ICON Vehicle Dynamics 22040 Installation Instructions

3-Inch Front and Rear Box Kit for Jeep Wrangler JK

Part number: 22040

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ICON VEHICLE DYNAMICS®
7929 Lincoln Ave. Riverside, CA 92504
Phone: 951.689.ICON | Fax: 951.689.1016

22040 INSTALLATION INSTRUCTIONS

6-15-2021 REV.B

PART #	DESCRIPTION
22040	07-UP JEEP WRANGLER JK 3" BOX KIT

COMPONENTS INCLUDED

(2) 124023 JK FRONT SWAY BAR LINK 3"	(4) 139001 SLEEVE .625 X .508 X 1.625
(2) 127200 JK FRONT BUMP STOP SPACER 1"	(1) 22040H 07-UP JK 3" BOX HARDWARE KIT
(2) 127201 JK REAR BUMP STOP SPACER 1"	(8) 297024 SWAY BAR URETHANE BUSHING

HARDWARE INCLUDED

(2) 120038 JK REAR BRAKELINE DROP	(2) 605116 3/8-16 X 1.750 CSUNK ALLEN BOLT
(4) 605016 5/16 SAE FLAT WASHER	(2) 605122 3/8-16 C-LOCK NUT
(2) 605052 1/4-20 NYLOCK NUT	(2) 605133 3/8 SAE FLAT WASHER
(4) 605053 1/4 SAE FLAT WASHER	(2) 605308 1/2-13 X 3.000 BOLT
(2) 605054 1/4-20 X .750 BOLT	(2) 605322 1/2-13 C-LOCK NUT
(4) 605075 5/16-18 X 1.500 CSUNK ALLEN BOLT	(4) 605330 1/2 SAE FLAT WASHER
(4) 605076 5/16-18 C-LOCK	(1) 605968 VIBRATITE BLUE

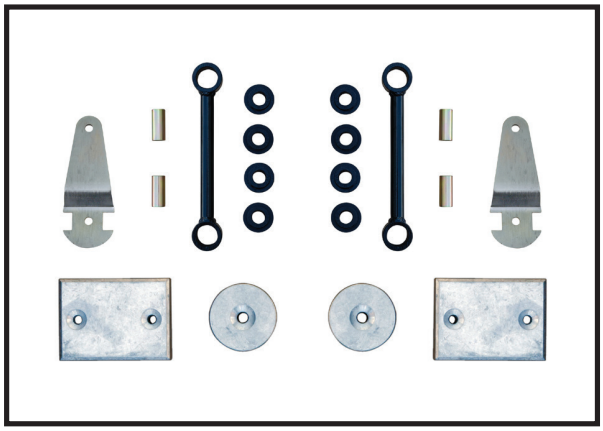
TOOLS REQUIRED

HYDRAULIC JACK & JACK STANDS	10MM SOCKET / WRENCH
POWER DRILL	15MM SOCKET / WRENCH
3/8" DRILL BIT	16MM SOCKET / WRENCH
ASSEMBLY / CHASSIS GREASE	18MM SOCKET / WRENCH
7/32" & 3/16" ALLEN WRENCH	21MM SOCKET / WRENCH

TECH NOTES

1. USING THE STOCK SHOCKS WITHOUT AN ICON SHOCK EXTENSION KIT WILL HINDER PERFORMANCE OF THIS KIT. FOR BEST RIDE QUALITY IT IS RECOMMEND TO USE ONE OF THE MANY SHOCK OPTIONS ICON OFFERS THAT ARE TUNED SPECIFIC TO THIS KIT.

2. ICON 3" FRONT COIL SPRINGS (PART #22010) AND 2" REAR COIL SPRINGS (PART #22015) ARE REQUIRED FOR COMPLETE INSTALLATION OF THIS KIT.



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. 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.

2. Dismount the front wheels from the vehicle.

3. Using an 18 and 19mm remove the front sway bar links completely, they will not be reused. **[FIGURE 1]**

FIG.1



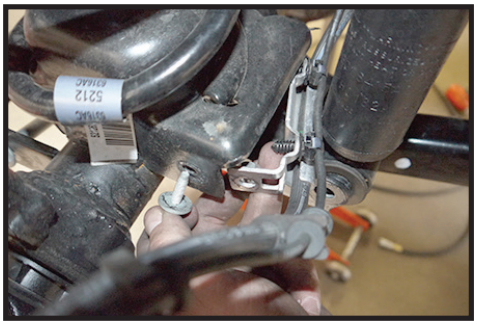
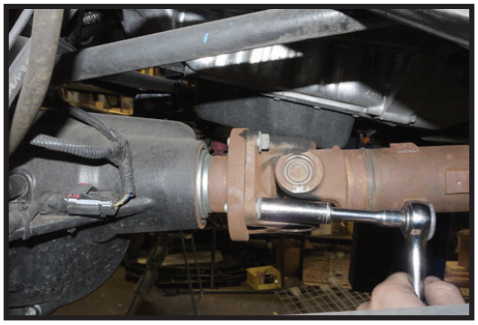


FIG.2

- For 2012+ models: Carefully remove the ABS connector and brake line bracket from the coil seat using a 10mm. **[FIGURE 2]**
- For 2007-2012 models: Remove the brake line bracket from the frame using a 10mm.
- For Rubicon models: Disconnect the locker control wires from the differential to allow the axle to droop.

