ICON Vehicle Dynamics 94000 Installation Instructions

Front Knuckle Kit for Ford F-150 4WD (2021-2025)

Part number: 94000

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94000 INSTALLATION INSTRUCTIONS

8-17-2023 REV.A

PART #	DESCRIPTION
94000	21-23 F150 4WD FRONT KNUCKLE KIT

COMPONENTS INCLUDED

(1) 197060D 21 F150 4WD LIFTED STEERING KNUCKLE DRVR	(1) 197060P 21 F150 4WD LIFTED STEERING KNUCKLE PASS

HARDWARE INCLUDED

(1) 605969 VIBRATITE RED 2ML BULLET	

TOOLS REQUIRED

JACK JACK STAND RATCHET EXTENSIONS TORQUE WRENCH HAMMER / DEADBLOW HAMMER BALL JOINT SEPERATOR	T45 TORX 5MM HEX KEY 8MM SOCKET / WRENCH 10MM SOCKET / WRENCH 13MM SOCKET / WRENCH 18MM SOCKET / WRENCH 21MM SOCKET / WRENCH 36MM SOCKET / WRENCH

TECH NOTES

1. ESTIMATED INSTALL TIME: 3-4 HOURS

2. 4WD EQUIPPED VEHICLES ONLY

3. WILL NOT WORK ON CCD EQUIPPED TRUCKS

4. MUST USE ICON UPPER CONTROL ARM: #98522DJ

5. ALL OEM HARDWARE FROM THE KNUCKLE REMOVAL WILL BE REUSED ON THE ICON KNUCKLE.



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. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove the wheels/tires.

2. Begin by removing the sway bar link from the upper part of the knuckle using a T45 torx and 21mm wrench. **[FIGURE 1]**

FIG.1



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3. Next, remove the ABS and brake line bracket from the knuckle using a 10mm. **[FIGURE 2]**

FIG.2



4. Remove the brake caliper from the knuckle using a 21mm. Once removed, use a wire hanger or string to support the caliper so it does not hang by the brake line. Remove the rotor and set it aside. **[FIGURE 3 & 4]**

FIG.3



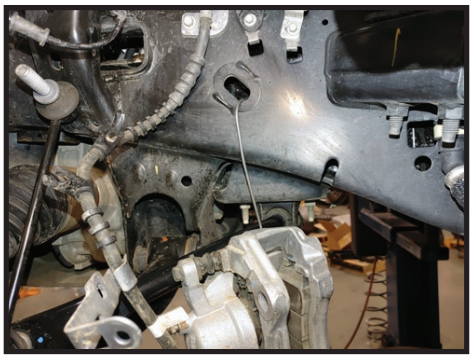


FIG.4

5. Remove the 3 bolts holding the rotor rock shield from the knuckle using an 8mm. **[FIGURE 5 & 6]**

FIG.5

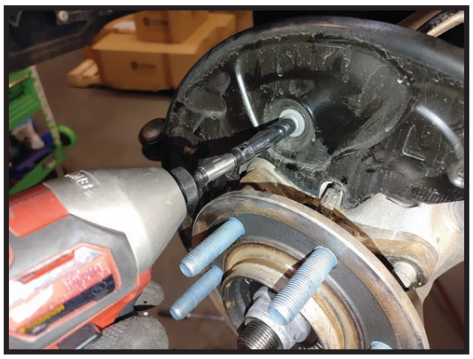




FIG.6

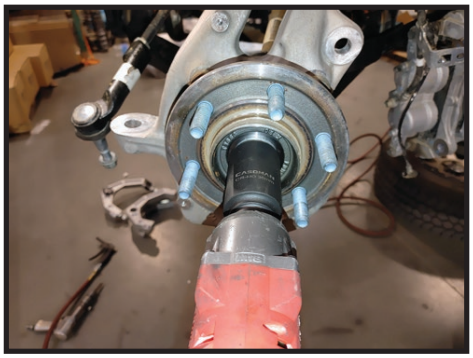
6. Remove the speed sensor from the top side of the knuckle, behind the rock shield using a 5mm hex key. **[FIGURE 7]**

