inlet Pressure, ¼" N.P.T. Female Downstream Pressure Tapping	ASCO	V710GASV	8
	510-744-332	Hydramotor Gas Valve Body, With Parabolic Guide 1½" N.P.T., Rated For Closure Against 5.0 PSIG Inlet Pressure, ¼" N.P.T. Female Downstream Pressure Tapping	ASCO	V710HASV	11-13
	510-744-334	Hydramotor Gas Valve Body, With Parabolic Guide, 2" N.P.T., Rated For Closure Against 5.0 PSIG Inlet Pressure, ¼" N.P.T. Female Downstream Pressure Tapping	ASCO	V710JASV	14-23
4,8	Not Available From Weil Mclain	Hydramotor Gas Valve Actuator, 120 Volt, 13 Second Opening Time, On/Off	ASCO	AH2B112A10	All Sizes
		Hydramotor Gas Valve Actuator, 120 Volt, Low/High/Off	ASCO	AH4B112A4	All Sizes
5	511-046-340	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, ¾" N.P.T.	ASCO	S262SA02N3RG5	6-13
	511-046-342	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, 1" N.P.T.	ASCO	S262SA02N3FJ5	14-23
6	511-210-415	Test Cock, ¼" N.P.T.	Conbraco	41-560-05	All Sizes

LGB - Series 1
IRI / FM Main Gas Control Train Parts Continued
For 7.0" W.C. Natural Gas Supply Pressure

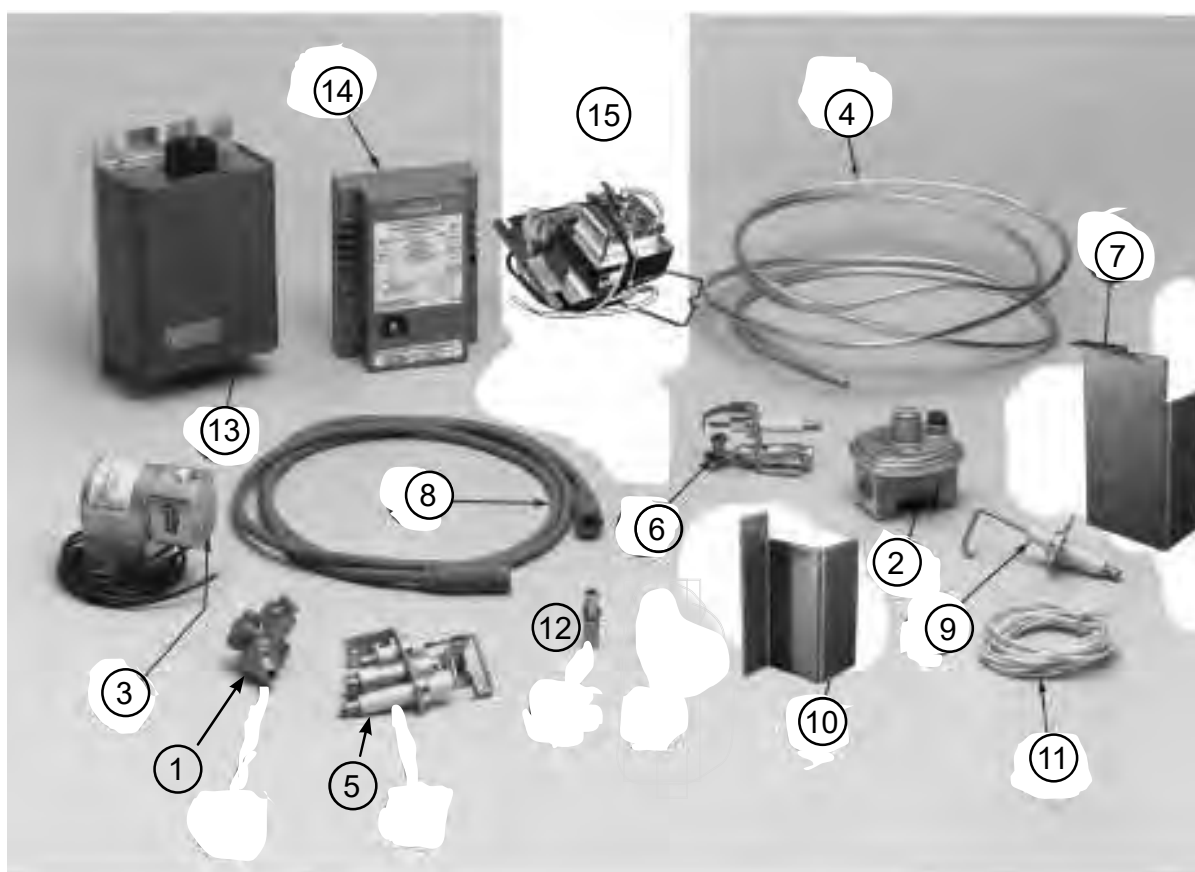
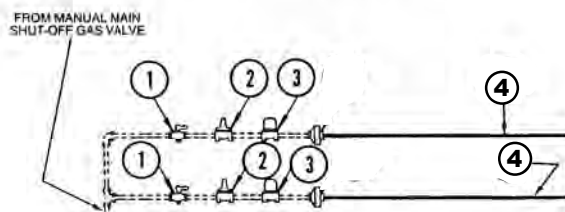
Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Boiler Size
10	511-048-503	Combination Gas Control Valve, 1" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V4944N1011	6-7
	511-048-502	Combination Gas Control Valve, 1 1/4" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V4944N1029	8-10
	511-048-501	Combination Gas Control Valve, 1 1/2" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V4944N1037	11-13
	511-048-500	Combination Gas Control Valve, 2" N.P.T., 120 Volt, With Low Fire Operator, High Fire Operator, and Main Pressure Regulator, 1/8" N.P.T. Downstream Pressure Tapping	Honeywell	V4944N1045	14-23
8	511-624-555	High Gas Pressure Switch, SPDT, Manual Reset, Lockout On Pressure Rise, Diaphragm Type, 3.0-21.0" W.C. Range, 1.0-3.0" W.C. Differential, 1/4" N.P.T. Female Connector, 1/8" N.P.T. Female Vent Connector, With Switch Position Indicator	Honeywell	C645B1013	All Sizes
N/S	510-933-197	Regulator 1"	Maxitrol	RV61	6-7
	510-933-199	Regulator 1 1/4"	Maxitrol	RV81	8-10
	510-933-201	Regulator 1 1/2"	Maxitrol	RV81	11-13
		Regulator 2"	Maxitrol	RV91	14-23

