

Preparation:

- Disconnect the negative battery terminal. Park the vehicle on level ground and set the emergency brake.
- We recommend reading through the installation instructions in whole before performing the work.
- Estimated Installation Time: **4 Hours**

****This installation requires 2 people for best results****

You will need the following tools:

- | | | |
|---------------------------|--------------------------|---------------------------|
| - Ratchet | - 9/16" Socket & Wrench | - 13/16" Socket & Wrench |
| - 3/4" Socket & Wrench | - 15/16" Socket & Wrench | - 1 1/16" Socket & Wrench |
| - 1 3/16" Socket & Wrench | - 5/8" 12-Point Socket | - 18mm Socket |
| - 21mm Socket | - Welder | - Grinder |
| - Black Paint | | |

Included in Kit:

- | | |
|--|---|
| 2 - Lower Control Arms | 8 - Misalignment Spacers for 1" Spherical Bearing |
| 2 - Top Misalignment Spacer for 1.5" Bearing | 2 - Bottom Misalignment Spacer for 1.5" Bearing |
| 2 - Weld On Strap Tabs | 2 - Hex Head Bolts (M20-2.5 x 120mm) |
| 4 - Washers (M20) | 2 - Metal Lock Nuts (M20-2.5) |
| 2 - 12-Point Flange Cap Screw (5/8"-18 x 4") | 2 - Washers (5/8") |
| 2 - Metal Lock Nuts (5/8"-18) | 4 - Hex Head Bolts (9/16-12 x 1 1/4") |
| 8 - Washers (9/16") | 4 - Metal Lock Nuts (9/16"-12) |
| 2 - Aluminum Sway Bar End Link Tubes | 4 - Rod Ends (1/2") |
| 4 - Grade 8 Nuts (1/2"-20) | 8 - Misalignment Spacers for 1/2" Rod Ends |
| 4 - Grade 8 Bolts (3/8"-16 x 2 1/2") | 8 - Washers (3/8") |
| 4 - Metal Lock Nuts (3/8"-16) | 2 - Grade 8 Bolts (1/2"-20 x 2 1/4") |
| 4 - Washers (1/2") | 2 - Metal Lock Nuts (1/2"-20) |

Removal:

1. Place vehicle on jack stands and remove the front tires.
2. Using a 1 1/16" Socket and a 1 3/16" Wrench, remove the lower shock mounting bolt. (Fig A)



Fig A

- Using an 18mm Socket, remove the upper sway bar end link bolt. Then, pop the sway bar end link free from the sway bar. (Fig B)

