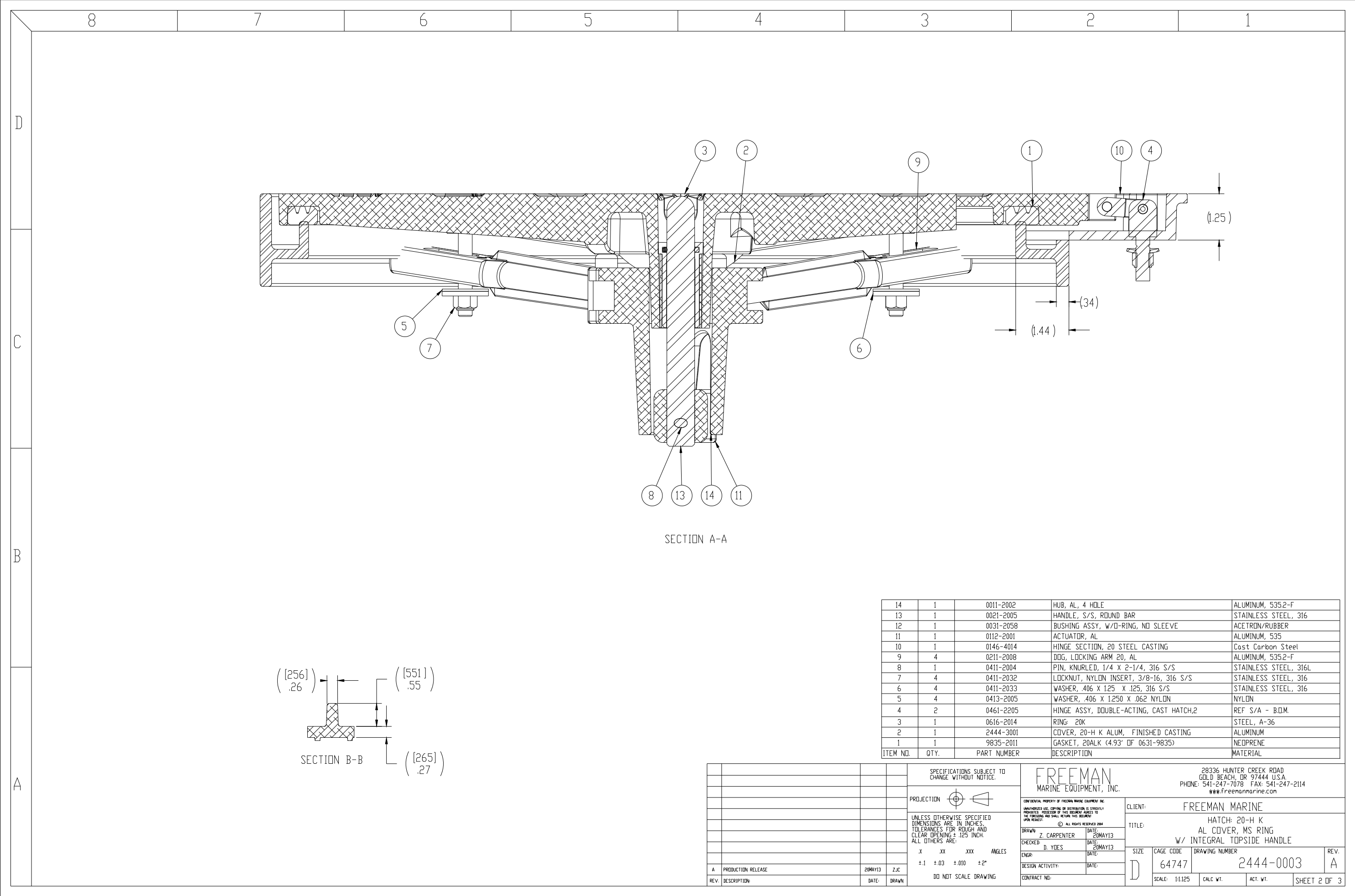
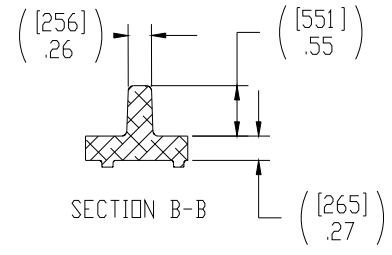


