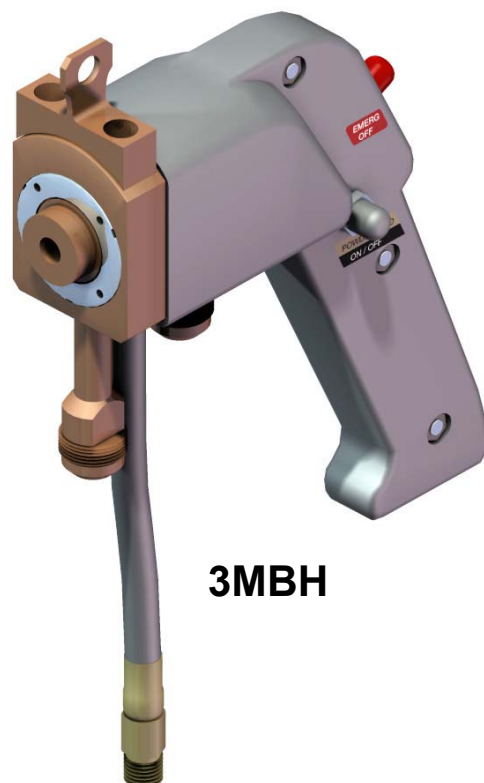
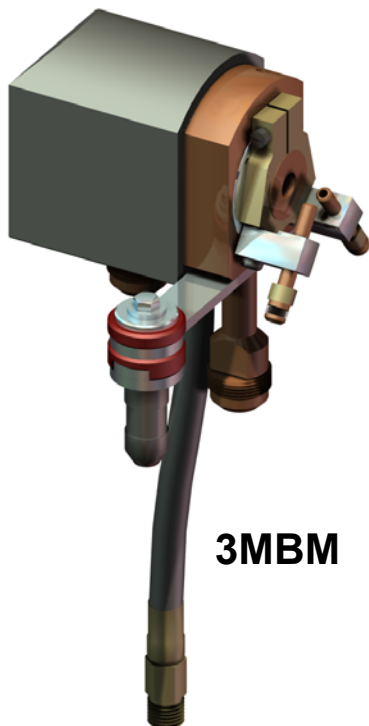


# 3MB Plasma Gun

## Plasma Spraying


Parts List  
PL 40923 EN 13




## 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**

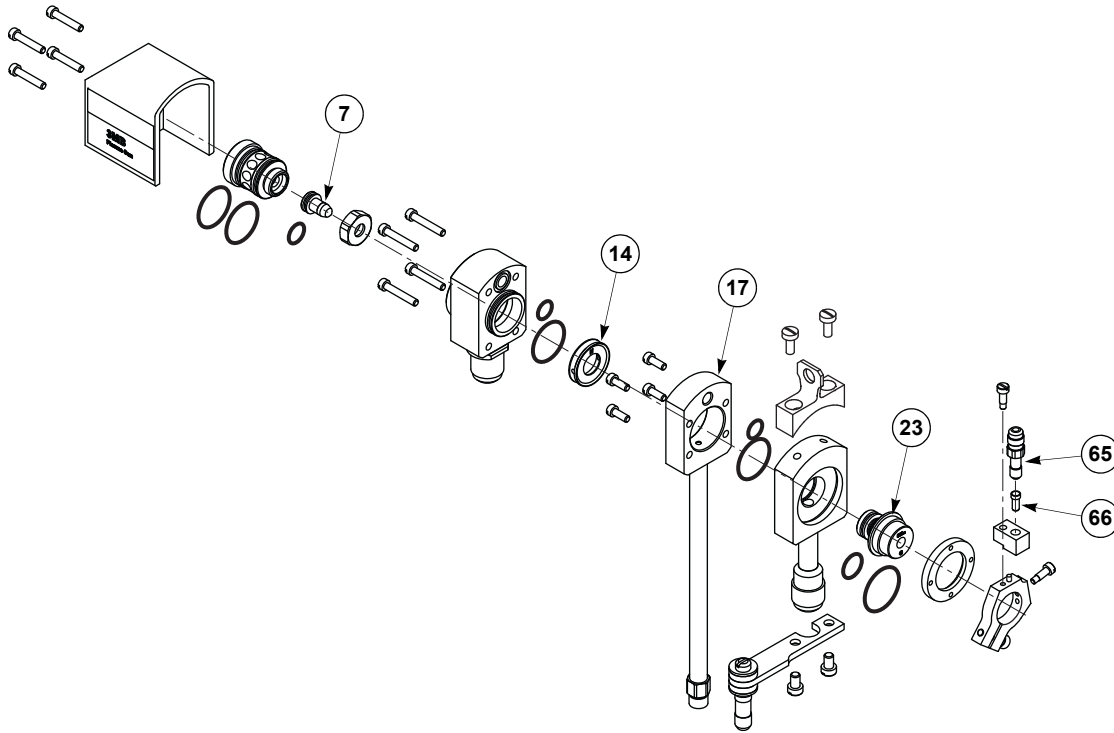
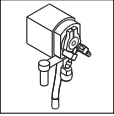
Parts recommended in order to guarantee maximum availability of component. This prevents downtime caused by delay in procurement.



