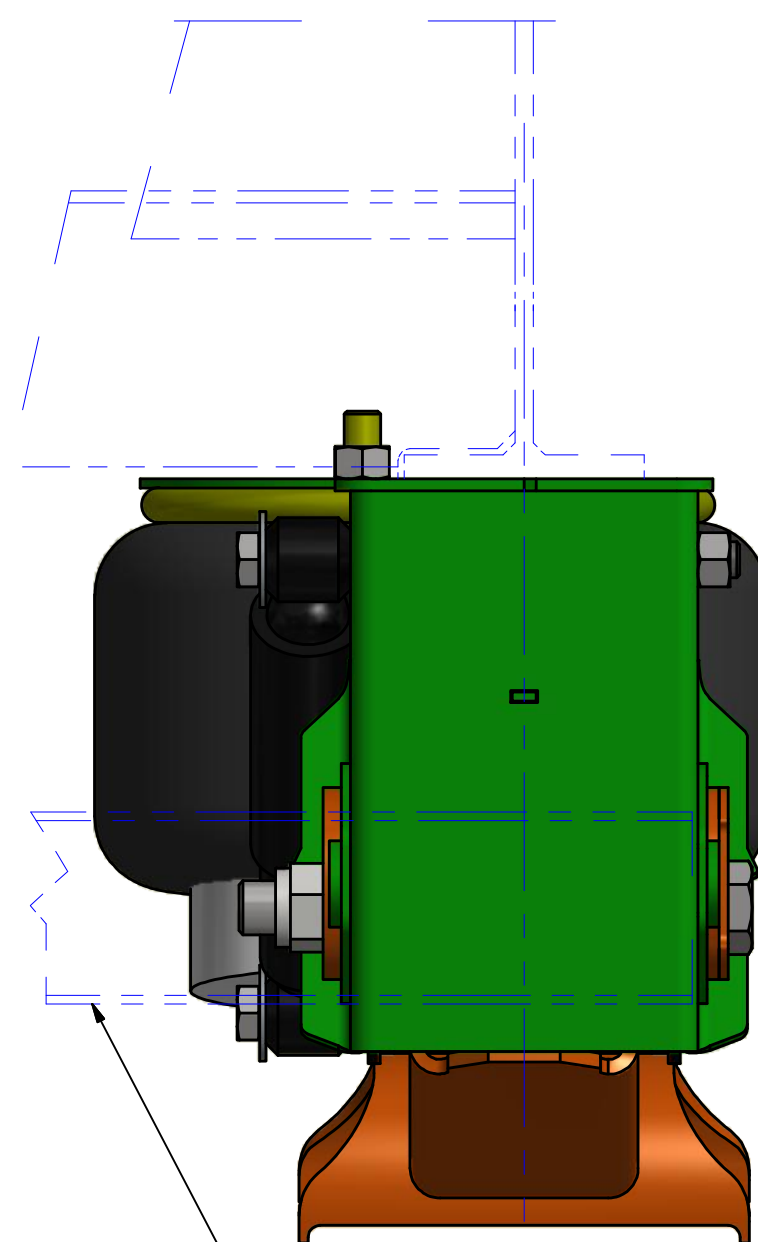
