

8

7

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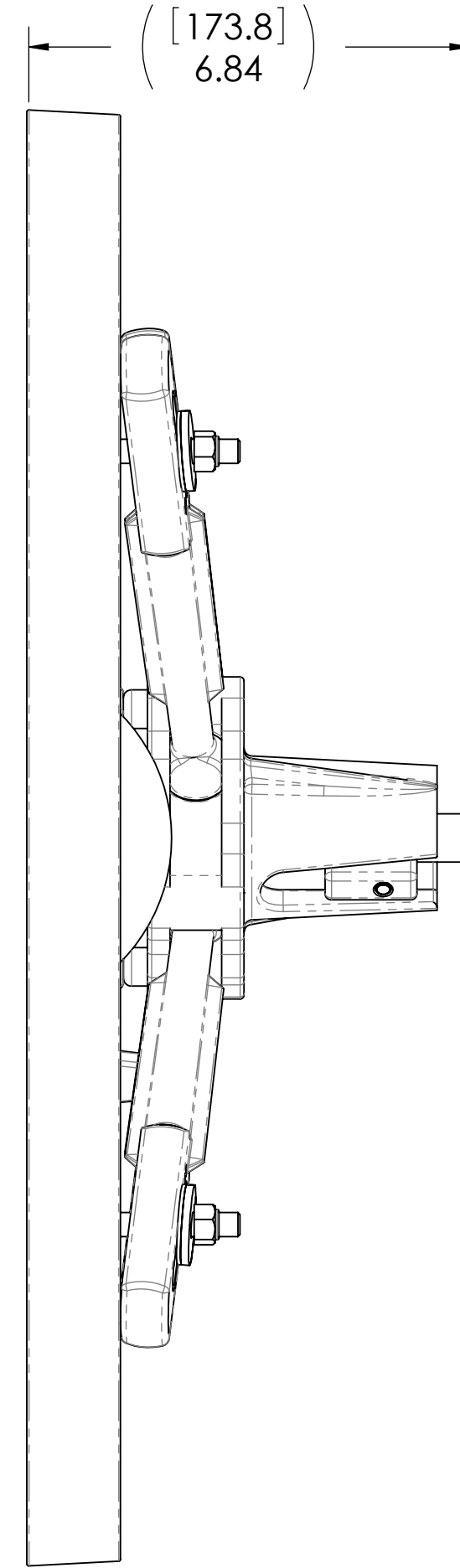
