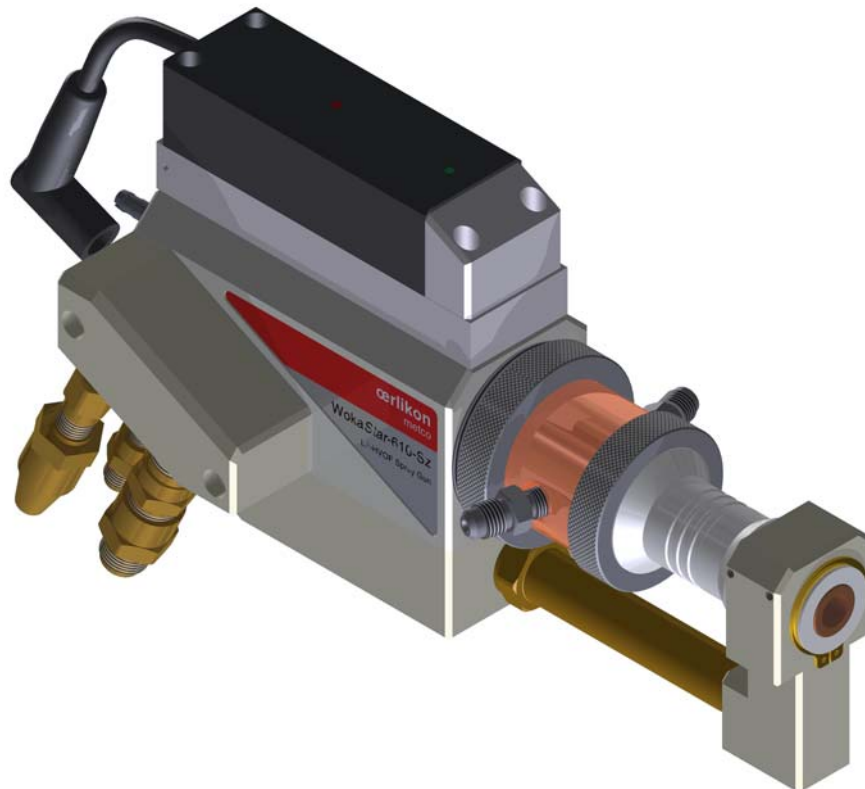


# WokaStar™-610 Spray Gun HVOF Spraying


**Parts List**  
**PL 98993 EN 09**




## Oerlikon Metco US, Inc.

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## Spare Parts Categories

### **C = Consumable Parts**

Parts subjected to major wear during normal operation. These parts require replacement on a regular basis.

Recommended in order to avoid downtimes.

### **W = Wear Parts**

Parts used for maintenance service. These parts are likely and expected to wear out during the life of the product.

Wear parts are not subject to warranty.

### **K = Critical Parts**

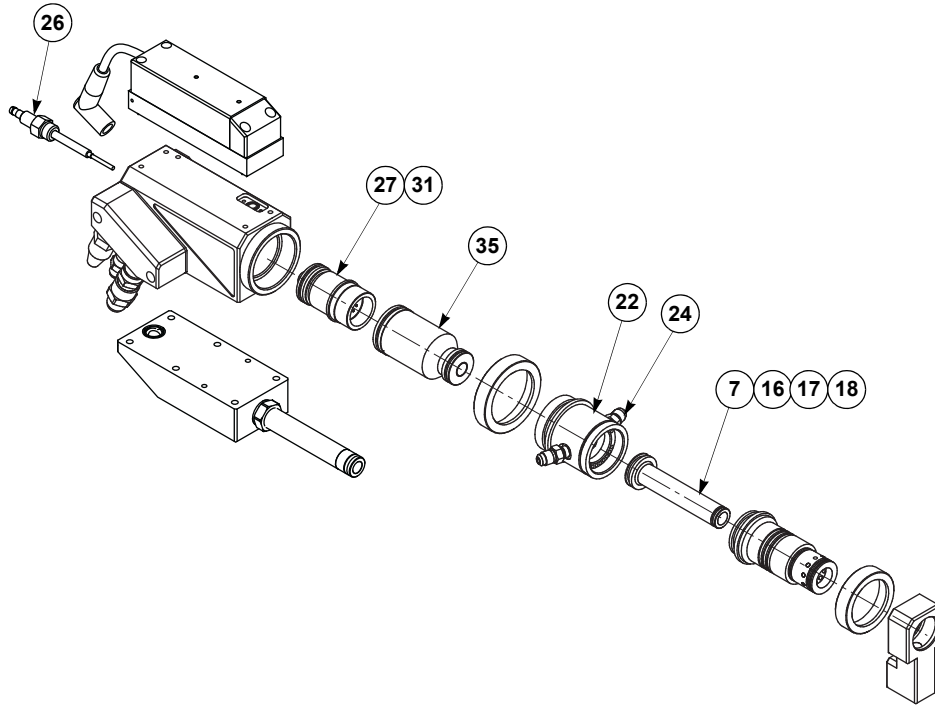
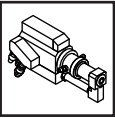
Parts recommended in order to guarantee maximum availability of component. This prevents downtime caused by delay in procurement.



