703030A
1998-2000 RANGER 2WD (COIL SPRING)

703030B
2001-2009 RANGER 2WD (COIL SPRING)

703030C
2001-2009 RANGER 2WD (TORSION BAR)

YEAR RANGE	PART #	SUSPENSION	ROTOR DIAM	UPPER BJ HOLE INCHES	UPPER BJ HOLE MM	DIST FROM SPUD TO CALIPER HOLES
1998-2000	703030A	COIL SPRING	10.280"	.695"	17.653	ABOUT 2.5"
2001-2009	703030B	COIL SPRING	11.280"	.695"	17.653	ABOUT 3"
2001-2009	703030C	TORSION BAR	11.280"	.772"	19.6088	ABOUT 3"

3 HOUR INSTALL TIME

Recommended Tire size 31x10.50

Components	Hardware
(1) 703030D (DRIVE SIDE SPINDLE)	(8) COTTER PINS
(1) 703030P (PASS SIDE SPINDLE)	(2) M10-1.5 X 70 HEX CAP SCREW
	(2) M10-1.5 STOVER NUT
	(4) M10 HARDENED FLAT WASHER

WARNING

Max Trac Suspension recommends using an 15" x 7" wheel w/ 3.75" back spacing. Any wheel that is wider or has less back spacing "i.e. Deep Dish Wheels" can cause component failure and will void the warranty. Max Trac Suspension also recommends using a 31" x 10.5" tire with the spindle only or a 33" x 11.5" tire when combining lift coils with our spindle.

***REQUIRES TRIMMING OF THE LIP OF THE LOWER CONTROL ARM, AROUND THE LOWER BALL JOINT AND FADING BACK**
***REQUIRES DRILLING A HOLE IN THE FRAME TO RELOCATE THE MOUNTING BRACKET OF THE FRONT BRAKE LINES**
***IT IS RECOMMENDED TO INSPECT YOUR BALL JOINTS, BUSHINGS, WHEEL BEARINGS, ROD ENDS, AND STEERING JOINTS BEFORE THE INSTALL OF THESE SPINDLES. REPLACE ANY AND ALL PARTS WHICH ARE WARN OUT**
***IT IS RECOMMENDED TO USE MOTORCRAFT CONTROL ARMS FOR PROPER BALL JOINT FITMENT AND MINIMAL LCA CLEARANCING.**

WARNING

***CERTAIN AFTERMARKET LOWER CONTROL ARMS HAVE BEEN RE-TOOLED AND NOW FEATURE A LARGER BULGE AROUND THE LOWER BALL JOINT LEAVING LESS OF A LIP TO BE CLEARANCED. THESE ARMS WILL REQUIRE THE INSTALLER TO ADDITIONALLY CLEARANCE THE BACK OF THE SPINDLE. TWO KNOW BRANDS ARE (ORIELLY'S HOUSE BRAND & MOOG)**
***WHEEL BEARING INTEGRITY AND TENSION IS CRITICAL. SPUD FAILURE DUE TO LOOSE OR CEASED UP BEARINGS IS NOT COVERED UNDER WARRANTY**

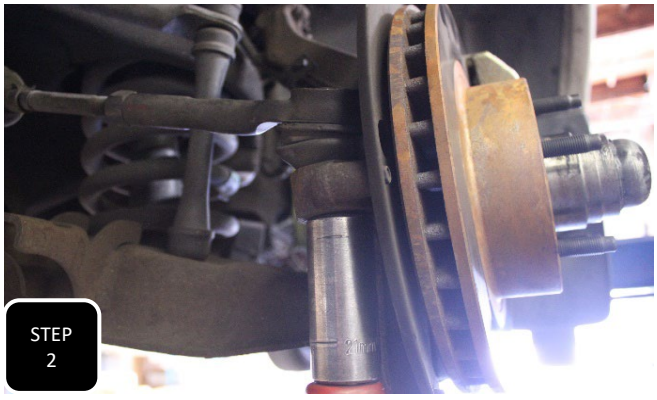
REVISED 12/20/2023

Please double check the parts list before beginning installation to ensure all parts are present. If there is something missing, please contact Maxtrac Suspension (714) 630-0363. Please have the boxes present if parts are missing or damaged

