



INSTALLATION INSTRUCTIONS

28007

6"- 7" LIFTING STRUT

300 W. Pontiac Way Clovis, CA 93612 Toll free: 1-800-445-3767 Web: www.belltech.com

15-20 FORD F150 4WD

** Designed specifically to be used with BELLTECH lift kit 152501TP**

Thank you for being selective enough to choose our high quality BELLTECH PRODUCT. We have spent many hours developing our line of products so that you will receive maximum performance with minimum difficulty during installation.

Note: Confirm that all of the hardware listed in the parts list is in the kit. **Do not** begin installation if any part is missing. Read the instructions thoroughly before beginning this installation.

Warning: DO NOT work under a vehicle supported by only a jack. Place support stands securely under the vehicle in the manufacturer's specified locations unless otherwise instructed.

Warning: DO NOT drive vehicle until all work has been completed and checked. Torque all hardware to specified values.

Reminder: Proper use of safety equipment and eye/face/hand protection is absolutely necessary when using these tools to perform procedures!

Note: It is very helpful to have an assistant available during installation.

Exceptional Customer Experience Guarantee:

STOP! We strive for an exceptional experience for all of our valued customers. If, for any reason, you need assistance with your Belltech products, please do not return the products to the store or website you purchased from. Please call our dedicated experts at (1-800-445-3767) from 6am to 5pm PST.

RECOMMENDED TOOLS:

- Properly rated floor jack and support stands
- Wheel chocks
- Torque wrench up to 200 ft/lbs range
- Metric socket wrench set
- Metric wrench set
- Metric hex key set
- Tape measure
- Dead blow hammer
- Marking pen
- Safety Glasses

KIT CONTENTS

PART #:	DESCRIPTION:	QTY:
28007-200	LIFTING STRUT	1
25003-010	10mm SPACER	2
25003-008	8mm SPACER	2
4927-001	BUMP STOP	1
65210031	VENT DISC	1
4935-001	15mm PACKER	2
26021-001	SPRING PERCH	1
NUT	STRUT PISTON ROD- M12 x 1.5	1
112058	HH CAP SCREW 14MM-1.5 X 70mm	2
112298	NYLON LOCK NUT 14MM-1.5	2
110660	FLAT WASHER	2



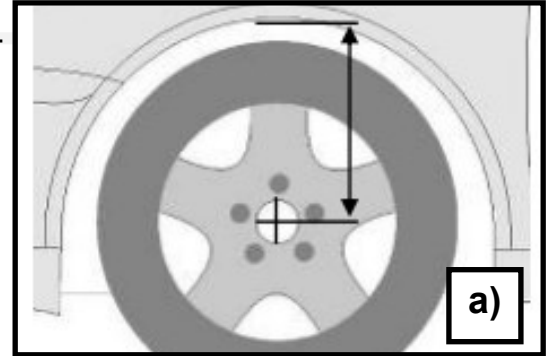
!WARNING!:

BELLTECH Trail Performance lift strut, 28007 was designed to work specifically with BELLTECH lift kit 152501TP for proper height adjustments, suspension travel and alignment specifications. Installation of this strut in any other lift kit results may vary from kit to kit.

It is very important that the vehicle is properly supported during this installation to prevent personal injury and chassis damage. Make sure that the support stands are properly placed prior to performing the following procedures. We **DO NOT RECOMMEND** using wheel ramps while performing this installation. **BELLTECH** recommends that this install be done a trained professional and or certified installa-

1) KIT PREPERATION

- a) Before beginning the install process, measure the hub to fender heights for your vehicle so you can compare the resulting height to the original. Measure vertically from the center of the wheel to the inner edge of the fender. Record the results here:



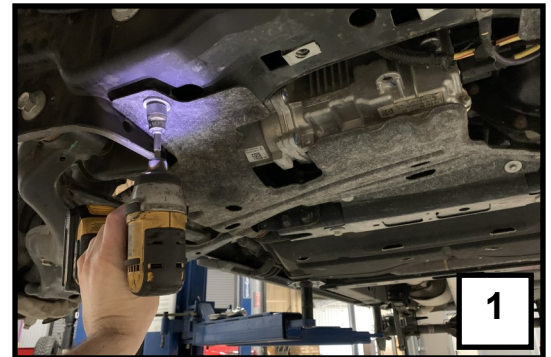
LF: _____ RF: _____ LR: _____ RR: _____

- b) Park the vehicle on a smooth, level concrete or seasoned asphalt surface and activate the parking brake. Block the rear wheels of the vehicle with appropriate wheel chocks; making sure the vehicle's transmission is in 1st gear (manual) or "Park" (automatic).

