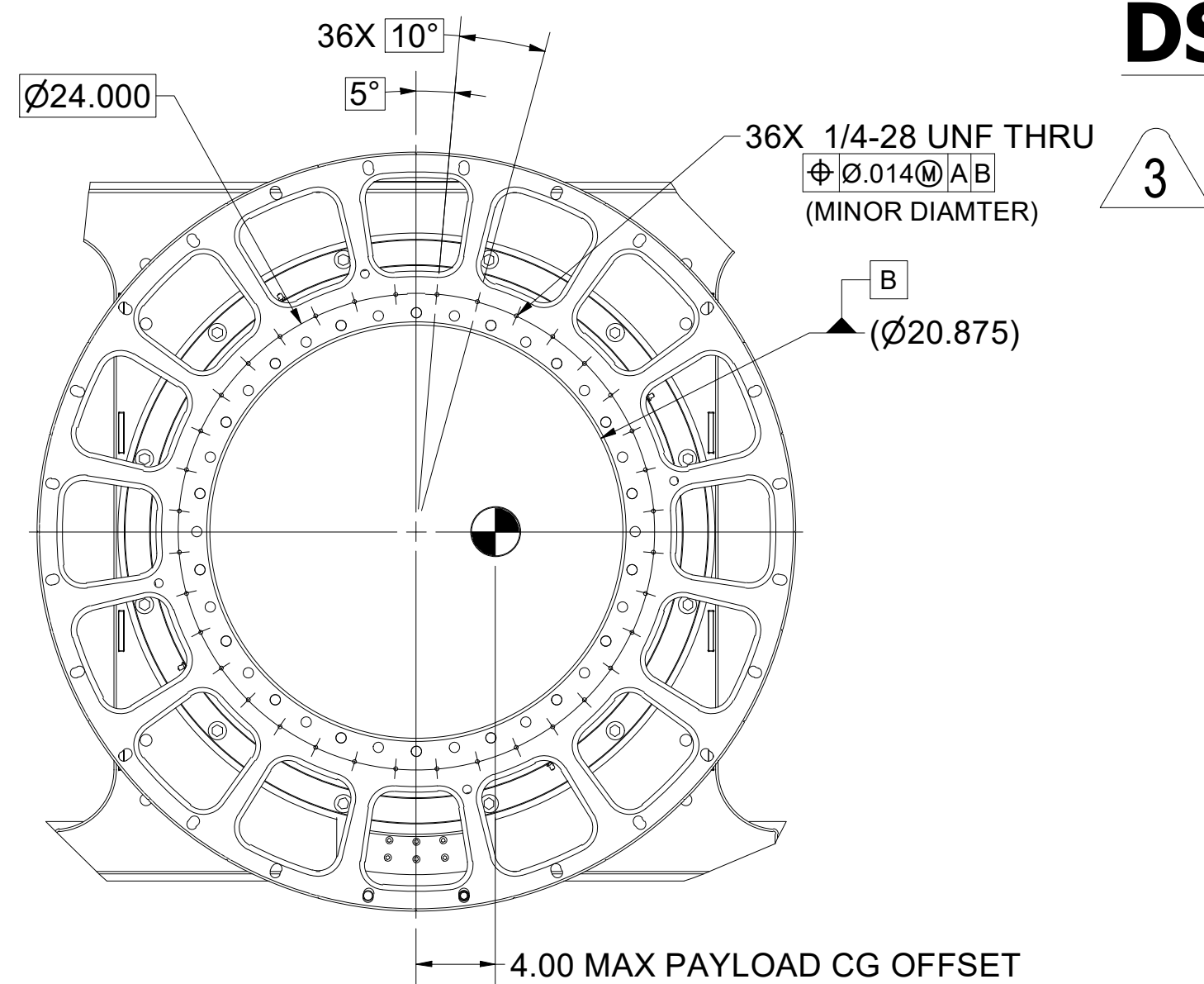
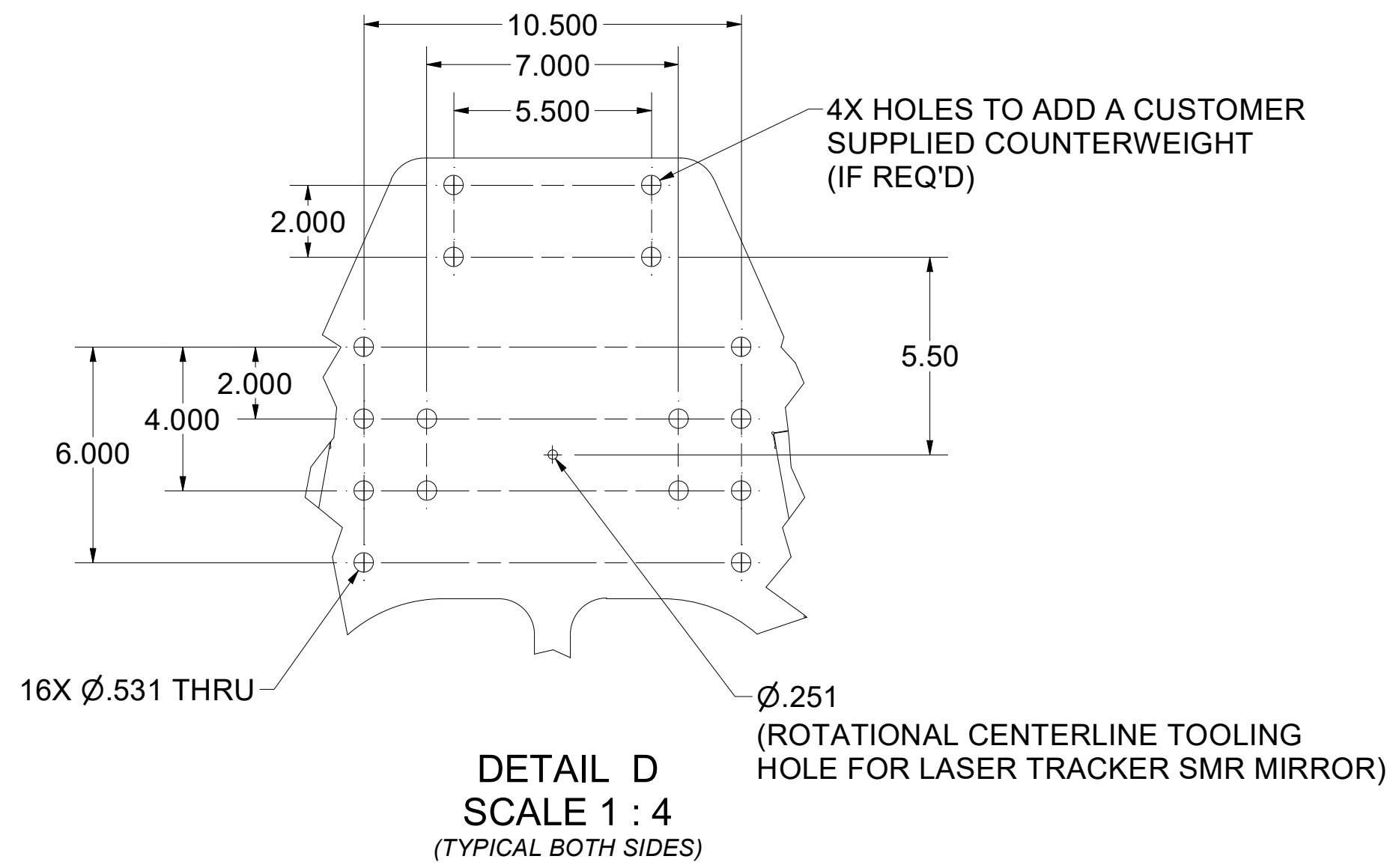


DSC-P1 (SECONDARY AXIS OF ROTATION CRADLE - PINNED INTERFACE SA1-SA8)

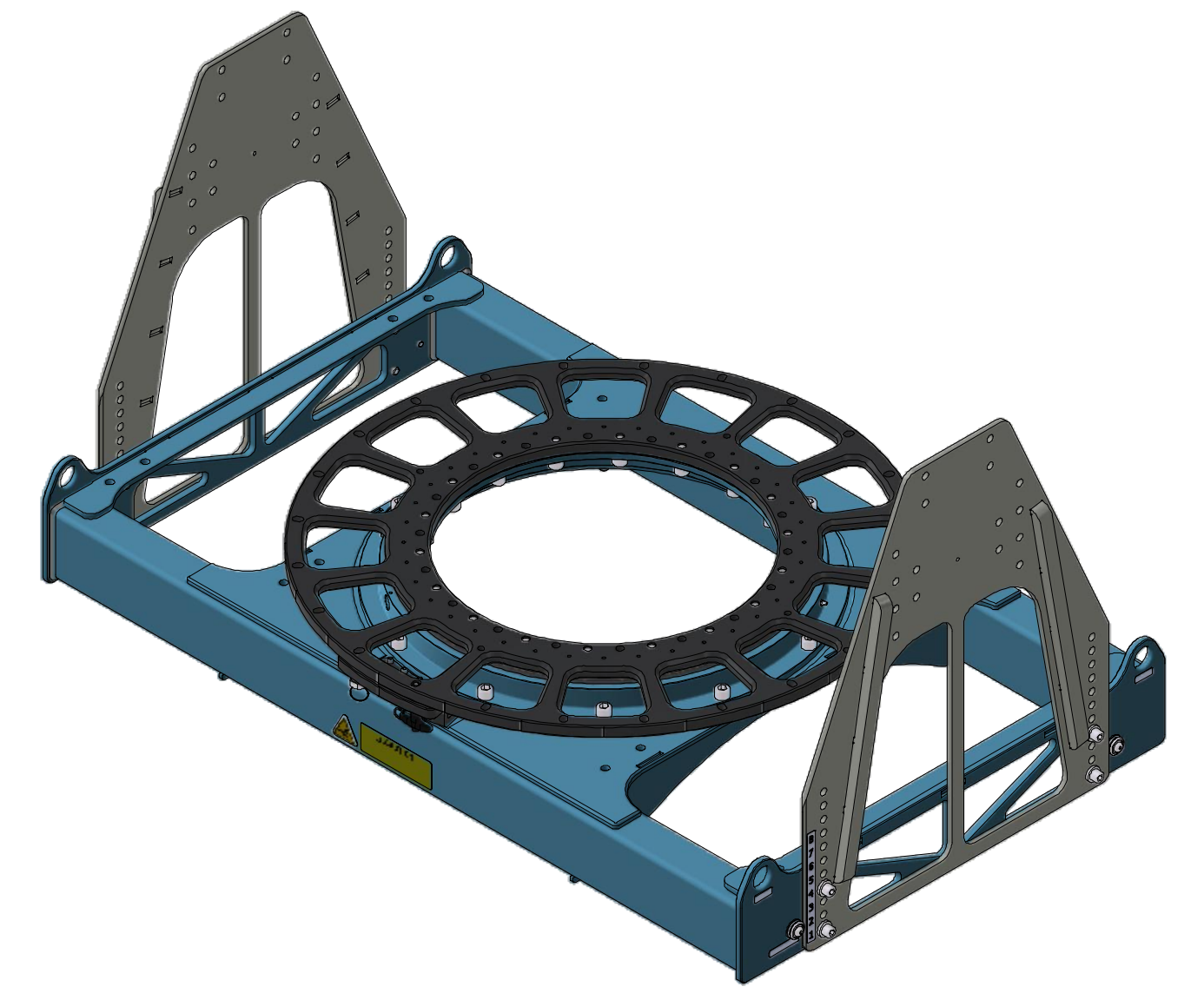
BOLT POSITIONS CAN BE CHANGED IN THE FIELD, BUT BOLT POSITION SELECTED WILL BE THE BOLT POSITION THE FIXTURE IS SHIPPED WITH. B060 INTERFACE DISTANCE SHOWN ON THIS DRAWING BUT OTHER CRADLE LENGTHS AVAILABLE FROM B050-B140 IN INCREMENTS OF 10". SEE WEB SITE FOR MORE INFORMATION. DIFFERENT INTERFACE DISTANCES WILL CHANGE LOAD CURVES.



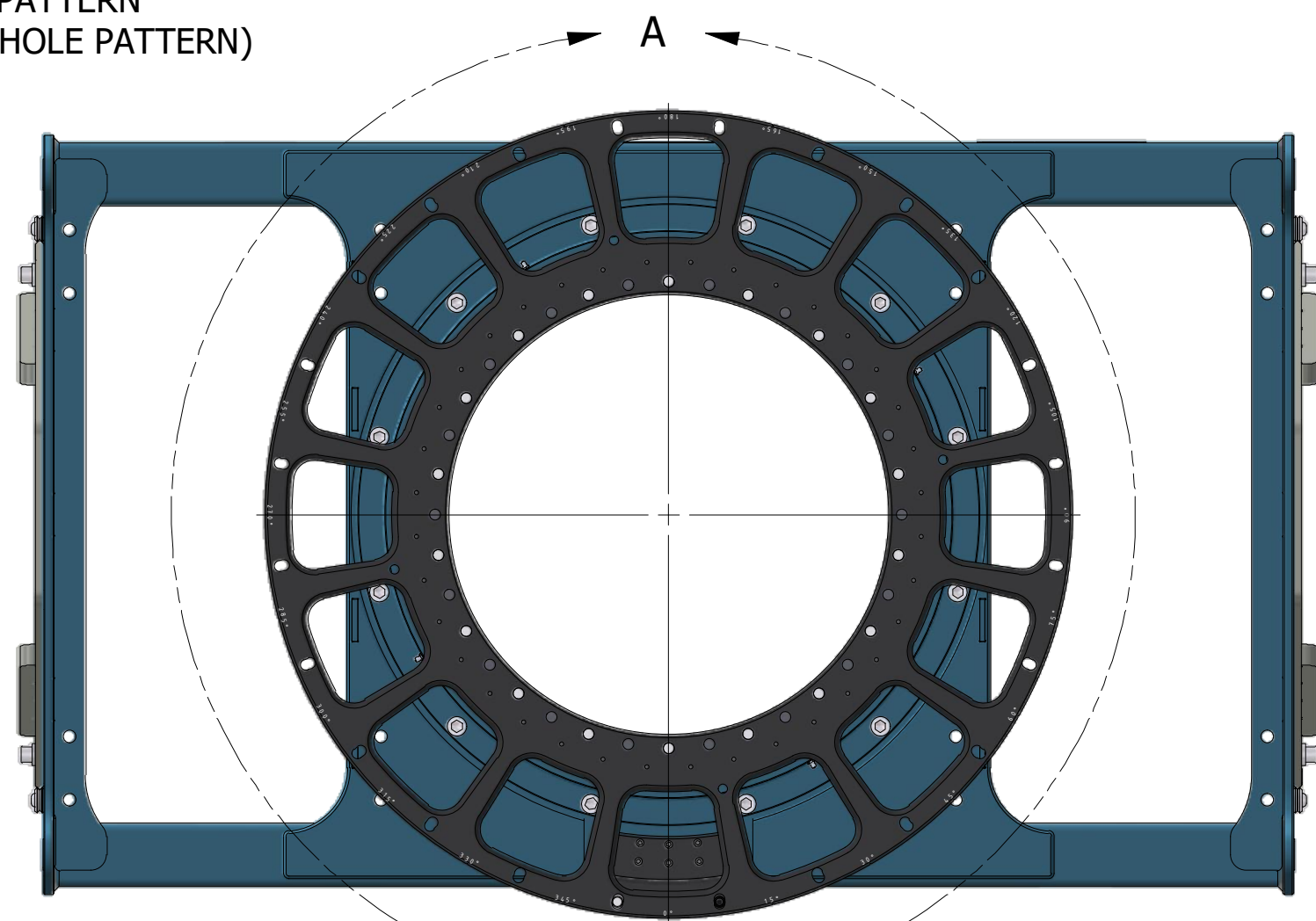
DETAIL A
SCALE 1 : 8
INTERFACE HOLE PATTERN
(24" ESPA GRANDE/MLB HOLE PATTERN)



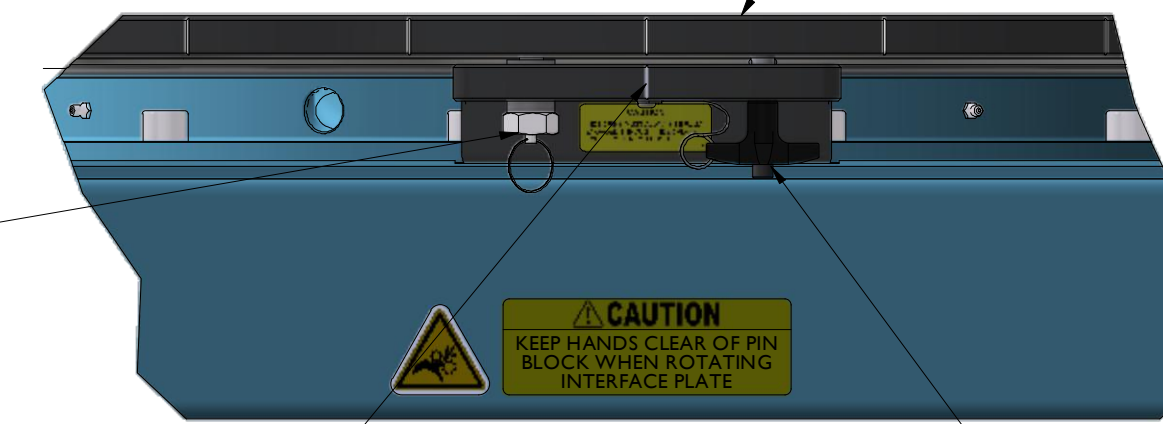
DETAIL D
SCALE 1 : 4
(TYPICAL BOTH SIDES)



INTERFACE MUST BE IN PAYLOAD VERTICAL ORIENTATION (INTERFACE SURFACE PARALLEL TO FLOOR AS SHOWN) BEFORE REMOVING ROTATION LOCK PINS. DO NOT REMOVE IN ANY OTHER ORIENTATION.



