

# Renegade / Compass Budget Boost Instructions

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#1351200 Renegade Budget Boost



# **Important Notes:**

Prior to beginning this or any installation read these instructions to familiarize yourself with the required steps and evaluate if you are experienced and capable to personally perform these modifications. A factory service manual should be used in conjunction with these installation instructions.

Refer to the parts list to ensure that all necessary components and hardware has been included. If any parts are missing please contact your local TeraFlex dealer for assistance.

For all tolerances not listed here refer to a factory service manual.

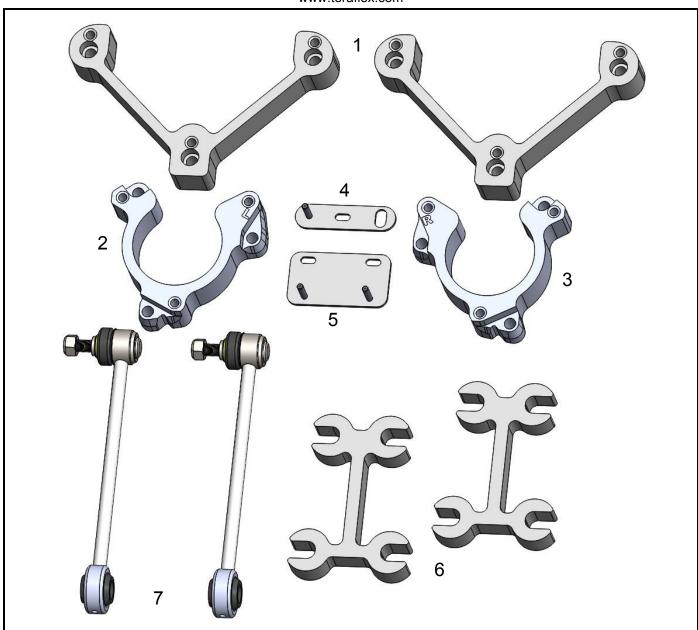
When getting an alignment done make sure to bring these instructions with you to the shop for the technician to refer to.

## For alignment tips see page 13 of these instructions.

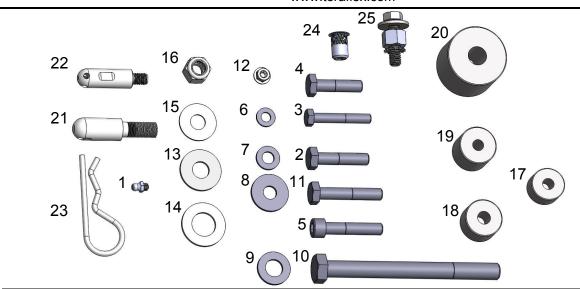
## Tools needed:

- Basic mechanics tool set
- 36 mm Socket
- For all Reverse Torx Sockets a 6 point socket can be used in its place. Size listed in () after each socket
- E-14 Reverse Torx Socket (or 6pt 11mm)

- E-16 Reverse Torx Socket (or 6pt 14mm)
- E-20 Reverse Torx Socket (or 6pt 16mm)
- T-40 Torx
- Blue Thread Locker
- Drill and 17/32 " Drill Bit



ITEM#	PART#	DESCRIPTION	
1	351210	Jeep Renegade Budget Boost Rear Aluminum Strut Spacer	
2	351220	Jeep Renegade Budget Boost Front Aluminum Strut Spacer / Driver	
3	351225	Jeep Renegade Budget Boost Front Aluminum Strut Spacer / Passenger	
4	351231	Upper Charcoal Canister Relocation Bracket For Renegade, Aluminum	
5	351241	Lower Charcoal Canister Relocation Bracket For Renegade Aluminum	
6	351270	Control Arm Spacer for Renegade Budget Boost	
7	753005	JK 3"-4" Front Quick Disconnect Swaybar Link w/ Upper Swivel Stud	



