

REVISIONS			
REV.#	DESCRIPTION	DATE	BY
1	On Sheets 1 and 2 of 3: Added 21B166 & 21B167	10/16/07	ASJ
2	On Sheets 1 & 2 of 3: Removed 21B173 Bracket Assembly. (It is replaced by 21B166)	9/4/09	RML
3	Updated Formats & re-established Charts & Views that were out of Spec.	10/20/11	ASJ

**21B181
CARRIER
ASSEMBLY**

**BRACKET
ASSEMBLY**

(21B178 shown;
SEE CHART BELOW)

**X = RECOMMENDED DISTANCE
TO ACHIEVE BEST SASH
OPERATION**
= 1.695

Y = X - GUIDE RAIL THICKNESS
= 1.695 - .095 = 1.60

**A = RECOMMENDED MINIMUM
STILE LEG DEPTH**
= .908 (MAXIMUM BRACKET)

B = Y - A
= 1.60 - .908 = .692

TAKE-OUT CLEARANCE = .1875

C = STILE / JAMB OVERLAP
= **B** - TAKE-OUT CLEARANCE
= .692 - .1875 = .5045

.103
NOMINAL

45°

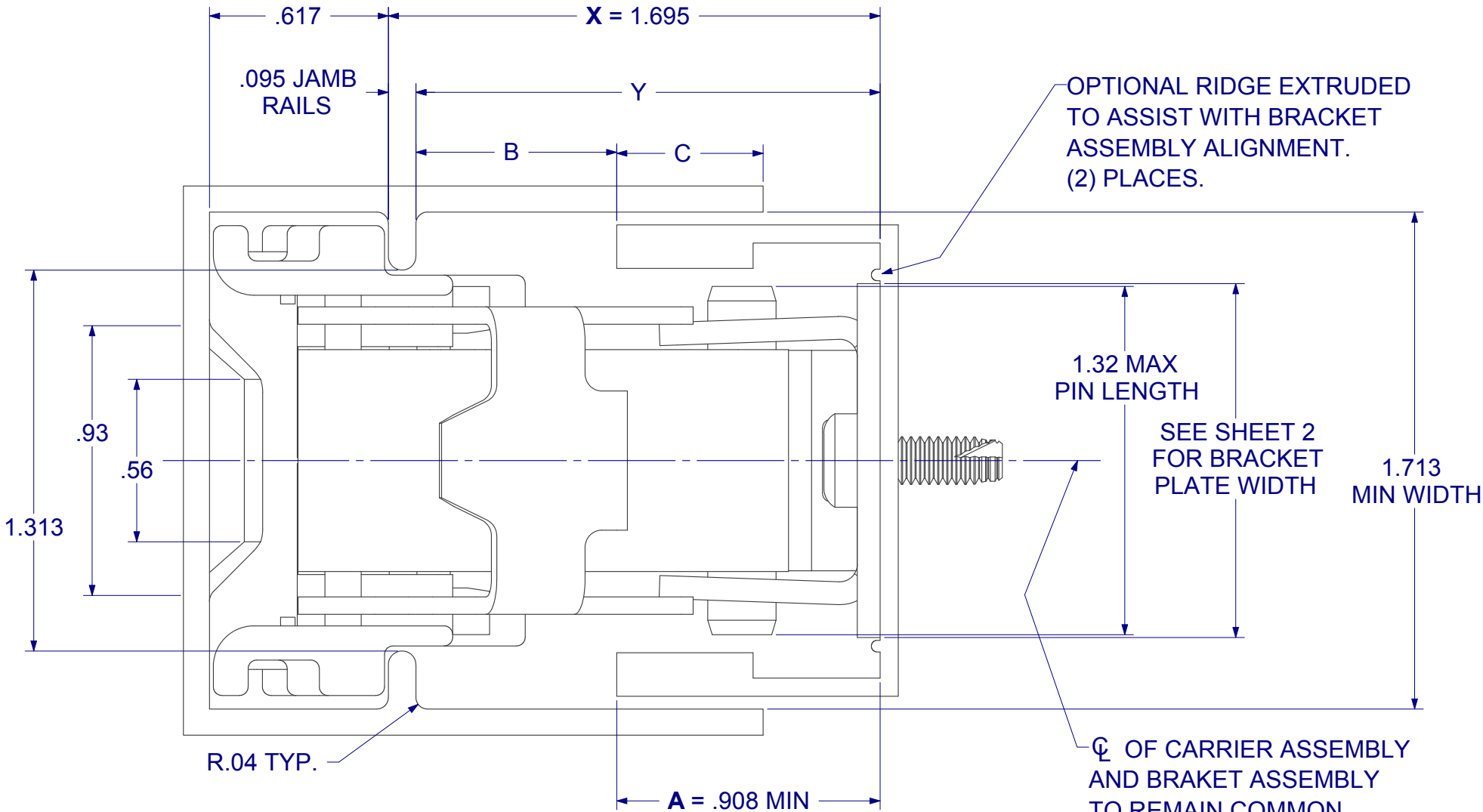
DO NOT
SLIT WALL
OF LANCE

