





# **INSTALLATION INSTRUCTIONS**

#### 7988

5th Gen Toyota 4 Runner - Rear Stabilizer Bar



### **Component Contents**

Number	Part Name	Quantity
1	Sway Bar	1
2	Factory Style D - Bushings	2
3	Bushing U-Plates	2
4	Lube	1
5	Loctite	1
6	Collar Clamp Set	1
7	Instruction Sheet	1
8	Warranty Form	1

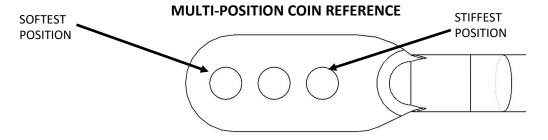
#### **General Notes:**



These instructions are meant to be a general guide for installing Hellwig Products Co. sway bars. Hellwig Products Co. Inc. assumes no liability for the actual installation process. Consumers should apply common automotive safety practices when working on any vehicles. DO NOT put yourself in a position where if the vehicle should move unexpectedly, you may be seriously hurt.

Hellwig suspension products are designed for ease of installation with standard and metric tools. However, access to a jack, jack stands, and work lights may provide added assistance during your installation. As described in Hellwig installation instructions, many fasteners require proper tension or torque. Use of a torque wrench will verify proper torque for this requirement.

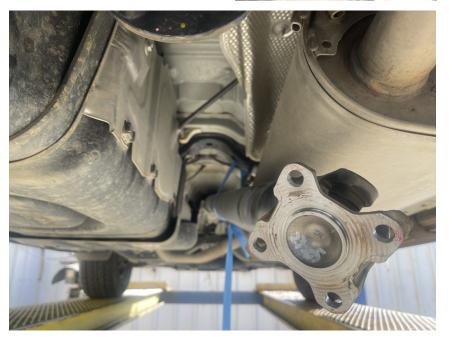
- To ease installation and to properly adjust bar, the weight of the vehicle must be on the suspension, as if driving down the road. Do not Raise Vehicle by frame.
- Before installation, set the E-brake and place wheel chucks under the tires in the appropriate locations to prevent the vehicle from rolling away.
- If you're not using a 4 post lift when raising the vehicle off the floor to install the anti-sway bar, always fully support the vehicle with jack stands. Ensure that the jack stands are securely positioned, and are rated at or above the weight of the vehicle.
- 2 post lifts are not recommended as the weight of the vehicle must be on the suspension.
- Don't forget to lube all bushings and end links.
- Always use impact grade sockets with air ratches or impact drivers.
- Holes Are Producing an Interference apply torque to the nut.
- <u>Nut and Bolt Head are Different Diameters or Shapes</u> apply torque to the side with the smaller bearing face. This also applies when the hole diameters are different.
- When Clamping Two Different Materials Together It is always better to apply torque on the component that is against the material with a lower frictional coefficient.
- <u>Long Bolts Are Being Used</u> When torque is applied to the head of a very long bolt, you may see the effects of torsional wind-up. Applying torque to the nut in this situation will help to avoid that issue.
- There will be many instances where you can apply torque to either the nut or the bolt head. But if one of
  the above situations applies, remember to follow the guidelines for a better fit and more durable installation











#### **Step 1: Rear Assembly**

Locate rear sway bar and associated components. It is required to disconnect drive shaft from the rear differential to access the sway bar.

#### **Step 2: Driveshaft Support**

Secure drive shaft with a ratchet strap prior to disconnecting utilizing a crossmember located forward of the gas tank.

#### **Step 3: Disconnect Driveshaft**

Remove the four bolts and nuts connecting the pinion flange and driveshaft flange using a 14mm socket and wrench combo. It may be necessary to have the vehicle in neutral to gain access to all flange bolts. These bolts will be reinstalled following the Hellwig bar installation.

The drive shaft's flange is seated within in a machined register on the pinion flange. It may require the shaft to be pushed toward the front of the vehicle to be dislodged.





### Step 4: Sway Bar Removal

With the drive shaft out of the way, locate the end links on either side of the vehicle and the bushing mounts found at the axle.

### Step 5: Disconnect Link

Utilizing a 17mm socket or ratcheting wrench, disconnect the rod end from the sway bar. A Allen wrench may be needed if the rod end rotates within the coin. Repeat on opposite side.





