

GROUND **FORCE**

01 & UP ESCALADE DROP KIT WITH COIL REAR INSTALLATION

READ INSTRUCTIONS COMPLETELY THROUGH BEFORE STARTING
FAILURE TO ADHERE TO THE INSTRUCTIONS WILL VOID ANY GROUND FORCE WARRANTY
IT IS RECOMMENDED THAT INSTALLATION BE DONE BY A QUALIFIED MECHANIC
REPLACE ALL STOCK PARTS THAT ARE DAMAGED OR WORN
INTERMIXING OF PARTS IS NOT RECOMMENDED AND WILL VOID THE WARRANTY
ALWAYS WEAR EYE PROTECTION

CHECK TO SEE THAT ALL PARTS LISTED ARE INCLUDED:

2- REAR COILS	1- WARNING DECAL
2- TORSION BAR ADJUSTERS	2- SWAY BAR SPACERS
1- REAR PARTS PACK	

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NOTE: REFER TO REAR INSTALL SECTION IF ONLY INSTALLING REAR KIT.

NOTE: AMOUNT OF DROP APPROXIMATE DUE TO FACTORY OPTIONS.

MEASURE AND DOCUMENT THE VEHICLE HEIGHT FROM FLOOR TO FENDER LIP.

LF _____ RF _____ LR _____ RR _____

FRONT INSTALL

1. BEFORE GETTING UNDER VEHICLE, JACK THE FRONT OF VEHICLE UP AND PLACE JACK STANDS UNDER THE FRAME RAILS. LOWER THE VEHICLE ONTO JACK STANDS AND MAKE SURE STANDS ARE SECURELY HOLDING THE VEHICLE.
2. REMOVE THE FRONT TIRE AND WHEEL ASSEMBLY.
3. SUPPORT THE LOWER CONTROL ARM.

WARNING: THE TORSION BARS ARE UNDER PRESSURE. EXTREME CARE MUST BE TAKEN WHEN REMOVING AND INSTALLING THE TORSION BAR ADJUSTERS TO AVOID INJURY. FOLLOW THE TORSION BAR TOOL MANUFACTURERS LOADING / UN-LOADING INSTRUCTIONS. TOOL IS AVAILABLE AT MOST GM DEALERS.

4. TORSION BAR ADJUSTER REMOVAL PROCEDURE. MAKE SURE THE JACK STANDS ARE SECURE UNDER THE VEHICLE FRAME.
 - A. MARK THE TORSION BARS LEFT OR RIGHT AND FRONT OR REAR.

- B. USING A PROPERLY RATED TORSION BAR LOADER / UN-LOADER TOOL, INCREASE THE TENSION ON THE STOCK TORSION BAR ADJUSTING ARM. (FOLLOW THE TOOL MANUFACTURES INSTRUCTIONS). **REFER TO PHOTO # 1.**
 - C. REMOVE THE ADJUSTING BOLT AND RETAINING PLATE.
 - D. REMOVER THE TORSION BAR UN-LOADER.
 - E. SLIDE THE TORSION BAR FORWARD.
 - F. REMOVE THE STOCK ADJUSTING ARM.
 - H. REPEAT TO OTHER SIDE OF VEHICLE.
5. FRONT BUMP STOP TRIM PROCEDURE. **REFER TO PHOTO # 2.**
- A. PRY THE STOCK FRONT BUMP STOP OUT OF THE FRAME CUP.
 - B. MEASURE UP **1 1/8"** FROM THE **BOTTOM** OF THE STOCK BUMP STOP AND MARK ALL THE WAY AROUND.
 - C. USING A FINE TOOTHED SAW CUT THE BOTTOM OF THE STOCK BUMP STOP OFF.
 - E. REINSTALL THE TRIMMED FRONT BUMP STOP UP INTO THE STOCK FRAME CUP (START ONE SIDE IN AND PUSH THE OTHER SIDE UP INTO THE CUP USING A FLAT EDGED BAR).
 - D. REPEAT TO THE OTHER SIDE.
6. NEW RE-INDEXED TORSION BAR ADJUSTER INSTALLATION PROCEDURE.
- A. INSTALL THE NEW ADJUSTER UP INTO THE CROSSMEMBER WITH THE BOTTOM OF THE NEW ADJUSTER JUST HANGING OUT FROM THE BOTTOM OF THE CROSSMEMBER.
 - B. SLIDE THE TORSION BAR BACK INTO THE NEW ADJUSTER.
 - C. USING THE TORSION BAR LOADER / UN-LOADER TOOL INCREASE THE TENSION ON THE NEW TORSION BAR ADJUSTING ARM (FOLLOW THE TOOL MANUFACTURES INSTRUCTIONS).
 - D. INSTALL THE STOCK RETAINER PLATE THROUGH THE CROSSMEMBER WITH THE NOTCHES IN THE RETAINER POINTING DOWN.
 - E. INSTALL THE STOCK ADJUSTING BOLT UP INTO THE RETAINING PLATE AND TURN THE TORSION BAR ADJUSTING BOLT IN UNTIL THERE IS ABOUT $\frac{3}{4}$ " FROM THE BOTTOM OF THE RETAINING PLATE TO THE OUTSIDE OF THE BOLT HEAD.
- NOTE: FINIAL ADJUSTMENT TO THE TORSION BARS ADJUSTING BOLTS WILL BE DONE LATER IN THE INSTALLATION.**
- F. REPEAT TO OTHER SIDE OF VEHICLE.
7. REINSTALL THE STOCK TIRE AND WHEEL ASSEMBLY AND TORQUE TO SPEC.

