



ICON VEHICLE DYNAMICS

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Part No. 214030
Adjustable Pan Rod Bar
(Optional Pan Rod Mount and Pitman Arm)
2003-Present Dodge Ram 2500-3500

Enclosed Parts List:

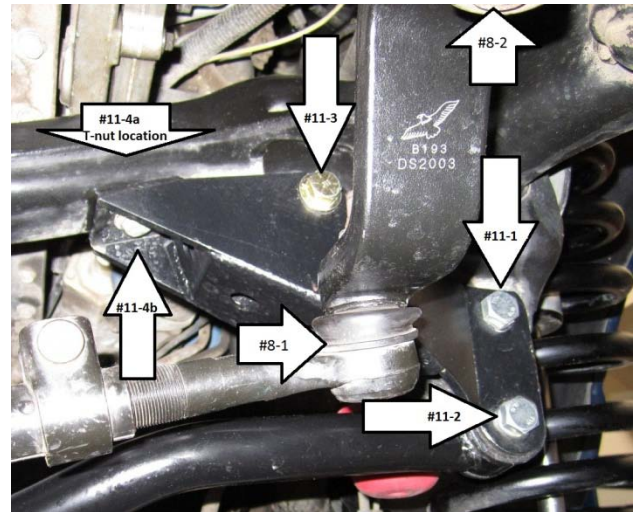
(1) Adjustable Pan Hard Bar	(Optional) (1) Pan Hard Bar Mount (1) Pitman Arm
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READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED, SEVERE FRAME, SUSPENSION AND TIRE DAMAGE 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 or on a lift.

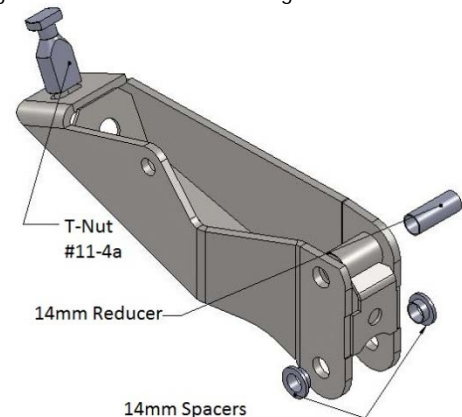
FRONT SUSPENSION INSTALLATION

- 1.) Jack up the front end of the truck and support the frame at the front frame rails with jack stands. Keep vehicle at ride height but allow the frame rails to lay on the jack stands placed behind the lower control links. NEVER WORK UNDER AN UNSUPPORTED VEHICLE.
- 2.) Loosen and remove lower pan hard bar bolt at the axle.
- 3.) Jack up vehicle and remove tires
- 4.) Support the axle with a heavy duty floor jack. With the housing supported, loosen the lower shock mount bolts going through the axle housing. THE AXLE HOUSING IS EXTREMELY HEAVY AND IS SUPPORTED BY THE SHOCKS, MAKE SURE THE HOUSING IS SECURELY SUPPORTED BY THE JACK.
- 5.) Disconnect the steering tie-rod from the pitman arm (#8-1) using a ball joint remover and allow steering to hang in front of housing. Remove the pitman arm (#8-2) using a pitman arm puller. Loosen and remove upper pan hard bar bolt at the chassis cross-member. Remove pan hard bar (#11-1).



