



**DIRECT-REPLACEMENT
INSTALLATION GUIDE**

MERCEDES SPRINTER 2500/3500 4WD/AWD (2015-ON)

PERFORMANCE ELITE 2.5 FACTORY RACE 2.5 DUAL SPEED COMPRESSION

883-16-000 - Kit: 15-ON Mercedes Sprinter 2500/3500 4WD/AWD, Front, 2.5 PES, R/R, Strut, 0.0-0.5" Lift, DSC EVO

883-26-150 - Kit 15-ON Mercedes Sprinter 2500 4WD/AWD, Rear, 2.5 PES, P/B, 0-1.5" Lift, DSC EVO

883-26-151 - Kit: 15-ON Mercedes Sprinter 3500 4WD/AWD, Rear, 2.5 PES, P/B, 0-1.5" Lift, DSC EVO

883-16-001 - Kit: 15-ON Mercedes Sprinter 2500/3500 4WD/AWD, Front, Internal Bypass, 2.5 FRS, R/R, Strut, 0.0-0.5" Lift, DSC EVO

883-26-156 - Kit: 15-On Mercedes Sprinter 2500 4WD/AWD, Rear, 2.5 FRS, P/B, 0-1.5" Lift, DSC EVO

883-26-157 - Kit: 15-On Mercedes Sprinter 3500 4WD/AWD, Rear, 2.5 FRS, P/B, 0-1.5" Lift, DSC EVO

CONTENTS

INTRODUCTION	1
SUPPLIED PARTS	2
SAFETY INSTRUCTIONS	3
INSTALLATION GUIDELINES	4
FRONT STRUT INSTALLATION	5
REAR SHOCK INSTALLATION	13
FOX FACTORY DSC EVO	15
MAINTENANCE	16
WARRANTY INFORMATION	17
CONTACT	18

INTRODUCTION

Thank you for choosing FOX direct-replacement shocks for your vehicle. FOX products are designed, tested, and manufactured by the finest professionals in the industry.

FOX recommends that you become completely familiar with the handling characteristics of your modified vehicle before operating it under rigorous conditions, helping to avoid potential rollover situations and other loss of control events. FOX further recommends that you use appropriate protective equipment at all times when operating your vehicle.

To achieve the best performance and product longevity, periodic service and maintenance is required. Please refer to the Service and Upgrades section for more information.

IN THE BOX

- Front Struts or Rear Shocks
- Supplied Hardware (Rear Only)
- Installation Guide

SUPPLIED PARTS

FRONT STRUT ASSEMBLY			
FOX PN	DESCRIPTION	QTY	NOTES
883-16-000	FRONT KIT, PERFORMANCE ELITE	N/A	
983-16-000-L/R	FRONT STRUT, PERFORMANCE ELITE	2	
883-16-001	FRONT KIT, FACTORY RACE	N/A	
983-16-001-L/R	FRONT STRUT, FACTORY RACE	2	

REAR SHOCK ASSEMBLY			
FOX PN	DESCRIPTION	QTY	NOTES
883-26-150	2500 REAR SHOCK KIT, PERFORMANCE ELITE	N/A	
983-26-150-L/R	2500 REAR SHOCK, PERFORMANCE ELITE	2	
883-26-151	3500 REAR SHOCK KIT, PERFORMANCE ELITE	N/A	
983-26-151-L/R	3500 REAR SHOCK, PERFORMANCE ELITE	2	
883-26-156	2500 REAR SHOCK KIT, FACTORY RACE	N/A	
983-26-156-L/R	2500 REAR SHOCK, FACTORY RACE	2	
883-26-157	3500 REAR SHOCK KIT, FACTORY RACE	N/A	
983-26-157-L/R	3500 REAR SHOCK, FACTORY RACE	2	

FRONT MOUNTING HARDWARE			
FOX PN	DESCRIPTION	QTY	NOTES
026-00-012	MOUNTING HARDWARE: TIE, CABLE, BLACK [8.00 TLG]	4	Secures sensor wires to strut assembly

2500 REAR MOUNTING HARDWARE			
FOX PN	DESCRIPTION	QTY	NOTES
803-02-212	KIT: MOUNTING HARDWARE, 15-ON MERCEDES SPRINTER 2500 4WD/AWD REAR	N/A	
213-01-930	EYELET PARTS:REDUCER [EB2, Ø.785 OD, 0.10 OFFSET, M14] 17-4 H900	2	For use with double shear bracket kits