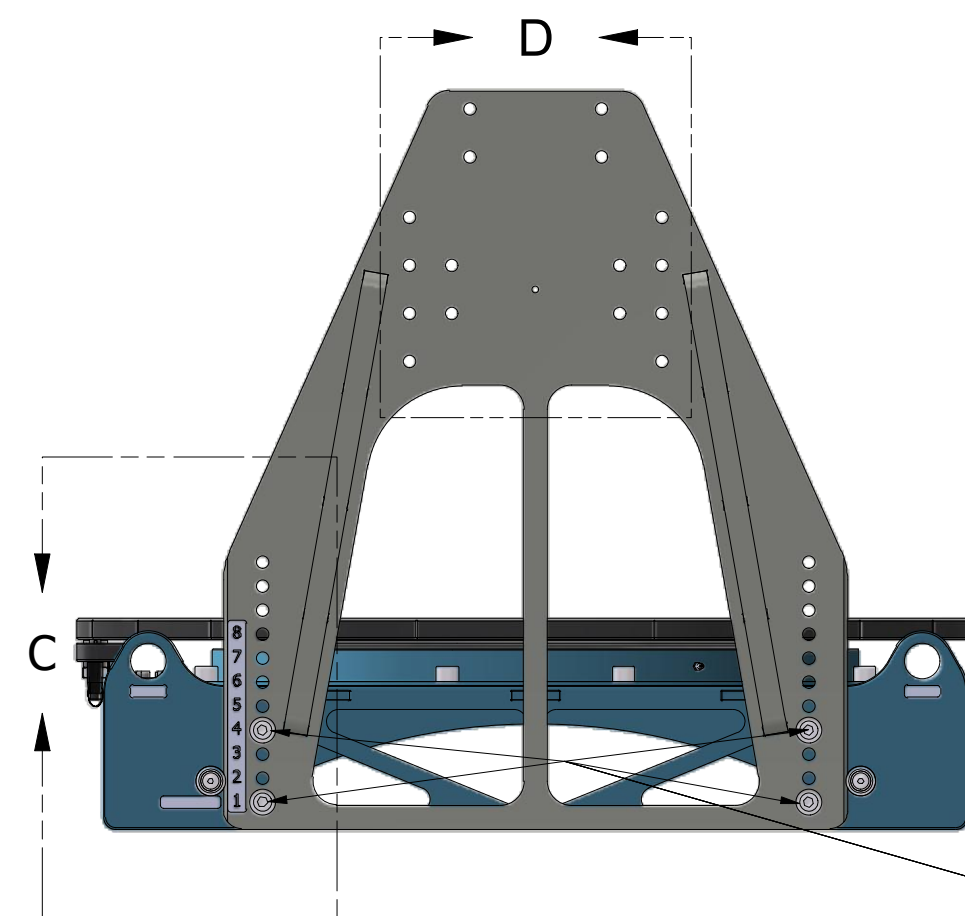
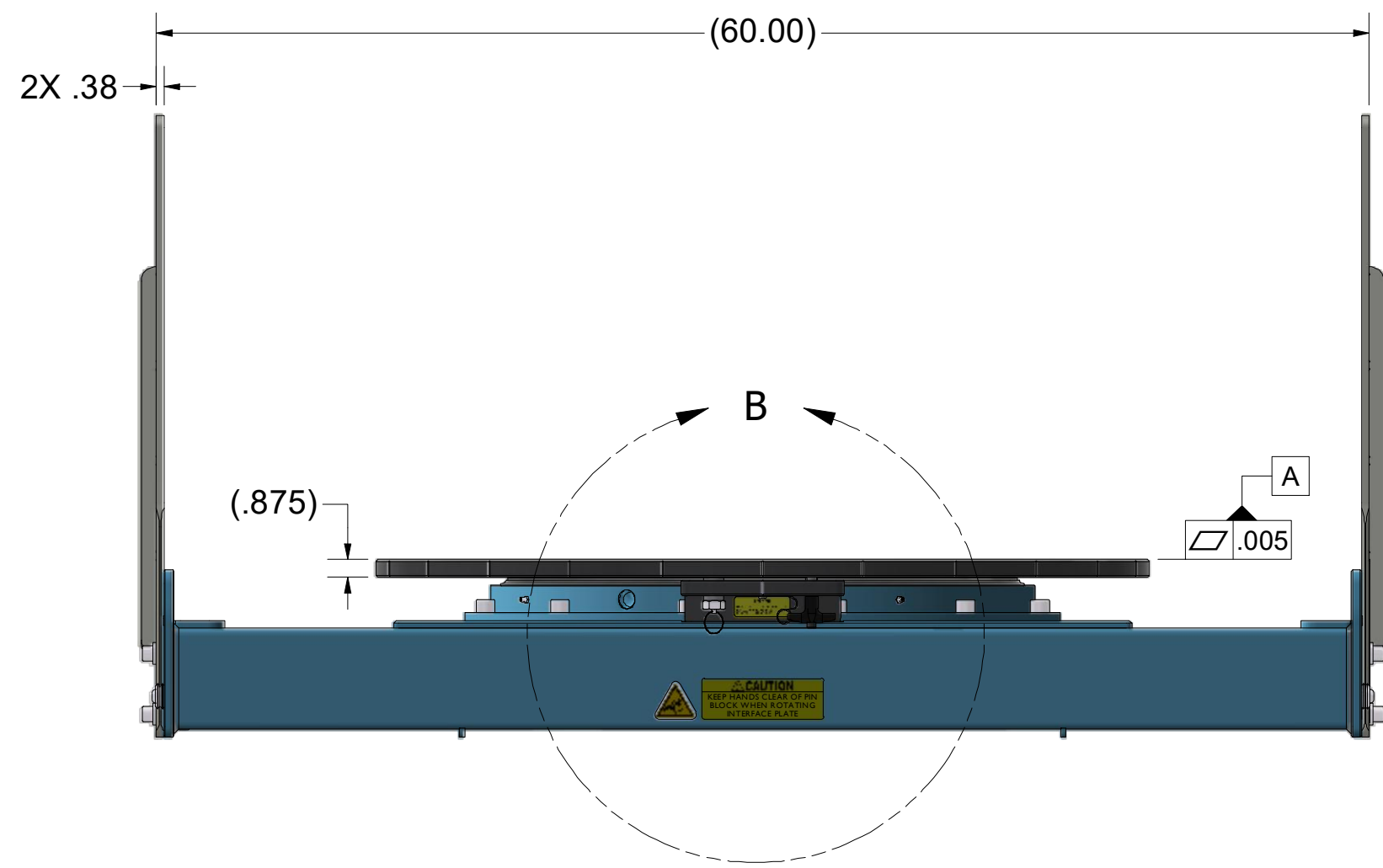
SECONDARY REDUNDANT SPRING LOADED PIN TO LOCK ROTATION IN 15° INCREMENTS. MUST BE HELD OPEN DURING ROTATION AND WILL AUTOMATICALLY SPRING INTO PLACE WHEN RING IS RELEASED.



POSITION INDICATOR MARK

DETAIL B
SCALE 1 : 4

BALL LOCK PIN TO LOCK ROTATION IN 15° INCREMENTS. **MUST BE ENGAGED IN A HOLE EXCEPT WHEN ROTATING.**



ROLLERS TO ASSIST IN THE ADJUSTMENT OF BOLT POSITION. HELP KEEP END PLATES IN LINE WITH THREADED BOLT HOLES.

BOLT POSITION INDICATOR LABEL.
BOLT POSITION SA1 SHOWN.

DETAIL C
SCALE 1 : 4

4X BOLTS PER SIDE TO BE REMOVED FOR BOLT POSITION ADJUSTMENT. CENTRAL CRADLE MUST BE SUPPORTED BY OVERHEAD CRANE PRIOR TO BOLTS REMOVAL.

4. "B" DISTANCE OF B060 SHOWN ON THIS SHEET AND FOR LOAD CURVES ON SHEETS 3-6. "B" DISTANCE IS DEPENDANT ON CRADLE LENGTH CHOSEN. SEE LOAD CURVES ON FLOTRON WEB SITE FOR OTHER CRADLE LENGTHS.
3. RECOMMENDED TORQUE FOR 36X 1/4-28 UNF (GRADE 8 OR STRONGER) INTERFACE FASTENERS: 70-80 IN-LBS (LUBRICATED). MINIMUM .50" THREAD ENGAGEMENT REQUIRED.
2. LOAD RATING: 1,000 LBS CANTILEVERED 24" FROM INTERFACE. MAX ECCENTRICITY 4" FROM SECONDARY AXIS OF ROTATION. SEE LOAD CURVES FOR LOAD RATINGS AT VARIOUS BOLT POSITIONS (STANDARD B060 LOAD CURVES SHOWN ON THIS DRAWING. FOR LOAD CURVES OF OTHER "B" DISTANCES, SEE FLOTRON WEBSITE) LOAD RATING SHOWN IS FOR CRADLE ONLY AND MAY BE LIMITED BY BASE FIXTURE USED. MAKE SURE THAT PAYLOAD WEIGHT PLUS CRADLE WEIGHT DOES NOT EXCEED BASE FIXTURE MAX CAPACITY.
1. FINISHES:
- a) "STANDARD" FINISH: CLASS 10K (ISO 7 CLEANROOM COMPATIBLE FINISHES) - CRADLE POWDER COATED TEXTURED FLOTRON BLUE COLOR; STAINLESS STEEL HARDWARE; ALUMINUM PARTS CHEM FILM OR HARD ANODIZED; SEE SHEET 7 FOR STANDARD LUBRICANTS
 - b) "C" FINISH: CLASS 1K (ISO 6 CLEANROOM COMPATIBLE FINISHES) - SAME AS STANDARD FINISH WITH CRADLE POWDER COATED SMOOTH SKY WHITE. SEE SHEET 7 FOR CLEAN ROOM LUBRICANTS.

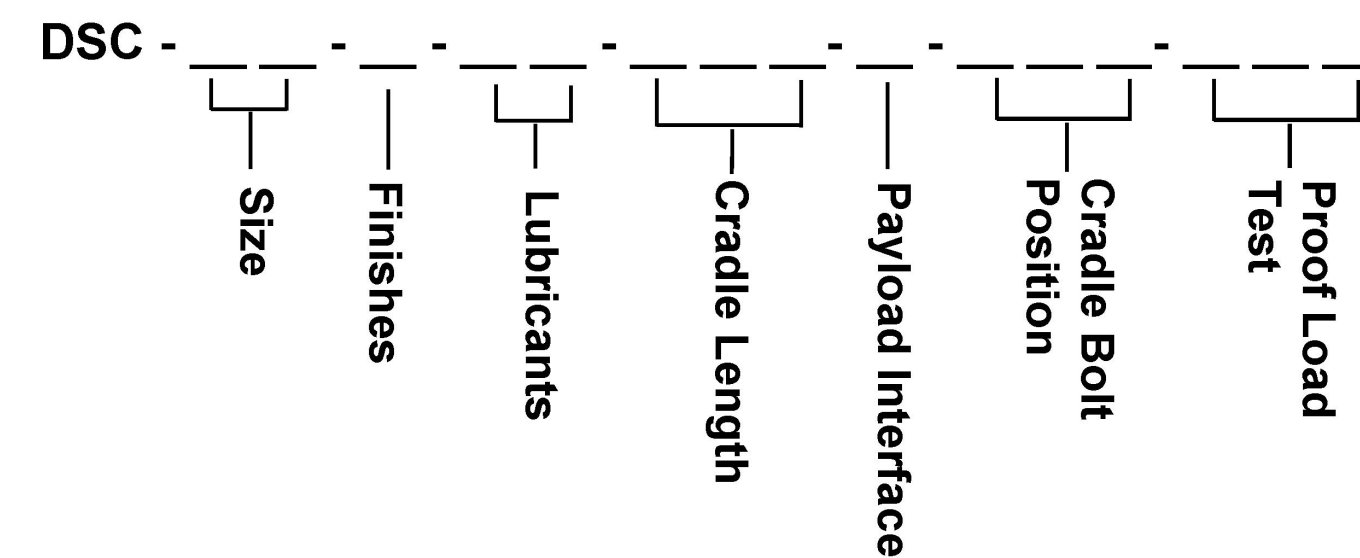
NOTES:

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SCALE	SIZE	DRAWING NO.			
1 : 8	D	8053-440-PROP			
WT: 352.3 lbmass		Cad software: Inventor		SHEET 1 OF 8	



Dual Support Cradle

Creating a model number



Size

- P1 – Capacity: 1,000 lbs @ 24” – Manual rotation, pinned.¹
- P2 – Capacity: 2,500 lbs @ 30” – Manual rotation, pinned.²
- G2 – Capacity: 2,300 lbs @ 30” – Gearbox driven rotation.³

Finishes

- (blank)-Standard finishes.⁴
- C - - - - Clean room finishes – Same as standard with gloss white powder coated frame. Slewing ring raceway and gears lubricated with Krytox GPL 217.

Lubricants

- (blank) – Standard lubricants.⁵
- L1 - - - - Krytox GPL 207 on fasteners. Krytox GPL 217 on bearing raceway, and gear teeth (if applicable).
- L2 - - - - Braycote 631RP on fasteners, bearing raceway, and gear teeth (if applicable).

Cradle Lengths

- B050 - B140 - - - Available for P1 size in 10” increments.
- B080 – B220 - - - Available for P2 & G2 size in 20” increments.

