

Matrix Brush Guard System



PN XG-K201
PN XG-K221/K221B
PN XG-K240
PN XG-K261
PN XG-K281

INSTALLATION INSTRUCTIONS

Thank you for purchasing this accessory from 4xGuard. We certainly hope it provides the functionality and enhanced appearance you are expecting. If you have any questions, or wish to provide us feedback on this product, please contact us at 4xGuardInfo@gmail.com.

Safety Statement—CAUTIONS!

Like any aftermarket product there is the potential for vibration to eventually loosen any of the screws and bolts involved in the installation of this item. Therefore, **all** must be checked for tightness **after the first 100 miles, after each period of extensive off-road use, and then as part of routine vehicle maintenance for off-road use**, which is Schedule B in your Jeep owner's manual. A tube of **Threadlocker** is enclosed as a thank you gift from **4XGUARD**. It should be used during the installation in order to help ensure that the product does not loosen and fall from the vehicle—an event that could result in **vehicle damage or even an accident**.

Matrix Basic (PN XG-K201)

Product	Number	Part	Part Number	Quantity
Matrix-Basic	XG-K201	Outside mounting bracket--RS	XG-K220.01	1
		Outside mounting bracket--LS	XG-K220.02	1
		Inside mounting bracket--RS	XG-K220.03	1
		Inside mounting bracket--LS	XG-K220.04	1
		Backing plate	XG-K220.06	2
		Bow shackle bracket	XG-K220.11	2
		Instructions	XG-K200.15	1
		Sticker	XG-K020	1
		Hardware	XG-K200.07	1
			1.5" x 1/2" hex bolt gr 8	6
			1/2" lock flange nut	6
			1.25" x 7/16" hex bolt gr 8	4
			7/16" lock flange nut	4
			Threadlocker	1

1. If the vehicle is equipped with OEM tow hooks you will need to remove them. There are three bolts, two on the outside and one on the inside. Remove all three nuts holding the tow-hook bracket. The OEM, or after market, tow hooks can be re-installed later if desired.
 - Retain the two OEM bolts located on the outside rail. Clips hold these fastening systems in place. If these clips are very loose, bend over the clip TO THE OUTSIDE so the bolts will not recede into the unibody when the 4xGuard product is installed.
 - Remove the inside bolt/bracket. This can be done by breaking off the mounting clip and pushing/prying the bolt head up into the cavity of the cross member. After removing this bracket via the access hole, clean the inside bottom of the cross member.

If your vehicle does not have OEM tow hooks, you will need to buy and install PN 52090140AA, which is a “stud plate” available from any Jeep dealer. The required nuts must be obtained separately as they are no longer provided as part of the stud-plate kit. Installation instructions are available on our website.

2. Install **XG-K200.01** and **XG-K200.02** using the OEM fastening bolt/nut located along each end of the cross-member (**Threadlocker!**). Do not fully tighten at this time. See photo 1.
3. Install the backing plate Part **XG-K220.06**. Note the distances between the holes and the large rectangular opening, and insert the plate such that the end with the greatest distance is outside and with the mounting holes rearward. Maneuver the plate until the holes in the plate align with the holes in the cross member. See Photo 2.
4. Install **XG-K200.03** and **XG-K200.04** using two **7/16" x 1.25" hex bolts (Threadlocker!)**. **Important note: If you are also installing the Receiver Kit at this time then discard XG-K200.03 and XG-K200.04 and replace them at this time with XG-K261.91, the Receiver assembly.** Use the large rectangular opening to hold the backing plate in place while slipping each bolt up into a hole. A **7/16" lock flange nut** can then be fed through the opening and secured to the bolt. Do not fully tighten at this time.
5. Now bolt the two mounting brackets together along with **XG-K220.11** (which can adjusted 1 inch to suit your needs), either with or without OEM or aftermarket tow hooks. Carefully align holes in all adjoining parts. If tow hooks are not installed at this time use three (3) **1/2" x 1.5" hex bolts with 1/2" lock nuts (Threadlocker!)**. If installing tow hooks you will need to use a combination of these bolts and possibly the bolts for the OEM or aftermarket hooks. See photo 3.
6. For each side fully tighten (70 ft/lbs.) these three (3) bolts.
7. Fully tighten (65 ft/lbs.) the eight (8) nuts/bolts securing the brackets to the vehicle.

