

XXTREME ADVANTAGE

Gimbal

Parts and Service Manual



IMCO

510 East Arrow Highway
San Dimas, CA 91773

(800) 899-8058 (909) 592-6162 Fax (909) 592-6052

www.imcomarine.com email info@imcomarine.com

TABLE OF CONTENTS

Cutting Transom, Gimbal Installation, Trim Pump Hose Hookup	1
Drive Oil Reservoir Tank, Water Supply Fitting	2
Rear Engine Mount, Shift Cable Adjustment, Steering Hose Hookup	3
Gimbal Housing (Drawing)	4
Gimbal Housing (Parts List)	5
Gimbal Ring (Drawing)	6
Gimbal Ring (Parts List)	7
Gimbal Helmet (Drawing)	8
Gimbal Helmet (Parts List)	9
Gimbal Steering & Trim (Drawing)	10
Gimbal Steering & Trim (Parts List)	11

Serial Number _____

Date of Purchase _____

Purchased From _____

Cutting Transom

1. Using the provided template or using the Bravo Drilling fixture that can be purchased through a Mercury MerCruiser Dealer can determine the transom cutout size. (Angle holes for tiller arm are not necessary with Xtreme Advantage Gimbals).
2. Propeller height or crankshaft centerline is best determined by the hull manufacture or by previous testing.
3. Transom thickness must be between 2" and 2 ¼".

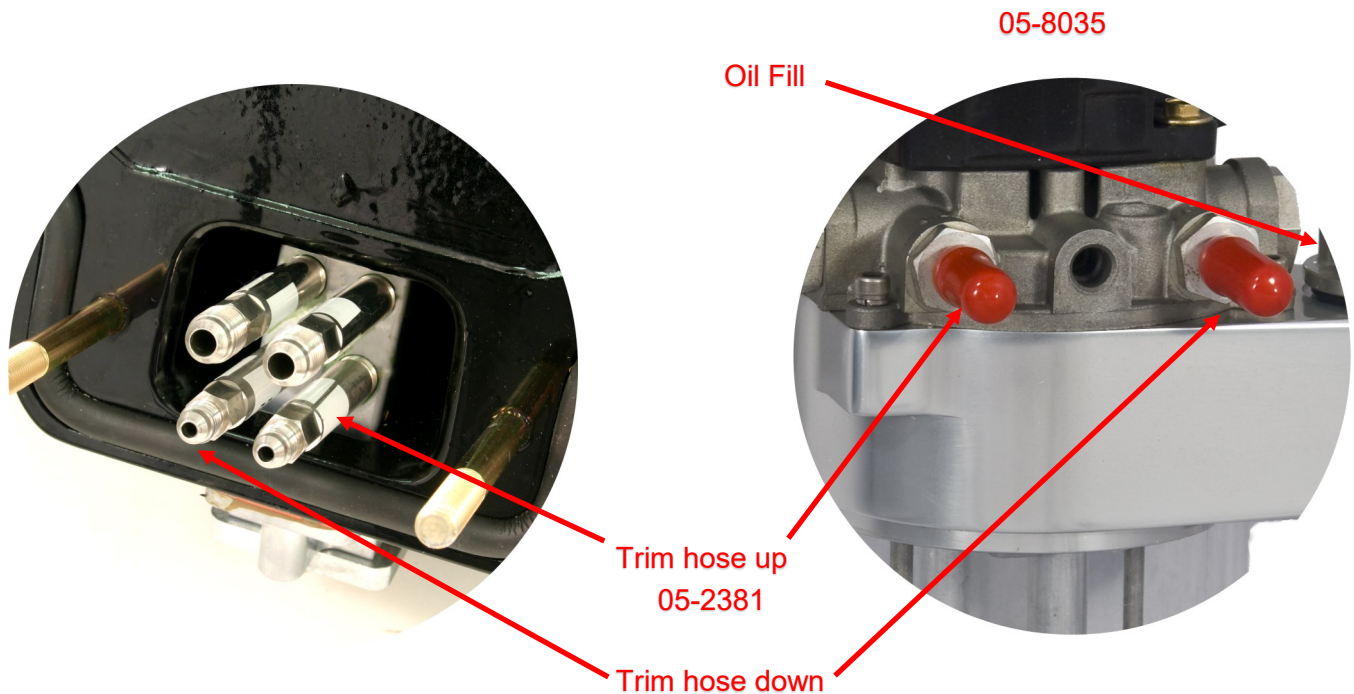
Xtreme Advantage Gimbal Installation

1. Remove gimbal from shipping carton and remove plywood backing plate.
2. Remove all packing materials, retain steering ram restraints. (Do not allow steering rams to damage painted surfaces.)
3. Position gimbal housing onto transom and hold in place.
4. Secure inner and outer transom pieces together with 8-7/16 washers and 8-7/16 nylock nuts provided.
5. Tighten fasteners in small increments in a criss cross pattern to 23 ft lbs.

