

Installation of Van Steel Tubular A-Arms & Coilovers

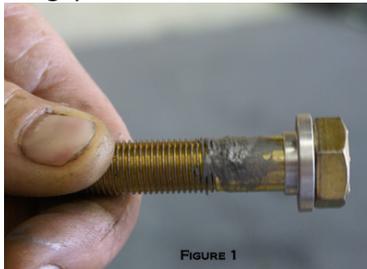
Tools Needed

- ¾" Wrench & Socket
- 3/8" Allen Head Socket/T-handle
- Pry Bar or Long Screwdriver
- Torque Wrench
- Rubber Mallet

Once you have the old arms removed from the car you can start installing the tubular arms in the car.

Installing Van Steel Tubular Lower A-Arms

First, start with the lower a-arms. The flat part of the shaft goes against the frame. There is a bolt that already came in the arm when we assembled it. (Figure 1) This bolt goes toward the rear of the car. There is a top hat style reducing washer. Remove the bolt and washer from the arm and drop it through the frame bracket. The top hat part of the washer should face down. This washer is designed to reduce the gap of the OE hole to accommodate the ½" bolt supplied.



Once you stick the nut and reducing washer through the frame (add anti-seize), you can put the arm to the frame and thread the lock nut on a couple of threads. (Figure 2)



Moving toward the front side of the arm you can install the aluminum cradle bracket that is supplied w/2 7/16-20-1" Allen head bolts and lock washers. You are to re-use your existing 2 hole plate that come on the car. You will need a 3/8" Allen head socket/wrench/T-handle to tighten these down. (Figure 3) Do not torque these yet as you should move to the rear bolt again and torque it 1st. Torque the rear bolt to 60 ft/lbs. (oiled) and the front bolts to 40ft/lbs. (oiled) Oiled=Anti-seize



Installing Upper A-Arms

The ball joint is going to sit further back in the car than the OE upper a-arm. It's easier to do with the alignment studs removed but if you choose not to remove the studs that's fine. (We suggest you use a rubber mallet as these bolts can be tweaked a little bit and you may need to hit a stud forward or backward.) If the studs are out and you are installing new studs, slide the a-arm into position and push the studs through the frame and through the cross shaft by hand until you get to the knurl of the stud. Place the 7/16" flat washers over the stud and thread the alignment nut onto the alignment stud and drive the studs into place so that they are seated. Once the studs are seated, tighten the alignment nuts. For starters, you can use a 1/16" shim on the front stud and a 1/16" + a 1/8" shim on the rear stud. Once you get the car aligned, the alignment shop will correctly place the correct size shims between the frame and the cross shaft.



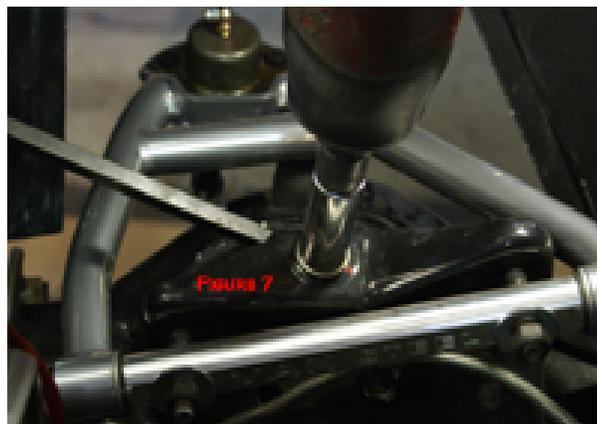
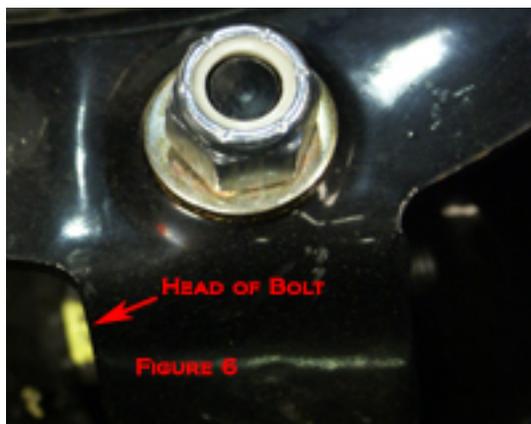
Installing Coilover Shocks

