

Instructions



2015-2024 FORD F150 2WD/4WD 3" DROP FRONT COILOVER KIT

PART NUMBER (PN): 6560-1

Technical Support

We strive to provide the utmost pre- and post-sales support for our products. Whether you just need upgrade advice, or assistance in adjusting or installing a product, our experienced support staff is always ready to help optimize your UMI product.

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Need installation advice or clarification on the instructions? Scan the QR code (right) to chat directly with a UMI Professional or use the contact information provided to talk to customer service.

Note: UMI social media accounts do not respond to customer service questions.



CONTACT CUSTOMER SERVICE

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SOCIAL MEDIA

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Included Parts

Tools Needed

Part Description	Quantity	PN
Viking Coilover Shock	2	C209-W
Coil Springs - 600lb	2	12DP600
Thrust Bearing Kit	2	7917-101
Upper Coilover Mount	2	6561
Lower Coilover Mount	2	6560
Front Hardware Kit	1	

Floor Jack
Jack Stands
Metric socket set up to 27mm
SAE wrench set up to 3/4"
Metric wrench set up to 27mm
Hex Bit socket set
Snap Ring Pliers
Torque wrench up to 150 ft-lbs
Locking Pliers
Dead blow hammer

INSTALLATION INSTRUCTION

DISCLAIMER

UMI Performance shall not be held liable for any injuries or damages resulting from the improper installation of this product. It is the sole responsibility of the user to ensure that the product is installed correctly and in accordance with all applicable laws, codes, and regulations. The user assumes all risk and liability for any injuries or damages that may arise from the improper installation of this product. It is important to follow these steps carefully and use the proper tools to avoid damaging the vehicle or causing injury to yourself. If you are uncertain about any part of the installation process, it is recommended that you seek the assistance of a professional mechanic.

STEP 1: Preparing And Disassembling

Organize and layout all necessary parts and hardware prior to beginning the installation process. Carefully review the components and tools required to ensure that all necessary items are present. Once confirmed, proceed to disassemble the front suspension. The front shock and spring assembly will need to be removed. **DO NOT** remove the spring from the shock. The coil spring is under compression and could cause injury.

STEP 2: Lifting and Supporting Vehicle

Park the truck on a flat level surface and place the transmission in park. Activate the parking brake and chock the front wheels. Break the lugnuts loose to prepare for the wheels being removed.

IMPORTANT: Do not remove lug nuts, just break them loose.

Using a properly rated floor jack, lift the front of the truck off the ground so that the front suspension is in full droop. Place properly rated jack stands under the frame of the truck. Release floor jack and lower frame onto jack stands. Remove the lug nuts and the front wheels.

STEP 3: Front Suspension Disassembly

A) Remove the bolts that secure the ABS sensor cables to the spindle and frame (Fig 1.). 8mm and 10mm bolt heads.

B) Remove the nut for the sway bar end link. Use an 18mm wrench for the nut and an 8mm to keep the end link from rotating. (Fig 2.). Newer trucks have a 21mm bolt head and T45 on the end link.

C) Remove the nuts that secure the shock T-bar to the lower control arm. (Fig 3.). 19mm head.

D) Remove the nut that secures the tie rod end to the spindle. (Fig 4.) 21mm head.

E) Remove the nut that secures the upper control arm ball joint to the spindle. (Fig 5.). 18-21mm depending on the year.

CAUTION: The upper control arm may be under tension. When the ball joint is free'd from the spindle, the lower control arm may drop. Support the lower control arm with a jack stand or wooden block.

FIGURES FOR REFERENCE



Figure 1: ABS Cable Removal



Figure 2: Sway Bar End Link Removal



Figure 3: Shock Removal



Figure 4: Tie rod end removal

STEP 3 (Cont.):

F) Using an 18mm wrench, remove the nuts from the top strut mount. (Fig: 6).

G) On 4wd trucks, remove the CV axle nut cover and nut (13mm socket) (Fig 7). Remove the strut assembly from the truck. Be sure not to overextend or stretch the ABS cable and brake hose.



Fig 7: Strut Removal

STEP 4: Front Coilover Assembly

A) Remove the coilover shocks from their packaging (Fig 8) and install the upper and lower bearing assemblies. Using snap ring pliers, install one snap ring in the designated groove on top and bottom of the coilover. Push bearings into shock eyelets and install remaining snap rings. (Fig 9.)