LGB - Series 1 -Universal Control System - Natural Gas IRI / FM Pilot Gas Control Train / Flame Sensing Parts

**IRA AND FM
PILOT TRAIN GAS PIPING DIAGRAM
LGB-6 THROUGH LGB-12 BOILERS**



**IRA AND FM
PILOT TRAIN GAS PIPING DIAGRAM
LGB-13 THROUGH LGB-23 BOILERS**



LGB - Series 1 - Universal Control System - Natural Gas IRI / FM Pilot Gas Control Train / Flame Sensing Parts

Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Qty Per Boiler Size	
					6-12	13-23
IRI And FM Pilot Line Gas Train Components						
1	511-246-345	Pilot Line Manual Shut-off Gas Valve, ¼" N.P.T. Male x ¼" N.P.T. Female	Conbraco	53-300-01	1	2
2	510-933-195	Pilot Line Gas Pressure Regulating Valve, 3.5-7.0" W.C. Outlet Adjustment Range, ¼" N.P.T.	Maxitrol	RV20VL-22	1	2
3	511-044-040	Pilot Line Solenoid Gas Valve, Quick Opening, 120 Volt, ¼" N.P.T.	Johnson	H91ABA-12C	1	2
4	560-742-915	Pilot Line Aluminum Tubing, ¼" O.D. x 100" Coil	Weil-McLain		1	2
IRI And FM Pilots, Flame Sensing And Ignition Components						
5	511-330-181	Combination Pilot Burner With Fame Rod, Ignition Electrode, and Natural Gas Orifice, 0.026" Dia.	Honeywell	Q179C1009	1	1
6	511-330-170	Combination Pilot Burner With Ignition Sensing Electrode, Natural Gas Orifice and Ignition Wire	Honeywell	Q348A1002		1
7	460-005-624	Combination Pilot Burner Mounting Bracket	Weil-McLain		1	2
8	591-391-798	Ignition Cable, 36" Long, For Q179C Pilot	Weil-McLain		1	1
9	511-724-274	Main Fame Sensor	Honeywell	MH 392956	1	1
10	423-300-420	Main Fame Sensor Mounting Bracket	Weil-McLain		1	1
11	590-849-236	Flame Rod Cable For Main Fame Sensor and Q179C Pilot (Feet Required)	Honeywell	R129 8020	4'	4'
12	591-850-140	Rajah Connector, Female (Connects Sensing Cable To Q179C Pilot)	Weil-McLain		1	1
13	511-802-625	Solid State Ignition Transformer, 120 Volt/6,000 Volt	Dongan	AO6-SA-6	1	1
14	510-811-456	S86H Conversion to UCS Kit (Includes: Control Panel, 2 Ignition/Sensing Control Modules, Pilot Burner Assembly, Wiring Harness and Ignition Cable)			-	1
15	510-312-166	Control Transformer/Relay Receptacle 120/24 Volt, 40 VA, Plate Mounted, for Universal Control System (UCS) Ignition Sensing Control	Honeywell	AT72 H1002	-	1
			White-Rodgers	599-9002	-	1

