

GROUND FORCE

05-12 TOYOTA TACOMA FRONT 2.0" LEVELING KIT INSTALLATION INSTRUCTIONS

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
EMBRITTELEMENT. THIS KIT HAS A LIMITED LIFETIME WARRANTY.

CHECK TO SEE THAT ALL PARTS LISTED ARE INCLUDED.

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

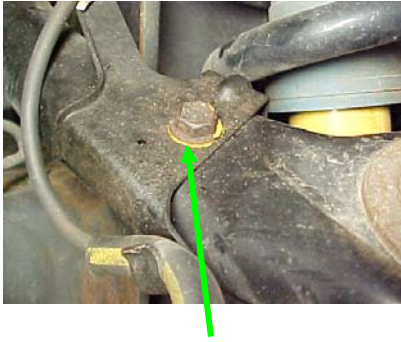
FRONT STRUT SPACER INSTALLATION PROCEDURE.

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

LF _____ RF _____ LR _____ RR _____

1. BEFORE GETTING UNDER VEHICLE, 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. REMOVE THE TWO FACTORY BOLTS THAT HOLDS THE BRAKE LINE AND ANTI LOCK BRAKE WIRE TO THE STEERING KNUCKLE AND UPPER CONTROL ARM. MOVE THE LINES OUT OF THE WAY WHILE DOING THIS PROCEDURE, SAVE HARDWARE.



REMOVE THE BOLT HOLDING THE ANTI LOCK BRAKE BRACKET AND LINE FROM THE UPPER CONTROL ARM SAVE THIS HARDWARE.



REMOVE THE BOLT THAT HOLDS THE BRAKE LINE/ BRAKE LINE BRACKET TO THE STEERING KNUCKLE AND UPPER CONTROL ARM, SAVE THIS HARDWARE.

4. SUPPORT THE LOWER CONTROL ARM AND REMOVE THE SWAY BAR CONNECTING LINK UPPER HARDWARE FROM THE SPINDLE ON BOTH SIDES, SAVE HARDWARE.



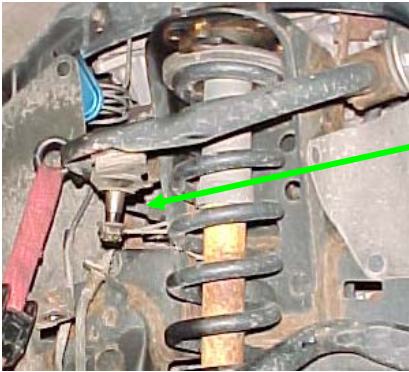
UPPER SWAY BAR CONNECTING LINK HARDWARE LOCATION

5. REMOVE THE FACTORY TIE ROD COTTER PIN, 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.



REMOVE THE TIE ROD COTTER PIN, TIE ROD NUT AND REMOVE TIE ROD FROM THE SPINDLE.

- SUPPORT THE LOWER CONTROL ARM, REMOVE THE FACTORY UPPER BALL JOINT COTTER PIN, LOOSEN THE UPPER BALL JOINT NUT, TAP ON THE STEERING KNUCKLE WITH A MALLET TO POP THE UPPER BALL JOINT LOOSE. REMOVE THE UPPER BALL JOINT NUT AND REMOVE THE UPPER BALL JOINT FROM THE STEERING KNUCKLE, SAVE THE BALL JOINT NUT FOR REASSEMBLY.

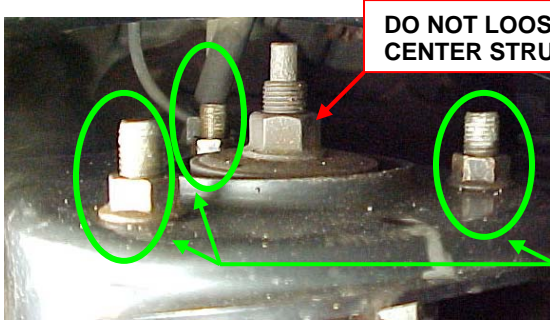


UPPER BALL JOINT REMOVED FROM THE STEERING KNUCKLE.

- SECURE THE TOP OF THE SPINDLE IN TOWARD THE VEHICLE SO THE 1/2 SHAFT DOES NOT COME APART OR COME OUT OF THE FRONT DIFFERENTIAL.

WARNING: DO NOT LOOSEN THE CENTER STRUT NUT TO UPPER STRUT MOUNT AS THIS NUT HOLDS THE COIL SPRING IN PLACE ON THE STRUT AND IS UNDER A GREAT AMOUNT OF PRESSURE.

