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DESCRIPTION
2017-UP FORD SUPER DUTY 4 LINK KIT

COMPONENTS INCLUDED	
164501 (BOX 2 OF 3)	
(2) 164013 05-UP FSD UPPER LINK (4) 167018 HEIM SPACER COM16 X .750 X 2.80	(2) 295501 COM16T BEARING (2) 605945 WHT-175 SPIRAL RET RING
164502 (BOX 3 OF 3)	
(2) 164012 05-UP FSD LOWER LINK (2) 167014 L/R ADJ SLEEVE 1.25-12L / 1.00-14 (4) 167017 HEIM SPACER JM16 X .750 X 2.750	(2) 295510 JM16-1T 1-14 RH ROD END (4) 605145 3/8-16 X 1.00 12PT FLANGED SCREW
164504 (BOX 1 OF 3)	
(1) 164040 17-UP FSD 4-LINK BRACKET (DRVR) (1) 164041 17-UP FSD 4-LINK BRACKET (PASS)	(1) 164504H 17-UP FSD 4-LINK HARDWARE KIT
164504H HARDWARE KIT	
(1) 164042 17-UP FSD FRAME NUT PLATE (DRVR) (1) 164043 17-UP FSD FRAME NUT PLATE (PASS) (4) 167029 SLEEVE 1.50 X .525 X .625 (1) 294008 WASHER 2.25 X .650 X .250 (4) 605230 7/16" FLAT WASHER (8) 605357 WASHER 1.50 X .531 X .046 (2) 605518 5/8-11 X 1.50 BOLT (2) 605527 5/8 SPLIT LOCK WASHER (2) 605601 3/4-10 X 5.50 BOLT	(2) 605602 3/4-10 X 5.00 BOLT (4) 605620 3/4-10 NYLOCK NUT (8) 605630 3/4" FLAT WASHER (2) 605823 M12-1.75 NYLOCK NUT (2) 605849 M12-1.75 X 180MM BOLT (4) 605851 M18-2.50 X 30MM BOLT (4) 605852 M18 SPLIT LOCK WASHER (2) 605925 PLASTIC PUSH IN CLIP - ABS
TOOLS REQUIRED	
JACK JACK STANDS TORQUE WRENCH 3/8" 12PT SOCKET / WRENCH 1/2" SOCKET / WRENCH 15/16" SOCKET / WRENCH 1 1/16" SOCKET / WRENCH 1 1/8" SOCKET / WRENCH 8MM SOCKET / WRENCH	10MM SOCKET / WRENCH 13MM SOCKET / WRENCH 15MM SOCKET / WRENCH 18MM SOCKET / WRENCH 19MM SOCKET / WRENCH 21MM SOCKET / WRENCH 24MM SOCKET / WRENCH 27MM SOCKET / WRENCH 30MM SOCKET / WRENCH
TECH NOTES	
<p>1. ICON 4-LINK KIT INTENDED FOR USE WITH ICON 4.5" OR 7" LIFTS.</p> <p>2. ICON TRACK BAR (64038) REQUIRED FOR INSTALLATION.</p> <p>3. EXTENDED BRAKE LINE KIT AVAILABLE (61110) AS AN OPTION INSTEAD OF BRAKE LINE DROP BRACKETS.</p>	



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.
- Remove the sway bar links from the sway bar using an 8mm & 18mm. Leave them connected to the axle. [FIGURE 1]

FIG.1

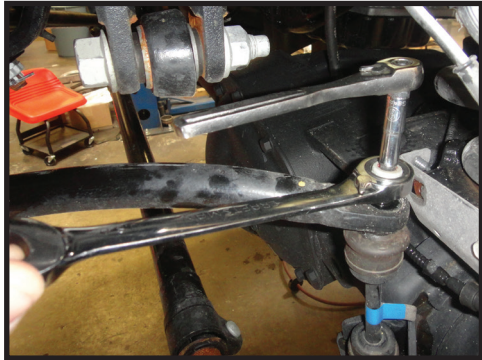


FIG.2



- Disconnect the upper brake line brackets from the frame using a 13mm and lower brake line brackets from the axle with a 10mm. [FIGURE 2]

4. Remove the factory track bar using a 27mm and 30mm. (Refer to track bar instructions) [FIGURE 3]

FIG.3



5. Support the axle with a floor jack and remove the front shocks. The shocks are limiting droop so make sure that the axle is supported or it will drop when the shocks are removed. Only remove the lower bolt using an 18mm.

