



ICON VEHICLE DYNAMICS

1580 Commerce St. Corona, CA 92880
ph. 951.272.ICON fx. 951.272.4IVD

Instruction Sheet:

Part No. 6-1500

4-Link System

2005-2007 Ford Super Duty F250/F350 4WD

Enclosed Parts List:

- (2) Frame Bracket
- (1) Frame Bracket Hardware Kit
- (2) Lower Link Assembly
- (2) Upper Link Assembly

*****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!***

*****Warning!*** *Icon Vehicle Dynamics* recommends that you exercise extreme caution when working under a vehicle that is supported with jack stands.

WHILE INSTALLING 4.5" OR 7" KIT: These instructions will continue from the point at which you have the front axle free of the vehicle.

1. The first thing you need to do is set one of the radius arm nuts, which you just removed to get the rear radius arm bolt, aside to be used later.
2. With the front axle and radius arms supported unbolt one of the radius arms from the front axle. Leave the other radius arm attached to the axle housing to hold the axle from rotating.
3. On the side of the frame that you just removed the radius arm from, place the end of the 4-link bracket with the welded nuts into the stock radius arm bracket. The welded nuts will line up with the upper forward most hole in the stock radius arm bracket. Loosely install (2) 3/4 "-10 x 1" bolts with split lock washers into the 4 link brackets welded on nuts.
4. Pivot the bracket up till it meets the frame and loosely install (4) 7/16" - 14x 1.5" bolts with washers and nylock nuts.
5. Now install the new upper control arm for the 4-link kit to the axle with a stock radius arm bolt. This is the shorter arm with the solid mounted bearing. Be sure the ABS mounting tab is facing up then install the axle side of the link. Leave the bolt loose for now. Next, line up the holes in the 4-link bracket, the stock radius arm bracket, and the spacer. Install the new 3/4"-10 x 5.5" bolt with flat washers and nylock nut. Leave the bolt loose for now.
6. Next install the lower control arm to the axle with a stock radius arm bolt. This is the longer arm with the rod end and double pinch bolts. First be sure the double pinch bolts are in, but loose so the rod end can move freely. **DO NOT** adjust the length of the lower link. The rod end and adjuster are set to the correct length from the factory. Install the axle end of the link with the nut and bolt loose, for now. Swing the lower link into position, align the lowest 4 link frame bracket hole with the lower link, insert the 3/4" - 10 x 5" bolt with a washer, and install a washer and nylock nut on the other side. Depending on how the axle is currently sitting, you will likely have to move the axle around to line up the holes in the bracket and the link.

7. Once you have completed steps 2 to 6 on one side, and everything is still loose, repeat step 2 to 6 on the other side.
8. Now you should have both the four link frame brackets and all four links installed loosely on the vehicle. You can now tighten the (4) 7/16" bolts and nuts and (4) 3/4" bolts and nuts on each frame bracket. Torque the 7/16" bolts to 54lb-ft and the 3/4" bolts to 260lb-ft.
9. Check the left/right adjuster collars on the lower links and see if they move freely. The collars should move with some resistance but should not be bound. Move the slit in the collars to a position that matches the slit in the double pinch collar by rotating it in the direction it moves most freely. This should assure that the links are not fighting each other to hold caster angle on the front end. You can now torque the (4) 3/8" 12 point bolts to 37lbs by alternating back and forth between the bolts on one link then on the other. We recommend torquing each bolt three times to 37lbs.
10. Press the plastic tab that comes in your hard ware kit, into the outer hole on each upper link. Place the stock ABS wire into the plastic holder and close the holder.
11. You are done with the install of the four link, for now. You'll tighten the axle side link bolts when the vehicle is sitting on its own weight. Once on the ground torque the axle side link bolts to 260 lb-ft.
12. If you are installing a 4.5" kit you can now continue, the instructions for the 4.5" kit, at step 13. If you are installing a 7" kit you can continue, the instructions for the 7" kit, at step 17.

