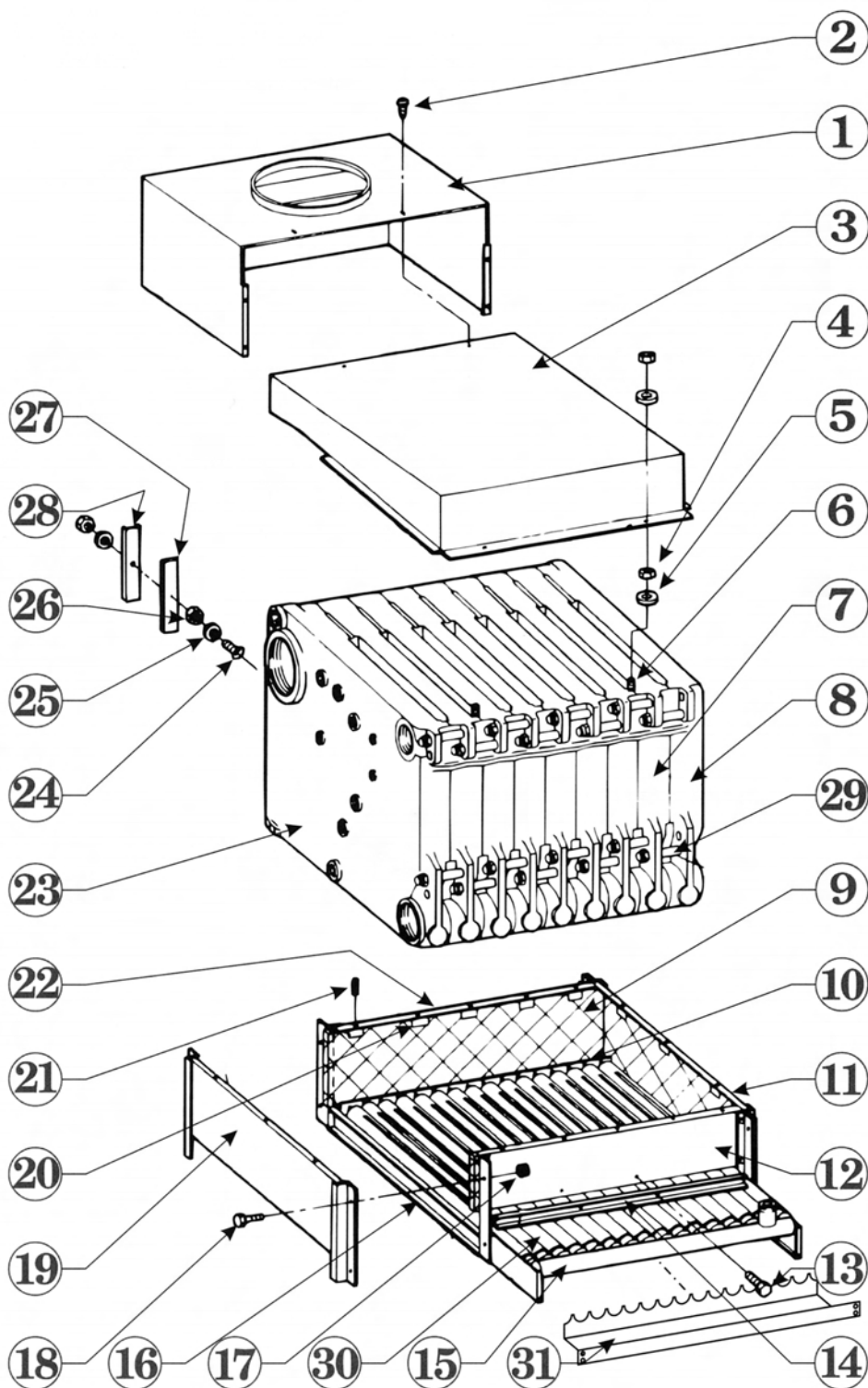


LGB Series 1 & 2 Section And Base Assembly



GAS

Base Insulation Table

Base Size (Note 1)	Base Insulation Size (Note 2)
4	4
5	5
A	A
B	B
C	C
D	A and K
E	B and K
F	A and J
G	B and J

Notes:

1. See page 267, **Base Arrangement Table**, to determine base size for your boiler.
2. Contains 1 each front and back.

LGB Series 1 & 2 Section And Base Assembly

Fig. No.	Part No.	Size	Description	Notes
	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 (next page)	
1	443-300-099	5	Horizontal Draft Hood, See Table 1 (next page)	
1	443-300-100	A	Horizontal Draft Hood, See Table 1 (next page)	
1	443-300-101	B	Horizontal Draft Hood, See Table 1 (next page)	
1	443-300-102	C	Horizontal Draft Hood, See Table 1 (next page)	
1	443-300-103	D	Horizontal Draft Hood, See Table 1 (next page)	
1	443-300-104	E	Horizontal Draft Hood, See Table 1 (next page)	
1	443-300-105	F	Horizontal Draft Hood, See Table 1 (next page)	
1	443-300-106	G	Horizontal Draft Hood, See Table 1 (next page)	
2	Available locally		Screw, Philips # 10 x 1/2"	
3	450-019-858	4	Horizontal Collector Hood, See Table 1 (next page)	
3	450-019-859	5	Horizontal Collector Hood, See Table 1 (next page)	
3	450-019-851	A	Horizontal Collector Hood, See Table 1 (next page)	
3	450-019-852	B	Horizontal Collector Hood, See Table 1 (next page)	
3	450-019-853	C	Horizontal Collector Hood, See Table 1 (next page)	
3	450-019-854	D	Horizontal Collector Hood, See Table 1 (next page)	
3	450-019-855	E	Horizontal Collector Hood, See Table 1 (next page)	
3	450-019-856	F	Horizontal Collector Hood, See Table 1 (next page)	
3	450-019-857	G	Horizontal Collector Hood, See Table 1 (next page)	
	591-602-913		Retort Cement (Collector Hood and Base Seal)	
4	Available locally		Hex Nut, Regular 1/4" -20	
5	Available locally		Washer, Plain 1/4"	
6	Available locally		Carriage Bolt, 1/4" - 20 x 1 1/2"	
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.	
	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	
9		4	Base Front and Back Insulation, See Tables 1 & 2 (next page)	
9		5	Base Front and Back Insulation, See Tables 1 & 2 (next page)	
9		A	Base Front and Back Insulation, See Tables 1 & 2 (next page)	
9		B	Base Front and Back Insulation, See Tables 1 & 2 (next page)	
9		C	Base Front and Back Insulation, See Tables 1 & 2 (next page)	
9		J	Base Front and Back Insulation, See Tables 1 & 2 (next page)	
9		K	Base Front and Back Insulation, See Tables 1 & 2 (next page)	
	591-221-126		Insulation End Panels, Left and Right	
10	450-003-600	4	Burner Rest, See Table 1 (next page)	
10	450-003-601	5	Burner Rest, See Table 1 (next page)	
10	450-003-560	A	Burner Rest, See Table 1 (next page)	
10	450-003-561	B	Burner Rest, See Table 1 (next page)	
10	450-003-562	C	Burner Rest, See Table 1 (next page)	
10	450-003-563	D	Burner Rest, See Table 1 (next page)	
10	450-003-564	E	Burner Rest, See Table 1 (next page)	
10	450-003-565	F	Burner Rest, See Table 1 (next page)	
10	450-003-566	G	Burner Rest, See Table 1 (next page)	
	450-003-602	4	Burner Stop, See Table 1 (next page)	
	450-003-603	5	Burner Stop, See Table 1 (next page)	
	450-003-568	A	Burner Stop, See Table 1 (next page)	
	450-003-569	B	Burner Stop, See Table 1 (next page)	
	450-003-570	C	Burner Stop, See Table 1 (next page)	
	450-003-571	D	Burner Stop, See Table 1 (next page)	
	450-003-572	E	Burner Stop, See Table 1 (next page)	
	450-003-573	F	Burner Stop, See Table 1 (next page)	
	450-003-574	G	Burner Stop, Size G, See Table 1 (next page)	
	450-003-604	4	Combustion Air Baffle for Base, See Table 1 (next page)	