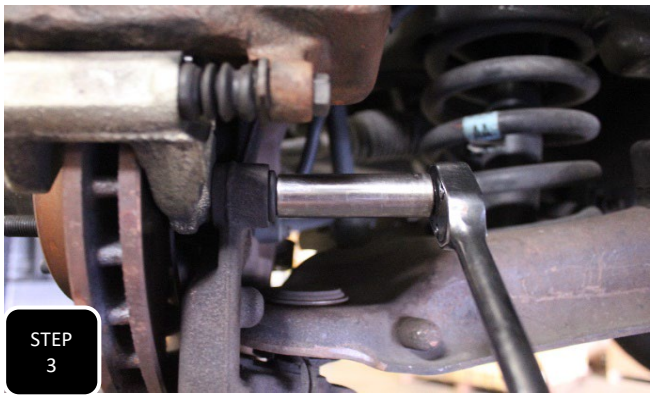
PRIOR TO INSTALLATION:
1. Factory service manual is recommended to have on hand.
2. Secure and properly block vehicle prior to beginning installation.
3. Always wear safetly glasses when using power tools or working under the vehicle
4 Modification to any part will void the warranty associated with that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

AFTER REMOVING PARTS FROM VEHICLE, SAVE HARDWARE FOR REINSTALLATION

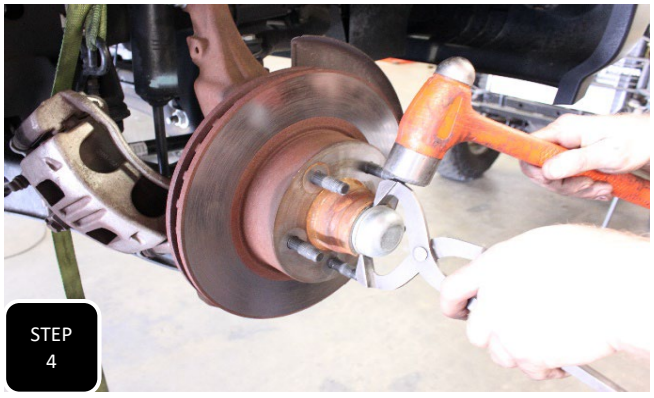
Step 1 Jack up the front of your vehicle and support under the frame with jack stands.



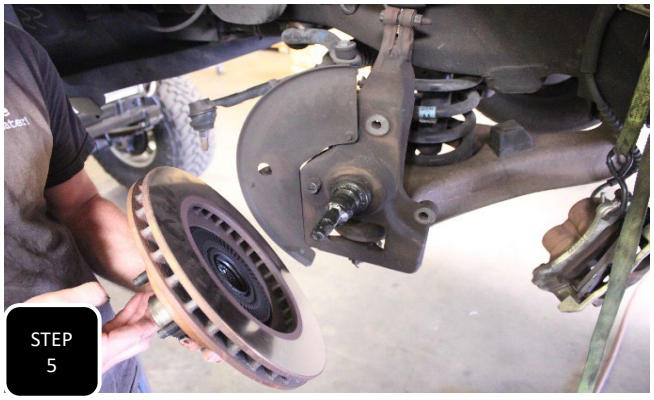
Step 2 Pull the cotter pin from the castle nut at the tie rod, remove the nut, and then break the rod end loose by hitting the side of the steering arm with a hammer. **NOTE: NEVER HIT THE ROD END ON THE THREADS.**