## Warranty Disclaimer

Installing non-Oerlikon Metco spare parts on Oerlikon Metco equipment voids the product warranty.

# 1 List of Recommended Spare Parts for WokaStar™-610 Spray Gun



ws-610\_spare

Item No.	Description	Qty.	Cat.	Order No.
7	Barrel, 4"	1	C	1051230
16	Barrel, 4", (with chamfer) (optional)	1	C	1070668
17	Barrel, 6" (optional)	1	C	1051236
18	Barrel, 6", (with chamfer) (optional)	1	C	1070669
22	Middle Gun Body	1	K	1041806
24	Powder Injector	2	K	1041807
26 <sup>(1)(2)</sup>	Sparkplug Assembly	1	K	1071048
27 <sup>(1)(2)</sup>	Burner Assembly	1	K	1072321
31 <sup>(3)</sup>	Burner Assembly	1	K	1051224
35	Combustion Chamber	1	W	1051211
64	Krytox®	1	C	1070061
70	Reseal Kit	1	W	1075834

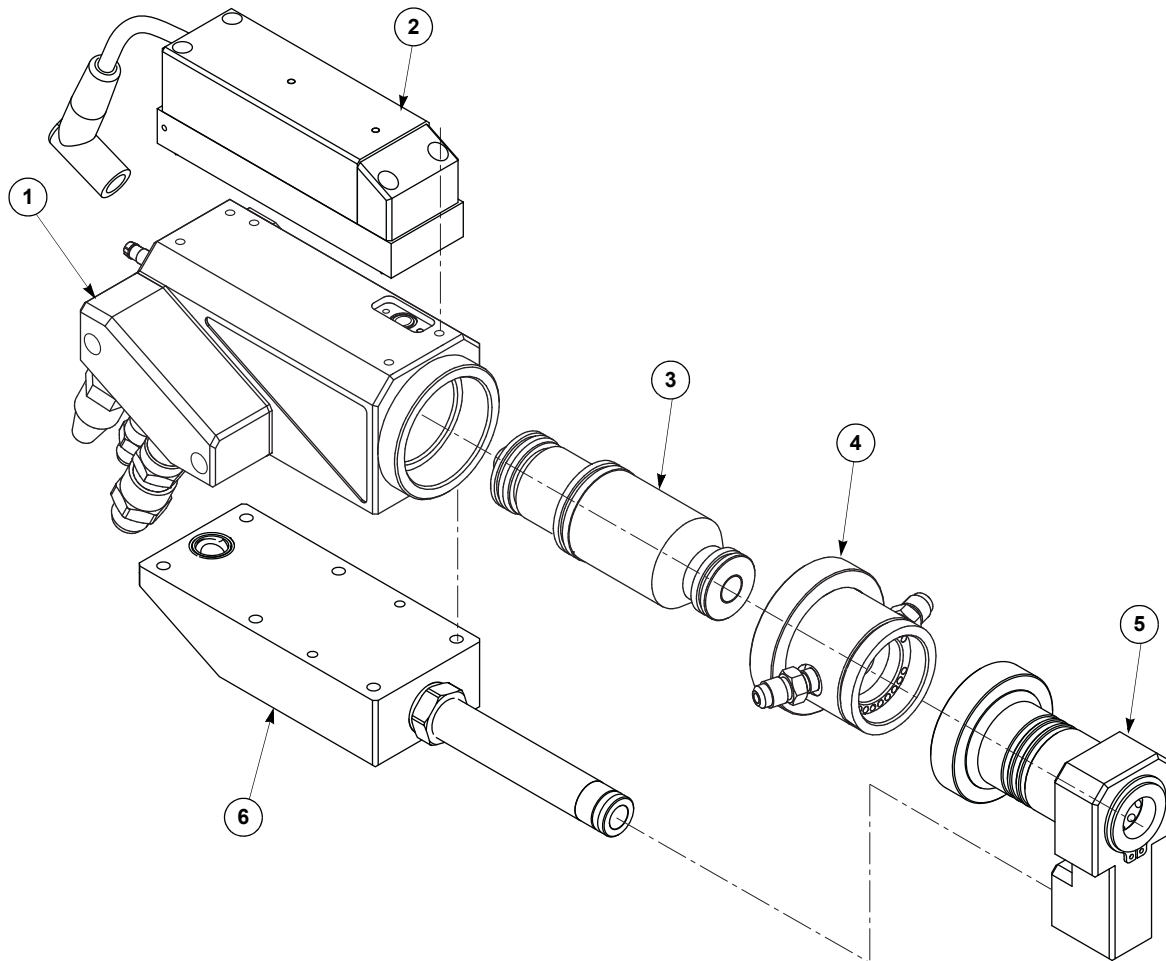
- 1. WokaStar-610-Sz
- 2. WokaStar-610-S
- 3. WokaStar-610

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## 2 Parts List for WokaStar™-610 Spray Gun

### 2.1 Overview

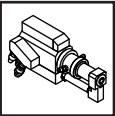
WokaStar-610 HVOF Spray Gun	(Hydrogen Pilot)	1070684
WokaStar-610-S HVOF Spray Gun	(Spark Plug)	1070996
WokaStar-610-Sz HVOF Spray Gun	(Spark Plug with ignition)	1089586



