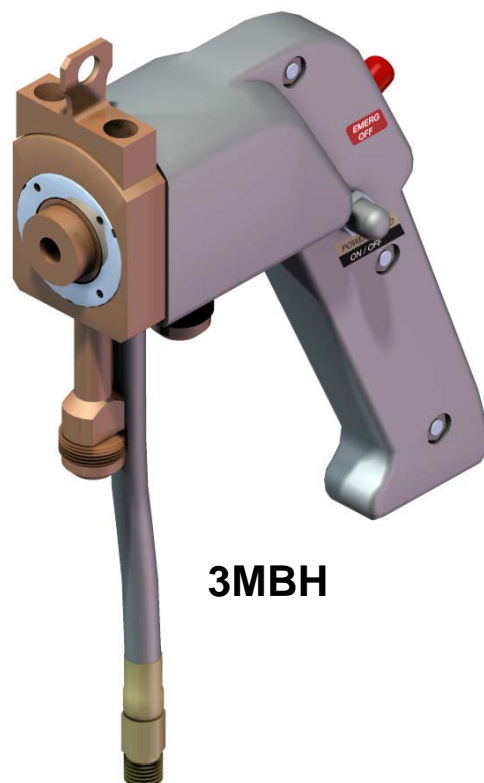
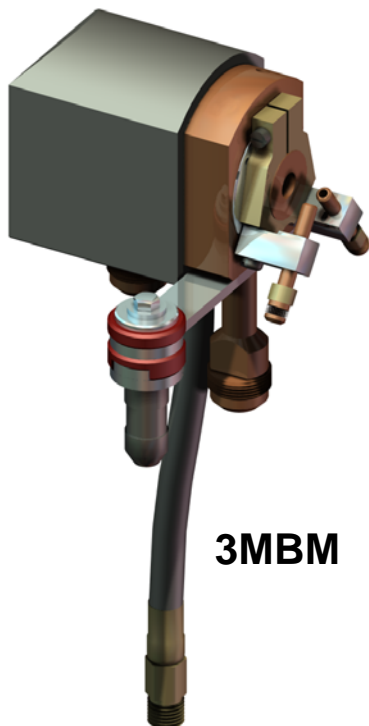


# 3MB Plasma Gun

## Plasma Spraying


Parts List  
PL 40923 EN 11




## Oerlikon Metco (US) Inc.

1101 Prospect Avenue

Westbury NY 11590

 +1 516 334 1300

 +1 516 338 2414

[www.oerlikon.com/metco](http://www.oerlikon.com/metco)

## 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**

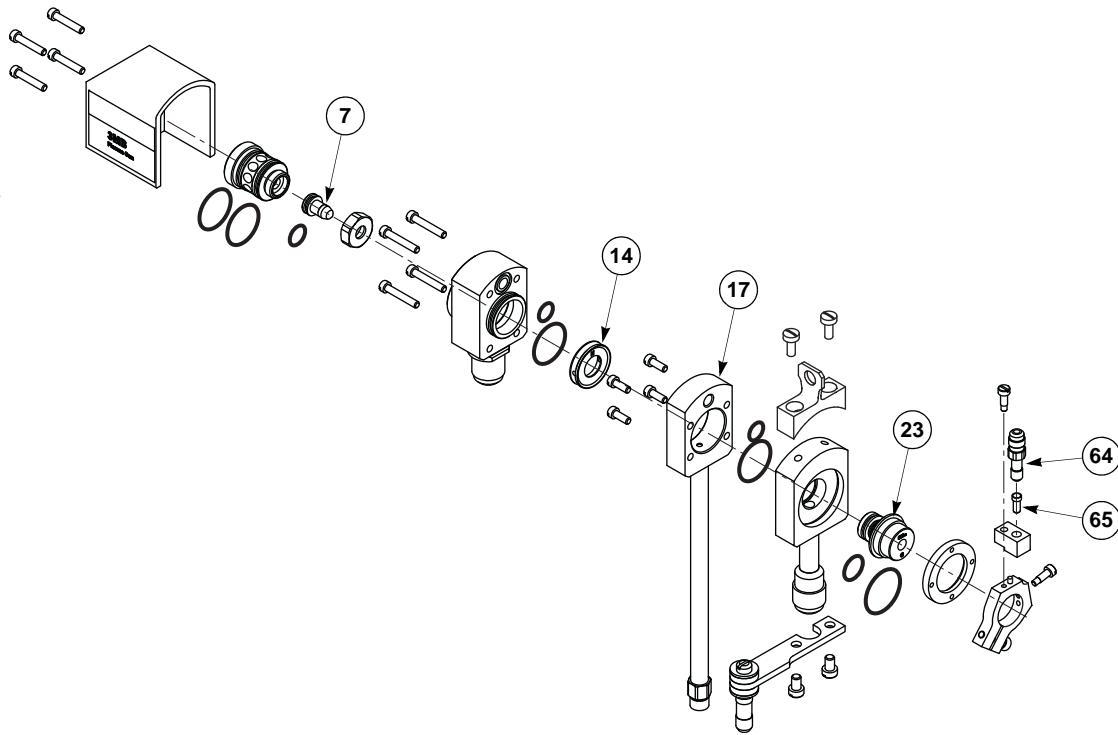
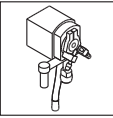
Parts recommended in order to guarantee maximum availability of component. This prevents downtime caused by delay in procurement.