NOTE: THE VEHICLE HEIGHT WILL NEED TO BE ADJUSTED WITH THE TIRES AND WHEELS THAT WERE ON THE VEHICLE WHEN MEASURED BEFORE KIT INSTALLATION.

NOTE: IF THE STOCK TORSION BAR ADJUSTING BOLTS WERE ADJUSTED FROM THE FACTORY SETTING YOUR DROP MAY VARY FROM THE ADVERTISED 2.00" OF DROP.

NOTE: AFTER TRIMMING THE STOCK FRONT BUMP STOPS AND WITH THE VEHICLE AT THE NEW LOWERED RIDE HEIGHT, YOU MUST HAVE A MINIMUM OF 1/8 TO 1/4" OF CLEARANCE BETWEEN THE BOTTOM OF THE BUMP STOP AND THE TOP OF THE LOWER CONTROL ARM.

8. CHECK CLEARANCE OF ALL FRONT COMPONENTS WHILE SWEEPING THE STEERING COMPLETE LEFT TO RIGHT LOCK.
9. RECHECK THE TORQUE ON ALL NUTS AND BOLTS AFFECTED BY THIS PROCEDURE.

NOTE: A COMPLETE FRONT END ALIGNMENT MUST BE PERFORMED ONCE THE FRONT AND REAR INSTALLATION IS COMPLETE AND ALL TORSION BAR ADJUSTMENTS HAVE BEEN MADE.

NOTE: IF YOU ARE ONLY INSTALLING THE FRONT TORSION BAR KEY KIT REFER TO STEP NO.24 FOR FINIAL TORSION BAR ADJUSTMENT PROCEDURES.

REAR INSTALL

10. REAR DROP KIT INSTALLATION. JACK UP THE REAR OF THE VEHICLE AND PLACE JACK STANDS UNDER THE FRAME RAILS. LOWER THE VEHICLE ONTO THE JACK STANDS AND MAKE SURE THE STANDS ARE SECURELY HOLDING THE VEHICLE. SUPPORT THE REAR AXLE WITH A FLOOR JACK. REMOVE REAR TIRE AND WHEEL ASSEMBLY FROM THE VEHICLE.
11. REAR ROAD SENSING SENSOR RELOCATION PROCEDURE.
 - A. REMOVE THE SIX SCREWS AND PLASTIC CLIPS THAT HOLD THE PASSENGER SIDE PLASTIC REAR INNER FENDER TO THE VEHICLE AND REMOVE THE INNER FENDER FROM THE VEHICLE.
 - B. PRY THE LINKAGE OFF THE TOP SENSOR BALL STUD. NOTE THE LINKAGE END IS PLASTIC SO BE CAREFUL NOT TO BREAK THE LINKAGE.
REFER TO PHOTO # 3.
 - C. LOCATE AND REMOVE THE STOCK M-8 BOLT THAT HOLDS THE SENSOR TO THE TOP OF THE FRAME.
 - D. LOCATE THE NEW SENSOR RELOCATION BRACKET THAT IS STAMPED **R** FOR **RIGHT** (PASSENGER) SIDE OF VEHICLE. **REFER TO PHOTO # 4.**
 - E. INSTALL THE SENSOR ON TOP OF THE NEW RELOCATION BRACKET AND MAKE SURE THE **INDEX TAB** ON THE STOCK SENSOR BRACKET GOES DOWN INTO THE TOP FRONT HOLE IN THE NEW BRACKET.