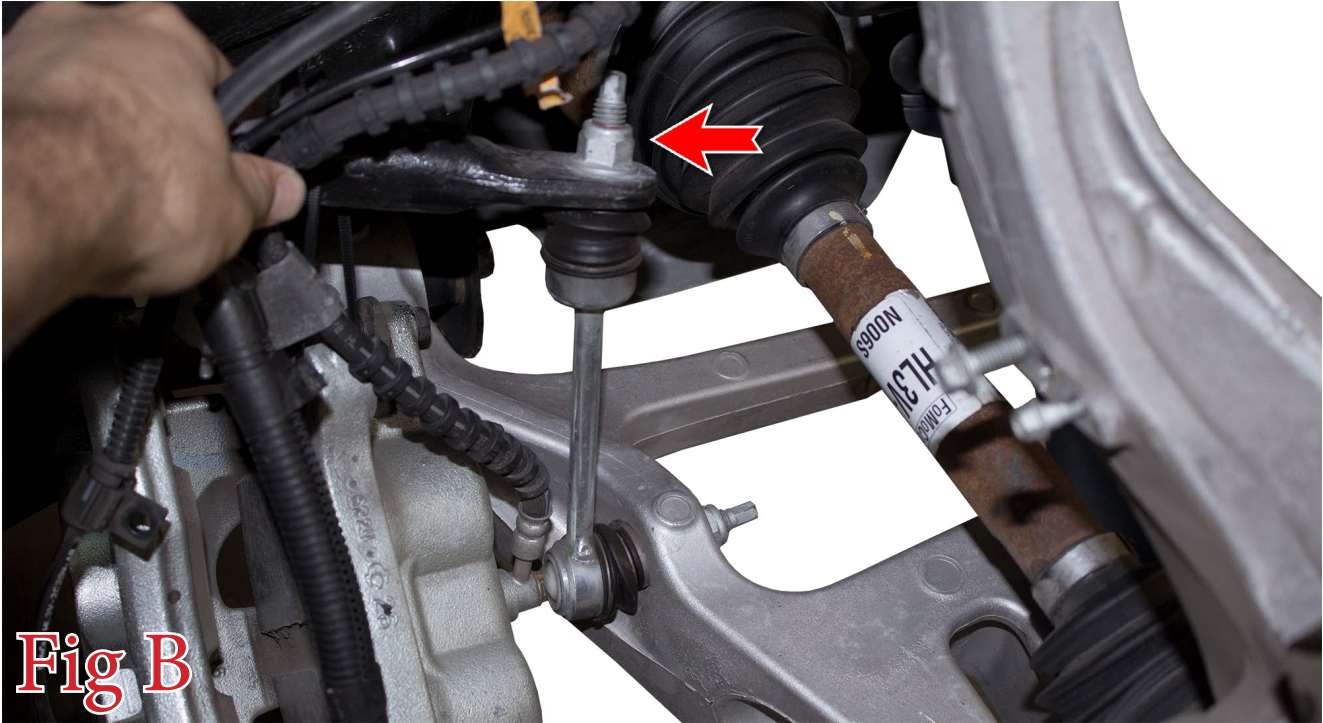


Fig B

- Using a 21mm Socket, remove the lower ball joint nut. Then, pop the ball joint free from the spindle. (Fig C)