3500 REAR MOUNTING HARDWARE			
FOX PN	DESCRIPTION	QTY	NOTES
803-02-213	KIT: MOUNTING HARDWARE, 15-ON MERCEDES SPRINTER 3500 4WD/AWD REAR	N/A	
019-00-026	FASTENER, STANDARD (METRIC): NUT, NYLOCK [M14 X 2.0] CLASS 10.9, ZINC	2	Replaces OE hardware for rear upper shock mount
019-01-289	FASTENER, STANDARD (METRIC): WASHER [M14, 28 OD X 2.5 THK] CLASS 10.9, ZINC	2	Replaces OE hardware for rear upper shock mount
019-01-301	FASTENER, STANDARD (METRIC): BOLT [M14 X 2.0 X 180MM LG] HEX HEAD, CLASS 10.9, ZINC	2	Replaces OE hardware for rear upper shock mount

 WARNING

SAFETY INSTRUCTIONS

- FOX direct-replacement shocks are designed to fit and allow proper clearance with the stock suspension. If aftermarket suspension components are installed it is the customer's responsibility to ensure that interference between the FOX shocks and other vehicle components does not occur at any point in the shock stroke.
- FOX direct-replacement shocks should always be installed as a set for maximum performance.
- Proper installation and service procedures are essential for the safe and reliable operation of the suspension components, requiring the experience and tools specially designed for this purpose. Installation and maintenance procedures for this product must be performed by a qualified service technician to avoid potentially unsafe vehicle handling characteristics, which may result in **SERIOUS INJURY** or **DEATH**.
- Modifying your vehicle's suspension will change the handling characteristics of your vehicle. Under certain conditions, your modified vehicle may be more susceptible to loss of control or rollover, which can result in **SERIOUS INJURY** or **DEATH**. Thoroughly familiarize yourself with the modified vehicle handling characteristics before any rigorous vehicle operation. Wear protective body gear and a helmet when appropriate. Installation of vehicle roll bars or cage is highly recommended.
- FOX direct-replacement shocks are gas-charged and are highly pressurized. Placing shocks in a vise or clamp, applying heat, or attempting to open or service the shock without the proper tools and training can result in **SERIOUS INJURY** or **DEATH**. Do not attempt to modify, puncture or incinerate a FOX direct-replacement shock absorber.
- Any attempt to misuse, misapply, modify, or tamper with any FOX product voids any warranty and may result in **SERIOUS INJURY** or **DEATH**.

 WARNING

INSTALLATION GUIDELINES

- Always use a chassis lift for the installation of shocks, and make certain that the raised vehicle is securely attached to the lift to prevent the vehicle from slipping, falling, or moving during the installation process.
- DO NOT install any FOX product without the necessary special tools, expertise and chassis lift or you will subject yourself to the risk of SERIOUS INJURY or DEATH. If you elect to not use a chassis lift (which may result in SERIOUS INJURY or DEATH), ensure that the vehicle is: (1) on level ground, (2) that all tires on the ground during installation are blocked to prevent vehicle movement, (3) that at least two tires are on the ground at all times, and (4) that adequately secured jack stands are used to support the vehicle. NEVER get under the vehicle until you have checked to ensure that the vehicle will be stable during installation.
- FOX direct-replacement shocks are designed to fit your vehicle's shock mounts without modification except the reservoir placement on specific models and applications.
- If a preload adjustment is necessary for your application DO NOT adjust preload with the coil-over on the vehicle. Remove the coil-over from the vehicle and use a spring compressor to remove the spring retaining hardware and spring. Once the spring is removed, you can adjust the preload ring. DO NOT exceed more than 1" of additional preload. If more than 1" of preload is required, you will need to go up in spring rate or get a longer spring that fits the application.

FRONT SHOCK INSTALLATION

PREPARATION

1. Please read the INSTALLATION GUIDELINES for instructions on how to properly lift and secure the vehicle.
2. Record the front vehicle ride height to ensure the proper lift is attained after kit is installed. READ INSTALLATION GUIDELINES ON HOW TO PROPERLY ADJUST PRELOAD.

NOTICE: Medium-strength thread-lock is recommended on all bolts.