LGB - Series 1 - Universal Control System - Natural Gas Pilot / Flame Sensing Control Parts

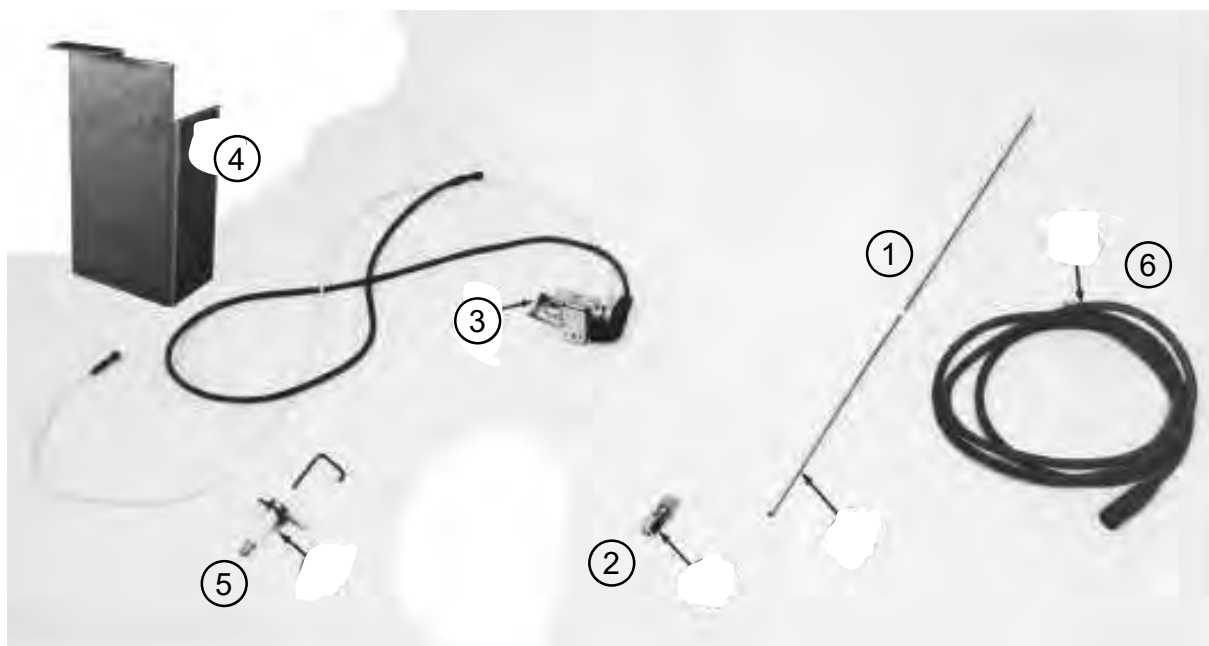


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	6-12	13-23
1	560-742-880	Pilot Line Aluminum Tubing, 1/4" Dia. x 2" Long			1	2
2	561-643-450	Pilot Line Union, 1/4" CC (Purchase Locally)	Weil-McLain		1	2
3	511-330-221	NG PIN Pilot Burner Assembly With Pilot Burner, Orifice, Sensing Lead and Ignition Cable	PSE	PSE-NA16	1	2
4	460-005-624	Combination Pilot Burner Mounting Bracket	Weil-McLain		1	2
5	511-724-274	Main Flame Sensor	Honeywell	MH 392956	1	2
6	591-391-790	Sensing Cable For Main Flame Sensor, 36" Long	Ristance	180749	1	2

LGB - Series 1 - Natural Gas
 Flame Guardian® WFG Electronic Control System
 Ignition / Sensing Control Module Parts