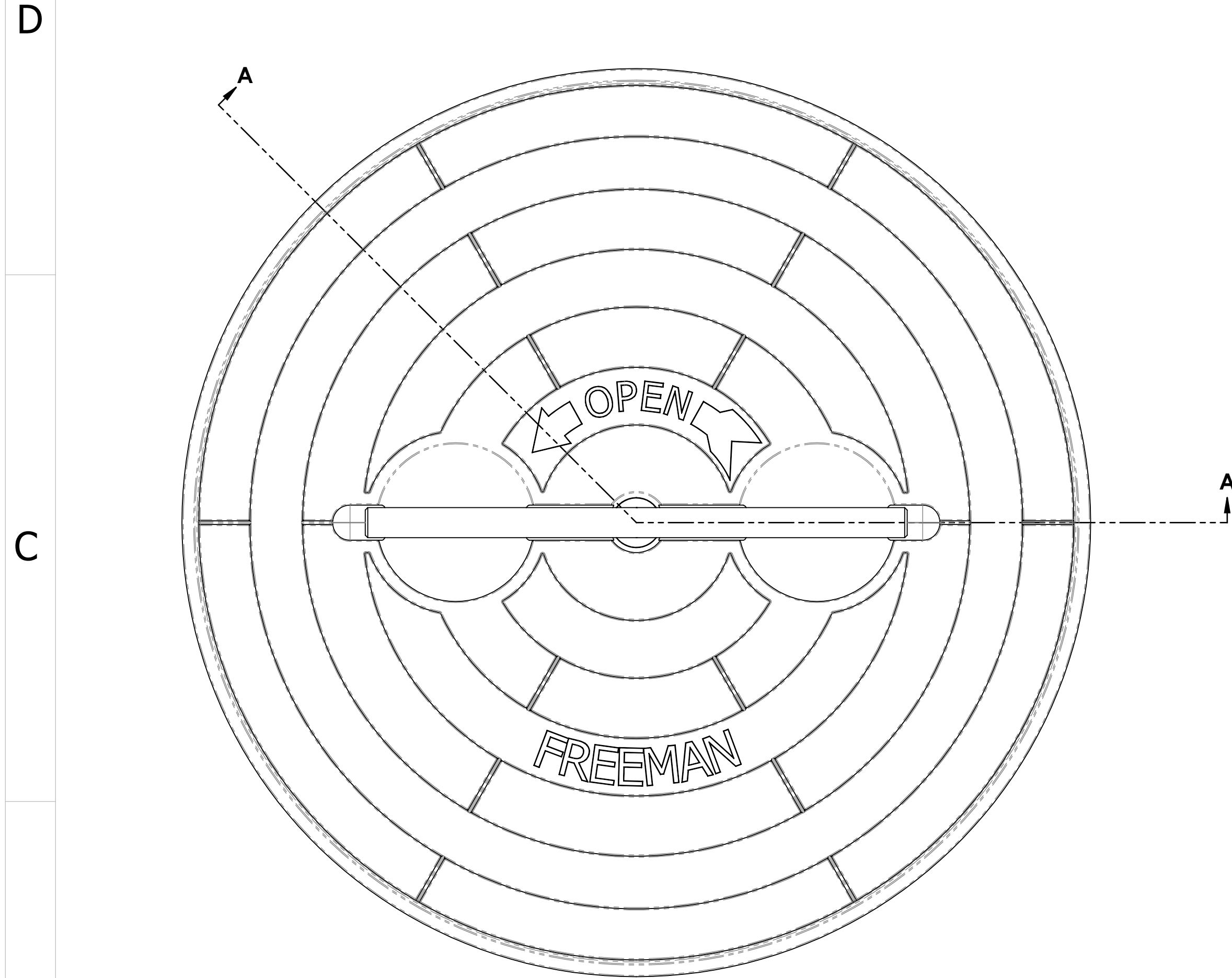
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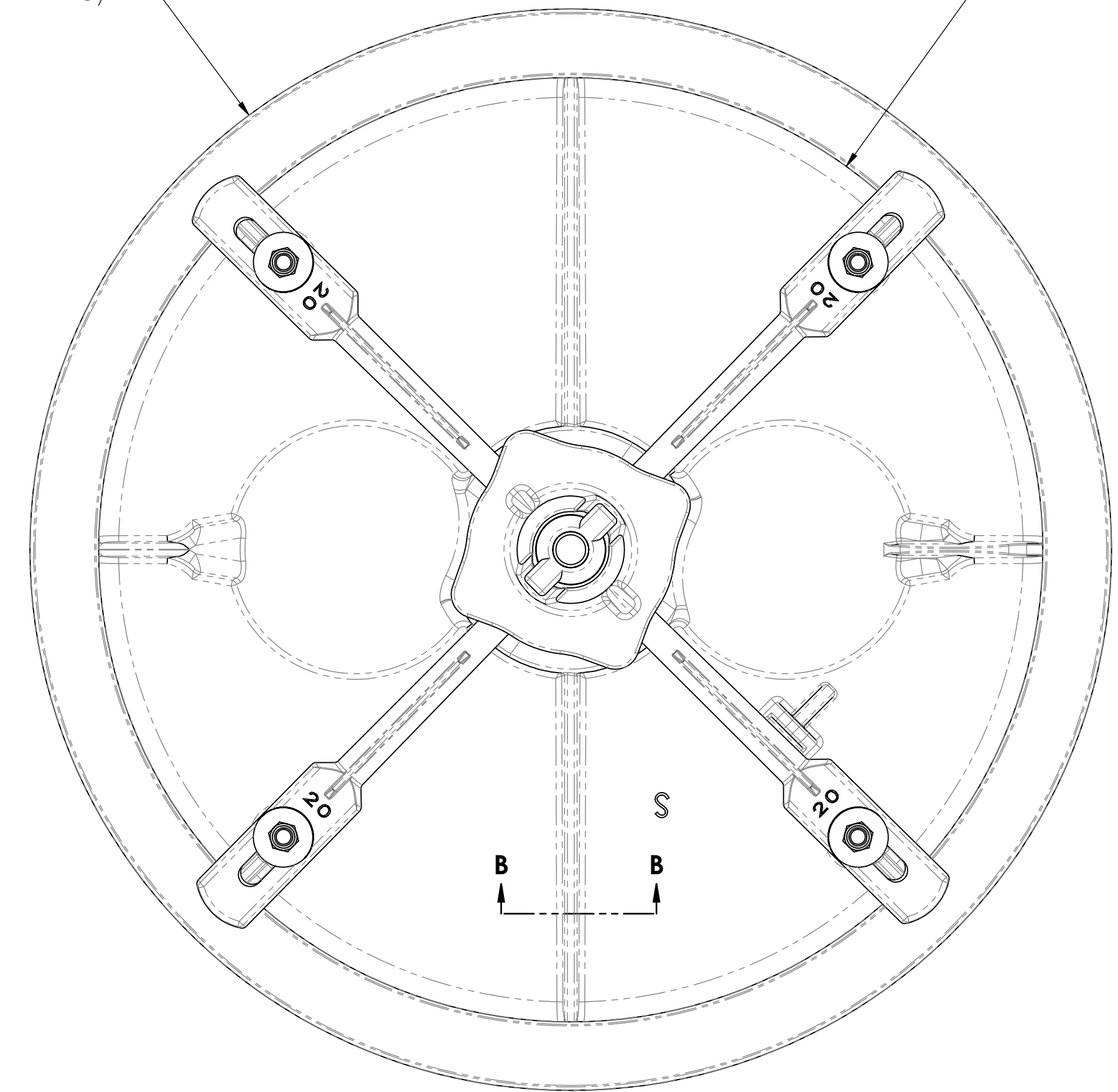
