

1994-2002 THUREN FABRICATION FRONT TRACKBAR INSTALL INSTRUCTIONS

These instructions are applicable to the following Trucks:

- 1994-2002 Ram 2500
- 1994-2002 Ram 3500
- 1994-2001 Ram 1500

Tools Required: Typical Hand Tool Set, 1-1/8" Socket, 21mm Socket, 15/16" Wrench, Hand Drill, 1/2" & 5/8" Drill Bits, round & Flat file, Angle Grinder (1999-02 trucks), Jack Stands, Floor Jack, 3/4" Drill Bit (early Built 1994 trucks) and Black Paint for touch up.

WARNING

This Trackbar model comes pre-set to length and pre-torqued to spec, ready to install. If you change the length, it is your responsibility to re-torque properly. If done incorrectly you will void your Warranty, and risk your safety if the Trackbar fails.

1) Your Trackbar is pre-set to 37.00" length and the Jam Nut torqued to 200/foot lbs, for any 1" to 3" lift height. If you do not have a lift added to your front suspension, you may want to shorten the length about 1/8" to dial in the geometry, but even at stock height it's not mandatory to adjust our Trackbar shorter than you receive it.

NOTE

Some trucks may have a tapered end link mount on the axle. This requires drilling the taper out with a 1/2" drill bit.

2) After adding a lift height to your front suspension, it's possible that your front axle will not be perfectly center side-to-side in the chassis for a couple of reasons explained below:

Reason One - The axle needs to land close to center on the bump-stops when the truck bottoms out. When you add lift to your truck, the Suspension/Axle Arc is altered and shifts the axle to the drivers side at ride height. You cannot lengthen the Trackbar too much to compensate for this or the bump stop landing position will be altered and outside ideal spec.

Reason Two - When the Track Bar is too long, the differential shifts too far to the drivers side and can hit the frame causing metal to metal contact before you reach full compression. If you notice the axle looks to be shifted 1/8" to 1/4" more to the drivers side, this is normal.

3) IF YOU DO NOT NEED TO ALTER THE PRE-SET LENGTH, SKIP TO "INSTALLATION PREP" NUMBER 6.

If you need to alter the length of the Trackbar

4) You'll need a 1-5/16" (33mm) Crowfoot, or even a very large adjustable wrench will work to break the jam nut loose. The length noted below does not have to be perfect. Just aim for as close as you can get. Approximate center to center lengths for different lift heights are:

The aluminum collars are somewhat fragile and require minimal torque to secure them to the swaybar. Be careful not to overtighten and break or strip them!

- 0.0" lift to 0.5" lift = 36-7/8" center to center straight length
- 1.0" lift to 3.0" lift = 37" center to center straight length
- 3.5" lift to 4.0" lift = 37-1/8" center to center straight length.

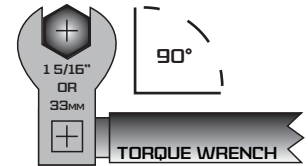
***Not designed for use over a 4.0" lift height.**



PRO-TIP

If you have a 4.5" or longer 5/8" bolt and nut, you can use this through your trailer hitch pin-hole, and then through the trackbar bushing end to hold the trackbar while you loosen/final torque the Jam Nut.

5) After setting the length of your Trackbar you must torque the Heim Joint jam nut. Acquire a 1 5/16" or 33mm Crowsfoot and applicable torque wrench. Torque the Heim Joint jam nut to 200 foot-pounds. The Heim Joint and the bushing end do not need to end up perfectly parallel after Jam Nut is torqued down, be as close as you can. Make sure to position the Torque Wrench 90° ----->



Installation Prep.

6) The easiest way to install this trackbar kit is with the truck suspension under vehicle weight resting on Jack Stands placed under the axle. If you put the truck on a lift with the axle hanging at full droop, you will generally be fighting the axle to get the bolts lined up. Supporting under the axle with jack-stands and removing the wheels for access is the absolute best way to do this install.

7) Once on jack-stands and the wheels are removed, remove the current track bar. If you have a track bar conversion bracket or something at the frame mount, all of that needs to come off so the OEM frame is exposed.

8) Inspect the angled frame mount and make sure the bottom flat surface is truly flat. Use a flat file to clean up any raised areas where required. The top of the mounting surface, where the OEM bar mounting nut was, has a small recessed surface area - this is normal.

9) Grab the 3/4" Black Flange Bolt and make sure it can insert fully through the tapered frame mounting hole. If The 3/4" bolt does not fit all the way through the taper, a small round file is all you'll need to open the hole-top so it can fit through (**SEE IMAGE 1**). The bolt should slip straight through easily with no resistance. *NOTE: If you have a rare very early 1994 model year truck, you may need to drill all the way through the frame mount with a 3/4" drill bit.*



10) 4 different thickness washers are provided. Mid-1994 to 2002 trucks, only 2 washers will be used as a bracket-spacer that goes on top of the frame mount. Early 1994 trucks will use all 4 washers.

11) Find the combination of washers that when stacked on top of the frame mount, will allow the new bracket to slip over the frame and stacked washers combo, while fitting snug as possible. (**SEE IMAGE 2**) If you are met with resistance and the bracket won't slip over fully, read the "Possible clearance issue" warning.