## 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



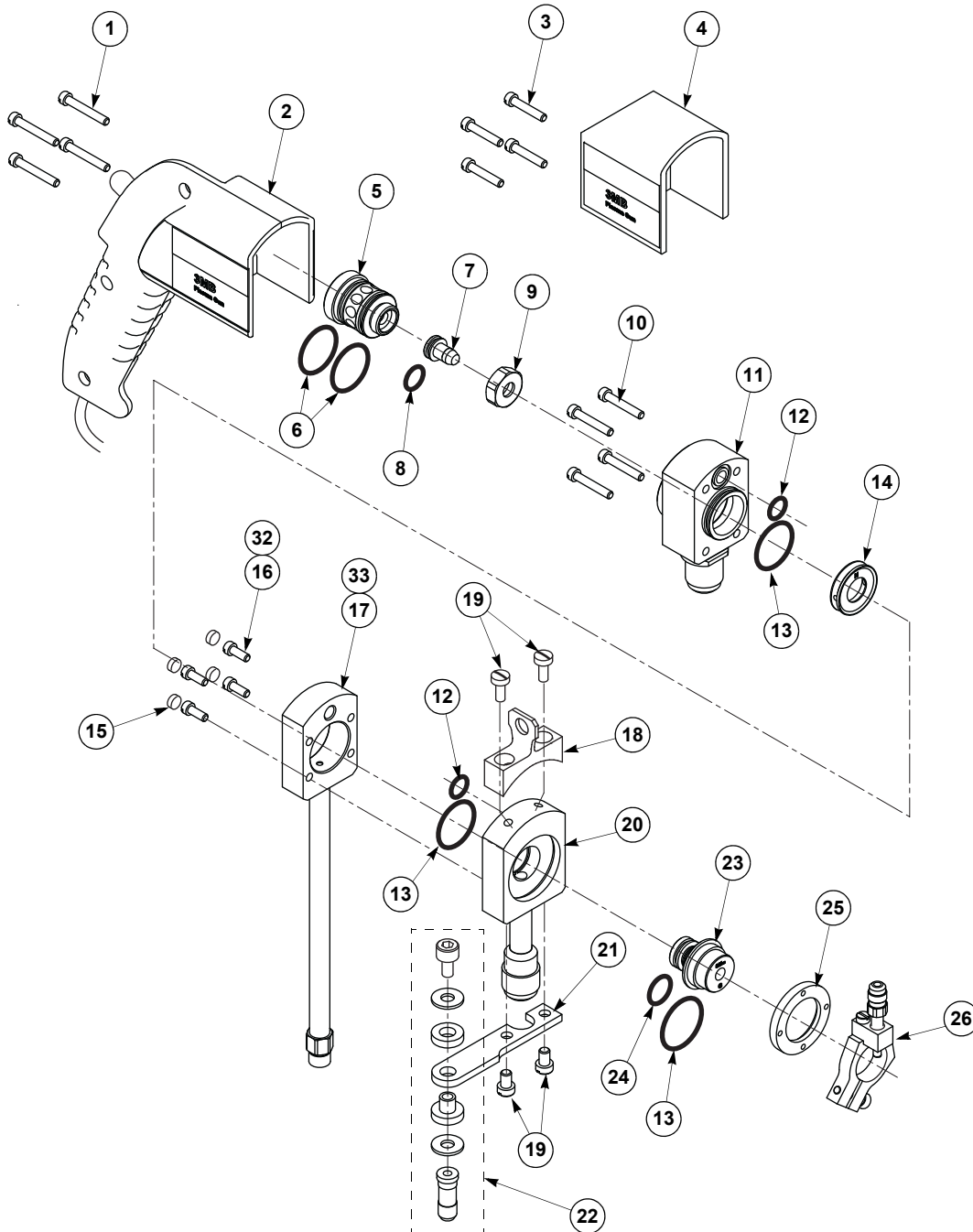
Item No.	Description	Qty.	Cat.	Catalog No.	Order No.
7	Electrode	1	C	2M11-TF	1084121
14	Distribution Ring (Nitrogen)	1	C	3MBTD48979	1031653
17	Insulator & Hose Assembly	1	C	3MB57690	1036011
23	Nozzle Assembly G (N2, N2/H2, Ar/H2)	1	C	3M7-G	1000721
65	Powder Stem	1	W	3M202	1000679
66	No. 2 Powder Port	1	W	3M210	1000681
103	Ringlube	1	C	2M182	1000508
15	Insulating Compound	1	C	2M281	1000526
105	Reseal Kit	1	C	2M206	1000522

