

2009 Ford F-150 4WD 2" <u>Leveling Kit</u> Installation Instructions

REQUIRED TOOL LIST:

- * Safety Glasses
- * Metric / Standard Wrenches & Sockets
- * Floor Jack
- * Jack Stands
- * Measuring Tape
- * Torque Wrench
- * Strut Spring Compressor
- * Ball Joint Separator



Make sure you park the vehicle on a level concrete or asphalt surface. Many times a vehicle is not level (side-to-side) from the factory & is usually not noticed until a lift kit has been installed which makes the difference more visible. Using a measuring tape, measure the front & rear (both sides) from the ground up to the center of the fender opening above the axle. Record this information below for future reference.

Driver Side Front:	Passenger Side Front:
Driver Side Rear:	Passenger Side Rear:

IMPORTANT NOTES:

- * If larger tires (10% more than the stock diameter) are installed, speedometer recalibration will be necessary. Contact your local Ford dealer or an authorized dealer for details.
- * After installation a qualified alignment facility is required to align the vehicle to factory specifications.

Kit Box Breakdown:

Part #: F920MS

ITEM#	DESCRIPTION	QTY	
F920MS-1	09 F150 .750" ALUM FRT SPCR	2	
F920MS-2	09 F150 .625" ALUM FRT SPCR	2	
HB-F920MS	HARDWARE BAG FOR F920MS	1	
I-F920MS	INSTRUCTION SHEET: F920MS	1	

Hardware Bag Breakdown:

HB-F920MS	HARDWARE BAG FOR F920MS		
ITEM#	DESCRIPTION	QTY	
10MMX60MMB	10 X 60 METRIC BOLT/10.9	6	
10MMX1.5NFN	10MM X 1.5 NYLON FLANGE NUT	6	

Front Installation:

- 1. Secure & properly block the tires of the vehicle on a level concrete or asphalt surface.
- 2. Jack up the front of the vehicle in accordance to the manufacturers recommendation & support with jack stands, so that the front two tires are off of the ground.
- 3. Remove the front tires / wheels.
- 4. Disconnect the sway bar end links.
- 5. Disconnect the steering linkage & push forward out of way.
- 6. Separate the upper ball joint from the spindle using a ball joint remover or other suitable tool.
- 7. Remove the 3 upper strut nuts on the strut tower that holds the strut assembly to the strut tower. (Note: Leave one nut on to prevent the strut from dropping out in the next step.)
- 8. Remove the lower strut bolt from the lower control arm & remove the strut assembly from the vehicle. (Note the direction of the bolt for reinstallation)
- 9. Compress the coil spring on the strut assembly with a suitable coil spring compressor & remove the upper strut nut & strut mount, leaving the coil spring isolator in place on top of the coil spring.
- 10. Remove the 3 pressed in studs from the upper strut isolator mount. (See Photo # 1)
- 11. Install the lower aluminum spacer (Part # F920MS-2) into the bottom of the strut mount using the 3 10mm x 60mm bolts making sure the hex heads of the bolts recess into the slots of the lower spacer. Install the upper aluminum spacer (Part # F920MS-1) by aligning the bolt holes with the bolts on top of the strut mount. (See Photo # 2, 3, & 4)
- 12. Place the assembled strut mount & spacer assembly on the strut shaft & install the upper strut mount nut.
- 13. Decompress the coil spring. Making sure that the coil spring seats correctly on the upper & lower coil mounts. Photo # 3



Photo # 1



Photo # 2



- 14. Install the strut assembly (See Photo # 5) into the strut tower & start the 3 upper 10mm nuts. (Make sure that the bottom of the strut is aligned as well)
- 15. Install the lower strut bolt in the original position that it was removed.
- 16. Using a floor jack, raise the lower control arm & connect the upper ball joint on the upper control arm to the spindle.
- 17. Repeat steps 5 thru 16 for the opposite side.
- 18. Reconnect the sway bar end links & install the front tires / wheels.
- 19. Lower the vehicle onto the ground & tighten the 3 upper strut tower nuts on both sides of the vehicle.



Photo # 4



FINAL NOTES:

- After the installation is complete, double check that all nuts & bolts are tight. Refer to the following chart again for the proper torque specifications. (Do not retighten the nuts & bolts where thread lock compound was used.)
- With the vehicle placed on the ground, cycle the steering lock to lock & inspect the steering, suspension, driveline systems, & brake line systems for proper operation, tightness, & adequate clearance.
- Have the headlights readjusted to the proper settings.
- Have a qualified alignment center realign the front end to the factory specifications.
- Retorque all the bolts after the first 100 miles.

TORQUE SPECIFICATIONS							
	INCH SYSTEM			METRIC SYSTEM			
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	Class 10.9		
<u>5/16</u>	15 FT LB	20 FT LB	6MM	5 FT LB	9 FT LB		
<u>3/8</u>	30 FT LB	35 FT LB	8MM	18 FT LB	23 FT LB		
7/16	45 FT LB	60 FT LB	10MM	32 FT LB	45 FT LB		
1/2	65 FT LB	90 FT LB	12MM	55 FT LB	75 FT LB		
9/16	95 FT LB	130 FTLB	14MM	85 FT LB	120 FT LB		
<u>5/8</u>	135 FT LB	175 FT LB	16MM	130 FT LB	165 FT LB		
3/4	185 FT LB	280 FT LB	18MM	170 FT LB	240 FT LB		

^{*}The above specifications are not to be used when the bolt is being installed with a bushing.

Seat Belts Save Lives, Please Wear Your Seat Belt.

Part # F920MS

