

## Assembly Numbers

COMBUSTIFUME® Line Burners Material Specifications >		Ductile iron bodies w/#310 SS mixing plates				Ductile iron bodies w/ Hastelloy X mixing plates				
Configured Item Number >		CF4D24	CF4D48	CF4D96	CF4D120	CF5D24	CF5D48	CF5D96	CF5D120	
Designations >		Old Style	4CF	4CF4	4CF5	---	5CF	5CF4	5CF5	---
		Current	CF4D24	CF4D48	CF4D96	CF4D120	CF5D24	CF5D48	CF5D96	CF5D120
<b>Burner Sections</b>	6" straight (-6)	1047387 (15)	1047394 (15)	1047401 (15)	1047408 (15)	1047415 (15)	1047422 (15)	1047429 (15)	1047436 (15)	
	12" straight (-12)	1047388 (18)	1047395 (18)	1047402 (18)	1047409 (18)	1047416 (18)	1047423 (18)	1047430 (18)	1047437 (18)	
	12" x 6" tee (-T)	1047389 (30)	1047396 (30)	1047403 (56)	1047410 (30)	1047417 (30)	1047424 (30)	1047431 (30)	1047438 (30)	
	12" x 12" cross (-X)	1047390 (37)	1047397 (37)	1047404 (37)	1047411 (37)	1047418 (37)	1047425 (37)	1047432 (37)	1047439 (37)	
<b>Back Inlet Feed Sections</b> <small>(each requires inlet flange from Page 5700-A/P-2)</small>	12" back inlet straight (-12B)	1047391 (31)	1047398 (31)	1047405 (31)	1047412 (31)	1047419 (31)	1047426 (31)	1047433 (31)	1047440 (31)	
	12" x 12" back inlet cross (-BX)	1047392 (42)	1047399 (42)	1047406 (42)	1047413 (42)	1047420 (42)	1047427 (42)	1047434 (42)	1047441 (42)	
	36" back inlet "H" section (-BH)	1047393 (95)	1047400 (95)	1047407 (95)	1047414 (95)	1047421 (95)	1047428 (95)	1047435 (95)	1047442 (95)	

COMBUSTIFUME® Line Burners Material Specifications >		Aluminum bronze bodies w/Hastelloy X mixing plates				
Configured Item Number >		CF5B24	CF5B48	CF5B96	CF5B120	
Designations >		Old Style	6CF4	---	---	---
		Current	CF5B24	CF5B48	CF5B96	CF5B120
<b>Burner Sections</b>	6" straight (-6)	1047443 (18)	1047447 (18)	1047451 (18)	1047455 (18)	
	12" straight (-12)	1047444 (20)	1047448 (20)	1047452 (20)	1047456 (20)	
	12" x 6" tee (-T)	1047445 (35)	1047449 (35)	1047453 (35)	1047457 (35)	
<b>Back Inlet Feed Sections</b> <small>(each requires inlet flange from Page 5700-A/P-2)</small>	12" back inlet straight (-12B)	1047446 (36)	1047450 (36)	1047454 (36)	1047458 (36)	

**NOTE:** To order line burner arrangements, order the appropriate configured item number. To order loose items, order individual assembly numbers.

**Approximate net ship weight (in pounds) shown in parentheses**

## Assembly Numbers

### Inlet Flange Options

		Description		All CF4	CF5D	CF5B
<b>A.N.S. Inlet Flange Options</b> (for inlet feed sections on Page 5700-A/P-1)	For 12" (-12B) back inlet sections	1.5"	1.5" Inlet Flange (12B)	0150 D BIF		0150 B BIF
		2"	2" Inlet Flange (12B)	0200 D BIF		0200 B BIF
		2.5"	2.5" Inlet Flange (12B)	0250 D BIF		0250 B BIF
		3"	3" Inlet Flange (12B)	0300 D BIF		0300 B BIF
		4"	4" Inlet Flange (12B)	0400 D BIF		---
	For 36" (-BH) back inlet sections	1.5"	1.5" Inlet Flange (36B)	0150 D BIF		---
		2"	2" Inlet Flange (36B)	0200 D BIF		---
		2.5"	2.5" Inlet Flange (36B)	0250 D BIF		---
		3"	3" Inlet Flange (36B)	0300 D BIF		---
		4"	4" Inlet Flange (36B)	0400 D BIF		---
	For 12"x12" (-BX) back inlet cross sections	3"	3" Inlet Flange (cross)	0300 D XIF		---
		4"	4" Inlet Flange (cross)	0400 D XIF		---

