

PART #	DESCRIPTION
55166	10-24 4RUNNER 10-14 FJ CRUISER HD TIE ROD KIT

COMPONENTS INCLUDED	
(2) 154510 10-24 4RUNNER 10-14 FJ CRUISER HD TIE ROD ASSEMBLY	
HARDWARE INCLUDED	
605968 BLUE LOCKTITE	
TOOLS REQUIRED	
19MM BALL JOINT SEPARATOR PLIERS	TORQUE WRENCH PINCH CLAMP PLIERS LARGE ADJUSTABLE WRENCH
TECH NOTES	
1. GREASE THE INNER PIVOT BEFORE INSTALL 2. INSTALL TIME: 2 HOURS	



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. Place the truck on a flat surface with the parking brake engaged, chock the rear tires.
2. Use a suitable floor jack in the manufacturer designated spot on the frame to lift the front 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 front wheels and tires.
3. Begin by removing the cotter pin from the outer tie rod nut using a pliers. [FIGURE 1]

FIG.1



4. Use a 19mm wrench to remove the castle nut from the tie rod stud. [FIGURE 2]

FIG.2



5. Use a ball joint separator to dislodge the taper from the knuckle. A hammer can also be used to strike the edge of the knuckle. [FIGURE 3]

FIG.3



6. Remove the outer clamp on the tie rod boot using a pliers to pinch and slide the clamp out of the way. [FIGURE 4]

FIG.4



7. Next, you'll want to remove the inner clamp using a pliers to pry apart the factory pinch clamp. With the clamp removed, the boot can be slid out of the way to access the inner joint and remove it using an adjustable wrench. [FIGURE 5 & 6]

FIG.5



FIG.6



8. Before installing the driver side tie rod check for clearance in the steering rack if the rackend of the tie rod is too tight please clearance the rack to avoid collision.

9. Clean out the threads, grab the new tie rod assembly and thread it into the rack using the supplied thread locker. Tighten to factory spec. [FIGURE 7]

FIG.7



10. Grab the new boot and slide it over the inner tie rod assembly. Then thread the outer assembly onto the inner including the jam nut. Use the old tie rod assembly to match the length to the new. [FIGURE 8]

FIG.8



11. The boot can be clamped into place now. [FIGURE 9, 10 & 11]

FIG.9



FIG.10



FIG.11



12. Repeat this process with the outer clamp. Apply a small amount of grease to the sealing surface which will help with future alignment, to keep the boot from twisting. [FIGURE 12]

FIG.12



13. Insert the outer ball joint into the knuckle, tighten with the castle nut to 50 ft/lbs and install the cotter pin. Install the grease zerk. [FIGURE 13 & 14]

FIG.13



FIG.14



14. Repeat process on passenger side.

15. Get vehicle professionally aligned.

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.

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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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