



Deaver Mini Leaf Pack Set for 2008-2024 Ford F250/F350 Super Duty Trucks

INSTALL INSTRUCTIONS:

Deaver Mini Leaf Pack Set for 2008-2024 Ford F250/F350 Super
Duty Trucks
SKU: 220-91285

PARTS LIST FOR SKU: 220-91285

QUANTITY	PART #	DESCRIPTION
2	90473	2008+ Ford Super Duty Deaver Mini Leaf Pack

**WARNING**

Please read this entire instruction sheet before beginning installation. Proper installation of these components requires a qualified mechanic. Always wear safety glasses when using power tools, and take appropriate precautions when working under a vehicle. If these instructions are not properly followed you may jeopardize your, and your passenger's safety, and severe frame, suspension or tire damage may also result from improper installation.



INTRODUCTION

Thank you for purchasing the Deaver Mini Leaf Pack set. This leaf pack set replaces the stock overload spring. The stock bottom overload spring has a very harsh spring rate, this mini pack is a progressive overload that will ride better and provides between 7/8 and 2 inches of rear lift depending on how many of the spacer blocks are removed.

Get better ride quality and the added height with one product. These mini packs are only compatible with the stock spring packs, and they fasten to the stock spring packs with a new center pins (included).

REQUIREMENTS

- Installation requires a qualified mechanic.
- Follow the OE specifications when replacing or re-installing OE fasteners, retainers, and hardware specified in the OEM manual.
- Always wear safety glasses when using power tools.
- When a lift is required to perform the installation of these products and always ensure the vehicle is properly supported before attempting installation or serious injury may occur.
- Depending on the rear lift height, replacement U-bolts may be required.

TECH NOTES

- Read instructions carefully and study the pictures (if included) before attempting installation.
- If this product was purchased as part of a kit each kit, and options to kits, are packaged separately. Therefore installation procedures are covered in separate instructions. Familiarize yourself with each specific set of instructions before beginning.
- Check the parts and hardware packages against the parts list to assure that your kit is complete before starting.

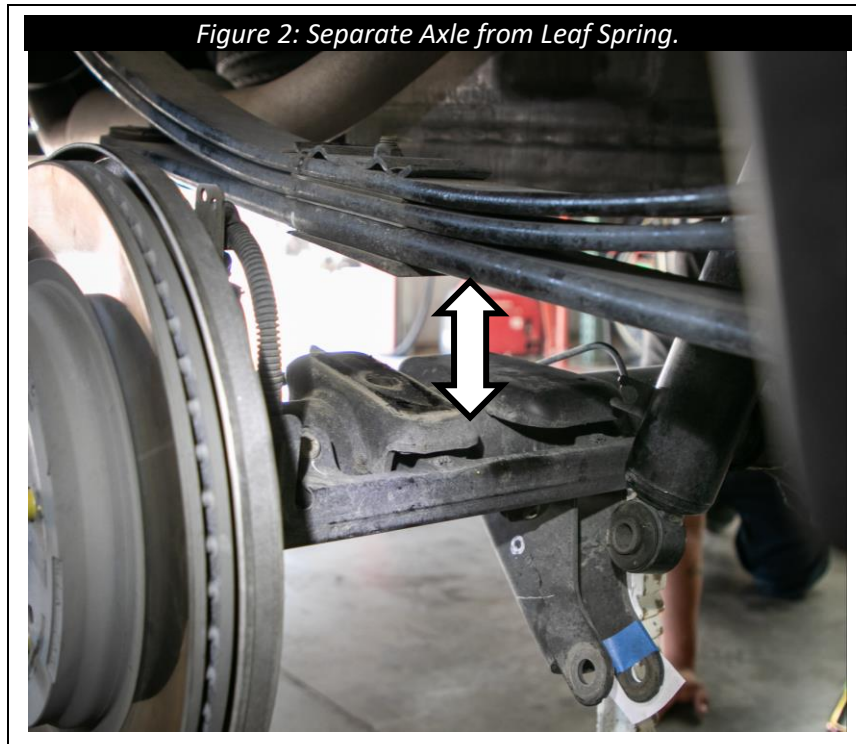
INSTALLATION

1. Rack the vehicle and lift it off the ground, or if no hoist is available then jack rear of truck off the ground and support properly with jack stands. Remove the rear tires and set them as side.
 - **NEVER WORK ON AN UNSUPPORTED VEHICLE.**
2. If using OEM brake lines, check to make sure they will not be overextended when the suspension reaches full droop. Modifications to the OEM brake line brackets might be necessary.
 - If aftermarket extended brake lines were purchased, install them now. Make sure to bleed the brakes, purge any air from the system and check for leaks.
3. Remove lower shock mount bolts holding the shocks to the axle on both sides.
4. Support one side of the rear axle and remove the U-bolt nuts from that side of the vehicle. Remove the factory U-bolts (Figure 1).

Figure 1: Remove Factory U-bolts.



5. Lower the support under the axle until there is enough room to access the spring pack (Figure 2).



6. Use two c-clamps to hold the leaf pack together. Do not include the overload spring when clamping. F-250's with the High Cap Tow or Tremor packages or F350's will have 3 main leaf springs, the front most leaf spring "keeper" will need to be removed during mini pack installation. Use vice grips to hold the round head of the leaf spring center pin (Figure 3).