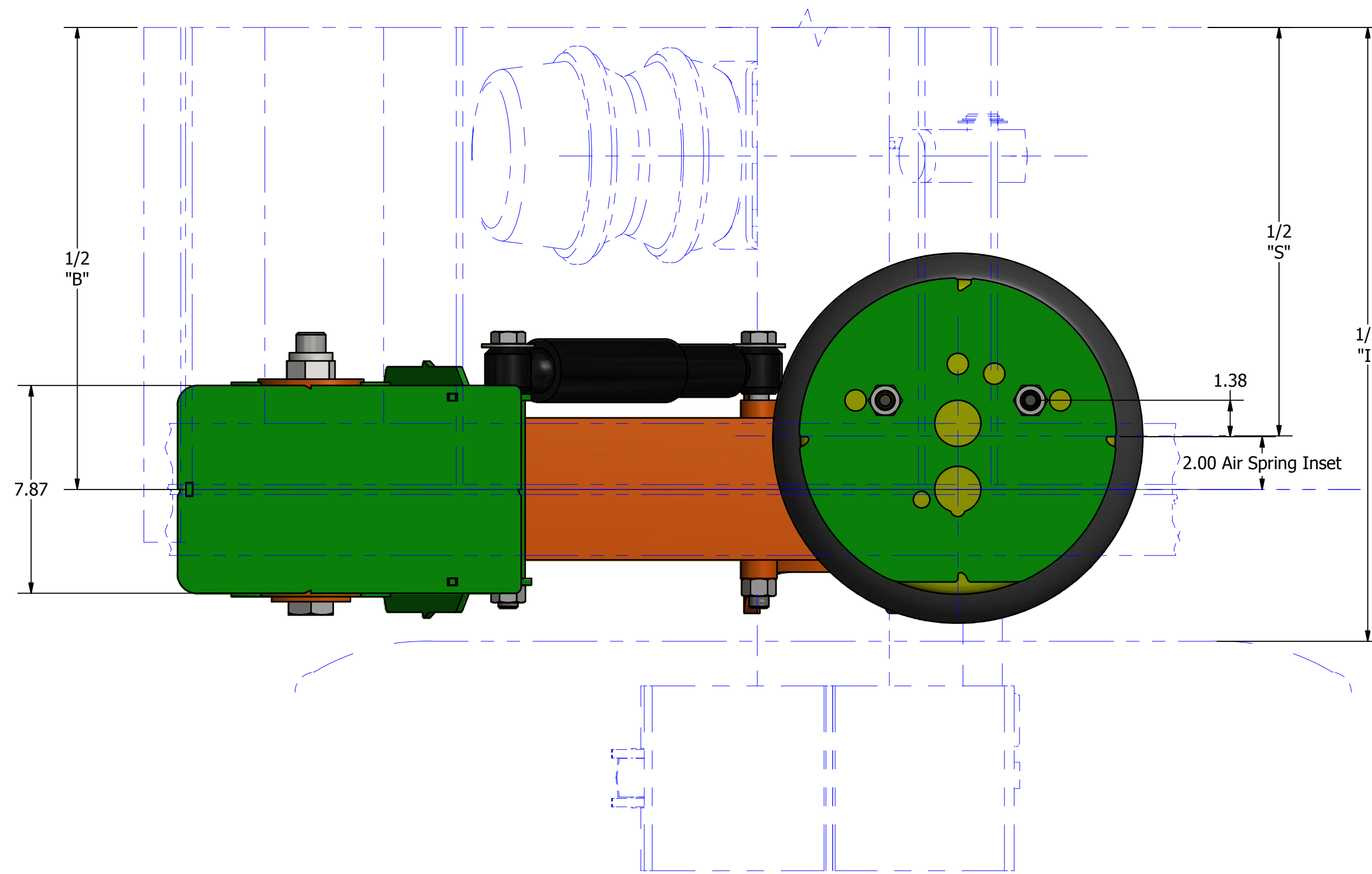
