

INSTALLATION INSTRUCTIONS: PART# 5353

Long Travel Extended Radius Arms

Solid Axle Swap 1980-96 Bronco

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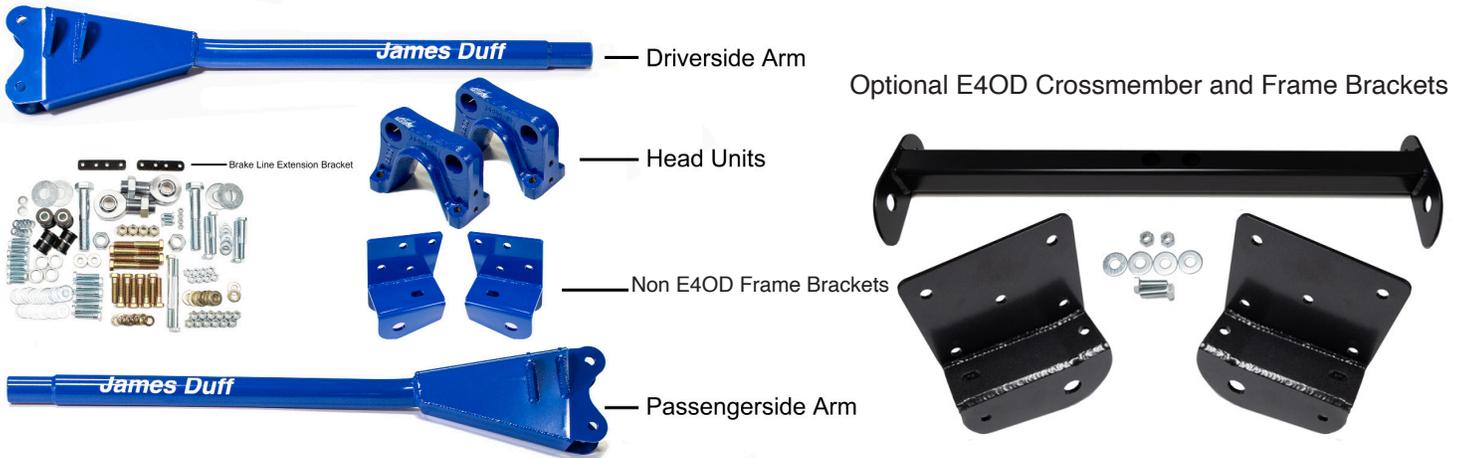
1	Drivers Side (DS) Radius Arm	8	9/16" x 2 1/4" NC GR 8 Bolts
1	Passenger Side (PS) Radius Arm	2	9/16" x 3 1/2" NC GR 5 Bolts
2	Radius Arm Cast Head Units	8	9/16" Lock washers
1	DS Frame Bracket	2	9/16" Small flat washers
1	PS Frame Bracket	12	1/2" x 2" NC GR 5 Bolts
2	Brake Line Extension Brackets	2	1/2" x 3 1/2" NC GR 5 Bolts
4	Head Unit Bushing Sleeves	2	1/2" x 6" NC GR 5 Bolts
8	Head Unit Bushings	14	1/2" Nyloc Nuts
2	1 1/4" thread x 1" bore Rod Ends	22	1/2" BIG Flat Washers
2	1 1/4" Jam Nuts	6	1/2" SMALL Flat Washers
2	1" x 5 1/2" NC GR 5 Bolts	2	7/16" x 1 1/4" NC GR 5 Bolts
2	1" Nyloc Nuts	2	7/16" LARGE Flat Washers
4	1" Flat Washers	2	7/16" Lock Washers
4	1" I.D. Rod End Spacers	2	7/16" SAE Flat Washers
4	5/8" x 4" GR 8 Bolts	4	5/16" x 3/4" NC GR 5 Bolts
4	5/8" Nyloc Nuts	4	5/16" Nyloc Nuts
8	5/8" Flat washers		



865.938.6696 www.dufftuff.com
6609 Bronco Ln.
Knoxville, TN 37921

1/8 5/25

Optional:
Crossmember for E4OD Transmission



ATTENTION: Depending on the vehicle. You will need 5 to 6" of suspension lift to install this SAS kit. Your factory shocks and coil springs should not be reused with this kit. Please contact us through our tech department at dufftuff.com/tech if you have any question. Our tech department works through email only.

