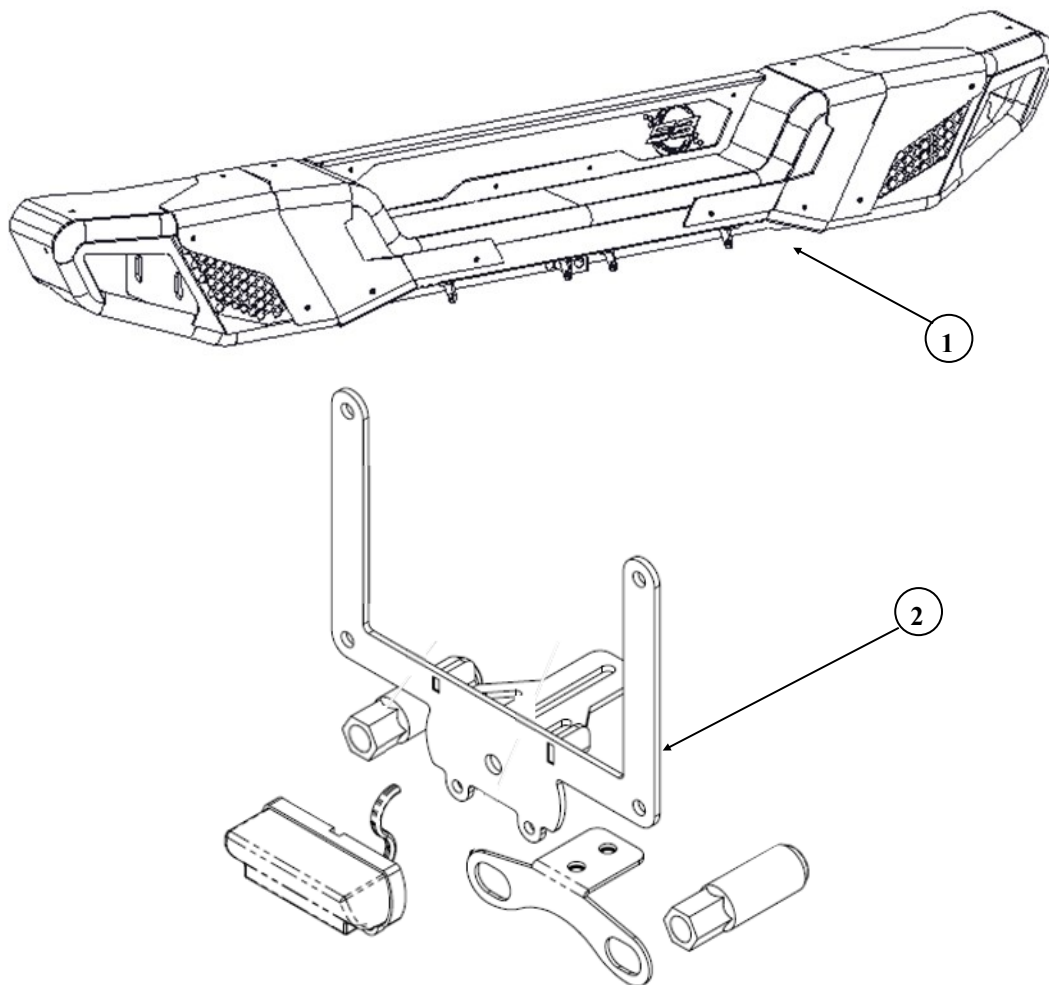




Installation Instructions:

*Apollo Rear Bumper (Part # SB77784)
2018+ Jeep JL 2 and 4 Door*

CAUTION: *This bumper is not rated for towing.*



SB77784 PARTS INCLUDED	Qty.	ID.
APOLLO REAR BUMPER	1	1
LICENSE PLATE RELOCATION BRACKET (SB7734)	1	2
M14 NUT PLATE (77784)	1	-
LED LIGHT MOUNTING BRACKETS (77784)	4	-
HARDWARE PACK (90-77784-01)	1	-
M12 X 100 MM HEX BOLTS Gr. 10.9	4	-
M12 FLAT WASHER Gr. 10.9	8	-