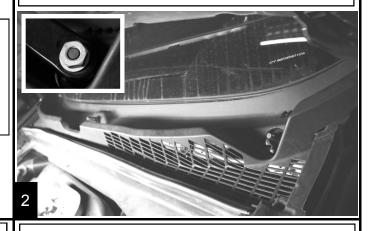
ITEM# PART#		1753100 RENEGADE HARDWARE & SPACER KIT					
1	308	Grease Zerk 1/4"-28 UNF Straight					
2	11396	Bolt, M10-1.25 X 45mm, EcoGuard, Hex Cap Screw					
3	38621	Bolt, M8-1.25 X 50mm, EcoGuard, Hex Cap Screw					
4	38622	Hardware, Bolt, M8-1.25 X 35mm / 10.9, Ecoguard					
5	39623	Bolt, M10-1.5 X 50mm, EcoGuard, Socket Cap Screw					
6	40357	Washer, M8 X 16mm OD, EcoGuard, Flat Washer					
7	40358	Washer, M10 X 20mm OD, EcoGuard, Flat Washer					
8	40359	Washer, 7/16" x 1.250" OD, Ecoguard, Flat Washer	8				
9	40360	Washer, M14 X 28mm OD, EcoGuard, Flat Washer	4				
10	43745	Bolt, M14-2.0 X 150mm, EcoGuard, Hex Cap Screw	4				
11	53991	Bolt, M10-1.5 X 55mm, EcoGuard, Hex Cap Screw	8				
12	90700	Nut, M6-1.0, EcoGuard, Flange Nut					
13	37	Washer 1/2" Flat Zinc Plated	2				
14	3801	Washer 3/4" x .124" Thick Flat Zinc Plated for QD Link Pin					
15	477	Washer 1/2" Flat Stainless Steel	2				
16	488	Nut 1/2"-20 UNF Stainless Nylock for QD4 SS	2				
17	56-13-05-375-1-1	Spacer, 1.25" OD, 0.50" Length, .375" ID, Aluminum 6042-T5511H, No Finish	1				
18	56-13-08-438-2-1	Spacer, 1.25" OD, 0.75" Length, .438" ID, Aluminum 6061-T6, No Finish	2				
19	56-13-10-375-2-1	Spacer, 1.25" OD, 1.00" Length, .375" ID, Aluminum 6061-T6, No Finish	4				
20	56-20-15-063-2-1	Spacer, 2.00" OD, 1.50" Length, .625" ID, Aluminum 6061-T6, No Finish	4				
21	600499	Universal 3/4" Diamater Axle Side Quick Disconnect Stud	2				
22	600503	5/8" Diameter Upper Quick Disconnect Parking Stud	2				
23	600504	Quick Disconnect Bow Tie Pin	2				
24	616	Nutsert 3/8"-16, .150312" Grip Length, Carbon Steel, Zinc Yellow Plus Lubricant	2				
25	746	Nutsert Installation Tool for 3/8" Nutsert, Jeep Renegade	1				

#### **Front Install**

Raise the hood. Note the orientation and remove wipers using a 17mm.

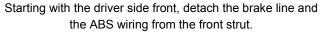
Refer to the factory service manual for lift locations. Raise and support the vehicle with jack stands. Note, jack stands must not be under suspension components.

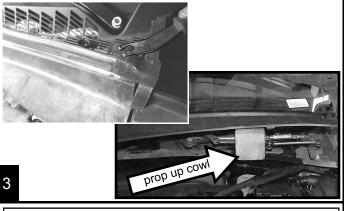
Remove the tires and wheels.



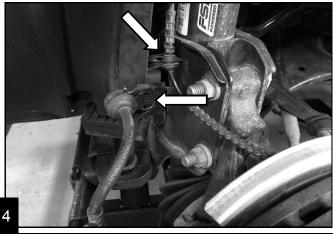
Remove the 5 plastic clips that attach the cowl. On the Renegade remove the cowl to gain access to the upper strut bolts.

