Installation Instructions: Heim Joint Steering Systems #5640A 48" System, Fits 66-75 Drum Knuckles, Disc Conversion using **Duff, Chevy or 79 F150 Bronco Knuckles** 

#5640B 51" System, Fits 76-77 Ford Disc Knuckles #5640C Custom Setups

Contents: 3/4-10 Unitorque Nuts QTY 3 Post 10-19

Tie Rod + Saddle 3/4-16 Unitorque Nut

1/4" Washers 2 Drag Link

M20 Metric Flat Washer QTY 6 Post 3/4 Rod End Right 2 8

3/4 Rod End Left 10-19

3/4" Bushings Pre 10-19 2 3/4-16 Jam Nuts Right Hand 2 1/8 x1.5" Cotter Pin 3/4-16 Jam Nuts Left Hand

3/4-10 x 3" GR 8Hex Bolt Post October 2019 swap w/ 1 RH rod end

3/4-10 x 4" GR 8Hex Bolt 3/4 Heim w/ stud (for pitman arm)

9/16-18 Castle Nut

## PLEASE READ INSTRUCTIONS COMPLETELY THROUGH BEFORE STARTING INSTALLATION AND GO TO BRONCO GARAGE FOR INSTALL VIDEO - www.bit.ly/362wSzf

Notes: For tie rod over (TRO) conversion or to eliminate clearance issues between the shock and tierod, you may have to modify shock mounts on the c-caps or use a new weld on C-Cap shock mount sold by James Duff (#5640-CCAP)

## If you think either piece is too long, please call before cutting!

- 1. Chock the rear wheels, raise the front of the vehicle and set the axle housing on jack stands.
- 2. Make sure the wheels are straight and measure your toe in. You can do this by measuing the distance between the tires, front and back as shown in Fig. 1. Record these measurements. Note: Ideally the front measurement is 1/8" to 1/4" less than the rear.

3. Remove existing steering linkage and tie rods. You can use this to setup new heim 3. Remove existing steering intrage and the road. The steer to help get your alignment close. Record the measurement.

LEFT HAND HEIM, 3° BOLT,

4. Assemble steering linkage by installing rod ends and jam nuts into linkages. We recommend using anti-seize on the threads of the rod ends to lubricate the threads and help to prevent seizing. Note: Only add anti-seize to the first 1/2" of threads.

Note: There is an extra stover nut included. This is to replace the castle nut on the axle track bar mount when installing the system over the knuckle. Sometimes there is a clearance issue with the mount stud and the tie rod. Once the stover nut is installed, the stud can be trimmed for clearance.

5. Drill 3/4" clearance hole in both knuckles and pitman arm. Post Oct. 19, do not drill pitman arm!

6. Using the appropriate diagram, install the linkage standard or (TRO) as shown in Fig. 2 or 3.

- 7. Be sure to check toe and make sure it's 1/8th to 1/4th toe in before you install the lock nuts on the 3/4" bolts, make sure these are extremely tight!
- 8. We recommend installing the supplied cotter pins by drilling 1/8" holes through the locking nuts and 3/4" bolts and installing the cotter pins.
- 9. We recommend having a professional verify your toe is correct before putting the vehicle back in service. Note: Watch video for how to correctly remove free play from your steering before tightening jam nuts.

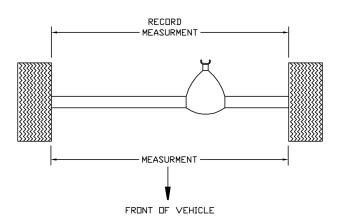
10. Once your alignment is correct and your steering wheel is centered use 3 drops of red loc-tite between the jam nut and the end of the bar. Then tighten your jam nuts.

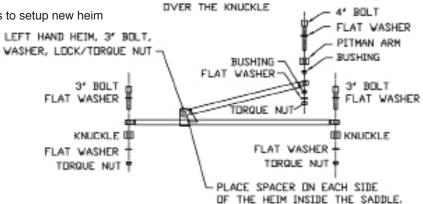
NOTE: If you are reinstalling a steering stabilizer, you will need to get larger (1.25") U-bolts. Squeeze the ends a little bit to get them in the bracket and slide the bracket back on.

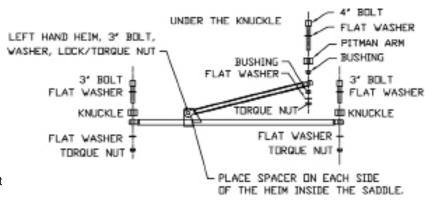


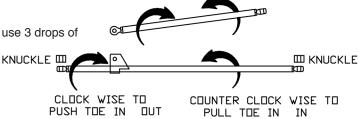
www.jamesduff.com www.dufftuff.com 865-938-6696 m-f 10-6 eastern 6609 Bronco Ln. Knoxville, TN 37921

12/2019









☐ PITMAN

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 manufacturer defects, and does not cover product finish or damage resulting from abuse, misuse, negligence, racing, alteration, accident or damage in transit damage in transit.

All returns must be pre-authorized by JDI and accompanied with a Return Goods Authorization (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 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.