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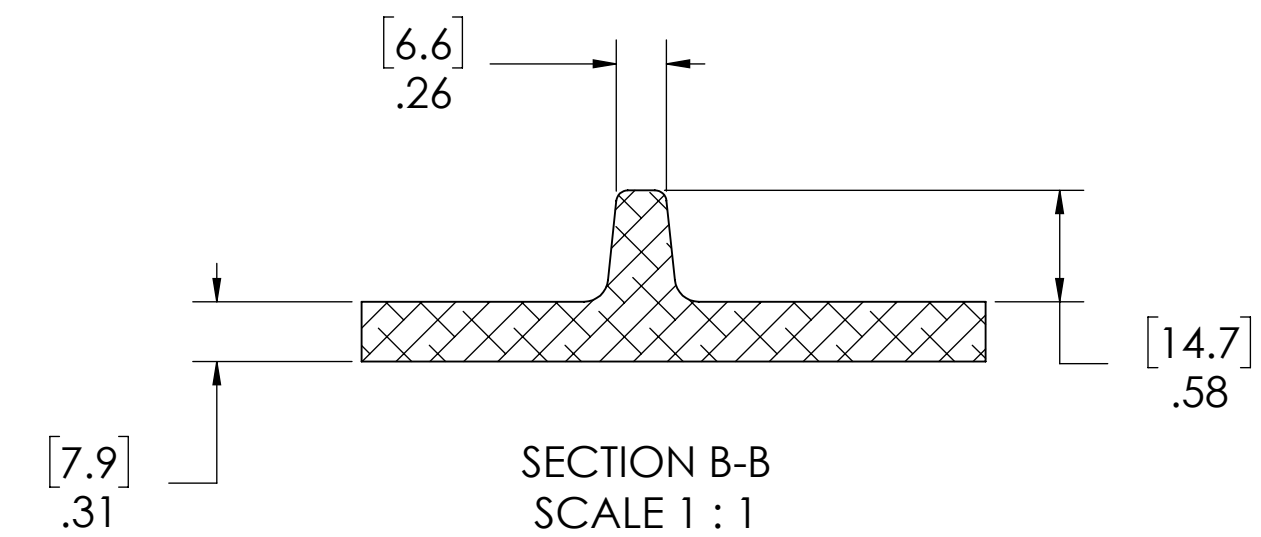
1



