

8

7

6

5

4

3

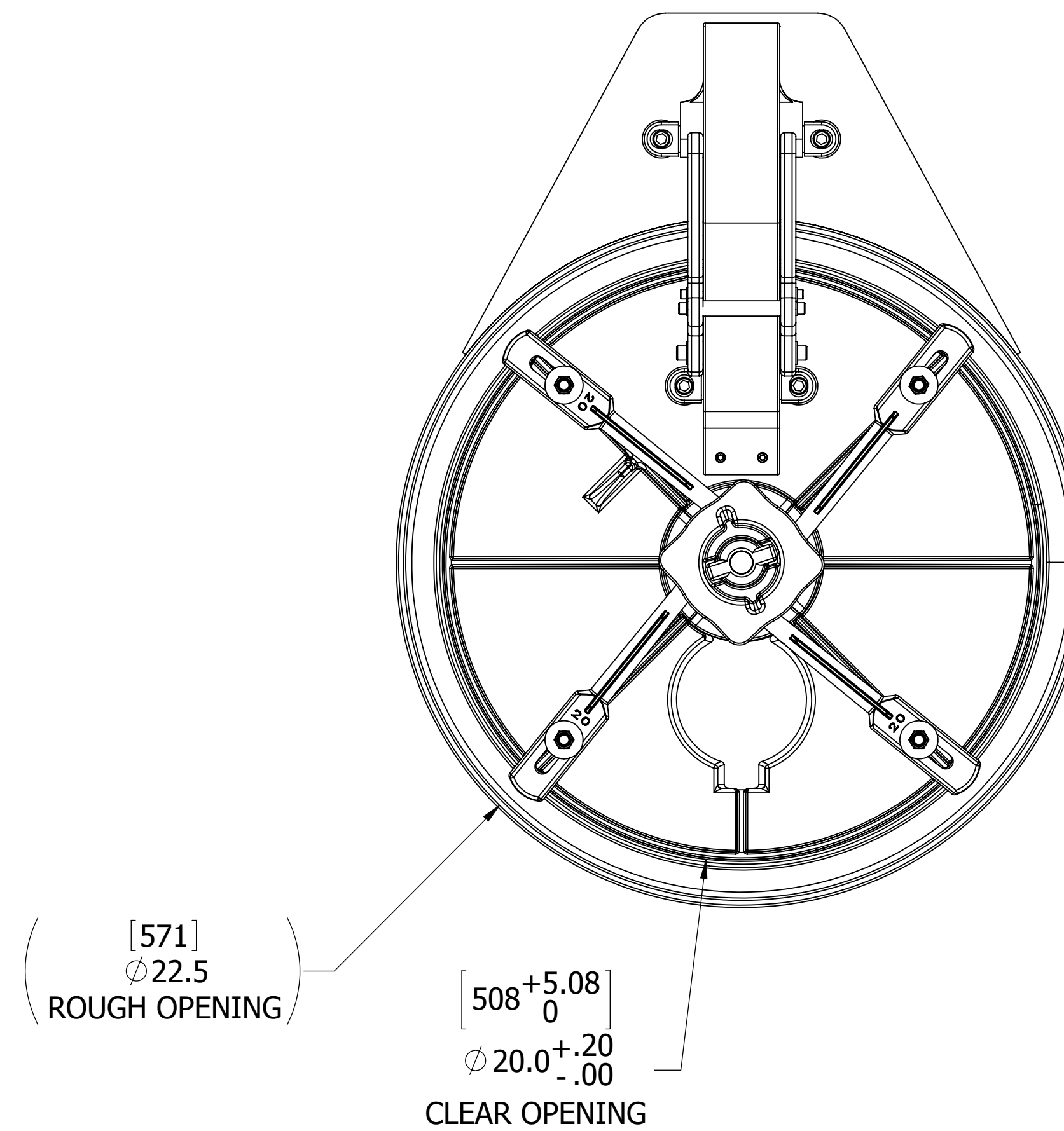
