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Revisions

Rev.	Description	Date	Approved
A	INITIAL RELEASE ECO 25-032	4/8/25	MB



Ford Super Duty Single Steering Stabilizer Kit Installation Instructions

Applications:

2005-23 FORD SUPER DUTY F250/F350 4x4
2005-CURRENT FORD SUPER DUTY F450/F550/F600 4x4



TITLE:

**FSD SINGLE STEERING STABILIZER
KIT, 05-23 F250/F350/F350/F450/F550
INSTALLATION INSTRUCTIONS**

SIZE	DWG NO:	REV
A	8603-02-INST	-
SCALE: N/A		PAGE 1 OF 8



FSD SINGLE STABILIZER KIT, 05-23 F250/F350/F450/F550/F600 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

8603-02 FSD Steering Stabilizer Relocation Bracket		
QTY	Part Number	Description
1	860302-W01-PC	FSD SINGLE STABILIZER MOUNT, POWDER COATED
1	NA	TOP LOCK NUT, 1/2-20, ZINC PLATE
2	NA	HEX HEAD BOLT GR8 UNF 1/2"-20 X 2.5"
2	NAS1149-F0863P	FLAT WASHER, 1/2" ID, 7/8" OD, MIL-SPEC
3	NA	HEX HEAD BOLT, UNC, GR 8, 3/8 X 1"
3	NA	SPLIT LOCK WASHER, 3/8" GR8
1	440001-02-PL	SPACER,.375" PLATED

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 8603-02 Single Stabilizer Bracket will allow for the use of one steering stabilizer mounted from the axle to the tie rod on your Ford Super Duty 2005-2023 F250/F350/F450/F550/F600 truck equipped with The Synergy 8602-11 or 7602-01 Tie Rod.
- The kit comes with an extra spacer and bolt to allow for different stabilizer fitment.
- The 8602-11 uses a 4050-75 tie rod clamp. The 7602-01 uses a 4050-20 tie rod clamp.
- The 8603-02 Single Stabilizer Bracket was designed for an eyelet diameter of .50" and a mounting width of 1.4".
- For **F250** and **F350** a Minimum 8" stroke stabilizer is required.



FSD SINGLE STABILIZER KIT, 05-23 F250/F350/F450/F550/F600 INSTALLATION INSTRUCTIONS

- For **F450** and **F550** and **F600** a Minimum 10" stroke stabilizer is required
- **Fox TS or ATS** steering stabilizers **ARE NOT COMPATIBLE** with **F450 or F550 or F600**
- **Fox ATS** stabilizers will need to be rotated so the reservoir does not hit the track bar at full bump
- If using the single stabilizer bracket with Fox TS or ATS stabilizers, one 4051-01 Steering Stabilizer Clamp Adapter kit is required.
- The Fox Adjustable Through Shaft steering stabilizer has a narrow eyelet (1.12") and will require the use of (2) 867301-01-PL spacers to replace the fox misalignment spacers
- The factory Stabilizer mounted to the drag link can be retained or removed based on preference.

TOOLS REQUIRED

- Sockets and Wrenches
- Allen wrenches
- Tape measure
- Torque wrench
- Marking tool (Paint Pen or Sharpie)
- Basic hand tools

ESTIMATED INSTALLATION TIME

~ 1 Hour

INSTALLATION

1. Make sure the vehicle is parked on a flat, level surface. Ensure the vehicle is in park or in gear with the parking brake set.
2. Remove the 3 bolts on the differential housing. See **Figure 1**.