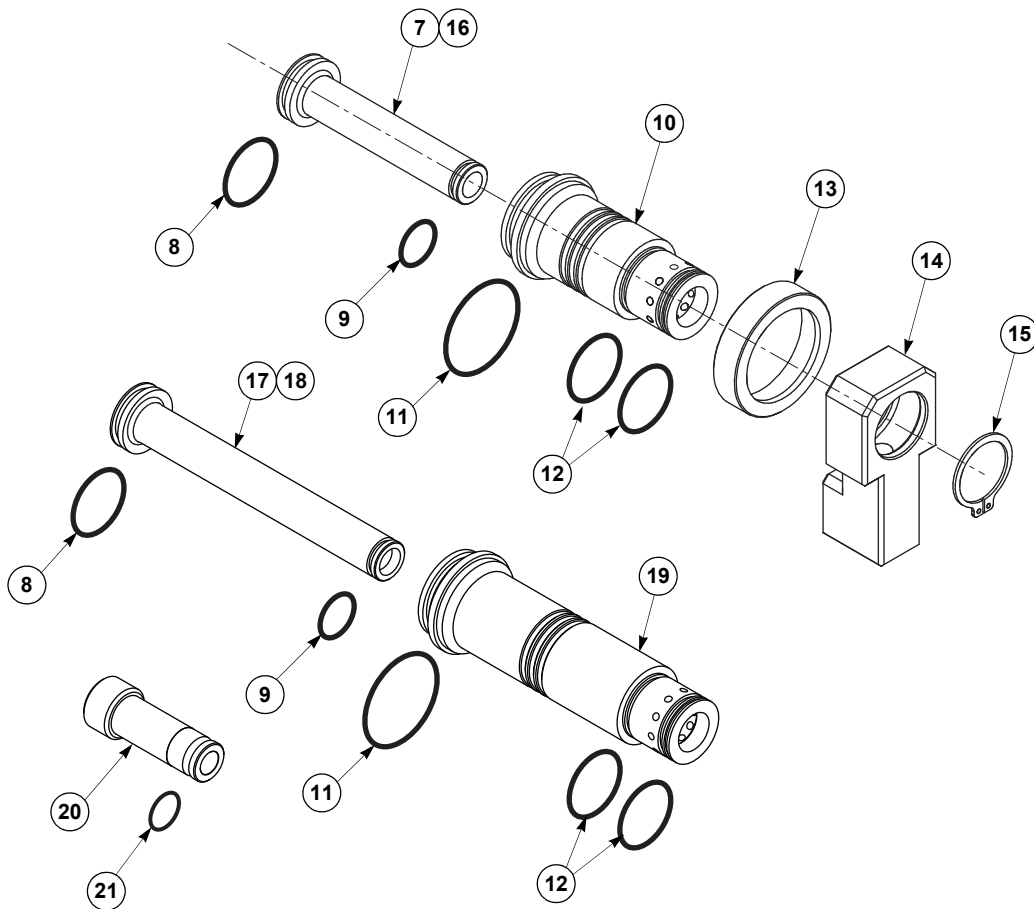
ws-610\_overview

Item No.	Description	Qty.	Order No.
1	Gun Body Assembly	1	See page 8.
2 (1)	Ignition Assembly	1	See page 8.
3	Burner and Combustion Chamber	1	See page 7.
4	Middle Gun Body Assembly	1	See page 6.
5	Front Gun Body Assembly	1	See page 5.
6	Water Connection / Mounting Block	1	See page 8.

