

(Part # SB76896) 07-13

Jeep JK Atlas Rear Bumper w/Tire

Parts Included Qty		Parts Included	
S/B76896-01		1/4"-20 BLACK HEX NUT	
93-9191 ATLAS REAR BUMPER 1		90-6912 HARDWARE PACK:	
90-6910 HARDWARE PACK: Rear Bumper	1	3/8" X 1" BLACK SOCKET HEAD BOLT	2
1/2" X 1 1/2" HEX BOLT GR. 8	4	3/8" NYLOCK NUT	2
1/2" HARDENED FLAT WASHER	4	3/8" USS FLAT WASHER	2
7/16" X 4 1/2" GR. 8 HEX BOLT	4	90-6913 HARDWARE PACK: Wheel Mount	1
7/16" USS FLAT WASHER	8	3/8" X 1" HEX HEAD BOLT GR. 8	5
7/16" SPLIT LOCK WASHER	4	3/8" STOVER NUT	5
7/16" HEX FINISH NUT	4	3/8" HARDENED FLAT WASHER	10
S/B76896-02		90-6914 HARDWARE PACK: Main Pin	1
93-9215 TIRE GATE	1	1/2" X 6 1/2" HEX BOLT GR. 8	1
90-4536 MAIN PIN	1	1/2" USS FLAT WASHER	1
90-9214 CAM WHEEL	1	90-6915 HARDWARE PACK: Light Tab	1
90-3925 NUT PLATE: Rear Bumper	2	3/8" X 1" HEX HEAD BOLT GR. 8	2
93-9182 LIGHT TAB	2	3/8" STOVER NUT	2
93-9183 WHEEL MOUNT STATIONARY BRACKET	1	3/8" USS FLAT WASHER	4
93-9187 WHEEL MOUNT ADJUSTABLE BRACKET	1	90-6916 HARDWARE PACK: Cam Wheel	1
90-4537 STRIKER PIN	1	3/8" X 3/4" BLACK ALLEN HEAD BOLT	1
90-4552 BILLET CAM WHEEL CAP	1	90-6917 HARDWARE PACK: Trail Jack	1
90-9285 MAIN PIN NUT PLATE	1	93-9288 TRAIL JACK MOUNT	
90-9287 STAINLESS PIN WASHER	2	020110 U-BOLT: 5/16" X 2 1/2" X 3 3/16"	2
93-9241 3RD BRAKE LIGHT LOWER BRACKE	Т 1	5/16" NYLOCK NUT	4
93-5567 3RD BRAKE LIGHT UPPER BRACKET	1	5/16" SAE FLAT WASHER	4
90-4560 WHEEL MOUNT STUD: 1/2"-20	3	1/2" X 1 1/4" GR. 8 HEX BOLT	2
90-4219 LUG NUTS: 1/2"-20	3	1/2" USS GR.8 FLAT WASHER	2
90-6911 HARDWARE PACK: Wheel Mount Brkt	1	1/2" SPLIT LOCK WASHER	2
1/2" X 1" HEX BOLT GR. 8	4	90-6925 HARDWARE PACK:	1
1/2" HARDENED FLAT WASHER	8	5/16" X 1" SOCKET ALLEN HEAD BOLT	3
1/2" STOVER NUT	4	S/B RATCHET STRAP	2
90-6932 HARDWARE PACK: 3rd Brake Light	1	90-6931 HARDWARE PACK: Striker Pin	1
1/4"-20 X 1/2" BLACK BUTTON HEAD BOLT	2	7/16" X 1" HEX NUT Gr. 8	1
1/4" BLACK USS WASHER	2	7/16" SAE FLAT WASHER Gr. 8	1

SMITTYBILT. The Original

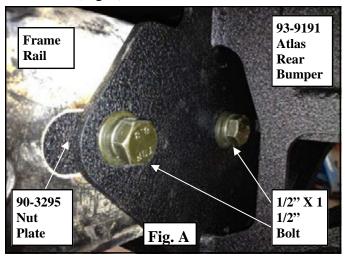
Installation Instructions:

(Part # SB76896) 07-13 Jeep JK Atlas Rear Bumper w/ Tire Gate

Step 1: Unbolt and remove the **OE** rear bumper, hitch, and from the vehicle. These items will not be reused.

