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The first item that requires some diligence is whether you have stock springs or the heavy duty Sway-a-Way units. I won't cover this here but I have attached Sway a Way's directions to this document if you think you need them. They will help you in figuring out how the springs are stacked and the orientation of the grub screw indents.

In the meantime this posting should assist those who are in need of some guidance when installing spring leaves in the beam tubes with an adjuster. You have to be able to see what you're doing. So not having the beam on the car is quite helpful but not always possible.

The installer must know the constraints you are working with. Let's assume you are working with the springs on top with the standard height adjuster. The ball joint beam is different from the link pin beam in configuration and design. So is the adjuster. Here are the differences.

First, the adjuster is different because it has two Allen screws that are 90 degrees apart. I'm going to call the one on the outside the external Allen screw. In addition the short one on the inside that I'll call the internal screw

The ball joint beam has trailing arm/spring pack grub screw locations that face up on the left side and down on the right. So spring pack rotation/orientation is important. Lots of wrong ways to install the spring pack, but only one correct way.

Remove the external spring pack center Allen screw and its aluminum block completely and back off the adjusting bolt. Turn the adjuster 90 degrees to expose the internal Allen screw. Make a note of where this short Allen screw is in rotational position because that is where the spring pack center dimple locates. Back this Allen screw out but leave one thread screwed in to make sure you don't push the inside of the adjuster out of its sleeve.

Insert the middle spring oriented in the direction of Allen being careful to note that the slot for the right torsion arm faces up (true) and the left faces down. Double check this. Next begin working the middle spring then outward insert one spring on the bottom of this middle spring then one on top of it. Install the remaining large springs until you have them all installed. Last install the remaining small springs in their skinny slots bottom first. Then lock down the small Allen screw. Rotate it back 90 degrees and install the external Allen, main center screw, aluminum block and adjuster bolt. You can the install the torsion arms remembering their up down and left right orientation.



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INSTRUCTIONS SWAY-A-WAY VW FRONT END ADJUSTERS

- 1. The Sway-A-Way Adjuster must be installed by a qualified mechanic.
- 2. Place the car on jack stand and remove tires, wheels, drums, spindles, control arms, and springs.
- 3. Disconnect the steering shaft and tie rods. Remove the bolts holding the front end to the chassis. Remove the front end.
- 4. Scratch a 3" long line, lengthwise along the top tube, through the center of the set screw. If you have a ball joint front end.
- 5. Mark the exact center of the tube, vertically, through the set screw hole, and at right angles to the 3" scratch. Then mark your cutting line to each side of the center line (1" to each side for the adjuster and 1 11/16" for the widener/adjuster.)
- 6. Using a tube cutter, cut the piece out of the center of the tube (2" for an adjuster and 3 3/8" for a widener/adjuster.) Be sure the cuts are straight and at a right angle to the tube itself.

NOTE: If you want to have all of your height adjustment in either the upward or downward direction, Its possible to set the adjuster for that effect before you go on to step 7A or 7B. If you want only downward adjustment you should set the block (#3) and its socket set screw (#2 or #8) as far back from the bracket as possible. If you want only upward adjustment you should set the block and screw as close to the bracket as possible. Set it in the middle to allow equal amounts of upward and downward adjustment. Then continue with step 7A or 7B.

7A. FOR LINKPIN FRONT END: Set the adjuster for the selected adjustment. Place the whole unit in the tube, with the disc (#9) turned as shown in illustration 1. The scratched line should pass through the center of the new socket set screw (#8). The unit should be placed so that the sleeve assembly #4) and the socket set screw (#2A) point forward of the car. The adjuster block (#3) and its socket set screw (#8) should be on top.

- 7B. FOR BALLJOINT FRONT END: Set the adjuster for the selected adjustment. The ½" socket set screw (#6) should not yet be installed. Place the whole unit in the tube with the disc (#5) turned as shown in illustration 2, Figure B. The second 3" line that you scratched should pass through the center of the new socket set screw (#2). The unit should be placed so that the sleeve assembly (#4) and socket set screw (#2A) point forward of the car. The adjuster block (#3) and its socket set screw (#2) should be on top.
- 8. Tack weld the unit in place and test it straightness by inserting your leaf spring. They should be centered at both ends of the tube.
- 9. Once the unit is straight, weld it into place, being sure that it remains concentric with the tube.
- 10. If you are installing two adjusters, repeat steps 4 through 9 with the other tube.
- 11. If you are installing a Sway-A-Way Widener/Adjuster, you would have to cut your old springs through the center set screw hole and drill new inside holes on each half. The distance between centers of the set screw holes should be 17 ½" for link pin front ends and 17 ¾" for ball joint. Sway-A-Way also makes heavy duty springs with these holes already drilled.
- 12A. FOR LINKPIN FRONT END: Replace the 1-beam on the car and reassemble.
- 12B. FOR BALLJOINT FRONT END: Replace the 1-beam on the car and insert springs. Go on to step 13.

