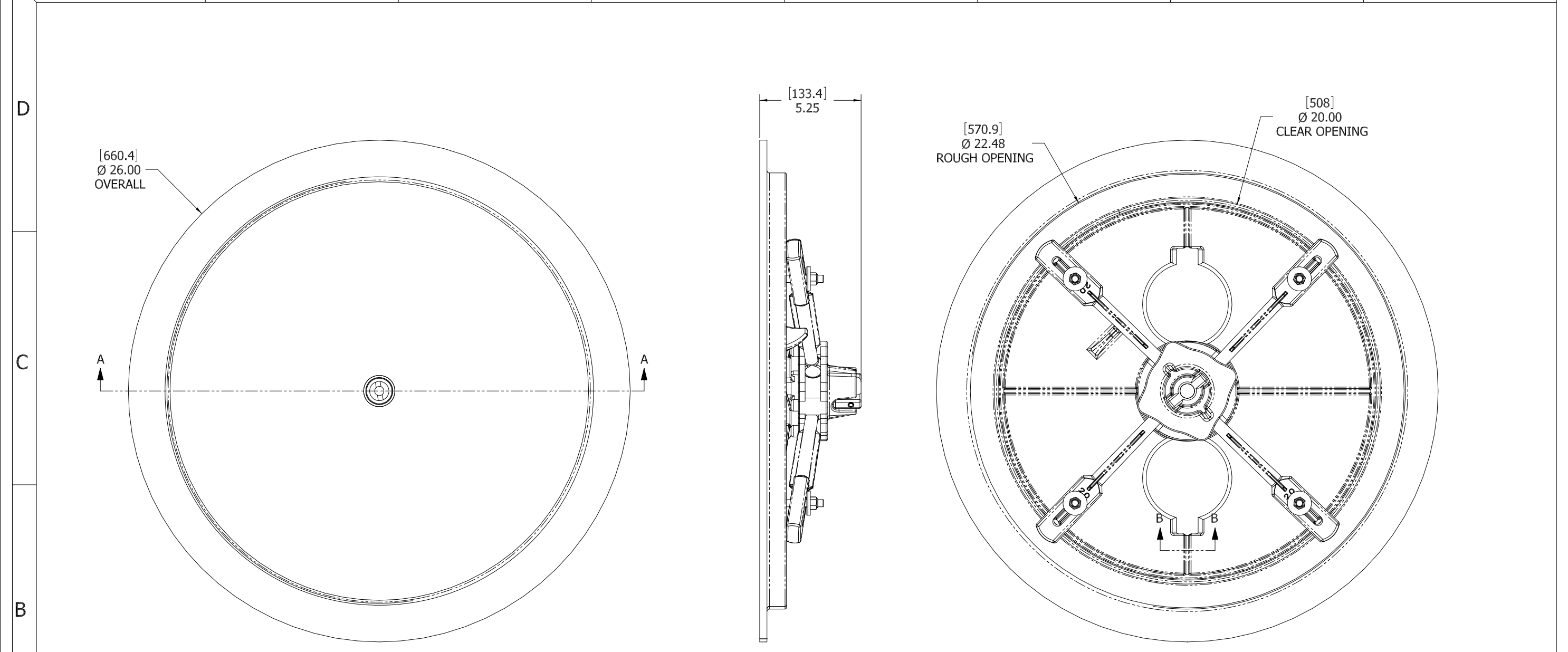


8 7 6 5 4 3 2 1



- 9. FOR SPECIFIC INFORMATION CONTACT SALES.
- 8. COMPLETE ASSEMBLY WEIGHT W/ DECK RING, 35.6LBS/ 16.1K.
- 7. DOGGING PRESSURE FULLY ADJUSTABLE.
- 6. ALUMINUM ALLOY MECHANISM SHOWN.
- 5. FLUSH, WATERTIGHT CONSTRUCTION.
- 4. REMOVABLE 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	01DEC09	TLK

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.**

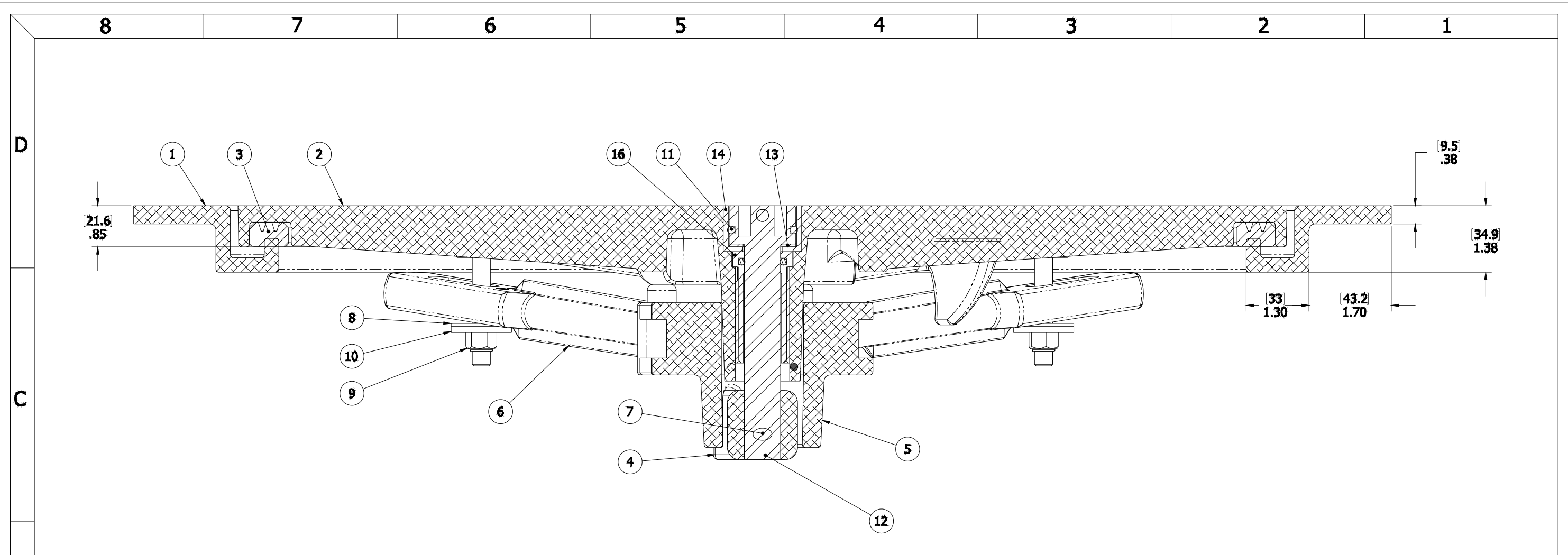
28336 HUNTER CREEK ROAD  
GOLD BEACH, OR 97444 U.S.A.  
PHONE: 541-247-7078 FAX: 541-247-2114  
www.freemanmarine.com

CLIENT: FREEMAN MARINE EQUIPMENT

TITLE: HATCH: 20 K  
AL COVER, AL RING

SIZE	CAGE CODE	DRAWING NUMBER	REV.
D	64747	2407-0062	-

SCALE: 1:2.5    CALC. WT.    ACT. WT.    SHEET 1 OF 2



SECTION A-A  
SCALE 1 : 2

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	MATERIAL
16	1	0031-2001	BUSHING ASSY, STD HATCH, W/SLEEVE	VARIOUS
15	1	0031-2028	HANDLE, INTERLOCKING REMOVABLE T	316 STAINLESS STEEL
14	1	0441-2133	CUP, INTERLOCKING SPINDLE, FLUSH TO 1/4	STAINLESS STEEL, 316L
13	1	0413-2049	WASHER, SHIM CAST HATCH BI-SQ	ACETAL, BLACK
12	1	0031-2107	SPINDLE, INTERLOCKING, FLUSH TO 1/4 TEAK	STAINLESS STEEL, 316L
11	2	0441-2045	O-RING, 27MM X 4MM	BUNA-N
10	4	0411-2033	WASHER .406 X 1.25 X .125IN SS 316	SS 316/316L
9	4	0411-2032	NUT .375IN-16 SS 316 NYLOCK	SS 316/316L
8	4	0413-2005	WASHER .406 X 1.250 X .062 NYLON	NYLON
7	1	0411-2004	PIN KNURLED .25 X 2.25IN SS 316	SS 316/316L
6	4	0211-2008	DOG, LOCKING ARM 20, AL	ALUMINUM, 535.2-F
5	1	0011-2006	HUB, 4 HOLE - SHORT	ALUMINUM, 535.2
4	1	0112-2001	ACTUATOR, AL	ALUMINUM, 535
3	1	9810-2008	GASKET: 20 AL K (4.93 FT OF 0631-9810)	NEOPRENE
2	1	2407-3041	COVER, 20 K FLAT TOP AL, FINISHED CASTING	ALUMINUM
1	1	2407-1002	RING: 20K AL	ALUMINUM

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.		<b>FREEMAN MARINE EQUIPMENT, INC.</b> 28336 HUNTER CREEK ROAD GOLD BEACH, OR 97444 U.S.A. PHONE: 541-247-7078 FAX: 541-247-2114 www.freemarinete.com	
PROJECTION		CLIENT: FREEMAN MARINE EQUIPMENT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES FOR HOLES AND CLEAR OPENINGS: .125 INCH. ALL OTHERS ARE:		TITLE: HATCH: 20 K AL COVER, AL RING	
X XX XXX ANGLES ±.1 ±.05 ±.010 ±.2		SIZE: 64747 DRAWING NUMBER: 2407-0062	
DO NOT SCALE DRAWING		SCALE: 1:1	
REV. DESCRIPTION: INITIAL RELEASE DATE: 200808 TLK		SHEET 2 OF 2	