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Non-Vaporizer / Vaporizer**
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**Extraction Electrode
Version 34**
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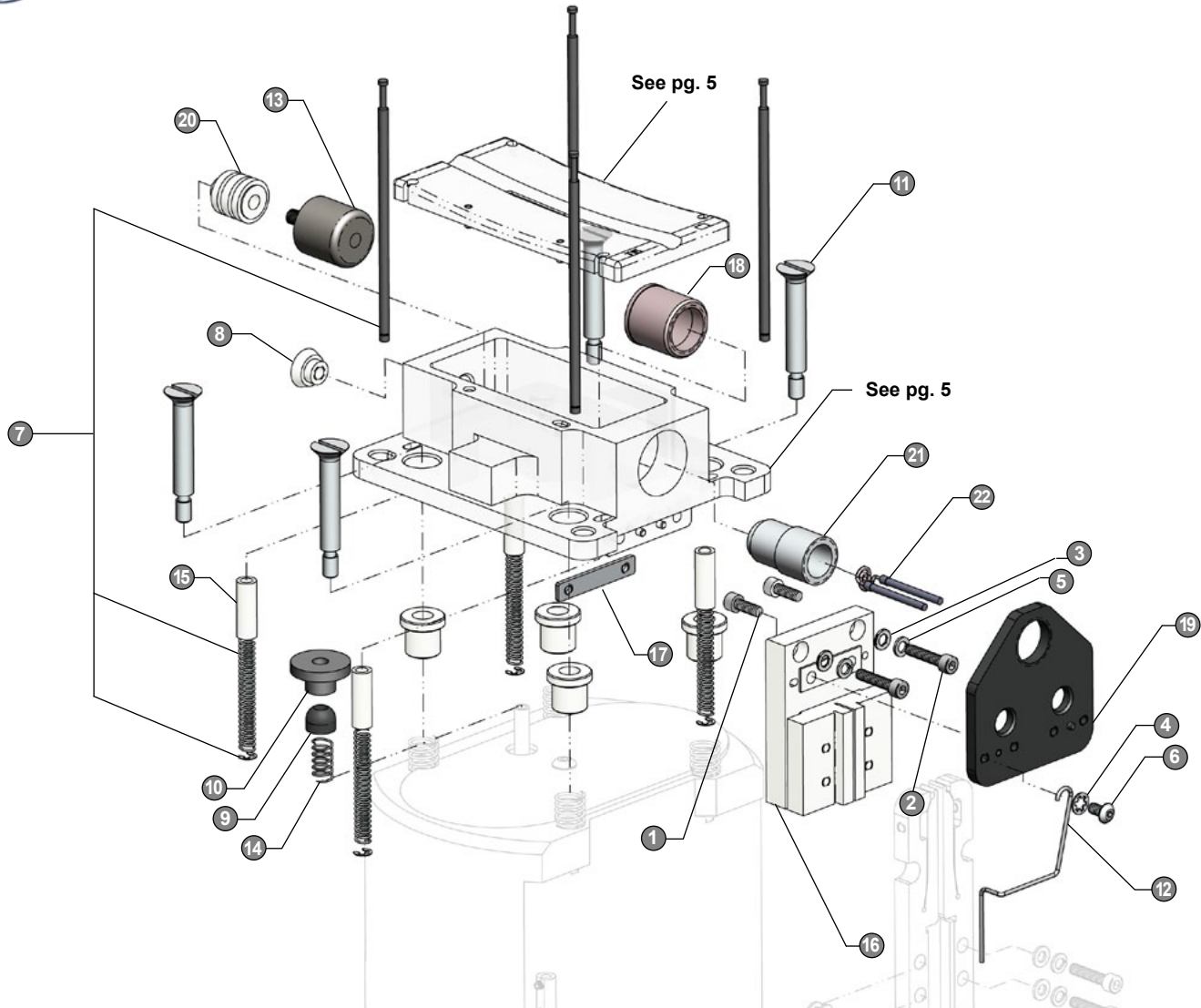
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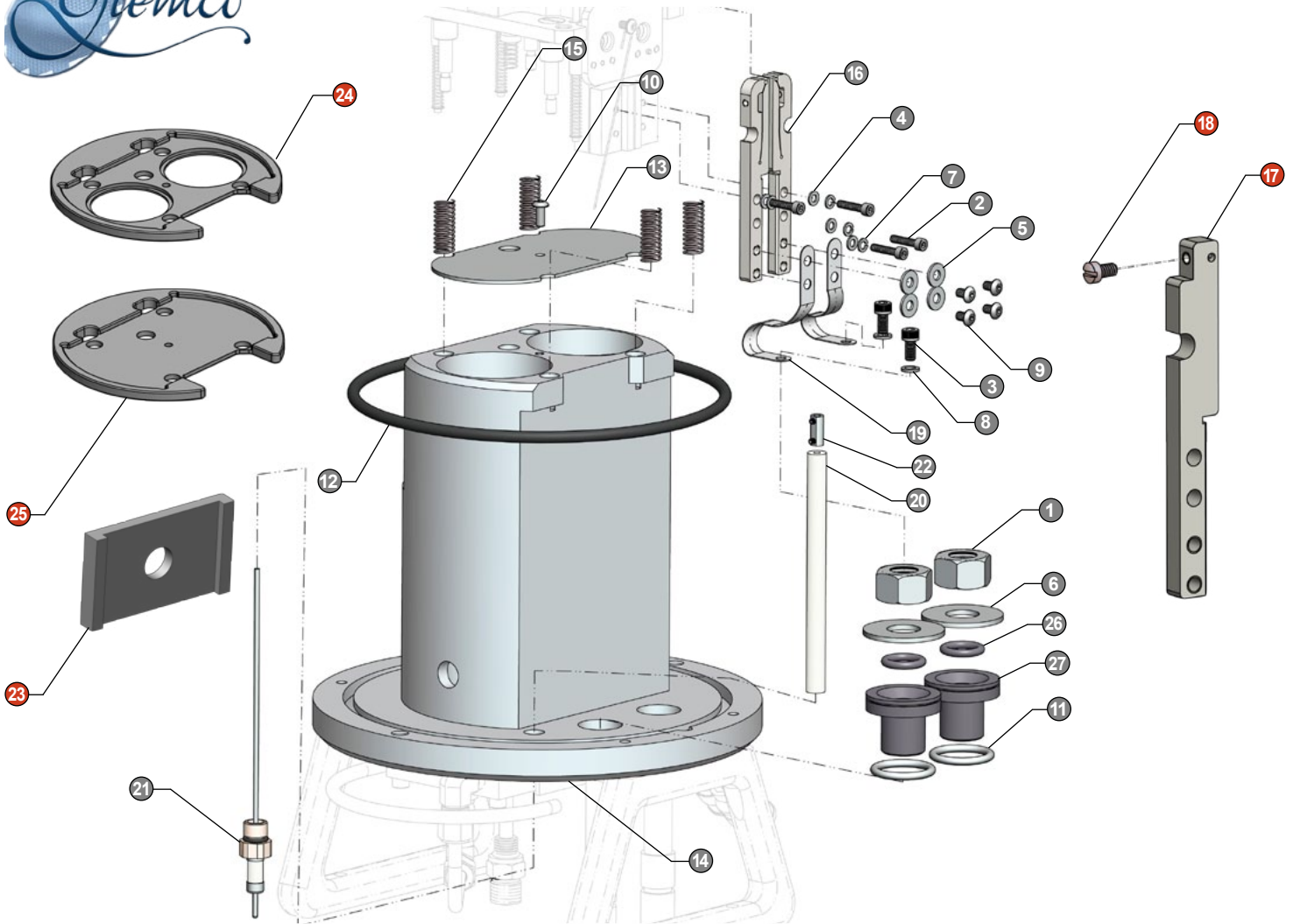
**GSD EMER Components
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Pg. 25-28

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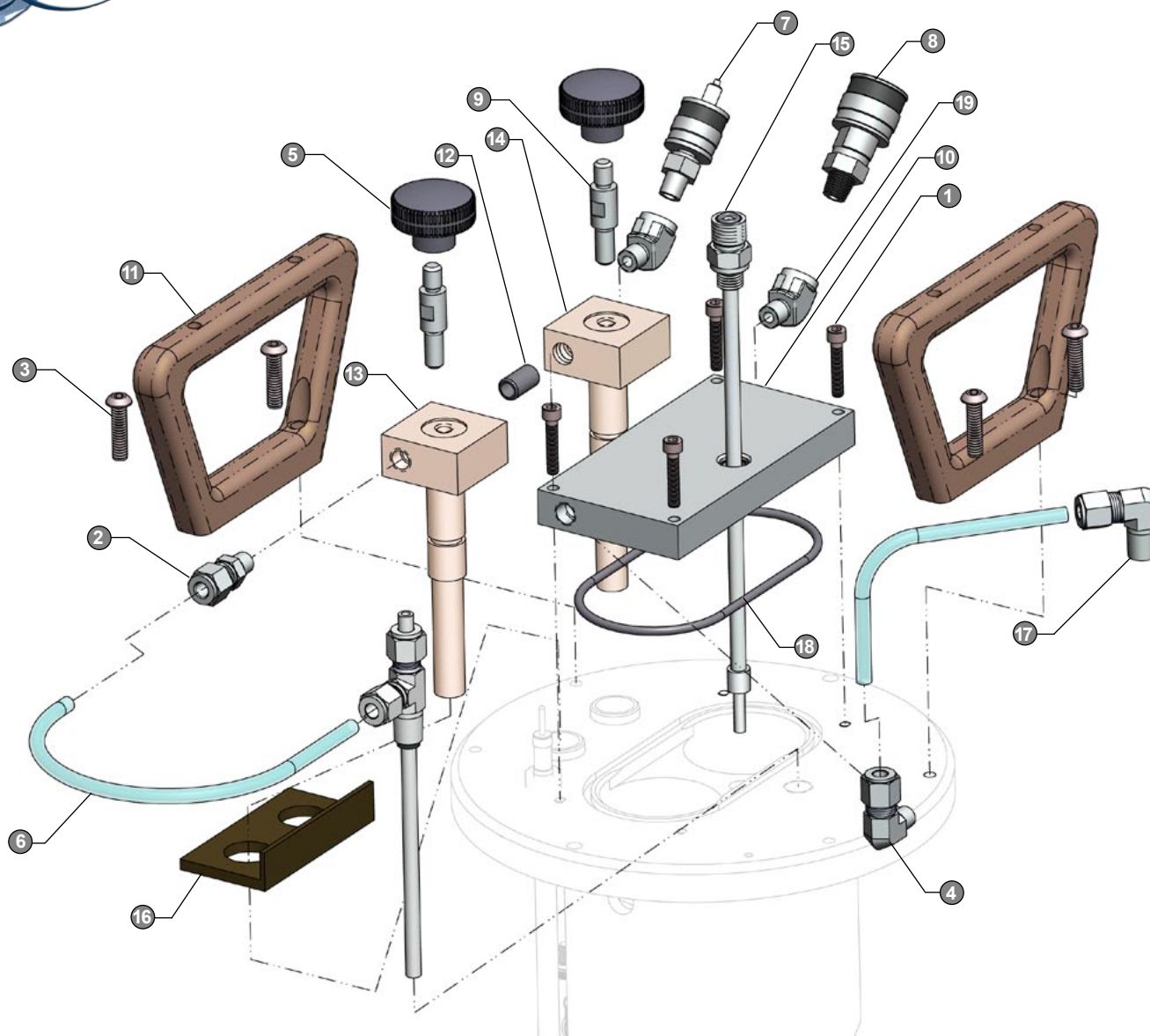
Item	P/N	Description	OEM	QTY
1	82411	SHCS 6-32 X 3/8" SST	4400044	2
2	82420	SHCS 6-32 X 5/8" SST	4400061	6
3	82469	#6 Washer, 18-8 SST, .032 TH , 5/16 ID, 1/4 OD	8462-0043-0001	6
4	82604	Lock Washer No.6 Internal Tooth	4400059	1
5	82606	#6 Regular Spring Washer, 18-8 SST	4400034	6
6	82625	BHSS 6-32x1/4" SST	44K00002	1
7	99014	Retainer Pin Assembly	1200080	4
8	99022	Filament Insulator, Ceramic	1708680	1
9	99176	Ball Joint, Graphite	17021591	1
10	99177	Skt Joint	17033150	1
11	99338	Arc Chamber Mounting Screw	17127640	4
12	99428	Cathode Wire	17156990	1
13	99666	Repeller, Tungsten	17119620	1
14	99172A	Compression Spring, Stainless	17033140	1
15	99285A	Ceramic Spacer	17124410	4
16	99401B	Insulator Mounting Block W/ Screws	17287870	1
17	99404A	Screw Retainer, No Slots	17189140	1
18	99409W	Cathode Repeller, Fully Dense / Pure Tungsten	17133340	1
19	99410GC	Cathode Support Plate, Graphite	17287860 REV A	1
20	99412A	Repeller Insulator	17170590	1
21	99413A	GSD ELS Cathode, Arc Wire, Tungsten	17158000	1
22	99477A	GSD ELS Filament, .040	17287850	1

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Item	P/N	Description	OEM	QTY
1	82337	Nut 5/8-11 Hex, SST	5053-0027-0632	2
2	82420	SHCS 6-32 X 5/8", SST	4400061	6
3	82439	SHCS 10-32 X 3/8" SST	4400001	2
4	82469	#6 WASHER, 18-8 SST, .032 TH , 5/16 ID, 1/4 OD	8462-0043-0001	6
5	82474	#8 Flat Washer, Standard, 18-8 SST	8462-0004-0807	4
6	82491	Washer Filament Feed-Thru	1700250	2
7	82606	#6 Regular Spring Washer, 18-8 SST	4400034	6
8	82608	Lock Washer No.10 Regular Spring	8465-0002-0102	2
9	82630	8-32 X 1/4", Button Head Socket Screw, SST	4400735	4
10	82631	8-32 X 3/8" Button Head Socket Screw, SST	4400183	1
11	83114	O-Ring -214 Buna N	No OEM Reference	2
12	83264	O-Ring 364 Buna-N	3500028	1
13	99252	Vaporizer Exit Shield	No OEM Reference	1
14	99277	Source Body	17174120	1
15	99293	Shoulder Screw Spring	4001166	4
16	99407	Filament Clamp	17287880	2
17	99407A	Filament Clamp Assembly	No OEM Reference	
18	99407A-2	Screw, 6-32 X 1/4, Fillister Head, Slotted	No OEM Reference	
19	99414	Filament Feed Strap	17133300	2
20	99422	Insulator, Cathode Feed Thru	17147310	1
21	99426	Feed-Thru Cathode	1910710	1
22	99445	Connector, Feed-Thru / Cathode	5101979	1
23	99554B	Heat Shield Retainer, Used with P/N 99562A	17033100	
24	99562A	Source Body Shield, Vaporizer Version	No OEM Reference	
25	99562B	Source Body Shield, Non-Vaporizer Version	No OEM Reference	
26	82207V	O-Ring -208 Buna-N	No OEM Reference	2
27	99324A	Feed-Thru Insulator, Long	17127830	2

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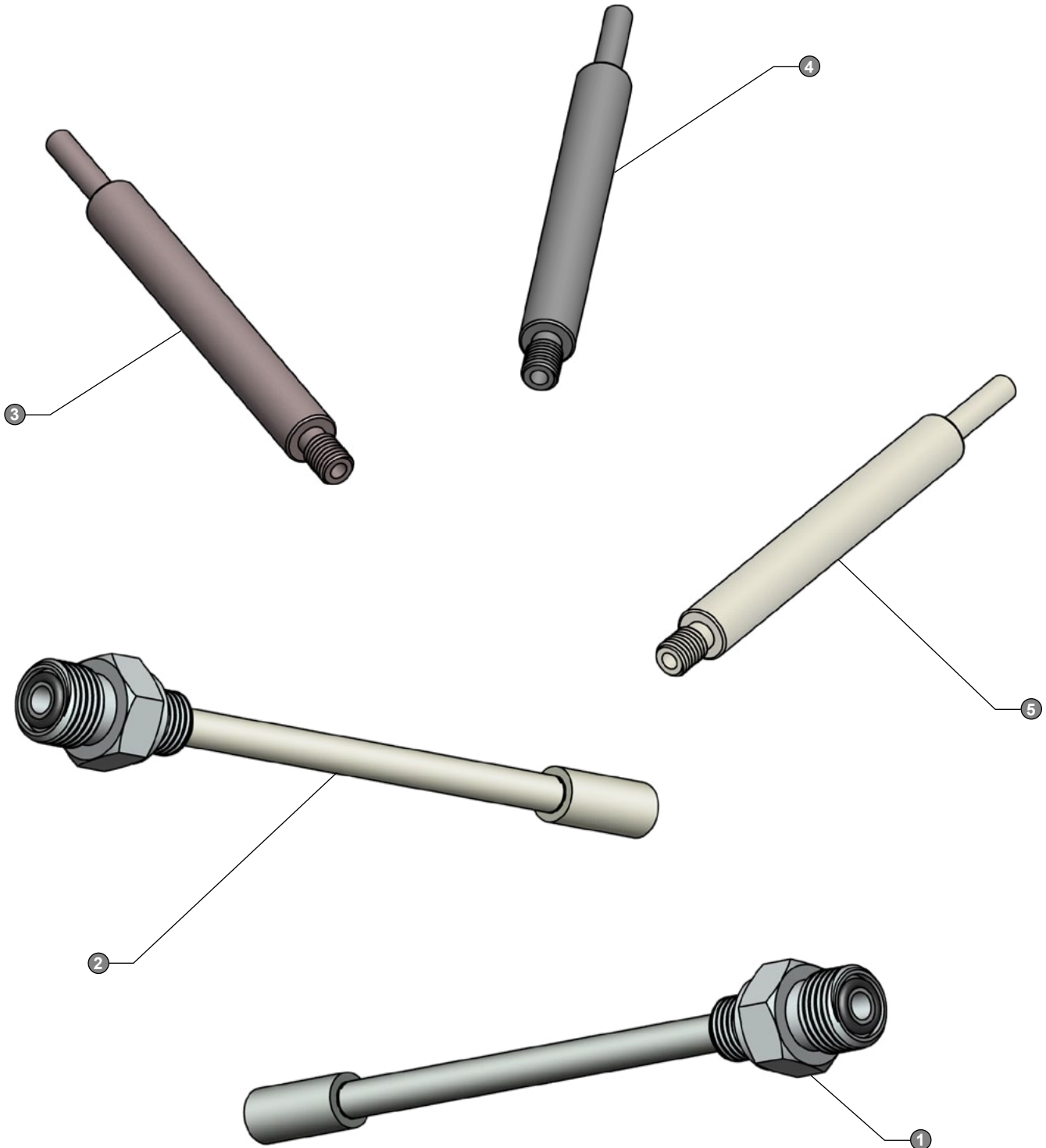
Item	P/N	Description	OEM	QTY
1	82442	SHCS 10-32 X 1 SST	4400022	4
2	82527	Fitting, Connector, 1/4", 1/8" Male NPT, SST	3400064	1
3	82655	BHSS 1/4"-20 X 1" SST	4500263	4
4	82528	Fitting, Male Elbow, 1/4" TUBE, 1/8 NPT,	3400501	1
5	82708	Knob, Plastic Fluted Hand Knob	4000861	2
6	82751	Tube 1/4"OD X .040 Wall LDPE Yellow	7500007	13.5"
7	83701	Fitting, QC Series Instrumentation Quick Connect Stem, Key 1	No OEM Reference	1
8	83703	Fitting, QC Series Instrumentation Quick Connect Stem, Key 3	No OEM Reference	1
9	99120	Threaded Stud	1700220	2
10	99251	Vaporizer Blank-off Plate	No OEM Reference	1
11	99326A	Source Handle	17036660	2
12	99327	Feed-Thru Connector	17033010	1
13	99329	Positive Feed-Thru	17033021	1
14	99330	Negative Feed-Thru	17033020	1
15	99333	Gas Feed Tube Assembly	17032980	1
16	99418	Insulator	17127840	1
17	82535A	Fitting, Union Elbow, 1/4" W/O Nut, SST	No OEM Reference	1
18	83141V	O-Ring-241 Viton®	3500344	1
19	8A130	Street Elbow, 45° 1/8 NPTF X 1/8 NPTM, SST	3401279	2

