

Item	Purpose	Quantity	Vendor	P/N
<b>Glovebox panels</b>				
5mm x 0.8mm x 15mm button head torx drive machine screw, SS	hold panels together	100	Maryland Metrics	?
PEM nuts, 5mm x 0.8mm, round head broach style	hold panels together	100	MMC	94100A140
<b>Acrylic Panels</b>				
5mm x 0.8mm x 15mm button head torx drive machine screw, SS	hold acrylic to panel	100	Maryland Metrics	?
5/16" square Buna-N cord stock	seal acrylic to GB	100'	MMC	9700K19
<b>Glove Ports</b>				
1/4"-20 acorn nuts, 1/4" thread depth, 15/32" head height, 18-8 SS	hold glove ports to panels	25	MMC	91855A350
O-ring and hose clamp assembly, and neoprene gaskets	holds glove to port	7	Renco	?
<b>Top Hat</b>				
5/8"-11 socket head cap screw, 1.5" long, 18-8 SS	holds top hat to panel	10	MMC	92196A798
5/8" fixture washer, 1.375" OD, 18-8 SS, .11" minimum thickness	washer for bolts	10	MMC	98370A035
5/8"-11 brass hex nut, 3/8" height, 15/16" wide	nut for bolts	10	MMC	92174A455
Buna-N sheet, 3/32" thick, 12" x 12", Shora A - 40 Durometer	gasket for top hat	2	MMC	86715K103
<b>Rod Seal</b>				
5mmx0.8mmx20mm 18-8 SS, hex head cap screw	hold rod seal to flange	12	MMC	91292A128
Dash #138 Viton O-Ring	rod seal to base plate	5	MMC	9464K138
Dash # 325 O-Ring	internal o-rings	10	MMC	9464K47
Swagelok Nut and ferrule set	Gas input & exhaust	4	Swagelok	SS-600-NFSET
5mmx0.8mmx40mm 18-8 SS, hex head cap screw	compression to cap	5	MMC	91292A194

<b>Tube Seal</b>				
5mmx0.8mmx20mm 18-8 SS, hex head cap screw	hold tube seal to flange	12	MMC	91292A128
Dash #030 Viton O-Ring	tube seal to flange	5	MMC	9464K031
Dash # 134 Viton O-Ring	tube seal to flange	5	MMC	9464K134
Dash # 202 Viton O-Ring	internal o-rings	10	MMC	9464K118
<b>Liquid Monitor Seal</b>				
5mmx0.8mmx20mm 18-8 SS, hex head cap screw	hold lm seal to flange	12	MMC	91292A128
Dash # 123 Viton O-Ring	lm to flange	5	MMC	9464K87
Dash #202 Viton O-Ring	internal o-rings	5	MMC	9464K118
<b>Tether Drum</b>				
5/16-18 Brass hex nuts	hold back plate to all thread	60	MMC	92174A030
5/16-18 SS acorn nuts	internal gb mounting	60	MMC	91855A370
1/4" diameter, 2.5" long, SS socket head shoulder bolt	auger shaft	15	MMC	90298A550
#10-32, 1/4" long, 18-8 SS, socket head cap screw	hold rods in place	15	MMC	92196A265
1/4"-20, set screw, SS	hold mounting block to back plate	30	MMC	92196A550
1/4" Tube to 1/4" MPT bored through fitting	feedthru for tether	6	Swagelok	SS-400-1-4
<b>Tether Meter</b>				
#6-32, 1/4" long, low head 18-8SS, socket head cap screw	hold front and back on	50	MMC	93615A210
#10-24, 3/8" long, 18-8 SS, socket head cap screw	hold mounts in place	10	MMC	92196A240
1/16", 3/4" long, 18-8SS dowel pin	locks wheel to shaft	10	MMC	90145A422
1/16", 3/4" long, 18-8 SS cotter pin	locks shaft to rotary encoder	10	MMC	98401A413
rotary encoder	counts tether	3	Digikey	GH3048-ND
1/4"ID, 3/8" OD, PTFE flange bushing	grommet for tether	4	MMC	2706T13
1/4" ID, .437" OD, shaft retainer	hold grommet in place	4	MMC	97200A200

#6, 18-8 SS washer	for #6 cap screws	50	MMC	92141A007
<b>Cross</b>				
5/16"-24 12 pt head, silver plated bolts	holds flanges on	25	Varian	FB1000C12S
10" Viton square gasket	seals flanges	4	Varian	FG1000VU
10" Copper conflat gasket	seals flanges	50	Varian	FG1000CI
<b>Top Flange</b>				
5/16", 7/8" OD, nylon washers	seals around top flange bolts	25	MMC	90295A164
Dash # 448 Viton O-Ring	seals flange to collar	3	MMC	9464K686
<b>Hinge</b>				
5/16" diameter, 1/2" long, 316 SS shoulder bolt	hinge rotation shaft	5	MMC	97345A578
5/16" diameter, 316 SS, wave washers	take motion out of hinge	25	MMC	92161A030
1/4"-20, 7/16" wide, 13/64" tall, nylon insert lock nut	keeps shoulder bolt from backing out	5	MMC	90101A230
<b>Collar</b>				
1/4"-20, 7/16" long, 18-8 SS, socket head cap screw	Attaches collar to bottom panel	20	MMC	92196A536
Buna-N sheet, 1/16" thick, 12" x 12", Shora A - 40 Durometer	gasket btwn bottom panel and collar	2	MMC	86715K102
<b>Insertion Rods</b>				
5/16"-18, 1" long, Ni plated, socket head cap screws	hold rod sections together	60	UC Components	C-1816-NK
#10-32, 1/2" long, Ni plated, socket head cap screws	source coupler cover	5	UC Components	C-1008-NK
1/4"-20, 1" long, slotted drive, pan head, Ni plated machine screw	rod plug screws	30	UC Components	PS-2016-NK

<b>Source</b>				
Externally threaded split Teflon ring	holds source	5	VT	
SS Extension Spring (dimensions?)	spring mounts source	5	MMC	?
1/4" swagelok front and back ferrules	holds tether tube into source holder	10	Swagelok	SS-400-SET
<b>Drain</b>				
1/2" tube to 3/4"-16 SAE Straight Thread Fitting	connects drain tube to bottom panel	2	Swagelok	SS-810-1-OR
Viton O-ring for SAE fitting	seals fitting to bottom gb panel	2	Swagelok	VI9-OR-0908
3/4"-16, 18-8SS, slotted castle nut	secures fitting inside GB, slotted so PC fill enter tube	2	MMC	91853A550
<b>Miscellaneous</b>				
3/8"-16, 1" long, 18-8 SS low head socket cap screw	rod slip lock	5	MMC	93615A520
5mm x 0.8mm x 6mm nylon tip set screw	rod seal collar lock	5	MMC	93285A312