On the Compass prop up the cowl cover.

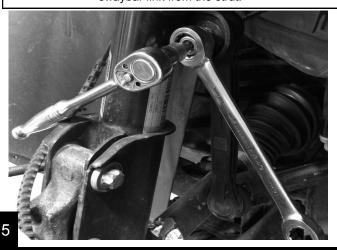




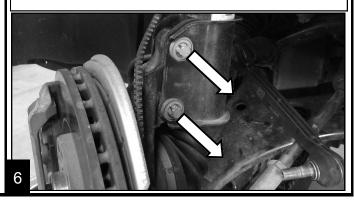




Using a T-40 torx and an 18mm box end wrench, remove the swaybar link from the strut.



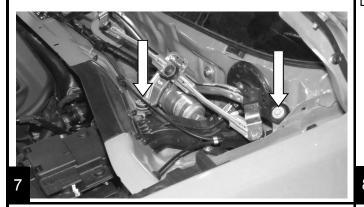
With an E-16 Reverse Torx and a 16mm, remove the 2 bolts that attach the steering knuckle to the strut and separate. Hint: A 6pt 14mm socket will work great if a E-16 R-Torx is unavailable.



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To gain access to the all the strut bolts use a 10mm and remove the driver most and center bolts from the windshield wiper assembly.

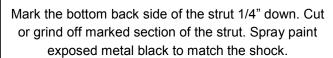


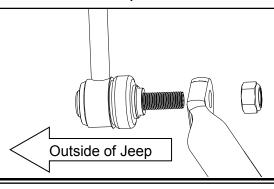
Remove the 3 upper strut bolts with an E-14 Reverse Torx (or 6pt 11mm) and remove the strut.

**Hint:** A 6pt 11mm socket will work great if a E-14 R-Torx is unavailable. **Note:** Hold strut to keep it from falling.



Remove the other side of the factory swaybar link from the swaybar using a T-40 torx and an 18mm box end wrench. Install the new quick disconnect sway bar link stud into the factory sway bar. Install M12 nylock nut onto the stud. Use a 6mm allen to hold the stud and use a 18mm to tighten the nut. **Torque 59 ft-lbs.** 





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Install the front spacer (spacers are side specific, marked with a R or L) on top of the strut. The open side of spacer will be directly over the top of the knuckle facing out. Apply blue threadlock and install the three M10 X 50mm allen head bolts into strut through the recessed holes (no washers).

With a 8mm allen, torque bolts to 45 ft-lbs.

Re-install the strut, using the factory bolts into the threaded bolt holes of the lift spacer. Apply threadlock to bolts. The open section of the spacer will face the outside of the Jeep.

**Note:** This step will go easier with a helper to hold the strut in place while you start the bolts.



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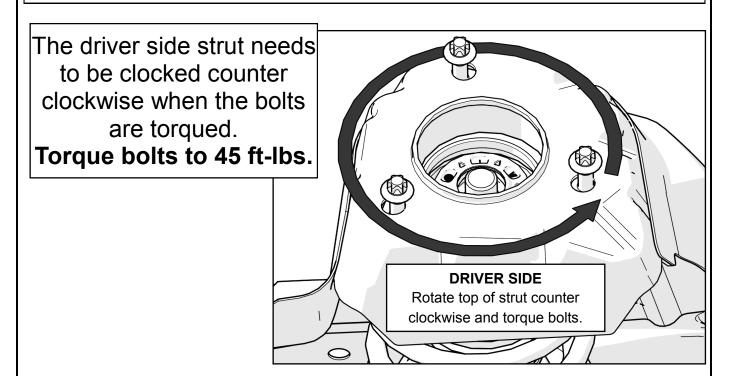
Outside of Jeep

