

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

PART #	DESCRIPTION
51100	96-UP TACOMA/00-06 TUNDRA 1.5" ADD A LEAF KIT

COMPONENTS INCLUDED	
(2) 158501 05+ TACOMA/00-06 TUNDRA ADD A LEAF PACK	(1) 52050 8" U-BOLT KIT
HARDWARE INCLUDED	
N/A	
TOOLS REQUIRED	
JACK JACK STANDS CUT OFF WHEEL CENTER PUNCH	9/16" SOCKET / WRENCH 7/8" SOCKET / WRENCH 14MM SOCKET / WRENCH 19MM SOCKET / WRENCH TORQUE WRENCH
TECH NOTES	
<p>1. SOME LEAF PACKS MAY HAVE A SPRING CLIP THAT WILL NEED TO BE REMOVED TO ALLOW FOR INSTALLATION OF THE ICON ADD A LEAF KIT.</p> <p>2. LEAVING THE FACTORY OVERLOAD LEAF INSTALLED IS NOT RECOMMENDED.</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 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.</p>

INSTALLATION

- Using a properly rated jack, 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.
- Remove the lower rear shock bolts using a 19mm socket/wrench.
- Use a jack to support the axle then loosen and remove the driver side U-bolts using a 19mm socket/wrench. Make sure the axle is well supported or it could fall when the U-bolts are removed.
- Slowly lower the axle away from the springs and remove the factory centering pin and factory overload spring. Clamp the factory spring together before removing center pin. Remove the factory overload spring at this time, this will not be reused.
- If your factory leaf pack is equipped with a spring clip that interferes with the ICON add a leaf spring clip, the factory spring clip must be removed from the leaf. To remove the spring clip, cut the head of the rivet off and pound the rivet out of the leaf with a center punch. Sand the rivet hole smooth on both sides. Use touch up paint to prevent corrosion.
- The add a leaf has a different length front to rear of the centering pin. The longer side is to be placed towards the REAR of the vehicle.
- Remove the spring clip hardware and center pin nut from ICON add a leaf for installation.
- Place the new add a leaf pack between the axle and factory spring pack, make sure the ICON add a leaf clamp bolts and center pin nut are unbolted before installation. Slide new center pin through factory leaf spring pack, reinstall the supplied center pin nut and tighten. Trim the excess length of the center pin, leaving about 1/2" of threads sticking out from the top of the nut.
- Use a jack to raise the axle and guide the spring center pin into the hole on the top of the axle. Install supplied U-bolts (long U-bolts on driver side), washers, and nuts. [Torque to 90ft-lbs]
- Reinstall the spring clip bolts.
- Reinstall shock to the factory lower shock mount using a 19mm socket/wrench. [Torque to factory spec]
- Repeat steps 2-11 on opposite side of the vehicle.
- Reinstall wheels and lower to the ground. [Torque to factory spec]

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
www.iconvehicledynamics.com



FOLLOW US ON FACEBOOK!