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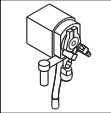
## 2 Parts List for 3MB Plasma Gun

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

### 2.1 Complete Gun Assembly



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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	2M11-TF	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 (N2, N2/H2, Ar/H2) (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 62 & 63)	1	9MB961	1001664

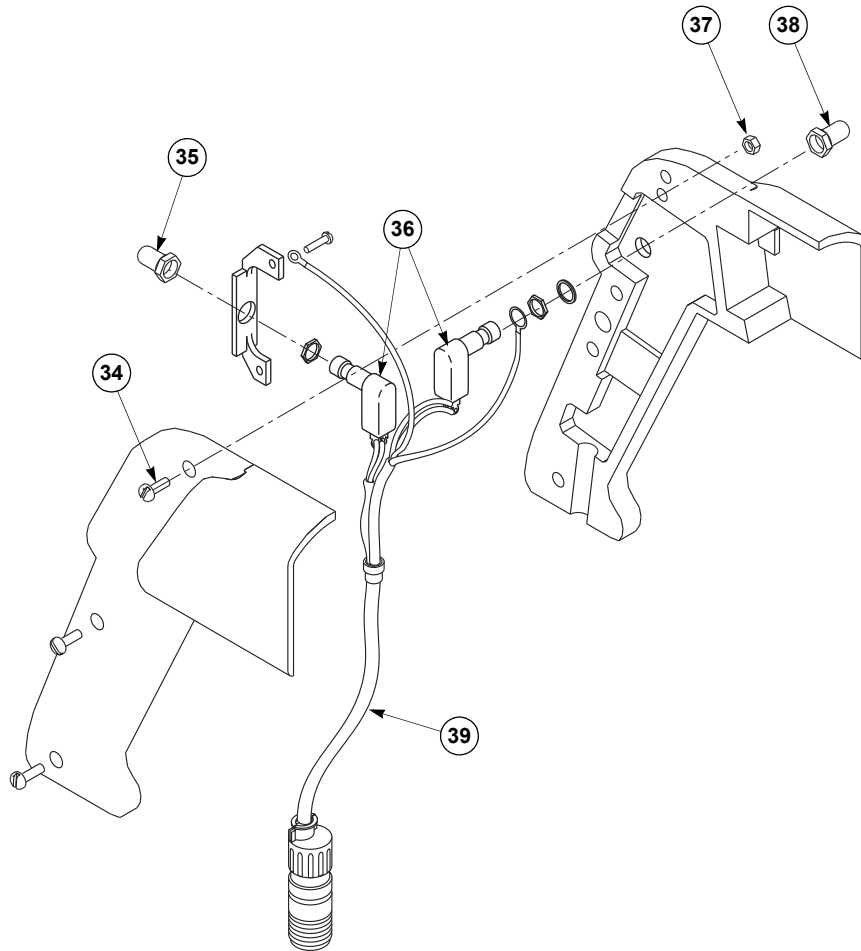
1. 3MBH  
2. 3MBM

## 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

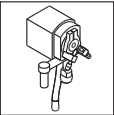
1. Recommended for use on UniCoat and MultiCoat systems to prevent arcing during ignition.