Solid Axle Swap Guide (SAS):

First and foremost. If you have never removed or installed a front axle this is a BIG JOB and will require Mechanical knowledge and experience beyond installing an SAS. Please do a lot of research before you get started and make a list of what tools and equipment you will need to perform this swap. Also keep in mind, you do not have to use a donor or junkyard axle to do an SAS. There are several new axle options available. We recommend Currie crate axles. Currie can build you an axle to your exact specification. Note: Building a custom axle will also allow the differential to be in the correct place for a 4" suspension lift.

Second, take the time and go through your donor axle BEFORE you start your SAS. Make notes of where it's leaking, Clean it real good, inspect it for damage and cracks in the tubes and center section. Make sure the axle shafts aren't bent or broken, brakes, ring & pinion, bearings and seals are all in good working order and there are no surprises left waiting for you once it is under your vehicle and time to be used. Repack the bearings, replace the old diff fluid and check the ball joints or king pins in the knuckles. The last thing you want to experience is death wobble on your maiden voyage. If you're new or inexperienced to axle swaps, use your local and online resources to ensure your axle is ready to be swapped into your vehicle. Keep in mind, dufftuff.com can provide you with several Dana 44 brake, knuckle and hub parts. Plan ahead and get these parts shipped to you when you order your James Duff SAS kit.

LIST OF KEY AREAS AFFECTED BY THE SAS

RIDE HEIGHT - DuffTuff.com for HD coil buckets that can be adjusted up or down to set your desired ride height. We don't recommend running below 6" of suspension lift when installing a SAS on a '80-'96 Bronco. Anything less could require serious modifications to the front of the front engine crossmember.

DRIVESHAFT(S) - DuffTuff.com can sell new and refresh/shorten/lengthen your existing driveshaft(s)

BRAKES - DuffTuff.com for dana 44 brake refresh kit and knuckle components

ABS SENSORS ('93 & UP) - Will need to be bypassed. DuffTuff.com can supply the correct proportioning valve w/ bracket & brake line kit

STEERING - DuffTuff.com for standard and custom heim steer kits to replace your tie rod and drag link Factory '80-'96 FSB steering or any RBV steering linkage will not work with an SAS.

REAR SUSPENSION - DuffTuff.com for new leaf springs and leaf spring kits.

We offer a 6-7" Deaver leaf spring for FSB at DuffTuff.com and can be purchased with new shackles, bushings, u bolts, HD leaf spring plates and all new grade 8 hardware.

SOLID FRONT AXLE - DuffTuff.com has the weld on axle wedges, c-cap spacer kits and c bushings to adapt/convert any axle to work under your vehicle

Lift height to tire size ratio for 80-96 FSB

A 6-8" SAS with no body lift and a 35" tire will look and function very good and require minimal trimming of the fenders depending on what you do with the Bronco

A 9-10" lift with no body lift and a 37" tire will look and function very good and require minimal trimming of the fenders depending on what you do with the Bronco

Is any welding required?

If you have to install the weld on c wedges to the axle and if you bought a Torque Tamer then yes there is welding required. We do believe adding 3-4 one inch stitch welds to the coil buckets, shock towers and radius arm frame brackets is a smart play but not required.

NOTE: All Ford Broncos/SUV's started coming standard equipped with 4 wheel ABS in 93. Prior years (beginning in the late 80's) were REAR WHEEL ABS ONLY and should not be affected by an SAS.

If your vehicle comes equipped with 4 wheel ABS (anti-lock braking system) It will need to be bypassed in order for your brakes to function properly with your SAS. After your ABS is bypassed there will be a light on the dash that says ABS. It will stay lit from now on. If you want your 4 wheel ABS to work and the light in your dash to go out, you will have to use a solid front axle that comes equipped with the correct size tone ring and buy a sensor adapter for the ABS sensor wiring. James Duff does not currently support this part of the SAS.