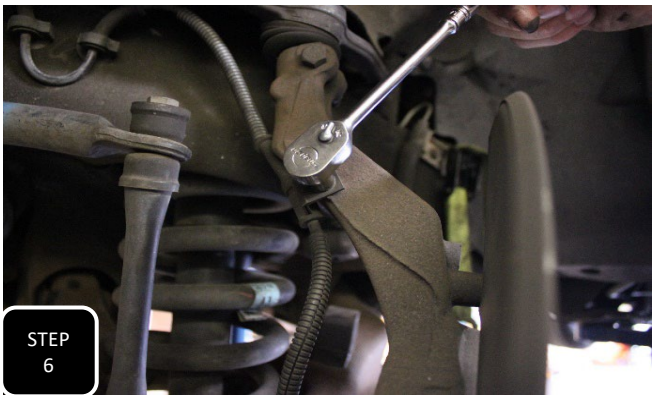
Step 3 Unbolt both brake caliper mounting bolts and support the brake caliper up, out of the way. **NOTE: NEVER ALLOW THE BRAKE CALIPER TO HANG BY THE BRAKE LINE.**



Step 4 Remove the wheel bearing dust cap to access the wheel bearings. Next, remove the cotter pin from the castle washer and then loosen the nut.



Step 5 Remove the castle washer along with the nut and outer wheel bearing and then remove the brake rotor.

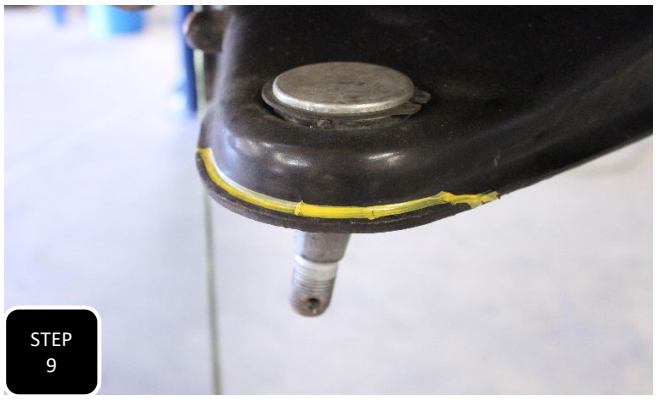


Step 6 Unbolt the ABS sensor from the spindle and then unbolt the ABS wire guide from the neck of the spindle. Next, hang the ABS sensor up, out of the way so that it does not get damaged during the install.

Step 7 Remove the cotter pin from the lower ball joint, loosen but don't remove the nut and then break the ball joint loose by hitting the side of the spindle, right at the ball joint. **NOTE: NEVER HIT THE BALL JOINT ON THE THREADS.**

Step 8 Unbolt the bolt attaching the spindle to the upper ball joint, but do not remove until you have a firm grip on the spindle. Once you do, remove the bolt and then remove the spindle.

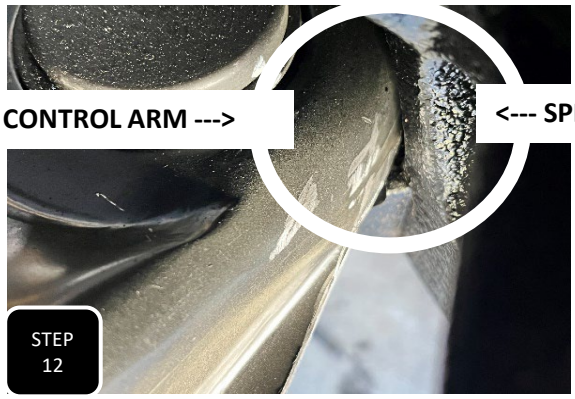
NOW WOULD BE A GOOD TIME TO REPLACE ANY WARN OUT PARTS, INSPECT WHEEL BEARINGS, BRAKES, BALL JOINTS, BUSHINGS AND/OR CLEAN UP ANY SUSPENSION COMPONENTS.



