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PART #	DESCRIPTION
62513	23 F-250/F-350 FRONT 2.5" GAS DUAL RATE SPRING KIT

COMPONENTS INCLUDED	
(2) 168520 - FSD 2.5" LIFT DUAL RATE COIL SPRING	(2) 167008 FSD ALIGNMENT CAM (2) 605900 1/8 X 2.000 COTTER PIN
HARDWARE INCLUDED	
N/A	
TOOLS REQUIRED	
JACK JACK STANDS PLIERS TORQUE WRENCH HAMMER BALL JOINT SEPARATOR 3/4" SOCKET / WRENCH	10MM SOCKET / WRENCH 13MM SOCKET / WRENCH 18MM SOCKET / WRENCH 21MM SOCKET / WRENCH 24MM SOCKET / WRENCH 30MM SOCKET / WRENCH
TECH NOTES	
1. LIFT HEIGHTS ARE BASED ON CREW CAB GAS F-250 CONFIGURATIONS.	



### 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.** 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 front wheels.

**2.** Remove the sway bar links from the sway bar using an 18mm socket/wrench. Leave them connected to the differential. [FIGURE 1]

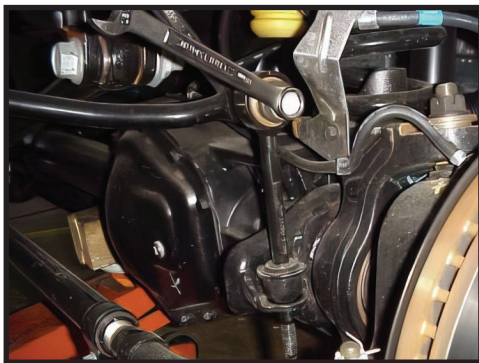


FIG.1

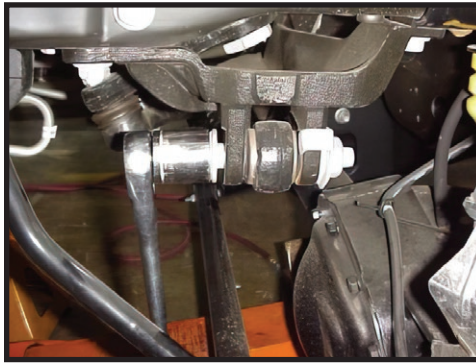
**3.** Disconnect the upper brake line brackets from the frame using a 13mm socket/wrench and lower brake line brackets from the differential using a 10mm socket/wrench. [FIGURE 2]



FIG.2

- 4.** On the driver side of the track bar, remove the nut and the upper track bar bolt using (2) 30mm socket/wrenches. [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 fall when the shocks are removed. (21mm socket/wrench, 18mm socket/wrench)
- 6.** Slowly lower the axle, the coils will unload from the mounts and can be removed. Be careful not to stretch or damage any lines connected to the axle or radius arms.
- 7.** Lower the axle just enough to install the new springs. Place the original rubber isolator on top of the new coil and install. Be careful to not stretch or damage any lines. Check the rotation/clocking of the coil to make sure it is properly seated in the lower spring perch.
- 8.** Lift the axle high enough to connect the shocks but be careful not to lift the truck off of its supports. Use the original bolt on the lower shock mount and tighten with an 18mm socket/wrench [Torque to factory spec]. Tighten the stem top nut using a 3/4" socket/wrench. (Refer to shock Instructions)
- 9.** Install the alignment cams (167008). Remove the cotter pin from the ball joint castle nut then remove the castle nut from the upper ball joint using a 24mm. Using a hammer (or ball joint separator), strike the knuckle to dislodge the taper, be careful not to damage the threads. Remove stock alignment cam.
- 10.** Install the new alignment cam: Make sure the arrow is pointing toward the front of the truck and the flat end of the cam is aligned with the flat end of the knuckle. Use the old sleeve to tap the new one down into the taper. Install the castle nut using a 24mm [Torque to 69 ft-lbs]. Install the new cotter pin.
- 11.** Repeat steps 9-11 for the opposite side.
- 12.** Connect the sway bar links to the sway bar using an 18mm socket/wrench. [Torque to factory spec]
- 13.** Reconnect the upper brake line bracket to the frame using a 13mm socket/wrench and the lower bracket using a 10mm socket/wrench [Torque to factory spec]. Depending on the year of the truck, the brake line may need to be manipulated down to not overextend at full droop.
- 14.** Reconnect the track bar using (2) 30mm socket/wrenches. [Torque to factory spec]
- 15.** Install the wheels and lower the vehicle to the ground.
- 16.** 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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