Before starting disassembly, take measurements of your vehicle while resting on a flat, level surface, including ride height, wheelbase & tire/wheel clearance. Drop plumb bobs and note wheelbase on fender with masking tape for reference. Check all clearances before installing.

Be safe and use proper PPE (Personal Protective Equipment)

Several Jack stands and floor jacks will be required to do this swap. Having a 2 or 4 post lift will also be a great benefit but not required. Block the rear tires, raise the front of the vehicle and place jack stands under the frame so the front axle can hang freely by the coil springs.

For all vehicles that have a TTB front end from the factory you will have to remove the entire front axle assembly, axle brackets at the front crossmember and frame. You will find most of those brackets are riveted on and will require an electric hand grinder with stone wheel to be removed.

If you have an IFS front end we do not have tear down or install instructions that support those vehicles.

Buy a can of Knocker Loose thread penetrator before you get started and spray it on all hardware that connects the axle to the bracketry, arms and frame to the axle.

If you plan on using our HD coil buckets and/or shock towers you will need to remove your stock coil buckets now as well. All '78-'96 Full Size Broncos will need to use our **#5110** coil towers and our **#5225** shock towers.

Typically the brake lines are routed through the stock coil buckets on TTB equipped vehicles and will need to be separated and set off to the side.

If you buy our **#3742** MC Brake line kit it will come with plugs to stop the brake fluid from leaking out of the master cylinder.

It is time to mock up your new solid front axle. There are a few key areas here that need to be addressed depending on what axle you decide to use.

Please be sure to go through it and inspect/replace all the axle, brake and hub components where needed. If it is a Ford Dana 44 we supply several brake & knuckle components for it at dufftuff.com

76-79 F-150 & 78-79 Bronco Dana 44 high pinion front axle

This axle needs very little to adapt to the FSB or RBV using James Duff SAS parts

72-77 Bronco dana 44 low pinion front axle

TYPICALLY ONLY USED ON THE RBV OR MIDSIZE TRUCK/SUV PLATFORMS DUE TO OVERALL WIDTH

This axle needs very little to adapt to the RBV OR MIDSIZE TRUCK/SUV PLATFORMS using James Duff SAS parts

Dana 44 and Dana 60 drivers drop with leaf spring perches

The leaf spring perches will need to be cut and ground off before the JD SAS kit can be mocked up or installed. You will also need our weld on axle wedges **#5340**. You will need to purchase a **#5351-HP44** or **#5351-60** C-Cap spacer kit.

Super Duty aka SD Dana 60

We do not currently support the SD 60 axle swap for brakes adapter fittings, tone ring sensor adapters or bolt on control arms but that might change. Subscribe to our email and/or follow us on Facebook and Instagram for updates on all our product updates.

You're now ready to mock up your new or new to you solid front axle under your vehicle. You will need to use a plumb bob and tape measure to verify the axle is positioned correctly, square, level and centered to the frame. This will ensure your wheelbase and track width are set. **If you do not know where to begin or how to do this correctly please stop and ask for help. This is a vital step that must be done correctly before moving forward.**

If you are setting up your new JD coil buckets, you will also need to set the ride height in your front end. The Zinc plated JD HD coil buckets(#5110) are not pre-drilled and can be slid up or down the frame to achieve the desired lift height. It will be up to you to position them correctly and make sure they are drilled and attached properly. The JD coil buckets can safely give 6-9" of suspension lift on FSB & RBV. You can also stitch weld the JD coil buckets and shock towers to the frame once bolted in place. Keep the stitches at 1" long and move around keeping the welds 3-4 inches apart so they don't change the temperance of the frame and/or create brittle hotspots that can break off over time.

Note: We do not provide install instructions or mounting hardware for our 5110, 5111, or 5112 coil buckets. This is a DIY part that you decide where & how to mount using bolts, welding, or both. Drilling holes may be required for your vehicle. If your fram is not flat where the coil bucket mounts you may have to add shims or washers between the frame and coil bucket.