## Warranty Disclaimer

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

# 1 List of Recommended Spare Parts for 3MB Plasma Gun

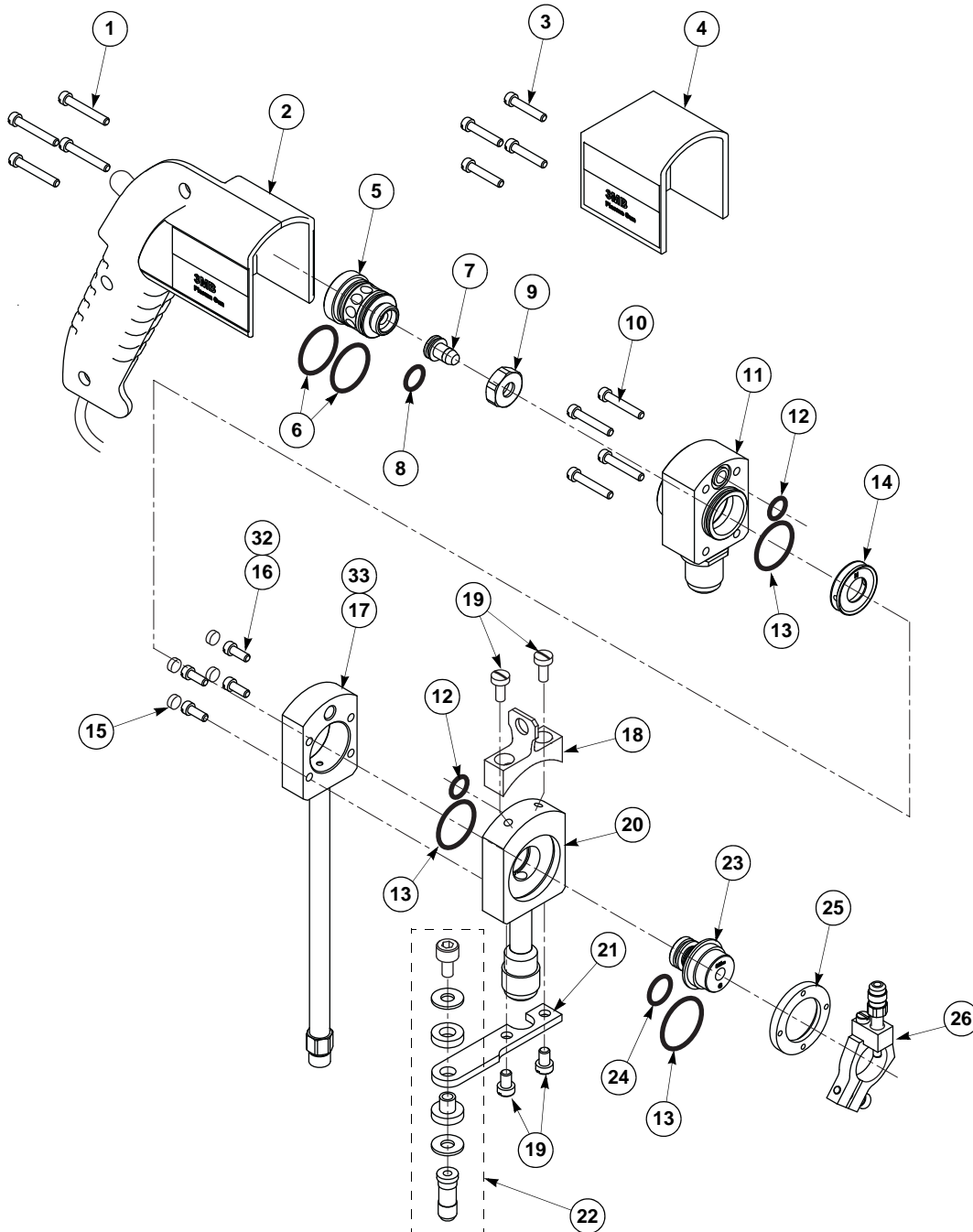


Item No.	Description	Qty.	Cat.	Catalog No.	Order No.
7	Electrode	1	C	2M119197	1084121
14	Distribution Ring (Nitrogen)	1	C	3MBTD48979	1031653
17	Insulator & Hose Assembly	1	C	3MB57690	1036011
23	Nozzle Assembly G ( $N_2$ , $N_2/H_2$ , $Ar/H_2$ )	1	C	3M7-G	1000721
64	Powder Stem	1	W	3M202	1000679
65	No. 2 Powder Port	1	W	3M210	1000681
97	Ringlube	1	C	2M182	1000508
15	Insulating Compound	1	C	2M281	1000526
99	Reseal Kit	1	C	2M206	1000522

