



1/13/03

**'99-'02 Tundra 4WD & 2WD  
0" or 2" Lift**

**P/N 10-47000**

## **Installation Instructions**

**NOTE:** This kit is being sold as a factory front shock replacement that can be adjusted for Factory Ride Height or 2" of lift.

### **Parts List**

<b><u>Item</u></b>	<b><u>Description</u></b>	<b><u>Qty.</u></b>
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### **Box 1 of 1**

BE5-6024	Shock Absorber, Front '99-'02 Tundra 2WD or 4WD	2
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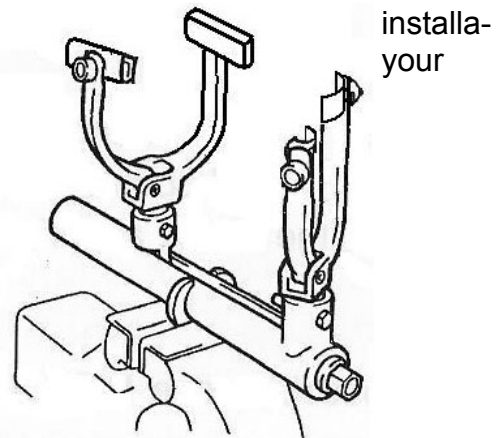
## **BEFORE YOU BEGIN**

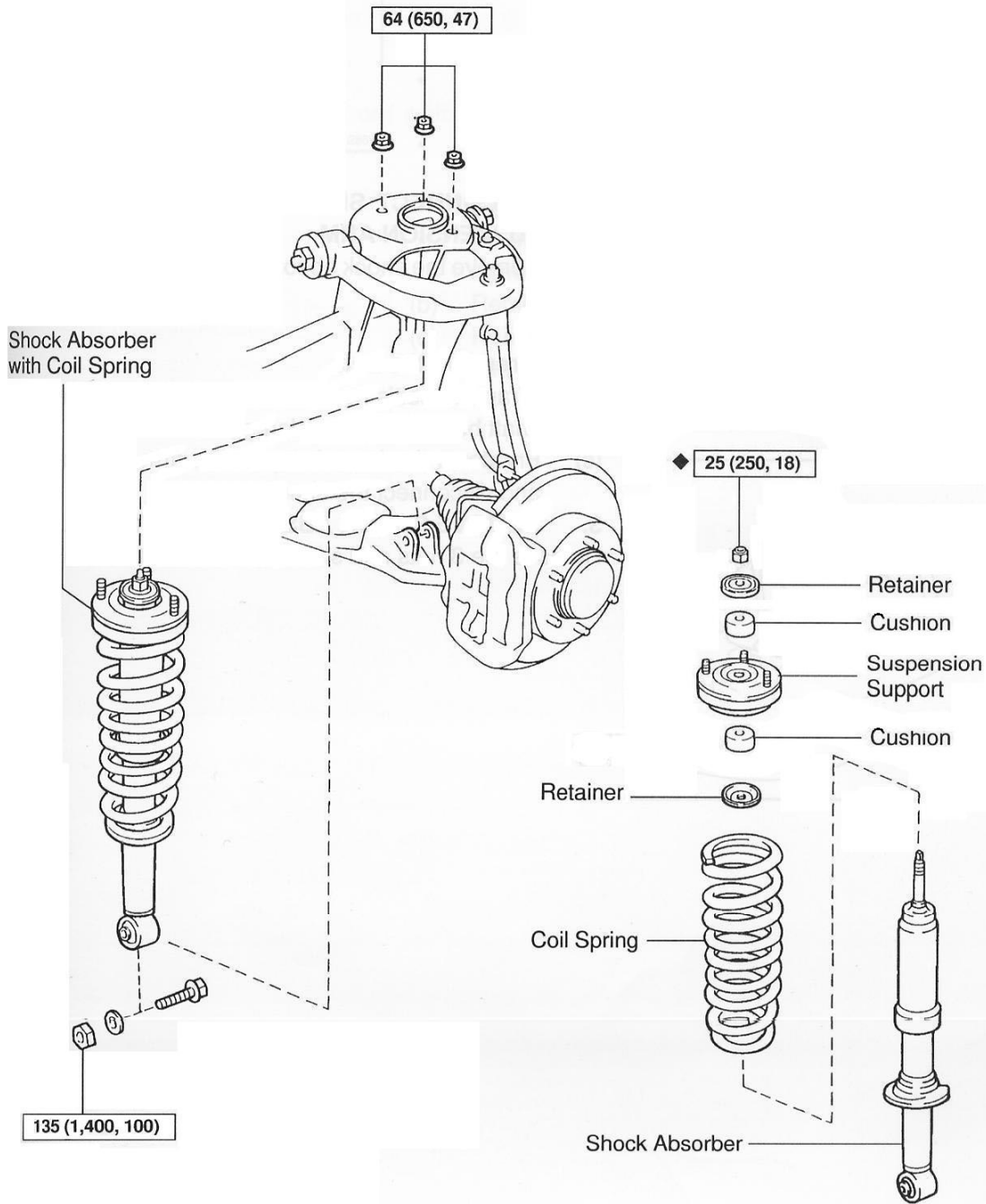
- Installation by a professional mechanic is recommended. Use of the appropriate power tools, a Toyota service manual and a shop hoist can greatly reduce installation time,
- Prior to installation, carefully inspect the condition of the vehicle's steering and drive train systems, paying close attention to the tie rod ends, pitman and idler arms, ball joints, and wheel bearing preload. Also check steering-to-frame and suspension-to-frame attaching points for stress cracks. The overall vehicle must be in excellent working condition; repair or replace worn parts.
- Read instructions carefully and study the illustrations before attempting installation. Race Car Dynamics is not responsible for damage, failure or injury resulting from improper installation or parts substitution of this kit.
- An overview illustration of how the shock sits in the vehicle and the components of the shock is provided on the following page.
- Check parts and hardware against parts list to assure that your kit is complete. Report any shortages to Race Car Dynamics at (1-619-588-4723), The parts and hardware supplied are of high-grade material and must not be replaced by inferior parts or failure may result.
- All components in this kit come with a protective coating. Do not plate (i.e. chrome, cadmium, zinc etc,) or otherwise alter the finish in any way. This could weaken the structural strength of the components and voids the warranty of the lift system.
- Secure and properly block vehicle prior to beginning installation.
- Foot-pound torque readings are listed in Torque Specifications at the end of the instructions unless specifically stated in an instruction. **DO NOT USE AN IMPACT WRENCH TO TIGHTEN ANY OF THE BOLTS.**