It's time to assemble the arms. Note: Although the bushings are self lubricating, we recommend lube for installation. Silicone base bushing lube is best, but white lithium will work. Do not use Petroleum Based Grease! The silicone grease will outlast lithium and prevent squeaking, as well as improve articulation. Insert the bushings into the head unit, then press the 2" sleeves into the bushings. NOTE: The tolerance of the holes in the head unit are very tight to prevent bushing wear. Be patient and firm using a light tap of a hammer to start the bushings into the holes. We highly recommend using thread-locking compound on all fasteners without a locking nut. Lay out and verify all James Duff parts you may need are accounted for before you tear down your Bronco. This is especially important if you have a rented space or if a mechanic/shop is doing the install. We recommend that you have a caster reading taken at a front end alignment shop before installation to assure you have the proper degree bushing, so you won't be held up waiting for them or have to tear it back down and reinstall. We recommend a reading of 3.5 to 4.5°+. Too much or too little will result in caster shimmy or wandering. Take into consideration when calculating for the proper bushings, there is 4.25°+ built into these arms.

Please read all instructions before beginning.

Step 1: Using generous amounts of lube, coat the inside and outside of the c-bushings. Be sure to orientate them correctly by reading the inside edge of it. If you mount them upside down, your caster will be drastically off.

2. Slide the C bushing into the head unit. NOTE: Make sure the 7/16" threaded holes are facing up. Position the other C bushing into the C cap, again make sure the threaded hole is at the top. We have supplied you with 2, 9/16" x 3.5" Grade 5 bolts, and small flat washers. This is your starter hardware that will pull the head unit and c cap together close enough so that you can use the 9/16" x 2.25" Grade 8 bolts and lock washers. We highly recommend chasing all threaded holes on the head unit & c-cap before assembly. **BE SURE TO USE ANTI SEIZE ON ALL OF THESE BOLTS AND DO NOT USE AN IMPACT GUN!** Start the longer bolts first diagonal from each other. Using a ratchet, thread them in a little at a time. If they don't thread in easily, back them back out and back in until the hole becomes easier to thread. Do not bottom out the long bolt, this will cause the bolt to seize when trying to remove it. **HEAD UNITS ARE VERY EXPENSIVE TO REPLACE, SO GO SLOW AND TAKE YOUR TIME TO PREVENT STRIPPING THE THREADS.** Now install the shorter bolts with 9/16" lock washers. Once the first two are in place and have relieved the tension off the starter bolts, remove them and install the last two short bolts with lock washers. Once you have the shorter bolts threaded in 3 or 4 turns, move on to the other side and repeat. Do not tighten these down yet, doing so can cause Bronco Lean! Which can be exaggerated when the c-bushings aren't lubed adequately.

3. Align the arm to the head unit, so the bent portion is to the inboard side of the vehicle and the shock tabs are facing up. Align the upper and lower holes in the head unit with the upper and lower holes in the arm. Use the 5/8" x 4" bolt, two 5/8" washers and a 5/8" Nyloc nut to secure these positions. Use the impact to tighten the bolts until they are snug but still have a little bushing squish and the arm can move side to side. You will tighten these in step 16.

4. Now that the arms are installed and securely tightened to the Head units. It's time to finish tightening the C cap bolts. Grab the driver side arm and prevent it from rotating down. While doing this, remove the small jack stand or wood block under the pinion snout and slowly let the arms rotate down to the ground. Be mindful of the jack stands holding the axle up so the axle doesn't slip off of them. Also keep an eye on your axle to frame brake lines so they don't kink or over extend. Once the ends of the arms are resting on the ground, it is time to tighten the C-cap bolts the rest of the way. Grab your 13/16" socket, 6" extension and 1/2" ratchet driver and get comfortable underneath the front end. The goal here is to manually tighten down your C-caps while keeping both arms frame ends touching the ground. Make sure to go in a criss cross pattern and jump from the driver side to passenger side frequently. The arms will lift and drop a little as you tighten the bolts but once you are done tightening all 8 bolts, the arms should be flat on the ground. This is how you prevent the dreaded Bronco Lean. Once you have all 8 bolts tightened down by hand, torque them to 90-110 foot pounds.