### Step 6: Remove U-Plates

Utilizing a 14mm socket, remove the four bolts mounting the sway bar to the axle. Keep these bolts, as they will be reused.







### Step 7: Remove Bar

With the bar now disconnected, rotate the center hump down and forward toward the pinion flange. It may be necessary to shift the bar left or right to clear the frame and suspension linkages. Fully remove the bar and set aside.

### Step 8: Grease Bushing

Pre-grease the provided D-Bushing prior to installing on the bar. Use a liberal amount to fully coat the bushing surface. Mount the D-Bushing on the Hellwig sway bar. Use the OEM bushing locations as a reference for correct spacing.











### Step 9: Install Hellwig Bar

Install the Hellwig bar in reverse order of the OEM disassembly. First install the sway bar center hump over the rear differential. It may be necessary to shift the bar left and right to clear the suspension linkages and gas tank. Rest the bar on the differential while you install the OEM end links into the coined end.

Torque to 45-50 ft-lbs.

NOTE: REFERENCE THE ILLUSTRATION ON PAGE 2 TO DETERMINE STIFFNESS ADJUSTMENT.

HELLWIG RECOMMENDS THE
SOFTEST SETTING FOR NORMAL
EVERY DRIVING INSTALLATIONS.
THE MIDDLE OR STIFFEST SETTING
SHOULD BE UTILIZED FOR VEHICLES
WITH INCREASED LOADS OR
VEHICLES WITH INCREASED
HEIGHTS SUCH AS OVERLANDING
SET UPS OR LOADED ROOF RACK
SET UPS.

### Step 10: Mount Bar

Using the supplied D-Bushing and the OEM hardware. Mount the bar to the axle at the factory locations. Apply provided thread locking agent to the oem bolts. Wait to tight fully until you have centered the bar with the vehicles frame. Torque to 35-40 ft-lbs.







## Step 12: Install Collar-Clamps

Install the supplied collar clamps to the bar on the inside of each bushing. This will prevent the bar from, shifting under load.

### Step 13: Reinstall Driveshaft

Re-seat driveshaft onto pinion flange and reinstall the 4 OEM bolts and nuts. Tighten and torque to 70-80 ft-lbs. Remove any strap or appliance used previously to support the driveshaft.

### Step 14: Check Fittings

Check overall installation of bar.
Insure that all bolts are tightened and nothing installed is coming into contact with vehicle other than its original mounting locations.
Review all torqued fasteners and

#### **Maintenance and Inspection:**

Your Hellwig Suspension Product is built to last. However, as with all vehicle systems, it requires routine inspection. Inspect your Hellwig installation looking for secure hardware and tight fitting brackets and bushings. If you do not perform this inspection, have your professional mechanic inspect as described. Hellwig recommends periodically re-lubing bushings to avoid bushing /bar wear and noise reduction. A standard synthetic silicone bushing grease is preferred.





#### 1. Fasteners:

All Hellwig supplied fasteners must be utilized and installed in accordance with the installation instructions and apply torque to the specifications as defined.

#### 2. Modification:

Do not attempt to modify the vehicle or the Hellwig product you are installing. If a problem is encountered, stop and call Hellwig Products (1-800-367-5480) for support. Hellwig Products Company will not be responsible for any damage or injury resulting from any modification or alteration.

Do not use this document for custom fabrication, as it may not show all parts or structural components.

#### 2. Drilling:

Most Hellwig products do not require drilling and or tapping for installation. If drilling is defined as required, use caution when drilling a vehicle. Failure to review an area to be drilled, may result in personal injury and/or injury to other as well as vehicle damage.

#### 3. Eye Protection:

Always wear safety glasses or goggles during the installation process to avoid personal injury.

#### 4. Maximum Towing/Carrying Capacity:

User should never exceed the vehicle manufacture's maximum tow and weight rating. Failure to follow these guidelines will void the Hellwig warranty and may result in personal injury and/or injury to others as well as vehicle damage.

#### 5. For California Residents Only—Prop 65 Warning:

Some products may contain chemicals such as DEHP, which can cause cancer, birth defects or other reproductive harm. For more info go to www.p65warning.ca.gov

#### 6. Checks after Install:

After installing your new Hellwig sway bar it is recommended to bounce the vehicle, check for clearances, and if all looks good test drive the vehicle. Check the fasteners regularly thereafter. Ensure no damage is being done to the sway bar or your vehicle.