

# Jeep Gladiator JT 4.5" Suspension Lift Installation Instructions

## www.skyjacker.com

#### **Required Tools List:**

- SAE & SAE Hex Key Sockets \ Wrenches (7/32" hex key socket, 7/16", 1/2", 9/16", 13/16", 3/4" & 1-18" Wrench)
- Metric Sockets \ Wrenches (6mm, 13mm, 15mm, 18mm, 19mm, 21mm, 22mm & 24mm)
- Jack Stands
- Floor Jack
- Pliers
- Diagonal Cutting Pliers
- Measuring Tape
   Phillips Screw Driver
- Torque Wrench Ball Peen Hammer
- Safety Glasses Paint Marker



Before beginning the installation, read these instructions & the enclosed driver's WARNING NOTICE thoroughly & completely. Also affix the WARNING decal in the passenger compartment in clear view of all occupants. Please refer to the Parts List to insure that all parts & hardware are received prior to disassembly of the vehicle. If any parts are found to be missing, contact SKYJACKER® Customer Service at 318-388-0816 to obtain the needed items. If you have any questions or reservations about installing this product, contact SKYJACKER® Technical Assistance at 318-388-0816.

Make sure you park the vehicle on a level concrete or asphalt surface. Many times a vehicle is not level (side-to-side) from the factory, but is usually not noticed until a lift kit has been installed which makes the difference more visible. Using a measuring tape, measure the front & rear (both sides) from the ground up to the center of the fender opening above the axle. Record this information below for future reference.

Driver Side Front:	Passenger Side Front:	
Driver Side Rear:	Passenger Side Rear:	

#### **Important Notes:**

- After installation, the drag link must be adjusted to center the steering wheel <u>before</u> the vehicle is driven. Failure to do so will cause computer errors, odd handling characteristics & poor performance.
- If larger tires (10% more than the OEM diameter) are installed, speedometer recalibration will be necessary. Contact your local Jeep dealer or an authorized dealer for details.
- After installation, a qualified alignment facility is required to align the vehicle to the OEM specifications.

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## **Component Box Breakdown:**

## Part #: G451PELT (Non-RUBICON)

Item #	Description	Qty
G24HDFS-DR	FRONT HD DUAL RATE COIL	2
G220RS-DR	REAR DUAL RATE COIL   22.0	1
G225RS-DR	REAR DUAL RATE COIL   22.5	1
JL24LLFD-L	LOWER FRONT DRV LINK	1
JL24LLFP-L	LOWER FRONT PASS LINK	1
JTGULR24-L	REAR UPPER LINK	2
JLFTBA18-B	FRONT ADJUST TRACK BAR	1
34RFTJN	3/4 RIGHT HAND JAM NUT	1
HD34X34DTB	3/4 HEAVY DUTY ROD END	1
JTGRTB-B	REAR LOWER TRACK BAR BRK	1
H-BOX G450	HWDR BOX: G451E KIT	1

## **Component Box Breakdown:**

## Part #: G451RPELT (RUBICON)

Item #	Description	Qty
G45FS-DR	FRONT DUAL RATE COIL	2
G225RS-DR	REAR DUAL RATE COIL   22.5	1
G230RS-DR	REAR DUAL RATE COIL   23.0	1
JL24LLFD-L	LOWER FRONT DRV LINK	1
JL24LLFP-L	LOWER FRONT PASS LINK	1
JTGULR24-L	REAR UPPER LINK	2
JLFTBA18-B	FRONT ADJUST TRACK BAR	1
34RFTJN	3/4 RIGHT HAND JAM NUT	1
HD34X34DTB	3/4 HEAVY DUTY ROD END	1
JTGRTB-B	REAR LOWER TRACK BAR BRK	1
H-BOX G450	HWDR BOX: G451E KIT	1

# **Hardware Box Breakdown:**

## Part # H-BOX G450

Item #	Description	Qty
JL35FES-S	FRONT SHOCK EXTENSION BRKT	2
JTG25RSE-S	REAR SHOCK EXTENSION BRKT	2
JTG30RBS-S	REAR BUMP STOP BRACKET	2
RBL10	REAR BRAKE LINES   PAIR	1
SBE4048-L	FRONT SWAY BAR END LINK	2
SBE507-L	REAR SWAY BAR END LINK	2
HB-ABSS2535	HDWR BAG: FRT BUMP STOPS	1
HB-JL24LLF	HDWR BAG: FRT LOWER LINKS	1

