## Quadratec® 3.5" Coil Spring Lift Kit

Installation Manual: for 97-06 Wrangler (TJ & LJ)

#16400.0X33





#### **PARTS LIST:**

Front 3.5" Coil Springs - QTY 2 Rear 3.5" Coil Springs - QTY 2 3" Bump Stop Extensions - QTY 4

Front Shocks - QTY 2 Rear Shocks - QTY 2 Rear Track Bar

Relocation Bracket - QTY 1

Transfer Case Lowering Kit

Transfer Case Linkage

Drop Kit Bracket - QTY 1 Front Sway Bar Links

Rear Sway Bar Links

Full Kit Hardware Listed Inside Booklet

**AWARNING A** 

TO REDUCE RISK OF SERIOUS INJURY OR PROPERTY DAMAGE: READ ALL SAFETY MESSAGES AND UNDERSTAND ALL INSTRUCTIONS AND PROCEDURE NOTICES BEFORE ATTEMPTING TO INSTALL OR USE THIS PRODUCT. FOLLOW ALL INSTRUCTIONS AND WARNINGS WITH PRODUCT & VEHICLE OWNERS MANUAL.

**AWARNING ②** 

THIS KIT INCLUDES A COCKPIT SAFETY WARNING STICKER REGARDING INCREASED ROLLOVER RISK. THIS STICKER MUST BE AFFIXED IN THE COCKPIT, VISIBLE TO ALL VEHICLE OCCUPANTS AT ALL TIMES.

**ACAUTION A** 

RISK OF EYE INJURY! SAFETY GLASSES MUST BE WORN AT ALL TIMES WHILE INSTALLING OR MAINTAINING THIS PRODUCT. TORQUE AND RECHECK FASTENERS AFTER 250 MILES AND FREQUENTLY THEREAFTER. DO NOT USE IF DAMAGED.



#### A Few Words About Product Safety:

Your Quadratec Suspension product is intended to enhance the utility and enjoyment of your off road capable vehicle. Before installation, please review the following safety information and installation recommendations.

Throughout these instructions important safety information is generally preceded by one of three signal words indicating the relative risk of injury, property damage or adverse consequence. **The signal words mean:** 

**AWARNING A** 

a hazardous situation which, if not avoided, could result in death or serious injury. You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

**ACAUTION A** 

a hazardous situation which, if not avoided, could result in minor or moderate injury. You CAN be moderately HURT and also may suffer property damage if you don't follow instructions.

NOTICE

Careful attention is required to this instruction or operation but does generally not relate to personal injury. Damage to your Quadratec® product or other property may result if you don't follow instructions.

#### **Before You Begin Installation:**

Congratulations on your purchase of the Quadratec 3.5" Lift Kit for 1997-2006 TJ Wrangler Vehicles. When unpacking, check to make sure all parts are included and not damaged due to shipping. If any part is missing or broken, please call Customer Service at 800-745-6037 as soon as possible.

#### **IMPORTANT PRODUCT SAFETY TIPS**

**▲ WARNING ♦** 

INSTALLATION OF THIS PRODUCT ON YOUR JEEP® WILL MODIFY AND ENHANCE ITS SUSPENSION AND OFF-ROAD PERFORMANCE. IT MAY HANDLE DIFFERENTLY THAN AS FACTORY-EQUIPPED INCLUDING; INCREASED RIDEHEIGHT; REDUCED LATERAL STABILITY; AND HIGHER RISK OF ROLL-OVER OR OTHER ACCIDENT. ALSO, OWNER'S CHOICE OF LARGER TIRE/WHEEL COMBINATIONS MAY REQUIRE ADDITIONAL PEDAL PRESSURE OR INCREASED DISTANCE TO STOP; CAUSE SPEEDOMETER TO READ SLOW AND MAY REDUCE VISIBILITY AROUND THE VEHICLE. CHOICE OF TIRE/WHEEL COMBINATIONS OTHER THAN AS TESTED OR RECOMMENDED MAY COMPROMISE FMVSS 126 COMPATIBILITY.