.184
MAX.

.120

SEE CHART FOR
DIMENSION "CH"
(NOTE: THE LARGER THIS
DIMENSION, THE MORE
DIFFICULT CARRIER ACCESS
WILL BE DURING SERVICE.)

SEE CHART FOR DIMENSION "BH".
(THE BOTTOM OF THE BRACKET
ASSEMBLY SHOULD BE MOUNTED
CLOSE TO FLUSH WITH BOTTOM
OF THE LIFT / KEEPER RAIL.)



BRACKET ASSEMBLY	DIM "BH"	DIM "CH"
21B166	0.190	0.699
21B167	0.190	0.699
21B174	0.190	0.699
21B178	0.190	0.073
21B179	0.190	0.073

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NOTE: DO NOT SCALE DRAWING!
UNLESS OTHERWISE SPECIFIED
ALL TOLERANCES ARE AS FOLLOWS:
TWO DECIMAL PLACES ± .010"
THREE DECIMAL PLACES ± .005"
ANGULAR ± 1°
FRACTIONS ± 1/64"

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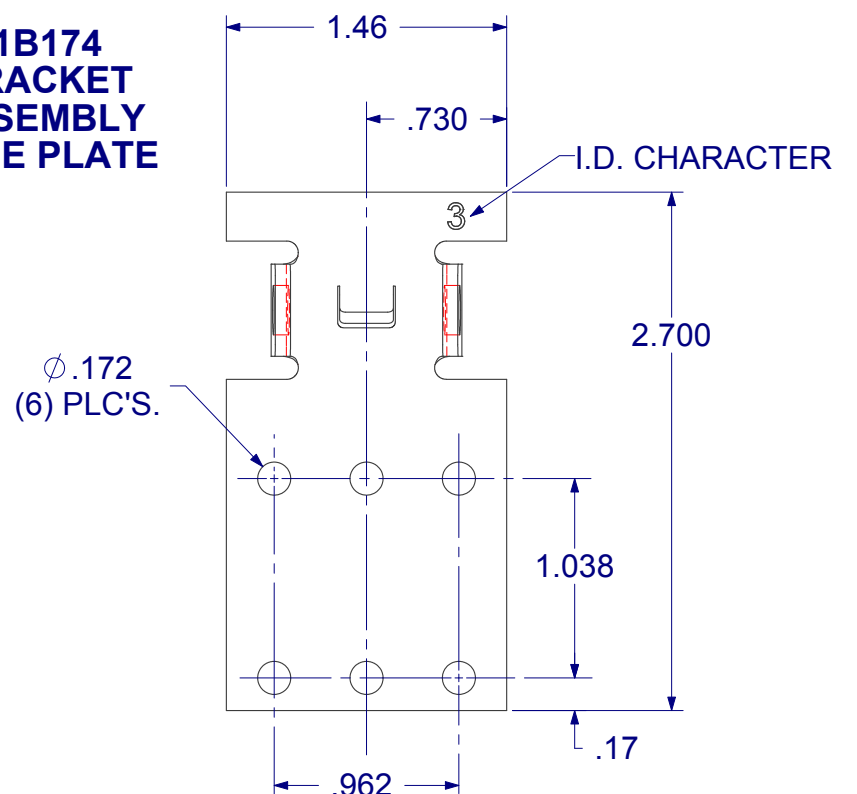
TAKE-OUT SYSTEM III LAYOUT
THIRD ANGLE PROJECTION