LGB Series 1 & 2 Section And Base Assembly

	450-003-605	5	Combustion Air Baffle for Base, See Table 1	
	450-003-575	A	Combustion Air Baffle for Base, See Table 1	
	450-003-576	B	Combustion Air Baffle for Base, See Table 1	
	450-003-577	C	Combustion Air Baffle for Base, See Table 1	
	450-003-578	D	Combustion Air Baffle for Base, See Table 1	
	450-003-579	E	Combustion Air Baffle for Base, See Table 1	
	450-003-580	F	Combustion Air Baffle for Base, See Table 1	
	450-003-581	G	Combustion Air Baffle for Base, See Table 1	
11, 19	383-300-165		Base End Panel	
	591-221-126		Insulation End Panels, Left and Right	
	450-003-589		Right Hand Base Leg	
	450-003-590		Left Hand Base Leg	
12	450-003-543	4	Base Front Panel, See Table 1	
12	450-003-544	5	Base Front Panel, See Table 1	
12	450-003-545	A	Base Front Panel, See Table 1	
12	450-003-546	B	Base Front Panel, See Table 1	
12	450-003-547	C	Base Front Panel, See Table 1	
12	450-003-548	D	Base Front Panel, See Table 1	
12	450-003-549	E	Base Front Panel, See Table 1	
12	450-003-550	F	Base Front Panel, See Table 1	
12	450-003-551	G	Base Front Panel, See Table 1	
13	Available Locally		Screw, Hex Washer Head Slotted 10-32 x 3/8"	
14	450-003-606	4	Base Access Shield, See Table 1	
14	450-003-607	5	Base Access Shield, See Table 1	
14	450-003-582	A	Base Access Shield, See Table 1	
14	450-003-583	B	Base Access Shield, See Table 1	
14	450-003-584	C	Base Access Shield, See Table 1	
14	450-003-585	D	Base Access Shield, See Table 1	
14	450-003-586	E	Base Access Shield, See Table 1	
14	450-003-587	F	Base Access Shield, See Table 1	
14	450-003-588	G	Base Access Shield, See Table 1	
15	591-125-908	4	Manifold, See Table 1	
15	591-125-909	5	Manifold, See Table 1	
15	591-125-910	A	Manifold, See Table 1	
15	591-125-911	B	Manifold, See Table 1	
15	591-125-912	C	Manifold, See Table 1	
15	591-125-913	D	Manifold, See Table 1	
15	591-125-914	E	Manifold, See Table 1	
15	591-125-915	F	Manifold, See Table 1	
15	591-125-916	G	Manifold, See Table 1	
16	450-003-567		Base Cross Tie	
17	Available Locally		Nut, Flange whiz-Lock 1/4" – 20	
18	Available Locally		Screw, Hex Head Cap 1/4" – 20 x 3/4"	
20	562-650-104		Support Clip for Base Insulation	
21	562-930-236		Roll Pin 1/8 x 2"	
22	450-003-598	4	Base Back Panel, See Table 1	
22	450-003-599	5	Base Back Panel, See Table 1	
22	450-003-553	A	Base Back Panel, See Table 1	
22	450-003-554	B	Base Back Panel, See Table 1	
22	450-003-555	C	Base Back Panel, See Table 1	
22	450-003-556	D	Base Back Panel, See Table 1	
22	450-003-557	E	Base Back Panel, See Table 1	
22	450-003-558	F	Base Back Panel, See Table 1	
22	450-003-559	G	Base Back Panel, See Table 1	
23	313-300-109		Left Hand End Section – 3314 – 80 P.S.I.	
24	Available Locally		Carriage Bolt, 1/4" – 20 x 1 3/4"	
25	Available Locally		Washer, Plain 1/4"	

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.

Also on the bottom of page 261 in the lower right of Table 2, the K's are replaced with an E and the J's are replaced with a D.

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

Item	Part Number	Size	Description
9	591-221-330	4	Base insulation front (See tables 1 & 2, next page)
9	591-221-331	4	Base insulation rear (See tables 1 & 2, next page)
9	591-221-332	5	Base insulation front (See tables 1 & 2, next page)
9	591-221-333	5	Base insulation rear (See tables 1 & 2, next page)
9	591-221-334	A	Base insulation front (See tables 1 & 2, next page)
9	591-221-335	A	Base insulation rear (See tables 1 & 2, next page)
9	591-221-336	B	Base insulation front (See tables 1 & 2, next page)
9	591-221-337	B	Base insulation rear (See tables 1 & 2, next page)
9	591-221-338	C	Base insulation front (See tables 1 & 2, next page)
9	591-221-339	C	Base insulation rear (See tables 1 & 2, next page)
9	591-221-340	D	Base insulation front (See tables 1 & 2, next page)
9	591-221-341	D	Base insulation rear (See tables 1 & 2, next page)
9	591-221-342	E	Base insulation front (See tables 1 & 2, next page)
9	591-221-343	E	Base insulation rear (See tables 1 & 2, next page)