5. Thread one 1-1/4" jam nut fully onto each of the 1-1/4" rod ends. Thread the rod ends into the radius arms. Thread them in until they bottom out then back them off 1/4" until the rod end bolt hole is side ways with the arm installed.

E4OD Crossmember Install - skip to step 8 if you are installing the standard frame brackets

6. Using a floor jack & a piece of wood lift the transmission slightly. Remove the 2 nuts that hold the transmission to the crossmember. With the floorjack now lift the transmission until the mount has cleared the crossmember. Remove the push in harness clips from the crossmember and set the harness out of the way as best as possible. Remove the transmission crossmember completely from the chasses including all crossmember braces.

7. Lower the transmission back down a few inches and mount the JDI cross member to the transmission using the factory transmission mount hardware. Using the 1/2 x 1.5 NC GR5 Bolts and the 1" bolts attach the radius arm pivots to the crossmember. Raise the transmission back up until the radius arm pivots to the crossmember. Raise the transmission back up until the radius arm pivots snug against the frame. Measure from the body mount back to the radius arm pivot on both sides and adjust until the measurements are equal and square with the chassis. Mark and drill holes to mount the radius pivots to the frame using 1/2" x 2" NC GR5 Bolts, Washers and Nyloc nuts. Remove the 1" Bolts for the next step.

8. This step is best to do with a helper. With a jack or jack stand, slide and secure the radius arms up into the frame brackets. Be sure to protect the arm from the jack or jack stand. Have the 1" bolt with a 1" flat washer installed on it and ready to slide into the frame bracket, take a 1" rod end spacer slide it between the inside of the frame bracket and the rod end and then massage the bolt through rod end spacer and the rod end. Now on the other side of the rod end slide another 1" rod end spacer between it and the frame bracket and continue to push the bolt through to the other



side. Secure the bolt with a 1" flat washer and 1" Nyloc nut provided. Note: The bolt head should be to the outside of the vehicle and the nut on the inside. Securely tighten the 1" bolts in the frame brackets and jam nuts against the radius arms. We recommend using an impact and large wrench to tighten the 1" bolt and nut. With the impact on the nut run the impact until the nut stops moving. **Note: Use 3 drops of blue loctite when securing the jam nut.**

Long arm frame brackets from rear of A pillar body mount flange to front leading edge of long arm frame bracket - 13" BOTH SIDES

5110 Duff Coil bucket placement - hook tape measure to the back edge of the front body mount and measure back 15 1/2" - BOTH SIDES

5110 Duff coil bucket height from bottom of frame to the landing pad/seat for the top of the coil spring is 9.5" for a 6" lift - BOTH SIDES

Note: the measurements provided are a guide, you also need to measure and make sure your axle is where you want it. Always triple check before making anything permanent. Full color photos of the above photos can be viewed at dufftuff.com/faq under the Full-Size Bronco Section.

9. Once your axle is set and you have checked or determined your ride height you will want to start assembling and attaching the other components so you can cycle the suspension and check for any clearance issues.

10. Start with the JD trac bar bracket, then mount the JD trac bar, then continue with JD heim steer. Use the instructions provided with those parts to install them correctly.

11. Now that the trac bar frame bracket, trac bar, steering, shock towers and radius arms are installed/in place it is time to cycle the suspension. You will want to do this WITHOUT the coil springs installed.

NOTE: If you are using #5136 FSB coil springs, you can use our compressed and extended heights for this exercise. For all other coil springs please contact the distributor/manufacturer for that info before moving forward.

ADD COIL SPRING SPECS HERE: _____

12. With the frame fully supported, lower the axle(w/o wheels & tires installed) till the axle measures at full coil spring extension (w/o the coil springs installed).

13. Measure the distance from your upper to lower mounting point for the shock(s) and see if the shock will still be long enough fully extended in the mount. Write this info down here: _____

14. Mount the desired wheels and tires on the axle and lower the front axle to level ground so all the axle weight is on the tires and wheels.

Make sure the rear wheels are chocked while doing this and also at the desired ride height.

15. Lift the frame up and remove the frame stands so you can lower the vehicle. Slowly lower the vehicle until it is where the coil springs would be 100% compressed.

