ICON Vehicle Dynamics 71607 Installation Instructions

Front 2.5 Expansion Coilover for Silverado & Sierra 1500

Part number: 71607

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Scan for fitment, price and install help

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71607 INSTALLATION INSTRUCTIONS

3/3/2023 REV.A

PART #	DESCRIPTION
71607	19-23 GM 1500 FRONT 2.5 EXP COILOVER

COMPONENTS INCLUDED

(1) 174958 19 GM 1500 FRONT 2.5 IR EXP COILOVER (1) 170156 19 GM FRONT BEAUTY PLATE	(1) 294060 EXP COIL MOUNT KIT

HARDWARE INCLUDED

(1) 605988 EXP COILSEAT SNAP RING SS (1) 257516 EXP COILSEAT	(1) 605968 VIBRATITE BLUE 2ML BULLET

TOOLS REQUIRED

JACK JACK STANDS RETAINING RING PLIERS TORQUE WRENCH COIL SPRING COMPRESSOR 3/4" SOCKET / WRENCH 7MM SOCKET / WRENCH	9MM SOCKET / WRENCH 10MM SOCKET / WRENCH 15MM SOCKET / WRENCH 18MM SOCKET / WRENCH 21MM SOCKET / WRENCH PRY BAR

TECH NOTES

1. YOUR ICON SHOCK ASSEMBLIES COME FACTORY CHARGED TO 250 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. NOT COMPATIBLE WITH MODELS EQUIPPED WITH ADAPTIVE RIDE CONTROL.

3. NOT COMPATIBLE WITH ZR2 AND AT4X SUB MODELS.

4. NOT COMPATIBLE WITH TRAIL BOSS AND AT4 MODELS.

5. SEE PAGE 7 FOR EXP SHOCK GROOVE SPECS.



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. Lift vehicle and securely place heavy duty jack stands under the manufacturer recommended lifting locations for the front of the vehicle. Take care when lifting the vehicle, and allow 3-4" of ground clearance from the tire. Remove front tires. NEVER WORK UNDER AN UNSUPPORTED VEHICLE.

2. Starting on the driver side, remove the five 10mm bolts that hold the speed sensor and line, brake line, and brake pad sensor wire from the knuckle (passenger side only have four bolts). Move the loose the wiring to the back, along the frame. **[FIGURE 1 & 2]**

FIG.1





FIG.2

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3. Disconnect the sway bar link from the sway bar using a 9mm and 18mm. **[FIGURE 3]**

FIG.3



4. Support the lower control arm with a jack. Remove the three 18mm nuts from the top of the coilover mount. The wiring harness can be pried off the stud with a pry bar. On the passenger side, the inner nut can be accessed from under the hood. **[FIGURE 4]**

FIG.4



5. Using a 15mm, remove the two bolts that hold the coilover to the lower control arm. **[FIGURE 5]**

FIG.5



6. Remove the tie rod from the knuckle using a 21mm and a ball joint separator. A 10mm may be needed to hold the ball stud from turning while removing the nut.

7. Remove the upper control arm ball joint from the knuckle using an 18mm and a ball joint separator. Keep the nut while breaking the stud loose from the knuckle. Once the stud is loose, remove the nut and support the knuckle so that the CV axle does not pull apart or over-extend the brake hose. **[FIGURE 6 & 7]**

FIG.6





FIG.7

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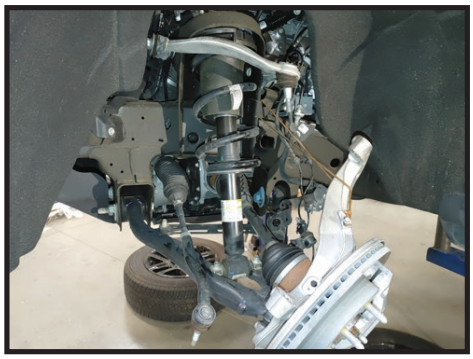
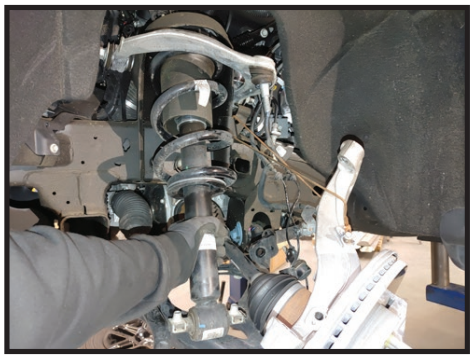
8. Once the stud is loose, remove the nut and support the knuckle so that the CV axle does not pull apart or over-extend the brake hose. **[FIGURE 8]**

