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PART #	DESCRIPTION
22019	2007-UP JK FRONT HYDRAULIC BUMP STOP KIT

COMPONENTS INCLUDED	
(2) 124042 JK FRONT BUMPSTOP MOUNT (2) 204902 2.0 AIR BUMP, 2.5 TRAVEL, 1:1 RATIO	(1) 22019H JK FRONT BUMPSTOP HARDWARE KIT
HARDWARE INCLUDED	
22019H HARDWARE KIT	
(2) 150109 WASHER 1.25 X .395 X .125 (2) 605052 1/4-20 NYLOCK NUT (2) 605057 1/4-20 X 2.000 HHCS	(2) 605115 3/8-16 X 1.500 FHSCS SS 18-8 (2) 605121 3/8-16 NYLOCK NUT (2) 605970 VIBRATITE ANTI SEIZE TUBE
TOOLS REQUIRED	
JACK JACK STANDS GRINDER / SANDER SAWZALL W/ METAL BLADE HEX KEY SET	TORQUE WRENCH 9/16" SOCKET / WRENCH 18MM SOCKET / WRENCH 21MM SOCKET / WRENCH
TECH NOTES	
1. IF YOU ARE USING THIS BUMP STOP KIT WITH ICON'S SHORTER (1.75-3") COILOVER CONVERSION, IT IS RECOMMENDED TO HAVE THE BUMP STOPS REDUCED FROM 2.5" TO 2.0" OF TRAVEL TO ACHIEVE THE ABSOLUTE BEST RIDE QUALITY.	



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 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 shock at the lower mount, the swaybar link at the axle, and the lower brake line bracket at the axle. Disconnect the track bar. Depending on lift height and type of front drive shaft you may also need to disconnect the front drive shaft at the pinion. Disconnect locker wires going to the front differential if applicable.
- Slowly lower the front axle to unload the coil springs. Remove the front coils from the vehicle. Remove the rubber coil isolator from the bucket and put aside for reassembly.
- The tube in the middle of the coil bucket must be removed by cutting the weld where it goes through the bucket. This can be done with a sawzall or an abrasive cut off wheel. If using a sawzall, place masking tape over the front of the coil bucket to prevent the foot of the sawzall from scratching the bucket. Repeat on opposite side. [FIGURE 1]

FIG.1



FIG.2



- Once the weld has been removed, loosen the bumpstop tube with a hammer and remove it. [FIGURE 2]

6. Clean up the cut surface with a sander or grinder and cover the bare metal surface with spray paint. [FIGURE 3]

FIG.3

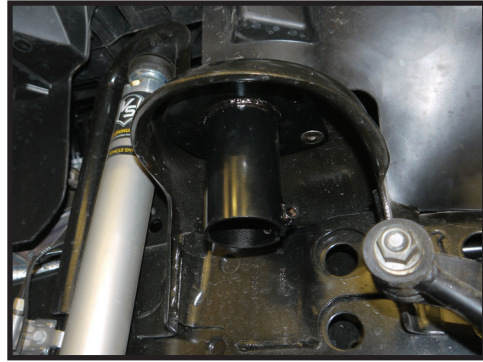


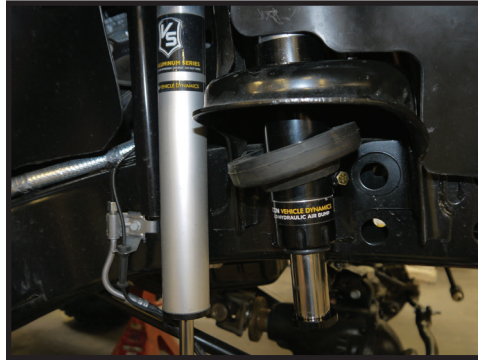
FIG.4

7. The bumpstop mount is retained primarily by the coil, but there is an additional retaining bolt to keep it from rotating and to hold it in place for assembly. Position the mount as shown and bolt it in place using the supplied 3/8" flat head bolt going up through the mount and bucket. Place the large OD washer on the top side of the bucket and secure with the supplied nylock nut. Center the mount tube in the middle of the bucket as you tighten the retaining bolt. Repeat on opposite side. [FIGURE 4]

8. If this is being installed with a coilover conversion kit the bumpstop mount will replace the tower anchor doubler plate. Use the doubler plate to drill the hole pattern in the bucket then remove the doubler plate and install the bumpstop mount. The bumpstop mount has the appropriate bolt pattern.

9. Slide the factory rubber coil isolator over the bumpstop mount. Preassemble the 1/4" bolt and nut through the pinch tubes. Apply one tube of antiseize to the bump stop cylinder, then slide the hydraulic bumpstop up into the mount and tighten the pinch bolt. Do not over tighten. Repeat on opposite side. [FIGURE 5]

FIG.5

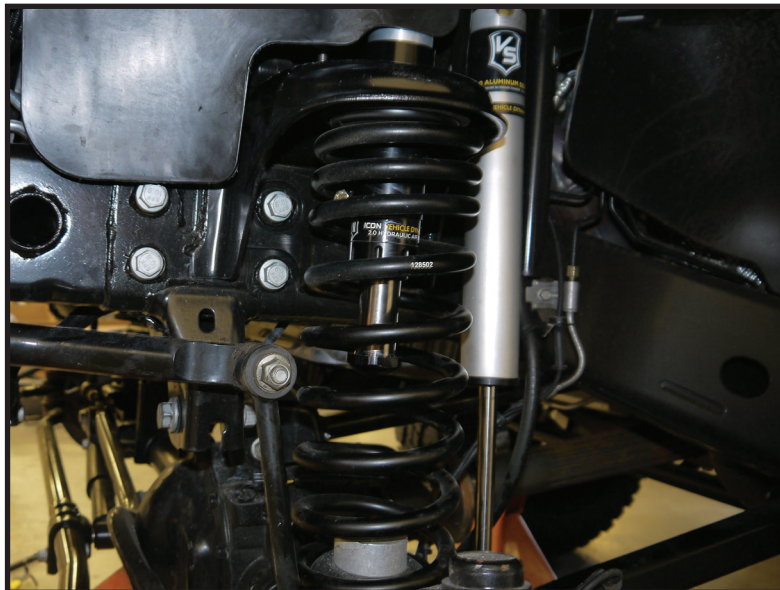


10. Reinstall the spring and slowly raise the axle until you can reconnect the shock, swaybar links, brake line brackets, and wiring.

11. Reinstall wheels and lower the vehicle 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 LIMITED LIFETIME WARRANTY

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