1. WokaStar-610-Sz



## 2.2 Front Gun Body Assembly

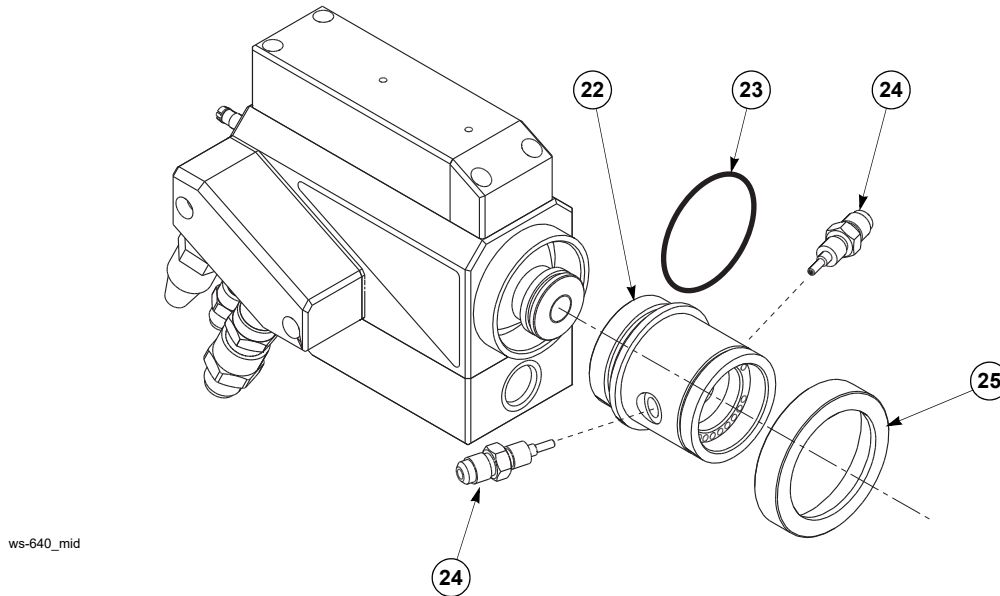


ws-640\_front

Item No.	Description	Qty.	Order No.
7	Barrel, 4" (includes items 8&9)	1	1051230
8	O-Ring, Viton 0.924 x 0.103 in.	1	1041816
9	O-Ring, Black Viton, 0.551 x 0.07 in.	1	1006226
10	Front Gun Body, 4" (includes items 11&12)		1072317
11	O-Ring, Viton 1.266 x 0.103 in.	1	1017893
12	O-Ring, Black Viton 0.989 x 0.07 in. (pkg. of 2)	2	1000225
13	Front Ring Nut	1	1041813
14	Water Manifold	1	1072318
15	Snap Ring	1	1041812
<b>Optional:</b>			
16	Barrel, 4", (with chamfer) (includes items 8&9)	—	1070668
17 <sup>(1)</sup>	Barrel, 6" (includes items 8&9)	—	1051236
18 <sup>(1)</sup>	Barrel, 6", (with chamfer) (includes items 8&9)	—	1070669
19 <sup>(1)</sup>	Front Gun Body, 6" (includes items 11&12)	—	1072319
20	Water Tube, 6" Extension (includes item 21)	—	1072315
21	O-Ring, Buna, 0.487 x 0.103 in.	1	1072313

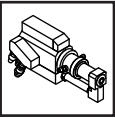
1. 6-inch Water Tube Extension, item 20 also required with this item.

### 2.3 Middle Gun Body

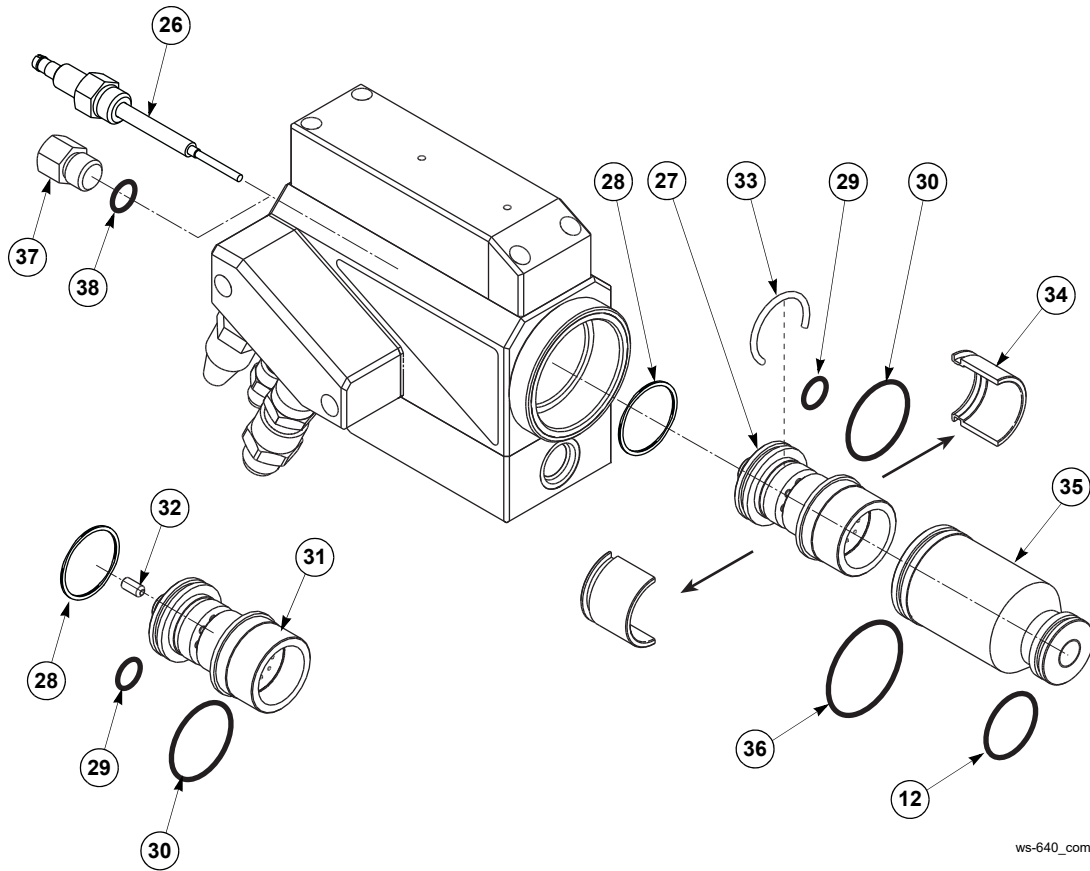


Item No.	Description	Qty.	Order No.
22	Middle Gun Body (includes item 23)	1	1041806
23	O-Ring, Buna 1.674 x 0.103 in.	1	1017589
24	Powder Injector	2	1041807
25	Middle Ring Nut	1	1041808