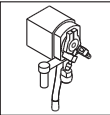
## 2 Parts List for 3MB Plasma Gun

3MBM Plasma Spray Gun ( <i>Machine Mounted</i> )	3MBM	1035207
3MBH Plasma Spray Gun ( <i>Hand Held, Non-CE</i> )	3MBH	1035212

### 2.1 Complete Gun Assembly



PL 40923 EN 11 Released on: 14.12.2015



Item No.	Description	Qty.	Catalog No.	Order No.
1 (1)	Screw, 10-24 x 1-1/8 (pkg. of 6)	4	C440	1022159
2 (1)	Handle Assembly, 3MBH (See page 6.)	1	3MB57674	1036015
3 (2)	Screw, 10-24 X 7/8 (pkg. of 5)	4	2E71	1004819
4 (2)	Gun Cover, 3MBM	1	3MB38539	1036013
5	Electrode Holder	1	2M184	1000510
6	O-Ring, Buna, 0.989 x 0.07 in. (pkg. of 6)	2	2M198	1000520
7	Electrode (incl. item 8)	1	2M119197	1084121
8	O-Ring, Black Viton, 0.426 x 0.07 in. (pkg. of 2)	1	7M51	1001493
9	Locknut	1	3M276	1000688
10	Screw, 10-24 x 1 (pkg. of 5)	4	2M192	1000516
11	Rear Gun Body	1	3MB57653	1036012
12	O-Ring, Buna, 0.489 x 0.07 in. (pkg. of 6)	2	2M195	1000518
13	O-Ring, Black Viton, 1.114 x 0.07 in. (pkg. of 6)	3	7M57	1001495
14	Distribution Ring (Nitrogen)	1	3MBTD48979	1031653
15	Insulating Compound	AR	2M281	1000526
16	Screw, 10-24 x 1/2 (pkg. of 5)	4	4E38	1000834
17	Insulator & Hose Assembly	1	3MB57690	1036011
18 (1)	Mounting Bracket (incl. item 19)	1	2M183	1000509
19	Screw, 1/4-20 x 3/8 (pkg. of 6)	2	2M185	1000511
20	Front Gun Body	1	3MB57657	1036008
21 (2)	Tool Post Bracket	1	2M268	1000524
22 (2)	Tool Post Stud Package	1	2M269	1004831
23	Nozzle Assembly G (N <sub>2</sub> , N <sub>2</sub> /H <sub>2</sub> , Ar/H <sub>2</sub> ) (incl. items 13 & 24)	1	3M7-G	1000721
24	O-Ring, Black Viton, 0.614x0.07 in. (pkg. of 6)	1	7M111	1001462
25	Nozzle Locking Ring	1	2M190	1000515
26	Dual Powder Port Mounting Bracket (incl. items 61 & 62)	1	9MB961	1001664

