

PART #	DESCRIPTION
71010	15-UP COLORADO/CANYON 2.5 VS IR COILOVER KIT

COMPONENTS INCLUDED	
(2) 174953 15-UP COLORADO/CANYON 2.5 VS IR CO UPKG (1) 611019 COILOVER HARDWARE KIT	(1) 611065 15-UP COLORADO SWAY BAR RELOCATOR KIT
HARDWARE INCLUDED	
611019 HARDWARE KIT	
(6) 605101 3/8" X 1.000 BOLT	(6) 605131 3/8" SPLIT LOCK WASHER
611065 HARDWARE KIT	
(2) 177093 15-UP COLORADO/CANYON SWAY BAR RELOCATOR KIT	(4) 605133 3/8" FLAT WASHER (4) 605100 3/8" X .750 BOLT
TOOLS REQUIRED	
TORQUE WRENCH RECIPROCATING SAW SANDER 2LB SLEDGE HAMMER 9/16" SOCKET / WRENCH	10MM SOCKET / WRENCH 13MM SOCKET / WRENCH 15MM SOCKET / WRENCH 18MM SOCKET / WRENCH 21MM SOCKET / WRENCH 22MM SOCKET / WRENCH
TECH NOTES	
<p>1. THE SHOCKS SHIP AT ICON'S RECOMMENDED RIDE HEIGHT. DO NOT PRELOAD THE COIL BEYOND .9" OF EXPOSED THREADS BETWEEN THE BOTTOM OF THE TOP CAP AND THE TOP OF THE COIL NUT. INCREASING PRELOAD BEYOND THE FACTORY SETTING WILL CAUSE COIL TO BIND.</p> <p>2. YOUR NEW COILOVER ASSEMBLIES COME CHARGED WITH THE CORRECT AMOUNT OF NITROGEN. DO NOT RELEASE PRESSURE FROM THE CHARGE PORT, AS THIS CAN CAUSE THE SHOCK TO MALFUNCTION.</p>	



WARNING!
<p>** READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED SEVERE FRAME, <a href="#">SUSPENSION</a> AND TIRE DAMAGE MAY RESULT TO THE VEHICLE!</p> <p>** ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.</p>

## INSTALLATION

- 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.
- Remove the front plastic skidplate covering the sway bar using a 15mm socket/wrench. (FIGURE 1)

FIG.1



- Remove the OEM sway bar link bolt on both driver and passenger sides using a 15mm socket/wrench on top and 13mm socket/wrench on bottom. (FIGURE 2)

FIG.2



4. Remove the 4 bolts holding sway bar to chassis using a 10mm socket/wrench.

5. Install supplied sway bar relocation brackets to shift the sway bar forward. Use the factory hardware to fasten to the frame using a 10mm socket/wrench. [Torque to factory spec]

**NOTE:** Leave the sway bar off until after the coilovers are installed.

6. Remove the 3 nuts holding the factory coilover to the coil bucket using an 18mm socket/wrench. (FIGURE 3)

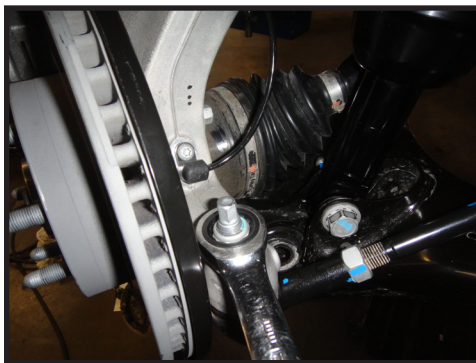
FIG.3



7. Remove lower bolt using a 21mm socket/wrench.

8. Remove the tie rod from the knuckle. Use a 21mm socket/wrench to remove the nut and a 10mm socket/wrench to hold the stud from spinning. Use a hammer to break the seat of the taper. (FIGURE 4)

FIG.4



9. Remove upper ball joint nut to allow room for coilover removal, use a 21mm socket/wrench and a 2lb sledge on the knuckle to unseat taper. Tie up the neck of the knuckle so the CV joints do not over extend. (FIGURE 5 AND 6)

