

# 09 & UP DODGE 4X4 FRONT LEVELING KIT 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.

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 RELIVE ANY HYDROGEN EMBRITTLEMENT. THIS KIT HAS A LIMITED LIFETIME WARRANTY.

CHECK TO SEE THAT ALL PARTS LISTED ARE INCLUDED.

2-STRUT SPACERS 1-PARTS PACK
6-STRUT EXTENDERS 1-GROUND FORCE WARNING DECAL

LF	RF	LR	RR

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

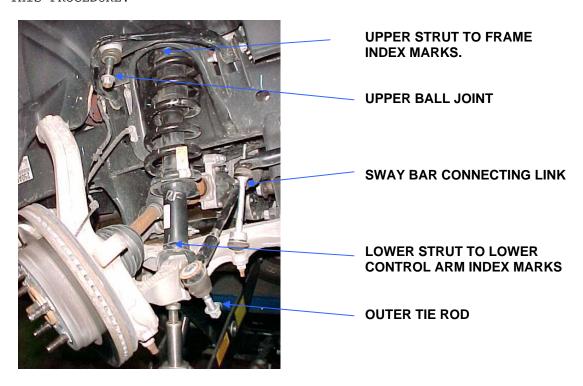
- 1. BEFORE GETTING UNDER VEHICLE, JACK THE FRONT OF VEHICLE UP AND PLACE STANDS UNDER THE FRAME RAILS. LOWER THE VEHICLE ONTO JACK STANDS AND MAKE SURE STANDS ARE SECURELY HOLDING THE VEHICLE.
- 2. REMOVE TIRE AND WHEEL ASSEMBLY.
- 3. THE LOWER CONTROL ARM FRAME MOUNTS HAVE FACTORY ALIGNMENT SLOTS AND MUST BE MARKED BEFORE LOOSING. THIS PROCEDURE WILL AID IN ADJUSTING THESE BOLTS BACK TO THE CORRECT LOCATION DURING FINAL ASSEMBLY. REFER TO THE PHOTO BELOW.
  - A. USING A PAINT MARKER PLACE PAINT LINES ON ALL FOUR LOWER CONTROL ARM MOUNTING BOLT LOCATIONS.
  - B. LOOSEN BUT DO NOT REMOVE THE FOUR LOWER CONTROL ARM TO FRAME MOUNT BOLTS. THIS NEEDS TO BE DONE SO THAT THE LOWER CONTROL ARM WILL SWING DOWN FAR ENOUGH TO BE ABLE TO REMOVE AND REINSTALL THE STRUT ASSEMBLY FROM THE VEHICLE. SUPPORT THE LOWER CONTROL ARM.



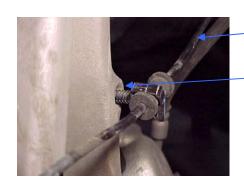
**INDEX MARK** 

FACTORY LOWER
CONTROL ARM
ALIGNMENT CAM BOLT
WASHER

- 4. REMOVE THE SWAY BAR CONNECTING LINKS FROM THE SWAY BAR.
- 5. REMOVE THE OUTER TIE ROD NUT AND REMOVE THE TIE ROD FROM THE SPINDLE USING A TIE ROD PULLER OR TAP ON THE SIDE OF THE SPINDLE WITH A MALLET. BE CAREFUL NOT TO DAMAGE THE RUBBER BOOT WHILE DOING THIS PROCEDURE.
- 6. REMOVE THE UPPER BALL JOINT NUT AND REMOVE THE BALL JOINT FROM THE SPINDLE USING A BALL JOINT SEPARATOR OR TAP ON THE SIDE OF THE SPINDLE WITH A MALLET. BE CAREFUL NOT TO DAMAGE THE RUBBER BOOT WHILE DOING THIS PROCEDURE.



