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

T99PS9FT0J INSTALLATION INSTRUCTIONS

7-16-2018 REV.C

PART #	DESCRIPTION
T99PS9FT0J	2016-UP NISSAN TITAN (NON-XD) PERFORMANCE SUSPENSION SYSTEM

COMPONENTS INCLUDED

(1) TITAN TUBULAR UCA (DRVR)	(1) DELTA JOINT REGISTRATION CARD
(1) TITAN TUBULAR UCA (PASS)	(1) U-BOLT KIT WITH HARDWARE
(4) HAT BUSHING	(2) REAR LIFT BLOCK
(4) HAT BUSHING (CHAMFERED)	(2) TITAN REAR 2.0 SHOCK
(4) POLYURETHANE RING	(2) TITAN 2.5 COILOVER
(4) BUSHING SLEEVE	(1) COILOVER HARDWARE KIT
(4) 1/4-28 STRAIGHT STEEL ZERK	(2) TITAN 3/16" BUMP STOP SPACER

HARDWARE INCLUDED

COILOVER HARDWARE KIT	
(6) 3/8-16 X 1.000 BOLT	(6) 3/8" SPLIT LOCK WASHER

TOOLS REQUIRED

JACK	13MM SOCKET / WRENCH
JACK STANDS	14MM SOCKET / WRENCH
FLATHEAD SCREWDRIVER	17MM SOCKET / WRENCH
TORQUE WRENCH	19MM SOCKET / WRENCH
9/16" SOCKET / WRENCH	22MM SOCKET / WRENCH

TECH NOTES

1. 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.

2. LOWER CONTROL ARM CAM KIT (SPC #87520) IS NOT REQUIRED FOR INSTALLATION, ALTHOUGH IT MAY MAKE THE ALIGNMENT PROCESS EASIER.

3. YOUR ICON COILOVER ASSEMBLIES COME FACTORY CHARGED TO 250 PSI. RELEASING NITROGEN PRESSURE MAY LEAD TO SHOCK MALFUNCTION AND REDUCED RIDE QUALITY. FAILURE CAUSED BY LOW NITROGEN PRESSURE IS NOT COVERED UNDER ICON'S WARRANTY POLICY.

4. YOUR ICON COILOVER ASSEMBLIES COME SHIPPED AT ICON'S RECOMMENDED RIDE HEIGHT. REDUCING DROOP TRAVEL WILL REDUCE RIDE QUALITY. DO NOT PRELOAD THE COIL BEYOND 0.50" (MAX OF .375" IS RECOMMENDED) OF EXPOSED THREADS BETWEEN THE BOTTOM OF THE TOP CAP AND THE TOP OF THE COIL ADJUSTER NUT. ADJUSTING PRELOAD BEYOND THIS SETTING WILL CAUSE THE COIL TO BIND AND DAMAGE WILL OCCUR TO COILOVER AND/OR VEHICLE. IF ADJUSTING PRELOAD, ICON COILOVER SPANNER WRENCH (PN: 198000) IS REQUIRED.

5. YOUR REAR 2.0 ICON SHOCK ASSEMBLIES COME FACTORY CHARGED TO 180 PSI. RELEASING NITROGEN PRESSURE MAY LEAD TO SHOCK MALFUNCTION AND REDUCED RIDE QUALITY. FAILURE CAUSED BY LOW NITROGEN PRESSURE IS NOT COVERED UNDER ICON'S WARRANTY POLICY.

6. 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.

PRODUCT IMAGE

COMING SOON

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

UPPER CONTROL ARM INSTALLATION

1. Using a properly rated jack or hydraulic lift, raise the front of the vehicle and support the frame rails with jack stands. Ensure the jack stands are secure and set properly before lowering the jack. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove front wheels.

2. Using a jack, slightly lift the lower control arm to support the suspension and prevent it from being at full droop.

3. Disconnect the upper ball joint: Remove the cotter pin securing the upper ball joint nut. Using a 22mm socket/wrench, loosen the nut to the end of the shank but do not remove entirely so that the nut protects the threads. Dislodge the taper by either using a ball joint separator or by striking the spindle on the outside of the taper with a large hammer. Remove the ball joint nut and disconnect the upper control arm from the spindle. **(4WD ONLY)** Support the spindle so that it does not overextend the CV joints when detached. **[FIGURE 1]**

FIG.1

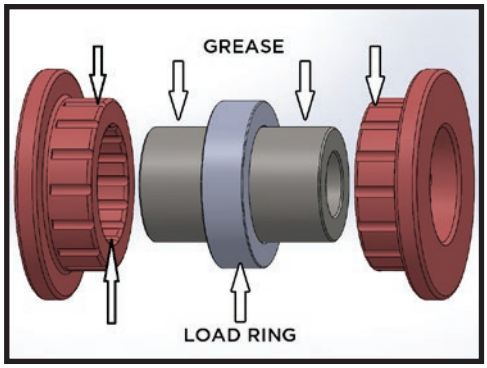
FIG.2

4. Using a 19mm socket/wrench, remove the upper control arm pivot bolts from the frame. This hardware will be reused, note direction and order of components. Remove the nut and washer from the rear side of the pivot bolts. Take care to not damage the steering column boot when removing hardware. **[FIGURE 2]**

