



## INSTALLATION INSTRUCTIONS

6410

### REAR LOWERING KIT FORD RANGER

**Congratulations! You were selective enough to choose a 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 values specified.

**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.

#### **RECOMMENDED TOOLS:**

- Properly rated floor jack, support stands, and wheel chocks
- Combination wrench set
- Torque wrench: *0-75 lb ft. range*
- Ratcheting socket wrench and socket sets
- Air Chisel / Die grinder W/ cut off wheel
- Heavy Duty Drill
- Safety Glasses

#### **KIT INSTALLATION**

1. Open the hardware kit and remove all of the contents. Refer to the part list (Page 3) to verify that all parts are present.
2. Park the vehicle on a smooth level asphalt or concrete surface. Place a block in front of and behind the front wheels. Jack up the rear of the vehicle and place jack stands securely under the frame in the manufacturer's specified locations. Remove the rear wheels.
3. Removing the bed from the vehicle simplifies this operation. This is achieved by removing the six bolts from inside the bed floor, disconnecting the gas filler neck, ground straps and the tail light harness. The bed can then be lifted off and set aside. This is **NOT** a necessity, but helps to access points to which work will be being done.
4. Slightly raise the rear end with the jack until all tension is taken off the leaf springs.
5. Remove the rear shackle mounting bolts, and remove the stock shackle from the truck. **IMPORTANT:** Keep these shackles because you will be reusing them later. (Photo 1, arrow)

6. Remove the two lower shock mounting bolts and nuts. Move the shocks slightly away from the rear end housing.
7. Remove the front spring hanger bolts and nuts, freeing the springs completely from the frame. **NOTE:** Depending on the model of the truck, there are two types of emergency brake brackets. Shown here is the type held by the spring-center bolt, and on the other that bolts to the chassis above the stock hanger. In either case both must be loose before removal and replacement of the front spring hangers. (Photo 2)
8. Once all the springs and brackets are removed, lower the rear end out of the way of the front and rear hangers.
9. Using a chisel or grinder remove the rivets holding the stock hangers to the frame. (Photos 3 & 4)  
**CAUTION:** Always wear eye protection when using chisels or power tools.
10. Once the rivets are gone, remove the stock hangers from the frame. See comparison photo between the stock hanger and the new Belltech hanger. (Photo 5)
11. The Belltech kit comes with all the necessary mounting hardware that attaches the new hangers to the frame. **NOTE:** Because of the close fit of the gas tank, on the driver's side, it may be necessary to move the tank over to access space while bolting the hanger to the frame.
12. Bolt the new Belltech front hangers to the frame, as shown, tighten all the mounting hardware completely. Do not install the spring and center bolt to the hanger yet. (Photo 6) **NOTE:** If your truck has the frame mounted emergency brake bracket, the front hanger with the additional hole on the upper center must be used on the driver's side of the vehicle.
13. Bolt the new rear hangers to the frame as shown. Tighten the mounting hardware completely. Do not install the shackles and center bolts yet. (Photo 7)
14. Raise the rear end and spring assembly so the rear eye on the spring is above the new rear hanger. Bolt the stock rear shackle into position as shown. (Photo 7) The comparison photo shows the stock location of the shackle and the location in the new Belltech rear hanger (Photo 8)
15. Raise the rear so the front spring eye positions itself into place in the new front hanger. Slide the spring center bolt thru the hanger and spring and replace the nut. **NOTE:** If the truck is equipped with an emergency bracket shown, it must be installed with the center bolt. If it is the frame-mounted style, there is a hole in the new hanger for it to attach, with the new bolt and nut supplied. (Photo 9, arrow)
16. Once all the spring points have been attached, completely tighten all six spring center bolts on the hangers and shackles. (Photos 10 & 11)
17. Re-install the lower shock mounts to the rear end.
18. Re-install the bed if it was removed.
19. Check all mounting hardware again to make sure everything is securely tightened.
20. Install the tires and wheels. Lift the truck off the jack stands and lower the truck to the ground.
21. **SPECIAL NOTE:** A pair of 2° pinion shims, have been included in the kit. We suggest that after installation of the kit and while the truck is at the alignment shop, have the rear drive shaft angle checked. If it is necessary have the 2° shims installed at this time.

# PART LIST FOR 6410 FORD RANGER

## REAR LOWERING KIT

PART No.	DESCRIPTION	QTY.
4903-001	Bump Stop w/Nylon Ln	2
4975-001	Pinion Shim 2°	2
110314	Spring Center Bolt 7/16-20 x 5"	2
110321	Coupling Nut 7/16-20 x 1- 1/8"	2
110408	1/2"-20 x 1-1/4" HHCS	16
110402	Stover Lock Nut 1/2"	16
110660	Flat Washer 1/2"	32
6410-060	Hanger Front	2
6410-050	Hanger Rear	2