B EX NO
SIZE
SCALE 2:1

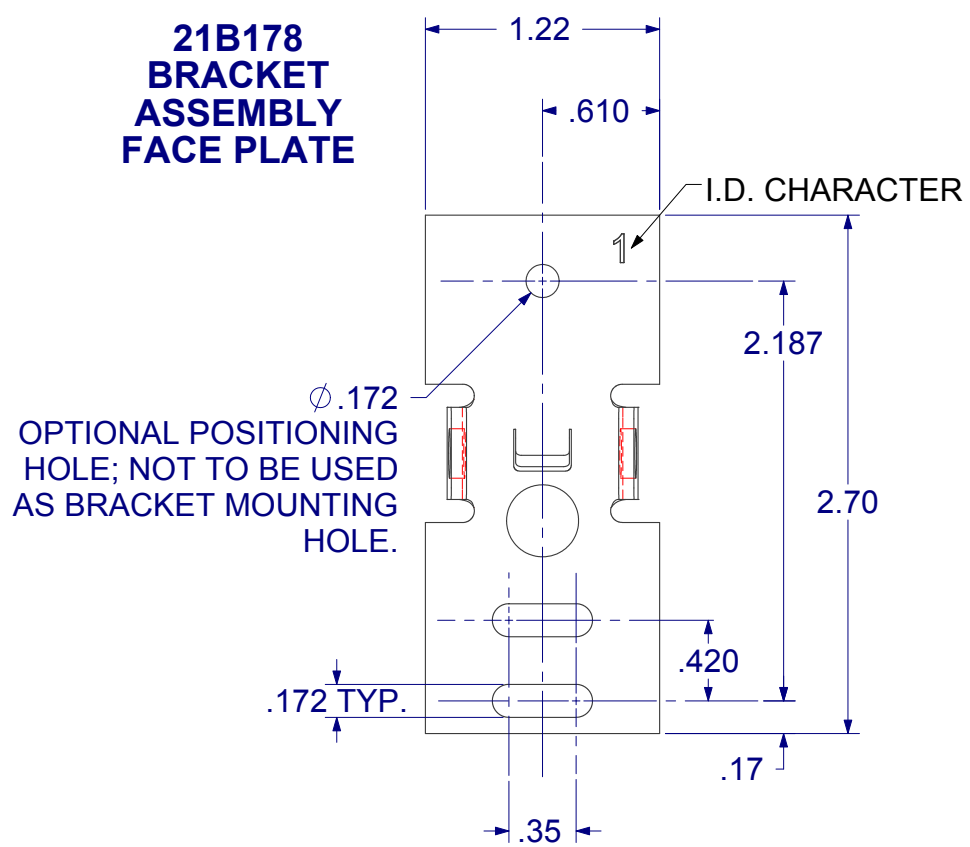
DRAWN RML
CHECKED
APPROVED RML
DATE 07/26/05
DATE 10/21/11
DWG NO
SL-14B-054
SHEET 1 OF 3