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

PART #	DESCRIPTION
56503R	05-UP TACOMA 4WD 0-1.5" REAR 2.0 VS RR

COMPONENTS INCLUDED	
(1) 154913R 05-UP TACOMA 4WD 0-1.5" REAR 2.0 VS RR	(1) 611007 9/16" MEDIUM DUTY STEM BUSHING KIT (1) 611050 2.0 UNIVERSAL 6" RESI MOUNT KIT
HARDWARE INCLUDED	
611007 HARDWARE KIT	
(2) MEDIUM DUTY 9/16" ID STEM BUSHING (1) MEDIUM DUTY 9/16" ID STEM WASHER	(1) MEDIUM DUTY 12MM ID STEM WASHER (1) M12-1.25 LOCK NUT
611050 HARDWARE KIT	
(1) 605131 3/8 SPLIT LOCK WASHER (1) 605144 3/8-12 X .750 FLANGED SELF TAP BOLT	(2) 605928 1/2 X 1 5/16 - 2 1/4 ID#28 SS HOSE CLAMP (1) 250000 6.00 UNIVERSAL RESI MT PLATE
TOOLS REQUIRED	
JACK JACK STANDS DRILL CENTER PUNCH 21/64" DRILL BIT LOCKING PLIERS	17MM SOCKET / WRENCH 19MM SOCKET / WRENCH 5/16" SOCKET / WRENCH 9/16" SOCKET / WRENCH TORQUE WRENCH BARREL SANDER
TECH NOTES	
<p>1. YOUR ICON SHOCK ASSEMBLIES COME FACTORY CHARGED TO 150 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.</p> <p>2. FAILURE TO MAKE SURE SHOCK RESERVOIR FITTING ORIENTATION IS CORRECT CAN RESULT IN FITTING COLLIDING INTO SHOCK MOUNT AND BECOMING LOOSE OR BREAKING, WHICH CAN CAUSE OIL LOSS AND SHOCK FAILURE. VERIFY FITTING IS CLOCKED DOWNWARD AND CLEAR OF MOUNT AS SHOWN. INCORRECT INSTALLATION IS NOT COVERED UNDER ICON'S WARRANTY.</p> <p>3. FAILURE TO ALLOW FOR ADEQUATE SLACK IN RESERVOIR HOSE CAN CAUSE THE HOSE ASSEMBLY TO PULL FITTING AS THE SHOCK CYCLES WHICH CAN CAUSE DAMAGE. INCORRECT INSTALLATION IS NOT COVERED UNDER ICON'S WARRANTY.</p> <p>4. FAILURE TO SAND SHOCK MOUNT MAY CAUSE DAMAGE TO RESERVOIR FITTING, WHICH IS NOT COVERED UNDER ICON'S WARRANTY POLICY.</p>	



WARNING!

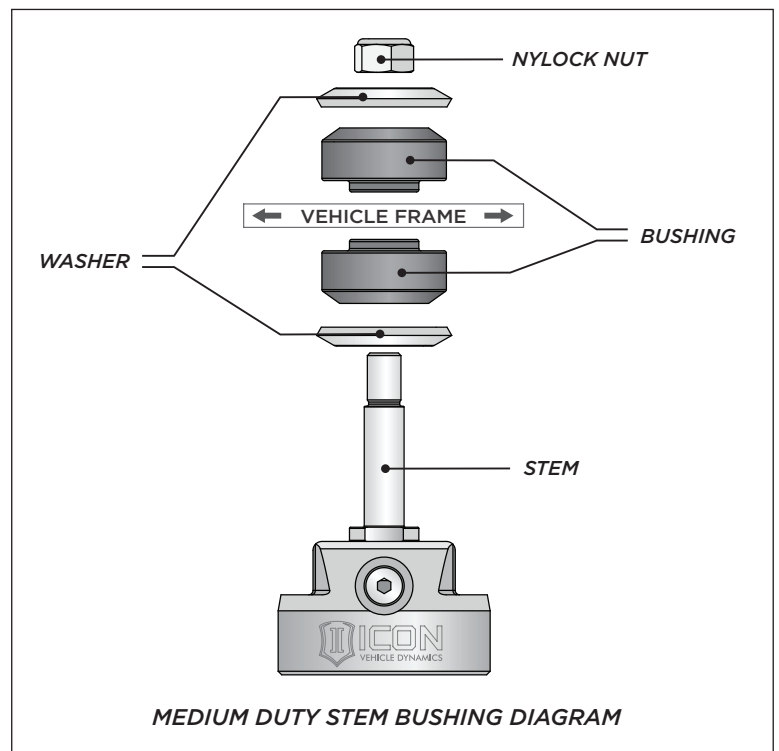
**** READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE!**

**** 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

- Using a properly rated jack, 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.
- Place a floor jack under the axle housing and slightly raise the jack to remove tension from the shock. Loosen and remove the lower shock bolt using a 17mm socket/wrench. Make sure the axle is well supported, then remove the stem bushing nut and upper stem bushings using a 17mm socket/wrench.
- Remove the rear shock from vehicle.
- Install the lower shock mount in the factory location and reinstall the factory lower shock bolt and nut using a 17mm socket/wrench. [Torque to factory spec]
- Install stem hardware as seen in diagram. Tighten the stem nut until it is flush with the top of the stem. Do not overtighten bushing assembly as this can lead to premature bushing wear. Failure caused by incorrect installation of bushings is not covered under ICON's warranty policy.



