

## Assembly Numbers UNI-RAD Burners

### UNI-RAD Burners - *configured assembly item numbers*

Burner Size		w/ 1.25 recuperator	w/ 1.5 recuperator	w/ 2.0 recuperator
w/4" housing	metal tube	0125 0400 UR	0150 0400 UR	---
w/4.5" housing	silicon carbide tube	0125 0450C UR	---	---
w/5" housing	metal tube	0125 0500 UR	0150 0500 UR	---
w/6" housing	metal tube	---	0150 0600 UR	0200 0600 UR
	silicon carbide tube	---	0150 0600C UR	---
w/7" housing	metal tube	---	0150 0700 UR	0200 0700 UR
w/8" housing	metal tube	---	---	0200 0800 UR

NOTE: Metal and silicon carbide tubes normally supplied by others, not by Maxon

### Segment Choice Detail - UNI-RAD Burners

Segment Name	Segment Description	Segment Choices (DEFAULT is shaded)	Segment Choice Description
DRILLED HOUSING	---	YES	Drilled Mounting Flange
AIR HOUSING CONNECTION	Type of connection	ANSI	ANSI Threaded
HOUSING FINISH	Type of finish on housing	STD	Standard
MAXIMUM AIR INLET TEMP (F)	Maximum air inlet temperature	800	800F (427C) Maximum
AIR INLET TUBE LENGTH (IN)	Length of air inlet tube in inches	115	11.5" Long Air Tube
		135	13.5" Long Air Tube
		155	15.5" Long Air Tube
		4	4" Long Air Tube
		7	7" Long Air Tube
		95	9.5" Long Air Tube

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## Assembly Numbers UNI-RAD Burners

### Segment Choice Detail - UNI-RAD Burners (continued)

Segment Name	Segment Description	Segment Choices (DEFAULT is shaded)	Segment Choice Description
NOZZLE TYPE	Type of nozzle	STD	Standard nozzle
METERING VALVE	---	NO	None provided
RECUPERATOR (shipped loose)	Burner with recuperator	NO	Do not include with order
		YES	Include with order
.75" GAS BALL VALVE	Gas ball valve (shipped loose)	ANSI	ANSI Threaded (shipped loose)
		NO	None provided
.5" IGNITION AIR BALL VALVE	Ignition air ball valve (shipped loose)	ANSI	ANSI Threaded (shipped loose)
		NO	None provided
MAIN AIR BALL VALVE	Main air ball valve (shipped loose)	ANSI	ANSI Threaded (shipped loose)
		NO	None provided
MAIN AIR ORIFICE VALVE	Main air limiting orifice valve (shipped loose)	ANSI	ANSI Threaded (shipped loose)
		NO	None provided
MAIN AIR ORIFICE VALVE SIZE	Size of main air limiting orifice valve in inches	NONE	None Selected
		125	1.25" Connection
		15	1.5" Connection
		2	2" Connection
		25	2.5" Connection
		3	3" Connection
.125" SAMPLE COCKS (QTY 2)	If desired; shipped loose	ANSI	ANSI Threaded (shipped loose)
		NO	None provided
POWER SUPPLY CONNECTION KIT	If desired; shipped loose	NO	Do not include with order
		YES	Include with order
PRIMARY POWER SUPPLY	If desired; shipped loose	NONE	None Provided
		115_60_1	115v 60 hz Single Phase
IGNITION TRANSFORMER OUTPUT	If desired; shipped loose	NONE	None Provided
		10000	10000v
IGNITION WIRE LENGTH (FT)	Wire length in feet	Specify value	---
18/2 SJO CORD LENGTH (FT)	Cord length in feet	Specify value	---
GROSS HEAT IN (BTU/sq in/hr)	Heat flux - application sensitive	50	Lower Limit
		85	Nominal Value
		95	Upper Limit
EFFECTIVE TUBE AREA (sq in)	Exposed tube surface inside the chamber	840	Lower Limit
		3750	Nominal Value
		7400	Upper Limit

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### Segment Choice Detail - UNI-RAD Burners (*continued*)