6. Lower the axle until the coil springs are unloaded from their mounts. Be careful not to stretch or damage any lines connected to the axle or radius arms. Remove the coils. [FIGURE 4]

FIG.4



7. Some trucks have a transfer case skid plate that must be removed using a 15mm. Remove the nut clips from the frame.

8. Lift the axle enough to reconnect the shocks and then lower the axle back down. [FIGURE 5]

FIG.5

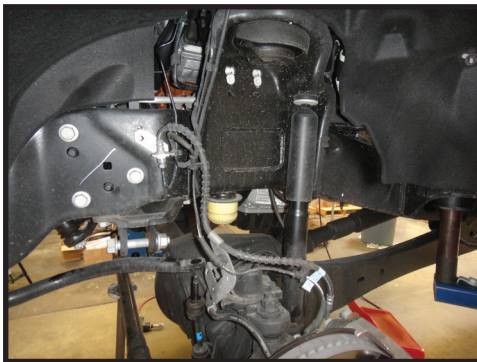


FIG.6



9. With both coils removed, the radius arms don't have much force on them and can be safely removed from the frame mount using a 24mm & 27mm. [FIGURE 6]

10. Once the bolts are removed from the radius arms, lift up on the tie rod to rotate the axle rearward which will then rotate the radius arms out of their pockets. [FIGURE 7]

FIG.7



FIG.8



11. Remove the outside crossmember bolt on both sides using an 18mm. [FIGURE 8]

12. Disconnect the radius arms from the axle using a 24mm. [FIGURE 9]

FIG.9



FIG.10

13. Connect the upper link to the axle and let it hang while the 4-link bracket is being installed. The driver side upper radius arm/axle bolt uses one of the nuts from the factory radius arm/frame bolts as they will not be reused. [FIGURE 10]

14. Position the driver side 4-link bracket into the stock radius arm pocket. Loosely install the two supplied 2.50" X 30mm bolts with lock washers into the forward radius arm pocket holes. [FIGURE 11]

FIG.11



15. Spacers, shims, and longer 12mm bolts are supplied to mount the 4-link bracket to the crossmember. The shims are used to account for the variances in crossmember placement in relation to the radius arm pockets. Position the supplied spacers and shims between the crossmember and 4-link bracket. 1 spacer must go on both sides of the crossmember. Position the shims as needed. 4 shims must be used on each side of the truck. The shim positioning may vary from one side to the other. Use the supplied 7/16" washers on the 12mm bolts and fasten using a 19mm. [Torque to 65 ft-lbs] [FIGURE 12 & 13]

FIG.12



FIG.13



Slide the nut plate in the end of the crossmember and align over the hole. Using the supplied 5/8" bolts, start the bolts in the nut plate, mounting the 4-link bracket to the crossmember. Use the supplied 1/4" washer between the bracket and crossmember on the driver side only. [FIGURE 14]

FIG.14



16. With the 4-link brackets installed loosely on the vehicle, mount the upper links to the bracket using the supplied 3/4" x 5.5" bolts.

17. Mount the lower links to the axle using the factory bolts. [FIGURE 15]

FIG.15



FIG.16

18. Mount the lower links to the 4-link bracket using the supplied 3/4" X 5" bolt. [FIGURE 16]

19. Tighten all bolts on the 4-link brackets. Torque M12 bolts to 65 ft-lbs using a 19mm. Torque 5/8" bolts to 150 ft-lbs using a 15/16". Torque 3/4" bolts to 260 ft-lbs using an 1 1/8" & 1 1/16". Torque M18 bolts to 225 ft-lbs using a 27mm.