- F. INSTALL THE SUPPLIED M-8 LOCK AND FLAT WASHER UNDER THE HEAD OF THE NEW M-8 X 30 HEX BOLT AND INSTALL THIS HEX BOLT DOWN THROUGH THE STOCK SENSOR, THE NEW RELOCATION BRACKET AND INTO THE STOCK THREADED HOLE IN THE FRAME.
 - G. MAKE SURE THE **INDEX PIN** IN THE NEW BRACKET GOES DOWN INTO THE FRAME AND THE **INDEX TAB** ON THE SENSOR GOES INTO THE TOP OF THE RELOCATION BRACKET. SNUG UP AND THEN TORQUE TO SPEC.
 - F. DO NOT REATTACH THE LINKAGE AT THIS TIME.
 - H. REPEAT SENSOR RELOCATION PROCEDURE TO LEFT SIDE OF VEHICLE.
12. DISCONNECT THE STOCK REAR SHOCKS FROM THE LOWER MOUNTS, SAVE HARDWARE.
- WARNING: THE COILS ARE UNDER PRESSURE. EXTREME CARE MUST BE TAKEN WHEN REMOVING AND INSTALLING THE COILS TO AVOID INJURY.**
13. REAR COIL REMOVAL. MAKE SURE THE JACK STANDS ARE SECURE UNDER THE VEHICLE FRAME AND THE REAR AXLE IS SUPPORTED.
- A. REMOVE THE LOWER SWAY BAR CONNECTING LINK HARDWARE FROM THE SWAY BAR, SAVE HARDWARE.
 - B. REMOVE THE STOCK LOWER REAR SHOCK HARDWARE AND SAVE.
 - C. LOWER THE JACK UNDER THE REAR DIFFERENTIAL, REMOVE THE STOCK REAR COILS FROM THE VEHICLE.
 - D. SAVE THE UPPER AND LOWER RUBBER COIL INSULATORS AS THEY WILL BE REUSED.
14. REAR BUMP STOP TRIM PROCEDURE. **REFER TO PHOTO #5.**
- A. PRY THE STOCK REAR BUMP STOPS OUT OF THE REAR FRAME CUPS.
 - B. MEASURE UP **2.00"** From THE **BOTTOM** OF THE STOCK BUMP STOP AND MARK ALL THE WAY AROUND.
 - C. USING A FINE TOOTH SAW CUT THE BOTTOM OF THE STOCK BUMP STOP OFF.
 - D. REINSTALL THE TRIMMED REAR BUMP STOP UP INTO THE STOCK FRAME CUP (START ONE SIDE IN AND PUSH THE OTHER SIDE IN USING A FLAT EDGED BAR).
 - E. REPEAT REAR BUMP STOP TRIM PROCEDURE TO OTHER SIDE OF VEHICLE.
15. INSTALL THE STOCK RUBBER INSULATORS ONTO THE TOP AND BOTTOM OF THE NEW REAR COIL SPRINGS.

NOTE: THE COIL NEEDS TO BE INSTALLED WITH THE GROUND FORCE LOGO UPRIGHT AND OR THE SMALL GAPS IN THE SPRING TOWARD THE TOP.

16. COIL SPRING INSTALLATION

- A. SET THE NEW DROP COILS ONTO THE STOCK LOWER SPRING SEAT WITH THE GROUND FORCE LOGO UPRIGHT. SPIN THE COIL UNTIL IT IS CENTERED.
- B. CAREFULLY JACK UP THE REAR DIFFERENTIAL WHILE ALIGNING THE UPPER AND LOWER INSULATORS AND SPRINGS INTO THE STOCK SPRING SEATS.
- C. ONCE THE SPRINGS ARE PROPERLY SEATED AND ALL CLEARANCES ARE OK JACK UP THE DIFFERENTIAL AND PLACE JACK STANDS UNDER THE AXLE. MAKE SURE THE VEHICLE IS SECURE.
- D. REINSTALL THE STOCK SHOCKS TO THE LOWER SHOCK MOUNTS USING THE STOCK HARDWARE AND TORQUE TO SPEC.

17. SWAY BAR SPACER INSTALLATION **REFER TO PHOTO # 6.**

- A. REMOVE THE LOWER TWO BOLTS THAT ATTACHES THE SWAY BAR TO THE AXLE.
- B. INSTALL THE NEW SWAY BAR SPACER BETWEEN THE AXLE AND STOCK SWAY BAR MOUNT USING THE STOCK HARDWARE (JUST SNUG BOLTS).
- C. REPEAT TO THE OTHER SIDE AND TORQUE ALL FOUR LOWER SWAY BAR MOUNTING BOLTS TO SPEC.
- D. REINSTALL THE LOWER STOCK SWAY BAR CONNECTING LINK ENDS TO THE SWAY BAR AND TORQUE TO SPEC.

18. REATTACH THE STOCK REAR SENSOR LINKAGE TO THE RELOCATED SENSOR BY HOLDING THE BACK SIDE OF THE SENSOR ARM AND PUSH THE UPPER PLASTIC LINKAGE OVER THE STOCK BALL STUD, YOU WILL HER A SNAP WHEN THE LINKAGE GOES INTO PLACE.