IMPORTANT: When installing gimbal to IMCO extension box the two upper studs need to be 2 ¾" for EB-12-N and EB-12-3 and 2 ¼" for EB-14-T extension box's.

Trim Pump Hose Hookup

1. Use provided hoses to hookup trim pump as pictured below.
2. Fill oil through oil fill cap as shown.



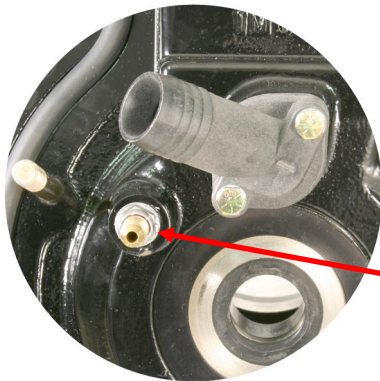
Drive Oil Reservoir

1. Connect the gimbal housing and drive oil reservoir tank together with the hose and fitting provided.

IMPORTANT: Drive oil reservoir must be installed higher than the oil fitting on gimbal. Run hose as straight as possible to avoid a low section in the system.

2. Hose must be routed away from rotating shaft.

CAUTION: Do not over fill drive oil reservoir!



Oil hose connection



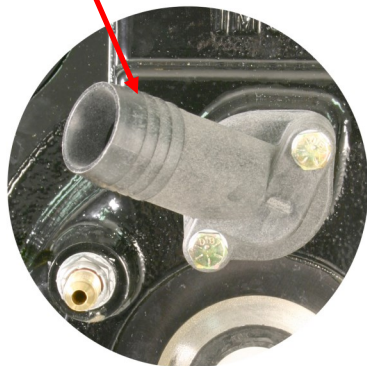
Drive Oil Reservoir

1. Install water supply fitting with bolts and lock washers provided. (Torque bolts to 45 in lbs).
2. Install optional water block off plate with bolts and lock washers provided. (Torque bolts to 45 in lbs).

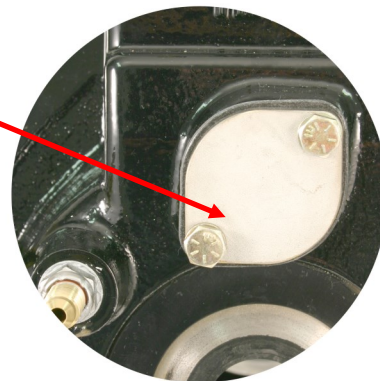
CAUTION: When using optional block off plate provisions for water flow through the drive is mandatory for drive cooling.

- a. Remove or cut water supply hose in gimbal.
- b. Route water to external water dump.