LGB Series 1 & 2 Section And Base Assembly

26	Available Locally		Hex Nut, Regular 1/4" – 20	
27	591-221-115		Cleanout Plate Insulation 3 x 10 1/2 x 1/2 (1 per joint)	
28	450-029-549		Cleanout Plate (1 per joint)	
29	560-134-480		5/8-11 x 8" Draw Rod w/o Nut (3 req'd per joint)	
	561-928-224		5/8-11" Nut (2 per draw rod)	
	562-248-710		5/8" Washer (1 per draw rod)	
	590-735-140		1/2" Dia Sealing Rope (5' per joint) – Type HD-500	
	591-641-850		Construction Adhesive for Sealing Rope (11 oz. Tube)	
30	512-200-050		Burner, Tubular Steel, Regular	
	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	
31	450-003-352	5	Burner shield, See Table 1	
31	450-003-354	A	Burner shield, See Table 1	
31	450-003-356	B	Burner shield, See Table 1	
31	450-003-358	C	Burner shield, See Table 1	
31	450-003-360	D	Burner shield, See Table 1	
31	450-003-362	E	Burner shield, See Table 1	
31	450-003-364	F	Burner shield, See Table 1	
31	450-003-366	G	Burner shield, See Table 1	
	383-300-405		Section Assembly Kit, 1 required for each joint	

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

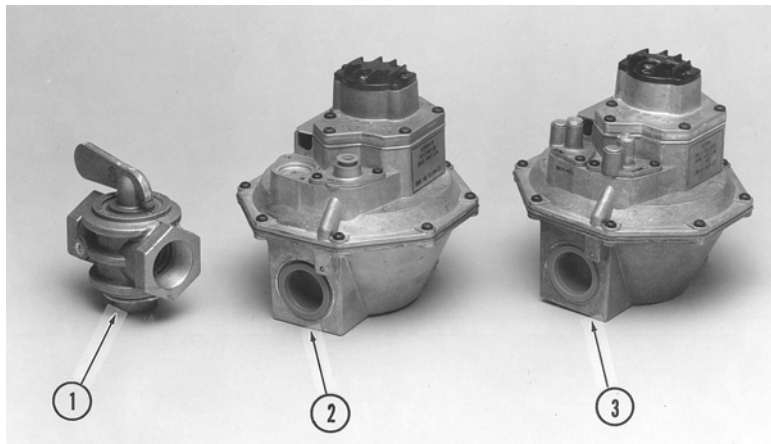
Size Designator	Base Front and Back Insulation	
	Designator	Designator
4	4	-
5	5	-
A	A	-
B	B	-
C	C	-
D	A	E
E	B	E
F	A	D
G	B	D

NOTE: Refer to Table 1 to Key Size Designator According to Boiler Size.

LGB Series 2

Main Gas Control Train Components

Natural Gas



TO SELECT PARTS: Determine control train for proper LGB boiler size from Table 1.
Refer to Table 2 for individual components and sizes.

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 Pressure	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	CD	EFG	H	I	J	K	L	AB	CD	E	FG	H	I	J	K
1	Manual Main Shut-Off Gas Valve, 1" N.P.T.	X	X		X	X	X	X						X	X	X	X
	Manual Main Shut-Off Gas Valve, 1 1/4" N.P.T.			X				X	X	X	X			X	X	X	X
	Manual Main Shut-Off Gas Valve, 1 1/2" N.P.T.											X				X	X
	Manual Main Shut-Off Gas Valve, 2" N.P.T.												X				X
2	Safety Gas Valve, 1" N.P.T.	X	X		X	X	X	X									
	Safety Gas Valve, 1 1/4" N.P.T.			X					X	X	X			X	X	X	X
	Safety Gas Valve, 1 1/2" N.P.T.											X	X			X	X
3	Combination Gas Control Valve, 1" N.P.T.	X	X		X	X	X	X									
	Combination Gas Control Valve, 1 1/4" N.P.T.			X					X	X	X			X	X	X	X
	Combination Gas Control Valve, 1 1/2" N.P.T.											X	X			X	X

Main Gas Control Train Components Universal Control System - Natural Gas LGB (Series 2)

Fig #	Part No.	Description	Mfg.	Mfg's Part No.
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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
	511-246-325	Manual – Main Shut-Off Gas Valve, 1" N.P.T., with Downstream Pressure Tapping, 1/8" N.P.T.	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
	511-246-330	Manual – Main Shut-Off Gas Valve, 1 1/4" N.P.T., with Downstream Pressure Tapping, 1/8" N.P.T.	Key	224-142111
	511-246-300	Manual – Main Shut-Off Gas Valve, 1" 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	V8943A-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

NS	511-044-287	Gas Valve, 1" N.P.T., 24 Volt, with 1/8" N.P.T. and 1/8" N.P.T. Downstream Pressure Tapping, LGB-4 & 5 only, Robertshaw 7000 DERHC-S7C	Grayson	5N6-501-723
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Gas Pressure Switch and Accessories

	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
	511-624-556	Gas Pressure Switch Mounting Bracket Assembly for C645 (2 Required for LGB-21 through LGB-23)	Honeywell	15865AC
	561-643-451	Union, 1/8" Male N.P.T. x 1/4" CC (4 Required for LGB-21 through LGB-23)	Weil-McLain	
	560-742-915	Aluminum Tubing, 1/4" O.D. x 100" Roll	Weil-McLain	