Segment Name	Segment Description	Segment Choices (DEFAULT is shaded)	Segment Choice Description
FUEL HEATING VALUE (BTU/cu ft)	Specify value	900	Lower Limit
		1000	Nominal Value
		1200	Upper Limit
FUEL SPECIFIC GRAVITY	Specify value	0.55	Lower Limit
		0.65	Nominal Value
		0.85	Upper Limit
FUEL PRESSURE DROP (in wc)	Specify value	8	Lower Limit
		14	Nominal Value
		35	Upper Limit
IGN AIR PRESSURE DROP (in wc)	Specify value	5	Lower Limit
		18	Nominal Value
		51	Upper Limit
VOLUMETRIC AIR TO FUEL RATIO	Specify value	9	Lower Limit
		11.5	Nominal Value
		25	Upper Limit
IGN AIR PERCENT (of overall)	Specify value	2	Lower Limit
		5	Nominal Value
		8	Upper Limit
APPROX FUEL ORIF AREA (sq in)	Approximate, in square inches	calculated	- - -
APPROX AIR ORIF AREA (sq in)	Approximate, in square inches	calculated	- - -
FUEL FLOW RATE (cu ft/hr)	Cubic feet/hour	calculated	- - -
IGN AIR FLOW RATE (cu ft/hr)	Cubic feet/hour	calculated	- - -
APPROX FUEL ORIF DIA (in)	Approximate, in inches	calculated	- - -
APPROX AIR ORIF DIA (in)	Approximate, in inches	calculated	- - -

## Assembly Numbers

### MAX-SAVER® Recuperators

#### MAX-SAVER Recuperators (when purchasing recuperator only)

Recuperator Size [1]	1.25	1.5	2.0
Item Number	0125 UR RECUP	0150 UR RECUP	0200 UR RECUP

[1] Size refers to the recuperator NPT connections or the equivalent O.D. to Sched. 40 black pipe

#### Segment Choice Detail - MAX-SAVER Recuperators

Segment Name	Segment Description	Segment Choices (DEFAULT is shaded)	Segment Choice Description
CONNECTION	Type of connection	ANSI_THRD	ANSI Threaded
		ISO_THRD	ISO Threaded
BAFFLES (size)	Size of baffles	NONE	No Baffle
		Default Size	See Below

#### Baffle Sizes (available in 1/8" increments from minimum to maximum)

Recuperator Size [1]	Baffles [2]		
	Minimum Size Available	Maximum Size Available	Default Size
1.25	3.75" (375)	5" (5)	375
1.5	5" (5)	7.5" (75)	5
2	5.5" (55)	10" (10)	55

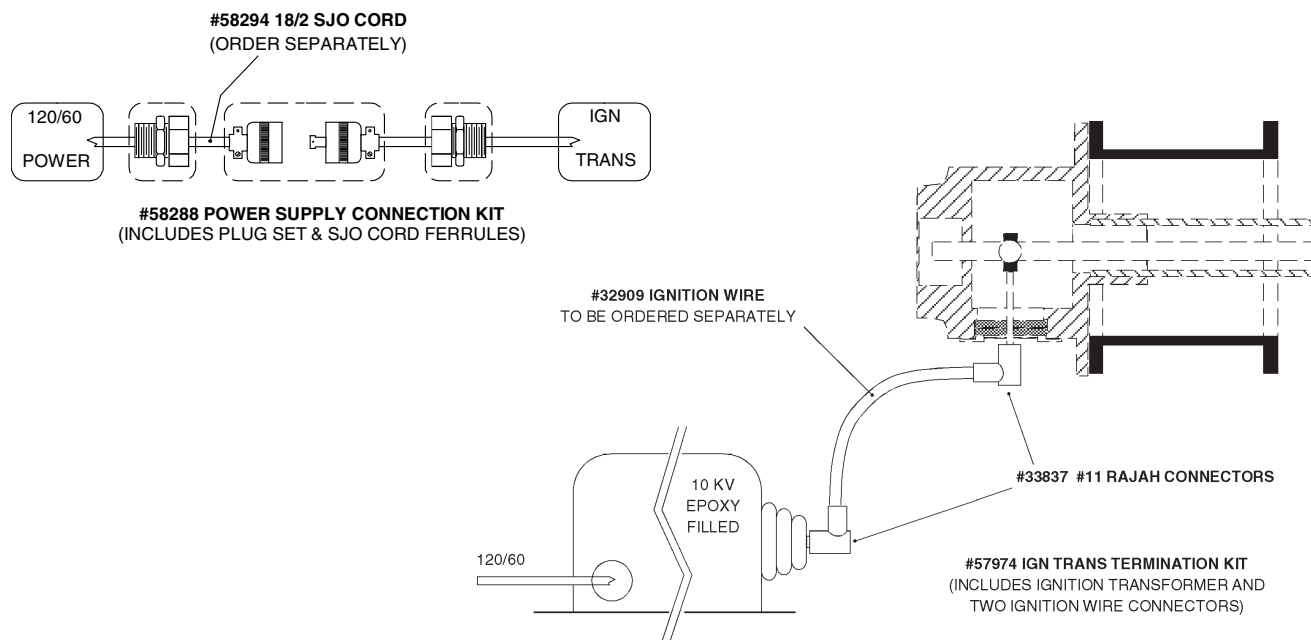
[1] Size refers to the recuperator NPT connections, or the equivalent O.D. to Sched. 40 black pipe