05-2013



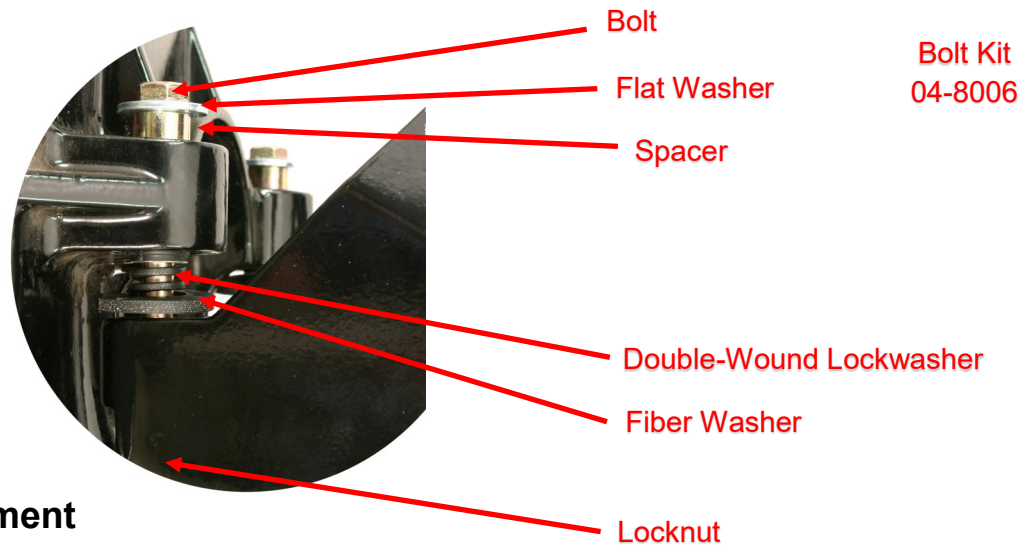
05-2382



Rear Engine Mount

1. Install the rear engine mount attaching hardware on the inner transom plate mounts as shown.

CAUTION: Engine must be aligned to gimbal using the appropriate method for each individual application.



Shift Cable Adjustment

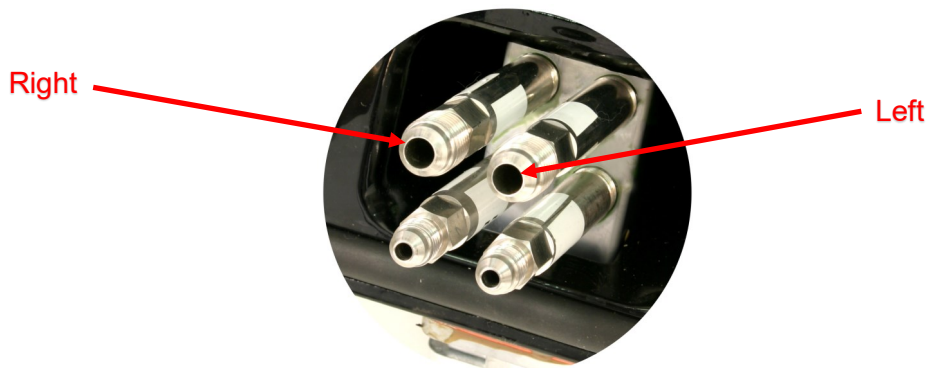