19. REAR INNER FENDER TRIM PROCEDURE REFER TO **PHOTOS # 7 AND 8.**

NOTE: THE GOAL TO THIS PROCEDURE IS TO TRIM THE INNER FENDER SO THAT THE SENSOR LINKAGE AND SENSOR ARM WILL NOT COME INTO CONTACT WITH THE INNER FENDER AS THE SUSPENSION MOVES.

- A. LOCATE THE `` RAISED `` SECTION OF THE INNER FENDER WHERE THE SENSOR ARM AND LINKAGE WAS LOCATED.
- B. MEASURE FROM THE REAR SIDE OF THE RAISED SECTION **3.00"** TOWARD THE **FRONT** AND MARK.
- C. MEASURE UP **2 ¾** INCHES FROM THE **BOTTOM** EDGE AND MARK.
- D. TRIM THIS SECTION OUT AND MAKE SURE TO LEAVE A **ROUND RADIUS** AT THE TOP OF THE CUT OUT SECTION IN ORDER TO AVOID ANY STRESS POINTS ON THE INNER FENDER.
- E. REINSTALL THE INNER FENDER INTO THE STOCK POSITION AND INSTALL THE STOCK SIX SCREWS AND THREE PLASTIC PUSH IN CLIPS.

F. CHECK THE CLEARANCES AT THE SENSOR ARM AND LINKAGE AND TRIM THE INNER FENDER IF NECESSARY.

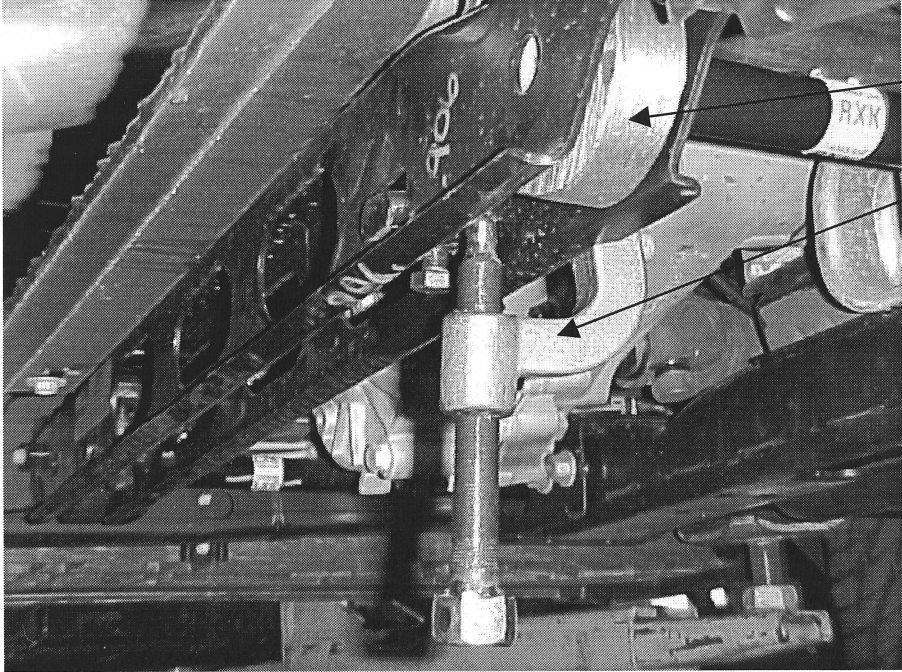
NOTE: THE SENSOR MUST NOT COME INTO CONTACT WITH THE INNER FENDER OR THE SENSOR WILL NOT WORK CORRECTLY.

G. REPEAT TO OTHER SIDE OF VEHICLE.

20. REINSTALL THE REAR TIRE AND WHEEL ASSEMBLY. TORQUE THE LUG NUTS TO SPEC. CHECK THE CLEARANCE BETWEEN THE REAR AXLE AND ALL REAR COMPONENTS. ADJUST IF NECESSARY.
21. JACK UP THE REAR OF VEHICLE REMOVE SAFETY STANDS AND LOWER VEHICLE.
22. GO BACK AND CHECK THAT ALL INSTALLATION STEPS HAVE BEEN COMPLETED. CHECK THE TORQUE OF ALL NUTS AND BOLTS AFFECTED BY THIS PROCEDURE. RECHECK ALL NUTS AND BOLTS FOR TIGHTNESS AFTER THE FIRST 300 MILES.
23. ROAD TEST VEHICLE.
24. MEASURE THE VEHICLE FENDER LIP TO FLOOR. THE FRONT SHOULD HAVE APPROX. 2.00" OF DROP AND THE REAR 3.00". THE FRONT CAN BE ADJUSTED BY TURNING THE TORSION BAR ADJUSTING BOLTS (IN TO LIFT OUT TO LOWER) TO GET THE VEHICLE TO THE DESIRED HEIGHT AND LEVEL SIDE TO SIDE. MAKE SURE TO MAINTAIN THE **1/8" TO 1/4" MINIMUM** CLEARANCE BETWEEN THE BOTTOM OF THE FRONT BUMP STOP AND THE LOWER CONTROL ARM.