## 2.3 Handle Assembly (3MBH)

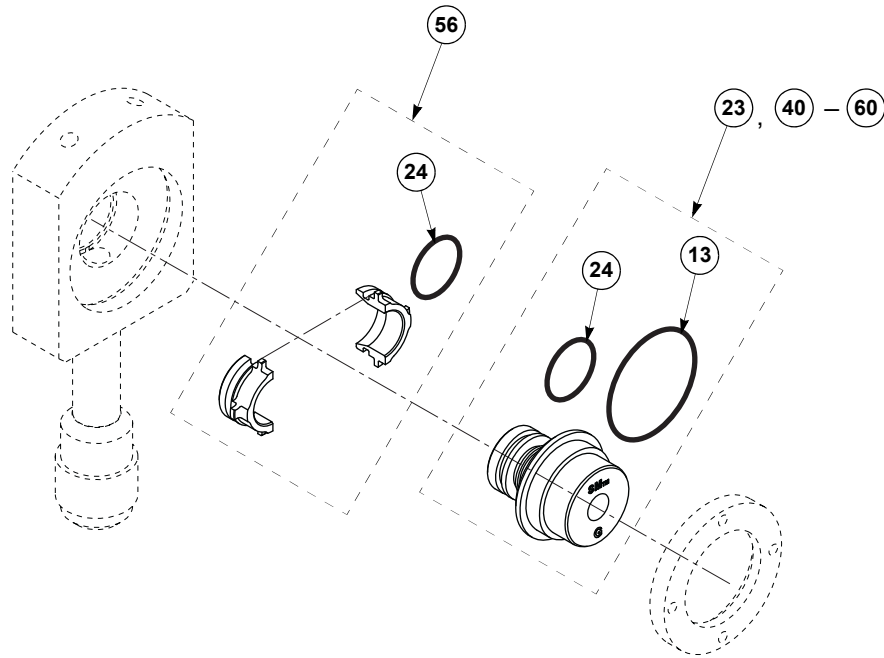


Item No.	Description	Qty.	Catalog No.	Order No.
34	Screw, 10-32 x 3/8	3	4MP71	1031800
35	Boot (Red)	1	—	—
36	Pushbutton Switch	2	3M341	1000695
37	Nut, #10-32	3	—	—
38	Push Button Boot	1	3M670	1000713
39	Receptacle Cable	1	7M23	1032346

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## 2.4 Nozzle Assemblies



Item No.	Description	Qty.	Catalog No.	Order No.
<b>Standard Nozzle</b> (Supplied with spray gun.)				
23	Nozzle Assembly G (N2, N2/H2, Ar/H2) (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/H2, Ar/He)	1	3M7-GP	1000724
41	Nozzle Assembly GE (N2, N2/H2, Ar/N2, Ar/H2, Ar/He)	—	3M7-GE	1000722
42	Nozzle Assembly GH (Ar/H2, Ar/He)	—	3M7-GH	1000723
43	Nozzle Assembly 700 (Ar, Ar/H2, N2)	—	7M700	1001507
44	Nozzle Assembly 703 (Ar, Ar/H2)	—	7M703	1001508
45	Nozzle Assembly 704 (Ar, Ar/H2, Ar/He)	—	7M704	1001509
46	Nozzle Assembly 705 (Ar/N2, Ar/He)	—	7M705	1001510
47	Nozzle Assembly 706 (Ar, Ar/He, Ar/N2)	—	7M706	1005298
48	Nozzle Assembly 707 (Ar, N2, N2/H2, Ar/H2, Ar/He)	—	7M707	1005299

(continued)

(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 <sub>2</sub> , N <sub>2</sub> /H <sub>2</sub> )	—	9MB57850(TF)	1088071
50 <sup>(1)</sup>	Nozzle, 932W (Tungsten Lined) (Ar, Ar/H <sub>2</sub> )	—	9MB57851(TF)	1088072
51 <sup>(1)</sup>	Nozzle, 933W (Tungsten Lined) (Ar, Ar/H <sub>2</sub> , Ar/He)	—	9MB57852(TF)	1088077
52 <sup>(1)</sup>	Nozzle, 927W (Tungsten Lined) (N <sub>2</sub> , N <sub>2</sub> /H <sub>2</sub> , Ar/H <sub>2</sub> , Ar/He)	—	9MB57889(TF)	1088078
53 <sup>(1)</sup>	Nozzle, 931W (Tungsten Lined) (N <sub>2</sub> , N <sub>2</sub> /H <sub>2</sub> , Ar/N <sub>2</sub> )	—	9MB58244(TF)	1088079
54	Nozzle, G-W (Tungsten Lined) (N <sub>2</sub> , N <sub>2</sub> /H <sub>2</sub> )	—	9MB58395(TF)	1088073
55	Nozzle, GH-W (Tungsten Lined) (Ar, Ar/H <sub>2</sub> , 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