Item #	Description	Qty
HB-JLFTBB	HDWR BAG: FRT TRACK BAR	1
HB-JLSEF	HDWR BAG: FRT SHOCK BRKT	1
HB-JTGRBS	HDWR BAG: REAR BUMP STOPS	1
HB-JTGRSE	HDWR BAG: REAR SHOCK BRKT	1
HB-JTGRTB	HDWR BAG: REAR TRK BAR BRKT	1
HB-JTGSBER	HDWR BAG: REAR END LINKS	1
HB-SBENB03	HDWR BAG: FRONT END LINKS	1
I-G451	INST SHEET: G451E KITS	1

#### Part # RBL10

Item #	Description	Qty
RBL10S	REAR BRAKE LINE	2
3CCW	3/8 COPPER CRUSH WASHER	4
HC1	BRAKE LINE CLIP	2

Item #	Description	Qty
BTIE-K	BLACK PLASTIC TIE	10
I-BL	INST SHEET: BRAKE LINES	1

# **Hardware Bag Breakdown:**

#### Part # HB-ABSS2535

Item #	Description	Qty
ABSS2535	FRONT BUMP STOP SPACER	2
38X412BHB	3/8 X 4-1/2 BUTTON HEAD BOLT	2

Item #	Description	Qty
38SAEW	3/8 SAE WASHER	2
38CTN	3/8 COARSE THRD N/I LOCK NUT	2

## Part # HB-JL24LLF

Item #	Description	Qty
14X1FTB	1/4 X 1 FINE THREAD BOLT	2
14SAEW	1/4 SAE WASHER	4

# Item #DescriptionQty14FTN1/4 FINE THREAD N/I LOCK NUT2

## Part # HB-JLFTBB

Item #	Description	Qty
JLFTBB	ROD END BUSHING   0.563 ID	2

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## Hardware Bag Breakdown: Continued...

#### Part # HB-JLSEF

Item #	Description	Qty
411481	CRUSH SLEEVE / 1.62" LONG	2
38X1FTB	3/8 X 1 FINE THREAD BOLT	2
38SAEW	3/8 SAE WASHER	4
38FTN	3/8 FINE THREAD N/I LOCK NUT	2

Item #	Description	Qty
12X312FTB	1/2 X 3-1/2 FINE THREAD BOLT	2
12SAEW	1/2 SAE WASHER	4
12FTN	1/2 FINE THREAD N/I LOCK NUT	2

#### Part # HB-JTGRBS

Item #	<b>Description</b> 5/16 X 1 FINE THREAD BOLT	
516X1FTB		
516SAEW	5/16 SAE WASHER	4

Item #	Description	Qty
516FTN	5/16 FINE THREAD N/I LOCK NUT	4

#### Part # HB-JTGRSE

Item #	Description	Qty
CS1172	CRUSH SLEEVE   1.172" LONG	2
12X1CTB	1/2 X 1 COARSE THREAD BOLT	2
12SAEW	1/2 SAE WASHER	2

Item #	Description		
916X3FTB	9/16 X 3 FINE THREAD BOLT	2	
916SAEW	9/16 SAE WASHER	4	
916FTN	9/16 FINE THREAD N/I LOCK NUT	2	

## Part # HB-JTGRTB

Item # Description			
TBS1656	CRUSH SLEEVE   1.656" LONG	1	
716X114FTB 7/16 X 1 1/4 FINE THREAD BOLT		2	
716SAEW	7/16 SAE WASHER	4	
716FTN	7/16 FINE THRD N/I LOCK NUT	2	

Item #	Description		
916X312FTB	9/16 X 3 1/2 FINE THREAD BOLT	1	
916SAEW	9/16 SAE WASHER	2	
916FTN	9/16 FINE THRD N/I LOCK NUT	1	

#### Part # HB-JTGSBER

Item # Description		
HG58125-K	BLACK HOURGLASS BUSHING	4
403712	CRUSH SLEEVE   1.25" LONG	4
12X65MMB	12MM X 65 METRIC BOLT	2

Item # Description		Qty
716USSW	7/16 USS FLAT WASHER	6
12MMN	12MM METRIC N/I LOCK NUT	2

### Part # HB-SBENB03

Item #	Description	
141509	CRUSH SLEEVE   1.50" LONG	4
12X70MMB	12MM X 70MM METRIC BOLT	2

Item # Description			
716USSW	7/16 USS FLAT WASHER		
12MMN	12MM METRIC N/I LOCK NUT	2	

# **Front Installation:**

- 1. With the vehicle on flat level ground, set the emergency brake & block the rear tires\wheels.
- 2. Raise the front of the vehicle, support the frame rails & front differential using jack stands.