### Segment Choice Detail –Configured Inlet Flanges for Back Inlet & Cross Sections

Configured Item Number	Segment Name	Segment Choice (DEFAULT is shaded)	Segment Choice Description
0150 D BIF 0200 D BIF 0250 D BIF 0300 D BIF 0400 D BIF 0150 B BIF 0200 B BIF 0250 B BIF 0300 B BIF 0300 D XIF 0400 D XIF	FLANGE MATERIAL	DI	Ductile iron
		GI	Gray iron
	GAS CONNECTION	ANSI_THRD	ANSI threaded
		ISO_THRD	ISO threaded
	MAX APPROACH AIR TEMP (F)	1000	1000°F approach air temperature (max)
		1050 [1]	1050°F approach air temperature (max)
		450	450°F approach air temperature (max)
		600	600°F approach air temperature (max)
		800	800°F approach air temperature (max)

[1] Available for 0150 B BIF, 0200 B BIF, 0250 B BIF, and 0300 B BIF only

NOTE: All choices are not available in some cases.

**NOTE: To order line burner arrangements, order the appropriate configured item number. To order loose items, order individual assembly numbers.**

**Approximate net ship weight (in pounds) shown in parentheses**

## Assembly Numbers

COMBUSTIFUME® Line Burners Material Specifications >		Ductile iron bodies w/#310 SS mixing plates	Ductile iron bodies w/Hastelloy X mixing plates	Aluminum bronze bodies w/Hastelloy X mixing plates
Configured Item Number >		CF4D24 - 120	CF5D24 - 120	CF5B24 - 120
End Plate Sets (A)	<b>PLAIN END PLATE SET: 2-PC</b> Plain end plate set - 2 piece	1047743 (4)	1047750 (4)	1047757 (4)
Direct Spark End Plate & End Inlet Flange Sets (A)	<b>DIR SPRK SET W/18075 SI</b> Direct spark set includes #18075 spark ignitor & provision to mount a flame rod (order flame rod, if used, separately - available in sealed (#1104615) and unsealed (#18117) versions)	1047744 (4)	1047751 (4)	---
	<b>2" INLET DS SET W/18075 SI</b> 2" inlet direct spark set includes #18075 spark ignitor & provision for mounting a flame rod (order flame rod, if used, separately - available in sealed (#1104615) and unsealed (#18117) versions)	1047745 (4)	1047752 (4)	----
Pilot End Plate Sets (A)	<b>BUILT-IN PILT SET (DIRECT MNT)</b> Built-in pilot set, for direct mounted flame rod/UV scanner & spark ignitor; includes #18075 spark ignitor (order #18291 flame rod, if used, separately)	1047746 (6)	1047753 (6)	1047758 (6)
	<b>BUILT-IN PILT SET (EXT MOUNT)</b> Built-in pilot set, for externally mounting flame rod/UV scanner & spark electrode (order flame rod and/or electrode and external mounting assembly separately)	1047747 (6)	1047754 (6)	1047759 (6)
	<b>AIRFLO-PAK PILT SET (DIR MNT)</b> AIRFLO-PAK pilot set, for direct mounted flame rod/UV scanner & spark ignitor, includes #18075 spark ignitor (order #18291 flame rod, if used, and pilot mixer separately)	1047748 (8)	1047755 (8)	1047755 (8) [1]
	<b>AIRFLO-PAK PILT SET (EXT MNT)</b> AIRFLO-PAK pilot set, for externally mounting flame rod/UV scanner & spark electrode (order flame rod and/or spark electrode, pilot mixer and external mounting assembly separately)	1047749 (8)	1047756 (8)	1047756 (8) [1]
Pilot Mixers for AIRFLO-PAK pilots (A)	<b>ATMOSPHERIC PILOT MIXER</b> Atmospheric pilot mixer	20103 (1)		20103 (1) [1]
	<b>PRESSURE PILT MIXER W/ADJ ORIF</b> Pressure pilot mixer includes #38579 adjustable orifice	11680 (2)		11680 (2) [1]
External Mounting Plate Assemblies (A)	<b>EXT MTG PLT: INT SI &amp; EXT UV</b> For internal spark ignitor & external UV scanner	40907 (3)		
	<b>EXT MTG PLT: EXT SPK ELEC &amp; UV</b> For external spark electrode & external UV scanner (order shrouded electrode separately)	36544 (3)		

[1] Uses ductile iron castings instead of aluminum-bronze castings. Lowers the maximum approach temperature to 1000°F.