! It is very important that the vehicle is properly supported during this installation to prevent personal injury and chassis damage. Make sure that the support stands are properly placed prior to performing the following procedures. We **DO NOT RECOMMEND** using wheel ramps while performing this installation. **! THE FOLLOWING STEPS SHOULD JUST BE USED AS REFERENCE WHEN INSTALLING ON A NON-BELLTECH KIT!!**

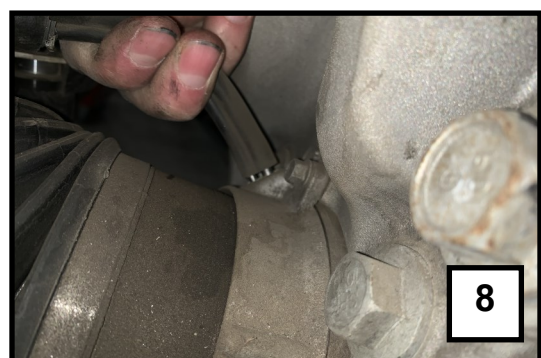
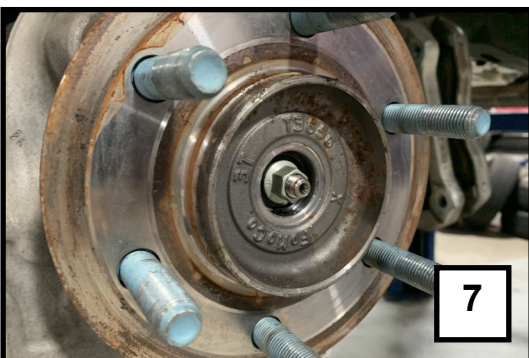
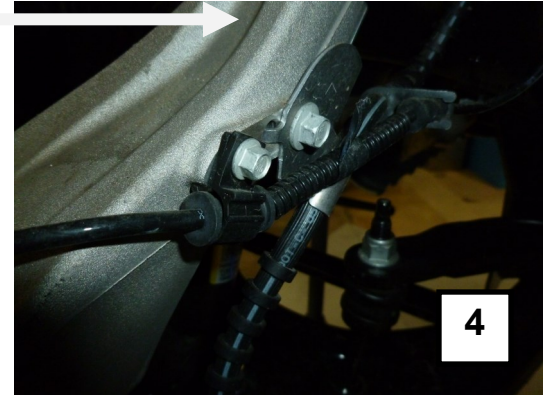
2) FRONT OEM STRUT REMOVAL INSTRUCTIONS

- a) Jack up the front of the vehicle. Place jack stands under the frame rails and lower onto jack stands letting the front suspension hang.
- b) Remove the factory splash guards under the engine and transmission. **(PHOTO 1)**
- c) Undo the lug nuts (21mm if OEM) and remove the wheels.
- d) Remove the sway bar with end links from the vehicle. **(PHOTO 2)**
- e) Remove the tie-rod nut. Strike the side of the mount with a dead blow hammer or use a puller tool to dislodge the tie rod end. **(PHOTO 3)**
- f) Remove all mounting points for the brake line and abs sensor wire from the control arm and spindle. **(PHOTO 4)**



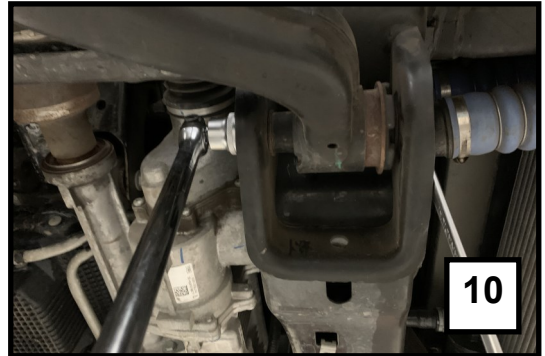
2. FRONT REMOVAL OEM STRUT INSTRUCTIONS CONT...

- g) Undo the Brake Caliper mounting bolts. Hang the calipers to prevent stretching of the lines using large zip ties or hangers. Remove the rotors. **(PHOTO 5)**
- h) Remove the brake backing plate and the ABS sensor from the Spindle. **(PHOTO 6)**
- h) Remove the cap in the center of the hub assembly with a pair of wide jaw pliers to expose the axle nut. Remove the nut using a 13mm socket. **(PHOTO 7)**
- i) Remove the Vacuum actuator line from the behind the Spindle/hub assembly by carefully pulling it. **(PHOTO 8)**
- j) Loosen but do not remove the nuts from the lower and upper ball joints. Use a hammer or puller tool to dislodge the spindle from the ball joints. **(PHOTO 9)**
- k) Remove spindle.. **Always be careful not to damage the vacuum actuator or grease seals with the axle shaft while removing or installing spindles.**



