ADDICTIVE DESERT DESIGNS

2009 - Current Ford F150/Raptor Upper Control Arm Installation Instructions

PREPARATION

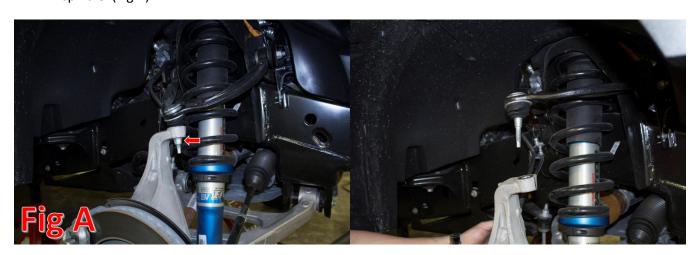
- 1. Disconnect the negative terminal on the battery. Park the vehicle on level ground and set the emergency brake.
- 2. We recommend reading through the installation instructions in whole before performing the work.
- 3. Estimated Installation Time: 3 Hours
- 4. You will need the following tools:
 - a. Ratchet
 - b. 10mm Socket
 - c. 18mm Socket & Wrench
 - d. 21mm Socket & Wrench
 - e. 1/2" 12 Point Socket
 - f. 3/4" Wrench

Note: this installation requires 2 people for best results

- 5. Included in Kit:
 - 2 Upper Control Arms
 - 8 Misalignment Spacers 7/8"
 - 4 Misalignment Spacers 1 1/2"
 - Flanged Bolt 1/2-20 x 5"
 - 2 Washers 1/2"
 - 2 Metal Lock Nut 1/2"

REMOVAL

- 1. Put your truck on jack stands and remove the front wheels. **Never work under an unsupported vehicle**.
- 2. Using an 18mm Socket, remove the upper ball joint nut. Then, separate the upper ball joint from the spindle. (Fig A)



3. Using a 10mm Socket, remove the brake line bracket mounting bolt from the side of the spindle. Then, move the brake line out of the way. (Fig B)



4. Using an 18mm Wrench and a 21mm Socket, loosen both upper control arm mounting bolts. (Fig C)



5. Using an 18mm Wrench or Socket, remove the upper shock mount bolts. (Fig D)



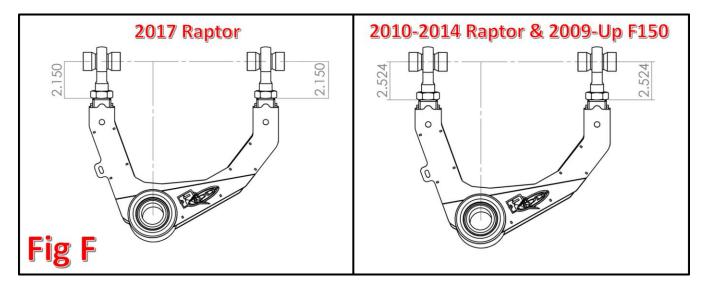
- 6. Remove the upper control arm mounting bolts. For this step, you will have to move the shock around and push down on the control arm to gain the space to be able to fully remove these bolts. Be sure not to over-extend your CV axle during this step. **Save these bolts for reuse**.
- 7. Remove the OEM Control Arm. (Fig E)



8. Prepare to install your new ADD Upper Control Arms.

INSTALLATION

1. Set the length of your new Upper Control Arms' Heim Joints. For a 2017 Raptor, the Heim joint should measure 2.150 inches from the center of the hole in the Heim Joint to the bottom of the Jam Nut while its seated. For a 2010-2014 Raptor or any year F150, the Heim joint should measure 2.524 inches from the center of the hole in the Heim Joint to the bottom of the Jam Nut while its seated. Refer to Fig F. Once the distance has been set, tighten the Heim Joint Jam Nut.



2. Set the supplied 7/8" Misalignment spacers into the 7/8" Heim Joints on the Upper Control Arm. Then, set the upper control into place on the vehicle. (Fig G)



3. Use the OEM Bolts you removed in Removal Step 6 to secure the Upper Arms to the vehicle. For an easier installation, we install the bolts from the outside of the shock tower. Leave these bolts loose for now. On the passenger side of the vehicle, you will have to loosen the ABS controller (three 10mm bolts) to be able to fit the front bolt in. (Fig H)



4. Set the 1 1/2" Misalignment Spacers in place on the uniball portion of the Upper Control Arm. Then, use the supplied 1/2" Bolt (x1), Washer (x1) and Lock Nut (x1) to mount the Upper Arm to the vehicle's spindle. (Fig I)



- 5. Go back and tighten the OEM bolts (Installation Step 3) to OEM torque spec. Then, tighten the supplied 1/2" Bolt (Installation Step to 70 foot pounds.
- 6. Reinstall the nuts you removed in Removal Step 5. Tighten these nuts to OEM torque spec.
- 7. Reinstall the brake line bracket and brake line bracket mounting bolt you removed in Removal Step 3, then tighten the bolt to OEM torque spec.
- 8. Reinstall your wheels and bring the vehicle off its jack stands.
- 9. Your vehicle will need to be aligned after this installation.
- 10. Stand back and enjoy your new ADD Upper Control Arms.
- 11. Check and re-tighten if needed, all mounting bolts after 100 miles and periodically thereafter.



For Additional Support or Technical Questions, Please Call 480.671.0820 or Email info@addictivedesertdesigns.com