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Revisions			
Rev.	Description	Date	Approved
A	Initial Release Per ECO 25-025	3/7/2025	KB



99-04 FORD SUPERDUTY DUAL STEERING STABILIZER

Installation Instructions

Applications:

99-04 FORD F250-F350
99-04 FORD EXCURSION



TITLE:

99-04 FORD SUPERDUTY DUAL STEERING STABILIZER INSTALLATION INSTRUCTIONS

SIZE

DWG NO:

REV

A

7510-01-INST

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SCALE: N/A

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99-04 FORD SUPERDUTY DUAL STEERING STABILIZER INSTALLATION INSTRUCTIONS

Thank you for purchasing the best aftermarket products available for your vehicle. We strongly feel that the parts you are about to install should meet or exceed your expectations for performance. Proper assembly is critical to the performance of these components and the vehicle as a whole. Please take the time to carefully read these instructions and familiarize yourself with the installation procedure before working on your vehicle. If you have any questions PLEASE contact Synergy Manufacturing BEFORE beginning installation. Thanks again for supporting Synergy – enjoy the performance benefits of the best aftermarket products available for your vehicle!

Synergy Manufacturing

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Modifying or otherwise altering vehicle components may cause the vehicle to handle differently than originally designed. It is the driver’s responsibility to familiarize themselves with the performance and handling characteristics of the modified vehicle. Vehicles with larger diameter than stock tires must be driven carefully and cannot be expected to perform as stock or meet OEM performance with regard to handling, braking or crash performance. Ensure all replacement components are compatible with vehicle capacities so as not to overload components, especially tires. It is up to the individual to ensure that the vehicle and all components are compatible with the intended vehicle use, including load ratings, road conditions, and driver abilities. Thorough and frequent vehicle inspections are recommended to ensure a safe and reliable state of readiness, especially after off-highway use.

PARTS LIST

7510-01 99-04 Ford Superduty Dual Steering Stabilizer		
QTY	Part Number	Description
1	751001-W01-PC	99-04 Ford Superduty Dual Steering Stabilizer Bracket
2	405050	Tie Rod Stabilizer Mount Clamp, 1.5” With Hardware
2	440001-03-PL	Spacer, Sway Bar Endlink, .375” Plated
4	HF8-8-21	Hex Head Bolt, Grade 8, 1/2-20 x 2.25” UNF
6	WF8-8	Flat Washer, Grade 8, 1/2” SAE

GENERAL NOTES

- These instructions are also available on our website; www.synergymfg.com. Check the website before you begin for any updated instructions and additional photos for your reference.
- The installation of the Synergy 7510-01 Dual Stabilizer Bracket will allow for the use of two steering stabilizers on your 99-04 Ford Superduty F250/F350 truck.
- The 7510-01 Dual Stabilizer Bracket was designed around the Fox 985-24-170 stabilizer. If using the dual stabilizer bracket with Fox TS or ATS through shaft stabilizers, two 4051-20 Steering Stabilizer Clamp Adapter kits must be purchased to adapt the units to the brackets. Additionally, the lower portion of the factory steering stabilizer bracket will need to be trimmed off.

TOOLS REQUIRED

- Metric and SAE Sockets and Wrenches
- 7/32" Allen wrench
- Tape measure
- Torque wrench
- Marking tool (Paint Pen or Sharpie)
- Basic hand tools
- Jack and Jack Stands

ESTIMATED INSTALLATION TIME

1.0 Hours

INSTALLATION

1. Installation can be done on the ground or in the air on a lift. If doing the install on the ground it is easiest to get the axle up on jack stands and pull both front wheels off. This will allow you to turn the steering freely.
2. Remove any previous steering stabilizer from the vehicle. If using the factory setup, unbolt the stabilizer from the factory bracket on the tie rod and then unbolt the stabilizer from the axle side mount.
3. If using the stock tie rod, remove the factory stabilizer mount from the tie rod itself. Loosen and remove the u-bolts holding the bracket to the tie rod and remove the bracket. See **Figure 1**.



Figure 1. Removing the Factory Steering Stabilizer and Tie Rod Bracket.

4. Additionally, if you are using the stock tie rod, you will need to rotate the tie rod adjustment clamp to point forward or up in order to clear the stabilizer mounted on that side. See **Figures 2. and 3.**



Figure 2. Tie Rod Clamp in Stock Position.



Figure 3. Tie Rod Clamp Rotated Forward

5. If using a through shaft style of steering stabilizer like a Fox TS or ATS, the stock passenger side stabilizer mount needs to be trimmed in order for the through shaft stabilizer body mount to fit. Trim the lower portion of the mount off as indicated in **Figures 4.** Drill the remaining upper bolt hole to 1/2".