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Gas Feed Tube and Nozzle Options

(Used in place of OEM P/N 17032980 - Glemco P/N 99333)

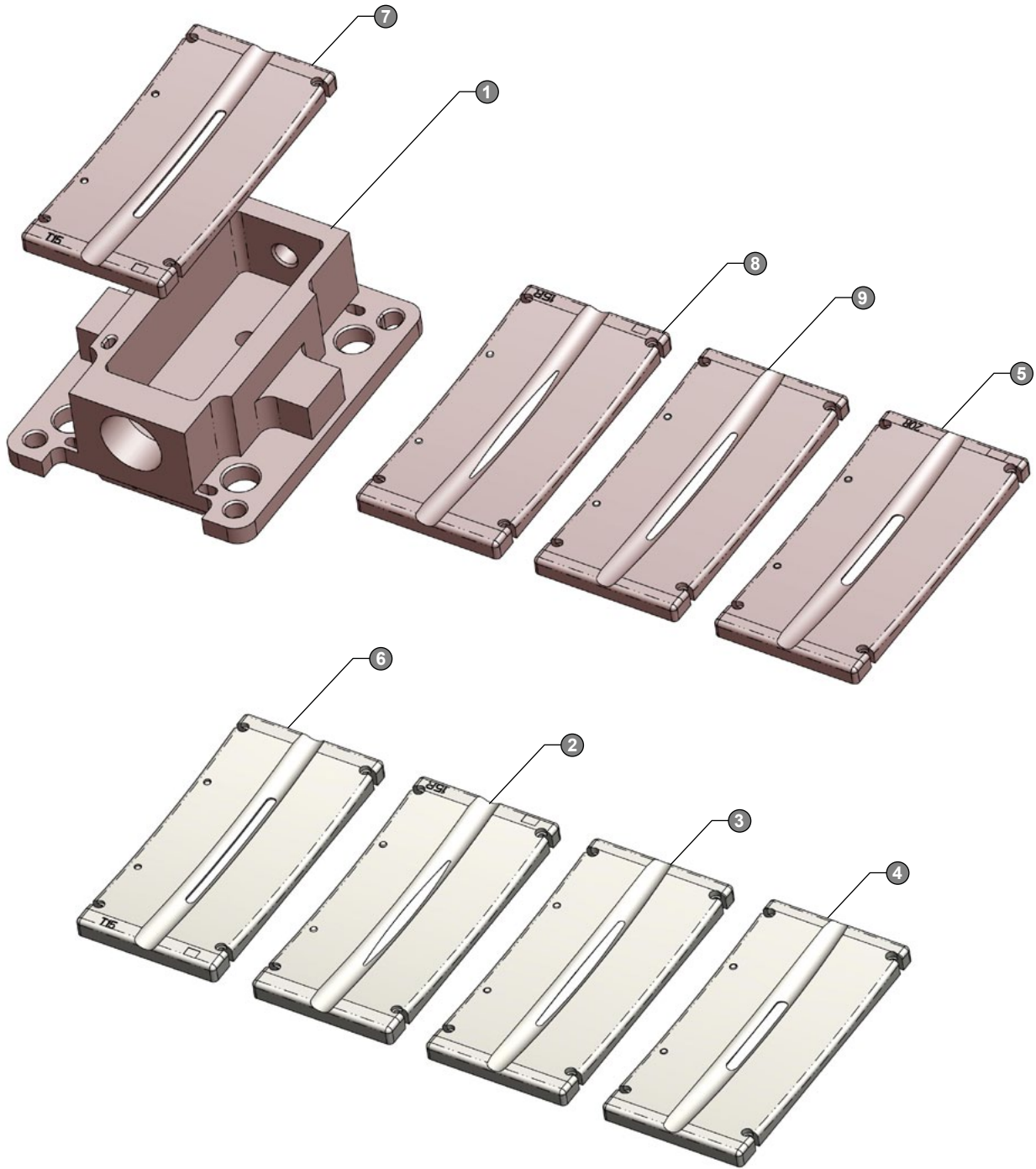


Item	P/N	Description	OEM
1	99333A-S1	Gas Feed Tube Assembly, Stainless Body, Stainless Fitting	No OEM Reference
2	99333AM-S1	Gas Feed Tube Assembly, Molybdenum Body, Stainless Fitting	No OEM Reference
3	99334A	Gas Feed Nozzle, Tungsten	No OEM Reference
4	99334AG	Gas Feed Nozzle, Graphite	No OEM Reference
5	99334AM	Gas Feed Nozzle, Molybdenum	No OEM Reference

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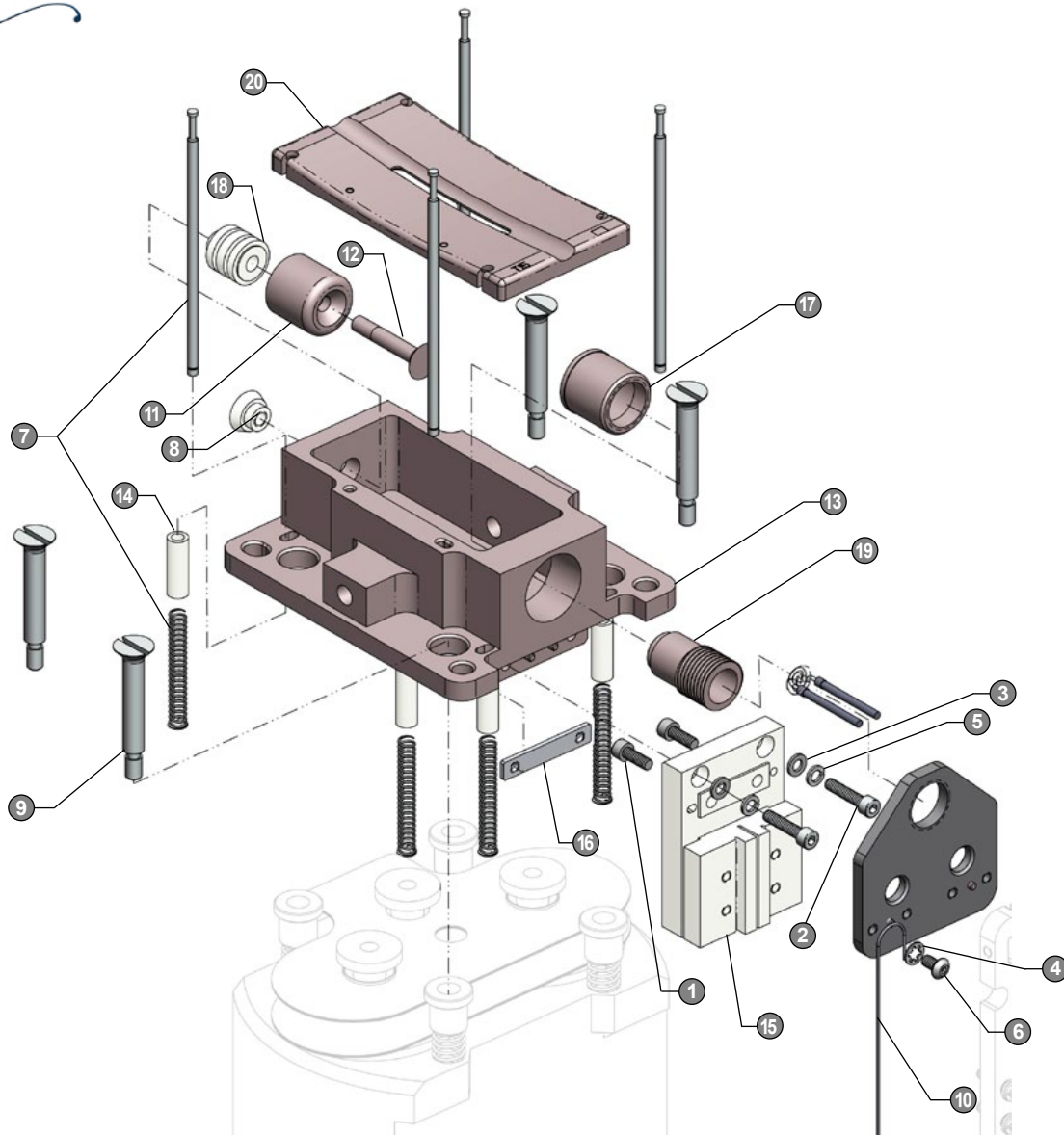


Source Body Arc Chamber/ Face Plates Non-Vaporizer



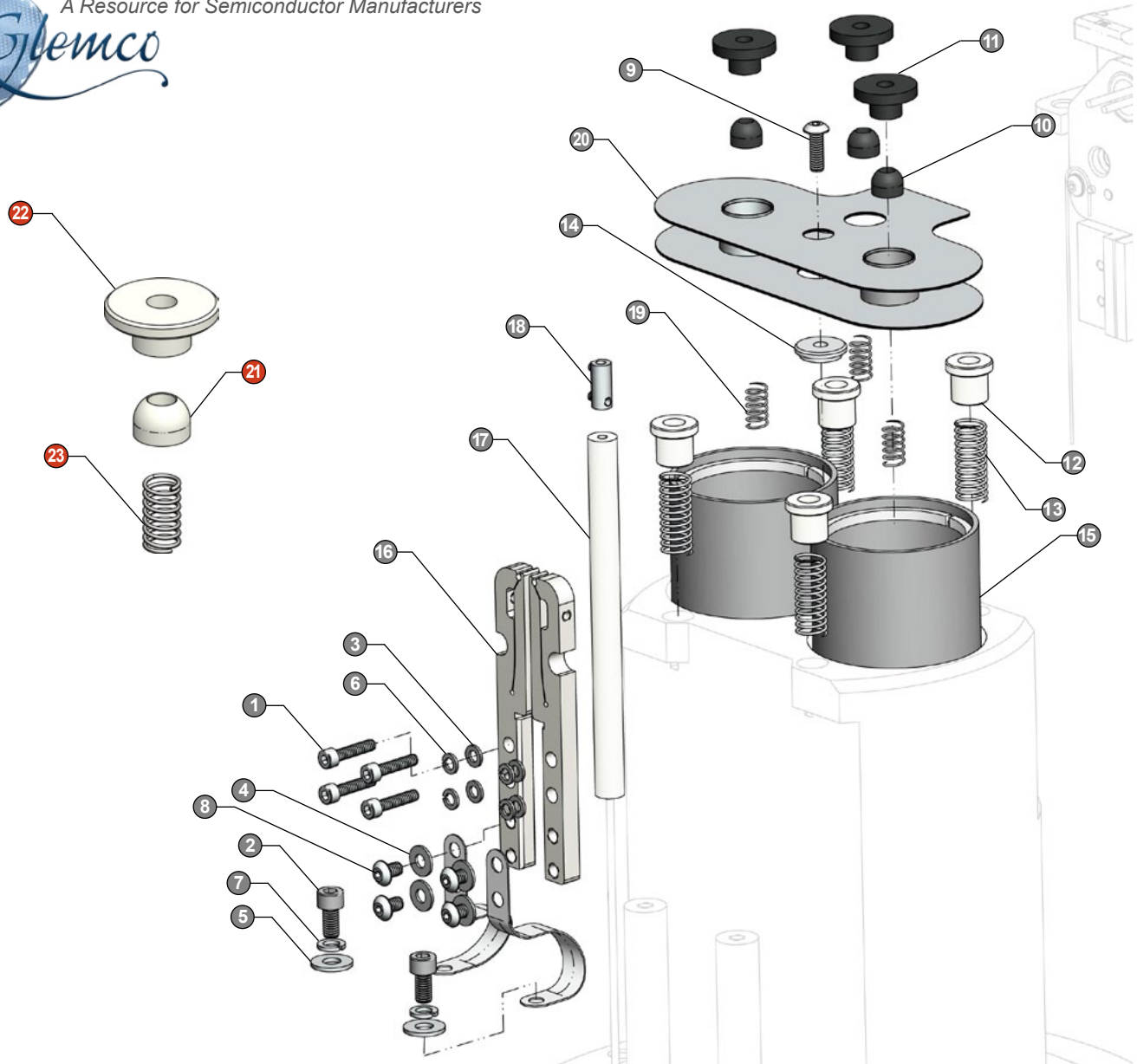
Item	P/N	Description	OEM
1	99589	GSD ELS Arc Chmb., .313 Repeller Hole, No Vaporizer Ports, No Liner Pocket, Tungsten	17133310
2	99290	GSD Face Plate, 15R, Molybdenum	17128110
3	99402	GSD Face Plate, 20R, Molybdenum	17155580
4	99402C	GSD Face Plate 20R Molybdenum	17165580
5	99402CW	GSD Face Plate 20R, Tungsten	17165580
6	99290T15	GSD Face Plate, Molybdenum	17230100
7	99290T15W	GSD Face Plate, Tungsten	17230090
8	99290W	GSD Face Plate, 15R, Tungsten	17129020
9	99402W	GSD Face Plate, 20R, Tungsten	17155580

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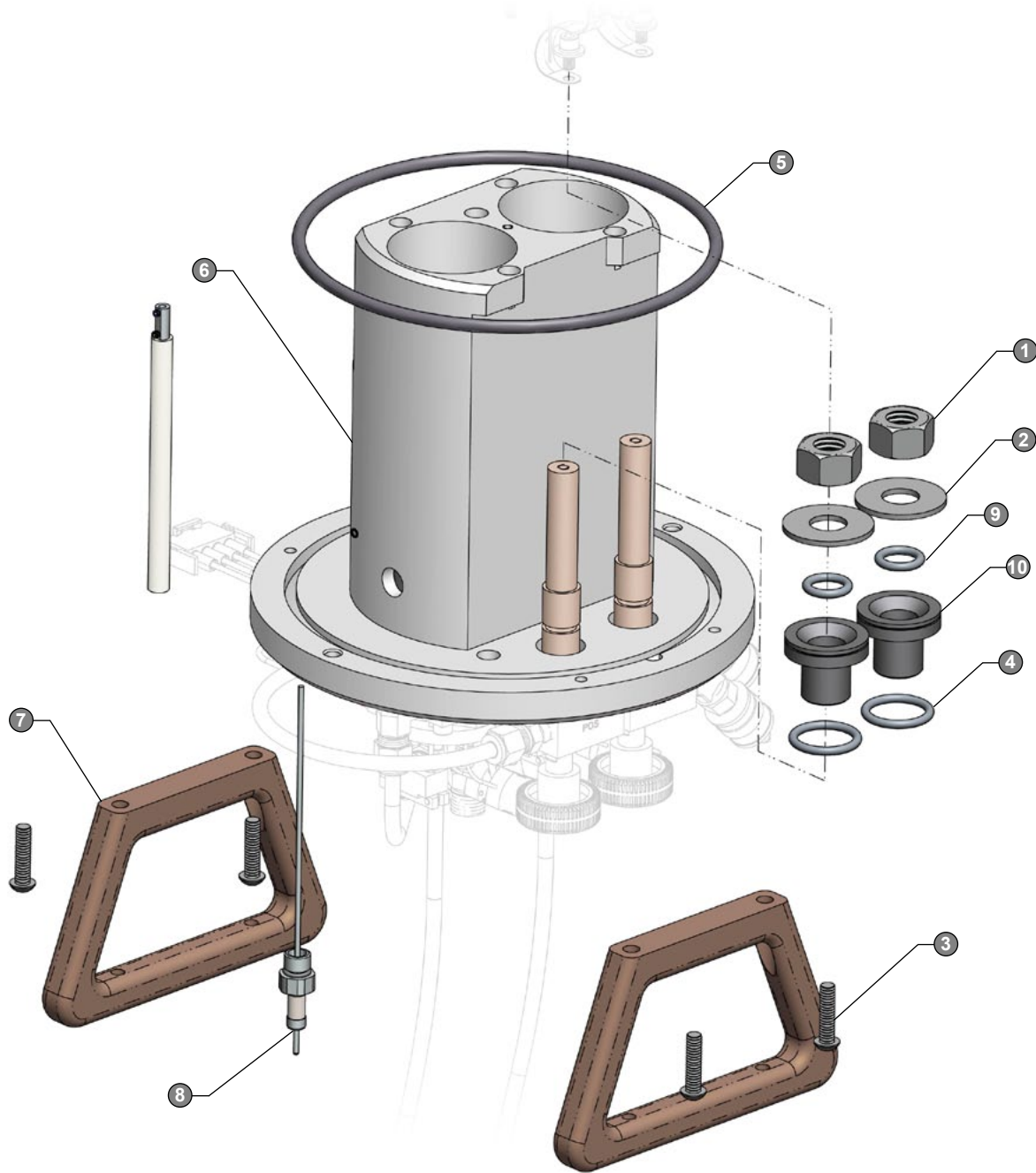
Item	P/N	Description	OEM	QTY
1	82411	SHCS 6-32 X 3/8" SST	4400044	2
2	82420	SHCS 6-32 X 5/8" SST	4400061	6
3	82469	#6 Washer, 18-8 SST, .032 TH , 5/16 ID, 1/4 OD	4400232	6
4	82604	Lock Washer No.6 Internal Tooth	4400059	1
5	82606	No.6 Regular Spring Washer, 18-8 SST	4400034	6
6	82625	BHSS 6-32x1/4"SST	44K00002	1
7	99014	Retainer Pin Assembly	17036440	4
8	99022	Filament Insulator, Ceramic	1708680	1
9	99338	Arc Chamber Mounting Screw	17127640	4
10	99428	Cathode Wire	17156990	1
11	99429	Repeller, Tungsten	17170600	1
12	99430	Repeller Screw	17170610	1
13	99595	Arc Chamber, ELS, W/ Vaporizer Ports, No Liner Pocket, Tungsten	17133310	1
14	99285A	Ceramic Spacer	17124410	4
15	99401B	Insulator Mounting Block W/ Screws	17287870	1
16	99404A	Screw Retainer, No Slots	17189140	1
17	99409W	Cathode Repeller, Fully Dense / Pure Tungsten	17133340	1
18	99412A	Repeller Insulator	17170590	1
19	99413A	Cathode, Arc Wire, Tungsten w/ 4.6mm Tungsten Button	17158000	1
20	99290T15W	Face Plate, T15, Tungsten	17230090	1

