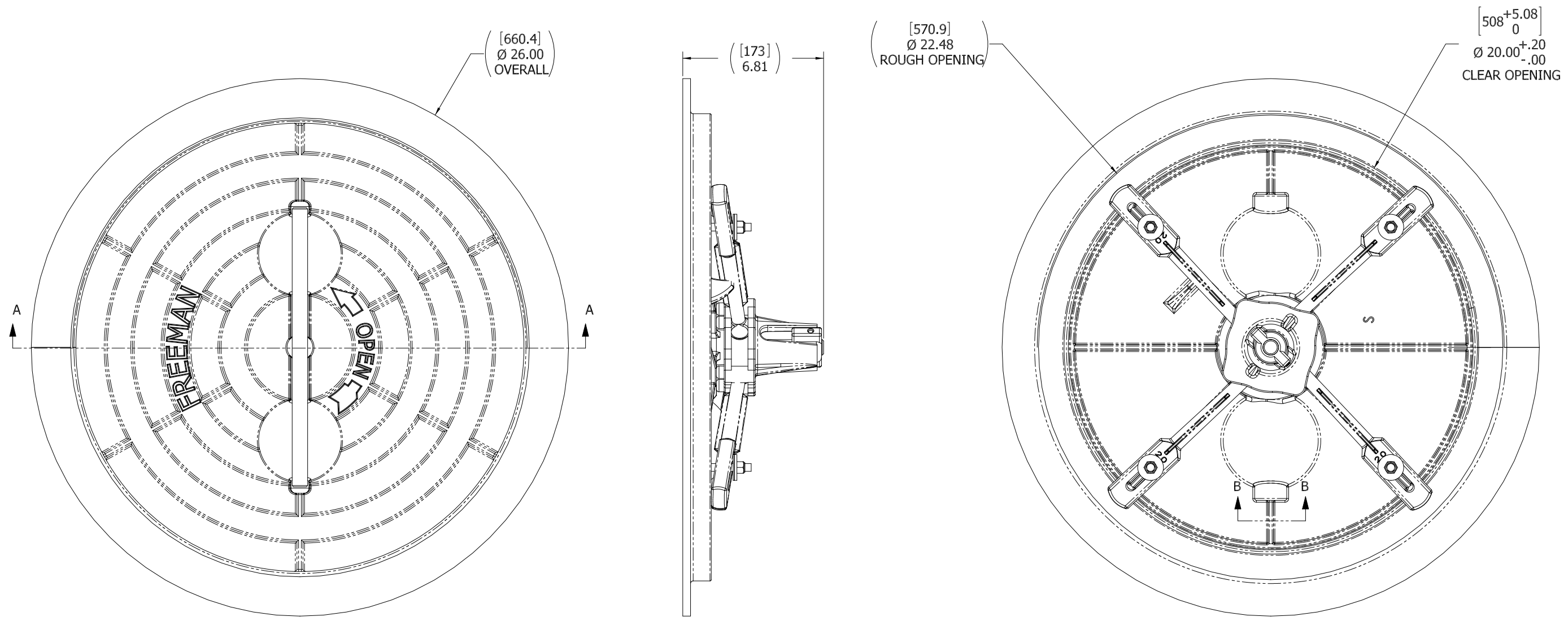


D
C
B
A



- 10. FOR SPECIFIC INFORMATION CONTACT SALES.
- 9. COMPLETE ASSEMBLY WEIGHT W/ DECK RING, 35.2LBS/ 15.9K.
- 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. CAST ALUMINUM ALLOY FLANGE, FLANGE CAN BE DRILLED FOR BOLTED INSTALLATIONS OR WELDED TO ALUMINUM.
- 2. QUICK-ACTING, MECHANISM ENGAGES OR DISENGAGES IN QUARTER-TURN OF CENTER SPINDLE.
- 1. 20.0" / 508MM DIAMETER CLEAR OPENING, ALL DIMENSIONS SHOWN SUBJECT TO CASTING VARIATION AND ARE REFERENCE ONLY.

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:
-	INITIAL RELEASE	07JUL11	PPC