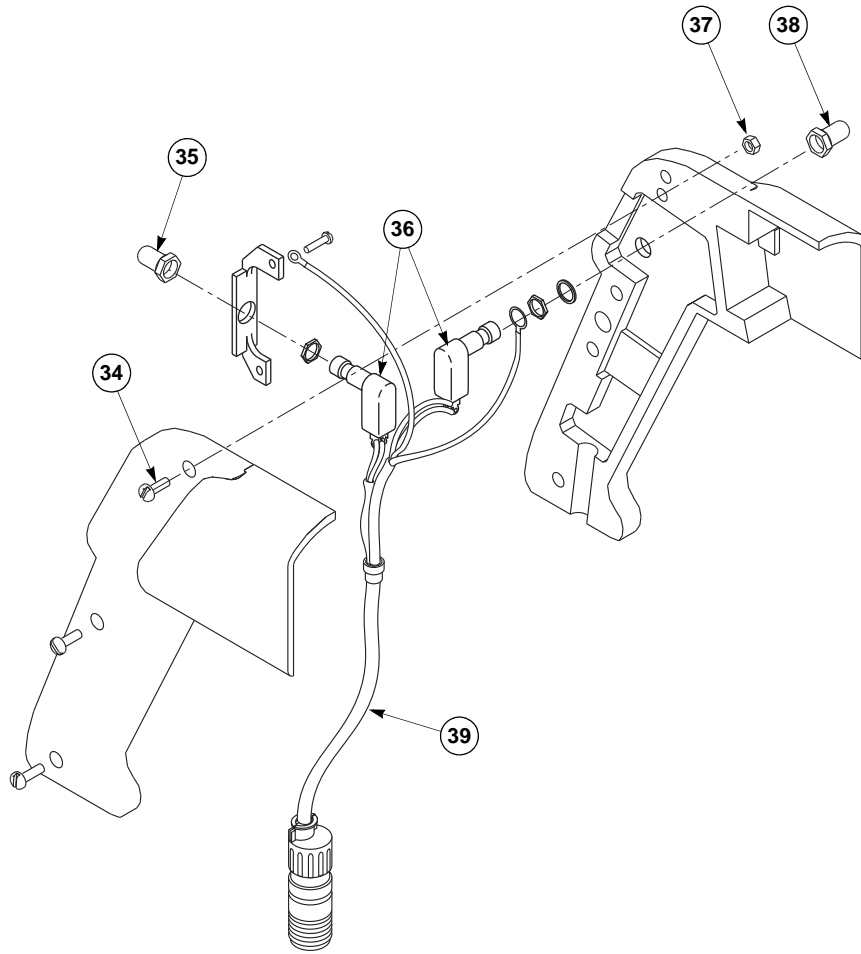
1. 3MBH
2. 3MBM

## 2.2 Optional Gun Components

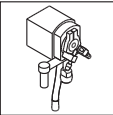
Item No.	Description	Qty.	Catalog No.	Order No.
—	Optional Nozzle Assemblies, see page 7.	—	—	—
27	Distribution Ring Argon, 1 hole	—	3M275	1000687
28	Electrode (incl. item 8)	—	9M119198	1084120
29	Electrode Package (Contains quantity 50, item 28.)	—	9MB63-50	1089198
30	Nozzle Package (Contains quantity 50, item 23.)	—	3M7-G-50	1067309
31 (1)	Insulator & Nylon Screws Package (incl. items 32&33)	—	3MB118456	1083275
32 (1)	Screw, Socket Cap 10-24 x 1/2 Nylon (pkg. of 4)	4	3MB118	1084687
33 (1)	Insulator	1	3MBTD48974	1031652

1. Recommended for use on UniCoat and MultiCoat systems to prevent arcing during ignition.

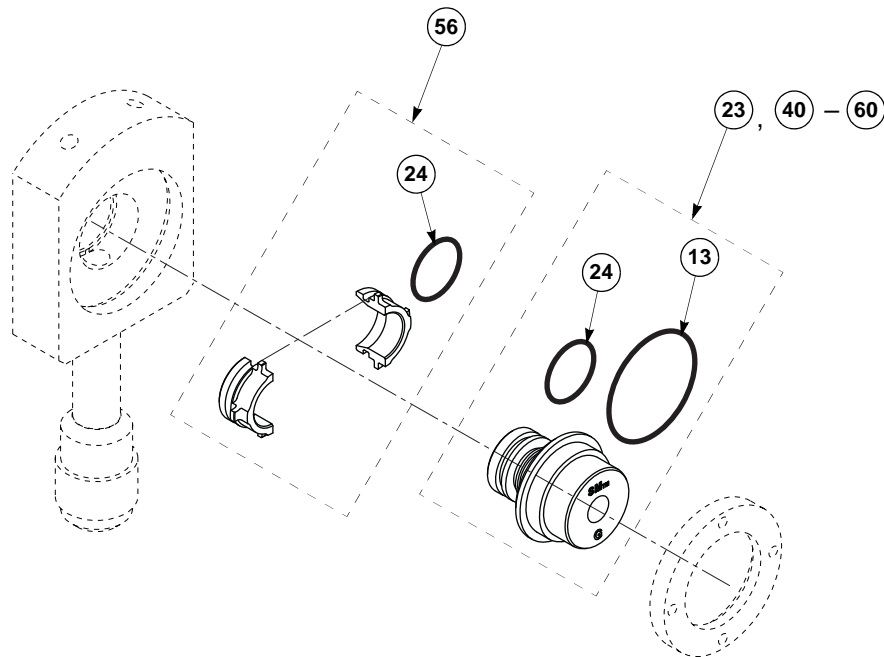
## 2.3 Handle Assembly (3MBH)



Item No.	Description	Qty.	Catalog No.	Order No.
34	Screw, 10-32 x 3/8	3	4MP71	1031800
35	Boot (Red)	1	—	—
36	Pushbutton Switch	2	3M341	1000695
37	Nut, #10-32	3	—	—
38	Push Button Boot	1	3M670	1000713
39	Receptacle Cable	1	7M23	1032346



