

INSTALLATION INSTRUCTIONS:

#5233 0-1" Body Lift #5234 2"+ Body Lift

Universal Long Travel Shock Tower – Bronco & F-Series

CONTENTS:

2 - Shock Towers
2 - 1/2-13 x 3.5 Grade 5 Bolts
4 - 1/2" USS Flat Washer
2 - 1/2-13 Grade 5 Nyloc Nuts
4 - Shock Mount Spacer

Bolt to frame Kit '66-'77 Bronco ONLY (Add-on)
2 - Frame Backing Plate
8 - 1/2-13 x 4.5 Grade 5 Bolts
8 - 1/2-13 Grade 5 Nyloc Nuts
16 - 1/2" SAE Flat Washer



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6609 Bronco Ln.
Knoxville, TN 37921
1/4 12/20

Dual Shock Hardware (Add-on)

2 - 1/2-13 x 6 Grade 5 Bolts
2 - 1/2-13 Grade 5 Thin Nyloc Nuts
2 - Dual Shock Mount Spacer

Bolt on kit for C channel frames '78-'79 Bronco & 73-97 F series 4x4 (Add-on)

8 - 1/2-13 x 1.5 Grade 5 Bolts
8 - 1/2-13 Grade 5 Nyloc Nuts

Note: For all 73-79 4x4 C channel frames, If you are installing these towers with factory radius arms, and your Bronco/truck is not equipped with quad shocks, you will need to purchase 5201-1 Stock Radius Arm Shock Mount - 1 Pair

Tools needed: Tape measure, sawzall or cut off wheel (for 66-77 Bronco), steel wire brush, drill and 1/2" bit, scribe or other marking device, center punch, 6" c-clamp & painter's tape.

Safety gear: (minimum requirements) clear safety glasses or mask, Gloves, long pants, boots and long sleeve shirt.

BEFORE YOU START:

•This shock tower covers several different makes/models of vehicle and has 2 different frame mounting hardware kits. If you are installing these on a '66-'77 Bronco, you will have 2 options to install. Weld the towers on or purchase the Bolt to frame kit.

•The #5234 2-3" body lift shock tower will always need to be welded on a '66-'77 Bronco.

•James Duff T-Rex Arms will only be able to use 1 shock with this mount.

•If you are installing these on a '78-'79 "Big Bronco" or '73-'79 F-Series these towers allow you to delete the driver side shock mounted to the trac bar frame mount that is in front of the coil spring. Rearward of the coil spring you will need to remove an engine crossmember bolt, and drill the factory sleeve for that bolt to 1/2" in order to install the supplied replacement bolt.

•If you are installing these on an '80-'96 FSB or '80-'97 F150/F250, You will need to remove the stock coil buckets and replace them with the James Duff HD coil buckets part# 5110 and remove the TTB and replace with a solid front axle before installing these towers. Instructions to do this are not provided here.

•When welding the shock towers on, it is imperative that you weld them exactly how the instructions guide you. We do not recommend welding these on any application other than '66-'77 Bronco.

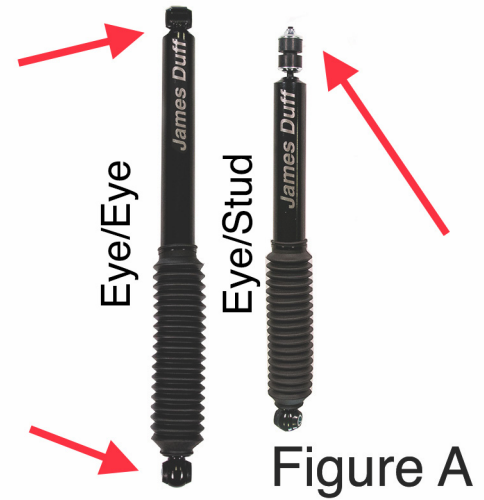


Figure B

•If you are starting with a stock shock mount, these new shock towers will convert your vehicle from a stud-eye shock to an eye-eye shock. See figure A for comparison.