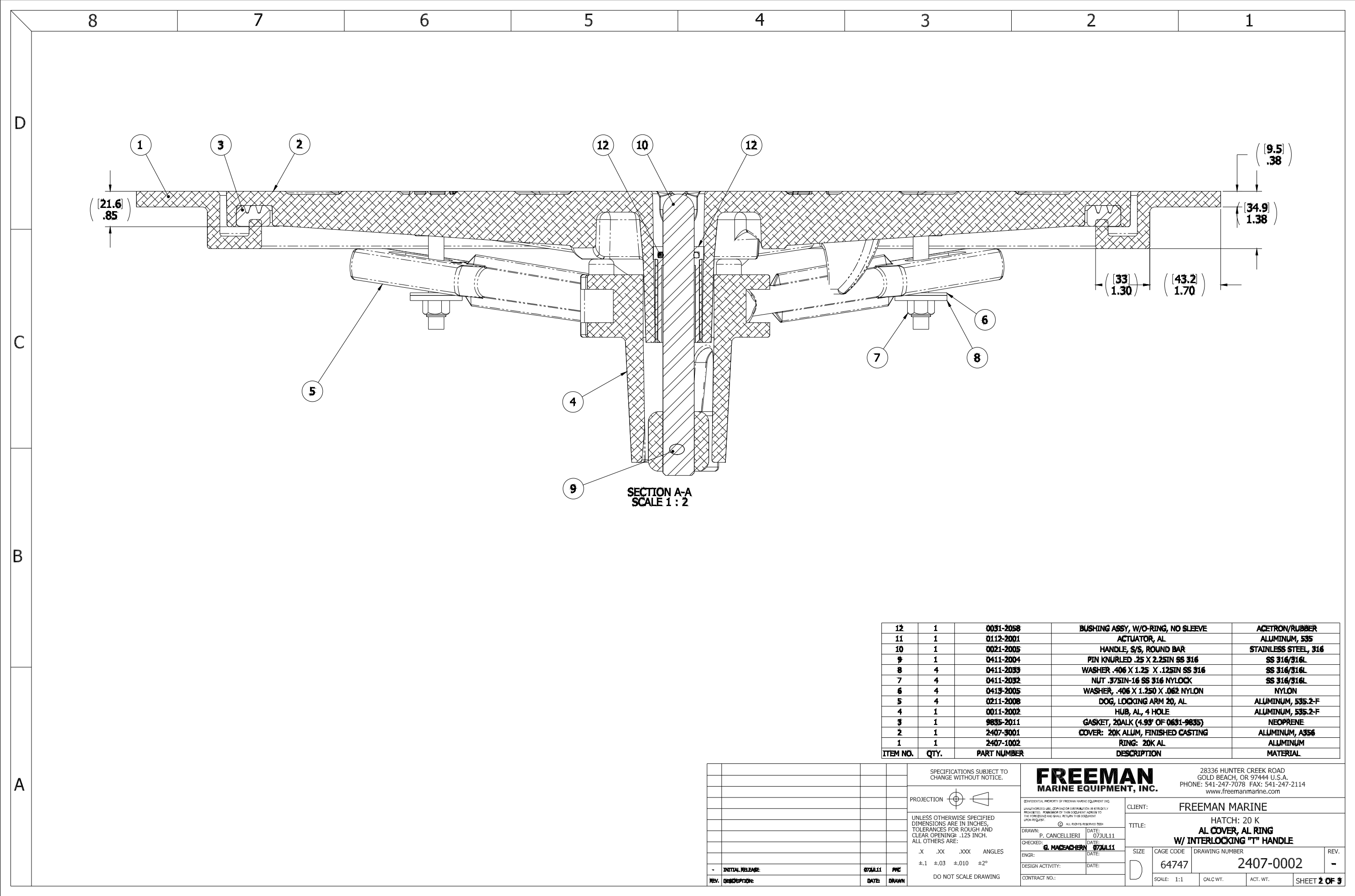
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.
PROJECTION
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES FOR ROUGH AND CLEAR OPENINGS: .125 INCH. ALL OTHERS ARE:
.X .XX .XXX ANGLES
±.1 ±.03 ±.010 ±2°
DO NOT SCALE DRAWING

FREEMAN MARINE EQUIPMENT, INC.
28336 HUNTER CREEK ROAD
GOLD BEACH, OR 97444 U.S.A.
PHONE: 541-247-7078 FAX: 541-247-2114
www.freemanmarine.com