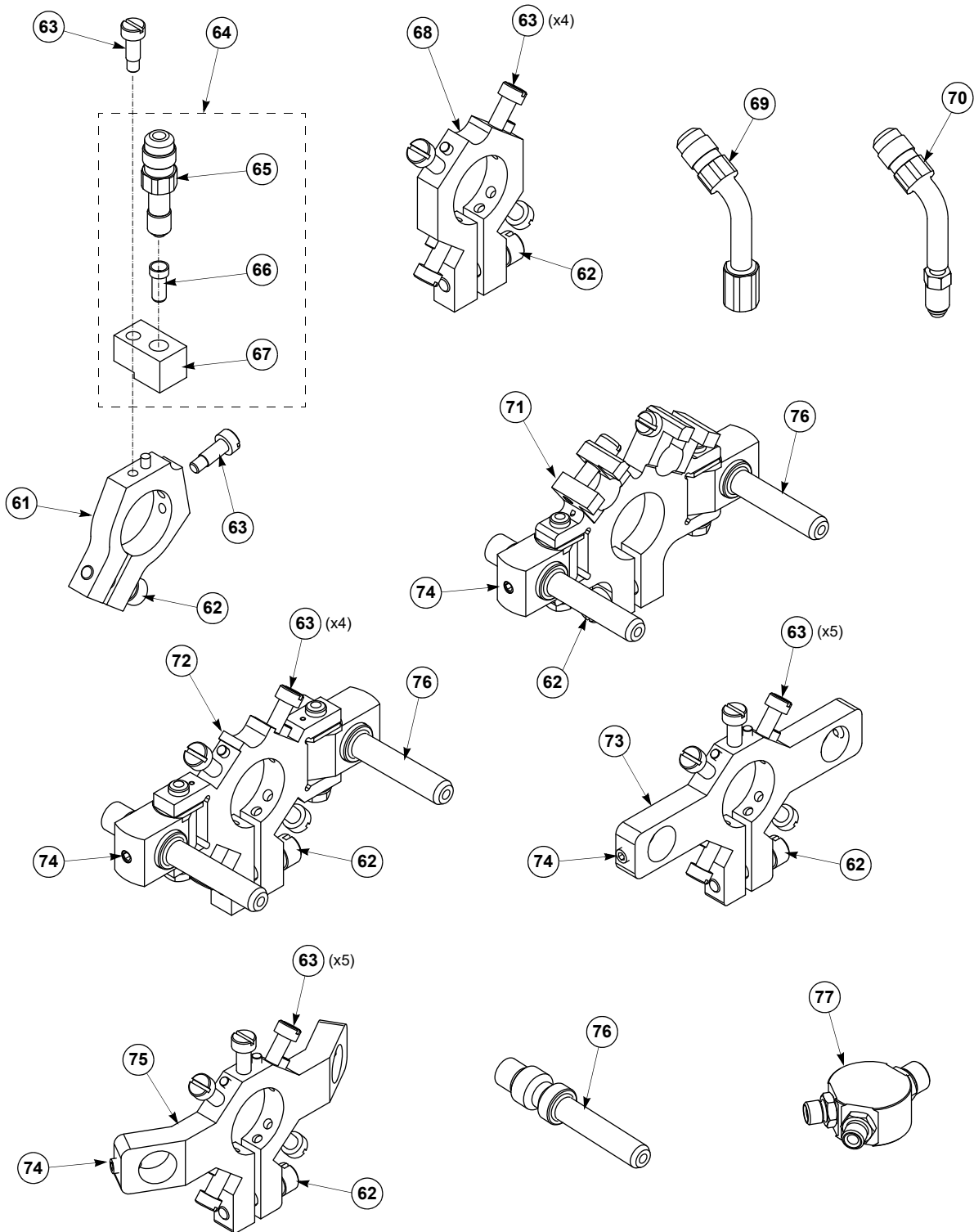
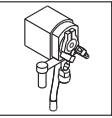
1. Requires Water Jacket, item 56.