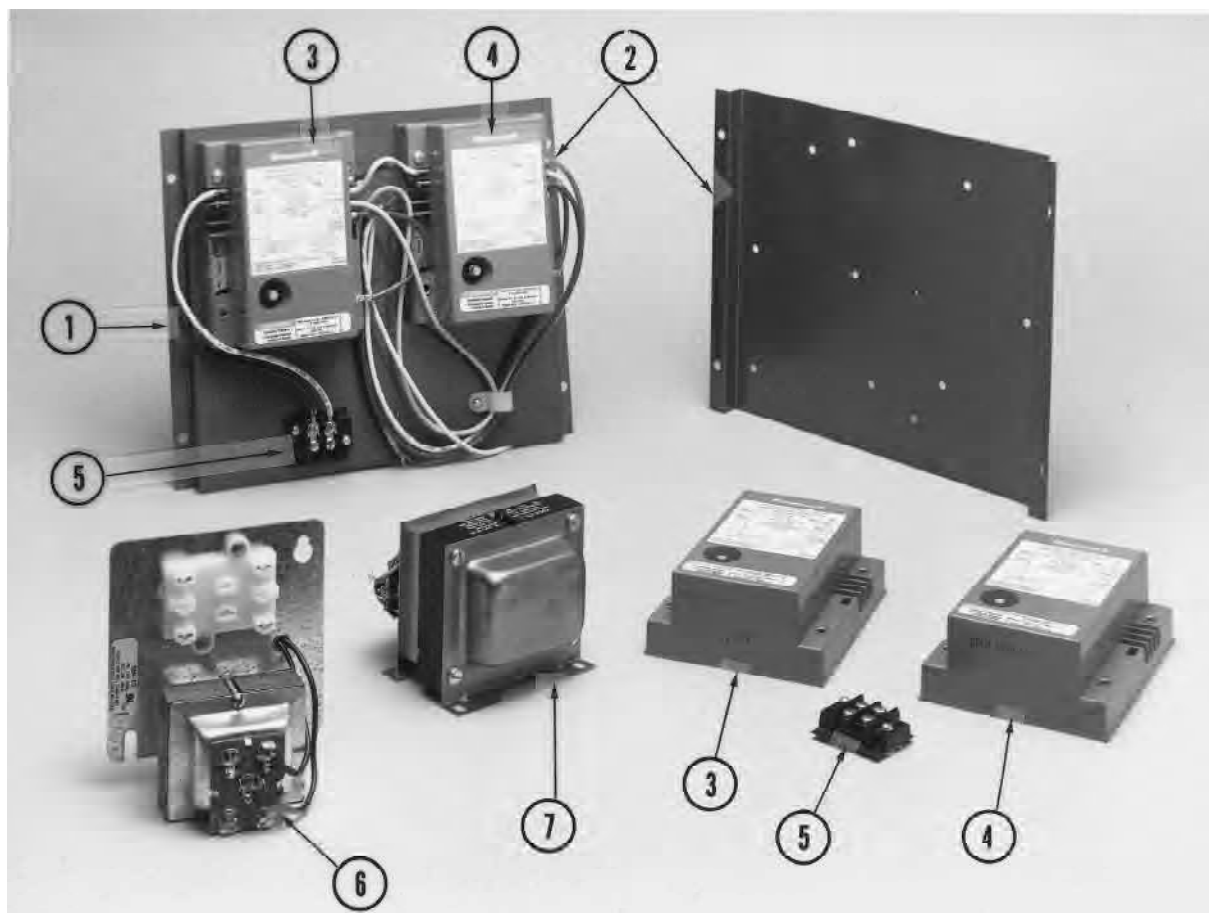


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	Quantity/ Boiler Base
1	510-811-456	Flame Guardian WFG Ignition/Sensing Control Module (Complete) Conversion Kit From Honeywell S86H To Universal Control System	Weil-McLain		1,2
2	450-003-593	Mounting System	Weil-McLain		1,2
3 & 4	511-330-097	Pilot Proving Ignition/Sensing Control Module, 24 Volt	Universal Technology	1003-511	1,2
5	512-050-013	Terminal Block	Weil-McLain		1,2
6	510-312-166	Combination Transformer-Relay Receptacle, 120/24 Volt, 40VA, Plate Mounted	White-Rodgers	599-9002	1
			Honeywell	AT72 H1002	1
7	511-842-364	Control Transformer, 120/24 Volt, 75 VA, Foot Mounted With Circuit Breaker	Johnson Controls	Y66AUD-1C	1
			Honeywell	AT175C1004	1

