

UNIPOWER G SERIES

REPLACEMENT PARTS LIST

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 use discontinued approximately June 1989;
Date Code 2489 (24th week, 1989) – See Note 5.
Installation Manual (8449-06 Formerly UG1).

GENERAL BURNER PARTS

BURNER CHASSIS

- 6712-05 Flame Retention Plate with Mounting
Screws -- Models G56, G57 & G58
- 6713-05 Flame Retention Plate with Mounting
Screws -- Model G69
- 6736-00 Adjustable Alloy Sleeve -- Models G56,
G57 & G58
- 6741-00 Adjustable Alloy Sleeve -- Model G69
- 6755-10 Drawer Assembly with Pilot and Vent
Tube. Vent Tube is required when
burner is equipped with a V48A
Diaphragm type Main Gas Valve.
Order Pilot Gas and Air Orifices
separately.
- 6755-11 Drawer Assembly with Pilot. Order
Pilot Gas and Air Orifices separately.
- 2020300 5" diameter Mounting Flange -- Models
G56, G57 & G58
- 2020800 6" diameter Mounting Flange -- Model
G69

BLOWER HOUSING

- 6719-00 Motor Mounting Plate -- Used on 48M
Frame (ref. Model G56; discontinued
approximately July 1989)
- 3197-50 Motor Mounting Plate -- Used on 56C
or 66C Frames (ref. Models G57, G58
& G69. Became production item on
G56 Models approximately July 1989)
- 6755-50 Air Shutter -- Models G56 & G57
- 3246-08 Air Shutter -- Models G58 & G69
- 6734-00 Air Shutter Shaft
- 3152-01 Quadrant -- for Air Shutter adjustment
- 6724-10 Blower Inlet Screen

BLOWER WHEELS

- 6748-00 G56 - 51/4" diameter x 31/2" wide(1/2" Bore)
- 3427-50 G57 - 65/16" diameter x 4" wide(5/8" Bore)
- 3627-50 G58 & G69 - 7" diameter x 31/2" wide
(5/8" Bore)

BLOWER MOTORS 1-Phase, 48M or J48Y Frame (3450 RPM, 1/2" Shaft) OPEN DRIPPROOF

- 6728-90 G56-1/6 HP 115/230/1/60/50 (Instruction
Bulletin 8470-33 is included)

BLOWER MOTORS 1-Phase, 56C Frame (3450 RPM, 5/8" Shaft)

OPEN DRIPPROOF

- 8437-31 G57-1/3 HP 115/1/60
- 8437-15 G58-1/2 HP 115/230/1/60
- 8437-25 G69-3/4 HP 115/230/1/60

TEFC(Totally Enclosed, Fan Cooled)

- 8437-36 G57-1/3 HP 115/230/1/60
- 8437-40 G58-1/2 HP 115/230/1/60
- 8437-39 G69-3/4 HP 115/230/1/60

BLOWER MOTORS 3-Phase, 56C Frame (3450 RPM, 5/8" Shaft)

TEFC(Totally Enclosed, Fan Cooled)

- 8440-19 G58-1/2 HP 208/230/460/3/60
- 8440-20 G69-3/4 HP 208/230/460/3/60

DRAWER ASSEMBLY COMPONENTS

- 6717-90 Flamerod Wire Replacement Kit
- 7122-90 Peep Sight Assembly -- with Gasket
and Mounting Screws
- 5616-90 Strain Relief Bushing for Spark Cable
- 8408-39 Silicone Boot -- for covering Spark
Cable to Rod Connection
- 8502-05 Spark Cable

PILOT COMPONENTS AND ACCESSORIES

- 6725-90 Pilot with Flamerod and Spark Rod
Assemblies mounted
- 6717-00 Flamerod and Insulator Assembly
- 6720-90 Mounting Clamp for Flamerod
Assembly
- 6725-50 Spark Rod and Insulator Assembly -
See Note 1
- 6764-00 Spark Rod Retainer Assembly with O-
Ring Seal
- 8432-07 Spark Rod Retainer O-Ring. Parker
2-014 -- 0.489" I.D. x 0.070 thick
- 8400-10 Pilot Pressure Regulator, 1/4" --
NATURAL and PROPANE (1/2 PSI
maximum inlet pressure)
- 8402-00 Gas Safety Shut-Off Valve -- 1/8" NPT;
120/1/60
- 8447-11 Ignition Transformer -- 120/1/60; 6000
volt secondary
- 6729-91 Pilot Air Tube -- Blower Housing to
Drawer Assembly

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8472-00**

GENERAL BURNER PARTS (continued)

PILOT GAS-AIR ORIFICES

Effective Production Date Code 486 (January 20, 1986), the pilot pressure tap was moved from the "B" Cock Assembly to the Pilot Assembly. In order to accomplish this change, the early Straight Gas Orifice was modified to a Tee Orifice. The drilling on the Orifice Block on the Cartridge Back Plate was modified to permit the use of the Tee configuration. If replacement of a Pilot Gas Orifice is required, the MODEL NUMBER, DATE CODE and GAS TYPE shown on the Burner Specification Plate must be known before the proper orifice (Straight or Tee) can be selected, as the Tee configuration will not fit on early models.