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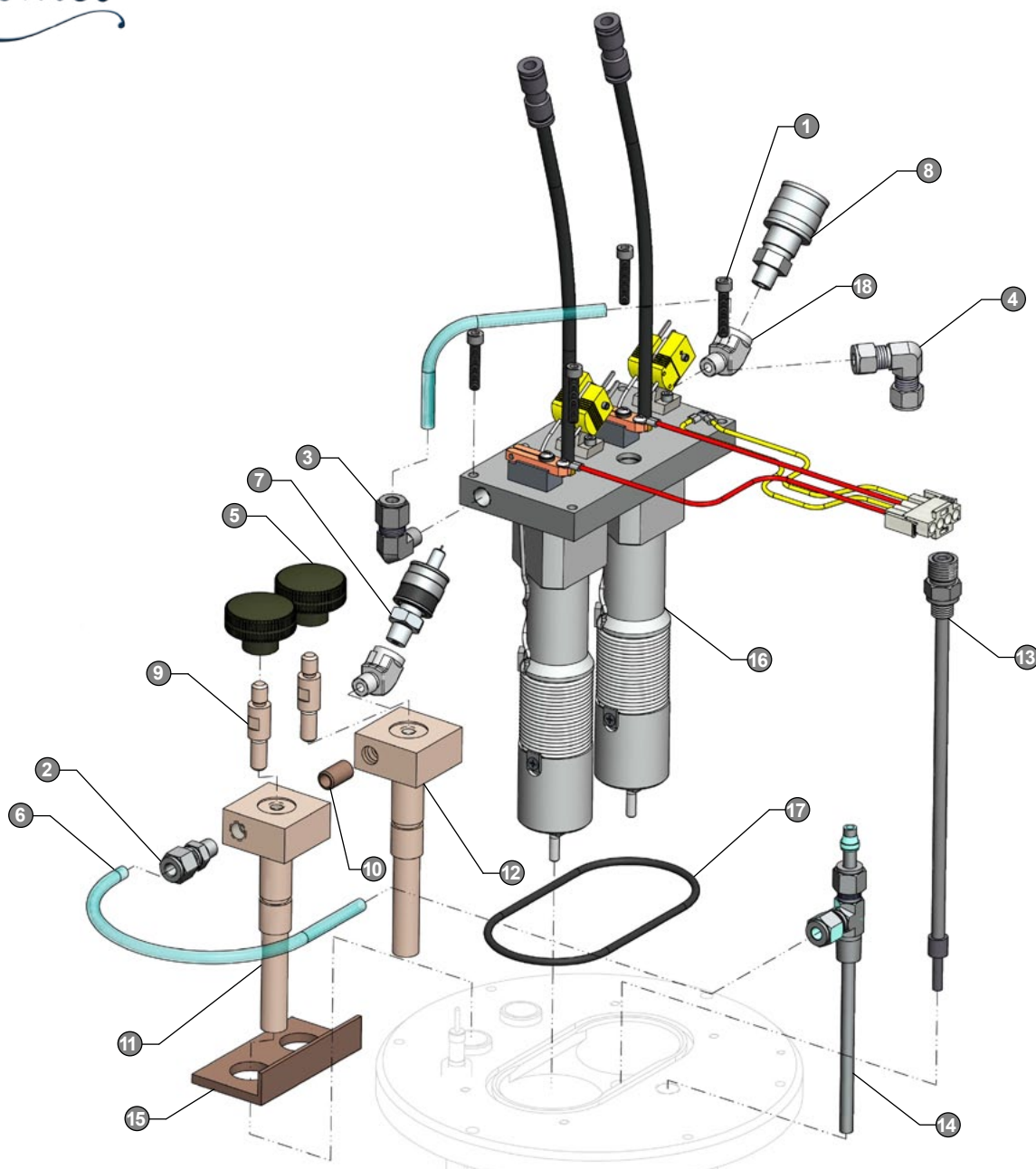
Item	P/N	Description	OEM	QTY
1	82420	SHCS 6-32 X 5/8" SST	4400061	6
2	82439	SHCS 10-32 X 3/8" SST	4400001	2
3	82469	#6 Washer, 18-8 SST, .032 TH , 5/16 ID, 1/4 OD	4400232	6
4	82474	No.8 Flat Washer, Standard, 18-8 SST	4400498	4
5	82478	Washer No.10 Standard 18-8 SST	4400007	2
6	82606	No.6 Regular Spring Washer, 18-8 SST	4400034	6
7	82608	Lock Washer No.10 Regular Spring	4400041	2
8	82630	8-32 X 1/4", Button Head Socket Screw, SST	4400735	4
9	82633	BHSS 8-32 X .50 Long 18-8 SST	4400042	1
10	99176	Ball Joint, Graphite	17021591	3
11	99177	SKT Joint	17033150	3
12	99292	Shoulder Screw Spacer	17128230	4
13	99293	Shoulder Screw Spring	4001166	4
14	99331	Retainer Washer, Vaporizer Heat Shield	17033100	1
15	99336	Vaporizer Heat Shield	1152240	2
16	99407	Filament Clamp	17287880	2
17	99422	Insulator, Cathode Feed Thru	17147310	1
18	99445	Connector, Feed-Thru / Cathode	5101979	1
19	99172A	Compression Spring, Inconel	17033140	3
20	99183B	Heat Shield Assembly	17142660	1
21	99176C	Ball Joint, Alumina	17287690	
22	99177C	SKT Joint, Alumina	No OEM Reference	
23	99664A	Compression Spring, Gas Feed, GSD, Long Life Gas Feed, GSD, Long Life	17270640	

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Item	P/N	Description	OEM	QTY
1	82337	Nut 5/8-11 Hex SST	4400006	2
2	82491	Washer Filament Feed-Thru	1700250	2
3	82655	BHSS 1/4"-20 X 1" SST	4500263	4
4	83114	O-Ring -214 Buna N	No OEM Reference	2
5	83264	O-Ring 364 Buna-N	3500028	1
6	99277	Source Body W/ Vaporizer Ports	17174120	1
7	99326	Source Handle	1703660	2
8	99426	Feed-Thru Cathode	1910710	1
9	82207V	O-Ring -208, Viton®	No OEM Reference	2
10	99324A	Feed-Thru Insulator, Long	17127830	2

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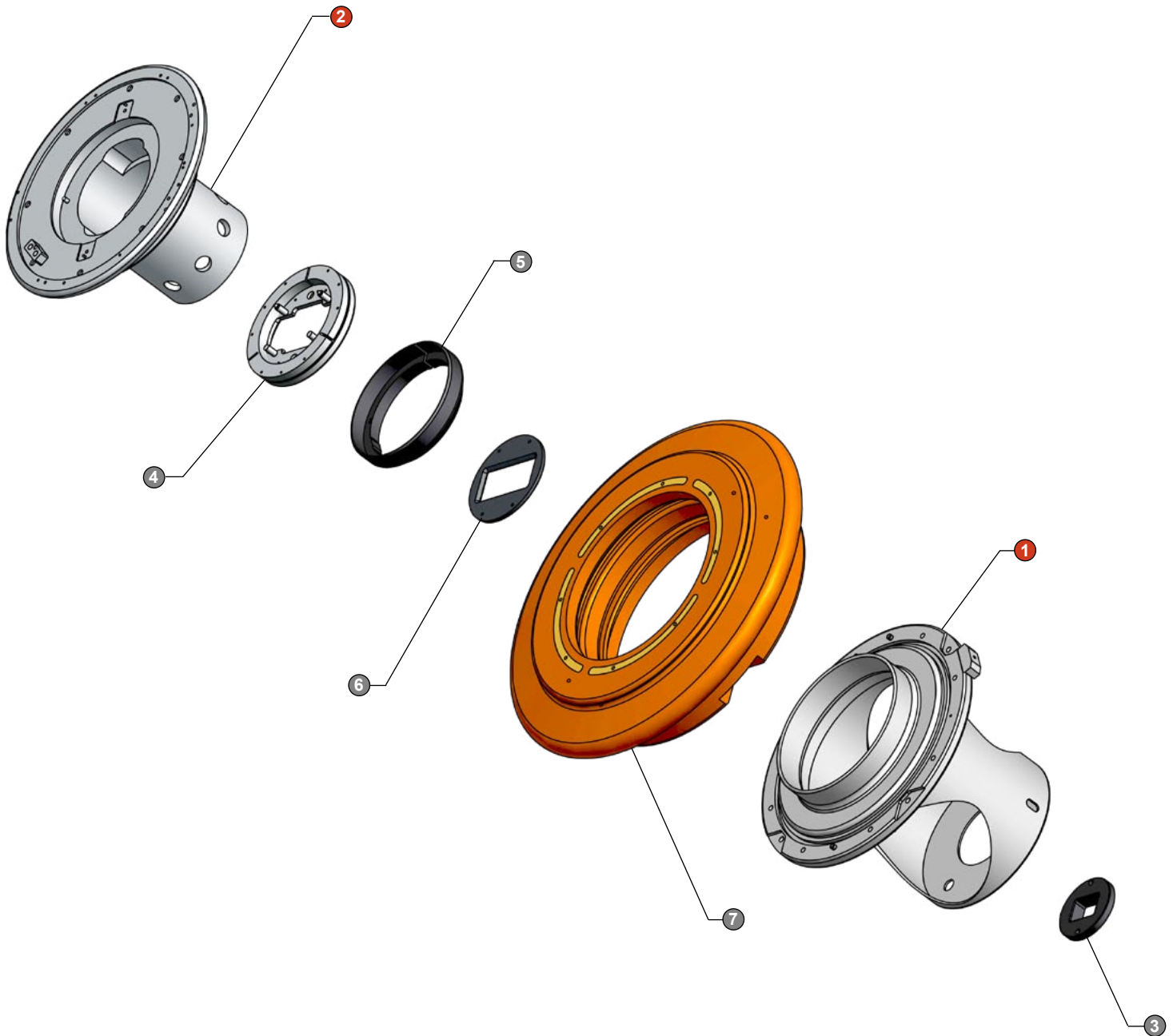


Item	P/N	Description	OEM	QTY
1	82442	SHCS 10-32 X 1 SST	4400022	4
2	82527	Fitting, Connector, 1/4", 1/8" Male NPT, 316 SST	3400064	1
3	82528	Fitting, Male Elbow, 1/4" TUBE, 1/8 NPT, 316 SST	3400501	1
4	82535	Fitting, Union Elbow, 1/4", 316 SST	3400062	1
5	82708	Knob, Plastic Fluted Hand Knob	4000861	2
6	82751	Tube 1/4"ODX.040 Wall LDPE Yellow	7500007	13.5"
7	83701	Fitting, QC Series Instrumentation Quick Connect Stem, Key 1	No OEM Reference	1
8	83702	Fitting, QC Series Instrumentation Quick Connect Stem, Key 2	No OEM Reference	1
9	99120	Threaded Stud	1700220	2
10	99327	Feed-Thru Connector	17033010	1
11	99329	Positive Feed-Thru	17033021	1
12	99330	Negative Feed-Thru	17033020	1
13	99333	Gas Feed Tube Assembly	17032980	1
14	99335	Cooling Tube Assembly	1200850	1
15	99418	Insulator	17127840	1
16	99551	Dual Vaporizer Assembly, 1-1/8" Nozzle Thread,	17033330	1
17	83141V	O-Ring, -241, Viton®	3500344	1
18	8A130	Street Elbow, 45 DEG. 1/8 NPTF X 1/8 NPTM, SS	3401279	2

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GSD Water Cooled Bushing and Liner Flange Upgrades

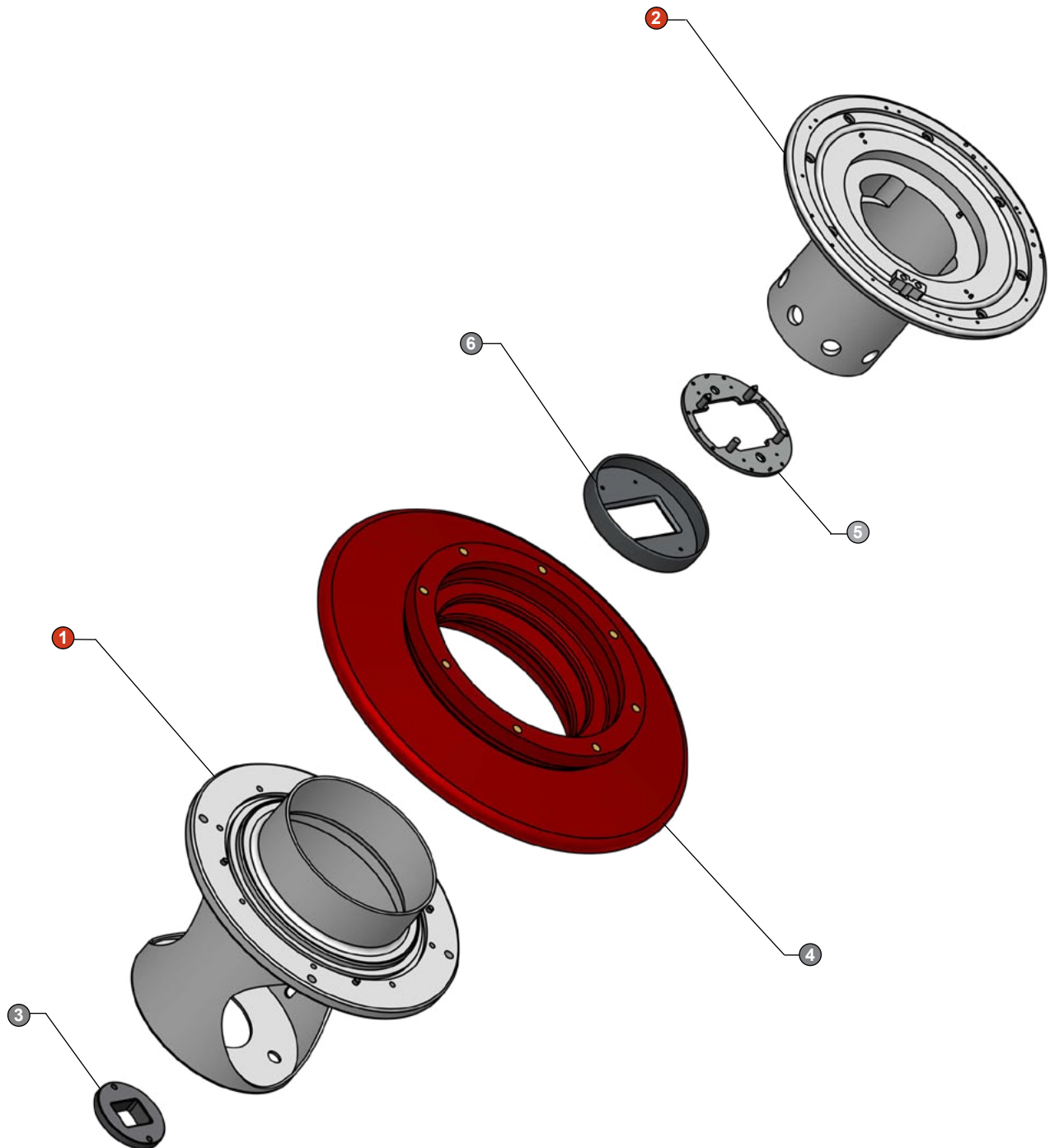


Item	P/N	Description	OEM	QTY
1	99196	Source Liner Flange, Water Cooled, Modified	11026870MOD	1
2	99280A	Source Flange, Water Cooled, Modified	17263590MOD	1
3	99453A	Beam Defining Aperture	17208240	1
4	99462	Source Collar	1190320	1
5	99463	Source Clamp Ring, Graphite	17128740	1
6	99548	Source Shield	17139160, 17128250	1
7	99636	GSD II Source Bushing, High Voltage	11022760	1