INSTRUCTIONS IF YOU ALREADY HAVE A DONAHOE 4.5" OR 7" LIFT INSTALLED: These instructions will start with the vehicle still together, drivable, and on the ground.

1. **To install this four-link kit you need to have stock alignment cams for the upper ball joints. If you are removing the radius arms and brackets from a 7" lift you will need to change the upper ball joint alignment cams back to stock cams. The 4.5" lift kit should still have stock alignment cams in place. Both these statements assume the lift was installed according to Icon Vehicle Dynamics's installation instructions.**
2. 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.
3. Pick one side of the truck to remove the radius arm from. You will complete one side at a time, so that the front axle is not able to rotate during the install.
4. Make sure to set one of the radius arm nuts, which you just removed to get the rear radius arm bolt out, aside to be used later.
5. On the side of the frame that you just removed the radius arm from, place the end of the 4-link bracket with the welded nuts into the stock radius arm bracket. The welded nuts will line up with the upper forward most hole in the stock radius arm bracket. Loosely install (2) 3/4 "-10 x 1" bolts and split lock washers into the 4 link brackets welded on nuts.
6. Pivot the bracket up till it meets the frame and loosely install (4) 7/16" - 14x 1.5" bolts with washers and nylock nuts
7. Now install the new upper control arm for the 4-link kit to the axle with a stock radius arm bolt. This is the shorter arm with the solid mounted bearing. Be sure the ABS mounting tab is facing up then install the axle side of the link. Leave the bolt loose for now. Next line up the holes in the 4-

link bracket, the stock radius arm bracket, and the spacer. Install the new ¾-10 x 5.5" bolt with flat washers and nylock nut. Leave the bolt loose for now.

8. Next install the lower control arm to the axle with a stock radius arm bolt. This is the longer arm with the rod end and double pinch bolts. First be sure the double pinch bolts are in, but loose so the rod end can move freely. **DO NOT** adjust the length of the lower link. The rod end and adjuster are set to the correct length from the factory. Install the axle end of the link with the nut and bolt loose, for now. Swing the lower link into position, align the lowest 4 link frame bracket hole with the lower link, insert the ¾"- 10 x 5" bolt with a washer, and install a flat washer and nylock nut on the other side.
9. Once you have completed step 5 to 8 on one side, and everything is still loose, repeat step 5 to 8 on the other side.
10. Now you should have both the four link frame brackets and all four links installed loosely on the vehicle. You can now tighten the (4) 7/16" and (4) 3/4" on each frame bracket. Torque the 7/16" bolts to 54lb-ft and the ¾" bolts to 260lb-ft.
11. Check the left/right adjuster collars on the lower links and see if they move freely. The collars should move with some resistance but should not be bound. Move the slit in the collars to a position that matches the slit in the double pinch collar by rotating it in the direction it moves most freely. This should assure that the links are not fighting each other to hold caster angle on the front end.
12. You can now torque the (4) 3/8" 12 point bolts to 37lbs by alternating back and forth between the bolts on one link then on the other. We recommend torquing each bolt three times to 37lbs.
13. Press the plastic tab, that comes in your hard ware kit, into the outer hole on each upper link. Place the stock ABS wire into the plastic holder and close the holder.
14. You are done with the install of the four-link system. For the last step tighten the axle side link bolts to 260lb-ft when the vehicle is sitting on its own weight.

Register your Icon Vehicle Dynamics product online at: www.donahoeracing.com

For technical assistance or suggestions on how to make our product better call (951) 272-ICON Monday-Friday between the hours of 8am-12pm and 1pm-5pm Pacific-standard time, certain holidays excluded.

***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.

Coil over take-apart shocks are considered a serviceable shock with a one year warranty on leakage only. Service seal kits are available separately for future maintenance. We do not warranty any other product not directly manufactured by *Icon Vehicle Dynamics*.

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.