NOTES

GAS

LGB Series 2 Pilot and Flame Sensor

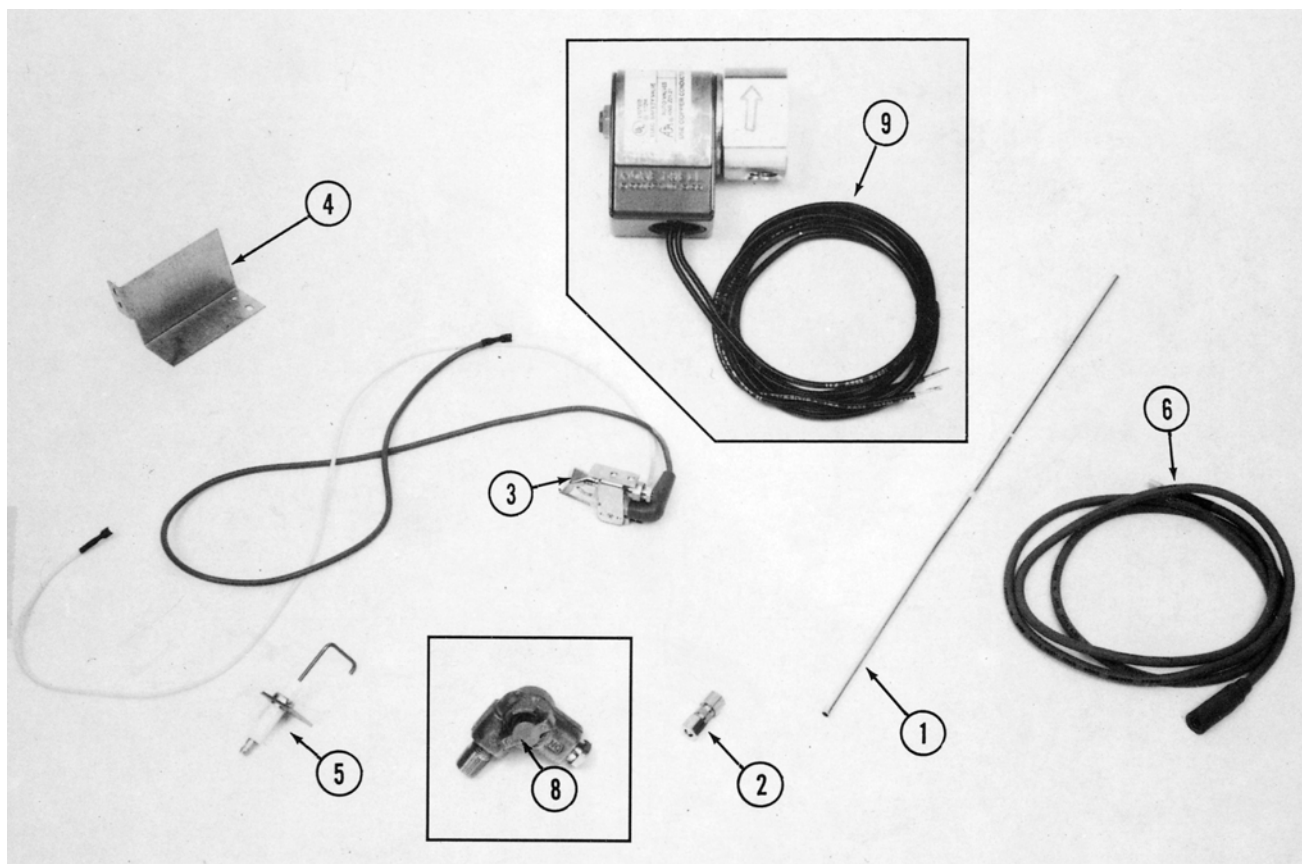


Fig. No.	Part No.	Description	Mfg.	Mfg.'s Part No.	4-5	6-12	13-23
LGB PILOTS AND FLAME SENSOR							
1	560-742-880	Pilot Line Aluminum Tubing, 2 pieces required, 1/4" Dia. X 20" Long	Weil-McLain			1	2
2	561-643-450	Pilot Line Union, 1/4" CC	Weil-McLain			1	2
3N	511-330-221	Pilot Assy Kit with orifice, and pilot tube fitting	PSE	PSE-NA16	1	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, 72" Long	Ristance	180749		1	2
7	423-300-420	Main Flame Sensor Mounting Bracket	Weil-McLain			1	2
8	511-246-340	Manual Shut-Off Pilot Gas Valve, 1/8" N.P.T. x 1/4" CC	Conbraco	56-603-01		1	2
9	511-044-039	Pilot Line Solenoid Gas Valve, 1/4" N.P.T., 24 Volt	Key	P2R		1	2
			Honeywell	V8046C1014			
9	511-044-039	Pilot Line Solenoid Gas Valve, 1/4" N.P.T., 24 Volt	Johnson Controls	H91ABG-5C		1	2
			Grayson	5N6-501-723	1		
NS	511-044-287	Gas Valve, 1" N.P.T., Robertshaw 7000DERHC-S7C	Grayson	5N6-501-723	1		