16. Check for clearance issues around the tires, trac bar, steering and arms.

Write down any issues you see here: _____

17. You're still not out of the woods yet for tire fitment but if it clears here you will more than likely just have to do slight trimming from here on out.

18. Measure the distance from your upper to lower mounting point for the shock(s) and see if the shock will still fit fully compress in the mount. Write this info down here: _____

19. Now that you know what your Fully extended & compressed shock measurements are and you know where your vehicle will make contact at full bump you can make adjustments to the shock towers mounting height as well as clearance where needed on the front of the engine crossmember wheel wells, front bumper, and fenders.

NOTE: Once you have these key areas dialed in you can install the Coil and Shock towers as outlined in the steps below.

20. When installing the front coils and coil spring retaining cups. We recommend upgrading to HD lower coil retainers #5122 that provide a much more stable platform for your coil spring and additional articulation when off-roading. If you decide to continue your factory 2 piece lower coil retainers, a 7/16 x 1.25" NC GR 5 bolt, flat washer #5353 6/8 5/25

and split lock washer are provided for securing the rear hole in the coil spring retaining cup. Torque these bolts to approximately 30 ft-lbs.

21. Our new double shear shock mount on the radius arm is designed to work with one shock or two. Use the supplied 1/2 x 3.5" hex bolt with 1/2" small washers when installing the shock. Very important **NOT TO USE** 1/2" big washers here or they could potentially damage your tires when turning. For 2 shock applications mount one shock in between the two shock tabs and the second shock rearward of the first shock. Use the supplied 5/8ths aluminum spacer between the rear mount and the rear shock. When mounting 2 shocks use the 1/2 x 6" hex bolt and 2 small washers. Insert lower mounting bolt from the back side of shocks. Some shocks will require a 1/2" small washer between the tab and the shock. We've supplied extra 1/2" small washers for this purpose. Reuse mounting hardware for the top end of your shock provided with the upper shock mount.



Now that you have all front end components installed it is time to address your brakes.

22. Using the brake line extension bracket, the 5/16" x 3/4" bolts and Nyloc nuts provided, raise the brake line brackets up to clear the radius arm head units. Use the original bolts in the original position. CAUTION: Be careful not to kink or crack brake lines.

NOTE: If you don't have ABS or just have rear wheel ABS you can simply adapt your existing brake lines to the front axle by using adapters and line extensions where necessary. Most local hydraulic hose supply stores have all the components you need.

You can also cut or remove your existing line and adapt it to our DuffTuff.com #3931 frame to axle brake line kit if you are using our #3742 MC brake line kit. This kit may require you to fabricate a bracket to mount at the frame.

NOTE: If you have 4 wheel ABS and have opted to bypass it, you will need to purchase a proportioning valve, pv mounting bracket and #3742 MC brake line kit from DuffTuff.com and install it. In some cases, the PV mounting bracket will likely need a secondary bracket to mount to your frame in the proper orientation. Secondary bracket is not offered by James Duff at this time.

23. Bleed the brakes after all lines fittings and parts are mounted and plumbed. Reinstall the front tires and wheels.

24. Due to variations in tire size and wheel offset, check clearances around shocks, shock mounts and radius arms.

Also check that the front axle u-joint is not binding at full droop. Adjust the steering stops located on the backside of each knuckle to correct any wheel to shock interference. We highly recommend that an alignment be performed after the install. After the alignment has been performed turn the steering wheel lock to lock to verify the steering stops are properly adjusted. Use an RTI ramp or forklift to check tire clearance for vehicles that go off-road. Failure to do so could result in damage to tires, wheels or shocks and body.

25. After verifying all hardware is tightened to the proper torque sequence, brakes are bled and they do not leak with engine on or off. Remove jack stands and test drive vehicle remaining in close proximity to your home or shop. Drive your vehicle in a series of turns left and right, over bumps and listen and feel for anything that doesn't sound or feel normal. Take time to adjust to the way your vehicle reacts to the road. **IT WILL BE DIFFERENT.** Once you are comfortable and you feel your vehicle is ready. Take it for a 10-20 mile drive. After your first 50 miles and/or 1st off-road trip inspect all hardware and re-torque. Inspect & re-torque at next oil change interval as well.