[574.9]
 ϕ 22.63
 ROUGH OPENING



[508^{+5.08}₀]
 ϕ 20.0^{+.20}_{-.00}
 CLEAR OPENING



- 10. FOR SPECIFIC INFORMATION CONTACT SALES.
- 9. COMPLETE ASSEMBLY WEIGHT W/ DECK RING, 44.1LBS/ 20KG.
- 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. STAINLESS STEEL RING CAN BE WELDED.
- 2. QUICK-ACTING, MECHANISM ENGAGES OR DISENGAGES IN QUARTER-TURN OF CENTER SPINDLE.
- 1. 19.8"/ 502MM DIAMETER CLEAR OPENING, ALL DIMENSIONS SHOWN SUBJECT TO CASTING VARIATION AND ARE REFERENCE ONLY.

NOTES: UNLESS OTHERWISE SPECIFIED.

A

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:
B	CORRECTED TITLE TO SS RING, REVISED WT.	03/27/18	AC
A	UPDATE GEN NOTES AND B.O.M.	03-SEPT-08	PPC
-	INITIAL RELEASE	07-JUL-11	SAS

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

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

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CLIENT: **FREEMAN MARINE**

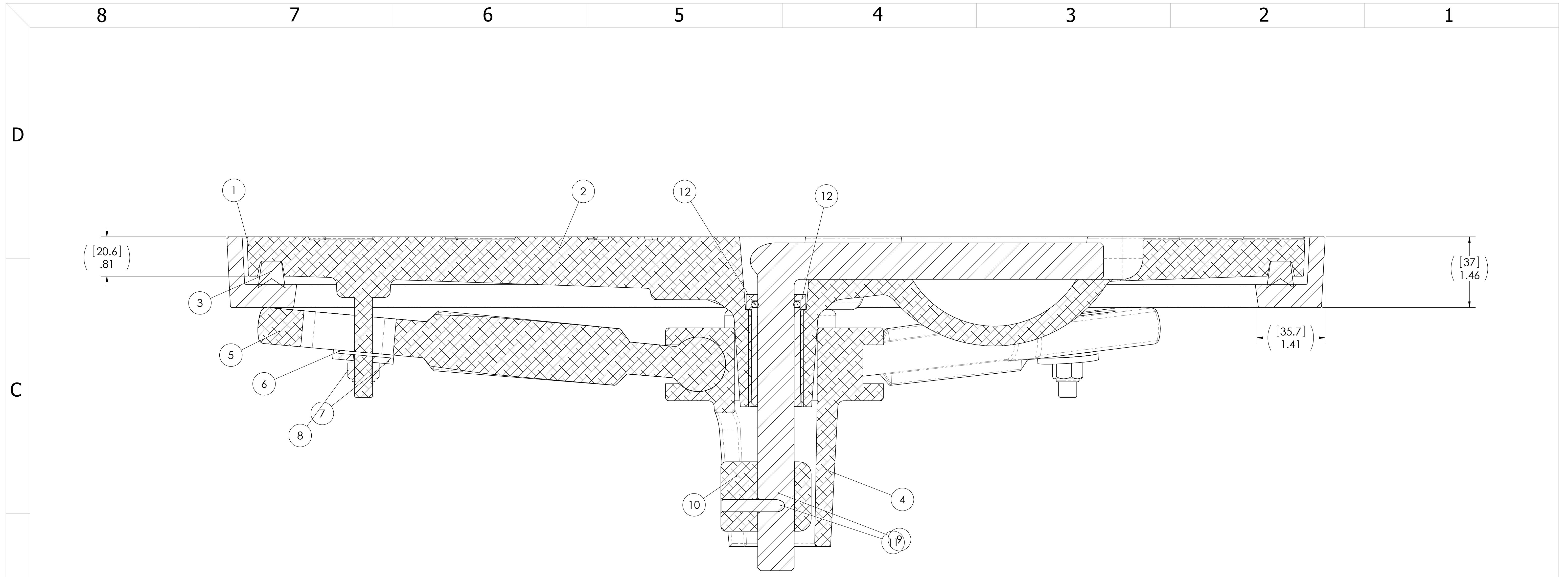
TITLE: **HATCH: 20, AL COVER, SS RING**

DRAWN: S SNYDER DATE: 03 SEPT 08
 CHECKED: G. MACEACHERN DATE: 07JUL11
 ENGR: DATE:

