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ICON Vehicle Dynamics K53194T Installation Instructions

Stage 4 Suspension System with Tubular Arms, Toyota Tundra

Part number: K53194T

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58461DJ INSTALLATION INSTRUCTIONS

9-20-2023 REV.C

PART #	DESCRIPTION
58461DJ	22-UP TOYOTA TUNDRA TUBULAR UCA KIT

COMPONENTS INCLUDED

(1) 154162 22-UP TUNDRA DRVR UCA	(1) 154163 22-UP TUNDRA PASS UCA

HARDWARE INCLUDED

(8) 150026 B WASHER 2.125 X .630 X .188 CZINC (4) 157560 SLEEVE 1.00 X 16MM X 2.310 CZINC (8) 297034 HAT BUSHING 1.625 X 1.000 X .850 (4) 297042 POLY RING 1.590 X 1.005 X .250 (2) 297166 DELTA JOINT PRO TUBULAR UCA DUST COVER	(2) 605800 M6-1.00 FLANGE NUT GR10.9 YZINC (2) 605862 M6-1.0 X 25MM SHSS 18-8 RAW (2) 605890 M14 FENDER WASHER 36MM OD (1) 605969 VIBRATITE RED 2ML BULLET

TOOLS REQUIRED

JACK JACK STANDS #2 PHILLIPS SCREWDRIVER BODY CLIP REMOVAL TOOL SMALL FLAT BLADE SCREWDRIVER NEEDLE NOSE PLIERS	TORQUE WRENCH 10MM SOCKET / WRENCH 12MM SOCKET / WRENCH 19MM SOCKET / WRENCH 22MM SOCKET / WRENCH

TECH NOTES

1. ICON DELTA JOINTS ARE PRE-GREASED FROM THE FACTORY. ICON RECOMMENDS GREASING THE DELTA JOINT EVERY 3,000 MILES (OR EVERY OIL CHANGE). ADD NEW GREASE UNTIL ALL OF THE OLD GREASE IS EXPELLED FROM THE BOTTOM OF THE DELTA JOINT ASSEMBLY, WIPE AWAY EXCESS WITH A RAG OR SHOP TOWEL.

2. ALL ICON UPPER CONTROL ARMS HAVE BEEN ENGINEERED TO ALLOW FOR THE MOST POSSIBLE CASTER, WHILE STILL ALLOWING THE VEHICLE TO BE PROPERLY ALIGNED. NOTIFY YOUR PROFESSIONAL ALIGNMENT SHOP OF THIS INFORMATION SO THAT MAXIMUM RIDE QUALITY CAN BE ACHIEVED.

3. ESTIMATED INSTALL TIME: 2.5 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. 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. Remove front tires. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove the wheels.

2. Open the hood and disconnect the negative terminal on the battery using a 12mm and unplug the electrical connector.

3. Unplug the electrical connector on the air intake tube. **[FIGURE 1]**



FIG.1

4. Remove the airbox. Loosen the hose clamp with a #2 phillips screwdriver or 10mm on the air intake hose located closest to the engine. **[FIGURE 2]**

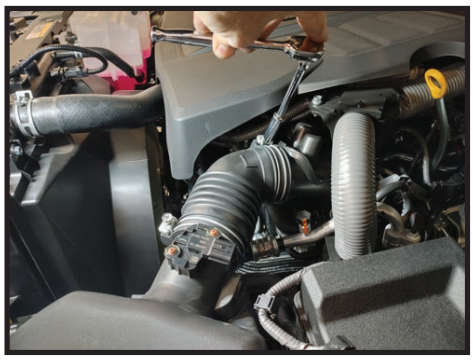

FIG.2

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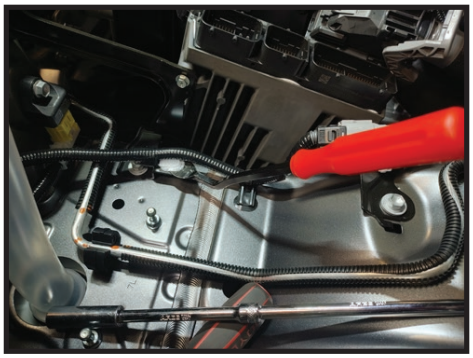
5. Lift up on box and remove. The box is only held in place by the intake tube and rubber grommets underneath.

