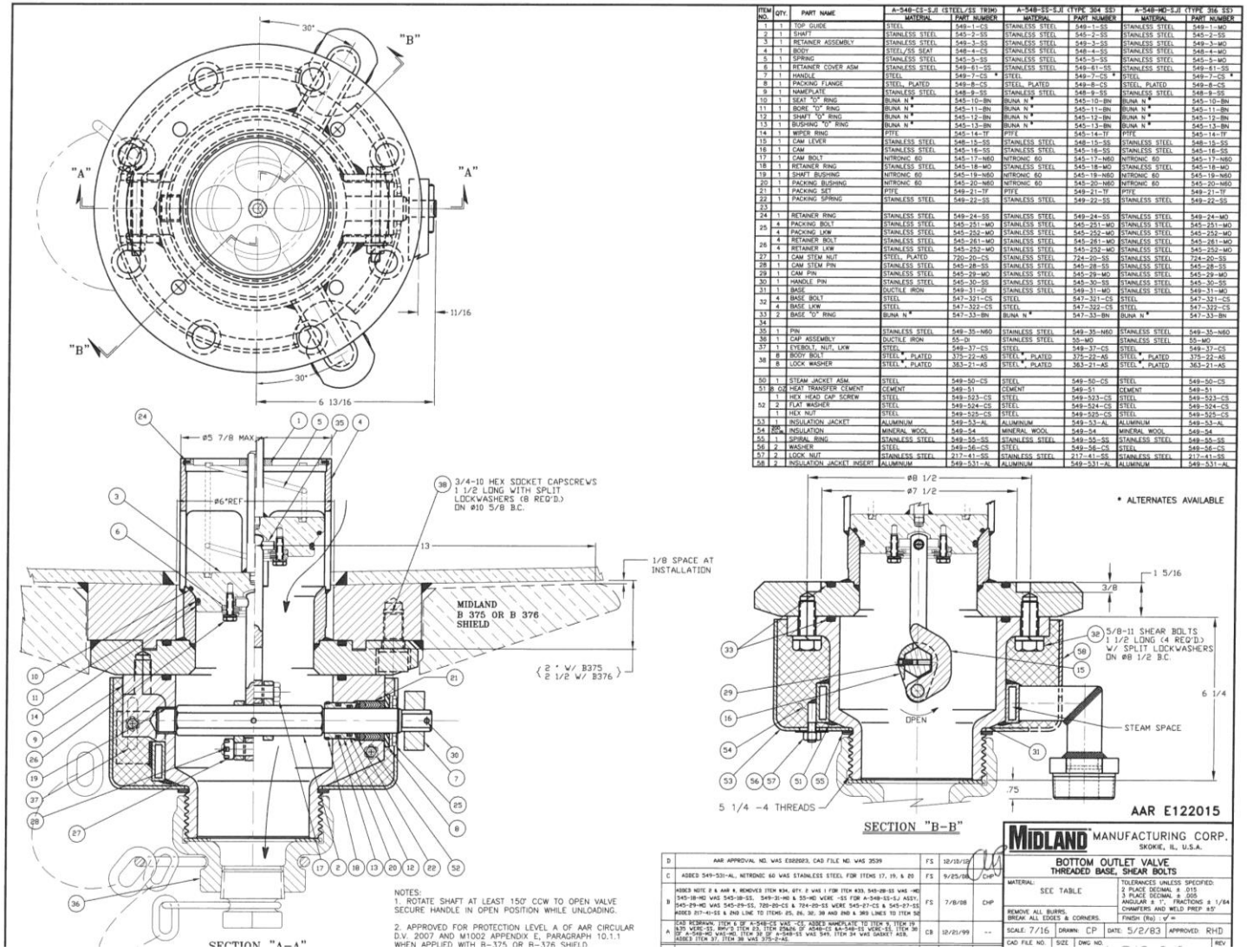
MIDLAND
PART OF OPW A DOVER COMPANY

A-549-CS-SJ1, A-549-SS-SJ1, A-549-MO-SJ1



ITEM NO.	QTY.	PART NAME	A-549-CS-SJ1 (STEEL/SS TRIM) MATERIAL	A-549-CS-SJ1 (STEEL/SS TRIM) PART NUMBER	A-549-SS-SJ1 (TYPE 304 SS) MATERIAL	A-549-SS-SJ1 (TYPE 304 SS) PART NUMBER	A-549-MO-SJ1 (TYPE 316 SS) MATERIAL	A-549-MO-SJ1 (TYPE 316 SS) PART NUMBER
1	1	TOP GUIDE	STEEL	549-1-CS	STAINLESS STEEL	549-1-SS	STAINLESS STEEL	549-1-MO
2	1	SHAFT	STAINLESS STEEL	545-2-SS	STAINLESS STEEL	545-2-SS	STAINLESS STEEL	545-2-SS
3	1	RETAINER ASSEMBLY	STAINLESS STEEL	549-3-SS	STAINLESS STEEL	549-3-SS	STAINLESS STEEL	549-3-MO
4	1	BODY	STEEL/SS SEAT	548-4-CS	STAINLESS STEEL	548-4-SS	STAINLESS STEEL	548-4-MO
5	1	SPRING	STAINLESS STEEL	545-5-SS	STAINLESS STEEL	545-5-SS	STAINLESS STEEL	545-5-MO
6	1	RETAINER COVER ASM	STAINLESS STEEL	549-61-SS	STAINLESS STEEL	549-61-SS	STAINLESS STEEL	549-61-SS
7	1	HANDLE	STEEL	549-7-CS *	STEEL	549-7-CS *	STEEL	549-7-CS *
8	1	PACKING FLANGE	STEEL, PLATED	549-8-CS	STEEL, PLATED	549-8-CS	STEEL, PLATED	549-8-CS
9	1	NAMEPLATE	STAINLESS STEEL	548-9-SS	STAINLESS STEEL	548-9-SS	STAINLESS STEEL	548-9-SS
10	1	SEAT "O" RING	BUNA N *	545-10-BN	BUNA N *	545-10-BN	BUNA N *	545-10-BN
11	1	BORE "O" RING	BUNA N *	545-11-BN	BUNA N *	545-11-BN	BUNA N *	545-11-BN
12	1	SHAFT "O" RING	BUNA N *	545-12-BN	BUNA N *	545-12-BN	BUNA N *	545-12-BN
13	1	BUSHING "O" RING	BUNA N *	545-13-BN	BUNA N *	545-13-BN	BUNA N *	545-13-BN
14	1	WIPER RING	PTFE	545-14-TF	PTFE	545-14-TF	PTFE	545-14-TF
15	1	CAM LEVER	STAINLESS STEEL	548-15-SS	STAINLESS STEEL	548-15-SS	STAINLESS STEEL	548-15-SS
16	1	CAM	STAINLESS STEEL	545-16-SS	STAINLESS STEEL	545-16-SS	STAINLESS STEEL	545-16-SS
17	1	CAM BOLT	NITRONIC 60	545-17-N60	NITRONIC 60	545-17-N60	NITRONIC 60	545-17-N60
18	1	RETAINER RING	STAINLESS STEEL	545-18-MO	STAINLESS STEEL	545-18-MO	STAINLESS STEEL	545-18-MO
19	1	SHAFT BUSHING	NITRONIC 60	545-19-N60	NITRONIC 60	545-19-N60	NITRONIC 60	545-19-N60
20	1	PACKING BUSHING	NITRONIC 60	545-20-N60	NITRONIC 60	545-20-N60	NITRONIC 60	545-20-N60
21	1	PACKING SET	PTFE	549-21-TF	PTFE	549-21-TF	PTFE	549-21-TF
22	1	PACKING SPRING	STAINLESS STEEL	549-22-SS	STAINLESS STEEL	549-22-SS	STAINLESS STEEL	549-22-SS
23								
24	1	RETAINER RING	STAINLESS STEEL	549-24-SS	STAINLESS STEEL	549-24-SS	STAINLESS STEEL	549-24-MO