REV
3

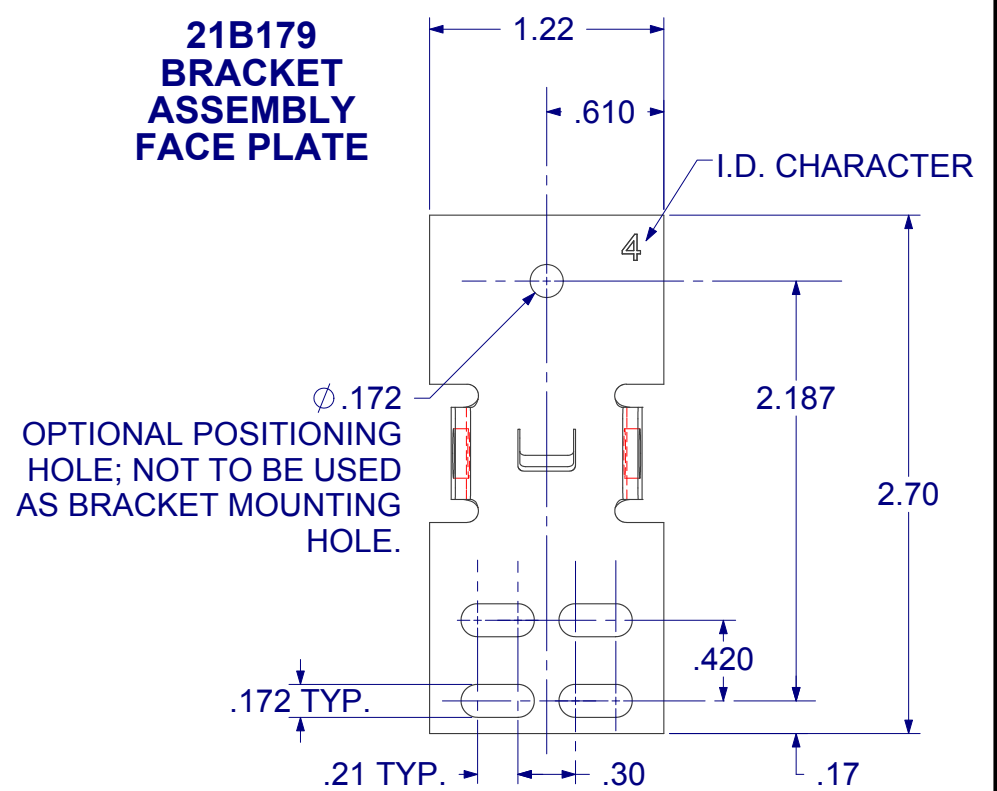
**21B174
BRACKET
ASSEMBLY
FACE PLATE**



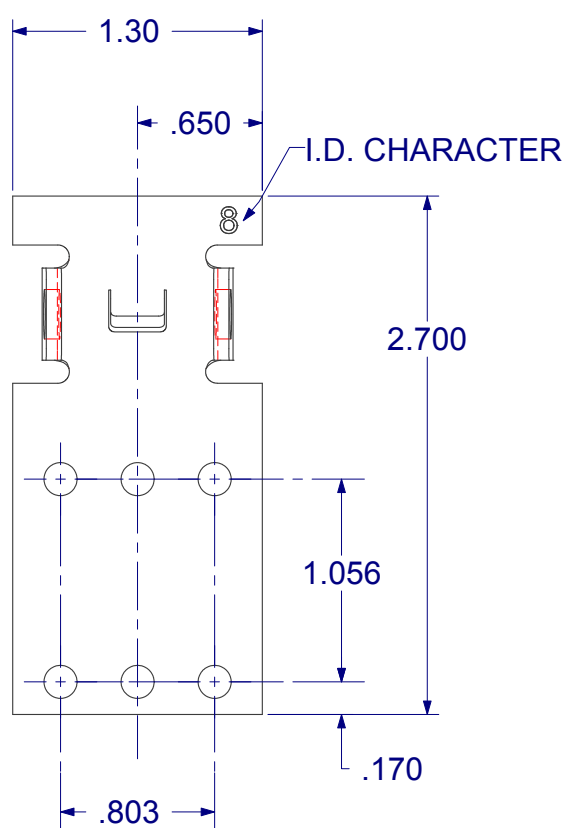
**21B178
BRACKET
ASSEMBLY
FACE PLATE**



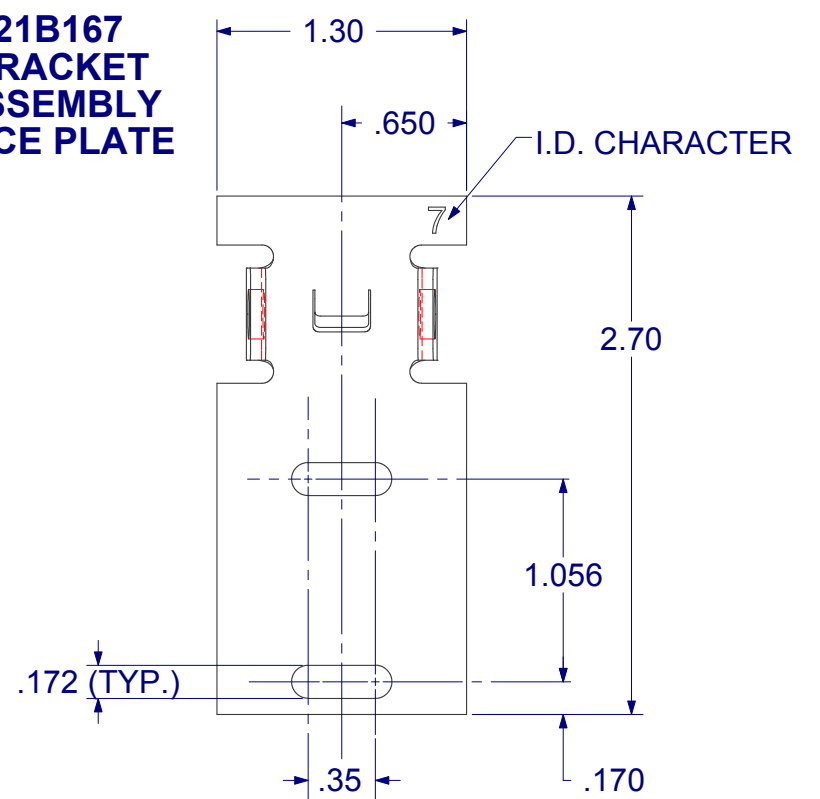
**21B179
BRACKET
ASSEMBLY
FACE PLATE**



**21B166
BRACKET
ASSEMBLY
FACE PLATE**



**21B167
BRACKET
ASSEMBLY
FACE PLATE**



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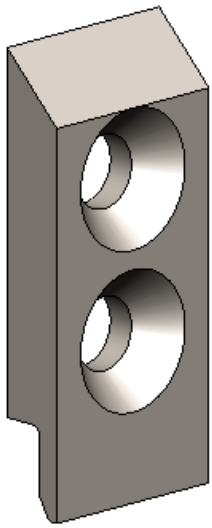
TWO DECIMAL PLACES	$\pm .010"$
THREE DECIMAL PLACES	$\pm .005"$
ANGULAR	$\pm 1^\circ$
FRACTIONS	$\pm 1/64"$