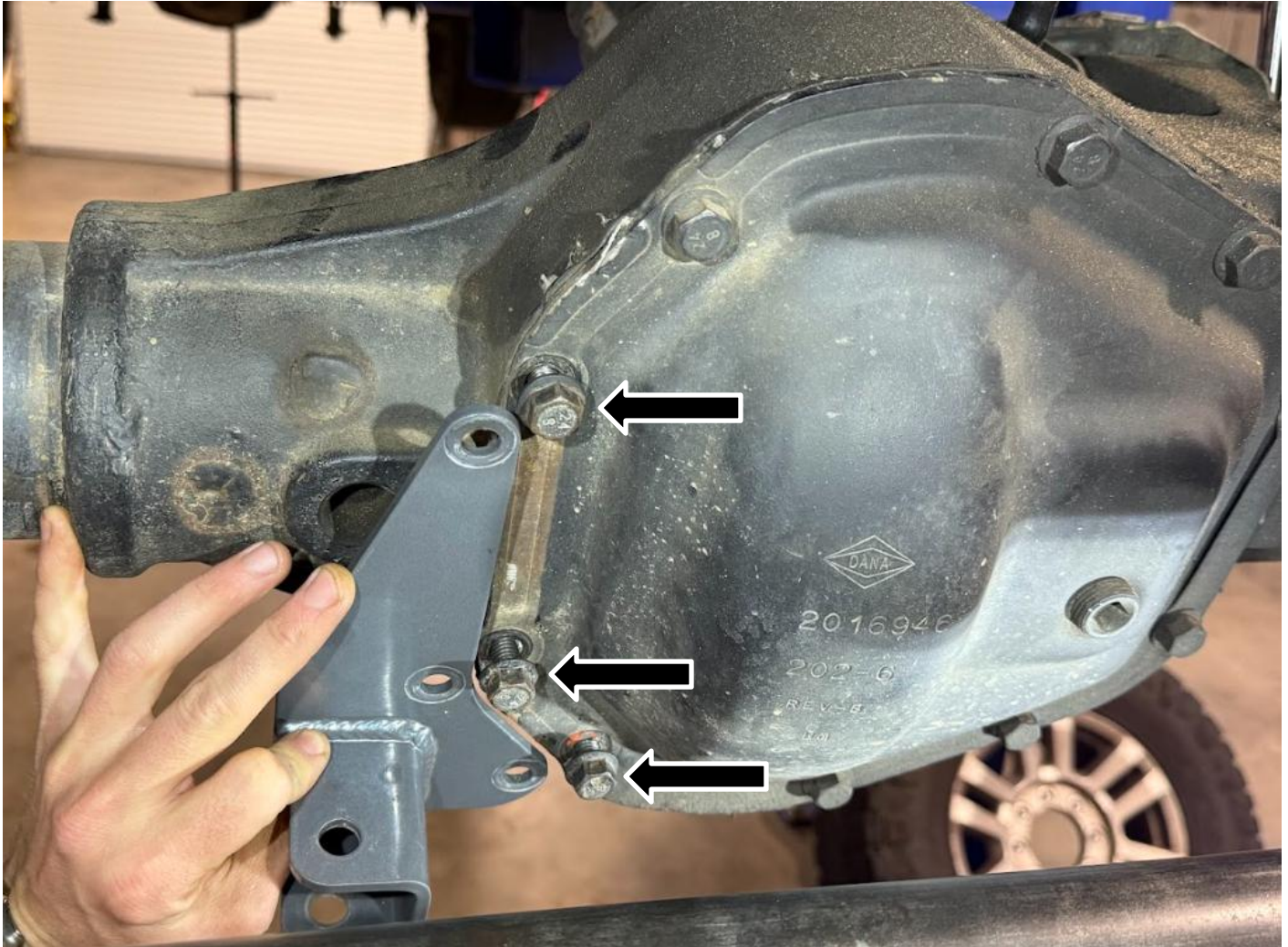


Figure 1. Bolts to Remove. Bracket Shown for Reference

3. Install the Synergy Single Stabilizer bracket to the housing with the 3 supplied 3/8" bolts and washers. See **Figure 2**.

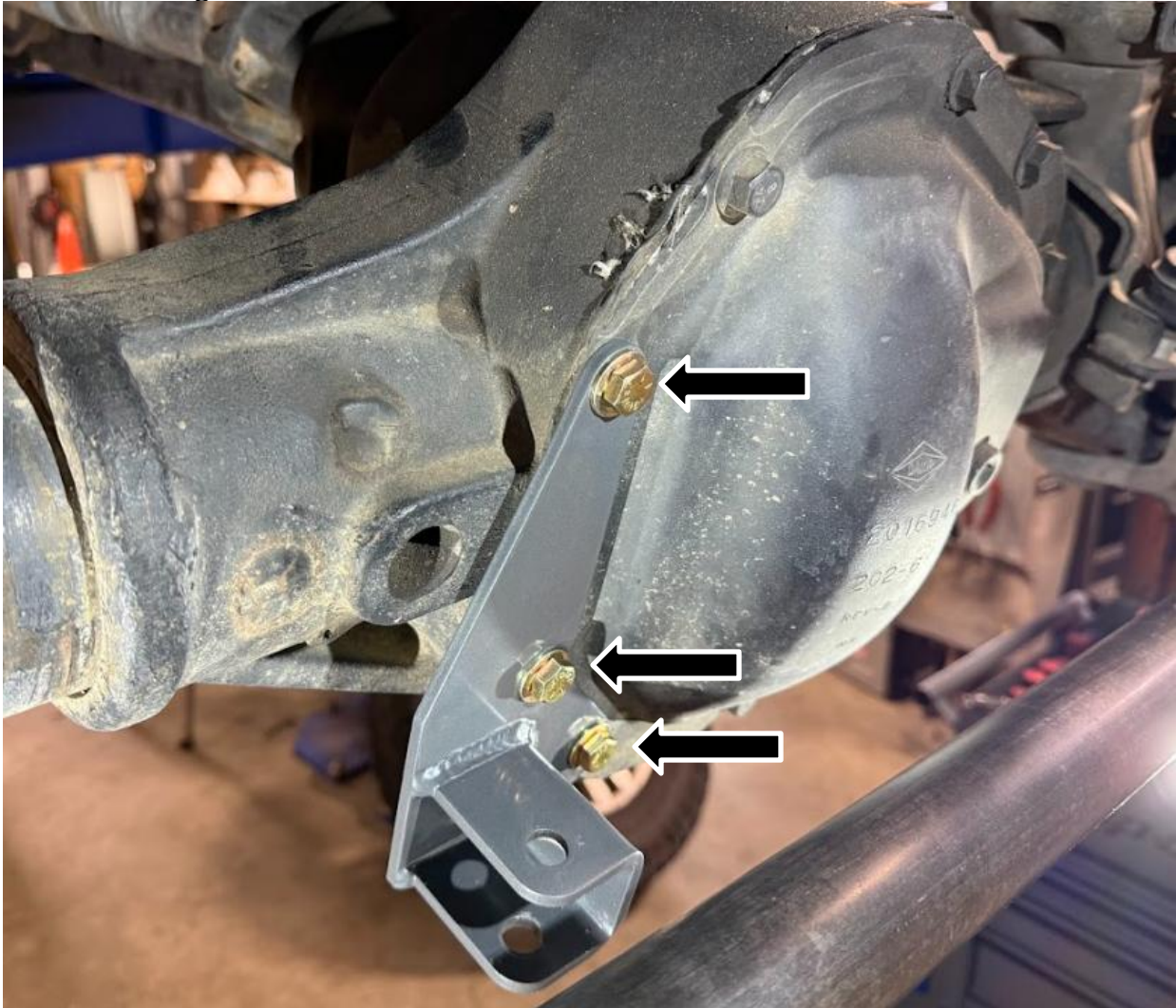


Figure 2. Bolts and Washers That Hold the Bracket On

4. Evenly tighten and torque the bolts that hold the single stabilizer bracket to the axle. Torque to 30 ft-lb.

5. Have a helper turn the steering all the way to the **passenger** side, it is important that they keep pressure on the wheel to make sure the truck stays at full steering lock. **See Figure 4.**



Figure 4. Driver Side Knuckle Fully Turned to the Passenger Side, Contacting the Steering Stop

6. Bolt the stabilizer to the tie rod clamp. See Figure 5.



Figure 5. 4050-75 Clamp Installed on Steering Stabilizer.

7. Compress the stabilizer about a 1/4" and bolt the tie rod clamp to the tie rod. Ensure the vehicle is still turned fully to the passenger side before bolting the clamp on. Torque the Allen head bolts to 15 ft-lb with a 7/32" Allen key. **See Figure 9.**



Figure 9. Correctly Installed Fox 2.0 IFP Stabilizer With The Steering Turned Passenger.

8. Have a helper turn the steering from full driver to full passenger to verify that the stabilizer does not fully compress or fully extend through the entire travel of the steering. If the stabilizer does fully compress or extend before the steering hits the axle stops, remove and reinstall the tie rod clamps following steps 7-8 until the correct mounting location has been achieved.
9. 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
Single Stabilizer Bracket Bolt	9/16"	30 ft-lb
Stabilizer Mounting Bolts on Bracket	3/4"	70 ft-lb
Stabilizer Mounting Bolts on Tie Rod	3/4"	70 ft-lb
Stabilizer Clamp Mount Socket Head Bolts	7/32" Allen	15 ft-lb

Table 2. Stabilizer Spacer Locations

Stabilizer	Eyelet Spacer	Body Spacer	Clamp Bolt	Which side is mounted to the axle bracket?
FOX IFP	N/A	440001-03-PL	2.5" Bolt	Eyelet
FOX TS	N/A	N/A	4051-01	Eyelet
FOX ATS	867301-01-PL	N/A	4051-01	Eyelet