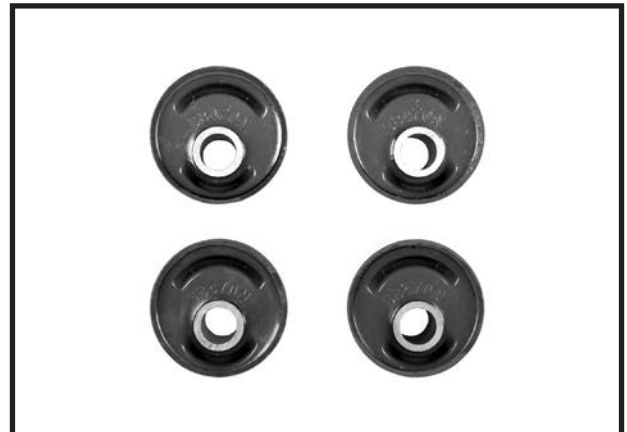


7929 Lincoln Ave. Riverside, CA 92504
 Phone: 951.689.ICON Fax: 951.689.1016

PART #	DESCRIPTION
53008	91-97 LAND CRUISER CASTER CORRECTION KIT

COMPONENTS INCLUDED	
(4) 155103 91-97 LAND CRUISER CASTER BUSHING (1) PRESS TOOL, WASHER, SLEEVE	(1) ALIGNMENT TEMPLATE
HARDWARE INCLUDED	
N/A	
TOOLS REQUIRED	
JACK JACK STANDS HYDRAULIC SHOP PRESS	TORQUE WRENCH 22MM SOCKET / WRENCH 24MM SOCKET / WRENCH
TECH NOTES	
N/A	



WARNING!

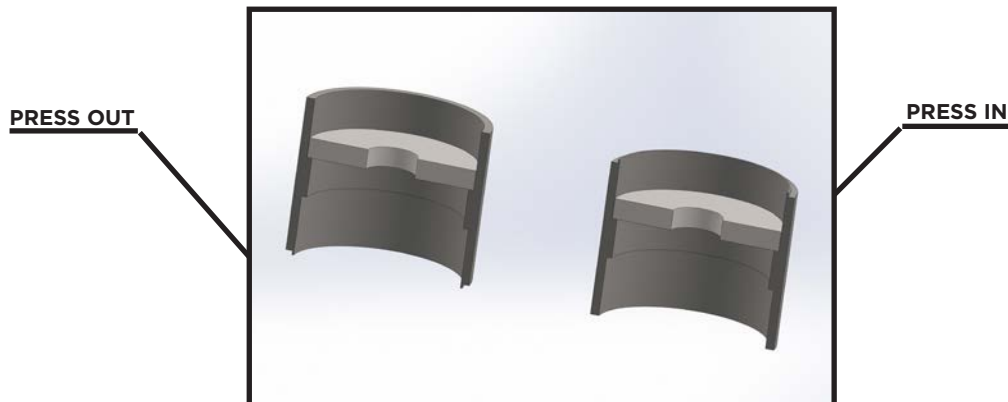
**** READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE!**

**** 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. ENSURE TRUCK IS IN GEAR OR IN PARK, SET PARKING BRAKE, TURN OFF ENGINE AND CHOCK REAR TIRES!
2. This procedure is best done on flat level ground, not on a lift.
3. Raise the front of the vehicle about 1-2" from ride height and support with jack stands under the frame rail. The front tires should still be on the ground but the jack stands should be supporting part of the weight of the vehicle.
4. Loosen (but do not remove) all 6 bolts on the radius arms (2 on the axle and one at the frame per side). The factory nuts are designed to bite into the mount surface so it is better to break loose via the bolt head rather than the nut on the axle end.
5. Remove the radius arm on ONLY ONE SIDE of the vehicle. We will always have at least one of the radius arms in the vehicle to maintain axle position at all times while we replace the bushings on the other one.
6. Measure the distance between the holes on the bushing and on the axle. It is important that the new bushings get installed with the holes the same distance apart. CENTER DISTANCE MEASUREMENT: _____
7. The supplied press tool is a reversible designed, one end is for pressing factory bushings out and the other end is for pressing aftermarket bushing in. The supplied washer is inserted in the tool on the opposite side from the end you are using.