LGB - Series 1 - Natural Gas Gas Pressure Switch / Accessory Parts

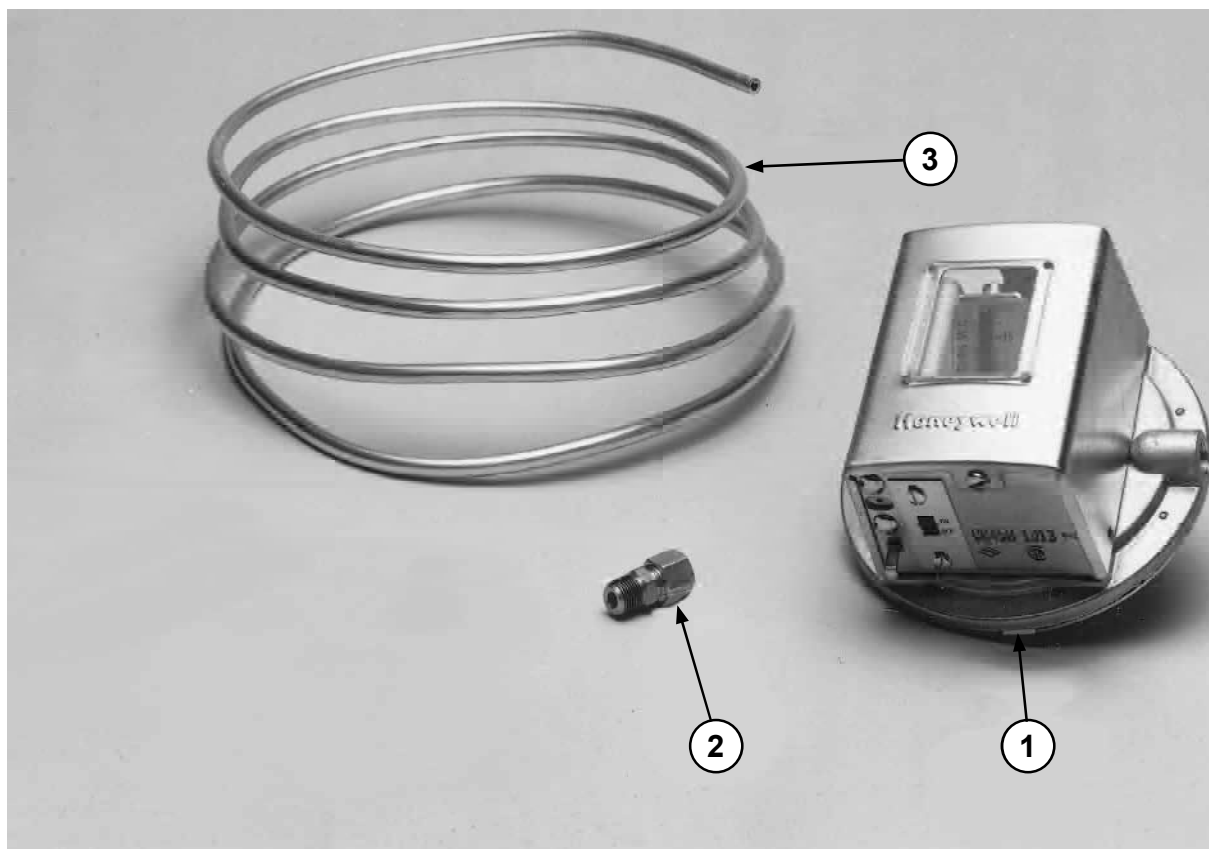


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.
1	511-624-555	High Gas Pressure Switch, SPDT, Manual Reset, Lockout On Pressure Rise, Diaphragm Type 3.0-21.0" W.C. Range, 1.0-3.0" W.C. Differential, 1/4" N.P.T. Female Vent Connector, With Switch Position Indicator (2 Required For LGB-21 Through LGB-23)	Honeywell	C645B1013
2	561-643-451	Union, 1/8" Male N.P.T. x 1/4" CC (4 Required For LGB-21 Through LGB-23) (Purchase Locally)	Weil-McLain	
3	560-742-915	Aluminum Tubing, 1/4" O.D. x 100" Roll	Weil-McLain	
N/S	511-330-229	Pilot Switch Box - Replaces WR 3048-25 - Must Add Thermocouple	Johnson	L626B-3C