6. Sand the upper shock mount as shown to provide extra clearance for the hose fitting. This must be done to keep the fitting from hitting the upper mount as the bushings move during normal use. [FIGURE 1]

FIG.1



7. The hose must exit as pictured. [FIGURE 2] Allowing the reservoir hose to exit differently OR over tightening of the stem bushing lock nut will cause the reservoir fitting to collide into the frame. [FIGURE 3] displays contact of the reservoir fitting and the frame when the shock is installed incorrectly.

FIG.2



FIG.3



8. Mount the remote reservoir to the reservoir mount plate (250000) using the provided (605928) hose clamps. Be sure to install the hose clamp to the recessed ends of the reservoir.

9. Orient the reservoir mounting bracket on frame rail, allow for enough hose slack for the shock to cycle. Mark the center of the hole. The remote reservoir and bracket should not come in contact with any part of the frame, frame brackets, or bed. The reservoir fitting should point slightly downward so that it does not contact the mount as the suspension cycles. Failure to provide adequate slack in the line can cause failure as the suspension cycles.

10. Center punch and drill to 21/64" [FIGURE 4]

FIG.4



11. Thread the supplied (3/8" x 3/4") self tap bolt into the frame rail using a 9/16" socket/wrench, minimum of 2 full rotations.

12. Remove the (3/8" x 3/4") self tap bolt and secure remote reservoir bracket using a 9/16" socket/wrench. [Torque to 30ft-lbs]

13. Place reservoir in the reservoir mounting bracket with the ICON shield logo oriented up into the fender well. Secure reservoir with the supplied (605928) hose clamps using a 5/16" nut driver. **[FIGURE 5]**

FIG.5



14. Repeat step 2-13 on opposite side.

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

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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

2.0 ALUMINUM SERIES TECHNICAL INFORMATION

MAINTENANCE

ICON shock absorbers are a high quality rebuildable race style shock absorber designed for optimal performance. With a unit of this caliber on your vehicle, routine maintenance is required to keep them looking and operating in like new condition. Residual oil and assembly lube may be present at all seal paths from the factory out of the box and is considered normal. Pooling of oil however is not acceptable at any time and one should contact the ICON dealer where purchased.

BELOW ARE GUIDELINES BASED ON HOW YOU USE YOUR VEHICLE BUT YOUR MILEAGE MAY VARY:

STREET USE:

- Send in for factory servicing every 40,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Remove any buildup of road salt, mud, or debris from shocks anytime accrued
- Clean with mild soap and water with each oil change or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure yearly. (252004 charge needle assembly available at any ICON distributor)

STREET/DIRT:

- Send in for factory servicing every 15,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Clean with mild soap and water with each oil change, offroad trip, or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure each dirt outing. (252004 charge needle assembly available at any ICON distributor)

DIRT USE:

- Send in for factory servicing every 1,000 miles.
- Check nitrogen pressure each outing. (252004 charge needle assembly available at any ICON distributor)
- Remove any buildup of mud or debris from shocks after every outing.

SELF-SERVICE:

- Contact ICON for service kits & tools at (951) 689-4266.

PRODUCT REGISTRATION

Please visit: <http://www.iconvehicledynamics.com/tech-support/registration/> to register your product.

ICON VEHICLE DYNAMICS SHOCK ABSORBER WARRANTY

This shock absorber has a 1 year warranty against any manufacturer's defects. If a shock fails within the initial year of ownership, the shock must be shipped to ICON Vehicle Dynamics for inspection and service. If a shock is inspected and it has been determined the shock failed due to neglect, damage caused by improper installation or any other reason besides "normal wear and tear", the owner of said shock is responsible for all service costs. This includes labor, parts, and shipping.

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.

To send a shock in for warranty please visit our website <http://www.iconvehicledynamics.com/tech-support/shock-service/>



ICON VEHICLE DYNAMICS®
PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

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



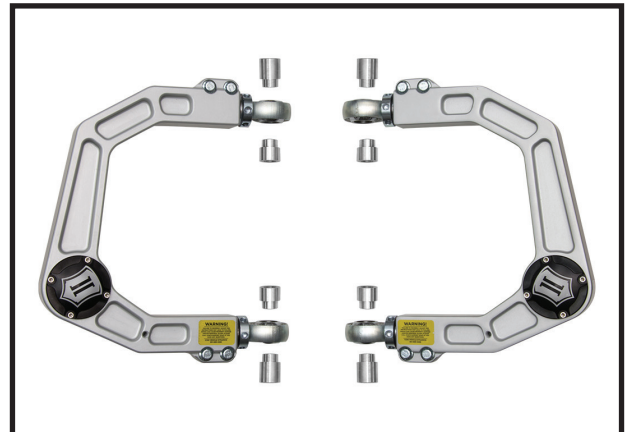
FOLLOW US ON FACEBOOK!