1. With outdrive in neutral position, adjust to 6 1/4" between center of "Cable Adapter End" hole and center of "Cable Pivot"



Hydraulic Steering Hose Hookup

CAUTION: IMCO Xtreme Advantage Gimbals can only be used with full hydraulic steering systems.

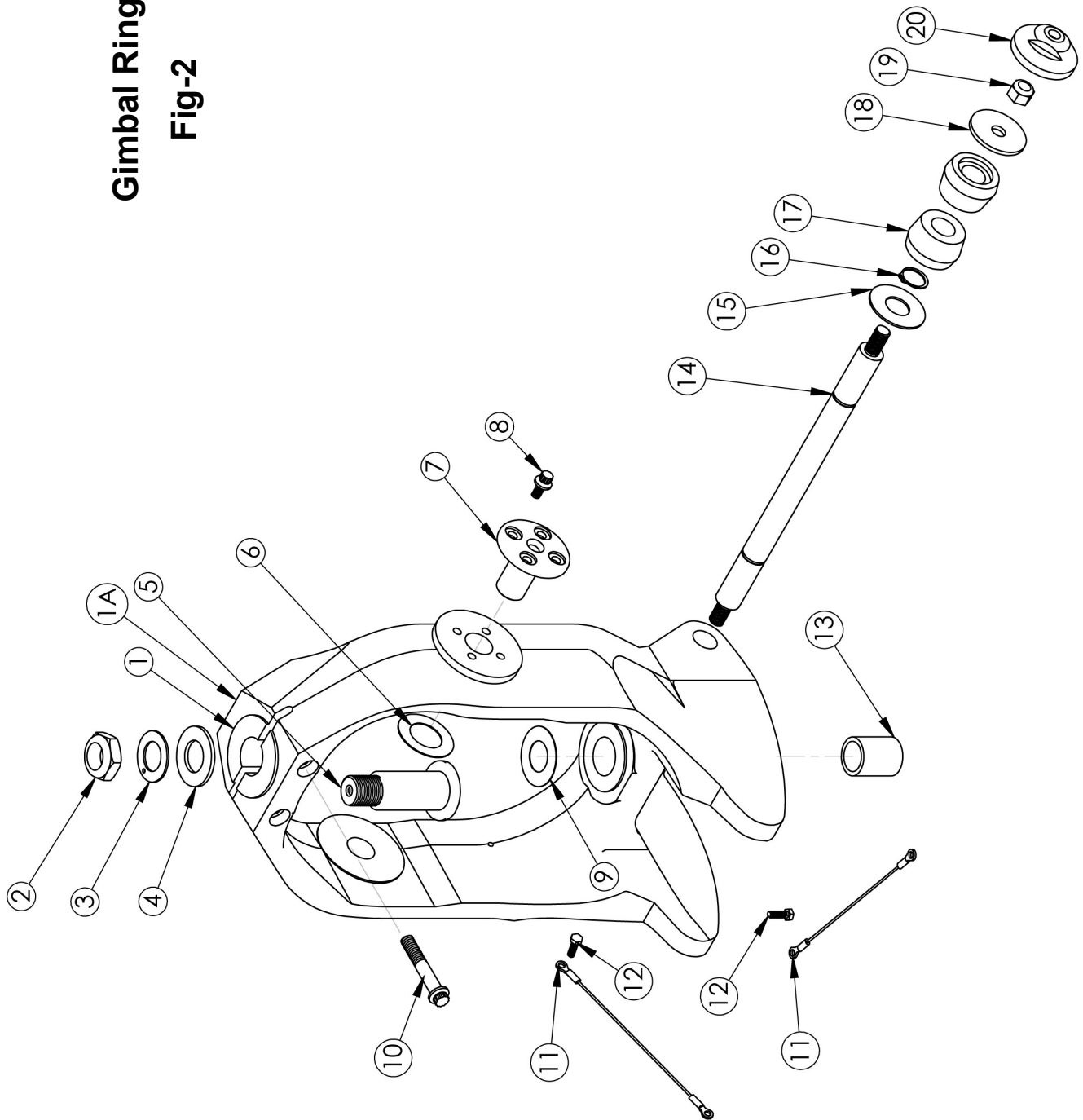
1. Attach hoses from helm control as pictured below.