Proof Load Test

- (blank) - No proof load test.
- PLT - - - Standard proof load test. Static 2X vertical load, 100% torque. (includes deliverable report)

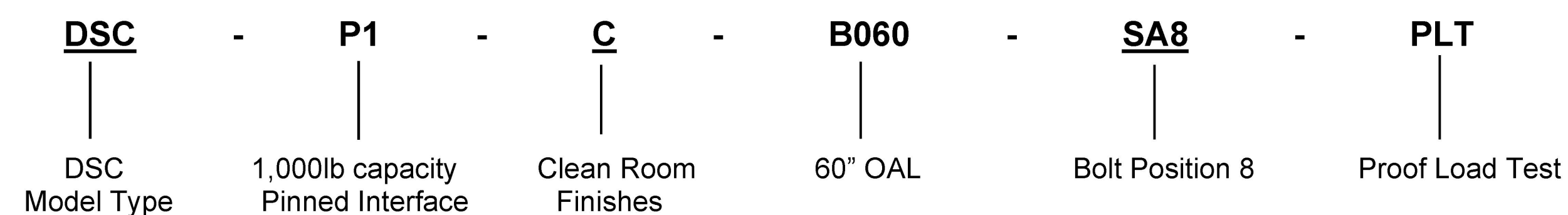
Cradle Bolt Position

- SA1 - - - Bolt Position 1
 - SA2 - - - Bolt Position 2
 - SA3 - - - Bolt Position 3
 - SA4 - - - Bolt Position 4
 - SA5 - - - Bolt Position 5
 - SA6 - - - Bolt Position 6
 - SA7 - - - Bolt Position 7
 - SA8 - - - Bolt Position 8
- See proposal drawing load curves to determine correct bolt position. Bolt positions can be changed in the field, but the bolt position selected will be the bolt position fixture is shipped with.*

Payload Interface

- (blank) – ESPA Grande/MLB interface. 36X ¼-28 UNF threaded holes on a Ø24” bolt circle.
- R24 - - - ESPA Grande/MLB Adapter ring included for 36X Ø.281 through holes on a Ø24” bolt circle.
- RUN - - - Universal ESPA Grande/MLB Adapter ring that includes R24 interface adapter bolt pattern as well as Ø.281 through holes for Ø15” & Ø18.25” bolt circle MLB interfaces. See proposal drawing for details.

Example:



¹ P1 Size designed to be used with Flotron models XD739, XD747, and SFP-645. Cradle load capacity will be reduced depending on base fixture capacity and cradle length.

² P2 Size designed to be used with Flotron models SFP-759, SFP-853, and SFP-862. When used with SFP-759, load rating is reduced to 1,800 lbs cantilevered 33” max. (Cradle capacity limited by base fixture load rating. Subtract weight of cradle from base fixture max load rating to get capacity of cradle.)

³ G2 Size designed to be used with Flotron models SFP-759, SFP-853, and SFP-862. When used with SFP-759, load rating is reduced to 1,800 lbs cantilevered 33” max. (Cradle capacity limited by base fixture load rating. Subtract weight of cradle from base fixture max load rating to get capacity of cradle.)

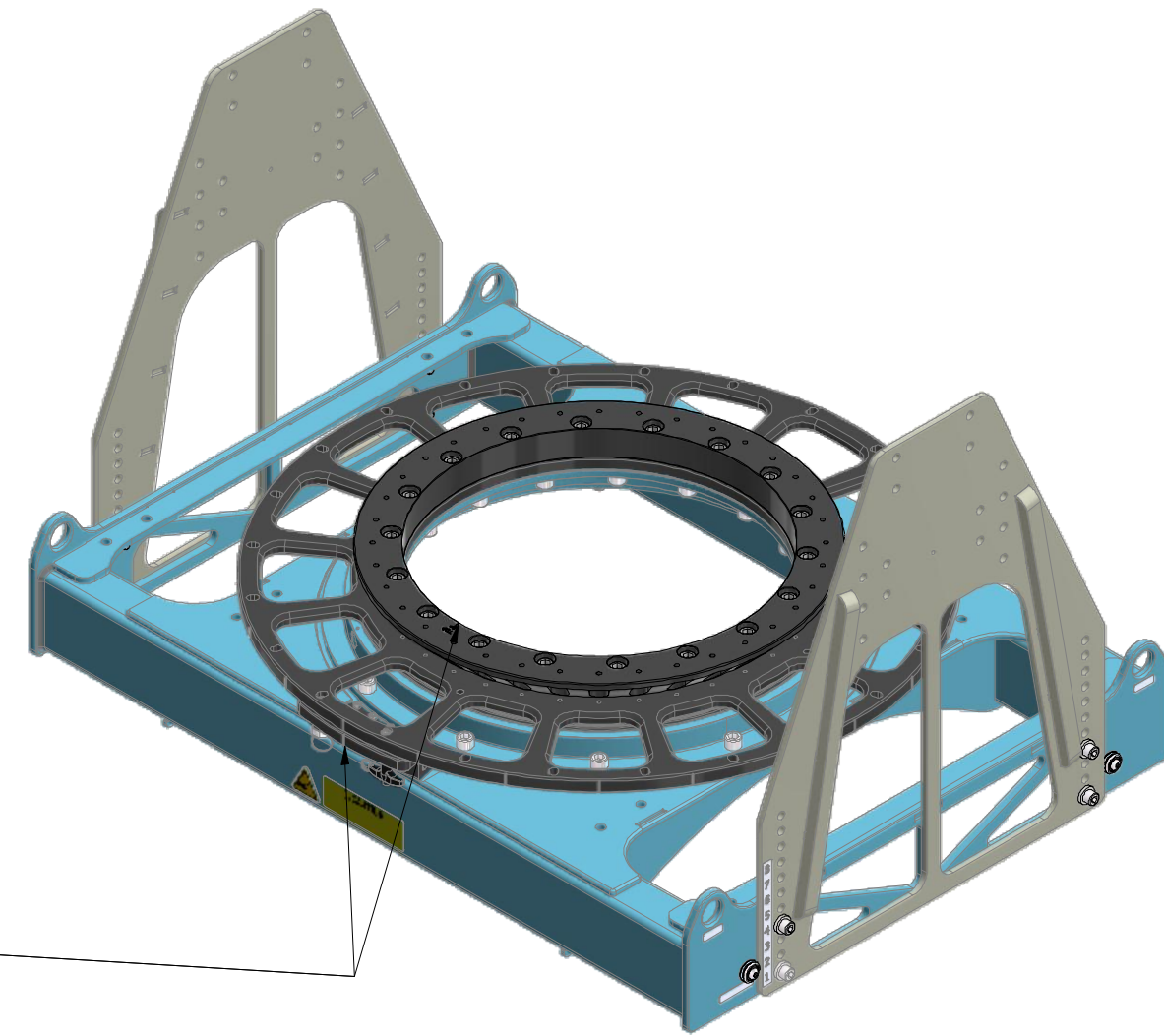
⁴ Cradle powder coated textured Flotron blue color; Stainless steel hardware; Aluminum parts chem film or hard anodize.

⁵ Mobiltac 375NC (or equivalent) applied to all gear teeth; slewing ring inner raceway lubricated with Mobilux EP2. Fasteners lubricated with Loctite 242 or Krytox GPL 207.

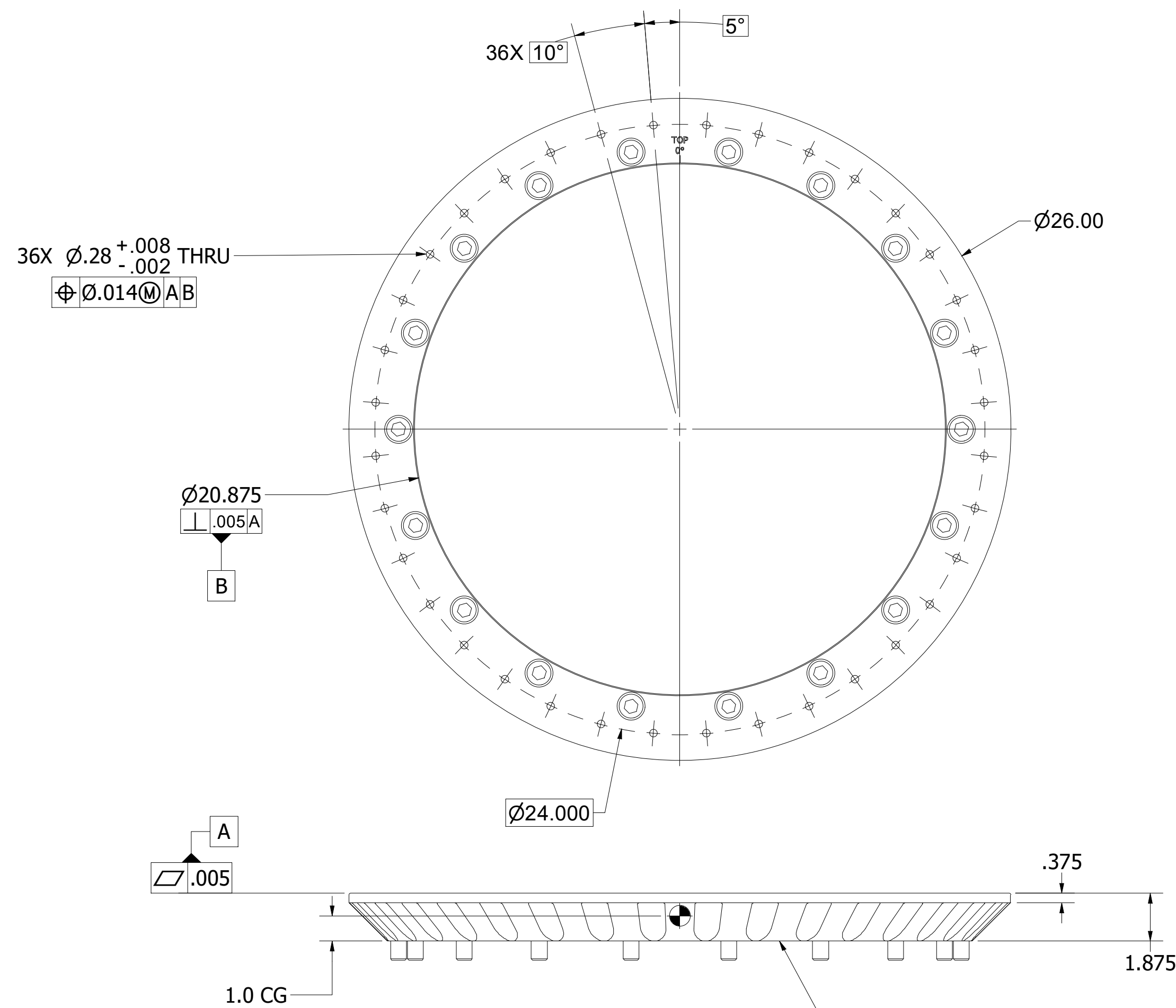
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SECONDARY AXIS PAYLOAD ADAPTER RING (R24)

ADAPTER RING TO CONVERT SA INTERFACE THREADED HOLES TO 36X Ø.281 THROUGH HOLES ON A Ø24.000" BOLT CIRCLE (ESPA GRANDE/MLB)
 WHEN DETERMINING PAYLOAD AND CRADLE CG BALANCE, ADAPTER RING MASS & CG NEEDS TO BE ADDED TO PAYLOAD CG CALCULATIONS.
 HARD ANODIZE FINISH WITH ONE MASKED HOLE FACE FOR ESD.



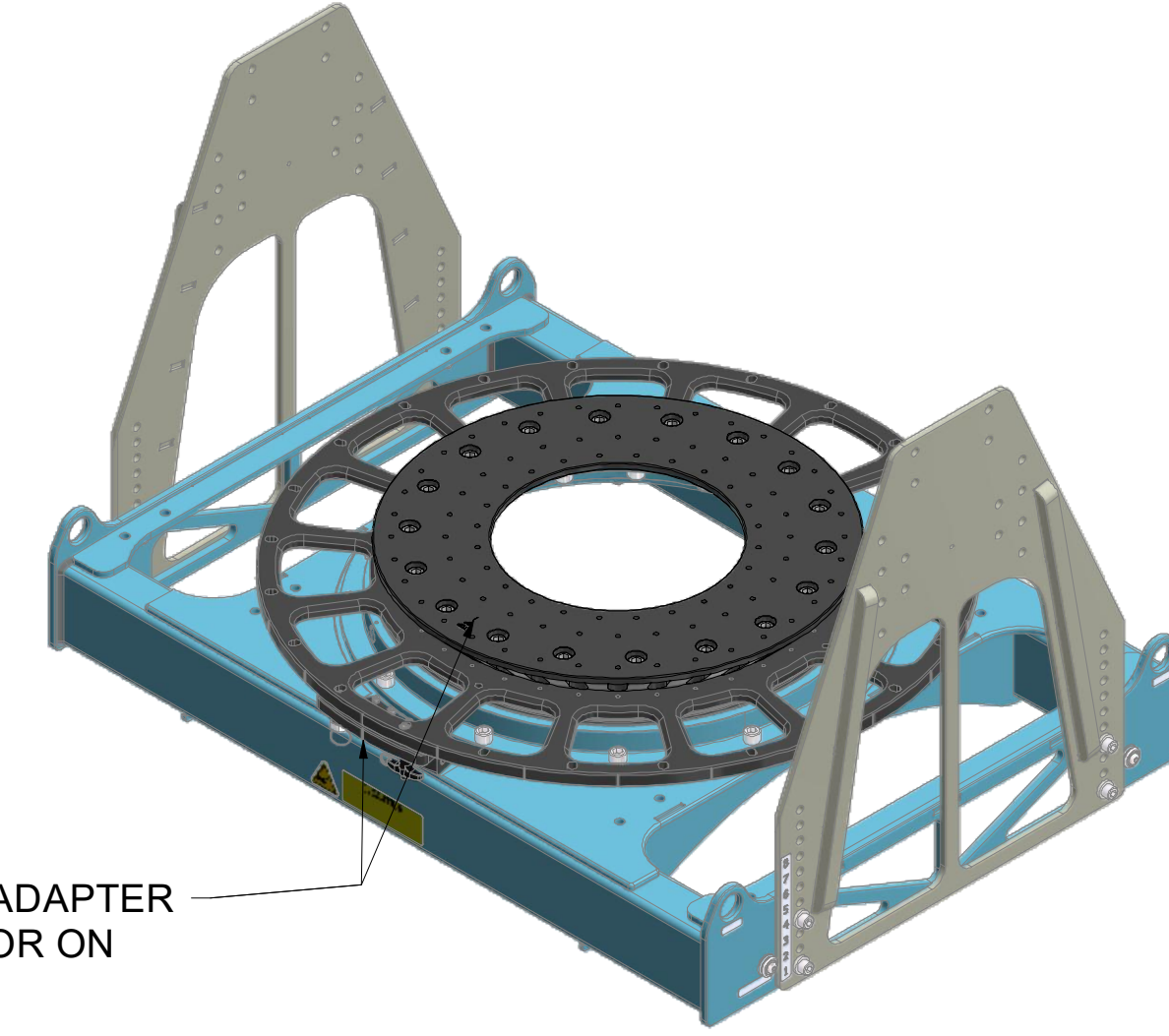
TOP 0° MARKER ON INTERFACE ADAPTER SHOULD ALIGN WITH 0° INDICATOR ON BOTTOM INTERFACE