- LOOSEN THE UPPER THREE **OUTER** NUTS ATTACHING THE UPPER STRUT ASSEMBLY TO THE VEHICLE FRAME.



DO NOT LOOSEN THE CENTER STRUT NUT

LOOSEN THE THREE OUTER UPPER STRUT MOUNTING NUTS.

- MARK THE STRUTS LEFT AND RIGHT, ALSO PLACE INDEX MARKS ON THEM SO THAT THEY CAN BE REINSTALLED IN THE CORRECT LOCATION.



HARDWARE HOLDING LOWER STRUT MOUNT TO THE LOWER CONTROL ARM

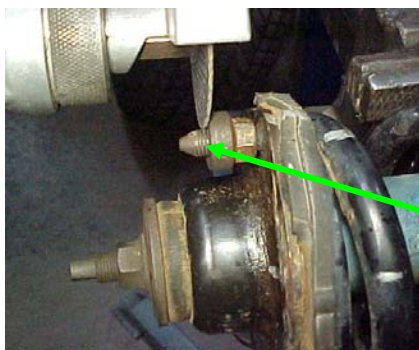
INDEX LOCATION PAINT MARKS



10. REMOVE THE FACTORY BOLT HOLDING THE LOWER STRUT TO THE LOWER CONTROL ARM.
(SAVE HARDWARE)
11. LOWER THE JACK SLIGHTLY UNDER THE LOWER CONTROL ARM AND 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 FACTORY NUT WITH THE HEX DOWN ON ONE OF THE FACTORY UPPER STRUT STUDS.
 - B. MEASURE AND ADJUST THE NUT $\frac{3}{4}$ " ABOVE THE TOP OF THE STRUT MOUNT.
 - C. TRIM THE EXCESS STUD OFF USING A FINE TOOTH SAW OR CUT OFF WHEEL.
 - D. REMOVE THE FACTORY NUT AND REPEAT THIS PROCEDURE TO THE REMAINING FIVE UPPER STRUT STUDS. DISCARD THE FACTORY NUTS AFTER ALL SIX STUDS HAVE BEEN TRIMMED, AS NEW LOCK NUTS WILL BE INSTALLED LATER.



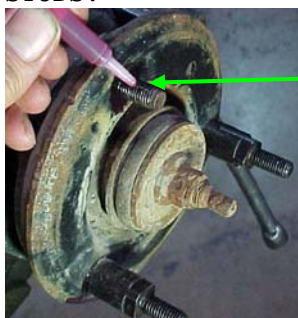
FACTORY NUT INSTALLED $\frac{3}{4}$ " ABOVE THE TOP OF THE STRUT MOUNT WITH HEX SIDE DOWN SO IT CAN BE USED AS A GUIDE TO TRIM THE STUD OFF.



THE EXCESS STUD BEING TRIMMED OFF

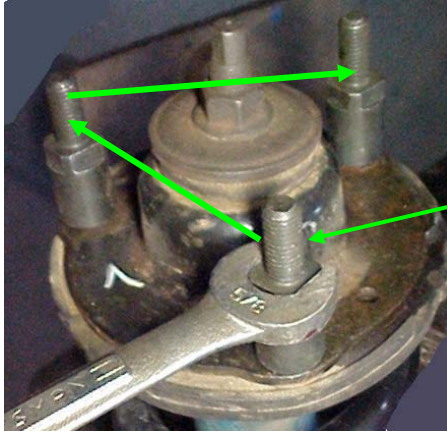
NOTE: THE STUD TRIMMING PROCEDURE MUST BE COMPLETED SO THAT THE NEW STRUT EXTENDERS WILL SEAT FLAT AGAINST THE TOP OF THE STRUT MOUNT WHEN INSTALLED AND TIGHTENED.

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



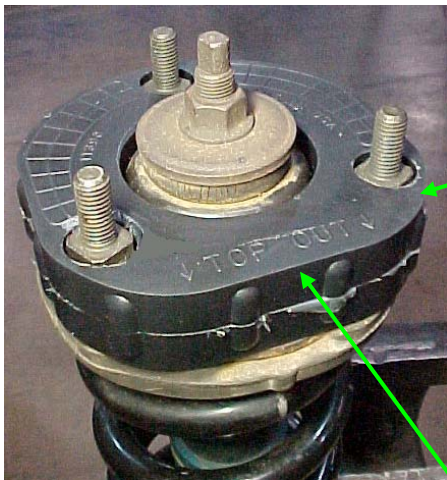
SUPPLIED HIGH STRENGTH THREAD LOCKER BEING APPLIED TO THE FACTORY STRUT STUDS TO LOCK THE NEW STRUT EXTENDERS IN PLACE

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



**STRUT EXTENDERS
BEING INSTALLED
OVER THE FACTORY
STRUT UPPER
MOUNTING STUDS.**

16. INSTALL THE SUPPLIED URETHANE STRUT SPACER
(WITH THE SIDE MARKED TOP OUT TOWARD THE OUTSIDE OF THE VEHICLE)
OVER THE STRUT EXTENDERS ON TOP OF THE FACTORY STRUT MOUNT.