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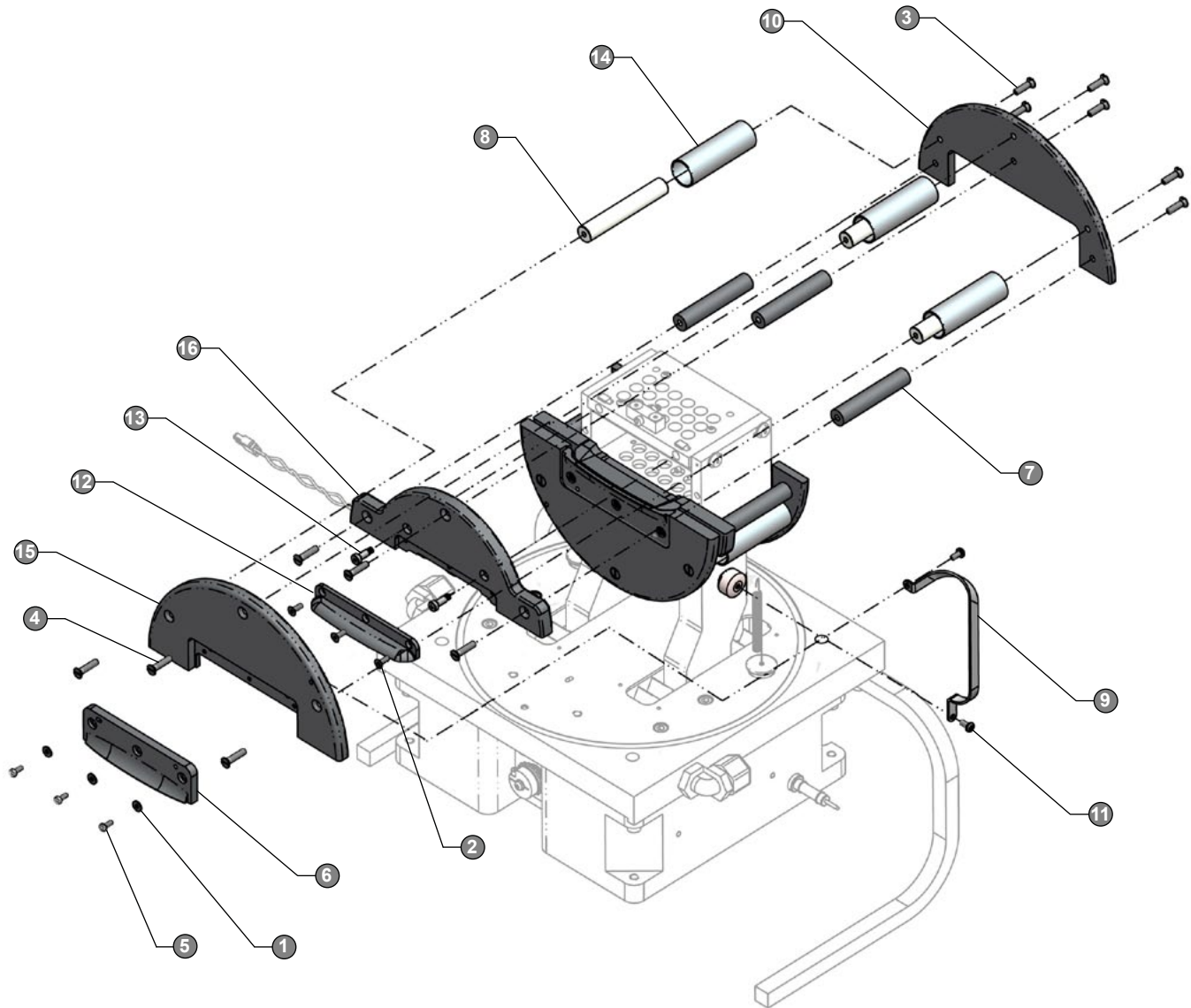


GSD Non-Water Cooled Bushing and Liner Flange Enhanced Upgrades



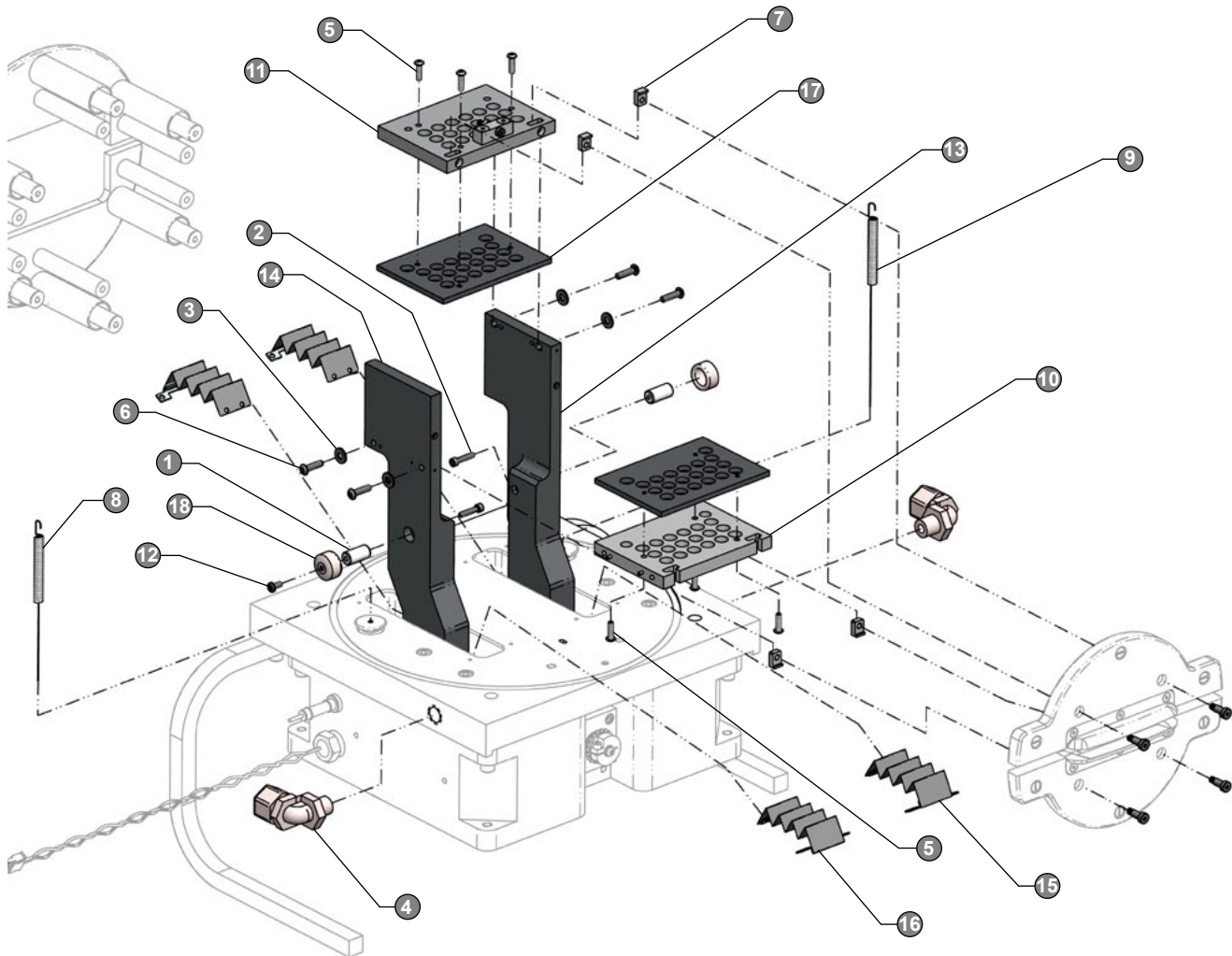
Item	P/N	Description	OEM
1	99196A	Source Liner Flange, Non-Water Cooled, Modified	11051680MOD
2	99280C	Source Flange, Fixed Clamp Ring, Glemco Design	17263590
3	99453A	Beam Defining Aperture	17208240
4	99454B	Source Bushing, High Voltage Insulating, Non-Lead	17322400
5	99462C	Source Collar, Rigid Mount Non-Floating	1190320
6	99548B	Source Shield, Fixed Clamp Flange, Graphite	17304460

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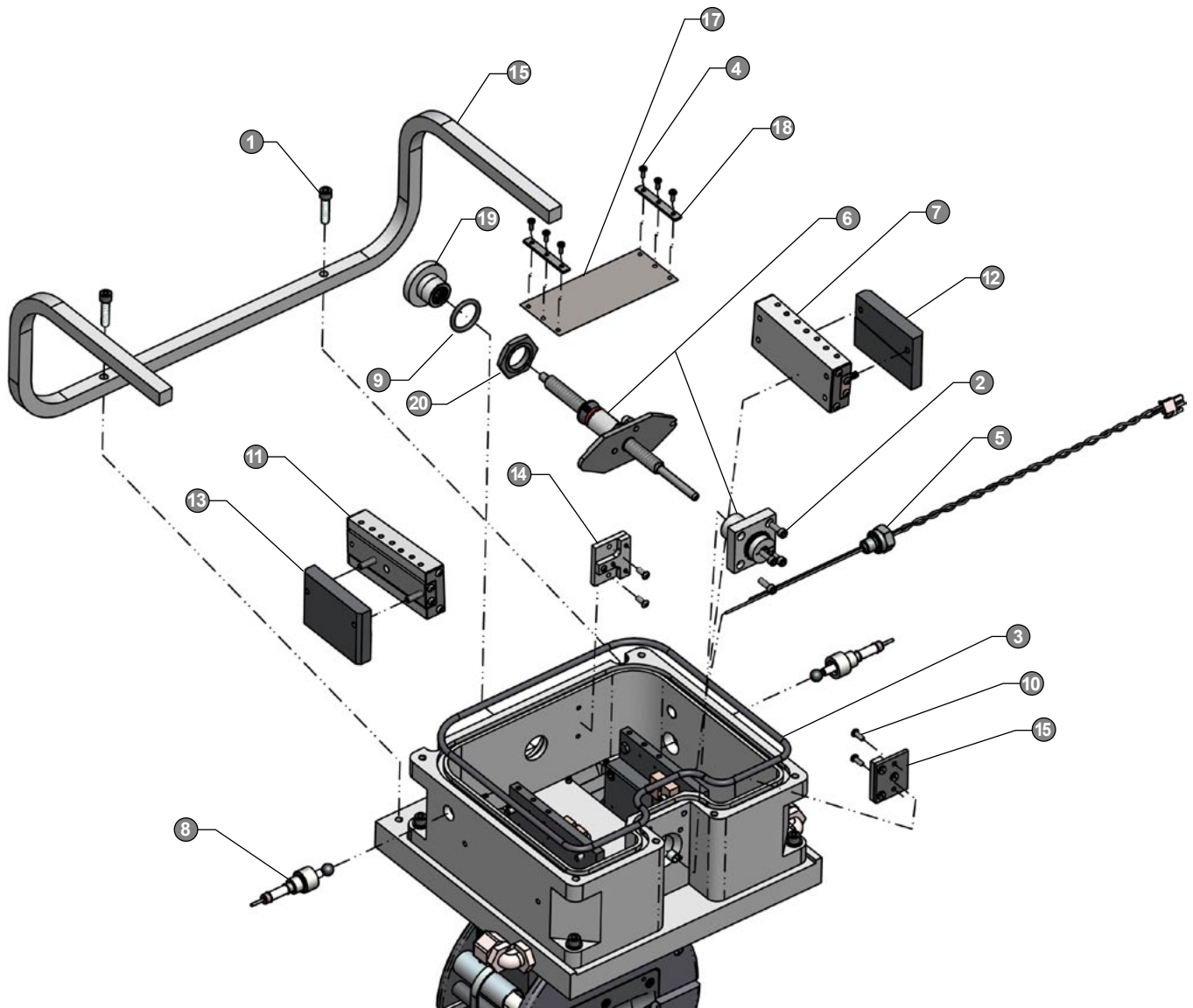
Item	P/N	Description	OEM	QTY
1	82456	Washer, No.4, .028" Thick X .125" ID X .250" OD, 300 Series, SST	4400035	6
2	82580	4-40 X 3/8", Flat Head Socket Screw, 18-8 SST	4400208	6
3	82735	8-32 X 5/8" Flat Head Cap Screw, Slotted, Vented, SST	4400619	6
4	82737	Flat Head Screw, 8-32 X 3/4", Slotted, Vented	4400659	12
5	83628	4-40 X 5/16 Slotted PHCS, 18-8 SST	4400364	6
6	99432	Extraction Electrode Aperture, Graphite	17170040	4
7	99455	Spacer, Ground Electrode, Graphite	17192390	6
8	99456	Standoff, Ceramic	17192380	6
9	99472	Suppression Strap, Aluminum	17251090 REV A	1
10	99537	End Plate, Graphite	17192430	2
11	8A060	6-32 X 5/16", Pan Head Phillips Screw, 18-8 SST	4400113	2
12	99238A	Ground Electrode Aperture	17132290	2
13	99262-3	Shoulder Screw, Lower Extraction Electrode	1214390	4
14	99433A	Insulator Shield, Aluminum	17192400	6
15	99436A	Extraction Electrode, Graphite	17192410	2
16	99437A	Ground Plate, Graphite	17192420	2

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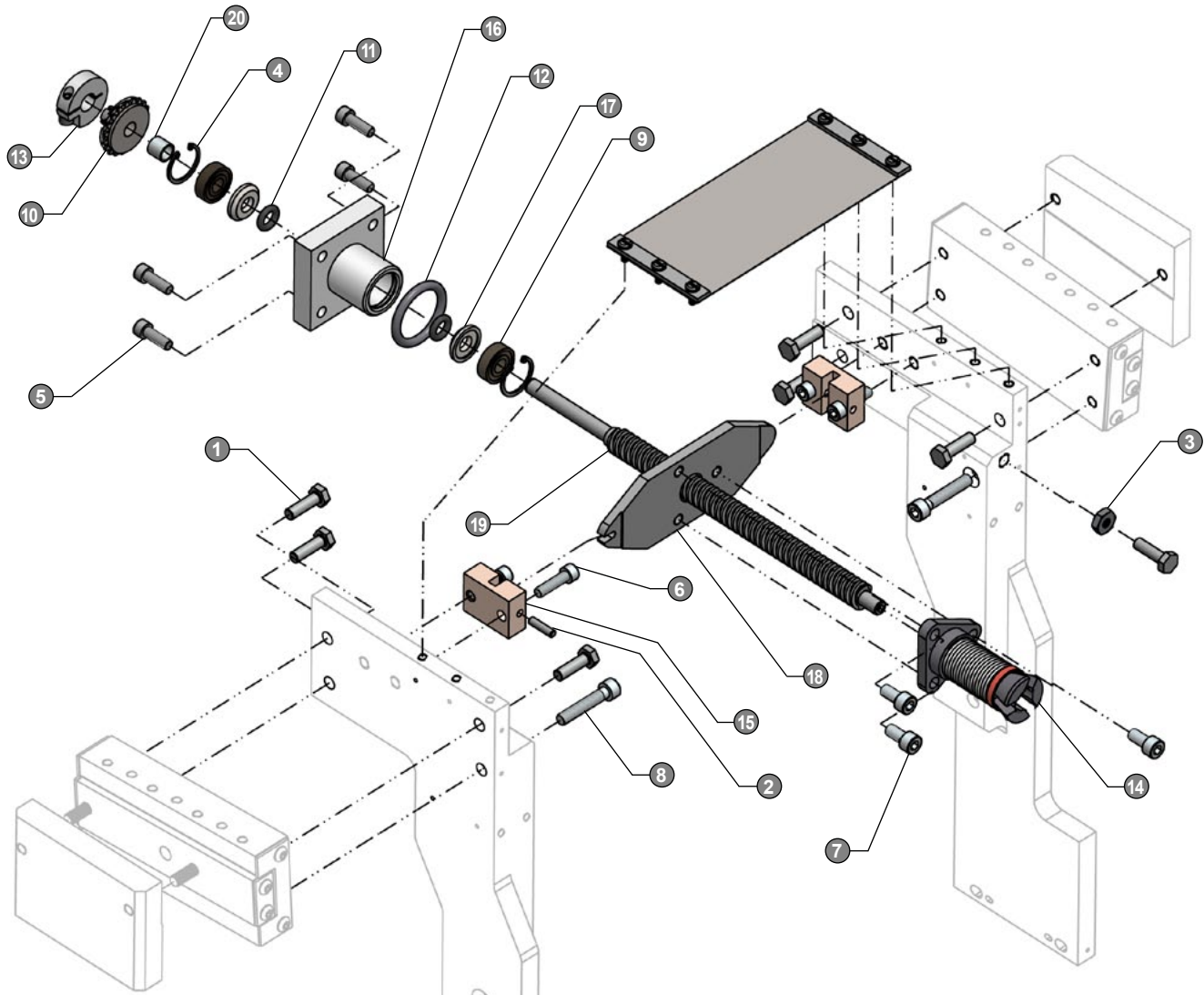
Item	P/N	Description	OEM	QTY
1	30680	Ceramic Standoff, 3/8" Dia X 3/4 Long	5001608	2
2	82420	SHCS 6-32 X 5/8" SST	4400061	2
3	82474	#8 Flat Washer, Standard, 18-8 SST	4400498	4
4	82547	Fitting, Fast & Tite Male Elbow, White Polypro	No OEM Reference	2
5	82629	6-32 X 1/2" Button Head Socket Screw, SST	4400431	6
6	82634	BHSS 8-32 x 5/8 18-8	1236200810	4
7	99186	Electrode Mounting Plate Nut	17133750	4
8	99469	Extension Spring, Short	17255000	1
9	99470	Extension Spring, Long	17254990	1
10	99756	Electrode Mounting Plate, Bottom SST	17133741	1
11	99757	Top Electrode Mounting Plate With Cam Assy.	17133740	1
12	8A060	6-32 X 5/16", Pan Head Phillips Screw, 18-8 SST	4400113	2
13	99254AV	Top Extraction Electrode Assembly Arm, VIG	17133800	1
14	99255AV	Bottom Extraction Electrode Assembly Arm, VIG	17133790	1
15	99262-13L	Bellows Shield, Left	17097661	2
16	99262-13R	Bellows Shield, Right	17097660	2
17	99262-5	Liner, Extraction Electrode	17122880	2
18	99435A	Shield, Extraction Insulator	17254950	2