NOTE: IF ANY TORSION BAR ADJUSTMENTS ARE MADE THE VEHICLE MUST BE TEST DRIVEN TO GET THE SUSPENSION HEIGHT SETTLED IN BEFORE RE-MEASURING.

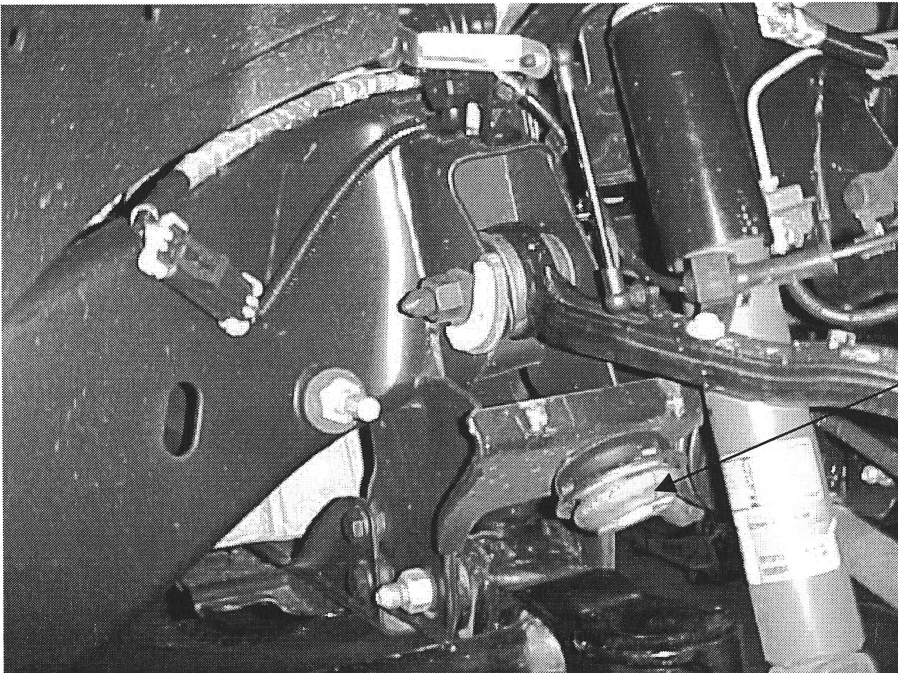
NOTE: MAKE ALL TORSION BAR HEIGHT ADJUSTMENTS BEFORE HAVING THE VEHICLE ALIGNMENT DONE.



