ZONF5203, 5303, 5502, 5501
Installation Instructions
Ford F250/350/450 - 4WD | 2023-2026
Ride Height Sensor Bracket Relocation Kit

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

Live Chat provides instant communication with Zone tech support. Anyone can access live chat through a link on www.zoneoffroad.com .

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

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

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

» 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.

Difficulty Level

easy 1 (2) 3 4 5 difficult

Estimated installation: 1-2 hours

Special Tools Required

Tire/Wheel Fitment

Kit Contents

Qty	Part
1	Sensor Mounting Bracket- Drv
1	Sensor Mounting Bracket- Pass
1	Radius Arm Mount - Drv
1	Radius Arm Mount - Pass
2	Sensor Lever Arm
1	**Bolt Pack**
Frame Bracket	
2	5/16" x 3/4" Hex Head Bolt
4	5/16" Nylock Nut
4	5/16" SAE Washer
Radius Arm Mounting	
4	1/4" x 3/4" Hex head Bolt
4	Nylock Nut
8	1/4" SAE Washer
Calibration Tool	
4	1/4" Serrated Edge Nut
2	10mm Ball Stud
2	1/4" x 2" Hex Head Bolt

Instructions

1. Working one side at a time, locate the frame mounted ride height sensor (Fig. 1)

Figure 1

2. Unplug the wire harness from the sensor using a clip tool, remove the harness retention clip from the OE sensor bracket.
3. Disconnect the linkage rod from the radius arm mounting bracket using an 8mm wrench or socket.
4. Using a 13mm wrench, loosen and remove the nut holding the OE sensor bracket to the frame. The sensor assembly can now be removed from the vehicle.
5. Using a small pry tool, carefully remove the linkage rod from the sensor lever arm.
6. Using a T20 Torx bit, remove the plastic shield from the sensor bracket.
7. Using an 8mm wrench, remove the two bolts holding the sensor to the bracket.
8. Using a large flat blade screwdriver or spreading pliers, spread the two tabs and pull out on the pivot ball to remove the OE sensor lever arm. (Fig. 2)

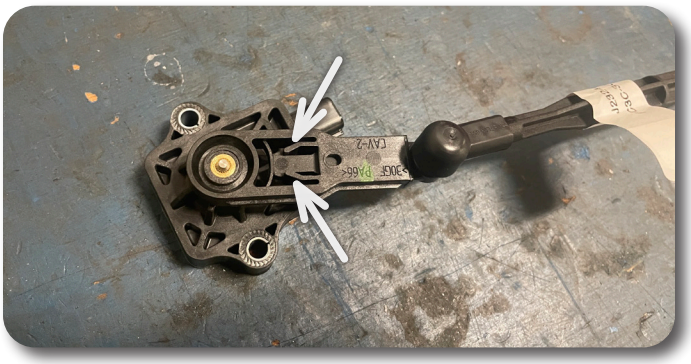


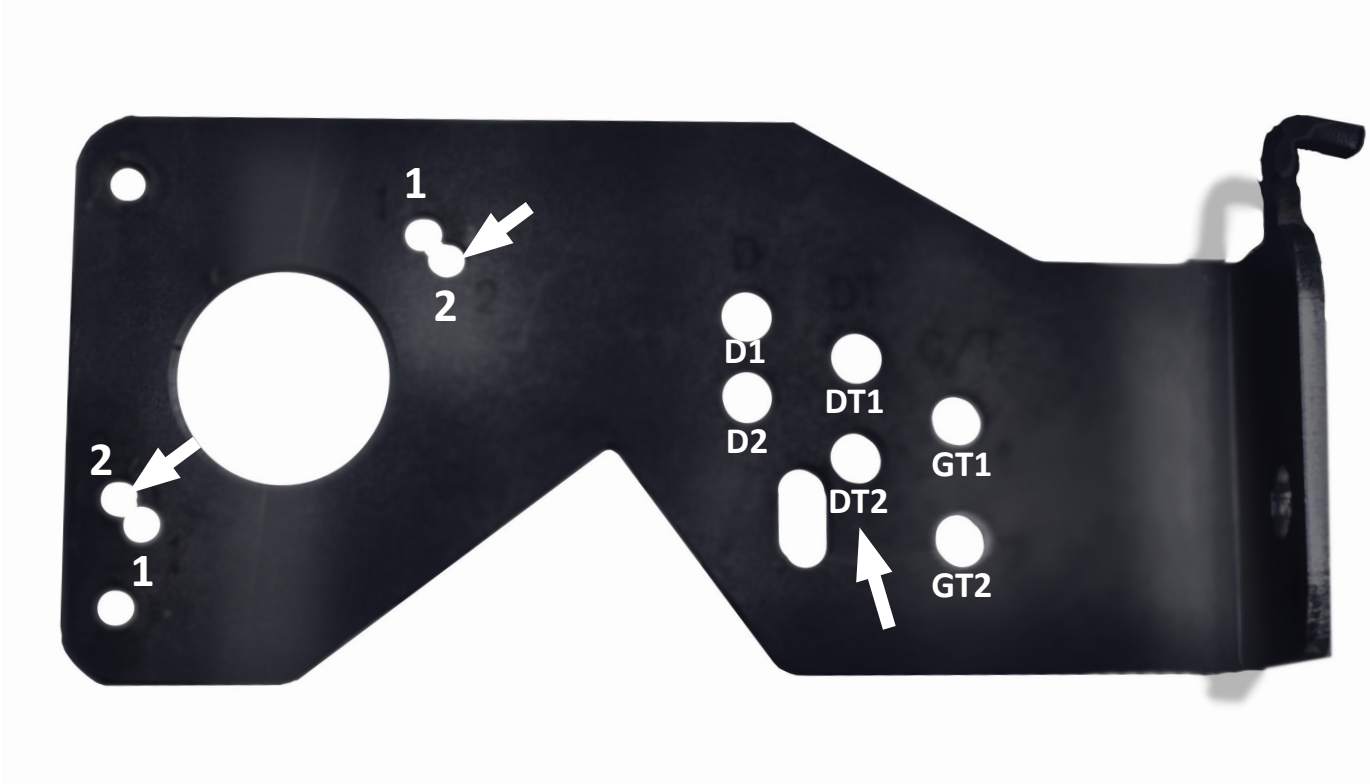
Figure 2

9. Insert the new lever arm into the Sensor.
10. Attach the new ball stud to the lever arm and secure with 5/16” nylock nut.
11. Attach the linkage rod to the ball stud. A vise is helpful for this process, but not required.
12. Attach the sensor to the new sensor bracket using the oe hardware. The sensor brackets are side specific, so be sure to use the bracket with a similar profile to the oe bracket.

CALIBRATION INSTRUCTION

13. Refer to the below table to determine the correct points of alignment for the OE height sensor and the bolt stop. Note that the table displays the vehicle model type, Diesel, Diesel Tremor, Gas and Gas Tremor. Find the appropriate model for your application then the kit height and type, 1” Spacer, 2” Spacer, 3” Radius Arm, 4/5” Radius Arm, 6/7” Radius Arm, 4/5” 4-Link or 6/7” 4-Link.

	Diesel	Diesel Tremor	Gas	Gas Tremor
1” Spacer	1-D1	2-DT2	2-GT2	2-GT2
2” Spacer	1-D1	1-DT1	1-GT1	1-GT1
3” Radius Arm	1-D1	1-DT1	1-GT1	1-GT1
4/5” Radius Arm	1-D1	1-DT1	2-GT2	2-GT2
6/7” Radius Arm	1-D1	1-DT1	1-GT1	1-GT1
4/5” 4-Link	1-D1	1-DT1	N/A	N/A
6/7” 4-Link	1-D1	1-DT1	N/A	N/A



14. Determine from the chart the 2 correct mounting holes for the ride height sensor. Mount sensor. Use the calibration chart to determine the correct mounting hole for the calibration bolt. Install the ride height sensor calibration bolt according to the fitment chart. NOTE: Sensor arm should be below the calibration bolt. Fig. 3

Step 14 Note:
Calibration bolt is 1/4" x 2" long bolt, place serrated nut on backwards insert bolt into hold and place 2nd serrated nut onto the backside of bracket to hold in place.