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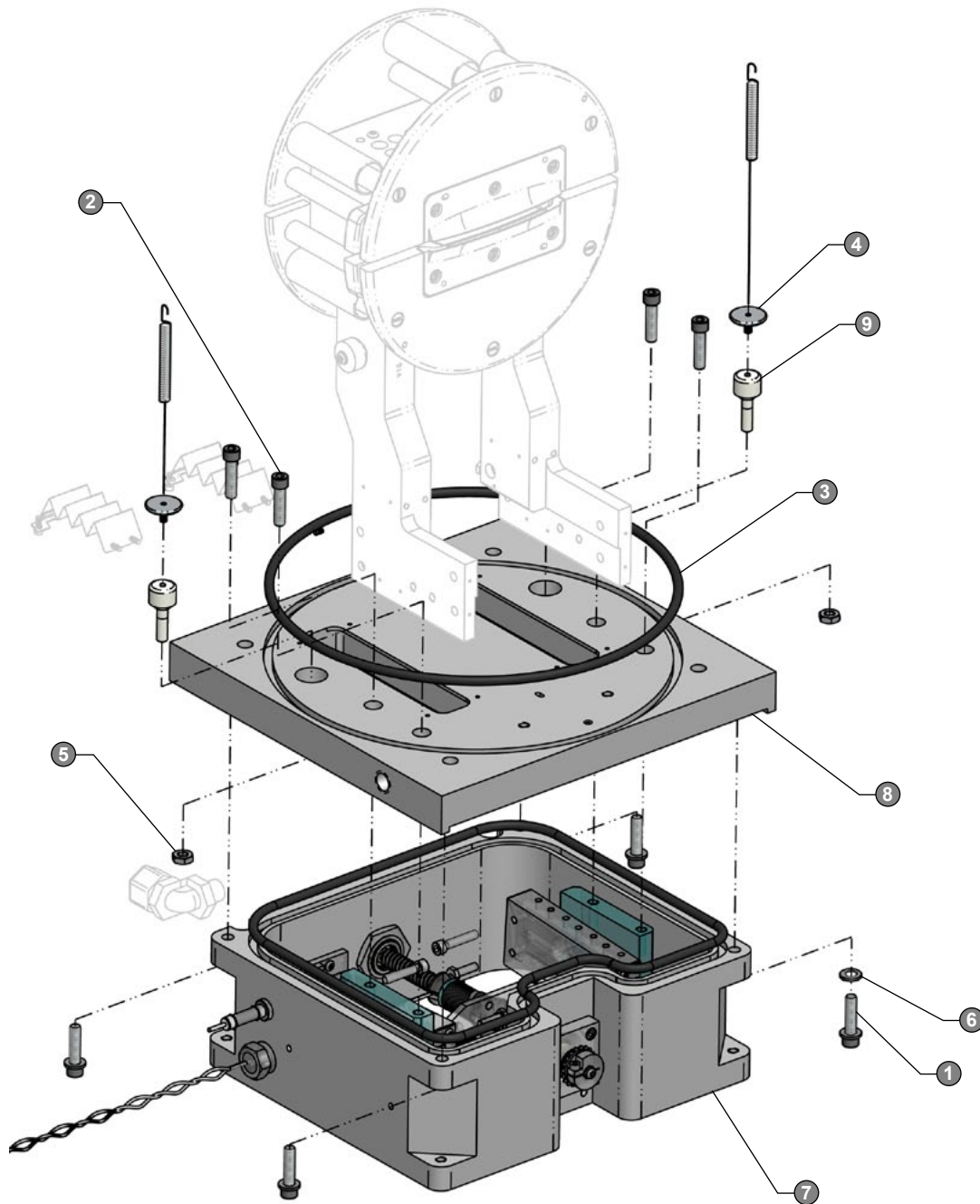
Item	P/N	Description	OEM	QTY
1	82446	1/4-20 X 1" Socket Head Cap Screw, SST	4500138	2
2	82395	8-32 X 1/2, SHCS, 18-8 SST	44000145	4
3	83277	O-Ring - 377 Buna-N	3500263	2
4	83628	4-40 X 5/16 Slotted PHCS, 18-8 SST	4400364	6
5	99265	Readback Harness, Extraction Electrode	1176940	1
6	99267	Lead Screw Assembly	No OEM Reference	1
7	99270	Modified Linear Slide Bearing	No OEM Reference	2
8	99546	Feed-Thru, 10Kv	1909860	2
9	83112V	O-Ring 212 Viton®	E35000190	1
10	8A257	6-32 X 3/8" Vented Button Head Socket Screw, SST	No OEM Reference	4
11	99270A	Modified Linear Slide Bearing	No OEM Reference	1
12	99262-12	No. 1 Linear Slide Mtg Plate	No OEM Reference	1
13	99262-17	No. 2 Linear Slide Mtg Plate	No OEM Reference	1
14	99262-19	Sensor Plate Assembly	No OEM Reference	1
15	99262-20	Sensor Plate Assembly	No OEM Reference	1
16	99262-21	Handle, Extraction Assembly	No OEM Reference	1
17	99262-6	Shield Plate	No OEM Reference	1
18	99262-7	Brace Clamp	No OEM Reference	2
19	99267-4	Bearing Screw Assembly	No OEM Reference	1
20	99267-5	Washer Face Jam Nut 7/8-14 UNF	No OEM Reference	1

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Item	P/N	Description	OEM	QTY
1	82875	Hex Head Screw 10-32 X 5/8, 18-8 SST	No OEM Reference	7
2	82234	Dowel Pin 1/8D x 1/2 18-8 SST	No OEM Reference	1
3	82299	Nut, 10-32 Hex, 18-8 SST	4400049	1
4	82342	Retaining Ring	No OEM Reference	2
5	82395	8-32 X 1/2, SHCS, 18-8 SST	44000145	4
6	82430	SHCS 8-32 X 5/8" SST	4400074	4
7	82439	SHCS 10-32 X 3/8" SST	4400743	3
8	82442	SHCS 10-32 X 1 SST	4400022	2
9	82579	Bearing, Angular Contact	No OEM Reference	2
10	82672	Sprocket	No OEM Reference	1
11	83008	O-Ring -108 -Buna-N	3500196	2
12	83112	O-Ring 212 Buna-N	3500086	1
13	8A452	Split Circular Hub Clamp	No OEM Reference	1
14	8A454	Anti Backlash Nut	No OEM Reference	1
15	99262-9	Mounting Block	No OEM Reference	2
16	99267-1	Bearing Housing	No OEM Reference	1
17	99267-2	Bearing Spacer	No OEM Reference	2
18	99267-3	Lead Screw Mounting Plate	No OEM Reference	1
19	99267-6	Acme Lead Screw, 7/16-4, 8TPI	No OEM Reference	1
20	99267-9	Spacer, Leadscrew Assy	No OEM Reference	1

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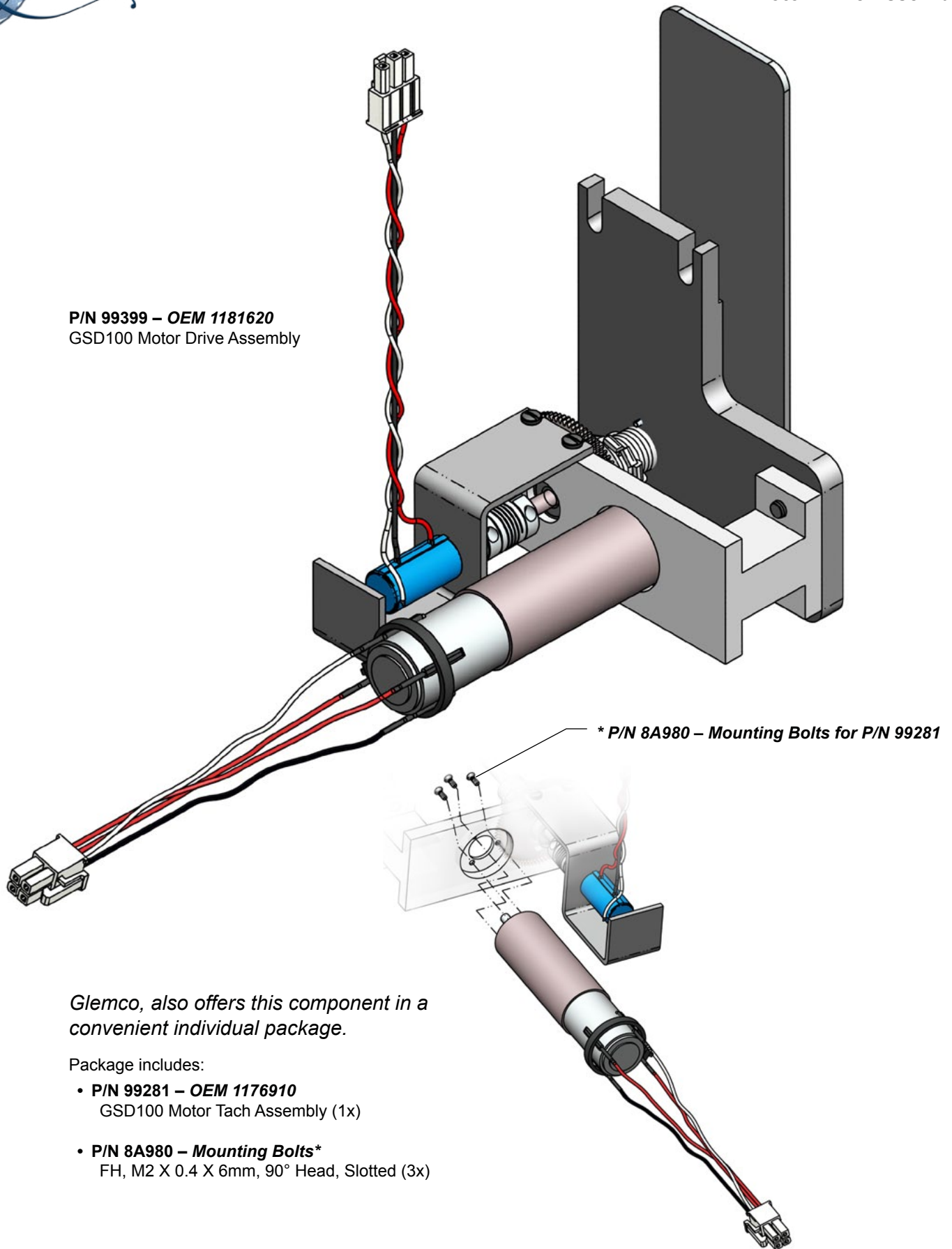


Item	P/N	Description	OEM	QTY
1	82446	1/4-20 X 1" Socket Head Cap Screw, SST	4500138	4
2	82748	VSHCS, 1/4-20 X 1, 18-8 SST Vented, Cap Screw	No OEM Reference	4
3	83293	O-Ring 374, Buna-N	3500074	1
4	99468	Feed-Thru Shield, Aluminum	17254980	2
5	8A235	Nut, 1/4-20, Hex, Thin (Jam), SST	4400153	2
6	8A820	Flat Washer Ø.275 ID, Ø.50 OD, X.06-.09	No OEM Reference	4
7	99262-2	Extraction Electrode Housing	No OEM Reference	1
8	99262V34-1	Mounting Plate	No OEM Reference	1
9	99353B	Electrode Insulator, 96% Al2O3 Not glazed w/ 8-32 Threaded Hole.	17254970	2

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Extraction Electrode Version 34 Motor Drive Assembly

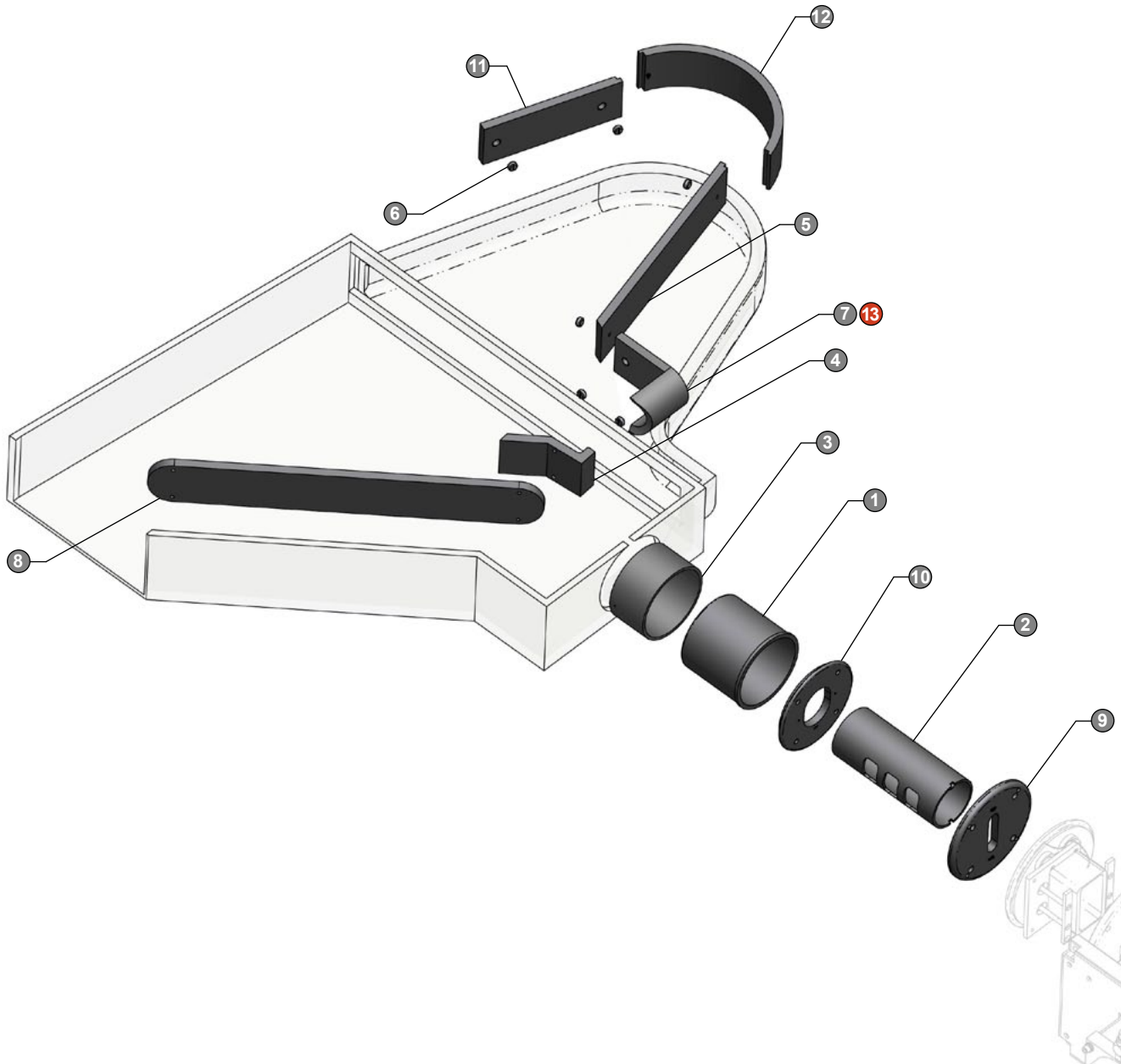


Glemco, also offers this component in a convenient individual package.

Package includes:

- **P/N 99281 – OEM 1176910**
GSD100 Motor Tach Assembly (1x)
- **P/N 8A980 – Mounting Bolts***
FH, M2 X 0.4 X 6mm, 90° Head, Slotted (3x)

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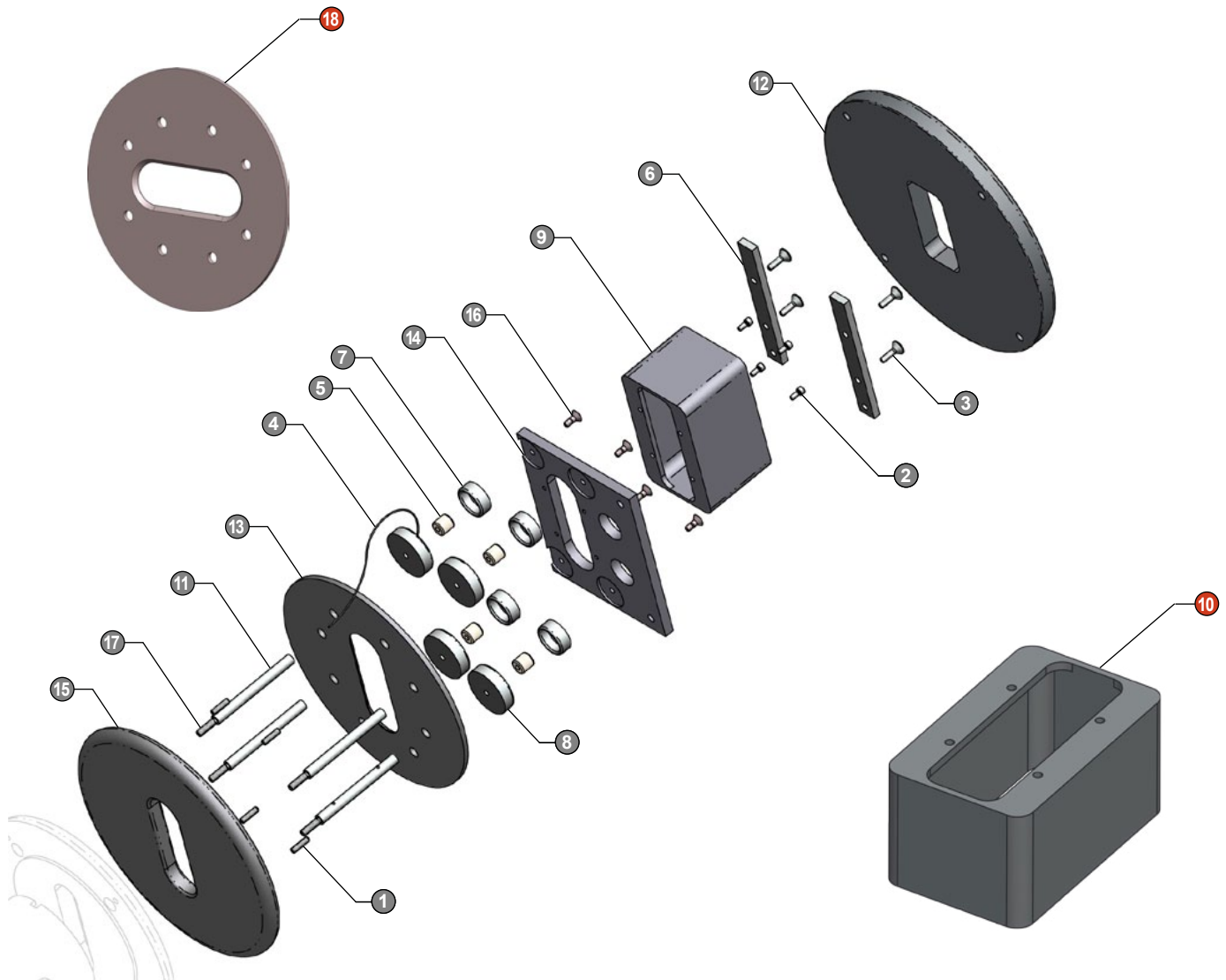


