



PART # TJ3015

ARTEC INDUSTRIES HD REPLACEMENT COIL BUCKET FOR TJ/LJ, XJ/MJ, ZJ



ESTIMATED INSTALLATION TIME

3-4hrs

REQUIRED SKILLS

- General Mechanics Skills
- Fabrication Skills (Cutting Welding)

REQUIRED TOOLS & SUPPLIES

- Safety Glasses
- Gloves
- Wrench Set
- Socket Set
- Torque Wrench
- Pliers
- Jack (or Vehicle Lift)
- Jackstands
- Wheel Chocks
- Welder
- Cutting Tools
- Angle Finder
- Tape Measure

NOTES:

- Some changes to factory positions have been altered. The Anti-sway bar bracket hole is 2.75" higher than factory hole to allow for clearance with crossover steering.
- Shocks will need to be changed to a Eylet Style Mount in place of Oem Barpin Style mount

WARNING MESSAGES

This product demands a basic understanding of mechanical procedures and should only be installed by individuals proficient with mechanic's tools. Any tasks involving welding or cutting parts should be performed by trained professionals. Artec Industries disclaims responsibility for mishaps arising from improper installation, or any damage or accidents resulting from cutting or welding tasks. Exercise caution and seek professional help as required

SAFETY

1. We've furnished a written installation guide, along with relevant details, to aid you in making safety-conscious decisions.
2. While these guidelines will highlight potential risks, it's crucial to exercise your personal judgment when performing any required steps.
3. Before initiating any tasks, it's essential to conduct a job safety analysis to identify specific hazards in your situation and take measures to eliminate or protect against them.
4. Before commencing the installation of this product, make sure you familiarize yourself with and fully understand all safety warnings and guidelines.

DISCLAIMERS

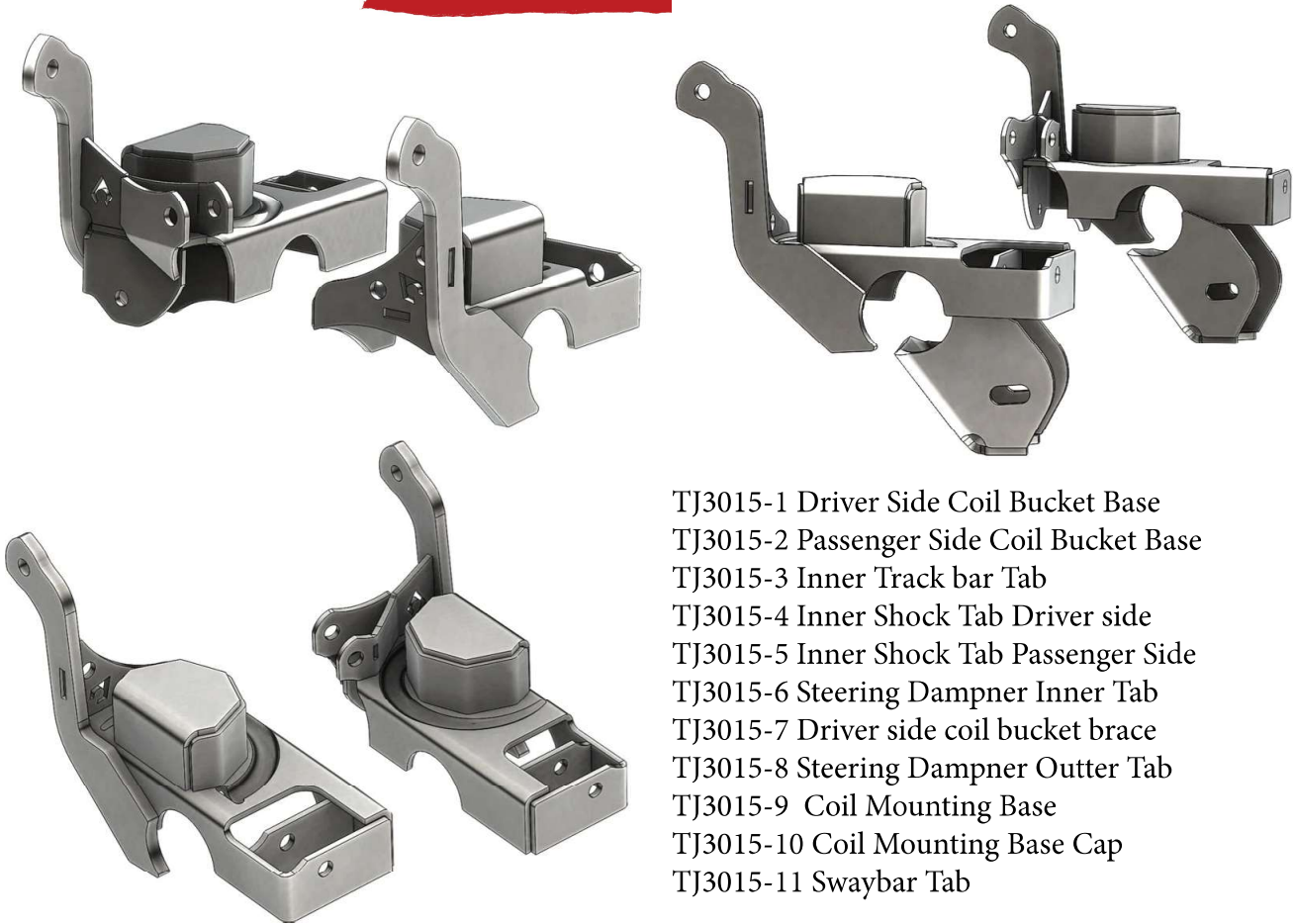
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Many products necessitate lifting and supporting the vehicle off the ground. It is the installer's responsibility to ensure this can be done safely and that the right equipment is at hand to carry out the installation. Artec Industries installation instructions presume the installer is competent to lift the vehicle safely and correctly.

