

DIRECT-REPLACEMENT INSTALLATION GUIDE

TOYOTA 4RUNNER (2003-24) TOYOTA FJ CRUISER (2007-ON)

# PERFORMANCE ELITE 2.5 DUAL SPEED COMPRESSION

883-06-184 - Kit: 03-24 Toyota 4Runner, 07-14 FJ Cruiser, Front, Coilover, 2.5 Truck PES, R/R, 2" Lift, DSC

883-06-185 - Kit: 03-24 Toyota 4Runner, 07-14 FJ Cruiser, w/ UCA, Front, Coilover, 2.5 Truck PES, R/R 2-3" Lift, DSC

883-26-115 - Kit: 03-24 Toyota 4Runner, 07-14 FJ Cruiser, Rear, 2.5 Truck PES, R/R, 0-1.5" Lift, DSC

883-26-116 - Kit: 03-24 Toyota 4Runner, 07-14 FJ Cruiser, w/ Extended Sway Bar Links, Rear, 2.5 Truck PES, R/R, 2-3" Lift, DSC

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# 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 Shocks or Rear Shocks
- Supplied Hardware
- Installation Guide

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# FRONT SHOCK SUPPLIED PARTS

FRONT SHOCK ASSEMBLY					
FOX PN	DESCRIPTION	QTY	NOTES		
883-06-184-L/R	LEFT/RIGHT SHOCK	2			
883-06-185-L/R	LEFT/RIGHT SHOCK	2	UCAs are required.		
	FRONT RESERVOIR BRACKET ASSEMBLY				
FOX PN	DESCRIPTION	QTY	NOTES		
026-01-300-1	LEFT RESERVOIR BRACKET	1	Brackets mount the remote reservoirs		
026-01-300-2	RIGHT RESERVOIR BRACKET	1	to the vehicle.		
026-01-094	SWAY BAR RELOCATION BLOCK	2	The sway bar mounts to the relo- cation bracket.		
018-04-017-A	SWAY BAR SPACER BOLT: 3/8-16	4	Bolts fasten the relocation block to the vehicle.		
018-04-012-A	SELF TAPPING SCREW: 3/8-12 X 3/4"	2	Screws fasten the brackets to the vehicle's frame.		
018-01-066	SCREW: 8-32, 3/4"	4	Each bracket uses		
026-01-167-1	2.5 RESERVOIR CLAMP, TOP	2	two clamps and a clamp uses two		
026-01-167-2	2.5 RESERVOIR CLAMP, BOTTOM	2	screws.		
SKID PLATE HARDWARE					
FOX PN	DESCRIPTION	QTY	NOTES		
018-01-053	HEX BOLT: M10 X 1.25 X 40mm	6	Spacer bolts for older vehicles.		
018-05-030-A	WASHERS	10	Washers for bolts and sway bar.		
018-01-071	HEX BOLT: M12 X 1.25 X 40mm	7	Spacer bolts for newer vehicles.		
241-01-127	TOYOTA SKID PLATE SPACER	7	One extra spacer is included if using 018-01-053.		

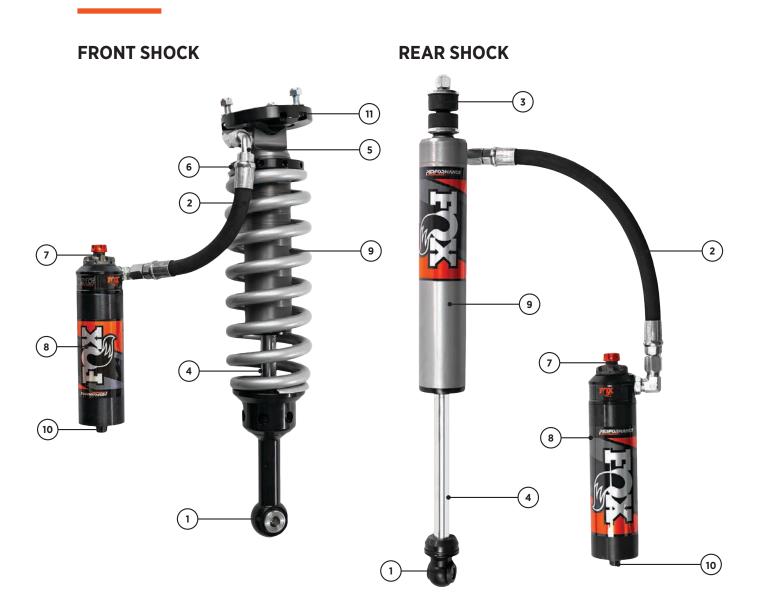
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# **REAR SHOCK SUPPLIED PARTS**