[2] The correct baffle size (diameter) will be a nominal 0.250" smaller than the I.D. of the firing tube

## Assembly Numbers Spare Parts

### UNI-RAD, MAX-SAVER spare parts

Description	Part Number
.875" x 2.31" CERAMIC SPACER	57948
1.375" x 2.31" CERAMIC SPACER	57955
.25" x 2.31" CERAMIC SPACER	57968
CENTERING SPACER	57971
.5" SIGHT GLASS	19284
IGN TRANS TERMINATION KIT	57974
125V POWER SUPPLY CONN KIT	58288
18/2 SJO CORD (FT)	58294
.125" TEST CONNECTION KIT	34137
SM BRNR GSKT	1114783
LG BRNR GSKT	1114784



## Assembly Numbers Accessories

### LOV - Limiting Orifice Valve

Size	Maxon Part Number
.5"	1040910
.75"	1033928
1.0"	1033934
1.25"	1030339
1.5"	1035023
2.0"	1030338
2.5"	1040337
3.0"	1040335

### Main Air Control Valves

Size	Maxon Part Number
1.5"	1054140
2.0"	1054141
2.5"	1054142
4.0"	58635
Actuator w/o Dampening	1054147
Actuator w/Dampening	58634

**Note: Shaded part numbers are included in configurator**

### Main Gas Control Solenoid Valves

Size	Pressure Rating	Maxon Part Number	Flow (Gas)	Drop
.375"	50 PSIG	28695	183 CFH	1"
.5"	50 PSIG	32826	240 CFH	1"
.75"	50 PSIG	28697	248 CFH	1"
.75"	25 PSIG	45945	580 CFH	1"
1.0"	25 PSIG	28845	1,119 CFH	1"
1.25"	25 PSIG	28846	1,730 CFH	1"
1.5"	25 PSIG	28847	1,900 CFH	1"
2.0"	25 PSIG	29400	3,251 CFH	1"

### Pressure Gauges

1/4" NPT, Bottom Connection 2-1/2" Dial

Pressure Range	Maxon Part Number
0 - 15" wc	20202
0 - 35" wc	20203
0 - 60" wc	20204
0 - 5 PSIG	20199
0 - 15 PSIG	20200
0 - 30 PSIG	20205
0 - 60 PSIG	20201
0 - 160 PSIG	30540
Protection Valve for above	30516
Lever Sample Cock	1035967

## Assembly Numbers Accessories

### Manual Valves

#### Cast Iron Plug Cock

Size	Maxon Part Number
.75"	26180
1.0"	26181
1.25"	20194
1.5"	20195
2.0"	20196
2.5"	20197
3.0"	20198
4.0"	36881

DeZurick Fig. 425 w/handle

#### Ball Valves for Air or Gas

Size	Maxon Part Number
.25"	33110
.375"	31046
.5"	31045
.75"	31047
1.0"	31081
1.25"	31080
1.5"	37925
2.0"	37926

Maxitrol BV250 / BV250T

### Pressure Switches

Type of Switch	Manufacturer's Description	Maxon Part Number
Proof-of-Opening Pressure Switches	Antunes JD2 Pressure Switch with red spring, .1-24" wc	1030337
	ASCO Tripoint - Pressure Switch SA20D	1041818
	ASCO Tripoint - Transducer TA20A11	1041819
Gas and Air Low Pressure Switch	Honeywell #C437-F-1011, 0-26" wc	33224
Gas High Pressure Switch	Honeywell #C437-D-1013, .5-5 PSIG	33591

**Note: Shaded part numbers are included in configurator**

## Notes