

# Installation Instructions www.skyjacker.com

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

- Safety Glasses
- Metric & SAE Sockets / Wrenches
- Metric & SAE Hex Key Sockets / Wrenches
- Pliers
- Hammer
- Center Punch
- Drill / 7/16" Drill Bit
- Floor Jack
- Jack Stands
- Measuring Tape
- Torque Wrench



Jeep Gladiator JT 4.5" Suspension Lift

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<sup>®</sup> Customer Service at 318-388-0816 to obtain the needed items. If you have any questions or reservations about installing this product, contact SKYJACKER<sup>®</sup> 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.

I-G452 7-19 Pg 1

# **Component Box Breakdown:**

# Part #: G452LT / G452RLT

Item #	Description	Qty	Item #	Description	Qty
JL34FS-DR	FRONT D/R L/T COIL SPRING	2	JL24LLFD-L	LOWER FRONT DRV LINK	1
	(Included With G452LT)		JL24LLFP-L	LOWER FRONT PASS LINK	1
G45FS-DR	FRONT D/R L/T COIL SPRING	2	JTGULR24-L	REAR UPPER LINK	2
	(Included With G452RLT)		JLFTBA18-B	FRONT ADJUST TRACK BAR	1
G225RS-DR	REAR D/R L/T COIL SPRING	1	34RFTJN	3/4 RIGHT HAND JAM NUT	1
	(Included With G452LT)		HD34X34DTB	3/4 HEAVY DUTY ROD END	1
G230RS-DR	REAR D/R L/T COIL SPRING	1	JTGRTB-B	REAR LOWER TRACK BAR BRK	1
G235RS-DR	REAR D/R L/T COIL SPRING	1	H-BOX G452	HWDR BOX: G452LT / G452RLT	1
	(Included With G452RLT)				

# **Hardware Box Breakdown:**

# Part # H-BOX G452

Item #	Description	Qty	Item #	Description	Qty
JTG30RBS-S	REAR BUMP STOP BRACKET	2	HB-JLFTBB	HDWR BAG: FRT TRACK BAR	1
SBE4048-L	FRONT SWAY BAR END LINK	2	HB-JTGRBS	HDWR BAG: REAR BUMP STOPS	1
SBE507-L	REAR SWAY BAR END LINK	2	HB-JTGRTB	HDWR BAG: REAR TRK BAR BRK	1
RBL10	REAR BRK LINES / PAIR	1	HB-JTGSBER	HDWR BAG: REAR END LINKS	1
HB-ABSS2535	HDWR BAG: FRT BUMP STOPS	1	HB-SBENB03	HDWR BAG: FRONT END LINKS	1
HB-JL24LLF	HDWR BAG: FRT LOWER LINKS	1	I-G452	INST SHEET: G452 KITS	1

# Part # RBL10

Item #	Description	Qty	Item #	Description	Qty
RBL10S	REAR BRAKE LINE	2	BTIE-K	BLACK PLASTIC TIE	10
3CCW	3/8 COPPER CRUSH WASHER	4	I-BL	INST SHEET: BRAKE LINES	1
HC1	BRAKE LINE CLIP	2			

# **Hardware Bag Breakdown:**

# Part # HB-ABSS2535

Item #	Description	Qty	Item #	Description	Qty
ABSS2535	FRONT BUMP STOP SPACER	2	38SAEW	3/8 SAE WASHER	2
38X412BHB	3/8 X 4 1/2 BUTTON HEAD BOLT	2	38CTN	3/8 COARSE THRD N/I LOCK NUT	2

#### Part # HB-JL24LLF

Item #	Description	Qty	Item #	Description	Qty
14X1FTB	1/4 X 1 FINE THREAD BOLT	2	14FTN	1/4 FINE THREAD N/I LOCK NUT	2
14SAEW	1/4 SAE WASHER	4			

#### Part # HB-JLFTBB

Item #	Description	Qty
JLFTBB	ROD END BUSHING / .563 ID	2

# Part # HB-JTGRBS

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

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

# Part # HB-JGTRTB

Item #	Description	Qty
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	Qty
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-JGTSBER

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

Item #	Description	Qty
716USSW	7/16 USS FLAT WASHER	4
12MMN	12MM METRIC N/I LOCK NUT	2

