



SUSPENSION INC.

Installation Instructions Ford F150 7" 44-2575

IF YOUR ReadyLIFT® OFF ROAD SUSPENSION PRODUCT IS MISSING A PART OR HAS A DAMAGED PART, PLEASE CONTACT CUSTOMER SERVICE DIRECTLY.

A NEW REPLACEMENT PART WILL BE SENT TO YOU IMMEDIATELY

(800)549-4620

MON-FRI 7AM-5PM PST

OR

EMAIL: INFO@ReadyLIFT.COM

WEBSITE: www.ReadyLIFT.COM

****Please retain this document in your vehicle at all times****

ReadyLIFT® Off Road Suspension Limited Warranty

Limited Warranty details for ReadyLIFT® Off Road Suspension.

The ReadyLIFT® Off Road Suspension Limited Lifetime Warranty covers defective materials or defective workmanship for the life of the product to the original purchaser and only on the original vehicle which the product was installed. The ReadyLIFT® Off Road Suspension Limited Lifetime Warranty excludes the following wearable items: bushings, bushing sleeves, bump stops, top-out stops, spherical bearings (uniballs), heim joints (rod ends), and misalignment spacers (upper control arm and steering). These items are considered wear items and are covered for 90 days from the original purchase date, therefore these items will not be considered defective because of wear. Wear is subject to use of product, use of vehicle, driving conditions, weather conditions, cleanliness of product/components, and maintenance/up-keep. The degree of wear and overall lifetime of each wear item is subject to afore mentioned conditions and circumstances. ReadyLIFT® Off Road Suspension will only warranty wear items in the case of workmanship and defects for the period of 90 days following the date of purchase. Please note that all products should be inspected by a professional technician before installing any part/kit onto the vehicle. In addition, all products should be installed by a qualified technician. Please contact ReadyLIFT® Off Road Suspension if there is any question as to the quality of workmanship of each component or its installation procedure. Contact ReadyLIFT® Off Road Suspension directly about any potentially defective parts prior to removing any parts from the vehicle. If it appears that the part is warrantable, you will be given an RGA number and asked to return the part freight prepaid. If the part is found to be warrantable, at the sole discretion of ReadyLIFT® Off Road Suspension, it will be repaired or replaced and returned to you. **The limited warranty expressed by ReadyLIFT® Off Road Suspension supersedes that of any claims made by authorized and unauthorized dealers of ReadyLIFT® Off Road Suspension products.**

www.ReadyLIFT.com



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Please read Instructions thoroughly and completely before beginning installation.
Installation by a certified mechanic is recommended.

ReadyLIFT® Suspension is NOT responsible for any damage or failure resulting from improper installation.

Safety Warning: 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 abrupt maneuvers. Always operate your vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Failure to drive safely may result in serious injury or death to driver and passengers. Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers. ReadyLIFT® Suspension does not recommend the combined use of suspension lifts, body lifts, or other lifting devices. You should never operate your vehicle under the influence of alcohol or drugs. 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 their vehicle before the purchase and installation of any ReadyLIFT® products. It is the responsibility of the driver/s to check their surrounding area for obstructions, people, and animals before moving the vehicle. All raised vehicles have increased blind spots and damage, injury and/or death can occur if these instructions are not followed.

This suspension system was developed using a 37" x 12.5" tire with 20" x 9" wheel and a offset of +25mm. If wider tires are used, offset wheels may be necessary and trimming may be required. Factory wheels can be used but are not recommended with tires over 11" wide. The stock spare rim can be run in an emergency. Please note that if running the spare factory tire, it is done for short distances and a speed not to exceed 45mph or damage to differentials may occur.