SB77784 PARTS INCLUDED	Qty.	ID.
M12 NYLOCK NUT Gr. 10.9	4	-
M14 X 40MM HEX BOLTS Gr. 10.9	2	-
M14 FLAT WASHER Gr. 10.9	2	-
M14 LOCK WASHER Gr. 10.9	2	-
HARDWARE PACK (90-77784-02)	1	-
M6 X 16 MM BHCS BOLT Gr. 10.9	4	-
M6 NYLOCK NUT Gr. 10.9	2	-



Installation Instructions:

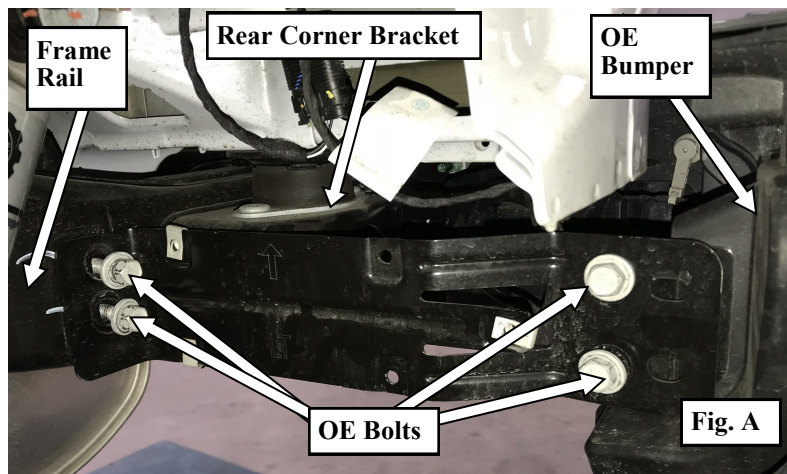
*Apollo Rear Bumper (Part # SB77784)
2018+ Jeep JL 2 and 4 Door*

INSTALLATION:

NOTE : *These instructions were performed on a Rubicon model equipped with metal bumpers, Sport and Sahara models with plastic bumpers may differ slightly. If your Jeep has plastic bumpers with sensors, you will need to purchase OE Rubicon backup sensor sockets and retainers from your local dealership, as they are not removable.*

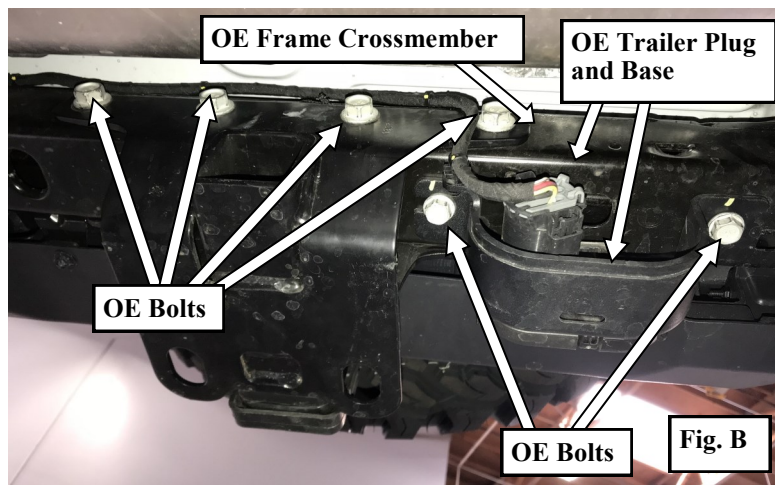
Step 1: Park the vehicle on a flat level surface. Apply the parking brake and chock all 4 wheels.

Step 2: Remove the (4 per side) OE bolts securing the driver and passenger side rear corner brackets to the frame rails (Fig. A).



NOTE: *Configuration will vary per model and options package.*

Step 3: Using an 18mm wrench, remove the (4) OE bolts securing the OE rear bumper to the OE frame crossmember (Fig. B).

