

PART #	DESCRIPTION
58747C	10-UP FJ/4RUNNER EXT TRAVEL 2.5 VS RR CDCV COILOVER KIT

COMPONENTS INCLUDED

(1) 154953C 07+ FJ EXT TVL CO RR CDCV (DRVR)	(1) 611019 COILOVER HARDWARE KIT (PAIR)
(1) 154953C 07+ FJ EXT TVL CO RR CDCV (PASS)	(1) 611031 10+ FJ SWAYBAR RELOCATION KIT
(1) 154005 05+ TACO / FJ RESI MOUNT (DRVR)	(1) 611051 HOSE CLAMP KIT
(1) 154004 05+ TACO / FJ RESI MOUNT (PASS)	(4) 605144 3/8-12 X .750 FLANGED SELF TAP BOLTS (KDSS ONLY)

HARDWARE INCLUDED

611019 HARDWARE KIT

(6) 605101 3/8-16 X 1.000 BOLT	(6) 605131 3/8 SPLIT LOCK WASHER
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611031 HARDWARE KIT

(2) 157110 10+ FJ SWAYBAR RELOCATION BRACKET	(4) 605100 3/8-16 X .750 BOLT
(6) 605432 9/16 WASHER THICK 1.18 X .585 X .18	(4) 605133 3/8 SAE FLAT WASHER
	(4) 605808 M10-1.25 X 25MM

611051 HARDWARE KIT

(4) 605931 1/2 X 2 1/16 - 3 ID #40 SS HOSE CLAMP
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TOOLS REQUIRED

JACK	8MM ALLEN WRENCH
JACK STANDS	10MM SOCKET / WRENCH
TORQUE WRENCH	13MM SOCKET / WRENCH
HAMMER	14MM SOCKET / WRENCH
DRILL (KDSS ONLY)	15MM SOCKET / WRENCH
11/32" DRILL BIT (KDSS ONLY)	18MM SOCKET / WRENCH
5/16" NUT DRIVER	21MM SOCKET / WRENCH
9/16" SOCKET / WRENCH	

TECH NOTES

1. YOUR ICON COILOVER ASSEMBLIES COME FACTORY CHARGED TO 150 PSI. RELEASING NITROGEN PRESSURE MAY LEAD TO SHOCK MALFUNCTION AND REDUCED RIDE QUALITY. FAILURE CAUSED BY LOW NITROGEN PRESSURE IS NOT COVERED UNDER ICON'S WARRANTY POLICY.
2. YOUR ICON COILOVER ASSEMBLIES COME SHIPPED AT ICON'S RECOMMENDED RIDE HEIGHT. REDUCING DROOP TRAVEL WILL REDUCE RIDE QUALITY. DO NOT PRELOAD THE COIL BEYOND 1.75" (1.13" FOR 700LB COIL #158508) OF EXPOSED THREADS BETWEEN THE BOTTOM OF THE TOP CAP AND THE COIL ADJUSTER NUT. ADJUSTING PRELOAD BEYOND THIS SETTING WILL CAUSE THE COIL TO BIND AND DAMAGE WILL OCCUR TO COILOVER AND/OR VEHICLE.
3. KDSS EQUIPPED VEHICLES WILL NOT USE SWAYBAR RELOCATION KIT (611031).
4. ICON EXTENDED TRAVEL COILOVERS (58547, 58547C) MUST BE USED WITH ICON UPPER CONTROL ARMS (58451, 58551).



WARNING!

**** READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE!**

**** ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.**

****ICON VEHICLE DYNAMICS RECOMMENDS ALL INSTALLATION TO BE PERFORMED BY A PROFESSIONAL SHOP/SERVICE TECHNICIAN. PRODUCT FAILURE CAUSED BY IMPROPER INSTALLATION WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY.**