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## 2.4 Burner and Combustion Chamber



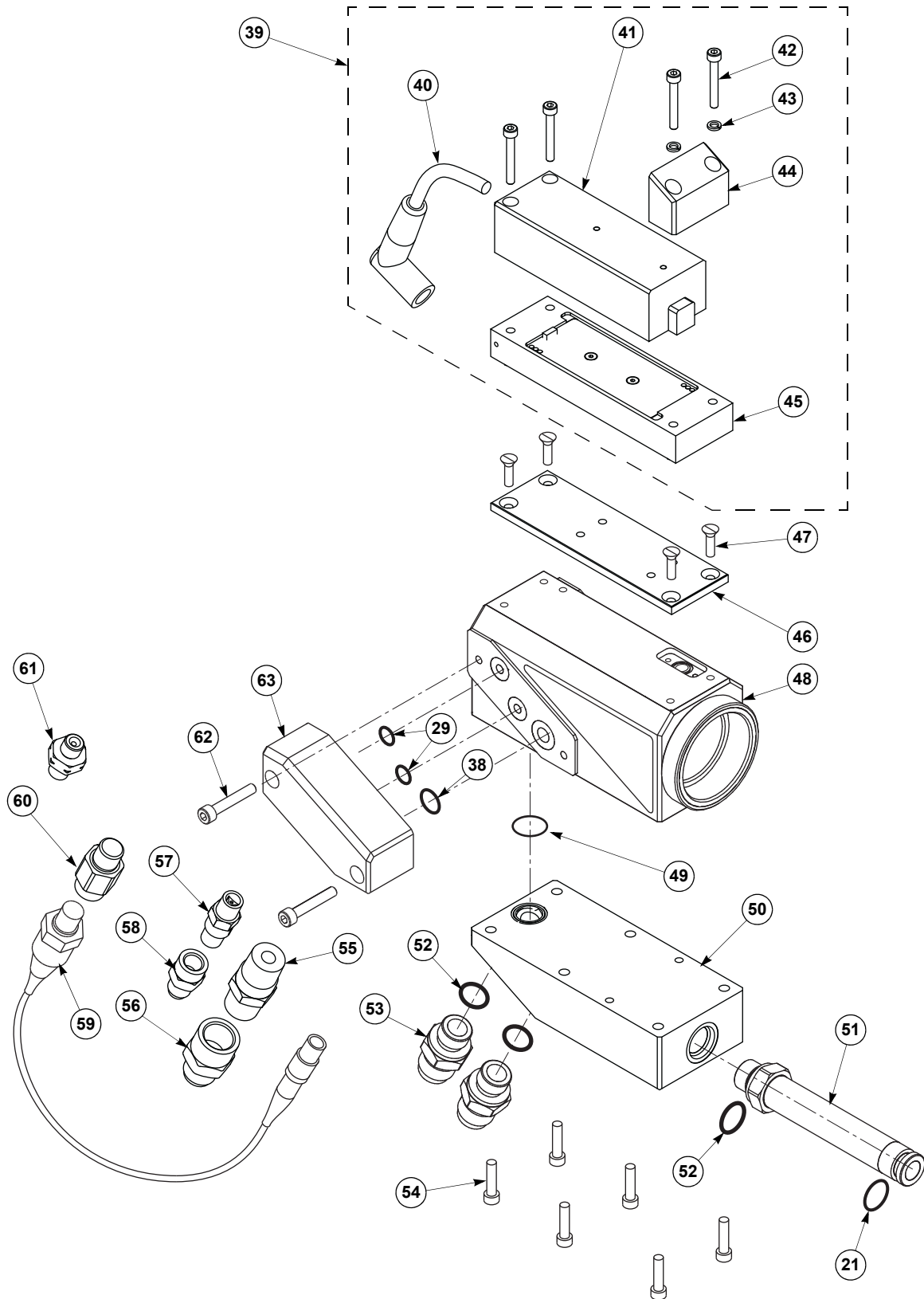
ws-640\_combust\_burn

Item No.	Description	Qty.	Order No.
12	O-Ring, Black Viton 0.989 x 0.07 in. (pkg. of 2)	1	1000225
26 <sup>(1)(2)</sup>	Sparkplug Assembly	1	1071048
27 <sup>(1)(2)</sup>	Burner Assembly (includes items 28-30)	1	1072321
28	Wave Spring Washer	1	1077246
29	O-Ring, Black Viton, 0.301 x 0.07 in.	1	1015535
30	O-Ring, Viton, 1.176 x 0.07 in.	1	1059684
31 <sup>(3)</sup>	Burner Assembly (includes items 28-30&32)	1	1051224
32 <sup>(3)</sup>	Orifice Insert	1	1051284
33	External Ring	1	1051257
34	Sleeve	2	1051249
35	Chamber, 8mm (includes items 12&36)	1	1051211
36	O-Ring, Black Viton, 1.364 x 0.07 in.	1	1000362
37 <sup>(3)</sup>	Plug	1	1051283
38	O-Ring, Black Viton 0.426 x 0.07 in. (pkg. of 2)	1	1001493

