

# INSTRUCTION SHEET: EARLY BRONCO COIL SPRINGS

## #5136 Full Size Bronco w/ Solid Axle Swap



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6609 Bronco Ln  
Knoxville, TN 37921

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**NOTE: INSTALLING SPRINGS TALLER THAN STOCK WILL CHANGE THE GEOMETRY OF YOUR SUSPENSION AND WILL REQUIRE THE USE OF LONGER SHOCKS. THE RESULTING REDUCTION IN CASTER CAN CAUSE STEERING PROBLEMS. WE RECOMMEND USING OUR POLYURETHANE "C" BUSHINGS TO CORRECT THIS PROBLEM. TO IMPROVE HANDLING YOU MAY WANT TO INSTALL OUR COMPLETE BUSHING KIT WHICH ALSO INCLUDES TRACKING BAR AND RADIUS ARM BUSHINGS.**

**All unnecessary components (TTB assembly, steering linkages, shocks, steering stabilizers, etc.) should be removed and out of the work area before beginning to install any new SAS components.**

### **BELOW IS A LIST OF OTHER PARTS WE RECOMMEND FOR SOLID AXLE SWAPPING YOUR FSB.**

5415 SAS Track Bar Bracket 1980-96 Bronco or  
5110 Heavy Duty Coil Buckets or  
5120 Lower Retainers or  
5225 Bolt on Dual Shock Mounts or

6007 7° C Bushings or  
5408 Adjustable Track Bar or  
5351 Long Travel Radius Arms w/4° built in caster  
5645 FSB Heim Steer

### **INSTALLATION INSTRUCTIONS:**

Note: we recommend measuring the distance from the frame to bump-stop mounting surface before installing the lift for referencing after the install. Lift height will vary slightly depending on the front weight and accessories added, such as a winch and/or heavier than stock bumper.

1. Jack up the vehicle with a floor jack under the front differential.
2. Place jack stands under the frame. Leave the floor jack in place.
3. Remove front wheels.
4. Remove shocks.
5. Remove the upper spring clips. Lower the front axle using the floor jack until the spring is fully extended and free of the upper spring cup.
6. Loosen the two bolts holding the lower spring cup in place. Rotate the spring counter clockwise until the spring is free of the bottom cup. It is best not to remove the bolts completely unless you are going to change the "C" bushings at the same time, as they are difficult to put back in. If you do remove the cup retaining bolts, be sure to restart them with the lower spring retainer in place prior to installing the spring.
7. For Broncos with stock length radius arms and/or a strut arm bushing at the frame. We recommend loosening the large nut that holds the arm to the frame mount. Do not remove the nut! This will allow the arm to relax and lower to remove the coil spring. This step is not necessary for arms with a heim joint used at the frame mount like our long arms part# 5351-4
8. Insert the bottom end of the new spring and rotate it until the end of the spring is under the lower spring retainer and the top coil is in the proper position to mate up to the upper spring clip.
9. Raise the differential until the spring makes contact with the upper cup and check that the spring is in the proper position so the upper spring clip can be installed.
10. Install the upper spring clip and tighten the lower spring cup retaining nuts.
11. Tighten radius arm nut until you can insert the cotter pin into the threaded shank on the end of the radius arm. Torque spec is 80-120ft lbs. Make sure arm is parallel with frame before tightening.
12. Raise the differential until the shocks can be reattached. Or install your new Duff 70/30 shocks.
13. Repeat the same procedure for the other side.
14. Install wheels.
15. Remove jack stands, lower vehicle and check that lug nuts are properly torqued.

On the taller lift springs you may notice that your coil springs “bow” after installation. This is the nature of a modern soft progressive rate coil spring. The amount of bow depends on the vehicle. If the problem is excessive in your vehicle, you can replace the lowers with our new lower retainers which will significantly reduce, if not eliminate the problem.  
#5120 Lower Coil Spring Retainers \$75/pr.



Many people have issues with Bronco Lean after disassembly of the front end. To help troubleshoot we have included this writeup.