VEHICLE HEIGHT MEASUREMENTS

Driver Front:	Driver Rear:	Pass. Front:	Pass. Rear:



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BILL OF MATERIALS

Front Cross Member	1
Rear Cross Member	1
M18 x 150mm Bolt	2
M18 x 140mm Bolt	4
M18 Washer	8
M18 Lock Nut	2
Cam Adj Plate and Nut	4
Front Differential Skid Plate	1
3/8"x 1" Bolt	6
3/8" Washer	6
Ball Joint Spacer	2
Driver Side Differential Drop	1
Pass Side Differential Drop	1
Driver Differential Torsion Bracket	1
Pass Differential Torsion Bracket	1
Barb Connector	1
Vent Tube	1
Steering Extension Shaft	1
Universal Joint	1
Rod End	1
Driver Knuckle	1
Pass Knuckle	1
Front Driveshaft Spacer	1
M10 x 100mm Allen Bolt	6
M14 x 90mm Allen Bolt	1

14mm Washer	1
9/16" x 4.0" Bolt	3
9/16" Washer	6
9/16" Lock Nut	3
Driver Sway Bar Drop	1
Pass Sway Bar Drop	1
7/16" x 1.25" Bolt	4
7/16" Washer	8
7/16" Lock Nut	4
Front Brake Line Bracket	2
Rear Brake Line Bracket	1
Rear Parking Brake Bracket	1
5/16" x 1" Bolt	4
5/16" Washer	8
5/16" Lock Nut	4
M6 x 16MM Bolt	2
M6 Washer	2
Zip Tie	6
Driver Side 5" Block	1
Pass Side 5" Block	1
U-bolt and Hardware Pack	1
Driver Strut Spacer	1
Pass Strut Spacer	1
M10 - 1.25 Flange Nut	6
M10 - 1.50 Flange Nut	6
Rear Shock	2

Safety Warning

Before you start installation:

ReadyLIFT® Suspension highly recommends that the installation of this product be performed by a professional mechanic with experience working on and installing suspension products. Professional knowledge and skill will typically yield the best installation results. If you need an installer in your area, please contact ReadyLIFT® Suspension customer service to find one of our "Pro-Grade" Dealers.

Notes:

- Installation by a professional mechanic is highly recommended.
- A Factory Service Manual for your specific Year / Make / Model is highly recommended for reference during installation.
- Vehicles with a two piece rear driveline may require a carrier bearing drop support bracket, call technical assistance for details.
- All lifted vehicles may require additional driveline modifications and or balancing.
- A four wheel vehicle alignment will need to be performed after installation of this product.
- Speedometer / Computer recalibration is required if changing +/- 10% from factory tire diameter.
- Use of a Vehicle Hoist will greatly reduce installation time.
- Vehicle must be in excellent operating condition. Repair or replace any and all worn or damaged components prior to installation.

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Park vehicle on a clean flat surface and block the rear wheels for safety. Engage the parking brake.

Record the stock vehicle measurements on both the front and the rear, this will provide a guideline on vehicle rake and lift height.

Measure from the center of the wheel up to the bottom edge of the fender well opening and record on the chart provided on page 2.

Disconnect the vehicle power source at the ground terminal on the battery.

Lock the steering wheel in the straight forward position with the column lock or steering wheel locking device.

Raise the front of the vehicle and support with jack stands at each frame rail behind the lower control arms.

Remove all factory skid plates and plastic guards in between the two cross members of the frame by unclipping the plastic clips. Discard all.

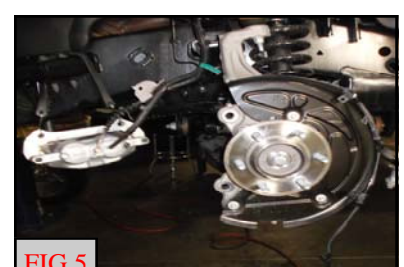
Remove the brake line brackets from the knuckle and frame. Remove the ABS line from the knuckle. Disconnect the vacuum line from the actuator on the backside of the knuckle. (Fig 1, 2)

Disconnect the ABS wires from the engine compartment and remove from brake line brackets. Unclip electrical connectors from plastic holders to gain slack for reassembly later.