- 1. WokaStar-610-Sz
- 2. WokaStar-610-S
- 3. WokaStar-610

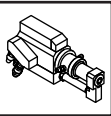
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## 2.5 Gun Body Assembly



ws-610\_gun\_body





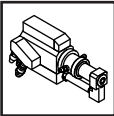
Item No.	Description	Qty.	Order No.
21	O-Ring, Buna, 14.5 mm x 1 mm	1	1072313
29	O-Ring, Black Viton, 0.301 x 0.07 in.	2	1015535
38	O-Ring, Black Viton 0.426 x 0.07 in. (pkg. of 6)	1	1001493
39 <sup>(1)</sup>	Ignition Assembly (includes items 40-45)	1	1082625
40	Spark Plug Ignition Cable	1	1072300
41	Ignition Unit	1	1072289
42	Screw, M4 x 30 mm	4	1070092
43	Lock Washer	2	1071113
44	Ignition Cover Clamp	1	1072290
45	Base Plate	1	—
46 <sup>(2)(3)</sup>	Blank Cover	1	1072295
47 <sup>(2)(3)</sup>	Screw, M4 x 10 mm	4	—
48	Gun Body	1	1089814
49	O-Ring, Buna, 16 mm x 1 mm	1	1072296
50	Water Connection / Mounting Block	1	—
51	Water Tube, 4" (includes items 21 & 52)	1	1072312
52	O-Ring, Buna, 0.549 x 0.103 in. (pkg. of 3)	3	1015320
53	Water Fitting (includes item 52)	2	1072314
54	Screw, M5 x 12 mm	6	1072299
55	Oxygen Check Valve	1	1041800
56	Oxygen Fitting	1	1041801
57	Fuel Check Valve	1	1041802
58	Fuel Fitting	1	1041803
59 <sup>(1)</sup>	Transducer Assembly	1	1072288
60 <sup>(1)</sup>	Snubber	1	1077240
61 <sup>(2)(3)</sup>	Hydrogen / Back-Pressure Fitting	1	1066213
62	Screw, M5 X 30mm	2	1072322
63	Fuel/Oxygen Manifold	1	1072323

1. WokaStar-610-Sz
2. WokaStar-610-S
3. WokaStar-610

## 2.6 Tools and Spares

The following items are supplied with WokaStar™-610 Spray Gun.

Item No.	Description	Qty.	Order No.	
64	Krytox®	1	1070061	
65	Allen Wrench 3/32"	1	1002327	
66	Retaining Ring Pliers	1	1004993	
67	Burner Removal Tool	1	1051285	
68	Flame Sensor Adapter Block	1	1075927	
69	Screw, M4 x 12mm	(pkg. of 4)	2	1062281
70	Reseal Kit	includes the following items:	1	1075834
8	O-Ring, Viton 0.924 x 0.103 in.	1	1041816	
9	O-Ring, Black Viton, 0.551 x 0.07 in.	1	1006226	
11	O-Ring, Viton 1.266 x 0.103 in.	1	1017893	
12	O-Ring, Black Viton 0.989 x 0.07 in.	3	1000225	
21	O-Ring, Buna, 14.5 mm x 1 mm	1	1072313	
23	O-Ring, Buna 1.674 x 0.103 in.	1	1017589	
29	O-Ring, Black Viton, 0.301 x 0.07 in.	3	1015535	
30	O-Ring, Viton, 1.176 x 0.07 in.	1	1059684	
36	O-Ring, Black Viton, 1.364 x 0.07 in.	1	1000362	
38	O-Ring, Black Viton 0.426 x 0.07 in.	2	1001493	
49	O-Ring, Buna, 16 mm x 1 mm	1	1072296	