## 2.4 Nozzle Assemblies



Item No.	Description	Qty.	Catalog No.	Order No.
<b>Standard Nozzle</b> (Supplied with spray gun.)				
23	Nozzle Assembly G ( $N_2$ , $N_2/H_2$ , $Ar/H_2$ ) (incl. items 13 & 24)	—	3M7-G	1000721
13	O-Ring, Black Viton, 1.114x0.07 in. (pkg. of 6)	1	7M57	1001495
24	O-Ring, Black Viton, 0.614x0.07 in. (pkg. of 6)	1	7M111	1001462
30	Nozzle Package (Contains quantity 50, item 23.)	—	3M7-G-50	1067309
<b>Optional Nozzles</b> (Each includes O-Rings, items 13 & 24.)				
40	Nozzle Assembly GP ( $Ar$ , $Ar/H_2$ , $Ar/He$ )	1	3M7-GP	1000724
41	Nozzle Assembly GE ( $N_2$ , $N_2/H_2$ , $Ar/N_2$ , $Ar/H_2$ , $Ar/He$ )	—	3M7-GE	1000722
42	Nozzle Assembly GH ( $Ar/H_2$ , $Ar/He$ )	—	3M7-GH	1000723
43	Nozzle Assembly 700 ( $Ar$ , $Ar/H_2$ , $N_2$ )	—	7M700	1001507
44	Nozzle Assembly 703 ( $Ar$ , $Ar/H_2$ )	—	7M703	1001508
45	Nozzle Assembly 704 ( $Ar$ , $Ar/H_2$ , $Ar/He$ )	—	7M704	1001509
46	Nozzle Assembly 705 ( $Ar/N_2$ , $Ar/He$ )	—	7M705	1001510
47	Nozzle Assembly 706 ( $Ar$ , $Ar/He$ , $Ar/N_2$ )	—	7M706	1005298
48	Nozzle Assembly 707 ( $Ar$ , $N_2$ , $N_2/H_2$ , $Ar/H_2$ , $Ar/He$ )	—	7M707	1005299

(continued)

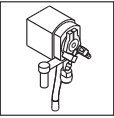
PL 40923 EN 11 Released on: 14.12.2015

(continued)

Item No.	Description	Qty.	Catalog No.	Order No.
<b>Tungsten-Lined Nozzles</b> (Each includes O-Rings, items 13 & 24.)				
49 <sup>(1)</sup>	Nozzle, 930W (Tungsten Lined) ( $N_2$ , $N_2/H_2$ )	—	9MB57850(TF)	1088071
50 <sup>(1)</sup>	Nozzle, 932W (Tungsten Lined) ( $Ar$ , $Ar/H_2$ )	—	9MB57851(TF)	1088072
51 <sup>(1)</sup>	Nozzle, 933W (Tungsten Lined) ( $Ar$ , $Ar/H_2$ , $Ar/He$ )	—	9MB57852(TF)	1088077
52 <sup>(1)</sup>	Nozzle, 927W (Tungsten Lined) ( $N_2$ , $N_2/H_2$ , $Ar/H_2$ , $Ar/He$ )	—	9MB57889(TF)	1088078
53 <sup>(1)</sup>	Nozzle, 931W (Tungsten Lined) ( $N_2$ , $N_2/H_2$ , $Ar/N_2$ )	—	9MB58244(TF)	1088079
54	Nozzle, G-W (Tungsten Lined) ( $N_2$ , $N_2/H_2$ )	—	9MB58395(TF)	1088073
55	Nozzle, GH-W (Tungsten Lined) ( $Ar$ , $Ar/H_2$ , $Ar/He$ )	—	9MB58396(TF)	1088074
56	Water Jacket (Includes both halves & item 24.)	—	9MB54809	1040838
<b>Commercial-Grade Nozzle Packages</b> (Each includes O-Rings, items 13 & 24. Quantity 10 each.)				
57	Nozzle, G (Commercial Grade, pkg. of 10)	—	3M7-G-CG	1063176
58	Nozzle, GE (Commercial Grade, pkg. of 10)	—	3M7-GE-CG	1063179
59	Nozzle, GH (Commercial Grade, pkg. of 10)	—	3M7-GH-CG	1063178
60	Nozzle, GP (Commercial Grade, pkg. of 10)	—	3M7-GP-CG	1063182