CLIENT: **FREEMAN MARINE**
TITLE: **HATCH: 20 K AL COVER, AL RING W/ INTERLOCKING "T" HANDLE**

SIZE: **D** CAGE CODE: **64747** DRAWING NUMBER: **2407-0002** REV: **-**

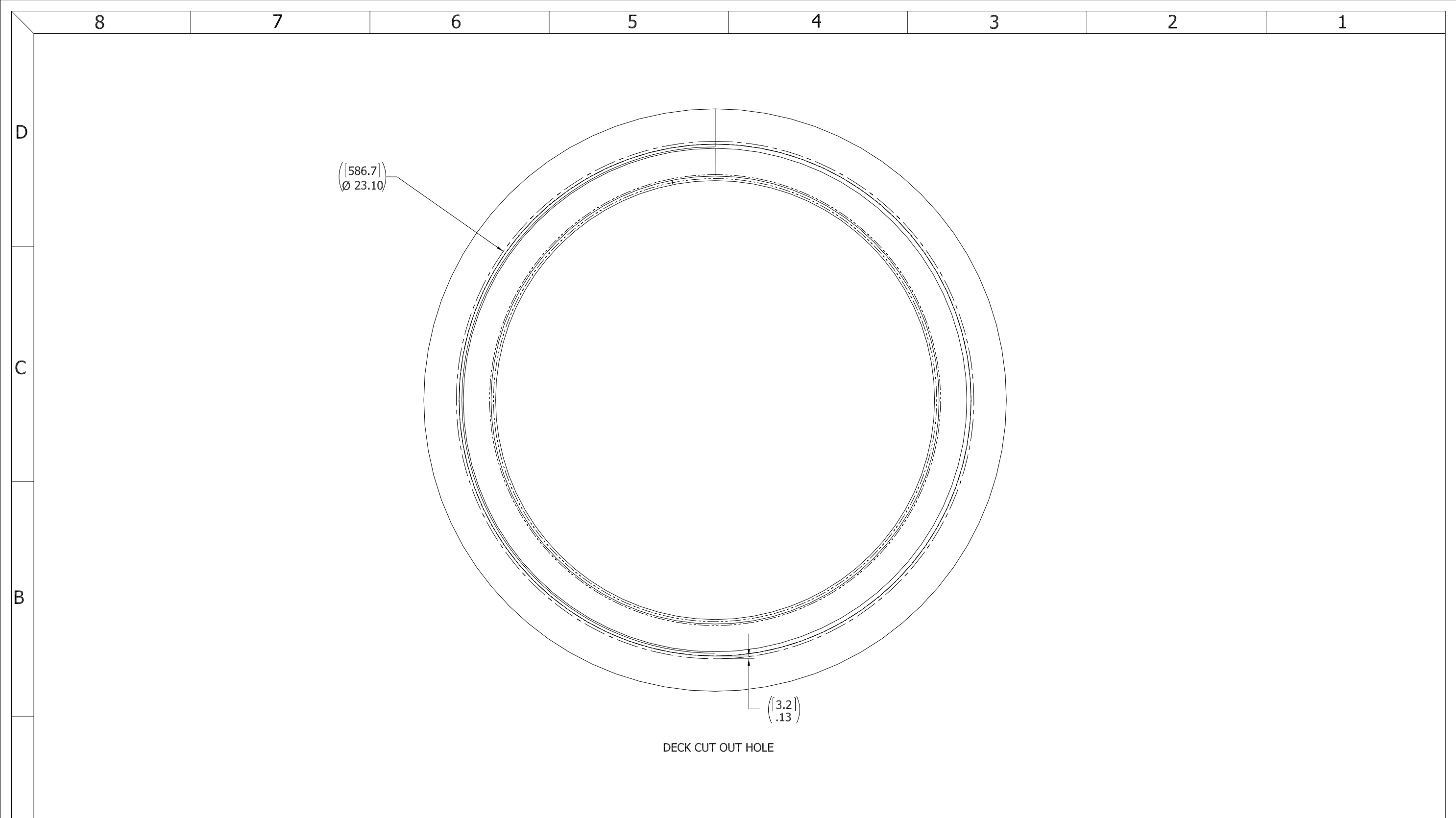
SCALE: 1:2.5 CALC. WT. ACT. WT. SHEET 1 OF 3



SECTION A-A
SCALE 1:2

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	MATERIAL
12	1	0031-2058	BUSHING ASSY, W/O-RING, NO SLEEVE	ACETRON/RUBBER
11	1	0112-2001	ACTUATOR, AL	ALUMINUM, 535
10	1	0021-2005	HANDLE, S/S, ROUND BAR	STAINLESS STEEL, 316
9	1	0411-2004	PIN KNURLED .25 X 2.25IN SS 316	SS 316/316L
8	4	0411-2033	WASHER .406 X 1.25 X .125IN SS 316	SS 316/316L
7	4	0411-2032	NUT .375IN-16 SS 316 NYLOCK	SS 316/316L
6	4	0413-2005	WASHER .406 X 1.250 X .062 NYLON	NYLON
5	4	0211-2008	DOG, LOCKING ARM 20, AL	ALUMINUM, 535.2-F
4	1	0011-2002	HUB, AL, 4 HOLE	ALUMINUM, 535.2-F
3	1	9835-2011	GASKET, 20ALK (4.93" OF 0631-9835)	NEOPRENE
2	1	2407-3001	COVER: 20K ALUM, FINISHED CASTING	ALUMINUM, A356
1	1	2407-1002	RING: 20K AL	ALUMINUM

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PROJECTION		CLIENT: FREEMAN MARINE	
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INITIAL RELEASE: 07JUL11 PKC		DRAWN: P. CANCELLIERI DATE: 07JUL11 CHECKED: G. MACEACHERN DATE: 07JUL11 ENGR: DATE: DESIGN ACTIVITY: DATE: CONTRACT NO.:	
DO NOT SCALE DRAWING		SIZE: D CAGE CODE: 64747 DRAWING NUMBER: 2407-0002 SCALE: 1:1 SHEET 2 OF 3	



- 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: _____

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REV.	DESCRIPTION	DATE	DRAWN
-	INITIAL RELEASE	07JUL11	PPC

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 .X .XX .XXX ANGLES
 ±.1 ±.03 ±.010 ±2°

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		CLIENT:	FREEMAN MARINE
DRAWN: P. CANCELLIERI CHECKED: G. MACEACHERN ENGR: DESIGN ACTIVITY: CONTRACT NO.:	DATE: 07JUL11 DATE: 07JUL11 DATE: DATE:	TITLE:	HATCH: 20 K AL COVER, AL RING
SIZE: D	CAGE CODE: 64747	DRAWING NUMBER: 2407-0002	REV.:
SCALE: 1:2.5	CALC. WT.	ACT. WT.	SHEET 3 OF 3