25	4	PACKING BOLT	STAINLESS STEEL	545-251-MO	STAINLESS STEEL	545-251-MO	STAINLESS STEEL	545-251-MO
	4	PACKING LKW	STAINLESS STEEL	545-252-MO	STAINLESS STEEL	545-252-MO	STAINLESS STEEL	545-252-MO
26	4	RETAINER BOLT	STAINLESS STEEL	545-261-MO	STAINLESS STEEL	545-261-MO	STAINLESS STEEL	545-261-MO
	4	RETAINER LKW	STAINLESS STEEL	545-252-MO	STAINLESS STEEL	545-252-MO	STAINLESS STEEL	545-252-MO
27	1	CAM STEM NUT	STEEL, PLATED	720-20-CS	STEEL, PLATED	724-20-SS	STAINLESS STEEL	724-20-SS
28	1	CAM STEM PIN	STAINLESS STEEL	545-28-SS	STAINLESS STEEL	545-28-SS	STAINLESS STEEL	545-28-SS
29	1	CAM PIN	STAINLESS STEEL	545-29-MO	STAINLESS STEEL	545-29-MO	STAINLESS STEEL	545-29-MO
30	1	HANDLE PIN	STAINLESS STEEL	545-30-SS	STAINLESS STEEL	545-30-SS	STAINLESS STEEL	545-30-SS
31	1	BASE	DUCTILE IRON	549-31-DI	STAINLESS STEEL	549-31-MO	STAINLESS STEEL	549-31-MO
32	4	BASE BOLT	STEEL	547-321-CS	STEEL	547-321-CS	STEEL	547-321-CS
	4	BASE LKW	STEEL	547-322-CS	STEEL	547-322-CS	STEEL	547-322-CS
33	2	BASE "O" RING	BUNA N *	547-33-BN	BUNA N *	547-33-BN	BUNA N *	547-33-BN
34								
35	1	PIN	STAINLESS STEEL	549-35-N60	STAINLESS STEEL	549-35-N60	STAINLESS STEEL	549-35-N60
36	1	CAP ASSEMBLY	DUCTILE IRON	55-DI	STAINLESS STEEL	55-MO	STAINLESS STEEL	55-MO
37	1	EYEBOLT, NUT, LKW	STEEL	549-37-CS	STEEL	549-37-CS	STEEL	549-37-CS
38	8	BODY BOLT	STEEL *, PLATED	375-22-AS	STEEL *, PLATED	375-22-AS	STEEL *, PLATED	375-22-AS
	8	LOCK WASHER	STEEL *, PLATED	363-21-AS	STEEL *, PLATED	363-21-AS	STEEL *, PLATED	363-21-AS
50	1	STEAM JACKET ASM.	STEEL	549-50-CS	STEEL	549-50-CS	STEEL	549-50-CS
51	8 OZ	HEAT TRANSFER CEMENT	CEMENT	549-51	CEMENT	549-51	CEMENT	549-51
52	1	HEX HEAD CAP SCREW	STEEL	549-523-CS	STEEL	549-523-CS	STEEL	549-523-CS
	2	FLAT WASHER	STEEL	549-524-CS	STEEL	549-524-CS	STEEL	549-524-CS
	1	HEX NUT	STEEL	549-525-CS	STEEL	549-525-CS	STEEL	549-525-CS
53	1	INSULATION JACKET	ALUMINUM	549-53-AL	ALUMINUM	549-53-AL	ALUMINUM	549-53-AL
54	AS REQ.	INSULATION	MINERAL WOOL	549-54	MINERAL WOOL	549-54	MINERAL WOOL	549-54
55	1	SPIRAL RING	STAINLESS STEEL	549-55-SS	STAINLESS STEEL	549-55-SS	STAINLESS STEEL	549-55-SS
56	2	WASHER	STEEL	549-56-CS	STEEL	549-56-CS	STEEL	549-56-CS
57	2	LOCK NUT	STAINLESS STEEL	217-41-SS	STAINLESS STEEL	217-41-SS	STAINLESS STEEL	217-41-SS
58	2	INSULATION JACKET INSERT	ALUMINUM	549-531-AL	ALUMINUM	549-531-AL	ALUMINUM	549-531-AL