DESIGN ACTIVITY: DATE:

CONTRACT NO.:

SIZE	CAGE CODE	DRAWING NUMBER	REV.
D	64747	2406-0005	B
SCALE: 1:2.5	CALC. WT.	ACT. WT.	SHEET 1 OF 3



SECTION A-A

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	MATERIAL
12	1	0031-2058	BUSHING ASSY, W/O-RING, NO SLEEVE	REF S.A. BOM
11	1	0411-2004	PIN KNURLED .25 X 2.25IN SS 316	316/316L
10	1	0112-2001	ACTUATOR, AL	6061 Alloy
9	1	0021-2005	HANDLE, S/S, ROUND BAR	SS 304/304L ANLD
8	4	0411-2032	NUT .375IN NYLOCK	316/316L
7	4	0411-2033	WASHER .406 X 1.25 X .125IN SS 316	316/316L
6	4	0413-2005	WASHER, .406X1.25X.062 NYLON	PTFE (general)
5	4	0211-2008	DOG, LOCKING ARM 20, AL	535.2-F
4	1	0011-2002	HUB, AL, 4 HOLE	535.2-F
3	1	9801-2007	GASKET: 20 - 5.48FT	Rubber
2	1	2406-3005	COVER: 20 ALUM, FINISHED CASTING	A356.0-F
1	1	2406-1005	RING:20 STAINLESS STEEL	STAINLESS STEEL, 316

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.X	.XX	.XXX	ANGLES
±.1	±.03	±.010	±2°

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DRAWN: S SNYDER DATE: 03 SEPT 08
CHECKED: G. MACEACHERN DATE: 07JUL11
ENGR: DATE:
DESIGN ACTIVITY: DATE:
CONTRACT NO.:

CLIENT: FREEMAN MARINE

TITLE: HATCH: 20, AL COVER, SS RING

SIZE: D	CAGE CODE: 64747	DRAWING NUMBER: 2406-0005	REV. B
SCALE: 1:1	CALC. WT.	ACT. WT.	SHEET 2 OF 3

A

B

C

D

8

7

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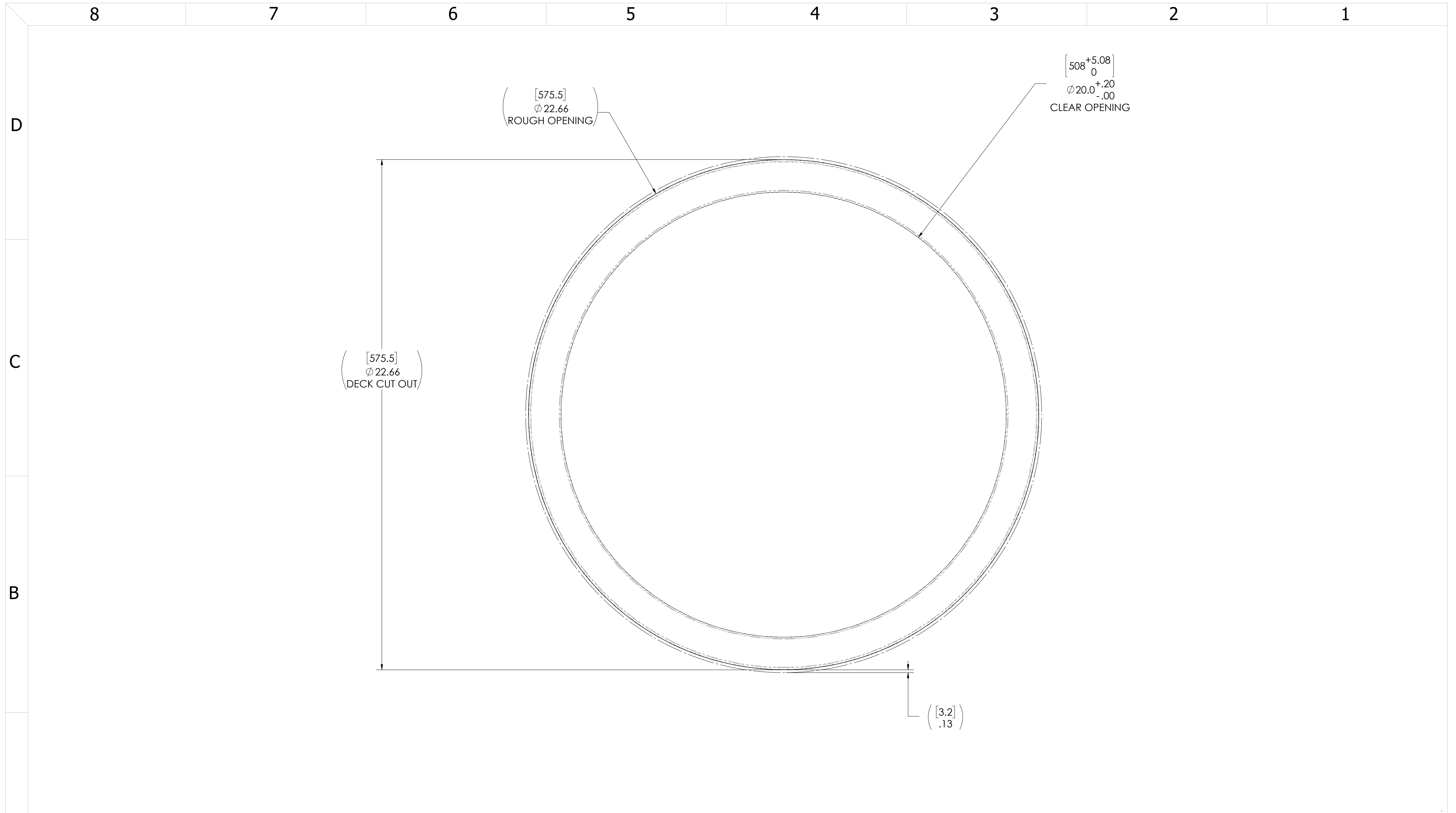
5

4

3

2

1



$\left[\begin{matrix} 508^{+5.08} \\ 0 \end{matrix} \right]$
 $\phi 20.0^{+.20}_{-.00}$
 CLEAR OPENING

$\left(\begin{matrix} [575.5] \\ \phi 22.66 \end{matrix} \right)$
 ROUGH OPENING

$\left(\begin{matrix} [575.5] \\ \phi 22.66 \end{matrix} \right)$
 DECK CUT OUT

$\left(\begin{matrix} [3.2] \\ .13 \end{matrix} \right)$

- 3. FINISH: 125 RMS MAX.
 - 2. BREAK SHARP EDGES AND DEBURR.
 - 1. MATERIAL: 316 STAINLESS STEEL
- NOTES: UNLESS OTHERWISE SPECIFIED.

CUSTOMER APPROVAL

Signature: _____
 Date: _____

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CLIENT: **FREEMAN MARINE**

TITLE: **HATCH: 20, AL COVER, SS RING**

SIZE: **D** CAGE CODE: **64747** DRAWING NUMBER: **2406-0005** REV. **B**

SCALE: 1:2 CALC. WT. ACT. WT. SHEET 3 OF 3