12) Remove the lower-rearward long steering gearbox mounting bolt. (**SEE IMAGE 3**)

13) With chosen washers on top of the frame mount, install main bracket with 3/4" bolt inserted from the bottom, thread on the nut a few turns, swing the new bracket close to the frame, and re-install the long gearbox bolt. If you were met with some resistance and the bracket does not sit flush to the frame, please read the below clearance warning. If the bracket sits nice and tight and the gearbox bolt lines up well, lightly snug the gearbox bolt.

WARNING

Possible clearance issue: Newer trucks may have a small welded flange that sticks up in front of the main mount, normally the bracket will fit over this flange. On some trucks, specifically 1999-2002 trucks, this flange sticks up rather high, and may need to be filed down a bit or even ground down with an angle grinder. In some cases, this added frame support will not let our bracket fit flush to the frame. If this happens, locate the problematic area on the frame, and grind that area down to allow our bracket to fit.

14) Last thing to confirm is that the underside inward bolt hole, that attaches to the frame crossmember, lines up with the existing 1/2" crossmember hole. **(SEE IMAGE 4)** If the holes don't line up perfect (up to 1/8" off), it's best to use a 1/2" drill bit to ream out the holes so the 1/2" bolt can insert through. If the holes are off more than 1/8", loosen up the other 2 bolts a bit and see if you can adjust the bottom hole to line up better. Worst case, read the **(PAGE 2)** clearance note and check for places on the frame that might need to be relieved with the grinder or file.



15) Now you are at a point you can install all 3 mounting bolts through the main bracket, and into their frame mounting locations.

PRO-TIP

If you had to grind at any frame locations, at this point it would be a good time to remove the bracket and use paint to seal up any bare metal, if you like.

16) With the bracket in place and only the angled main 3/4" bolt and nut snug, and the gearbox bolt snug, drop the stainless long handled/tabbed nut in through the crossmember top slot, then fish down inside to line up and thread to the supplied black 1/2" flange bolt, inserted from the bottom. **(SEE IMAGE 4 and 5)** Only snug this bolt down.

17) Final tighten the gearbox bolt to 120 ft/lbs, then the large 3/4" main mounting bolt and nut to 200 Ft/Lbs, and then final tighten the underside 1/2" black flange bolt to 100 Ft/Lbs. **Main bracket install is complete!!**

Trackbar Installation

18) You will need to drill through the track bar axle mounting hole/pocket with a 5/8" drill **(SEE IMAGE 6)**, bit to allow the supplied larger bolt to fit. Easiest way to do this is to drop the tie rod out of the passenger side knuckle by loosening the nut past the lock portion, and with a fitting socket on the flange nut, the tap the socket to knock the tie rod end out. This should provide access for the drill. Drill through both the front and back flanges, and walk the drill a bit side to side to oversize the holes just a tiny bit, to help the 16mm supplied bolt slip through easy. Check the fit of the 16mm(Silver color) bolt once drilled.

19) With the trackbar set to length and the jam nut torqued, you will now install the trackbar using supplied hardware. Axle end bolt (Silver colored bolt and nut) installed first works best. The Black bolt and nut goes to the frame side.

Frequently the axle pocket has collapsed and will need to be opened up with a pry bar or large adjustable wrench just a bit to allow the Heim end of the trackbar to slide in easier.

Normally you will need to shove the chassis a bit side to side to line the frame bracket mount hole up. If this becomes difficult, using a helper to turn the steering wheel a little each way to line the holes up. A ratchet strap can assist in lining up the chassis as well.

20) With the grease zerk pointing down at the frame side, install the axle side Heim joint into the axle pocket, then slide the bolt through.

21) Bring the frame side up to the bracket, line up the holes, and then slide the bolt through. **(SEE IMAGE 7)**

22) Thread on the nuts, and then apply 215 ft/lbs torque to each mounting bolt.

23) Re-install steering linkage, wheels and tires, or anything else earlier removed in reverse order, and set truck back on the ground.



TORQUE YOUR LUG NUTS!

WARNING

Using only an impact gun will not be enough torque on the Trackbar mounting bolt. You need to get a manual torque wrench on the bolt heads and verify the torque properly. Using only an impact gun will most likely result in a shifting or popping feeling due to improper Trackbar install, which will still require proper torque with a torque wrench.

Straightening the Steering Wheel

24) Most of the time after installing a new track bar, you will need to re-align the steering wheel. This is very easy to do by altering the length of the Drag Link (the steering link paralleling the track bar going from the gearbox to the passenger side axle) to bring the steering wheel back straight. Often this will take a few test drives and re-adjusts to get right. Make sure when you tighten down the adjuster that both end joints of the drag link are very close to parallel to each other. If they are not set close to parallel, the joints can bind and cause issues as the steering is cycled.

Future Maintenance

- Re-torque mounting bolts after 500 miles.
- Grease zerks at every oil change.
- The frame joint holds very little grease so you won't feel the grease gun substantially pump grease through the joint. If the grease gun handle feels firm on pressure, the joint is happy and full of grease so no need to force the pressure, or worry that there is an issue.
- The Acetal/Delrin we machine our bushings from is a very forgiving material. It is very slippery so it does not need much grease at all, and it can use almost any kind of grease. If using a Non-Synthetic grease try to use an NLGI#1 spec, as it is thinner so it can penetrate the tight wear surface. If using a Full Synthetic grease, either NLGI#1 or #2 is just fine, as the base grease is thinner, regarding Full-Synthetic.

PRO-TIP

Put Torque Stripe or Paint Marker across jam nut and other mounting bolts, so in the future you can easily visually check that the hardware has not backed off.

THANK YOU & ENJOY THE RIDE

NOTES