NOTICE: Do not exceed manufacturer Gross Vehicle Weight Rating (GVWR) for your model.

NOTICE: Performance Elite struts do not fit 3500XD (dual rear wheel) models. Must purchase Factory Race Series struts.

NOTICE: If using OEM wheels and tires, a minimum of 16mm wheel spacer is required to clearance FOX strut assembly.

NOTICE: If using larger than stock tires, a minimum of 16mm wheel spacer PLUS the below is required to clearance FOX strut assembly.

- 2500/3500 single rear wheel models: front wheels must have maximum 6.200 inch backspacing
- 3500 dual rear wheel models: front wheels must have maximum 8.000 inch backspacing

STOCK STRUT REMOVAL

1. Remove both front wheels from the vehicle.
2. Place a jackstand under the lower control arm.
3. Unclip the speed sensor and brake sensor wires from the rear of the stock strut (Fig. 1).



Fig. 1: Unclip the speed sensor and brake sensor wires.

4. Unplug the speed sensor and brake sensors from the steering knuckle (Fig. 2A).
5. Place a cover over the CV boot to prevent damage (Fig. 2B).
6. Secure the two ratchet straps on the hub end at the 3 o'clock and 9 o'clock positions to prevent the CV from unseating (Fig. 3-4).
7. Remove the lower clevis bolt from the strut assembly.
NOTICE: Do not discard any OEM bolts, many are reused with the new FOX strut installation.
8. Insert a bar into the lower clevis hole to stabilize it during removal (Fig. 5).
9. Remove the upper clevis bolt from the strut assembly.

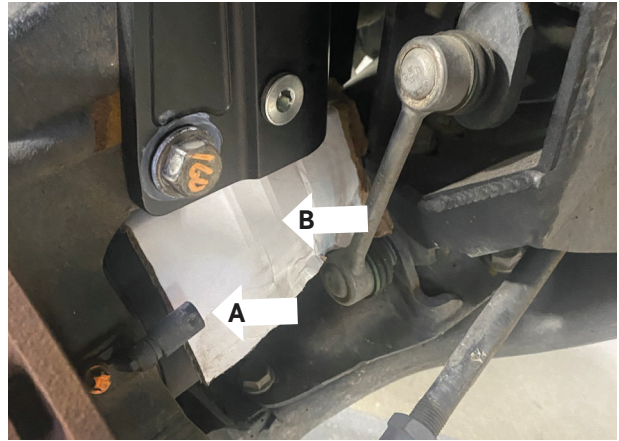


Fig. 2: Unplug the sensor (A); cover the CV boot (B).

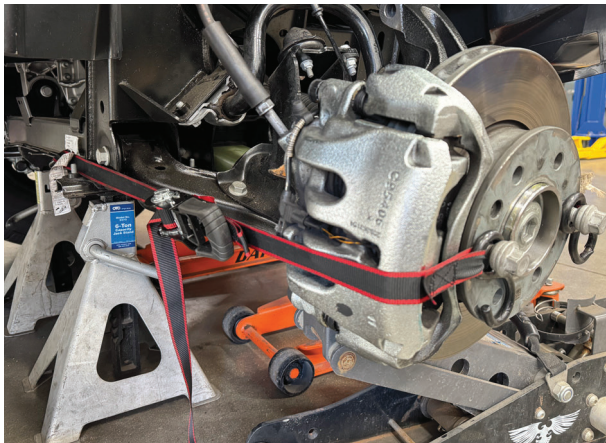


Fig. 3: Secure two ratchet straps on the hub end.

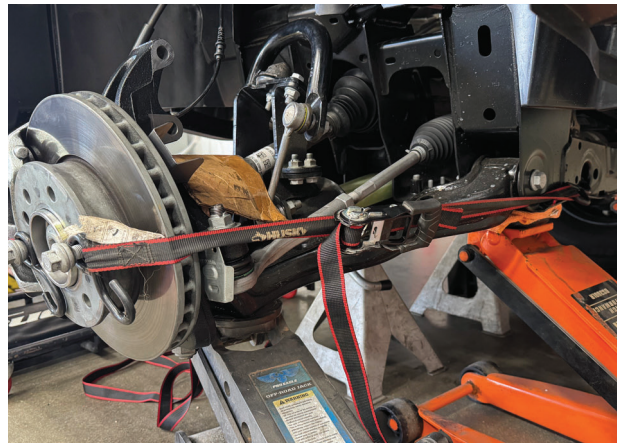


Fig. 4: Secure two ratchet straps on the hub end.



