

# RUGGED OFF ROAD

7-105

2007-17 Toyota  
Tundra 4WD

**Step by step instructions:** Use the proper tools and safety equipment to perform all work. Torque all fasteners to proper specifications and double check work. Align your vehicle after installation.



Position truck on a flat surface and lift vehicle by the frame so that the front wheels are off the ground. Use a floor jack and jack stands or a two post lift if available.



*Blank*

Remove the skid plate. Some models may have two skid plates. A 12mm socket is needed.

Starting on the driver side, remove the five lug nuts and the wheel.



Front



Rear



Using a 24mm socket, loosen **but don't remove** the driver side lower control arm bolts. This will allow the lower control arm to move freely.

**DO NOT REMOVE ALIGNMENT CAMS.**

Using a 19mm socket, loosen and remove the sway bar end link bolt on the lower control arm.



Lower strut nut.



Lower strut mounting bolt.



Using a 22mm socket, loosen and remove the lower strut mounting nut and bolt from lower control arm.

Using a 14mm wrench, loosen **but do not remove** the four upper strut mounting nuts.



Loosen and remove the two 22mm bolts that connect the lower ball joint to the spindle. **Please take caution as the lower control arm will swing down as soon as you remove the lower ball joint bolts.** Holding the Strut with one hand remove the four 14mm upper strut mounting nuts. Remove the strut, being careful not to damage the CV Boot on 4WD.



Install the strut extension and torque to factory specs.



Reinstall strut into vehicle and install the new nuts provided, but do not tighten. Using a jack, raise the lower control arm and guide both the lower strut mount and the sway bar end link into their respective pockets. Install the lower strut mounting bolt and nut, torque to factory specs. Use thread locker if necessary.



Use of a pry bar and hammer may be needed to align mounting holes for the end link bolt. Install 19mm bolt and torque to factory specs.



Install the two 22mm lower ball joint bolts starting with the rear bolt first, as it is easier to line up with the spindle. Torque to factory specs, use thread locker where necessary. Tighten the four 14mm upper strut mounting bolts and torque to factory specs. Put the wheel back on and torque to 85-90 ft/lbs. With vehicle on the ground tighten the lower control arm bolts and torque to factory specs. Use thread locker where necessary.



1. Position a floor jack under the front differential. Raise the pad so that it is touching the diff.



2. Remove the factory 19mm differential mounting nuts and bolts. The OEM washers will be reused.



3. Install the 1" spacers between the differential supports and the front cross-member. Install the new bolts with factory washers and the new nuts and washers. Torque to factory specs.

## **Final Checks & Adjustments**

**Post Installation Warnings:** Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to insure proper torque. Torque wheels to factory specs. Move vehicle backwards and forwards a short distance to allow suspension components to adjust. Turn the front wheels completely left then right and verify adequate tire, wheel, brake line, and ABS wire clearance. Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brakes hoses and ABS lines for adequate slack at full extension. Failure to perform the post inspection checks may result in vehicle component damage and/or personal injury or death to driver and/or passengers. Test drive vehicle and re-check the torque of all fasteners and re-torque wheels on vehicle.

### **Wheel Alignment/Headlamp Adjustment:**

**It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. Align the vehicle to factory specifications. It is recommended that your vehicle alignment be checked after any off-road driving. In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment.**

### **Vehicle Re-Torque and Safety Inspection:**

Upon completion of all services and adjustments performed on your vehicle, and within 50 miles of driving, check to ensure all fasteners and hardware are properly torqued to specification as noted in the vehicles factory service manual or the torque chart included.

WWW.RUGGEDOFFROAD.COM