Step 2: Unclip the 3rd brake light wiring harness. Unbolt and remove the 3rd brake light housing from the vehicle.

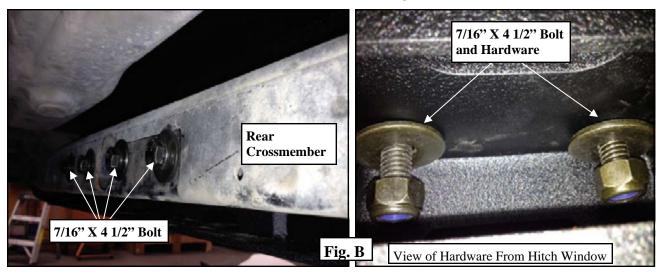
Step 3: Install the (2) nut plates (90-3925) into the rear frame rails and align the nuts with the outer slots in the frame. (Fig A)



Step 4: Carefully raise the Atlas rear bumper (93-9191) against the outer frame rails. Secure to the outer frame rails and previously installed nut plates (90-3925) using the (4) supplied 1/2" X 1 1/2" bolts and washers. Leave the bolts loose at this time. (Fig A)

<u>Step 5:</u> Install the (4) 7/16" X 4 1/2" bolts and hardware through the rear crossmember and into the bumper hitch. (Fig B)

NOTE: Use the window in the hitch to access and tighten the 7/16" hardware.



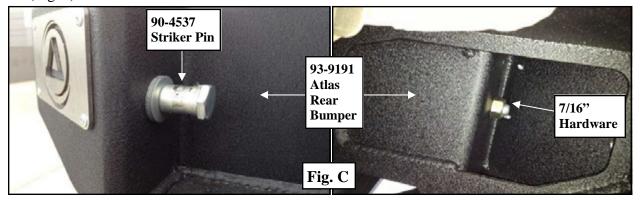
Step 6: Torque the **7/16**" bumper hardware to **55** ft./lbs. and **1/2**" hardware the **80** ft./lbs. (Fig B)

SMITTYBILT. The Original

Installation Instructions:

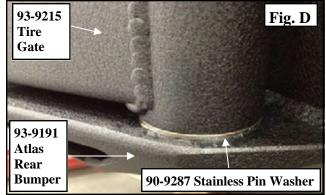
(Part # SB76896) 07-13 Jeep JK Atlas Rear Bumper w/ Tire Gate

<u>Step 7:</u> Install the striker pin (90-4537) using the 7/16" hardware from pack (90-6931) onto the driver side of the Atlas rear bumper (93-9191). Torque the 7/16" hardware to 55 ft./lbs. (Fig C)



Step 8: Grease the hole in the tire gate (93-9215), the main pin (90-9214), the surface the gate sits on, and the location that the adjustment cam rides on. (Fig E)

Step 9: Carefully raise and install the tire gate (93-9215) into the mounting pocket in the Atlas rear bumper. Insert (1) stainless pin washer (90-9287) under the tire gate. If there is additional room you may insert an additional stainless pin washer (90-9287) to close the gap. (Fig D)



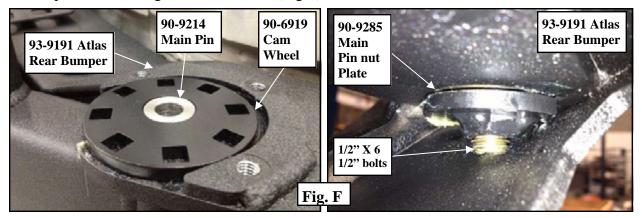
Step 10: Slide the main pin (90-9214) down through the hole in the Atlas rear bumper, stainless pin washer(s), tire gate, and into the lower bumper. Do not tighten at this time. (Fig E) *NOTE: The pin will be installed with the reduced shoulder on top*.