\*Special tools are required for safe removal and installation of this kit. These tools can be purchased from Toyota Dealer.

Coil Spring Compressor, # 09727-30021

Consisting of #s  
(09727-00010, 09727-00021,  
09727-00031)





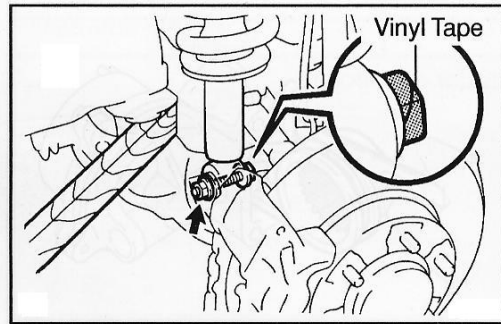
$N \cdot m$  (kgf·cm, ft·lbf) : Specified torque

◆ Non-reusable part

# DISASSEMBLY

1. Raise vehicle. If working without a shop hoist, put vehicle in gear, set emergency brake and block rear wheels in front of and behind tires. Loosen lug nuts. Lift vehicle with floor jack and place safety jack stands under frame rails, behind front wheel wells, and lower frame onto stands. Remove tire/wheel assemblies.

**ILLUSTRATION 1**



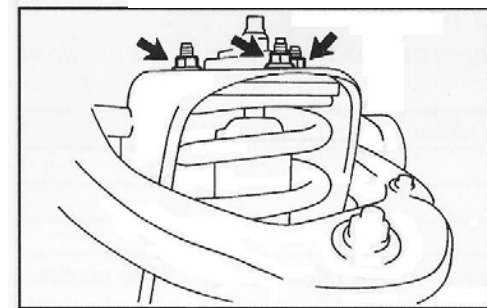
2. Loosen the lower shock bolt shown in **Illustration 1**. Pry down on the lower control arm and remove the bolt.

**NOTE:** Wrap the bolt's head with vinyl tape to prevent the drive shaft boot on 4WD models from being damaged.

3. Remove the three nuts on top of the upper shock pocket on the frame as shown in **Illustration 2**.

4. Remove shock absorber and coil spring assembly.

**ILLUSTRATION 2**



5. Using a coil spring compressor, compress the coil spring just enough to relieve the tension on the upper coil hat. Remove the top locking nut. Release the spring until it is fully extended and remove the spring compressor.

