

INSTALLATION INSTRUCTIONS: Polyurethane Bushings

PART #'S 6002-7, 6502-7, 6100, 6108, 6109



PLEASE READ INSTRUCTIONS COMPLETELY THROUGH BEFORE STARTING.

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NOTE: We recommend having a caster reading taken at a front end shop before installation to assure you have the proper degree bushing. 3.5 to 4.5°+ for offroading, street trucks can easily use more. Too much or too little will result in caster shimmy or wandering.

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TRACKING BAR BUSHING INSTALLATION:

1. Unbolt the tracking bar and remove the old bushings. Wire brush the rust from the inside of both ends of the bar.
2. Check your upper tracking bar bracket. If the holes are worn & egged out, you should weld washers with a 5/8" inside diameter onto the outside of each side of the bracket. Otherwise, your tracking bar will continue to cause wandering.
3. Install the new bushings in the bar. Install bar at the axle end and tighten the nut to 155-205 ft. lbs.
4. Reinstall the bar in the bracket and tighten the bolt to 110-130 ft. lbs. If you have difficulty lining up the bolt, try turning the wheel slowly until they line up.

NOTE: For vehicles with lifts and/or wandering problems, tracking bar drop down brackets and adjustable tracking bars are available to correct alignment. Please see our dufftuff.com for more information.

"C" BUSHING INSTALLATION:

Note: Although our Urethane Bushings are meant to be self lubricating. We recommend lubing them for installation. We recommend either white lithium or even petroleum jelly.

1. Install one side at a time. Jack the vehicle up until the coil springs are extended to their full free length & support it by jack stands placed under the frame. Keep a jack under the axle to prevent it from falling when the "C" bushing caps are removed.
2. Remove the front wheels. Unbolt the front shock from the lower mount, if so equipped, and compress it up out of the way.
3. Remove the lower spring cup retaining bolts.
4. Remove the front "C" bushing cap retaining bolts and remove cap, making sure the axle is supported by a jack.
5. Any flashing or rust on the inside of the iron cap should be wire brushed away to ease installation.
6. Replace the old rubber bushing with the new "C" bushings, reading markings on the inside of the bushings for correct placement. All the bushings are the same, but must be oriented to correspond to their position as shown in drawing.
7. The bushings should be a tight squeeze. You will have to start bolts at opposite corners without lock washers. When the cap has compressed the bushing partially, go back and install the lock washers. Torque the bolts to 90-110 ft. lbs. Though the sidewalls may bulge after installation, bushing performance will not be affected.
8. Reinstall the lower spring cup retaining bolts and torque to 45-55 ft. lbs. Reinstall front shock, if so equipped.
9. Repeat for other side.

STRUT BUSHING INSTALLATION:

1. Install one side at a time. Jack the vehicle up & support it with frame jacks. Remove the front wheels.
2. Unbolt the bottom end of the shock(s) and compress the shock(s) upward.
3. Remove the cotter pin from the large nut at the rear of the strut arm, if so equipped. Remove the large nut & washer.
4. Pull the axle housing forward far enough to remove the strut arm from the strut arm bracket.
5. Remove the old bushings & sand or wire brush away any rust on the strut arm.
6. Install a bushing on the front side of the bracket with the small end facing rearward & pull the housing back into the bracket. Install a bushing onto the rear of the strut arm with the small end facing forward & install the nut on the rear without the washer.
7. Tighten the nut to pull bushings into place. When enough of the radius arm has come through the bushing, remove the nut and install the washer in front of the nut. Tighten the nut until it is completely on the strut arm to between 80-120 ft. lbs. DO NOT OVERTIGHTEN! Bushings compress no more than 1/4". Reinstall shock(s).
8. Repeat for other side.