Modified vehicles won't perform identically to their stock counterparts. It's incumbent upon the vehicle owner to understand the alterations such modifications will bring to the vehicle's driving dynamics. These might encompass (but aren't limited to): changes in handling, braking, rollover angle, and potential incompatibilities with the factory-installed anti-lock braking systems, stability control systems, or traction control systems.

SPECIAL NOTES

HS6121 PARTS BILL OF MATERIALS



- TJ3015-1 Driver Side Coil Bucket Base
- TJ3015-2 Passenger Side Coil Bucket Base
- TJ3015-3 Inner Track bar Tab
- TJ3015-4 Inner Shock Tab Driver side
- TJ3015-5 Inner Shock Tab Passenger Side
- TJ3015-6 Steering Dampner Inner Tab
- TJ3015-7 Driver side coil bucket brace
- TJ3015-8 Steering Dampner Outter Tab
- TJ3015-9 Coil Mounting Base
- TJ3015-10 Coil Mounting Base Cap
- TJ3015-11 Swaybar Tab

NOTE: The part numbers indicated above end in a "" and "letter" which indicate the revision number for the part. The etched part number on your physical parts do not need to match the above drawing revision exactly.

INSTRUCTIONAL GUIDE

Step 1:

Take an inventory of your parts, Please contact Artec Industries Immediately @ (855) 278-3299 M-F 8:30am-5pm MST if it is after those hours Email Sales@artecindustries with a picture of what you have and packing slip.

Step 2:

Place Wheel chocks at the rear wheels on the vehicle. with the vehicle on the ground break the lug nutson the wheels free (Do not fully loosen or remove them.) Using a jack raise up the front of the vehicle and place tall jack stands under the frame behind the lower control arm mounts.and a shorter set under the axle.

Step 3:

Remove wheels from vehicle,Remove front drive shaft from the axle Remove the brake calipers and rotors Hang the calipers from the Frame with some bungee cords (Do not let the calipers hang freely from the brake lines this can damage them.)

Step 4:

Remove cotter pins on Tie rods,Then loosen the castle nuts.(Leave the castle nuts installed by a few threads !) Remove the Steering stabilizer ,Grab your Tie rod Separator, wedge it between the knuckle and the base of the tie rod the hit on the end of the Tie rod separator with your Big Freaking Hammer until it pops loose. Repeat this on the other side. Remove the castle nuts and the Drag-link and tie rod should drop off the Jeep.

Step 5:

Remove the coil spring retainers from the axle,Remove Shocks, sway bar end links, and Trackbar Using a jack lower slowly lower the axle to remove the coilsprings. Raise the axle back up and place jack stands under the axle.

Step 6:

Remove upper and lower control arms.Pull the axle out from under the vehicle for more room to work. use an angle finder to measure the angle of the coil spring mounts and use a tape measure to measure the space between the outside of the Knuckle C and outside edge of the coil mount (Record these measurements for later)

Step 7:

Coil bracket Assembly.

