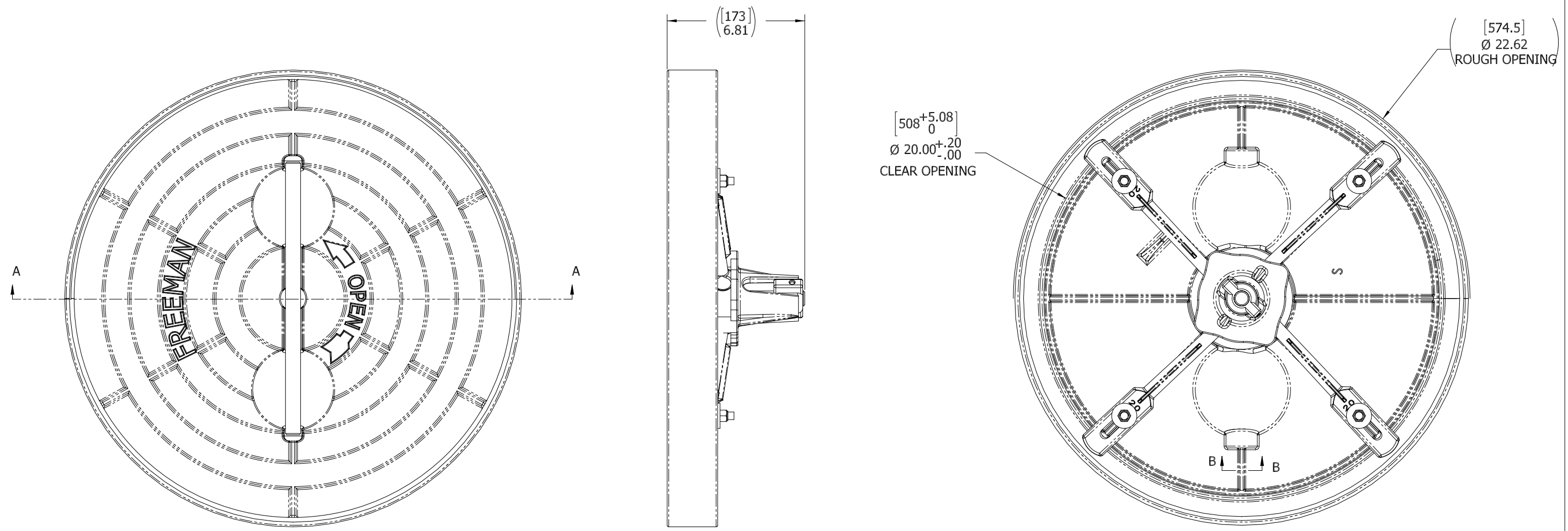


D  
C  
B  
A



- 10. FOR SPECIFIC INFORMATION CONTACT SALES.
- 9. COMPLETE ASSEMBLY WEIGHT W/ DECK RING, 43LBS
- 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 RING, RING CAN BE WELDED.
- 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.

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			
REV.	DESCRIPTION:	DATE:	DRAWN:
A	PRODUCTION RELEASE	28MAY13	ZIC

**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**

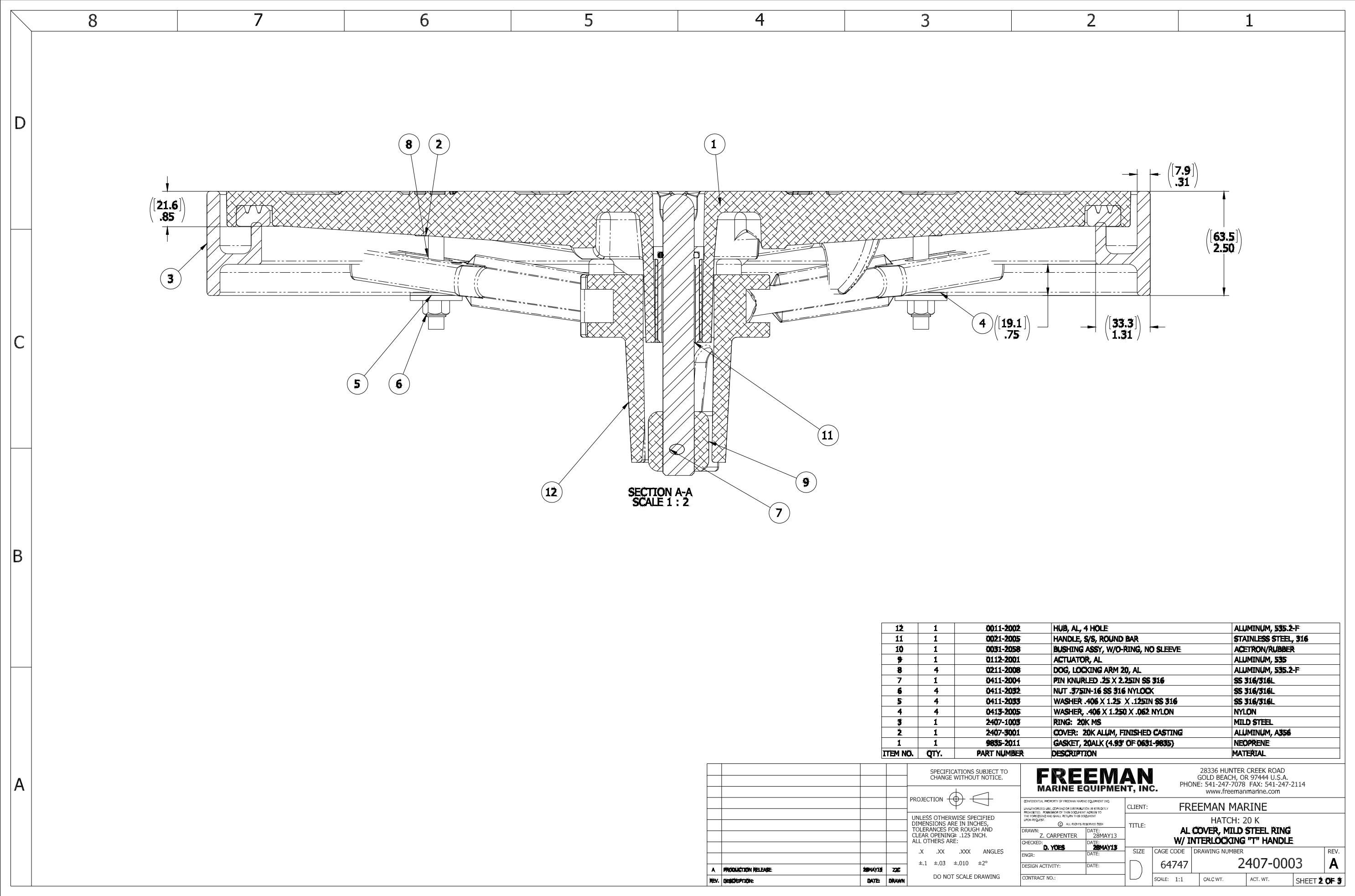
TITLE: **HATCH: 20 K  
AL COVER, MILD STEEL RING  
W/ INTERLOCKING "T" HANDLE**

SIZE: **D** CAGE CODE: **64747** DRAWING NUMBER: **2407-0003** REV: **A**

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

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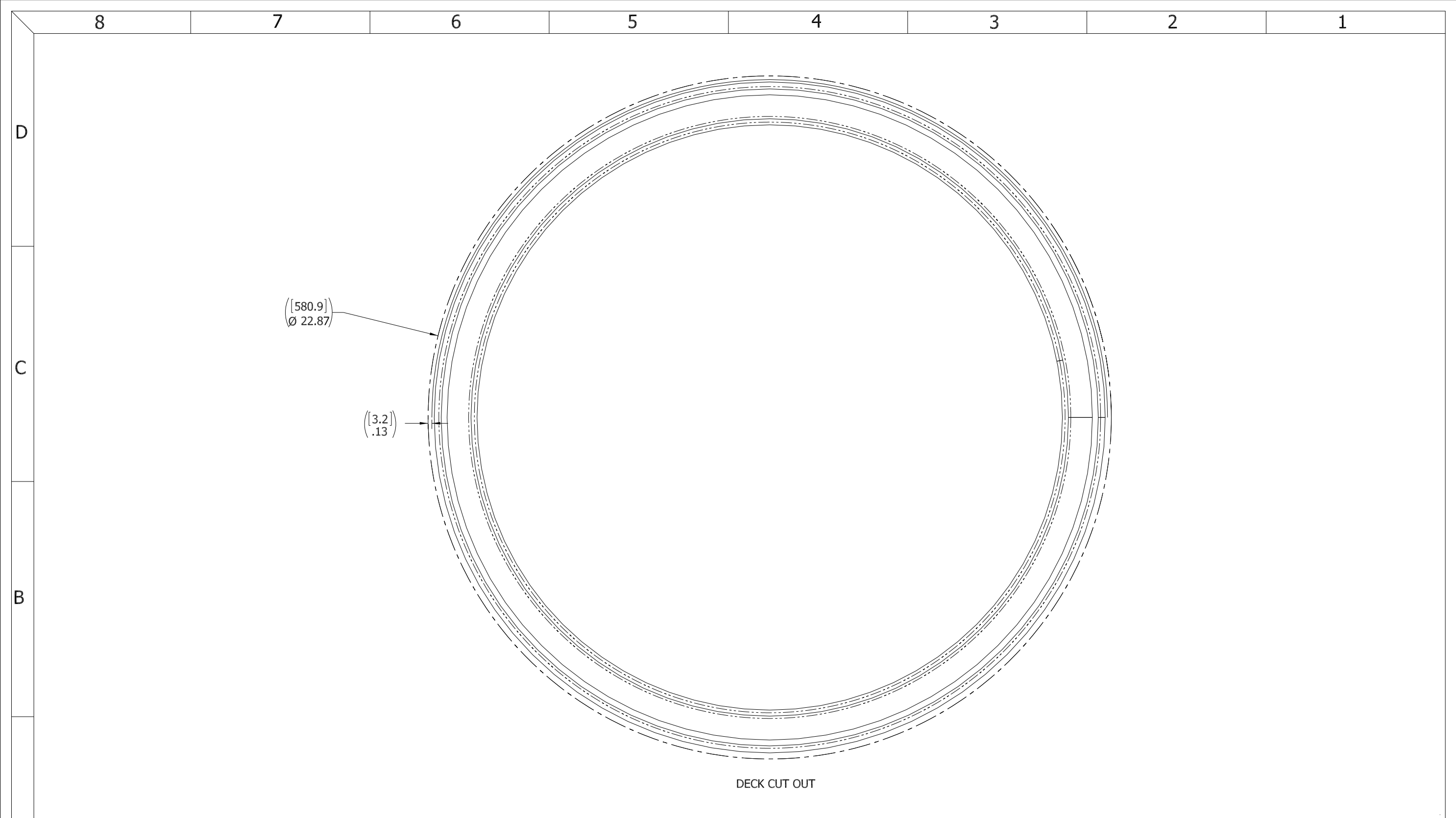
DRAWN: Z. CARPENTER DATE: 28MAY13  
CHECKED: D. YOES DATE: 28MAY13  
ENGR: DATE:  
DESIGN ACTIVITY: DATE:  
CONTRACT NO.:



SECTION A-A  
SCALE 1 : 2

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	MATERIAL
12	1	0011-2002	HUB, AL, 4 HOLE	ALUMINUM, 535.2-F
11	1	0021-2005	HANDLE, S/S, ROUND BAR	STAINLESS STEEL, 316
10	1	0031-2058	BUSHING ASSY, W/O-RING, NO SLEEVE	ACETRON/RUBBER
9	1	0112-2001	ACTUATOR, AL	ALUMINUM, 535
8	4	0211-2008	DOG, LOCKING ARM 20, AL	ALUMINUM, 535.2-F
7	1	0411-2004	PIN KNURLED .25 X 2.25IN SS 316	SS 316/316L
6	4	0411-2032	NUT .375IN-16 SS 316 NYLOCK	SS 316/316L
5	4	0411-2033	WASHER .406 X 1.25 X .125IN SS 316	SS 316/316L
4	4	0413-2005	WASHER, .406 X 1.250 X .062 NYLON	NYLON
3	1	2407-1003	RING: 20K MS	MILD STEEL
2	1	2407-3001	COVER: 20K ALUM, FINISHED CASTING	ALUMINUM, A356
1	1	9835-2011	GASKET, 20ALK (4.93" OF 0631-9835)	NEOPRENE

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PROJECTION		CLIENT: FREEMAN MARINE	
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°		TITLE: HATCH: 20 K <b>AL COVER, MILD STEEL RING          W/ INTERLOCKING "T" HANDLE</b>	
DO NOT SCALE DRAWING		DRAWN: Z. CARPENTER DATE: 28MAY13 CHECKED: D. YONES DATE: 28MAY13 ENGR: DATE: DESIGN ACTIVITY: DATE: CONTRACT NO.:	
A PRODUCTION RELEASE 28MAY13 ZC		SIZE: D CAGE CODE: 64747 DRAWING NUMBER: 2407-0003 REV. A	
REV. DESCRIPTION: DATE: DRAWN:		SCALE: 1:1 CALC. WT. ACT. WT. SHEET 2 OF 3	



DECK CUT OUT

- 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
A	PRODUCTION RELEASE	28MAY13	ZIC

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

PROJECTION

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

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		CLIENT:	FREEMAN MARINE
DRAWN: Z. CARPENTER DATE: 28MAY13		TITLE: HATCH: 20 K	
CHECKED: D. YOES DATE: 28MAY13		AL COVER, MILD STEEL RING	
ENGR: DATE:		SIZE: D	REV. A
DESIGN ACTIVITY: DATE:		CAGE CODE: 64747	DRAWING NUMBER: 2407-0003
CONTRACT NO.:		SCALE: 1:1.5	SHEET 3 OF 3