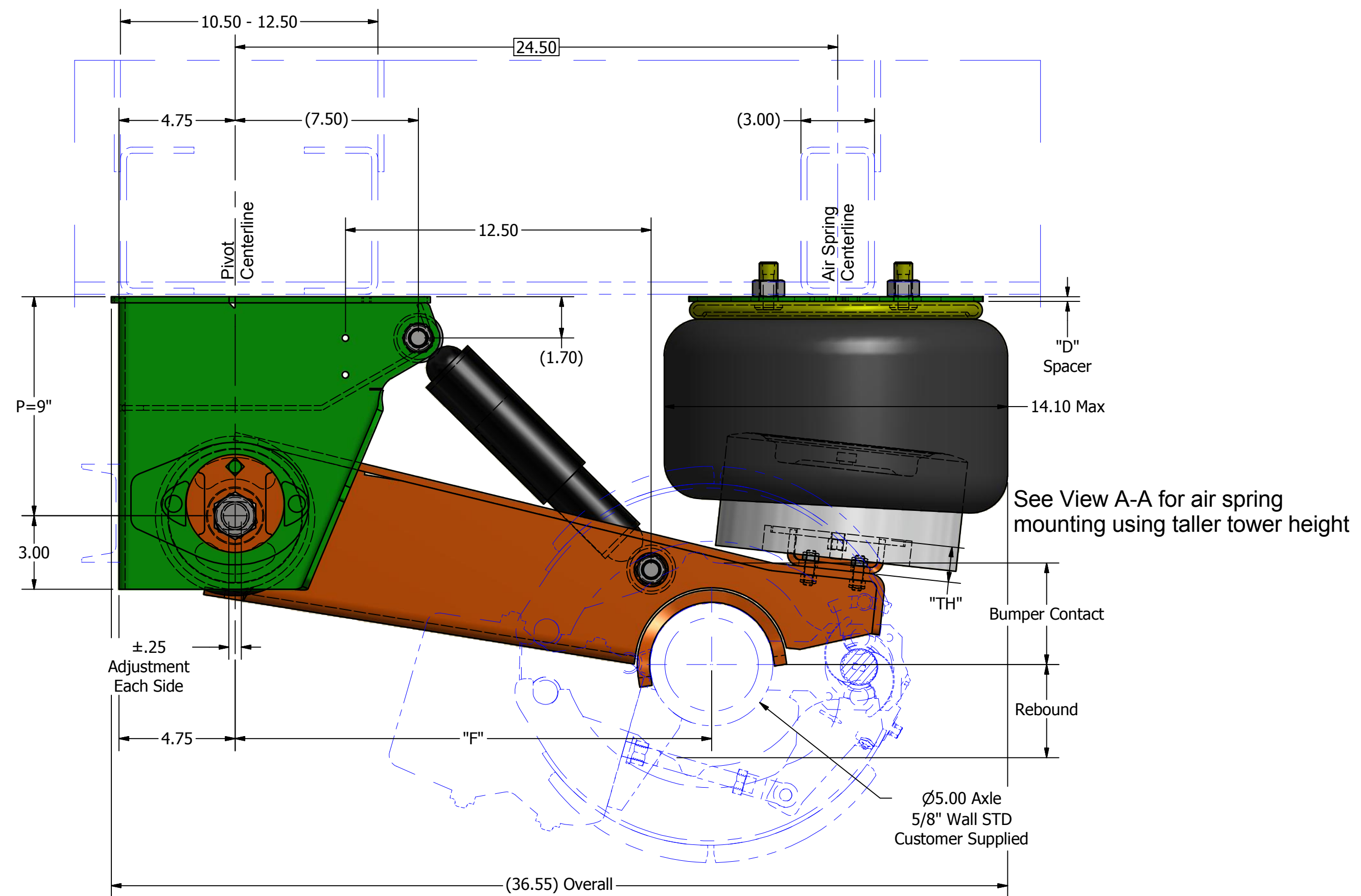