Fig. 5: Insert a bar into lower clevis hole.

NOTICE: Do not discard any OEM bolts, many are reused with the new FOX strut installation.

10. To expose tophat bolts:

Passenger side: Use a screwdriver to turn the fasteners and remove the footwell floormat, then unclip the tool tray to expose the tophat bolts (Fig. 6-8).

Driver side: Use a screwdriver to remove the fasteners from the section of the door step trim, then lift the footwell floormat to expose the tophat bolts (Fig. 9-10).

11. Remove the tophat bolts. Leave the alignment plate in the footwells.

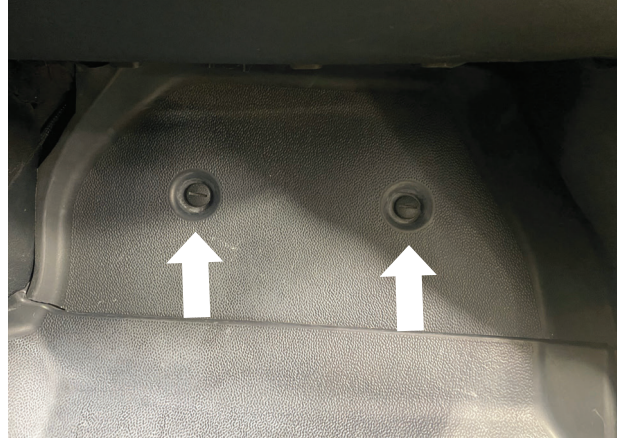


Fig. 6: Remove fasteners.



Fig. 7: Unclip the tool tray.

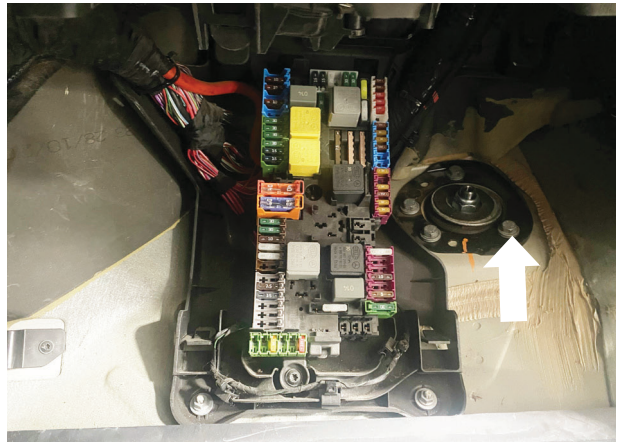


Fig. 8: Expose tophat bolts.



Fig. 9: Remove door step trim.



Fig. 10: Lift the footwell floormat to expose tophat bolts.

NOTICE: Do not discard any OEM bolts, many are reused with the new FOX strut installation.

12. Carefully remove the stabilizing bar from the lower clevis hole and remove the strut from the wheel well. Do not damage the CV boot (Fig. 11).
13. Make a note of the orientation and order of the tophat components, as you will need to reinstall them in the same way in a later step.
14. Remove the nut and tophat components from the stock strut. Remove the lower washer from the strut boot (Fig. 12-13). Inspect and replace these components as necessary.

NOTICE: Do not discard any OEM hardware/components. If in proper condition, they may be reused with the new FOX strut installation.



Fig. 11: Remove stabilizing bar from lower clevis hole; remove strut from wheel well.

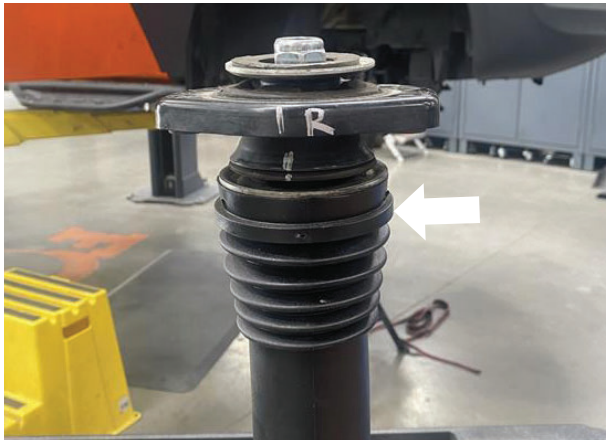


Fig. 12: Remove lower washer from strut boot.

