NOTES:
1) THIS DWG. REPRESENTS A SUB-GROUP OF COMPONENTS WITHIN THE SEAKEEPER 16 BRAKE SYSTEM BILL OF MATERIAL AND DOES NOT NECESSARILY REPRESENT THE ACTUAL ASSEMBLY PROCEDURE. THIS DWG DOES PROVIDE TECHNICAL INFORMATION REGARDING COMPONENT LOCATION, SUGGESTED HOSE ROUTING, AND FASTENER APPLICATION.

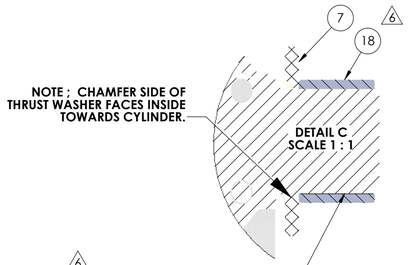
2) WHEN FILLING MANIFOLD WITH OIL, CHARGE TO A STATIC PRESSURE OF 235 - 245 PSI.

3) BEFORE INSTALLING ITEM 1 TO CYLINDER ROD, CLEAN THREADS ON BOTH COMPONENTS, FREE OF OIL AND DEBRIS. APPLY BLUE THREADLOCKER DURING ASSEMBLY OF THREADS.

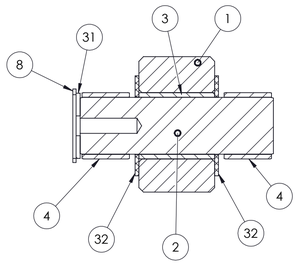
4) HOSE CONNECTION PORTS ARE STAMPED NUMERICALLY 1 THRU 4 ON BOTTOM SIDE OF MANIFOLD. ACTUAL HOSE ROUTING MAY DIFFER FROM DRAWING.

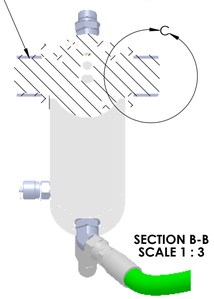
5) THE COLOR STANDARD FOR THE CABLE TIE HOSE MARKERS ARE AS FOLLOWS:
BLUE - UPPER CYLINDERS, REAR TRUNNION END PORT - MANIFOLD PORT #EX1 LEFT SIDE, #EX2 RIGHT SIDE.
YELLOW - LOWER CYLINDERS, FRONT ROD END PORT - MANIFOLD PORT #RET1 LEFT SIDE, #EX2 RIGHT SIDE.
RED - UPPER CYLINDERS, REAR TRUNNION END PORT - MANIFOLD PORT #EX3 LEFT SIDE, #EX4 RIGHT SIDE.
GREEN - LOWER CYLINDERS, FRONT ROD END PORT - MANIFOLD PORT #RET3 LEFT SIDE, #RET4 RIGHT SIDE.
APPLY MARKERS AT BOTH ENDS OF HOSES AS SHOWN BELOW.

REV.	ECN NO.	ZONE	DESCRIPTION	DATE	APPROVED
1	0178		RELEASED FOR PRODUCTION	9/22/2014	WED
2	0281		TEST PORT REMOVED FROM MANIFOLD ASSEMBLY	2/18/2015	RSK
3	0289		ADDED COLORED HOSE MARKERS TO BOM	2/18/2015	RSK
4	0380		BRAKE CYLINDERS CHANGED TO ROUND BODY DESIGN	3/24/2016	SAC
5	0500		BRAKE MANIFOLD UPGRADES WITH SUN CHECK VALVES AND DAMAN MANIFOLD BLOCK	4/27/2017	SAC
6	0514	E7	CYLINDER TRUNNION BEARINGS HAVE CHANGED TO NEW MATERIAL AND ARE NOW A 2 PIECE DESIGN. ASSEMBLY GREASE INSTRUCTIONS HAVE CHANGED.	6/9/2017	SAC
7	0572	D5	HYDRAULIC BRAKE MANIFOLD ASSEMBLY IS NOW SUPPLIED BY DIFFERENT VENDOR - AFS	3/22/2018	SAC