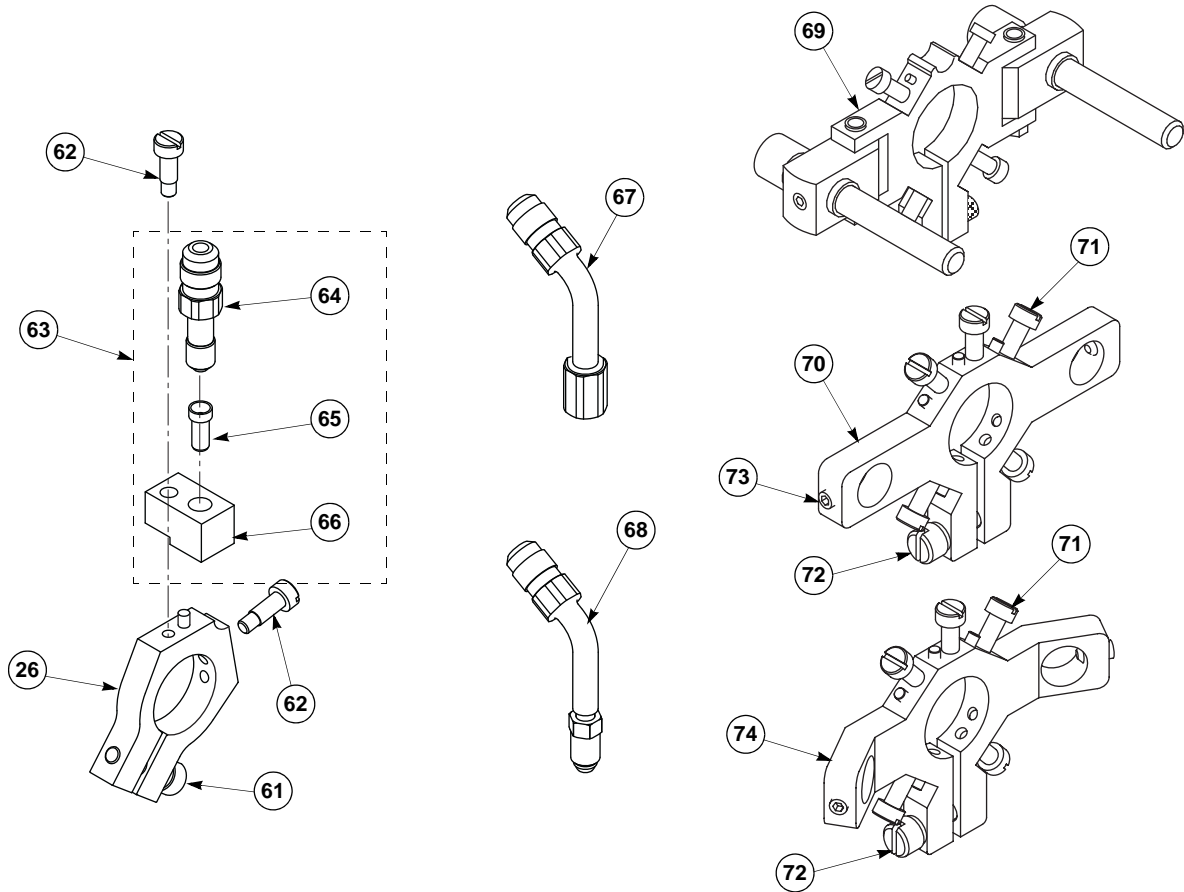
1. Requires Water Jacket, item 56.





## 2.5 Powder Port Hardware

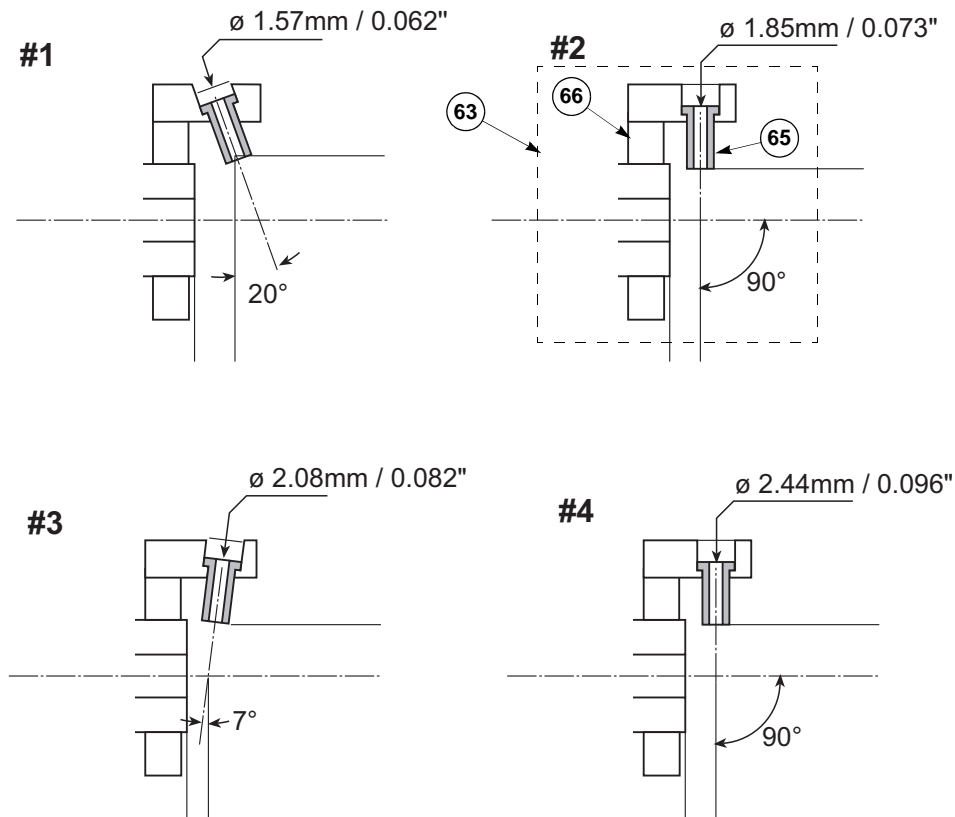
### 2.5.1 Powder Port and Air Jet Assemblies



