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PART #	DESCRIPTION
56109	07-UP TUNDRA S2 SECONDARY SHOCK HOOP KIT

COMPONENTS INCLUDED	
(1) 154150 07-UP TUNDRA S2 HOOP (DRVR) (1) 154151 07-UP TUNDRA S2 HOOP (PASS)	(2) 157015 07-UP TUNDRA S2 PUCK (1) 56109H 07-UP TUNDRA S2 HARDWARE KIT
HARDWARE INCLUDED	
56109H HARDWARE KIT	
(1) 150110 TUNDRA LOWER ARM TAB (DRVR) (1) 150111 TUNDRA LOWER ARM TAB (PASS) (1) 219007 SLEEVE 1.00 X .688 X 1.625 (2) 294007 NUT TAB 1/2-13 4.0" BENT (8) 605131 3/8" SPLIT LOCK WASHER (8) 605155 3/8-16 X 2.5" BOLT	(2) 605300 1/2-13 X 1.00 BOLT (2) 605330 1/2" FLAT WASHER (2) 605517 5/8-18 X 9.00 BOLT (2) 605525 5/8-18 LOCK NUT (4) 605530 5/8" FLAT WASHER
TOOLS REQUIRED	
JACK JACK STANDS GRINDER W/ CUT-OFF WHEEL SMALL SANDING DISC DRILL 17/32" DRILL BIT WELDER	MARKER DIAGONAL CUTTERS TORQUE WRENCH 9/16" SOCKET / WRENCH 3/4" SOCKET / WRENCH 15/16" SOCKET / WRENCH 22MM SOCKET / WRENCH
TECH NOTES	
<p>1. IF NOT USING AN ICON UCA, YOU MUST CHECK CLEARANCE FROM UCA TO SECONDARY SHOCK AS THE SUSPENSION CYCLES. CHECK THE ABS LINE TABS AND THE SECONDARY SHOCK TO VERIFY THAT THERE IS ADEQUATE CLEARANCE.</p> <p>2. THE UCA ABS LINE BRACKET MUST BE REMOVED FROM ABS LINE (AND UCA) AND ABS LINE ZIP TIED TO BRAKE LINE AS SHOWN.</p> <p>3. REMOVE RESERVOIR SECONDARY SHOCK (59922P) IS NOT RECOMMENDED WITH REMOTE RESERVOIR COILOVER. IF USING REMOTE RESERVOIR SECONDARY SHOCK USE WITH IR COILOVER KIT.</p> <p>4. S2 SECONDARY SHOCK IS NOT COMPATIBLE WITH OEM COILOVER.</p>	



WARNING!
<p>** 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!</p> <p>** ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.</p> <p>** 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.</p>

INSTALLATION

- 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 the front wheels.
- Mark and trim the fender as shown on both driver and passenger side. Be careful not to cut anything but the fender as there are brake lines, wires, and hoses close by. Use the minimal amount of trimming necessary to ensure proper fitment of components, excessive trimming leads to increased dirt/mud accumulation in the engine compartment. [FIGURE 1 - 6]

FIG.1



FIG.2



FIG.3



FIG.4



FIG.5



FIG.6



3. Remove the (4) upper mounting bolts securing the upper shock mount to the coil bucket. Do not loosen or remove the larger center nut securing the spring seat to the shock shaft. [FIGURE 7]

FIG.7



FIG.8



4. Support the lower control arm with a jack and use a 22mm to remove the bolt holding the shock rod end to the lower control arm. Slide the supplied 5/8" bolt in. [FIGURE 8]

5. Drill out the existing hole on the frame (above the plastic cap) to 17/32 (.531") as shown. [FIGURE 9]

FIG.9



6. Remove the plastic cover in the side of the frame below the hole you just drilled.

7. Set the S2 puck on top of the bucket on the frame. Set the S2 hoop on top of the puck and start the (4) bolts connecting the S2 hoop, S2 puck, frame bucket, and coilover. Do not tighten yet. [FIGURE 10]

FIG.10



8. Slide the nut tab through the window in the side of the frame and hold the nut behind the drilled hole.

9. Thread the 1/2" bolt into the nut tab using a 3/4" socket/wrench. [Torque to 75 ft-lbs] [FIGURE 11]

FIG.11



10. Tighten the (4) upper bolts using a 9/16" socket/wrench. The inner bolts are easier to get to from under the hood of the truck using some long extensions. [Torque to 35 ft-lbs]

11. Remove the ABS line bracket from the ABS line before mounting the secondary shock. Using the supplied zip ties, attach the ABS line to the brake line leaving enough slack to allow the suspension and steering to cycle fully without damaging the line. [FIGURE 12]

FIG.12



FIG.13



12. Slide the supplied weld sleeve onto the bolt on the back of the LCA and the weld on bracket. Mark the area to be welded and remove the bracket. Sand the paint from the areas to weld. Slide the bracket back on with the weld sleeve in place and install the washer and nut. Tighten the nut using a 15/16" until the bracket is snug against the LCA. The sleeve is slightly wider than the shock to allow for easy installation of shock in pocket. [FIGURE 13]

13. Check positioning and weld path. Weld the bracket to the LCA, then remove the weld sleeve and paint the shock mount to prevent rust. [FIGURE 14 & 15]

FIG.14



FIG.15



14. Once the paint dries, mount the shock in place and tighten the 5/8" bolt using a 15/16". [Torque to 240 ft-lbs] The S2 shock has a short and a long bearing spacer. The short spacer goes toward the front for the truck.

15. Mount the secondary shock on the S2 hoop using the supplied 1/2" X 2.75" bolt and 3/4" socket/wrench. [Torque to 75 ft-lbs] Make sure the reservoir is clocked toward the frame for tire clearance, but also make sure it will not hit anything as the suspension cycles. Adjust the reservoir (if needed) for optimal clearance. [FIGURE 16]

FIG.16



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

17. 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.

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