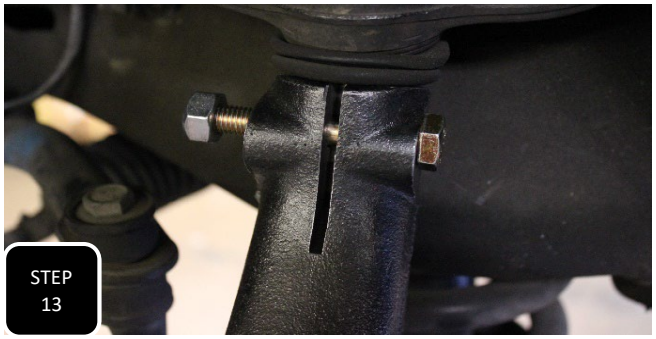
Step 9 Mark a line around the front of the lower control arm where the vertical part of the control arm meets the lip and then using a suitable cutting device, cut the lip of the control arm off. **NOTE: MAKE SURE ALL CUTS HAVE A SMOOTH, ROUNDED TRANSITION.**

Step 10 Above is a picture of a good cut and a bad cut. Good cuts are smooth and round off at all transitions. This will prevent the control arm from cracking. When done trimming, spray paint the cut area for rust prevention.

Step 11 Loosely install the new spindle by tightening the LBJ nut and just loosely installing the UBJ bolt. Cycle the spindle back and forth in its steering cycle to make sure the control arm has been clearance enough. If there is still contact, remove the spindle and clearance a little more. **NOTE: TORSION BAR RANGER'S HAVE A LARGER UPPER BALL JOINT THAT WILL NOT FIT IN THE HOLE OF A COIL SPRING RANGER SPINDLE. SEE MEASUREMENTS ARE ON THE COVER PAGE OF THESE INSTRUCTIONS.**



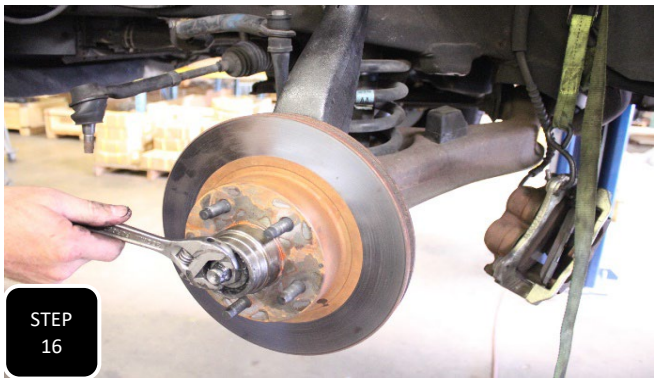
Step 12 As stated on the cover of these instructions, there are now some newely molded, aftermarket control arms that feature a larger bulge around the lower ball joint. Known brands (Orielly's & MOOG) If you replaced your LCA's with either of these brands then you will likely need to additionally clearance the back of your spindle as well to eliminate contact between the two. **NOTE: THE FACTORY CONTROL ARM HAD ABOUT A 3" DIAMETER AROUND THE BALL JOINT WHERE AS THESE PROBLEMATIC ARMS HAVE A 3 1/4" DIAMETER.**



Step 13 If replacing your upper control arms during this install, it is recommended to use **Motorcraft** brand arms as some after market control arms have been found to have a slightly smaller ball joint shank which could prove to not fully tighten up in your Max Trac lift spindle.

Step 14 Torque the upper ball joint bolt to 45 ft/lbs and the lower ball joint nut to 120 ft/lbs. For the lower ball joint, further tighten the nut by hand until the opening in the castle nut aligns with the hole in the ball joint and then install the cotter pin.