Item	P/N	Description	OEM	QTY
1	99213	Extension Liner	17122930	1
2	99259	Accel Graphite Tube	17122950	1
3	99264	Exit Liner	17122910	1
4	99467	Inner Exit Shield	17122900	1
5	99531	Liner	17236730	1
6	99581	Threaded Insulating Cap	17167970	6
7	99591	Liner, Magnet, Duct	17233330	1
8	99684	Inner Beam Dump	17099631	1
9	99808	Terminal Aperture	17227050	1
10	99489A	Post Accel Aperture	17227030	1
11	99531A	Liner	17236720	1
12	99575A	Magnet Analyzer	17236740	1
13	99591V	Liner, Magnet, Duct, Vig	17233330	

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High Current Post Accel Extraction Electrode Assembly/Resolve Housing Aperture

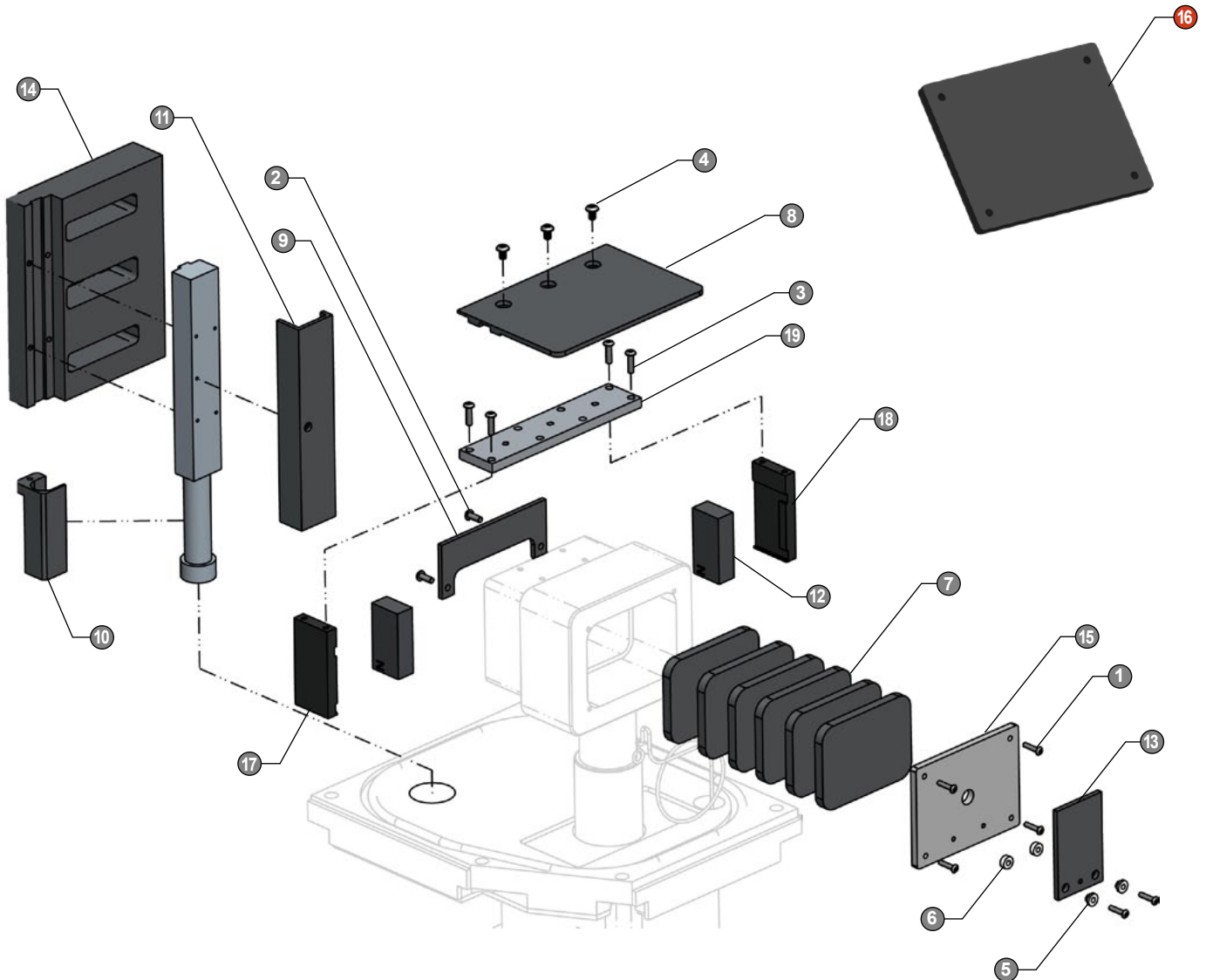


Item	P/N	Description	OEM	QTY
1	82119	6-32 X 1/2, Set Screw, 18-8 SST	4400082	4
2	82385	SHCS 4-40 X 1/4" SST	4400194	4
3	82587	FHSS No.6-32 3/8 LG SST	No OEM Reference	4
4	82785	Wire, Safety, Ø.032", 302 SST	7100042	
5	99054	Ceramic Standoff, 3/8" Dia X 3/8" Long X 6-32 Thread	2866042	4
6	99137	Bar	1701730	2
7	99138	Small Cup	1711262	4
8	99139	Large Cup	1711261	4
9	99473	Post Accel Aperture	17122980	1
10	99473A	Post Accel Aperture Block, Modified, Graphite	17122980	
11	99582	Electrode Standoff	1712391 Rev. C	4
12	99807	Resolving Housing Aperture	17102651	1
13	40570A	Shield, Extraction Electrode, Graphite	No OEM Reference	1
14	99030C	Single Gas Ground Electrode Plate	17237140	1
15	99181B	Extraction Aperture	17237130	1
16	8A217	8-32 X 3/8" Flat Head Screw, 18-8 SST, 82°	4400024	4
17	8A387	VSS, 8-32 X 1/2, SST	4400664	4
18	40570AW	Shield, Extraction Electrode, Tungsten	17237120	

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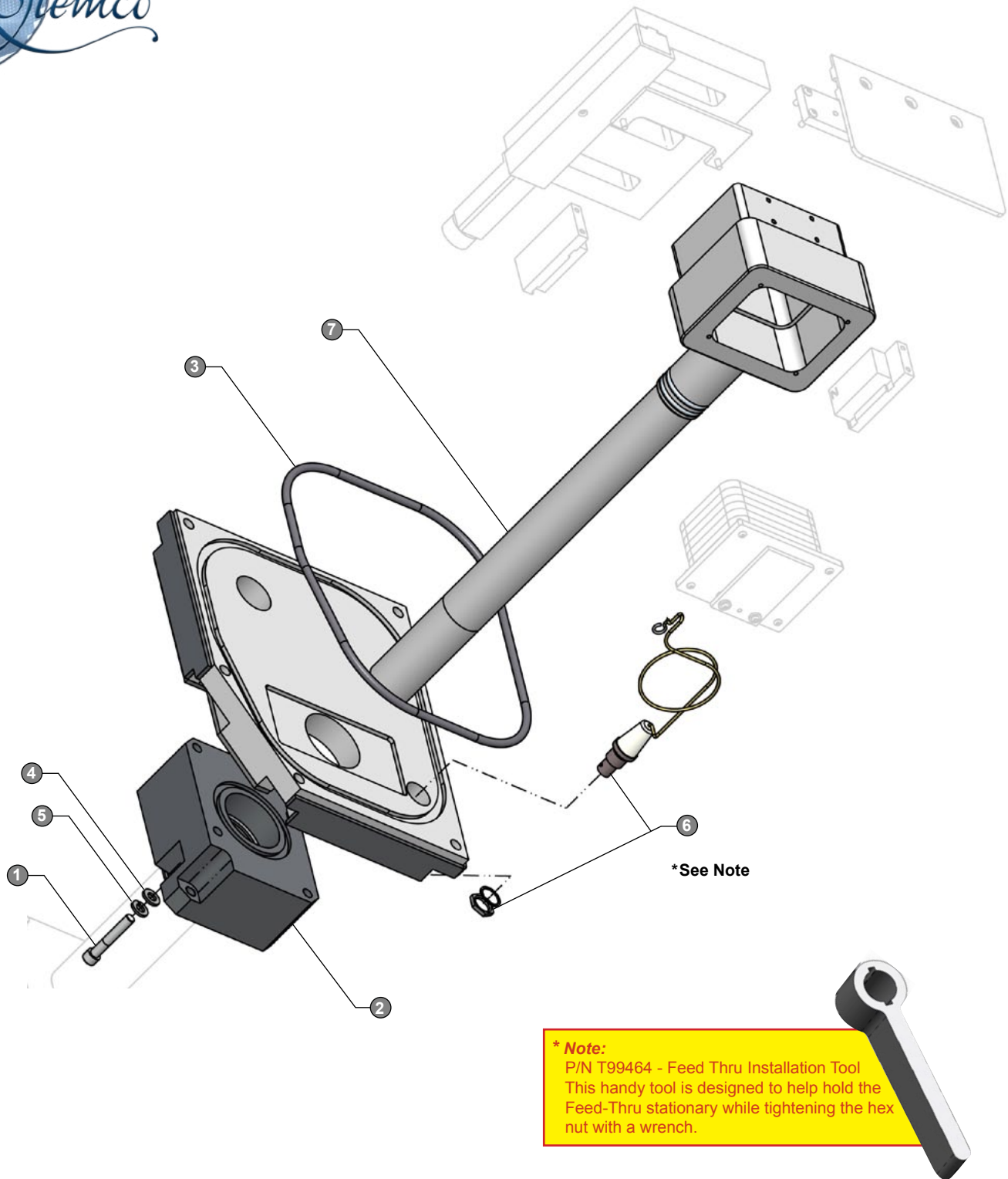


Faraday Flag Selective Aperture Components



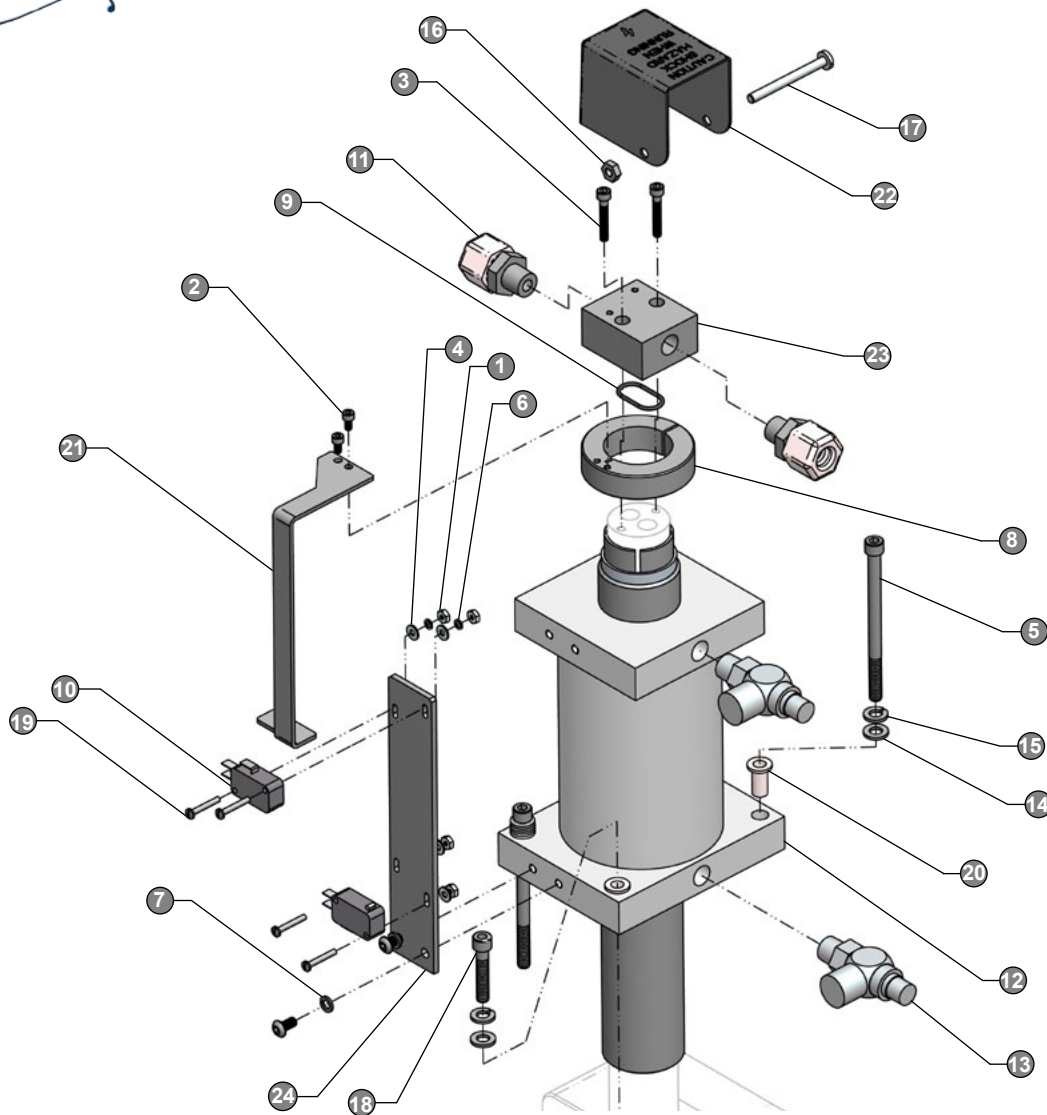
Item	P/N	Description	OEM	QTY
1	82621	4-40 X 1/2" Button Head Socket Screw, SST	No OEM Reference	6
2	82627	6-32 X 3/8" Button Head Socket Screw, SST	1236200606	2
3	82629	6-32 X 1/2" Button Head Socket Screw, SST	1236200608	4
4	82630	8-32 X 1/4", Button Head Socket Screw, SST	4400735	3
5	99087	Standoff Insulator	1744570	2
6	99088	Top Insulator	1744690	2
7	99339	Strike Block, Faraday Flag	17099201 Rev. A	6
8	99390	Shield, Faraday Flag	17099831	1
9	99392	Shield, Faraday Flag	17100461	1
10	99536	Shield Tube, Selectable, Graphite	17272300	1
11	99674	Shield, Graphite	17250360	1
12	8A314	Magnet, .50 X .88 X 1.75, Samarium Cobalt, Special	No OEM Reference	2
13	99040A	Burn-Thru Sensor Plate, Graphite	1766531	1
14	99549A	Selectable Aperture, Graphite	17250340	1
15	99820-10	Cover Plate, Aluminum	17104820	1
16	99820-10G	Cover Plate, Graphite	17104820	
17	99820-5-1	Bracket, Magnet, Right	17065301	1
18	99820-5-2	Bracket, Magnet, Left	17065300	1
19	99820-5-3	Support Plate, Bracket	17099150	1

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Item	P/N	Description	OEM	QTY
1	84171	SHCS 1/4-20 X 1.5	No OEM Reference	1
2	99721	Seal Block, GSD & HE Faraday Flag	17099140	1
3	83269K	O-Ring 7.975ID X .210W, 4079 Kalrez	22-00657-00	1
4	8A331	Washer, Flat .260 ID X .500 ODX .060 Thick, Black Oxide Finish	No OEM Reference	1
5	8A332	Washer, Lock, 1/4 Regular Spring .260ID, .489OD, .06 Thick Black Oxide Finish	No OEM Reference	1
6	99464	5 Amp Mini MHV Coaxial Connector, Feed-Thru	1214980	1
7	99820-6	Faraday Cup	17104810	1

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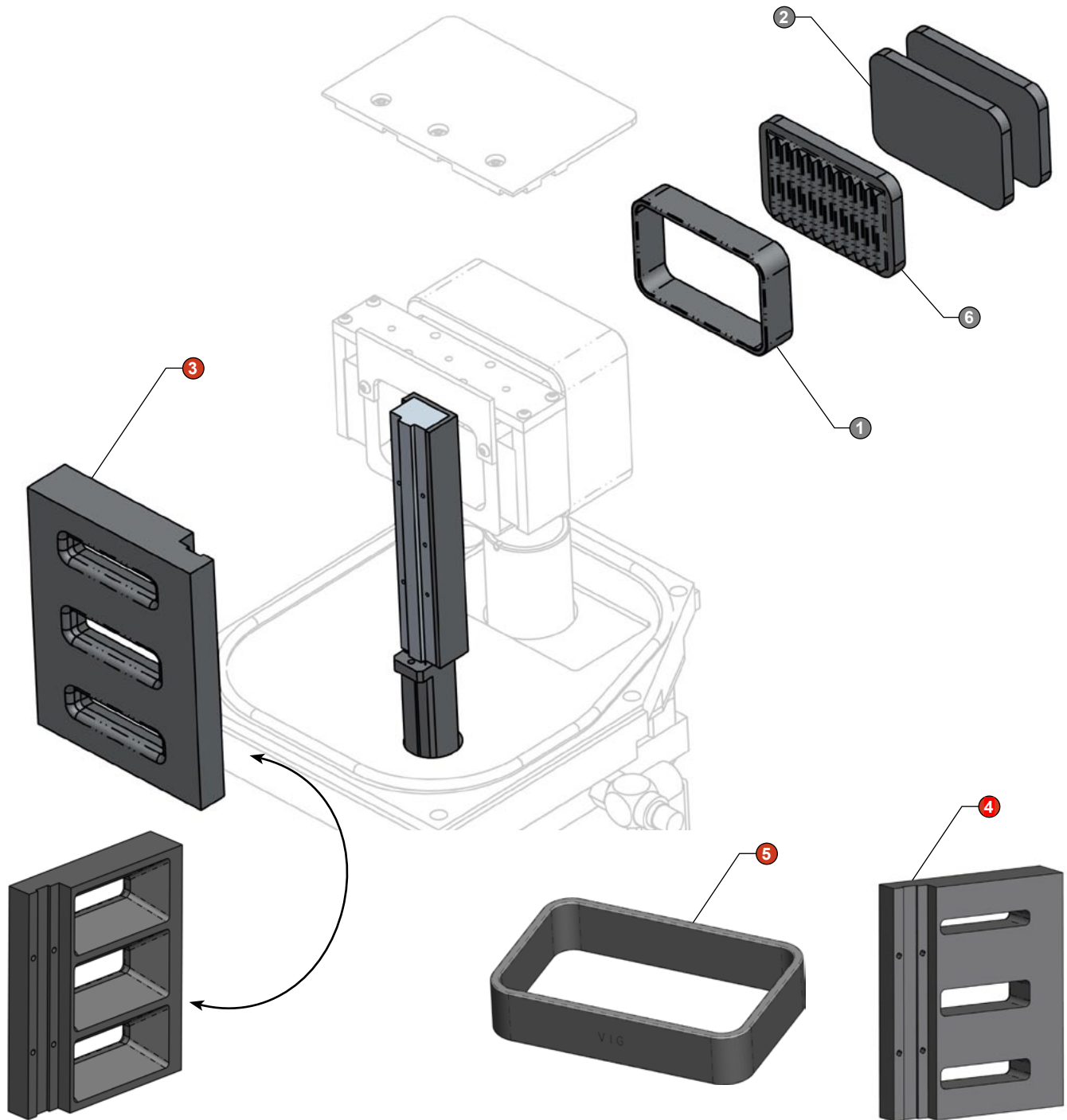