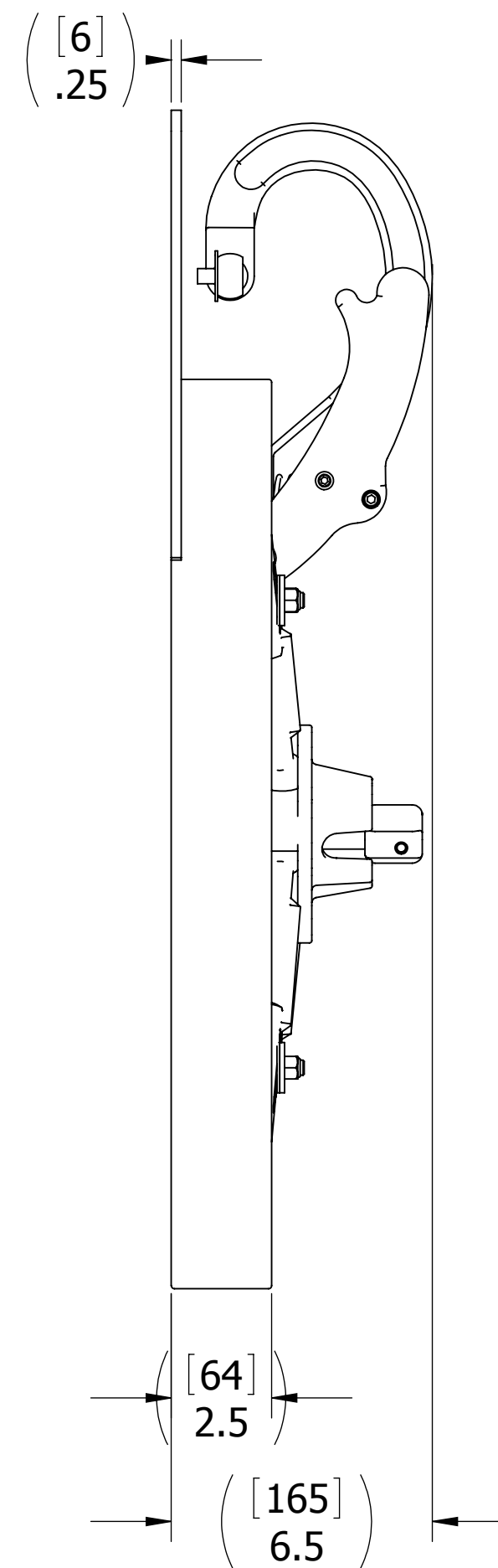
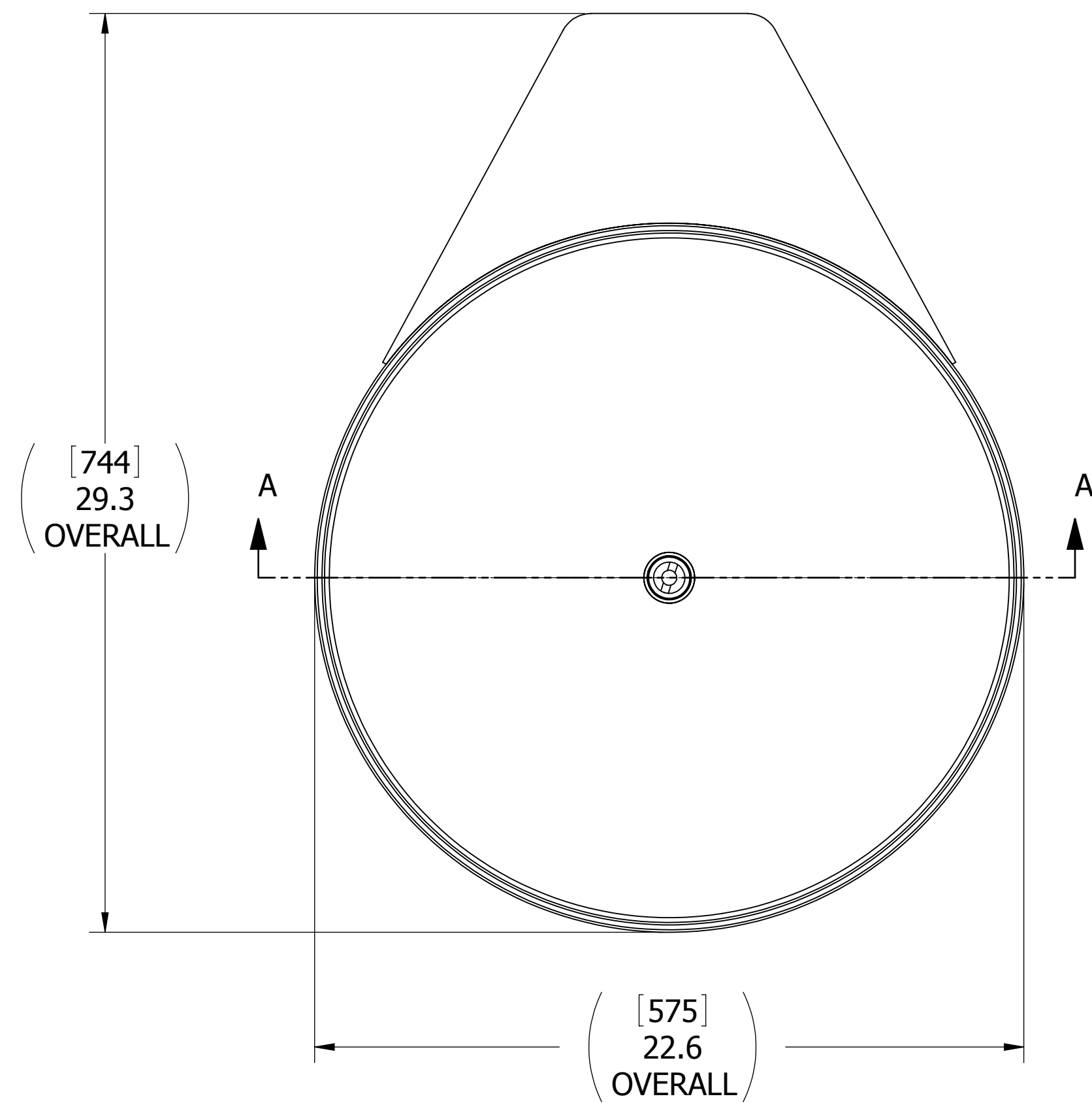
2

