

UNIPOWER A5 SERIES GAS

REPLACEMENT PARTS LIST

First Construction October 1976.
Installation Manual 8449-11 (formerly UA4)

GENERAL BURNER PARTS

BURNER CHASSIS

- 7270-00 Mounting Flange
- 7284-00 Drawer Assembly -- for Models
A50 - A52
- 7283-00 Drawer Assembly -- for Models
A53 - A55

BLOWER HOUSING

- 7275-90 Air Shutter -- A50 only
- 3429-30 Air Shutter -- Models A52 - A58
- 3152-01 Quadrant -- for Air Shutter adjustment
- 3155-50 Air Shutter Shaft
- 3197-50 Motor Mounting Plate

BLOWER WHEELS

- 7188-00 A50 -- 53/4" dia. x 31/2" wide
- 3427-50 A52 -- 65/16" dia. x 4" wide
- 3627-50 A53 - 58 -- 7" dia. x 31/2" wide

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

- 8437-31 A50 -- 1/3 HP 115/1/60
- 8437-15 A52 -- 1/2 HP 115/230/1/60
- 8437-25 A53 - 55 -- 3/4 HP 115/230/1/60

TEFC (Totally Enclosed, Fan Cooled)

- 8437-40 A52 -- 1/2 HP 115/230/1/60
- 8437-39 A53 - 55 -- 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 A52 -- 1/2 208/230/460/3/60
- 8440-20 A53-55 -- 3/4 HP 208/230/460/3/60

GAS PILOT

- 7124-40 Flamerod and Insulator Assembly
- 7105-50 Spark Rod and Insulator Assembly
- 8451-06 Flamerod Insulator Protecting Sleeve
- 3175-40 Spark Rod Gland Nut
- 8484-06 Flamerod or Spark Rod Wire without
Terminals -- sold per foot
- 8408-08 Snap Connector -- angular with stud
terminal -- connects to Flamerod
- 8408-07 Snap Connector -- right angle with
spring terminal -- connects to Spark
Rod
- 7151-50 Flame Detector Mounting Tube without
Orifice (for all models except A50 with
UV Scanner)
- 7151-70 Flame Detector Mounting Tube with
Orifice (for A50 with UV Scanner only)
- 7150-90 Pilot Assembly with NATURAL Gas
Orifice (without Air Orifice)
- 7150-91 Pilot Assembly with PROPANE Gas
Orifice (without Air Orifice)
- 7161-50 Gas Orifice Tee Kit -- NATURAL -- #47
Drill (.078) -- See Note below
- 7161-51 Gas Orifice Tee Kit -- PROPANE -- #50
Drill (.070) -- See Note below
- 7162-02 Air Orifice Ell -- A50 -- 5/16" Drill
- 7162-01 Air Orifice Ell -- A52 through A58
-- 9/32" Drill
- 8402-40 1/8" NPT Pilot Safety Shut-Off Valve --
120/1/60
- 8400-10 1/4 NPT Gas Pressure Regulator --
1/2 PSI maximum inlet pressure
- 8416-32 3/8 NPT Gas Pressure Regulator --
10 PSI maximum inlet pressure
- 8447-11 Ignition Transformer -- 120/1/60,
6000 volt secondary

NOTE: Effective production date code 486 (January 20, 1986), the pilot pressure tap was moved from the "B" cock assembly to the pilot assembly. To accomplish this change, the early ell orifice was modified to a tee orifice to incorporate a pressure tap. Each replacement orifice kit contains enough fittings to adapt to all early pilots.

Effective production date code 4586 (first week of November, 1986), the drill size on the tee orifice was reduced for NATURAL gas and increased for PROPANE gas. These changes resulted when field experience indicated that a change in drill size improved flame signal response. All replacement assemblies will be supplied with new orifice size.