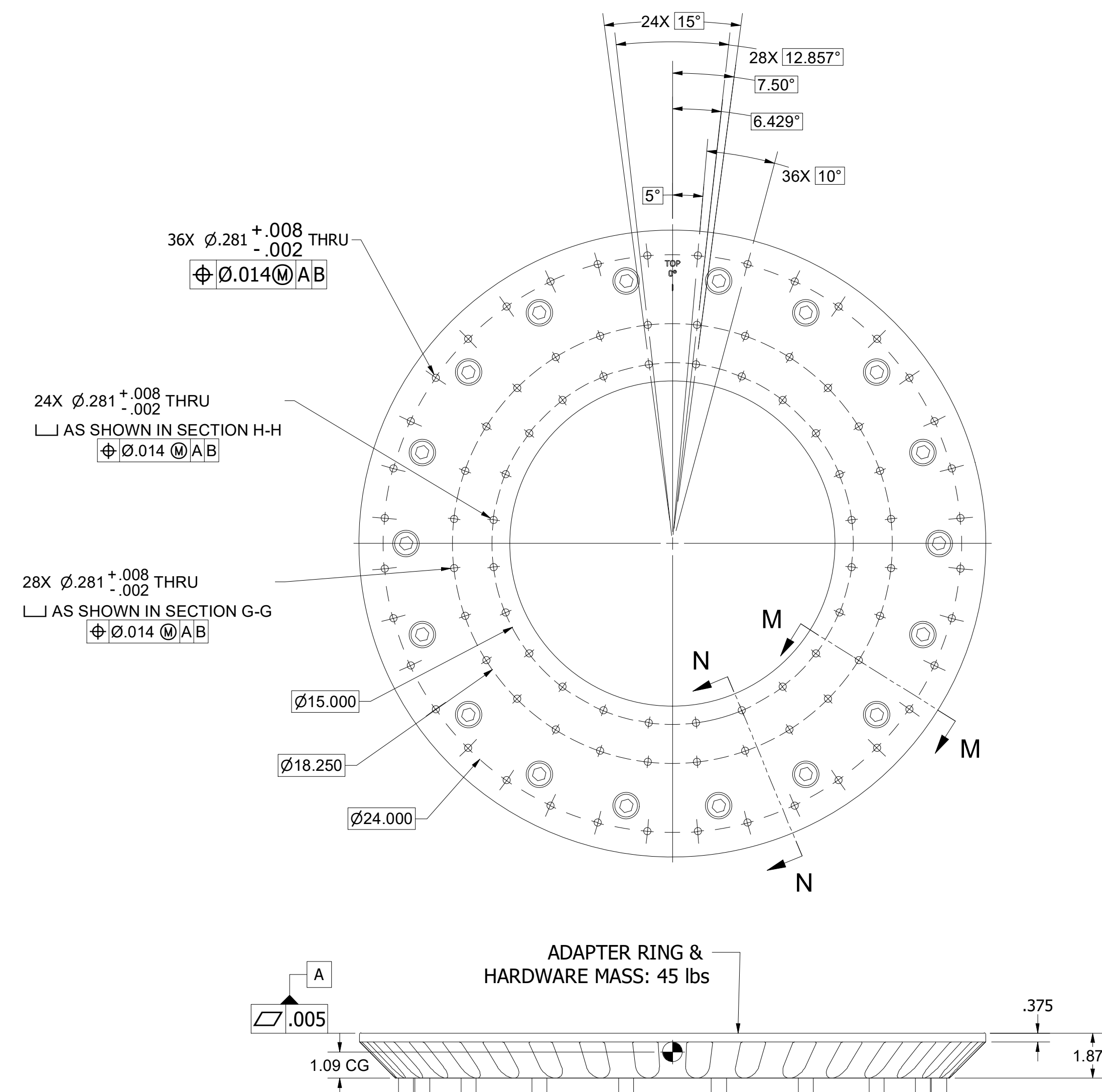
ADAPTER RING & HARDWARE MASS: 25 lbs

SECONDARY AXIS PAYLOAD ADAPTER RING (RUN)

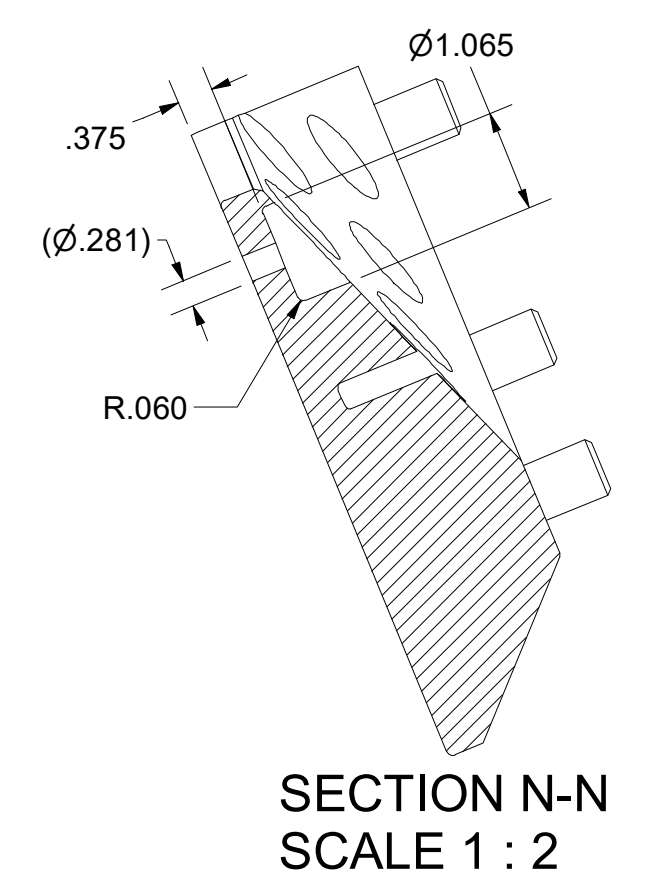
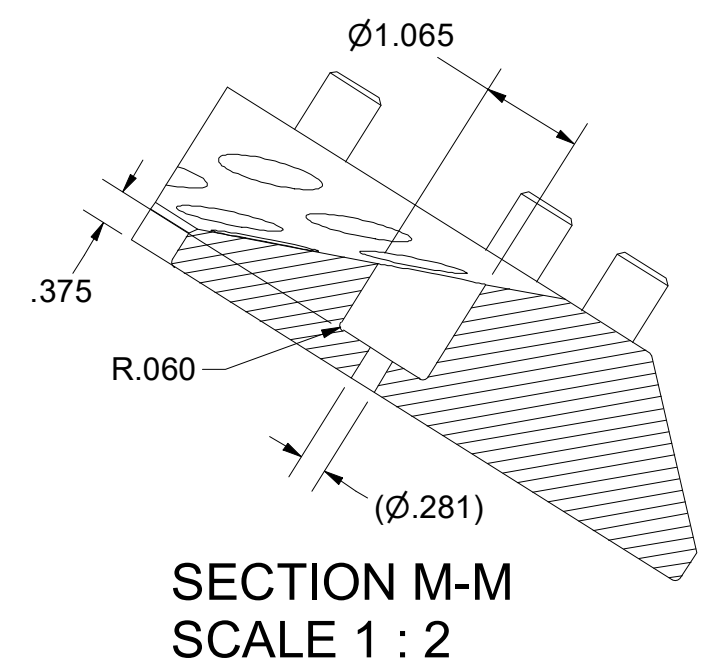
UNIVERSAL ADAPTER RING ASSEMBLY TO CONVERT SA INTERFACE TO ALL R15, R18, AND R24 HOLE PATTERNS.
 WHEN DETERMINING PAYLOAD AND CRADLE CG BALANCE, ADAPTER RING MASS & CG NEEDS TO BE ADDED TO PAYLOAD CG CALCULATIONS.
 HARD ANODIZE FINISH WITH ONE MASKED HOLE FACE FOR ESD.



TOP 0° MARKER ON INTERFACE ADAPTER SHOULD ALIGN WITH 0° INDICATOR ON BOTTOM INTERFACE

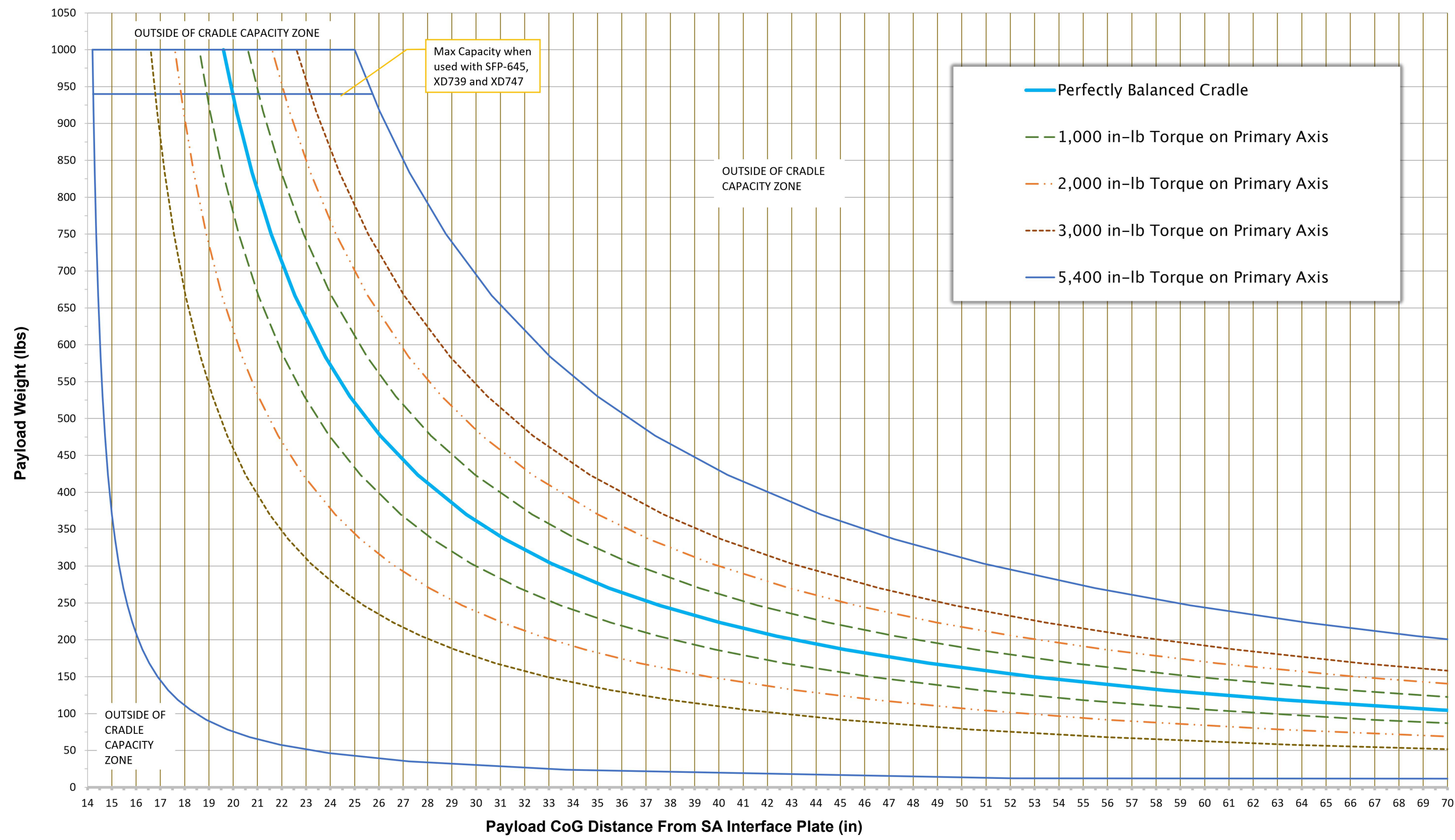


ADAPTER RING & HARDWARE MASS: 45 lbs

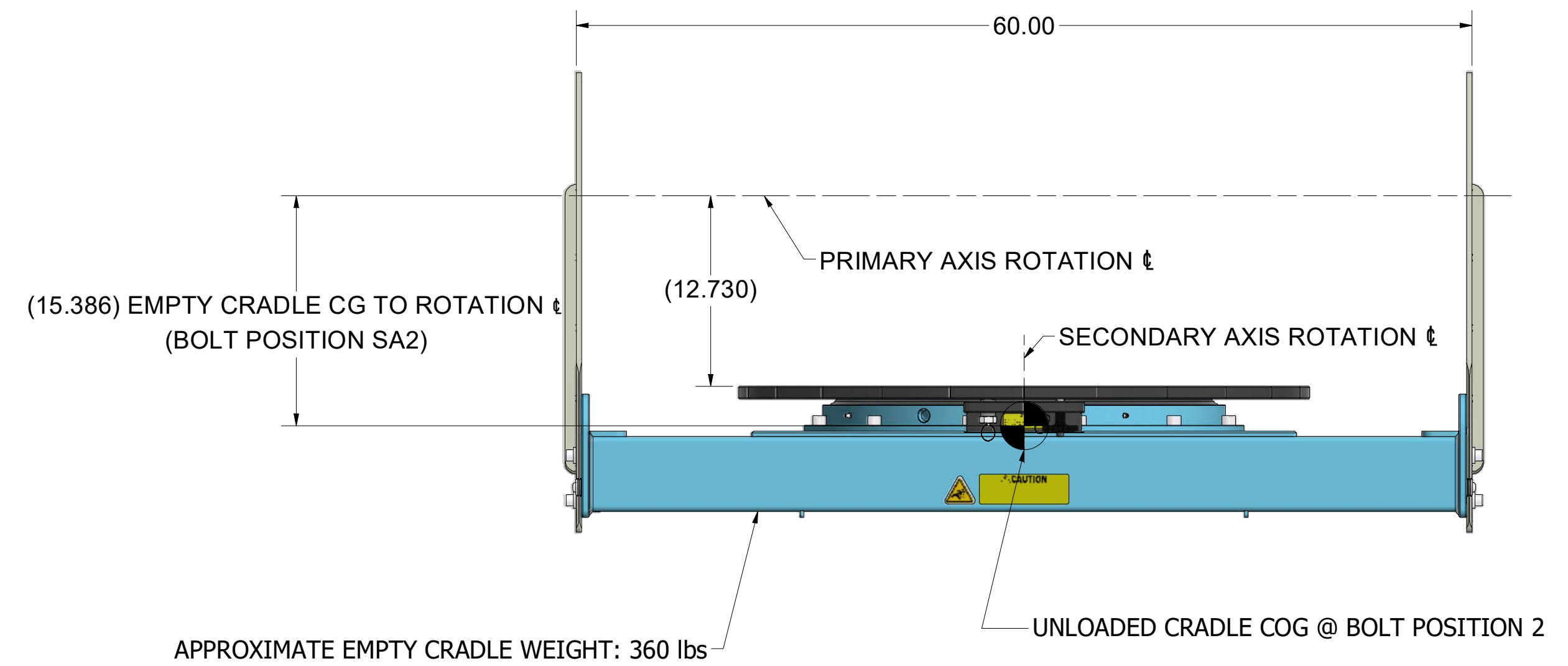
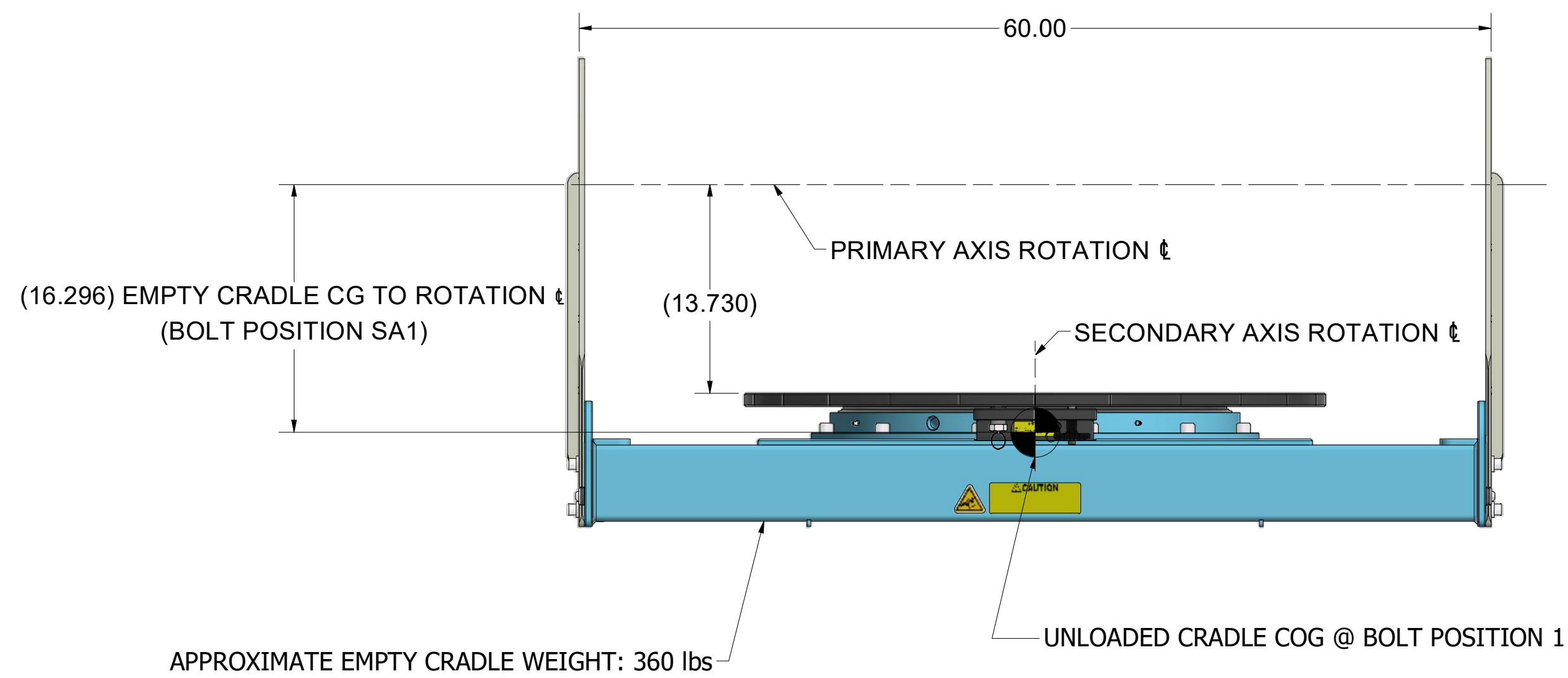
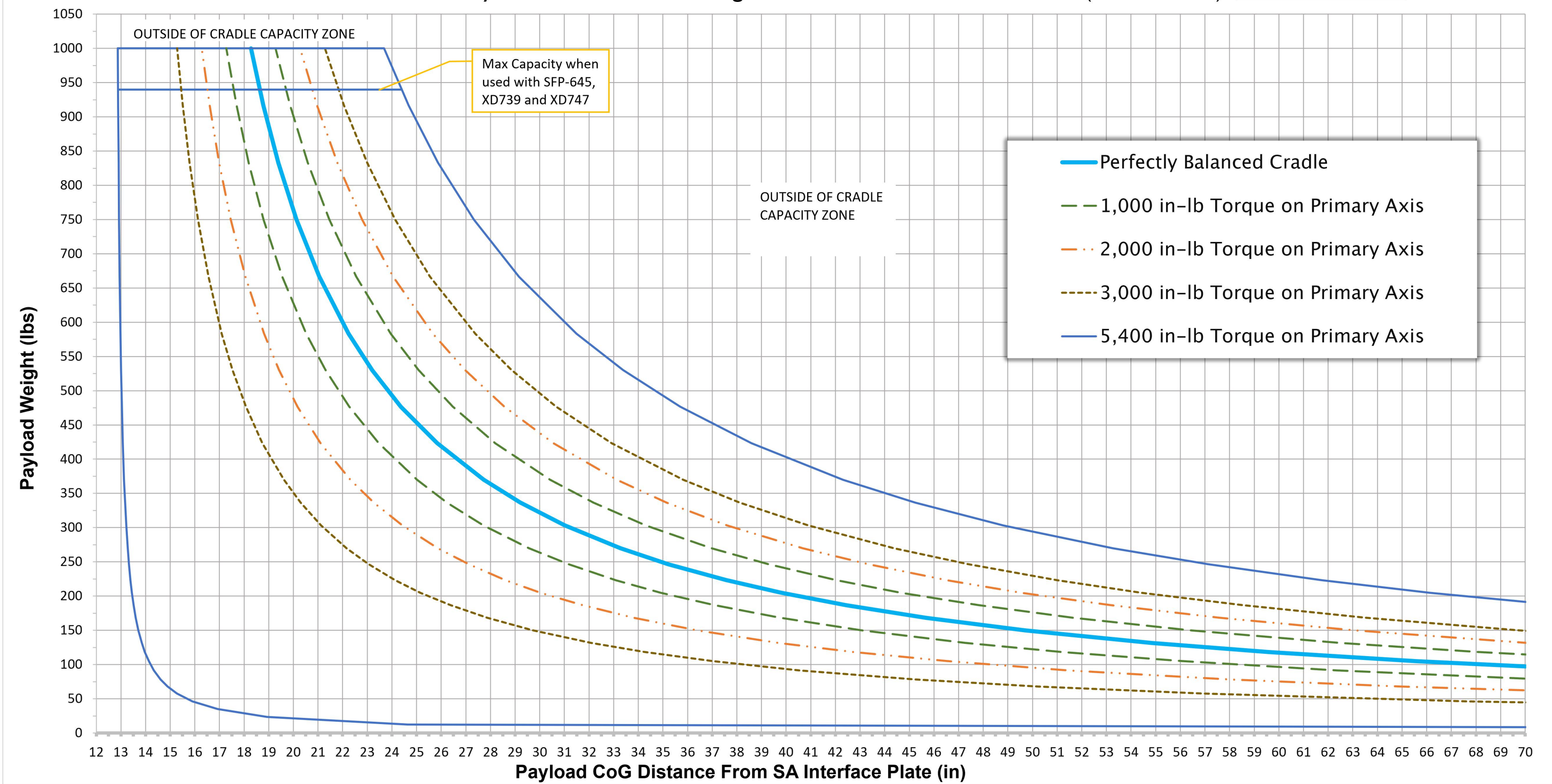