Step Using a suitable cutting device, cut off the head of the steering stop located on the lower control arm. The head is on the inside of the control arm. Once cut off, use an air hammer or hammer and punch to punch the steering stop out of the control arm. **NOTE: FAILING TO REMOVE THIS FACTORY STEERING STOP WILL CAUSE THE BRAKE CALIPER TO CONTACT THE STOP AND LOSS OF BRAKES CAN BE EXPERIENCED.**



WARNING

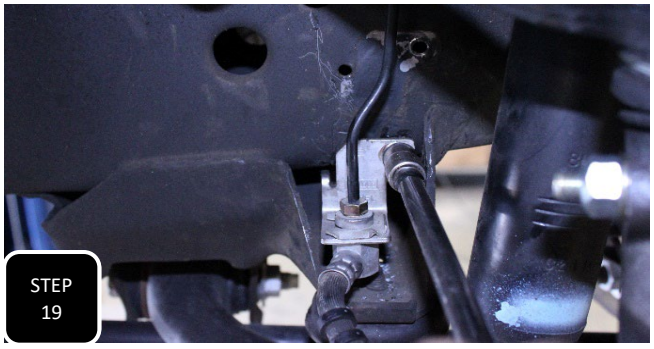
BEARING INTEGRITY AND TENSION IS CRITICAL. SPINDLE SPUD FAILURE CAN OCCUR DUE TO BAD BEARINGS AND/OR BAD BEARING TENSION. SPINDLE SPUD FAILURE DUE TO THESE REASONS IS NOT COVERED UNDER WARRANTY

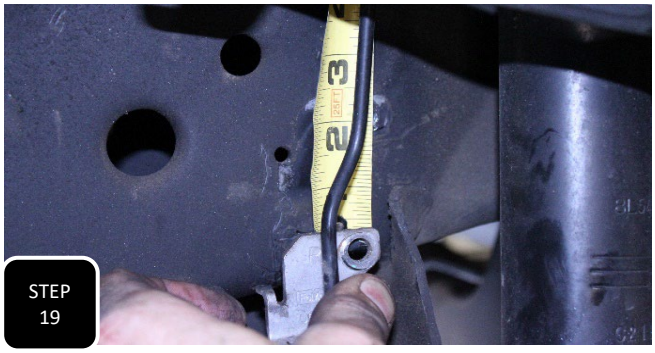
Step 16 15 Install the rotor, bearings, washer and nut. Tighten down the nut to about 50 ft/lbs while spinning the rotor. This will seat the bearings.

NOTE: IT IS RECOMMENDED TO INSPECT YOUR WHEEL BEARINGS AND TO REPLACE THEM IF WARN. IF THEY STILL LOOK GOOD, RE-PACK BOTH WHEEL BEARINGS WITH FRESH GREASE AND INSTALL A NEW SEAL IN THE BACK OF THE

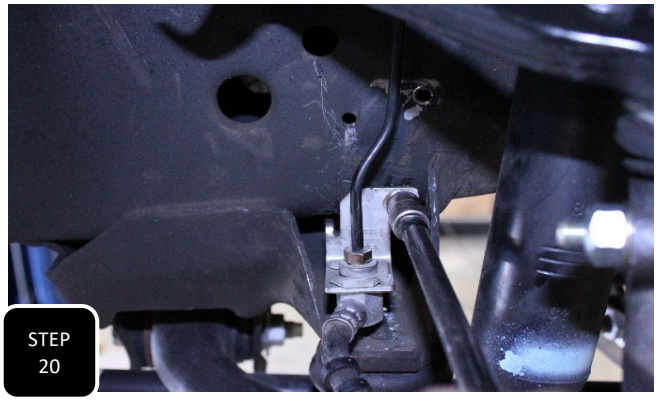
Step 17 Loosen the nut and then tighten just beyond hand tight. (About 22 in/lbs) Spin the nut a little bit tighter until the opening in the castle nut aligns with the hole in the spindle's spud and then install the provided cotter pin. Next, re-install the dust cap over the wheel bearings using a mallet or dead blow to tap it into place.