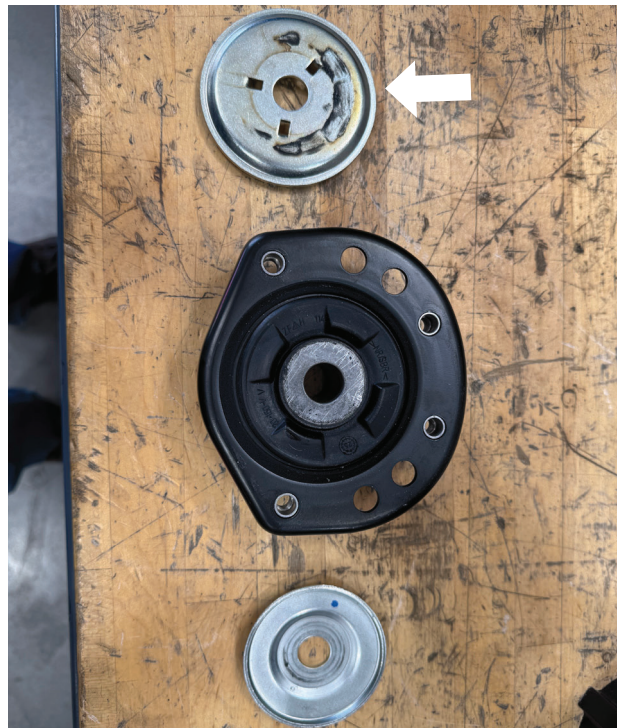


Fig. 13: Remove lower washer from strut boot.

FOX STRUT INSTALLATION

1. Slowly remove the tophat nut and the spacer sleeve from the FOX strut (Fig. 14). Discard the spacer sleeve.
NOTICE: The spring ships at nearly free length to help avoid injury.
2. If gross weight of your vehicle is less than 8000lb, we recommend removing the provided helper spring and either swapping to a lighter rate or removing all spring and hardware to avoid lifting the vehicle too high and causing repeated/harsh topout.
If you choose to install with no spring, remove the center piece from the tophat assembly and place it on the shaft with the large diameter facing towards the strut body (Fig. 15 and Fig. 16). This is critical to properly space the OE tophat on the shaft end. Then, set aside remaining components in case your vehicle requires use of helper spring in the future.



Fig. 14: Remove tophat nut and spacer sleeve.



Fig. 15: Remove center piece from provided tophat.



Fig. 16: Install center piece onto shaft.

3. Install the OE tophat components onto the FOX strut in the same orientation and order they were removed from the stock strut. Make sure the dished sides of the washers face away from the tophat (Fig. 17).

4. Install the supplied tophat nut onto the FOX strut (Fig. 18), then torque it to OE specification.

NOTICE: Do not push or pull on the reservoir when installing or torquing, as this could damage the reservoir clamps.

5. Install the strut onto the steering knuckle with the bolts loosely installed into the clevis. Make sure the tophat is aligned with the plate inside each footwell and that the reservoir is pointing toward the rear of the vehicle (Fig. 19).

6. Torque the tophat bolts to OE specification.

Passenger side: Re-install the tool tray and replace the floor mat.

Driver side: Replace the floormat and the section of door step trim.



Fig. 17: Install OE tophat components.



Fig. 18: Install OE tophat components.



Fig. 19: Loosely install strut onto steering knuckle; align tophat with footwell plate.

7. You will now need to set the alignment to full negative camber to avoid aggressive steering while driving to the alignment shop. Do this by “justifying” the hub angle to the end of the slot on the lower clevis bolt hole farthest from vehicle center (Fig. 20).
8. Torque both clevis bolts to 160 ft-lbs.
9. Remove the CV cover, ratchet strap, and jackstand from wheel well area.
10. Use the supplied zip ties to secure the speed sensor and brake sensor wires between the bracket and the strut body on the rear of the FOX strut. Plug the speed sensor and brake sensor back into the steering knuckle (Fig. 21).

NOTE: Ensure that the brake sensor wire runs between the strut body and the strut hose (Fig. 22).