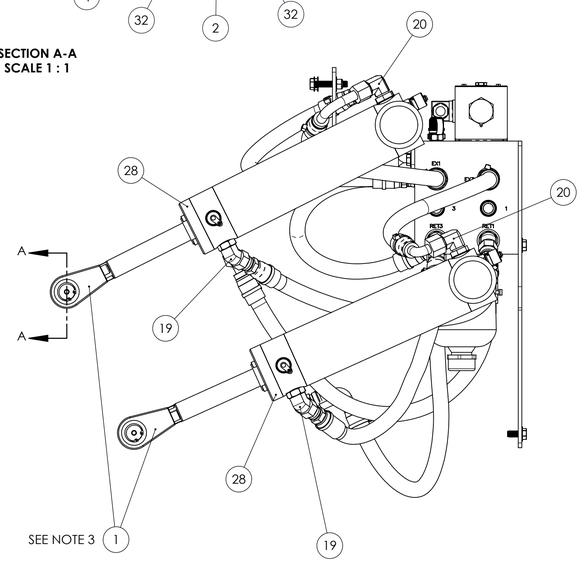


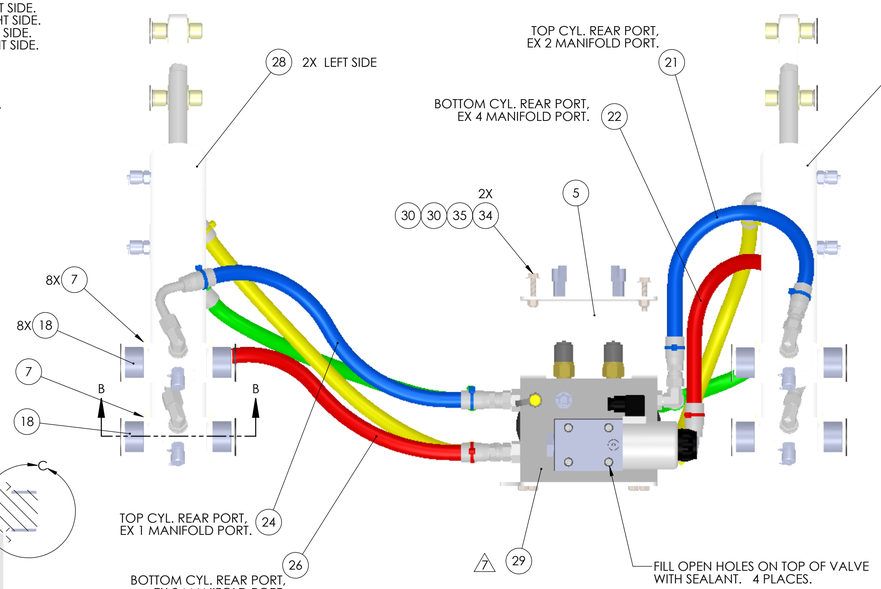
△6 APPLY THIN FILM OF BLACK MOLY GREASE TO INSIDE SURFACE OF BEARINGS PRIOR TO INSERTING CYLINDER TRUNNION SHAFT OR APPLY TO CYLINDER TRUNNION SHAFT DIRECTLY. **DO NOT REAM BEARINGS IF TIGHT FIT, INSPECT CYLINDER SHAFT FOR OVERSIZE CONDITION.** TRUNNION SHAFT DIAMETER SHOULD MEASURE 1.374/1.375