4. Using a 15mm disconnect the front drive shaft from the front differential. This will allow the axle to go low enough for coil removal later. **[FIGURE 3]**

FIG.3



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5. Using a 21mm disconnect the front track bar from the frame side **[FIGURE 4]**. Leave axle side connected unless you are installing an ICON Vehicle Dynamics Adjustable Track Bar (Part# 21020). Refer to #21020 instructions if replacing stock track bar.

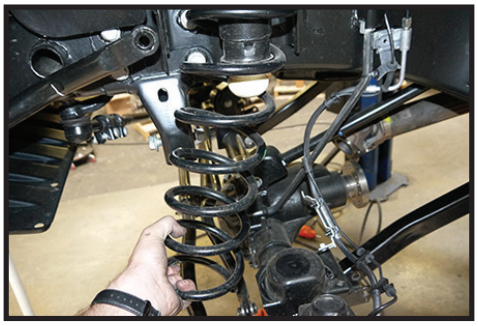
FIG.4



6. With the front axle supported, remove the front shocks by loosening the upper stem and lower eyelet. The shock may spin when you try and remove the stem hardware - you will need to hold onto the shock body if this happens. The shocks are limiting droop so MAKE SURE THE AXLE IS SUPPORTED OR THE AXLE WILL FALL when the shocks are removed.

7. Lower the axle to unload the springs from the coil buckets and carefully remove the stock springs. **[FIGURE 5]**

FIG.5



8. Drill a 3/8" hole in the center of the lower bump stop pad using the supplied bump stop spacer as a guide. **[FIGURE 6]**. With a 7/32" allen wrench install the supplied 3/8" allen bolt, washer, and lock nut to attach the bumpstop spacer to the spring pads [Torque to 35 ft-lbs]. **[FIGURE 7]**

FIG.6



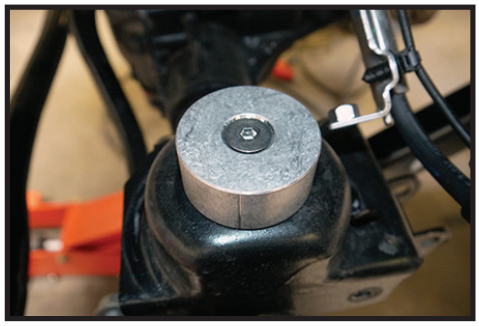


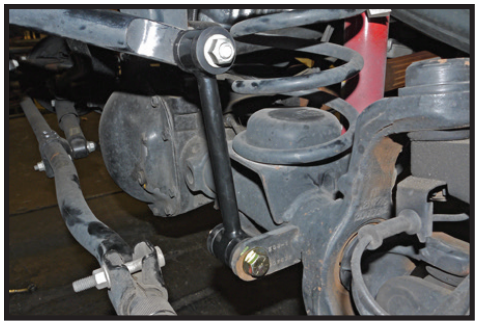
FIG.7

9. Install the rubber spring isolator on top of the new coil spring, install the new coil spring on the axle and into the frame. You may need to lower the axle to allow access for the new coils, watch for wiring and hoses that may be stretched. Make sure the bottom of the coil spring is seated properly into the factory mount. Repeat on passenger side.

10. Slowly raise the axle making sure the coils align in the upper and lower seats and just far enough to install the shocks. See the instructions supplied with the shocks for installation of any of ICON's several shock options or shock extension option. If retaining the factory shocks and not adding shock extensions, the ride will be hindered greatly.