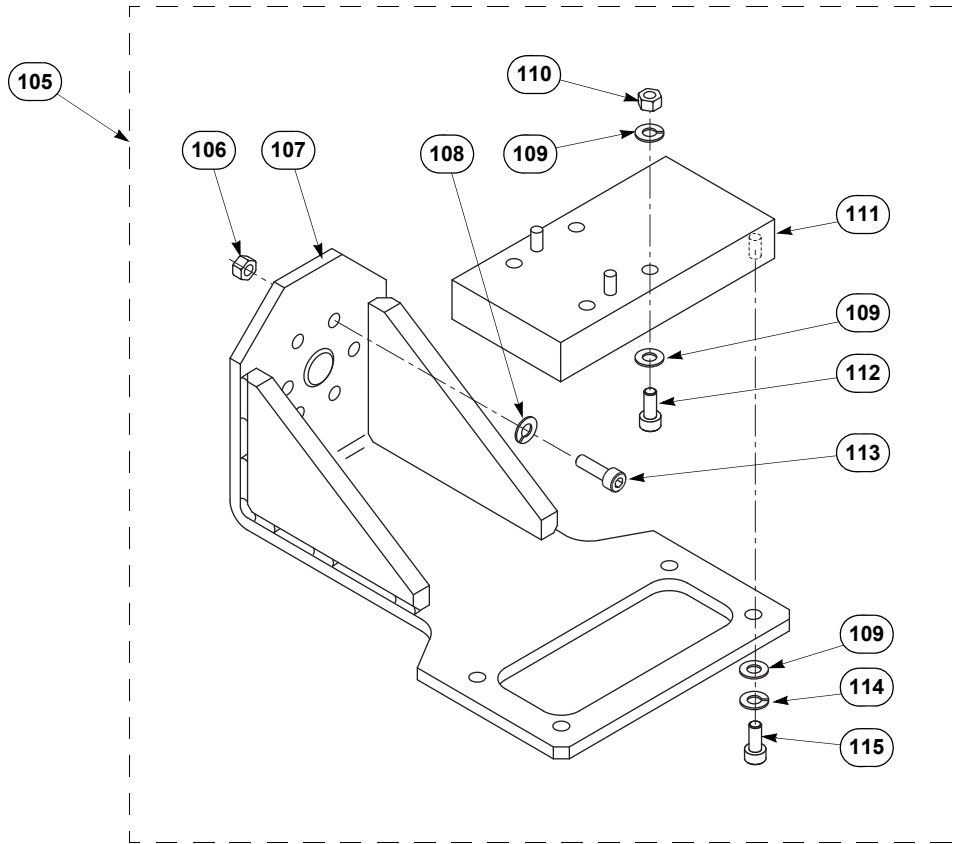
### 3 Additional Equipment

Items in this section are not supplied with WokaStar™-610 Spray Gun.

#### 3.1 Hoses and Fittings

Item No.	Description	Qty.	Order No.
71	Complete 18H Hose Assembly 25' (7.6 m; spray gun to JAMbox)	—	1041826
72	Hydrogen Hose Assembly 25' (7.6 m)	1	1041821
73	Oxygen Hose Assembly 25' (7.6 m) 3/8 ID	1	1041822
74	Fuel Hose Assembly 25' (7.6 m) 1/4 ID	1	1041823
75	Complete 18H-15 Hose Assembly 15' (4.6 m; spray gun to JAMbox)	—	1049797
76	Hydrogen Hose Assembly 15' (4.6 m)	1	1059809
77	Oxygen Hose Assembly 15' (4.6 m) 3/8 ID	1	1059830
78	Fuel Hose Assembly 15' (4.6 m) 1/4 ID	1	1059833
79	Complete 18H-35 Hose Assembly 35' (10.7 m; spray gun to JAMbox)	—	1049798
80	Hydrogen Hose Assembly 35' (10.7 m)	1	1059827
81	Oxygen Hose Assembly 35' (10.7 m) 3/8 ID	1	1059831
82	Fuel Hose Assembly 35' (10.7 m) 1/4 ID	1	1059835
83	Complete 18H-50 Hose Assembly 50' (15.2 m; spray gun to JAMbox)	—	1049799
84	Hydrogen Hose Assembly 50' (15.2 m)	1	1059828
85	Oxygen Hose Assembly 50' (15.2 m) 3/8 ID	1	1059832
86	Fuel Hose Assembly 50' (15.2 m) 1/4 ID	1	1059836
87	Complete 19H-25 Hose Assembly 25' (7.6 m; Includes items 73, 74, 88 & 89.)	—	1070914
88	Water-In Hose Assembly, 25' (7.6 m)	1	1001819
89	Water-Out Hose Assembly, 25' (7.6 m)	1	1001820
90	Complete 19H-50 Hose Assembly 50' (15.2 m; Includes items 85, 86, 91 & 92.)	—	1070831
91	Water Hose-In (made to order 5-50')	—	1049868
92	Water Hose-Out (made to order 5-50')	—	1049869
93	Complete 19H-70 Hose Assembly 70' (21.3 m; Includes 94-97.)	—	1301048
94	Water-In Hose Assembly, 70' (21.3 m)	1	1049868
95	Water-Out Hose Assembly, 70' (21.3 m)	1	1049869
96	Oxygen Hose Assembly 70' (21.3 m) 1/4 ID	1	—
97	Fuel Hose Assembly 70' (21.3 m) 1/4 ID	1	—
98	Quick Disconnect Socket 3/8NPTF	—	1001821
99	Hose Hex Nipple Fitting, 1/2 x 3/8-18NPTF	—	1001822
<b>Praxair JP-5000 Integration Components</b>			
100	Praxair Adapter Kit (Refer to AI128356.)	—	1098196
101	Praxair-style Powder Tube	—	1042920
<b>Gun Cable Packages (For WokaStar-610-Sz. Each includes sensor, ignition and ground cables.)</b>			
102	Liquid Fuel Gun Cable Package, 8 m (26 ft)	—	1090453
103	Liquid Fuel Gun Cable Package, 15 m (50 ft)	—	1090463
104	Liquid Fuel Gun Cable Package, 20 m (66 ft)	—	1301092