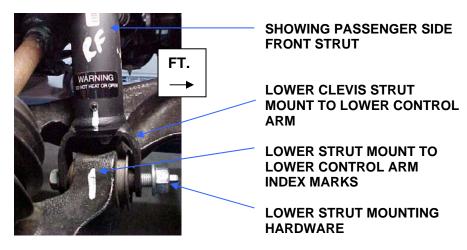
- 7. MARK THE UPPER AND LOWER STRUT MOUNTS SO THAT WHEN YOU REINSTALL THE STRUT YOU WILL BE ABLE TO ALIGN THE UPPER AND LOWER STRUT MOUNTS IN THE STOCK LOCATION. ALSO MARK THE STRUTS LEFT AND RIGHT.
- 8. LOCATE AND REMOVE THE ANTI-LOCK BRAKE SENSOR WIRE FROM THE FACTORY MOUNT ON THE INSIDE OF THE SPINDLE BELOW THE UPPER BALL JOINT MOUNTING LOCATION.



ANTI- LOCK BRAKE SENSOR WIRE

ANTI-LOCK BRAKE SENSOR WIRE FACTORY MOUNTING LOCATION.

9. LOOSEN AND REMOVE THE LOWER STRUT MOUNTING BOLT (THE BOLT THAT ATTACHES THE LOWER STRUT CLEVIS TO THE LOWER CONTROL ARM).



WARNING: THE COIL SPRING ASSEMBLY IS UNDER PRESSURE, DO NOT REMOVE THE CENTER UPPER STRUT ROD NUT.

- 10. REMOVE THE **OUTER THREE NUTS** ATTACHING THE UPPER STRUT ASSEMBLY TO THE VEHICLE FRAME.
- 11. LOWER THE JACK SLIGHTLY UNDER THE LOWER CONTROL ARM REMOVE THE STRUT ASSEMBLY FROM THE VEHICLE.
- 12. REPEAT STRUT REMOVAL PROCEDURE TO OTHER SIDE OF VEHICLE.
- 13. UPPER STRUT STUD TRIMMING PROCEDURE.
  - A. INSTALL THE SUPPLIED TWO **FREE RUNNING** 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.





- 14. 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 INTO PLACE.

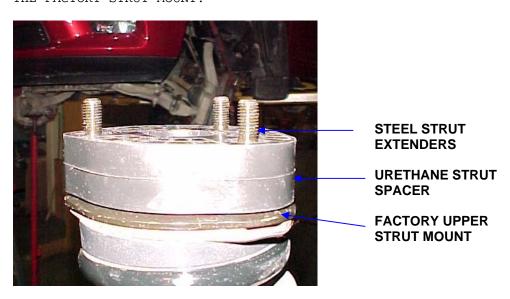
B. INSTALL THE THREE SUPPLIED STRUT EXTENDERS PER STRUT AND TIGHTEN USING A 5/8 " WRENCH.



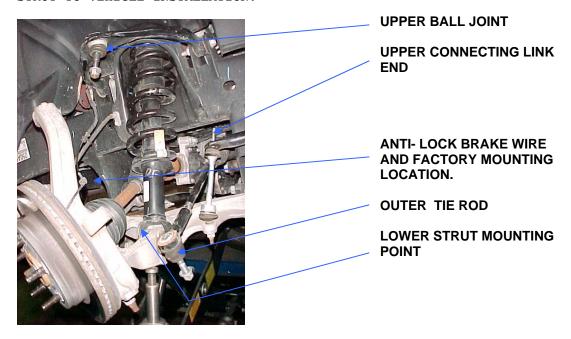
STRUT EXTENDERS BEING INSTALLED OVER THE TRIMMED STRUT UPPER MOUNTING STUDS.