Remove the tie rods from the knuckle. Strike the tie rod boss on the knuckle with a dead blow hammer to dislodge the taper from the knuckle. (Fig 3)

Remove the caliper from the knuckle and hang the out of the way using a S - Hook or suitable strap. **DO NOT** let the caliper hang by the brake hose. (Fig 4)

Remove the brake rotor and dust shield. (Fig 5)



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Remove the axle nut dust cover. Remove the axle nut.

Loosen the upper ball joint nut. Strike the ball joint boss on the knuckle with a dead blow hammer to dislodge the taper. Remove the upper ball joint nut and separate the upper control arm ball joint from the knuckle. Remove the hardware holding the vacuum actuator on the knuckle and slide it and the axle off to the side. Carefully remove the vacuum hub from the axle. **USE CAUTION TO NOT DAMAGE THE VACUUM ACTUATOR.** Loosen the lower ball joint nut. Strike the ball joint boss on the knuckle with a dead blow hammer to dislodge the taper and slide the knuckle off of the ball joint. (Fig 6)



Remove the sway bar end link from the lower control arm. (Fig 7)

Remove the lower strut mount from the lower control arm. (Fig 8)

Remove the strut from the frame. (Fig 9)



Remove the sway bar from the frame. (Fig 10)

Remove the rear cross member from the frame. (Fig 11)

Mark driveshaft to differential location for installation later. Remove the driveshaft mounting bolts and allow driveshaft to rest out of the way. (Fig 12)



Remove both the driver side and passenger side CV axle. Strike the shaft with a mallet or soft hammer to dislodge it from the c-clip. This step makes handling the differential much easier, but is not necessary. (Fig 13)



Support the differential with a suitable jack. Remove the vent tube. Remove the 3 differential mounting bolts from the frame and lower the differential out of vehicle.

Locate the intermediate shaft pinch bolt. Mark the alignment of the rack and pinion input shaft and the coupler. Remove the pinch bolt and separate. (Fig 14)



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Disconnect the electrical leads to the rack and pinion. Support the rack and pinion and remove hardware from the frame. Carefully lower the rack & pinion assembly from the vehicle and set aside.

(Fig 15)

Measure from the outside edge of the driver side rear control arm pocket $2\ 5/8"$. Mark a vertical line on both the front and rear of the control arm pocket. Connect the 2 lines across the top of the pocket. Using a suitable cutting tool, cut this section off the frame. Sand and paint exposed metal with quality rust preventative paint. (Fig 16)

Locate the upper differential frame mount. Mark a line across the center of the mount. Make a cut to the frame. Cut the front half off the frame and sand flush with the frame. Paint exposed metal with quality rust preventative paint. This cut is for clearance of the steering shaft extension and u-joint. (Fig 17)

Locate the driver side differential drop bracket and the $3/4"$ rod end. Install the rod end into the bung on the drop bracket. Set the distance from the edge of the bung to the middle of the rod end to $1\ 3/4"$. Do not tighten at this time. (Fig 18)

Install the completed driver side drop bracket into the factory location using the $14\text{mm} \times 90\text{mm}$ Allen bolt and flat washer. Do not tighten at this time. (Fig 19)

Install the ReadyLift passenger side differential drop into the factory location using factory hardware. Do not tighten at this time. (Fig 20)

Install differential onto the drop brackets using $9/16"$ x 4" bolts, and 2 washers from the front of the vehicle facing the rear. Do not install the 2nd washer and nuts at this time. (Rack and Pinion shown for reference) (Fig 21)

Install vent tube, and barb extension onto vent tube and differential.