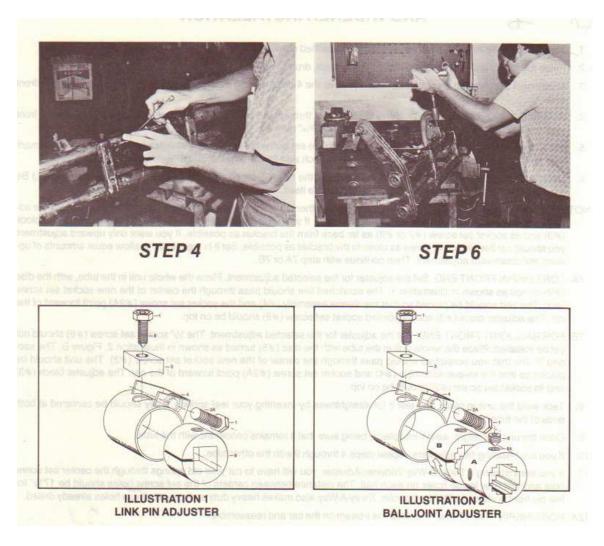
NOTE: Step 13 through 15 apply only to the assembly of ball joint front ends.

- 13. Remove the socket set screw (#2) which goes through the adjuster block (#3).
- 14. Put a control arm on the springs and rotate them until the lower set screw hole (#6A) is visible through the slot. (See Il-lustration 2, Figure A) Insert and fully tighten the ½" socket set screw (#6).
- 15. Now rotate the springs back to their original position and reinstall the big socket set screw (#2), block (#3), and jam nut (#1).
- 16. Reassemble the rest of the front end.

ADJUSTMENT PROCEDURE

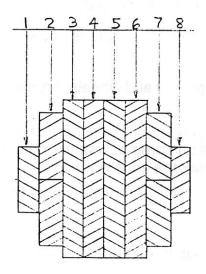
Adjustment is made by loosening both jam nuts (#1) and the socket set screw (#2 or #8) with the block (#3) on it. Turn the adjusting socket set screw (#2A) to your desire position and retighten the set screw and both jam nuts. If you have more than one adjuster in your front end, either in a widened beam or a stock width beam, make the adjustments all at the same time. Torque the socket set screw to 30 foot pounds and the jam nuts to 55 foot pounds.

NOTE: Your new Sway-A-Way adjuster, when set in the middle, w8ill give you 20 degrees of adjustment up or down, for a total of 40 degree of adjustment. In terms of ground clearance, this is about 2" up or down, or a total of 4".

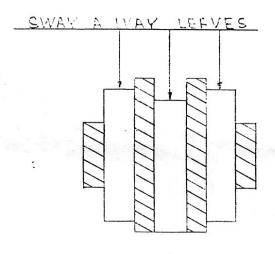


PARTS LIST

- 1 Jam nut $(6354) \frac{1}{2} 20$, 2 per adjuster.
- 2 & 2A Socket set screw, rounded tip $(5600) \frac{1}{2} 20X1 \frac{3}{4}$ ", use 2 for ball joint adjusters, 1 for link pin adjuster.
- 3 Curve adjuster block (6351)-1per adjuster.
- 4 Sleeve assembly with welded bracket and nut (6358), 1 per adjuster.
- 5 Slotted disc with two threaded holes (6353), for ball joint adjuster.
- 6 Socket set screw, cone point (6355)-1/2-20X ½ ", per ball joint adjuster.
- 8 Socket set screw, pointed tip (5603)-1/2-20X1 ³/₄ ", 1 per link pin adjuster.
- 9 Slotted disc with 1 threaded hole (6352), for link pin adjuster.



STOCK SPRING



HEAVY DUTY SPRING

SWAY-A-WAY BALL JOINT FRONT END SPRING INSTALLATION

(To stiffen a stock front end by approximately 20%)

NOTE: Sway-A-Way springs must be installed by a qualified mechanic.

- 1. Disassemble the front end by removing: tires and wheels, drums and backing plates, and spindles and control arms.
- 2. Remove stock springs from beam, keeping track of the right and left sides of each spring. This can be done easily, by placing the springs on some newspaper laid on the ground in front of the car. Place the springs on the paper, and mark the ends right and left.
- 3. Remove the two split leaves (numbers 2 and 7 in the stack) and replace each with one un-notched Sway-A-Way leaf.
- 4. Next, remove leaves number 4 and 5 (the two in the center) and replace them with the Sway-A-Way leaf which has the center grub-screw notch. Be sure the center notches line up.
- 5. Repeat steps number 3 and 4 with the other stack of leaf springs.
- 6. Reassemble the front end.