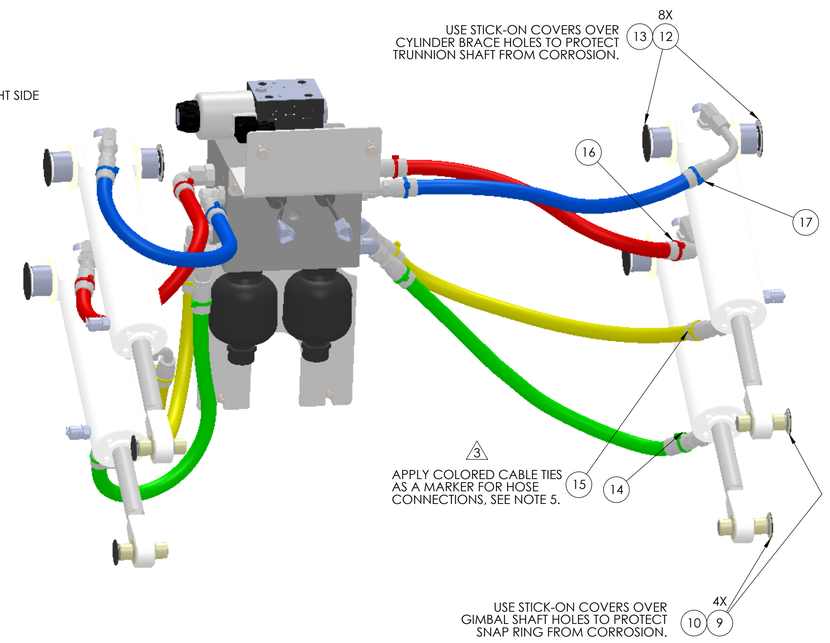


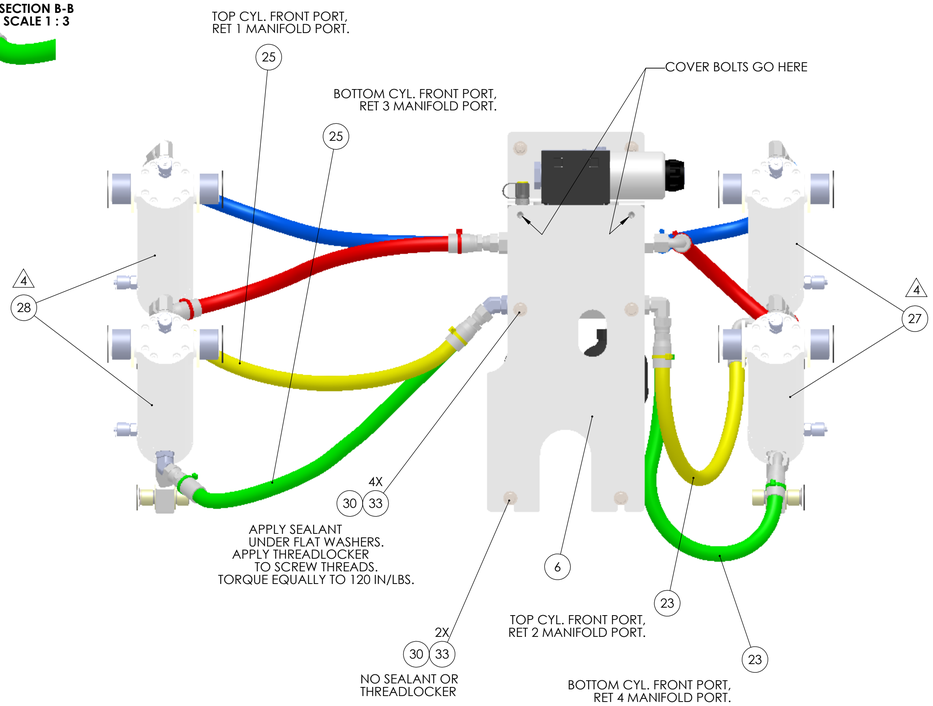


SECTION A-A
SCALE 1 : 1









ITEM NO.	PART NO.	DESCRIPTION	MATERIAL	QTY.	NOTE
37	70054	THREADLOCKER, LOC-TITE #243, BLUE	---	AR	
36	70021	GREASE, BLUE ASSEMBLY	---	AR	
35	60267	HEX NUT, NYLOK M8-1.2 SS	316 SS	2	
34	60247	HEX HD CAP SCREW M8-1.25 X 40mm LG 316SS	316SS	2	
33	60246	HEX HD CAP SCREW M8-1.25 X 20mm LG. 316SS	316SS	6	
32	60156	FLAT WASHER, 3/4 , DELRIN	ACETAL PLASTIC	8	
31	60121	FLAT WASHER, .86 X .26 X .06	18-8 SS	4	
30	60003	WASHER, FLAT TYPE B NARROW 0.31	316 SS	10	
29	50250	SEAKEEPER 16 BRAKE MANIFOLD ASSEMBLY - AFS	---	1	
28	50178	SEAKEEPER 16 LEFT SIDE UPPER-LOWER BRAKE CYLINDER, ROUND BODY	---	2	
27	50177	SEAKEEPER 16 RIGHT SIDE UPPER-LOWER BRAKE CYLINDER, ROUND BODY	---	2	
26	50150	SEAKEEPER 16 BRAKE HOSE ASSY, LEFT LOWER CYLINDER EXTEND	---	1	21-1/2"
25	50149	SEAKEEPER 16 BRAKE HOSE ASSY, LEFT UPPER CYLINDER RETRACT	---	2	22-1/2"
24	50148	SEAKEEPER 16 BRAKE HOSE ASSY, LEFT UPPER CYLINDER EXTEND	---	1	22-1/4"
23	50147	SEAKEEPER 16 BRAKE HOSE ASSY, RIGHT LOWER CYLINDER RETRACT	---	2	23-1/4"
22	50146	SEAKEEPER 16 BRAKE HOSE ASSY, RIGHT LOWER CYLINDER EXTEND	---	1	19-3/4"
21	50144	SEAKEEPER 16 BRAKE HOSE ASSY, RIGHT UPPER CYLINDER EXTEND	---	1	18-3/8"
20	50106	ADAPTOR, -8 SAEORB TO -8 JIC M, 90 DEG	ZINC PLTD STEEL	6	