**NOTE: To order line burner arrangements, order the appropriate configured item number. To order loose items, order individual assembly numbers.**

**Approximate net ship weight (in pounds) shown in parentheses**

## Assembly Numbers

COMBUSTIFUME® Line Burners Material Specifications >		Ductile iron bodies w/#310 SS mixing plates	Ductile iron bodies w/Hastelloy X mixing plates	Aluminum bronze bodies w/Hastelloy X mixing plates
Configured Item Number >		CF4D24 - 120	CF5D24 - 120	CF5B24 - 120
Spark Ignitor Sub-Assemblies (A)	<b>DIRECT MOUNTED SPARK IGN: 14MM</b> Direct mounted spark ignitor 14mm	18075 (0.5)		
	<b>EXT MTD SHROUDED ELEC: L=12"</b> 12" External mounted shrouded electrode	36539		
	<b>EXT MTD SHROUDED ELEC: L=18"</b> 18" External mounted shrouded electrode	36540		
	<b>EXT MTD SHROUDED ELEC: L=24"</b> 24" External mounted shrouded electrode	36541		
	<b>EXT MTD SHROUDED ELEC: L=36"</b> 36" External mounted shrouded electrode	36542		
	<b>QUARTZ IGNITOR W/DI END FLG</b> Quartz ignitor w/ DI flange (See Page 5700-A/P-6)	CF4DQIGN	CF5DQIGN	---
	<b>QUARTZ IGNITOR W/AL-BZ END FLG</b> Quartz ignitor w/ AL BRZ flange (See Page 5700-A/P-6)	CF5BQIGN		
Flame Rod Sub-Assemblies (A)	<b>FR-DIRECT MOUNTED (L=7.125")</b> Direct mounted flame rod sub-assembly (length=7.125")	18117 (unsealed) or 1104615 (sealed)		
	<b>FR-DRCT MNTD (L=7.125") W/RBR CVR</b> Direct mounted flame rod sub-assembly (length=7.125") with rubber cover	1037594 (unsealed) or 1104615 (sealed) and 18722 (order separately with #1104615)		
	<b>FR-DIRECT MOUNTED (L=12")</b> Direct mounted flame rod sub-assembly (length=12")	18291		
	<b>FR-EXTERNAL MOUNTED (L=24")</b> Externally mounted flame rod sub-assembly (length=24")	18410		
	<b>FR-EXTERNAL MOUNTED (L=24")</b> Externally mounted flame rod sub-assembly with cover (length=24")	1050319		
Optional Accessory & Replacement Items	<b>UNIVERSAL SUPPORT BRKT: (CS)</b> Universal support bracket, plated carbon steel, good up to 800°F (order in pairs)	23577		
	<b>UNIVERSAL SUPPORT BRKT: #304SS</b> Universal support bracket,#304SS, good up to 1600°F (order in pairs)	39940		
	<b>DIVISION PLATE</b> Division plate (A)	1048448		
	<b>PROFILE PLATE BRACKET</b> Profile plate bracket (A)	24003		
	<b>Electrode cover</b> for flame rod or spark ignitor, good for up to 450°F (R)	18722		
	<b>BODY FLANGE KITS</b> Body flange kits (fastener kits for joining two burner bodies)	1049627 or 1049626 or 1049625 (depends on temperature)		
	<b>2" END INLET FLANGE</b> End inlet flange kit (See Page 5700-A/P-5 for segment choices)	CF4D 2EIF	CF5D 2EIF	CF5B 2EIF