FIG.5



FIG.6



10. With the OEM coilover removed, sway bar removed, and UCA free from the knuckle, sand the lower shock tab as shown. Failure to sand this section will allow the CV boot to rub at full droop and full steering lock. Be careful not to hit the CV boot. (FIGURE 7 AND 8)

FIG.7

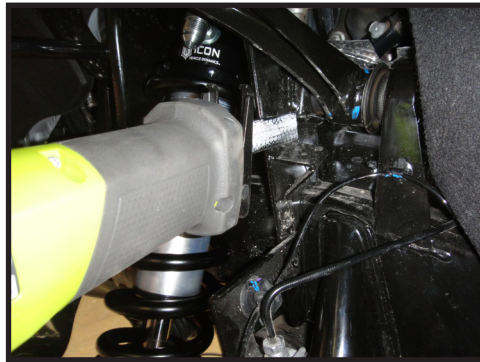


FIG.8



**11.** With a reciprocating saw, cut the UCA droop tab from the coil bucket. Paint all exposed metal. (FIGURE 9)

FIG.9



**12.** Slide the ICON coilover assembly into position and fasten it using the supplied 3/8" bolts and washers with a 9/16" socket/wrench. [Torque to 30 ft-lbs] (FIGURE 10 AND 11)

FIG.10



FIG.11

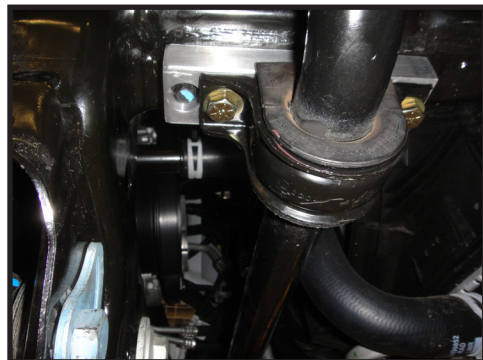


**13.** Install the bottom spacers on the coilover assembly push the coilover away from the CV boot. Installing these spacers backwards will cause the CV boot to rub the rod end. Reuse the factory lower bolt and a 21mm socket/wrench to fasten. [Torque to factory spec] (FIGURE 12)

FIG.12



FIG.13



**14.** Use the supplied 3/8" hardware to fasten the sway bar back to the chassis using a 9/16" socket/wrench. [Torque to 45 ft-lbs] Failure to install this relocater kit will cause the sway bar ends to make contact with the coil cup. (FIGURE 13)

**15.** Using a 13mm socket/wrench loosen the brake line bracket on the coil bucket. Push it down and slightly bend it rearward. [Torque to factory spec] (FIGURE 14 AND 15)