(This bracket eliminates the bar pin style of lower shock mount in favor of a normal shock eye using a bolt.)

While coil bucket is off axle, take piece 4 and determine the mounting width of your bottom shock eyelet. pieces 1 and 4 and tack weld piece 4 to piece1. Remove the shock and weld piece 4 fully. Place piece 3 into bottom side of Part 1 and use your track bar to set the mounting width to tac weld into place once part 3 is welded into place you can remove the track bar and fully weld it into position.

Step 8:

Place pieces 9 and 10 on 1. Place your coil spring on piece 1 in the stamped coil relief and use the spring to center pieces 9 and 10. Remove the spring and tack weld all pieces together.

Step 9:

Using your cutting tool of choice remove the stock coil bucket mount and sway bar end link mounts from the vehicle. Once they are removed prep the area for welding .

Step 10:

Using the measurements you took in step #6 Place the coil bucket mounts on the axle (TJ3010-1 will go on Passenger side) and rotate until the degree is matches the one you took in step 6 and tack weld it into place on the axle

Step 11:

Position the sway bar link onto the axle and slide it up against the side of the coil bucket, the flat part of the part 11 mount goes upright should sit level with the top of the coil bucket tack weld it into position . Place the part 6 tab into the part 11 slot and tack weld it into place. Now place your steering damper against part 6 and run a bolt through part 6 and part 8 to Line up and set the spacing for your damper. tack weld part 8 to the part 6 and the coil bucket .remove the steering stabilizer and fully weld parts 11, 6 and 8 to the coil bucket and repeat the process on the driver side.

Step 12:

On the driver side you will not have part 6 or 8 so you will weld part 7 to the face of the coil bucket and part 11 to the side of the bucket part 7 will also jig into place on the coil bucket and sway bar link mount

Step 13:

Fully weld the coil buckets to the axle once the parts have cooled paint them with a self-etching primer and paint of your choice

Step 14:

Move the axle back under the Jeep and install the upper and lower control arms (A drift punch can help with aligning the bolt holes), Do not fully tighten the bolts.

Step 15:

Install the coil springs and retainers then Raise the axle onto jack stands.

Step 16:

Install the track bar, shocks, and sway bar end links on to the axle (Do not fully tighten the bolts.)

Step 17:

Install the Tie rod onto the vehicle along with the steering stabilizer.

Torque the Tie rod ends to 65ftlbs ,

Torque Steering stabilizer to 55ftlbs

Step 18:

Install the rotors and calipers onto the Jeep torque caliper bolts to 11ftlbs .Then install thewheels and tires, tighten lug nuts. (Do not torque lug nuts yet)

Step 19:

Lower the Jeep off of the Jack stands and onto the ground. Once the Jeep is on its own weight. Torque the lug nuts to 95ft lbs.

Torque upper control arm to 55ftlbs

Torque Lower control arm to 85ftlbs

Torque Trackbar to 55ft lbs

Torque Shocks to 20ftlbs

Torque Swaybar links to 75ft lbs.

After 50 miles check all bolts for tightness and re torque if needed.

If you purchased the optional LCA brackets with this kit please continue to the next few pages for install instructions



PART # TJ3011

HEAVY DUTY REPLACEMENT FRONT LCA BRACKETS FOR TJ/XJ/ZJ DANA 30/ DANA 44



ESTIMATED INSTALLATION TIME

3-5 hours

REQUIRED SKILLS

- General Mechanics Skills
- General Fabrication Skills
- General Welding Skills

REQUIRED TOOLS & SUPPLIES

- Safety Glasses
- Gloves
- Wrench Set
- Socket Set
- Torque Wrench
- Jack (or Vehicle Lift)
- Wheel Chock
- Cutting Tools (Sawzall, Grinder, Plasma cutter)
- Welder

NOTES:

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SPECIAL NOTES

Control arm Bracket Orientation

TJ3011-1 Will be on the Passenger side

TJ3011-2 Will be for the Driver side

JL4162 PARTS BILL OF MATERIALS

- Qty 1: TJ3011-1 Passenger Side LCA
- Qty 1: TJ3011-2 Driver Side LCA
- Qty 4: TJ3011-3 Cambolt Adjustment Plates



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STEP LOCATION GUIDE

Step 1:

Take an inventory of your parts, If you are missing any parts Please contact Artec Industries Immediately @ (855) 278-3299 M-F 8:30am-5pm MST

Step 2:

Break free the lug nuts on the front of the Jeep (Do not completely loosen or remove the lugnuts!) Place wheel chocks at the rear wheels of the vehicle. Jack up the front of the Jeep as high as you can place the jack stands securely under the frame of the Jeep and under the axle. Now lower the jack.

