

1-888-MAXX-CAM www.SuspensionMAXX.com

Applications Include:

Dodge Ram 4x4 R1500 2002-2005 Standard Cab Extended Cab

RammCams are designed to add additional height adjustment to your vehicle. Under no cicumstances should the truck be adjusted beyond the factory height measurement.

The shock absorber is the suspension height limiter and only stock length shock absorbers are recommended without modification whatsoever.

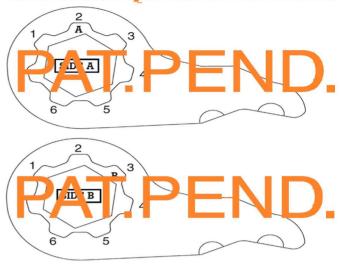
Adjusting vehicle suspension height beyond the maximum factory height can cause binding of crucial steering and suspension components.

These instructions and warnings shall not be substituted for the factory service manual. Torsion bars are preloaded in the vehicle. Only experienced suspension technicians with a working knowledge of the system and the properly designed tools and SAFETY EQUIPMENT should attempt installation of this part.

Installation of this product and all the adjustments should be performed by a licensed certified technician. Using the correct tools and procedures. Adjusting the suspension beyond the factory recommended maximum height can cause binding and accelerated wear of critical steering and suspension parts. Under no cicumstances shall Suspension MAXX Inc. be held liable for any damage or loss of use due to incorrect installation or adjustment. Purchaser of this product assumes all liability.



Calibration is required before installation.



- 1. To calibrate match A or B stamped on the internal hub with the appropriate numbered outer position
- **2.** Apply Anti-Seize on gear tooth area to ease future disassembly
- 3. Install hub alignment clip for install. (Only 1 supplied)
- 4. Install RAMM Cam into vehicle
- 5. Remove hub retainer clip and discard
- 6. Adjust suspension ride height within specified range
- 7. Wheel alignment required after installation

*Actual measurements may vary due to initial starting position, load and bar fatigue.

RAMM Cam R1500

<u>Decrease Height</u>	Increase Height
A4 = -0.7''	B5 = +0.7''
B4 = -1.2''	A5 = +1.2''
	B6 = +2.0''

Record Position for reference:

Right	Left
Installed	Mileage

This kit adds suspension travel only and will not add load carrying capacity to the suspension system.

DO NOT OVERLOAD

This kit can be over calibrated. Over adjustment of the torsion bar is not recommended.

Wheel Alignment Specs w/ Leveling Kit

Camber... 0.0 Deg. +/- 0.5 Deg. Caster.... 2.0 Deg. +/- 1.0 Deg. Toe...... 1/8" +/- 1/16" (toe in)

Measurments are equal on both sides



1-888-MAXX-CAM

www.SuspensionMAXX.com

DODGE Truck Torsion Bar Tool

 $oldsymbol{\Lambda}$ CAUTION: To prevent personal injury,

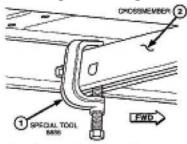
- Wear eye protection that meets ANS1787.1 and OSHA requirements.
- The torsion bar is under pressure, creating a potentially dangerous situation. Completely release pressure before servicing the torsion bar.

REMOVAL

CAUTION: The left and right side torsion bars are NOT interchangeable. the bars are identified and stamped R or L, for right or left. The bars do not have a front or rear end and can be installed with either end facing forward.

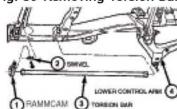
- Raise and support the vehicle with the front suspension hanging.
- 2. Remove the transfer case skid plate.
- 3. Install Special Tool (8686 or SMX-MT) to the anchor arm and the cross member. See Fig. 38
- Increase the tension on the anchor arm tool until the load is removed from the adjustment bolt and the adjuster nut. See Fig. 38
- **5.** Turn the adjustment bolt counter-clockwise to remove the bolt and adjuster nut.
- Remove the Torsion Bar Unloading Tool, allowing the torsion bar to unload. See Fig. 38

Fig. 38: Loading &Unloading Torsion Bar



Remove torsion bar and anchor. Remove anchor from torsion bar. See Fig. 39

Fig. 39 Removing Torsion Bar



- **8.** Remove all foreign material from torsion bar mounting in anchor and suspension arm.
- Inspect adjustment bolt, bearing and swivel for damage.

INSTALLATION

CAUTION: The left and right side torsion bars are NOT interchangeable. The bars are identified and stamped R or L, for right or left. The bars do not have a front or rear end and can be installed with either end facing forward.

- Insert torsion bar ends into Ramm Cam and suspension arm.
- Position the Ramm Cam in the frame crossmember.See Fig. 38
- **3.** Install Torsion Bar Unloader Tool to the anchor and the torsion bar.
- Increase the tension on the anchor in order to load the torsion bar.
- 5. Install the adjustment bolt and adjustment nut.
- **6.** Remove tool from the torsion bar crossmember. See Fig. 38
- 7. Install the transfer case skid plate.
- **8.** Lower vehicle and adjust the front suspension height. See SPECIFICATIONS & PROCEDURES

CAUTION: Always raise vehicle to correct front suspension height. Never lower vehicle to obtain correct front suspension height. If front suspension height is too high, lower vehicle below height specification. Then raise vehicle to correct front suspension height specification. This will ensure vehicle maintains proper front suspension height.

To adjust front suspension height, turn torsion bar adjustment bolt clockwise to raise vehicle, or counterclockwise to lower vehicle. Jounce front of vehicle several times, then recheck front suspension height.

MEASUREMENT PROCEDURE

- 1. Remove any load within passenger and luggage compartments that is not factory equipment. Place vehicle on wheel alignment rack or drive-on lift per equipment manufacturer's recommendations. Check all tires for proper inflation pressure and adjust as necessary.
- 2. Jounce front of vehicle several times. Measure and record distance between center of lower suspension arm rear mounting bolt and surface front tire is sitting on. Measure and record distance between center of front wheel and surface front tire is sitting on. See Fig. 7
- 3. Subtract first measurement from second measurement. Difference between 2 measurements should be 2.28" (58mm), plus or minus .118"(3mm). If front suspension height is not within specification, go to ADJUSTMENT PROCEDURE.

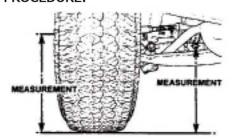


Fig. 7: Measuring Front Suspension Height

Perform a wheel alignment. See Front Page for Specs.