6. With the box removed, remove the wiring clips from the ECU bracket. **[FIGURE 3 & 4]**

FIG.3



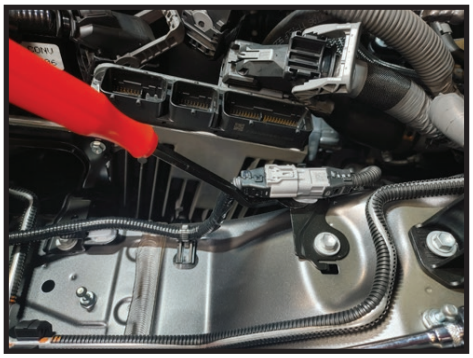
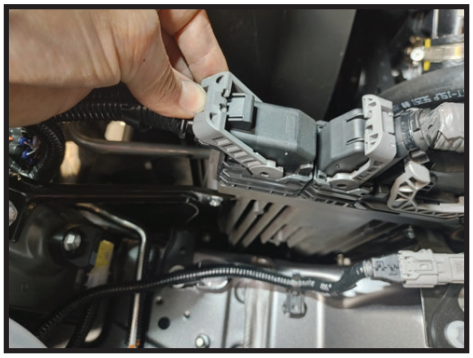


FIG.4

7. Unplug the small grey connector next to the ECU.

8. Unplug the ECU harnesses from the ECU. Push down on the safety latch and push the lever the opposite way. The connector will lift up and you will be able to remove it completely. **[FIGURE 5 & 6]**

FIG.5



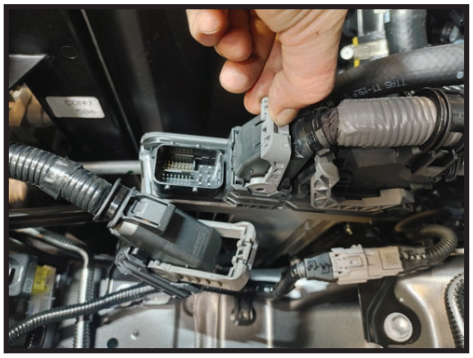
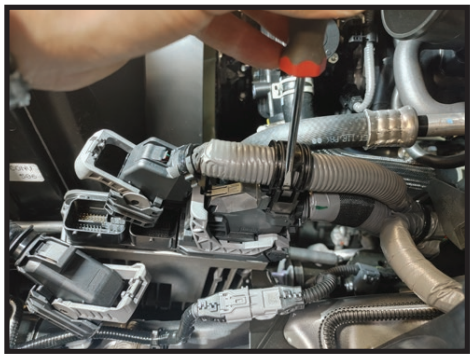


FIG.6

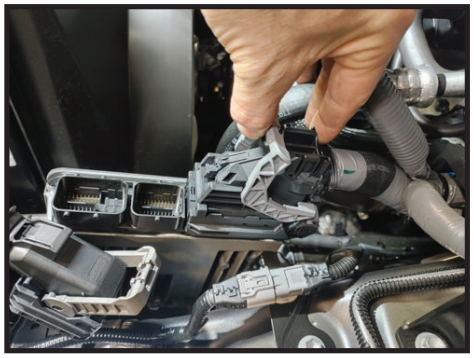
9. Remove the harness clamp from the large wire loom using a small flat blade screwdriver. **[FIGURE 7]**

FIG.7



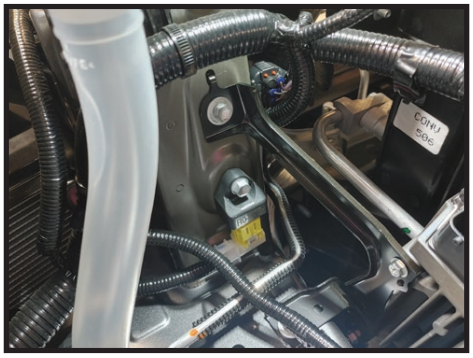
10. Remove the large harness from the ECU. Press lock clip and pull up on the grey lever and pulling plug out. **[FIGURE 8]**