Figure 9: Assembled bearing

B) Apply nickel based anti seize lubricant to threads of the coilover shock. Thread the lower perch nut onto the shock with the flat side facing down followed by the upper perch nut. (Figure 10.)

C) Place thrust bearing set onto the top perch followed by the spring.

D) Install the spring cap onto the Spring and seat it into the top eyelet. (Fig 11.)

E) Using a tape measure, set the spring perch at 3-1/4" measured from the bottom of the shock. (Fig. 12). This will set the front ride height at approximately a 4" drop from factory ride height. Further adjustment may be needed.



Figure 5: Ball joint removal



Figure 6: Remove nuts



Figure 8: Bearing Installation



Figure 10: Perch Nuts, Thrust Bearing installed

INSTALLATION INSTRUCTION

F) Using the supplied $\frac{1}{2}$ " x 2- $\frac{3}{4}$ " bolts, $\frac{1}{2}$ " nuts and $\frac{1}{2}$ " washers, attach 6560 and 6561 coilover mounting brackets to the viking coilover. (Fig. 13)

G) Install the coilover assembly using the supplied hardware (M12x1.5 nuts for top mount, M14x2 bolts, M14x2 nuts and M14 washers for bottom mount) (Fig 14 and Fig 15).

PROTIP: Now is a good time to set a starting point on compression and rebound for the front shocks. We have found that 10 clicks on compression and 14 clicks on rebound is a good starting point. Further adjustment may be needed based on desired shock characteristics.



Figure 14: Upper mount Install



Figure 15: Lower Mount Install

H) Torque upper 12mmx1.5 coilover nuts to 70 ft/lbs. Torque Lower M14x2 nuts to 125 ft/lbs. $\frac{1}{2}$ "-13 upper and lower coilover thru bolts get torqued to 90 ft/lbs.

G) Reinstall all factory components in reverse order of instructions with manufacturer torque specs. (Fig 13b).

FIGURES FOR REFERENCE



Figure 11: Spring Cap



Figure 12: Set Ride Height



Figure 13: Full Coilover assembly



Figure 13b: Front Reassembled

STEP 7: Shock Adjustment

Locate the compression and rebound knobs on your new double adjustable Viking shocks (Fig 16). Viking shocks have a total of 19 positions (18 clicks plus a zero position) of adjustment per knob, for a total of 361 different valvings. Position 0 is the softest setting and position 18 is the stiffest. Trucks used on the street, drag and autocross will have different needs in terms of shock valving.

Drive the truck and take notes on ride quality vs handling. Make small adjustments (1-2 clicks at a time) until the truck feels satisfactory. Below are some recommendations from Viking for approximate settings.

Ride Quality/Street: Front: 1 - 4 compression; 4 - 8 rebound
Rear: 0 - 3 compression; 2 - 5 rebound

Handling: Front: 8 - 10 compression; 10 - 14 rebound
Rear: 6 - 8 compression; 8 - 12 rebound

Autocross: Front: 10 - 14 compression; 14 - 18 rebound
Rear: 6 - 10 compression; 10 - 14 rebound

Drag Racing: Front: 12 - 18 compression; 0 - 4 rebound
(<600 HP)
Rear (Weight Transfer): 0 - 4 compression;
4 - 10 rebound
Rear (Separation): 6 - 10 compression;
2 - 6 rebound

STEP 8: Camber Adjustment

When the front suspension is lowered, it will gain negative camber. We have found that for a drop of 3" or less, this can be adjusted out via the lower control arms (Fig 17). The lower control arm mount is notched on both sides where the lower control arms bolts up (Fig 18). Break both bolts loose and the lower control arm can be moved in towards the center of the truck. For a 3" drop, move the control arm in all of the way and lock it down with the bolts. This will put the front camber at approximately .9 degrees negative which is within Ford spec. The front toe will now need to be adjusted after setting camber.

For more precise camber adjustment, 6572 camber adjustment kit can be ordered.

Coming Soon...

Alternatively, the upper control arm can be swapped out for one of our control arms. These will be available in adjustable and non-adjustable versions. Please visit www.umiperformance.com for more information on the products.



Figure 16: Viking Adjustment Knobs



Figure 17: Camber Adjustment



Figure 18: Camber Adjustment