View A-A
SCALE 1 / 4
Air Spring Lower Tower Height
"TH" = 3.5" Shown
for T17_16"/18"
Ride Heights



Customer Furnished



DCN#		REV	REVISION DESCRIPTION			DATE	BY	CHK	APP
DRAFTSMAN: DWalker			TITLE: <h1>Layout</h1> Cush Roughneck Top Mount Half Wrap 25000lbs Gross Suspension Weight Rating 14"/16" RH Weld-On Wingless Hanger Mount						
CHECKED: CHK									
RELEASED: APP									
WEIGHT: N/A									
MATERIAL:									
All of the Information shown herein is the intellectual property of Cush Corp and is submitted only on a confidential basis. The recipient agrees that no disclosure of this information will be made to a third party without written consent of Cush Corp.			TOLERANCE UNLESS OTHERWISE STATED: XX = +/- .002 FRACTIONS = +/- 1/16 XXX = +/- .001 ANGLES = +/- 1°			Nixa, MO, USA PHONE: 417-724-1239 www.cushcorp.com			
			PROJECT NO:	SHEET:	SCALE:				REV:
			14200	1 OF 3	A-SIZE: NTS B-SIZE: 1/X D-SIZE: 1/4				-
			PART/DRAWING NO:						
									CR25C-(15/16/17)

CUSH TORQUE SPECIFICATIONS			(Ft*Lbs)		(N*m)	
Suspension Fastener Description	Size	Grade	Min.	Max.	Min	Max
Air Spring Mount	3/8	5/B	15	20	20	27
Air Spring Mount	1/2	5/B	25	35	34	47
Air Spring Mount	3/4	5/B	40	50	54	68
Brake Chamber Mounting	5/8	5/B	100	110	136	149
Beam Tower for Air Spring Mount	3/8	5/B	30	45	41	61
Shock Eye Mount	3/4	5/B	210	235	285	319
U-Bolt Nut	7/8	8/C	475	525	644	712
Pivot Nut <i>(as supplied)</i>	7/8	8/C	550	600	746	813
Pivot Nut <i>(Wet_Oily_Anti-seize)</i>	1 1/8	8/C	800	1000	1085	1356