Install the ReadyLift differential brace on the driver side differential drop bracket using $9/16"$ washer and lock nut. Install the crush tube into the frame using the factory hardware. Do not tighten at this time. (Fig 22)



FIG 13



FIG 14

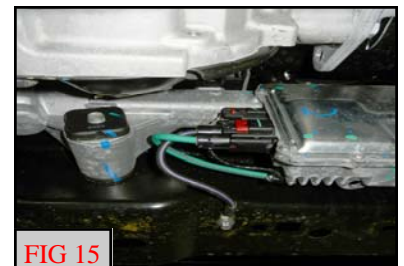


FIG 15



FIG 16



FIG 17



FIG 18

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Install the ReadyLift differential brace onto passenger differential drop bracket. Install the **9/16" washer and lock nut**. Do not tighten at this time. (Fig 23)



Install the ReadyLift sway bar brackets to corresponding sides of the frame using **7/16" x 1 1/4" bolts, flat washers, and lock nuts**. Do not tighten at this time. (Fig 24)



Install the ReadyLift rear cross member into the factory control arm frame pockets using **18mm x 150mm bolts, flat washers, and lock nuts**. Go through the sway bar drop brackets and then the factory control arm frame pockets from the rear of the vehicle. Do not tighten at this time.



Install factory cross member hardware into the passenger side frame pocket and into passenger differential support bracket. Do not tighten at this time. (Fig 25)



Install rear differential mount using **9/16" x 4" bolt, flat washers, and lock nut**. Do not tighten at this time. (Fig 26)

Install the ReadyLift front cross member using the **factory hardware** from the rear of the vehicle facing forward. Do not tighten at this time. (Fig 27)



Locate the steering u-joint assembly. Install the complete assembly onto the rack and pinion. Torque the u-joint Allen pinch bolt to **165 in-lbs**. **Lube the extension with anti-seeze before installing unit into vehicle**. (Fig 28)

Install the rack and pinion unit onto the front cross member using the **factory hardware**, lining up the steering extension through the 3/4" rod end. Do not attach at this time. Attach factory intermediate shaft to extension using **factory pinch bolt**. Make sure there is 1/16" clearance between the intermediate shaft and rod end. Adjust as necessary. Use a drop of thread locker on the pinch bolt. Torque to **165 in-lbs**. Plug electrical connectors into rack and pinion. (Fig 29)



Install driver and passenger axles at this time if removed by sliding them into the differential until c-clip engages.

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Install driver and passenger side lower control arms into corresponding sides of the cross members using **M18 x 140mm, flat washer, cam bracket and cam nut**. Bolts facing to the endside of the vehicle and cam plates on the outside of the cross member. Do not tighten at this time. (Fig 30)



Tighten all differential, rack and pinion, and cross member hardware at this time. Starting with differential, torque all differential hardware to **95 ft-lbs**, differential brace to cross member to **45 ft-lbs**, cross member main hardware to **200 ft-lbs**, sway bar drop bracket hardware to **60 ft-lbs**, rack and pinion to front cross member hardware to **150 ft-lbs**.



Install the ReadyLift front skid plate using **3/8" x 1" bolts, and washers**. Torque to **35 ft-lbs**. (Fig 31)



Install the ReadyLift driveshaft spacer and driveshaft in the same orientation with the marks previously made using the **10mm x 100mm Allen head bolts**. Apply thread locker to all bolts. Torque hardware to **50 ft-lbs**. (Fig 32)



Install the ReadyLift driver and passenger side strut spacers to their corresponding struts using supplied **10mm x 1.50 flange nuts**. They are marked D for drivers and P for passenger. Torque to **35 ft-lbs**.

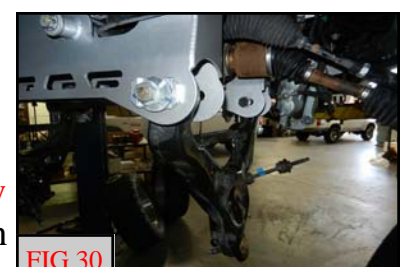
Install completed strut assemblies into vehicle frame and lower control arms in their corresponding locations using supplied **10mm x 1.25 flange nuts, factory lower hardware**. Torque upper nuts to **35 ft-lbs** and lower nuts to **90 ft-lbs**. (Fig 33)



Remove hub assembly from the factory knuckles and transfer them to the ReadyLift knuckles in the same orientation using **factory hardware**. Torque to **148 ft-lbs**. (Fig 34)

Locate the vacuum hub assembly and place onto the factory axle. (Fig 35)