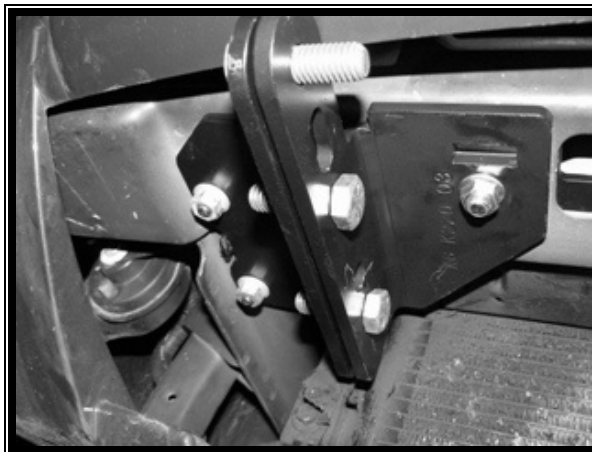


Photo 1. Passenger side view showing location of outside and inside mounting brackets.



Photo 2. Passenger side view showing location of inside mounting bracket and Backing plate.

Matrix HC Mounting Platform (PN XG-K221/K221B)

Product	Number	Part	Part Number	Quantity
Matrix-HC	XG-K221, XG-K221B	Outside mounting bracket	XG-K220.01	1
		Outside mounting bracket	XG-K220.02	1
		Inside mounting bracket	XG-K220.03	1
		Inside mounting bracket	XG-K220.04	1
		Bow shackle bracket	XG-K221.05	2
		Backing plate	XG-K220.06	2
		Light tab bracket	XG-K221.07	1
		Light tab bracket	XG-K221.08,	1
			XG-K220.09	
		Center bracket--4xGuard logo	XG-K201.10	1
		Instructions	XG-K201.15	1
		Sticker	XG-K020	1
		Hardware	XG-K221.13	1
			1.5" x 1/2" hex bolt gr 8	6
			1/2" lock flange nut	6
			1.25" x 7/16" hex bolt gr 8	4
			7/16" lock flange nut	4
			3/4" x 3/8" hex bolt gr 5	4
			3/8" lock flange nut	8
			1.25" x 3/8" hexhead bolt gr 8	4
	1/2" black plastic hole plug	2		
	3/8" black plastic hole plug	2		
	Threadlocker	1		

1. Remove license plate/bracket if so equipped and follow Matrix Basic steps 1-4 above.
2. Install part **XG-K221.05** on the outside of the flange of Parts **XG-K200.01** or **XG-K200.02** using three (3) **1/2" x 1 1/2" hex bolts** with **1/2" lock nuts (Threadlocker!)** on each side (see Photo 3).
 - For 2005-2008 vehicles, align the rear most hole of Part **XG-K221.05** with the rear most hole of Parts **XG-K200.01 and XG-K200.02**.
 - For 2008+ vehicles, align the rear most hole of Part **XG-K221.05** with the second hole from the rear most hole of Parts **XG-K200.01 and XG-K200.02**.
3. Moderately tighten these six (6) bolts and the four (4) nuts securing the brackets to the unibody (some adjustment may later be required before final tightening).
4. Install Part **XG-K220.09** (Silver) or **XG-K220.10** (Black) to Parts **XG-K221.07** and **XG-K221.08** using provided **3/8" x 3/4" hex bolts** and **3/8" lock nuts (Threadlocker!)**. Protect the fronts of these parts to avoid abrasions. Fully tighten at this time (30 ft/lbs).
5. If you are installing the Hoop Kit or Rail Kit proceed to Step 2 of those instructions now.
6. Mount the assembled unit to Part **XG-K221.05** using provided four (4) **3/8" x 3/4" hex bolts** and **3/8" lock nuts (Threadlocker!)**. It is easiest to temporarily fasten one end with the nut on the outside and then move to the other end. Do not fully tighten at this time.
7. Check alignment and fascia clearance of the product.
8. Fully tighten (65 ft/lbs.) the eight nuts/bolts securing the mounting brackets to the unibody.