NOTE: Effective February 9, 1987 (Date Code 787), sizing of Pilot Air Orifices and Pilot Gas Orifices was changed when field experiences indicated an improved flame signal response. Air and Gas Pilot Orifices are sold only as kits, in matched sets (with new sizes) and are not available as individual orifices.

	BURNER MODEL	STRAIGHT KITS Date Code 386 and earlier	ORIFICES		TEE KITS Date Code 486 and later
			GAS	AIR	
NATURAL	G56	6747-50	#60 Dr. (.040)	#26 Dr. (.147)	6766-00
	G57	6747-51	#60 Dr. (.040)	#30 Dr. (.128)	6766-01
	G58	6747-52	#55 Dr. (.052)	#26 Dr. (.147)	6766-02
	G69	6747-52	#55 Dr. (.052)	#26 Dr. (.147)	6766-02
PROPANE	G56	6747-55	#64 Dr. (.036)	#26 Dr. (.147)	6766-05
	G57	6747-56	#64 Dr. (.036)	#30 Dr. (.128)	6766-06
	G58	6747-57	#56 Dr. (.046)	#26 Dr. (.147)	6766-07
	G69	6747-57	#56 Dr. (.046)	#26 Dr. (.147)	6766-07

FLAME SAFEGUARDS AND ACCESSORIES (120/1/60)

CHASSIS (order plug-in components separately)

8428-23 R4795A
 8428-33 R4795A with alarm contacts
 8428-38 R4795D with alarm contacts
 8428-55 R4140M 42 second purge -- See Note 4
 8428-56 R4140M 90 second purge -- See Note 4
 8428-57 R4140G High Fire Purge
 8428-58 R4140L High Fire Purge
 8428-41 TFM2
 8428-64 TFM3
 8428-78 70D10 High Fire Purge
 8428-77 70D20 High Fire Purge
 8428-76 70D30
 8429-17⁸ RM7840M
 8429-19⁸ RM7895A

PLUG-IN PURGE TIMER (see Note 4)

8428-26 ST71A for R4795 30 seconds
 8428-27 ST71A for R4795 90 seconds
 8428-66 MT30 for TFM 30 seconds
 8428-67 MT90 for TFM 90 seconds
 8428-79 71D80 for 70D30 30 seconds
 8428-80 71D90 for 70D30 90 seconds
 8428-88 71D70 for 70D10 & 20 High Fire Purge
 8429-22⁸ ST7800 FOR RM7895 30 seconds
 8429-25⁸ ST7800 for RM7895 90 seconds

PLUG-IN AMPLIFIER

8428-24 R7289A for R4795
 8428-59 R7247A for R4140
 8428-81 72DRT1 for 70D10, 20 & 30
 8429-27⁸ R7847A for RM7895 Rectification Amplifier

WIRING BASE

8428-07 Q270 for R4795
 8428-08 Q520 for R4140
 8428-42 61-3060 for TFM
 8428-49 60-1386-2 for 70D10, 20 & 30
 8429-16⁸ Q7800B for RM7895

FLAME SAFEGUARDS AND ACCESSORIES -- 120/1/60

OTHER CONTROLS

8406-68	DPST Relay (Aromat: JH2A-W-AC120V-Q, Potter Brumfield: T9S7A22-120)
8423-03	On-Off Toggle Switch (CH 7500K14)
8425-19	Blower Air Switch (Chicago Safety Prod. #SMP; Tridelta #FP4039)
6765-95	High-Low Single Body Gas Pressure Switch -- See Note 2
8425-03	Low Gas Pressure Switch (MH C645A; Fireye PSML) -- See Note 3
8425-04	High Gas Pressure Switch (MH C645B; Fireye PSMH) -- See Note 3
8406-39	R4222B SPDT Switching Relay
8406-38	R4222D DPDT Switching Relay
8415-31	Three Phase Contactor -- order Adaptor Kit and Thermal Overload Relays separately (SQ-D 8502-PD2.10E) -- See Note 6
8415-44	Adaptor Kit to join Three Phase Contactor PD2.10E to TD Series Overload Relays (SQ-D Class 9999 Type T2C) -- See Note 6
8415-xx	Thermal Overload Relays for Three Phase Contactor -- specify motor HP and voltage (SQ-D TD Series) -- See Note 6
8425-18	Thermal Switch (Therm-O-Disc, 6OT-13-203125) -- Incinerator applications only, see note.