5. Remove the factory upper control arm assembly from the frame.

6. Before installing the new upper control arms, care must be taken to grease the bushings (liberally) prior to installing assembly. Failure to grease properly will cause premature bushing wear and increased noise. Install the chamfered bushings on the rearward side (towards the rear of the vehicle on both sides) of the upper control arm frame pivots. **[FIGURE 3 & 4]**

FIG.3



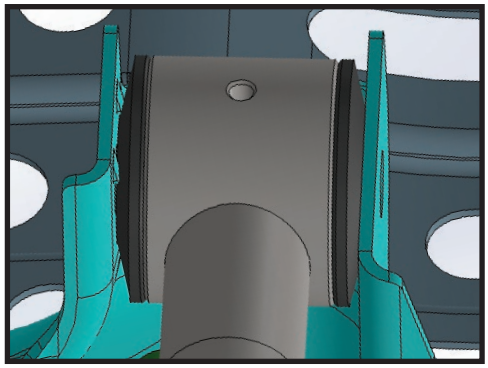


FIG.4

7. Install the new ICON tubular upper control arm into the chassis. If the upper control arms are difficult to install in the frame pockets, verify that the bushings have been properly installed. Note the side and orientation of the arms. Carefully feed the pivot bolts through the pivots of the arm and through the chassis. Grease the zerk fittings until you can see that the grease has worked itself all the way into the bushings and then tighten pivot bolts. [Torque to factory spec]

FRONT COILOVER INSTALLATION

1. Remove the (3) smaller nuts securing the upper coil seat to the frame mount using a 14mm socket/wrench. DO NOT loosen or remove the large center nut securing the spring seat to the shock shaft. Removing the large nut will result in the stock coil assembly to come apart violently, causing damage to components and possible injury. **[FIGURE 1]**

FIG.1

FIG.2

2. Remove the bolt connecting the shock to the lower control arm using a 19mm socket/wrench. Note orientation, as this bolt will be reused. The head of the bolt should be facing forward toward the front of the truck. **[FIGURE 2]**

3. Remove the OEM coilover assembly. Be careful not to damage any brake lines or wires.

4. Install new ICON coilover assembly using a 9/16" socket/wrench with (3) 3/8" X 1.0" bolts and (3) 3/8" lock washers. [Torque to 35 ft-lbs]

5. Fasten the coilover to the lower control arm: The lower shock mount has (1) long and (1) short spacer. **MAKE SURE THAT THE LONG SPACER IS PLACED TOWARDS THE REAR OF THE VEHICLE.** This will position the shock further forward for maximum coil to CV clearance. Reinstall the factory lower shock bolt. [Torque to factory spec]

6. Pivot the Delta Joint stem so that it is inline with the taper bore in the spindle. The new Delta Joint will be very stiff the first time you move it.

7. Rotate the upper control arm downward and install the stem through the spindle taper, be careful to not damage the threads of the taper. Install the supplied flanged nut on the taper pin. [Torque to 75 ft-lbs]

8. Install the supplied bump stop spacer under the factory bump stop using a 13mm socket/wrench. [Torque to factory spec]

REAR LIFT BLOCK & SHOCK INSTALLATION

1. Using a properly rated jack or hydraulic lift, raise the rear of the vehicle and support the frame rails with jack stands. Ensure the jack stands are secure and set properly before lowering the jack. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove the rear wheels.

2. Remove the plastic strip in the driver's side wheel well providing access to the upper shock mount. Use a flathead screwdriver to pop up the center piece of the reusable plastic rivets then use the screwdriver to lift the plastic rivet and remove it from the hole. Take care to not break the rivets and set the plastic panel and rivets aside. **[FIGURE 1]**

FIG.1

FIG.2

3. Remove the clip holding the wire harness to the top of the frame, lift the wire harness allowing access to the nut. **[FIGURE 2]**

4. Remove the factory shocks using a 19mm and 21mm socket/wrench.

5. Remove the U-bolts from the driver's side of the truck using a 19mm socket/wrench.

6. Lower the axle enough to install the lift block between the axle and the spring.

7. Place the lift block on the spring pad of the axle with the locating pin in the center hole of the spring pad.

8. Slowly raise the axle while guiding the leaf spring center pin into the hole in the lift block.

9. Fasten using the supplied U-bolts using a 7/8" socket/wrench, do not torque until vehicle is sitting under its own weight.

10. Repeat steps on passenger side.

11. Mount the new shocks with a 19mm/21mm socket/wrench with the shaft facing upwards. [Torque to factory spec] **[FIGURE 3 & 4]**

FIG.3

FIG.4

12. Push the wire harness clip back into the hole in the top of the frame.

13. Fasten the plastic panel to the driver side wheel well using the reusable plastic rivets.

14. Install the wheels and slowly lower the vehicle back to the ground. [Torque U-bolts to 75 ft-lbs] [Torque lugs to factory spec]

15. If desired, remove excess threads from U-bolts so that they are flush with the nuts.

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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