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SAFETY AND OPERATING CONTROLS -- 120/1/60

FLAME SAFEGUARD

8429-16	Subbase
8429-19	RM7895A Controller
8429-34	RM7895C Controller
8429-17	RM7840M Controller
8429-33	RM7840L1018 Flame Safeguard
8429-22	30-Second Timer
8429-25	90-Second Timer
8429-27	Rectification Amplifier
8429-28	Keyboard Display Module
8429-30	Plug-in UV Amplifier
8429-36	S7830A1005 Expanded Annunciator

OTHER CONTROLS

8423-03	On-Off Toggle Switch (CH 7500K14)
8425-19	Blower Air Switch (Chgo. Safety Prod. #SMP; Tridelta #FP4039)
8425-42	High Gas Switch (GMHA4-4-4)
8425-43	Low Gas Switch (GMLA4-4-4)
8406-39	R4222B SPDT Switching Relay
8406-38	R4222D DPDT Switching Relay
8415-20	Single Phase Motor Contactor; 3PST (A-H ACC-230-UM20)
8415-90	AC Magnetic Contactor
8415-91	Thermal Overload Relay (#193-A1D1)
8415-92	Thermal Overload Relay (#193-A1E1)
8415-93	Thermal Overload Relay (#193-A1F1)
8415-94	Thermal Overload Relay Mount

INCINERATOR CONTROLS—See Note 6

8414-22	Q723OA 4-20 mA Control Module for use with M9484
8425-18	Thermal Switch (Thermo-O-Disc, 60T-13-203125)

MAIN GAS TRAIN COMPONENTS

V48A DIAPHRAGM VALVES

8418-21	1"
8418-22	1 1/4" -- See Note 4
8418-23	1 1/2" -- See Note 4
8418-20	2"

MOTORIZED VALVES

V5055A Body 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"

V5055C Body 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"

Valve Actuators Without "Proof of Closure" Switch

8418-31	V4055A On-Off
8418-79	V4062A Low-High-Low-Off

Valve Actuators With "Proof of Closure" Switch

8418-88	V4055D On-Off
8418-97	V4062D Low-High-Low-Off

SOLENOID VALVES

Safety Valves—Normally Closed

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

Vent Valves -- Normally Open

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

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)

2933-50	1"	2933-53	2"
2933-51	1 1/4"	2933-54	2 1/2"
2933-52	1 1/2"	2933-55	3"

MBF VALVES (Motorized Butterfly Valves)

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

2010200	1"	2010500	2"
2010300	1 1/4"	2010600	2 1/2"
2010400	1 1/2"	2010700	3"

MODUTROL MOTORS -- See Note 6

8414-21	M9484D Full Modulating (no End Switch)
8414-25	M9484E Full Modulating with End Switch
8414-19	M9484F Full Modulating with Two End Switches
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" through 3" MBF Valve
2926-00	MBF Overrunning Spring
7180-30	SRBF Return Spring
2919-02	Stop Arm for MBF Valve
8414-03	Crank Arm -- Mod Motor or Valve Actuator Shaft
8450-94	Crank Arm -- Air Shutter and MBF Valve Shafts
7180-20	Connecting Rod -- MBF Valve to Air Shutter or Valve Actuator
8450-18	Connecting Rod Ball Joint
8432-02	3/8" dia. O-Ring for BF and MBF Valves

NOTES

1. The Chicago Safety Products single body high-low gas pressure switch, Model HLGP, used through date code 2681 (June 22, 1981) 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 No. 7160-95, which includes Installation Bulletin 8449-88.
2. 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.
3. 30-second minimum pre-ignition purge 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.
4. Because of the difficulty in maintaining a stock of the 1 1/4" V48 Diaphragm Valves, some burners have been built utilizing a "bushed down" 1 1/2" valve as a substitute. If the replacement valve size is determined from the burner Model or Bill of Material number as being 1 1/4", that size will be furnished when available, though a bushed 1 1/2" valve may be substituted.
5. 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.
6. 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.