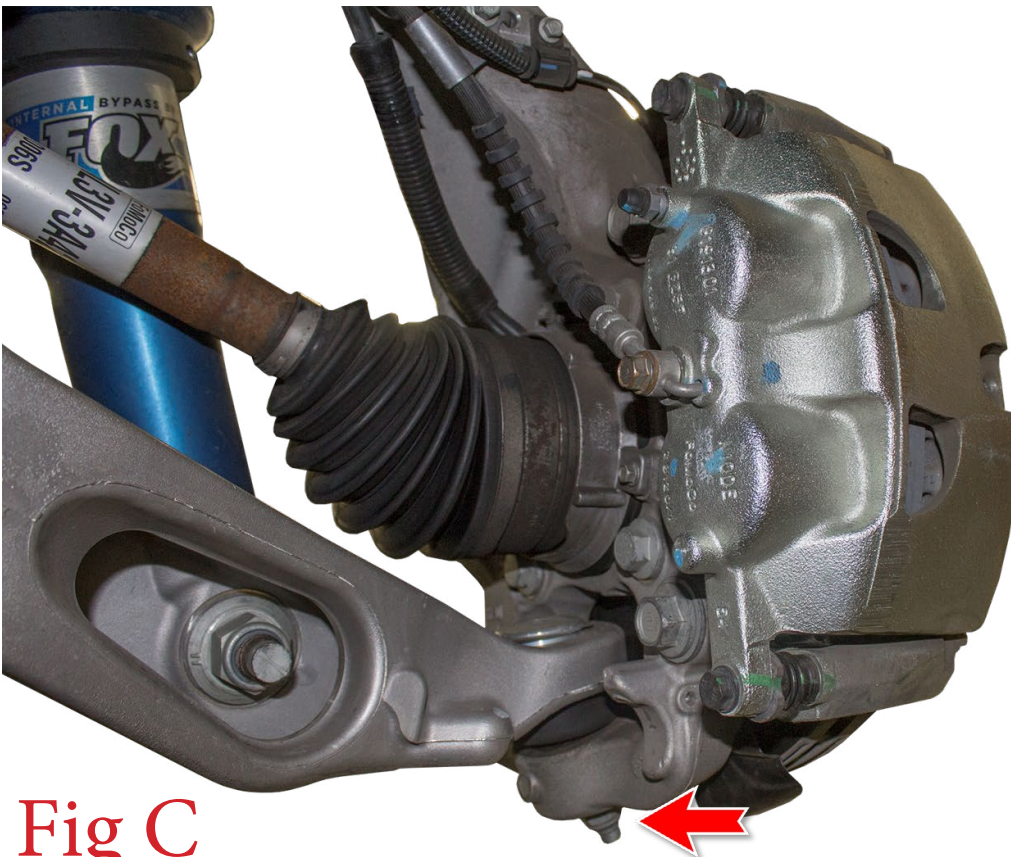
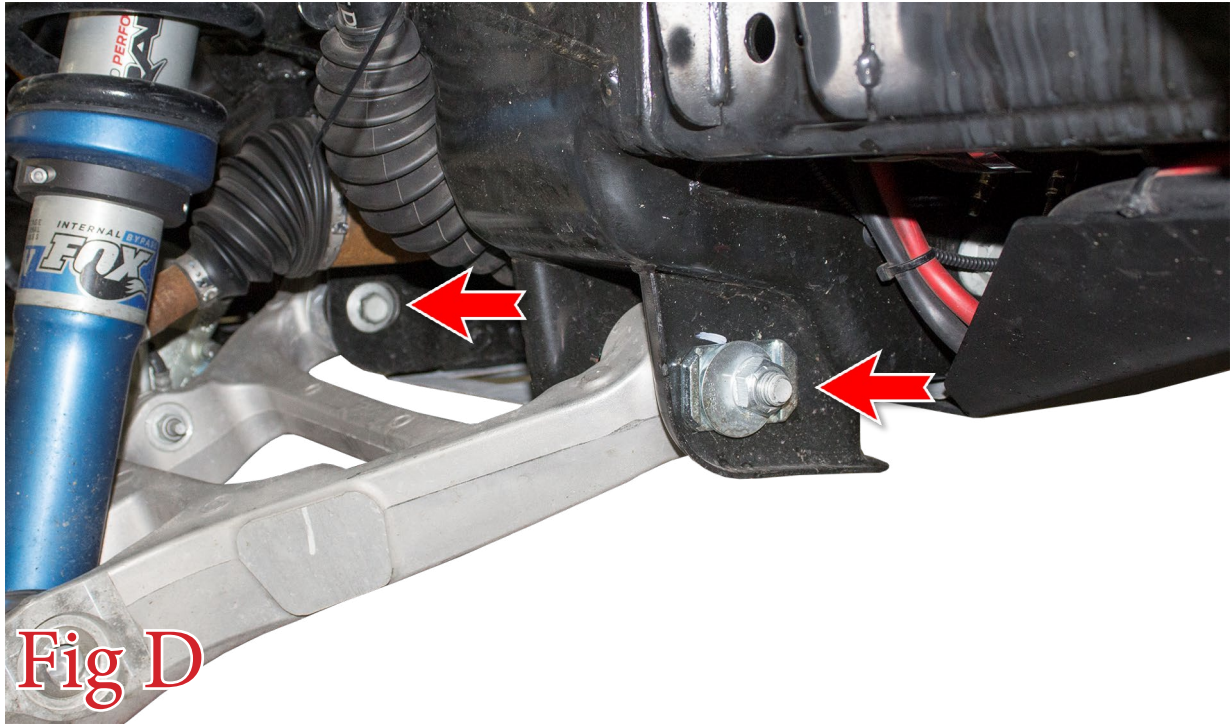