## Assembly Numbers

### Configured End Inlet Flange Kits - Segment Choices

Configured Item Number	Segment Choices	Descriptions	Segment Values
CF4D 2EIF CF5D 2EIF CF5B 2EIF	2" NPT W/ .75"-10 THRD	For quartz ignitors	Specify quantities
	2" ISO W/ .75"-10 THRD		
	2" NPT W/ 18075 (14MM) IGNITOR	Local internal ignitor	
	2" ISO W/ 18075 (14MM) IGNITOR		
	2" NPT W/ .562 DRILL-THRU	For feed-through shrouded ignitors	
	2" ISO W/ .562 DRILL-THRU		
	600F BODY FLANGE KIT (STL)	600°F body flange fastener kit	
	800F BODY FLANGE KIT (SS)	800°F body flange fastener kit	
	1000F BODY FLANGE KIT (718)	High temperature body flange kit for CF4D and CF5D	
	1050F BODY FLANGE KIT (718)	High temperature body flange fastener kit for CF5B	

## Assembly Numbers

### Segment Choice Detail – Quartz Ignitors

Configured Item Number	Segment Name	Segment Choices (DEFAULT is shaded)	Segment Choice Description
CF4DQIGN CF5DQIGN	LENGTH	12	12" long
		18	18" long
		20	20" long
		24	24" long
		30	30" long
		36	36" long
		42	42" long
		48	48" long
	MATERIAL	CS	Carbon steel
		SS	Stainless steel
	MAX APPROACH AIR TEMP (F)	1000	1000°F approach air temperature (max)
		450	450°F approach air temperature (max)
		600	600°F approach air temperature (max)
		800	800°F approach air temperature (max)
	FLANGE KIT	NO	Choice not selected
		YES	Choice selected
CF5BQIGN	LENGTH	12	12" long
		18	18" long
		24	24" long
		30	30" long
		36	36" long
		42	42" long
		48	48" long
		MATERIAL	SS
	MAX APPROACH AIR TEMP (F)	1000	1000°F approach air temperature (max)
		1050	1050°F approach air temperature (max)
		450	450°F approach air temperature (max)
		600	600°F approach air temperature (max)
		800	800°F approach air temperature (max)
	FLANGE KIT	NO	Choice not selected
		YES	Choice selected

## Assembly Numbers

**Optional Accessory and Replacement Items - Spark Ignitors**

COMBUSTIFUME® Line Burner Material Specifications >		Ductile iron bodies with #310 SS mixing plates	Ductile iron bodies with Hastelloy X mixing plates	Aluminum bronze bodies w/Hastelloy X mixing plates
Configured Item Number >		CF4D24 - 120	CF5D24 - 120	CF5B24 - 120
<b>Spark Ignitors (R)</b>	<b>Ceramic ignitor</b>	12"	24715	
		18"	1115240	
		24"	1115241	
		36"	35553	
	<b>Ceramic ignitor with rubber cover</b>	12"	36539	
		18"	36540	
		24"	36541	
		36"	36542	
	<b>Quartz ignitor</b>	12"	44665	
		18"	44666	
		20"	45716	
		24"	44667	
		30"	44668	
		36"	44669	
		42"	44935	
		48"	44670	
	<b>Quartz ignitor with carbon steel tube</b>	12"	44658	
		18"	44659	
		20"	45715	
		24"	44660	
		30"	44661	
		36"	44662	
		42"	44933	
		48"	44663	
	<b>Quartz ignitor with stainless steel tube</b>	12"	44652	
		18"	44653	
		20"	not available	
		24"	44654	
30"		44655		
36"		44656		
42"		44934		
48"		44657		

## Assembly Numbers

### Optional Accessory and Replacement Items - Flame Rods

COMBUSTIFUME® Line Burner Material Specifications >			Ductile iron bodies with #310 SS mixing plates	Ductile iron bodies with Hastelloy X mixing plates	Aluminum bronze bodies w/Hastelloy X mixing plates
Configured Item Number >			CF4D24 - 120	CF5D24 - 120	CF5B24 - 120
Flame Rods	Mounted Flame Rod	7.125" long (for direct mounted)	18117 (unsealed) or 1104615 (sealed)		
		12" long (for direct mounted)	18291		
		24" long (for external mounted)	18410		
	Mounted Flame Rod with Rubber Cover	7.125" long (for direct mounted)	1037594		
		12" long (for direct mounted)	1050318		
		24" long (for external mounted)	1050319		