NOTE: Before proceeding, ensure the wires do not hang below the bottom of the strut and that they clear all vehicle components, such as the bump stop pad, while steering completely in both directions.



Fig. 20: Position the hub angle to the end of the slot on the lower clevis bolt hole.

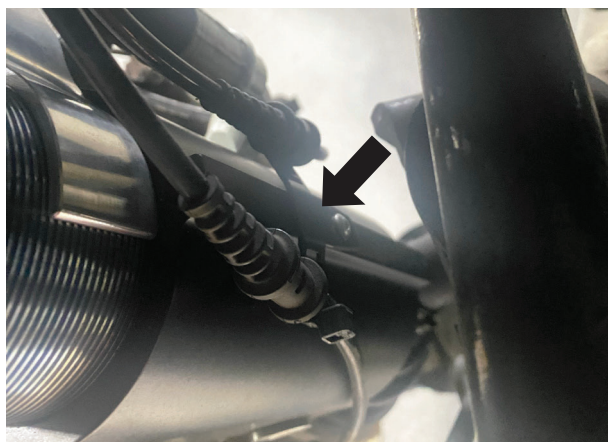


Fig. 21: Secure the speed sensor and brake sensor wires.



Fig. 22: Route the wire between the strut body and strut hose.

CHECK AND FINAL DETAILS

1. Reinstall the wheels and torque to OEM specifications.
2. Set the vehicle back on the ground and drive back and forth several feet to allow the suspension to settle.
3. Measure the ride height and adjust if necessary. READ INSTALLATION GUIDELINES ON HOW TO PROPERLY ADJUST PRELOAD.

NOTE: Be sure to leave at least 2.5 inches of droop travel in order to avoid harsh/excessive topping out. If you have less than this, consider removing the helper spring assembly or using a lower rate spring.

NOTE: The included spring ships at full extended length. DO NOT back preload ring off further unless you are installing a longer spring.

4. Check that the suspension has proper clearance by steering completely in both directions.
5. It is required to have your wheel alignment checked.

⚠ WARNING: Failure to maintain proper wheel alignment will result in premature tire wear and changes in vehicle handling.



Fig. 23: Final FOX strut installation.

REAR SHOCK INSTALLATION

PREPARATION

1. Please read the Installation Guidelines of this manual for instructions on how to properly lift and secure the vehicle.

NOTICE: Medium-strength thread-lock is recommended on all bolts.

⚠ NOTICE: 3500 rear piggyback shocks do not fit models equipped with cross member behind rear shock mounts (Fig. 24).

STOCK SHOCK REMOVAL

1. Remove the rear wheels from the vehicle and support the rear axle.
2. Remove the upper and lower shock mount bolts. Set the hardware aside for reuse at a later step (Fig. 25).
3. Remove the rear stock shocks.

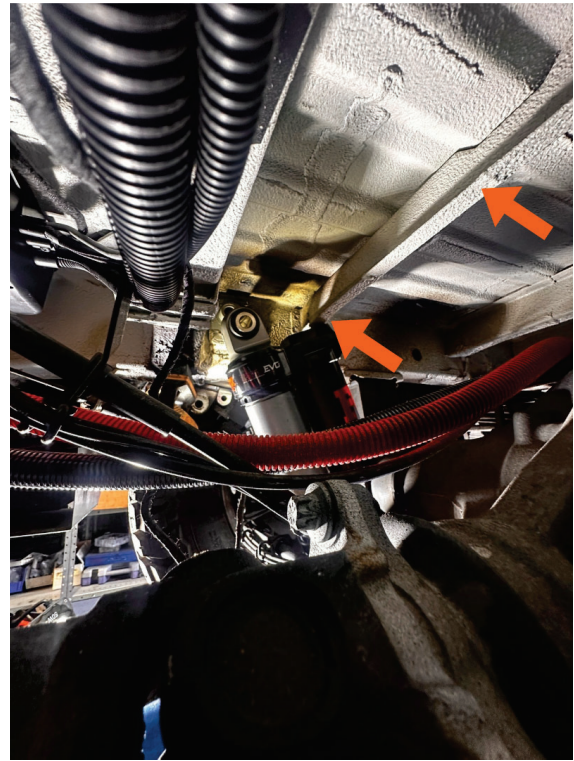


Fig. 24: Reservoir contacts support brace on some 3500 models, do not install.