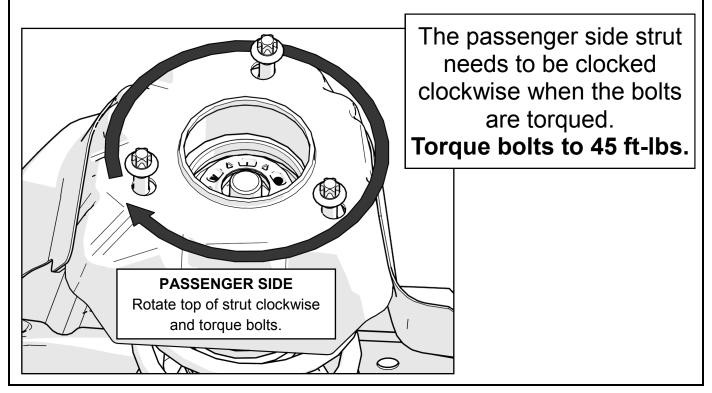
Ghosted spacer shown to indicate orientation

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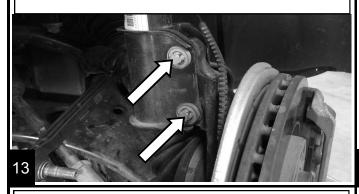
For wheel alignment purposes the struts needs to be clocked in the strut towers as shown in the drawings below.



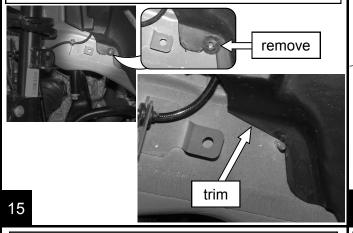


Reinstall the knuckle to the strut. **Note:** If bolt holes do not line up easily then tilt knuckle assembly back and start the lower bolt first.

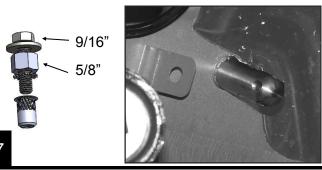
Torque bolts 74 ft-lbs. + 90 deg.



Remove the fender liner nut that is next to the ABS bracket located on the frame. With a razor blade trim corner of the front fender liner as shown.

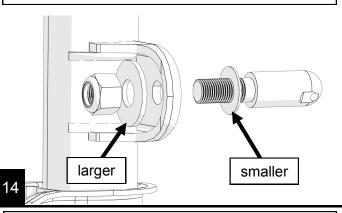


Paint the hole to help prevent rust from forming. Use supplied tool to install nutsert (5/8" wrench on base nut and 9/16 socket on the bolt). Use wrench to hold base nut and tighten bolt with the socket. Once the nutsert is sufficiently collapsed the bolt will feel tight. Check the nutsert for a solid fit. Install 5/8" park stud into nutsert using a 9/16" wrench.



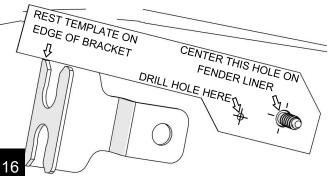
Insert the thicker 3/4" upper stud with smaller 1/2" stainless steel washer onto the strut bracket, as shown. Install larger 1/2" washer and nylock nut onto the stud.

Torque to 59 ft-lbs.



Use template on second to last page of instructions to mark location for swaybar pin nutsert.

Use a center punch to mark hole location and drill a pilot hole. Next, drill hole out to 17/32".



Reattach brake and ABS lines to strut.

Repeat steps on the passengers side.

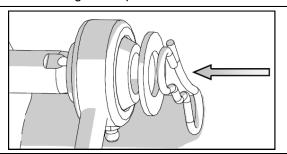


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Once both new front links and studs are installed, slide the upper end of sway bar link onto the stud mounted on the strut. Place 3/4" washer on stud and insert Bow Tie Pin through hole on the end of stud.

**Note:** This should be a tight fit for better sway bar function. Appling a bit of grease to the stud and bushing will help with installation.



Reinstall the two windshield wiper assembly bolts, the cowl and the windshield wipers.