ROUGHNECK HANGER WITH 1.13" LARGE PIVOT BOLT

1. Bushings with 1.125" inner sleeve ID will not need plastic insert reducer for the 1-1/8" pivot bolt.

2. Use Cush Height Control Kit bracket from ACK-0206 or weld bracket to side of hanger.

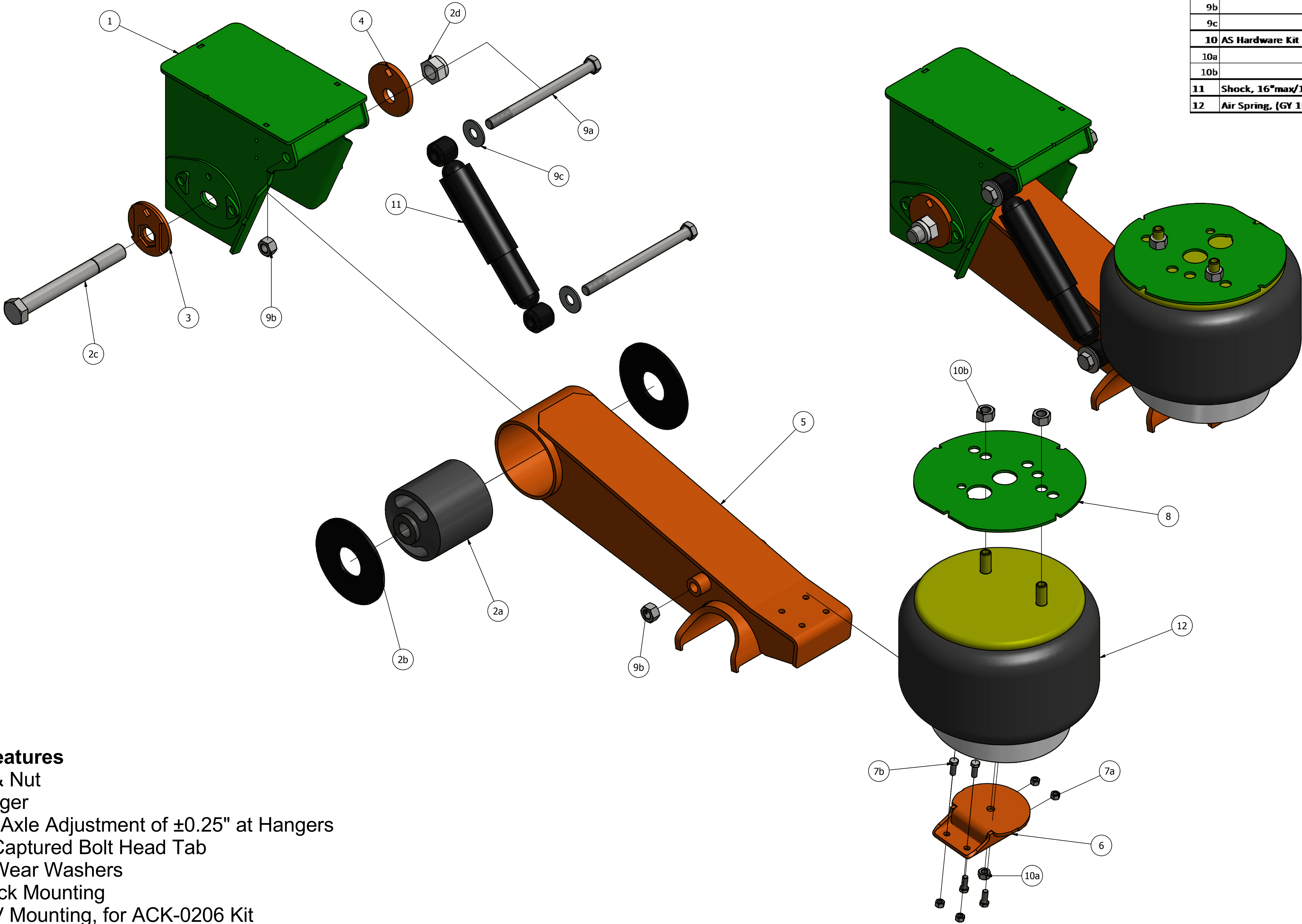
DUAL ECCENTRIC ALIGNMENT NOTES:


OVERVIEW: The DUAL ECCENTRIC pivot joint features outside eccentric cam gear washers that cover the alignment slot, Final axle alignment is required for proper bushing and tire wear.

CAUTION: DO NOT APPLY undercoating to the area until after alignment and torque of the pivot bolt.

CAUTION: With dual eccentric alignment both gears at the pivot must be moved/adjusted together at the same time and in the same direction. If not adjusted together on the same hanger this may lead to an improper pivot joint clamp and cause failure.

- With both pivot bolts snug and suspension at ride height.
- For adjustment, use (2) 1/2" square-drive breakover bars or ratchet to move the axle forward/rearward on one hanger at a time. Must move inside and outside gears together for adjustment. The square Adjustment Holes must line up side to side on each hanger.
- The Slot gives you 1/4" pivot movement fore and aft per hanger side.
- Start with the eccentric gears in the neutral position with the 1/2" adjustment square at 12 o'clock and lined up with the inset 1/2" plug hole, you can use a 1/2" round bar to check.
- To align the axle, move both sides of the suspension gears to get the axle aligned. If needed, go to the other side of the suspension and move in the gears in the opposite direction to fully align the axle to within 1/16".
- After alignment, clamp the joint per Cush torque specifications.
- After alignment, the suspension installer can weld the gears to the hanger side with 1/2" welds at 12 & 6 o'clock to prevent tampering & for off-road applications.



