



**PRODUCT: 703030C**  
**99-10 RANGER EDGE 4" LIFT SPINDLES**

**PARTS LIST QTY**

HEX CAP SCREW M10-1.5X70MM	2
STOVER NUT, M10-1.5	2
HARDEN WASHER 3/8, SAE, FW, GOLD	4
1/8 X 1 1/2 COTTER PIN	6
LIFT SPINDLE - DRIVER SIDE	1
LIFT SPINDLE - PASS. SIDE	1

PLEASE DOUBLE CHECK THE PARTS LIST BEFORE BEGINNING INSTALLATION, TO ENSURE ALL PARTS ARE PRESENT

READ THE INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING THE INSTALLATION.

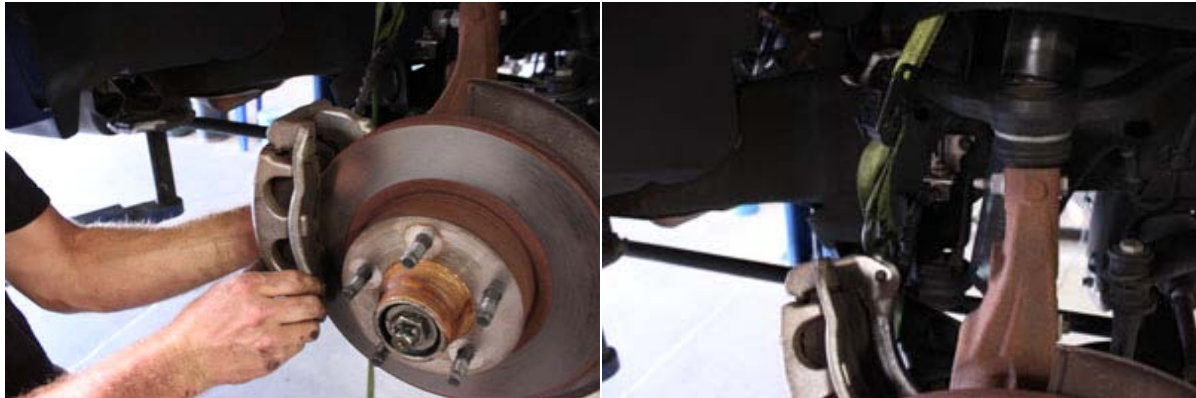
**PRIOR TO INSTALLATION:**

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.
5. Jack up front of vehicle, place jack stands under frame, behind front suspension.

After removing parts from vehicle, save hardware for reinstallation

**IT IS RECOMMENDED THAT YOU HAVE YOUR VEHICLE'S ALIGNMENT CHECKED WHENEVER INSTALLING NEW SUSPENSION. IT IS ALSO RECOMMENDED THAT YOU ADJUST YOUR HEADLIGHTS WHENEVER YOUR VEHICLE'S RIDE HEIGHT IS ALTERED.**

Remove the wheel, then the bolts securing the brake caliper to the spindle. Tie the caliper up and out of the way with a tie-down or other method, but **DO NOT HANG THE CALIPER BY THE BRAKE LINE.**



Support the lower control arm with a floor jack, compress the arm  $\frac{1}{4}$ ". Remove the cotter pin and castle nut from the tie rod end at the spindle. Separate tie rod end from the spindle, then remove the dust cap from the rotor. Slide the rotor and bearings off the spindle.



If the truck is equipped with ABS, separate the wire from the spindle and set the sensor aside. Remove the top pinch bolt from the upper ball joint at the spindle. Remove cotter pin and castle nut from the lower ball joint. Separate the lower ball joint from the spindle and slide the spindle off the ball joints.

Die Grinder required here. Remove the inside head of the steering stop on the backside of the lower control arm. Tap out the steering stop with a hammer and punch. Next, use a grinder with a cutoff wheel, and remove approximately  $\frac{1}{4}$ " from the front lip of the lower control arm. Grind smooth and paint for rust protection



**GRIND SMOOTH AND PAINT FOR RUST PROTECTION ON THE LOWER CONTROL ARM AFTER THE CUT.**

On models with front ABS, attach the sensor to the spindle in the provided hole using the original bolt to mount the ABS sensor. Check clearance from ABS sensor to ABS reluctor ring, if contacting ring place a washer between sensor and spindle to create an air gap. Place the passenger side spindle onto the lower ball joint and reinstall the castle nut. Slide the upper ball joint into the top of the spindle. Insert the supplied M10-1.5x70mm bolt from front to rear through the top pinch hole in the spindle with a 3/8" flat washer on each side followed by a lock nut. Torque the top of the bolt to 50 ft/lbs. Torque the lower castle nut to 70 ft/lbs and align it with the cotter pin hole in the lower ball joint. Install cotter pin, reconnect the ABS sensor wire at the frame.



Slide the rotor back onto the spindle, install the original castle nut and adjust preload on wheel bearing to factory spec. It's important to check the clearance between the ABS Sensor and the reluctor ring. If there is contact, refer to previous step to space the sensor back.



Slide the brake caliper back onto the spindle, place several drops of thread lock / locktite onto the original brake caliper bolts and attach the caliper to the spindle. Torque bolts to 35 ft/lbs.



Locate the brake line mount on the frame, disconnect the bracket from the frame where the hard line and hose come together. Save the factory hardware, drill a 1/4" hole at 2 1/8" below the original mounting hole. Use original self tapping bolt to reattach brake line tab to frame. While suspension is at full droop and spindle turned all the way in, carefully bend the hard line @ the caliper until you have a slight amount of slack in the brake hose. (Turn spindle full lock in both directions to check for slack)



Place the tie rod end into the spindle, reinstall the castle nut and torque to 35 ft/lbs.

Repeat this process on the opposite side of the truck.

After the truck is placed back on the ground, turn the steering wheel freely, to ensure it turns fully in each direction with ample clearance between the wheels, tires, control arms, brake lines, and ABS wires.

Align the front end of the vehicle as necessary, and re-torque all hardware after 500 miles.