TORSION BAR
ADJUSTER

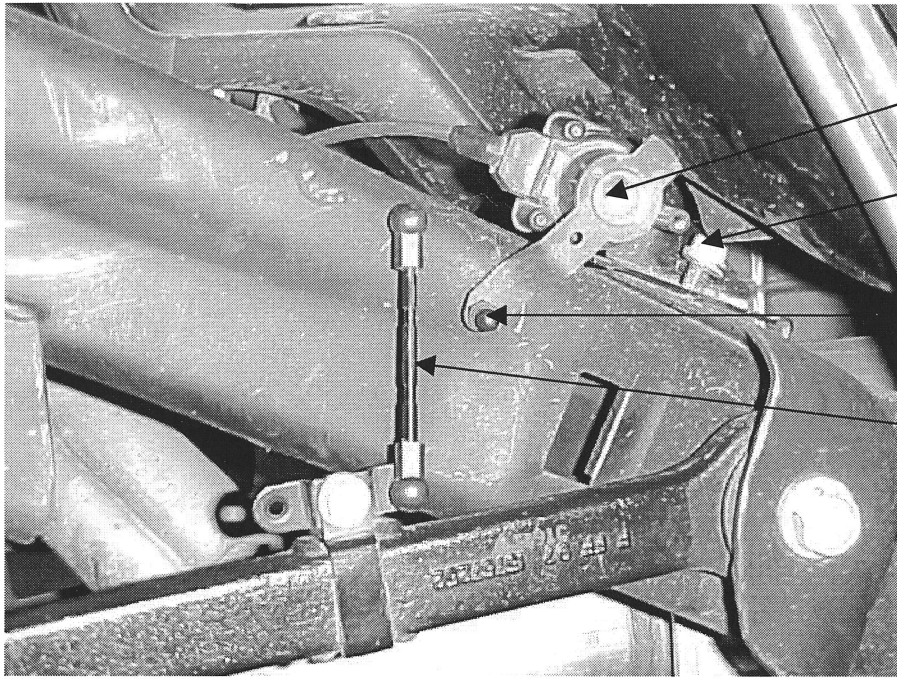
TORSION BAR
LOADER /
UN-LOADER

PHOTO NO 1



FRONT TRIMMED
BUMP STOP

PHOTO NO 2



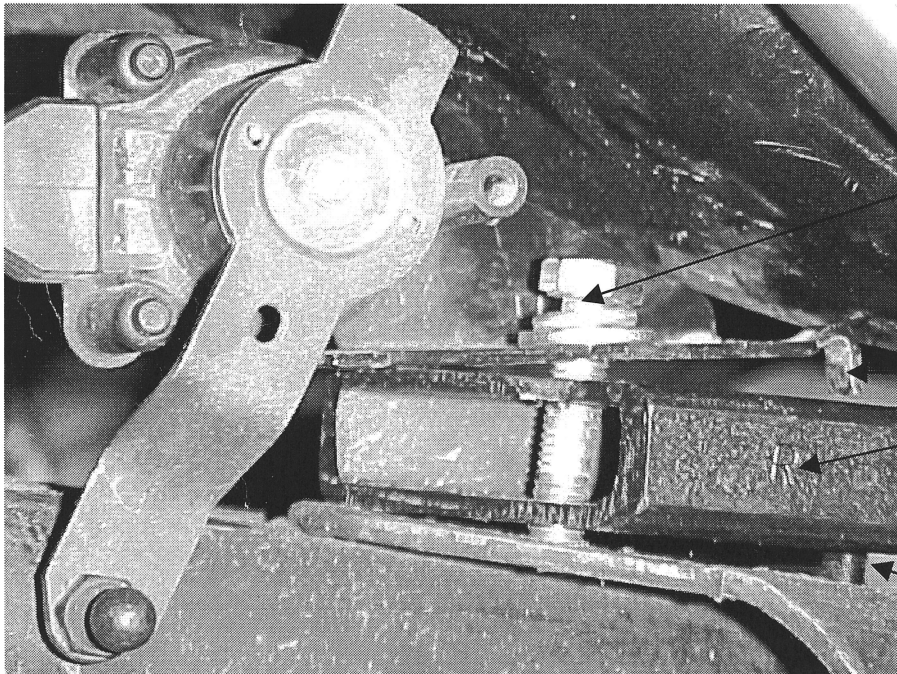
REAR SENSOR

STOCK M-8 BOLT

BALL STUD

LINKAGE

PHOTO NO 3



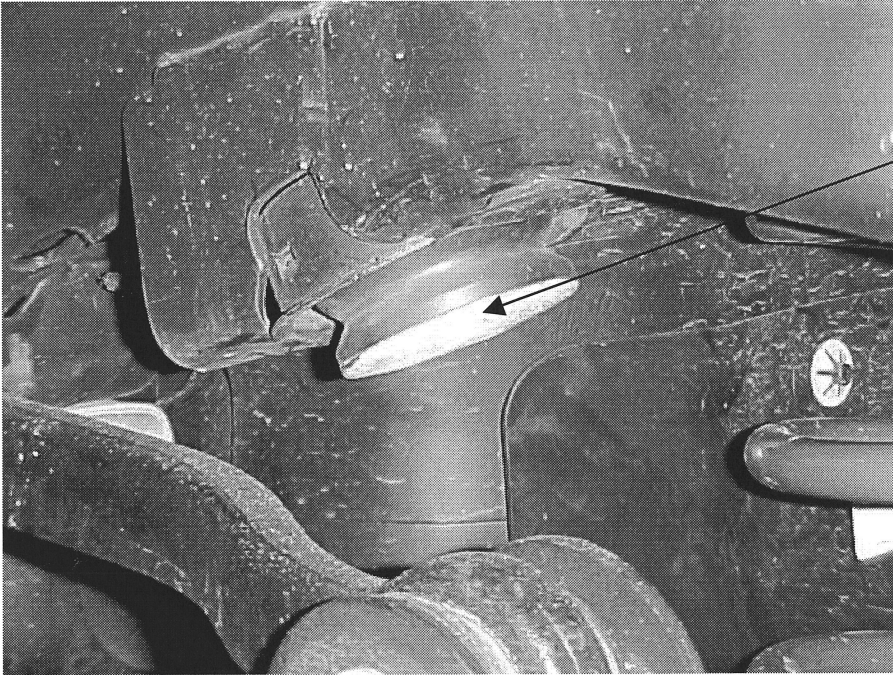
M-8 X 30 HEX BOLT

INDEX TAB

NEW SENSOR
RELOCATION
BRACKET WITH
LOCATION STAMP

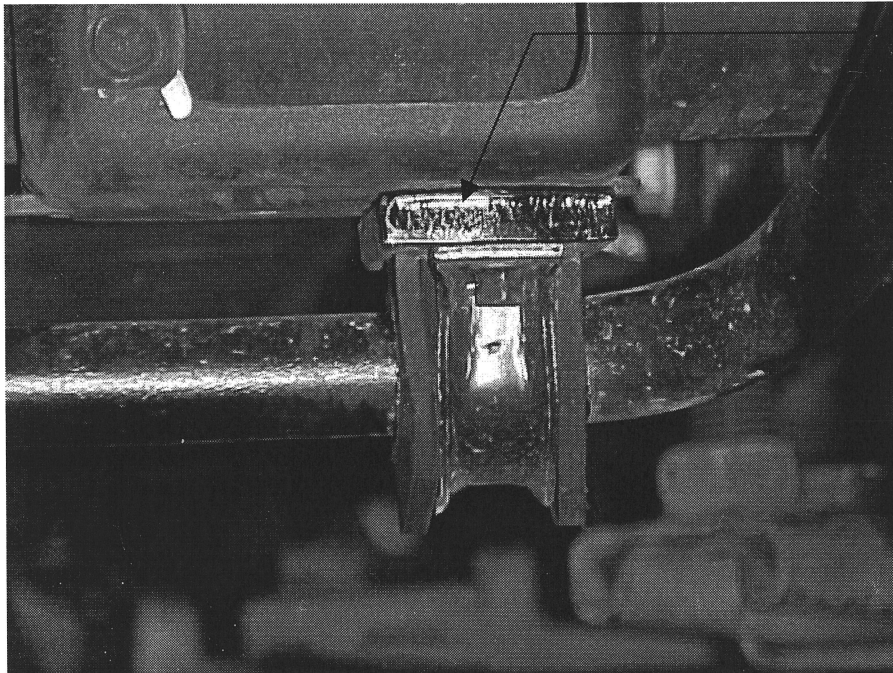
INDEX PIN

PHOTO NO 4



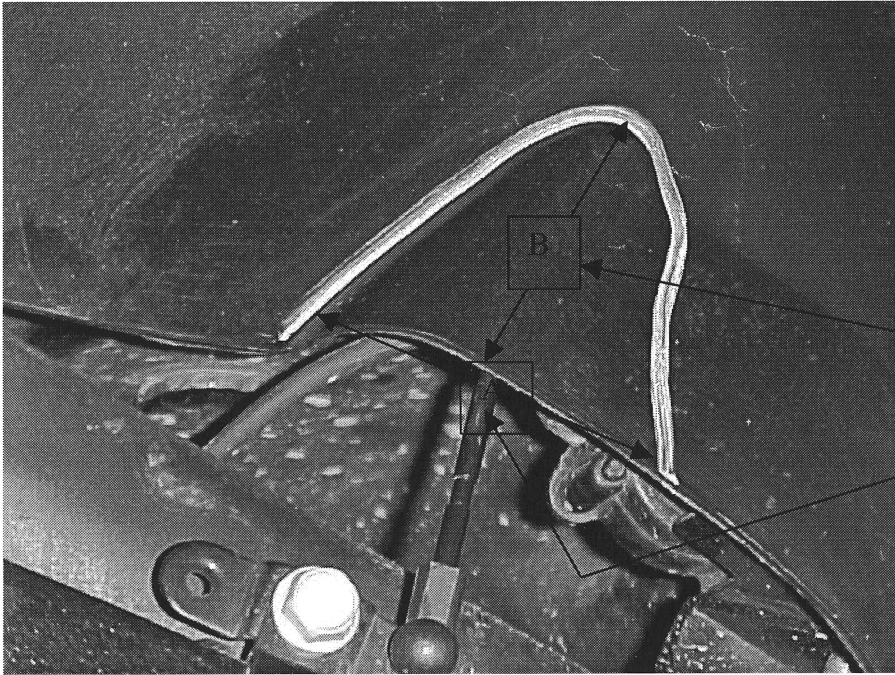
TRIMMED REAR
BUMP STOP

PHOTO NO 5



REAR SWAY BAR
SPACER

PHOTO NO 6



REAR INNER
FENDER TRIM
LAYOUT

B = 2 ¾ INCHES

A = 3 INCHES

PHOTO NO 7



TRIMMED INNER
FENDER

PHOTO NO 8



WARNING

MODIFYING AN ORIGINAL EQUIPPED VEHICLE WILL RESULT IN A VEHICLE HANDLING DIFFERENTLY. ALL TYPES OF SUSPENSION MODIFICATIONS WILL AFFECT REACTION, RIDE, HANDLING AND WEAR AND TEAR RATE OF A VEHICLE AND ITS COMPONENTS. ABRUPT MANEUVERS, SHARP AND SUDDEN TURNS AND WEATHER CONDITIONS WILL INCREASE THE VEHICLE'S SUSCEPTIBILITY FOR LOSS OF CONTROL. DEATH AND SERIOUS INJURY COULD BE THE RESULT IF YOU FAIL TO OPERATE A MODIFIED VEHICLE SAFELY. KNOW AND FOLLOW THE LAWS OF THE STATES.