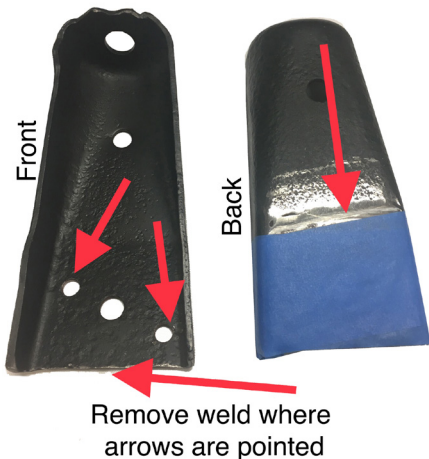
•Typically when you buy these shock towers you will also be purchasing longer shocks to go with them. If you already have longer shocks and have deleted the stock shock mount attached to the frame it is good to take a measurement of how long your shock is at static ride height before you remove them.

•The new towers may make your shock extend further at static ride height and require you to buy long travel shocks. If the towers were not included in one of our suspension systems and you plan on going off-road, we encourage you to articulate your suspension during & after install to verify your shocks will work properly.

Installation Instructions

Jack front axle up and put on jack stands. Remove front wheels. Provide sufficient lighting to see in wheel wells. Remove shock behind the coil springs

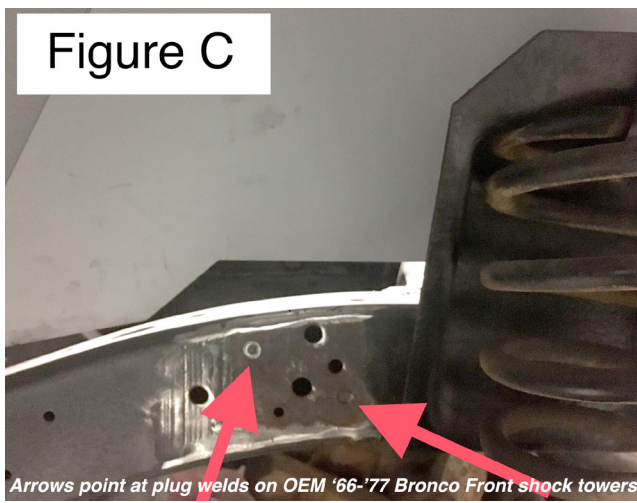
1a. **For '66-'77 Bronco** See Figure B the stock towers will have to be cut off. There are



Remove weld where arrows are pointed

several ways to do this. Check the backside of the frame and behind the towers for anything that could be damaged by the cutting/drilling device. You can easily remove the factory mount with a sawzall and a cut off/grinding wheel. Take your time and don't cut into the frame. There are a few plug welds on the front face of the factory mount, into the frame to drill out. Be sure to set your drill depth to 1/8" MAX when drilling out these plug welds. See Figure C. Be careful of where the sparks may fly due to gas, transmission and brake lines in the engine bay.

1b. For '78-'79 "Big Bronco" or '73-'79 F-Series See Figure D, the shock mounts unbolt. This may require you to wire brush & spray the mounting bolts in bolt penetrator to remove them. We recommend using a product called Knocker Loose.



Arrows point at plug welds on OEM '66-'77 Bronco Front shock towers.