REAR SHOCK ASSEMBLY				
FOX PN	DESCRIPTION	QTY	NOTES	
983-26-115-L/R	LEFT/RIGHT SHOCK	2		
983-26-116-L/R	LEFT/RIGHT SHOCK	2	Extended sway bar links are required.	
REAR RESERVOIR BRACKET ASSEMBLY				
FOX PN	DESCRIPTION	QTY	NOTES	
026-01-130	RESERVOIR BRACKET	2	Brackets mount the remote reservoirs to the vehicle.	
018-01-049	SELF TAPPING SCREW: 1/4-14 X 1"	4	Screws fasten the bracket to vehicle.	
018-01-066	SCREW: 8-32, 3/4"	4	Each bracket uses	
026-01-167-1	2.5 RESERVOIR CLAMP, TOP	2	two clamps and a clamp uses two	
026-01-167-2	2.5 RESERVOIR CLAMP, BOTTOM	2	screws.	

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# **SHOCK DIAGRAM**



PART NO.	NAME	PART NO.	NAME
1	Eyelet	7	DSC adjuster
2	Hose	8	Reservoir
3	Stem top	9	Shock body
4	Shaft	10	Schrader valve
5	Hose fitting	11	Top hat
6	Preload ring		

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#### 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.

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#### 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 lower spring hardware and spring. Once the spring is removed, you can adjust the preload ring.

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### FRONT SHOCK INSTALLATION

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

- 1. Please read the installation guidelines on page 5 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:** The spring preload is set by FOX for a stock weight vehicle to last the life of the product. Any additional spring preload may negatively effect the life of the spring.

#### STOCK SHOCK REMOVAL

- 3. Remove both front wheels from the vehicle.
- 4. Detach the tie rod end link at the spindle steering arm on both sides of the Vehicle (Fig. 1).
- 5. Separate the sway bar end link from the steering knuckles on both sides of the vehicle (Fig. 2).
- 6. Take off the nut connecting the upper control arm (UCA) to the upright. Tap the ball joint stem with a hammer to break it free. Proceed with caution, the UCA has spring tension (Fig. 3). Detach the UCAs on both sides of the vehicle.



Fig. 1: Tie rod end link.



Fig. 2: Sway bar end link.

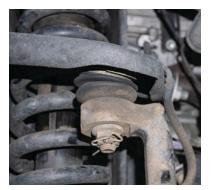


Fig. 3: Disconnect UCA.

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- 7. Remove the three top hat nuts that secure the stock shock assembly to the vehicle (Fig. 4). DO NOT remove the center nut. Removal of the center nut will release the spring from the stock assembly and may result in SERIOUS INJURY or DEATH!
- 8. Take off the bolt connecting the shock to the lower control arm (Fig. 5). Remove the stock shock assembly.

**NOTICE:** Do not discard any OEM bolts, many are reused with the new FOX shock assembly.

9. If an aftermarket UCA is required with the FOX shock kit, install the UCA now. Follow the company's required specifications. After installation, continue to step 10.



Fig. 4: Remove the three top hat nuts.



Fig. 5: Remove the bolt from the lower control arm.

#### **FOX SHOCK INSTALL**

- 10. Install the new shock assembly with the hose fitting pointed outboard (Fig. 6). Loosely install the provided top hat nuts, washers, and OEM lower mount bolt.
- 11. Once the shock is oriented, torque the top hat nuts to 24 ft-lbs. Torque the lower mount bolt to OEM specification.



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Fig. 6: The hose fitting faces outboard.

