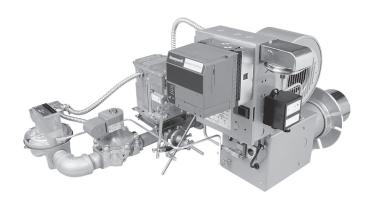
Replacement Parts L1St Unipower G series





Installation and Service Manual - 8449-06 Date Code - April 2000

- First Construction October 1976; date code 4176 (41st week, 1976).
- Push-Pull Input Adjusters first used June 1980; date code 2380 (23rd week, 1980).
- Push-Pull Input Adjusters discontinued approximately June 1989; date code 2489 (24th week, 1989)-See Note 5.



Midco[®] International Inc. 4140 West Victoria Street Chicago, Illinois 60646 toll free 866.705.0514 tel 773.604.8700

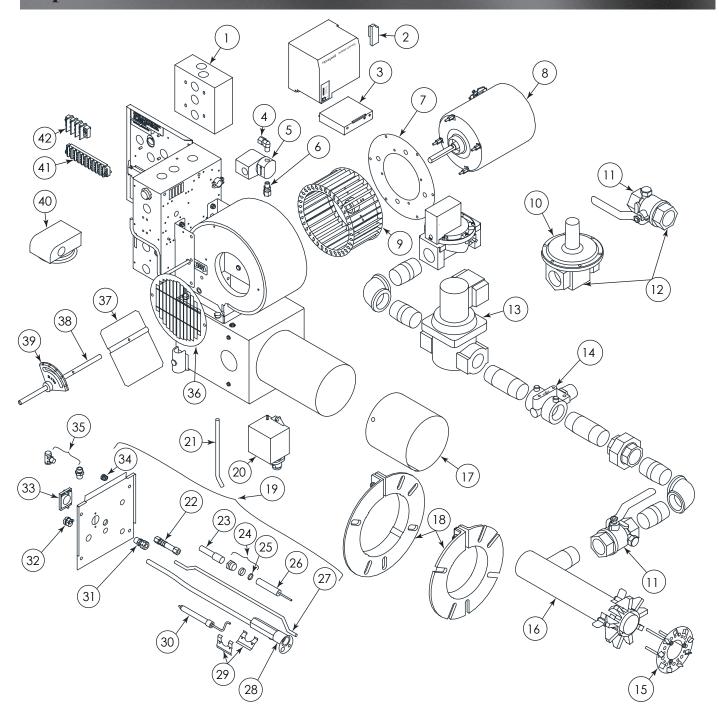
fax 773.604.4070
web www.midcointernational.com
e-mail sales@midcointernational.com

AVOID ERROR IN PARTS SELECTION. When ordering use complete MIDCO Part Number and Description. Furnish Burner Model Number, Bill of Material Number and Serial Number (if available) from the specification plate found on the product.

IMPORTANT: Availability of parts as well as specifications are subject to change without notice. Please consult factory for item availability.