NOTES:
1. ROTATE SHAFT AT LEAST 150° CCW TO OPEN VALVE SECURE HANDLE IN OPEN POSITION WHILE UNLOADING.
2. APPROVED FOR PROTECTION LEVEL A OF AAR CIRCULAR D.V. 2007 AND M1002 APPENDIX E, PARAGRAPH 10.1.1 WHEN APPLIED WITH B-375 OR B-376 SHIELD

D	AAR APPROVAL NO. WAS ES02023, CAD FILE NO. WAS 3539	FS	12/10/08	
C	ADDED 549-531-AL, NITRONIC 60 WAS STAINLESS STEEL FOR ITEMS 17, 19, & 20	FS	9/25/08	CHP
B	ADDED NOTE 2 & AAR R. REMOVED ITEM #34, QTY. 2 WAS 1 FOR ITEM #33, 549-08-SS WAS -MO, 545-18-MO WAS 545-18-SS, 549-31-MO & 55-MO WERE -SS FOR A-549-SS-SJ ASSY. 545-29-MO WAS 545-29-SS, 720-20-CS & 724-20-SS WERE 545-27-CS & 545-27-SS ADDED 217-41-SS & END LINE TO ITEMS 25, 26, 30, 38 AND END & 363 LINES TO ITEM 58	FS	7/8/08	CHP
A	CAD REDRAWN. ITEM 4, OF A-549-CS WAS -CS, ADDED NAMEPLATE TO ITEM 9, ITEM 19 .635 WERE-SS, RMV'D ITEM 23, ITEM 23&26 OF A549-CS WERE-SS, ITEM 38 OF A-549-MO WAS-MO, ITEM 38 OF A-549-SS WAS 549, ITEM 34 WAS GASKET ASS. ADDED ITEM 37, ITEM 38 WAS 375-2-AS.	CB	12/21/99	--

MIDLAND MANUFACTURING CORP.
SKOKIE, IL, U.S.A.

BOTTOM OUTLET VALVE
THREADED BASE, SHEAR BOLTS

MATERIAL: SEE TABLE
REMOVE ALL BURRS, BREAK ALL EDGES & CORNERS.

TOLERANCES UNLESS SPECIFIED:
2 PLACE DECIMAL ± .015
3 PLACE DECIMAL ± .005
ANGULAR ± 1°. FRACTIONS ± 1/64
CHAMFERS AND WELD PREP ±5°
FINISH (Ra) : √ =

SCALE: 7/16 | DRAWN: CP | DATE: 5/2/83 | APPROVED: RHD
CAD FILE NO. | SIZE | DWG NO. | REV