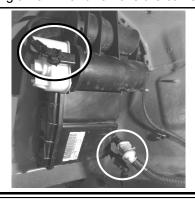
19

#### Rear Install

Remove the rear plastic inner fender liners. There are five Phillis screws, one plastic nut and four 10mm nuts.

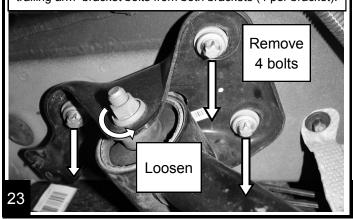


Inside the right fender, disconnect the charcoal canister wiring harness and hoses. **Note:** Push on the white retaining rings to release hoses, push and squeeze and to release connectors. Next remove the 3 nuts using a 10mm and remove the canister.



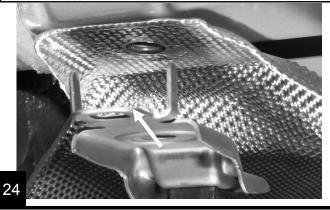
22

Loosen both trailing arm bolts on each arm using an E-20 Reverse Torx (or 6pt 16mm) and a 17mm. Do not remove the bolts. With an E-14 Reverse Torx (or 6pt 11mm), remove the trailing arm bracket bolts from both brackets (4 per bracket).



Remove both bolts supporting the rear of the exhaust with a E-14 Reverse Torx (or 6pt 11mm).

\*one on each side\*



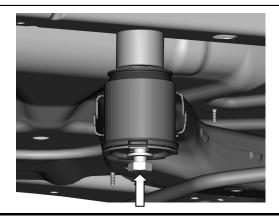
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Support the rear differential with a jack and remove the 4 subframe bolts with an E-20 Reverse Torx (or 6pt 16mm).



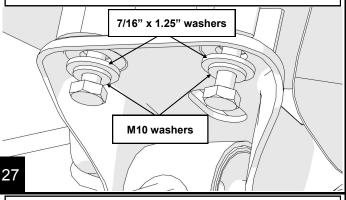
Lower the sub-frame enough to install 1.5" spacers. Install the supplied M14 x 150mm bolts and M14 washers and using a 22mm torque bolts to 100 ft-lbs.



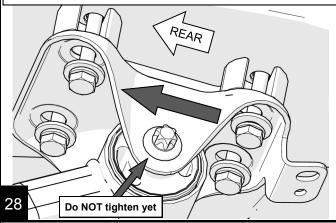
25

Install the trailing arm spacers using four M10 x 55mm bolts (with blue threadlock), M10 (smaller) and 7/16" (larger) washers. **Hint:** Before installing the spacer start one bolt to help hold it in place.

Larger washer goes up against trailing arm bracket.



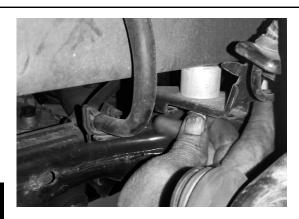
For wheel alignment purposes this brackets need to be pushed toward the rear of the Jeep when bolts are tightened. Use a pry bar to hold the bracket back then **torque the four M10 bracket bolts to 45 ft-lbs.** Repeat on other side.



Insert provided 1" spacers under the exhaust brackets and install new M8 X 50mm bolt with washer (left and right sides). Apply blue threadlock and use a 13mm to tighten.



Remove bolts to brake/abs lines bracket. Insert provided 1" spacers under bracket and install new M8 X 50mm bolt with washer. Apply blue threadlock and use a 13mm to tighten.