# **Component Box Breakdown:**

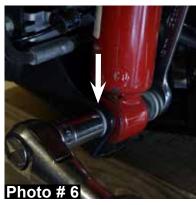
# Part #: G45B / G45M

Item #	Description	Qty	Item #	Description	Qty
B8388	FRONT BLACK MAX SHOCK	2	B8397	REAR BLACK MAX SHOCK	2
	(Included With G45B)			(Included With G45B)	
M9388	FRONT M95 MONOTUBE SHK	2	M9397	REAR M95 MONOTUBE SHOCK	2
	(Included With G45M)			(Included With G45M)	

# **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. (See Photo # 1)
- 4. Remove the OEM front skid plate using a 13mm socket / wrench. (See Photo # 2)
- 5. Remove the OEM front sway bar end links using a 6mm hex key socket / wrench & 18mm socket / wrench. (See Photo # 3)
- 6. Remove the OEM front track bar using a 21mm socket / wrench. (See Photo # 4)
- 7. Disconnect the OEM drag link from the OEM pitman arm using a 21mm socket / wrench. (See Photo # 5)
- 8. Remove the OEM front shocks using a 18mm socket / wrench. (See Photo # 6)
- 9. Disconnect the OEM front brake line brackets from the OEM front lower control arms using a 15mm socket / wrench. (See Photo # 7)











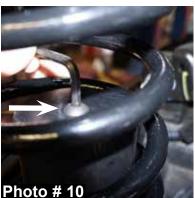




- 10. Mark the location of the OEM front driveshaft / flange at the front differential & disconnect using a 15mm socket / wrench. (See Photo # 8)
- 11. Disconnect the wiring harness from the passenger side OEM front upper control arm using pliers.
- 12. Disconnect the wiring harness from the OEM 4WD acuator. (See Photo # 9)
- 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 # 10) **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 & connect the OEM front driveshaft using the OEM hardware & a 15mm socket / wrench. (See Photo # 8)
- 17. Connect the OEM drag link to the OEM pitman arm using the OEM hardware & a 21mm socket / wrench. (See Photo # 5)
- 18. Connect the OEM vent hose to the front differential using pliers.
- 19. Connect the wiring harness to the OEM 4WD acuator. (See Photo # 9)
- 20. Connect the wiring harness to the passenger side OEM front upper control arm.
- 21. 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.
- 22. 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)

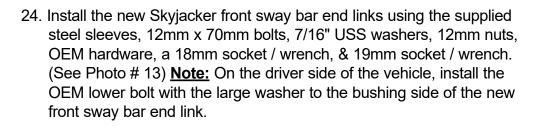


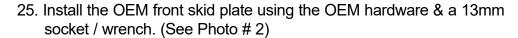






23. Install the new Skyjacker front shocks using the supplied polyurethane bushings, steel sleeves, OEM hardware & a 18mm socket / wrench. Note: The new front shocks use the larger inside diameter polyurethane bushings / longer steel sleeves for the front upper shock mounts & the smaller inside diameter polyurethane bushings / shorter steel sleeves for the front lower shock mounts. (See Photo # 12)





- 26. Install the front tires / wheels using a 22mm socket & lower the front of the vehicle to the ground. (See Photo # 1)
- 27. 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 # 14) **Note:** Do not tighten at this time.
- 28. 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.
- 29. 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 # 15) **Note:** Fully tighten the OEM hardware at this time.
- 30. Tighten the supplied jam nut of the new Skyjacker adjustable front track bar using a 1 1/8" wrench.

# **Rear Installation:**

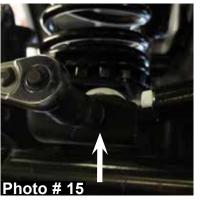
- Block the front tires / wheels, raise the rear of the vehicle, support the frame rails, & rear differential using jack stands.
- 2. Remove the rear tires / wheels using a 22mm socket. (See Photo # 16)