**AWARNING ②** 

FAMILIARIZE YOURSELF WITH VEHICLE HANDLING AND REVIEW ALL VEHICLE MANUFACTURERS AND QUADRATEC® WARNINGS, INSTRUCTIONS AND LIMITED WARRANTIES BEFORE DRIVING A MODIFIED SUSPENSION JEEP®. FOLLOW ALL RECOMMENDED MAINTENANCE PROCEDURES AND ROUTINELY INSPECT YOUR VEHICLE COMPONENTS FOR UNUSUAL WEAR OR OFF-ROAD DAMAGE.

**▲ WARNING ②** 

DO NOT DRIVE UNDER ANY SPEED OR MANEUVERING CONDITIONS WHICH MAY CAUSE THE VEHICLE TO TRIP, ROLL, LOSE TRACTION OR COMPROMISE YOUR ABILITY TO SAFELY BRAKE IN AN EMERGENCY. QUADRATEC® DOES NOT RECOMMEND COMBINED USE OF SUSPENSION KITS, BODY LIFTS, OTHER LIFTING DEVICES OR COMPONENTS ALTERING THE INTENDED RIDEHEIGHT OR FUNCTION OF ITS PRODUCTS. MANY STATES HAVE LAWS RESTRICTING THE EXTENT OF VEHICLE MODIFICATIONS. OWNER/DRIVER IS RESPONSIBLE FOR MODIFICATIONS CONSISTENT WITH STATE LAWS AND GOOD SENSE.



#### **IMPORTANT PRODUCT SAFETY TIPS**



QUADRATEC $^\circ$  RECOMMENDS PROFESSIONAL INSTALLATION OF THIS PRODUCT.



#### 3.5" KIT PARTS LIST:

Front 3.5" Coil Springs - QTY 2 Rear 3.5" Coil Springs - QTY 2 3" Bump Stop Extensions - QTY 4 10mm x 90mm Bolts - QTY 4 Front Shocks - QTY 2 Rear Shocks - QTY 2

#### Rear Track Bar Relocation Bracket - QTY 1

12mm x 70mm Bolt - QTY 1 12mm Locknut - QTY 1 1/2" x 1 1/2" Fine Thread Bolt - QTY 1 ½"- 20 Find Thread Locknut - QTY 1 1/2" SAE Washer - QTY 3 Spacer Sleeve - QTY 1

#### Transfer Case Lowering Kit

1.5" Spacer - QTY 8 1/2" x 3 Tapered Socket Bolt - QTY 6 12mm x 80 Bolt - QTY 8 1/2" SAE Washer - QTY 8

#### **Transfer Case Linkage Drop Kit Bracket - QTY 1**

1/4" x 1 Fine Thread Bolt - QTY 2 1/4"-28 Fine Thread Locknut - QTY 2 1/4" SAE Washer - QTY 2

#### Front Sway Bar Links

Sway Bar End Link - QTY 2 Sway Bar U Bracket - QTY 2 Sleeves 1.50" Long - QTY 4 10mm x 35 Bolt - QTY 2 10mm Locknut - QTY 2 3/8" SAE Washer - QTY 2 1/2" x 21/2" Coarse Thread Bolt - QTY 2 1/2" Coarse Center Lock Nut - QTY 2

#### Rear Sway Bar Links

Rear Sway Bar End Link - QTY 2 Sleeves 1.66" Long - QTY 4

Thread Locker

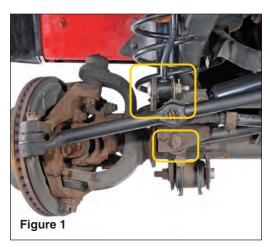
#### **REQUIRED TOOLS:**

Safety Glasses % Open End Wrench 13mm Open End Wrench 15mm Open End Wrench 18mm Open End Wrench 3/4" Open End Wrench 21mm Open End Wrench T40 Torx Socket T55 Torx Socket %" Allen Wrench %6" Socket 13mm Deep Well Socket 15mm Socket %" Socket 17mm Socket 18mm Socket 3/4" Socket 21mm socket Hammer Punch Center Punch Drill Motor 13/32" Drill Bit ½" Drill Bit