CURING THE INFAMOUS BRONCO LEAN

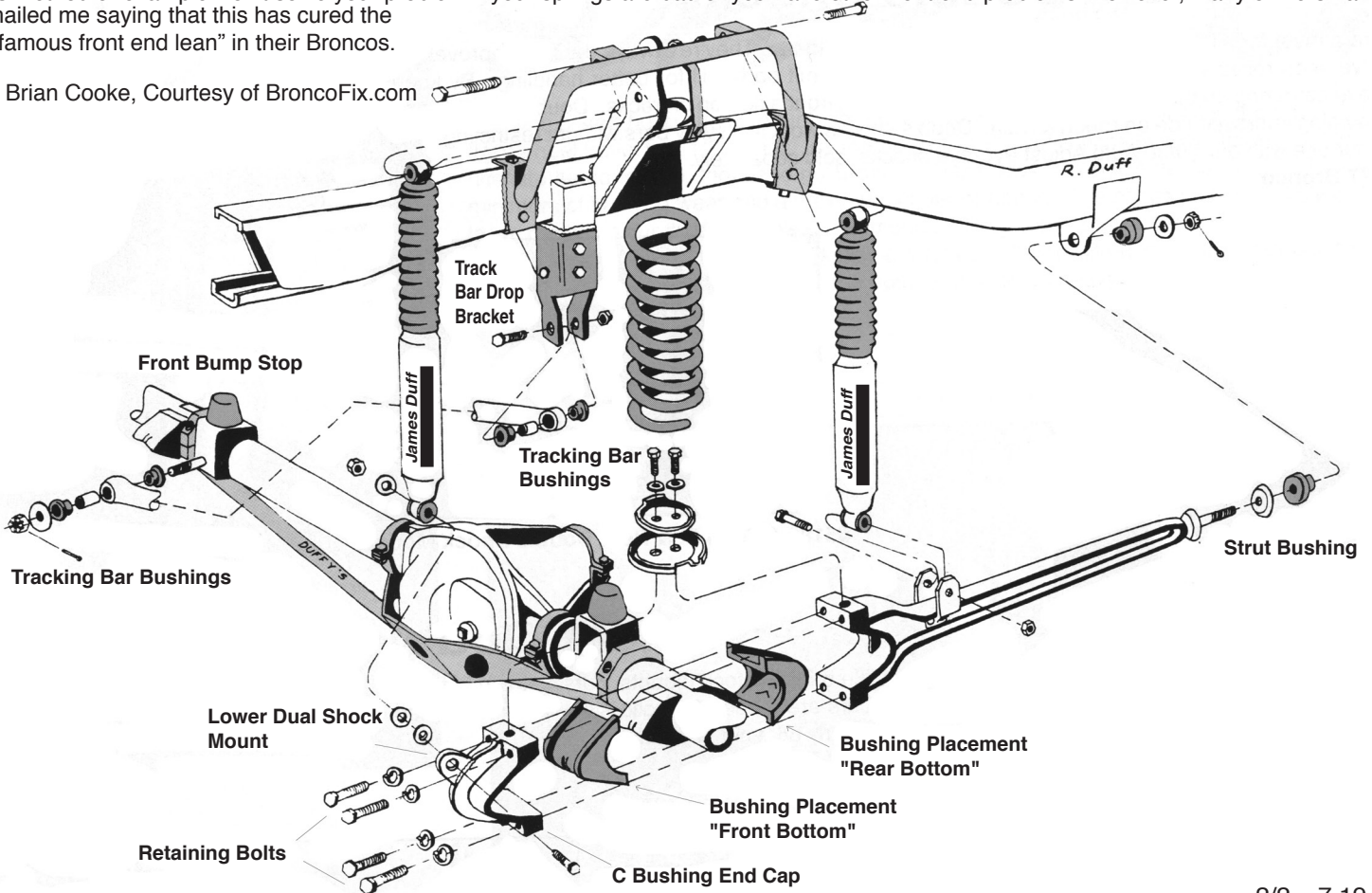
Drivers side lean or less common, passenger side lean in the front of your Early Bronco is commonly caused when replacing stock or older "stiffer" style front coil springs with the newer soft riding more flexible coil springs. It can also be caused by replacing your c bushings alone and not replacing the springs. 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 any body damage or bad body bushings won't affect the numbers. The cure to this problem is as follows:

You must disconnect the entire front axle assembly from the Bronco. Disconnect and remove the coil springs, disconnect the frame to axle brake line and front housing breather line, remove the radius arms from the frame mounts. Remove the rear bushings on the frame end of the arms. With a set of jack stands supporting the axle (under the front hub assembly on either side works good) lower the frame 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 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 arm is touching the floor and the other is not, then this is the most common cause of your lean. You must have both arms parallel to each other. Are the C bushings installed correctly? Remove and check the writing on the inside of the 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 arm by 2" or more by proceeding this way. However, sometimes you cannot get the frame end of the 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 arm bolts. Proceed to loosen the cap bolts on the other arm and repeat the steps you've already tried on the first arm. It may take 5-6 times on either or both caps before you will get the arms parallel to each other. Keep trying. It's 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 owners have emailed me saying that this has cured the "infamous front end lean" in their Broncos.

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, Suspension Products, Power Brake Boosters and Master Cylinders have a one year warranty. Adapters and soft goods such as 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 and shipped prepaid to: JDI, 6609 Bronco Ln, Knoxville, TN 37921 Returns without an RGA# or sent COD 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.