9. Again check overall alignments and tighten (70 ft/lbs.) the six (6) **1/2" x 1" hex bolts** with **1/2" lock nuts**. Lastly, tighten the four **3/8" x 3/4" hex bolts**. There is some front/rear angle adjustment in the design, and generally the assembly needs to tilt forward for proper positioning—this is particularly critical when equipped with the Brush Rail Kit (See Photo 4) as improper alignment of the assembly will result in the tube ends having a downward profile.
10. The **1/2" and 3/8" black plastic hole plugs** are provided for the unused hole in the light tab gusset (used if the Grill Hoop Kit is installed) and/or the unused upper hole along the outside of the light tab brackets (used if the Brush Rail Kit is installed).

Grill Hoop Kit (PN XG-K240)

Product	Number	Part	Part Number	Quantity
Matrix-Hoop Kit	XG-K240	Hoop tube assembly	XG-K240.91	1
		Instructions	XG-K201.15	1
		Sticker	XG-K020	1
		Hardware	XG-K240.09	1
		1" x 1/2" hex bolt grade 5		2
		1.25" x 3/8" hex head bolt gr 8		2
		3/8" lock flange nuts		2
		1/2" splitlock washer		2
		Threadlocker		1

1. If you have previously installed the Matrix HC Mounting System you will need to begin by removing the six **1/2" x 1" hex bolts** that secure the Matrix assembly to the mounting brackets and lift the assembly from the vehicle.
2. Place the face of the assembly on a clean, non-abrasive surface to protect its finish.
3. Mount Part **XG-K240.91** to the Light Tab Brackets, Parts **XG-K221.07** and **XG-K221.08**, using two (2) **1/2" x 1" hex bolt** from the underside (be very careful not to cross thread) and two (2) **3/8" x 1" button head bolts** from the front side (**Threadlocker!**).
4. Tighten the 3/8" bolts first (30 ft/lbs) and then the 1/2" bolts (70 ft/lbs).
5. Proceed to either Step 6 of the Matrix HC or to Step 3 of the Rail Kit, if it needs to be installed as well.

Receiver Kit (PN XG-K261)

Product	Number	Part	Part Number	Quantity
Matrix-Receiver Kit	XG-K261	Receiver bracket assembly	XG-K261.91	1
		Instructions	XG-K201.15	1
		Sticker	XG-K020	1
		Hardware	XG-K260.05	1
		Threadlocker		1

1. **If this accessory is being installed at the same time as either the Matrix Basic or Matrix HC then proceed to Step 4 of the Matrix Basic portion of these instructions.**
2. Removal of inside mounting brackets:
 - If equipped with the Matrix–Basic remove the two (2) bow shackle brackets (Part **XG-K220.11**), and then the two (2) **inside** mounting brackets (Parts **XG-K200.03/200.04**).
 - If equipped with the Matrix–HC: (1) remove the entire assembly from the mounting brackets by unbolting the **Bow shackle brackets (XG-K220.05)**, and then remove the two (2) **inside** mounting brackets (Parts **XG-K200.03 and XG-K200.04**).
3. Place the Receiver bracket assembly (**XG-K261.91**) up against the cross member and temporarily secure by insert several **1/2" x 1 1/2" hex bolts/nuts** through the remaining **outside** mounting brackets. Finger tighten only at this time.
4. On each side align the holes in the receiver assembly with the holes in the cross member and backing plate. Attach the receiver bracket assembly to the cross member using two **7/16" x 1.25" hex bolts (Threadlocker!)**. Use the large rectangular opening to hold the backing plate in place while slipping each bolt into a hole. Once in the hole a **7/16" lock flange nuts** can be fed through the opening and secured to the bolt. Do not fully tighten at this time.
5. Complete the installation of the six (6) bolts connecting the receiver assembly, the outside mounting brackets and the Bow shackle bracket of the Matrix-Basic or the Matrix–HC.
6. Adjust the assembly for proper fit and tighten the 7/16" bolts (65 ft/lbs).
7. Return to Step 7 of the Matrix Basic or Step 9 of the Matrix HC