Fig C

5. Using a 13/16" Socket and a 1 1/16" Wrench, remove the lower control arm mounting bolts. Then, remove the lower control arm from the vehicle. (Fig D)



Installation:

6. Using the OEM Lower Control Arm Mounting Bolts, mount the lower control arm to the vehicle. Tighten these bolts to OEM torque spec. (Fig E)



7. Place the Top and Bottom Misalignment Spacers into the 1.5" Uniball on your new Lower Control Arm. (Fig F)

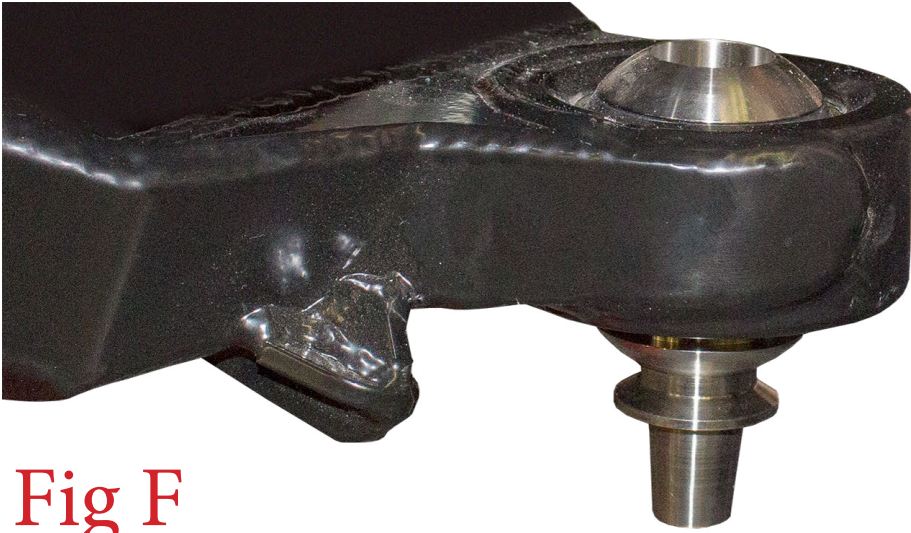


Fig F

8. Mount the lower control arm and spindle together using the supplied 5/8" Flange Cap Screw (x1), 5/8" Washer (x1), and 5/8" Metal Lock Nut (x1). Tighten this bolt to 70 foot pounds. (Fig G)

