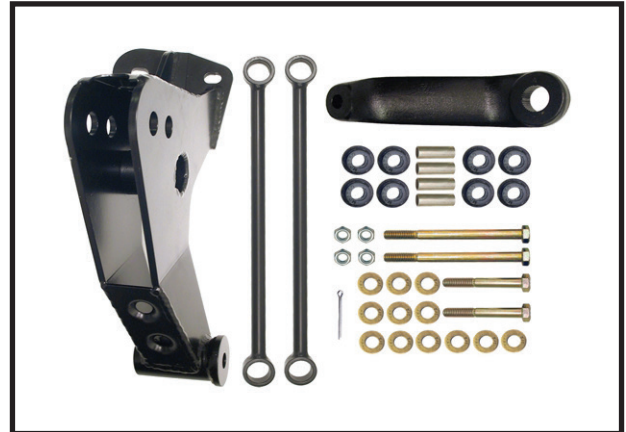


7929 Lincoln Ave. Riverside, CA 92504
 Phone: 951.689.ICON | Fax: 951.689.1016

PART #	DESCRIPTION
31020	00-04 FSD FRONT 4-8" BOX KIT

COMPONENTS INCLUDED	
(1) 31020H 00-04 4-8" BOX HARDWARE KIT	(1) 138041 DROP PITMAN ARM
HARDWARE INCLUDED	
134035 BAR DROP BRACKET 134036 SWAY BAR LINK	(4) 139001 SLEEVE .625 X .508 X 1.625 (8) 297024 HAT BUSHING 1.005 X .620 X .755
31020H HARDWARE KIT	
(2) 605310 1/2-13 X 3.500 HHCS (2) 605313 1/2-13 X 5.000 HHCS (4) 605321 1/2-13 NYLOCK NUT	(12) 605330 1/2 SAE FLAT WASHER (1) 605900 1/8 X 2.000 COTTER PIN STEEL
TOOLS REQUIRED	
FLOOR JACK JACK STANDS PITMAN ARM PULLER TORQUE WRENCH 8MM SOCKET / WRENCH 13MM SOCKET / WRENCH 15MM SOCKET / WRENCH	18MM SOCKET / WRENCH 21MM SOCKET / WRENCH 24MM SOCKET / WRENCH 27MM SOCKET / WRENCH 7/16" SOCKET / WRENCH 3/4" SOCKET / WRENCH
TECH NOTES	
N/A	



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!**

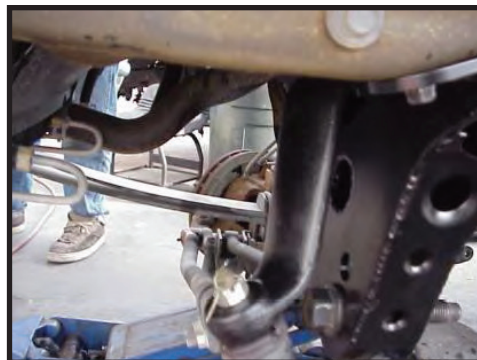
**** ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.**

**** ICON VEHICLE DYNAMICS RECOMMENDS ALL INSTALLATION 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

1. Jack up the front end of the truck and support the frame at the front frame rails with jack stands. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove front tires.
2. Remove the brake calipers and tie them up out of the way. DO NOT ALLOW CALIPERS TO HANG FROM THE BRAKE LINES! Supporting the front axle with two floor jacks, remove the front shocks and sway bar end links. Remove the cotter pin and castle nut from the drag link at the pitman arm. Using a tie rod puller, separate the tie rod from the pitman arm. Remove the bolt from the top end of the pan-rod bar, where it connects to the frame bracket. Remove the three bolts securing the pan-rod bar bracket to the frame and set the bracket aside.
3. Remove the bolts securing the front drive shaft to the axle yoke. Tape the bearing caps on the front u-joint and remove the drive shaft from the transfer case. Remove all four u-bolts from the front axle. Slowly lower the two floor jacks supporting the front axle to clear the front leaf springs. Loosen the four front leaf spring shackles bolts, DO NOT REMOVE THEM. While supporting the leaf spring, remove the front bolt followed by the rear bolt, separating the leaf spring from the shackle. Set the leaf spring aside and repeat this step on the opposite leaf spring.
4. Remove the nut securing the original pitman arm to the steering box shaft. A pitman arm puller must be used to remove the pitman arm from the steering shaft. Once off, replace the stock pitman arm with the drop pitman arm supplied in the box kit. If the splines on the pitman arm do not match, your truck is an early 1999 model and you will need box kit part number 31000 to replace this part number 31020. Align the master splines on the steering shaft, replace the original washer and nut, and torque the new unit in place at 200-225 ft-lbs. [FIGURE 1]

FIG.1



- 5.** Place the enclosed pan-rod bracket into position where the original bracket was. Reinstall the three original bolts with red Loctite and torque to 30 ft/lbs. Remove the front bump stops from the frame and install the new bump stop spacers (boxed separately) in the factory holes with the 3/8" washers and nylock nuts supplied with the bump stop spacers.
- 6.** If you are installing the IVD 4.5" Hanger kit with this box kit, follow the instructions in the 4.5" hanger kit box at this time. Once completed go to step 8.
- 7.** Slide one of the new leaf springs into the front spring hanger, the double wrapped bushing end will go towards the front. Reinstall the factory bolts and nuts but do not fully torque. Repeat this step with the opposite side spring. Raise the floor jacks supporting the front axle, aligning the center pins on the springs with the holes in the front axle spring pads, until the spring pads are fully seated on the leaf spring and the front springs compress 1/4". Slide the new u-bolts over the leaf spring and through the original spring plates. Place new washers and nuts on each u-bolt. Torque the u-bolts in an "X" pattern to 60ft/lbs.
- 8.** Attach the drag link to the drop pitman arm, torque the original nut to 60ft/lbs followed by the proper amount to line up the cotter pin hole. **DO NOT LOOSEN THE NUT TO LINE UP THE COTTER PIN HOLE!** Install the new cotter pin. Install both front shocks (or follow the instructions for THE EDGE DUAL SHOCK MOUNT/HOOP KIT) and reinstall brake calipers.
- 9.** Put the front tires back on and torque all lug nuts. Factory lug nut torque specifications can be found in your owners manual. Raise the jacks supporting the front axle enough to remove the jack stands supporting the truck and set the truck on the ground. Steer the truck fully from lock to lock making sure the brake lines do not come in contact with the front tires. Make sure the new bump stops are centered with the springs.
- 10.** Torque the front u-bolts to 85 ft/lbs. Raise the pan-rod bar to align it with the new pan-rod bracket. Install the original nut and torque to 369ft/lbs (FORD factory specs). Torque all spring bolts, including the frame to shackle bolts to 75ft/lbs.
- 11.** Apply a light coat of grease to the supplied bushings and press the bushings into the sway bar end links. Grease the inside of the bushing and press in the supplied sleeve to each end. If you hold up the sway bar link you will see that the ends are built off set. Using the 1/2" bolts install the sway bar link to the upper mount with the sway bar link bottom heading inboard of the truck. Install 1/2" washers on each side of the bushings. Install sway bar link to sway bar with 1/2" bolts and nuts. Toque to 53ft/lbs. Reinstall front driveline using original bolts. Torque to factory specifications.
- 12.** Check the torque on all hardware and adjust the drag link to center the steering wheel. Drive the truck 1-2 miles and re-torque all nuts, bolts and lugs. Re-center the steering wheel if necessary.
- 13.** Install rear block kit and shocks at this time.

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.