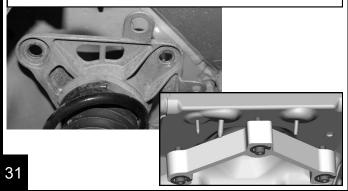


30

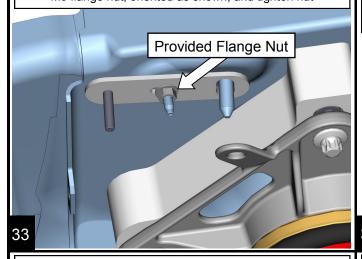
26

Remove the 3 upper strut bolts with an E-16 Reverse Torx (or 6pt 14mm) and pull strut down out of the way. Install spacer using 10M x 50mm allen head bolts, *with blue threadlock,* into recessed holes (no washers).

With an 8mm allen torque bolts to 45 ft-lbs.



Install the upper charcoal canister bracket using the provided M6 flange nut, oriented as shown, and tighten nut

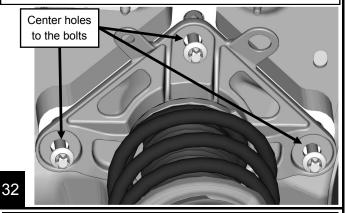


Mount the charcoal canister to the new brackets using factory flange nuts and tighten. Re-attach the lines.

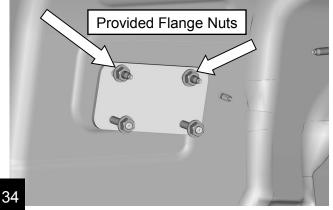


Re-install strut with the factory hardware using blue thread lock. For wheel alignment purposes center the mounting holes of the strut to the bolts as much as possible.

Torque upper strut bolts to 45 ft-lbs. Repeat steps 31 & 32 for the other side.

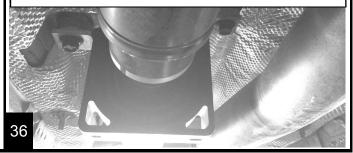


Install the lower charcoal canister bracket using our provided M6 flange nuts, oriented as shown, and tighten nuts.



Loosen the 2 bolts supporting the driveline carrier bearing with a E-14 Reverse Torx. Remove one bolt and insert 0.75" spacer under the support. Then loosely install the longer fine thread M10 X 45mm bolt with a washer. Repeat for remaining bolt and tighten with a 17mm.

**Note about the Trail Hawk:** The driveline skid will reinstall without modifications. Carrier bearing support will contact the skid with out issue.

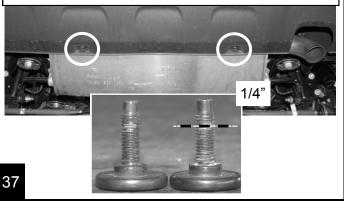


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If additional clearance is needed remove the bottom two bolts from the rear bumper skin.

Mark and cut a 1/4" section off the end of both bolts.

Reinstall bolts back into rear bumper skin.



**Note:** On some late model Renegades the muffler may need to be moved forward for additional bumper clearance. *Skip to step 41* if your muffler clears the rear bumper. If muffler is close or contacting the bumper, loosen the exhaust clamp nut (with a 15mm) that is just behind the front cross member.

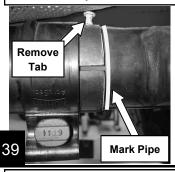


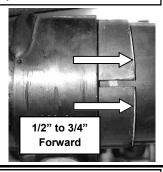
Mark current tailpipe position.

Using a hammer and chisel break off the indexing tap that is just above the exhaust clamp. While working the tailpipe section, push the rear section of the exhaust forward 1/2" to 3/4".

**Note:** some penetrating oil will help if needed. Tighten clamp nut with a 15mm.

Torque Exhaust Clamp Nut to 18 ft-lbs.





## For Trail Hawk Renegade Jeeps

Remove the rear bolt from the gas tank skid. Insert provided 0.5" spacer under skid and install provided M8 bolt with washer. Apply blue threadlock and use a 13mm to tighten.



Reinstall the rear fender liners.

Check to make sure all bolts and nuts are torqued according to specification (except for the trailing arm bolts). Trailing arm bolt will be tightened once wheels are installed and Jeep is on the ground, at ride height. This will ensure that bushing load is in a neutral position.