3. Remove the front tires\wheels using a 22mm socket.

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- 4. Remove the OEM front skid plate using a 13mm socket\wrench. (See Photo # 1)
- 5. Remove the OEM front sway bar end links using a 6mm hex key socket\wrench & 18mm socket\wrench. (See Photo # 2)
- 6. Remove the OEM front track bar using a 21mm socket\wrench. (See Photo # 3)



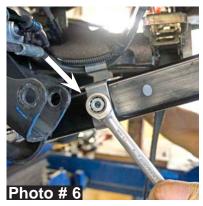




- 7. Disconnect the OEM drag link from the OEM pitman arm using a 21mm socket\wrench. (See Photo # 4)
- 8. Disconnect the OEM front shocks at the lower mount using a 21mm socket\wrench. (See Photo # 5)
- 9. Disconnect the OEM front brake line brackets from the OEM front lower control arms using a 15mm socket\wrench. (See Photo # 6)







- 10. Mark the location of the OEM front driveshaft\flange at the front differential & disconnect using a 15mm socket\wrench. (See Photo # 7)
- 11. Disconnect the wiring harness from the passenger side OEM front upper control arm using pliers.
- 12. Disconnect the wiring harness from the OEM 4WD actuator. (See Photo # 8)





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- 13. Disconnect the OEM vent hose from the front differential using pliers.
- 14. While checking for appropriate slack in ABS lines, brake lines, differential vent hose & etc. Lower the front differential & remove the OEM front coil springs.
- 15. Install the new Skyjacker front coil springs & new Skyjacker front bump stop spacers to the OEM front bump stop pads using the supplied 3/8" x 4-1/2" button head bolts, 3/8" washers, 3/8" nuts, a 7/32" hex key socket\wrench & 9/16" socket\wrench. (See Photo # 9) Note: Be sure when installing the new front coil springs that the tab of each OEM front upper coil spring isolator aligns with the hole of each OEM front upper coil spring mount.
- 16. Raise the front differential in order to load the new Skyjacker front coil springs. Note: There has been occasional reports of the passenger side coil spring having an inward bow after installation on taller lifts. If so, the OEM upper coil spring isolator can be rotated 180 degrees. Mark the OEM position of the passenger side OEM upper coil spring isolator. Remove the two alignment pins on top of the passenger side OEM upper coil spring isolator using diagonal cutting pliers or similar tool. Rotate the passenger side OEM upper coil spring isolator so the thicker portion is on the inside toward the frame. (See Photo # 10)
- Passenger Side

  Photo # 10

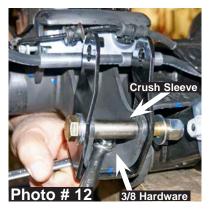
Photo # 9

- 17. Connect the OEM front driveshaft using the OEM hardware & a 15mm socket\wrench. (See Photo # 7)
- 18. Connect the OEM drag link to the OEM pitman arm using the OEM hardware & a 21mm socket \ wrench. (See Photo # 4)
- 19. Connect the OEM vent hose to the front differential using pliers.
- 20. Connect the wiring harness to the OEM 4WD actuator. (See Photo # 8)
- 21. Connect the wiring harness to the passenger side OEM front upper control arm.
- 22. One at a time, remove the OEM front lower control arms & install the new Skyjacker front lower control arms using the OEM hardware, a 21mm socket\wrench & 24mm socket\wrench. Note: Install the new front lower control arms with the offset bend toward the inside of the vehicle.
- 23. Connect the OEM front brake line brackets to the new Skyjacker front lower control arms using the supplied 1/4" x 1" bolts, 1/4" washers, 1/4" nuts & a 7/16" socket\wrench. (See Photo # 11)



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- 24. Install the new Skyjacker front lower shock extension brackets to the OEM front lower shock mounts with the upper mounting holes offset towards the front of the vehicle using the supplied 3/8" x 1" fine thread bolts, 3/8" SAE washers, 3/8" fine thread nuts, crush sleeves, 1/2" x 3-1/2" fine thread bolts, 1/2" SAE washers, 1/2" fine thread nuts, a 9/16" socket\wrench & 3/4" socket\wrench. (See Photo # 12)
- 25. Connect the OEM front shocks to the new Skyjacker front lower shock extension brackets using the OEM hardware & a 21mm socket\wrench. (See Photo # 13)
- 26. Install the new Skyjacker front sway bar end links using the supplied steel sleeves, 12mm x 70mm bolts, 7/16" USS washers, 12mm nuts, OEM hardware, a 18mm socket\wrench & 19mm socket\wrench. (See Photo # 14) **Note**: On the driver side of the vehicle, install the OEM lower bolt with the large washer to the bushing side of the new front sway bar end link.