20. Remove the shocks and lower the axle enough to install the new coil springs. [FIGURE 17]

FIG.17

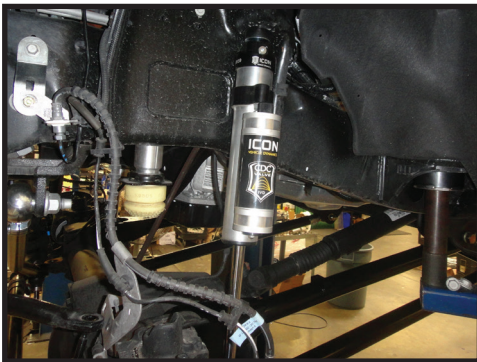


FIG.18

21. Once the coil springs are set in place, install the shocks using an 18mm & 19mm. Be careful not to lift the truck off of its supports. [Torque to factory spec] [FIGURE 18]

22. Reconnect the sway bar to the sway bar links using an 8mm & 18mm. [Torque to factory spec] [FIGURE 19]

FIG.19

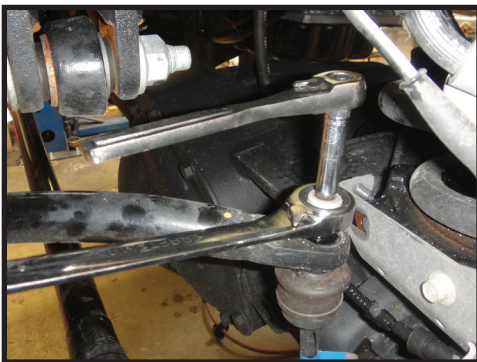
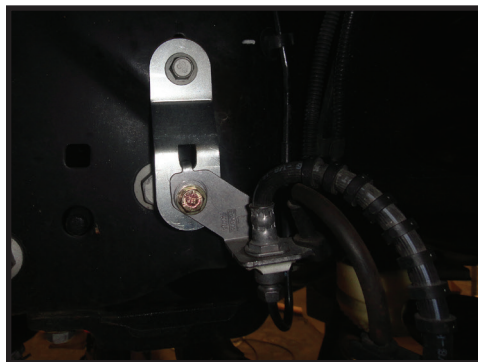


FIG.20

23. Connect the ICON adjustable track bar (64038) using a 30mm. (Refer to track bar instructions) [FIGURE 20]

24. Mount the upper brake line drop brackets with the factory bolt using a 13mm. [Torque to factory spec] [FIGURE 21]

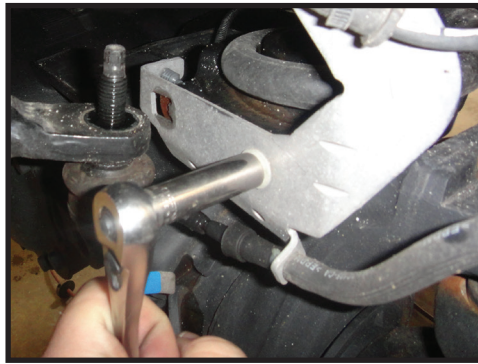
FIG.21



25. Mount the brake line to the supplied drop bracket using a 1/2". [Torque to 13 ft-lbs] [FIGURE 21] (Extended brake line kit (61110) available from ICON)

26. Mount the lower brake line brackets with the factory bolt and fasten using a 10mm. [Torque to factory spec] [FIGURE 22]

FIG.22



27. Ensure that the vacuum line is routed down and to the side of the bumpstop. Failure to check and adjust routing will allow the vacuum line to be crushed by the bumpstop. This will cause the auto locking feature of the hubs to not work. [FIGURE 23 & 24]

FIG.23

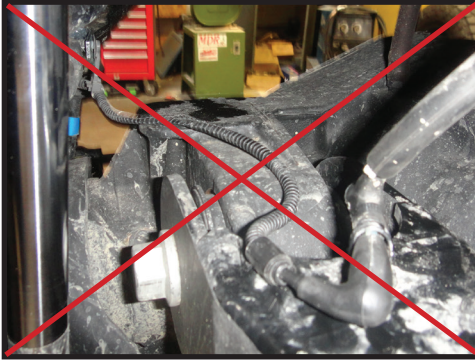


FIG.24



28. Install the front wheels and lower the vehicle back to the ground. [Torque lugs to factory spec]

29. Adjust caster using the double adjusters on the lower links. Line up the slit in the double adjuster sleeve with the slit in the link. Using an alternating pattern to ensure even clamping force, torque the pinch bolts back and forth three times to 45 ft-lbs.

30. Center the front axle under the truck using the adjustable track bar and then center the steering wheel. Refer to (64038) track bar instructions.

31. Have the vehicle professionally aligned.

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.

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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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