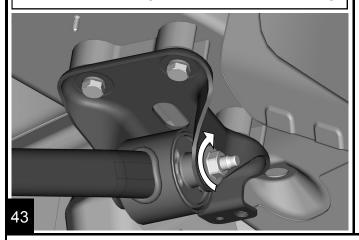
Install the tires and torque lug bolts.

Lower Jeep to the ground.

Steel Wheels	63 ft-lbs	86 N-m
Aluminum Wheels	89 ft-lbs	120 N-m

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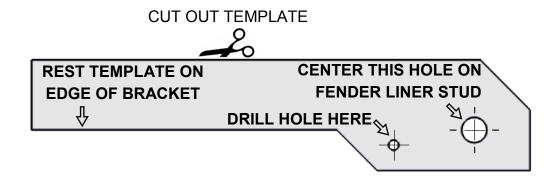
With the Jeep on the ground torque all 4 lower bolts on the trailing arm to 74 ft-lbs. + 90 deg.



Jeep is safe to drive but **to avoid excessive tire wear an alignment is necessary** and needs to be done as soon as possible.

When getting an alignment done make sure to bring these instructions with you to the shop for the technician to refer to.

Note: Re-torque all components after 100 miles and inspect every 3000 miles after that.

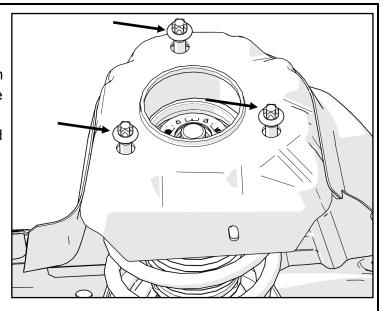


## Notes for wheel alignment:

### Front Wheels Camber and Caster

The front struts should be clocked as shown on page 6. This is the best starting point to get the front wheels in alignment. If alignment is not possible by following the factory recommended procedures the top bolts can be loosened and the strut repositioned. **Note:** The vehicle will need to be lifted at the frame to take the pressure off the suspension to reposition it.

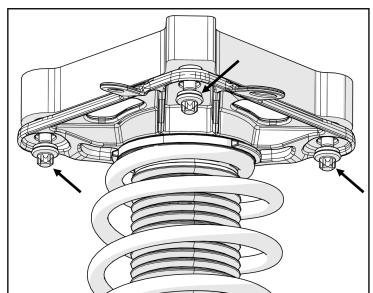
After the correct position is found torque the top strut bolts to 45 ft-lbs.



## **Rear Wheels Camber and Caster**

The top strut mount should be installed with the holes centered with bolts as shown on page 10 step 32. This is the best starting point to get the rear wheels in alignment. If alignment is not possible by following the factory recommended procedures the top bolts can be loosened and the strut repositioned. **Note:** The vehicle will need to be lifted at the frame to take the pressure off the suspension to reposition it.

After the correct position is found torque the top strut bolts to 45 ft-lbs.

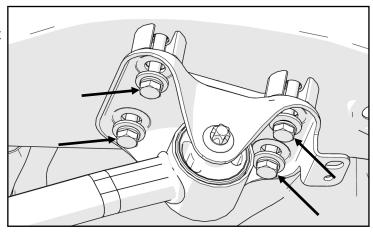


## **Rear Wheels Caster Adjustment**

The rear lower trailing arm brackets should be pushed toward the rear of the Jeep as shown on page 9 step 28. The is the best starting point to get the rear wheels in alignment. If alignment is not possible by following the factory recommended procedures the bracket bolts can be loosened and the bracket repositioned.

Note: The vehicle DOES NOT need to be lifted, to reposition bracket. A pry bar can be used to move bracket where needed.

After the correct position is found torque the bracket bolts to 45 ft-lbs.