Step 18 Install the ABS sensor using the factory bolt and tighten. Next, attach the ABS wire guide bracket to the side of the spindle using the factory bolt and tighten. **NOTE: MAKE SURE TO SPIN THE ROTOR AND CHECK FOR CLEARANCE BETWEEN THE SENSOR AND RELUCTOR RING. IF THERE IS CONTACT, INSTALL A SMALL WASHER BETWEEN THE SENSOR AND SPINDLE. IF THE SENSOR IS WAY TO BIG FOR THE OPENING IN THE SPINDLE THEN YOUR TRUCK HAS STABILITRAC AND THESE SPINDLES WILL NOT WORK.**





Step 19 Locate where the soft brake line meets the hard brake line and unbolt the mounting bracket from the frame. Mark a spot 2 1/8" straight down from the original bolt hole.



Step 20 Drill a 1/4" hole, 2 1/8" straight down from the original hole. The factory bolt is self tapping and will thread right in with pressure.

Step 21 Loosely install the brake caliper onto the brake rotor. Using a pry bar, gently pry on the hard brake line, at the brake caliper, until the soft line clears the neck of the spindle.

Step 22 Attach the caliper to the spindle using the factory bolts and tighten. **NOTE: CHECK FOR PROPER BRAKE PAD ENGAGEMENT. IF THE BRAKE PADS ARE HANGING OFF THE END OF THE ROTOR BY ABOUT 1/2" THEN YOU HAVE THE WRONG SPINDLES. 1998-2000 MODELS HAD A 10.280" DIAMETER ROTOR WHERE AS 2001-2009 MODELS HAD A 11.280" ROTOR.**

REPEAT STEPS 1-22 ON THE OTHER SIDE

AFTER MODIFYING YOUR SUSPENSION

HAVE THE VEHICLE'S ALIGNMENT CHECKED

PROPERLY ADJUST YOUR HEAD LIGHTS FOR THE NEW STANCE OF THE SUSPENSION

RE-TORQUE ALL BOLTS AFTER 500 MILES

MaxTrac suspension

RIDE HEIGHT SHEET

*THIS SHEET MUST BE FILLED OUT PRIOR TO CALLING WITH ANY DISCREPENCIES

YEAR _____ MAKE _____ MODEL _____

4WD / 2WD / AWD

MEASUREMENTS

*MOST ACCURATE MEASUREMENT IS FROM THE BOTTOM OF THE RIM, STRAIGHT UP TO THE BOTTOM OF THE FENDER

*TRUE HEIGHT WONT BE ACCURATE UNTIL VEHICAL IS ALIGNED

*THE VEHICLE'S CASTER WILL BE INCREASED OR DECREASED IF ONLY THE FRONT OF THE VEHICLE IS MODIFIED

	BEFORE	AFTER	DIFFERENCE
DRIVER FRONT	_____	_____	_____
DRIVER REAR	_____	_____	_____
PASSENGER FRONT	_____	_____	_____
PASSENGER REAR	_____	_____	_____

LIMITED LIFETIME WARRANTY

Max Trac Suspension makes no warranty, expressed or implied, as to the merchantability, fitness for purpose, description, quality, productiveness, accuracy or any other matter with respect to every product, all such warranties being hereby specifically and expressly disclaimed by Max Trac. Max Trac may offer technical advice or assistance with regard to the products based on laboratory and/or field experience and customer understands and agrees that such advice represents only good faith opinions and does not constitute a warranty or guarantee. The sole and express warranty provided by Max Trac is to warrant that the products sold as listed comply with Max Trac's specification at the date and time of manufacture. Max Trac makes no warranty that such products shall meet such specification at any time after installation of products. Use of such product is specifically not warranted, and Max Trac specifically excludes from this express warranty parts subject to normal wear and tear after one year, finish after one year, damage resulting from failure to follow recommendations in installation manuals, competition or off-road use, and damages caused by aftermarket products. Max Trac's liability and customer's exclusive remedy for any breach of this limited express warranty is limited to repair, replacement, or refund at Max Trac's option and in Max Trac's sole discretion. There are no warranties which extend beyond the description on the face hereof.

Our limited lifetime warranty excludes the following items: bushings, bump stops, ball joints, tie rod ends, rod end/heim joints, and shock absorbers. These parts are subject to immediate wear and tear and are not considered defective when worn. They are warranted for twelve (12) months from the date of purchase only for defects in workmanship.