1

D

C

B

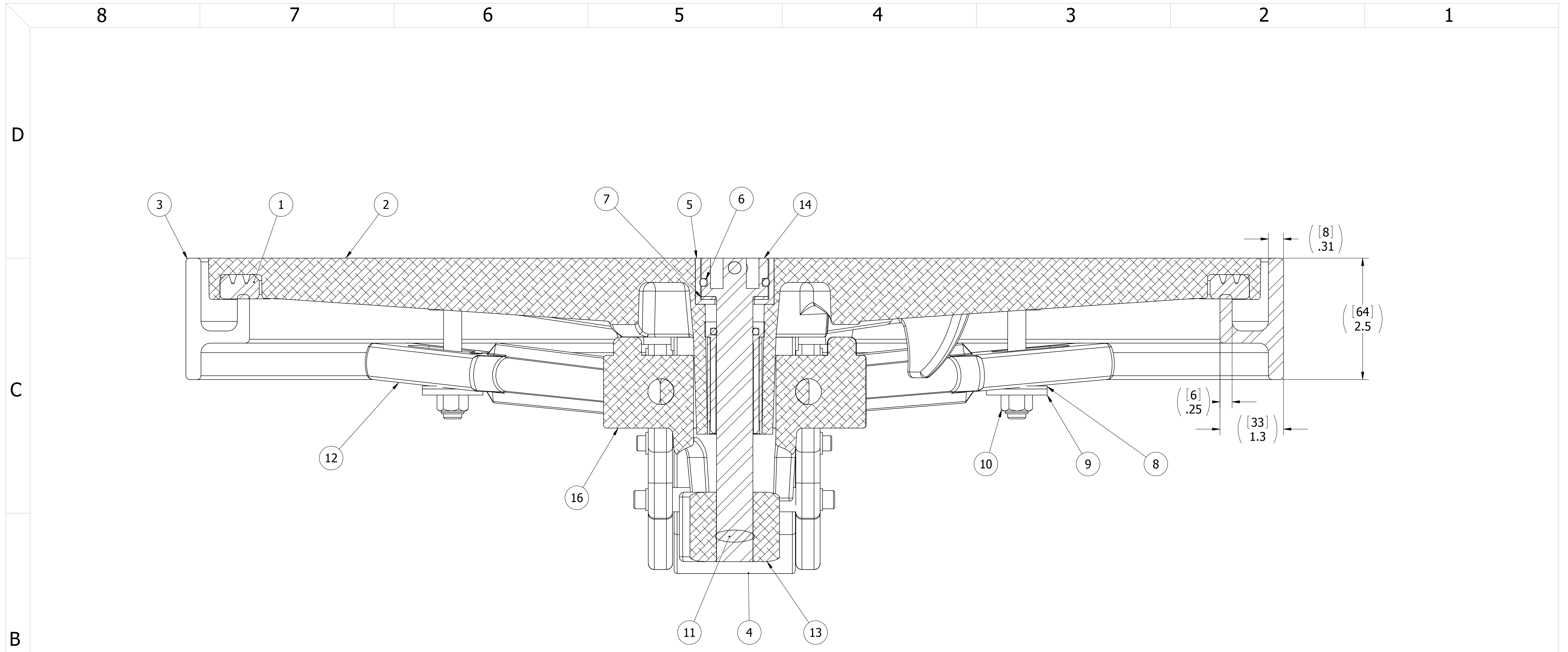


8. FOR SPECIFIC INFORMATION CONTACT SALES.
7. COMPLETE ASSEMBLY WEIGHT W/ DECK RING, 62LBS/ 28Kg.
6. DOGGING PRESSURE FULLY ADJUSTABLE.
5. ALUMINUM ALLOY MECHANISM SHOWN.
4. FLUSH, WATERTIGHT CONSTRUCTION.
3. STAINLESS STEEL RING.
2. QUICK-ACTING, MECHANISM ENGAGES OR DISENGAGES IN QUARTER-TURN OF CENTER SPINDLE.
1. 20.0" /508mm DIAMETER CLEAR OPENING, ALL DIMENSIONS SHOWN SUBJECT TO CASTING VARIATION AND ARE REFERENCE ONLY.

NOTES:

A

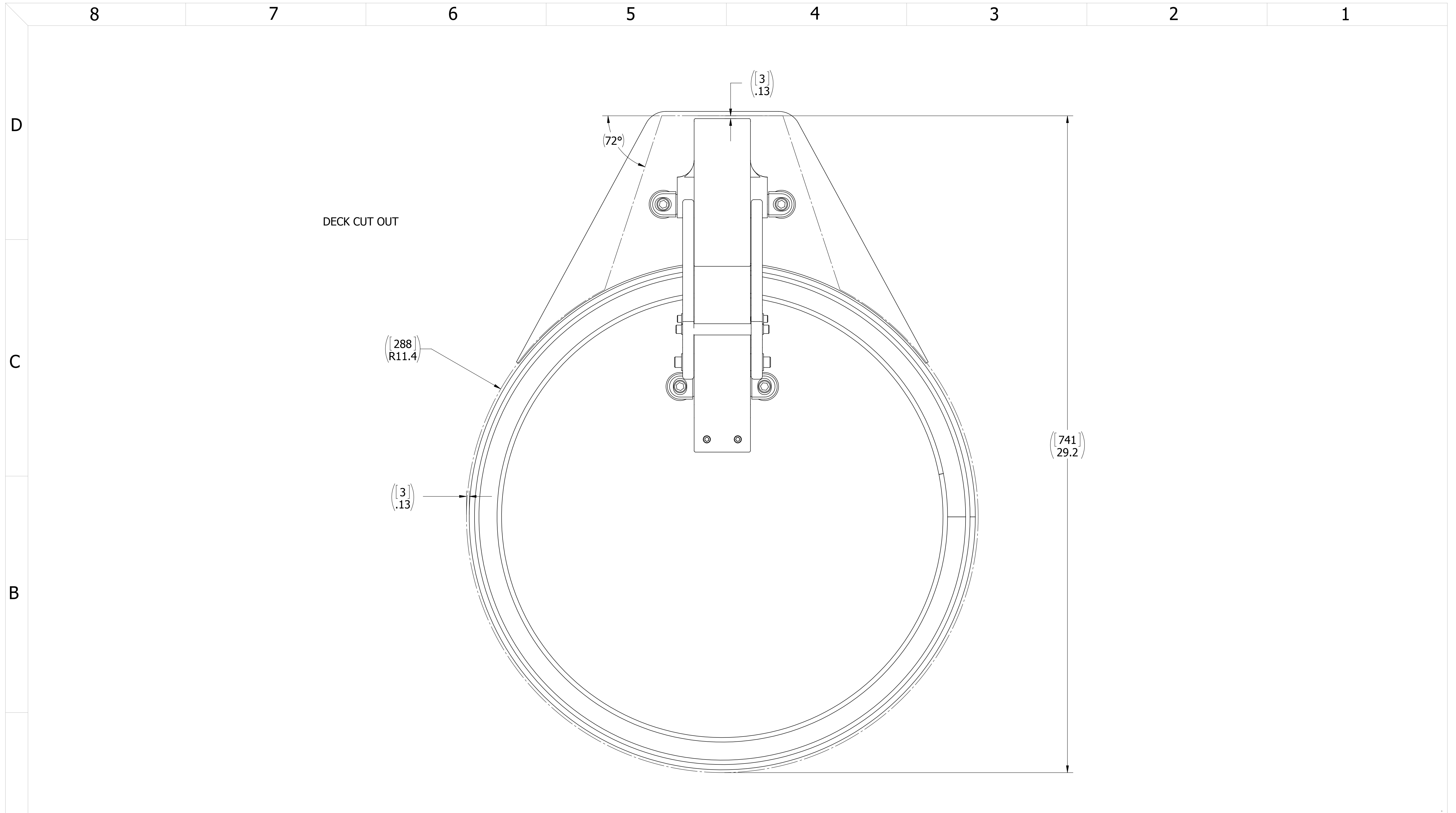
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.		FREEMAN MARINE EQUIPMENT, INC. 28336 HUNTER CREEK ROAD GOLD BEACH, OR 97444 U.S.A. PHONE: 541-247-7078 FAX: 541-247-2114 www.freemanmarine.com	
PROJECTION		CLIENT: FREEMAN MARINE	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES, TOLERANCES FOR ROUGH AND CLEAR OPENING ± .125 INCH. ALL OTHERS ARE: .X .XX .XXX ANGLES ±.1 ±.03 ±.010 ±2°		TITLE: HATCH: 20 K AL COVER, SS RING W/ INTERLOCKING "T" HANDLE	
DO NOT SCALE DRAWING		SIZE: D CAGE CODE: 64747 DRAWING NUMBER: 2485-0065 REV. A	
A PRODUCTION RELEASE 21MAY13 ZJC		SCALE: 1:4 CALC. WT. ACT. WT. SHEET 1 OF 3	
REV. DESCRIPTION: DATE: DRAWN		CONTRACT NO.:	



