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PART #	DESCRIPTION
22004	07-UP JEEP JK 2/4 DOOR REAR COILOVER CONVERSION SYSTEM

COMPONENTS INCLUDED	
(1) 124017 JK REAR CO MNT (1) 124018 JK REAR CO AXLE MNT (DRVR) (1) 124019 JK REAR CO AXLE MNT (PASS)	(1) 124035 JK CO REAR RESI MOUNT (1) 124036 JK CO REAR MOUNT SPACER (1) 25004H JK REAR RR CO MNT HARDWARE
HARDWARE INCLUDED	
(2) 120038 JK BRAKELINE DROP (2) 127201 JK REAR BUMP STOP SPACER 1" (2) 129009 SLEEVE .875 X .563 X 1.600 (4) 605016 5/16 SAE FLAT WASHER (2) 605052 1/4-20 NYLOCK NUT (4) 605053 1/4 SAE FLAT WASHER (2) 605054 1/4-20 X .750 BOLT (4) 605075 5/16-18 X 1.500 CS ALLEN BOLT (4) 605076 5/16-18 C-LOCK (2) 605101 3/8-16 X 1.000 BOLT (2) 605122 3/8-16 C-LOCK	(4) 605133 3/8 SAE FLAT WASHER (2) 605302 1/2-13 X 1.500 BOLT (2) 605307 1/2-13 X 2.750 BOLT (4) 605312 1/2-13 X 4.500 BOLT (2) 605313 1/2-13 X 5.000 BOLT (10) 605322 1/2-13 C-LOCK NUT (20) 605330 1/2 SAE FLAT WASHER (2) 605443 9/16-12 X 4.500 BOLT (2) 605450 9/16-12 C-LOCK NUT (4) 605455 9/16 F-436 FLAT WASHER (4) 605800 6MM FLANGED LOCK NUT
TOOLS REQUIRED	
JACK JACK STANDS DRILL DEAD BLOW LINE-UP BAR TORQUE WRENCH 1/2" DRILL BIT 3/16" ALLEN WRENCH	1/2" SOCKET / WRENCH 3/4" SOCKET / WRENCH 13/16" SOCKET / WRENCH 7/8" SOCKET / WRENCH 7/16" SOCKET / WRENCH 9/16" SOCKET / WRENCH 15/16" SOCKET / WRENCH
TECH NOTES	
<p>1. THIS KIT ELIMINATES THE OE REAR SWAYBAR &amp; EXHAUST MUFFLER.</p> <p>2. IF USING AN AFTERMARKET TRACK BAR BRACKET, A LARGER THAN SUPPLIED BUMPSTOP SPACER IS REQUIRED.</p> <p>3. ALL ADVERTISED LIFT HEIGHTS ARE BASED OFF OF A STOCK-EQUIPPED 4 DOOR JK.</p>	



WARNING!
<p><b>** 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!</b></p> <p><b>** ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.</b></p> <p><b>** 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.</b></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 tires.
- Disconnect rear track bar on frame side. (21mm)
- Remove the rear sway bar links and sway bar. (15mm, 18mm)
- Pop the ABS and differential wire connector out from the differential.
- Unhook differential breather tube from frame.
- Remove the brake line bracket from the frame to allow the axle to droop further.
- Unhook the parking brake cable from the hanger above the rear driveshaft.
- Support the differential with a floor jack.
- Disconnect the rear shocks from the axle. (18mm) Unbolt shocks from upper shock mount. (16mm)
- Lower the axle to unload the springs and remove the springs.
- The rear mounted muffler will have to be removed and replaced with a new exhaust system that exits before the rear axle. Remove the 2-3 rubber hangers that attach the muffler to the chassis. Unbolt the muffler and unbolt the remaining section of exhaust piping that is routed over the axle and remove.

