

## 2014 & UP GM 1500 PICKUP 2.0" FRONT 1.0" REAR LEVELING KIT INSTALLATION

READ INSTRUCTIONS/WARNINGS 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.

ALWAYS USE PROPERLY RATED SAFETY STANDS WHENEVER A PROCEDURE REQUIRES YOU TO BE UNDER A VEHICLE. KNOW AND FOLLOW ALL SAFE WORK PRACTICES TO AVOID SERIOUS INJURY OR DEATH.

NOTE: WE WANT TO THANK YOU FOR PURCHASING A GROUND FORCE PREMIUM LEVELING KIT. THIS KIT IS MANUFACTURED FROM HIGH QUALITY MADE IN THE USA MATERIALS. THE HIGH STRENGTH URETHANE THAT WE USE FOR OUR SPACERS IS HEAT RESISTANCE, IMPACT RESISTANCE AND ALSO HAS A EXCELLENT RESISTANCE TO OIL, SOLVENTS AND MANY OTHER CHEMICALS. WE ALSO USE HIGH STRENGTH 4140 MATERIAL FOR OUR STRUT EXTENDERS THAT HAS BEEN HEAT TREATED, BLACK ZINC COATED AND AFTER BAKED TO RELIEVE ANY HYDROGEN EMBRITTLEMENT. THIS KIT HAS A LIMITED LIFETIME WARRANTY.

CHECK TO SEE THAT ALL PARTS LISTED ARE INCLUDED.

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6-	STRUT	EXTENDERS	1-	PARTS	PACK	
2-	STRUT	SPACERS	1-	INSTRU	JCTION	SHEET

1- GROUND FORCE WARNING DECAL

8- U-BOLT HI HEX NUTS 4- U-BOLTS

2- LEVELING BLOCKS 8- U-BOLT WASHERS

#### FRONT STRUT SPACER INSTALLATION PROCEDURE.

MEASURE	AND	DOCUMENT	THE	VEHICLE	HEIGHT	FROM	FLOOR	TO	FENDER	LIP.
LF		RF		LR		_ RR _				

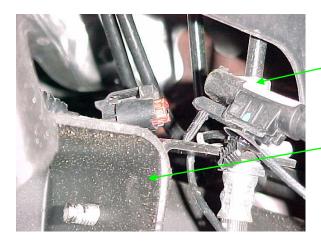
- 1. BEFORE GETTING UNDER VEHICLE, REMOVE THE KEYS FROM THE IGNITION. DISCONNECT THE NEGATIVE BATTERY TERMINAL FROM THE BATTERY. DO NOT MOVE THE STEERING OR TIE RODS LEFT OR RIGHT WHILE DOING THIS INSTALLATION AS MISALIGNMENT OF THE ELECTRONIC STEERING SYSTEM MAY RESULT. JACK THE FRONT OF VEHICLE UP AND PLACE STANDS UNDER THE FRAME RAILS. LOWER THE VEHICLE ONTO JACK STANDS AND MAKE SURE STANDS ARE SECURELY HOLDING THE VEHICLE.
- 2. REMOVE TIRE AND WHEEL ASSEMBLY.

3. DISCONNECT THE ANTILOCK BRAKE WIRE FROM THE UPPER CONTROL ARM.



ANTILOCK BRAKE WIRE UNCLIPPED FROM THE TOP OF THE UPPER CONTROL ARM.

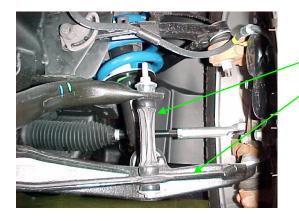
4. DISCONNECT THE ANTILOCK BRAKE WIRE FROM THE CONNECTOR LOCATED BEHIND THE UPPER CONTROL ARM MOUNTING POCKET.



ANTILOCK WIRE CONNECTOR BEING DISCONNECTED.

REAR UPPER CONTROL ARM MOUNTING POCKET.

5. SUPPORT THE LOWER CONTROL ARM AND REMOVE THE SWAY BAR CONNECTING LINK FROM THE SWAY BAR AND LOWER CONTROL ARM ON BOTH SIDES OF THE VEHICLE, SAVE HARDWARE.