Figure 3

15. Re-Install the OE sensor shield using the factory hardware.(Fig. 4)

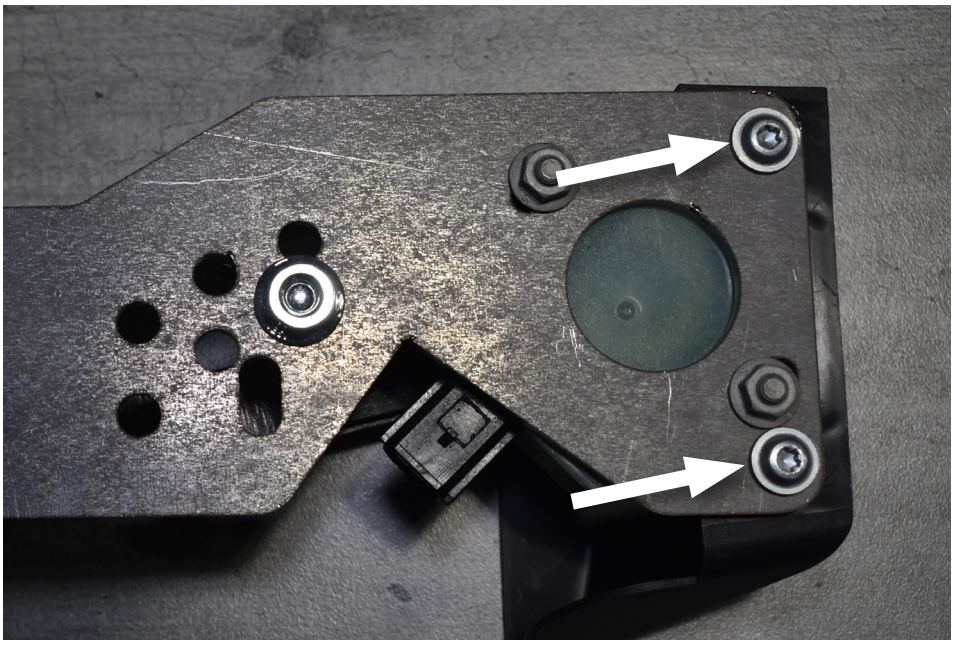


Figure 4

16. Install the sensor bracket assembly on the frame using the 5/16”-18x3/4” bolts, nylock nuts and washers. (Fig. 5)

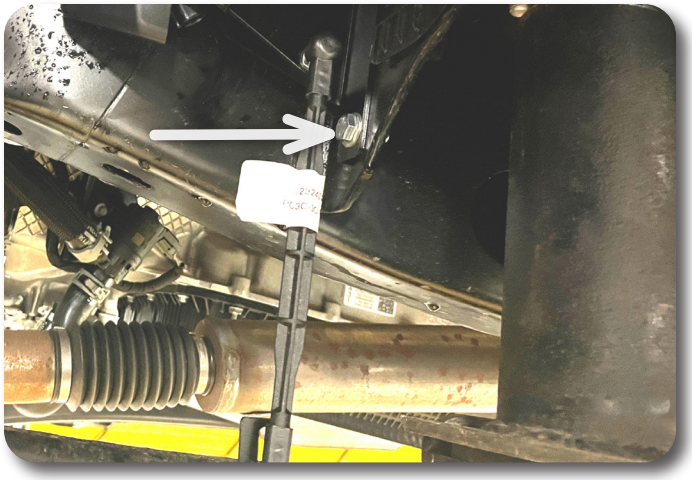


Figure 5

17. Check clearance to wire harness through full range of motion.

OE Radius Arm

18. Remove the OE radius arm linkage bracket by removing the bolt using a 13mm wrench. (Fig. 6)

Figure 6

19. A new radius arm side linkage bracket is included. Brackets are side specific. Attach the new bracket to the radius arm using oe hardware. (Fig. 7)

Figure 7

Step 19 Note:
Slot in bracket goes vertical, upwards. Your bracket may appear different depending on lift height of kit.

Zone Radius Arm

20. The brackets included attaches to the outside of the Radius arm using 2x 1/4" bolts, washer, and nuts provided. Brackets are not side specific. Mount so C opening is toward the rear of the vehicle..(Fig. 8)

Figure 8

Final steps

21. When all other new suspension components are installed and the suspension is on the ground and settled, the linkage can be attached to the radius arm mount.

22. Secure the lower end of the linkage rod using the OE nut. The lower mount is slotted to account for slight variations in ride height and various lift heights.

23. Remove the calibration bolt and flange lock nut. (Fig. 9)

Figure 9

24. Insert wire harness retention clip into slot on bracket.

25. Reinstall wire harness plug into sensor.

26. Fully cycle vehicle suspension to ensure sensor can handle full range or motion of Shock. (Fig. 10)

Figure 10