FIG.14



FIG.15



**16.** Reattach the UCA to the knuckle using a 18mm socket/wrench. [Torque to factory spec] (FIGURE 16)

FIG.16

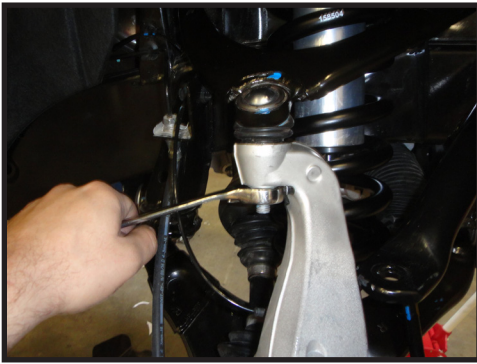


FIG.17

**17.** Verify that brake line tab and UCA do not make contact at full droop. (FIGURE 17)

**18.** Reassemble sway bar links using 13mm and 15mm socket/wrench. [Torque to factory spec] (FIGURE 18)

FIG.18

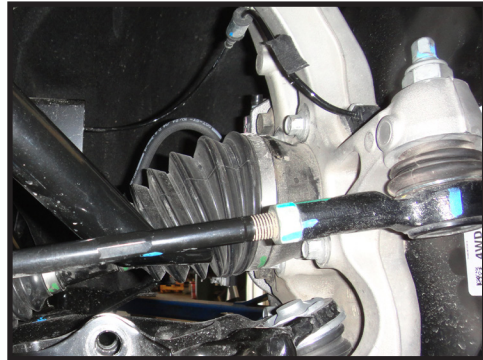


FIG.19

**19.** Reconnect the tie rod to the knuckle using a 21mm socket/wrench. [Torque to factory spec] (FIGURE 19)

**20.** Repeat all installation steps on the passenger side.

**21.** Reinstall plastic skidplate using 15mm socket/wrench. [Torque to factory spec] (FIGURE 20)

FIG.20



**22.** Install wheels and lower vehicle to the ground. [Torque to factory spec]

**23.** Have the truck professionally aligned.

***VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.***

***RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 100 MILES AND PERIODICALLY THEREAFTER.***

## 2.5 VS SERIES SHOCK & COILOVER TECHNICAL INFORMATION

### MAINTENANCE

ICON shock absorbers are a high quality rebuildable race style shock absorber designed for optimal performance. With a unit of this caliber on your vehicle, routine maintenance is required to keep them looking and operating in like new condition. Residual oil and assembly lube may be present at all seal paths from the factory out of the box and is considered normal. Pooling of oil however is not acceptable at any time and one should contact the ICON dealer where purchased.

**BELOW ARE GUIDELINES BASED ON HOW YOU USE YOUR VEHICLE BUT YOUR MILEAGE MAY VARY:**

#### **STREET USE:**

- Send in for factory servicing every 40,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Remove any buildup of road salt, mud, or debris from shocks and coil springs anytime accrued
- Clean with mild soap and water with each oil change or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure yearly. (252004 charge needle assembly available at any ICON distributor)
- Check bearings for excessive wear yearly.
- DO NOT apply any type of lube to the upper and lower bearings.

#### **STREET/DIRT:**

- Send in for factory servicing every 15,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Clean with mild soap and water with each oil change, offroad trip, or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure each dirt outing. (252004 charge needle assembly available at any ICON distributor)
- Check bearings for excessive wear yearly.
- DO NOT apply any type of lube to the upper and lower bearings.

#### **DIRT USE:**

- Send in for factory servicing every 1,000 miles.
- Check nitrogen pressure each outing. (252004 charge needle assembly available at any ICON distributor)
- Remove any buildup of mud or debris from shocks and coil springs after every outing.

### ICON VEHICLE DYNAMICS SHOCK ABSORBER WARRANTY

This shock absorber has a 1 year warranty against any manufacturer's defects. If a shock fails within the initial year of ownership, the shock must be shipped to ICON Vehicle Dynamics for inspection and service. If a shock is inspected and it has been determined the shock failed due to neglect, damage caused by improper installation or any other reason besides "normal wear and tear", the owner of said shock is responsible for all service costs. This includes labor, parts, and shipping.

ICON Vehicle Dynamics warrants to the original retail purchaser who owns the vehicle on which the product was originally installed. ICON Vehicle Dynamics does not warrant the product for finish, alterations, modifications and/or installation contrary to ICON Vehicle Dynamics instructions. ICON Vehicle Dynamics products are not designed, nor are they intended to be installed on vehicles used in race applications, for racing purposes or for similar activities. (A "race" is defined as any contest between two or more vehicles, or a contest of one or more vehicles against the clock, whether or not such contest is for a prize). This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warranty are sales outside of the United States of America and Canada.

ICON Vehicle Dynamics' obligation under this warranty is limited to the repair or replacement, at ICON Vehicle Dynamics' discretion, of the defective product. Any and all costs of removal, installation or re-installation, freight charges and incidental or consequential damages are expressly excluded from this warranty. Items that are subject to wear are not considered defective when worn and are not covered.

ICON Vehicle Dynamics components must be installed as a complete kit as shown in our current application guide. Any substitutions or exemptions of required components will immediately void the warranty. Some finish damage may happen to parts during shipping and is not covered under warranty.

This warranty is expressly in lieu of all other warranties expressed or implied. This warranty shall not apply to any product that has been improperly installed, modified or customized subject to accident, negligence, abuse or misuse.

# ICON VEHICLE DYNAMICS

PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS