

7-23-2014 REV.A



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PART #	DESCRIPTION
57800	96-02 4RUNNER 0- 3" REAR 2.5 REMOTE RESERVOIR SHOCK

COMPONENTS INCLUDED		
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(2) 154925R 96-02 4RUNNER 0-3" REAR 2.5 REMOTE RESERVOIR SHOCK (2) 250002 7.5" UNIVERSAL RESI MT PLATE	(2) 611007 9/16 MED DUTY STEM BUSHING KIT	
HARDWARE INCLUDED		
(4) 605931 1/2 X 2 1/16 - 3 HOSE CLAMP (2) 605033 #14-14 X .750 SELF TAP HEX HEAD SCREW (2) 605934 #12 ADEL CLAMP ZINC PLATED	(2) 605131 3/8 HEAVY LOCK WASHER (2) 605144 3/8-12 X .750 FLANGED SELF TAP BOLT	
611007 BUSHING KIT HARDWARE		
(2) MED DUTY 9/16 ID STEM BUSHING (1) MED DUTY 9/16 ID STEM WASHER	(1) MED DUTY 12MM ID STEM WASHER (1) M12-1.25 LOCK NUT	
TOOLS REQUIRED		
JACK JACK STANDS 8MM / 5/16" NUT DRIVER 11/32" DRILL BIT DRILL	14MM SOCKET / WRENCH 17MM SOCKET / DEEP SOCKET / WRENCH 19MM SOCKET / DEEP SOCKET / WRENCH 9/16" SOCKET / WRENCH	
TECH NOTES		
1. THIS UNIT IS CHARGED WITH 250PSI OF NITROGEN. DO NOT DISCHARGE.		

#### 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.

# INSTALLATION

- 1. ENSURE TRUCK IS IN GEAR OR IN PARK, SET PARKING BRAKE, TURN OFF ENGINE AND CHOCK REAR TIRES!
- 2. Jack up the rear of the truck and support with jack stands under the frame rail and remove the wheels
- 3. With a floor jack under the rear end, slightly raise the rear axle housing, loosen and remove the lower shock bolts. Make sure the axle is well supported. Keep all of the hardware, it will be reused.
- 4. Disconnect top of the shock. Reach up over the top mount near the coil bucket to access the upper stem nut. This can be a little hard to reach, when loose you may be able to spin the shock to aid in removal
- 5. Install the shock stem washer and bushing onto the top of the shock assemblies as follows: washer, bushing, OEM shock mount, bushing, washer, lock nut. Put the lower washer and bushing on the shock stem, raise the shock up into position with the outlet to the reservoir toward the front of the vehicle and install the remaining bushing washer and lock nut.
- **6.** Tighten the lock nut so 2-3 threads are showing through the nut. Over-tightening can hinder performance
- **7.** There are 2 spacers that go on either side of the bearing on the lower shock mount stud on the axle. The fit of the spacers and the lower shock bearing is a very tight tolerance. It is common for the stud on the axle to get corroded over time. You may need to clean the stud of buildup prior to installation of the spacers and bearing. Emery cloth or sand paper works best.
- **8.** Slide 1 spacer over the stud then the lower shock bearing followed by the other spacer. To assist in lining up the bearing with the stud you will have to jack up the axle very slowly so the parts align. You will also need to rotate the inner part of the bearing to be parallel with the stud, this can be easily done using the female head of a 3/8" extension in the bearing for leverage. Use the OE bolt and captive washer to clamp the lower bearing and spacers [Torque to 35 ft-lbs].
- 9. Route the reservoir under and to the outside of the frame toward the back of the vehicle.
- 10. Mount the reservoir to the outside of the frame. There is an existing hole toward the back of the wheel well on the outside of the frame, measure down 1-7/8" and drill an 11/32" hole (FIGURE 1). Mount the reservoir bracket using the supplied 3/8" x .75" thread forming bolt such that the reservoir is above the hole you drilled. Leave loose enough to fit the hose clamps behind the bracket in the locating notches. Secure the reservoir as shown with the hose clamps and then tighten the bracket against the frame with a 9/16" open end wrench (FIGURE 2).

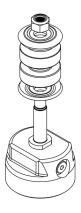








FIG.2

11. Secure the reservoir hose: Make a mark on the bump stop bracket mid way from the top to the hole below (FIGURE 3). Place the Adel clamp on the hose such that it locates the hose inward over the bump stop bracket. Secure using the self-drilling screw where marked. (FIGURE 4)





FIG.4

12. Reinstall wheel and carefully place vehicle back on the ground.

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE. RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 100 MILES AND PERIODICALLY THEREAFTER.

> ICON RECOMMENDS KEEPING YOUR STOCK SUSPENSION COMPONENTS IN CASE SHOCK SERVICE IS EVER REQUIRED

# TECHNICAL INFORMATION

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:

FIG.1

FIG.3

- 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.

#### 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

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