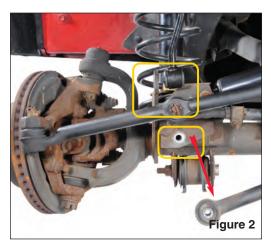


**ACAUTION A** 

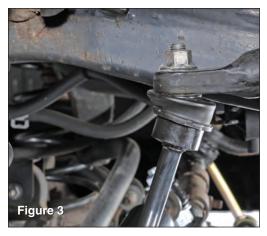
PARK THE VEHICLE ON FLAT, LEVEL GROUND AND SET EMERGENCY BRAKE. ALWAYS SUPPORT FRAME RAILS USING JACK STANDS.



Caution: Park the vehicle on flat, level ground and set emergency brake. Put on safety glasses. Raise the front of the vehicle and support frame rails using jack stands. Do not lower the axle at this time. Remove front tires/wheels.



Disconnect the front sway bar end links using a 18mm open end wrench and T55 Torx socket. Disconnect front track bar using a 15mm socket. (see FIG 1 & 2)

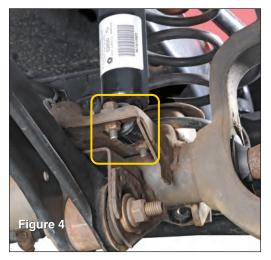


Remove upper sway bar link nut using a 15mm socket. (see FIG 3 & 3A)

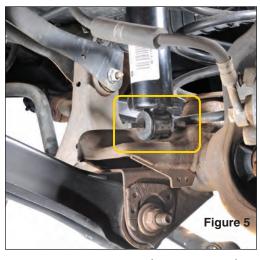


You will need to beat the link from swaybar as they are pressed in. Discard swaybar link.

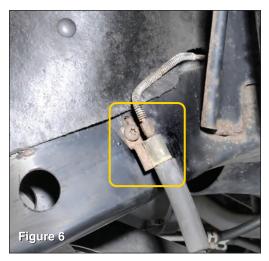




Disconnect the bottom end of the front shocks using a 13mm deep well socket



and open end wrench. (see FIG 4 & 5)

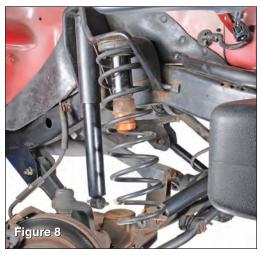


Disconnect brake line brackets from frame using a T40 Torx socket.



(see FIG 6 & 7)





Gently lower axle housing towards the ground and remove original coil springs. (see FIG 8)



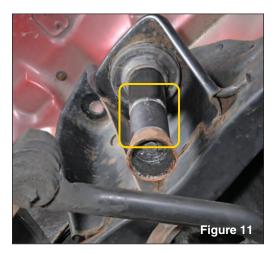
Remove original bump stop by pulling downward and twisting. (see FIG 9).

**ACAUTION A** 

**COIL SPRING MAY BE UNDER TENSION. REMOVE CAREFULLY.** 

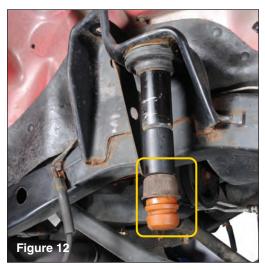


Remove bump stop cup using a 15mm socket (see FIG 10) Re-attach bump stop cup using supplied bump stop cup

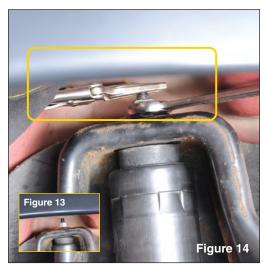


spacer with supplied 10mm bolt using a 17mm socket. (see FIG 11)