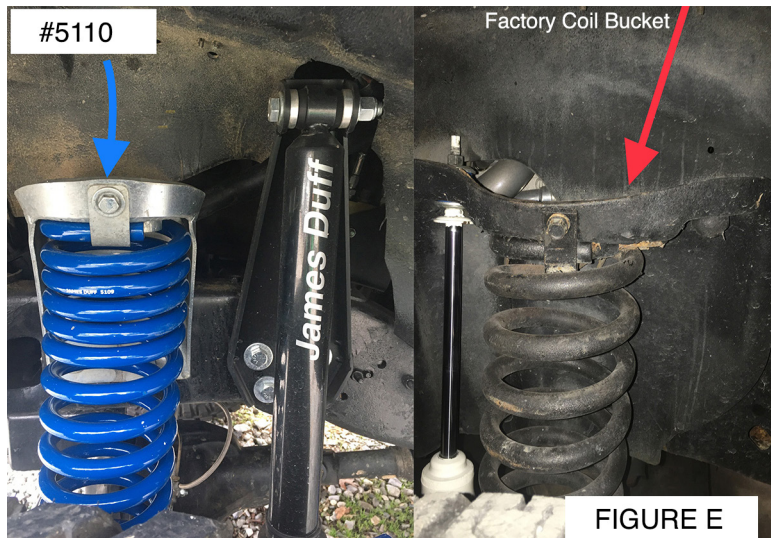


FIGURE E

1c. For '80-'96 Bronco & '80-'97 F150/F250 4x4 w/ SAS ONLY See Figure E. There are no factory shock mounts to be removed, but you will need to remove the factory coil buckets and install James Duff 5110 Coil Buckets first.

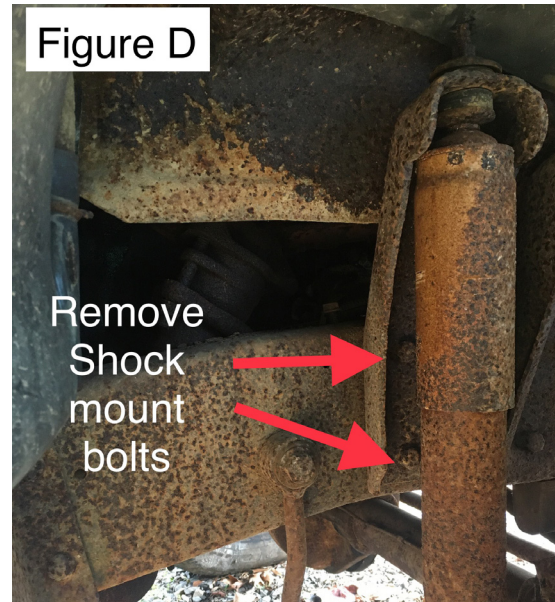


Figure D

Remove Shock mount bolts

2. ALL VEHICLES - Clean the outside of the frame. If welding, strip the frame to bare metal then prep with a good weld through primer. If bolting on, you may want to consider repainting the frame after the bolt holes are drilled and mock up is complete. We do not recommend welding these towers on anything other than a '66-'77 Bronco.

3. '78-'79 "Big Bronco" or '73-'79 F-Series ONLY - Reinstall the factory UPPER engine crossmember bolt where the stock shock mount was attached. On the LOWER bolt hole, use a 1/2" drill bit and drill the hole out and continue drilling through all the way to the other side. This will allow you to install the supplied 1/2"-13x5.5" replacement bolt. Use this lower bolt hole as a locator for the new shock tower. Make sure the tower is square to the frame See Figure F and mark your 3 other bolt holes using the tower as a template.



Drill your holes and use the supplied 1/2" -13 x 1.5" Grade 5 Bolts, 1/2"-13 Grade 5 Nyloc Nuts & 1/2" SAE Flat Washers to mount the towers as shown in Figure G. Torque all 8 bolts to 60 ft-lbs. You will also need to slightly notch the plastic inner fender liner to allow clearance at the top. Once this is complete, skip to step 7.

STEPS 4, 5 & 6 apply to '66-'77 & '80-'97 VEHICLES ONLY

4. This step is best done with a helper. Use painters tape to protect the new tower. Using the supplied hardware, attach the shock(s) to the new shock tower and place the tower on the frame as shown in figure G behind the coil bucket.

4a. For 66-77 Broncos only - You will want to place the mount on the frame so the edge of the bolt holes you use are a minimum of 1/2" from the top and bottom of the frame rail.