10. FOR SPECIFIC INFORMATION CONTACT SALES.
 9. COMPLETE ASSEMBLY WEIGHT W/ DECK RING
 8. DOGGING PRESSURE FULLY ADJUSTABLE.
 7. HANDLE POSITION TOPSIDE INDICATES WHETHER DOGGING MECHANISM IS IN OPEN OR CLOSED POSITION.
 6. ALUMINUM ALLOY MECHANISM SHOWN.
 5. FLUSH, WATERTIGHT CONSTRUCTION.
 4. INTEGRAL TOPSIDE "T" HANDLE STANDARD, OTHER TOPSIDE ACTUATION AVAILABLE.
 3. MILD STEEL FLANGE, FLANGE CAN BE DRILLED FOR BOLTED INSTALLATIONS OR WELDED.
 2. QUICK-ACTING, MECHANISM ENGAGES OR DISENGAGES IN QUARTER-TURN OF CENTER SPINDLE.
 1. 20.1" DIAMETER CLEAR OPENING, ALL DIMENSIONS SHOWN SUBJECT TO CASTING VARIATION AND ARE REFERENCE ONLY.
- NOTES: UNLESS OTHERWISE SPECIFIED.

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES FOR ROUGH AND CLEAR OPENING ± .125 INCH. ALL OTHERS ARE:		CLIENT: FREEMAN MARINE TITLE: HATCH: 20-H K AL COVER, MS RING W/ INTEGRAL TOPSIDE HANDLE	
.X .XX .XXX ANGLES ±.1 ±.03 ±.010 ±2°		DRAWN: Z. CARPENTER DATE: 20MAY13 CHECKED: D. YONES DATE: 20MAY13 ENGR: DATE: DESIGN ACTIVITY: DATE: CONTRACT NO:	
A PRODUCTION RELEASE 20MAY13 ZJC REV. DESCRIPTION DATE DRAWN		SIZE: D CAGE CODE: 64747 DRAWING NUMBER: 2444-0003 SCALE: 1:2.5 CALC. WT. ACT. WT. SHEET 1 OF 3	