Exploded View - G Series



Item	Part #	Description	N/S = Not Shown	Item	Part #	Description	N/S = Not Shown
	WIRING	BASE (See Note # 7)			BLOWER	R WHEELS	
1	8429-16	Q7800B Sub-Base for R	M7895	9A	6748-00	G56 5-1/4" dia x 3-1/	/2" W (1/2" Bore)
				9B	3427-50	G57 6-5/16" dia x 4"	· · · · · · · · · · · · · · · · · · ·
				9C	3627-50	G58 & G69-7" dia x 3	3-1/2" W (5/8" Bore)
	CHASSIS	G (Order plug-in componen	ts separately)	-			,
Chas		Longer Available - call	the Factory				
	8429-19	RM7895A Controller and					NT - On-Off or Full Mod
	8429-34	RM7895C 1020 Controlle	er			ZED VALVE BODY -	
					V5055A v	without "Proof of Clos	sure" Switch
	DI IIO IN	DUDGE TIMED (44047)	N/S	8418-32	1"	
O A		PURGE TIMER (see note	,				
	8429-22	ST7800 for RM7895 30 s					
2B	8429-25	ST7800 for RM7895 90	seconds		MAIN GA	AS TRAIN COMPONE	NT -
					MOTORI	ZED VALVE ACTUATO	OR
				N/S	8418-31	V4055A On-Off w/out	t "Proof of Closure" Switch
_		AMPLIFIER					
3	8429-27	R7847A Rect Amplifier					
					MAIN GA	AS TRAIN COMPONE	NT -
					SOLENO	DID VALVES	
		HUT OFF VALVE			Vent Valv	ves (normally open)	
4	8483-01	1/8" M X 5/16 T Compres		N/S	8402-31	1" Solenoid Valves (n	normally open)
5	8402-00	Gas Safety Shut-Off Valv					
6	8483-30	5/16" O.D. Tube X 1/8" N	PTM Straight Fitting				
					MAIN GA	AS TRAIN COMPONE	NT -
					PRESSU	IRE REGULATORS - N	Maxitrol RV Series
		MOUNTING PLATE		10A	8416-33	RV61 1" Maxitrol Gas	s Pressure Regulator
7	3197-50	Motor Mounting Plate—L		10B	8416-02	RV61 1-1/4" Maxitrol	Gas Pressure Regulator
		Frames (ref. Models G57		10C	8416-05	RV81 1-1/2" Maxitrol	Gas Pressure Regulator
		production item on G56 N	Models approximately	10D	8416-08	RV91 2" Maxitrol Gas	s Pressure Regulator
		July 1989).		10E	8416-11	RV111 2-1/2" Maxitro	l Gas Pressure Regulator
	BLOWER	R MOTORS - 1-Phase, 48	I of J48Y Frame		MAIN GA	AS TRAIN COMPONE	NT -
	(3450 RP	M, 1/2" Shaft) Open Drip	Proof		BALL VA	ALVES - Side Taps	
8A		G56 1/6 HP 115/230/1/6		11A	8404-23	1" NPT Ball Valve wit	th Side Tap
8B	8437-31	G57 1/3 HP 115/230/1/6	0			1-1/4" NPT Ball Valve	
8C	8437-15	G58 1/2 HP 115/230/1/6	0			1-1/2" NPT Ball Valve	· · · · · · · · · · · · · · · · · · ·
8D	8437-25	G69 3/4 HP 115/230/1/6	0			2" NPT Ball Valve wit	-
	BLOWER	R MOTORS - 3-Phase, 560	Frame (3450 RPM,		MAIN GA	AS TRAIN COMPONE	NT -
	5/8" Shaft)					ATOR/COCK KITS	
8E	8440-19	G58 1/2 HP 20/230/460/	3/60 TENV Motor	12A	6773-00		-1/4"
8F	8440-16	G69 3/4 HP 208/230/460	0/3/60 TENV Motor		6773-20	-	

Exploded View

Item	Part #	Description	N/S = Not Shown	Item Part #	Description	N/S = Not Shown
	MAIN GA	S TRAIN COMPONENT	-	BURNER	R CHASSIS - DRAWER	ASSEMBLIES
	SAFETY	VALVES (Normally close	ed)	19A 6755-10	Drawer Assembly with	Pilot and Vent Tube.
13A	8418-03	1" Solenoid Valve			Vent Tube is required	when burner is equipped
13B	8402-06	1-1/4" Solenoid Valve			with a V48A Diaphrag	m Type Main Gas Valve.
13C	8402-07	1-1/2" Solenoid Valve			Order Pilot Gas and A	ir Orifices separately.
				19B 6755-11	Drawer Assembly with	Pilot. Order Pilot Gas
					and Air Orifices Separ	ately. Used on All UL
	FIRING R	ATE CONTROLS -			Burners with Motorize	d Valve.
	BUTTERI	FLY VALVES (see note #	[‡] 5)	19C 6755-13	Drawer Assembly with	Pilot. Used on all CUL
14A	2933-50	On-Off Butterfly Valve A	Assembly 1"		Burners with V48A Di	aphragm Type Main Gas
14B	2933-51	On-Off Butterfly Valve A	Assembly 1-1/4"		Valve Order Pilot Gas	and Air Orifices
14C	2933-52	On-Off Butterfly Valve A	Assembly 1-1/2"		separately.	
14D	2933-53	On-Off Butterfly Valve A	Assembly 2"			