Gimbal Housing Fig-1

Item	Description	Qty	Part Number
1	Gimbal Housing Black	1	05-1306
1A	Gimbal Housing Silver	1	05-1307
2	"O" Ring -111 (Bulkhead Fitting)	1	11-2111
3	Bulkhead Fitting (Oil)	1	05-2345
4	Hose Fitting (1/8 NPT-1/4" Hose)	1	09-2004
5	"O" Ring (Bearing Carrier) -240	1	11-2240
6	"O" Ring (Bearing Carrier) -045	1	11-2045
7	Bearing Carrier	1	05-2308
8	3/8-16 x 3/4" Flat Head Allen S/S	3	08-020806061
9	Seal, Oil (Gimbal Bearing Carrier Seal)	1	11-3043
10	Gimbal Bearing	1	10-3001
11	Insert (Water Hose)	1	05-2004
12	Water Hose	1	05-2003
13	Cover Plate Gasket	1	11-1013
14	Cover Plate	1	05-2376
15	10-24 x 1/2" Button Head Allen S/S	2	08-040403041
16	Bellow (Shift Cable)	1	05-2008
17	Lower Swivel Pin S/N GA 600 & Up	1	05-3605
17A	Lower Swivel Pin S/N GA 599 & Down	1	05-3320
	Cotter Key 1/8 x 2 1/2" S/N GA 599 & Down	1	08-150200141
18	Clip (Lower Pin)	1	05-2601
19	5/16-18 x 3/4" HH SS W/Hole S/N GA 600 Up	1	08-230705061
20	Hydraulic Manifold Gasket	1	11-1012
21	-4 Hose Extension	2	05-2317
22	-6 Hose Extension	2	05-2316
23	Hydraulic Manifold	1	05-2315
24	1/4-20 x 7/8" Allen Bolt Armer Coat Steel	2	08-060604072
25	Anode Plate	1	05-2009
26	1/4" Lock Washer SS (For Socket Head Cap Screw)	2	08-170600001
27	1/4-20 x 5/8" Allen Bolt S/S	2	08-060604051
28	Zerk Fitting S/S	1	05-2011
29	Grease Short Strap Cap Fitting	1	05-2010
30	Hose Anchor	2	05-6012
31	10-24 x 5/8" Hex Head S/S	2	08-010403051
32	Permaglide Bearing	1	10-7002
33	Seal (Upper Swivel Pin)	1	11-3044
34	Gasket (Water Connector)	1	11-1045
35	Water Connector Block Off Plate -Optional-	1	05-2382
36	Water Connector	1	05-2013
37	1/4" Flat Washer AN	2	08-100600001
38		2	08-010604112
39	7/16" Thin Washer AN S/S	1	08-160900001
40	7/16-20 Lock Nut Thin S/S	1	08-090904001
41	Cable Glide Teflon Bushing 3/8" NPT x 1/4" NPT	1	09-2012
42	Stud, 7/16" x 4 3/4"	2	08-130904231
43	Stud, 7/16" x 4 1/4"	6	08-130904211
44	7/16" Washer AN S/S	8	08-100900001
45	7/16-20 Nylock Nut S/S	8	08-080904001
46	1/2" Sealing Cord	1	11-4026