### **CURING THE INFAMOUS BRONCO LEAN**

Drivers side lean or less common, passenger side lean in the front of your Early Bronco distracts from it's appearance.. This condition is commonly caused when replacing stock or older “stiffer” style front coil springs with the newer soft riding more flexible coil springs. It can also be caused by replacing your c bushings alone and not replacing the springs. Read on:

If you have the dreaded “Bronco Lean”, chances are you have recently replaced the coils with newer soft coils or you have replaced your “C” bushings. This lean can be measured at the bottom edge of the front fenders, bottom edge of front reflectors or any other handy place, making sure that any body damage or bad body bushings won't affect the numbers. . Quite commonly the lean is 2” or more in the front of the Bronco. The cure to this problem follows:

You must disconnect the entire front axle assembly from the Bronco. Disconnect and remove the front coil springs, disconnect the frame to axle brake line, disconnect the front housing breather line, remove the radius arm nuts from the rear mounts. Remove the rear original rubber bushings or aftermarket poly bushings that are on the end of the radius arms. With a set of jack stands supporting the axle (under the front hub assembly on either side works good) lower the threaded end of the radius arms down so they touch the LEVEL concrete floor. It's important that the floor surface is a level, flat surface. With a floor jack under the “pumpkin” or gear housing of the Dana 44 or Dana 30 differential, this makes this step very easy. Look very carefully at the ends of the radius arms. Do they BOTH touch the floor at the SAME time? If one radius arm is touching the floor and the other is not, then this is the most common cause of your Bronco leaning to one side or the other. You must have both radius arms parallel to each other. Are the C bushings installed correctly? Remove them and check the writing on the inside of the poly style bushings to verify correct installation. This step is critical. If the c bushings were installed wrong, then improper installation could be causing the lean.

To correct the lean, you must loosen the 4 bolts that hold the radius arm caps on. Randomly choose one side to start with. By loosening the cap bolts on this side almost all the way out and then tightening them back diagonally or slightly quicker at the top or bottom (try different ways), the c bushing will seat differently You can vary the distance off the floor of the offending radius arm by 2” or more by proceeding this way. However, sometimes you cannot get the threaded end of the radius arm that you want closer to the floor (more parallel to the other arm), only farther off the floor!! If this is the case, then you must try to get the arm back as close as parallel to the offending arm and then tighten/torque the radius arm bolts. Proceed to loosen the cap bolts on the other radius arm and repeat the steps you've already tried on the first arm. It may take 5 or 6 times on either or both radius arm caps before you will get the arms parallel to each other. Keep trying. It is hit or miss.

The bushings are IMO, the main culprit for front end lean when new suspensions are installed and the lean is a new condition. Of course this method or example won't solve your problem if your springs are bad or you have other front end problems. However, many Early Bronco owners have emailed me saying that this has cured the “infamous front end lean” in their Broncos.

Submitted by Brian Cooke. Courtesy of BroncoFix.com

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### **LIMITED WARRANTY**

James Duff Inc. warrants our products to the original purchaser to be free from defects in materials and workmanship. Warranty periods begin at the date of purchase and varies by product. Shocks have a limited lifetime warranty. Headers, Radiators and Suspension Products, Power Brake Boosters and Master Cylinders have a one year warranty. Adapters and soft goods such as upholstery, vinyl and rubber products have a 90 day warranty. All warranties are to the original purchaser with proof of purchase only. Such obligations under this warranty shall be limited to the repair or replacement, at JDI's discretion, of any assembly or part which upon examination by JDI proves to be defective. Any costs of removal, installation, reinstallation or freight charges are expressly excluded from this warranty. This warranty covers only manufacturers defects, and does not cover product finish or damage resulting from abuse, misuse, negligence, racing, alteration, accident or damage in transit.

All returns must be pre-authorized by JDEI and accompanied with a Return Goods Authorization Number (RGA) and a dated proof of purchase. Returns must be made within 90 days of purchase, packaged sufficiently to prevent damage in shipment and shipped prepaid to: JDI, 6609 Bronco Ln., Knoxville, TN 37921 Returns without an RGA# will be refused.

This warranty is expressly in lieu of all other warranties, expressed or implied, including the implied warranties of merchantability and fitness for use. This warranty gives you specific legal rights including other rights that vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, or do not allow the exclusion of limitation of incidental or consequential damages, so the above limitations and/or exclusions may not apply to you.

### **SUSPENSION PRODUCT INFORMATION**

Modifying your vehicle with JDI products to improve off road performance may result in the vehicle handling differently than a factory equipped vehicle. Taller tires will cause the vehicle's speedometer to read slow, so recalibration is required. Use of oversize tires, suspension lifts, body lifts, and other modifications may raise your vehicle's center of gravity, resulting in an increased tendency for the vehicle to pitch and roll during sudden turns or abrupt maneuvering. Failure to drive with extreme care to prevent loss of control or vehicle roll over may result in injury or death. Drive at a reduced speed to ensure your ability to maintain control of the vehicle under all driving conditions. We recommend installing functional roll bars and cages as well as double shocking all vehicles for more safety and stability on or off road. Always wear seat belts when in a vehicle. Consult your owners manual for recommended tire sizes, safety instruction and warnings unique to your vehicle. It is your responsibility to check state and local laws restricting vehicle height to ensure that modifications to your vehicle are legal.