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## 2.5 Powder Port Hardware

### 2.5.1 Powder Port and Air Jet Clamps

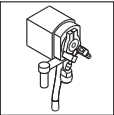


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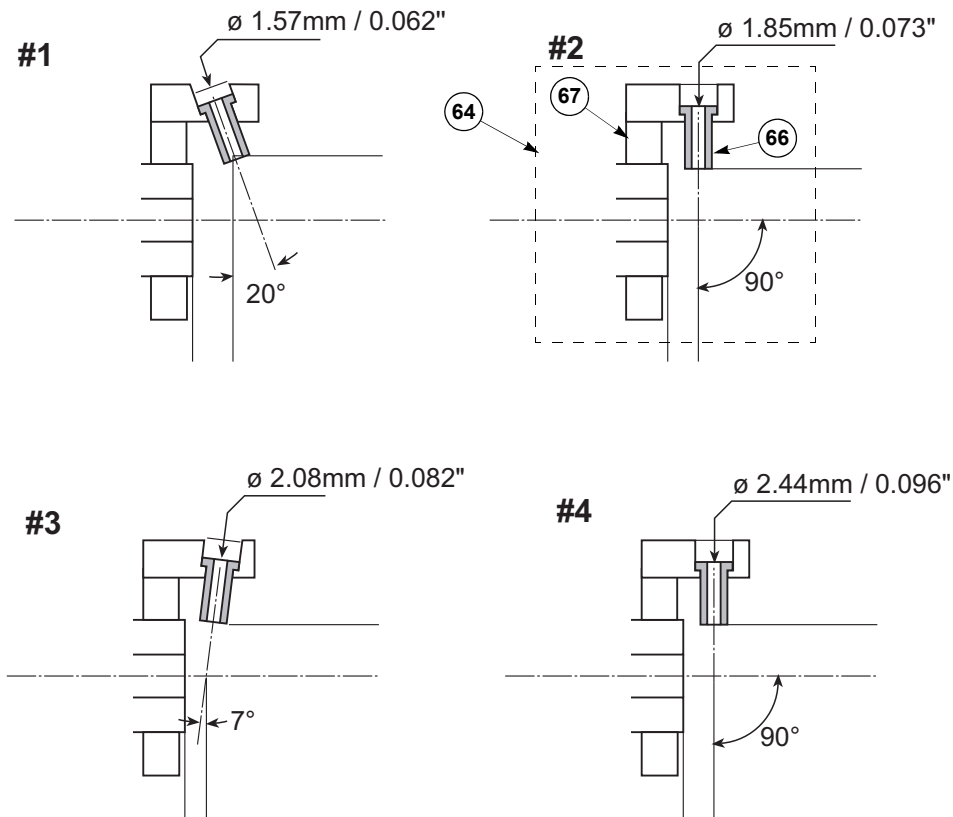
9mb\_pp\_clamps

Item No.	Description	Qty.	Catalog. No.	Order No.
<b>Supplied with 3MB Plasma Gun</b>				
61	Dual Powder Port Mounting Bracket (includes items 62 & 63)	1	9MB961	1001664
62	Screw, 10-24X1-13/64	1	3M327	1000692
63	Screw, 8-32 X 3/16	2	9MB962	1001665
64	No. 2 Powder Port Assembly (includes items 65 - 67)	2	9MB972	1001668
65	Powder Stem	1	3M202	1000679
66	No. 2 Powder Port	1	3M210	1000681
67	No. 2 Mounting Block	1	9MB982	1001674
<b>Optional</b>				
68	Quad Powder Port Clamp (includes items 62 & 63)	—	9MB964	1001666
69	Stem Assembly	—	3M331	1000694
70	Swivel Powder Port Stem	—	9MB963	1016440
71 <sup>(1)</sup>	Dual Powder Port Air Jet Assembly (Refer to AI 43605.)	—	3M780	1000715
72 <sup>(1)</sup>	Quad Powder Port Air Jet Assembly (Refer to AI 43579.)	—	9MB950	1001662
73 <sup>(2)</sup>	Powder Clamp, Straight (includes items 62, 63, 74)	—	3MB79557	1062575
74	Hex Set Screw, 10-24 X 3/8 (pkg. of 2)	2	2PSA37	1000542
75 <sup>(2)</sup>	Powder Clamp, 30° (includes items 62, 63, 74)	—	3MB79590	1062578
76	Air Nozzle	—	2PSA30	1000540
77	Wye Assembly	—	2PSA35	1000541
78	Air Supply Hose, 5.8 m (19') (not shown)	—	7M150	1001473
79	Air Nozzle Hose, 38 cm (15") (not shown; 2 required)	—	2PSA40	1000543
80	Hex Key Wrench (3/32") (not shown)	—	PS43	1002327