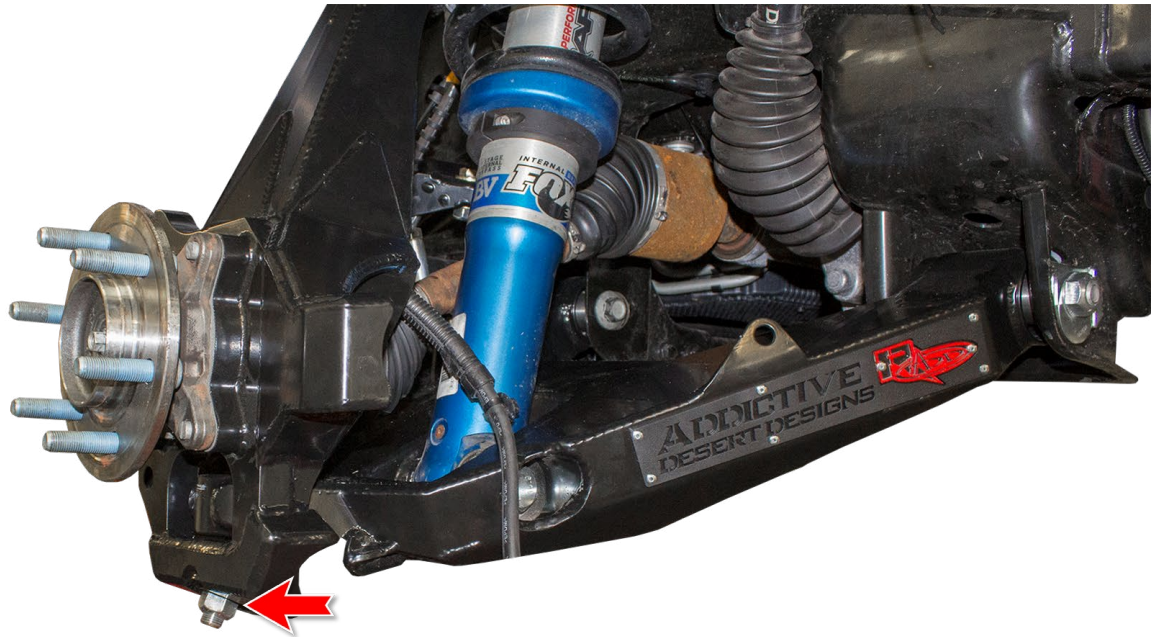


Fig G

9. Raise the lower control arm assembly until the shock enters the shock pocket. Then, use the supplied M20 Bolt (x1), M20 Washers (x2), and M20 Nut (x1) to secure the shock to the arm. (Fig H)



Fig H

10. Set the sway bar end link to 6 1/4" total length. Leave the nuts loose for now so you can line the heims up with the mounting points as you install the end links. (Fig I)