(Part # SB76896) 07-13 Jeep JK Atlas Rear Bumper w/ Tire Gate

Step 11: Close the tire gate. Install the cam wheel (90-6919) over the main pin shoulder. Install the 1/2"X 6 1/2" bolt and washer through the main pin into the (90-9285) main pin nut plate. Do not tighten at this time. (Fig F)

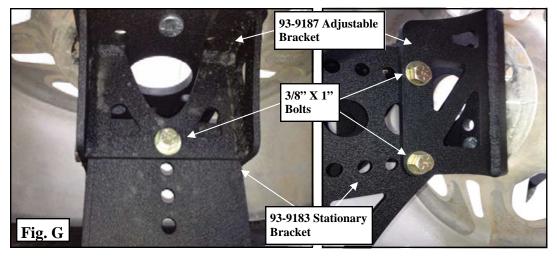


<u>Step 12:</u> Using the vehicle spare tire as a guide, set the adjustable wheel mount adjustable bracket (93-9187) on the backside of the rim mounting surface. Determine the bolt pattern by matching up the corresponding holes. Mark the holes that apply to your bolt pattern. (Fig A) *NOTE: The wheel mount plate is fully adjustable to accommodate multiple bolt patterns for future axle upgrades.*

Step 13: Install the wheel mount studs (90-4560) into the adjustable wheel mount plate.

NOTE: The studs may be pressed into place or drawn in by tightening the washer and nut.

Step 14: Assemble the wheel mount bracket (adjustable bracket 93-9187 & stationary bracket 93-9183) using the supplied (5) 3/8" X 1" bolts and hardware. Leave the bolts loose at this time. Lay the spare tire face down on the ground and install the wheel mount bracket temporarily onto the spare tire. (Fig. G)



<u>Step 15:</u> With the spare tire face down, lay a ruler or a flat bar across the tire and adjust the wheel mount bracket assembly until the base makes contact with the ruler or flat bar. Torque the wheel mount bracket assembly bolts according to the chart. (Fig. H) **NOTE:** The assembled bracket may not line up perfectly with the straight edge.



(*Part # SB*76896)

07-13 Jeep JK Atlas Rear Bumper w/

Straight Edge

Straight Edge

Wheel Mount
Assembly
Bracket

Tire

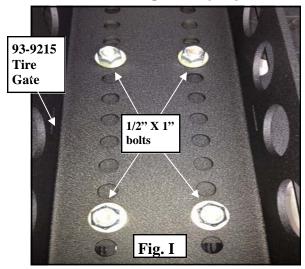
Rim Face

Fig. H

Step 16: Install the wheel mount bracket assembly onto the tire gate assembly using the (4) supplied 1/2" X 1" hardware. Torque 1/2" hardware to 80 ft./lbs. (Fig. I)

NOTE: The size of the spare tire will determine the mounting height of the bracket. If possible, it is better to have the tire fit tighter against the straight edge/tire gate to avoid excess vibration.

TIP: For off-road applications, raise the tire position for more departure angle. For street driven applications, lower the tire position for greater rear window vision.



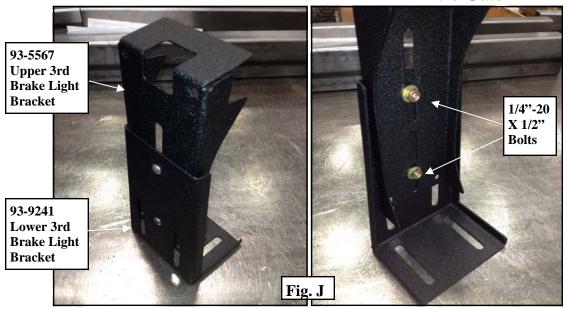
<u>Step 17:</u> Very carefully, close the tire gate assembly and watch for tire gate clearance over top of the bumper. *NOTE: Be careful not to scratch the top of the bumper.*

Step 18: Install the spare tire to the tire mount bracket assembly using the supplied (3) 1/2"-20 lug nuts (90-4219). Torque to 65 ft,/lbs.