1. Includes items 76-80. Refer to instructions.
2. Does not include items 76-80 (required).

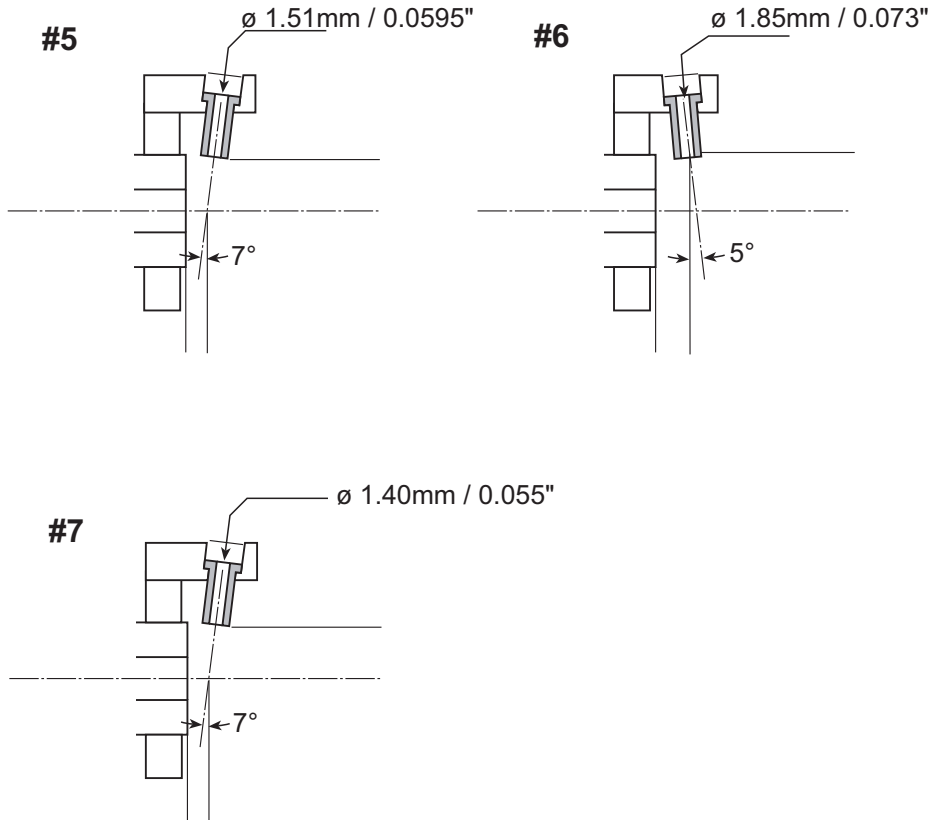


### 2.5.2 Powder Injectors



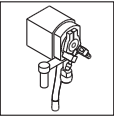
Item No.	Description	Qty.	Catalog. No.	Order No.
<b>Standard Powder Port (Supplied with spray gun.)</b>				
64	No. 2 Powder Port Assembly	1	9MB972	1001668
65	Powder Stem	1	3M202	1000679
66	No. 2 Powder Port	1	3M210	1000681
67	No. 2 Mounting Block	1	9MB982	1001674
<b>Optional Powder Ports</b>				
81	No.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