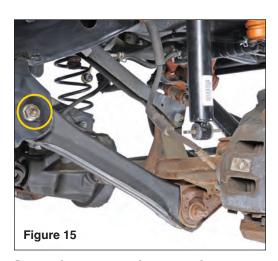




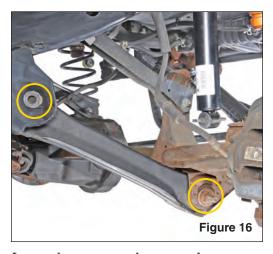
Press in bump stop as shown. (see FIG 12)



Locate upper shock mount stem and remove using vise grips and 15mm open end wrench. (see FIG 13 & 14) Remove and discard old front shocks.



Locate lower control arms and remove frame side bolt using a 21mm socket and open end wrench.



Locate lower control arms and remove bolts using a 21mm socket and openend wrench. (see FIG 15 & 16)



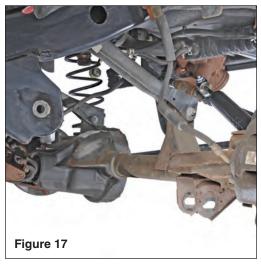
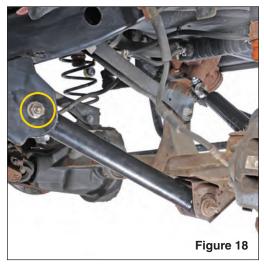
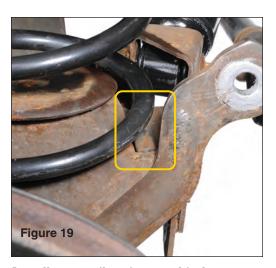


Photo depicting stock front lower control arm removed. (see FIG 17)



Install supplied lower control arms on axle end only with original hardware loosely at this time. (see FIG 18)



Install new coil springs and index on bottom mount as shown (see FIG 19) Carefully raise axle enough to re-attach the control arm to frame using original bolt. Install bolt and nut loosely at this time.





Locate and assemble front shocks as shown (see FIG 20 & 21). Install into original opening at top mount and torque to 20 ft. lbs. using a 9/16" socket.

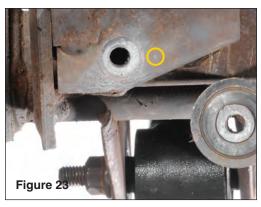


Raise the axle using a floor jack so the full weight of vehicle is on the newly installed coil springs. Re-Attach brake line brackets to frame. Using factory hardware, re-attach the bottom end of the shock and torque to 21 ft lbs. Install wheels/tires and torque to 105 ft lbs. Finally, remove jack stands and lower vehicle onto the ground. Tighten frame side control arm bolt to 130 ft lbs. Torque axle end control arm bolts to 85 ft. lbs. for 97-03 models and 130 ft. lbs. for 04-06 models.

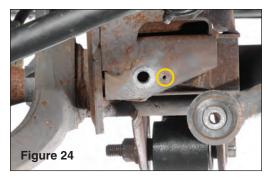
Locate and assemble front sway bar links and install as shown. (see FIG 22) Links will bend outward from frame. Push 1.50" sleeves into link bushings. Put 10mm bolt through U bracket first and then install sway bar end link using ½" coarse thread bolt from the inside

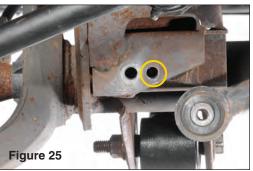


out and loosely tighten nut at this time. Push 10mm bolt up through sway bar and attach using 3/8" washer and 10mm locknut. Attach to axle using original hardware and torque to 75 ft. lbs. Tighten ½" and 10mm hardware at this time using ¾" and 17mm tools.