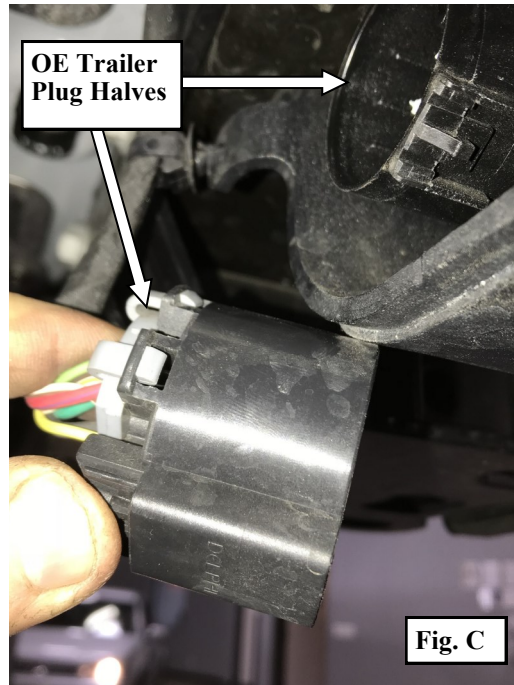




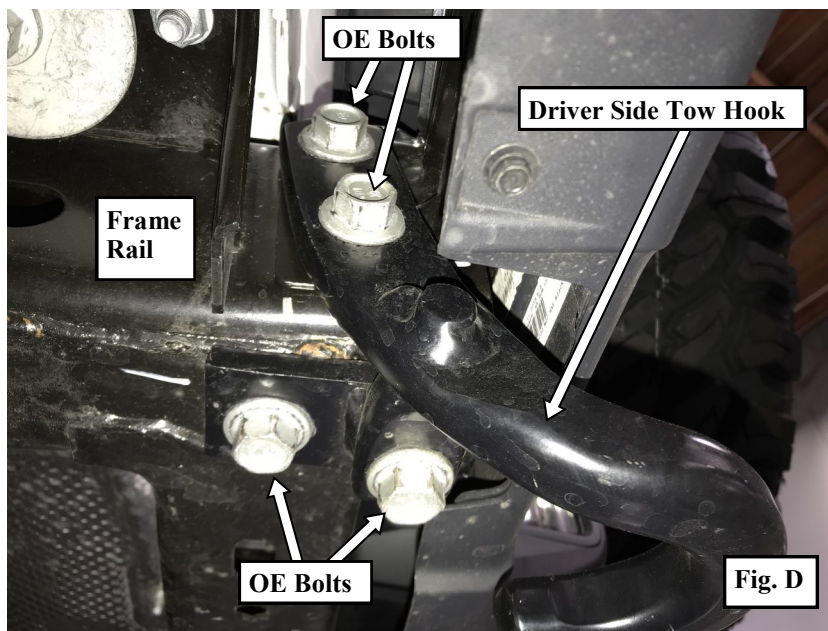
Installation Instructions:

Apollo Rear Bumper (Part # SB77784)
2018+ Jeep JL 2 and 4 Door

Step 4: If equipped, disconnect the trailer plug and unbolt the base from the frame (**Fig. C**).



Step 5: On the driver side, remove the (4) OE bolts and remove the tow hook from the frame. On the passenger side, remove the (2) OE bolts securing the OE front bumper to the side of the frame rail (**Fig. D**).





Installation Instructions:

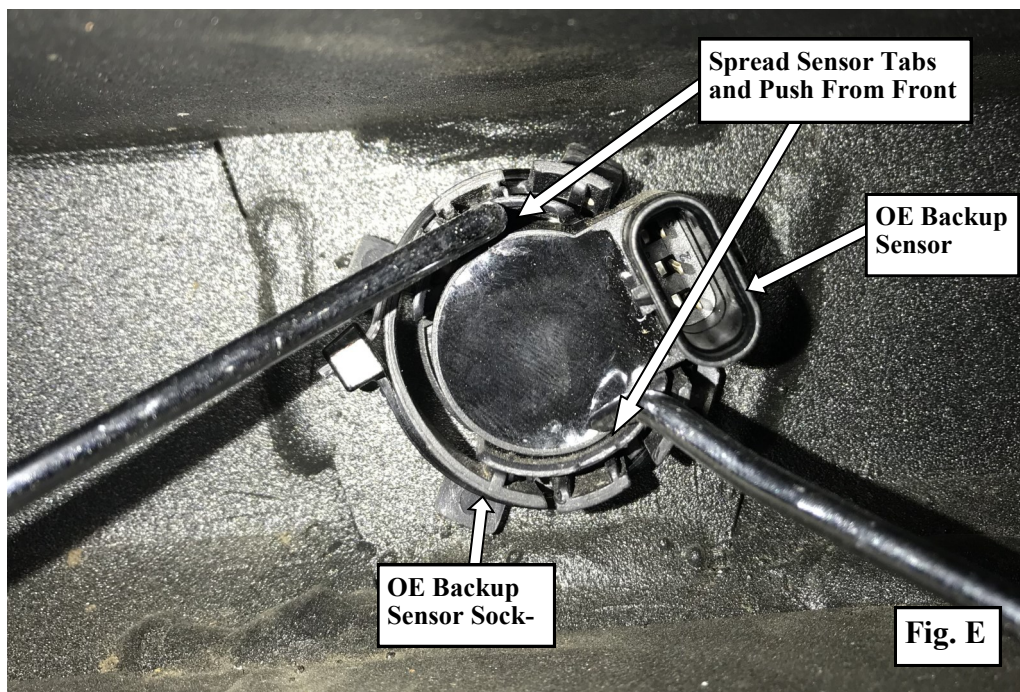
*Apollo Rear Bumper (Part # SB77784)
2018+ Jeep JL 2 and 4 Door*

Step 6: Under the driver side rear quarter panel, disconnect the backup sensor wiring harness connectors.

Step 7: Carefully remove the **OE** rear bumper from the vehicle. Save the **OE** hardware for reinstallation.

Step 8: Unplug the **OE** wiring harness from the **OE** backup sensors and remove the **OE** backup sensors by spreading the back of the sockets, where clipped over the sensor tabs, while pushing the sensors out from the front (**Fig E**).

NOTE: Be sure the OE backup sensor O-rings are not lost during removal.



Step 9: **Metal Rubicon Bumper Only:** Disengage the locking tabs securing the outer retaining ring to the socket. Carefully push the sockets out from the backside and remove from the **OE** rear bumper.

NOTE: Be sure to note the orientation of the back-up sensor retainers in the OE bumper prior to removal for reinstallation.



Installation Instructions:

*Apollo Rear Bumper (Part # SB77784)
2018+ Jeep JL 2 and 4 Door*

Step 10: Replace plastic O-ring from back up sensor with adhesive foam O-ring supplied with the kit (**Fig. F, F-a**).

NOTE: *For vehicles without back-up sensors, install block off plugs into the Apollo rear bumper instead.*



Step 11: Install the round adhesive foam pad in the back of the back up sensor (**Fig. F-b**).





Installation Instructions:

Apollo Rear Bumper (Part # SB77784)
2018+ Jeep JL 2 and 4 Door

Step 12: Install the back up sensor with previously installed O-ring and foam pad to the sensor bracket and securing with the plastic retainer (**Fig. G**).



Step 13: Install the LED light brackets to the Apollo rear bumper using (1) M6 X 16mm bolt (1) M6 Nylock nut, (4) brackets total (**Fig. H**).





Installation Instructions:

*Apollo Rear Bumper (Part # SB77784)
2018+ Jeep JL 2 and 4 Door*

Step 14: Install the 6" LED light to the LED light bracket previously install, using the supplied hardware with the light kit (**Fig. I**).



Step 15: Insert the nut plate in the rear passenger side of the frame See (**Fig. I-a**). Once the bumper is installed, use (2) M14 X 40mm hex bolts, (2) M14 lock washers and (2) M14 washers to bolt to the nut plate. Reuse OE tow hook hardware on driver side.



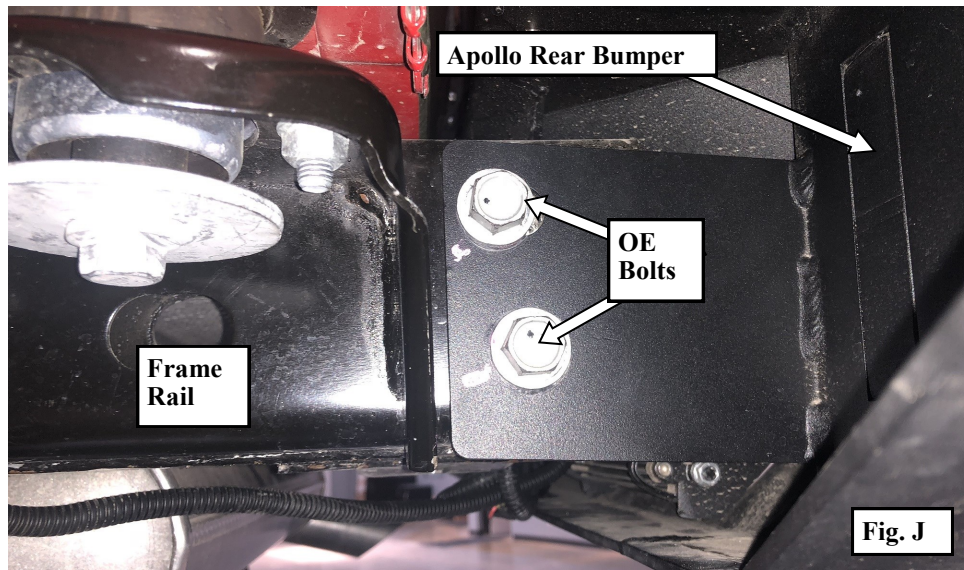


Installation Instructions:

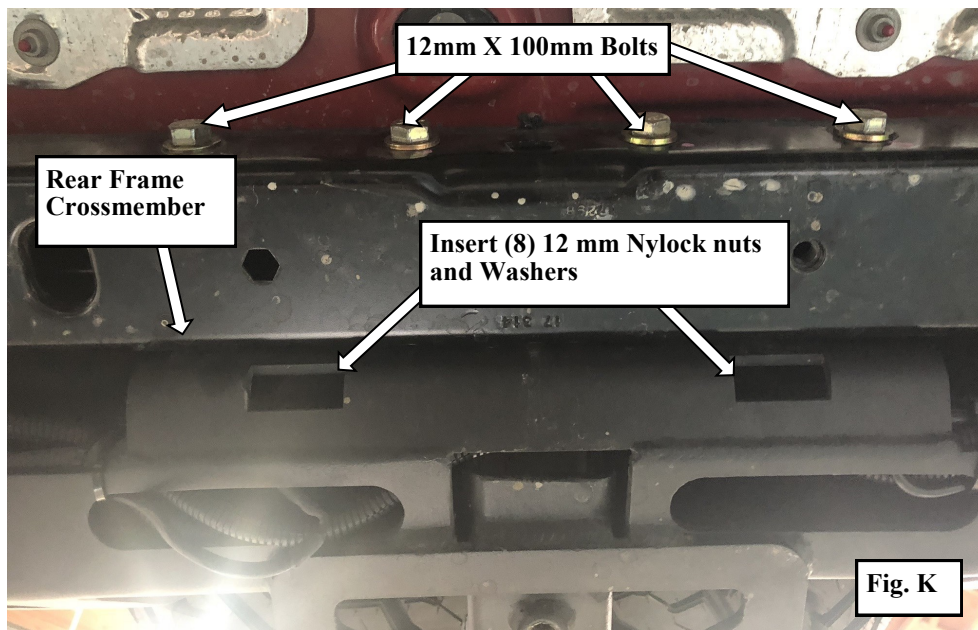
Apollo Rear Bumper (Part # SB77784)

2018+ Jeep JL 2 and 4 Door

Step 16: *NOTE: This step might require 2 people.* Carefully raise the rear bumper (Apollo Bumper 77784) against the outer frame rails and align the mounting holes. Secure the rear bumper to the outer frame rails using the previously removed OE bolts. Leave the bolts loose at this time (Fig. J).



Step 17: Secure the Apollo rear bumper (77784) to the rear frame crossmember. Using (4) M12 X 100 mm hex bolts, (8) M12 washers and Nylock nuts, supplied with the bumper kit. Level the rear bumper and torque the M12 bolts to 80 ft-lbs (Fig. K).



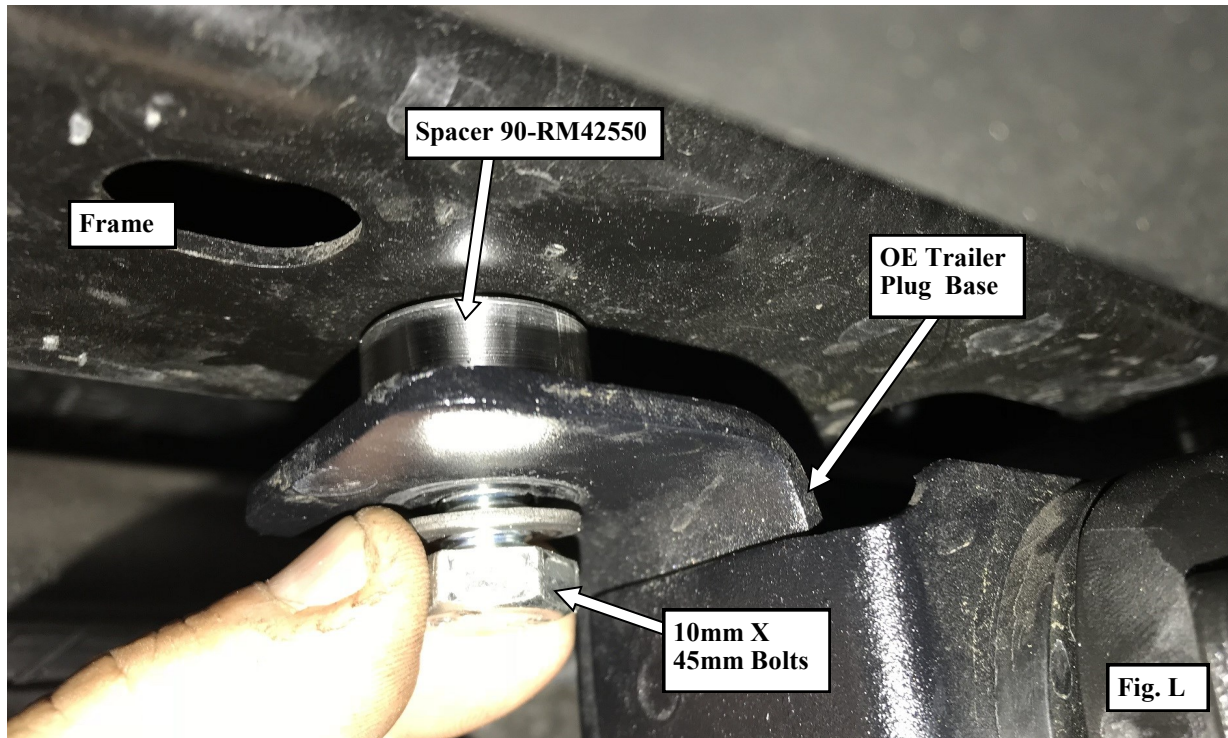


Installation Instructions:

*Apollo Rear Bumper (Part # SB77784)
2018+ Jeep JL 2 and 4 Door*

Step 18: Torque all the OE bumper mounting hardware to manufacturer's specifications.

Step 19: If applicable, reinstall the trailer plug base to the frame using the (2) provided 10mm X 45mm bolts and spacers (90-RM42550) and reconnect the trailer plug. Torque the 10mm bolts to 40 ft-lbs (Figs. C and L).



Step 20: If you are planning on wiring the LED lights to a dash switch; use the hardware and instructions provided with the LED light kits. Test, aim & adjust the LED lights at this time.

IMPORTANT!: *If planning on wiring LED lights into the OE reverse light circuit; it is recommended this task is performed by qualified automotive electrician.*

Step 21: Install license plate relocation bracket (SB7734) according to the instructions included with kit.

Step 22: Recheck all hardware for proper torque at this time. Torque all hardware according to manufacturer's specifications or chart on page 11.



Installation Instructions:

*Apollo Rear Bumper (Part # SB77784)
2018+ Jeep JL 2 and 4 Door*

Step 23: Installation is now complete (Fig. M).



Fig. M



Installation Instructions:

Apollo Rear Bumper (Part # SB77784)

2018+ Jeep JL 2 and 4 Door

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						
Bolt Size	Grade 5	Grade8	Bolt 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	60	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

1/2-13x1.75 HHCS

D T L X

Grade 5 Grade 8

(No. of Marks + 2)

M12-1.25x50 HHCS

D T L X

P

G = Grade (Bolt Strength)

D = Nominal Diameter (Inches)

T = Thread Count (Threads per Inch)

L = Length (Inches)

X = Description (Hex Head Cap Screw)

P = Property Class (Bolt Strength)

D = Nominal Diameter (Millimeters)

T = Thread Pitch (Thread Width, mm)

L = Length (Millimeters)

X = Description (Hex Head Cap Screw)

Product cleaning and maintenance instructions

Stainless Steel Finish – Aluminum polish may be used to polish small scratches and scuffs on the finish. Mild soap, window or glass cleaner may be used to clean the finish. **Dual state powder coat finish** – Mild soap, window or glass cleaner may be used to clean the finish. In order to protect the finish, you may wax your product on a regular basis with pure carnauba automotive wax. Do not use any types of soap, polish or was that contains abrasive that could damage the finish. **Textured coated finishes** should be cleaned with a mild soap on a damp sponge. Do not apply polish or was that requires to be removed by means of buffing. This type of wax is commonly used at car wash facilities. **Chrome Finish** – Mild soap, window or glass cleaner may be used to clean the finish. In order to protect the finish you should wax your product on a regular basis with pure carnauba automotive wax. Do not use any types of soap, polish or was that contains abrasive that could damage the finish.



Installation Instructions: *Apollo Rear Bumper (Part # SB77784)* *2018+ Jeep JL 2 and 4 Door*

Limited Warranties

Smittybilt's products are covered under the following limited warranties only. Note that the duration of the limited warranty differs according to the material and finish of the product purchased. Subject to the duration and conditions of the limited warranty stated below, Smittybilt warrants to the original retail purchaser that its products are free from defects in material and workmanship. All other warranties and representations express or implied, are hereby disclaimed, including fitness for merchantability and buyer's intended use or purpose. All parts are sold "AS IS" except for the limited warranties granted herein. Buyer assumes all risks as to the selection, suitability and performance of all goods and products selected. This limited warranty does not cover damage or impairment in any part due to misuse, improper installation, accident or contact with on-road or off-road hazards, product modification, improper or inadequate cleaning and/or maintenance. Smittybilt is not responsible for items damaged during shipping. This warranty is not transferable from the original buyer. For the original Buyer to be eligible for the limited warranty coverage, the Buyer must provide proof of purchase. Smittybilt strongly recommends returning the warranty registration card.

Customer's remedy hereunder shall be limited only to repair or replacement (at Smittybilt's option) of any defective part(s) returned to Smittybilt at customer's expense. The determination of whether or not a returned part is defective or subject to coverage under the limited warranties stated herein shall be made at Smittybilt's sole discretion.

To assure product quality, Smittybilt reserves the right to change product design, material, specification and finishes without prior notice to customers. This limited warranty gives you specific legal rights and you may also have other rights, which may vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply as to you. Also, some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Smittybilt reserves the right to discontinue product lines and substitute products, or provide other remedies than those listed in this limited warranty for those discontinued products.

Warning

Rollover and other types of vehicle accidents may result in serious injury or death to you, your passengers and others sharing the road. Smittybilt accessories are decorative and are not intended to reduce or avoid injury or damage in the event of an accident. The weight and location of Smittybilt accessories may affect your vehicles' handling, stability and performance, creating an increased risk of accident or rollover. Before installing any accessory, check state laws and assure that the accessory will not obscure any lights or interfere with proper operation on your vehicle's safety equipment. Consult your owner's manual and the Smittybilt instructions, or additional safety information. Smittybilt products, nor the warnings contained herein, are not a substitute for your safe driving. Don't drink and drive, always use seat belts and don't drive faster than conditions permit.