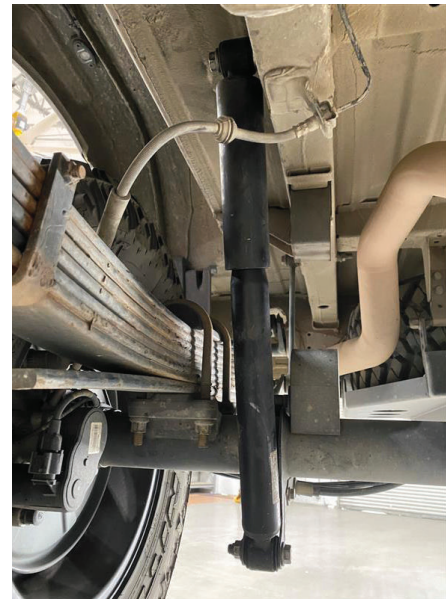


Fig. 25: Remove upper and lower shock mount bolts.

FOX SHOCK INSTALLATION

1. Position the FOX shock with the thicker upper reducer facing toward the frame rail, and with the reservoir facing toward the rear of the vehicle (Fig. 26).

NOTE: For 2500 models only, if using with a double shear kit, remove the thicker upper reducer and replace with the provided thinner one. Unused reducers can be discarded.

2. **For 2500 models**, reuse the stock bolt in the upper shock mount (Fig. 27). Torque to OE specification.

NOTE: For 2500 models only, if using with a double shear kit, use the hardware directed by that kit's instructions instead of the shock bolt. Torque to OE specification.

For 3500 models, use the provided bolt/washer/nut (Fig. 28). Torque to OE specification.

3. Reuse OE hardware in lower shock mount. Torque to OE specification.

CHECK AND FINAL DETAILS

1. Reinstall the wheels and torque to OEM specifications.



Fig. 26: Thicker reducer toward frame rail.



Fig. 27: 2500 model shown.

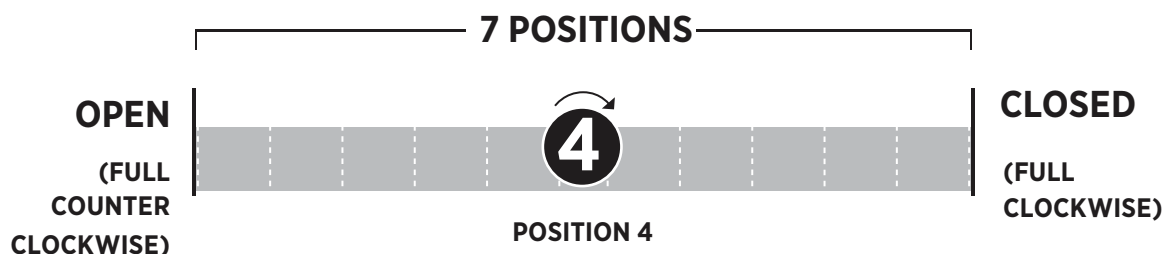


Fig. 28: 3500 model shown.

FOX FACTORY DSC EVO

DUAL SPEED COMPRESSION EVOLUTION (DSC EVO) ADJUSTER SETTINGS

DSC EVO HIGH- AND LOW-SPEED COMPRESSION



LEAST AMOUNT
OF COMPRESSION
DAMPING **SOFTEST**

GREATEST AMOUNT
OF COMPRESSION
DAMPING **FIRMEST**

ON-ROAD: SETTINGS FOR ALL SHOCKS

RIDE STYLE	LOW SPEED	HIGH SPEED
Comfort	2	2
Balanced	4	4
Sport	6	6

OFF-ROAD: SETTINGS FOR ALL SHOCKS

RIDE STYLE	LOW SPEED	HIGH SPEED
Comfort	2	2
Balanced	4	4
Sport	6	6

MAINTENANCE

PROPER INSPECTION AND MAINTENANCE IS ESSENTIAL TO MAINTAIN THE PERFORMANCE AND RELIABILITY OF YOUR SHOCK ABSORBERS.

To avoid corrosion, you should keep the shocks and springs clean, free of dirt and moisture. The wiper seal will clean deposits from the shaft, but the shock won't necessarily fully compress every time. This means you could accumulate dirt at the bottom of the shaft and underneath the jounce bumper. Make sure you clean these areas completely to prevent shaft corrosion. Avoid using a high-pressure washer near the shaft seals or adjusters, as this could drive dirt inside the shock.