Install the ReadyLift knuckles onto the lower ball joints using **factory ball joint nut, 3/4" thick washer**. Run tight at this time. Will torque in later step. (Fig 36)



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***** Important*** Read and understand following steps. Failure to do so may result in broken or damaged vacuum actuator.*****

Raise knuckle towards upper control arm while guiding the axle shaft into the hub assembly. Take vacuum actuator and move to knuckle mounting surface making sure to engage the splined inner ring to the hub assembly and that the vacuum ports are pointing to the top of the knuckle. Install vacuum actuator using **factory hardware**. Torque to **5 ft-lbs**. Install upper ball joint to knuckle using **factory hardware**. Grab axle and pull towards the hub assembly while rotating the hub to engage the splines of the axle with the vacuum actuator. Once the splines have been engaged, install **factory axle nut**. Torque to **18 ft-lbs**. You will be able to tell if the axle has been fully engaged to vacuum actuator and hub assembly when the shoulder of the axle is visible through the hub and when rotating hub assembly the axle will rotate also. The shoulder should be 2mm under the nut mounting surface. If this is not the case, then the hub assembly will need to be rotated more until full engagement of splines. These steps are very important to follow. The vacuum actuator is made of plastic and is very easily damaged. Repeat steps for driver and passenger sides. (Fig 37, 38, 39)

Install dust shield to knuckle using **factory hardware**. Torque to **5 ft-lbs**. Repeat for driver and passenger sides. (Fig 40)

Install rotor and brake caliper assembly to hub assembly and knuckle using **factory hardware**. Apply a drop of thread locker to threads and torque to **148 ft-lbs**.

Install brake line bracket to knuckle using **6mm x 16mm bolt, and washer**. Install ABS wire to knuckle using **factory hardware**. Torque all **10 ft-lbs**. Install vacuum lines to vacuum actuator. (Fig 41)

Install front brake line drop bracket to factory hard line bracket using **5/16" x 1" bolts, flat washers, and c-nuts**. Gently pull down and bend the metal brake line at the frame to be able to attach the brake line drop bracket to the factory location using the **factory hardware**. Torque all brake line bolts to **10 ft-lbs**. (Fig 42)



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Attach ABS wire to factory locations on factory brake line brackets. Run the ABS line on the outside of the strut tower next to the vacuum lines at strut tower location, attach to the frame with a zip tie through the upper control arm pocket. Reattach electrical connectors in engine compartment.



Install outer tie rod ends to knuckle using **factory hardware**. Torque tie rod end nut and lower ball joint nut to **110 ft-lbs**. Torque the upper ball joint nut to **85 ft-lbs**.



Install sway bar to drop brackets using **factory hardware**. Torque to **35 ft-lbs**. Install end links to lower control arm using **factory hardware**. Torque to **40 ft-lbs**.

Install the wheels and tires and lower the vehicle to the ground. Torque lug nuts to wheel manufacturer specifications.



Jounce the front of the vehicle to settle the front suspension. Move the lower control arm eccentric cams to full inboard. Torque to **150 ft-lbs**.

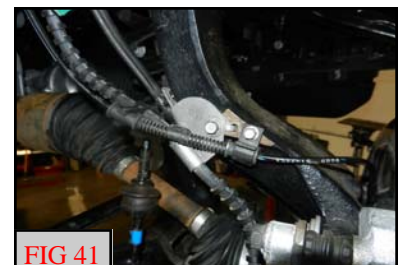
Rear Install

Block the front wheels and raise the rear of the vehicle. Place jack stands under the frame rails ahead of the spring hangers.



Remove the rear wheels.

Remove the rear emergency brake line bracket from the frame ahead of the driver side spring. (Fig 44)



Remove the brake line bracket from the frame. (Fig 45)

Support rear axle with a suitable jack and remove the shocks. Discard shocks as they will not be reused.



