

1-19-2017 REV.A



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PART #	DESCRIPTION
59910P	07-UP FJ/03-UP 4RUNNER REAR OMEGA 2.5 VS RR PAIR

COMPONENTS INCLUDED

(1) 1549690D FJ/4RNR 0-3" 2.5 OMEGA (DRVR) (1) 1549690P FJ/4RNR 0-3" 2.5 OMEGA (PASS) (2) 250002 UNIVERSAL RESI MOUNT PLATE (2) 605131 3/8" SPLIT LOCK WASHER (2) 605144 3/8" .750 SELF TAP BOLT (2) 605934 3/4" ADEL CLAMP (1) 611006 HD STEM BUSHING KIT (1) 611051 HOSE CLAMP KIT (4)

HARDWARE INCLUDED

611006 HD STEM BUSHING KIT

(4) 255200 9/16" STEM BUSHING (4) 254200 9/16" STEM WASHER (2) 605809 M12-1.25 JAM NUT (2) 605810 M12-1.25 NUT 19MM W X 10MM

TOOLS REQUIRED

JACK
JACK STANDS
TORQUE WRENCH
LOCKING PLIERS
CENTER PUNCH
DRILL
21/64" DRILL BIT

8MM NUT DRIVER 3/8" SOCKET / WRENCH 10MM SOCKET / WRENCH 14MM SOCKET / WRENCH 15MM SOCKET / WRENCH 17MM SOCKET / WRENCH 19MM SOCKET / WRENCH

TECH NOTES

- 1. YOUR ICON SHOCK 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.
- 2. ENSURE THAT THE BYPASS TUBES ARE CLOCKED CORRECTLY SO THAT THERE ARE NO COLLISIONS WITH THE PARKING BRAKE OR AXLE.
- 3. ICON SHOCK SHIN GUARDS (56100) ARE NOT COMPATIBLE WITH OMEGA BYPASS SHOCKS.



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

- 1. 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 rear wheels.
- 2. Support the rear axle using a floor jack. Use a 17mm to remove the driver side upper shock mount bolt in order to remove the OEM shock bushings and washers. Use locking pliers to hold the shaft from rotating.
- 3. Compress the shock enough to allow the stem to clear the frame and pull the upper portion of the shock away from the frame rail to relive any tension on lower shock mount.
- 4. Using a 17mm, remove the driver side lower stud nut and remove shock.
- 5. Install the lower shock mount as follows: 3/4" shock spacer, shock rodend, 3/4" shock spacer, factory stud bolt. [Torque to factory spec]
- 6. Lower the axle housing far enough to slide the top of the shock into position in the OEM shock location. Use a 19mm to install the shock stem bushing assembly onto the factory shock mount as follows: 9/16" stem washer, stem bushing (locater lip up), factory shock mount, stem bushing (locator lip down), 12mm stem washer, 12mm nylock nut. Fasten until bushing assembly is snug and nylock is engaged. [FIGURE 1]



FIG.1



- 7. Use a 10mm to remove the 4 bolts and the rivet clip holding in the driver side mud flap. Remove the mud flap.
- **8**. Reservoir hose should be oriented toward the rear of the vehicle. Mount the remote reservoir to the reservoir mount plate (250002) using the provided 1/2" x 3" hose clamps (605931). Be sure to install the hose clamp to the ends of the reservoir within the machined areas on the outer surface of the remote reservoir.
- **9**. Orient the reservoir mounting bracket on frame rail forward of the body mount and mark center of the hole. The remote reservoir and bracket should not come in contact with any part of the frame or frame brackets. Locate the reservoir bracket center bolt: Measure 2" up from the bottom of the frame rail and 4" forward of the body mount. [FIGURE 2]



FIG.2

10. Center punch and drill to 21/64".

FIG.3

FIG.5

- 11. Use a 9/16" socket to thread the supplied 3/8" x 3/4" self tap bolts into the frame rail.
- 12. Remove the self tap bolt and secure the remote reservoir bracket. [Torque to 30ft-lbs]
- 13. Place reservoir in the reservoir mounting bracket with the ICON shield logo oriented up into the fender well and secure reservoir with the supplied hose clamps using an 8mm nut driver. [FIGURE 3]





FIG.4

- 14. Install the adel clamp (605934) at the center of the remote reservoir hose in the fender well. Use a 3/8" and self tap screw (605033) to secure the adel clamp to the pinch weld above the frame in the wheel well. [FIGURE 4]
- 15. Make sure that the bypass tubes are oriented properly. If not positioned correctly, they could hit the parking brake cable as the suspension cycles, causing damage to the parking brake and the shocks. [FIGURE 5 & 6]





FIG.6

- 16. Use a 10mm to reinstall the mud flap and rivet clip
- 17. Repeat step 3-16 for passenger side.
- 18. Reinstall wheels and lower the vehicle back to the ground. [Torque lugs to factory spec]

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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

2.5 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.

SELE-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

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