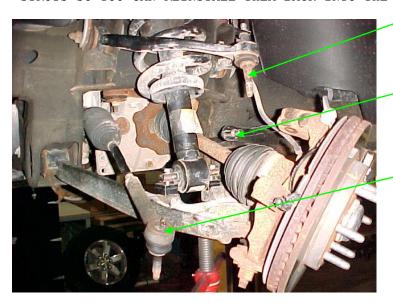


CONNECTING LINK

LOWER CONTROL ARM

- 6. LOOSEN THE TIE ROD NUT, TAP ON THE SPINDLE WITH A MALLET TO POP THE TIE ROD LOOSE FROM THE SPINDLE. REMOVE THE OUTER TIE ROD FROM THE SPINDLE, SAVE NUT.
- 7. SUPPORT THE LOWER CONTROL ARM, LOOSEN THE UPPER BALL JOINT NUT, TAP ON THE SPINDLE WITH A MALLET TO POP THE UPPER BALL LOOSE FROM THE SPINDLE. REMOVE THE UPPER BALL JOINT NUT AND REMOVE THE UPPER BALL JOINT FROM THE SPINDLE, SAVE THE BALL JOINT NUT FOR REASSEMBLY.

8. SECURE THE TOP OF THE SPINDLE IN TOWARD THE VEHICLE SO THE ½ SHAFT DOES NOT COME APART OR COME OUT OF THE FRONT DIFFERENTIAL. PLACE INDEX MARKS ON THE STRUTS SO YOU CAN REINSTALL THEM BACK INTO THE STOCK LOCATION.



UPPER BALL JOINT REMOVED FROM SPINDLE.

WIRE HOLDING THE TOP OF SPINDLE IN TOWARD VEHICLE, TO KEEP THE AXLE ½ SHAFT IN PLACE.

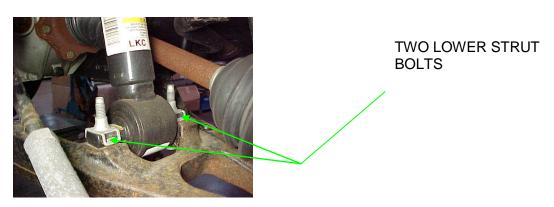
TIE ROD REMOVED FROM SPINDLE.

9. LOOSEN THE UPPER THREE OUTER NUTS ATTACHING THE STRUT ASSEMBLY TO THE VEHICLE FRAME. DO NOT LOOSEN THE CENTER STRUT TO UPPER MOUNT NUT.



18 MM WRENCH LOOSENING THE THREE OUTER UPPER STRUT MOUNTING BOLTS.

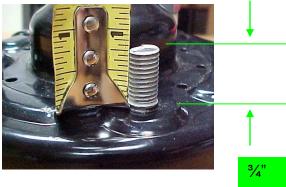
10. REMOVE THE TWO FACTORY BOLTS HOLDING THE LOWER STRUT TO THE LOWER CONTROL ARM. (SAVE HARDWARE)



- 11. LOWER THE JACK SLIGHTLY UNDER THE LOWER CONTROL ARM REMOVE THE STRUT ASSEMBLY FROM THE VEHICLE.
- 12. SUPPORT THE LOWER CONTROL ARM/SPINDLE ASSEMBLY SO THAT THE CV AXLE AND BRAKE LINES ARE NOT OVER EXTENDED.
- 13. REPEAT STRUT REMOVAL PROCEDURE TO OTHER SIDE OF VEHICLE.

- 14. UPPER STRUT STUD TRIMMING PROCEDURE.
  - A. INSTALL THE SUPPLIED TWO <u>FREE RUNNING</u> M10-1.50 HEX NUTS ONTO ONE OF THE FACTORY UPPER STUDS.
  - B. MEASURE AND LOCK THE NUTS DOWN .750" ABOVE THE TOP OF THE STRUT MOUNT.
  - C. CUT THE EXCESS STUD OFF USING A FINE TOOTH SAW OR CUT OFF WHEEL.
  - D. REMOVE THE TWO FREE RUNNING NUTS AND REPEAT THIS PROCEDURE TO THE REMAINING FIVE STUDS. DISCARD THESE TWO FREE RUNNING NUTS AFTER ALL SIX STUDS HAVE BEEN TRIMMED.



