

NOTES: 1) THIS DWG. REPRESENTS A SUB-GROUP OF COMPONENTS WITHIN THE SK9 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 350 PSI.
3) THE 1.4L ACCUMULATOR (#50295) IS TO BE PRE-CHARGED WITH NITROGEN TO 75 PSI ± 3 PSI, AND INSTALLED BY SEAKEEPER.
4) ROD ENDS (#10297) PROVIDED BY VENDOR AND INCLUDED AS PART OF WELDED CYLINDER ASSEMBLY, #50303 AND 50304
5) HOSE CONNECTION PORTS ARE STAMPED UT, LR, UR, AND LT. ACTUAL HOSE ROUTING MAY DIFFER FROM DRAWING.
6) APPLY THREADLOCKER ACCORDING TO SEAKEEPER WORK INSTRUCTION WI-085.
7) THE COLOR STANDARD FOR THE CABLE TIE HOSE MARKERS ARE AS FOLLOWS:
BLUE - UPPER CYLINDER, REAR TRUNNION END PORT - MANIFOLD PORT **UT**
YELLOW - UPPER CYLINDER, FRONT ROD END PORT - MANIFOLD PORT **UR**
RED - LOWER CYLINDER, REAR TRUNNION END PORT - MANIFOLD PORT **LT**
GREEN - LOWER CYLINDER, FRONT ROD END PORT - MANIFOLD PORT **LR**

NOTE: CHAMFER SIDE OF THRUST WASHER FACES INSIDE TOWARDS CYLINDER

DETAIL E
SCALE 1 : 1

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 B-B
SCALE 1 : 1

SECTION D-D

USE STICK-ON VINYL COVERS AND DOUBLE SIDED STICK TAPE APPLIED TO CYLINDER BRACES TO COVER OPEN TRUNNION BUSHINGS.

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FOR ROD END, 10297
SEE NOTE 4

REV.	ECN NO.	ZONE	DESCRIPTION	DATE	APPROVED
1	0174		RELEASED FOR PRODUCTION	3/11/2014	RSK
2	0288	A3	ADDED COLORED HOSE MARKERS TO BOM	2/17/2015	RSK
3	0232	F1	REPLACED WHITE PLASTIC CAPS WITH STICK-ON VINYL COVERS	5/12/2015	SAC
4	0353		BRAKE MANIFOLD WAS REVISED WITH POPPET STYLE BLOCKING VALVES	2/26/2016	SAC
5	0378		BRAKE CYLINDERS REPLACED WITH A CUSTOM ROUND BODY DESIGN, HOSE 50097 WAS MODIFIED WITH A 90 EL FITTING, ADDED FITTING 50088 TO LOWER CYLINDER.	5/17/2016	SAC
6	0507		BRAKE MANIFOLD ASSEMBLY IS SUPPLIED BY NEW VENDOR - AFS, WILL NO LONGER BE PAINTED. ALL COMPONENTS ARE CORROSION RESISTANT, NEW ACCUMULATOR BRAND	4/7/2017	SAC
7	0513	E7	CYLINDER TRUNNION BEARINGS CHANGED TO NEW MATERIAL AND ARE NOW A 2 PIECE DESIGN. ASSEMBLY GREASE INSTRUCTIONS HAVE CHANGED	7/25/2017	SAC
8	0569	B3	FLANGED NYLON HEX NUTS ARE NOW USED FOR FASTENING MANIFOLD BRACKET TO BRACE ARM	10/13/2017	SAC
9	730		MANIFOLD ACCUMULATORS ADDED TO BRAKE SUBSYSTEM DRAWING	4/4/19	BMK
10	758		BUCHER RECTIFIED MANIFOLD WITH NEW HOSES AND HANGER.	2/25/2020	EMS
11	0779		REPLACED UPPER BRAKE CYLINDER, 50179 WITH UPPER WELDED CYLINDERS, 50303; REPLACED LOWER BRAKE CYLINDER, 50180 WITH LOWER WELDED CYLINDERS, 50304; REMOVED BOTH ROD ENDS, 10297	3/24/2020	WMG

ATOS D03 VALVE INSTALLED BY BUCHER HYDRAULICS, SEE DWG # 50316.