GROUND FORCE

Mailing Address:

P.O. Box 149
Mt. Braddock, PA 15465

GROUND FORCE

Shipping Address:

Greater Uniontown Industrial Park
Rt. 119 & Mt. Braddock Rd.
Uniontown, PA 15401

(724) 430-2068
(724) 430-2075 Fax

ENCLOSED WITH THIS PRODUCT IS A WARNING LABEL WHICH IS TO BE AFFIXED ON THE VISOR OF THE VEHICLE WHERE VISIBLE TO ALL OCCUPANTS.

GROUND



VALIDATION AND CLAIM PROCEDURE

Answer your questions about Ground Force products by calling our hot line 724-430-2068.

Take advantage of our warranty/remedy program, complete and return the warranty registration card attached, along with a copy of your receipt, within thirty (30) days of purchase.

To make a warranty claim, notify Ground Force at:

Attn: Warranty Claim Dept.
Ground Force
P.O. Box 149
Mt. Braddock, PA 15465

providing your name, address, vehicle make and model, product sold and installing dealer, if any. For your convenience, we suggest you keep this warranty/remedy certificate with your owner's manual!

To register Part, tear off card below and mail to:

Ground Force Registration Dept.
Ground Force
P.O. Box 149
Mt. Braddock, PA 15465

GROUND FORCE WARRANTY/REMEDY REGISTRATION

Yes! I want to take advantage of Ground Force's warranty/remedy program. I have read the warranty/remedy certificate and certify that the enclosed receipt evidences my purchase of a Ground Force product.

Name: _____

Address: _____

Products: _____ Part #: _____

Dealer/Location: _____

Installer: _____ Date/Purchase: _____

Make/Model: _____ Year of Vehicle: _____

V.I.N. #: _____ Vehicle GVW: _____

Signature: _____

GROUND



Limited Lifetime Warranty

North America Only

GROUND FORCE WARRANTY (LIMITED) AND REMEDY LIMITATIONS

TO: WHOLESALERS, JOBBERS, RETAILERS, INSTALLERS, VEHICLE OWNERS

Ground Force warrants to vehicle owners that its products are free from material defects in workmanship and materials as long as the installing vehicle owner owns the vehicle. Ground Force makes no other warranty. Ground Force makes no application or use recommendations for its products and is not responsible for such decisions. Excluded from the warranty are the finish, poly boots, and steering stabilizers* (*90 days from purchase, only). Ground Force gas shocks have a limited warranty; one year from date of purchase.

Ground Force retains the exclusive right to determine whether a defect is material and replacement appropriate.

MATERIAL TO PARTICIPATION IN THIS WARRANTY PROGRAM IS THE DISCLAIMER OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

THE SOLE REMEDY FOR ANY CLAIM OF PRODUCT DEFECT EITHER IN BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE IS LIMITED TO

REPAIR OR REPLACEMENT OF THE PRODUCT AT GROUND FORCE'S DISCRETION.

EACH SELLER, INSTALLER AND USER OF THE PRODUCT AGREES THAT THIS LIMITATION OF REMEDIES IS A CONDITION OF THE SALE OF THE GROUND FORCE PRODUCT. EACH DISTRIBUTOR AND/OR SELLER OF GROUND FORCE PRODUCTS IS REQUIRED TO FORWARD WARRANTY/REMEDY INFORMATION TO EACH PURCHASER.

SELLERS, INSTALLERS AND USERS OF THIS PRODUCT(S) UNDERSTAND AND AGREE THAT REPAIR/REPLACEMENT REMEDY DOES NOT FAIL OF ITS ESSENTIAL PURPOSE. HOWEVER, IF DETERMINED TO FAIL OF ITS ESSENTIAL PURPOSE, SELLERS, INSTALLERS AND USERS AGREE, IN THE ALTERNATIVE, TO ACCEPT A REFUND OF THE PURCHASE PRICE AS A SOLE REMEDY.

Ground Force is not liable to sellers, installers or users of its products for incidental or consequential damages occasioned by any defect, malfunction, sale or use of any product, whether in breach of warranty, contract, strict liability or otherwise.

THIS DOES NOT APPLY TO PRODUCTS WHICH HAVE BEEN ABUSED, MISUSED, IMPROPERLY INSTALLED OR TO VEHICLE OWNERS SUBSEQUENT TO INSTALLING PURCHASE.