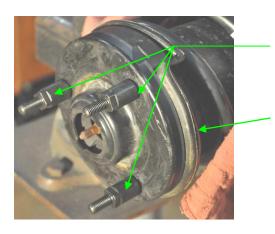


- 15. STRUT EXTENDER INSTALLATION PROCEDURE.
  - A. APPLY A FEW DROPS OF THE SUPPLIED THREAD LOCKER TO EACH OF THE FACTORY STRUT STUDS.



HIGH STRENGTH THREAD LOCKER BEING APPLIED TO LOCK THE NEW STRUT EXTENDERS IN PLACE.

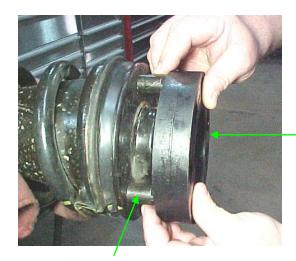
B. INSTALL THE THREE SUPPLIED STRUT EXTENDERS PER STRUT AND TIGHTEN USING A 5/8" WRENCH.



STRUT EXTENDERS BEING INSTALLED OVER THE TRIMMED STRUT UPPER MOUNTING STUDS.

FACTORY UPPER STRUT MOUNT.

16. INSTALL THE SUPPLIED URETHANE STRUT SPACER OVER THE STRUT EXTENDERS ON TOP OF THE FACTORY STRUT MOUNT.



URETHANE SPACER BEING INSTALLED OVER THE STRUT EXTENDERS.

STRUT EXTENDERS

17. STRUT AND NEW STRUT SPACER ASSEMBLY INSTALLATION.



INSTALL ASSEMBLY INTO THE FACTORY MOUNTING HOLE LOCATION.

STRUT WITH NEW LEVELING SPACER ASSEMBLY MOUNTED TO THE TOP.

- A. INSTALL THE STRUT ASSEMBLY UP INTO THE STOCK LOCATION MAKING SURE TO LINE UP THE INDEX MARKS MADE IN STEP NO 8.
- B. ALIGN AND INSTALL THE THREE STUDS UP INTO THE THREE HOLES IN THE FRAME UPPER MOUNT.
- C. INSTALL THE SUPPLIED THREE UPPER STRUT M10 FLANGE NUTS (JUST SNUG).
- D. USING THE FACTORY HARDWARE ALIGN AND INSTALL THE LOWER STRUT MOUNT INTO THE LOWER CONTROL ARM FACTORY STRUT MOUNT.(JUST SNUG BOLTS @ THIS TIME).
- E. JACK THE LOWER CONTROL ARM UP SLIGHTLY AND SECURE. USING A LARGE BAR, PRY DOWN ON THE UPPER CONTROL ARM AND REINSTALL THE UPPER BALL JOINT INTO THE SPINDLE. INSTALL THE FACTORY UPPER BALL JOINT NUT AND TORQUE TO 37. LBS.
- F. TORQUE THE UPPER THREE STRUT NUTS TO 35 FT. LBS. (DO NOT USE AIR TOOLS TO TIGHTEN THE UPPER STRUT NUTS).
- G. TORQUE THE LOWER STRUT FACTORY HARDWARE TO 38 FT. LBS.
- H. REPEAT STRUT ASSEMBLY INSTALLATION PROCEDURE TO THE OTHER SIDE OF VEHICLE.

- 18. REINSTALL THE TIE RODS TO THE SPINDLES AND TORQUE TO 44 FT LBS.
- 19. REINSTALL THE SWAY BAR CONNECTING LINKS INTO FACTORY LOCATION. LINE UP AND INSTALL THE FACTORY CONNECTING LINK HARDWARE THEN TORQUE BOTH SIDES TO 17 FT LBS.
- 20. RECONNECT THE ANTILOCK BRAKE WIRE TO THE CONNECTOR BEHIND THE UPPER CONTROL ARM MOUNTING POCKET AND ALSO TO THE CLIP ON THE UPPER CONTROL ARM.
- 21. MAKE SURE ALL FASTENERS AFFECTED BY THIS PROCEDURE ARE TORQUED TO FACTORY SPEC.
- 22. REINSTALL TIRE AND WHEEL ASSEMBLY AND TORQUE TO SPEC.
- 23. CHECK AND MAKE SURE THAT ALL INSTALLATION STEPS HAVE BEEN COMPLETED.
- 24. CHECK ALL NUTS AND BOLTS FOR TORQUE AFTER THE FIRST 300 MILES AND AT EVERY ROUTINE SERVICE INSPECTION.
- 25. JACK THE VEHICLE UP AND REMOVE STANDS, THEN LET THE VEHICLE DOWN.

#### REAR BLOCK INSTALLATION

- 26. 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 AND SMALL JACK STANDS.
- 27. REMOVE THE REAR TIRE WHEEL ASSEMBLY.
- 28. REMOVE THE STOCK REAR SHOCKS FROM THE LOWER MOUNT.
- 29. LOCATE AND REMOVE THE FOLLOWING ANTILOCK BRAKE LINE CLIPS FROM THE FACTORY SLOT HOLES. DO NOT PULL ON THE ANTI LOCK WIRE.
  - A. LOCATE AND REMOVE THE ANTILOCK CLIP OUT OF THE HOLE IN THE AXLE AT THE REAR OF THE LEAF SPRING PERCH(IF EOUIPPED WITH REAR ANTILOCK).
  - B. LOCATE AND REMOVE THE ANTILOCK CLIP OUT OF THE HOLE IN THE FRAME JUST BEHIND THE BUMP STOP(IF EQUIPPED WITH REAR ANTI LOCK).



ANTI LOCK BRAKE WIRE CLIP LOCATION

**BEHIND PERCH** 

BEHIND BUMP STOP



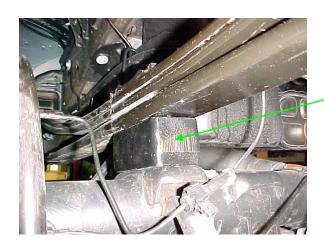
- 30. LOOSEN AND REMOVE THE STOCK U-BOLTS AND DISCARD.
- 31. REMOVE THE FACTORY LOWER SPRING PLATE.

32. LOWER THE AXLE FAR ENOUGH TO ALLOW STOCK BLOCK TO BE REMOVED.



THE FACTORY BLOCK BEING REMOVED.

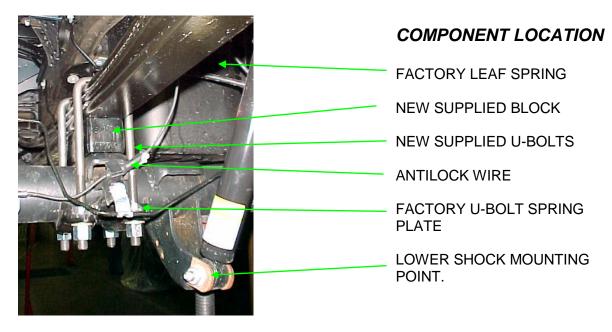
- 33. LOWER THE AXLE JUST FAR ENOUGH TO BE ABLE TO INSTALL THE NEW SUPPLIED BLOCK BETWEEN THE TOP OF THE AXLE PAD AND THE BOTTOM OF THE LEAF SPRING.
- 34. INSTALL THE SUPPLIED BLOCK MAKING SURE THE BLOCK PIN GOES INTO THE AXLE CENTER PIN HOLE AND RAISE THE AXLE SLOWLY. MAKE SURE THE CENTER PIN HEAD ON THE BOTTOM OF THE LEAF SPRING PACK GOES INTO THE TOP OF THE NEW BLOCK CENTER PIN HOLE. JACK THE AXLE UP SLIGHTLY AND SECURE.



NEW BLOCK BEING INSTALLED WITH THE LEAF SPRING CENTER PIN AND THE BLOCK PIN LOCATED CORRECTLY.

- 35. INSTALL THE SUPPLIED U-BOLTS DOWN OVER THE LEAF SPRING, NEW BLOCK AND AXLE.
- 36. INSTALL THE STOCK LOWER U-BOLT PLATE UP OVER THE U-BOLTS AND INSTALL THE SUPPLIED U-BOLT WASHERS AND TALL HEX NUTS AND SNUG THE U-BOLT NUTS, REPEAT THIS PROCEDURE TO THE OTHER SIDE OF THE VEHICLE AND THEN CROSS TIGHTEN THE U-BOLT NUTS AND THEN CROSS TORQUE THEM TO 74 FT. LBS.
- 37. REINSTALL THE STOCK SHOCK INTO THE LOWER MOUNT AND TORQUE THE LOWER SHOCK HARDWARE TO **85 FT LBS**.
- 38. REINSTALL THE ANTILOCK WIRE/CLIPS INTO THE STOCK CLIP HOLES IN THE AXLE AND FRAME.

NOTE: REFER TO THE PHOTO ON THE NEXT PAGE FOR LOCATION OF COMPONENTS.



- 39. GO BACK AND CHECK THAT ALL INSTALLATION STEPS HAVE BEEN COMPLETED.
- 40. MAKE SURE TO INSTALL THE SUPPLIED WARNING DECAL FOLLOWING THE INSTRUCTIONS INCLUDED WITH THE WARNING INFORMATION SHEET.
- 41. MAKE SURE TO KEEP THESE INSTRUCTIONS WITH THE VEHICLE.
- 42. REINSTALL TIRE AND WHEEL ASSEMBLY AND TORQUE TO SPEC, <u>WITH THE KEY OUT OF THE</u>
  IGNITION RECONNECT THE NEGATIVE BATTERY TERMINAL TO THE BATTERY.
- 43. MAKE SURE THERE ARE NO CLEARANCE PROBLEMS. ROTATE THE STEERING LOCK TO LOCK UNDER FULL WEIGHT OF THE VEHICLE AND FULL SUSPENSION
- 44. ROAD TEST THE VEHICLE.
- 45. THE VEHICLE NEEDS TO HAVE A FRONT END ALIGNMENT PERFORMED IMMEDIATELY AFTER THE INSTALLATION OF THIS KIT IS COMPLETE. THE FACTORY CAM BOLTS WILL NEED TO BE ADJUSTED TO THE FACTORY SPECIFICATIONS.
- 46. RE-ADJUST THE HEADLIGHTS TO THE PROPER SETTINGS.
- 47. CHECK THE TORQUE OF ALL NUTS AND BOLTS AFFECTED BY THIS PROCEDURE. RECHECK ALL NUTS AND BOLTS FOR TIGHTNESS AFTER THE FIRST 300 MILES AND AT EVERY ROUTINE SERVICE INSPECTION.

WARNING: AGAIN CHECK TIRE AND WHEEL CLEARANCE BEFORE MOVING VEHICLE.
ALSO CHECK CLEARANCE IF INSTALLING NEW TIRES AND/OR WHEELS.

NOTE: INSTALLATION OF WHEELS WITH BACKSPACING OTHER THAN STOCK MAY CHANGE THE VEHICLE HEIGHT AND ALSO EFFECT THE FRONT END ALIGNMENT.

#### **WARNING:**

INSTALLER/DEALER IT IS YOUR RESPONSIBILITY TO INSTALL THE SUPPLIED WARNING LABEL WHERE VISIBLE TO ALL OCCUPANTS AND FORWARD THE SUPPLIED WARNING SHEET & AND INSTALLATION INSTRUCTIONS TO THE END USER. FOR MORE INFORMATION PLEASE REFER TO PART NO 15237 WARNING SHEET THAT IS INCLUDED WITH THESE INSTRUCTIONS.

IF YOU WOULD HAVE ANY QUESTIONS CONCERNING THIS KIT PLEASE CALL 724-430-2068 AND ASK FOR CUSTOMER SERVICE.



### GROUND FORCE WARRANTY (LIMITED) AND REMEDY LIMITATIONS

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

Ground Force warrants to vehicle owners that its products are 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

Part Number 15079A-REV.C

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 PRODUCT WHICH HAVE BEEN ABUSED, MISUSED, IMPROPERLY INSTALLED OR TO VEHICLE OWNERS SUBSEQUENT TO INSTALLING PURCHASE.

#### VALIDATION AND CLAIM PROCEDURE

Answer your questions about Ground Force products by calling our hot line at (724) 430-2068. To take advantage of our warranty/remedy program, complete and return the warranty registration card attached, along with a copy of your receipt, within thirty days (30) of purchase.

#### To make a warranty claim, notify Ground Force at:

Attn: Ground Force Warranty Claim Department 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. 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.

Ground roice product.				
			Installer:	
	Ma	ike & Model:		
Yea	ar of Vehicle:		Vehicle GVW:	
	Dealer/Location:Yea	Dealer/Location: Ma Year of Vehicle:	Dealer/Location: Make & Model:	Dealer/Location: Installer:

# FROUND CE

## **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: 714 Braddock View Drive Mt. Braddock, PA 15465

GROUND FORCE Phone Numbers: (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.