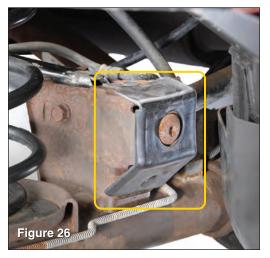


Locate front axle side track bar mount and measure to the drivers side ¾" from center of hole and make a mark using center punch. (see FIG 23) Drill pilot hole (see FIG 24) Drill out to 13/32" (see FIG 25) Re-attach track bar into new hole using factory hardware and torque to 55 ft. lbs. for 97-02 models and 40 ft. lbs. for 03-06 models.









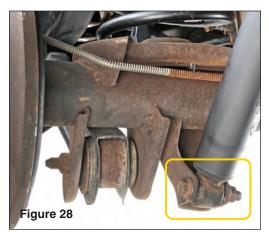
Raise rear end and properly support frame rails using jack stands. Locate rear axle track bar mount and removed plastic cover (see FIG 26) and discard.



Disconnect the rear track bar from the bracket using a T55 torx socket. (see FIG 27)

#### **ACAUTION A**

ALWAYS SUPPORT FRAME RAILS USING JACK STANDS.

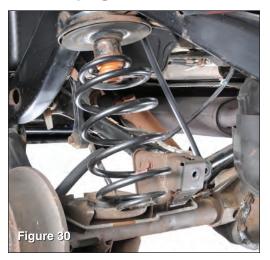


Remove rear lower shock bolts using a 18mm socket and 15mm open end wrench. (see FIG 28)

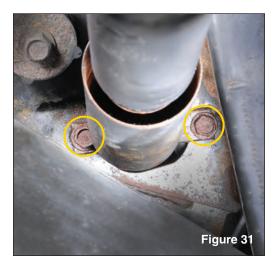


Remove sway bar end links using a 18mm socket and 15mm open end wrench. (see FIG 29)





Carefully lower axle housing and remove coil springs. (see FIG 30)



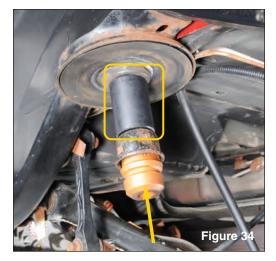
Locate rear upper shock mounting bolts and remove using 13mm socket (see FIG 31). Discard rear shocks.

**ACAUTION A** 

**COIL SPRING MAY BE UNDER TENSION. REMOVE CAREFULLY.** 



Remove original bump stop by pulling downward and twisting. (see FIG 32) Remove bump stop cup using a 15mm socket (see FIG 33) Then install included

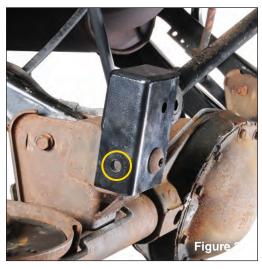


bump stop cup spacer and original bump stop cup with supplied 10mm bolt using a 17mm socket. (see FIG 34) Press in original bump stop.

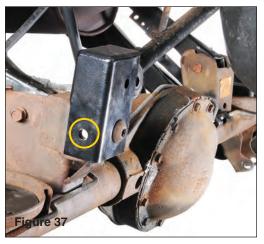




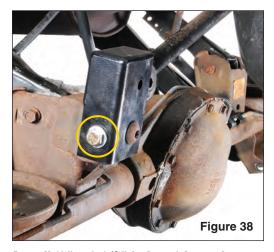
Using original track bar bolt and supplied sleeve install new rear track bar bracket over top original axel housing mount. Tighten by hand to make sure



bracket is completely flush. (see FIG 35) Using the new bracket as a guide carefully drill through axle housing bracket using a ½" drill bit. (see FIG 36 and 37)

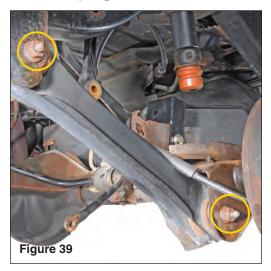


Using the new bracket as a guide carefully drill through axle housing bracket using a ½" drill bit. (see FIG 36 and 37)