FIG.8



9. Remove the coil-over from the vehicle now. Lower the jack enough to pull the bottom of the coilover from of the arm first then slide it out completely. **[FIGURE 9]**

FIG.9



10. Before removing the spring, mark the upper mount, coil isolator and spring with a marker. Make sure you orient the front of the coilover upper mount so you know which way to install it onto the ICON coilover. Using a spring compressor, remove the factory spring and upper mount from the coilover. **[FIGURE 10 & 11]**

FIG.10





FIG.11

11. Use an 18mm to remove the center nut on top of the coilover, once you have compressed the spring some. Be careful as the spring is under a lot of compression and the shock can shoot out when the nut is removed. Stand clear.

12. With the upper coilover disassembled, take the aluminum upper mount and drill out the center hole to 1/2”. Then reinstall it onto the spring isolator, making sure the marks are aligned. **[FIGURE 12 & 13]**

FIG.12

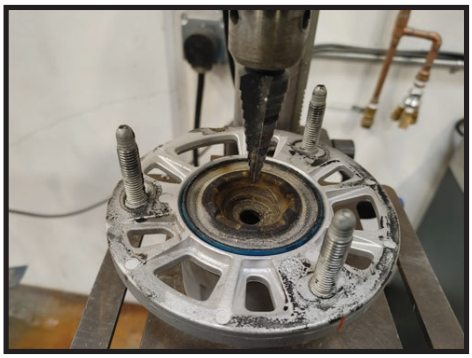




FIG.13

13. Grab the new ICON coilover and install the snap ring, coil seat and OEM GM foam bump stop. The snap ring groove lift heights can be found at the end of the instructions. **[FIGURE 14 & 15]**

FIG.14



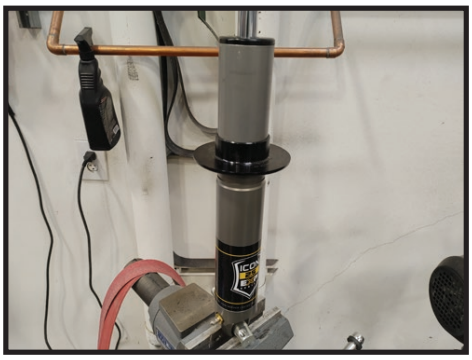


FIG.15

14. Now is a good time to rotate the lower bar-pin into position as shown. The coilover needs to be oriented so that the coilover is closer to the front of the vehicle, leaving plenty of space for the axle. Rotating the bar pin with a wrench or bolts threaded into the holes will help to align the bolts once installed. Install the OEM bump stop as shown. **[FIGURE 16 & 17]**

FIG.16



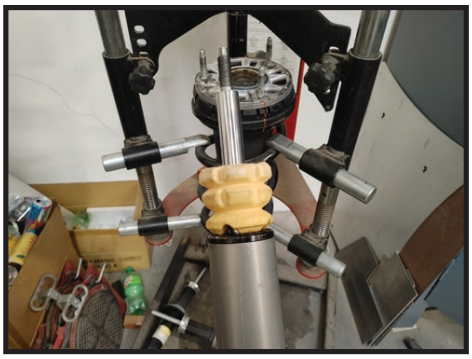


FIG.17

15. Install the ICON coilover into the OEM spring, align the threaded shaft through the upper mount and thread the nut on. Align the lower bar pin and upper mount as shown for easy install. Tighten down nut using a 3/4" [Torque to 60 ft-lbs] (Passenger shock pictured). Install the beauty plate onto the upper mount. **[FIGURE 18 & 19]**