7. Remove the center pin nut, center pin, and tapered shim. These will not be reused.

Remove the stock overload spring.

Install the Deaver Mini Pack using the supplied center pin.

- **Note:**

The Deaver Mini Pack included removable spacers to adjust ride height.

Each spacer is 3/8" thick, for a 7/8" lift do not use any of the 3 spacers, 1-1/4" lift use only 1 spacer, 1-5/8" lift use only 2 spacers, 2" lift use all 3 spacers.

Torque the center pin hardware to **30 ft-lbs**.

8. Perform the above steps on the opposite side of the vehicle.
9. Torque the U-bolt nuts to the manufacturer's specified torque. Be sure to tighten the nuts evenly and in a cross pattern on all the U-bolts so that the amount of thread protruding is about the same. Ford OEM torque specification is to make four passes on each U-bolt nut with each pass increasing the torque.
- First pass torque all nuts to **48 ft-lbs (74 ft-lbs for DRW)**.
 - Second pass torque all nuts to **96 ft-lbs (148 ft-lbs for DRW)**.
 - Third pass torque all nuts to **148 ft-lbs (221 ft-lbs for DRW)**.
 - Fourth pass torque all nuts to **195 ft-lbs (295 ft-lbs for DRW)**.

IF YOU ARE USING AFTERMARKET U-BOLTS REFER TO THE MANUFACTURER'S RECOMMENDED TORQUE VALUE. DO NOT LUBRICATE U-BOLTS WHEN TORQUING.

10. Check your U-bolt torque after 1000 miles.
11. Install rear shocks, torque OEM hardware to OEM specs. The OEM rear shock upper nut should be torqued to **52 ft-lbs**, and the rear shock lower nut should be torqued to **111 ft-lbs**.
12. Ensure that all bolts are properly torqued. Ensure there are no rubbing or loose cables anywhere after the Cognito lift block installation. Use cable ties to restrain any cables from interfering with any other parts. Check that all lines are free of stress or interference while the vehicle is in full droop and full bump.
13. Re-install rear wheels and set the vehicle back on the ground.



WARRANTY / RETURN POLICY / SAFETY

Cognito Limited Lifetime Warranty

Cognito Motorsports, Inc. hereinafter “Cognito,” warrants to the original retail purchaser, that its suspension products are free from workmanship and material defects for as long as the purchaser owns the vehicle on which the product(s) were originally installed. This warranty will be void if any modifications are made to the components, including alterations to the surface finish, i.e.; painting, powder coating, plating, and/or welding, or if they are improperly installed. Cognito truck suspension products are not designed nor intended to be installed on “competition” vehicles used in race applications, stunt or for exhibition purposes that are outside of the intended operating conditions specified by the manufacturer. Racing and competition are defined as any contests between two or more vehicles; or vehicles competing individually on off road circuits in timed events (whether or not such contests are for an award or prize).

This warranty does not include coverage for police, taxi, government or commercial vehicles, and the warranty does not cover Cognito products sold outside of the USA. Cognito’s obligations under this warranty are specified and applied at its sole discretion, and warranty coverage is limited to repair or replacement of the defective product(s). Any and all costs of removal, installation or reinstallation; freight charges, incidental or consequential damages associated with the covered products are expressly excluded from this warranty.

The following items are exempt from Cognito limited warranty coverage: bushings, bump stops, tie-rod ends (Heim joints) and limiting straps. These parts are “consumables” and designed to wear as a normal part of their duty cycle, therefore they are not considered defective when worn. The aforementioned products are warranted separately against defects in workmanship, for 60 days from the date of purchase. As a condition of warranty validation, respective Cognito suspension components must be installed as a complete system (not combined with non-Cognito hardware or ancillary parts). Any substitutions or omission of required components will void the warranty. Some minor cosmetic wear and imperfections may occur to parts during shipping, which is not covered under this warranty. This limited warranty does not apply to any components that have been subjected to collision damage, negligence, alteration, abuse, or misuse, and coverage does not extend to products manufactured by third-party companies. Cognito reserves the right to supersede, discontinue, or change the design, finish, part number and/or application of its parts when deemed necessary, without notice.

Return Policy

Product returns will not be accepted without prior written approval from an authorized Cognito representative. All products being returned must be shipped via trackable, prepaid freight. Returned products are subject to a 25% percent restocking fee. The eligible return period for products purchased directly from Cognito is 30 days from the verified date when the product(s) were originally received by the purchaser.

Product Safety Advisory

The installation of Cognito steering and suspension components will modify your vehicle’s original factory equipment and geometry, which may cause it to handle differently than a stock (unaltered) vehicle. Installation of these components is not intended to strengthen nor reinforce the vehicle’s frame, nor are they designed to increase rollover protection. It is necessary to periodically inspect all suspension and drive train components for proper attachment, torque specifications, operation, and for any potential unusual wear or damage. Installation of these parts will modify the height of the vehicle and may raise the center of gravity. Modifying vehicle height combined with off road operation may increase your vehicle’s susceptibility to rollover conditions, which may cause serious injury or death. Many states regulate allowable vehicle height modifications, and it is your responsibility to know and comply with the legal requirements specified by the laws where you reside. Modifications to your vehicle’s ride height may also affect the ride quality, driver input response, trackability and handling, and wear to your vehicle’s suspension components and tires.