11. Assemble the supplied sway bar links by greasing the bushings and inserting them into the link. Grease the inside of the bushings and install the supplied sleeve. The factory hardware will be re-used where the sway bar connects to the ICON link, reinstall with blue loctite. The supplied 1/2 x 3" bolt, washer, and nut will be used to connect the link to the axle tab [Torque 1/2" hardware to 60 ft-lbs & factory hardware to factory specs]. **[FIGURE 8]**

FIG.8



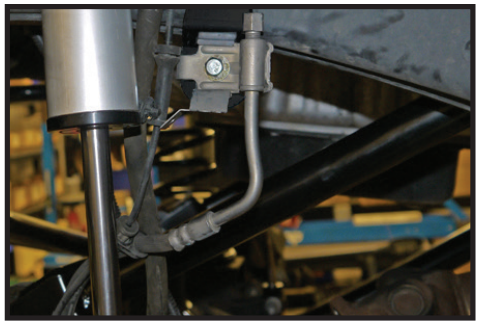


FIG.9

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12. Slightly bend the factory steel brake line roughly 30 degrees to allow for the additional droop travel. **[FIGURE 9]**

13. Reinstall the factory frame bolt thru the brake line bracket using a 10mm. For 2012+ models install the bracket on the lower coil seat using a 10mm [Torque to factory specs].

14. Install track bar bolt using supplied blue thread locker [Torque to factory specs].

15. Install wheels and lower to ground.

16. Reinstall the front driveshaft flange to the front differential [Torque to factory specs].

REAR

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.

2. Dismount the rear wheels from the vehicle.

3. With the rear axle supported with a floor jack, use a 16 and 18mm to remove the rear shocks by loosening the upper barpin and lower eyelet. The shocks are limiting droop so MAKE SURE THE AXLE IS SUPPORTED OR THE AXLE WILL FALL when the shocks are removed.

4. Using a 10mm remove brake line bracket bolt from frame on driver and passenger side.

5. Using a 21mm remove frame side track bar bolt.

6. Using an 18mm remove the lower sway bar link bolt from driver and passenger side.

7. Unhook the brake cable from the hook above the driveshaft

8. Lower the axle to unload the springs from any pressure and carefully remove the stock springs.

9. Using the 3/16" allen wrench, install bumpstop spacers with the 5/16" allen head bolts, washers, and nuts [Torque to 24 ft-lbs]. **[FIGURE 10]**

FIG.10

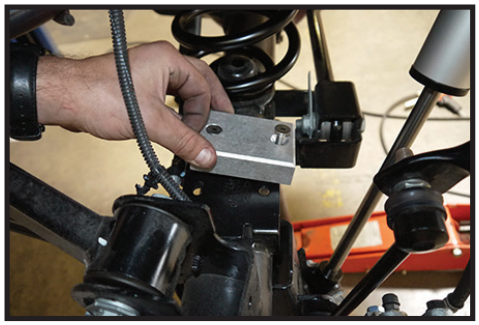




FIG.11

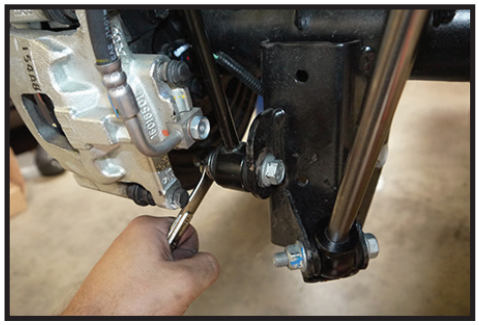
10. Making sure the factory rubber spring isolator is located in the upper coil spring mount on the frame, install the new coil springs on the axle and into the frame. You may need to lower the axle to allow access for the new coils, watch for wiring and hoses that may be stretched. Make sure the bottom of the coil spring is seated properly into the factory mount. **[FIGURE 11]**

11. Slowly raise the axle making sure the coils align in the upper and lower seats and just far enough to install the shocks. See the instructions supplied with the shocks for installation of any of ICON's several shock options or shock extension option. If retaining the factory shocks and not adding shock extensions, the ride will be hindered greatly.

12. Install the track bar bolt at frame and flip the bolt so it points to the rear of the vehicle or it will interfere with the bump stop spacer at full bottom causing damage.

13. Reconnect factory sway bar links using blue thread locker [Torque to factory specs]. **[FIGURE 12]**

FIG.12



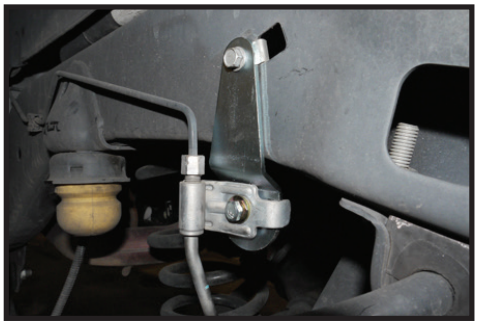


FIG.13

14. Attach the supplied brake line drops with the supplied 1/4" hardware [Torque to 12 ft-lbs]. **[FIGURE 13]**

15. Rehook the brake line cable above the driveshaft.

16. Carefully reinstall wheels onto vehicle and lower vehicle to the ground.

17. Reconnect all brake line brackets and routing clips. When re-installing these lines and clips make sure the lines will not interfere with any of the suspension components.

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.

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