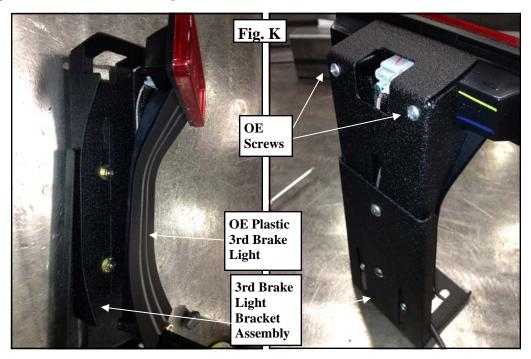
Step 19: If a third brake light is being used, install the third brake light upper bracket (93-5567) into the third brake light lower bracket (93-9241). Secure using the (2) supplied 1/4"-20 X 1/2" black button head bolts and hardware through the slots. (Fig. J)



(Part # SB76896) 07-13 Jeep JK Atlas Rear Bumper w/ Tire Gate



<u>Step 20:</u> Remove the (2) **OE** screws from the **OE** plastic third brake light assembly. Install the **OE** front plastic panel and lens into the new third brake light assembly using the (2) previously removed **OE** screws. (**Fig. K**)



<u>Step 21:</u> Secure the third brake light bracket (93-5663) assembly to the top of the tire gate assembly using the supplied (2) 3/8" X 1" black Allen head bolts and hardware. (Fig. L)



(Part # SB76896) 07-13 Jeep JK Atlas Rear Bumper w/ Tire Gate

Step 22: Extend the 3rd brake light wiring harness to the passenger side hinge, then up the tire gate. This can simply be done by splicing the wire and using some insulated butt splice connectors and 18 gauge wire, extend the wire to the appropriate length. It is recommended to have this done by an experienced electrical installer. (**Fig. L**)

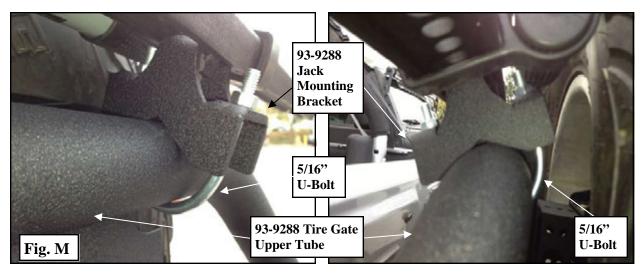


<u>Step 23:</u> Install the (1 per side) light tabs (93-9182) to the mounting holes in the tire gate. Secure using the (1 per side) supplied 3/8" X 1" bolts and hardware. (Fig. L)



(Part # SB76896) 07-13 Jeep JK Atlas Rear Bumper w/ Tire Gate

<u>Step 24:</u> If you are installing a trail jack, secure the jack mounting brackets (93-9288) to the upper tube of the tire gate using the (2) 5/16" U-bolts and hardware. (Fig. M)



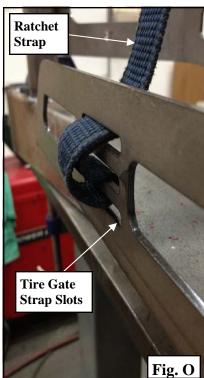
<u>Step 25:</u> Install the trail jack to the previously installed jack mounts using the (2) supplied 1/2" X 1 1/4" bolts and washers. Check that the tire gate assembly opens fully and that the jack does not contact the body of the jeep. Torque the 5/16" U-bolt hardware to 25 ft./lbs and the 1/2" hardware to 55 ft./lbs. (Fig. N)