8. A 12 ton (or greater) shop press is recommended to press the bushings in and out. Support the bottom of the arm with the supplied large sleeve. Place the press tool on the metal lip of the OE bushing, the small lip in the tool helps center the tool. Make sure everything is straight in the press and well supported to prevent anything from popping out causing possible damage or personal harm. Press both OE bushings out. [FIGURE 1]

FIG.1



9. Using the supplied template align the new bushings as shown, making sure the hole in the bushing is offset toward the top of the arm in the front position and the bottom of the arm in the rear hole. Mark the arm (top and bottom) where the center line of the bushing is on the template. [FIGURE 2 & 3]

FIG.2

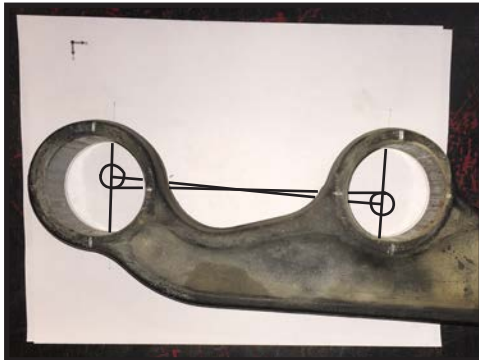
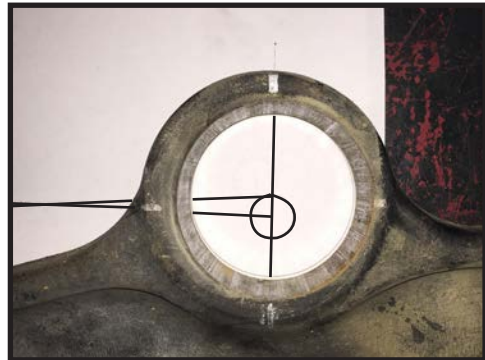


FIG.3



10. Mark the bushing on center line using the template also, note one end is tapered and should be oriented to push in starting with this edge. [FIGURE 4 & 5]

FIG.4



FIG.5



11. Using the other end of the press tool with the washer inserted on the opposite side, press the new bushing into the arm until it is centered in the arm. Make sure the hole center distance is the same as measured in step 6. [FIGURE 6 & 7]

FIG.6



FIG.7



12. Reinstall the arm in the vehicle: Install the frame pivot bolt and the front axle mount bolts loosely. The rear axle mount bolt will NOT line up at this point but the arm will position the axle forward and rearward the correct amount based on its length. You can now remove the frame pivot bolt on the opposite side radius arm and use it as a lever to rotate the axle rearward until the 3rd hole on the first arm lines up, install the 3rd bolt. It may be helpful to use a ratchet strap between the axle and the frame to assist in alignment of holes, not much force should be necessary, if it is check for misalignment or binding.

13. You can now remove the second arm and perform the same bushing replacement steps (6-11)

14. Install the second arm. The holes on this arm should line up now that both arms have caster bushings installed.

15. With all 6 bolts installed loosely, lower the vehicle back on the ground. With the vehicle on the ground bounce and rock the vehicle to settle the suspension. You may now tighten all 6 bolts to factory spec.

16. Check tie rod clearance to radius arms: With the axle rotated back farther the tie rod will be closer to the radius arms. It is closest when the wheels are turned. It also gets closer on one side when the suspension articulates due to bushing flex. Make sure there is clearance in these circumstances to prevent steering bind or damage. You can grind the top of the arm where the forging ridge is to increase clearance if needed.

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.

ICON VEHICLE DYNAMICS

PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

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