DCN#		REV	REVISION DESCRIPTION		DATE	BY	CHK	APP
DRAFTSMAN: DWalker			<div>TITLE:</div> <div>Parts Explosion</div> <div>Cush Roughneck Top Mount Half Wrap</div> <div>25000lbs Gross Suspension Weight Rating</div> <div>14"/16" RH</div> <div>Weld-On Wingless Hanger Mount</div>		<div></div> <div>Nixa, MO, USA</div> <div>PHONE: 417-724-1239</div> <div>www.cushcorp.com</div>			
3/17/2015								
CHECKED: CHK								
RELEASED: APP								
WEIGHT: N/A								
MATERIAL:								
<div>All of the Information shown herein is the intellectual property of Cush Corp and is submitted only on a confidential basis. The recipient agrees that no disclosure of this information will be made to a third party without written consent of Cush Corp.</div>			TOLERANCE UNLESS OTHERWISE STATED:					
			XX = +/- .062 FRACTIONS = +/- 1/16					
			XXX = +/- .031 ANGLES = +/- 1°					
PROJECT NO:		SHEET:	SCALE:	REV:	PART/DRAWING NO:			
14200		2 OF 3	A-SIZE: NTS B-SIZE: 1/X D-SIZE: 1/4	-	CR25C-(15/16/17)			

CUSH TORQUE SPECIFICATIONS			(Ft*Lbs)		(N*m)	
Suspension Fastener Description	Size	Grade	Min.	Max.	Min	Max.
Air Spring Mount	3/8	5/B	15	20	20	27
Air Spring Mount	1/2	5/B	25	35	34	47
Air Spring Mount	3/4	5/B	40	50	54	68
Brake Chamber Mounting	5/8	5/B	100	110	136	149
Beam Tower for Air Spring Mount	3/8	5/B	30	45	41	61
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U-Bolt Nut	7/8	8/C	475	525	644	712
Pivot Nut <i>(as supplied)</i>	7/8	8/C	550	600	746	813
Pivot Nut <i>(Wet Oily Anti-seize)</i>	1 1/8	8/C	800	1000	1085	1356

1. Bushings with 1.125" inner sleeve ID will not need plastic insert reducer for the 1-1/8" pivot bolt.
2. Use Cush Height Control Kit bracket from ACK-0206 or weld bracket to side of hanger.

OVERVIEW: The DUAL ECCENTRIC pivot joint features outside eccentric cam gear washers that cover the alignment slot, Final axle alignment is required for proper bushing and tire wear.

CAUTION: With dual eccentric alignment both gears at the pivot must be moved/adjusted together at the same time and in the same direction. If not adjusted together on the same hanger this may lead to an improper pivot joint clamp and cause failure.

NOTE: If the assembly fits tightly, it may be necessary to spread the mounting. DO NOT GRIND material from suspension components.

6) Place"-Align" gear washer, with indicator in neutral position, and insert pivot bolt/washer

General Application Dimension Variables - Installation Clearance Notes Supersede all Common Variables Shown						
"B" Ref. Suspension Beam(Hanger) Centers	34	35	40	41	40	39
"S" Ref. Air Spring Centers (2" inset/side)	30	31	36	37	36	35
"T" Ref. Axle Track	71.5"	71.5"	76.5"	77.5"	77.5"	77.5"
"C" Approx. Chamber Centers for 16.5" x 7" Brake	9.75	9.75	14.75	15.75	15.75	15.75
"I" Ref. Inside of Tires Min (Hanger Style)	46.5	46.5	51.5	52.5	52.5	52.5
Installation Clearance Notes						
1	0.75" minimum clearance must be maintained around air spring when it is at maximum diameter.					
2	It is the responsibility of the installer to ensure that proper clearances exist at the times: 1" minimum clearance required between top of tire and bottom of trailer structure when axle is at full jounce, 2" minimum clearance required between inside of tire and trailer frame structure for lateral movement, and there should be ample fore and aft clearances. 0.25" clearance is recommended between suspension beam and brake s-cam shaft.					


WARNING: Review Cush Recommended Steel Welding Procedures

2) For the best axle to beam weld joint use the following wire.

3) Create the root pass to connect the axle

INSPECTION: 30-DAY, 90-DAY, & at every brake lining change.