FIRING RATE CONTROLS - MOTORIZED BUTTERFLY VALVES

(Contains Modutrol Motor Mounting Plate, Overrunning Linkage and Stop Arm)

N/S 2010200	1"
N/S 2010300	1-1/4"
N/S 2010400	1-1/2"
N/S 2010500	2"

BURNER CHASSIS

15A 6712-05	Flame Retention Plate 5" w/ Mounting
	Screws—Models G56, G57 & G58
15B 6712-12	Flame Retention Plate 4.9" w/ Mounting.
	Screws used on OEM models consult factory
	for applications
15C 6713-05	Flame Retention Plate 6" w/ Mounting Screws
	Model G69

BURNER CHASSIS - NOZZLES

16A 6735-50	Manifold Weldment (5x1) Nozzle - G56 and
	G57 Nat & LP Gas and G58 LP Gas
16B 6735-00	Manifold Weldment (5x2) Nozzle G58 Nat Gas
16C 6740-00	Manifold Weldment (6x2) Nozzle G69 Nat Gas
16D 6740-05	Manifold Weldment (6x1) Nozzle G69 LP Gas

BURNER CHASSIS - SLEEVES & FLANGES

17A 6736-00	Adj Alloy 5"x5" Sleeve- G56, G57 & G58
17B 6741-00	Adj Alloy 6" Sleeve- G69
18A 2020300	5" Mounting Flange Kit G56,G57 & G58
18B 2020800	6" Mounting Flange Kit G69

PILOT COMPONENTS and ACCESSORIES

	PILOT CO	OMPONENTS and ACCESSORIES
20A	8447-22	Ignition Trans 120/1/60 12,000 V Secondary -
		Honeywell Q652B
20B	8447-11	Ignition Transformer 120/1/60; 6000 V
		Secondary - Allanson 1092-S
21	6729-91	Pilot Air Tube-Blower Housing to Drawer
		Assembly
22	8483-35	1/4" Bulk Head Union
23	8409-10	Silicone Boot- Orange- for covering Spark
		Cable to Rod Connection
24	6764-00	Sealing Gland Nut Kit - Spark Rod Retainer
		Assembly with O-Ring Seal - (see note #1)
25	8432-07	Spark Rod Retainer O-Rings ONLY
26	6725-50	Spark Rod and Insulator Assembly
27	6747-00	Vent Tube (Used w/ Diaphragm Gas Valves)
28A	6725-90	Pilot with Flamerod and Spark Rod Assemblies
		mounted. All UL burners with Diaphragm Valve
		and all CUL burners with Motorized Valve.
28B	6725-91	Pilot with Flamerod and Spark Rod Assemblies
		mounted. All UL burners with Motorized Valve
28C	6725-92	Pilot with Flamerod and Spark Rod Assemblies
		mounted. All CUL burners with Diaphragm
		valve.
29	6720-90	Mounting Clamp for Flamerod Assembly
30	6717-00	Flamerod and Insulator Assembly
31	8483-33	1/4 MPT X 3/8 Tube Str. Connector

N/S = Not Shown

Item	Part #	Description	N/S = Not Shown
	DRAWER	R ASSEMBLY COMPONE	NT
32	8484-72	Strain Relief SR-4K-1 St	raight
33	7122-90	Peep Sight Assemby w/	Gasket & Mounting
		Screws	
34	8457-46	Strain Relief Bushing for	Spark Cable
N/S	6717-90	Flamerod Wire Replacen	nent Kit
N/S	8502-05	Spark Cable	

TEE KITS ** Straight Kits Not Available

35A 6766-00	Nat G56 gas #60 Dr. (.040), air #26 Dr. (.147)
35B 6766-01	Nat G57 gas #60 Dr. (.040), air #30 Dr. (.128)
35C 6766-02	Nat G58 gas #55 Dr. (.052), air #26 Dr. (.147)
35D 6766-05	Prop G56 gas #64 Dr. (.036), air #26 Dr. (.147)