Step 3:

Remove lug nuts and the front wheels to provide more workingspace .

Step 4:

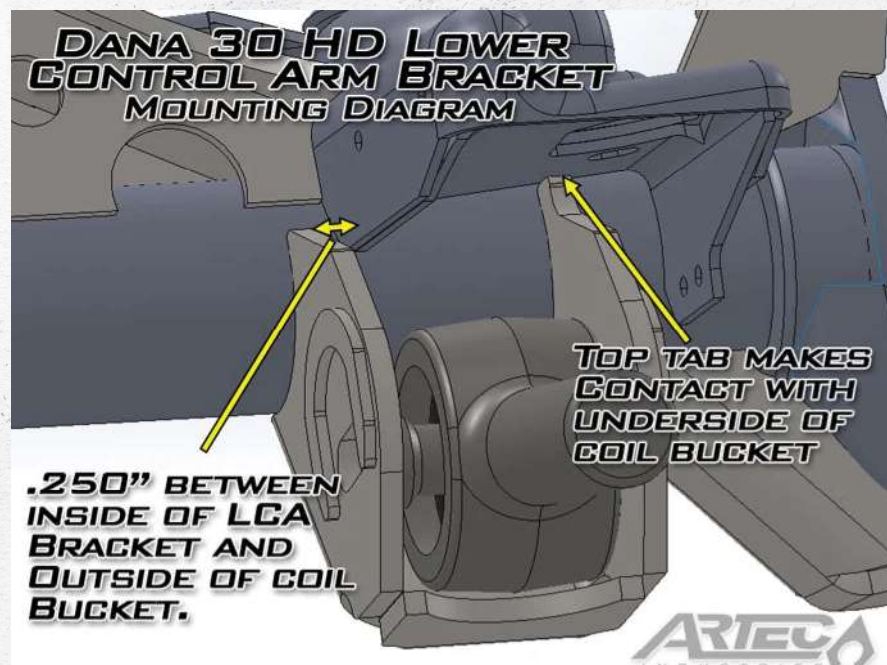
Use a 21mm wrench and socket to remove the lower control arm completely Take a photo reference of where your cam slot location is on the vehicle before removing you'll need this later on

Step 5:

With the lower control arm removed use a your cutting tool of choice to remove the lower control arm bracket off of the axle and grind the surface smooth with a angle grinder using a flap disk to ensure it is clean and ready for welding .

Step 6:

Place the corresponding control arm bracket under the axle rotate it up under the coil bucket the tab on the outside of the control arm bracket should make contact with the underside of the coil bucket. Once that makes contact measure 1/4" between the inside edge of the control arm bracket and outside of the coil bucket Then weld into place. (See Figure Below Passenger orientation referenced)



Step 7:

(TJ3011 Only)

Weld the TJ3011-3 Pieces (Cam adjustment plates) on the control arms the control arm bracket will have a laser etched mark for placement.

Step 8:

Weld the seams where the sides and bottom of Lca mount meet the front corners (if looking from front of vehicle) can be left open to help Water and mud drain .

Step 9:

Paint brackets with a self-etching primer and paint

Step 10:

Reinstall the Lower control arms (We find it easier to slip axle end of the arm into bracket first then put the frame side into place. Slip in the bolts and keep the nuts loose.

Step 11:

Install tires and lugnuts (Do not fully tighten lug nuts)

Step 12:

Use a Jack to raise the Jeep off of the Jack stands and remove them from under the vehicle then lower the Jack .

Step 13:

Torque the Lug nuts to Manufacturer Spec. (95ftlbs)

Step 14:

Adjust Cam bolt so it matches the Photo reference you took earlier

Step 15:

Torque Lca bolts To 85ftlbs At axle end and 130ftlbs at the Frame (Stock control Arms)

If you have Aftermarket control arms refer to their manufacturers spec Most aftermarket lowers control arm manufacturers suggest 90ftlbs for frame and axle end of link.

Step 16:

Take vehicle to have an alignment performed to ensure everything is in proper adjustment