**URETHANE SPACER BEING
INSTALLED OVER THE STRUT
EXTENDERS.**



**THE SIDE MARKED TOP
OUT MUST BE INSTALLED
UP AND TOWARD THE
OUTSIDE OF THE
VEHICLE.**

17. STRUT AND NEW STRUT SPACER ASSEMBLY INSTALLATION.



**STRUT WITH NEW
LEVELING SPACER
ASSEMBLY MOUNTED TO
THE TOP.**

**STRUT ASSEMBLY
INSTALLED INTO THE
FACTORY MOUNTING
LOCATIONS.**

- A. INSTALL THE STRUT ASSEMBLY UP INTO THE STOCK LOCATION.
- B. ALIGN AND INSTALL THE THREE UPPER STRUT STUDS UP INTO THE FACTORY THREE HOLES IN THE FRAME UPPER MOUNT.
- C. INSTALL THE SUPPLIED THREE UPPER STRUT M10 WASHERS AND M10 **LOCKNUTS**, JUST SNUG.
- D. USING THE FACTORY HARDWARE (**HEAD** OF BOLT TOWARD THE REAR) ALIGN AND INSTALL THE LOWER STRUT MOUNT INTO THE LOWER CONTROL ARM FACTORY STRUT MOUNT. (JUST SNUG THE HARDWARE @ THIS TIME).
- E. JACK THE LOWER CONTROL ARM UP TO RIDE HEIGHT AND SECURE THE VEHICLE WITH JACK STANDS. USING A LARGE BAR, PRY DOWN ON THE UPPER CONTROL ARM AND REINSTALL THE UPPER BALL JOINT INTO THE STEERING KNUCKLE. INSTALL THE FACTORY UPPER BALL JOINT NUT, TORQUE TO SPEC AND INSTALL THE SUPPLIED COTTER PIN.
- 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 SPEC.
- H. REPEAT STRUT ASSEMBLY INSTALLATION PROCEDURE TO THE OTHER SIDE OF VEHICLE.

18. REINSTALL THE SWAY BAR CONNECTING LINKS INTO FACTORY LOCATION. LINE UP AND INSTALL THE FACTORY CONNECTING LINK HARDWARE THEN TORQUE BOTH SIDES TO SPEC.
19. REINSTALL THE OUTER TIE RODS TO THE SPINDLES. INSTALL THE FACTORY TIE ROD NUTS AND TORQUE TO SPEC. INSTALL THE SUPPLIED COTTER PINS.
20. REINSTALL THE BRAKE LINES AND ANTI LOCK BRAKE WIRES INTO THE FACTORY LOCATIONS USING THE FACTORY HARDWARE AND TIGHTEN. CHECK THE ANTILOCK BRAKE WIRE AND BRAKE LINE FOR CLEARANCE AND ADJUST IF NECESSARY.
21. MAKE SURE ALL FASTENERS EFFECTED BY THIS PROCEDURE ARE TORQUED TO FACTORY SPEC.
22. REINSTALL TIRE AND WHEEL ASSEMBLY.
23. CHECK AND MAKE SURE THAT ALL INSTALLATION STEPS HAVE BEEN COMPLETED. CHECK ALL NUTS AND BOLTS FOR TORQUE AFTER THE FIRST 300 MILES AND AT EVERY ROUTINE SERVICE INSPECTION.
24. JACK THE VEHICLE UP AND REMOVE STANDS, THEN LET THE VEHICLE DOWN.
25. MAKE SURE THERE ARE NO CLEARANCE PROBLEMS. ROTATE THE STEERING LOCK TO LOCK UNDER FULL WEIGHT OF THE VEHICLE AND FULL SUSPENSION TRAVEL. MAKE SURE TO DOUBLE CHECK THE BRAKE LINE /ANTI LOCK WIRE TO TIRE/WHEEL CLEARANCE @ THIS TIME.
26. GO BACK AND CHECK THAT ALL INSTALLATION STEPS HAVE BEEN COMPLETED.
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 CAM BOLTS WILL NEED TO BE ADJUSTED 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.

GROUND FORCE

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 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 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 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: _____ Address: _____
Products: _____

Part # _____ Dealer/ Location _____ / _____ Installer _____
Date/Purchase _____ / _____ Make/Model: _____ / _____
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.