19	50088	ADAPTER, MALE, 45 DEGREE ELBOW	ZINC PLTD STL	2	
18	40522	PLAIN BEARING, BUNTING 1.38 ID X 1.63 OD X 1.0 LG.	BNW COMPOSITE	8	
17	40439	CABLE TIE, 50# X 7" LG, BLUE	NYLON	4	
16	40438	CABLE TIE, 50# X 7" LG, RED	NYLON	4	
15	40437	CABLE TIE, 50# X 7" LG, YELLOW	NYLON	4	
14	40436	CABLE TIE, 50# X 7" LG, GREEN	NYLON	4	
13	40413	VHB TAPE, 2" OD X 1-3/8" ID X .025 THK.	ARCRYLIC FOAM	8	
12	40412	COVER, 2" OD X .025 THK, BLACK	POLYETHYLENE	8	
11	40250	SILI-THANE 803 MARINE SEALANT	---	AR	
10	40244	VHB TAPE, 1.38" DIA, .025 THK	ADHESIVE FILM	4	
9	40243	COVER, 1-3/8" DIA. X .06 THK, BLACK	POLYETHYLENE	4	
8	40101	RETAINING RING, INTERNAL. .875	SS	4	
7	11749	TRUNNION THRUST WASHER, 1.38 X 2.5 X .18	NYLON	8	
6	11163	SEAKEEPER 16 BRAKE MANIFOLD BRACKET, REAR	.18 ALUM. SHEET	1	
5	11162	SEAKEEPER 16 BRAKE MANIFOLD BRACKET, FRONT	.18 ALUM. SHEET	1	
4	10657	PTFE BUSHING .875 OD X .750 ID X .63 LG	COMPOSITE	8	
3	10656	PTFE BUSHING .875 OD X .750 ID X 1.00 LG	COMPOSITE	4	
2	10306	BRAKE CRANK PIN	17-4PH	4	
1	10297	BRAKE CYLINDER ROD-END	1018 STEEL	4	

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SEAKEEPER
Seakeeper Inc.
44425 Pecan Court
Suite 151
California, MD 20619

WEIGHT - LBS: ---
MATERIAL: ---
DRAWN: SAC DATE: 18JUL14
ENG APPR: WED DATE: 22SEP14
PROD APPR: --- DATE: ---
NAME: SEAKEEPER 16 BRAKE SUB-SYSTEM SERVICE REFERENCE
DWG NUMBER: 11187-SP
REV. NO: 7
SHEET NO: 1 OF 1