LGB Series 2 Propane Gas

Adds Constant Burning, Thermally Supervised Pilot to Standard Controls

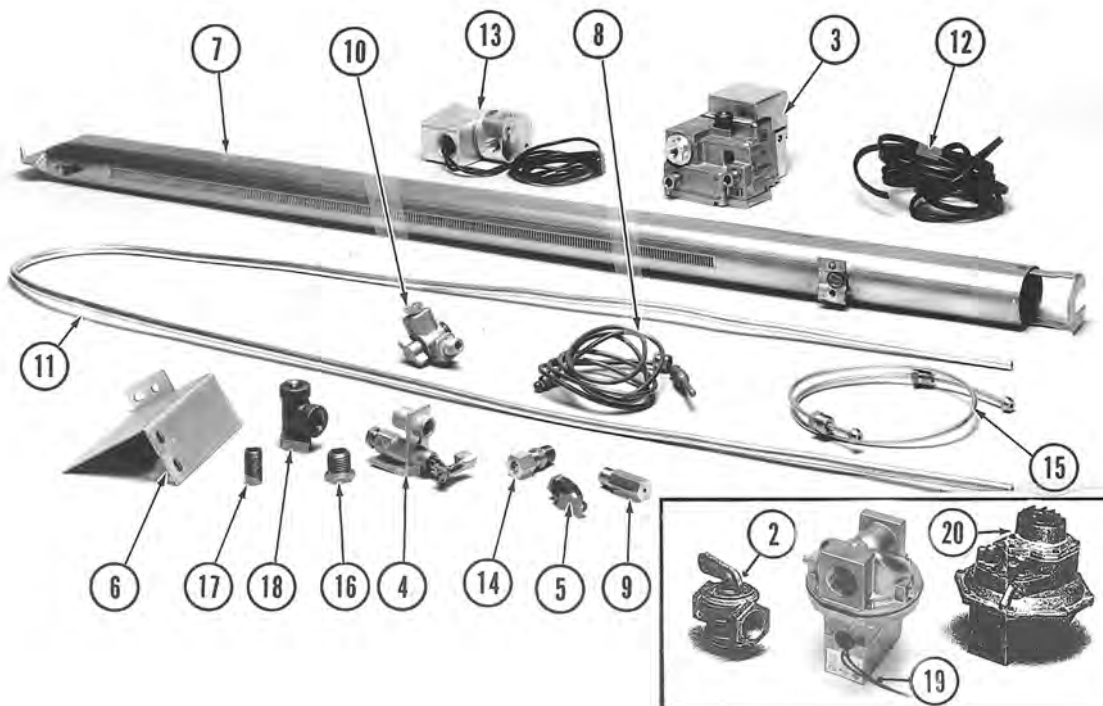


Fig. No.	Part No.	Description	Mfg.	Mfg.'s Part No.
2	511-246-325	Manual Main Shut-Off Gas Valve, 1" N.P.T.	Conbraco	50-403-02
			Key	223-142111
2	511-246-330	Manual Main Shut-Off Gas Valve, 1 1/4" N.P.T.	Conbraco	50-503-06
			Key	224-142111
3	511-330-229	Pilot Switch Box with built-In Pilot Filter, 1/4" CC Inlet and Outlet	Johnson Controls	L62GB-3C
4	511-330-186	Pilot Burner, Constant Burning, Thermally Supervised	Honeywell	Q327A1642
	383-300-410	Standing Pilot Burner Repair Kit, Propane, Includes pilot burner and orifice		
NS	511-330-222	Electronic Pilot Burner with spark and sense rod, Propane	PSE	LP-16
5	560-528-957	Propane Pilot Orifice, 0.010 Dia., for Q327A	Honeywell	388146KR
6	460-005-624	Pilot Mounting Bracket for both pilot burners	Weil-McLain	
7	512-200-055	LGB Main Burner with Pilot Bracket	Weil-McLain	
8	511-724-245	Thermocouple, 48" Long, for Q327A Pilot	Honeywell	Q309A2010
9	560-528-976	LGB Main Burner Orifice, 2.40 mm for Propane	Weil-McLain	
10	511-246-340	Manual Shut-Off Pilot Gas Valve, 1/8" N.P.T. x 1/4" CC	Conbraco	
			Key	P2R
11	560-742-880	Pilot Line Aluminum Tubing, 1/4" O.D. x 20" (2 pieces required)	Weil-McLain	
12	590-849-220	Control Circuit Wiring, 18 Gauge (Feet Required)	Weil-McLain	
13	511-044-039	Pilot Line Solenoid Gas Valve, 1/4" N.P.T., 24 Volt	Honeywell	V8046C1014
			Johnson	H91ABG-5C
14	561-643-450	Union, 1/4" CC, Brass	Weil-McLain	
15	560-742-860	Bleed Line Aluminum Tubing, 1/8" O.D. x 22 3/4" Long	Weil-McLain	
16	560-807-360	Bushing, Black 1/4" N.P.T. x 1/8"	Weil-McLain	
17	561-326-200	Nipple, Black 1/8" N.P.T. Close	Weil-McLain	
18	561-541-199	Tee, Black 1/8" N.P.T.	Weil-McLain	
19	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	
20	511-044-346	Combination Gas Valve, 1" N.P.T., Propane	Honeywell	V8944L1033
	511-044-218	Combination Gas Valve, 1 1/4" N.P.T., Propane	Honeywell	V8944L1041
NS	511-044-279	Combination Gas Valve, 1" N.P.T. Propane 7000DERHC-LP, LGB 4-5 only	Robertshaw	5N6-502-789

LGB Series 2 Universal Control System and CSD-1 Controls

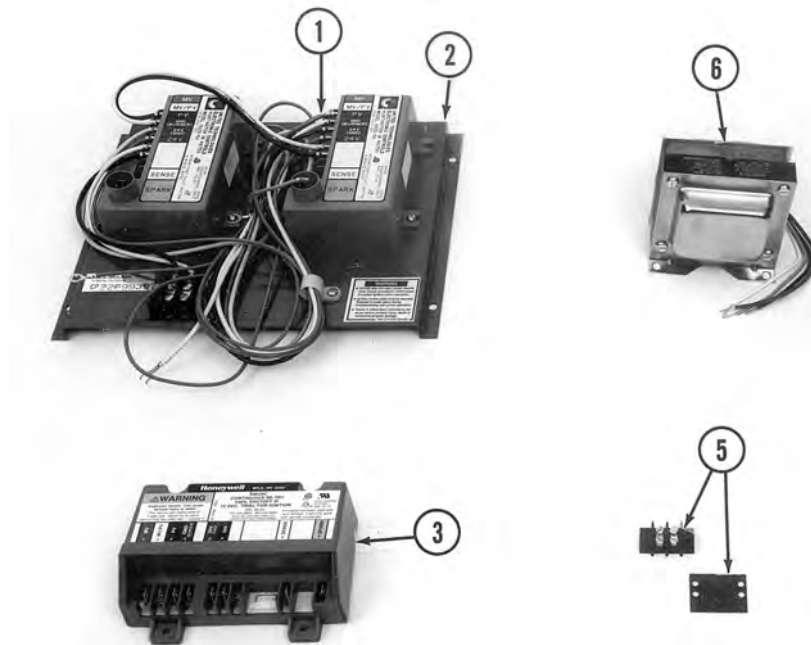


Fig. No.	Part No.	Description	Mfg.	Mfg.'s Part No.	Qty Per Boiler Size		
UNIVERSAL CONTROLS IGNITION/SENSING CONTROL MODULES					4-5	6-12	13-23
2	511-330-097	Flame Sense Module, 24 Volt	UT	1003-611	1	1	2
1	510-811-456	Universal Control System (UCS) Ignition/Sensing Control Module, Complete	Weil-McLain				
3	511-330-097	Intermittent Pilot Ignition Module, 24 Volt	UT	1003-611		1	2
5	512-050-013	Terminal Block	Weil-McLain		1	1	2
6	511-842-364	Control Transformer, 120/24 Volt, 75 VA Foot Mounted	Honeywell	AT175C1004	1	1	2
			Johnson Controls	Y66ACD-1C			

CSD-1 CONTROLS					5	6-12	13-20
NS	511-330-086	Pilot Proving Module	United Technologies	1003-615	1	1	2
NS	511-330-085	Main Flame Proving Module	United Technologies	1003-60	1	1	2
NS	510-350-226	Impulse Relay	Potter Brumfield	S89R-11 ABD1-24	1	1	2
NS	511-624-580	Push Button Switch	Honeywell	AML21CBA2AA	1	1	2
			Eaton Controls	ZZ1K11810K			
NS	511-624-581	Lens Cover	Honeywell	AML51-C10R	1	1	2
			Eaton Controls	ZZ0PM0ZA	1	1	2
NS	Available Locally	Light Bulb	Texas Instruments	3/4 #85	1	1	2
NS	510-933-195	Pilot Regulator					

GAS



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LGB Series 2

IRI and FM Control System

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, 1/4" N.P.T. Male x 1/4" 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, 1/4" N.P.T.	Maxitrol	RV20VL-22	1	2
3	511-044-040	Pilot Line Solenoid Gas Valve, Quick Opening, 120 Volt, 1/4" N.P.T.	Johnson	H91ABA-12C	1	2
6	560-742-915	Pilot Line Aluminum Tubing, 1/4" O.D. x 100" Coil	Weil-McLain		1	2
IRI AND FM PILOTS, FLAME SENSING AND IGNITION COMPONENTS						
7	511-330-181	Combination Pilot Burner with Flame Rod, Ignition Electrode, and Natural Gas Orifice, 0.026" Dia.	Honeywell	Q179C 1009	1	1
8	511-330-221	Combination Pilot Burner with Ignition Sensing Electrode, Natural Gas Orifice and Ignition Wire	PSE	NA-16		1
9	460-005-624	Combination Pilot Burner Mounting Bracket	Weil-McLain		1	2
10	591-850-140	Rajah Connector, Female, Connects Sensing Cable to Q179C Pilot	Weil-McLain		1	1
11	591-391-798	Ignition Cable, 36" Long, for Q179C Pilot	Weil-McLain		1	1
12	511-724-274	Main Flame Sensor	Honeywell	MH 392956	1	1
13	423-300-420	Main Flame Sensor Mounting Bracket	Weil-McLain		1	1
14	590-849-236	Flame Rod Cable for Main Flame Sensor and Q179C Pilot (Feet Required)	Honeywell	R129 8020	4'	4'
15	511-802-014	Solid State Ignition Spark Generator, 120 Volt/15,000 Volt, 66VA Primary	Honeywell	Q624 A1014	1	1
16	511-330-097	Pilot Proving Ignition/Sensing Control Module, 24 Volt, Q348A Pilot	Honeywell	S8620 C1003	-	1
16	511-330-097	Pilot Proving Ignition/Sensing Control Module, 24 Volt, Q348A Pilot	United Technologies	1003-511	-	1
17	510-312-162	Control Transformer/Relay Receptacle 120/24 Volt, 40 VA, Plate Mounted, for Universal Control System (UCS) Ignition Sensing Control	Honeywell	AT72 H1002	-	1
17	510-312-162	Control Transformer/Relay Receptacle 120/24 Volt, 40 VA, Plate Mounted, for Universal Control System (UCS) Ignition Sensing Control	White-Rodgers	S84-19	-	1
17	510-312-162	Control Transformer/Relay Receptacle 120/24 Volt, 40 VA, Plate Mounted, for Universal Control System (UCS) Ignition Sensing Control	White-Rodgers	599-9002	-	1

