

## INSTALLATION DISCLAIMER NOTES:

2) It is the responsibility of the installer to determine the correct location of the suspension in order to provide the proper trailer load distribution. The gross axle weight rating (GAWR) of each axle must not exceed the rated capacity of any of the components involved. The suspension capacity ratings are for suspension components and axle beam only.

4) It is the responsibility of the suspension installer to read the instructions on all the drawing sheets thoroughly before proceeding with a suspension installation.

CUSTOMER TORQUE INSTRUCTIONS:

2) It is the customer's responsibility to check and tighten fasteners to specified torque at installation, after the suspension has been in operation for 3000 miles, and at suspension inspection cycles. Failure to do so can result in loss of warranty.

4) CAUTION: Fasteners should never be reused if removed or loss of clamp load occurs. For proper joint clamping contact Cush for replacement fasteners.

5) CAUTION: Over-torquing fasteners could result in material failure.

MODEL: CP25C				(Ft*Lbs)		(Nm)	
Fastener Torque Specs	Size	Thread	Grade	Min.	Max.	Min	Max.

Air Spring Tower Mount Nut	3/8	16-UNC	5/B	30	45	41	61
Air Spring Bottom Mount TopLock Nut	1/2	13-UNC	5/B	25	35	34	47
Air Spring Top Mount Nut	3/4	16-UNF	5/B	40	50	54	68
Shock Mount Nut/Bolt	3/4	10-UNC	5/B	210	235	285	319
Slot-Align Pivot Bolt & Nut	7/8	9-UNC	8/C	550	600	746	813

### INSTALLATION OF "SLOT-ALIGN" NOTES:

**OVERVIEW:** The "SLOT-Align" pivot joint features outside eccentric cam gear washer that cover the alignment slo and gives the user a economical way to get axle alignment feature. **CAUTION:** DO NOT APPLY undercoating to the area until after alignment and torque of the pivot bolt.

- With the pivot bolt loose.
- For adjustment, use a breaker bar or other to move the axle forward/rearward.
- The Slot gives you 3/8" pivot movement fore and aft per hanger side. You can use Cush tool W1235 for adjusting pivot gear on one side or both.
- To align the axle, move one side of the suspension to get the axle aligned. If needed, go to the other side of the suspension and move in the opposite direction to fully align the axle.
- After alignment, clamp the joint per Cush torque specifications. After alignment, the suspension installer can weld the outside washer to the hanger Top & Bottom of the gear with 1/2" welds to prevent tampering & for off-road applications. Do not weld on the sides of the gear.

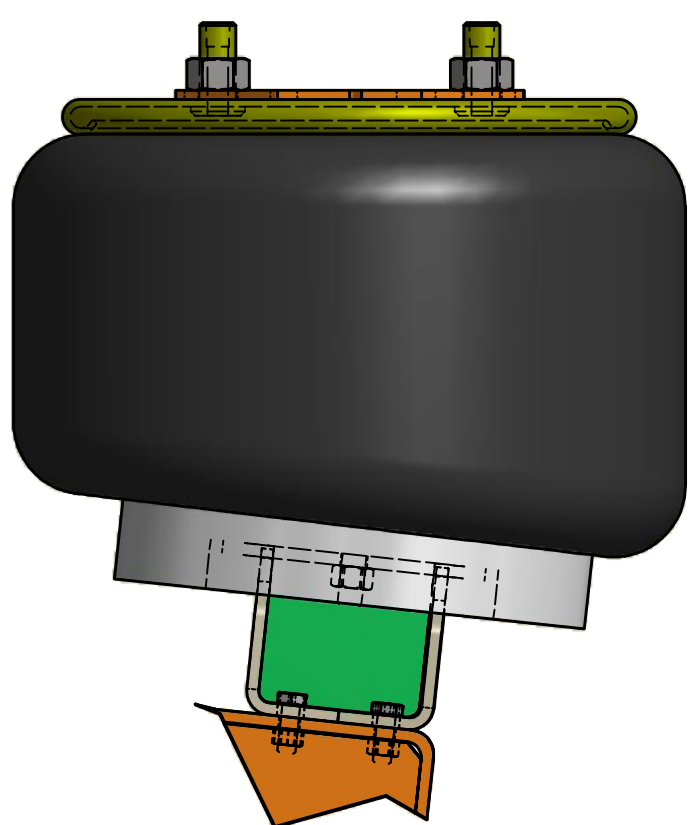
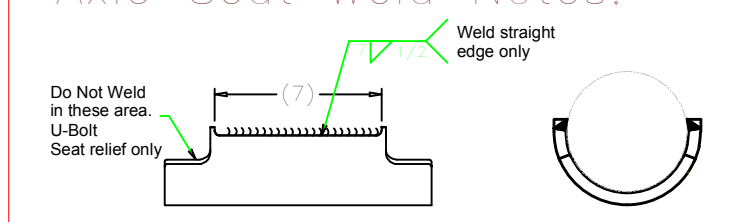
### INSTALLATION NOTES:

- (1) Measure trailing arm centers and track to verify your requirements.
- (2) DO NOT APPLY undercoating to the suspension until after completing the alignment. Undercoating will effect clamp load of the pivot connection fastener and can damage the hardware.
- (3) Mount hangers onto trailer frame per suspension drawing sheets.
- (4) Place plastic washers on both sides of bush inner metal and insert spacer collars into bush inner sleeve.
- (5) Measure for fit then mount Cushdrive trailing arm/axle assembly into suspension hangers. 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
- (7) Mount pivot washer/nut and torque joint for a snug fit.
- (8) Adjust "Align" for proper axle track alignment.
- (9) Torque bushing pivot bolts per Cush torque instructions.
- NOTE: Failure to follow the procedures in the Cush Service and Installation manual and/or properly torque the pivot fasteners at this time can result in a failed pivot connection and a loss of warranty coverage!
- (10) Install air springs and shocks per suspension installation manual and drawing sheets.

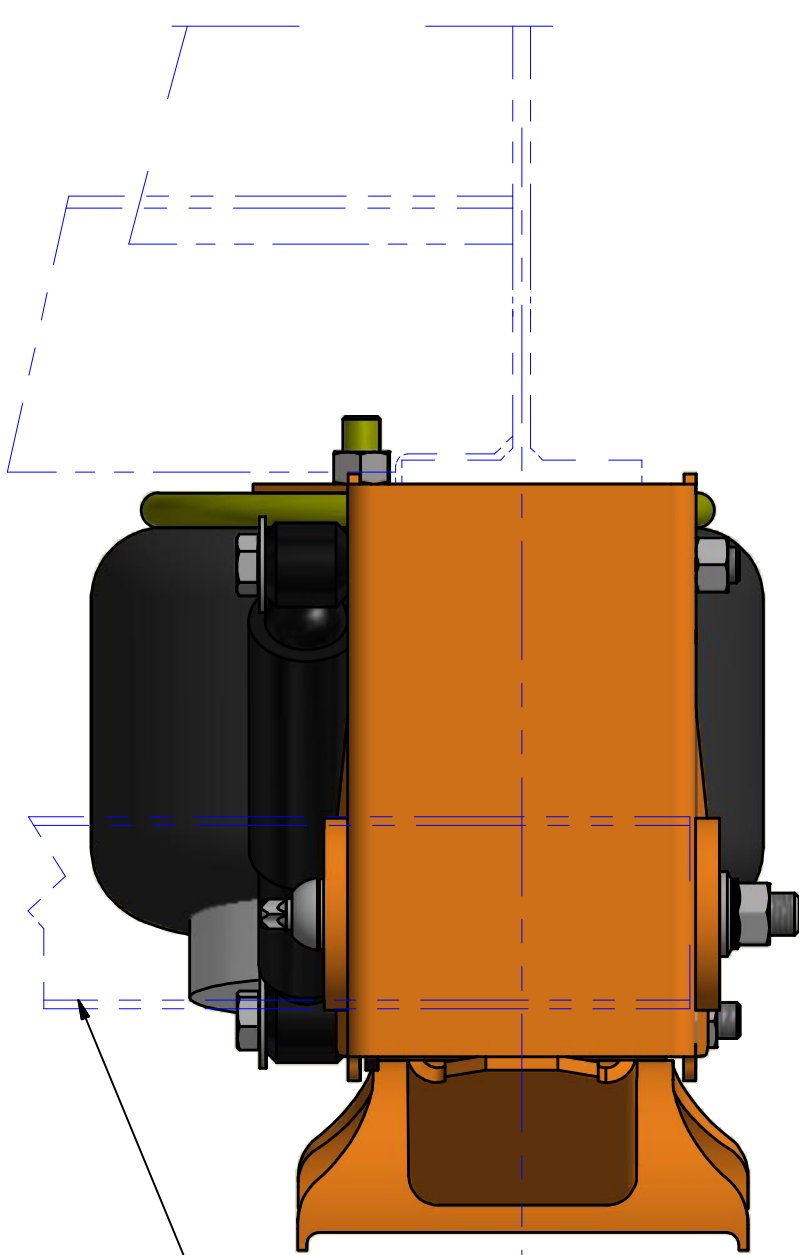
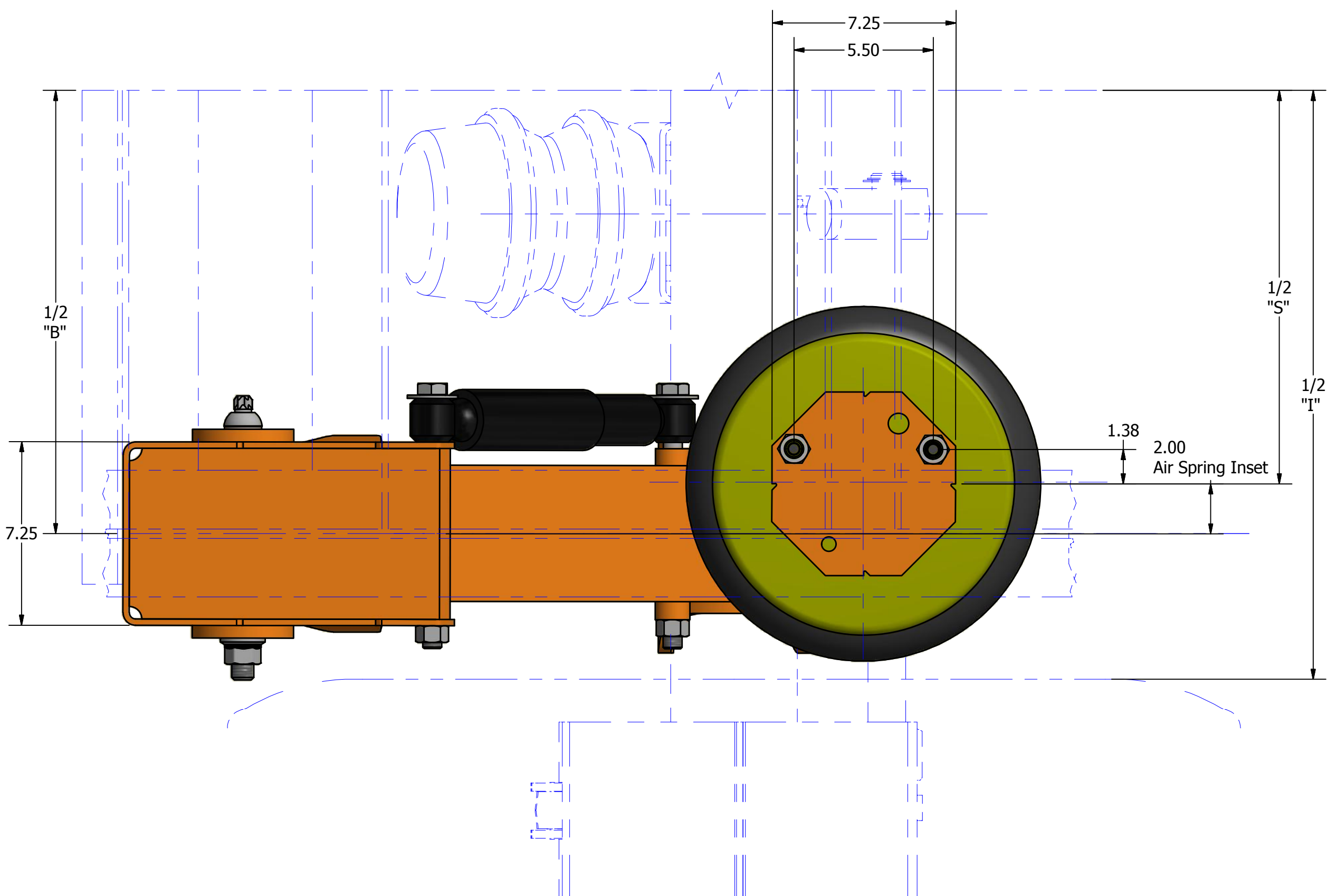
General Application Dimension Variables – Installation Clearance Notes Supersede all Common Variables Shown						
"B" Ref. Suspension Beam(Hanger) Centers	34	35	40	41	40	39
"S" Ref. Air Suspension Centers(2" Inset/side)	30	31	36	37	36	35
"T" Ref. Adu. Track	71.5"	71.5"	76.5"	77.5"	77.5"	77.5"
"A" Approx. Chassis Centers for 16.5" x 7" Brake	9.75	9.75	14.75	15.75	15.75	15.75
"T" Ref. Inside of Tires Min(Hanger Style)	46.5	46.5	51.5	52.5	52.5	52.5
<b>Installation Clearance Notes</b>						
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 tires. 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 hangers and brakes, can be 0.5".					

