

# **2019-2022 Ford Ranger 2WD/4WD** 2.5" Front Metal Spacer Kit Installation Instructions

#### www.skyjacker.com

### **Required Tools List:**

- Metric Sockets \ Wrenches (8mm, 10mm, 15mm, 18mm, 19mm & 21mm)
- Wheel Chock
- Jack Stands
- Floor Jack
- Measuring Tape
- Safety GlassesPunch
- Torque Wrench Ball Peen Hammer
- Plastic Fastener Removal Tool



Before beginning installation, read these instructions & enclosed driver's WARNING NOTICE thoroughly & completely. Also affix WARNING decal in passenger compartment in clear view of all occupants. Please refer to Parts List to insure that all parts & hardware are received prior to disassembly of vehicle. If any parts are found to be missing, contact SKYJACKER® Customer Service at 318-388-0816 to obtain needed items. If you have any questions or reservations about installing this product, contact SKYJACKER® Technical Assistance at 318-388-0816.

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

Driver Side Front:	Passenger Side Front:	
Driver Side Front.	i asseriger olde i forit.	

# **Important Notes:**

- If Larger Tires (10% More Than OEM Diameter) Are Installed, Speedometer Recalibration Will Be Necessary. Contact Your Local Ford Dealer or an Authorized Skyjacker® Dealer for Details.
- After Installation, a Qualified Alignment Facility Is Required to Align Vehicle to OEM Specifications.
- Not Designed to be Used on Models Equipped with TREMOR Off-Road Package.
- Aftermarket Wheels Must Have a Minimum of 93.1mm Center Bore and Maximum 6.5" Backspacing.
- Wheels with Less Than 6.50 Inch Backspacing May Require Slight Trimming.
- Nine (9) Inch Wide Wheels Will Require Trimming.

I-FR1925MS 03-22 Page 1 of 6

## **Component Box Breakdown:**

#### **Part # FR1925MS**

Item #	Description	
FR1925MS-S	FRONT STRUT SPACER	2
HB-10MM/NFN	HDWR BAG: 10MM FLANGE NUTS	1
I-FR1925MS	INST SHEET: FR1925MS	1

# Hardware Bag Breakdown:

#### Part # HB-10MM/NFN

Item #	Description	
10MMX1.5NFN	10MM X 1.5 N/I FLANGE NUT	6

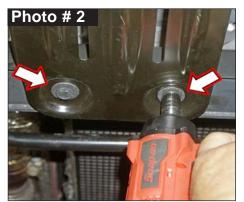
**Installation:** Note: Save all factory components and hardware for reuse, unless noted.

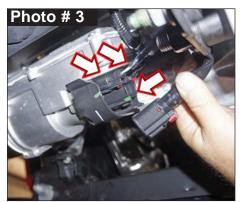
- 1. With vehicle on flat level ground, set emergency brake & chock rear tires\wheels.
- 2. Raise front of vehicle, support frame rails & front differential using jack stands.
- 3. Remove front tires\wheels using a 19mm socket.
- 4. Remove OEM lower skid plate by removing two (2) front bolts & two (2) rear bolts with a 15mm socket\wrench. (See Photo # 1 & # 2)

<u>Note</u>: Disconnect Electric Power Assist Steering (EPAS) connector. A sudden jar of a hammer blow or impact wrench to other suspension components could cause contacts of EPAS internal power relay to arch or short out.

5. Disconnect three (3) EPAS plugs on steering assembly next to front differential. (See Photo # 3)



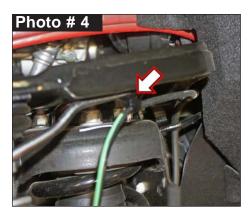




Note: Perform Steps 6-25 on One Side at a Time. Complete Steps On One Side, THEN Go to Opposite Side & Repeat Same Steps.

- 6. Disconnect ABS wire plastic clip from OEM upper control arm with plastic fastener removal tool. (See Photo # 4)
- 7. Disconnect ABS sensor bracket from forward side of OEM knuckle with a 8mm socket\wrench. (See Photo # 5)
- 8. Disconnect ABS sensor from outward side of OEM knuckle with a 8mm socket\wrench. (See Photo # 6)

I-FR1925MS 03-22 Page 2 of 6

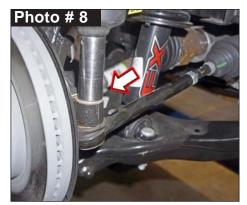






- 9. Disconnect brake line bracket from rearward side of OEM knuckle with a 10mm socket \ wrench. (See Photo # 7)
- 10. Loosen, but do not remove OEM tie rod nut from OEM knuckle using a 21mm socket\wrench. (See Photo # 8) To unseat tie rod taper, strike tie rod boss of knuckle at tie rod end to dislodge. Note: ONLY strike knuckle portion only. Remove nut and remove tie rod end from knuckle.
- 11. Disconnect OEM sway bar end link from OEM knuckle using a 18mm socket\wrench. (See Photo # 9)





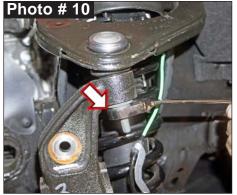


12. Loosen, but do not remove upper OEM ball joint nut from OEM knuckle using an 8mm wrench and a 21mm wrench. (See Photo # 10)

To unseat ball joint taper, strike ball joint boss of knuckle to dislodge. (See Photo # 11)

Note: ONLY strike knuckle portion only. Remove nut and remove ball joint from knuckle. Ease knuckle to rest back away from front strut.