**FACTORY UPPER STRUT MOUNT.** 

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



16. STRUT TO VEHICLE INSTALLATION.



- A. INSTALL THE STRUT ASSEMBLY UP INTO THE FACTORY LOCATION.
- B. ALIGN AND INSTALL THE THREE STUDS ON THE UPPER STRUT MOUNT INTO THE FACTORY FRAME UPPER STRUT MOUNTING LOCATION.
- C. INSTALL THE THREE SUPPLIED UPPER STRUT RETAINING WASHERS AND M10-1.50 LOCKNUTS, JUST SNUG NUTS.
- D. ALIGN AND INSTALL THE LOWER STRUT CLEVIS MOUNT TO THE LOWER CONTROL ARM AND INSTALL THE FACTORY HARDWARE (NUT TO THE FRONT OF VEHICLE) THROUGH THE STOCK LOWER STRUT MOUNT AND THROUGH THE LOWER CONTROL ARM, JUST SNUG NUT.
- E. REPEAT STRUT INSTALLATION PROCEDURE TO THE OTHER SIDE OF VEHICLE.
- 17. 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.
  - A. INSTALL THE FACTORY UPPER BALL JOINT NUTS AND TORQUE TO 85 FT. LBS.
- 18 REINSTALL THE OUTER TIE RODS TO THE SPINDLES. INSTALL THE FACTORY **TIE** ROD NUTS AND TORQUE TO 65 FT. LBS.
- 19. JACK THE LOWER CONTROL ARMS UP TO RIDE HEIGHT AND PLACE JACK STANDS UNDER THE LOWER CONTROL ARMS. REINSTALL THE CONNECTING LINKS TO THE SWAY BAR. TORQUE THE CONNECTING LINK FACTORY HARDWARE TO 27 FT. LBS.
- 20. REINSTALL THE ANTI-LOCK BRAKE SENSOR WIRES TO THE FACTORY MOUNTING POINT.
- 21. STRUT TORQUE PROCEDURE
  - A. TOROUE THE UPPER THREE STRUT NUTS TO 35 FT. LBS.
  - B. TORQUE THE LOWER STRUT BOLT/NUT TO 105 FT. LBS.
- 22. ADJUST THE FOUR LOWER CONTROL ARM ALIGNMENT CAM BOLTS TO THE INDEX MARKS MADE IN STEP NO 3 AND TORQUE ALL FOUR OF THESE ALIGNMENT CAM BOLT NUTS TO SPEC.

MAKE SURE ALL FASTENERS AFFECTED BY THIS PROCEDURE ARE TORQUED TO SPEC.

- 23. REINSTALL TIRE AND WHEEL ASSEMBLY.
- 24. CHECK AND MAKE SURE THAT ALL INSTALLATION STEPS HAVE BEEN COMPLETED. CHECK ALL NUTS AND BOLTS FOR TORQUE AFTER THE FIRST 300 MILES.
- 25. JACK THE VEHICLE UP AND REMOVE STANDS, THEN LET THE VEHICLE DOWN.
- 26. MAKE SURE THERE ARE NO CLEARANCE PROBLEMS. ROTATE THE STEERING LOCK TO LOCK UNDER FULL WEIGHT OF THE VEHICLE AND FULL SUSPENSION TRAVEL.
- 27. ROAD TEST VEHICLE.
- 28. MAKE SURE TO INSTALL THE SUPPLIED WARNING DECAL FOLLOWING THE INSTRUCTIONS INCLUDED WITH THE WARNING INFORMATION SHEET.
- 29. MAKE SURE TO KEEP THESE INSTRUCTIONS WITH THE VEHICLE.
- 30. THE VEHICLE NEEDS TO HAVE A FRONT END ALIGNMENT PERFORMED IMMEDIATELY AFTER THE INSTALLATION OF THIS KIT IS COMPLETE. THE FACTORY ALIGNMENT ADJUSTING BOLTS WILL NEED TO BE SET TO THE FACTORY SPECIFICATIONS.
- 31. READJUST THE HEADLIGHTS TO THE PROPER SETTINGS.

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.

## Limited Lifetime Warranty

North America Only

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

TO: WHOLESALERS, JOBBERS, RÉTAILERS, INSTALLERS, 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 PRO-GRAM 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. HOW-EVER, 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 you 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 days (30) of purchase.

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

Attn: Ground Force Warranty Claim Department PO 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 you owner's manual!

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

Ground Force Registration Dept PO 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:		Addi Prod:			
Part # Date/Purchase	Dealer/ Location _		/_ Make/Model:	Installer	1
VIN#		Year of Vehicle:		Vehicle GVW:	
Signature:					

Part Number 15079A-REV.B



# 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

(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.