From here you can move on to the back and add our leaf spring kit for FSB (some exclusions to later years apply) and Torque tamer for '80-96 Big (FSB) Bronco's.

To maximize the performance of your New Radius Arms we suggest combining them with our other components designed specifically for high articulation.

Dana 44/60 Radius Arm Spacer Kit

Don't want to grind down the wedges for your install? These machined steel blocks fill up the gap created by the larger diameter axle tube. Kit includes machined steel blocks and proper length Grade 8 Bolts. #5351-HP44 / 5351-60



Lower Coil Retainers

We designed our heavy duty replacements to securely hold your coils in place, allowing full flex (of even the last wrap!) without fear of your coil popping loose! Our simple but effective one piece design replaces both OE pieces. You may notice that your coils "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, our retainers will significantly reduce, if not eliminate the problem. Zinc plated for rust resistance. Fits EB & 78-79 (5 1/2" diameter) Coils. #5122



C-Bushing Kit

With positive caster adjustment built-in, our C bushings will help recover the steering control lost from lift kits and wear and tear. High-quality Black polyurethane bushings. #6002 / #6004 / #6007

Heavy Duty Adjustable Trac Bar End

Take bind out and increase the articulation of your track bar with this upgraded track bar end. 3/4" rod end tig welded to a 3/4"-16 threaded end is an easy install. Works with our adjustable track bars or any track bar that uses the fairly common 3/4"-16 threaded end. Hardware included makes it a direct replacement for any James Duff adjustable track bars and brackets. This kit now also includes the lower track bar bushings and sleeve to completely refresh your James Duff Track Bar. #5411



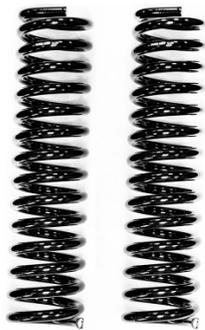
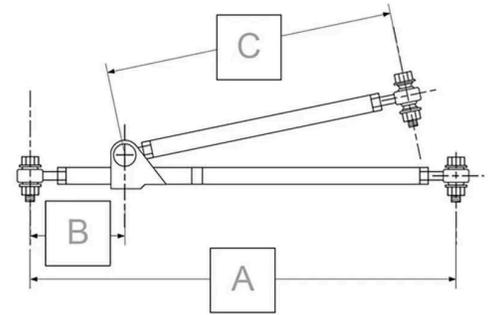
Progressive Axle Bump Stops

These are a progressive design which means the harder you come down on them, the more cushion comes into effect.

#6310 Rear Broncos**, 3"+ & F Series (all)

Full Size Bronco Heim Steering

Our tough new steering systems use 1.25" DOM with a .2815" wall thickness threaded (no weld in insert) for maximum strength and clearance. We attach the drag link to the tie rod via a saddle to maintain factory geometry and to eliminate the use of long spacers and additional torque on the passenger side knuckle. #5645



Full Size Bronco Front Coil Springs

These linear spring will provide 6-7" of lift on your Bronco depending how the coil buck is mounted if using our heavy duty coil buckets. Powdercoated black for a long lasting finish. #5136



James Duff MS200 Shocks

A shock developed by the industry leaders of Bronco suspension takes you beyond a simple hydraulic shock absorber. The new MS200 delivers the high performance of a high-pressure monotube gas shock in an affordable package that work PERFECT with our long travel radius arms. No need for expensive remote reservoirs, the MS200 provides a nice comfortable ride on the street & drastically reduces body roll while providing the extra dampening needed when the going gets TUFF.

#8212-15 12" or 15" Travel MS200

SAS Track Bar Bracket 80-96 FSB

All bolt on installation uses original holes in frame and by drilling two additional holes in engine cross member. Track Bar Mounting hole is 3/4", for use with heims & spacers or large bushings. Comes black powdercoated with hardware. #5415

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 sent prepaid to JDI, 6609 Bronco Lane, 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.

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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.