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LGB Series 2

IRI and FM Main Gas Control Train Components

For 7" W.C. Natural Gas Supply Pressure

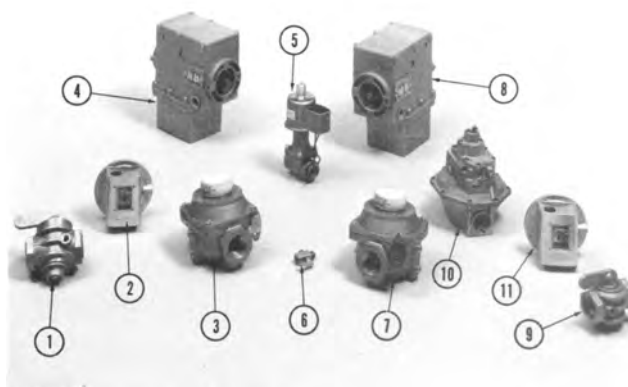
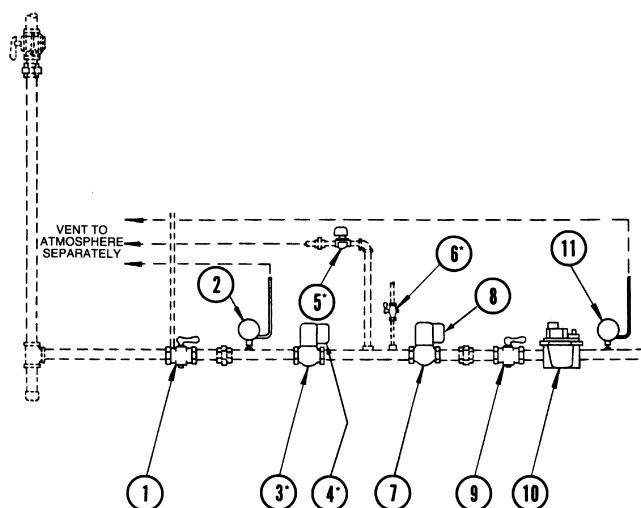


Fig. No.	Part No.	Description	Mfg.	Mfg.'s Part No.	LGB Boiler Size
1,9	511-246-325	Manual Main Shut-Off Gas Valve, 1" N.P.T., with 1/8" N.P.T. Female Pilot Take-Off Tapping and 1/4" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-503-02	5, 6, 7
1,9	511-246-330	Manual Main Shut-Off 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	
1,9	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
1,9	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 Fall, 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
NS	511-044-170	1" Pipe flange adapter for Gas Valve Body	Honeywell	32000109-002	5,6,7
NS	511-044-171	1 1/4" Pipe flange adapter for Gas Valve Body	Honeywell	32000109-003	8,9,10
NS	511-044-172	1 1/2" Pipe flange adapter for Gas Valve Body	Honeywell	32000109-004	11-18
NS	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

LGB Series 2

IRI and FM Main Gas Control Train Components

For 7" W.C. Natural Gas Supply Pressure

NS*	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	
5*	511-046-342	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, 1" N.P.T.	ASCO	S262SA02 N3FJ5	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
10	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
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
10	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

* Not used for Factory Mutual "High Risk" Gas Control Trains

LGB Series 2

IRI and FM Main Gas Control Train Components

For 5.5" W.C. Natural Gas Supply Pressure

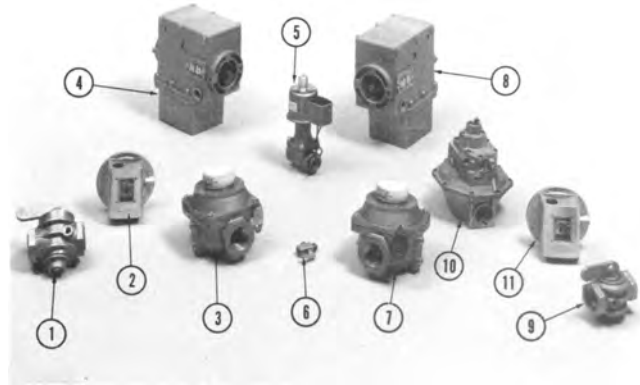
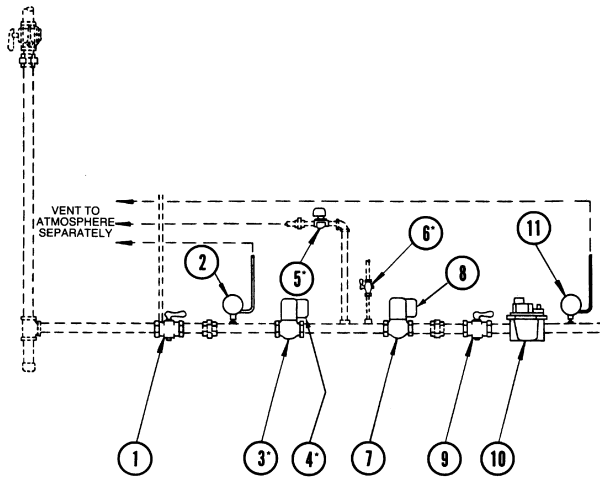