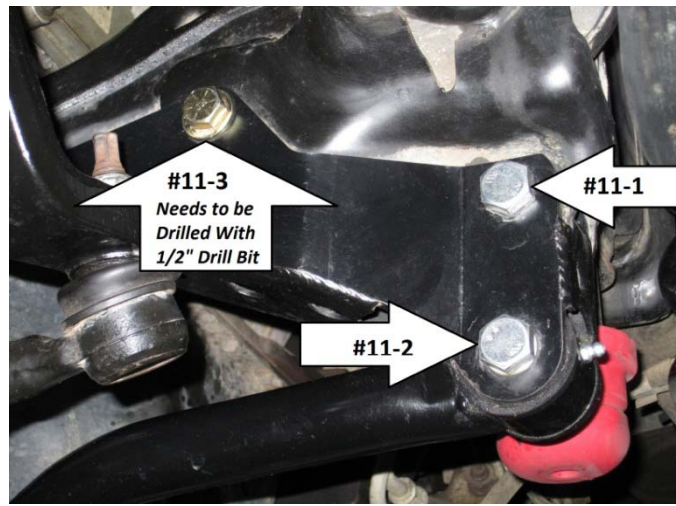
- 6.) To install the new *ICON Adjustable Pan Hard Bar Mount*, slide the mount into the original pan hard bar mount (#11-1) and locate the bracket using the stock pan hard bolt. Place the "T" nut (#11-4a) into the hole on the cross-member. The T-nut is slotted to fit through a hole in the cross-member, then can be rotated 90° to rest against the cross-member. Using the 1/2" x 1/2" bolt (#11-4b) rotate the new bracket up to the T-nut and thread in the supplied hardware. Tighten the assembly snugly to reduce any wobble when drilling new holes.

- a. Bolt sizes vary between a 14mm and 16mm. The 14mm bolts are used in the older vehicles. In order to retain those bolts, sleeves and spacers are included to bring the bracket bolt hole size down to a 14mm from the 16mm. The original OEM pan hard bar 14mm bolt or 16mm bolt can be re-used in the top hole (#11-1). New hardware is supplied for the lower bolt (#11-2) Trucks that come standard with the 16mm hardware will use the 16mm supplied bolt and no spacers. Trucks that came with the 14mm hardware but are running the new *ICON Adjustable Pan Hard Bar* can use a 16mm bolt.
 - b. Trucks that came with 14mm hardware and will be running the OEM pan hard bar will need to slide the 14mm spacers into the hole (#11-2) to allow use of the 14mm supplied hardware.
- 7.) The 3rd bolt hole (#11-3) will need to be drilled with a 1/2" drill bit. There is a pre-drilled hole in the new pan hard bracket. Use this to correctly align and center the hole. Once through, the bolt can be inserted and tightened.



- 8.) Replace the factory pan hard bar with the new *ICON Adjustable Pan Hard Bar*, making sure the side with the rod end is at the axle and the bushing goes into the pan rod bar mount. Only insert the top bolt (#11-2) (Only remove the pan hard bar if the optional *ICON OEM Replacement Pan Hard Bar Kit* has been purchased.)
- 9.) Install the new coil springs. Make sure the lower end of the spring is seated properly in its seat and the upper has the rubber coil isolator and shock mount stud ring installed.

- 10.) Begin to slowly raise the axle on the jack while guiding the coils in the coil bucket seats. Take care to guide the shock mount stud ring through the holes in the coil bucket.
- 11.) Place the lower control link into the axle and tighten hardware.
- 12.) Jack the axle up 2-3" from full droop. Make sure not to jack the vehicle off of the stands!!! Finish installation of the new *ICON Adjustable Pan Rod Bar* tightening the axle end of the bracket. Adjust the length making sure both threads have equal engagement.



- 13.) Re-install tires and lower vehicle to the ground.
- 14.) With the vehicle on the ground center the front axle by adjusting the pan rod bar adjusting collar. The bolts can remain in their stock location tightened, and just the adjusting collar can be spun in or out to align the front axle to the chassis. Tighten the adjusting collar pinch bolts, alternating between the two bolts, back and forth 2-3x in order to evenly apply pressure to secure the collar.
- 15.) Center the steering wheel. This lift does not affect castor, camber or toe-in, this is the only alignment that is needed. Point the tires straight ahead, make sure the steering column is not locked, loosen the clamps on the drag link turn buckle and rotate the turn buckle to center the steering wheel. Without the use of alignment equipment you may need to test drive the vehicle and re center the wheel if it is off slightly.
- 16.) Check the torque on all hardware. Drive the truck 1-2 miles and re-torque all nuts, bolts and lugs. Re-center the steering wheel if necessary.

RE-TORQUE ALL NUTS, BOLTS AND LUGS AFTER 100 MILES AND PERIODICALLY THEREAFTER.

For Technical Assistance Call: 951.689.ICON

***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.