**12.** The reservoir mount bolts to the 4 factory sheet metal heat shield studs using the supplied 6mm flange nuts. Remove heat shield and install reservoir mount. (FIGURE 1)

FIG.1

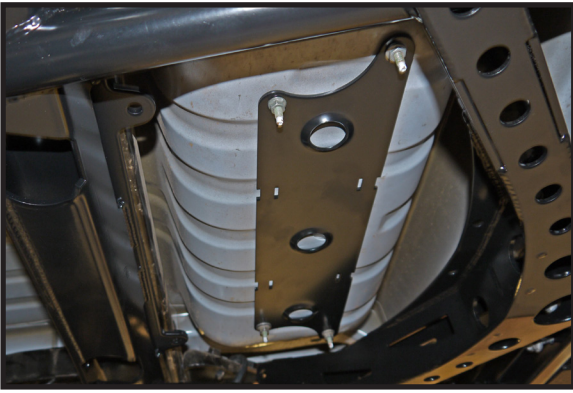
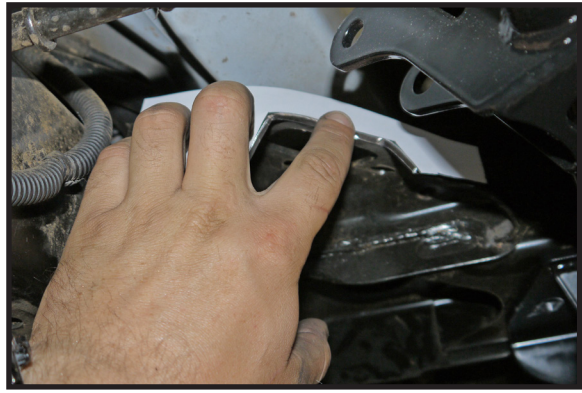


FIG.2



**13.** Certain OEM parts will need to be trimmed or sanded slightly to provide adequate room for the new coilovers to cycle. Included with the instructions are (2) 1:1 cut out templates that can be used as a guideline on trimming the minimum needed. Cut out the template for the shock mount and line it up as shown. (FIGURE 2) Mark twice, cut once. Repeat on the opposite side.

**14.** The 4 bolt holes in the back cross member must be used for this install. Depending on the tow package or bumper you have these holes may be currently used. If present, remove the 4 bolts taking care that the bumper or tow hitch remains in position. The ICON upper shock mount is designed to work with the thickness of these accessories. If none are present you must use the supplied 1/4" thick spacer plate in their place to position the shock mount correctly.

**15.** Raise the rear upper shock mount and install the (4) 1/2" x 4.5 bolts going through the rear cross member. (SEE FIG.3)

FIG.3



**16.** Use a c-clamp to pinch the other end of the shock mount to the cross member over the rear axle. (FIGURE 4) Secure the shock mount to the rear crossmember using supplied hardware, keeping it flat against the surface and the edges parallel to frame. (18mm or 3/4")

FIG.4



FIG.5



**17.** Use the shock mount as a drill guide to drill into the cross member with a 1/2" drill bit. Once the holes have been drilled and the inside has been de-burred, use the supplied 1/2" x 1.50 long hardware to tighten the shock mount to the cross member. (FIGURE 5)

**18.** Torque all 6 upper mount bolts to spec.

**Prep the lower shock/link mounts:** If the lower mounts have been hit on rocks dress up the outside of the stock mount so there are no burrs and the new coilover mount will sit flat and install easily. The stock lower shock tabs will have been squeezed in by the previous shock installation and must be bent back out and straightened to accommodate the spacer that will be installed. Use a crescent wrench to bend the tabs out. Install the supplied spacer and install the factory lower shock bolt. Tighten the factory shock bolt to reform the tabs to the correct width and remove the bolt. The spacer may want to stay pinched in the tabs - this is ok, leave it there. (FIGURE 6 & 7)

FIG.6



FIG.7



**19.** To install the lower rear shock mount, the lower link bolt will need to be removed. Do one side at a time to prevent the axle from shifting. Once the link has been disconnected (but still in place), slip the axle mount on from the bottom front side and slide towards the rear. Line up the rear shock mount bolt holes by using a tapered punch to align the holes and slip a bolt through the bracket and OEM shock tabs and spacer on the rear axle. Use a dead blow to help line up the bracket, and then insert the supplied 9/16" x 4.50" bolt through the bracket and lower link . (13/16", 7/8")

**20.** Use the shock mount bracket as a drill guide to drill a single hole through the axle mount. Bolt the bracket in using the supplied 3/8" hardware. (9/16")

**21.** Install the shocks from the top first. Use the supplied 1/2" x 2.75 hardware. The reservoir hose goes inward toward the mount.