FIG.8



11. Remove three 10mm bolts from the ECU bracket. One on the front core support, two on the fender well. **[FIGURE 9 & 10]**

FIG.9



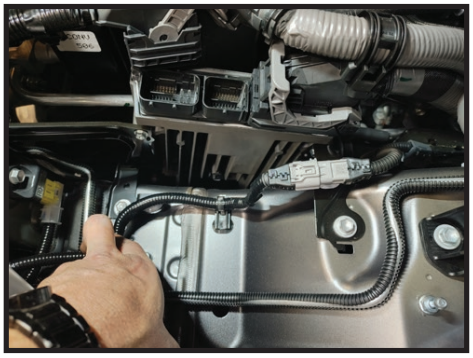
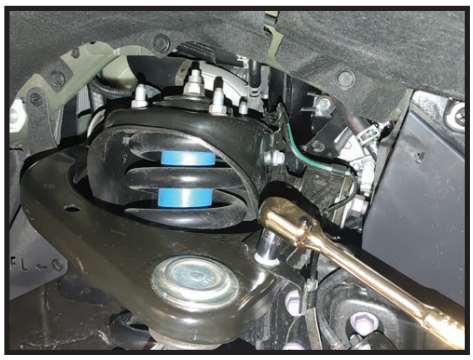


FIG.10

12. Remove the 12mm bolt from the top of the UCA that holds the ABS wire. **[FIGURE 11]**

FIG.11



13. Remove the cotter pin from the UCA balljoint using a small screwdriver or pick to pry over the safety clip, and pull out the pin using a needle nose pliers. Loosen the 19mm nut on the balljoint. **[FIGURE 12 & 13]**

FIG.12





FIG.13

14. Use a hammer or balljoint separator to loosen the balljoint taper from the spindle. **[FIGURE 14]**

FIG.14



15. Loosen and remove the UCA pivot bolt from the frame using a 22mm. **[FIGURE 15]**

FIG.15

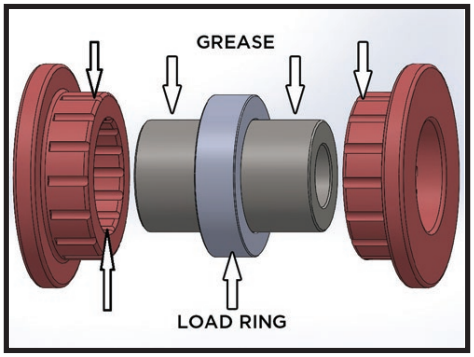


16. Remove the factory UCA. **[FIGURE 16]**

FIG.16



17. Install the new bushings into the ICON tubular UCA as indicated by the drawing below. Grease before install.



18. Install the ICON UCA into position and slide the factory mounting bolt through the bushings and frame. Apply thread locker to the threads of the bolt and install the nut (passenger side shown). **[FIGURE 17 & 18]**

FIG.17



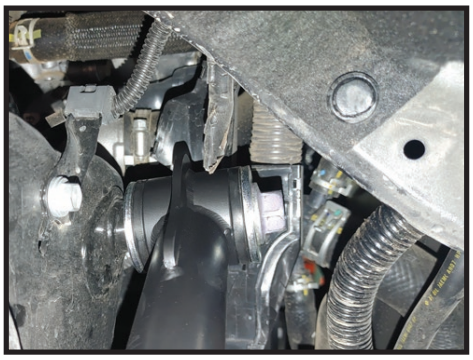


FIG.18

19. Install the Delta Joint Pro into the spindle, apply included blue thread locker to threads on flange nut and thread on to Delta Joint Pro with washer (605890) between the flange nut and spindle [Torque the nut to 70 ft-lbs]. **[FIGURE 19]**

FIG.19



20. Torque the long pivot bolt to factory spec.

21. Install the brake line bracket onto the UCA with the supplied M6 stud and nut. Tighten to 35 in-lbs. **[FIGURE 20]**

FIG.20



22. Reinstall the ECU and airbox in reverse order of removal.

23. Repeat steps 12-21 on passenger side.

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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

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ICON VEHICLE DYNAMICS LIMITED LIFETIME WARRANTY

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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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