This Max Trac warranty is void if (1) the vehicle is not aligned after kit installation, (2) proper maintenance is not routinely performed, (3) the Max Trac products are misused or abused in any way in either installation or service, or (4) the products are used in a way that violates federal, state, or local law or regulation in any respect. Max Trac is not responsible for vehicle compatibility with other aftermarket products. Warranty coverage does not include consumer opinions regarding ride comfort, fitment and design after product installation.

Max Trac reserves the right to change, modify or cancel this warranty without prior notice.

WARRANTY RETURN

Contact Maxtrac by sending an email with a copy of the original purchase receipt, along with photographs clearly illustrating the failure mode.

1. Upon validating the information provided, Maxtrac will issue a Return Manufacturer Authorization number (RMA#).
2. Return your product to Max Trac Suspension at your expense in order to execute a claim under this warranty.
3. Include the RMA# on the outside of the box. Any returns without the RMA# will be refused.

NON-WARRANTY RETURN & CREDIT POLICY

Your item must be in its original unused and resalable condition to be returned, unless there is a manufacturing defect. You must return the item within 30 days of your purchase. Otherwise, there will be an additional restocking fee.

1. Please contact Max Trac Suspension at (844) 535-1668 to obtain a Return Manufacturer Authorization Number (RMA#).
2. Return your product to Max Trac Suspension at your expense.
3. Include the RMA# on the outside of the box. Any returns without the RMA# will be refused.

Return Exceptions

Merchandise that has been installed, used, or altered may be subject to no credit.

Restocking Fee

All items are subject to a restocking fee based on the condition of the packaging and product.
Max Trac Suspension does not credit shipping and handling. Credit minus applicable restocking fee will be determined and issued within 10 business days of product receipt.
All returns will be credited to your Maxtrac account.

⚠ INSTALLATION WARNINGS

READ INSTRUCTIONS AND WARNINGS COMPLETELY PRIOR TO INSTALLATION.
MAXTRAC IS NOT RESPONSIBLE FOR ANY DAMAGE OR INJURY DUE TO IMPROPER INSTALLATION OR MAINTENANCE.

Installer is responsible to insure a safe and controllable vehicle after performing modifications. All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two post vehicle lift with safety jacks. Included instructions are recommended guidelines only.

Max Trac Suspension recommends reference to the OE Service Manual corresponding to the model and year of vehicle when either disassembling or assembling factory and related components.

Use caution during all disassembly and assembly steps to insure suspension components are not over extended, causing damage to any vehicle components and parts included in this kit. Unless otherwise specified, tighten all bolts and fasteners to standard torque specifications listed within the OE Service Manual.

Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing and maintain ride comfort.

Larger tire and wheel combinations may increase leverage on suspension, steering, and related components.

Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle ride height. Always measure the vehicle ride height prior to beginning of installation.

MAXTRAC SUSPENSION DOES NOT ADVISE USING WHEELS WIDER THAN 9" OR WHEELS WITH LESS THAN 4.5" BACKSPACING. DOING SO WILL RESULT IN VOIDING ANY AND ALL MANUFACTURER WARRANTIES

Max Trac Suspension does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

Final Checks & Adjustments

Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to ensure proper torque. Torque lug nuts to the wheel manufacturer specs.

Move vehicle backwards and forwards a short distance to allow suspension components to settle. Turn the front wheels completely left then right and verify adequate tire, wheel, brake line, and ABS wire clearance.

Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brakes, hoses, and ABS lines for adequate slack at full extension, and adjust as necessary.

⚠ ADDITIONAL WARNINGS

WARNING

Max Trac Suspension products should ONLY be installed by a certified professional mechanic with experience working on and installing suspension products. Professional knowledge and skill will typically yield the best installation results.

If you need a list of installers in your area, please contact Max Trac Suspension customer service to find one of our authorized dealers. Max Trac Suspension does not warrant work performed by any dealer, installer, or mechanic.

