

# Spring Bolt Vise Attachment

**USERS MANUAL**





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Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6

The spring bolt vise attachments mount to the crossbars of the F.A.S.T. Anchoring System and mate with the design of the spring / trailing arm mount bolts. They are primarily used in the rear of the vehicle's center section; however, they can be used in the front of the center section in a few applications.

**NOTE:** In addition to the spring bolt vise attachments, this manual also shows usage of the 3 inch riser bars, tie back plates, turnbuckle assists and tie down bolts which are part of the F.A.S.T. Anchoring System Upgrade Package (Part No. 200030 — see Page 5).

1. Lift end of vehicle where spring bolt vise is to be installed. Lift both sides of vehicle at the same time using Chief Air Jack or other suitable lifting device(s).



**CAUTION:** If opposite end of center section is not yet anchored, block both wheels at that end of vehicle prior to lifting. Position 4 inch wood blocks at front and rear of each wheel.

2. Install anchoring stands at corners of center section and secure the crossbar of the F.A.S.T. Anchoring System to the stands. (See Figure 1.)
3. Insert appropriate size bushings into spring bolt vise attachment. (See Figures 2 and 3.)
4. Lift spring bolt vise attachment into position making certain the bushings engage both ends of the spring bolt. (See Figure 4.)

**IMPORTANT:** Engage inside portion of spring bolt prior to outside portion of spring bolt.

5. Tighten adjustment bolt to secure attachment to spring bolt. (See Figure 5.) DO NOT firmly tighten at this time.
6. Chain suspension to frame rail to prevent interference with measuring and allow for drive shaft clearance. (See Figure 6.)

**NOTE:** This step may not be required on some vehicles.

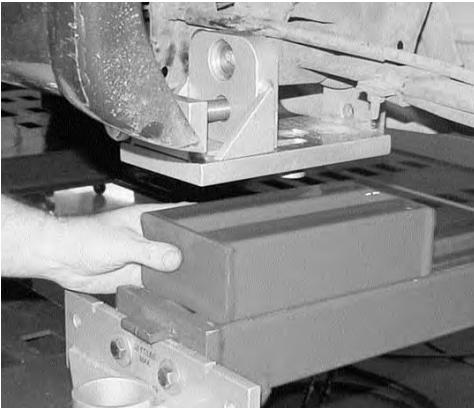


Figure 7



Figure 8



Figure 9

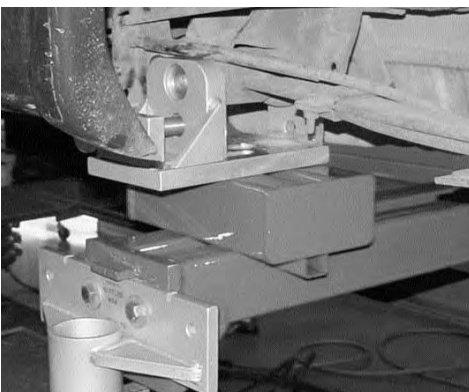


Figure 10

7. Install appropriate size spacer (if needed) on crossbar directly below spring bolt vise attachment. Some vehicles may require installation of one or two 3 inch riser bars (Part No. 539541) between attachment and top of crossbar. (See Figure 7.)

**IMPORTANT:** Before proceeding see Special Pulling Situation at bottom of this page.

8. Insert a tie back bracket (Part No. 539539) between the attachment and riser bar (see Figure 8) and lower vehicle making sure the attachment engages both the hole in the tie back bracket and the channel in the riser bar.

**CAUTION:** Keep hands and fingers clear of all contact points when lowering the vehicle.

9. Secure attachment to the crossbar using an appropriate length tie down bolt and tie down plate. Insert bolt upward through channels in crossbar and riser bar(s) threading it into base of spring bolt vise attachment.

10. For additional support, attach auxiliary chain to tie back plate and secure it to mainframe using a turnbuckle assist (Part No. 539630). (See Figure 9.)

