ICON Vehicle Dynamics 58660 Installation Instructions

2.5 VS IR Coilover Kit for Toyota Land Cruiser 200

Part number: 58660

trailfortress.com/icon-vehicle-dynamics-08-up-lc-200-2-5-vs-ir-coilover-kit-58660

Scan for fitment, price and install help

ICON VEHICLE DYNAMICS ™
7929 Lincoln Ave. Riverside, CA 92504
Phone: 951.689.ICON Fax: 951.689.1016

58660 INSTALLATION INSTRUCTIONS

7-6-2016 REV.B

PART #	DESCRIPTION
58660	08-UP LAND CRUISER 200 2.5 VS IR COILOVER KIT

COMPONENTS INCLUDED

(2) 154960 08+ LAND CRUISER CO IR UPKG	(1) 611025 CO HARDWARE KIT

HARDWARE INCLUDED

611025 HARDWARE KIT

(8) 605101 3/8-16 X 1.000 HHCS	(8) 605131 3/8 SPLIT LOCK WASHER

TOOLS REQUIRED

JACK JACK STANDS TORQUE WRENCH PLIERS	12MM SOCKET / WRENCH 19MM SOCKET / WRENCH 22MM SOCKET / WRENCH 24MM SOCKET / WRENCH 9/16" SOCKET WRENCH

TECH NOTES

1. YOUR ICON COILOVER 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. 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 2.00" OF EXPOSED THREADS BETWEEN THE BOTTOM OF THE TOP CAP AND THE TOP OF THE COIL ADJUSTER NUT. ADJUSTING PRELOAD BEYOND THIS SETTING WILL CAUSE THE COIL TO BIND AND DAMAGE WILL OCCUR TO COILOVER AND/OR VEHICLE.



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 INSTALLTION 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. To make room for the coil over to be swapped out the bottom you will need to separate the lower ball joint from the spindle. It is also easier to move the lower A-arm if you loosen the inner A-arm pivots so you don't have to fight the bushing stiffness. Note the position of the alignment cams. **[FIGURE 1 & 2]**

FIG.1





FIG.2

trailfortress.com/icon-vehicle-dynamics-08-up-lc-200-2-5-vs-ir-coilover-kit-58660

3. Remove the 4 nuts securing the upper coil seat to the coil bucket. Do not loosen or remove the larger center nut securing the spring seat to the shock shaft. This would result in the stock coil assembly to come apart violently causing damage to components and possible injury. **[FIGURE 3]**

FIG.3



4. Remove the bolt holding the lower shock eye to the lower A-arm. Note orientation, this bolt will be reused. **[FIGURE 4]**

FIG.4



5. Remove the stock assembly. Due to rubber bushing stiffness you may need to push down on the suspension. To make it easier you can use a pry bar over the top of the upper A-arm and under the pivot bolt for additional leverage. Be careful not to damage any brake lines or wires that may be routed down the A-arm.

6. Trim the edge of the bump stop to clear the coil spring at full extension. **[FIGURE 5 & 6]**

FIG.5





FIG.6

7. Install new coil assembly: there are 7 threaded holes in the top of the upper shock mount, you will be using 4 of them. Using a 9/16" socket/wrench, install upper mount with the charge port pointing outward using (4) of the supplied 3/8" X 1" bolts and lock washers. [Torque to 33 ft-lbs]

8. Install lower shock mount to A-arm: The lower shock mount has slightly offset spacers. Make sure the short spacer is toward the rear of the vehicle. Install the factory lower shock bolt. [Torque to factory spec]

9. Reattach the lower A-arm to the spindle. [Torque to factory spec]

10. Install wheels [Torque to factory spec] and lower vehicle back to the ground. **NOTE: If the inner A-arm pivots were loosened in step 2, re-tighten them now with the vehicle on the ground.** [Torque to factory spec]

11. Have the vehicle professionally aligned.

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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

trailfortress.com/icon-vehicle-dynamics-08-up-lc-200-2-5-vs-ir-coilover-kit-58660

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/

ICON VEHICLE DYNAMICS

PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

7929 Lincoln Ave. Riverside, CA 92504 Phone: 951.689.ICON Fax: 951.689.1016

www.iconvehicledynamics.com

FOLLOW US ON FACEBOOK!

trailfortress.com/icon-vehicle-dynamics-08-up-lc-200-2-5-vs-ir-coilover-kit-58660