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22006 INSTALLATION INSTRUCTIONS

12-7-2015 REV.A

PART #

22006

DESCRIPTION

07-UP JK 3-5" REAR COILOVER CONVERSION SYSTEM

COMPONENTS INCLUDED		
(1) 124001 JK TRACK BAR BRACKET (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) 22006H JK 3-5" REAR CO HARDWARE KIT	
HARDWARE INCLUDED		
22006H HARDWAR	E KIT - BRAKE LINES	
(1) 125100 07-15 JK REAR BRAKE LINE KIT 25"		
22006H HARDWARE KIT - BAG	1 OF 4 - UPPER MNT & RESI MNT	
(2) 605301 1/2-13 X 1.250 BOLT (2) 605307 1/2-13 X 2.750 BOLT (4) 605312 1/2-13 X 4.500 BOLT	(8) 605322 1/2-13 LOCK NUT (16) 605330 1/2 FLAT WASHER (4) 605800 M6-1.0 FLANGE NUT	
22006H HARDWARE KIT - BAG 2 OF 4 - LOWER MNT		
(2) 129009 SLEEVE .875 X .563 X 1.600 (2) 605001 3/8-16 X 1.000 BOLT (2) 605122 3/8-16 LOCK NUT (4) 605133 3/8 FLAT WASHER	(2) 605322 1/2-13 LOCK NUT (4) 605330 1/2 FLAT WASHER (2) 605443 9/16-12 X 4.500 BOLT (2) 605450 9/16-12 LOCK NUT	
(2) 605312 1/2-13 X 4.500 BOLT	(4) 605455 9/16 F-436 FLAT WASHER	WARNING!
22006H HARDWARE KIT - BAG 3 OF 4 - BUMP STOP SPACER		** READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE
(2) 127056 JK REAR BUMP STOP SPACER 2" (2) 605119 3/8-16 X 2.50 ALLEN BOLT	(4) 605124 3/8-16 LOCK NUT THIN (2) 605134 3/8-16 X .750 BUTTON HEAD	NOT PROPERLY FOLLOWED SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE!
22006H HARDWARE KIT - BAG 4 OF 4 - TRACK BAR BRACKET		
(4) 605122 3/8-16 LOCK NUT (4) 605133 3/8 FLAT WASHER (2) 605136 3/8-16 X 1.000 BUTTON HEAD (1) 605151 3/8-16 U-BOLT 3.188 ID X 4.562 L X 1.500 THREAD	(1) 605445 9/16-12 X 3.000 BOLT (1) 605450 9/16-12 LOCK NUT (2) 605455 9/16 F-436 FLAT WASHER	** 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
TOOLS REQUIRED		BE PERFORMED BY A PROFESSIONAL SHOP/SERVICE TECHNICIAN. PRODUCT FAILURE CAUSED BY IMPROPER INSTALLATION WILL NO
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	COVERED UNDER ICON'S WARRANTY POLICY.
TECH NOTES		
1. THIS KIT ELIMINATES THE OE REAR SWAYBAR & EXHAUST MUFFLER.		
2. AN AFTERMARKET DRIVESHAFT IS REQUIRED WITH THIS KIT AND IS AVAILABLE THROUGH ICON. FAILURE TO INSTALL A SMALLER DIAMETER DRIVESHAFT MAY RESULT IN DRIVESHAFT TO GASTANK COLLISION ON PASSENGER SIDE. EVAP CANISTER COLLISION MAY OCCUR ON DRIVER SIDE.		
3. ALL ADVERTISED LIFT HEIGHTS ARE BASED OFF OF A STOCK-EQUIPPED 4 DOOR JK. ICON RECOMMENDS 3.5" OF LIFT FOR BEST RIDE QUALITY AND PERFORMANCE.		
4. MINIMUM EYE TO EYE MEASUREMENT ON TRACK BAR IS 40.63" OR GAS TANK TO DIFFERENTIAL CASE CONTACT MAY OCCUR DURING MAXIMUM ARTICULATION.		

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 wheels.

- 2. Disconnect rear track bar on axle side using a 21mm socket/wrench.
- 3. Remove the rear sway bar links (will not be reused) and sway bar using a 15mm and 18mm socket/wrench.
- 4. Pop the ABS and differential wire connector out from the differential.
- **5**. Unhook differential breather tube from frame.
- 6. Remove the brake line bracket from the frame to allow the axle to droop further.
- **7.** Unhook the parking brake cable from the hanger above the rear driveshaft.
- **8.** Support the differential with a floor jack.

9. Disconnect the rear shocks from the axle using an 18mm socket/wrench, then loosen the shocks from upper shock mount using a 16mm socket/wrench.