11. Repeat steps 3 - 10 on opposite side of the vehicle.

12. Install appropriate anchoring equipment at the opposite end of the center section.

13. Firmly tighten all anchoring components.

### **Special Pulling Situation**

**If rail must move with the pull (for example: to correct diamond), make these adjustments on side of vehicle that must move:**

- If riser bar is installed, rotate riser bar (top riser bar if two are stacked) so it straddles the crossbar. (See Figure 10.) Then lower the vehicle to engage attachment base with groove in riser bar. **DO NOT** secure attachment to crossbar at this time. This setup allows rail movement across top of riser bar. After the pull is made, secure the attachment to the crossbar.



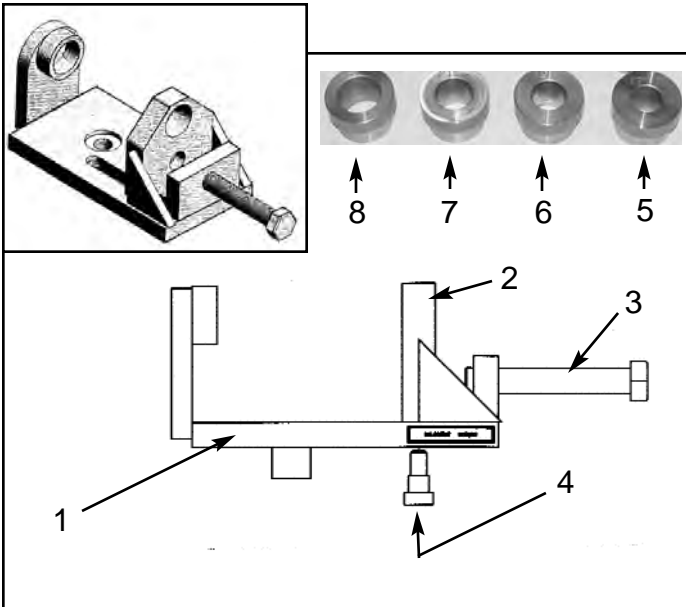
Figure 11

- If riser bar is not installed, loosen only the tie down bolt securing the anchoring stand to the mainframe. This setup allows the entire anchoring assembly to move with the pull. When the pull is applied use hammer and wood block at base of stand to assist the movement. (See Figure 11.) After the pull is made, firmly secure the anchoring stand to the mainframe.



**CAUTION:** DO NOT make pulls to correct diamond until:

1. Rail that 'must not move' is firmly secured at both front and rear anchoring locations.
2. Rail that will move is supported by anchoring equipment and is free to move with the pull.



### Parts Ordering Information

To order parts for the spring bolt vise attachment, contact a Chief Automotive Technologies, Inc. representative or contact Chief Automotive Technologies, Inc., 1924 East Fourth Street, Box 1368, Grand Island, Ne. 68802, 800-445-9262, and refer to part numbers listed.

Ref	Part No.	Description
	<b>539342</b>	<b>Spring Bolt Vise Attach., Set of Two</b>
	<b>539341</b>	<b>Final Ass'y, Spring Bolt Vise Atch., Complete</b>
1	539339	Spring Bolt Vise Weldment
2	539340	Slide Block Weldment
3	539010	Bolt, M20 x 127mm Hex Cap Screw
4	011081	5/8 Hex Socket Head Shoulder Screw
5	539117	Bushing, 17mm
6	539119	Bushing, 19mm
7	539121	Bushing, 21mm
8	539124	Bushing, 24mm
	539346	Spring Bolt Vise Attachment Users Manual

Part No.	Description
<b>200030</b>	<b>F.A.S.T. Anchoring Upgrade Pkg.</b>
539342	Spring Bolt Vise Set, Complete
519730	Anchoring Tool Box
539337	Rail Vise Assembly
539541	Riser Bar, 3 "
539539	F.A.S.T. Tie Back
539630	Turnbuckle Assist Set
539009	Bolt, M20 x 2.5 x 260mm





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**Chief reserves the right to alter product specifications and/or  
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