4b. Mounting the towers with the shock(s) attached will allow you to see where the bottom of the shocks will land on the radius arm and where all your potential clearance issues will be. Mock up each tower using a 6" C Clamp. Be sure to cover the towers with tape where the C Clamp will make contact.

Figure G



NOTE: if you are installing MS2020 shocks by James Duff they will have a nitrogen charge and you will NOT be able to install them on the radius arms until the new tower is 100% mounted to the frame. If that is the shock you are installing you will need to let the shock hang freely at the bottom and use a tape measure to verify your static measurement is correct.

If you are installing the classic Duff 70/30 shocks, they can be attached to the radius arms for final mock up and to check your static ride height measurement.

5. Now with the new tower in place it is time to check a few things:

A. 66-77 Broncos ONLY: If the mount is slid too far up the frame the bolt holes may not drill through the frame. Scribe or center punch where you want to drill your holes, then remove the tower to be sure the holes won't be too high or too low on the frame.

B. 66-77 Broncos ONLY: You don't want the bottom of the shock tower to be more than a 1/2" above the bottom of the frame so the tower can't try to make the frame twist from being over leveraged and not properly supported.

C. See Figure H for those of you installing dual shocks, be sure the top of the tower is not too far back in the fenderwell. You want to make sure the top shock bolt does not make contact with the inner fender & can be removed easily.

D. Whether you are running a Duff 70/30 or the new MS2020, your final exposed shock shaft length should be 4-5" regardless of lift height.

6a. With placement finalized, remove the shocks and drill or weld the tower into place. If drilling and bolting, be sure the inside of the frame is clear of anything the drill could damage. Also be sure you don't drill within an inch of something else that is already bolted on the inside of the frame. '66-'77 Bronco ONLY: Bolt on frame kit. Comes with a backing plate and hardware to allow you to bolt the tower on without compressing the frame. **Torque all 8 bolts to 60 ft-lbs.** Keep in mind, you can use the bolt on frame kit for both the 5233 and 5234 tower, **however the 5234 tower must also be welded as shown in Figure K. Failure to do this could result in premature failure of the tower.**

6b. For '66-'77 Bronco If welding, remove the powder coat from the tower as shown in Figure J. We recommend welding the outer perimeter of the tower where it makes contact to the frame. As well as the back side of the tower as shown in Figure I. **NOTE: This is critical! If you do not weld the back side of the tower, it can fatigue prematurely at the other weld points and break. Prep the heat affected areas for paint, and spray with black chassis paint.**

7. Reattach the shocks. Do not over tighten the bolts holding the shocks onto the towers and radius arms You don't want the shocks loose in the mount but they must be able to move freely. Reattach the wheels. Once the Bronco is off the jack stands and the tires are on the ground be sure to torque the lug nuts on the wheels to factory specs.