BLOWER HOUSING

36	6724-10	Blower Inlet Screen
37A	6755-50	Air Shutter—Models G56 & G57
37B	3246-08	Air Shutter—Models G58 & G69
38	6734-01	Air Shutter Shaft
39	3152-01	Quadrant—for Air Shutter Adjustment
N/S	8400-10	Pilot Pressure Regulator, 1/4" Natural and
		Propane (1/2 PSI maximum inlet pressure)

FLAME SAFEGUARD and ACCESSORIES OTHER CONTROLS

40A 8425-19	Blower Air Switch (Chicago Safety Prod. #SMP;
	Tri-delta #FP4039)
40B 8425-22	2 Blower Air Switch Canadian Versions
N/S 8406-68	B DPST Relay (Aromat: JH2A-W-AC120V- Q,
	Potter Brumfield: T9S7A22-120)
N/S 8425-73	B High Gas Pressure Switch (note # 3)
N/S 8425-62	2 Low Gas Pressure Switch (see note # 3)
N/S 8423-03	On-Off Toggle Switch (CH7500K14)
N/S 8406-38	R4222D DPDT Switching Relay

MISCELLANEOUS REPLACEMENT PARTS FOR FIRING RATE CONTROL

MBF VALVE (Motorized Butterfly Valve)

Description

SRBF VALVE (Spring Return Butterfly Valve--

Valve Actuator Operated)

 TERMINAL STRIPS

 41
 8408-42
 10 Terminal Strip

 42
 8408-78
 3 Terminal Strip

Item Part #

	Valve Actuator Operated)		
N/S	2926-50	Overrunning Spring and Rod Assembly	
		3/4" to 3" MBF Valve	
N/S	2926-00	MBF Overrunning Spring	
N/S	2919-01	Stop Arm for MBF Valve	
N/S	8450-94	Crank Arm Air Shutter and MBF Valve Shafts	
N/S	7180-20	Connecting Rod Air Shutter to MBF Valve or	
		Valve Actuator	
N/S	8450-18	Connecting Rod Ball Joint	
N/S	8432-02	3/8" diameter O-Ring for BF Valves and	
		MBF Valves	
	•	·	

Unipower G Series Parts Lists

NOTES

- 1. Starting in July 1980 (Date Code 3080), the one piece Spark Rod Assembly Retainer was superseded by a three piece Retainer Assembly which features an O-Ring seal to compensate for any irregularities in the Spark Rod size or shape. When replacing the Spark Rod, the O-Ring and the one piece Retainer (on burners where it is still in use) should also be replaced.
- 2. The Chicago Safety Products single body High-Low Gas Pressure Switch, Model HLGP, used through June 22, 1981 (Date Code 2681), has been superseded by an assembly of individual high and low pressure switches mounted on a junction box. For replacement of the single body High-Low Switch, order Kit Number 6765-95, which includes 8449-88 Installation Bulletin
- 3. Replacement individual High or Low Gas Pressure Switches may be a different make and have a different physical configuration than that previously supplied, but the mounting and wiring will be the same. Request Bulletin 8449-88 for terminal identification.
- 4. 30-second minimum pre-ignition purge is used with On-Off burners having the blower air shutter locked in a "fixed" firing rate position. Where the air shutter position is automatically controlled, a 90-second minimum purge or a purge with the air shutter driven to the "high fire" position, is required. Failure to keep pre-purge at its intended timing will VOID the UL listing.
- 5. Replacement of the unavailable Push-Pull Input Adjusters can be accomplished by substituting a butterfly valve assembly. The BF assembly is a straight line design, whereas the Push-Pull is a right angle design. This will require further replacement adjustments, as valve train pipe fittings will have to be rearranged. Be sure to carry out the same general arrangement: BF assembly between Automatic Safety Valve and burner chassis.
- 6. Three Phase Arrow-Hart (A-H) Motor Starters and accessories no longer available from MIDCO. Obtain locally.
- 7. Honeywell R4795 discontinued (Nov. 93) construction features Honeywell RM7895 Flame Safeguards (Nov. 93)
- 8. Dual Main Valves as standard construction April 1, 1994 (UL 795 requirement)