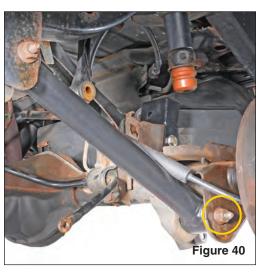


Install  $\frac{1}{2}$ " x 1-1/2" bolt, with washers on bolt sides and locknut into drilled hole loosely at this time. (see FIG 38)

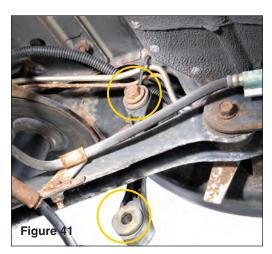




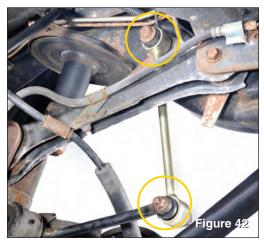
Locate lower control arms and remove bolts using a 21mm socket and openend wrench. (see FIG 39)



Install supplied lower control arms on axle end only with original hardware loosely at this time (see FIG 40)



Remove rear sway bar links using a 18mm socket from frame and discard links. (see FIG 41)



Assembly new rear links using 1.66" long sleeves and install using original hardware loosely at this time. (see FIG 42)







Locate and assemble rear shocks as shown (see FIG 43 & 44). Install shocks into top mount using original hardware and torque to 23 ft. lbs.

Raise the axle using a floor jack so the full weight of vehicle is on the newly installed coil springs making sure rear track bar slides into new bracket.

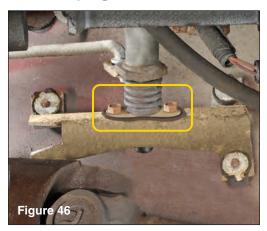
Re-attach rear lower shock bolt to axle housing and torque to 74 ft. lbs. Install wheels/tires to 105 ft. lbs. Remove jack stands and lower vehicle onto the ground.

Then, loosely re-attach track bar to new bracket using supplied 12mm bolt, ½" washer under bolt head and locknut. Tighten ½" bolt on side of bracket using a ¾" socket and open-end wrench. Torque original T55 Torx bolt then finally 12mm bolt to 74 ft. lbs. Torque sway bar link hardware to 40 ft. lbs. Torque control arm bolts to 103 ft. lbs. for 97-03 models and 150 ft. lbs. for 04-06 models.



Carefully support transmission and transfer case using floor jack. Remove the 4 transmission mount nuts using a 13mm socket. Raise transmission just enough to get the weight off of center skid plate. Remove the 6 bolts holding skid plate to frame using a ¾" (97-02) or 18mm (03-06) socket and set skid plate aside. (see FIG 45)





Locate transfer case shifter linkage and remove two bolts using 10mm socket or wrench. (see FIG 46) Install linkage drop

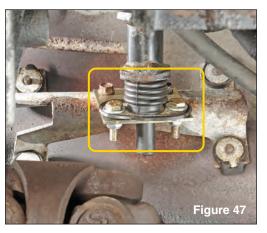
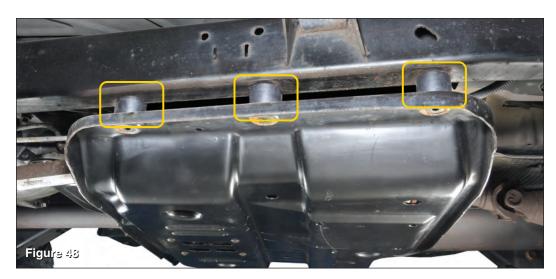


plate to body with original hardware, 4" bolts, washers and nuts using 7/16" tools (see FIG 47)



Using provided 1.5" spacers and corresponding hardware install skid plate and torque 75/80 ft. lbs. applying included thread lock compound to bolts. (see FIG 48)