MAIN GAS TRAIN COMPONENTS

V48A DIAPHRAGM VALVES

8418-21	1"
8418-22	1 1/4"
8418-23	1 1/2"
8418-20	2"
8418-41	2 1/2"

MOTORIZED VALVE BODY

ON-OFF OR FULL MOD.

V5055A WITHOUT "PROOF OF CLOSURE" SWITCH

8418-32	1"
8418-33	1 1/4"
8418-34	1 1/2"
8418-35	2"
8418-36	2 1/2"

MAIN GAS TRAIN COMPONENTS

(continued)

MOTORIZED VALVE BODY (continued)

ON-OFF OR FULL MOD.

V5055C WITH "PROOF OF CLOSURE" SWITCH

8418-90	1"
8418-91	1 1/4"
8418-92	1 1/2"
8418-93	2"
8418-94	2 1/2"

POSITIVE LOW FIRE START -- ON-OFF OR HI-LO-OFF

V5055B WITHOUT "PROOF OF CLOSURE" SWITCH

8418-78	1"
8418-84	1 1/4"
8419-00	1 1/2"
8419-01	2"
8419-02	2 1/2"

MOTORIZED VALVE ACTUATOR

8418-31	V4055A On-Off without "Proof of Closure" Switch
8418-88	V4055D On-Off with "Proof of Closure" Switch
8419-06	V4055A On-Off Positive Low Fire Start
8418-79	V4062A Hi-Lo-Off Low Fire Start

SOLENOID VALVES

VENT VALVES (normally open)

8402-30	3/4"
8402-31	1"
8402-32	1 1/4"

SAFETY VALVES (normally closed)

8402-05	1"
8402-06	1 1/4"
8402-07	1 1/2"
8402-18	2"
8402-19	2 1/2"

PRESSURE REGULATORS - MAXITROL RV SERIES

8416-33	1 RV61
8416-02	1 1/4" RV61
8416-05	1 1/2" RV81
8416-08	2" RV91
8416-11	2 1/2" RV111

FIRING RATE CONTROLS

BF VALVES (Butterfly Valves) -- See Note 5

2933-50 1"
2933-51 1 1/4"
2933-52 1 1/2"
2933-53 2"

MBF VALVES (Motorized Butterfly Valves)

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

2010200 1"
2010300 1 1/4"
2010400 1 1/2"
2010500 2"

MODUTROL MOTORS -- See Note 7

8414-00 M644C Low-High-Low (2-step)
8414-21 M9484D Full Modulating (no End Switch)
8414-20 M9484E Full Modulating with End Switch
8414-19 M9484F Full Modulating with Two End Switches
8414-22 Q7230A 4-20 mA Control Module for use with M9484 - Incinerator applications only
8414-24 MH 198162EA 24V Transformer for use with M9484

MISCELLANEOUS REPLACEMENT PARTS FOR FIRING RATE CONTROL

MBF VALVE (Motorized Butterfly Valve)

SRBF VALVE (Spring Return Butterfly Valve-- Valve Actuator Operated)

2926-50 Overrunning Spring and Rod Assembly -- 1" through 1 1/2" MBF Valve
2926-55 Overrunning Spring and Rod Assembly -- 2" MBF Valve
2926-00 MBF Overrunning Spring
2919-02 Stop Arm for MBF Valve
7180-30 SRBF Return Spring
8414-03 Crank Arm -- Mod. Motor or Valve Actuator Shaft
8450-94 Crank Arm -- Air Shutter and MBF Valve Shafts
7180-20 Connecting Rod -- Air Shutter to MBF Valve or Valve Actuator
8450-18 Connecting Rod Ball Joint
8432-02 3/8" diameter O-Ring for BF Valves, Push-Pull Input Adjusters and MBF Valves.

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 or substitute the listed SQ-D equipment. **NOTE:** The SQ-D equipment is not identical to the A-H equipment. Mounting and wiring modifications will be necessary. If substituting SQ-D for A-H, request wiring diagram 7501-50.
7. Honeywell discontinued manufacturing their M941 series Modulating Motors mid 1992. MIDCO stock ran out late 1992 when MIDCO switched to Honeywell M9484 Series Motors. The newer M9484 Motors are physically shorter and require an Adaptor Bracket to mount to MIDCO MBF valves. The replacement Mod Motors shown in listing include the necessary Adaptor Bracket. The accessory items used on the newer M9484 Motors and the 24V Transformers are NOT interchangeable with the older M941 Motors. If exact replacements are required for the M941 Motor, consult your local Honeywell distributor for available Tradeline replacement. When ordering 4-20 MA Control Module, Honeywell Q7230A, request MIDCO Blue Print 7503-07 which details revised terminal call outs.
8. Honeywell R4795 discontinued (Nov. 93) construction features Honeywell RM7895 Flame Safeguards (Nov. 93)
9. Dual Main Valves as standard construction April 1, 1994 (UL 795 requirement)