<u>CAUTION</u>: Do not let knuckle fall to side abruptly. It could cause damage to ABS wires, brake lines or pull CV axle shaft out.





Note: Do Not Overextend CV Axle Shaft.

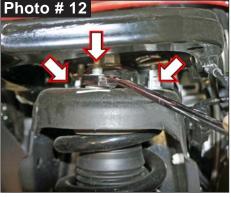
**Tech Note:** Use a bungee or rachet strap to prevent knuckle from overextending.

I-FR1925MS 03-22 Page 3 of 6

13. Disconnect three (3) OEM upper strut mounting nuts from frame mount using a 15mm socket\wrench. (See Photo # 12)

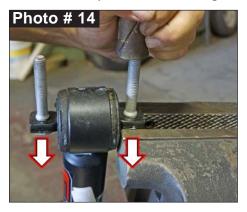
> Note: Do NOT remove center strut rod nut.

14. Disconnect two (2) OEM lower strut mounting nuts from lower control arm mount using a 18mm socket\wrench. (See Photo # 13)





- 15. Remove OEM strut assembly.
- 16. Note: For added clearance and an easier installation of completed OEM strut and installed spacer, remove OEM strut bar pin studs. Place lower bar pin of OEM strut assembly in a vise. Carefully knock out bar pin studs with a ball peen hammer. (See Photo # 14)
  - **CAUTION:** Do not damage studs' threads or splines. Retain studs for reassembly.
- 17. Install Skyjacker strut spacer to top of OEM strut assembly using factory hardware and a 15mm socket\wrench. (See Photo # 15)
- 18. Install Skyjacker\OEM strut assembly to upper strut mount at frame mount using supplied 10mm Nylon Insert Flange Nuts and a 15mm socket\wrench. (See Photo # 16)





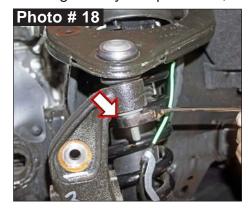


19. Install Skyjacker\OEM strut assembly to lower control arm mount using factory bar pin studs,

factory nuts and a 18mm socket\wrench. (See Photo # 17)

Note: To properly seat stud splines into bar pin, it may be necessary to strike factory studs with a punch and hammer.

20. Connect upper OEM ball joint nut to OEM knuckle Photo # 17



using an 8mm wrench and a 21mm wrench. (See Photo # 18)

**Note:** While connecting upper ball joint, be sure CV shaft properly aligns into hub.

I-FR1925MS 03-22 Page 4 of 6

- 21. Connect brake line bracket to rearward side of OEM knuckle with a 10mm socket\wrench. (See Photo #19)
- 22. Connect ABS sensor to outward side of OEM knuckle with a 8mm socket\wrench. (See Photo # 20)
- 23. Connect ABS sensor bracket to forward side of OEM knuckle with a 8mm socket\wrench. (See Photo # 21)



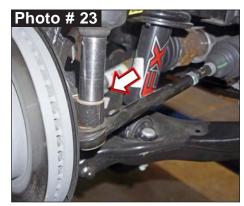






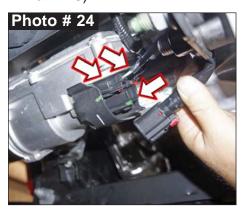
- 24. Connect ABS wire plastic clip to OEM upper control arm. (See Photo # 22)
- 25. Connect OEM tie rod to OEM knuckle using a 21mm socket\wrench. (See Photo #23)





### Note: Perform Steps 6-25 on Opposite Side at this Time.

- 26. Connect three (3) Electronic Power Assist Steering (EPAS) plugs to steering assembly next to front differential. (See Photo # 24)
- 27. Install OEM lower skid plate with factory bolts using a 15mm socket\wrench. (See Photo # 25 & # 26)







I-FR1925MS 03-22 Page 5 of 6

- 28. Install front tires\wheels using a 19mm socket & lower rear of vehicle to ground.
- 29. Connect OEM sway bar end link to OEM knuckle using a 18mm socket\wrench. (See Photo # 27)



#### **Final Notes:**

- After installation is complete, double check that all nuts & bolts are tight. Refer to following chart
  for proper torque specifications. (<u>Note</u>: Do not re-tighten nuts & bolts where thread lock
  compound was used.)
- With vehicle placed on ground, cycle steering lock to lock & inspect steering, suspension, brake lines, front & rear drivelines, fuel lines & wiring harnesses for proper operation, tightness & adequate clearance.
- Have headlights readjusted to proper settings.
- Have a qualified alignment center align vehicle to OEM specifications.
- After first 100 miles, check all hardware for proper torque & periodically thereafter.

TORQUE SPECIFICATIONS							
	INCH SYSTEM		METRIC SYSTEM				
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	Class 10.9		
5/16	15 FT LB	20 FT LB	6MM	5 FT LB	9 FT LB		
3/8	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 FT LB	14MM	85 FT LB	120 FT LB		
5/8	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		

Above specifications are not to be used when bolt is being installed with a bushing.

**Seat Belts Save Lives, Please Wear Your Seat Belt.** 

I-FR1925MS 03-22 Page 6 of 6