Make sure the ends of the spring and shock threads are clean and free of dirt before adjusting the preload ring. This will make the adjustment easier and reduce wear.

Ideally, the shocks should be clean around the adjusters. Use a small amount of contact cleaner or brake cleaner before making adjustments will keep these parts clean and operating smoothly for years

NOTICE: Keep the shock and spring clean and free of dirt or water to avoid corrosion. Keep the shock shaft clean and free of mud. Avoid using a high-pressure washer near the shaft seals and adjusters. Before adjusting preload or the crossover ring, clean the threads of the shock body for easier adjustment and mitigating wear.

FOX SERVICE AND UPGRADES

HAVE YOUR FOX SHOCKS SERVICED BY FOX TECHNICIANS. CALL OUR OFF-ROAD AND TRUCK SERVICE CENTER AT 619.768.1800 TO GO OVER THE SERVICE AND UPGRADE OPTIONS AVAILABLE FOR YOUR PRODUCT. ONCE YOU'VE SETUP YOUR SERVICE AND/OR UPGRADES YOU WILL RECEIVE A RETURN AUTHORIZATION NUMBER AND SHIPPING INSTRUCTIONS.

SERVICE MENUS AND PRICING

visit ridefox.com/service



**WARNING: Cancer and
Reproductive Harm —**
www.P65Warnings.ca.gov

WARRANTY INFORMATION

FOX LIMITED WARRANTY

FOX Factory, Inc., a California corporation having an office at 750 Vernon Way, Suite 101, El Cajon, CA 92020 ("FOX"), makes the following LIMITED WARRANTY with respect to its suspension products:
LIMITED ONE (1) YEAR WARRANTY ON SUSPENSION PRODUCTS.

Subject to the limitations, terms and conditions hereof, FOX warrants, to the original retail owner of each new FOX suspension product, that the FOX suspension product, when new, is free from defects in materials and workmanship. Unless otherwise required by law, this warranty expires one (1) year from the date of the original FOX suspension product retail purchase from an authorized FOX dealer or from a FOX authorized Original Equipment Manufacturer where FOX suspension is included as original equipment on a purchased vehicle. If law requires a warranty duration of greater than one (1) year, then, subject to the other provisions hereof, this warranty will expire at the end of the minimum warranty period required by such law.

TERMS OF WARRANTY

This warranty is conditioned on the FOX suspension product being operated under normal conditions and properly maintained as specified by FOX. This warranty is only applicable to FOX suspensions purchased new from an authorized FOX source and is made only to the original retail owner of the new FOX suspension product and is not transferable to subsequent owners. This warranty is void if the FOX suspension product is subjected to abuse, neglect, improper or unauthorized repair, improper or unauthorized service or maintenance, alteration, modification, accident or other abnormal, excessive, or improper use.

Should it be determined by FOX in its sole and final discretion, that a FOX suspension product is covered by this warranty, it will be repaired or replaced, by a comparable model, at FOX's sole option, which will be conclusive and binding. THIS IS THE EXCLUSIVE REMEDY UNDER THIS WARRANTY. ANY AND ALL OTHER REMEDIES AND DAMAGES THAT MAY OTHERWISE BE APPLICABLE ARE EXCLUDED, INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR PUNITIVE DAMAGES.

This limited warranty does not apply to normal wear and tear, malfunctions or failures that result from abuse, improper assembly, neglect, alteration, improper maintenance, crash, misuse or collision. This limited warranty gives the consumer specific legal rights. The consumer may also have other legal rights which vary from state to state or country to country. Some states and countries do not allow the exclusion or limitation of incidental or consequential damages or warranties, and if dictated by law the above limitations or exclusions may not apply to you. If it is determined by a court of competent jurisdiction that a certain provision of this limited warranty does not apply, such determination shall not affect any other provision of this limited warranty and all other provisions shall remain in full effect.

THIS IS THE ONLY WARRANTY MADE BY FOX ON ITS SUSPENSION PRODUCTS AND COMPONENTS, AND THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION HEREIN. ANY WARRANTIES THAT MAY OTHERWISE BE IMPLIED BY LAW INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED.

CONTACT

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