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

PART #	DESCRIPTION
58550DJ	05-UP TACOMA BILLET UCA DJ KIT

COMPONENTS INCLUDED	
(1) 157515 05+ TACOMA BILLET UCA (DRIVER)	(1) 157516 05+ TACOMA BILLET UCA (PASS)
HARDWARE INCLUDED	
(2) 157517BJ DELTA JOINT	(1) 605968 VIBRATITE BLUE 2ML BULLET
HEIM SPACER KIT	
(4) 157502 HEIM SPACER JM12 X 14MM X 3.275	(4) 157503 HEIM SPACER JM12 X 14MM X 1.775
DUST COVER COMPONENTS KIT	
(2) 157507 BILLET UCA DUST COVER (8) 605002 6-32 X .50" SHCS 18-8	(2) 155110 -032 O-RING
TOOLS REQUIRED	
JACK JACK STANDS LARGE HAMMER TORQUE WRENCH NEEDLE NOSE PLIERS 7/64" ALLEN WRENCH	10MM SOCKET / WRENCH 19MM SOCKET / WRENCH 21MM SOCKET / WRENCH 3/8" SOCKET / WRENCH 1/2" SOCKET / WRENCH 7/8" SOCKET / WRENCH
TECH NOTES	
<p>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.</p> <p>2. 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.</p> <p>3. DO NOT EXCEED 1.875" ADJUSTMENT FROM THE CENTER OF THE ROD END TO THE EDGE OF THE BILLET UPPER CONTROL ARM. FAILURE CAUSED BY EXCESSIVE ADJUSTMENT WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY. REFER TO TECH NOTE PHOTO.</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 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.</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 front wheels.
- Using a jack, slightly lift the lower control arm to prevent the suspension from being at full droop.
- 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.
- Support the spindle so that it does not over extend the CV joints when detached.
- Using a 10mm socket/wrench, disconnect the ABS line that is routed down the top of the arm. Remove the ball joint nut and disconnect the upper control arm from the spindle.
- Using a 19mm 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 A-arm. Remove the stock upper control arm.
- Install the new billet upper control arm into the chassis: Note the side and orientation of the arms, the Delta Joint should be oriented to the back of the vehicle and the 4 small holes for the dust cover should be pointing up. Carefully feed the pivot bolt through the pivots of the arm, through the pivot tube in the chassis and secure with the factory hardware. [Torque to factory spec]
- 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.
- Rotate the upper control arm downward and install the stem through the spindle taper. Install the supplied flanged nut on the taper pin. [Torque to 75 ft-lbs]
- Using a 10mm socket/wrench, reattach the ABS line to the threaded hole in the arm with the factory bolt.
- ICON billet upper control arms utilize heim joints at each pivot to allow alignment using the adjusters on the upper control arms as well as cam adjusters on the lower control arms. The heims can be extended or contracted by turning the collar. Make sure that the slit in the collar lines up with the slit in the housing and then tighten the pinch bolts in an opposing pattern at least 3 times. [Torque to 35 ft-lbs]

- 12.** Install wheels and lower vehicle back to the ground. [Torque to factory spec]
- 13.** Install the dust cover: Make sure that the o-ring is seated in the groove in the cap and apply anti-seize to the (4) allen head screws. DO NOT over tighten.
- 14.** Have the vehicle professionally aligned.
- 15.** Once aligned, apply BLUE thread locker to the outer pinch bolts located on the sides of the arm. Tighten the pinch bolts in an opposing pattern at least 3 times. [Torque to 35 ft-lbs]

ALIGNMENT NOTE

ICON SHIPS THE BILLET UPPER CONTROL ARM AT THE MOST COMMON ALIGNMENT SETTING. ONE OF THE MAJOR PERFORMANCE ADVANTAGES OF AN ICON BILLET ADJUSTABLE UPPER CONTROL ARM IS THE ABILITY TO IMPROVE WHEEL POSITION. IMPROVING WHEEL POSITION IMPROVES FIREWALL CLEARANCE ALLOWING FOR LARGER TIRES AS THE SUSPENSION CYCLES. IN ORDER TO TAKE ADVANTAGE OF THIS FEATURE, DISCUSS WITH YOUR PROFESSIONAL ALIGNMENT SHOP THAT YOU WOULD LIKE TO CAM THE LOWER CONTROL ARM TO MAXIMIZE WHEEL POSITION FORWARD AND THEN ADJUST CAMBER AND CASTER WITH THE UPPER THREADED ADJUSTERS.