On top of the Coilover is a clevis mount. The mount will have 2 flat washers and a nyloc nut. Remove the nyloc nut and 1 washer. (Shown in Figure 5)

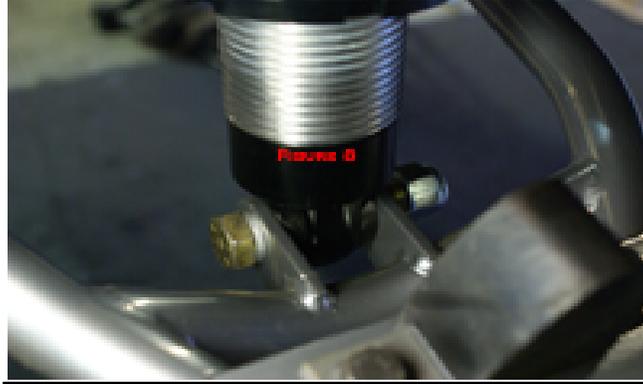


Next, slide the shock into place. You may need to angle it as the bolt may catch on the frame pocket. If you angle the shock and still cannot get it through the frame pocket you have 1 of 2 options. Since these cars are not all built to the same specs as the next frame, you will have to do one of the following. You can take a die grinder and open the hole a bit to clearance the bolt or you can grind the threaded section of the bolt that goes through the clevis. Normally if we have to do anything we grind the threads of the bolt down.

Once the shock is in place and the stud that is welded to the clevis is through the OE shock hole, install the flat washer and nyloc nut that you removed before you started the install and tighten the so the stud engages the nyloc in the nut. Make sure the head of the bolt (Highlighted in yellow on Figure 6) is facing the front of the car. You will need a pry bar or screwdriver to hold the upper clevis from rotating as you tighten the nyloc nut (Figure 7). Torque to 50 ft/lbs.



On the lower a-arm, remove the ½" bolt, nordlock lock washer and nut. Swing the lower a-arm into place so that you can install the lower part of the coilover shock into the lower mount of the a-arm. Once you get the shock hole lined up with the bracket for the lower mount, slide the ½" bolt with the nordlock lock washer through the hole and install the nut. We use a long bolt here because we like to get as much of the shank of the bolt through the shock as possible because it's stronger. Torque to 50 ft/lbs.



Installing Front Spindle Assembly

Install the lower ball joint on to the bearing assembly spindle and thread the nut on.

Next, place your floor jack under the lower a-arm with a block of wood. (Figure 9) Jack the arm up until you have clearance to insert the upper ball joint into the spindle. Once the stud of the upper ball joint is through the spindle, thread the nut on. *****PLEASE NOTE THE CAR MAY START TO LIFT OFF THE JACK STANDS/LIFT. If this occurs, you can let the spanners down on the coilover shock with the spanner wrenches supplied to take tension off of the spring.**



Once the front assembly is on you can refer to your assembly manual on how to install the rest of the steering parts (i.e., tie rod ends, center link etc).

63-82 Alignment Specs

Street Specs

Front

Toe1/32" Negative - Total
Camber.....0 Degrees
Caster.....2.75 Degree Positive
Caster w/offset shaft4.75 Degrees Positive
Caster w/Tubular Uppers...6-8 Degrees Positive

Rear

Toe.....1/8" Negative - Total
Camber.....0 Degrees

Advanced Street Specs

Front

Toe.....0 Negative - Total
Camber.....1/4-1/2 Degree Negative
Caster.....Max Possible
Caster w/Tubular Uppers...7-8.5 Degrees Positive

Rear

Toe.....1/8" Negative - Total
Camber.....1/4 – 1/2 Degree Negative

Track Specs ----Call with Tire Specs 1st

Front

Toe.....1/32" Negative - Total
Camber.....3/4 – 2 Degree Negative
Caster.....Max Possible
Caster w/Tubular Uppers...7-8.5 Degrees Positive

Rear

Toe.....3/16" Negative - Total
Camber.....3/4 – 1 Degree - Call