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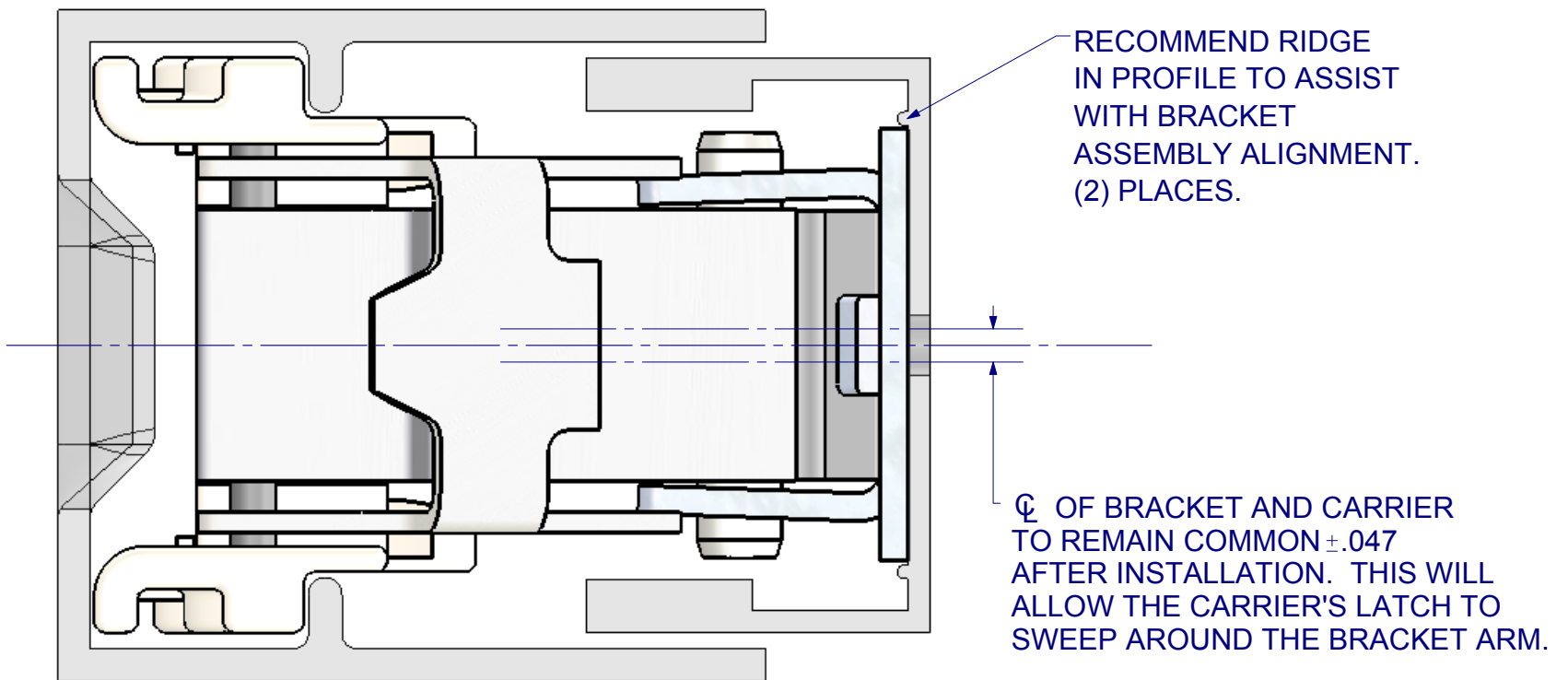
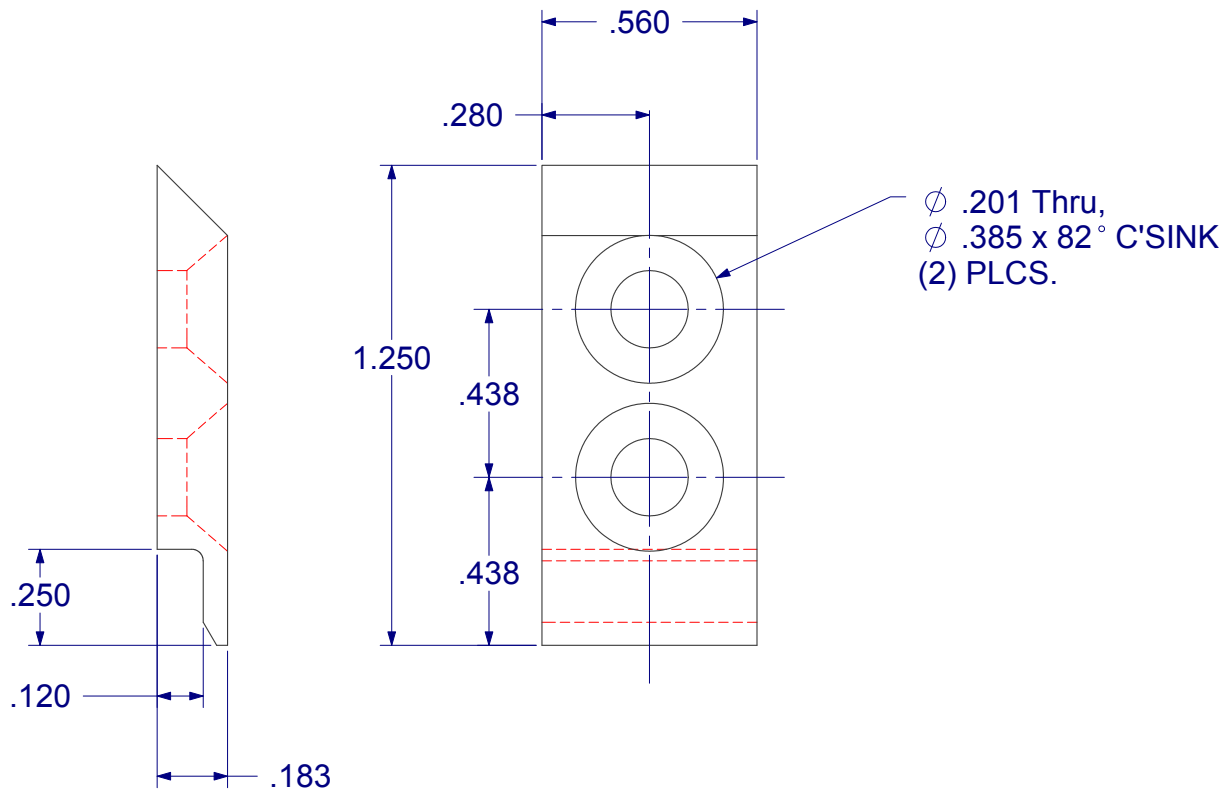
TITLE _____ (U.S. TRADE LIST)