**2.5.2 Powder Injectors (continued)**



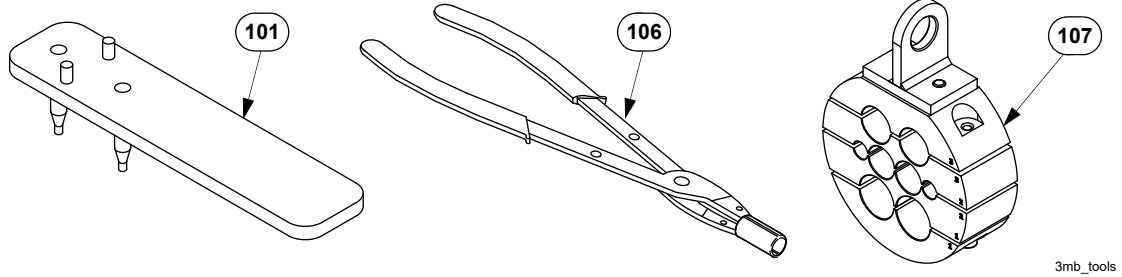
Item No.	Description	Qty.	Catalog. No.	Order No.
<b>Optional Powder Ports (continued)</b>				
91	No. 5 Powder Port Assembly (incl. item 65)	—	9MB975	1001671
92	No. 5 Powder Port	1	3M246	1000685
93	No. 5 Mounting Block	1	9MB985	1001676
94	No. 6 Powder Port Assembly (incl. item 65)	—	9MB976	1001672
95	No. 6 Powder Port	1	7M288	1001485
96	No. 6 Mounting Block	1	9MB986	1032449
97	No. 7 Powder Port Assembly (incl. item 65)	—	9MB977	1001673
98	No. 7 Powder Port	1	9MB997	1032451
99	No. 7 Mounting Block	1	9MB987	1032450

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### 3 Additional Equipment

#### 3.1 Tools and Spares



Item No.	Description	Qty.	Catalog. No.	Order No.
<b>Standard Equipment</b> (Supplied with spray gun.)				
100	Hardware Kit (incl. items 15 & 101-105)	1	3MB57596	1035644
15	Insulating Compound	1	2M281	1000526
101	Plasma Gun Wrench	1	2M193	1000517
102	Current Insulator	2	7M144	1001470
103	Ringlube	1	2M182	1000508
104 <sup>(1)</sup>	Gun Control Cable, 5.5 m / 18'	1	7M195	1001480
105	Reseal Kit (includes:)	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>				
106	Electrode Puller Pliers	—	7M108	1001461
107	Cable Hanger and Strain Relief	—	AR100	1100938
108 <sup>(1)</sup>	Gun Control Cable, 8.5 m / 28'	—	7M199	1032340
109 <sup>(1)</sup>	Control Cable (made to order, 1.5-15 m / 5-15')	—	7M199CTO	1075639

1. 3MBH

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### 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.
110	Hose & Cable Package, 5 m (16.4') (includes items 111-114)	—	8MH	1034011
111	Plasma Gas Hose	1	7MH50	1001561
112	Electric Cable, Water Cooled (Red) 5 m (16.4')	1	8MH57586	1034012
113	Electric Cable, Water Cooled (Blue) 5 m (16.4')	1	8MH57587	1034013
114	T-Clip Fastener (pkg. of 3)	3	8MH58390	1093447
115	Hose & Cable Package, 8 m (26') (includes 114, 116-118)	—	8MH-8	1034014
116	Plasma Gas Hose, 9.1 m (30')	1	7MH116	1001553
117	Electric Cable, Water Cooled (Red) 8 m (26')	1	8MH57568	1034470
118	Electric Cable, Water Cooled (Blue) 8 m (26')	1	8MH57567	1034471
119	Hose & Cable Package, 3.5 m (11.5') (includes 114, 120-123)	—	8MH-3.5	1058503
120	Electric Cable, Water Cooled (Red) 3.5 m (11.5')	1	8MH58592	1058539
121	Electric Cable, Water Cooled (Blue) 3.5 m (11.5')	1	8MH58593	1058540
122	Plasma Gas Hose, 3.5 m (11.5')	1	8MH58594	1058541
123	Air Hose 3.5 m (11.5')	1	8MH58595	1058543
124	Hose & Cable Package, 1.5 m (5') (includes 114, 125-128)	—	8MH-1.5	1058504
125	Electric Cable, Water Cooled (Red) 1.5 m (5')	1	8MH58586	1058550
126	Electric Cable, Water Cooled (Blue) 1.5 m (5')	1	8MH58588	1058551
127	Plasma Gas Hose, 1.5 m (5')	1	MH58589	1058552
128	Air Hose 1.5 m (4.9')	1	8MH58590	1058553
<b>Made-to-Order Lengths</b> (Minimum 1.5 m / 5' to maximum 10.5 m / 35')				
129	Hose & Cable Package (includes 114, 130-132)	—	8MHCTO	1034390
130	Plasma Gas Hose	1	7MH50MTO	1034352
131	Electric Cable, Water Cooled (Red)	1	8MH20CTO	1034542
132	Electric Cable, Water Cooled (Blue)	1	8MH10CTO	1034543

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