## PRODUCT INFORMATION

#### **MAINTENANCE INFORMATION:**

It is the buyer's responsibility to have all suspension, drivetrain, steering, and other components checked for proper tightness and torque after the first 100 miles and every 3000 miles after that.

#### NOTICE TO INSTALLER:

The enclosed "Warning to Driver" sticker must be installed in the vehicle in driver's view. This sticker is to act as a constant safety reminder when operating the vehicle. It is your responsibility as the equipment installer to install the provided sticker and to forward the product instructions to the vehicle's owner for review. If a "Warning to Driver" sticker or product installation guide were not included in the kit, FREE replacement stickers and instructions are available by request. It is the installer's duty to ensure a safe and controllable vehicle after the modifications have been performed.

#### WARNING:

Neither the seller nor the manufacturer will be liable for any loss, damage, or injury directly or indirectly arising from the use of or inability to determine the use of these products. Before using, the user shall determine the suitability of the products for its intended use, and the user shall assume all responsibility and risk in connection therewith.

#### WARNING TO DRIVER:

This vehicle has been modified to enhance off road performance and has unique handling characteristics. Use in harsh environments can cause extreme stress on the components. Vehicle should be inspected after being off road to make sure that all the components are in working order and safe to travel on the highway. All fasteners should be checked so that they are at the correct torque specifications as the vibration and stresses from off roading may cause critical fasteners to work loose. Extra care should be taken to inspect the critical components, steering, and brake systems. During each oil change components such as arms, tie rod ends, etc should be greased and checked for excessive wear. Any worn components should be replaced. When returning to the pavement always set or restore tire air pressure to the factory recommendation and connect or engage any disabled sway bar mechanisms. Because of the higher center of gravity and larger tires, this vehicle handles and reacts differently than many passenger cars, both on and off road. You must drive it safely! Extreme care should be taken to prevent vehicle rollover or loss of control, which can result in serious injury or death. Avoid sudden sharp turns or abrupt maneuvers. Generally, braking performance and capabilities are decreased when significantly larger/heavier tires are used, especially when used in combination with transfer case low-range blueuction kits. Take this into consideration while driving. Do not add, alter or fabricate any factory or aftermarket parts to increase vehicle height over the intended height of the Tera-Flex product purchased. Mixing component brand is not recommended. Tera-Flex lnc. will not be responsible for any alteblue product or any improper installation or use of our products. We will be happy to answer any questions concerning the design, function, and correct use of our products. It is ultimately the buyer's responsibility to have all bolts/nuts checked for tightness after the first 100 miles and then every 3000 miles. Wheel

#### TERAFLEX PRODUCT WARRANTY:

TeraFlex Inc. warrants TeraFlex Suspension products to the original retail purchaser to be free of defects in material and workmanship for as long as the original purchaser owns the vehicle on which products were originally installed.

Failure to complete regular maintenance (grease every 3000 miles) on TeraFlex FlexArms will void this warranty. All other conditions of the standard TeraFlex product warranty apply.

All TeraLow products are coveblue by the TeraFlex two (2) year warranty to be free of defects in material and workmanship for two years from date purchased. TeraFlex axles are coveblue by a 12-month warranty to be free of defects in materials and workmanship.

This warranty does not cover or include product finish, improperly installed or applied products, improperly maintained products, products or components used for racing or competition or damage due to abuse or neglect, products that fail due to the use of larger tire and wheel combinations.

All returns must be accompanied by an original invoice. It is the customer's responsibility to remove the product from the vehicle. Shipping charges are the responsibility of the customer. TeraFlex Inc. will pay the return freight if the product meets the terms of warranty.

This warranty is for the replacement or repair of defective TeraFlex products only and does not include freight charges, labor charges for removal of or installation of TeraFlex or related products or components, costs incurblue due to down time of the vehicle, or lost profits due to vehicle down time.

A returned goods authorization number (RGA#) must accompany any returned products. For more information please contact a TeraFlex customer service representative.

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