### Optional Accessory and Replacement Items - Gasket/Fastener Kits

COMBUSTIFUME® Line Burner Material Specifications >			Ductile iron bodies with #310 SS mixing plates	Ductile iron bodies with Hastelloy X mixing plates	Aluminum bronze bodies w/Hastelloy X mixing plates
Configured Item Number >			CF4D24 - 120	CF5D24 - 120	CF5B24 - 120
Gasket/ Fastener Kits	Body Flange Choices	Flange Gasket Only	1047672		39880
		600°F (max) Gasket Kit	1049627		
		800°F (max) Gasket Kit	1049626		
		1050°F (max) Gasket Kit	1049625		
	12" Back Inlet Choices	Flange Gasket Only	1047671		
		600°F (max) Gasket Kit	1049872		
		800°F (max) Gasket Kit	1049872		
		1050°F (max) Gasket Kit	1049873		
	36" Back Inlet Choices	Flange Gasket Only	1047671		
		600°F (max) Gasket Kit	1049874		
		800°F (max) Gasket Kit	1049874		
		1050°F (max) Gasket Kit	1049875		
	Cross Back Inlet Choices	Flange Gasket Only	1047674		
		600°F (max) Gasket Kit	1049896		
		800°F (max) Gasket Kit	1049896		
		1050°F (max) Gasket Kit	1049897		
	End Plate Spare Fastener Kits	Plated (600°F max)	1068683		
		Stainless Steel (800°F max)	1068685		
		A-286 High Temp (1050°F max)	1068681		
	Seal Plate Choices	Seal Plate Gasket Only	1047669		
	Gasket sealant		39565		



## Assembly Numbers

### Raw Gas INCINO-PAK® Burner Sections

(includes spark electrode & adjustable pilot gas orifice)

Description	Ductile iron bodies with #310 stainless steel mixing plates	Ductile iron bodies with Hastelloy X mixing plates
Series 600 CF	CF4D IP	CF5D IP
Series 800 CF		
Series 1100 CF		

NOTE: Each open end of these burner sections must be closed off with an end plate from options listed on page 5700-A/P-3.

Segment choices are as follows for configured products:

- Connection type
- Back inlet type
- Section type
- Extension (location A)
- Extension (location B)
- Extension (location C)
- Extension (location D)
- Max. Approach Air Temp. (°F)

### Segment Choice Detail – INCINO-PAK® Burner Sections

Segment Name	Segment Description	Segment Choice (DEFAULT is shaded)	Segment Choice Description
CONNECTION TYPE	Type of threaded connection	ANSI_THRD	ANSI threaded
		ISO_THRD	ISO threaded
BACK INLET TYPE	Type of back inlet	1100	43.3" (1100 mm) wall to body centerline
		600	23.8" (600 mm) wall to body centerline
		800	31.5" (800 mm) wall to body centerline
SECTION TYPE	Type of burner section	12B	12" B straight back inlet
		36H	36" H back inlet
EXTENSION (LOCATION A)	Additional section	NONE	No additional section
		12	12" straight section
		6	6" straight section
EXTENSION (LOCATION B)	Additional section	NONE	No additional section
		12	12" straight section
		6	6" straight section
EXTENSION (LOCATION C)	Additional section	NONE	No additional section
		12	12" straight section
		6	6" straight section
EXTENSION (LOCATION D)	Additional section	NONE	No additional section
		12	12" straight section
		6	6" straight section
MAX. APPROACH AIR TEMP (°F)	Maximum approach air temperature	1000	1000°F approach air temperature (max)
		450	450°F approach air temperature (max)
		600	600°F approach air temperature (max)
		800	800°F approach air temperature (max)

## Assembly Numbers

### Spare parts for CF INCINO-PAK® Burners

Description	Item Numbers		
	600	800	1100
SPARK IGNITOR	36934	36935	36936
ADJUSTABLE ORIFICE	15726		
MOUNTING GASKET (10" diameter)	1047670		
BODY GASKET (5.75" diameter)	1047672 (ductile) or 39880 (aluminum bronze)		
INLET FLANGE GASKET	1047675		
GASKET SEALANT (1/4 lb.)	39565		
LV HIGH TEMPERATURE FASTENER KIT*	1048206		
CF HIGH TEMPERATURE FASTENER KIT	1049625		

\*Intended for LV INCINO-PAK® Burners (refer to Catalog Section 4-21.4)

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