Figure H



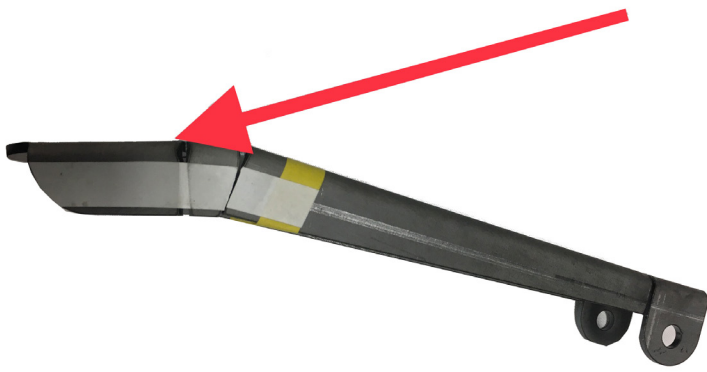


Figure J

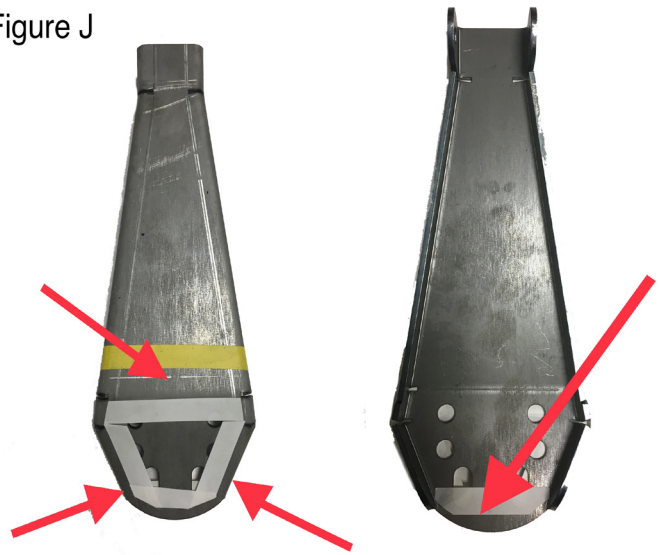


Figure J

NOTE: CHECK AND RE-TIGHTEN SUSPENSION COMPONENTS AFTER THE FIRST 50 MILES. AND EVERY OFF-ROAD USE.

IF YOU DID NOT PURCHASE THE TOWERS WITH A JAMES DUFF LIFT SYSTEM WE RECOMMEND YOU USE A RTI RAMP OR FORKLIFT AND ARTICULATE YOUR SUSPENSION AND VERIFY THE SHOCKS HAVE THE REQUIRED AMOUNT OF CLEARANCE FROM THE FRAME AND TIRES AS WELL AS ADEQUATE SHOCK TRAVEL UP AND DOWN.