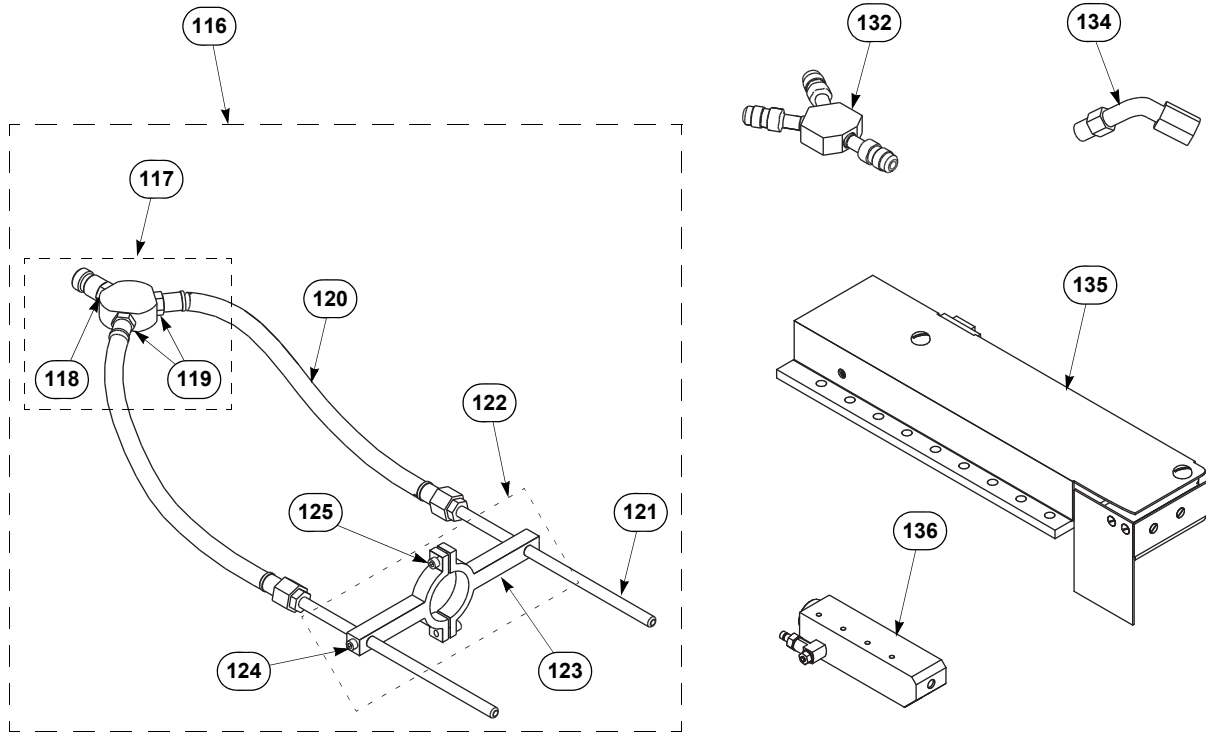
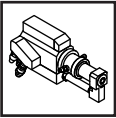
### 3.2 Mounting Bracket



ws-640\_mount

Item No.	Description	Qty.	Order No.
105	Gun Bracket Assembly, 90° includes items 106-115	—	1071272
106	Nut, 6mm X 5mm (pkg. of 5)	6	1000197
107	Gun Bracket	1	—
108	Split Spring Lock Washer	6	1038223
109	Flat Washer (pkg. of 4)	12	1000553
110	Nut, M5	4	—
111	Insulator Plate	1	—
112	Screw, M5 X 20mm	4	—
113	Screw	6	1038221
114	Spring Lock Washer (pkg. of 4)	4	1000554
115	Screw, 10-32 X 9/16	4	—

### 3.3 Accessories



ws-610\_acc

Item No.	Description	Qty.	Order No.
116	Air Jet Assembly	—	1051091
	includes items 117-126		
117	Wye Assembly	1	1000541
118	Hex Nipple	1	1000824
119	Hex Nipple	2	1000464
120	Hose Assembly Air Nozzle 15 in. (380 mm)	2	1000543
121	Air Jet Tube Assembly	2	1060775
122	Air Jet Clamp Assembly	1	1060774
	includes items 123-125		
123	Air Jet Clamp	2	1051090
124	Screw, M5x8	(pkg. 10)	1000178
125	Screw, M5x20	2	—
126	Air Hose 10m (35 ft) (not shown)	1	1001451
127	Air Hose 4.6 m (15 ft, not shown)	—	1001319
128	Air Hose 5.8 m (19 ft, not shown)	—	1001473
129	Air Hose 15.2 m (50 ft, not shown)	—	1005827
130 <sup>(1)</sup>	Hose Fitting, 1/4" X 9/16-18RH	—	1301332
131	Powder Wye Assembly	—	1049888
	includes items 132 & 133		
132	Powder Wye	1	1049944
133	Powder Feed Hose, Orange, 0.34 m (1.1') 3.2 mm (1/8") ID (not shown)	2	1049945
134	Powder 45 Elbow	—	1000694
135	Ignition Device, ZG2 (Refer to MAN 121082.)	—	1083161
136	Flame Sensor, 90° (Refer to MAN 121082.)	—	1009657

1. Use to connect/combine any two air hoses, items 126–129.