SECTION A-A
SCALE 1 : 2

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	MATERIAL
16	1	0011-2006	HUB, 4 HOLE - SHORT	ALUMINUM, 535.2
15	1	0031-2001	BUSHING ASSY, STD HATCH, W/SLEEVE	REF. S/A - B.O.M.
14	1	0031-2107	SPINDLE, INTERLOCKING, FLUSH TO 1/4 TEAK	STAINLESS STEEL, 316L
13	1	0112-2001	ACTUATOR, AL	ALUMINUM, 535
12	4	0211-2008	DOG, LOCKING ARM 20, AL	ALUMINUM, 535.2-F
11	1	0411-2004	PIN, KNURLED, 1/4 X 2-1/4, 316 S/S	STAINLESS STEEL, 316L
10	4	0411-2032	LOCKNUT, NYLON INSERT, 3/8-16, 316 S/S	STAINLESS STEEL, 316
9	4	0411-2033	WASHER, .406 X 1.25 X .125, 316 S/S	STAINLESS STEEL, 316
8	4	0413-2005	WASHER, .406 X 1.250 X .062 NYLON	NYLON
7	1	0413-2049	WASHER, SHIM CAST HATCH BI-SQ	ACETAL, BLACK
6	1	0441-2045	O-RING, 27MM X 4MM	BUNA-N
5	1	0441-2133	CUP, INTERLOCKING SPINDLE, FLUSH TO 1/4	STAINLESS STEEL, 316L
4	1	0461-2077	HINGE ASSY, YOKE, CAST HATCH, W/HOLD OPEN	REF S/A B.O.M.
3	1	2485-1005	RING: 20K SS, 613-9003	316L STAINLESS STEEL
2	1	2485-3041	COVER, 20 K FLAT TOP AL, FINISHED CASTING	ALUMINUM
1	1	9835-2011	GASKET, 20ALK (4.93" OF 0631-9835)	NEOPRENE

A PRODUCTION RELEASE DATE: 21MAY13 DRAWN: 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	FREEMAN MARINE EQUIPMENT, INC. <small>CONFIDENTIAL PROPERTY OF FREEMAN MARINE EQUIPMENT INC. UNAUTHORIZED USE, COPYING OR DISTRIBUTION IS STRICTLY PROHIBITED. POSSESSOR OF THIS DOCUMENT AGREES TO THE FOREGOING AND SHALL RETURN THIS DOCUMENT UPON REQUEST. © ALL RIGHTS RESERVED 2004</small> DRAWN: Z. CARPENTER DATE: 21MAY13 CHECKED: D. YOES DATE: 21MAY13 ENGR: DATE: DESIGN ACTIVITY: DATE: CONTRACT NO.:	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, SS RING W/ INTERLOCKING "T" HANDLE
REV. DESCRIPTION: DATE: DRAWN:	SCALE: 1:1 CALC. WT. ACT. WT.	SIZE: D CAGE CODE: 64747 DRAWING NUMBER: 2485-0065	REV. A SHEET 2 OF 3	



D
C
B
A

8 7 6 5 4 3 2 1

DECK CUT OUT

(.3)
.13

(72°)

(.288)
R11.4

(.741)
29.2

(.3)
.13

- 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.

A	PRODUCTION RELEASE	21MAY13	ZJC
REV.	DESCRIPTION:	DATE:	DRAWN

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 K AL COVER, SS RING		
SIZE	CAGE CODE	DRAWING NUMBER	REV.
D	64747	2485-0065	A
SCALE: 1:2	CALC. WT.	ACT. WT.	SHEET 3 OF 3