**22.** Once the coilover is in and hanging, use the jack to lower or lift the axle to help align the shock into the pocket in the lower shock mount on the axle. Use supplied spacer in the factory lower shock mount location and slide the 1/2" x 5.0 long bolt all the way through. The spacer is critical to keep the factory tabs from folding in when torquing to spec. The wide spacer on the lower shock end goes towards the inside of the vehicle.

**23.** Mount the coilover to the axle using supplied 1/2" hardware. (3/4") (FIGURE 8)

FIG.8

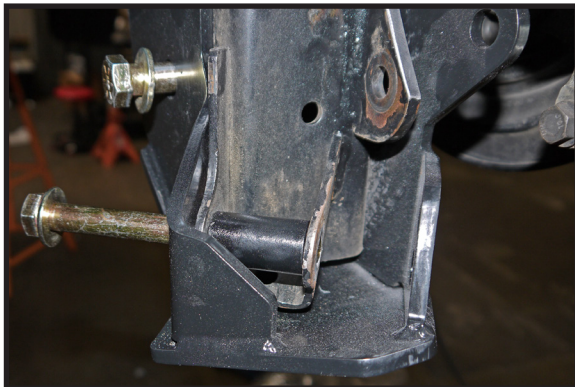
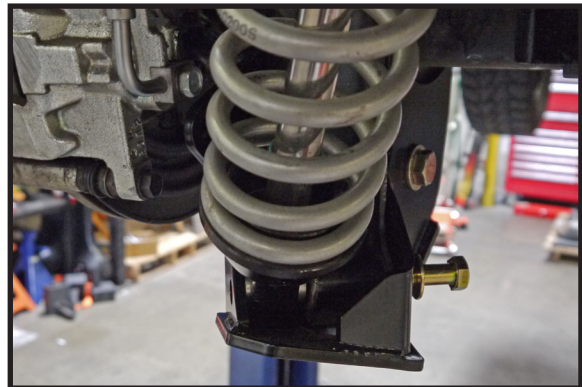


FIG.9



**24.** Tighten all hardware on the axle mount. (9/16", 3/4", 15/16", 7/8") (FIGURE 9)

25. The reservoirs mount to the previously installed plate. Use hose clamps to secure the reservoirs to the new plate, routing the hoses in a manner that will not cause chaffing or damage by any moving suspension component or sharp edge. (FIGURE 10)



FIG.10

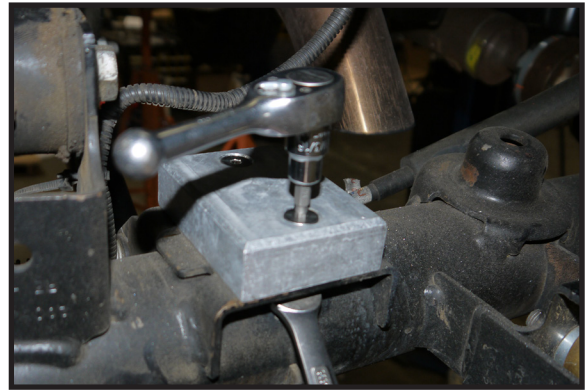


FIG.11

26. Install the supplied bump stop spacers with the 5/16" hardware. If vehicle has a track bar lift bracket, a taller bumpstop is required. (1/2", 3/16" Allen) (FIGURE 11)

27. Install the supplied brake line drop brackets (120038) using the supplied 1/4" x .75 bolts and washers. (7/16") (FIGURE 12)



FIG.12



FIG.13

27. Reconnect all routing clips, and e-brake cable. (10mm)

28. Clip breather tube to upper shock mount. (FIGURE 13)

29. Reinstall tires and lower vehicle to the ground. [Torque to factory spec]

30. With the vehicle on the ground re-connect the rear track bar and tighten to factory spec. Install bolt from opposite direction. The head of the bolt should be closest to the axle. (21mm)