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12. Reattach the UCA to the upright with the ball joint bolt. Use a pry bar to apply leverage to the UCA and lower it to the upright. Reattach the castle nut and torque to OEM specification (Fig. 7). Secure the castle nut with a new cotter pin.



Fig. 7: Reattach UCA to the upright.

#### **RESERVOIR INSTALL**

13. Attach the reservoir to the mounting bracket with the provided reservoir clamps and screws. (Fig. 8 & 9). Loosely pre-assemble the upper clamp assembly. Tighten the clamp to 50% when the reservior is centered with proper hose positioning. Slide the bottom half of the clamp into position for the second clamp assembly. Tighten both screws on each clamp assembly evenly until tight. Complete the installation and torque to 19 in-lbs (Fig. 10).

**NOTICE:** Utilize the slots in the bracket to locate the clamps. ONLY feed the clamp through the bracket's lower slot.



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Fig. 8: Locate the clamps accordingly.



Fig. 9: Mounted reservoir.

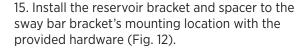
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Fig. 10: Diagram of reservoir and bracket interface.

14. Remove the four bolts that secure the sway bar to the vehicle's frame. Move the sway bar forward to allow clearance for shock removal and installation (Fig. 11).

**NOTICE:** For models equipped with Toyota's Kinetic Dynamic Suspension System (KDSS). Support the hydraulic ram on the driver side of sway bar with a jack, then remove the four bolts securing the sway bar to the lower control arms.



16. Fasten the reservoir bracket to the vehicle's frame with a self tapping screw (Fig. 13).



Fig. 12: Reservoir bracket assembly.



Fig. 11: Remove sway bar bracket.



Fig. 13: Install the self tapping screw into the existing hole.

17. Reinstall the sway bar to the reservoir bracket spacer and torque to OEM specification (Fig 14).

**NOTICE:** For KDSS equipped models, remove the rubber guard on the driver side, exposing KDSS lines and bracket. Cut or grind the factory bracket as shown in (Fig. 15) to remove and install the reservoir bracket.

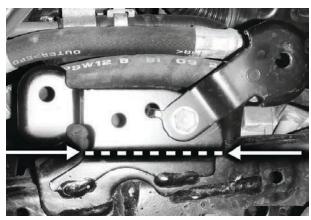


Fig. 15: Factory bracket removal for KDSS models.

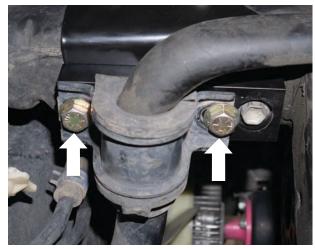


Fig. 14: Reinstall the sway bar.

18. Rotate the sway bar so it's pointed vertically to make room for the stock shock's removal.

19. For sway bar clearance, some vehicle models may require removal of the skid plate braces during installation of the sway bar relocation block. Check the clearance of the sway bar (Fig. 16). If there is a clearance issue between the sway bar and skid plate braces, install the supplied spacers between the vehicle frame and braces (Fig. 17). Secure the skid plate with using the supplied bolts. Torque to the bolts to OEM specification.

**NOTICE:** The skid plate hardware used in the installation will depend on the vehicle's trim level and model year. Hardware will be left over. Take note of the bolts during the skid plate's removal and compare them to the supplied hardware.



Fig. 16: Check clearance of the sway bar.



Fig. 17: Install the skid plate spacers

20. Reinstall the tie rod end link (Fig. 18) and sway bar end link (Fig. 19). Torque all hardware to OEM specification. Secure the tie rod end link's castle nut with a new cotter pin.



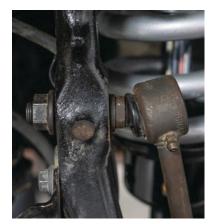


Fig. 18: Tie rod end link.

Fig. 19: Sway bar end link.

**NOTICE:** For KDSS models, reinstall wheels and torque to factory specifications. Lower the vehicle to the ground. Reattach sway bar, first secure the passenger side with two bolts onto the lower control arm. Use a jack to compress the hydraulic ram on the driver side and reattach using the remaining two bolts. Torque all four bolts the securing sway bar to factory specifications.