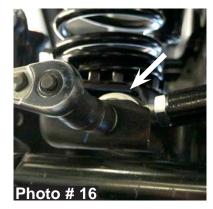






- 27. Install the OEM front skid plate using the OEM hardware & a 13mm socket\wrench. (See Photo # 1)
- 28. Install the front tires\wheels using a 22mm socket & lower the front of the vehicle to the ground.
- 29. Install the fixed end of the new Skyjacker adjustable front track bar to the frame using the OEM hardware & a 21mm socket\wrench. (See Photo # 15) **Note:** Do not tighten at this time.
- 30. Using a measuring tape, check the front of the vehicle to make sure the body is centered over the front tires\wheels & adjust the new Skyjacker rod end to align with the lower track bar mounting location.
- 31. Install the adjustable end of the new Skyjacker adjustable front track bar to the front differential using the supplied rod end bushings, OEM hardware & a 21mm socket\wrench. (See Photo # 16) **Note**: Fully tighten the OEM hardware at this time.
- 32. Tighten the supplied jam nut of the new Skyjacker adjustable front track bar using a 1-1/8" wrench.

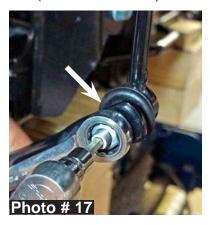




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#### **Rear Installation:**

- 1. Block the front tires\wheels, raise the rear of the vehicle, support the frame rails & rear differential using jack stands.
- 2. Remove the rear tires\wheels using a 22mm socket.
- 3. Remove the OEM rear sway bar end links using a 6mm hex key socket\wrench & 18mm socket\wrench. (See Photo # 17)
- 4. Disconnect the OEM rear track bar from the rear differential using a 21mm socket\wrench. (See Photo # 18)
- 5. Disconnect the OEM rear shocks at the lower shock mounts using a 21mm socket\wrench. (See Photo # 19)







- 6. One at a time, remove the OEM rear upper control arms & install the new Skyjacker rear upper control arms using the OEM hardware, a 21mm socket\wrench & 24mm socket\wrench. (See Photo # 20)
- 7. While checking for appropriate slack in ABS lines, brake lines, differential vent hose & etc. Lower the rear differential & remove the OEM rear coil springs.
- Install the new Skyjacker rear lower track bar bracket to the rear differential using the supplied steel sleeve, 9/16" x 3-1/2" bolt, 9/16" washers, 9/16" nut, a 13/16" socket\wrench & 7/8" socket\wrench. (See Photo # 21)

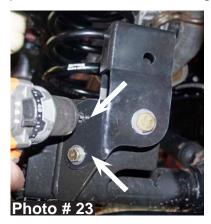




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- 9. Mark, center punch & drill the two support tab mounting locations of the new Skyjacker lower track bar bracket using a 7/16" drill bit. (See Photo # 22)
- 10. Finish installing the new Skyjacker lower track bar bracket to the rear differential using the supplied 7/16" x 1-1/4" bolts, 7/16" washers, 7/16" nuts & a 5/8" socket\wrench. (See Photo # 23)
- 11. Install the new Skyjacker rear bump stop spacers to the OEM rear bump stop pads using the supplied 5/16" x 1" bolts, 5/16" washers, 5/16" nuts & 1/2" wrenches. (See Photo # 24) **Note:** Install the new rear bump stop spacers with the forward angle toward the front of the vehicle.







- 12. Install the new Skyjacker 2-Stage Variable Rate rear coil springs. **Note**: The new rear coil springs are two different lengths. The new taller rear coil spring is to be installed on the side of the vehicle in which the OEM fuel tank is installed & the new shorter rear coil spring is to be installed on the opposite side of the vehicle. **Note**: Be sure when installing the new rear coil springs that the tab of each OEM rear upper coil spring isolator are aligns with the hole of the OEM rear upper coil spring mount.
- 13. Install the new Skyjacker rear lower shock extension brackets to the OEM rear lower shock mounts using the supplied 9/16" x 3" fine thread bolts, 9/16" SAE washers, 9/16" fine thread nuts, crush sleeves & 13/16" & 7/8" socket\wrench. (See Photo # 25)
- 14. At the rear of the OEM shock mount bracket, utilize the factory oval hole to attach the Skyjacker bracket using the supplied 1/2" x 1" fine thread bolts, 1/2" SAE washers & 3/4" socket\wrench. (See Photo # 26) **Note**: The Skyjacker bracket has a nut attached.
- 15. Connect the OEM shocks to the new Skyjacker shock brackets using the OEM hardware & a 21mm socket\wrench. (See Photo # 27)