2. FRONT REMOVAL OEM STRUT INSTRUCTIONS CONT...

- l) Using a **18mm** socket, remove the strut mounts from the control arm. (**PHOTO 10**)
- m) Using a **21mm** and **27mm** wrench, remove both lower control bolts from the frame. (**PHOTO 11**)
- n) Remove top mount nuts (3) and remove both front struts from the vehicle and set aside. (**PHOTO 12**)

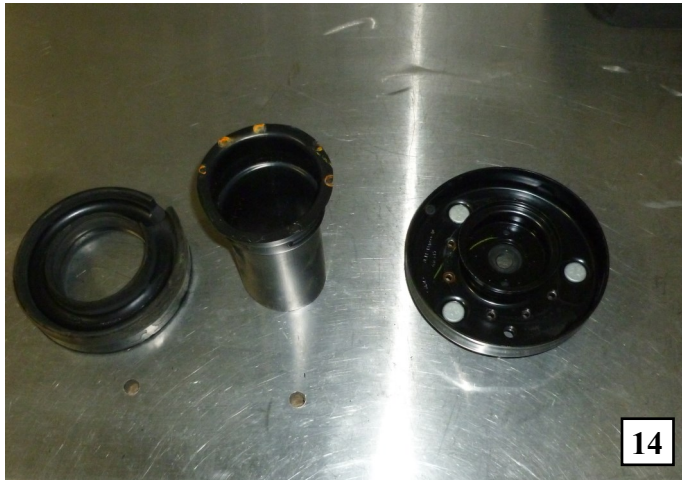
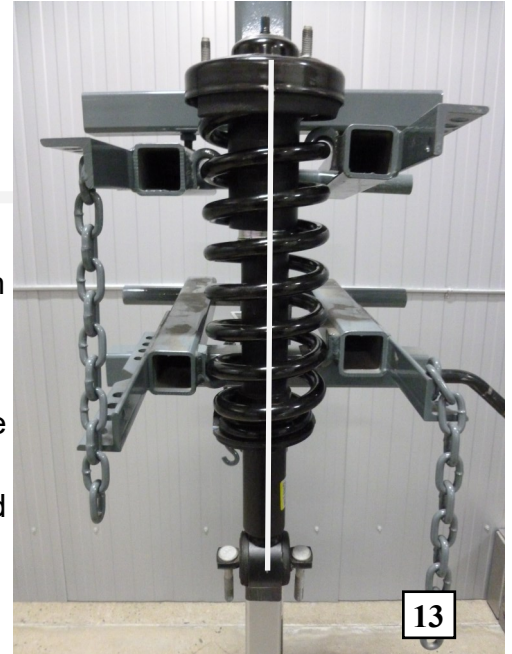


****NOTE: UNINSTALLATION OF THE OEM STRUT VARIES FROM KIT TO KIT WHEN NOT USING BELLTECH LIFT KIT 152501TP. IF A KIT IS ALREADY INSTALLED ON THE VEHICLE, ONLY REPLACING THE STRUT, UNINSTALLATION MAY VARY AND NOT ALL COMPONENTS MAY NEED TO BE REMOVED. BELLTECH IS NOT RESPONSIBLE FOR ANY DAMAGES THAT OCCURE AND OR LACK OF INSTRUCTIONS WHEN REMOVING COMPONENTS WHEN INSTALLING ON A NON BELLTECH LIFT KIT. FOR ANY FURTHER DETAILS AND OR EXPLANATIONS PLEASE CONTACT US DIRECTLY AND A DEDICATED EXPERT WILL HELP (1-800-445-3767 FROM 6am TO 5pm PST.)**

3. OEM STRUT DISASSEMBLY

!CAUTION! The coil spring is held in place under extreme load. BELLTECH recommends the use of a heavy duty spring compressor suitable for truck springs to perform this step. If unsure, take this to a professional installer. Use caution during the following steps to avoid personal injury and/or damage to vehicle.

- a. With the strut installed on a spring compressor, mark a white line down the center of each piece of the assembly for alignment purposes. **NOTE:** The orientation of the upper mount relative to the bottom shock bar pin and studs. **(PHOTO 13)**
- b. Compress the spring until the spring is longer holding tension against the upper and lower spring perch.
- c. Hold the strut shaft from spinning and remove the top center nut from the strut. The shock will need to be supported as the nut is removed as it will fall if not supported. Remove the shock, top mount, upper spring seat (rubber), dust cover, and OEM bum stop.
- d. You will REUSE the OEM top mount, upper spring seat (rubber) and dust boot. **(PHOTO 14 & 15)**