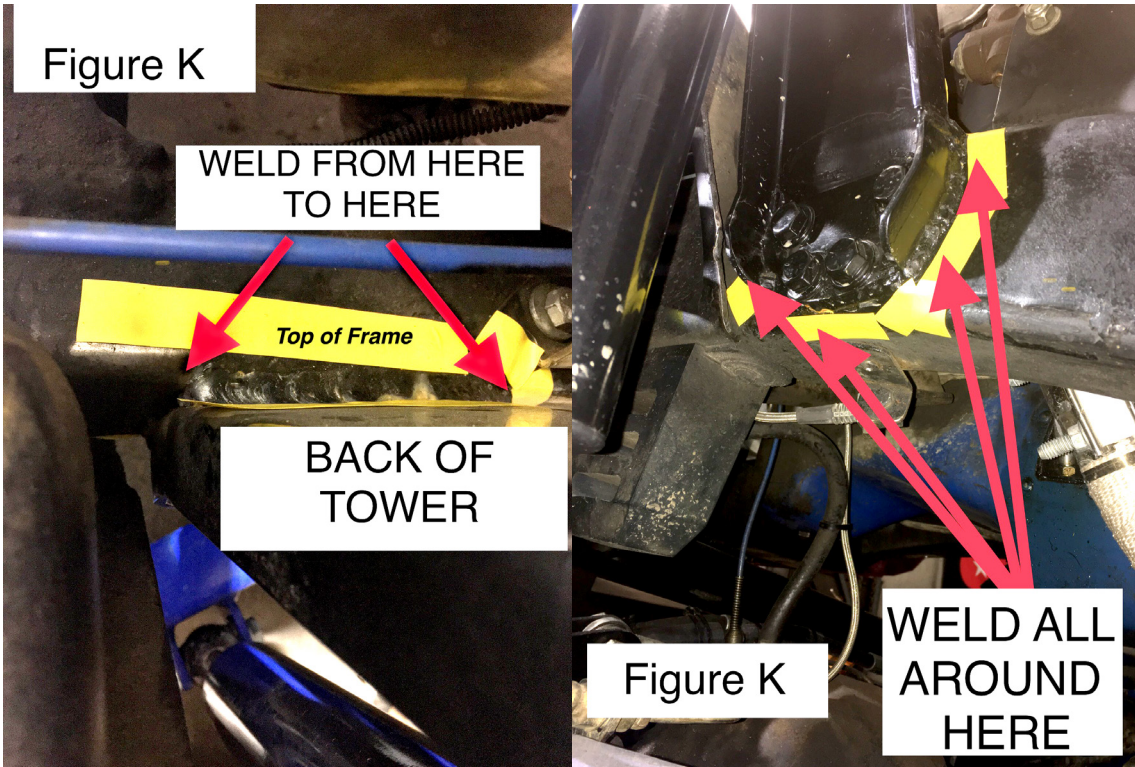


Figure K

Figure K

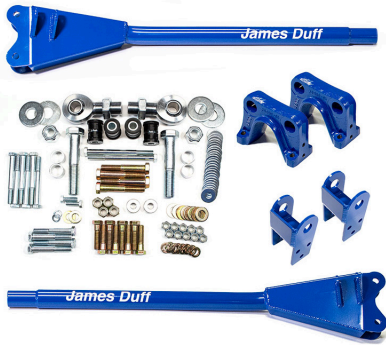
LIMITED WARRANTY

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 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, re-installation 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 JDI and accompanied with a Return Goods Authorization Number (RGA) and a dated proof of purchase. Returns must be made within 90 days of purchase, shipped prepaid, packaged in original cartons to prevent damage in shipment and sent 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.

Upgrades to consider:



Extended Long Travel Radius Arms

Looking to improve the ride of your Ford Bronco? Are you wanting it to handle better and get your turning radius back? Need better traction for when you go off-road? Then check out our proven Long Travel Extended Radius Arm. Designed for rugged off-road use while enhancing drivability.

Fabricated out of 2" diameter, heavy-wall DOM at a whopping 5/16" thick! For strength and safety, we designed a separate cast steel head unit to mount to the C-wedges on the axle.

#5350 '66-'77 Bronco

#5351 '73-'79 Dentside F-Series & Bronco

#5353 '80-'96 F-Series & Bronco



MS200 Shock Absorber

The new MS200 delivers the high performance of a high-pressure monotube gas shock in an affordable package. No need for expensive remote reservoirs, the MS200 provides a nice comfortable ride on the street while providing the extra dampening needed when the going gets TUFF.

#8208/8209/8210/8212/8215



T-Rex Stock Length Radius Arms

Our new T-Rex radius arms are a stock length version of our heavy-duty long arms with a built-in offset for additional tire clearance but unlike the extended arms, these are a direct bolt into your existing frame brackets. They use stock style polyurethane bushings, no welding of new brackets is necessary. Yes, 100% bolt-on!

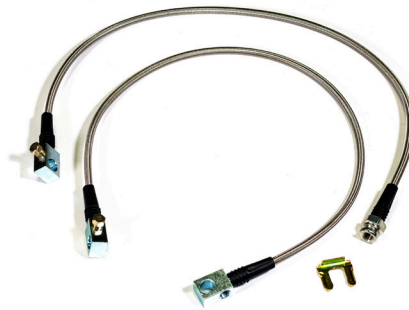
#5355 1966-'79 Bronco, 1967-'79 F150 4WD



Early Bronco Sway Bars

For your money, the best aftermarket investment you can make! Hellwig Sway Bars are an extremely effective handling upgrade you can make to your vehicle. Hellwig sway bars offer quick bolt-on installation that is engineered to perform.

#5311/5312/5313



Frame to Axle Stainless Braided Hoses

Our custom-built brake lines are stainless steel and DOT approved for street use as well as being longer to accommodate suspension travel. These lines won't swell under pressure as rubber ones can. The smaller inside diameter increases pressure, which improves pedal feel and brake response.

#3931 '66-'77 Broncos



Radius Arm C-Caps Dana 30/44/60

Exact reproductions of stock caps, cast of ductile steel. Available in bare, Duff Signature Blue, or Midnight Series Black.

#5341



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)