Item	P/N	Description	OEM	QTY
1	82294	Nut 4-40 Hex 18-8 SST	5053-0001-0042	4
2	82412	6-32 X 1/4", SHCS, SST 18-8	6973-0002-6202	2
3	82433	SHCS 8-32 x 1.0 SST	1231110820	2
4	82455	No.4 Flat Washer, .032 Thick, SST	1412200400	4
5	82458	SHCS 1/4-20 x 3.50, Alloy	No OEM Reference	4
6	82601	Lock Washer REG. Spring .120 ID, .209 OD, .025 Thick No.4	48K00033	4
7	82608	Lock Washer No.10 Regular Spring	4400041	2
8	99395	Shaft Clamp Spacer, SST	1212680	1
9	8A222	O-Ring -.018 Buna-N	No OEM Reference	1
10	8A312	Limit Switch	6500393	2
11	8A313	Fitting, 1/4 NPT Male	3401324	2
12	8A315	Air, Cylinder 3" Bore X 3.25" Stroke	No OEM Reference	1
13	8A316	Flow Control, Recessed	No OEM Reference	2
14	8A331	Washer, Flat .260 ID X .500 ODX .060 Thick	No OEM Reference	4
15	8A332	Washer, Lock, 1/4 Reg. Spring .260ID, .489OD, .06 Thick	No OEM Reference	4
16	8A333	Nut, Hex 10-32, Nylon	No OEM Reference	1
17	8A334	PH, 10-32 X 2", Nylon Slotted	No OEM Reference	1
18	8A335	SHCS 1/4-20 X 1-1/4, Alloy	No OEM Reference	1
19	8A338	PH, 4-40 X 3/4" Slotted Pan HDSS 18-8	No OEM Reference	4
20	8A345	Washer, Shoulder, .260 ID, .500 OD X .060 Lng Shoulder, .312 OD X .630 Shank Lth., Nylon	4000982	4
21	99820-11	Arm, Limit Switch Activator	17133500	1
22	99820-12	Cover	17104770	1
23	99820-4	Manifold	17065260	1
24	99820-8-1	Support Plate, Bracket	17065280	1

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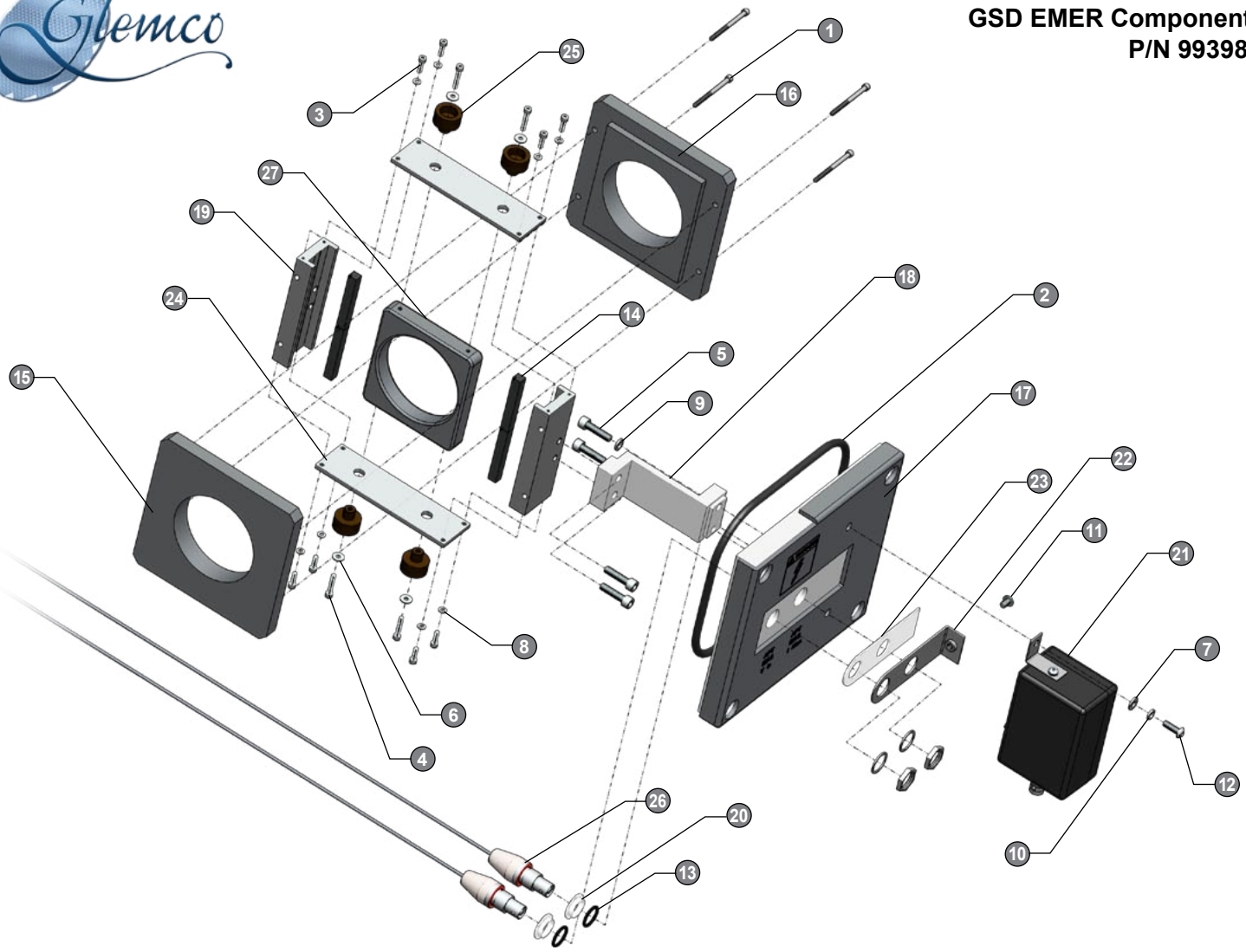


Upgraded Faraday Flag Aperture Components



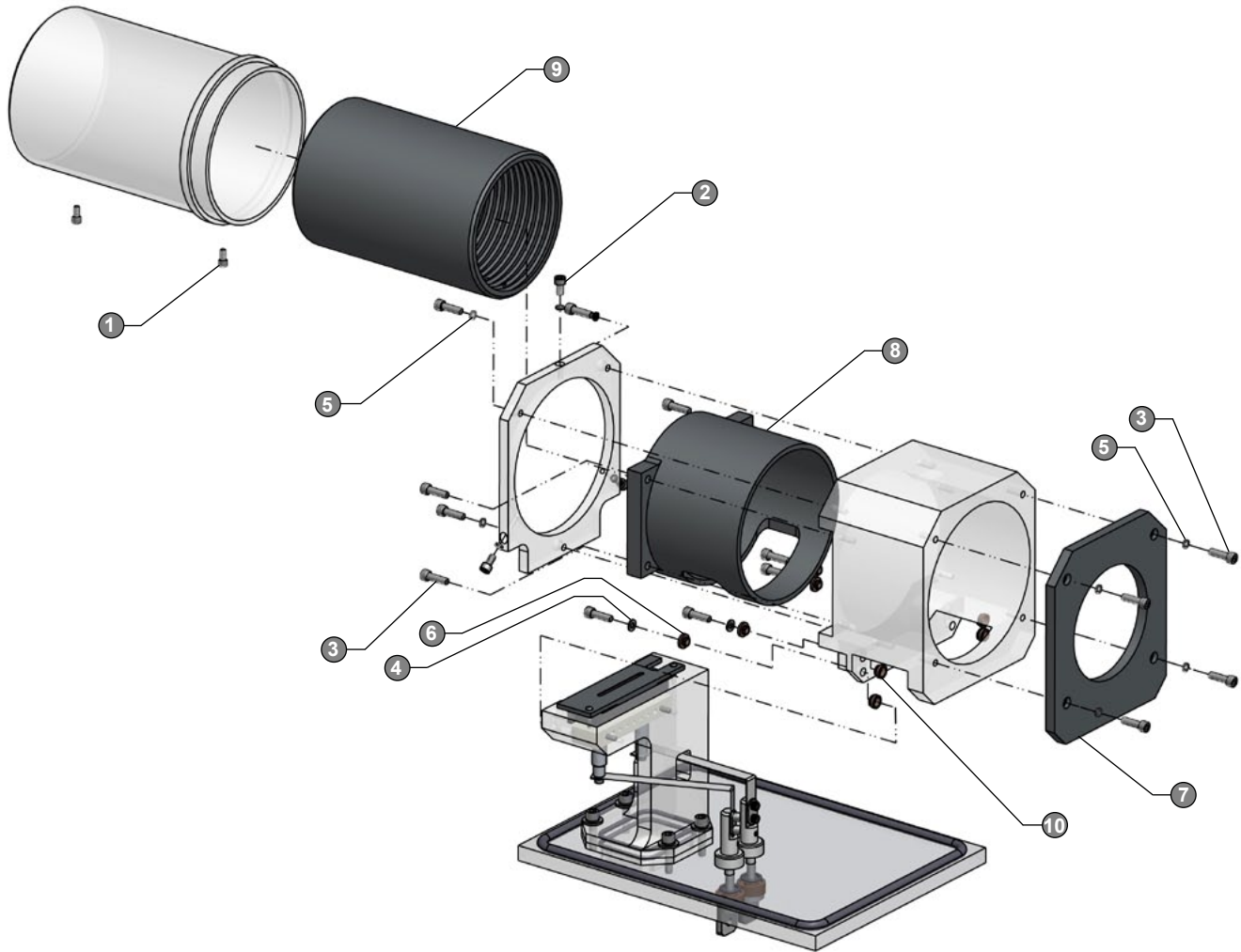
Item	P/N	Description	OEM	QTY
1	99679	Spacer, Strike Plate, Graphite	17320320	1
2	99781	Strike Plate, Graphite	17319860	2
3	99549B	Selectable Aperture	No OEM Reference	
4	99549C	Selectable Aperture Electrode, 9mm, 15.75mm, 12mm	17318060	
5	99679V	Spacer Strike Plate, Graphite VIG	17320320	
6	99681AV	Strike Plate, Serrated, Graphite VIG	17319860	1

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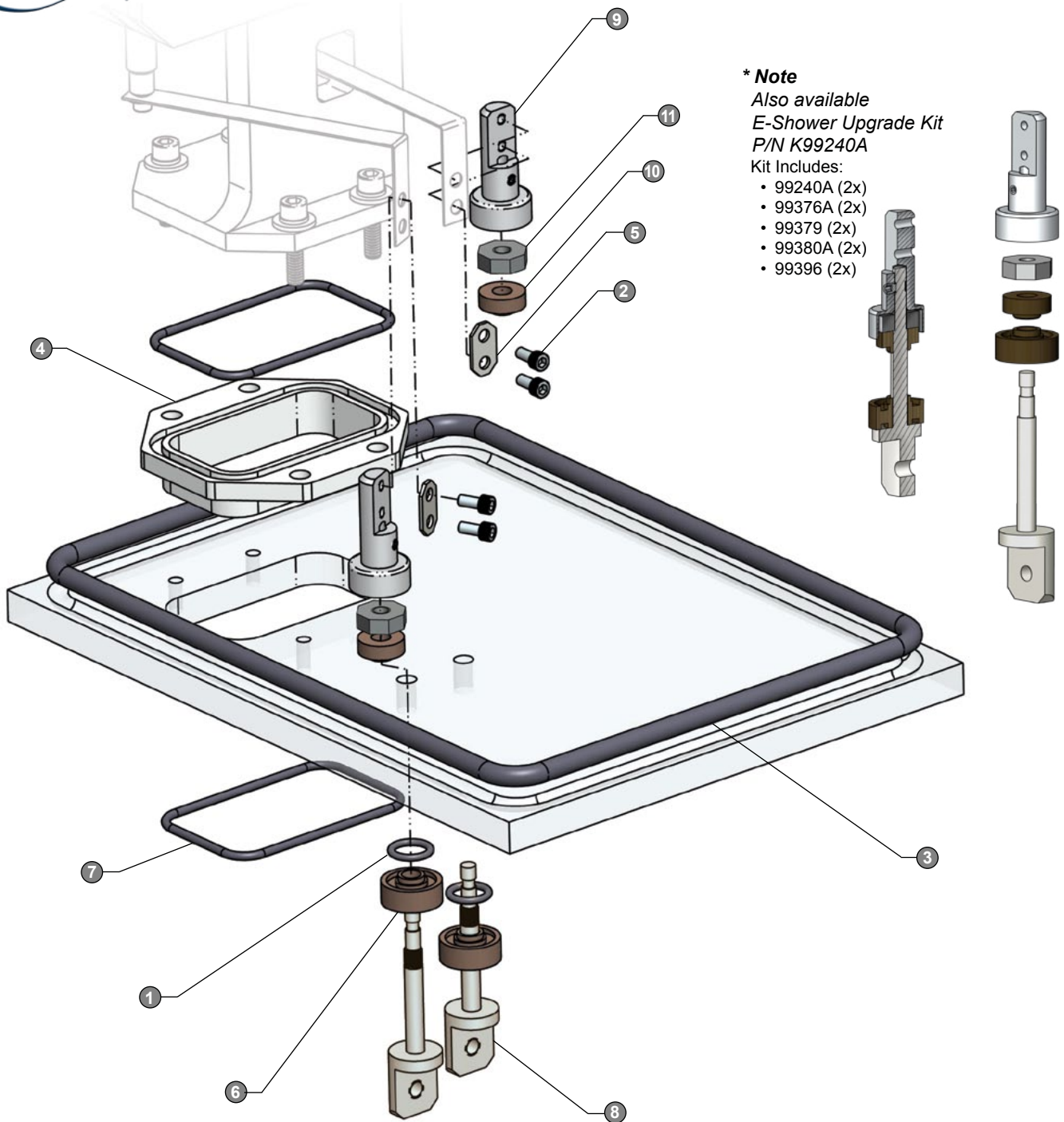
Item	P/N	Description	OEM	QTY
1	8A122	SHCS, 4-40 X 1-1/2", 18-8, SST	44S0040	4
2	8A219	O-Ring, -361, Buna-N	3500034	1
3	82387	SHCS, 4-40 X 3/8", SST	4400004	8
4	82390	SHCS, 4-40 X 5/8", 18-8, SST	4400219	4
5	82441	SHCS, 10-32 x 3/4", Long, SST	1231206012	4
6	82456	Washer, Flat, #4, .028" Thick X .125" ID X .250" OD, 300 Series, SST	4400035	4
7	82474	Washer, Flat, #8, Standard, 18-8, SST	4400498	1
8	82601	Washer, Lock, Regular Spring, #4, .025" Thick X .120" ID X .209" OD, SST	48K00033	8
9	82608	Washer, Lock, Regular Spring, #10, .047" Thick X .200" ID X .334" OD, SST	4400041	2
10	82609	Washer, Lock, Regular Spring, #8, .040" Thick X .174" ID X .293" OD, SST	4400062	1
11	82630	BHSS, 8-32 X 1/4" Long, 18-8, SST	4400735	1
12	82633	BHSS, 8-32 X 1/2" Long, 18-8, SST	4400042	1
13	82914V	O-Ring, -014, Viton®	3500127	2
14	99248	Magnetic Deflector Magnet	1749640	4
15	99305	Front Shield, Electromagnetic Energy Reflector, Graphite	17138750	1
16	99305A	Rear Shield, Electromagnetic Energy Reflector, Graphite	17138740	1
17	99398-1	Base Plate	No OEM Reference	1
18	99398-3	Support Arm, EMER Assembly	1190500	1
19	99398-5	Mounting Block, Magnet	17138710	2
20	99398-6	Insulator, Feed-Thru Connector	No OEM Reference	2
21	99398-7	EMER Electronics	No OEM Reference	1
22	99398-9	Ground Strap	No OEM Reference	1
23	99398-10	Insulator, Feed-Thru	No OEM Reference	1
24	99398A-4	Side Plate	No OEM Reference	2
25	99459	Bias Ring Aperture Insulator	17174410	4
26	99464	5 Amp Mini MHV Coaxial Connector, Feed-Thru, Potted w/ Teflon Insulated Lead Wire	1214980	2
27	99577	Aperture, Back Bias, EMER Assembly, Graphite	17138730	1