10. Lower the axle enough to allow for removal of the springs.

11. 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 using a 15mm socket/wrench and remove the remaining section of exhaust piping that is routed over the axle.

12. The reservoir mount bolts to the 4 factory sheet metal heat shield studs using the supplied 6mm (605800) flange nuts in bag 1. Remove heat shield and install reservoir mount. [Torque to 10 ft-lbs] (FIGURE 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 (124036) 1/4" thick spacer plate in their place to position the shock mount correctly.

15. Raise the rear upper shock mount into place and install the 1/2" (605312) bolts in bag 1 going through the rear cross member. (FIGURE 3)



16. Use a c-clamp to pinch the other end of the shock mount to the crossmember over the rear axle. (FIGURE 4) Use an 18mm socket/wrench to secure the shock mount to the rear crossmember if using the supplied 1/2" hardware in bag 1. Be sure to keep the mount flat against the surface and the edges parallel to the frame.





FIG.5

17. Use the shock mount as a drill guide to drill into the crossmember with a 1/2" drill bit. Once the holes have been drilled and the inside has been deburred, use the supplied 1/2" (605322) nuts and (605330) washers in bag 1 to tighten the shock mount to the crossmember using 3/4" socket/wrench. (FIGURE 5) [Torque 1/2" hardware to 80 ft-lbs, and factory hardware to factory spec]

18. Prepare the lower shock/link mounts if needed: 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 instillation 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 okay, leave it there. (FIGURE 6 & 7)



19. To install the lower rear shock mount (124018, 124019), 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 it towards the rear. Line up the rear shock mount bolt holes by using a tapered punch and slip a bolt through the bracket, 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" (605443) bolt, (605450) nut, and (605455) washer through the bracket and lower link. Tighten using a 13/16" and 7/8" socket/ wrench.

20. Use the shock mount bracket (124018 or 124019) as a drill guide to drill a single 3/8" hole through the axle mount. Fasten the bracket using the supplied 3/8" (605001) bolt, (605122) nut, and (605133) washer in bag 2 using a 9/16" socket/wrench.

21. Install the ICON (124001) rear track bar bracket: slide the new bracket into the stock track bar mount on the axle and position around the axle tube. 2 holes need to be drilled on the top side of the original bracket. Mark the 2 holes with a center punch. Remove the bracket and drill the holes using a 3/8" drill bit. Reinstall the bracket using the supplied 9/16" bolt (bag 4) through the lower hole in the stock position. Using a 13/16" and a 7/8" [Torque to 115 ft-lbs]. Install the U-bolt around the axle using a 9/16" [Torque to 35 ft-lbs]. Install and tighten both of the 3/8" button head bolts using a 7/32" allen and a 9/16" [Torque to 35 ft-lbs]. (FIGURE 8)

NOTE: If using ICON adjustable track bar, verify that gas tank does not hit differential case at full articulation.



22. Install the shocks from the top first using the supplied 1/2" (605307) bolt, (605322) nut, and (605330) washer in bag 1. Route the reservoir hose inward towards the mount.

23. 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. Mount supplied spacer (129009) in bag 2 in the factory lower shock mount location and slide the 1/2" x 4.5" long bolt (605312) 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 faces toward the inside of the vehicle [Torque to 75 ft-lbs]. (FIGURE 9) Use a 3/4" socket/wrench to mount the coilover to the axle using supplied (605312) bolt, (605322) nut, and (605330) washer hardware in bag 2.





FIG.10

FIG.7

24. Tighten all hardware on the axle mount. (FIGURE 10) [3/8" > 45 ft-lbs] [1/2" > 90 ft-lbs] [9/16" > 110 ft-lbs]

25. The reservoirs mount to the previously installed (124035) plate. Use the hose clamps (supplied with the coilovers) 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 11)



26. Install the supplied (127056) bump stop spacers with the supplied 3/8" (605119) allen bolts, (605134) button heads, and (605124) nuts in bag 4. The wedge will point towards the front of the vehicle as shown. (FIGURE 12)

27. Replace the factory brake lines with the supplied brake line kit and reattach to frame with the provided bracket and clip. (125100). Route brake lines so that they will not interfere with any moving components. Bleed brake lines as per factory instruction manual.

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



29. Instal wheels and lower vehicle to the ground. [Torque to factory spec]

30. With the vehicle on the ground reconnect the rear track bar. Install bolt using a 21mm socket/wrench. [Torque to factory spec]. Verify that the track bar is centering the axle underneath the vehicle. If setting ride height to more than 3.5", an ICON adjustable track bar is recommended. Minimum eye to eye measurement on track bar is 40.63" or gas tank to differential case contact may occur during maximum articulation.

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.

FIG.11

FIG.12