Item No.	Description	Qty.	Catalog. No.	Order No.
26	Dual Powder Port Mounting Bracket <i>(incl. items 61 &amp; 62)</i>	1	9MB961	1001664
61	Screw, 10-24X1-13/64	1	3M327	1000692
62	Screw, 8-32 X 3/16	2	9MB962	1001665
63	No. 2 Powder Port Assembly <i>(incl. items 64 - 66)</i>	1	9MB972	1001668
64	Powder Stem	1	3M202	1000679
65	No. 2 Powder Port	1	3M210	1000681
66	No. 2 Mounting Block	1	9MB982	1001674
<b>Optional</b>				
67	Stem Assembly	—	3M331	1000694
68	Swivel Powder Port Stem	—	9MB963	1016440
69	Quad Powder Port Air Jet Assembly <i>(Refer to AI 43579.)</i>	—	9MB950	1001662
70	Powder Clamp, Straight <i>(incl. items 71 - 73)</i>	—	3MB79557	1062575
71	Screw, 8-32 X 3/16	5	9MB962	1001665
72	Locking Screw, 10-24 X 1-13/64	1	3M327	1000692
73	Hex Set Screw, 10-24 X 3/8 <i>(pkg. of 2)</i>	2	2PSA37	1000542
74	Powder Clamp, 30° <i>(incl. items 71 - 73)</i>	—	3MB79590	1062578

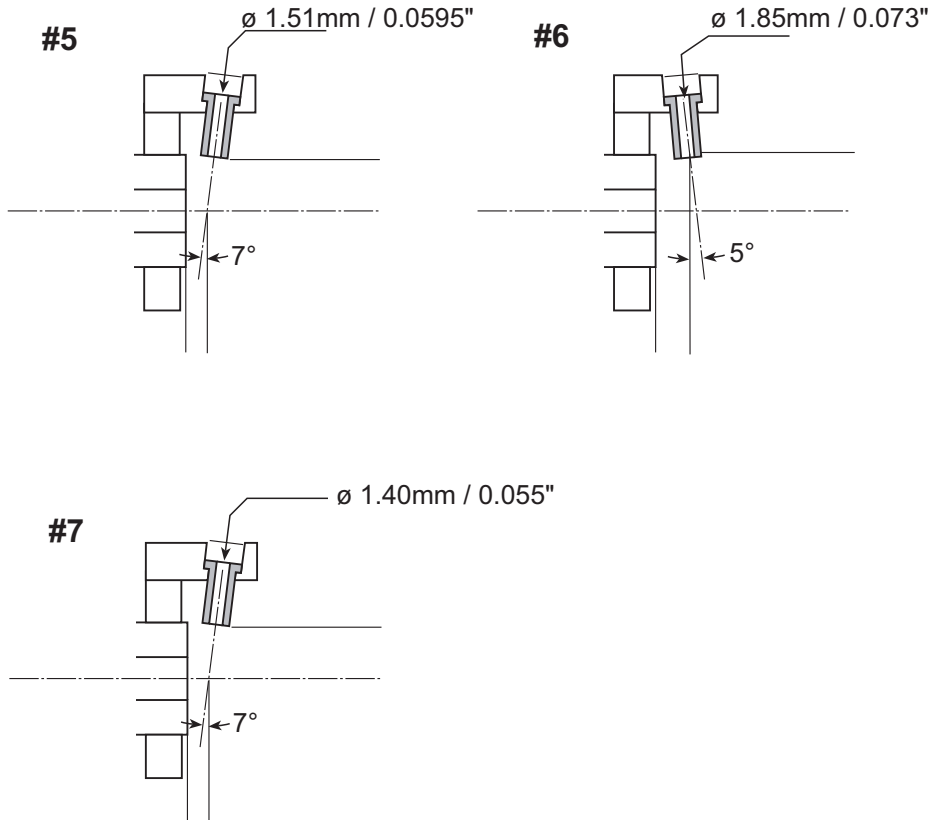
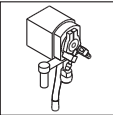
PL 40923 EN 11 Released on: 14.12.2015

## 2.5.2 Powder Injectors



Item No.	Description	Qty.	Catalog. No.	Order No.
<b>Standard Powder Port (Supplied with spray gun.)</b>				
63	No. 2 Powder Port Assembly	1	9MB972	1001668
64	Powder Stem	1	3M202	1000679
65	No. 2 Powder Port	1	3M210	1000681
66	No. 2 Mounting Block	1	9MB982	1001674
<b>Optional Powder Ports</b>				
75	No. 1 Powder Port Assembly	—	9MB971	1001667
76	Powder Feed Tube	1	—	—
77	No. 1 Powder Port	1	—	—
78	No. 1 Mounting Block	1	—	—
79	No. 3 Powder Port Assembly (incl. item 64)	—	9MB973	1001669
80	No. 3 Powder Port	1	3M203	1000680
81	No. 3 Mounting Block	1	9MB983	1001675
82	No. 4 Powder Port Assembly (incl. item 64)	—	9MB974	1001670
83	No. 4 Powder Port	1	3M215	1000683
84	No. 4 Mounting Block	1	9MB984	1006428