- All lifted vehicles may require additional driveline modifications and/or balancing.
- A Factory Service Manual for your specific Year/ Make / Model should be referenced during installation.
- Use of a vehicle hoist will greatly reduce installation time.
- Speedometer / computer calibration is required if changing +/- from factory tire diameter.
- Vehicle must be in excellent operating condition. Repair or replace any and all worn or damaged components prior to installation.

FAILURE TO PERFORM POST INSTALLATION INSPECTION AND/OR CHECKS MAY RESULT IN VEHICLE COMPONENT DAMAGE AND/OR PERSONAL INJURY OR DEATH.

RECHECK ALL HARDWARE FOR PROPER TORQUE VALUES AFTER 500 MILES, AND THEN PERIODICALLY AT EACH SERVICE INTERVAL THERAFTER.

Vehicle Handling Warning

Increasing the height of your vehicle raises the center of gravity and **WILL** affect stability and control. Use caution on turns and when steering. Vehicles with larger tires and wheels will handle differently than stock vehicles. Take time to familiarize yourself with the handling of your vehicle after product installation.

Wheel Alignment/Headlamp Adjustment

It is necessary after installation to have a wheel alignment performed by a certified alignment technician. Align the vehicle to factory specifications. It is recommended that your vehicle alignment be checked after any off-road driving. In addition to vehicle alignment, it is necessary to check and adjust vehicle head lamps for proper aim and alignment. If the vehicle is equipped with active or passive safety/collision monitoring and / or avoidance systems including, but not limited to, camera-or radar-based systems, check and adjust your vehicle's systems for proper aim and function.

Braking Warning

Generally, braking performance and capabilities are decreased when significantly larger or heavier tires and wheels are used. Take this into consideration while driving. Also, changing axle gear ratios or using tires that are taller or shorter than factory height will cause an erroneous speedometer reading. On vehicles equipped with an electronic speedometer, the speed signal impacts other important functions as well. Speedometer recalibration for both mechanical and electronic types is highly recommended.

⚠ SAFETY WARNINGS

SAFETY WARNING

MISUSE OF THIS PRODUCT COULD LEAD TO INJURY OR DEATH.

- Suspension systems or components that enhance the on and off-road performance of your vehicle may cause it to handle differently than it did from the factory. EXTREME CARE must be used to prevent loss of control or vehicle rollover during operation.

- ALWAYS operate your vehicle at reduced speeds and maintain distance between vehicles and obstacles to ensure your ability to control your vehicle under all driving conditions. Failure to drive safely may result in serious injury or death to the driver and passengers.

- Driver and passengers must ALWAYS wear seat belts, avoid rapid steering angles and rates and other sudden maneuvers.

- You should NEVER operate your vehicle under the influence of alcohol or drugs.

- Please check all factory components for excessive wear and tear. Please replace worn factory parts before installing any suspension kits. Failure to do so will void any Max Trac warranty.

- Please inspect all wheel bearings and hub bearings for excessive wear and replace worn components before installing suspension kits. These hub and wheel bearings may wear out sooner with installation of larger tires and wheels. MaxTrac does not warranty these factory parts at any time, also using any wheel that MaxTrac does not recommend will void any warranty of MaxTrac components.

- Constant maintenance is required to keep your vehicle safe. Thoroughly inspect your vehicle before and after every off-road use.

- It is the responsibility of the retailer and/or the installer to review all state and local laws with the end user of this product related to bumper height laws and the lifting of a vehicle before the purchase and installation of any Max Trac products.

- It is the responsibility of the driver to check the area around the vehicle for obstructions, people, and animals before moving the vehicle.

- All lifted vehicles have increased blind spots. Take note of these prior to operating the vehicle.

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DAMAGE, INJURY AND/OR DEATH CAN OCCUR IF ANY OF THE ABOVE WARNINGS ARE NOT FOLLOWED.