FIG.7



7. Remove the CV axle nut from the hub. Depending on the hub style of your truck, it will be a 13mm or a 36mm socket. If the truck is equipped with electric hubs, also, remove the 4x 8mm bolts from the backside of the knuckle. This will allow the locking portion to be removed with the CV axle shaft. **[FIGURE 8, 9 & 10]**

FIG.8



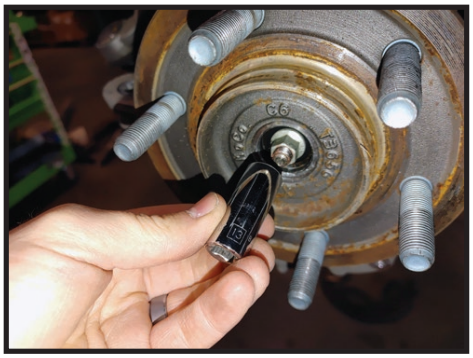
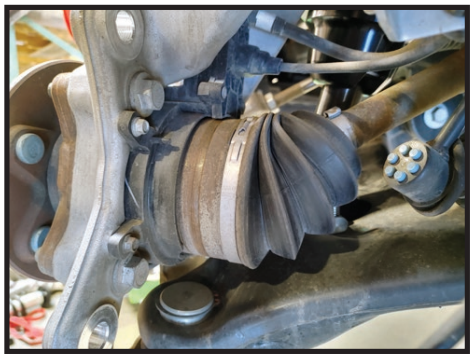


FIG.9

FIG.10



8. Next, loosen the upper balljoint nut using a 18mm. Leave the nut loosely installed. Use a ball joint separator to dislodge the ball joint stud from the knuckle. A hammer can also be used by striking the side of the knuckle. **[FIGURE 11 & 12]**

FIG.11

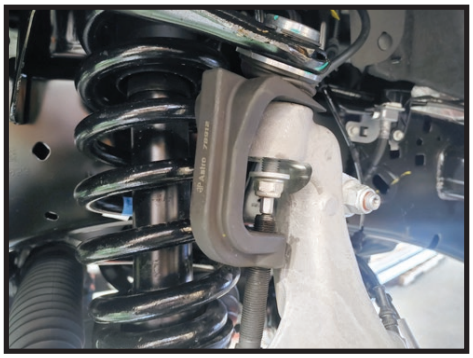




FIG.12

9. Repeat this process on the lower ball joint. Use a 24mm to loosen the nut. **[FIGURE 13]**

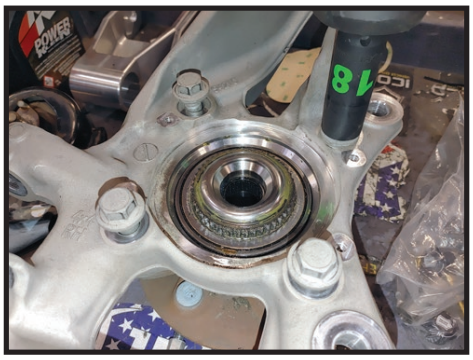
FIG.13



10. The knuckle can now be removed. The upper control arm might be under pressure, take caution when removing the nut. Tilt the arm out and remove the CV axle from the hub, a dead blow hammer can be used to persuade it. Now remove the lower ball joint nut and set the knuckle down.

11. With the knuckle out of the vehicle, the hub can be removed and transfer to the new ICON knuckle, using an 18mm. **[FIGURE 14 & 15]**

FIG.14



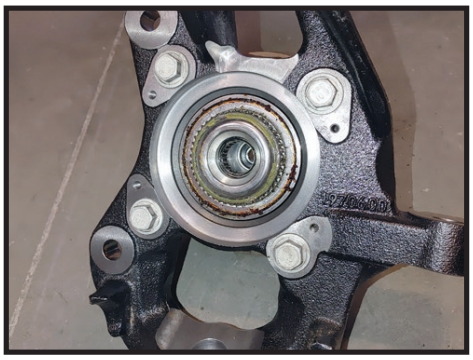


FIG.15

12. Move on to the coilover and upper control arm instructions now. Some steps might be redundant.

13. With the ICON coilover and upper control arm installed, the ICON knuckle can be reinstalled in the reverse order of removal of the OEM knuckle. Be sure to torque all bolts to OEM spec. Red thread locker should be used on the hub and brake caliper bolts and CV axle nut.

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

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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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