(ULTRA-LIFT) TAKE-OUT SYSTEM III LAYOUT		
THIRD ANGLE PROJECTION 	DRAWN RML DATE 07/27/05 CHECKED DATE APPROVED RML DATE 10/21/11	
B EX NO SIZE	DWG NO SL-14B-054	REV 3
SCALE 1:1	SHEET 2 OF 3	



OPTIONAL IDEA FOR A BOLT ON LANCE
INSTEAD OF SEMI-PERFORATED LANCE
IN JAMB CHANNEL.

NOTE: DRAWING SHOWN IS INTENDED TO CONVEY
GEOMETRIC RELATIONSHIPS ONLY. STRENGTH
OF FINAL PART DEPENDS ON PROPER SELECTION
OF MATERIAL AND IS THE RESPONSIBILITY OF
THE MANUFACTURER.



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THREE DECIMAL PLACES $\pm .005''$
ANGULAR $\pm 1^\circ$
FRACTIONS $\pm 1/64''$

Solutions That Set New Standards CALDWELL Since 1888				
Manufacturing Company 2605 Manitou Road, Rochester, New York				
TITLE (ULTRA-LIFT)				
THIRD ANGLE PROJECTION		DRAWN	RML	DATE 07/27/05
		CHECKED		DATE
B EX NO		APPROVED	RML	DATE 10/21/11
SIZE		DWG NO	SL-14B-054	
SCALE 2:1		SHEET 3 OF 3		REV 3