Gimbal Ring
Fig-2

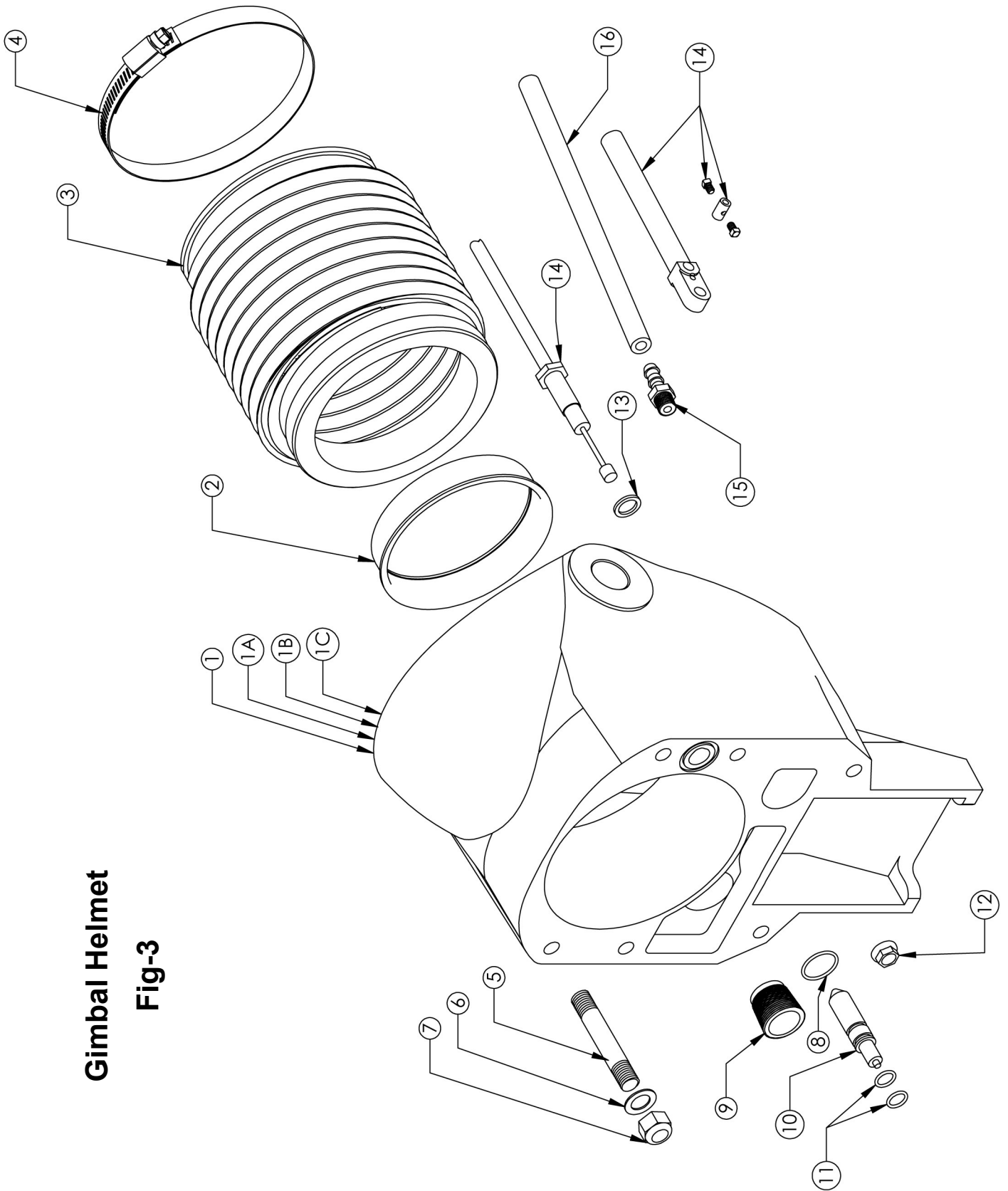


Gimbal Ring Fig-2

Item	Description	Qty	Part Number
1	Gimbal Ring Black	1	05-1297
1A	Gimbal Ring Silver	1	05-1298
2	7/8-14 Hex Thin Nut Grade 8 Steel	1	08-091507002
3	Permaglide Bearing	1	10-4003
4	Washer S/S	1	08-121500001
5	Upper Swivel Pin	1	05-3343
6	Fiber Washer	2	05-2016
7	Gimbal Hinge Pin	2	05-2307
8	1/4-20 x 1/2" 12pt. Bolt	8	08-070604041
9	Washer, Shim (Lower Pin)	1	05-2036
10	3/8-16 x 2 1/4" 12pt. Bolt	2	08-070806131
11	Bonding Wire 6"	1	05-2017
12	10-24 x 3/8" Hex Head	1	08-010403031
13	Bushing, (Lower Swivel Pin)	1	10-7004
14	Front Trim Pin (Trim Cylinder)	1	05-3611
15	S/S Washer (Big Hole-Trim Pin)	2	05-6002
16	Snap Ring	2	08-211300001
17	Bushing (Trim Pin)	4	05-2020
18	S/S Washer (Small Hole-Trim Pin)	2	05-6004
19	7/16-20 Nylock Nut S/S	2	08-080904001
20	Cap (Plastic Anchor Pin Cap)	2	05-2021