Fig. No.	Part No.	Description	Mfg.	Mfg.'s Part No.	LGB Boiler Size
1,9	511-246-330	Manual Main Shut-Off Gas Valve, 1 1/4" N.P.T., with 1/8" N.P.T. Female Pilot Take-Off Tapping and 1/4" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-503-06	5, 6, 7
			Key	224-142111	
1,9	511-246-300	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	8
1,9	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	9 - 17
1,9	511-246-310	Manual Main Shut-Off Gas Valve, 2 1/2" N.P.T., with 1/4" N.P.T. Female Pilot Take-Off Tapping and 1/4" N.P.T. Female Downstream Pressure Tapping, Lubricated Type	Conbraco	50-803-02	18 - 20
1,9	511-210-431	Manual Main Shut-Off Gas Valve, 3" N.P.T., with 1/4" N.P.T. Female Pilot Take-Off Tapping and 1/4" 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 Fall, 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	V5097 A1004	5 - 17
NS	511-044-171	1 1/4" Pipe flange adapter for Gas Valve Body	Honeywell	32000 109-003	5, 6, 7
NS	511-044-172	1 1/2" Pipe flange adapter for Gas Valve Body	Honeywell	32000 109-004	8

LGB Series 2

IRI and FM Main Gas Control Train Components For 5.5" W.C. Natural Gas Supply Pressure

NS	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 1/4" N.P.T. Female Downstream Pressure Tapping	Honeywell	V5097 A1012	18 - 23
NS	511-044-174	2 1/2" Pipe flange adapter for Gas Valve Body	Honeywell	32001 605-002	18 – 20
NS	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
NS*	511-044-176	Adapter for Solenoid Vent Valve (fits small valve body)	Honeywell	32002513	5 – 17
NS*	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, 3/4" N.P.T.	ASCO	S262SA02 N3EG5	5 – 8
			Honeywell	V4295 S1005	
5*	511-046-342	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt, 1" N.P.T.	ASCO	S262SA02 N3FJ5	9 –17
			Honeywell	V4295 S1013	
5*	511-046-344	Solenoid Vent Valve, Normally Open, Quick Closing, 120 Volt , 1 1/4" N.P.T.	ASCO	S262SA02 N3GJ7	18 – 23
			Honeywell	V4295 S1021	
6	511-210-415	Test Cock, 1/4" N.P.T.	Conbraco	41-560-05	All Sizes
10	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	V4944 N1029	5 – 7
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	V4944 N1037	8
10	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	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, 1/4" N.P.T. Female Connector, 1/8" N.P.T. Female Vent Connector, with Switch Position Indicator	Honeywell	C645B1013	All Sizes

*Not used for Factory Mutual "High Risk" Gas Control Trains

LGB Series 2 Water Trim

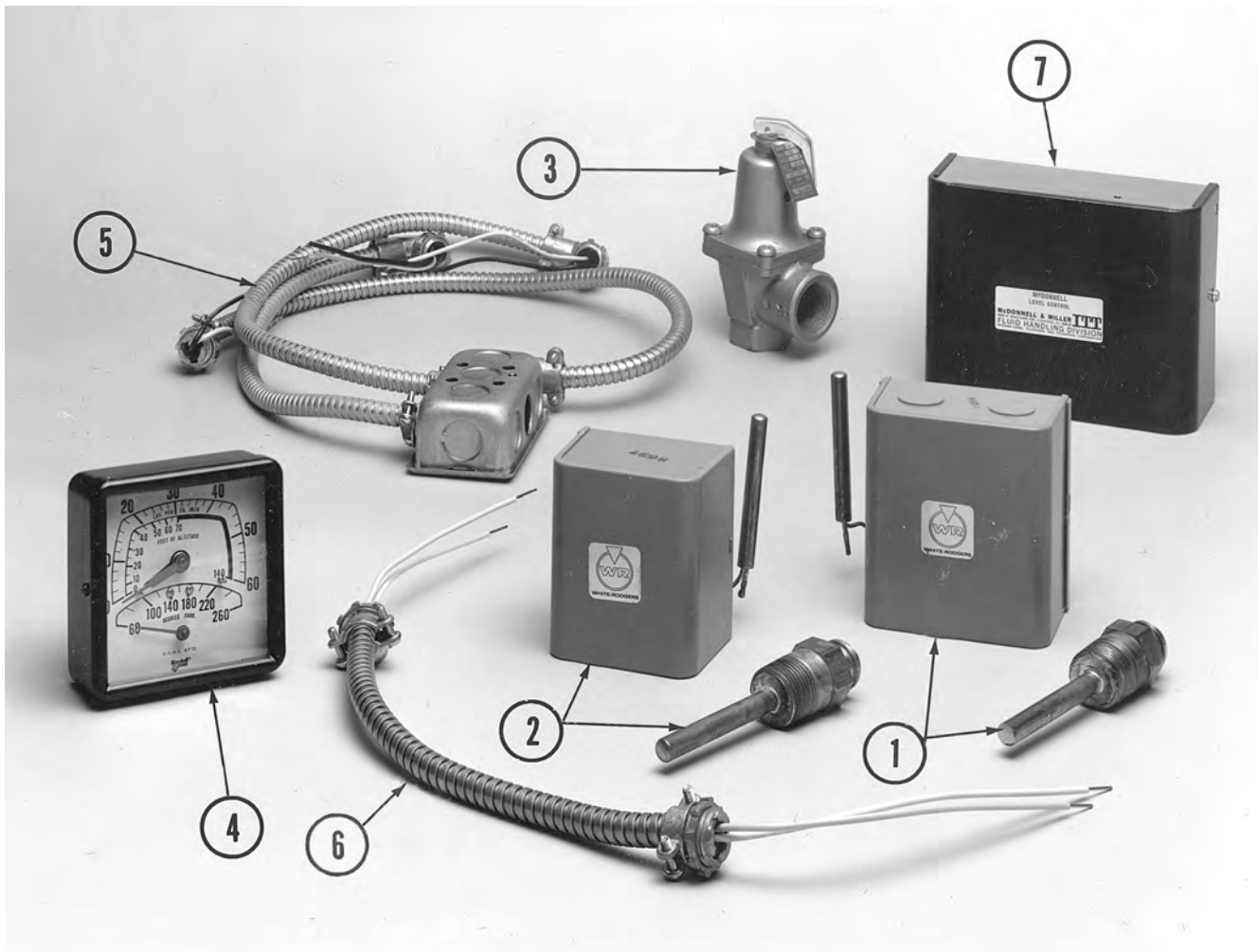
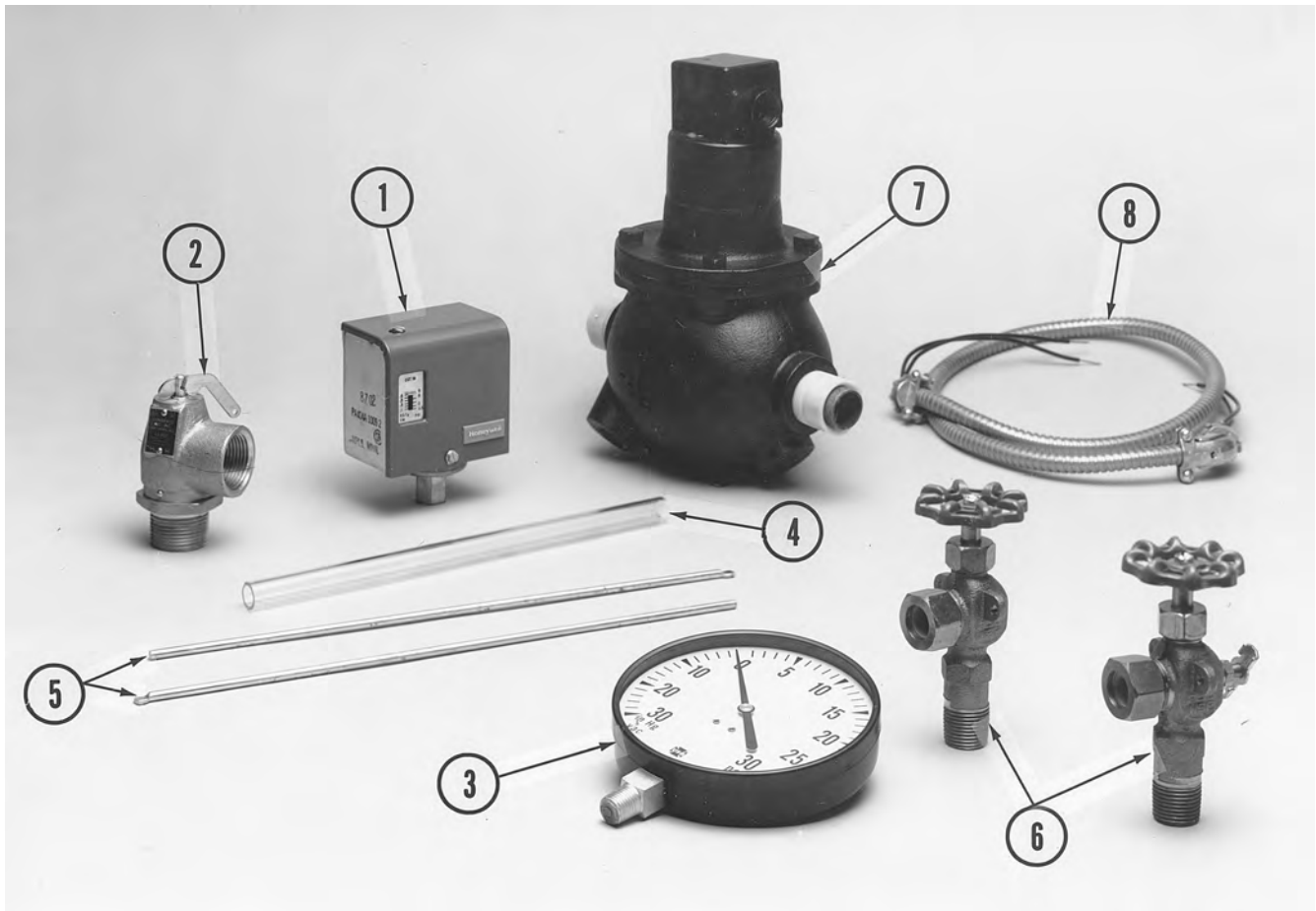


Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	LGB Boiler Size	Notes
1	510-312-065	Combination Operating and High Limit Control, DPST, Automatic Recycle, with 3/4" N.P.T. Control Well. OPERATING LIMIT: 100 – 220° Range with 10-35°F Adjustable Subtractive Differential. HIGH LIMIT: 140-240°F Range with 10°F Fixed Subtractive Differential.	Honeywell	L4081A1189	4 - 20	
1	510-312-065	Combination Operating and High Limit Control, DPST, Automatic Recycle, with 3/4" N.P.T. Control 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.	White-Rodgers	11C30-3	4 – 20	
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	
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)	White-Rodgers	11B83-16	21 - 23	

LGB Series 2 Water Trim

3	511-546-924	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	
3	511-546-924	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	Watts	335	4 - 5	
3	511-546-925	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	
3	511-546-930	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	
3	511-546-935	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	
3	511-546-940	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	
4	510-218-065	Combination Pressure-Temperature Gauge, 0-50 PSIG, 60-260°F, Back Connection, 1/2" N.P.T., Spec 144435	Ametek	PTA1088	All Sizes	
4	510-218-065	Combination Pressure-Temperature Gauge, 0-50 PSIG, 60-260°F, Back Connection, 1/2" N.P.T., Spec G22528	Marshalltown	13HJ	All Sizes	
5	591-319-793	Temperature Control Wiring Harness	Weil-McLain		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, 1/2" N.P.T. Male Electrode	McDonnell-Miller	PS-851-120	All Sizes	

LGB Series 2 Steam Trim



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LGB Series 2 Steam Trim

Fig. No.	Part No.	Description	Mfr.	Mfr.'s Part No.	LGB Boiler Size	Notes
1	510-312-135	* High Limit Steam Pressure Control, SPST, Automatic Recycle, 0-9 PSIG Range, 0-5 PSIG Adjustable Additive Differential, Bottom Connection, ¼" N.P.T. Male	Honeywell	PA404A1009	All Sizes	
1	510-312-106	* High Limit Steam Pressure Control, SPST, Automatic Recycle, 0-9 PSIG Range, 0-5 PSIG Adjustable Additive Differential, Bottom Connection, ¼" N.P.T. Male	Johnson Controls	P47AA-25D	All Sizes	
2	511-548-046	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	
2	511-548-051	ASME Steam Safety Relief Valve, Set to Relieve at 15 PSIG, Side Outlet, 1 ½" N.P.T. Male Inlet x 1 ½" N.P.T. Female Outlet, 1200 lbs./Hr. Capacity	Conbraco	13-213-08	8 – 12	
2	511-548-052	ASME Steam Safety Relief Valve, Set to Relieve at 15 PSIG, Side Outlet, 1 ½" N.P.T. Male Inlet x 2" N.P.T. Female Outlet, 1900 lbs./Hr. Capacity	Conbraco	13-214-08	13 - 19	
2	511-548-056	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 ½" Dial, Bottom Connection, ¼" N.P.T. Spec 05549	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 ½" Long (2 per Gauge Glass)	Weil-McLain		All Sizes	
6	510-218-145	Water Gauge Glass Cocks, Set ½" N.P.T. Male Inlet	Conbraco	21-205-03W	All Sizes	
7	511-114-474	Float Type Low Water Cut-Off, SPCT, Automatic Recycle, 15 PSIG Rated, 1" N.P.T.	McDonnell-Miller	61	All Sizes	
8	591-319-800	Steam Trim Wiring Harness	Weil-McLain		All Sizes	

* Two High Limits Used for Each LGB Steam Boiler