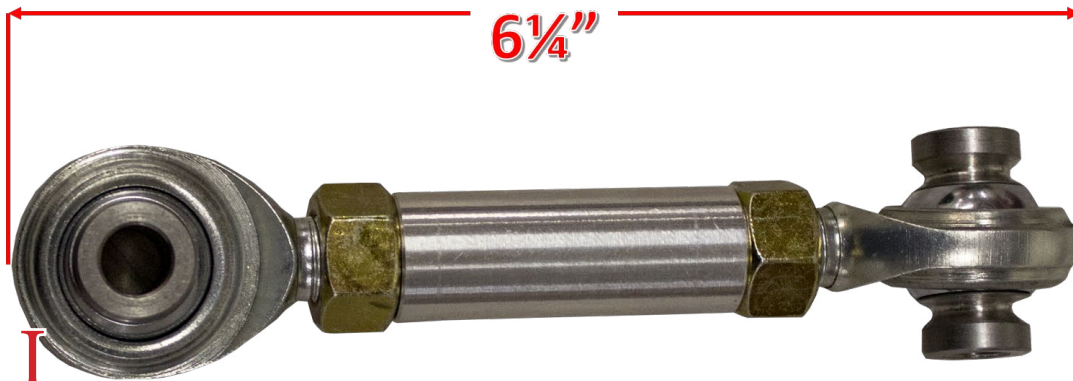


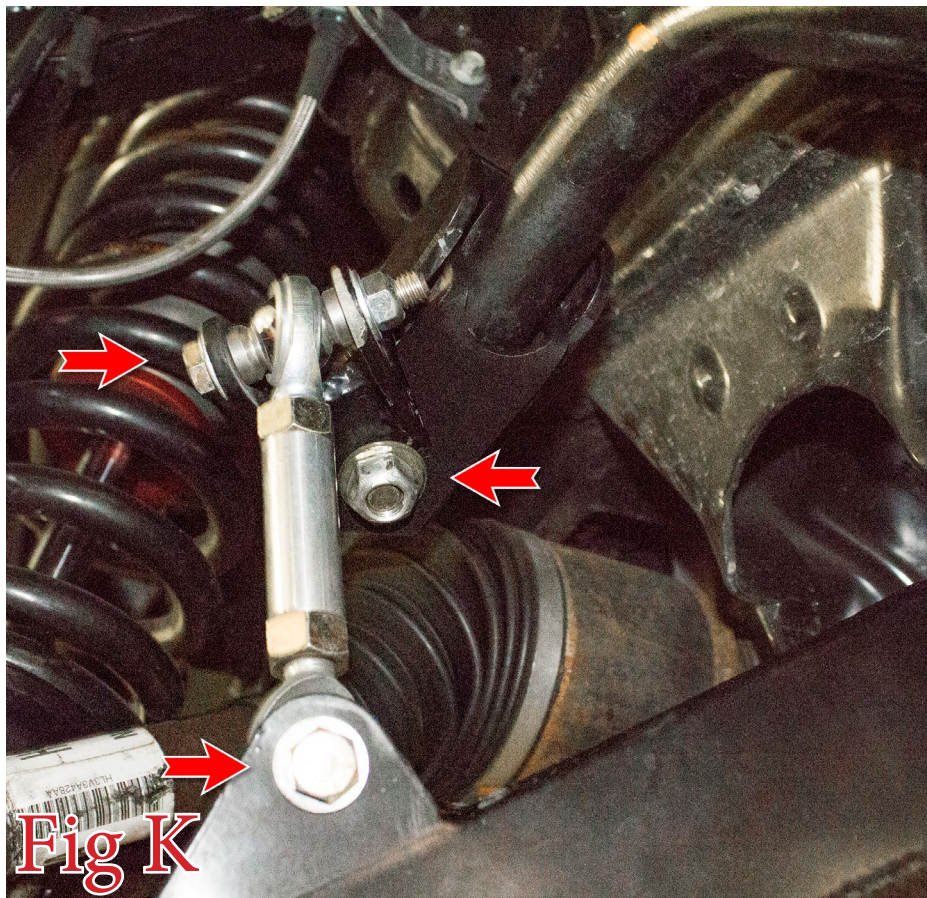
Fig I

11. Locate the correct set of sway bar brackets for your vehicle. One set covers the 2009-2014 F150/Raptor, while the other set covers the 2015-Current F150. The 2015-Current F150 Sway Bar Brackets have 2 Pieces per side. Refer to (Fig J).



Fig J

12. Set the main sway bay adapter bracket in place on the sway bar. Then, from the bottom, set the sway bar adapter bracket lower piece in place so that the prongs sit in between the sway bar and the wall of the upper piece. Secure the sway bar adapter pieces to the sway bar using the supplied 1/2" Bolt (x1), 1/2" Washers (x2), and 1/2" Lock Nut (x1). Then, set the assembled sway bar end links in place. Secure the sway bar end links to the sway bar adapter bracket and the lower control arm mounting points using the supplied 3/8" Bolts (x2), 3/8" Washers (x4), and 3/8" Nuts (x2). Tighten these bolts to 30 foot pounds. then, tighten the sway bar adapter bracket bolt to 70 foot pounds. Tighten the sway bar end link nuts. (Fig K)