FIG.18

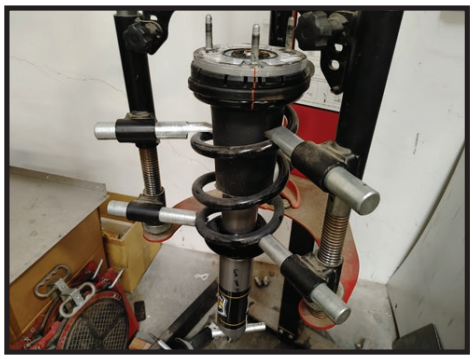




FIG.19

16. Install the coilover onto the truck now. Insert the upper mount into position and then the lower bar pin into the arm. Use thread locker on the OEM nuts and torque to 30 ft-lbs. Use Thread locker on the OEM bolts and torque to 40 ft-lbs. **[FIGURE 20]**

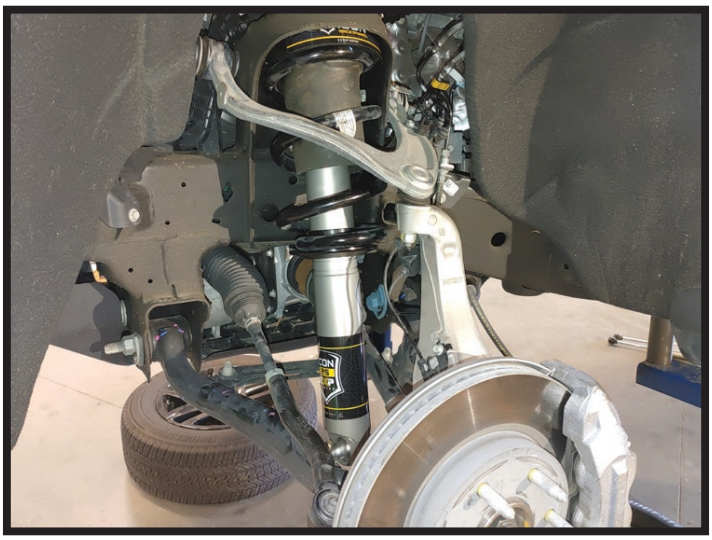
FIG.20



17. Reinstall the upper arm, tie rod, sway bar link and wires and hoses in reverse order of removal.

18. Now repeat the process on the passenger side.

19. Enjoy your new ICON coilovers!



VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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

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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.

SELF-SERVICE:

- Contact ICON for service kits & tools at (951) 689-4266.

PRODUCT REGISTRATION

Please visit: http://www.iconvehicledynamics.com/tech-support/registration/ to register your product.

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.

To send a shock in for warranty please visit our website http://www.iconvehicledynamics.com/tech-support/shock-service/

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ICON GM 1500 FRONT EXP GROOVE SPECS

FENDER TO HUB MEASUREMENT

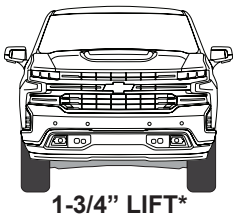
FACTORY
RIDE HEIGHT: **22-1/8”**

MAXIMUM
RIDE HEIGHT: ***25-1/8”**
25-3/4”



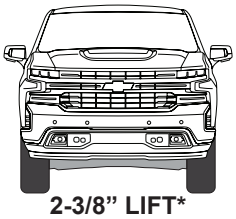


GROOVE 1:



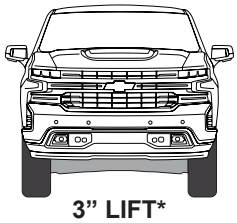
1-3/4” LIFT*
2-3/8” LIFT

GROOVE 2:



2-3/8” LIFT*
3” LIFT

GROOVE 3:



3” LIFT*
3-3/4” LIFT

GROOVE 1 & 2

GROOVE 3

***for diesel equipped vehicles.**

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