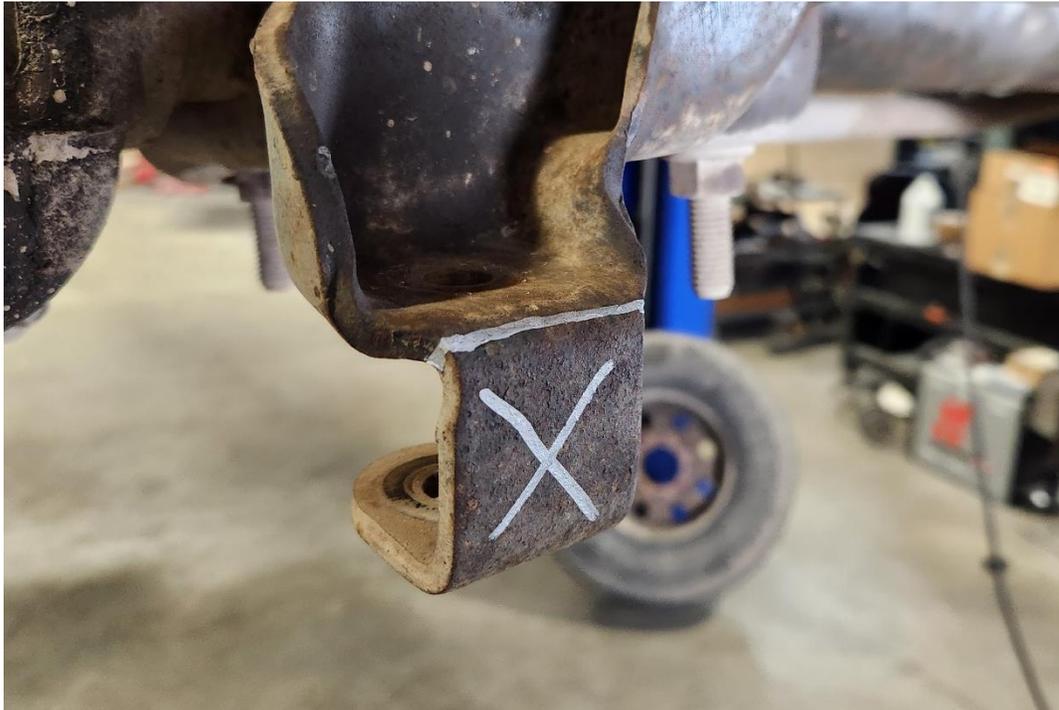


Figure 4. Lower Portion of Stock Steering Stabilizer Mount to be Removed to Mount Through Shaft Steering Stabilizers

6. Use an impact gun to remove the three U-bolt nuts on the driver side lower spring cap. See **Figure 5**. Do not throw the nuts away they will be reused. Do not remove the U-bolts or lower spring plate. Make sure axle is supported underneath if the vehicle is on a lift.

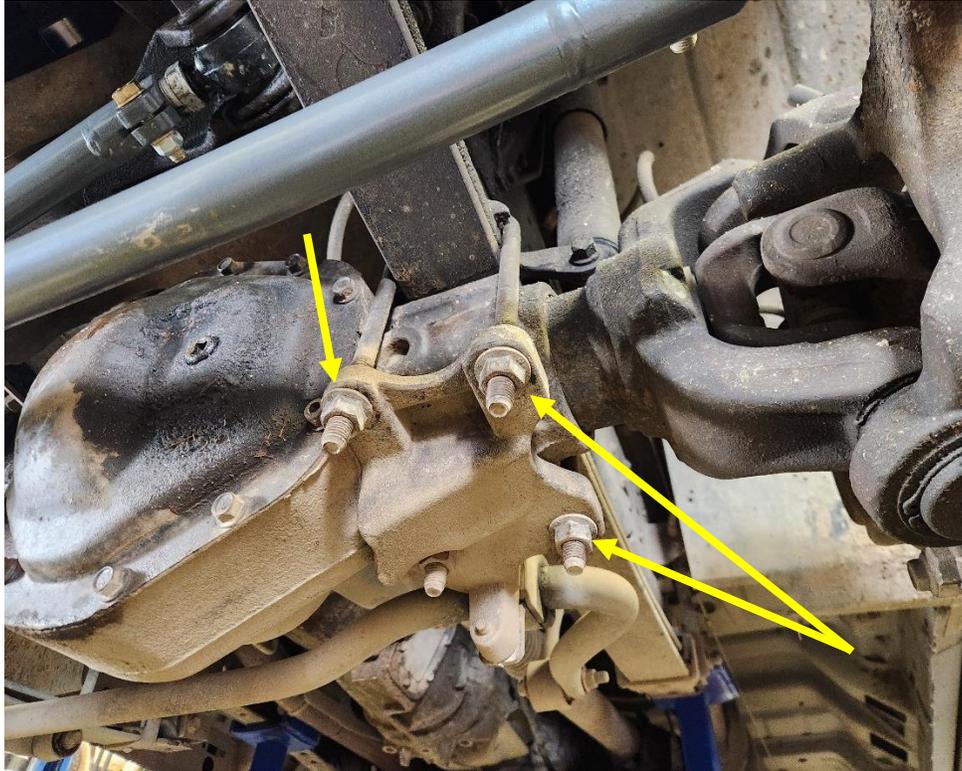


Figure 5. Remove the Three U-bolt Nuts On the Lower Spring Plate

7. Install the dual steering stabilizer bracket under the lower spring cap and secure with the factory U-bolt nuts. Torque the U-bolt nuts to 99lb-ft. See **Figure 6**.



Figure 6. Dual Steering Stabilizer Bracket Installed on Axle.

8. If using a standard steering stabilizer, bolt the shaft side of the driver side stabilizer on to the bracket using the supplied 2 1/2" long 1/2" bolts, washers, and 1/2" nuts. See **Figure 7**. If using a through shaft style stabilizer, bolt the body side of the stabilizer to the bracket using a 4051-20 steering stabilizer clamp adapter kit. See **Figure 8**.



Figure 7. Partially Installed Stabilizer on Synergy MFG Bracket



Figure 8. Through Shaft Stabilizer Mounted to the Dual Stabilizer Bracket

9. Have a helper turn the steering all the way to the **driver** side, it is important that they keep pressure on the wheel to make sure the truck stays at full steering lock.
10. Compress the driver side stabilizer until there is between 1/8" and 1/4" of shaft showing, mark the center of the stabilizer eyelet on the tie rod. **See Figures 9 and 10.**



Figure 9. Compressed Steering Stabilizer



Figure 10. Marking the Mount Centerline

11. Install the 4050-50 tie rod clamps on the tie rod so that the 1/2" stabilizer mount lines up with the mark left from step 9. Torque the Allen head bolts to 15 ft-lb with a 7/32" Allen key. **See Figure 11.**

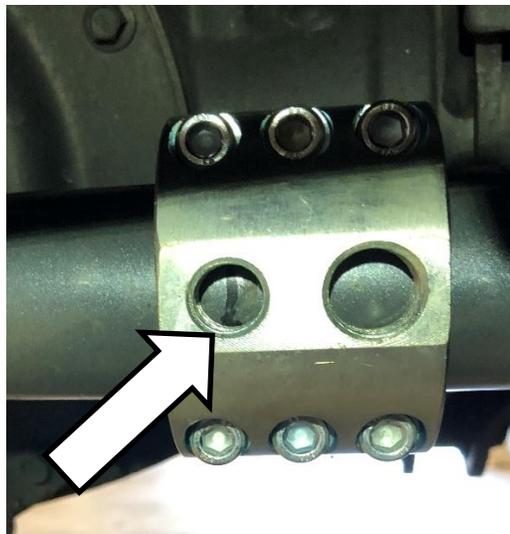


Figure 11. Driver Side Stabilizer Clamp Installed on the Tie Rod with 1/2" Mounting Hole Over the Mark Left from Step 9.

12. Bolt the stabilizer to the tie rod clamp using one of the 440001-03-PL spacers and 1/2 x 2.25" long bolts. **See Figure 12.** Removing the stabilizer from the duals mount may be required to ensure the bolt at the 4050-50 clamp goes in straight. Reattach the stabilizer to the duals bracket.



Figure 12. Stabilizer Body Mounted to 4050-50 Clamp

13. Repeat steps 8-12 on the passenger side of the vehicle using the factory stabilizer mount on the axle and with the wheels turned completely to the pass side of the vehicle.
14. Torque the stabilizers to the dual stabilizer bracket and tie rod clamp mounts. Torque all 1/2" bolts to 70 ft-lb. **See Figure 13.**



Figure 13. Dual Steering Stabilizers Installed on Dual Stabilizer Bracket

15. Have a helper turn the steering from full driver to full passenger to verify that the stabilizers do not fully compress or fully extend through the entire travel of the steering. If the stabilizers do fully compress or extend before the steering hits the axle stops, remove and reinstall the tie rod clamps following steps 4-8 until the correct 4050-50 mounting location has been achieved.
16. Recheck all hardware after approximately 100 miles of use and after each off road trip.

Installation is Complete

Table 1. Bolt Torques

Bolted Joint Location	Wrench Size	Torque
Factory U-bolt Nuts	22mm	99lb-ft
Stabilizer Mounting Bolts on Bracket	3/4"	70lb-ft
Stabilizer Mounting Bolts on Tie Rod	3/4"	70lb-ft
Stabilizer Clamp Mount Socket Head Bolts	7/32" Allen	15lb-ft
Lug Nuts	22mm	165lb-ft