**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**

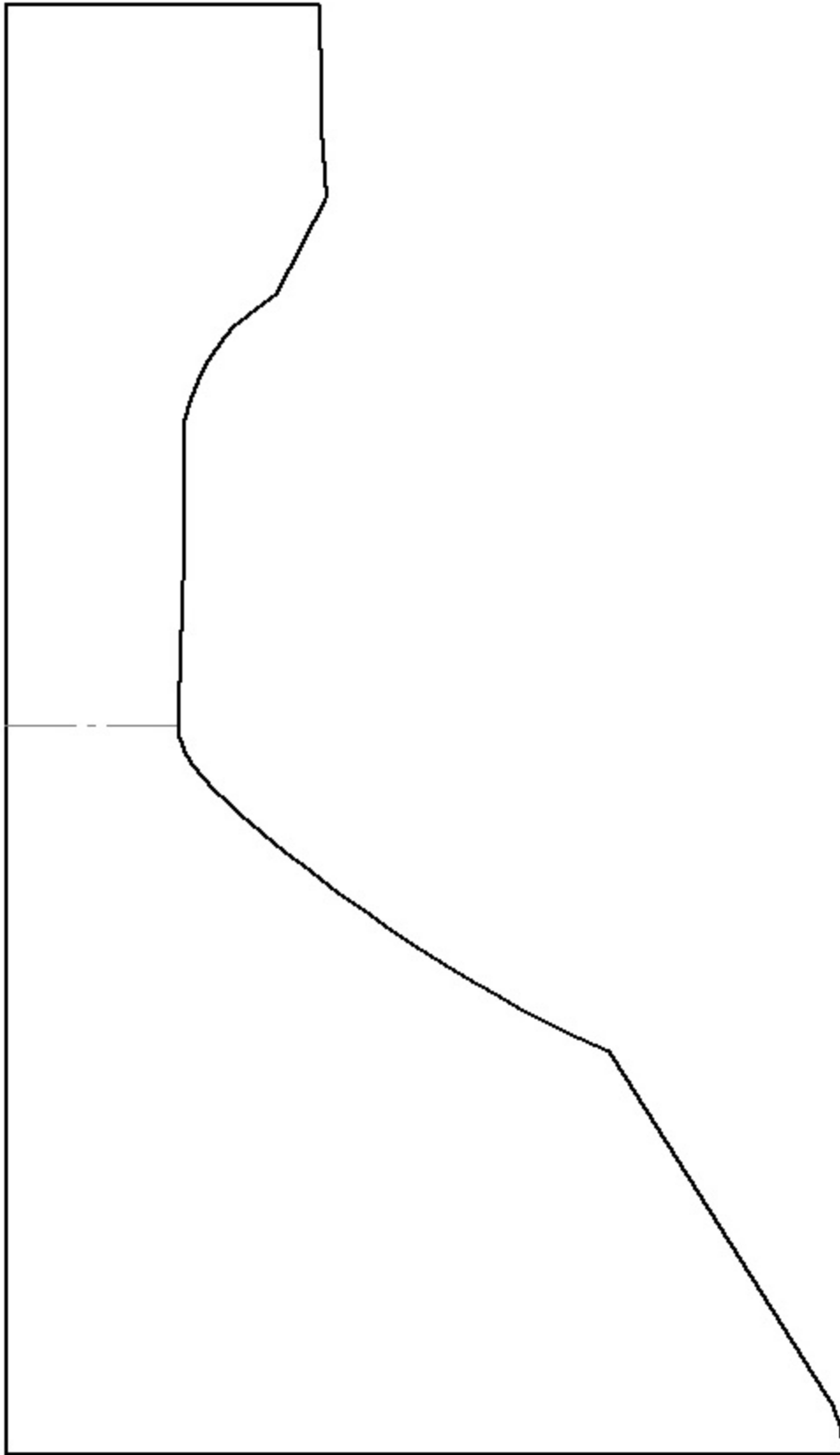
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ICON Vehicle Dynamics' obligation under this warranty is limited to the repair or replacement, at ICON Vehicle Dynamics' discretion, of the defective product. Any and all costs of removal, installation or re-installation, freight charges and incidental 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.

**1:1 TRIM TEMPLATES (STEP 13)**





**1:1 TRIM TEMPLATES (STEP 13)**

