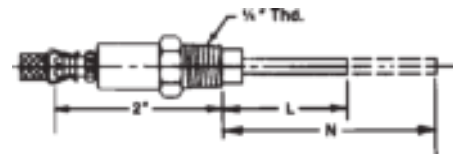


# Spark Ignitors and Flame Rods

## Flame Rod Identification

For those burners using flame rods, most applications are covered by one of four sizes (assembly number depends on nominal length "N" of rod extension). These may need cut to dimension "L" specified in tables on pages 9908 and 9908A before use in your particular application.

#18722 Rubber Cover (included in some arrangements, optional in others) protects porcelain insulator and electrical connection from dirt and moisture for ambient temperatures up to 450°F (232°C).



Assembly Number	N
18117	7.125"
18291	12"
18395	18"
18410	24"

## Spark Ignitor Identification

The broad range of Maxon burner equipment utilizes 13 basic spark ignitor configurations illustrated below.

Many incorporate locking bushings that must be adjusted for the particular burner type and size being

used. Refer to appropriate catalog section for exact positioning.

Applicable assembly numbers are shown in tables on pages 9908 and 9908A.

**17426**  
5/16" Hex, 1/2-14 Pipe Thread, 2.5, .72, 1.03, 18"

**25663**  
15/16" Hex, 13/16" Hex, 1/2" NPT, .562, .125" dia., .19, 1.15, .5, 5.5, 3", 9"

**19407, 24699**  
1-1/8" Hex, 7/8"-18 Thread, .75, 1.03, 2.67, .31, .33, .52, .61, L, Gap .125, 19407 L = 3.5", 24699 L = 2.5"

**28548**  
Gap .031, 1.88, .41, 14mm Thread

**36539, 36540, 36541, 36542**  
15/16" Hex, 1.00 dia., 1.562, Gap .062, .938, B, A, 36539 12, 36540 18, 36541 24, 36542 34.437, Dimension "A" 13.781, 19.781, 25.781, 36.170, Dimension "B"

**18075**  
14mm Thread, 2.03, .38, 1", Gap .062

**34043, 34042, 37160**  
13/16" Hex, 15/16" Hex, 1/2" NPT, .56 dia., .5, A, B, C, 34043 2.25, 34042 1.38, 37160 1.15, Dimension "A" 8.25, 6.5, 5.5, Dimension "B" 9.25, 7.5, 6.5, Dimension "C"

**23739**  
2.03, 14mm Thread, .38, 1.5, Gap .062

**18110**  
"Rajah" R/A/C #11 Right angle terminal, 10mm Thread, Gap .125, .25, 2.75

**25445**  
10.375, 1.625, .19, 1.15, .562 dia., 6.093, 1/2" NPT, 15/16" Hex, 13/16" Hex

**18118**  
18mm Thread, "Rajah" R/A/C #11 Right angle terminal, Gap .125, .5, 2.75

**33947**  
5.28, 3.83, .25, .69 Hex, .85, .81, .28, 2.5, 10mm Thread, .07 dia., 1.19

**36934, 36935, 36936**  
15/16" Hex, 5/8" Hex, 1/4" NPT, 3/8" dia., .63, .81, 1.81, L, 25, 36934 L = 35.06, 36935 L = 43.06, 36936 L = 54.06

## Replacement Spark Ignitors and Flame Rods

Catalog Section	Burner Type	Burner Size or Model	Spark Ignitor No.	Flame Rod No.	Cut flame rod length (in inches)
1100	"SN" & "SNF" SEALED NOZZLE Burners	1-1/4" -12, -14	18110	59235/47746	3.625 / 7 [1]
		1-1/2" -16, -18		59174/59176	4.125 / 6.438 [1]
		2" -20, -24; 2-1/2" -27		59175/59177	5.625 / 7.938 [1]
		3" -33; 4" -42		18117/59237	7.125 / 9.438 [1]
		4" -45; 6" -60			
	"SP" & "SPA" PILOTPAK™ Nozzle Burners	1-1/2" -18; 2" -21, -24	18110	59162	1.875
		2-1/2" -27		47743	2
		3" -30		59164	2.625
		4" -34, -41; 5" -50		59165	2.75
		6" -60		59166	6
		8" -88		47745	4
	HD STICKTITE (direct spark ignited)	1/2"-5 thru 3"-30	18118	N/A	N/A
		4"-34 and 4"-41			
	1200	Style A, B & C LINOFLAME® Burners	"A" with 16309 bracket	18118	47746
"B" with 16309 bracket			47745		4
"A" or "B" LINOPAK® pilot					
"VF" LINOFLAME® Burners		"VF" with LINOPAK® pilot	18118	1061849	4.5
		Direct spark ignition end plate	18110	N/A	N/A
		Direct spark ignition end inlet plate	23739		
INFRAWAVE® Burners		End mounted pressure pilot	18118	1062233/1062234	2.5 / 4.813 [1]
		End mounted direct spark	23739		
		Side mounted		1061849/1062235	4.5 / 6.813 [1]
		Sections w/ constant pilots	18110	N/A	N/A
1300	P/S Radiant Burners	Fenwal SI w/ integral FR	57586	N/A	N/A
		Blast pilot w/ SI	57549	1041550	3.843 bent 90deg
1350	P/S Radiant II Burners	Fenwal SI w/ integral FR	57586	N/A	N/A
		Blast pilot w/ SI	57549	1041550	3.843 bent 90deg
2100	"400" OVENPAK® Burners including MA & MRV versions	425, 435, 432M, 442M, EB-4, -5	25663	27731	N/A
		445, 456M, 470M, EB-6, -7		27732	
		All others		27729	
"200" OVENPAK® Burners	All sizes	28548	28637		
2150	OVENPAK® II Burners	405 - 415, EB1 - EB3	47232	43078	6
		425, 435, EB4, EB5	34042	43079	10.8
		445 - 487	39782	44402	11.75
		EB6, EB7		1049085	18.75
2200	"67" TUBE-O-FLAME® Burners including MA & MRV versions	6" -08, -LB	24699 [2] / 19407 [3]	47743	2
		8" -15, -LB	19407	47744	3
		10" -25, -LB		47745	4
		10" -30, 12" -38, -LB		47746	7
		14" -50, -LB		47745	4
2300	"500" OVENPAK® Burners including MA & MRV versions	All sizes	25663	N/A	N/A