2.5.2 Powder Injectors (continued)



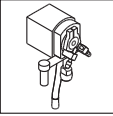
Item No.	Description	Qty.	Catalog. No.	Order No.
<b>Optional Powder Ports (continued)</b>				
85	No. 5 Powder Port Assembly <i>(incl. item 64)</i>	—	9MB975	1001671
86	No. 5 Powder Port	1	3M246	1000685
87	No. 5 Mounting Block	1	9MB985	1001676
88	No. 6 Powder Port Assembly <i>(incl. item 64)</i>	—	9MB976	1001672
89	No. 6 Powder Port	1	7M288	1001485
90	No. 6 Mounting Block	1	9MB986	1032449
91	No. 7 Powder Port Assembly <i>(incl. item 64)</i>	—	9MB977	1001673
92	No. 7 Powder Port	1	9MB997	1032451
93	No. 7 Mounting Block	1	9MB987	1032450

### 3 Additional Equipment

#### 3.1 Tools and Spares

Item No.	Description	Qty.	Catalog. No.	Order No.
<b>Standard Equipment</b> <i>(Supplied with spray gun.)</i>				
94	Hardware Kit <i>(incl. items 15 &amp; 95-99)</i>	1	3MB57596	1035644
15	Insulating Compound	1	2M281	1000526
95	Plasma Gun Wrench	1	2M193	1000517
96	Current Insulator	2	7M144	1001470
97	Ringlube	1	2M182	1000508
98 <sup>(1)</sup>	Gun Control Cable, 5.5 m / 18'	1	7M195	1001480
99	Reseal Kit <i>(includes:)</i>	1	2M206	1000522
6	O-Ring, Buna, 0.989x0.07in	2	2M198	1000520
8	O-Ring, Black Viton, 0.426x0.07'	3	7M51	1001493
12	O-Ring, Buna, 0.489 x 0.07'	2	2M195	1000518
13	O-Ring, Black Viton 1.114 x 0.07'	5	7M57	1001495
24	O-Ring, Black Viton, 0.614 x 0.07'	3	7M111	1001462
—	O-Ring, Buna, 0.239x0.07in	1	4EFC56	1000861
<b>Optional</b>				
100 <sup>(1)</sup>	Gun Control Cable, 8.5 m / 28'	—	7M199	1032340
101 <sup>(1)</sup>	Control Cable (made to order, 1.5-15 m / 5-15')	—	7M199CTO	1075639

1. 3MBH



### 3.2 Hoses and Cables

Water-cooled power cables and plasma gas hoses are listed below. Plasma gas hoses may also be supplied with the plasma control unit. Powder hoses are supplied with the powder feeder or selected based on the spraying application.

Item No.	Description	Qty.	Catalog. No.	Order No.
102	Hose & Cable Package, 5 m (16.4') <i>(includes items 103-106)</i>	—	8MH	1034011
103	Plasma Gas Hose	1	7MH50	1001561
104	Electric Cable, Water Cooled (Red) 5 m (16.4')	1	8MH57586	1034012
105	Electric Cable, Water Cooled (Blue) 5 m (16.4')	1	8MH57587	1034013
106	T-Clip Fastener <i>(pkg. of 3)</i>	3	8MH58390	1093447
107	Hose & Cable Package, 8 m (26') <i>(includes 106, 108-110)</i>	—	8MH-8	1034014
108	Plasma Gas Hose, 9.1 m (30')	1	7MH116	1001553
109	Electric Cable, Water Cooled (Red) 8 m (26')	1	8MH57568	1034470
110	Electric Cable, Water Cooled (Blue) 8 m (26')	1	8MH57567	1034471
111	Hose & Cable Package, 3.5 m (11.5') <i>(includes 106, 112-115)</i>	—	8MH-3.5	1058503
112	Electric Cable, Water Cooled (Red) 3.5 m (11.5')	1	8MH58592	1058539
113	Electric Cable, Water Cooled (Blue) 3.5 m (11.5')	1	8MH58593	1058540
114	Plasma Gas Hose, 3.5 m (11.5')	1	8MH58594	1058541
115	Air Hose 3.5 m (11.5')	1	8MH58595	1058543
116	Hose & Cable Package, 1.5 m (5') <i>(includes 106, 117-120)</i>	—	8MH-1.5	1058504
117	Electric Cable, Water Cooled (Red) 1.5 m (5')	1	8MH58586	1058550
118	Electric Cable, Water Cooled (Blue) 1.5 m (5')	1	8MH58588	1058551
119	Plasma Gas Hose, 1.5 m (5')	1	MH58589	1058552
120	Air Hose 1.5 m (4.9')	1	8MH58590	1058553
<b>Made-to-Order Lengths</b> <i>(Minimum 1.5 m / 5' to maximum 10.5 m / 35'.)</i>				
121	Hose & Cable Package <i>(includes 106, 122-124)</i>	—	8MHCTO	1034390
122	Plasma Gas Hose	1	7MH50MTO	1034352
123	Electric Cable, Water Cooled (Red)	1	8MH20CTO	1034542
124	Electric Cable, Water Cooled (Blue)	1	8MH10CTO	1034543