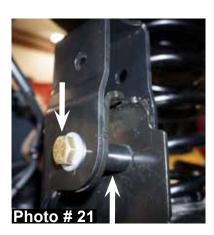


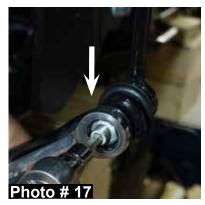




- 3. Remove the OEM rear sway bar end links using a 6mm hex key socket / wrench & 18mm socket / wrench. (See Photo # 17)
- 4. Disconnect the OEM rear track bar from the rear differential using a 21mm socket / wrench. (See Photo # 18)
- 5. Remove the OEM rear shocks using a 21mm socket / wrench. (See 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.
- 8. 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)
- 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)
- 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 # 22)













- 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 # 23) **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. <a href="Note: Note: The new rear coil springs are side specific">Note: The new rear coil spring will be installed on the driver side of the vehicle & the longer new rear coil spring will be installed on the <a href="passenger">passenger</a> side of the vehicle. See the list below for specific new rear coil spring part # & location information. Also, be sure when installing the new rear coil springs that the tab of each OEM rear upper coil spring isolator aligns with the hole of each OEM rear upper coil spring mount.

#### **Skyjacker 2-Stage Variable Rate Rear Coil Spring Locations:**

#### **Non-Rubicon Models:**

Driver Side Rear Part #: G225RS-DR (Shorter Rear Coil Spring)

Passenger Side Rear Part #: G230RS-DR (Longer Rear Coil Spring)

#### Rubicon Models:

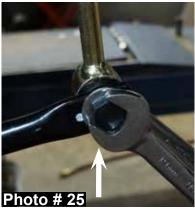
Driver Side Rear Part #: G230RS-DR (Shorter Rear Coil Spring)

Passenger Side Rear Part #: G235RS-DR (Longer Rear Coil Spring)

- 13. Raise the rear differential in order to load the new Skyjacker rear coil springs & install the new Skyjacker rear shocks using the supplied polyurethane bushings, steel sleeves, OEM hardware & a 21mm socket / wrench. (See Photo # 24)
- 14. 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 # 25)
- 15. Disconnect the OEM rear ABS lines from the OEM rear flex brake lines.
- 16. 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 # 26)
- 17. 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.





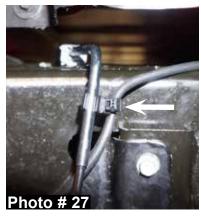




- 18. Lubricate the rubber keepers of the OEM ABS lines at the frame using a spray lubricant & adjust upward in order to reconnect the OEM ABS lines to the OEM ABS line frame brackets.
- Remove the OEM ABS line clip on the hard brake lines & relocate downward using the supplied plastic ties. (See Photo # 27)
- 20. Attach the OEM ABS lines to the new Skyjacker rear stainless steel brake lines using the supplied plastic ties. (See Photo # 28)
- 21. Install the rear tires / wheels using a 22mm socket & lower the rear of the vehicle to the ground. (See Photo # 16)
- 22. 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 # 29)

#### **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. (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.

I-G452

	]	ORQUE SPE	CIFICATION	<u>NS</u>	
	INCH SYSTEM			METRIC SYSTEM	
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	Class 10.9
<u>5/16</u>	15 FT LB	20 FT LB	6MM	5 FT LB	9 FT LB
3/8	30 FT LB	35 FT LB	8MM	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
<u>5/8</u>	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.

#### 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:

JLFTBA18 Front Adjustable Track Bar / 1"- 4.5" Lift JTGRTBA20 Rear Adjustable Track Bar / 1"- 4.5" Lift

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

JLZ4LLF	HD Front Lower Control Arms - Set / 1"- 4.5" Litt
GULR24	HD Rear Upper Control Arms - Set / 1"- 4.5" Lift
JLL24F-SX	Single Flex Front Lower Control Arms - Pair / 1"- 6" Lift
GLL24R-SX	Single Flex Rear Lower Control Arms - Pair / 1"- 6" Lift
JLULF26-SX	Single Flex Front Upper Control Arms - Pair / 1"- 6" Lift
GULR24-SX	Single Flex Rear Upper Control Arms - Pair / 1"- 6" Lift

#### **Optional Accessories:**

JLOSM	Front Outboard Shock Mounting Brackets
SBE4238	Front Double Disconnect Sway bar End Links / 2"- 3" Lift
SBE4258	Front Double Disconnect Sway bar End Links / 3.5"- 6" Lift