



F5905 Installation Instructions 2005-2025 Ford Super Duty F250 / F350 Front Alignment Cams

Read and understand all instructions and warnings prior to installation of product and operation of vehicle.

Zone Offroad Products recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known. Minimum tool requirements include the following: Assorted metric and standard wrenches, hammer, hydraulic floor jack and a set of jack stands. See the "Special Tools Required" section for additional tools needed to complete this installation properly and safely.

» PRODUCT SAFETY WARNING

Certain Zone Suspension Products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. Zone Offroad Products does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

» TECHNICAL SUPPORT

www.zoneoffroad.com may have additional information about this product including the latest instructions, videos, photos, etc.

Send an e-mail to tech-zone@ridefox.com detailing your issue for a quick response.

888.998.ZONE Call to speak directly with Zone tech support.

» IMPORTANT

2024+ Ford Super Duty Only: This kit includes ball joint cams to achieve optimum performance both on and off-road. For vehicles equipped with non-selectable passenger side hub-lock on the front axle along with these ball joint cams, it is required to replace the non-selectable with a selectable hub-lock. Part number (PC3Z-3B396-A) is needed to prevent a grinding noise from the front axle for these applications. If your vehicle is not factory equipped with them, see **Figure A**. You may also need vacuum lines (3C125-A and/or 3C124). You can reference Section 307-07A of the Workshop Manual or Bulletin SSM 52423 for more information. For trucks with the vacuum tube as shown in **Figure B**, this step is not needed.

Difficulty Level

easy ① 2 3 4 5 difficult

Estimated installation: hours

Special Tools Required

SPC #41550 or equivalent (ball joint removal tool)

Tire/Wheel Fitment

N/A



Figure A



Figure B

» PRE-INSTALLATION NOTES

1. Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
2. Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
3. Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
4. Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
5. Secure and properly block vehicle prior to installation of Zone Offroad Products. Always wear safety glasses when using power tools.
6. If installation is to be performed without a hoist, Zone Offroad Products recommends rear alterations first.
7. Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

***Important* Verify you have all of the kit components before beginning installation.**

F5905 Kit Contents

Qty	Part
2	Alignment Cams

Installation Instructions

1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
2. Raise the front of the vehicle and support the axle with jack stands.
3. Remove the wheels.
4. Remove the cotter pin from the upper ball joint.
5. Loosen the upper ball joint stud until the nut is level with the top of the stud. Strike the axle "ear" near the upper ball joint to release the ball joint to sleeve taper, **Figure 1**.

Step 5 Note

The top of the stud can also be struck using a soft blow hammer to aid in loosening the taper. Take care not to damage the stud/nut threads.



Figure 1

6. Remove the OE ball joint sleeve from the axle using the appropriate removal tool (SPC #41550 or equivalent) **Figure 2**.



Figure 2

7. Install the new sleeve with the arrow on the top of the sleeve pointing toward the front of the vehicle. 2 different sleeves are included. The sleeve marked “2.3 degrees” should be used on the driver’s side and the sleeve marked 2.6 degrees should be used on the passenger’s side. Using the old sleeve, pound down on the new sleeve to seat it on the ball joint taper. Make sure that the flat of the sleeve is flush with the flat of the axle, **Figure 3**.



Figure 3

8. Install and torque the OE ball joint nut to 69 ft-lbs. Install the cotter pin, **Figure 4**.



Figure 4

Step 8 Note

Do not loosen the nut to install the cotter pin.

9. Install the wheels.
10. Lower the front of the vehicle to the ground.
11. Torque lug nuts to factory specifications.
12. Check all hardware for proper torque.
13. Check hardware after 500 miles.