Gimbal Helmet

Fig-3

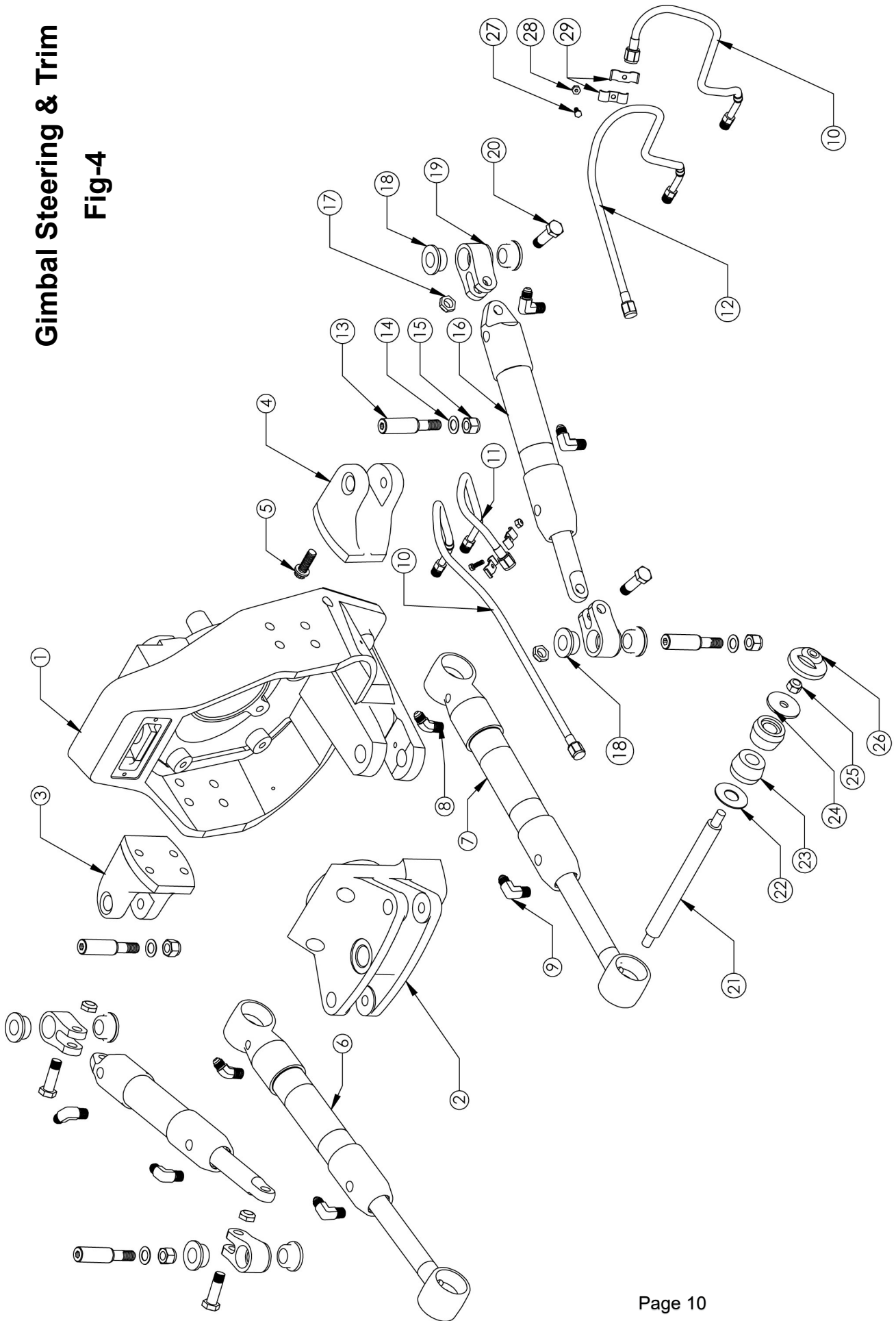


Gimbal Helmet Fig-3

Item	Description	Qty	Part Number
1	SC Gimbal Helmet	1	05-1309
1A	SCX Gimbal Helmet		05-1552
2	Bellows Sleeve	1	05-2022
3	Bellows Kit (U-Joint)	1	05-2023
4	Clamp	1	05-2007
5	Stud (7/16" x 2 3/4" SS)	6	08-130904151
6	7/16" SS AN Washer	6	08-100900001
7	7/16-20 Nylock Nut SS	6	08-080904001
8	"O" Ring (Oil Seal) -019	1	11-2019
9	Insert (Water Hose)	1	05-2004
10	Valve Assembly	1	05-2024
11	"O" Ring (Valve Assembly) -012	2	11-2012
12	Flange Nut 3/8-24 Self Locking	1	08-180803002
13	Gasket	1	11-1014
14	Shift Cable Assembly	Kit	05-8040
15	1/8" Pipe - 1/4" Hose (Oil Line)	1	09-2004
16	1/4" Push Lock Hose 8 3/4" (Oil)	1	09-2003

Gimbal Steering & Trim

Fig-4



Gimbal Steering & Trim

Fig-4

Item	Description	Qty	Part Number
1	Gimbal Housing Black	1	05-1306
1A	Gimbal Housing Silver	1	05-1307
2	See website for steering caps	1	n/a
3	Steering Bracket (Port) Black	1	05-1312
3A	Steering Bracket (Port) Silver	1	05-1314
4	Steering Bracket (Starboard) Black	1	05-1313
4A	Steering Bracket (Starboard) Silver	1	05-1315
5	7/16-14 x 1 1/4" 12 pt. Bolt	8	08-070907091
6	Trim Ram (Port)	1	05-6028
7	Trim Ram (Starboard)	1	05-6029
8	45° Jic -5 to 1/4" pipe S/S 316	2	09-2009
9	90° Jic -5 to 1/4" pipe S/S 316	6	09-2010
10	-5 Hose Assembly 17 1/2"	4	05-2331
11	-5 Hose Assembly 10 1/4"	2	05-2332
12	-5 Hose Assembly 25 1/2"	2	05-2330
13	3/4" x 2" Clevis Pin	4	05-6434
14	1/2" SS AN Washer	4	08-101000001
15	1/2-13 SS Nylock Nut	4	08-081008001
16	Steering Ram	2	05-6030
17	1/2" SS Thin Nylock Nut	4	08-091004001
18	Urethane Bushing	8	05-2240
19	Clevis Joint	4	05-1034
20	Clevis Bolt	4	05-6035
21	Rear Anchor Pin	1	05-3612
22	S/S Washer (Big Hole-Trim Pin)	2	05-6002
23	Bushing (Trim Pin)	4	05-2020
24	S/S Washer (Small Hole-Trim Pin)	2	05-6004
25	7/16-20 Lock Nut SS	2	08-080904001
26	Cap (Plastic Anchor Pin Cap)	2	05-2021
27	10-24 x 5/8" Hex Head SS	4	08-010403051
28	10-24 Lock Nut SS	4	08-080403001
29	Hose Anchor	4	05-6012