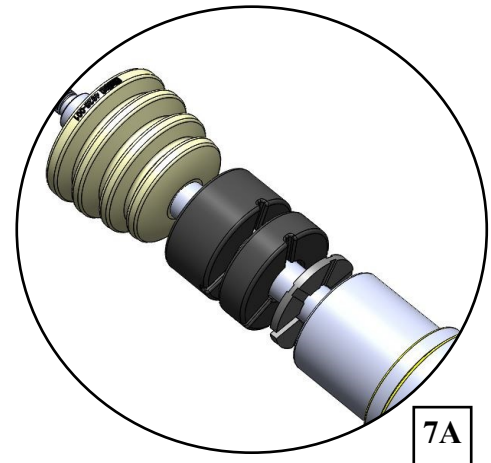
3. STRUT ASSEMBLY:

THE FOLLOWING SET UP CHART IS TO BE USED IN CONJUNCTION WITH BELLTECH LIFT KIT 151502TP/151502TPS. If you are utilizing this strut with a lift kit other than the one listed, use the provided ring chart only as a reference, adjustments may need to be made to achieve desired heights when using a non-BELLTECH kit.

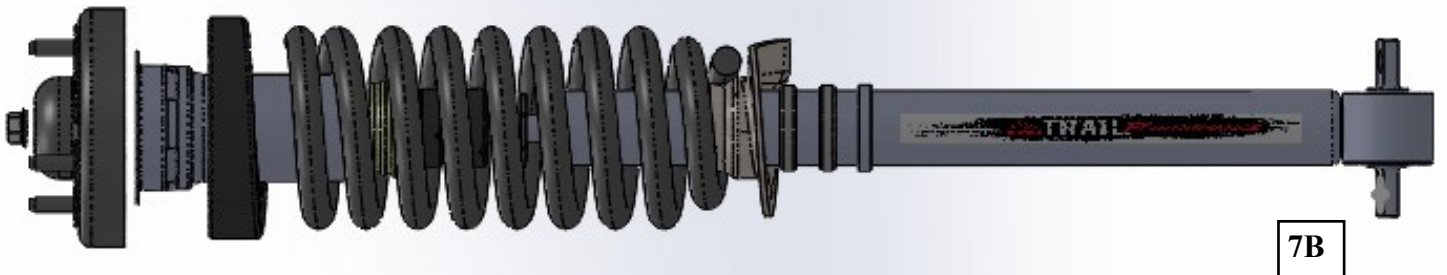
4WD APPLICATION				
ITEM NO	PART NO.	DESCRIPTION	LIFTING 6.0"	LIFTING 7.0"
1	25003-010	10mm(.293") RING	1	2
2	25003-008	8mm(.315") RING	1	2
3	4935-001	15mm(.59") PACKER	1	2

- a. Install your required spacers for the desired height onto the BELLTECH shock. See table / figure.
- b. Install BELLTECH spring perch onto strut once the desired combination of rings are installed.
- c. Insert the BELLTECH vent disc and packer (if applicable).

Note: Belltech uses "Packers" to maintain the correct bump stop engagement at various lift ranges. Using the appropriate packer will prevent excessive body roll. Please place packer on top of the vent disk, channel side down as shown in (FIGURE 7A and 7B)



- d. Insert the BELLTECH strut into the OEM spring and install the BELLTECH bump stop onto the strut
- e. Complete the assembly using the OEM spring isolator, top mount and supplied nut. REFER TO **FIGURE 8A)**



3. INSTALLATION OF BELLTECH LIFT STRUT

- a. IF USING THE BELLTECH 151205TP LIFT KIT INSTRUCTIONS, PLEASE REFER TO THE PRIMARY KIT INSTRUCTIONS AND PROCEED WITH THE INSTALLATION.
- b. If installing on a different kit, NOT a BELLTECH kit, please refer to the kit instructions for reinstallation of strut onto the vehicle, or reassemble in reverse order of removal.
- c. MAKE NOTE: BELLTECH LIFT STRUT 28007 was designed to work with BELLTECH KIT 151205TP. Proper fitment, suspension travel, height ranges and alignment may vary from kit to kit.
- d. Re use the top nuts for the top mount and the supplied bolt, washer and nuts for the bottom of the strut.

4. FINALIZING THE INSTALLATION

- a. All hardware being fastened to the vehicle's original fastening points should be torqued to the factory specifications (Reference Service Manual for Specifications). To prevent chassis damage, never over-torque the hardware.
- b. Check that all components and fasteners have been properly installed, tightened and torqued.
- c. Check brake hoses and other components for any possible interference.
- d. Lift the vehicle and remove the support stands. Carefully lower the vehicle to the ground. Torque wheels.
- e. Immediately test-drive the vehicle in a remote location so that you can become accustomed to the revised driving characteristics and handling. Be aware that the vehicle will handle substantially different now that it has been modified.
- f. Installation is complete. Check all of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.