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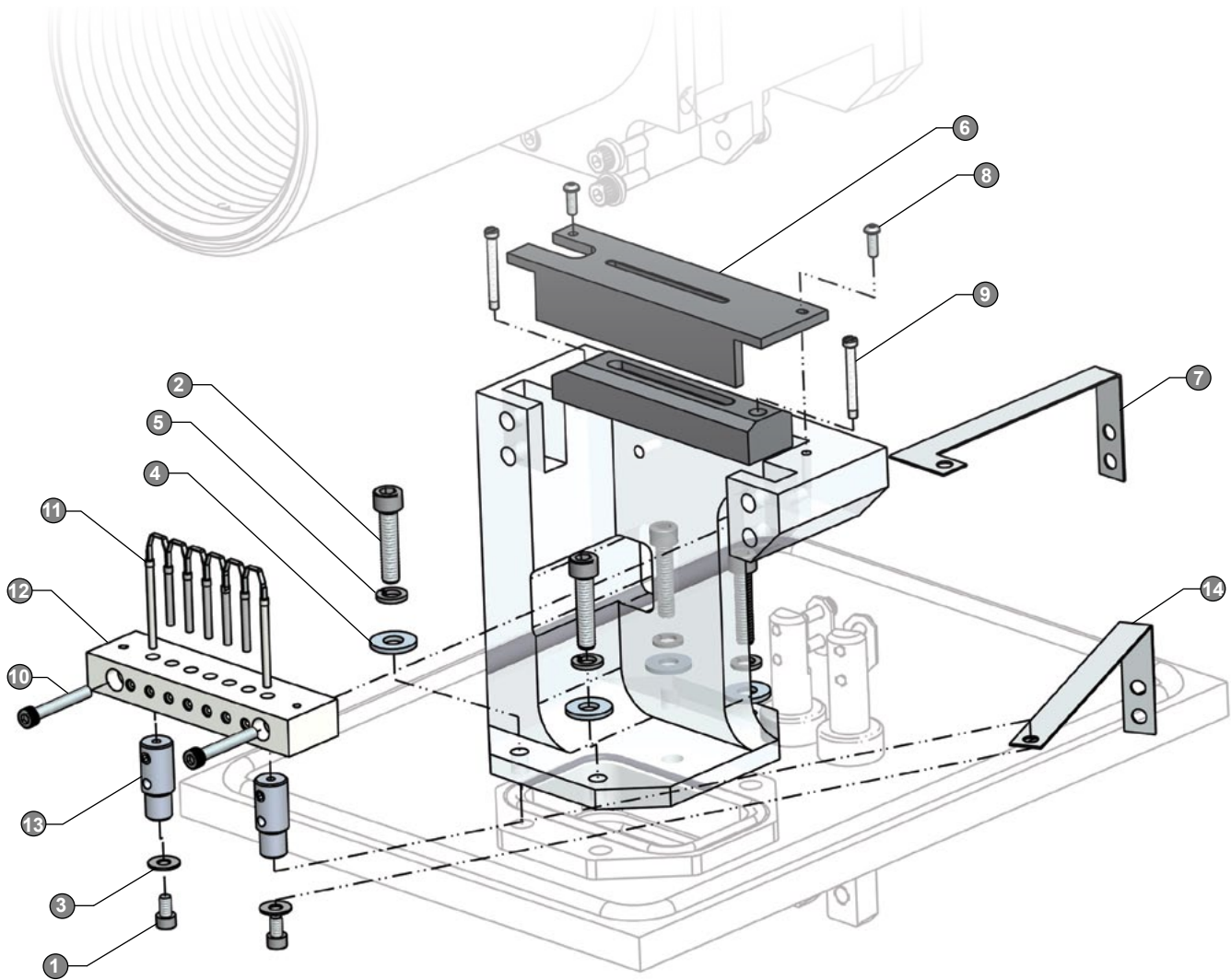
Item	P/N	Description	OEM	QTY
1	82385	SHCS 4-40 X 1/4" SST	1236200403	2
2	82412	6-32 X 1/4", SHCS, SST 18-8	4400216	3
3	82415	6-32 X 1/2" SHCS, SST	1231200608	15
4	82470	Washer Flat 6 X .025 Thick SST	141220600	4
5	82606	#6 Regular Spring Washer, 18-8 SST	4400034	10
6	99419	BSHG Snap Insulator	17109340	4
7	99475	Electron Shower Aperture Entrance	17173230 REV A	1
8	99476	Electron Shower Target, Graphite	17164580	1
9	99363A	Electron Shower Tube	17135440	1
10	99367A	Electron Shower Tube Insulator	17109910 REV A	4

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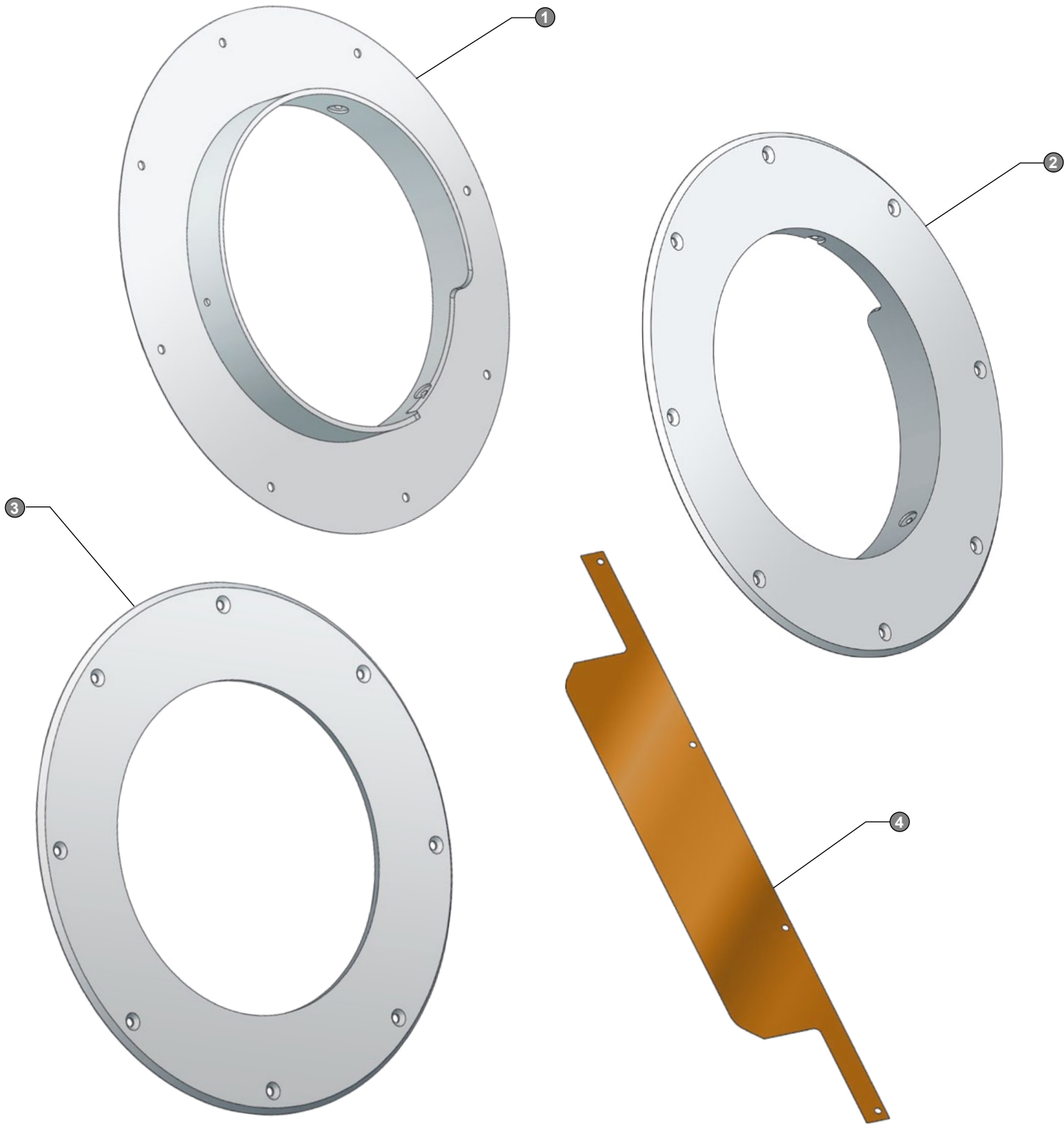
Item	P/N	Description	OEM	QTY
1	82200	O-Ring -012 Buna-N	2542012 / E35000067 / 3500068	2
2	82385	SHCS 4-40 X 1/4" SST	1236200403 / 4400194 / 4400105	8
3	83264	O-Ring -364 Buna-N	3500028	1
4	99318	E-Shower Base Insulator	No OEM Reference	1
5	99375	Clamp Feed Strap	17A0830	2
6	99379	Feed-Thru Insulator	17S4891 REV A	2
7	8A218	O-Ring - 137 Buna-N	3500774	2
8	99240A	Electron Shower Feed-Thru, For Glemco Design	No OEM Reference	2
9	99376A	Strap Mount,	17S1597	2
10	99380A	Spacer, for Glemco Design, Vespel®	No OEM Reference	2
11	99396	Feed-Thru Nut, 10-32, SST	17S1354	2

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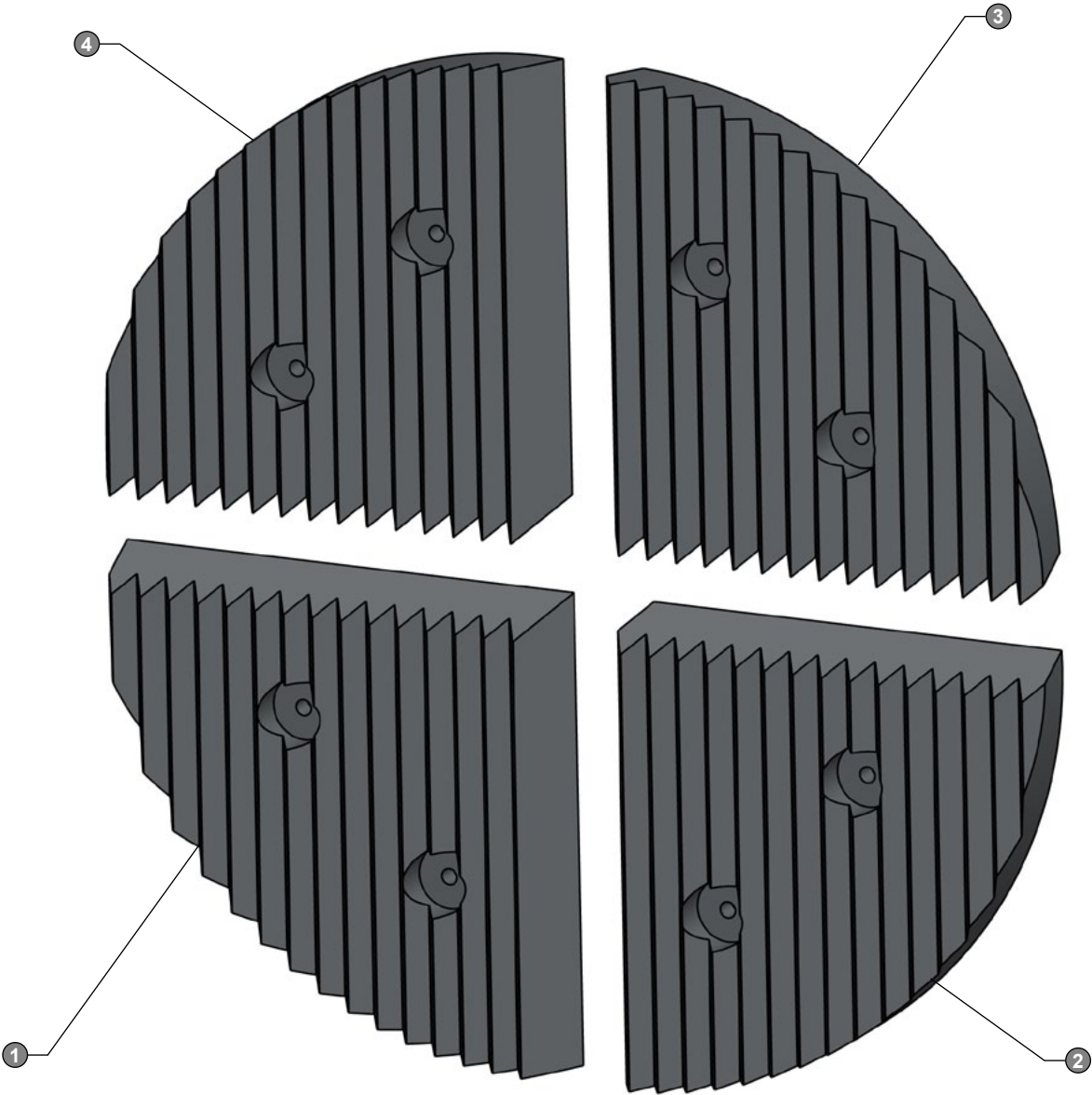
Item	P/N	Description	OEM	QTY
1	82384	SHCS 4-40 X 3/16 SST	4400002	2
2	82431	SHCS 8-32 X 3/4" SST	1236200620 / 4400057	4
3	82455	No. 4 Flat Washer, .032 Thick, SST	1412200400 / 4400033 / 4400222	2
4	82474	#8 Flat Washer, Standard, 18-8 SST	4400498 / 4400122 / 8462-0004-0807	4
5	82609	#8 Lock Washer, .174 ID .293 OD SST	4400062	4
6	99461	E-Shower Aperture, Graphite	17165510	1
7	99689	Strap Straight, Silver	17164560	1
8	8A154	BHSS 2-56 x 1/4 18-8 SST	4400202	2
9	8A155	2-56x3/4 Fillister HD Slotted	4400921	2
10	8A747	SHCS, 4-40 X 3/4 SST	No OEM Reference	2
11	99033A	E-Shower Filament	1909360 REV A	1
12	99421HC	E-Shower Filament Insulator, Boron Grad, HBC	17321470	1
13	99670A	Filament Mount, One Piece Type	17164570 / 4100028	2
14	99690A	Expansion Strap, RT, E-Shower Silver Strap	17164550	1

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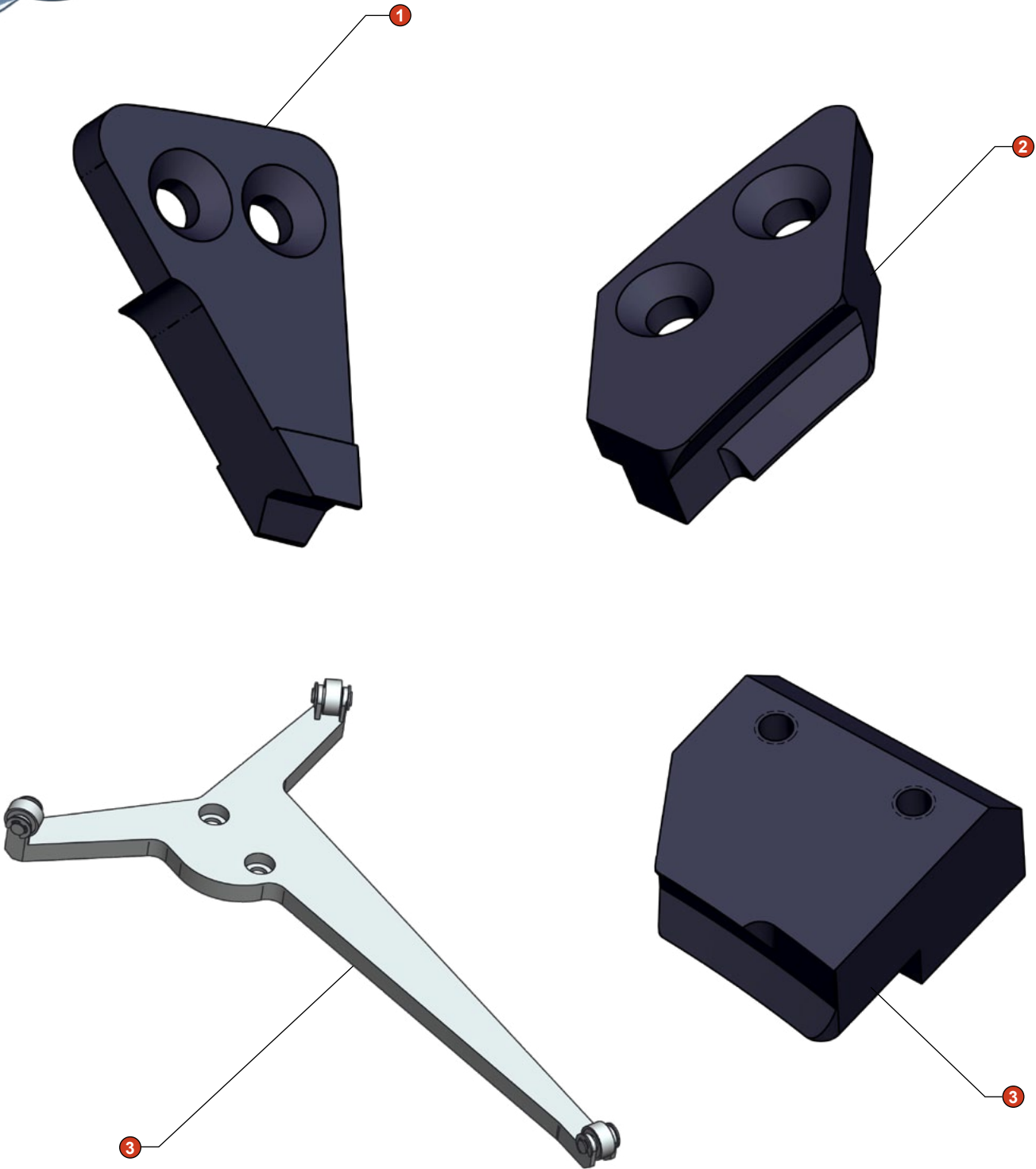
Item	P/N	Description	OEM	QTY
1	99903	V3 Bellows Liner Flange, Aluminum	170103830	1
2	99903A	V3 Bellows Liner Flange, Custom, Aluminum	170103830	1
3	99903B	V3 Bellow Valve Door Interface, Aluminum	170103830	1
4	99904	V3 Bellows Liner, Kapton®	170103830	1

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Item	P/N	Description	OEM	QTY
1	99483	Faraday Strike Plate, Disc 1	17182570	1
2	99484	Faraday Strike Plate, Disc 2	17182580	1
3	99485	Faraday Strike Plate, Disc 3	17182590	1
4	99486	Faraday Strike Plate, Disc 4	17182600	1

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Item	P/N	Description	OEM
1	99568C	No. 1 - Wafer Arm Guide, 150mm, ESD Conductive Material	17096730
2	99686C	No. 2 - Wafer Arm Guide, 150mm, ESD Conductive Material	17096740
3	99688C	No. 3 - Wafer Arm Guide, 150mm, ESD Conductive Material	17096750
4	99902A	Unclamper Roller Assembly	1180490

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