

7929 Lincoln Ave. Riverside, CA 92504  
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PART #	DESCRIPTION
91001	F-SERIES BILLET SHACKLE KIT

COMPONENTS INCLUDED	
(2) 194048 F-SERIES BILLET SHACKLE W/ BUSHING	
HARDWARE INCLUDED	
N/A	
TOOLS REQUIRED	
FLOOR JACK JACK STANDS RATCHET IMPACT	TORQUE WRENCH 21MM SOCKET / WRENCH 24MM SOCKET / WRENCH
TECH NOTES	
<ol style="list-style-type: none"> <li>WORKS WITH 2010 AND NEWER F150 AND F250 TRUCKS, INCLUDING RAPTORS WITH LEAF SPRINGS.</li> <li>PROVIDES 1" OF DROP.</li> <li>ESTIMATED INSTALL TIME: 2 HOURS</li> </ol>	



**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

- Place the truck on a flat surface with the parking brake engaged, chock the front tires.
- Use a suitable floor jack in the manufacturer designated spot on the frame to lift the rear of the truck, then place a suitable jack stand under the frame and set the truck down securely on the jack stand. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove the rear wheels and tires.
- Use the floor jack to support the rear axle.
- Use a 24mm to loosen and remove the nut holding the stock shackle to the frame mount. Some models, it's a 21mm for the bolt and the nut is captured inside the mount.
- With the bolt removed, you will need to jack up the axle so you can loosen and remove the bolt that holds the shackle to the leaf spring. A 24mm will loosen the nut while a 21mm can hold the bolt from spinning. Slide the bolt out and remove the shackle.
- Install the new ICON billet shackle as shown and install the OEM bolts in the same manner they were removed. The upper bolt will need to be installed prior to fitting the shackle into the frame mount. [FIGURE 1 & 2]

FIG.1

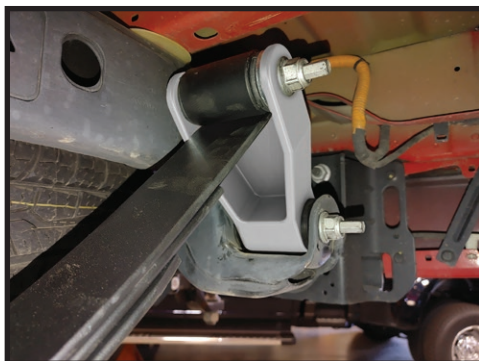


FIG.2



7. With both shackles installed, install the wheels and tires and lower the truck to the ground. Once on the ground, the bolts can be torqued to 175 ft-lbs.

**NOTE:** If the bolts are torqued with the suspension drooped out, it will cause premature wear and possible bushing failure.

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

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

### **ICON VEHICLE DYNAMICS LIMITED LIFETIME WARRANTY**

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.



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