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DSC-P1 Secondary Axis of Rotation Loading For B060 Pinned Cradle Interface (No Gearbox) **Bolt Position 1**

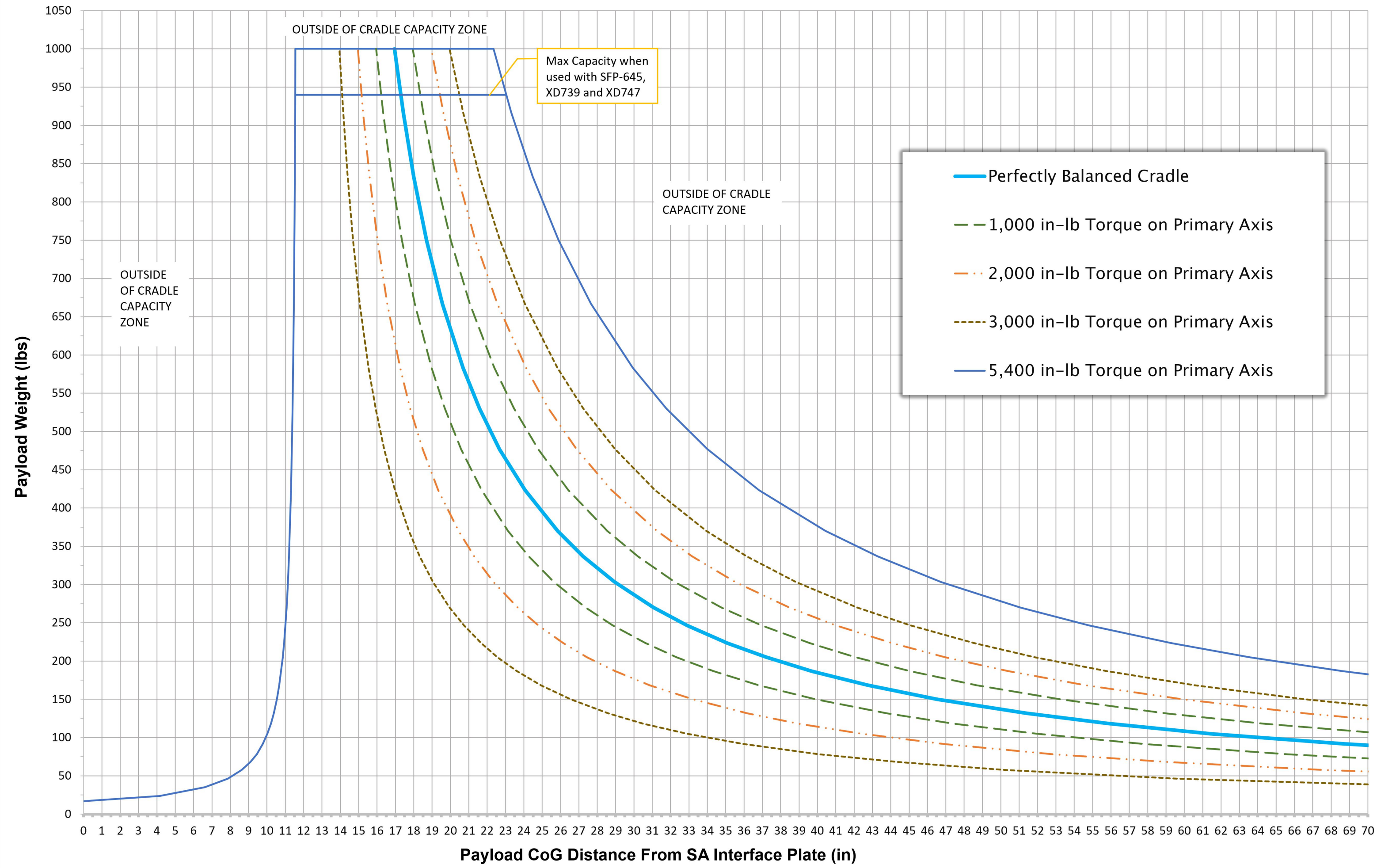


DSC-P1 Secondary Axis of Rotation Loading For B060 Pinned Cradle Interface (No Gearbox) **Bolt Position 2**

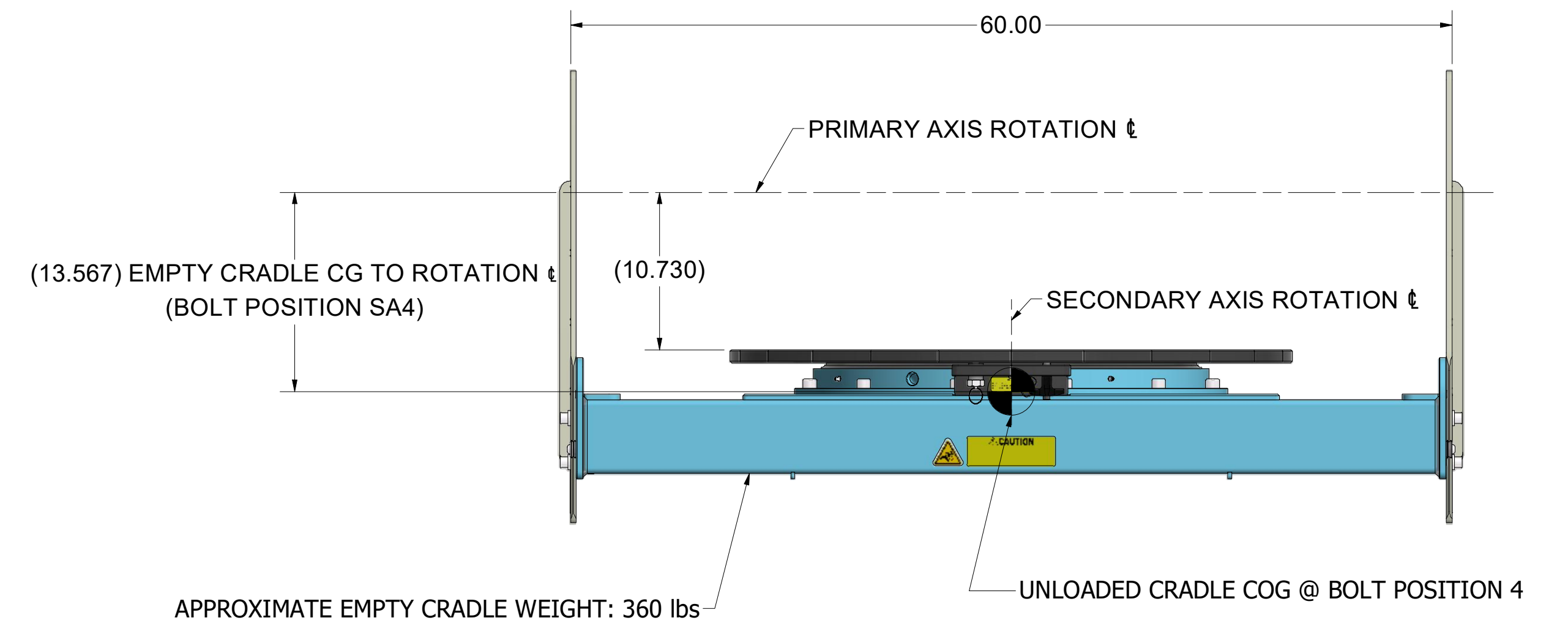
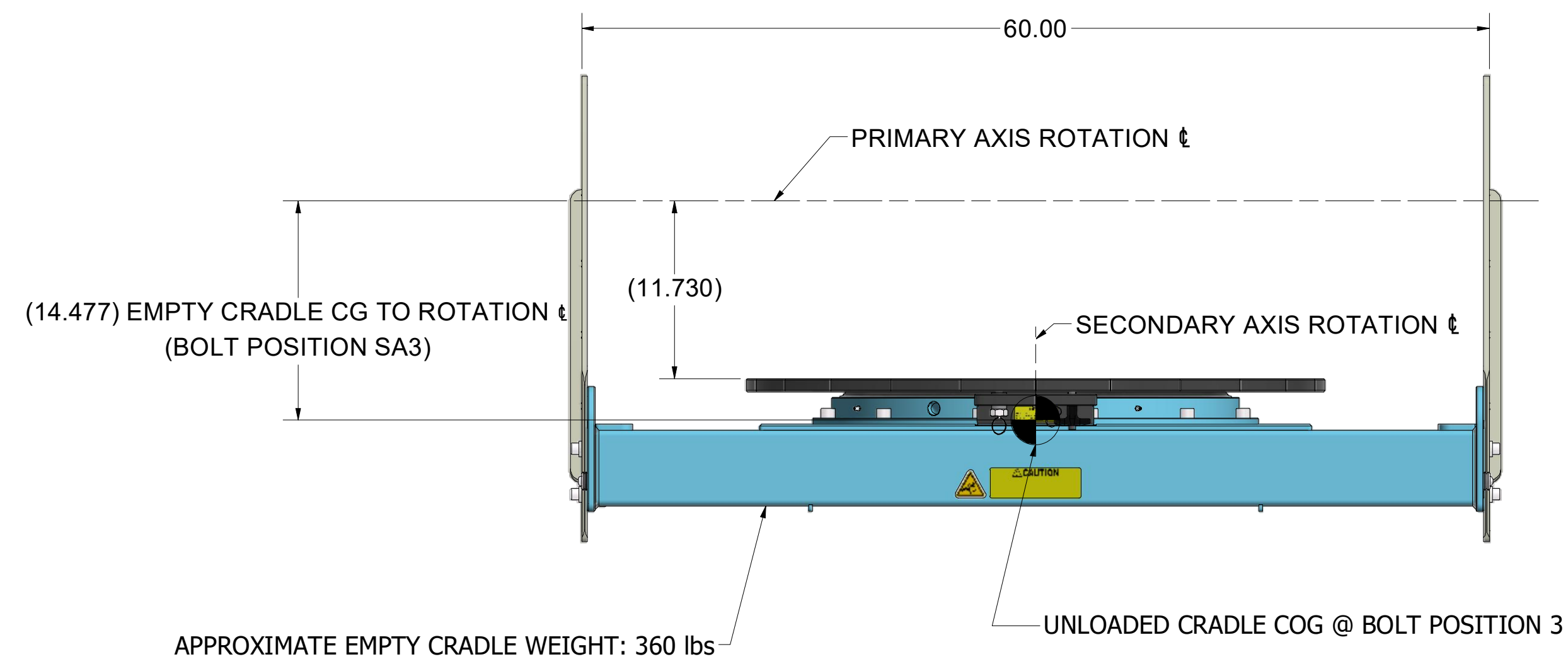
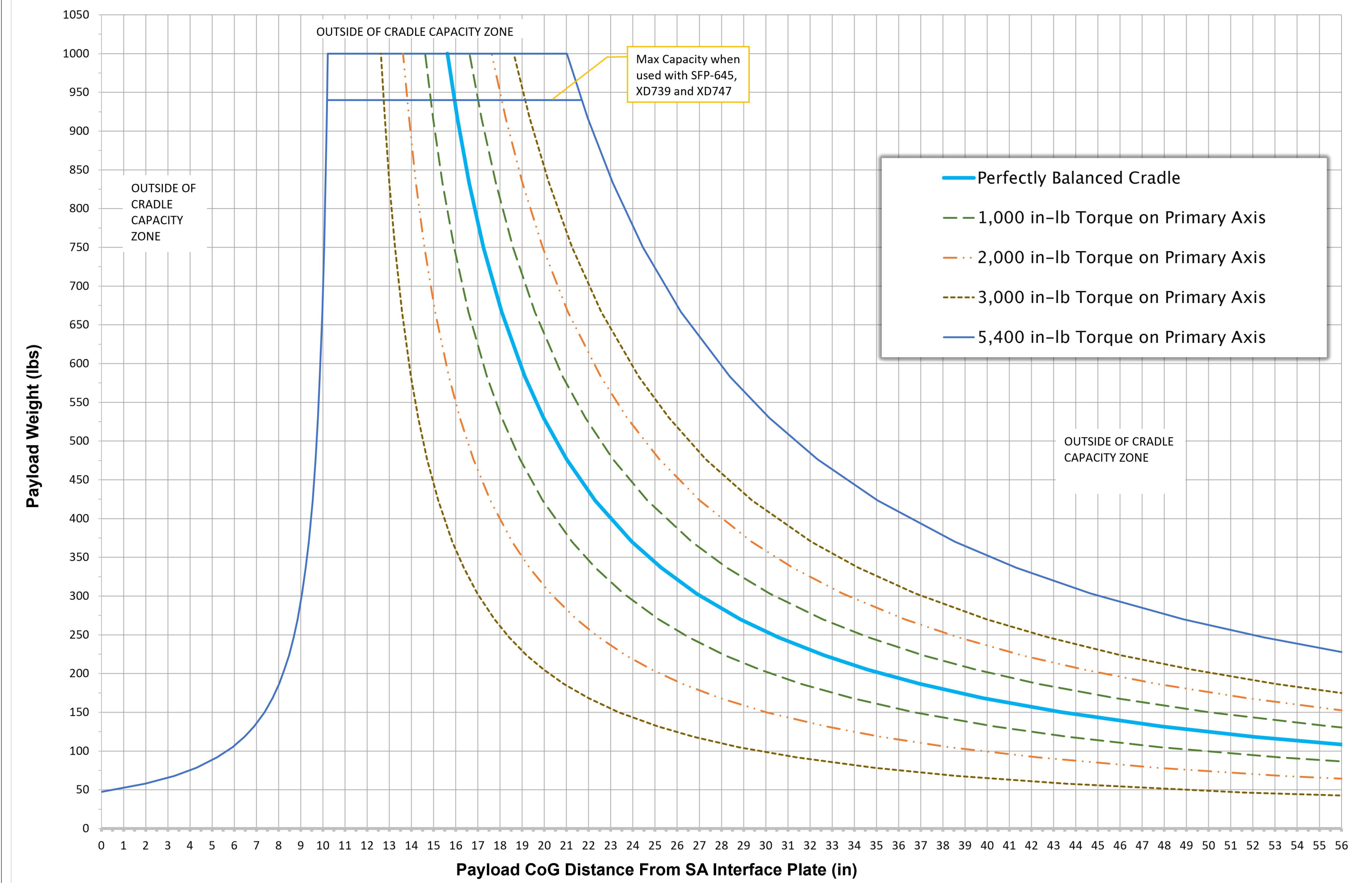


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DSC-P1 Secondary Axis of Rotation Loading For B060 Pinned Cradle (No Gearbox) **Bolt Position 3**

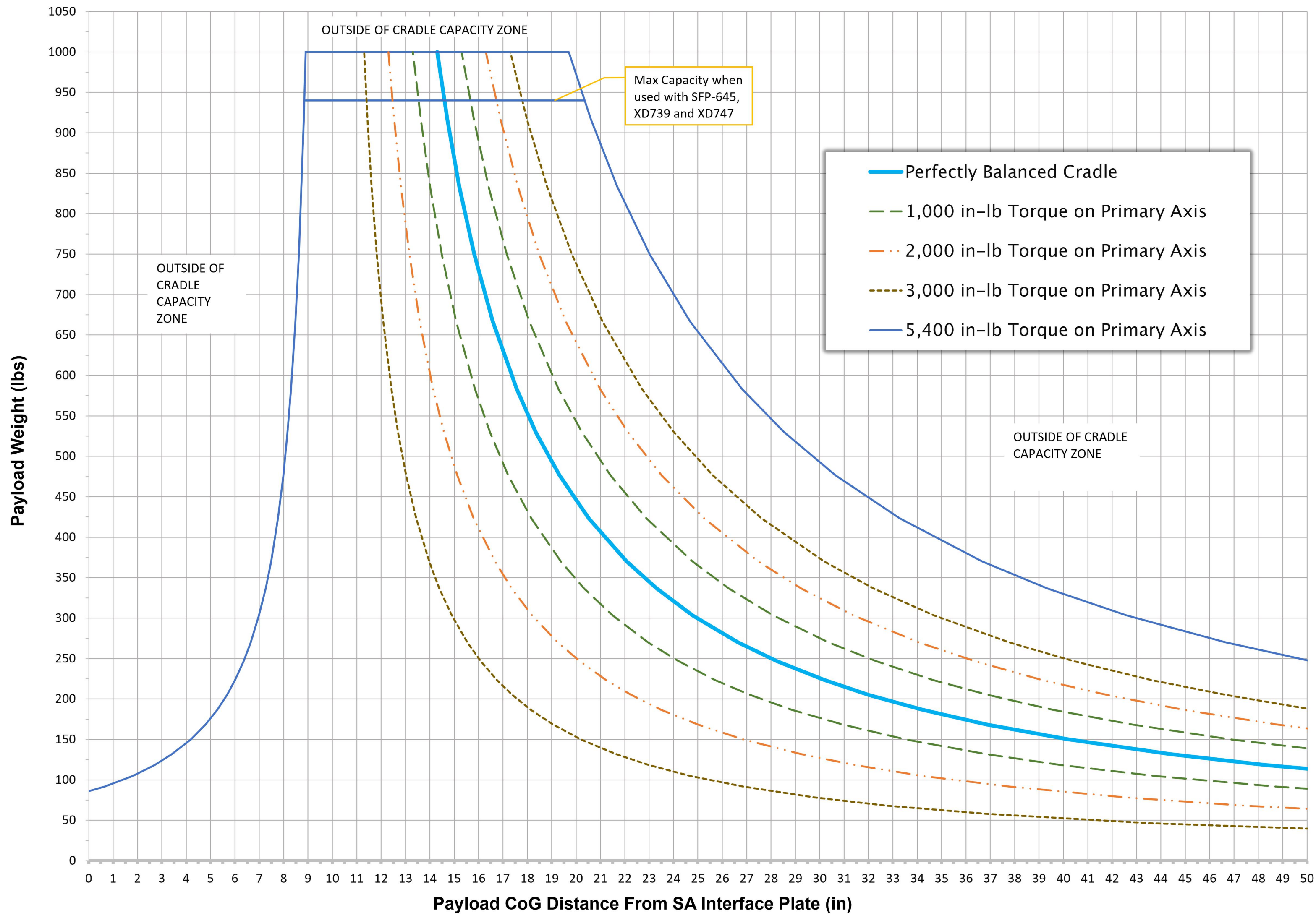


DSC-P1 Secondary Axis of Rotation Loading For B060 Pinned Cradle Interface (No Gearbox) **Bolt Position 4**

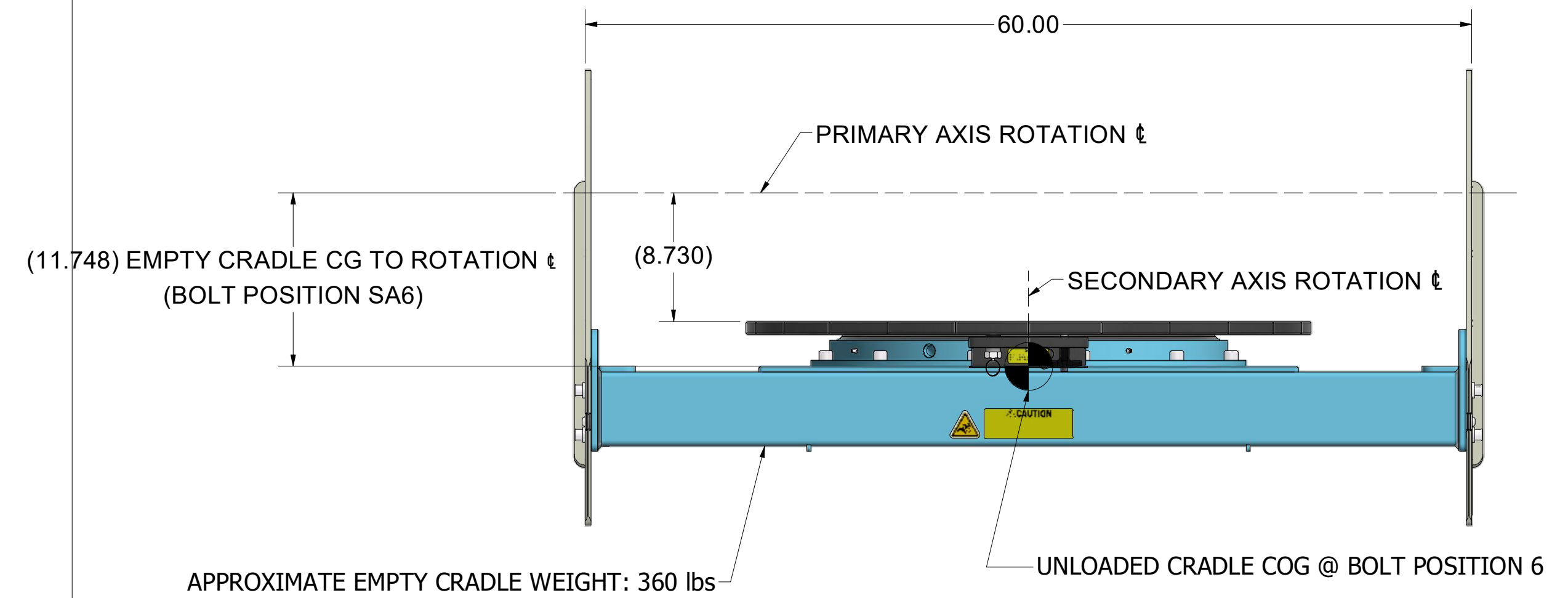
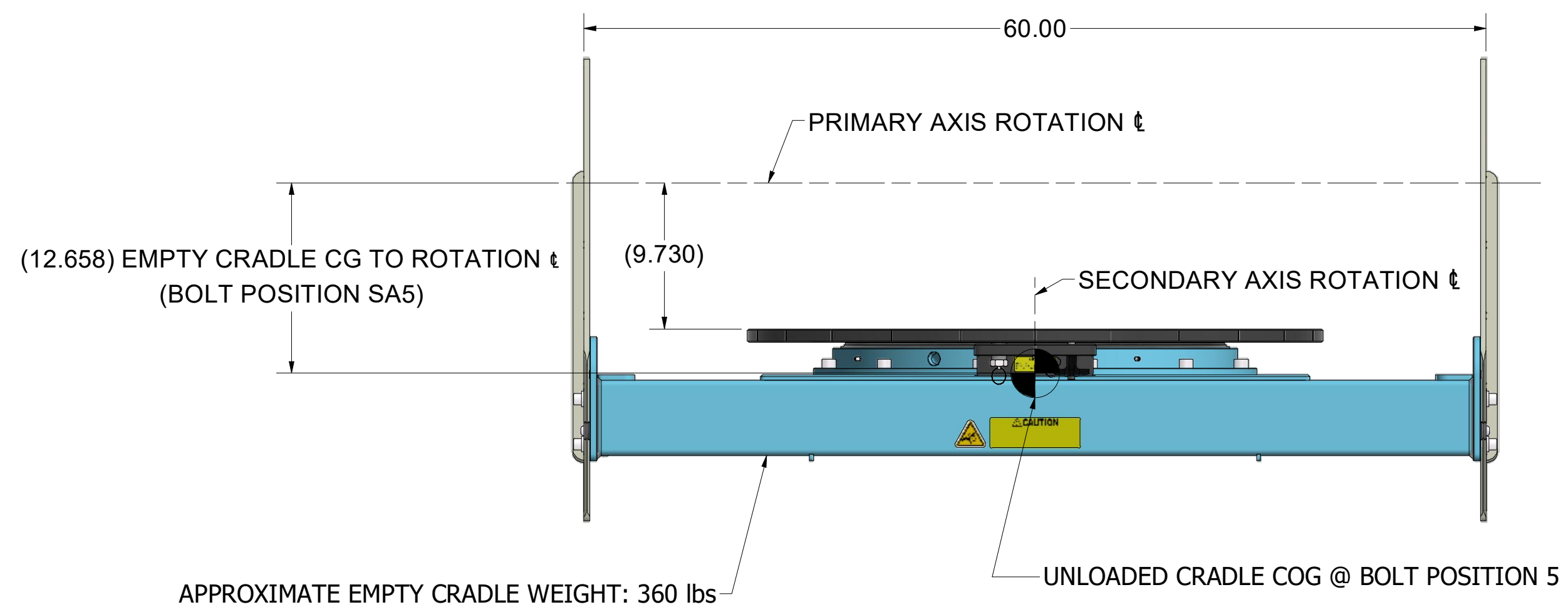
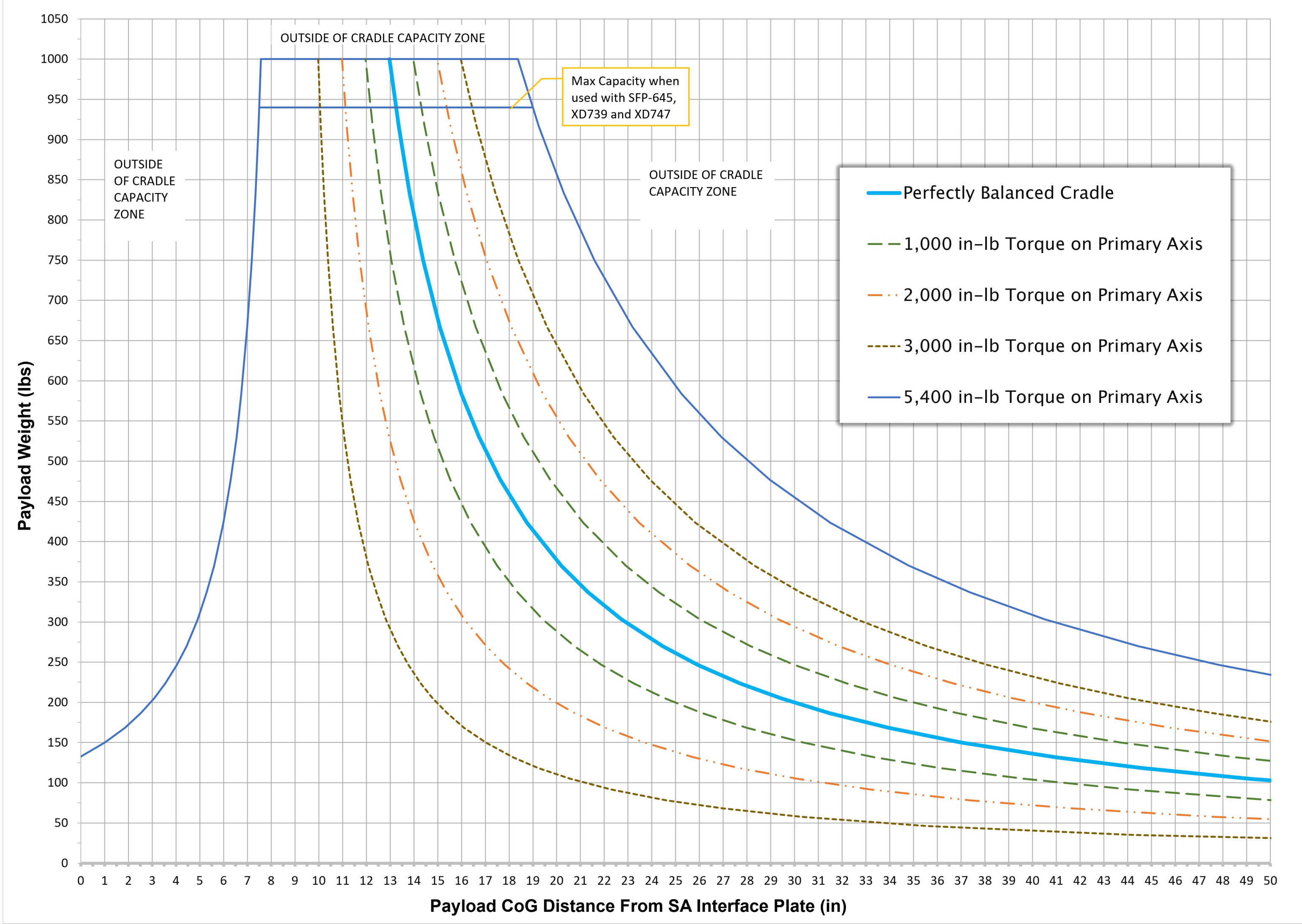


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DSC-P1 Secondary Axis of Rotation Loading For B060 Pinned Cradle Interface (No Gearbox) **Bolt Position 5**

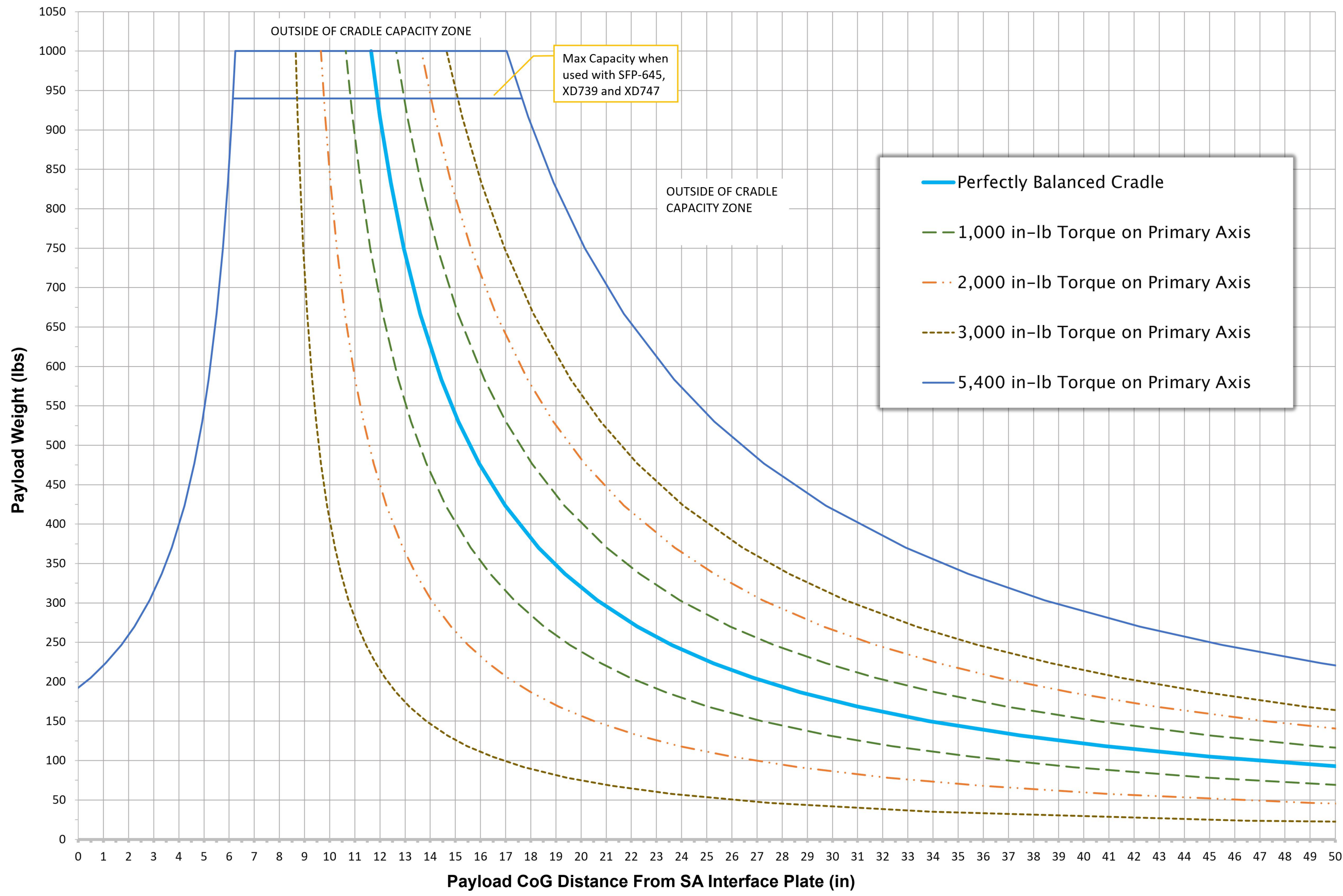


DSC-P1 Secondary Axis of Rotation Loading For B060 Pinned Cradle Interface (No Gearbox) **Bolt Position 6**

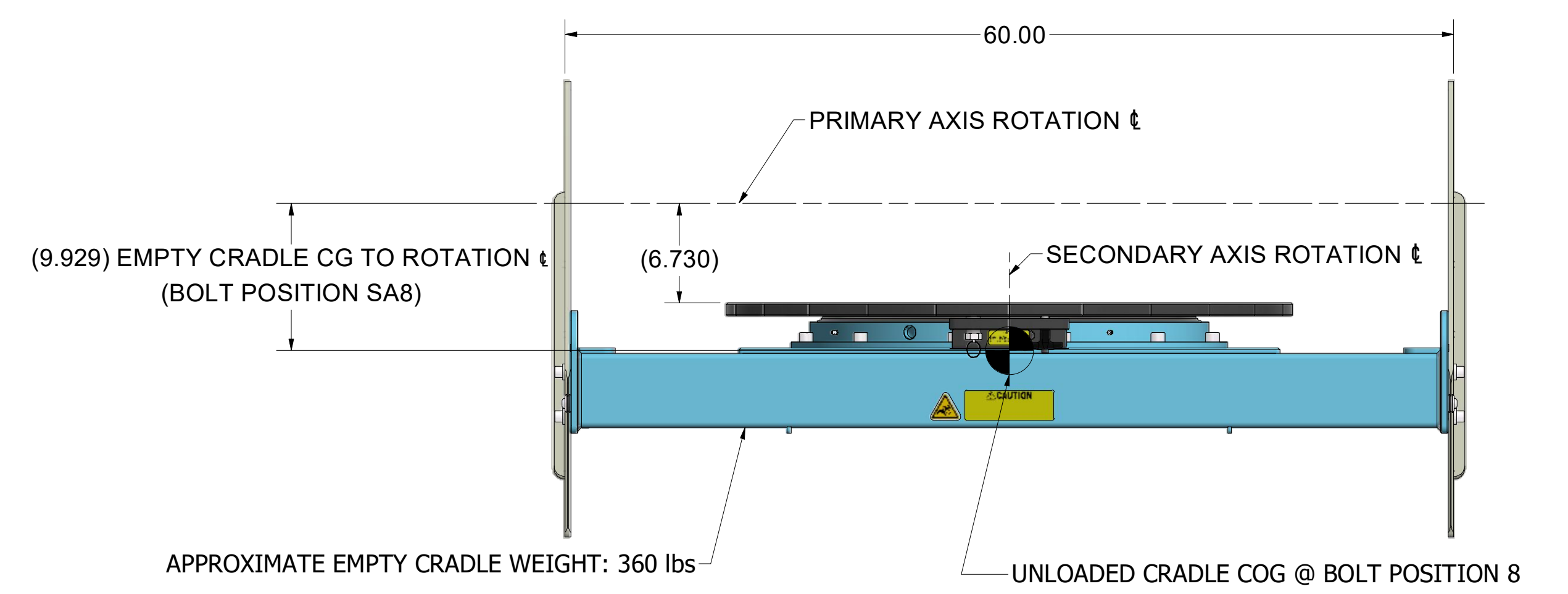
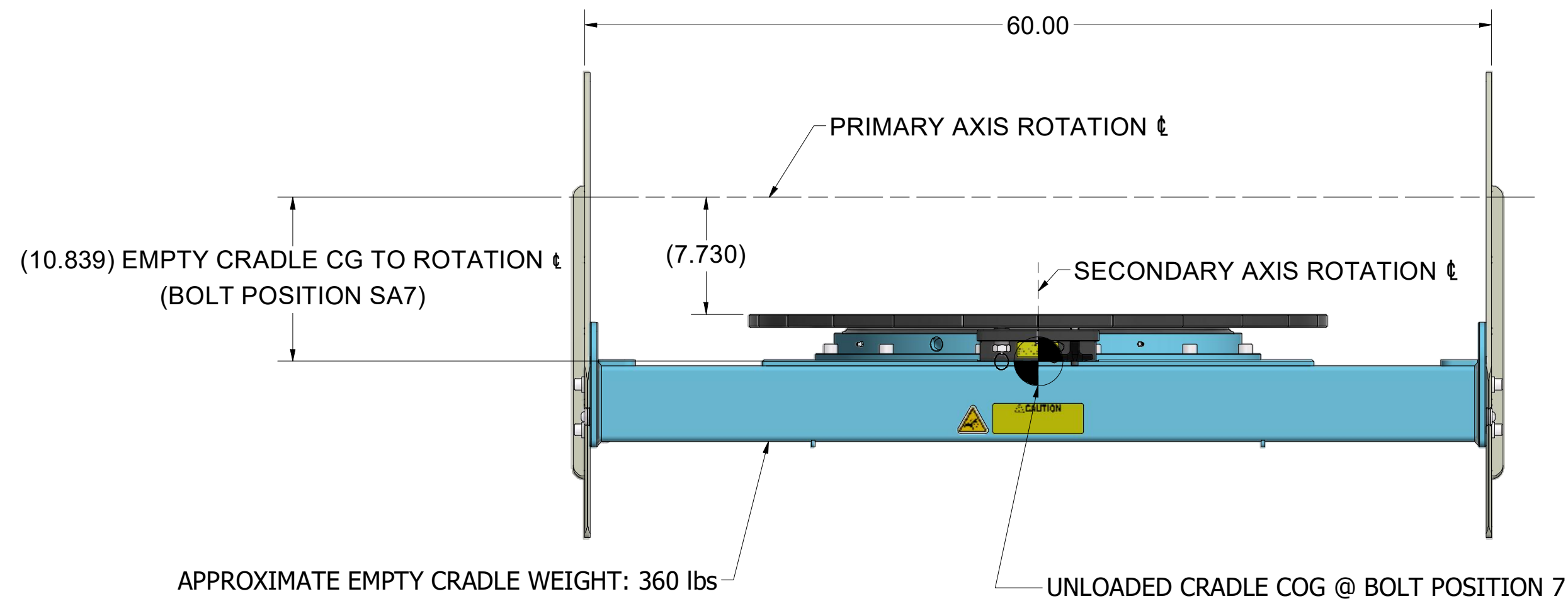
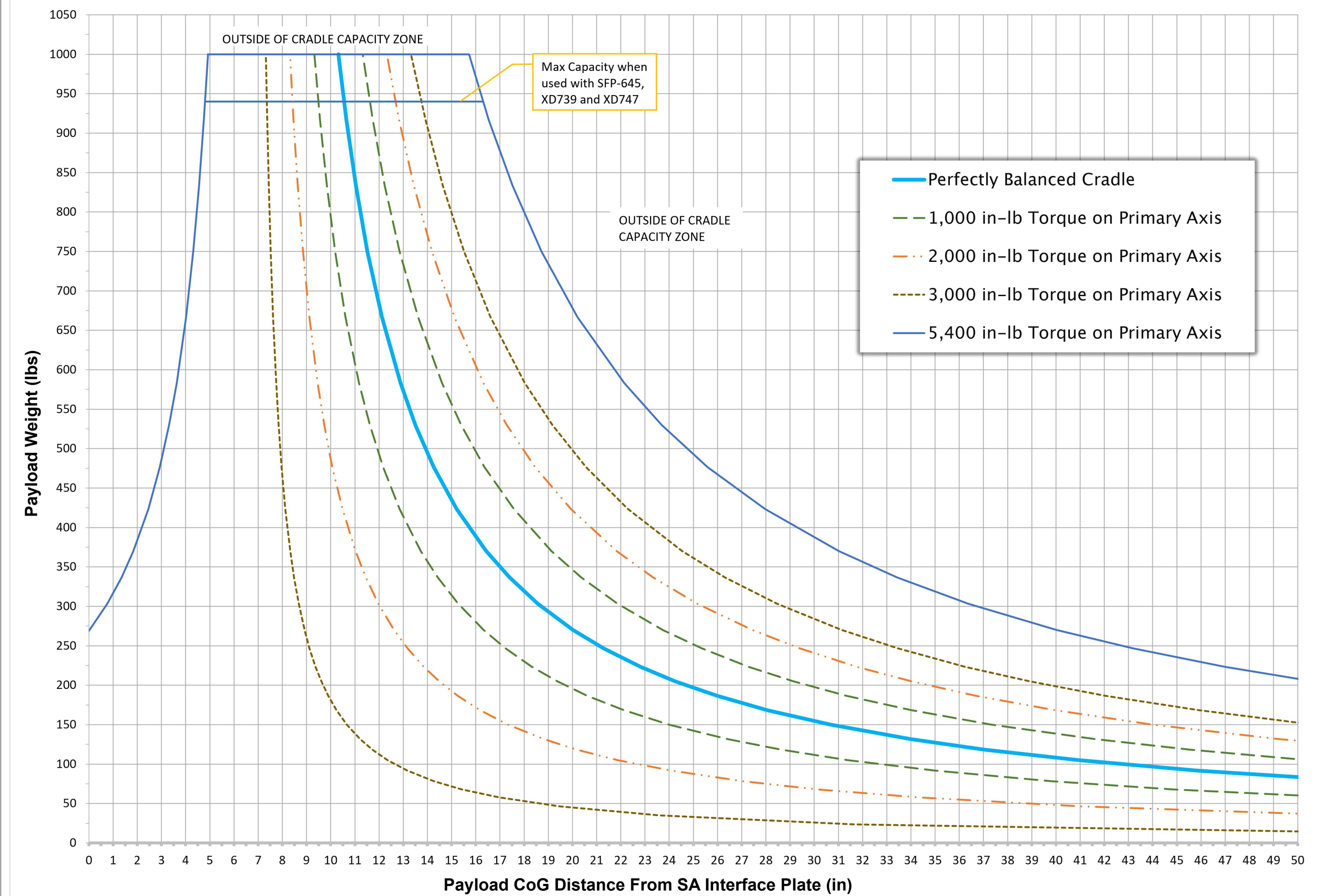


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DSC-P1 Secondary Axis of Rotation Loading For B060 Pinned Cradle Interface (No Gearbox) **Bolt Position 7**

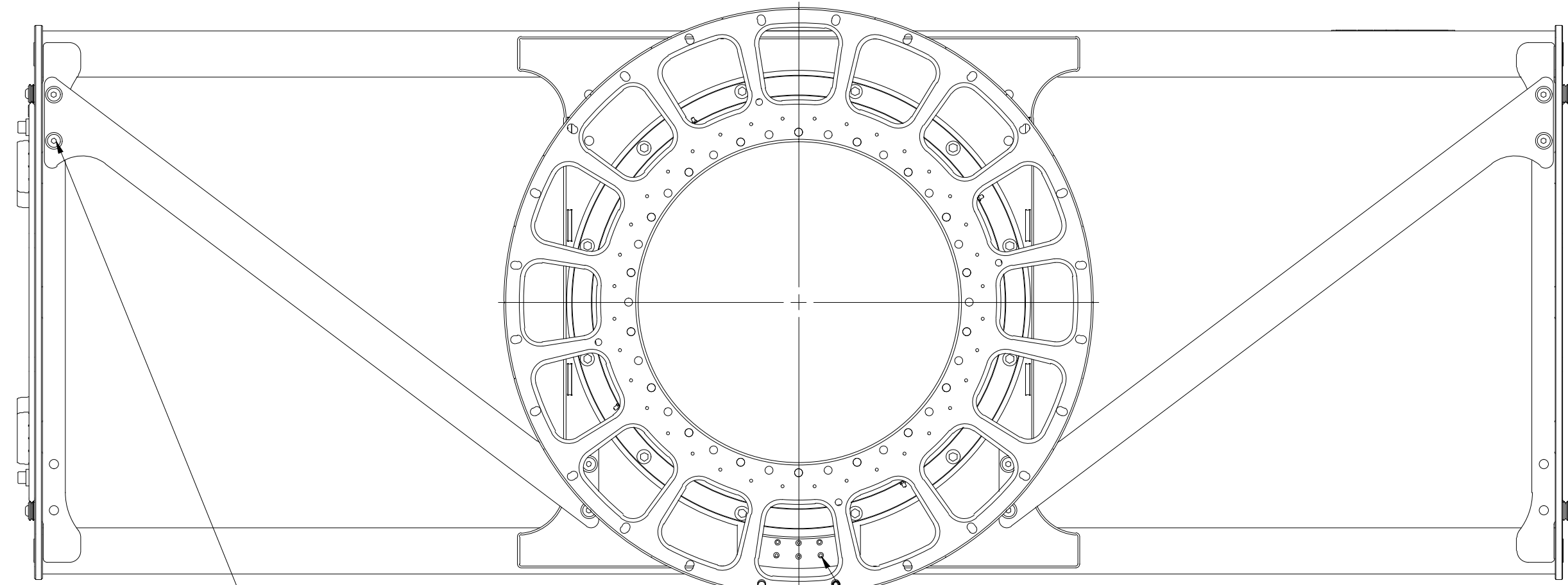


DSC-P1 Secondary Axis of Rotation Loading For B060 Pinned Cradle Interface (No Gearbox) **Bolt Position 8**



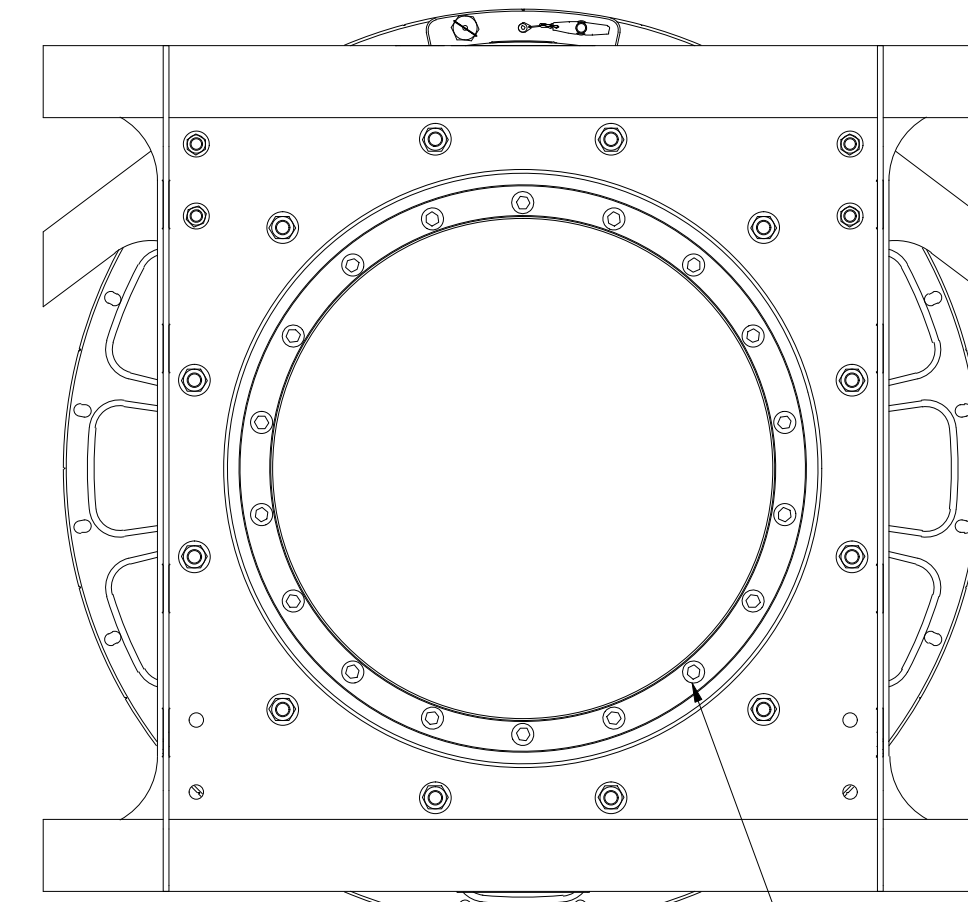
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BOLT TORQUE AND LUBRICATION INFORMATION



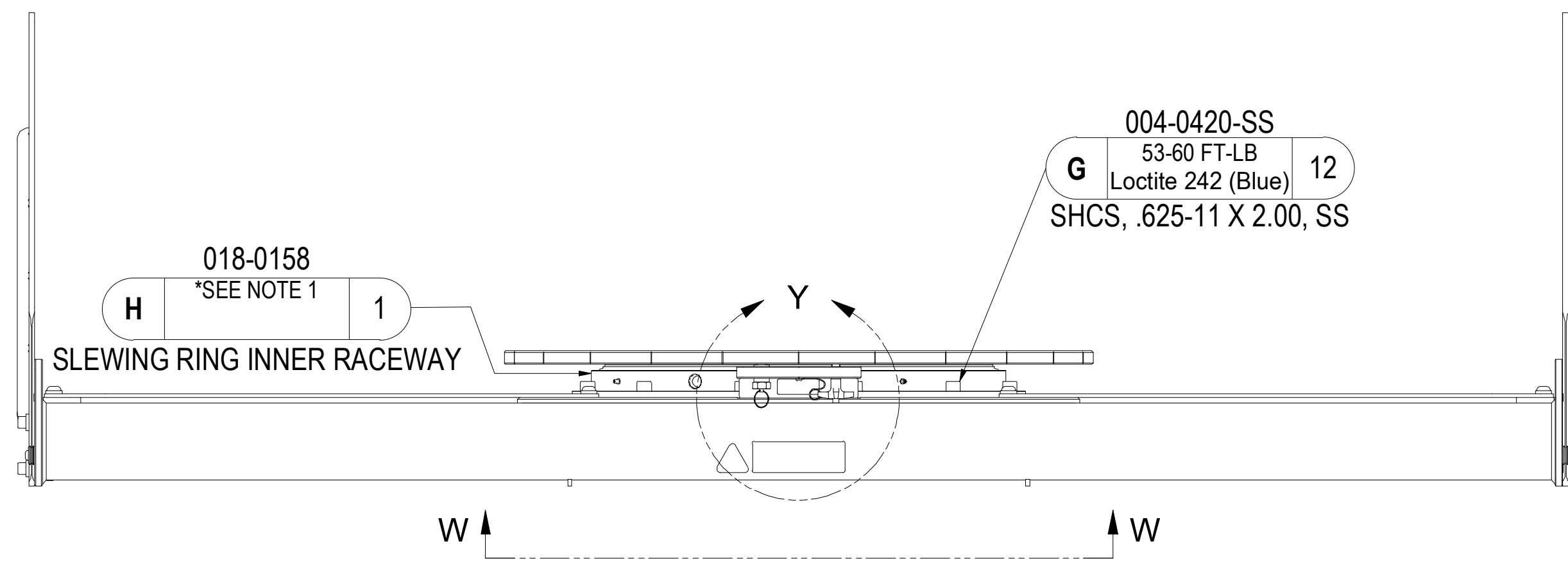
C 004-0305-SS
26-30 FT-LBS
Loctite 242 (Blue) 8
SHCS, .500-13 UNC X 1.50 BUTTON, SS

B 004-0021-SS
36-41 IN-LBS
Loctite 242 (Blue) 10
SHCS, .250-20 X 1", SS



VIEW W-W
SCALE 1 : 8

F 004-0284-SS
53-60 FT-LB
Loctite 242 (Blue) 18
SHCS, .625-11 X 1.25, SS

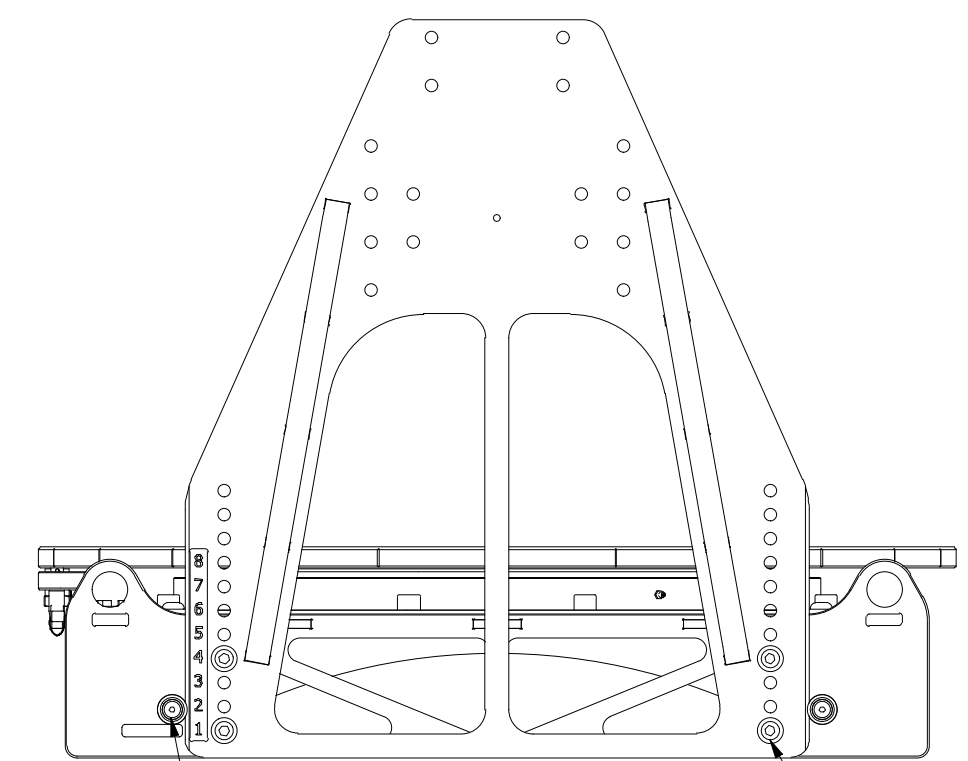


H 018-0158
*SEE NOTE 1 1

SLEWING RING INNER RACEWAY

G 004-0420-SS
53-60 FT-LB
Loctite 242 (Blue) 12
SHCS, .625-11 X 2.00, SS

W ↑

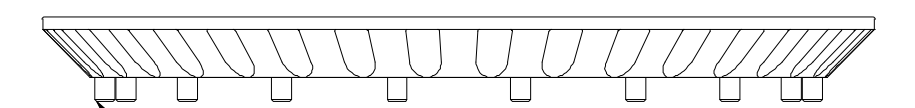


E 004-0415-SS
10-12 FT-LB
Loctite 242 (Blue) 4
SHCS, .375-16 X 1.00" BUTTON, SS

D 004-0007-SS
26-30 FT-LB
Krytox GPL-207 8
SHCS, .500-13 X 1.25, SS

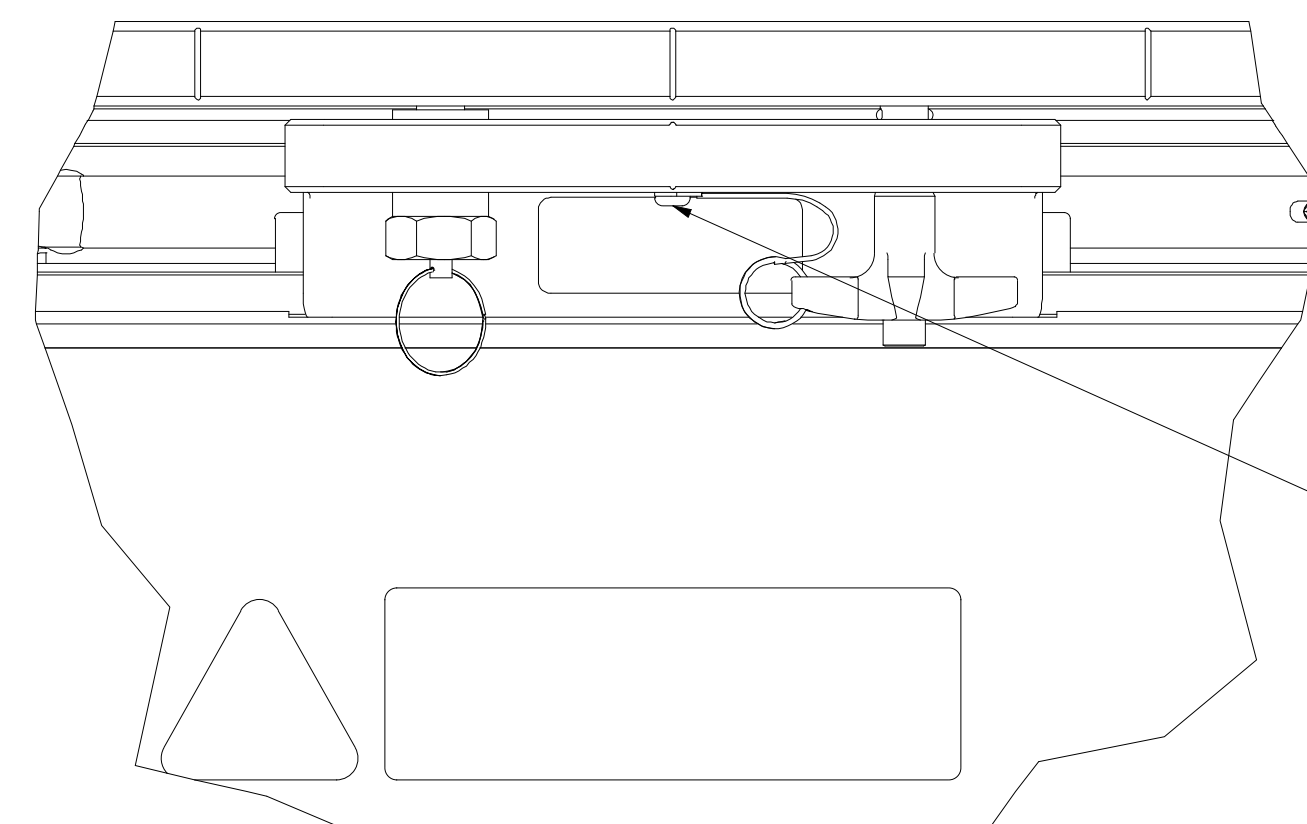
2

R24 & RUN OPTION



I 004-0047-SS
53-60 FT-LB
Krytox GPL-207 18
SHCS, .625-11 X 1.75, SS

2



DETAIL Y
SCALE 1 : 2

A 004-0104-SS
18-20 IN-LBS
Loctite 242 (Blue) 1
SHCS, #10-32 X .375 BUTTON, SS

2 "L2" OPTION REPLACES KRYTOX GPL 207 LUBRICANT WITH BRAYCOTE 631RP.

1. SLEWING RING LUBRICANTS:

a) *STANDARD* FINISH: INNER RACEWAY LUBRICATED WITH MOBILUX EP2.

b) FOR "C" FINISH & "L1" LUBRICANT OPTION: INNER RACEWAY LUBRICATED WITH KRYTOX GPL 217.

c) FOR "L2" LUBRICANT OPTION: INNER RACEWAY LUBRICATED WITH BRAYCOTE 631RP.

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