**NOTE:** When working with the spring compressor and removing the end nut position yourself so that you are not inline with the end of the shock. There is a tremendous amount of energy stored in the spring and if something fails this will minimize your chance of injury.

6. Notice on the new shock (BE5-6024) that if you slide up the lower spring seat there is a snap ring in a groove around the shock body. Notice also that there are two grooves machined in the body of the shock. The clip comes set from RCD to achieve 2" of lift on the front of the vehicle. If the clip is positioned in the groove closest to the rubber eyelet end of the shock this will retain the factory ride height. Determine which height is desired and make sure to place the clips on both shocks in the same appropriate groove.

7. Repeat steps 2-6 on the other side of the vehicle.

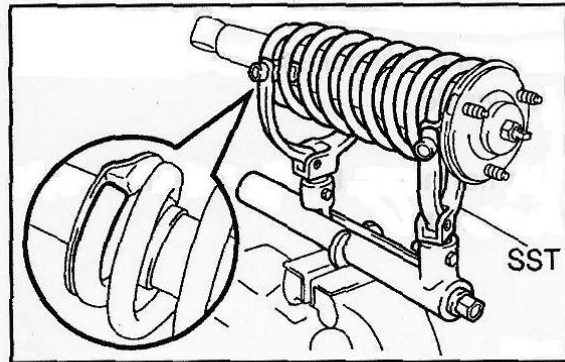
## **INSTALLATION**

1. Using the coil spring compressor, compress the spring enough to install the stock coil, suspension support, retainers, bushings and nut onto the new shocks. Torque upper nut to 18 ft. Lbs.

**NOTE:** Again, make sure to position yourself so that the end of the shock is facing away from your body to minimize chance of injury.

**NOTE:** Make sure the bottom of the coil spring is inserted in the indexing indentation on the lower spring seat. Refer to **Illustration 3**.

**ILLUSTRATION 3**

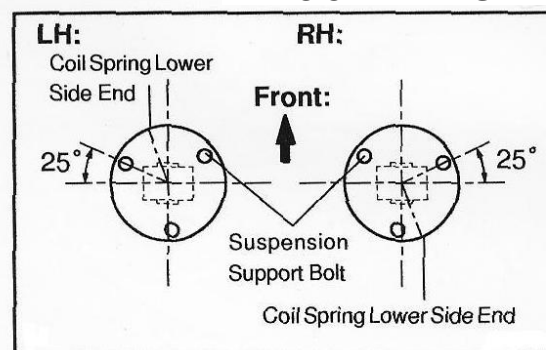


2. After removing the coil spring compressor check the orientation of the three upper studs in comparison to the lower rubber shock eyelet. Refer to **Illustration 4** to see how they should be positioned.

3. Install upper side of shock absorber to the chassis frame and tighten the three nuts. Torque the nuts to 47 ft. lbs.

4. Connect the lower side of the shock absorber to the lower control arm using the factory bolt, washer and nut. The lower control arm may need to be pried down in order to line up bolt holes. Torque the lower shock bolt to 100 ft. lbs.

**ILLUSTRATION 4**



5. Install front tire/wheel assembly and torque to factory specifications.

6. Repeat steps 1-4 on opposite side of the vehicle.

## **SOME FINAL NOTES**

- After installation is complete, double check that all nuts and bolts are tight refer to torque specifications chart on this page.
- If new tires were installed that are more then 10% taller than original tires, the speedometer must be recalibrated. Contact an Authorized Toyota dealer for details on recalibration.
- With vehicle on the floor, cycle steering lock to lock and inspect steering, suspension, and driveline systems for proper operation, tightness, and adequate clearance. Check brake hose fittings for leaks and make sure all hoses are long enough.
- Have headlights readjusted to factory specifications.
- Have front end aligned to factory specifications.

### **TORQUE SPECIFICATIONS:** (Grade 8 & Class 10.9)

5/16" NUTS	20 FT. LBS.	M6	9 FT. LBS.
3/8" NUTS	35 FT. LBS	M8	23 FT. LBS.
7/16" NUTS	60 FT. LBS.	M10	45 FT. LBS.
1/2" NUTS	90 FT. LBS.	M12	75 FT. LBS.
9/16" NUTS	160 FT. LBS.	M14	120 FT. LBS.
5/8" NUTS	175 FT LBS.	M16	165 FT. LBS.

### **EXISTING TORQUE SPECIFICATIONS**

Shock Absorber upper center nut	18 ft. lbs.
Upper shock mount nuts	47 ft. lbs.
Lower Shock mount bolt	100 ft. lbs.