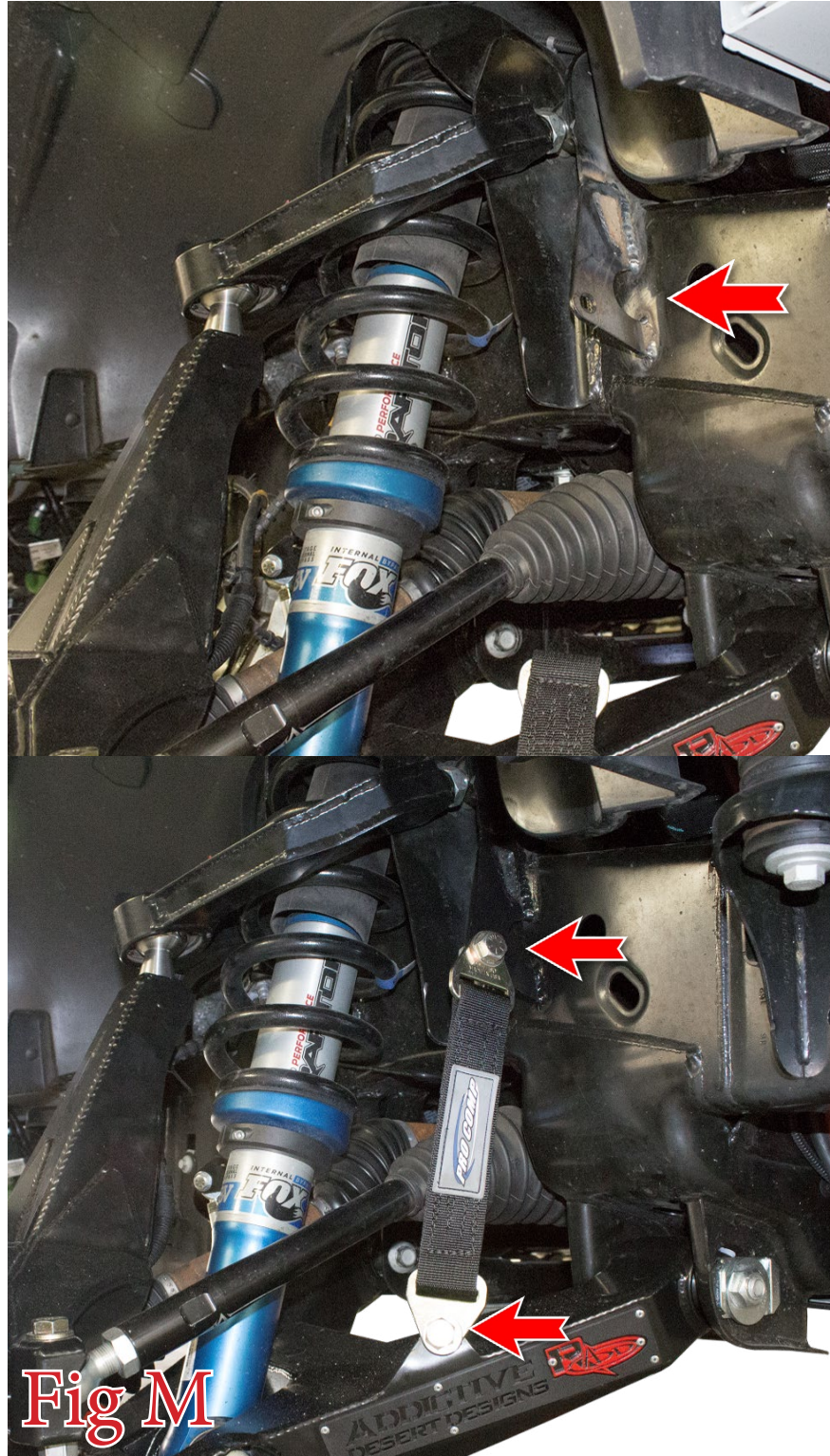


13. Locate the limit strap tab for your vehicle. Refer to (Fig L).



Fig L

14. Using the supplied 9/16" Bolts (x2), 9/16" Washers (x4), and 9/16" Lock Nuts (x2), attach the supplied limit strap to the lower control arm and the supplied weld on strap tab to the other end of the limit strap.
15. With the lower control arm at full droop, place the tab against the frame where the upper control arm mount meets the frame. The tab should lay against the upper control arm mount. Using a sharpie, mark the location of the bottom edge of the tab on the frame.
16. Unbolt the tab from the limit strap. The tab will be welded 1" higher than the mark you just made. Measure 1" vertically up from the mark you just made and weld the tab to the frame at that mark. Make sure to prep the frame for welding before you weld and make sure to paint the limit strap tab after you've welded it.
17. Raise the lower control arm and bolt the limit strap to the newly welded tab using the same hardware from Step 14. Tighten both limit strap bolts just until they are snug, but the limit strap can still move freely. (Fig M)
18. Repeat this entire procedure on the other side of the vehicle.
19. Reinstall your front wheels and take your vehicle off the jack stands.



20. Stand back and enjoy your new ADD Lower Control Arms.
21. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.