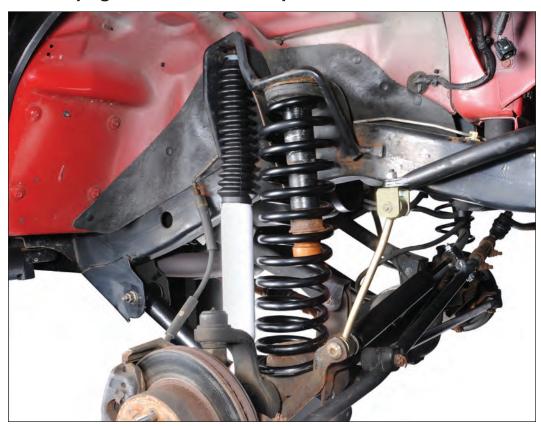
97-02 model years will use the  $\frac{1}{2}$ " x 3" long 5/16" Allen head tapered bolts.

03-06 models with use the 12mm bolts with washers. If equipped with automatic transmission you will need to also space down the extra skid plate with 1.5" spacers, bolts and washers as well.

Gently lower transmission onto skid plate and install original transmission mount nuts and tighten securely.



#### 3.5" Coil Spring Kit Installation: Front Complete



**▲ WARNING ②** 

COMPLETE INSTALLATION BY CAREFULLY INSPECTING AND CONFIRMING CLEARANCE OF CHOSEN TIRE/WHEELS THROUGH FULL STEERING SWEEP AND SUSPENSION TRAVEL. ASSURE BRAKE LINES CLEAR AND NOT RUBBING AGAINST ANY SURFACE, ABS FITTING AND OTHER FASTENERS SECURED. CHECK SPEEDOMETER READINGS AND IF NECESSARY RECALIBRATE. HAVE ALIGNMENT SETTINGS CHECKED AND IF INDICATED, RE-ALIGN AT SHOP WITH EQUIPMENT SUITED FOR MODIFIED SUSPENSION JEEP VEHICLES.



INSTALL COCKPIT WARNING STICKER ON VISOR OR OTHER LOCATION VISIBLE TO ALL DRIVERS.



#### 3.5" Coil Spring Kit Installation: Rear Complete





Install cockpit warning sticker on visor or other location visible to all drivers and occupants.







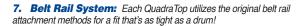
#### **Key QuadraTop Features**

- 1. Fabric: Tough 23 ounce mildew and UV resistant vinyl coated polyester and cotton fabric provides lasting durability and is backed by a limited three year warranty. QuadraTops are available in factory original colors and textures to keep your Jeep® looking showroom new!
- 2. Stitching: Our QuadraTop panels are sewn together with marine grade 135 gauge bonded Anefil® polyester thread that's super strong and UV protected. This rot resistant thread will provide years of worry free durability.
- 3. Seams: All exposed QuadraTop seams feature heat tape seals over double stitching to keep moisture out.
- 4. Windows: QuadraTops are available with your choice of zip out crystal clear windows or rear and quarter windows with a dark 31% tint keeping interiors much cooler in hot summer months. Our glass panels are 30mil thick and DOT approved for the ultimate in clarity and durability and feature leak proof heat seals. All windows are completely removable for



open air enjoyment.

6. Hook & Loop
Attachment: Our
patterns are fully tested to
ensure a tight and wrinkle
free fit like the originals. All
necessary snaps and Heavy Duty
Hook & Loop strips are in place to
install over the factory bows and
there's never any drilling or
modifications required!



8. Upper Door Skins: Our fabric upper doors install in just minutes onto your existing factory upper door frames by hook and loop fastener strips. It's quick and easy with our step by step illustrated instructions. Fabric upper doors have double sided weather strip bulb seals and double window zipper pulls. Note: Wranglers with half steel doors only feature clear upper door windows to meet federal and state requirements.



#### **QuadraTop® Replacement Soft Tops**

Affordable quality and durability with no compromises! Our top kits are designed to work with factory hardware and feature finer quality materials and workmanship along with the latest in manufacturing technologies for unprecedented value. Our new product team with decades of soft top knowledge and experience delivers you all the great features you want in a replacement top with unsurpassed customer service and support. Our QuadraTop is the best value in replacement soft tops compared to other tops costing hundreds more. If for any reason, you are not completely satisfied with your soft top purchase or have an installation question, please contact our professional customer support staff for a solution. All QuadraTops feature a limited Three year warranty against defects. The incredible fit & detailed instructions make installation as easy as...