INSTALLATION

1. Using a properly rated jack, raise the front of the vehicle and support the frame rails with jack stands. Ensure the jack stands are secure and set properly before lowering the jack. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove the front wheels.
2. Disconnect the outer tie rod end on both sides. Remove the cotter pin and loosen the nut until it is flush with the end of the threads. Strike the end of the steering knuckle arm with a large hammer to dislodge the taper. Remove the nut and swing the tie rod out of the way.
3. (NON KDSS VEHICLES ONLY) Disconnect the sway bar from the frame on both sides. Remove bolts using a 14mm socket/wrench and remove the bracket from the sway bar. Move the sway bar forward to make room for removal and installation of the shock.
4. To make room for removal of the factory coilover assembly, disconnect the knuckle from the upper control arm. Once the knuckle is disconnected from the upper control arm, support the knuckle so that brake line damage does not occur.
5. Support the lower control arm with a jack and remove the (3) nuts securing the upper shock assembly mount to the coil bucket. Do not loosen or remove the large center nut securing the spring seat to the shock shaft. Failure to comply will result in the stock coil assembly to come apart violently, causing damage to components and possible injury.
6. Loosen the bolt connecting the shock to the lower control arm. Lower jack and remove the bolt. Note orientation; as this bolt will be reused. The head of the bolt should be facing forward.
7. Remove the stock coil assembly. Due to rubber bushing stiffness you may need to pull down on the suspension. Be careful not to damage any brake lines or wires that may be routed down the upper control arm.
8. Install new coilover assembly. Install upper mount with the reservoir hose pointing outward using (605101) bolts and (605131) lock washers.

9. Install lower shock mount to lower control arm: The lower shock mount has (1) long and (1) short spacer. Make sure the long spacer is toward the front of the vehicle. This will position the shock further toward the rear of the lower control arm to ensure adequate sway bar clearance. Reinstall the factory lower shock bolt. [Torque to factory spec] **(FIGURE 1)**

FIG.1



10. Reinstall the upper control arm to the knuckle and tighten balljoint nut. [Torque to factory spec]

11. Reinstall the outer tie rod end [Torque to factory spec] and install cotter pin.

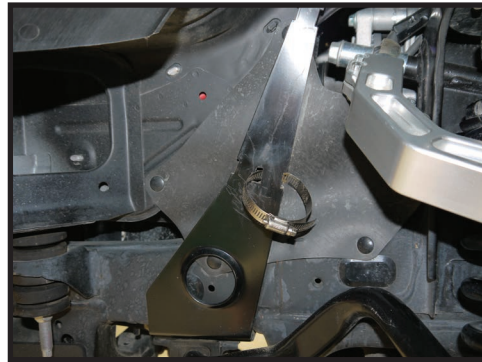
12. (SKIP TO STEP 14 FOR KDSS EQUIPPED VEHICLES) Remove the skid plate using a 15mm socket/wrench and set aside.

13. Install the reservoir mount and sway bar relocation block. Using the factory hardware, bolt the block to the frame with the reservoir mount sandwiched between the relocation block and frame as shown. The heads will be recessed in the block. Make sure the block is positioned so that the new threaded holes are forward of the countersunk holes. Using the supplied (605100) bolts, (605133) washers and factory U-clamp, reinstall the sway bar in it's new position, forward of factory location. **(FIGURE 2 AND 3)**

FIG.2



FIG.3



14. (KDSS ONLY) For vehicles equipped with Kinetic Dynamic Suspension System each remote reservoir bracket will be mounted using two (605144) self-tapping bolts.

15. (KDSS ONLY) Hold the reservoir mounting bracket against the frame and mark the location of the hole on the lower part of the frame.

16. (KDSS ONLY) Move the reservoir mounting bracket away from the frame and drill an 11/32" hole in the center of the spot that you just marked.

17. (KDSS ONLY) Deburr the hole, place the reservoir and mount back against the frame, and install the self-tapping bolts.

18. Mount reservoir according to diagram for appropriate year and model. The lower hose clamp goes through the slot in the bracket and the upper registers in the notches at the top of the bracket. Position the reservoir so the clamp bands are in the recessed groove on the can and secure. **(FIGURE 4 AND 5)**

FIG.4

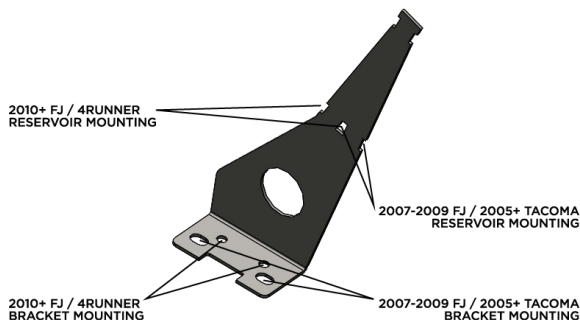


FIG.5



19. Install the skid plate with the supplied skid plate washers (605432) between the frame and skid plate on all six mounting locations. Using the factory hardware, tighten with a 15mm socket/wrench. [Torque to factory spec]

20. Install wheels and lower vehicle back to the ground. [Torque to factory spec]

21. Have the vehicle professionally aligned.