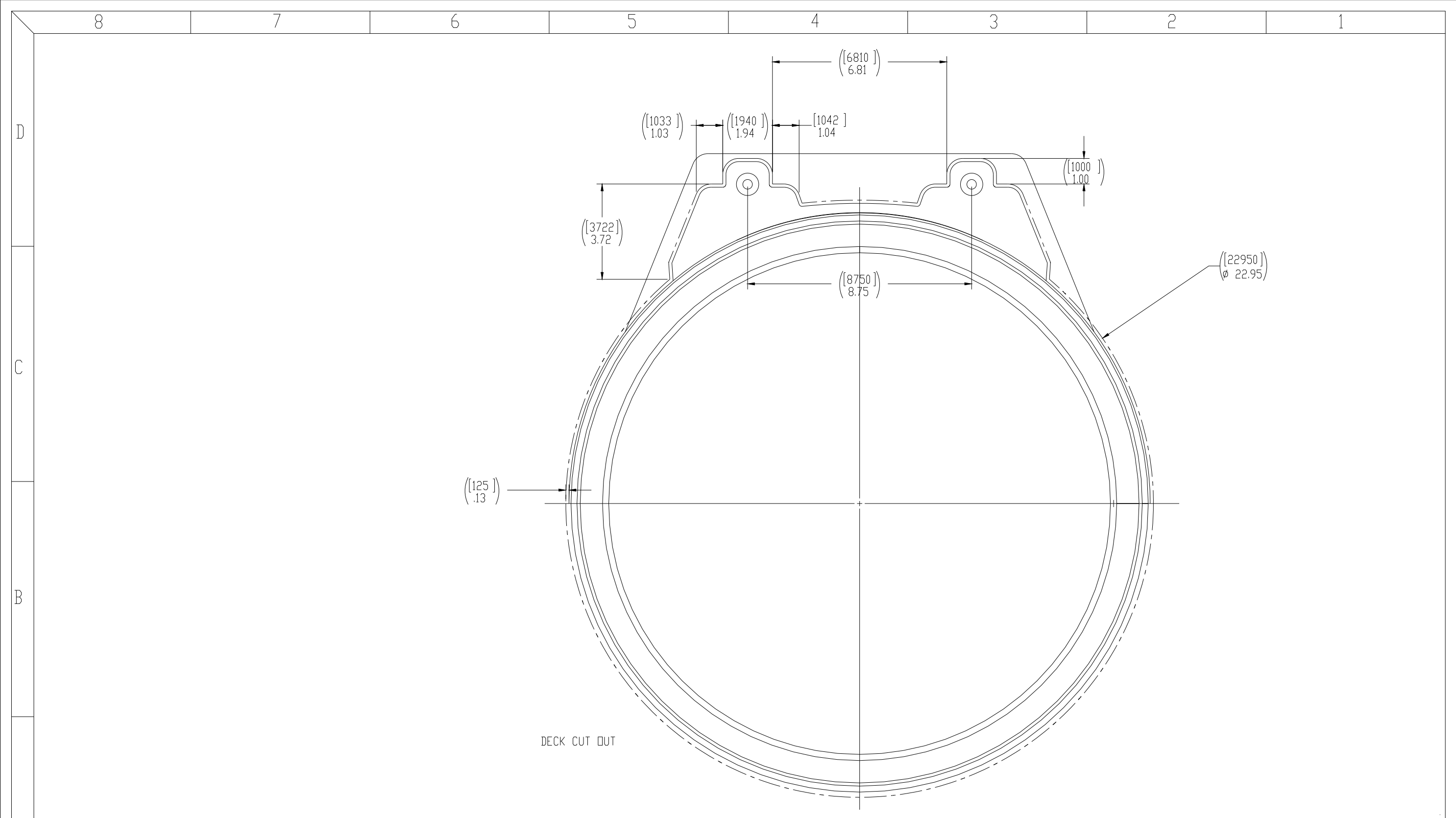


SECTION A-A



ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	MATERIAL
14	1	0011-2002	HUB, AL, 4 HOLE	ALUMINUM, 5352-F
13	1	0021-2005	HANDLE, S/S, ROUND BAR	STAINLESS STEEL, 316
12	1	0031-2058	BUSHING ASSY, W/O-RING, NO SLEEVE	ACETRON/RUBBER
11	1	0112-2001	ACTUATOR, AL	ALUMINUM, 535
10	1	0146-4014	HINGE SECTION, 20 STEEL CASTING	Cast Carbon Steel
9	4	0211-2008	DOG, LOCKING ARM 20, AL	ALUMINUM, 5352-F
8	1	0411-2004	PIN, KNURLED, 1/4 X 2-1/4, 316 S/S	STAINLESS STEEL, 316L
7	4	0411-2032	LOCKNUT, NYLON INSERT, 3/8-16, 316 S/S	STAINLESS STEEL, 316
6	4	0411-2033	WASHER, .406 X 1.25 X .125, 316 S/S	STAINLESS STEEL, 316
5	4	0413-2005	WASHER, .406 X 1.250 X .062 NYLON	NYLON
4	2	0461-2205	HINGE ASSY, DOUBLE-ACTING, CAST HATCH,2	REF S/A - B.D.M.
3	1	0616-2014	RING, 20K	STEEL, A-36
2	1	2444-3001	COVER, 20-H K ALUM, FINISHED CASTING	ALUMINUM
1	1	9835-2011	GASKET, 20ALK (4.93" OF 0631-9835)	NEOPRENE

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PROJECTION		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES FOR ROUGH AND CLEAR OPENING ± .125 INCH. ALL OTHERS ARE:	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES FOR ROUGH AND CLEAR OPENING ± .125 INCH. ALL OTHERS ARE:		CLIENT: FREEMAN MARINE TITLE: HATCH: 20-H K AL COVER, MS RING W/ INTEGRAL TOPSIDE HANDLE	
X XX XXX ANGLES ±.1 ±.03 ±.010 ±2*		CONTRACT NO:	
DO NOT SCALE DRAWING		SCALE: 1:1.25	
A PRODUCTION RELEASE 20MAY13 ZJC		SIZE: D CAGE CODE: 64747 DRAWING NUMBER: 2444-0003	
REV. DESCRIPTION DATE DRAWN		CALC. WT. ACT. WT. SHEET 2 OF 3	



A

B

C

D

- 3. FINISH: 125 RMS MAX.
 - 2. BREAK SHARP EDGES AND DEBURR.
 - 1. MATERIAL: REF. S/A - B.O.M.
- NOTES: UNLESS OTHERWISE SPECIFIED.

CUSTOMER APPROVAL

Signature: _____

Date: _____

IMPORTANT! THIS DRAWING SUPERSEDES ALL OTHER DOCUMENTS. By signing this approval you accept and agree that the dimensions and details shown are correct and properly fit your application, regardless of any differences between this drawing and any contract specifications. Should you see any errors in the drawing, or have any questions, please contact your Freeman Marine sales engineer for clarification.

REV.	DESCRIPTION	DATE	DRAWN
A	PRODUCTION RELEASE	20MAY13	ZJC

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES FOR ROUGH AND CLEAR OPENING ± .125 INCH. ALL OTHERS ARE:

.X .XX .XXX ANGLES
±.1 ±.03 ±.010 ±2°

DO NOT SCALE DRAWING

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		CLIENT:	FREEMAN MARINE
DRAWN: Z. CARPENTER DATE: 20MAY13 CHECKED: D. YDES DATE: 20MAY13 ENGR: DATE: DESIGN ACTIVITY: DATE: CONTRACT NO:		TITLE:	HATCH: 20-H K AL COVER, MS RING
SIZE:	D	CAGE CODE:	64747
SCALE:	1:1.75	DRAWING NUMBER:	2444-0003
CALC. WT.		ACT. WT.	
			REV. A
			SHEET 3 OF 3