

# **INSTALLATION INSTRUCTIONS**F150 & Raptor Rear Stabilizer Bar

Thank you for purchasing a quality Hellwig Product.

PLEASE READ THIS INSTRUCTION SHEET COMPLETELY BEFORE STARTING YOUR INSTALLATION



SAFETY: BEFORE STARTING YOUR INSTALLATION, PARK YOUR VEHICLE ON A FLAT LEVEL SURFACE, SET THE PARKING BRAKE, CHOCK THE FRONT TIRES.

### **IMPORTANT NOTES:**

- 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.
- THIS KIT INCLUDES LOCK NUTS WHICH REQUIRE TIGHTENING WITH A WRENCH AFTER BEING STARTED BY HAND.
- THIS SWAY BAR IS DESIGNED TO MOUNT BELOW THE REAR AXLE WITH THE ARMS TOWARD THE FRONT OF THE VEHICLE.

7743 1 6/8/21

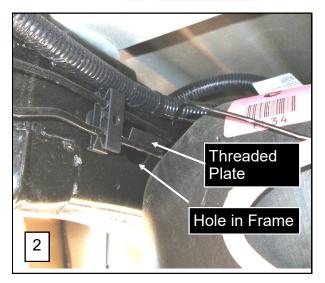


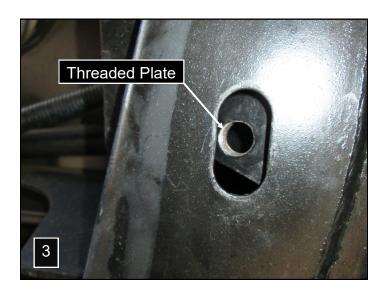
#### GENERAL INFORMATION:

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 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.

- If 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.
- The installer must read the instructions and use all bolts and parts supplied. Use only the parts supplied by Hellwig to install this kit.
- On older vehicles it may be necessary to deal with rusty or difficult fasteners. Normally quality
  penetrating oil applied to difficult fasteners ahead of time will help. An air impact wrench may also
  help with loosening these bolts and nuts
- It may be necessary to clean road debris and dirt from areas affected by this installation.
- 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.
- Regardless of year, make and model, a wide range of options and aftermarket products may or may
  not interfere with the Hellwig installation. It is the installer's responsibility to make certain that
  equipment is not damaged once the suspension travels through the full range of motion. Failure to
  ensure adequate clearance could result in non-warranty property damage, personal injury or even
  death.
- Hellwig Products Company will not be responsible for any damage or injury resulting from any modification or alteration.
- Always double-nut bolts and U-bolts when instructed to.
- Don't reuse self locking nuts.
- Check ALL the fasteners for tightness before and after road testing the vehicle.
- Do not use this document for custom fabrication, as it may not show all parts or structural components.
- Do not use an air impact wrench when re-installing bolts, as stripped threads may result.
- This anti-sway bar is only warranted for the original installation. Installing a used anti-sway bar on another vehicle is not recommended and will void the warranty.
- **Never overload your vehicle.** Never exceed the manufacturers GVWR, Gross Vehicle Weight Rating. Your vehicles manufacturer has listed the gross vehicle weight rating (GVWR) on the specification plate on the chassis. On a truck scale with the vehicle in a level state, weigh it when it is fully loaded to determine if you are exceeding the manufacturer's recommended GVWR.
- To avoid brake line damage and brake system failure be sure all U-bolts are put UNDER all brake
  lines, hoses and wiring located on the axles or frame to avoid pinching when tightened as shown in
  Figure 1 of this sheet. It may be necessary to slightly flex the brake line on the axle to allow clearance
  for the U-bolts. Be sure to locate the proper position for the U-bolts prior to flexing and then loosen
  the brake line clamps on the axle to allow enough slack. Double check U-bolts before tightening.
- Hellwig Products Co. sway bars are designed to improve stability handling. After test driving, recheck all fasteners for proper tightness and clearances on all undercarriage components. Without all kit components properly tightened or in place, the anti-sway bar will not stabilize the vehicle to its full capability, which may cause reduced cornering ability or other reductions in vehicle handling or performance.



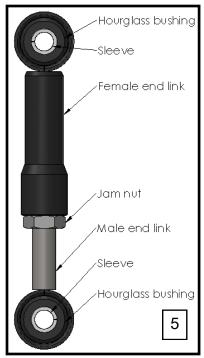




#### STEPS:

- 1. Insert the threaded plates through holes in frame rail using the attached wire to position them as shown in photos 2 & 3. On driver's side, the threaded plates will be inserted into the hole between the brake lines as shown in photo 3.
- 2. Attach clevis to threaded plate using provided 1/2" X 1" bolts and thread lock as shown in Photo 4. Align clevis as shown in photo and torque bolt to 50 ft-lb.
- 3. Insert hourglass bushings into the loops of the end links. Lubricate bushings with some of the supplied lubricant to aid installations. Install sleeves into hourglass bushings.
- 4. Assemble end links together as shown in diagram 5 with 9/16" jam nut on threaded portion of end link. Leave loose for adjustment later.
- 5. Loosely attach end links to clevis using 7/16-20 X 2-1/4" bolt and locknut as shown in photo 6.



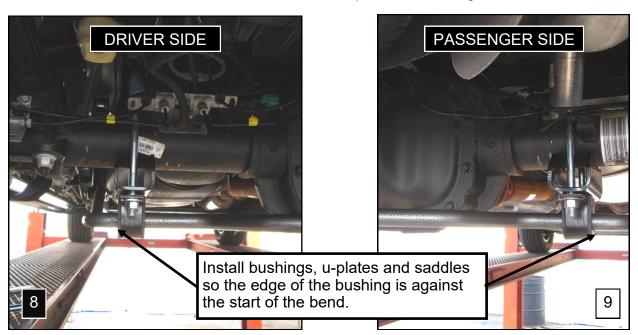








- 6. Attach end holes of the sway bar to end links using 7/16 x 2-3/4" bolts, washers, and locknuts as shown in photo 7. Leave loose at this time.
- 7. Lubricate and install the D-bushings on the sway bar as shown in photo 7. Install bushings as far out as possible so the edges of the bushings are against the start of the bends. If using this sway bar with a Hellwig air spring kit see special instructions on the last page of the instructions.
- 8. Position the U-bolts on axle as shown in photos 8 and 9. Make sure the U-bolts are under any brake lines, wires or hoses on the axle to avoid pinching or crushing when the U-bolts are tightened.
- 9. Place the U-plates over the D-bushings and rotate sway bar into position. Attach to axle by placing the legs of the U-bolts through the holes in the saddle brackets and U-plates as shown in photos 8 & 9. Fasten with thick washers and 1/2" locknuts. Leave loose for adjustment later.
- 10. If necessary, adjust the length of the end links so the bar is parallel to the ground.
- 11. With the sway bar properly aligned, ensure that all the vehicle components have the proper clearance, and no wires or hoses will be crushed or pinched when tightened.

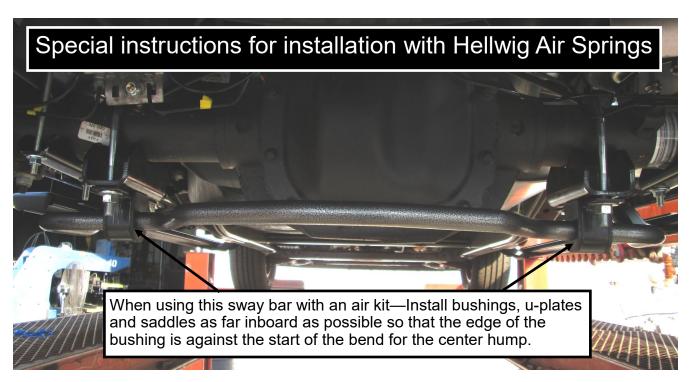




- 12. Torque U-bolts to 50-60 ft-lb
- 13. Torque end link fasteners to 35-40 ft-lb.
- 14. Bounce the vehicle checking for clearance on all undercarriage components, differential, shocks, exhaust etc. Test drive the vehicle and recheck your installation. Recheck on a regular basis thereafter.
- 15. The sway bar arms have three mounting holes. Mounting the sway bar on the outer hole is the nominal position. For firmer settings, use the inner holes. We recommend starting with the outer mounting hole until you are accustomed to the vehicles new handling characteristics. Select the mounting point that best fits your driving style

#### **TORQUE TABLE**

BOLT SIZE: 3/8" = 20-30 ft. lbs. -7/16" = 35-45 ft. lbs.  $-\frac{1}{2}$ " = 50-70 ft. lbs. -9/16" = 70-90 ft. lbs.



# ATTENTION INSTALLER: BE SURE THAT THE CUSTOMER RECEIVES THIS INSTRUCTION SHEET, ALL IMPORTANT NOTE CARDS AND THE WARRANTY FORM

#### 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.

Thank you for purchasing a quality Hellwig Product.

Hellwig Products Company, located in Visalia, California was founded in 1946 with solutions for load control of loaded passenger cars. The family operated company produces components for trucks, RVs, muscle cars and military vehicles. Hellwig is ISO9001 certified and is proud to develop, test and manufacture products in the USA.