- | | | | | | Top | Hanger | Horz | Beam |
|------------|--------|------------|-------|---------|----------|----------|----------|-----------|
| Part No. | (In) | Bumper | | UP | Spacer | Pivot | Pivot to | Tower |
| Suspension | RIDE | Deflection | Down | BUMPER | Height | Height | Axle | Height |
| Model & RH | HT | JOUNCE | REB'D | CONTACT | "D" (In) | "P" (In) | "F" (In) | "TH" (In) |
| CR25C15 | 14.0" | 3.0" | 5.5 | 2.75 | 0.18 | 9 | 19.7" | 1.5 |
| | 14.5" | 3.5" | | 3.25 | 0.18 | 9 | 19.5" | 1.5 |
| Shown | *15.0" | 4.0" | 4.5 | 3.75 | 0.18 | 9 | 19.4" | 1.5 |
| | 15.5" | 4.5" | 4 | 4.25 | 0.18 | 9 | 19.2" | 1.5 |
| | 16.0" | 5.0" | 3.5 | 4.75 | 0.18 | 9 | 19.0" | 1.5 |
| | 16.5" | 5.5" | 3 | 5.25 | 0.18 | 9 | 18.8" | 1.5 |
| CR25C16 | 15.0" | 3.0" | 5.5 | 2.75 | 0.18 | 10 | 19.7" | 2.5 |
| | 15.5" | 3.5" | 5 | 3.25 | 0.18 | 10 | 19.5" | 2.5 |
| | 16.0" | 4.0" | 4.5 | 3.75 | 0.18 | 10 | 19.4" | 2.5 |
| | 16.5" | 4.5" | 4 | 4.25 | 0.18 | 10 | 19.2" | 2.5 |
| | 17.0" | 5.0" | 3.5 | 4.75 | 0.18 | 10 | 19.0" | 2.5 |
| | 17.5" | 5.5" | 3 | 5.25 | 0.18 | 10 | 18.8" | 2.5 |
| CR25C17 | 16.0" | 3.0" | 5.5 | 2.75 | 0.18 | 11 | 19.7" | 3.5 |
| | 16.5" | 3.5" | 5 | 3.25 | 0.18 | 11 | 19.5" | 3.5 |
| | 17.0" | 4.0" | 4.5 | 3.75 | 0.18 | 11 | 19.4" | 3.5 |
| | 17.5" | 4.5" | 4 | 4.25 | 0.18 | 11 | 19.2" | 3.5 |
| | 18.0" | 5.0" | 3.5 | 4.75 | 0.18 | 11 | 19.0" | 3.5 |
| | 18.5" | 5.5" | 3 | 5.25 | 0.18 | 11 | 18.8" | 3.5 |

DCN#	REV	REVISION DESCRIPTION		DATE	BY	CHK	APP
DRAFTSMAN: DWalker	13/17/2015	TITLE:					
CHECKED: CHK		<h1>Installation Notes</h1> <p>Cush Roughneck Top Mount Half Wrap 25000lbs Gross Suspension Weight Rating 14"/16" RH Weld-On Wingless Hanger Mount</p>					
RELEASED: APP							
WEIGHT: 9.25# 10mmss							
MATERIAL: Steel							
All of the information shown herein is the intellectual property of Cush Corp and is submitted only on a confidential basis. The recipient agrees that no disclosure of this information will be made to a third party without written consent of Cush Corp.		TOLERANCE UNLESS OTHERWISE STATED:		Nixa, MO, USA PHONE: 417-724-1239 www.cushcorp.com			
		.XX ± .002 FRACTIONS ± .01/16 .XXX ± .001 ANGLES ± 1°					
		PROJECT NO:	SHEET:	SCALE:	REV:	PART/DRAWING NO:	
		14200	3 OF 3	A-SIZE: NTS B-SIZE: 1/X D-SIZE: 1/4	-	CR25C-(15/16/17)	