[1] When used with cooling tee [2] For use with flame rod [3] For use with UV scanner

## Replacement Spark Ignitors and Flame Rods

Catalog Section	Burner Type	Burner Size or Model	Spark Ignitor No.	Flame Rod No.	Cut flame rod length (in inches)
2400	"71" AIR HEATERS	All sizes	25445	18291	9
2500	MAXIFLEX® Burners	All sections	33947	59234	4.25
2550	MAXIFLEX® "SL" Burners	All sections	18110	47745	4
2600	MEGAFIRE® Burners	Gas only	24699	N/A	N/A
		Gas/oil	18110		
2750	TUBE-O-THERM® Burners	3"	42256	45852	8.06
		4"		45976	8.56
		6"	42148	45841	14.5
		8"		44347	17.25
		8"HC		N/A	N/A
2800	CYCLOMAX® Burners	0.4M - 1.6M	44889	N/A	N/A
		2.7M and 3.7M	44892		
2900	APX® Burners	Fig1	18110	18117	7.125
		Fig3	23739	N/A	N/A
		Fig4	47232	18117	7.125
		Fig5	47789		
		Fig6	N/A		
4100	WIDE-RANGE® Burners	WRF- 1-1/4"	18110	59235/47746	3.625 / 7 [1]
		WRF- 1-1/2", 2"		59174/59176	4.125 / 6.438 [1]
		WRF- 2-1/2", -3"		59175/59177	5.625 / 7.938 [1]
		WRF- 4"		18117/59237	7.125 / 9.438 [1]
		WRF- 5", 6"		18117/59238	7.125 / 9.812 [1]
		WRF- 8"		59236	5.5
4200	KINEMAX® Burners	1-1/2", 2"	34042	N/A	N/A
		2", 4"	34043		
		6"	37160		
4300	RAMFIRE® Burners	1-1/2", 2"	34042	N/A	N/A
		3", 4"	34043		
4400	VORTIFLARE® Burners	All sizes	18110	N/A	N/A
4500	MULTIFIRE® Burners	All sizes	18110	N/A	N/A
4700	KINEDIZER™ Burners	0.5 and 2.5	28548	N/A	N/A
		5 through 40	47789		
5100	"66" AIRFLO® Burners"	Standard pilot	18075	18117	7.125
		With external pilot mounting	17426 (18" long)	18291	12
				18395	18
				18410	2

[1] When used with cooling tee

## Replacement Spark Ignitors and Flame Rods

Catalog Section	Burner Type	Burner Size or Model	Spark Ignitor No.	Flame Rod No.	Cut flame rod length (in inches)	
5400	"LV" AIRFLO® Burners	LV-NP-1 direct spark ignition end plate	23739	N/A	N/A	
		LV-NP-1 1-1/4" direct spark end inlet plate	18075	N/A	N/A	
		LV-85, 4-CF, 5-CF direct mounted		18117	7.125	
		LV-4CF, -5CF externally mounted	36539 (12" long)	18291	12	
			36540 (18" long)			
			36541 (24" long)			
	36542 (36" long)					
	LV-85 externally mounted	36538 (18" long)	36537	18		
	INCINO-PAK Burners	600	36934	N/A	N/A	
		800	36935			
1100		36936				
5500	"RG" & "NP" AIRFLO® Burners	All sizes	23739	18117	7.125	
			18075 [4]			
5600	CROSSFIRE Burners	.5 through 9	1046629	N/A	N/A	
			1050342			
			1050343			
			1050344			
			1050345			
			1050346			
			1050347			
			1050348			
5700	COMBUSTIFUME® Burners	All sizes	Standard 18075	18291	12	
			Externally mounted			24715 (12" long)
						21063 (18" long)
						21064 (24" long)
	INCINO-PAK® Burners	600	36934	N/A	N/A	
		800	36935			
		1100	36936			
5750	Circular INCINO-PAK® Burners	4M and 8M	41057	N/A	N/A	
5800	LO-NOX® Burners	All sizes direct mounted	18075	18117	7.125	
		#310 SS & Hast. X externally mounted	36539 (12" long)	N/A	N/A	
			36540 (18" long)			
			36541 (24" long)			
			36542 (36" long)			
#321 SS externally mounted	36538 (18" long)	36537	24			

[4] Use only with 2-piece end inlet flange for direct spark ignition