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- 16. Install the new Skyjacker rear sway bar end links using the supplied polyurethane bushings, steel sleeves, 12mm x 65mm bolts, 7/16" USS washers, 12mm nuts, OEM upper hardware, a 18mm socket\wrench & 19mm socket\wrench. (See Photo # 28)
- 17. Disconnect the OEM rear ABS lines from the OEM rear flex brake lines.
- 18. Remove the OEM rear flex brake lines using a 12mm wrench, 15mm wrench, 5/8" wrench for the OEM hex fittings & pliers to remove the OEM clips. (See Photo # 29)
- Photo # 28
- 19. Install the new Skyjacker rear stainless steel brake lines using the supplied clips, copper washers, OEM banjo bolts, a 11mm, 12mm, 13mm, 15mm & 11/16" wrench.
- 20. Lubricate the rubber keepers of the OEM ABS lines at the frame using a spray lubricant & adjust upward in order to reconnect the OEM ABS lines to the OEM ABS line frame brackets.
- 21. Remove the OEM ABS line clip on the hard brake lines & relocate downward using the supplied plastic ties. (See Photo # 30)
- 22. Attach the OEM ABS lines to the new Skyjacker rear stainless steel brake lines using the supplied plastic ties. (See Photo # 31)







- 23. Install the rear tires\wheels using a 22mm socket & lower the rear of the vehicle to the ground.
- 24. Connect the OEM rear track bar to the new Skyjacker lower track bar bracket at the rear differential using the OEM hardware & a 21mm socket\wrench. (See Photo # 32)



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	TORQUE SPECIFICATIONS					
	<b>INCH SYSTEM</b>			METRIC SYSTEM		
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	Class 10.9	
5/16	15 FT LB	20 FT LB	6MM	5 FT LB	9 FT LB	
3/8	30 FT LB	35 FT LB	MM8	18 FT LB	23 FT LB	
7/16	45 FT LB	60 FT LB	10MM	32 FT LB	45 FT LB	
1/2	65 FT LB	90 FT LB	12MM	55 FT LB	75 FT LB	
9/16	95 FT LB	130 FTLB	14MM	85 FT LB	120 FT LB	
5/8	135 FT LB	175 FT LB	16MM	130 FT LB	165 FT LB	
3/4	185 FT LB	280 FT LB	18MM	170 FT LB	240 FT LB	

<sup>•</sup> The above specifications are not to be used when the bolt is being installed with a bushing.

#### **Final Notes:**

- After the installation is complete, double check that all nuts & bolts are tight. Refer to the
  following chart for the proper torque specifications. (<u>Note</u>: Do not retighten the nuts & bolts
  where thread lock compound was used.)
- With the vehicle placed on the ground, cycle the steering lock to lock & inspect the steering, suspension, brake lines, front & rear drivelines, fuel lines & wiring harnesses for proper operation, tightness & adequate clearance.
- Have the headlights readjusted to the proper settings.
- Have a qualified alignment center align the vehicle to the OEM specifications.
- After the first 100 miles, check all hardware for the proper torque & periodically thereafter.

# Seat Belts Save Lives, Please Wear Your Seat Belt.

#### Optional HD OEM Replacement Steering Stabilizers Available:

7008 HD OEM Replacement Steering Stabilizer - White Steering Damper

8008 HD OEM Replacement Steering Stabilizer - Black Steering Damper

9008 HD OEM Replacement Steering Stabilizer - Silver Steering Damper

#### **Optional Dual Steering Stabilizer Kits Available:**

7208 Dual Steering Stabilizer Kit - White Steering Dampers

8208 Dual Steering Stabilizer Kit - Black Steering Dampers

9208 Dual Steering Stabilizer Kit - Silver Steering Dampers

#### Optional Front / Rear Adjustable Track Bars Available:

JTGRTBA20 Rear Adjustable Track Bar / 1"- 6.5" Lift

#### Optional HD Front / Rear Upper & Lower Control Arms Available:

JLL24F-SX	Single Flex Front Lower Control Arms - Pair / 1"- 6.5" Lift
GLL24R-SX	Single Flex Rear Lower Control Arms - Pair / 1"- 6.5" Lift
JLULF26-SX	Single Flex Front Upper Control Arms - Pair / 1"- 6.5" Lift
GULR24-SX	Single Flex Rear Upper Control Arms - Pair / 1"- 6.5" Lift

#### **Optional Accessories:**

SBE4258 Front Double Disconnect Sway Bar End Links / 3.5"- 6.5" Lift

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