<u>Step 26:</u> If you are installing a gas cans, install the gas cans with the spouts facing toward the outside of the tire gate, using the supplied ratchet straps. Lace the ratchet strap through the tire gate slots according to figure O. (Fig. O)



(Part # SB76896) 07-13 Jeep JK Atlas Rear Bumper w/ Tire Gate



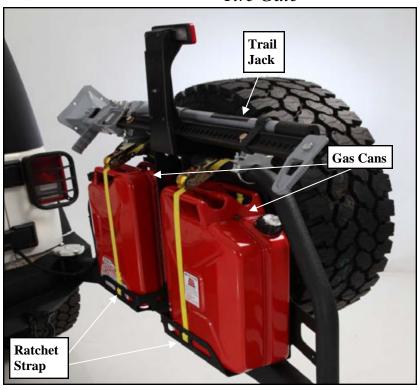
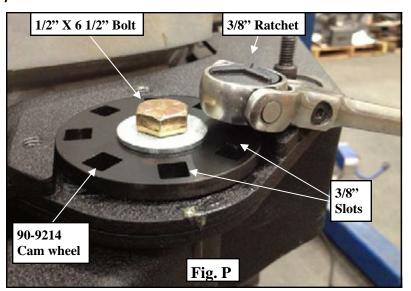


Fig. F

Step 27: With the tire gate fully loaded, adjust the cam wheel (90-9214) to make sure gate closes properly. Using a 3/8" ratchet, insert the ratchet into the cam wheel and rotate the cam wheel until it lifts the weight of the gate. Inspect and ensure the latch and striker mate properly. Once the striker and latch are aligned properly, install the 3/8" X 3/4" black Allen head bolt through the window in the cam wheel to lock it in place. Torque the 3/8" bolt to 18 ft./lbs. (Fig. P)

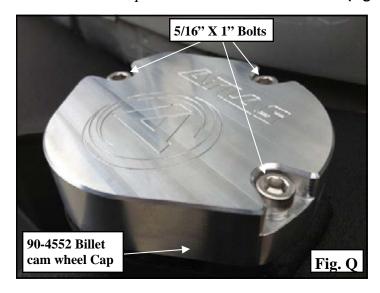


Step 28: Torque the previously installed 1/2" X 6 1/2" bolt to 80 ft./lbs. (Fig. P)



(Part # SB76896) 07-13 Jeep JK Atlas Rear Bumper w/ Tire Gate

Step 29: Install the billet cam wheel cap (90-4552) using the (3) supplied 5/16" X 1" stainless steel Allen head bolts. Torque 5/16" hardware to 10 ft./lbs. (Fig. Q)



Step 30: Installation of the Atlas rear bumper and tire gate is now complete. (Fig. R)





(Part # SB76896) 07-13 Jeep JK Atlas Rear Bumper w/ Tire Gate

Use this only as a guide for hardware without a called out torque specification in the instruction manual.

Bolt Torque and ID									
Decimal System			Metric System						
All Torques in Ft. Lbs. Maximums									
Rolt Size	Grade 5	GradeS	Rolt Size	Class 9.8	Class 10.9	Class 12.9			
5/16	15	20	M6	5	9	12			
3/8	30	45	M8	18	23	27			
7/16	45	8	M10	32	45	50			
1/2	65	90	M12	55	75	90			
9/16	95	130	M14	85	120	145			
5/8	135	175	M16	130	165	210			
3/4	185	280	M18	170	240	290			
D									
□ T L X (No. of Marks+2) □ T L X									
G = Grade (Bolt Strength)			P = Prop erty Class (Bolt Strength)						
D = Nominal Diameter (Inches)			D = Nominal Diameter (Millimeters)						
T - Thread Count (Threads per Inch) T - Thread Fitch (Thread Width, mm)									
L = Length (Inches) L = Length (Millimeters) X = Description (Hex Head Cap Screw) X = Description (Hex Head Cap Screw)									