One, Two, Three!



\*Order an In Stock New QuadraTop Soft Top for Delivery in the Lower 48 States Before 4pm Eastern Standard Time, and It'll Ship UPS Ground the Same Day, Ground Shipments take between 1-7 Business Days to Deliver. Need Your Top Faster? Expedited Shipping Options are Available with a UPS Air Freight Surcharge



# **Quadratec® Exclusive Limited Lifetime Warranty**

Your Quadratec® branded accessories are covered by the following **Limited Warranty** provided exclusively by Quadratec, Inc., 1028 Saunders Lane, West Chester PA 19380.

This Limited Warranty is the only warranty made in connection with your purchase. Quadratec neither assumes nor authorizes any vendor, retailer or other person or entity to assume for it any other obligation or liability in connection with this product or Limited Warranty. This Limited Warranty does not apply and is not cumulative to any accessory or part distributed by Quadratec for which the Manufacturer provides a separate written warranty.

What is Covered: Subject to the terms, exclusions and limitations herein and with respect only to Quadratec branded accessories first sold in the United States, Quadratec warrants to the initial retail purchaser only that your Quadratec accessory shall be free of defects in material and workmanship: for as long as the original purchaser owns the vehicle. The Warranty on bushings and other serviceable wear items (including shock absorbers) is limited to 1 year from date of retail purchase. This Limited Warranty is not assignable and shall terminate upon sale of the vehicle upon which the Quadratec accessory is installed or other transfer third persons.

All other warranties are hereby disclaimed, except to the extent prohibited by applicable law in which case any implied warranty of merchantability or fitness for a particular purpose on this limited to for as long as the original purchaser owns the vehicle. Quadratec reserves the rights to: (a.) require invoice or other proof your accessory is within the terms of this Limited Warranty as a condition of warranty service and, (b.) make future revisions to this product and Limited Warranty without prior notice or obligation to upgrade your product.

#### What is Not Covered:

Your Quadratec Limited Warranty does not cover products or parts Quadratec determines to have been damaged by or subjected to: (a.) installation damage, alteration, modification, combination with other parts, failure to maintain or improper repair or service, (b.) defects or use which pre-dates installation of Quadratec® accessory

or suspension kit by authorized dealer or shop, (c.) normal wear & tear or gradual reduction in expected performance of vehicle or components, (d.) emissions control or electronic stability systems or components, (e.) cosmetic damage or damage from moisture or water immersion, (f.) fleet, rental or commercial use, (g.) Acts of God, accidents, misuse, negligence, inadequate mounting or impact with vehicle(s), obstacles or other aspects of the environment, (h.) theft, vandalism or other intentional damage. (i.) use in competition or racing.

Other Exclusions: Surface finish of exposed suspension components is not covered under this Limited Warranty.

#### Remedy Limited to Repair/Replacement:

The exclusive remedy provided hereunder shall, upon Quadratec inspection and at Quadratec's option, be either repair or replacement of product or parts (new or refurbished) covered under this Limited Warranty. Customers requesting warranty consideration should first contact Quadratec to obtain a RGA number (610-701-3336). All labor, removal, shipping and installation costs are customer's responsibility.

### Other Limitations - Exclusion of Damages - Your Rights Under State Law:

In consideration of the purchase price paid, neither Quadratec nor any independent Quadratec distributor/licensee are responsible for any time loss, rental costs, or for any incidental, consequential, punitive or other damages you may have or incur in connection with any part or product purchased. Your exclusive remedy hereunder for covered parts is repair/replacement as described above.

This Limited Warranty gives you specific rights. You may also have other rights that vary from state to state. For example, some states do not allow limitations of how long an implied warranty lasts and /or do not allow the exclusion or limitation of incidental or consequential damages, so the limitations and exclusions herein may not apply to you.

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