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## 58460 INSTALLATION INSTRUCTIONS

5-4-2016 REV.A

PART #

58460

# O7-UP TUNDRA TUBULAR UCA KIT

COMPONENTS INCLUDED
(1) 154102 07+ TUNDRA TUBULAR UCA (DRIVER) (1) 154103 07+ TUNDRA TUBULAR UCA (PASS
HARDWARE INCLUDED
(8) 150026 WASHER 2.125 X .630 X .188   (2) 605337 1/2-20 X .875 12PT FLANGED CAP     (2) 157506 BEARING CAP .500 ID   SCREW     (2) 157517 07+ TUNDRA TAPER ADAPTER   (2) 605454 9/16-18 NYLOCK NUT     (4) 159208 SLEEVE 1.000 X 16MM X 2.060   (2) 605455 9/16 FLAT WASHER     (2) 295550 COMH16T STAINLESS BEARING   (4) 605903 1/4-28 X 90 DEG STEEL ZERK FIT     (8) 297034 HAT BUSHING 1.625 X 1.000 X .850   (2) 605950 WHT-200 SPIRAL RET RING     (4) 297042 POLY RING 1.590 X 1.005 X .250   (1) 605969 VIBRATITE RED 2ML BULLET
JACK 10MM SOCKET / WRENCH JACK STANDS 21MM SOCKET / WRENCH LARGE HAMMER 3/8" SOCKET / WRENCH
TORQUE WRENCH 5/8 SOCKET / WRENCH   NEEDLE NOSE PLIERS 1/2" SOCKET / WRENCH   7/8" SOCKET / WRENCH
TECH NOTES
1. ICON RECOMMENDS OPTIONAL BILLET UNIBALL DUST COVER SET (191011) TO PREVENT DEBRIS FROM ENTERING THE UNIBALL CUP. 2. ALL ICON UPPER CONTROL ARMS HAVE BEEN ENGINEERED TO ALLOW FOR THE MOST POSSIE
2. ALL ICON OPPER CONTROL ARMS HAVE BEEN ENGINEERED TO ALLOW FOR THE MOST POSSIE CASTER, WHILE STILL ALLOWING THE VEHICLE TO BE PROPERLY ALIGNED. NOTIFY YOUR PROFESSIONAL ALIGNMENT SHOP OF THIS INFORMATION SO THAT MAXIMUM RIDE QUALITY CAI BE ACHIEVED.

## INSTALLATION

**1.** Using a properly rated jack, 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 prevent the suspension from being at full droop.

**3.** Disconnect the upper ball joint: remove the cotter pin securing the upper ball joint nut. Using a 19mm 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 or hand sledge.

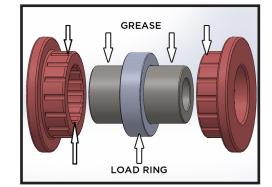
4. Support the spindle so that it does not over extend the CV joints when detached.

FIG.1

**5.** Remove the ball joint nut and disconnect the upper arm from the spindle. Using a 10mm socket/wrench, disconnect the ABS line that is routed down the top of the arm.

**6.** Using a 21mm socket/wrench, remove the large upper control arm pivot bolt. This hardware will be reused, note direction and order of components. Remove the nut and washer from the rear side of the long pivot bolt. Carefully feed the bolt forward until it clears the front of the control arm. Remove the stock upper control arm.

**7.** Before installing your 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. **[FIGURE 1]** 



**8.** Install the new ICON tubular upper control arm into the chassis: Note the side and orientation of the arms, the uniball should be oriented towards the back of the vehicle. Carefully feed the pivot bolt through the pivots of the arm and through the pivot tube in 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 bolt using a 21mm socket/wrench. [Torque to factory spec]

**9.** Install the taper pin adapter (157517) up into the uniball, install the upper dome on top and install the 12pt 1/2" bolt in the top. Make sure the radius of the taper adapter and upper dome meet the diameter of the inner ball of the uniball. Hand tighten the upper bolt, it will be torqued with thread locker later.

**10.** Pivot the uniball stem assembly so that the stem is inline with the taper bore in the spindle. The new uniball will be very stiff the first time you move it.

**11.** Rotate the arm down and install the stem through the spindle taper. Install the supplied washer and nut on the taper pin. As you begin to tighten the stem nut the stem may want to spin. If so, you can keep it from spinning by holding the upper 12pt bolt. Once the taper has seated, friction will keep it from spinning. Use a 7/8" socket/wrench to tighten. [Torque to 75 ft-lbs]

12. Using a 10mm socket/wrench reattach the ABS line to the threaded hole in the arm with the factory bolt.

13. Install wheels and lower vehicle back to the ground. [Torque to factory spec]

**14.** Remove the 12pt 1/2" bolt that holds the taper dome on the top of the uniball from step 9. Apply RED thread locker and reinstall. [Torque to 90 ft-lbs]

**15.** Repeat steps on opposite side.

**16.** Have the 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.

# ICON VEHICLE DYNAMICS

PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

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