A MAJOR PERFORMANCE ADVANTAGE OF ALL ICON UPPER CONTROL ARMS IS INCREASED CASTER OVER STOCK. DISCUSS WITH A PROFESSIONAL ALIGNMENT SHOP THAT YOU WANT THE VEHICLE ALIGNED WITH THE CASTER AT THE MAX OF THE FACTORY RECOMMENDED SETTINGS IF YOU WANT TO TAKE ADVANTAGE OF THE DYNAMIC EFFECTS OF INCREASED CASTER.

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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



[TECH NOTE #3]



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
www.iconvehicledynamics.com



FOLLOW US ON FACEBOOK!



PART #	DESCRIPTION
58635	05-UP TACOMA EXT TRAVEL 2.5 VS IR COILOVER KIT

COMPONENTS INCLUDED	
(1) 154950 05+ TACOMA CO EXTENDED TRAVEL IR (DRVR) (1) 154950 05+ TACOMA CO EXTENDED TRAVEL IR (PASS)	(1) 611019 COILOVER HARDWARE KIT (1) 611030 05+ TACO / 07-09 FJ SWAYBAR RELOCATION KIT
HARDWARE INCLUDED	
611019 HARDWARE KIT	
(6) 605101 3/8-16 X 1.000 BOLT	(6) 605131 3/8 SPLIT LOCK WASHER
611030 HARDWARE KIT	
(2) 157100 05+ TACO SWAYBAR RELOCATION BRACKET	(4) 605100 3/8-16 X .750 BOLT (4) 605133 3/8 SAE FLAT WASHER
TOOLS REQUIRED	
JACK JACK STANDS PLIERS TORQUE WRENCH HAMMER 9/16" SOCKET / WRENCH	8MM SOCKET / WRENCH 10MM SOCKET / WRENCH 13MM SOCKET / WRENCH 14MM SOCKET / WRENCH 15MM SOCKET / WRENCH 18MM SOCKET / WRENCH 21MM SOCKET / WRENCH
TECH NOTES	
<p>1. YOUR ICON COILOVER ASSEMBLIES COME SHIPPED AT ICON'S RECOMMENDED RIDE HEIGHT. DO NOT PRELOAD THE COIL BEYOND 2.13" (1.13" FOR 700LB COIL #158508) OF EXPOSED THREADS BETWEEN THE BOTTOM OF THE TOP CAP AND THE TOP OF THE COIL ADJUSTER NUT. A REDUCTION IN RIDE QUALITY WILL BE EXPERIENCED IF COILOVERS ARE ADJUSTED TO ALLOW FOR LESS THAN 2" OF DROOP TRAVEL FROM STATIC RIDE HEIGHT.</p> <p>2. YOUR NEW COILOVER ASSEMBLIES COME CHARGED WITH THE CORRECT AMOUNT OF NITROGEN (250PSI). DO NOT RELEASE PRESSURE FROM THE CHARGE PORT, AS THIS CAN CAUSE THE SHOCK TO MALFUNCTION.</p> <p>3. ICON EXTENDED TRAVEL COILOVERS REQUIRE AN ICON UCA (BILLET OR TUBULAR).</p> <p>4. 2016-UP TACOMA MODELS REQUIRE MORE PRELOAD (THAN 2005-2015 MODELS) TO ATTAIN LIFT, DO NOT EXCEED 2.13" OF EXPOSED THREADS.</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.
- Disconnect the outer tie rod end on both sides. Remove the cotter pin and loosen the nut a few turns. Strike the end of the steering knuckle arm with a large hammer to dislodge the taper. Remove the nut and swing the tie rod out of the way.
- Disconnect the sway bar from the frame on both sides. Remove the (2) bolts per side using a 14mm socket/wrench and remove the bracket from the sway bar. Move the sway bar forward to make room for removal and installation of the shock.
- Remove the (3) nuts securing the upper coil seat to the coil bucket. Do not loosen or remove the large center nut securing the spring seat to the shock shaft. Failure to comply will result in the stock coil assembly to come apart violently, causing damage to components and possible injury!
- Remove the bolt connecting the shock to the lower control arm. Note orientation: as this bolt will be reused. The head of the bolt should be facing forward.
- Remove the stock coil assembly. Due to rubber bushing stiffness you may need to pull down on the suspension. To make this easier you can use a pry bar over the top of the upper control arm and under the pivot bolt for additional leverage. Be careful not to damage any brake lines or wires that may be routed down the control arm.