**AXLE WELDING NOTES, See Cush Procedure A0001-3:**  
**WARNING:** Review Cush Recommended Steel Welding Procedures  
 1) Suspension components and their mating parts must be at a minimum temperature of 60°F(15.5°C) and free from moisture, dirt, scale, paint, grease, and other contaminants.  
 2) For the best axle to beam weld joint use the following wire.  
**Axle Weld Wire:** AWS E70S-6  
 3) Create the root pass to connect the axle to the trailing arm beam on the straight edge weld. Hit the axle seat tabs down to the axle to give you parent metal for pass 2 and 3. Finished axle weld should be a multi-pass 1/2" weld.

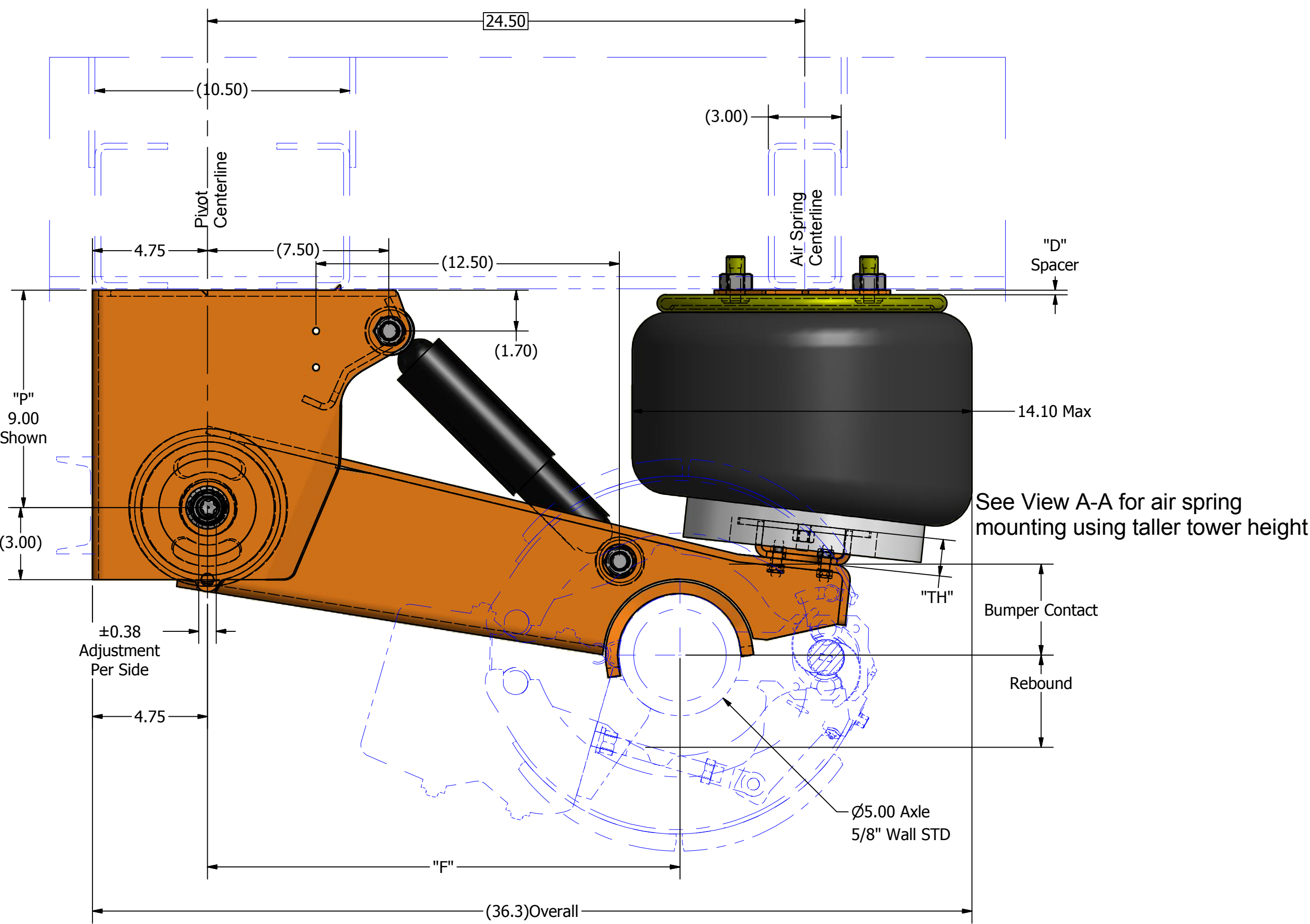
Axle Seat Weld Notes:




View A-A  
SCALE 1 / 4  
Air Spring Lower Tower Height  
"TH" = 3.5" Shown  
for T17\_16"/18"  
Ride Heights



– Front Cross-Member or  
Hanger Support  
Customer Furnished  
See Options



DCN#		B	Fixed Pivot Kit and Gears		3/18/15	DJW	CHK	APP
DCN#		A	Updated Layout to color		1/9/15	DJW	CHK	APP
DRAFTSMAN: DJW			<div>TITLE:</div> <div>Part List Installation Sheet</div> <div>Cush Performance Top Mount Half Wrap</div> <div>25000 Gross Suspension Weight Rating</div> <div>14"/16" Ride Height</div> <div>Weld-On Wingless Hanger Mount</div>					
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:			<div>Nixa, MO. USA</div> <div>PHONE: 417-724-1239</div> <div>www.cushcorp.com</div>		
			<div>.XX = +/- .062      FRACTIONS = +/- 1/16</div> <div>.XXX = +/- .031      ANGLES = +/- 1°</div>					
			PROJECT NO:		SHEET:	SCALE:	REV:	PART/DRAWING NO:
14208		1 OF 2	A-SIZE: NTS B-SIZE: 1/4 D-SIZE: 1/4	B	CP25C(15/16/17)			