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Slightly loosen but do not remove the driver side u-bolts. Remove the passenger side u-bolts completely and discard. Lower the axle just enough to remove the factory block and install the lift block. Locate the passenger side lift block, making sure the tapered end points to the front and the bump pad is facing the inside of the vehicle. Install the lift block on the axle pad aligning the pins. Raise the axle and the block up to the spring while aligning the center pins. Install the provided **u-bolts, washers and nuts**. Snug the u-bolt nuts but do not fully tighten at this time. Repeat steps for driver side. (Fig 46, 47)



Install new rear shocks with **factory hardware**. If installing the kit black shocks, the body goes to the ground the same as the factory. If installing other shocks, refer to their directions for install. Do not tighten at this time. (Fig 48)



Install the rear brake line drop bracket to the frame using **factory hardware**. Gently pull the rear hard lines down and attach the rear brake line bracket to the drop bracket using **5/16" x 1" bolt, washers, and lock nut**. Torque all to **10 ft-lbs**. (Fig 49)



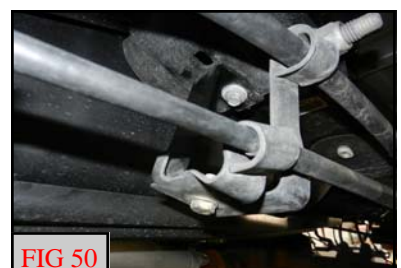
Install the rear emergency brake line drop bracket to the frame using the **factory hardware**, the emergency brake line bracket to the drop bracket using **5/16" x 1" bolt, washers and lock nut**. Torque to **10 ft-lbs**. (Fig 50)



Install rear wheels and lower vehicle to the ground. Torque lug nuts to wheel manufacturers specifications.

Jounce vehicle to settle suspension. Torque rear u-bolts to **120 ft-lbs**, and shock hardware to **60 ft-lbs**.

Have a reputable alignment shop set alignment to the recommended specs on the bottom of the last page of instructions.





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Final install and checks

Recheck that all hardware is of proper torque values and all electrical connections are hooked up. Start vehicle and verify that all dash warning lights are off. Cycle the steering wheel from lock to lock to check for any interference of steering intermediate shaft, steering extension, steering u-joint. wheels, tires, brake lines, hoses, wires, ect and ensure adequate clearance through out the suspension cycle. Adjust as necessary.

*** Due to manufacturer frame variances, if there is any contact between steering extension, u-joint or intermediate shaft, it may be necessary to remove extension from intermediate shaft and u-joint to adjust rod end in to gain clearance.***

If driving vehicle to an alignment shop, adjust toe prior to vehicle operation.

Install all warning tags and decals as directed:

1. Rear view mirror hanging warning card: Hang from rear view mirror to warn driver of vehicle modification.
2. Lifted truck warning decal: Apply decal to the upper left hand corner of the inside of the windshield facing the driver.

Give all installation instructions, warranty information, and all remaining literature to the end user to keep with vehicle records.



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Final Checks & Adjustments

Post Installation Warnings: Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to insure proper torque. Torque wheels to factory specs. Move vehicle backwards and forwards a short distance to allow suspension components to adjust. 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.

*****FAILURE TO PERFORM THE POST INSPECTION CHECKS MAY RESULT IN VEHICLE COMPONENT DAMAGE AND/OR PERSONAL INJURY OR DEATH TO THE DRIVER AND/OR OTHERS*****

Vehicle Handling Warning: Vehicles with larger tires and wheels will handle differently than stock vehicles. Take time to familiarize yourself with the handling of your vehicle.

Wheel Alignment/Headlamp Adjustment:

It is necessary to have a proper and professional 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 your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment

Vehicle Re-Torque and Safety Inspection:

Upon completion of all services and adjustments performed on your vehicle, and within 50 miles of driving, check to ensure all fasteners and hardware are properly torqued to specification as noted in the vehicles factory service manual or the torque chart included.

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

Recommended Alignment Specs

Camber	-0.3	-0.3	Tolerance	+/- 0.5
Caster	+3.0	+3.0	Tolerance	+/- 0.5
Toe	+1.0	+1.0	Total	+20