

## **PART# 506013**-FD

2019-2020 Ford Ranger 2WD/4WD 2.5" Strut Spacer w/ Diff drop

(2) Strut Spacer
(8) M10-1.25 flange nut
(1) Diff drop spacer
(1) Flat washer
(1) Nylock nut



Approximate install time 3.5hrs.



Recommended tire size 32"

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## READ THE INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING THE INSTALLATION.

- 1. Factory service manual is recommended to have on hand.
- 2. Secure and properly block vehicle prior to beginning installation
- 3. Always wear safety glasses when using power tools or working under the vehicle
- 4. Modifications to any part will void the warranty associated with that product.

STEP 1: Jack up the front of the vehicle and support under the frame rails with jack stands.

STEP 2: Unbolt the sway bar end link from the neck of the spindle and pivot out of the way.



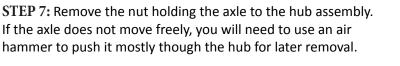
STEP 3: Un-bolt the ABS sensor & wire guide from the spindle. Next, unclip the guide at the upper control arm and move the sensor out the way.

STEP 4: Un-bolt the tie rod at the spindle and separate.

rotor and place out of the way.

**STEP 6:** Remove the brake

STEP 8: Loosen both the upper and lower ball joint nuts but do not remove. If the spindle does not pop loose by itself, you will need to hit the spindle right at the ball joint to break it loose. The nuts will catch the spindle, then you can remove the nuts and the spindle. NOTE: NEVER HIT THE BALL JOINT ON THE THREADS.



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STEP 9: Remove the nuts at the top and bottom of the strut and remove the strut. You will need to push down on the lower control arm with a prybar or your knee to get the strut assembly out. **STEP 10:** Install the new strut spacer and tighten it down using the factory flange nuts.





STEP 11: Rotate the top hat of the strut 180 using a strut compressor.



**STEP 12:** Place the strut assembly into the lower control arm and pry down on the lower control arm using a big pry bar while pushing the strut into the coil bucket.



**STEP 13:** Jack up the lower control arm to compress the coil so that you can now re-install the spindle. Attach the spindle to the upper and lower control arms using the factory nuts and tighten.



**STEP 14:** Install the brake rotor and then the brake caliper and tighten down both of the caliper mounting bolts.





STEP 15: Tighten up the axle using the factory nut.

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m STEP}$  16: Install the ABS sensor and re-attach the two guides at the neck of the spindle and the control arm.



 $\ensuremath{\mathrm{STEP}}$  17: Re-attach the brake line guide to the neck of the spindle.



STEP 18: Tighten down the top and bottom strut studs using the provided flange nuts at the top and the factory flange nuts at the bottom.



STEP 19: You will once again need to compress the coil to attach the tie rod to the spindle. Once compressed, tighten using the factory nut.



STEP 20: After the spacers have been installed on both sides of the truck, then you can attach the sway bar linkage to the spindle and tighten.





## **DIFF DROP INSTALL (4WD only)**

STEP 1: Unbolt the M16 bolting from the front diff mounting bracket and remove.

STEP~2: On the driver's side plate, measure and mark  $3\!\!\!/ ''$  down from the center of the original hole and 3/8" backwards.



STEP 3: Now you will need to drill a 5/8" hole through this mark. First, pivot the diff down so that the drill bit will go into the sleeve when it breaks though the plate. Second, it is recommended to use a step bit because it is shorter and will make the drilling process easier.



STEP 4: Insert the factory bolt through the recently drilled hole to support the diff and then un-bolt and remove the plate on the other side of the front diff mount.



STEP 5: Install the provided diff drop plate and attach using the factory nuts at the frame. Next, use the provided M16 nut and washer along with the factory bolt to attach to the diff and tighten.

STEP