VIEW A-A

APPLY THREADLOCKER TO SCREW THREADS. APPLY SEALANT, ITEM 11 UNDER FLAT WASHERS. TORQUE EQUALLY TO **120 IN-LBS.** (SEE NOTE 6)

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APPLY CLICKBOND ANCHOR FOR WIRE HARNESS

APPLY SEALANT UNDER ALL FLAT WASHERS. TORQUE EQUALLY TO **72 IN-LBS.**

33	70054	THREAD LOCKER, LOCTITE #243, BLUE	---	AR
32	70021	GREASE, BLUE ASSEMBLY	---	AR
31	60547	NUT, NYLOK HEX FLANGED NON-SERRATED, M6-1.0	18-8 SS	2
30	60246	HEX HD CAP SCREW M8-1.25 X 20mm LG. 316SS	316SS	8
29	60223	WASHER, FLAT, M6 12MM OD	316SS	2
28	60222	HHCS M6-1.0 X 35mm LG FULL THREAD	316 SS	2
27	60156	FLAT WASHER, 3/4 , DELRIN	ACETAL PLASTIC	4
26	60121	FLAT WASHER, .86" OD X .26" ID X .06" THK	18-8 SS	2
25	60003	WASHER, FLAT TYPE B NARROW 0.31	316 SS	8
24	50304	SEAKEEPER 9 LOWER BRAKE WELDED CYLINDER	---	1
23	50303	SEAKEEPER 9 UPPER BRAKE WELDED CYLINDER	---	1
22	50316	SK9 RECTIFIED MANIFOLD ASSEMBLY, D03 VALVE, BUCHER	---	1
21	50315	PROPORTIONAL DIRECTIONAL VALVE, ATOS D03, S3 SPOOL, 12V, DEUTSCH CONNECTOR	---	1
20	50312	SK9 HYDRAULIC HOSE ASSEMBLY, RECTIFIED MANIFOLD, LOWER TRUNION END	---	1
19	50311	SK9 HYDRAULIC HOSE ASSEMBLY, RECTIFIED MANIFOLD, UPPER ROD END	---	1
18	50310	SK9 HYDRAULIC HOSE ASSEMBLY, RECTIFIED MANIFOLD, LOWER ROD END	---	1
17	50309	SK9 HYDRAULIC HOSE ASSEMBLY, RECTIFIED MANIFOLD, UPPER TRUNION END	---	1
16	50295	ACCUMULATOR, 1.4 L, SAE -08 PORT	---	1
15	50106	ADAPTOR, -8 SAEORB TO -8 JIC M, 90 DEG	ZINC PLTD STEEL	3
14	50088	ADAPTER, MALE, 45 DEGREE ELBOW	ZINC PLTD STL	1
13	40522	PLAIN BEARING, BUNTING 1.38 ID X 1.63 OD X 1.0 LG.	BNW COMPOSITE	4
12	40413	VHB TAPE, 2" OD X 1-3/8" ID X .025 THK.	ARCRYLIC FOAM	4
11	40412	COVER, 2" OD X .025 THK, BLACK	POLYETHYLENE	4
10	40250	SILI-THANE 803 MARINE SEALANT	---	AR
9	40244	VHB TAPE, 1.38" DIA. .025 THK	ADHESIVE FILM	2
8	40243	COVER, 1-3/8" DIA. X .06 THK, BLACK	POLYETHYLENE	2
7	40101	RETAINING RING, INTERNAL. .875	SS	2
6	30015	SMALL CLICK BOND WIRE TIE ANCHOR	COMPOSITE	1
5	12178	SK9 BRAKE MANIFOLD BRACKET, RECTIFIED MANIFOLD	5052 ALUM SHT	1
4	11749	TRUNNION THRUST WASHER, 1.38 X 2.5 X .18	NYLON	4
3	10657	PTFE BUSHING .875 OD X .750 ID X .63 LG	COMPOSITE	4
2	10656	PTFE BUSHING .875 OD X .750 ID X 1.00 LG	COMPOSITE	2
1	10306	BRAKE CRANK PIN	17-4PH	2
ITEM NO.	PART NO.	DESCRIPTION	MATERIAL	QTY

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SEAKEEPER 9 BRAKE SUB-SYSTEM ASSEMBLY, SERVICE REFERENCE

10846-SP

REV. NO. 11
SHEET NO. 1 OF 1