#### **CHECK AND FINAL DETAILS**

- 21. Reinstall the wheels and torque to OEM specifications.
- 22. Set the vehicle back on the ground and drive back and forth several feet to allow the suspension to settle. Now measure ride height and adjust if necessary. READ INSTALLATION GUIDELINES ON HOW TO PROPERLY ADJUST PRELOAD.
- 23. Check that the suspension has proper clearance by steering completely in both directions.
- 24. Measure the vehicle's ride height and adjust if necessary.
- 25. It is highly recommended your wheel alignment is checked.

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# REAR SHOCK INSTALLATION

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

1. Please read the installation guidelines on page 5 for instructions on how to properly lift and secure the vehicle.

#### STOCK SHOCK REMOVAL

- 2. Remove the rear wheels from the vehicle and support the rear axle.
- 3. Remove the stem top nut and lower shock mount bolt (Fig 20 & 21).



Fig. 20: Remove stem top nut.



Fig. 21: Remove lower shock mount bolt.

4. Remove the rear stock shocks.

#### **RESERVOIR BRACKET INSTALL**

- 5. Mount the rear reservoir bracket on the frame. Screw in the first self tapping screw 14.75" from the edge of the bump stop brace (Fig. 22). Align the bracket to the frame and install the second self tapping screw.
- 6. If an aftermarket extended rear sway bar endlink is required with the FOX shock kit, install the end links now. Follow the company's required specifications. After installation, continue to step 7.



Fig. 22: Mount the reservoir bracket (driver side shown).



#### **FOX SHOCK INSTALL**

- 7. Orient the FOX shock with the hose fitting pointed outward. Loosely install the stem top nut and lower shock mount bolt (Fig. 23).
- 8. Torque the lower bolt to OEM specification (Fig. 24). Tighten the stem top nut until there are 3-4 threads showing above the nut.



Fig. 23: Install the stem top nut (driver side shown).



Fig. 24: Install the lower shock bolt (driver side shown).

- 9. Test fit the reservoir and assess how much trimming is required. Draw a cut line on the fender liner (Fig. 25).
- 10. Attach the reservoir to the mounting bracket with the provided reservoir clamps and screws (Fig. 26). Refer to page 11 (Fig. 16) to review the bracket and reservoir installation. Torque the screws to 19 in-lbs.

#### **CHECK AND FINAL DETAILS**

- 11. Reinstall the wheels and torque to OEM specifications.
- 12. It is highly recommended your wheel alignment is checked.



Fig. 25: Cut the fender liner.

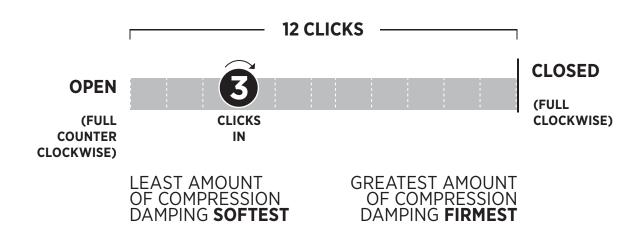


Fig. 26: Mount the reservoir to the bracket (driver side shown).

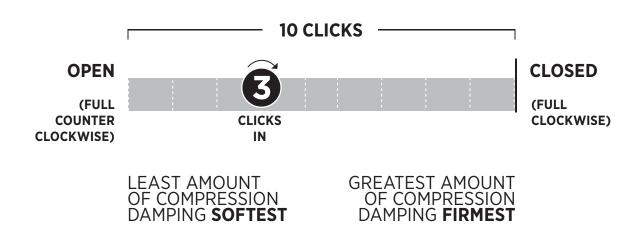
# **FOX FACTORY DSC**

#### **DUAL SPEED COMPRESSION (DSC) ADJUSTER SETTINGS**

#### **DSC HIGH SPEED COMPRESSION**



#### **DSC LOW SPEED COMPRESSION**



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### WARRANTY INFORMATION

#### **FOX LIMITED WARRANTY**

FOX Factory, Inc., a Georgia corporation having an office at 6634 Highway 53 Braselton, GA 30517 ("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.

# SHOCKS NEED LOVE TOO

#### **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.

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