7. Install new coil assembly. Install upper mount with the hose pointing outward using (3) 3/8-16 X 1.000 bolts and (3) 3/8 lock washers. [Torque to 35 ft-lbs] (FIGURE 1)

FIG.1



8. Connect the shock to the lower control arm: The lower shock mount has (1) long and (1) short spacer [Torque to factory spec]. Make sure the long spacer is toward the front of the vehicle as this will position the shock further toward the rear of the control arm to ensure adequate sway bar clearance. Install the factory lower shock bolt.

9. Install the outer tie rod end using a 21mm socket/wrench [Torque to factory spec]. Install cotter pin.

10. Remove the skid plate using a 15mm socket/wrench and set aside.

11. Install the sway bar relocation block. Using the factory hardware, bolt the sway bar relocation block (157100) to the frame. [Torque to factory spec] Make sure the block is positioned so that the new threaded holes are forward of the countersunk holes. Using the supplied 3/8" bolts, washers and factory bracket, reinstall the sway bar in its new forward position. [Torque to 35 ft-lbs] (FIGURE 2)

FIG.2



12. Install the skid plate using factory hardware and tighten with a 15mm socket/wrench. [Torque to factory spec]

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

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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

2.5 VS SERIES SHOCK & COILOVER TECHNICAL INFORMATION

MAINTENANCE

ICON shock absorbers are a high quality rebuildable race style shock absorber designed for optimal performance. With a unit of this caliber on your vehicle, routine maintenance is required to keep them looking and operating in like new condition. Residual oil and assembly lube may be present at all seal paths from the factory out of the box and is considered normal. Pooling of oil however is not acceptable at any time and one should contact the ICON dealer where purchased.

BELOW ARE GUIDELINES BASED ON HOW YOU USE YOUR VEHICLE BUT YOUR MILEAGE MAY VARY:

STREET USE:

- Send in for factory servicing every 40,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Remove any buildup of road salt, mud, or debris from shocks and coil springs anytime accrued
- Clean with mild soap and water with each oil change or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure yearly. (252004 charge needle assembly available at any ICON distributor)
- Check bearings for excessive wear yearly.
- **DO NOT** apply any type of lube to the upper and lower bearings.

STREET/DIRT:

- Send in for factory servicing every 15,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Clean with mild soap and water with each oil change, offroad trip, or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure each dirt outing. (252004 charge needle assembly available at any ICON distributor)
- Check bearings for excessive wear yearly.
- **DO NOT** apply any type of lube to the upper and lower bearings.

DIRT USE:

- Send in for factory servicing every 1,000 miles.
- Check nitrogen pressure each outing. (252004 charge needle assembly available at any ICON distributor)
- Remove any buildup of mud or debris from shocks and coil springs after every outing.

SELF-SERVICE:

- Contact ICON for service kits & tools at (951) 689-4266.

PRODUCT REGISTRATION

Please visit: <http://www.iconvehicledynamics.com/tech-support/registration/> to register your product.

ICON VEHICLE DYNAMICS SHOCK ABSORBER WARRANTY

This shock absorber has a 1 year warranty against any manufacturer's defects. If a shock fails within the initial year of ownership, the shock must be shipped to ICON Vehicle Dynamics for inspection and service. If a shock is inspected and it has been determined the shock failed due to neglect, damage caused by improper installation or any other reason besides "normal wear and tear", the owner of said shock is responsible for all service costs. This includes labor, parts, and shipping.

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.

To send a shock in for warranty please visit our website <http://www.iconvehicledynamics.com/tech-support/shock-service/>

ICON VEHICLE DYNAMICS

PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

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



FOLLOW US ON FACEBOOK!