Brush Rail Kit (PN XG-K280), including customization of rails

Product	Number	Part	Part Number	Quantity	
Matrix-Rail Kit	XG-K280	Brush-rail assembly--RS	XG-K241.95	1	
		Brush-rail assembly--LS	XG-K241.96	1	
		Instructions	XG-K201.15	1	
		Sticker	XG-K020	1	
		Hardware	XG-K280.09	1	
			3/8" x 1" hex bolt grade 5		2
			Round tubing plug		2
			Threadlocker		1

See Step 3 regarding customization of this accessory

1. If you have previously installed the Matrix HC Mounting System you will need to begin by removing the six **1/2" x 1" hex bolts** that secure the Matrix assembly to the mounting brackets and lift the assembly from the vehicle.
2. Place the face of the assembly on a clean, non-abrasive surface to protect its finish.
3. **Customization of parts XG-K220.07 and XG-K220.08.** If the customer prefers the tubing portion of these parts to be shorter to make the product better fit their design interests, this can be easily done.
 - Secure the portion of the tubing to be removed to avoid scaring the remaining product.
 - Wrap “blue” painter’s masking tape around the tube where the cut is to be made.

- Wrap a piece of heavy paper around the tube and secure with masking tape with one edge at the cut location. Use a marker or pen to carefully mark the tube. This method provides for marking a relatively perpendicular, circular cut.
 - Accurately cut the tube taking care to avoid scaring the product.
 - File the inside and outside edges of the cut to remove burrs.
 - Use a quality spray primer and paint (Krylon®, for example) on the cut end.
 - Install/re-install the provided plastic end caps.
4. Install provided plastic end caps on Parts **XG-K220.07** and **XG-K220**. They are easier to install if lubricated with water. Use a rubber mallet or similar to avoid damage to the caps.
 5. Mount Parts **XG-K241.95** and **XG-K241.96** to Parts **XG-K221.07** and **XG-K221.08** by installing (**Threadlocker!**) the **3/8" x 1" hex bolt** in the top (round) end of the assembly.
 6. Align the two remaining holes of Parts **XG-K241.95** and **XG-K241.96** with Parts **XG-K221.07** and **XG-K221.08** and fully tighten only the hexbolt at this time (30 ft/lbs).
 7. Return to Step 6 of the instructions for the Matrix HC Mounting Platform or Step 3 of the instructions for the Grill Hoop Kit.



Photo 3. Passenger side view showing location of Light Tab Bracket relative to where the Outside and Inside Mounting Brackets meet.



Photo 4. Passenger side view showing completed installation and proper alignment of Brush Rail (note the slight forward tilt of the top of the Light Tab Brackets).

LIMITED WARRANTY

- A. There is no warranty on the finish of the product due to the nature of its intended use.
- B. Due to its intended off-road use and thus potential for damage, this product can be returned for a refund of original cost minus a **10% restocking fee** for a period of **7 calendar days** from date of receipt **if the product is in unused condition and returned in the original package with packing material**. This return policy covers defects in material and workmanship, as well as customer satisfaction. **Shipping and handling costs are non-refundable**.
- C. After the initial “product satisfaction” period (7 days), the 4XGUARD warrants the product to be free from defects in material and workmanship for a period of **1 year from date of purchase** and applicable to the original purchaser only. Exclusions—
1. Any damage caused by acts of nature, improper installation (see D below), misuse, abuse or neglect.
 2. Damage caused by impacts with any object is not covered by this warranty.
- D. For any warranty issues an authorization must be first obtained from 4XGUARD **PRIOR** to removal of the product from the vehicle. Claims require photographic evidence of the damage or defect taken **BEFORE** the product is removed. Contact: 4XGUARD@comcast.net
- E. Determination of whether or not a product is covered by this warranty will be made by 4XGUARD at its sole and exclusive discretion. If determined to be covered, 4XGUARD’s responsibility is limited to repair or replacement **of the damaged or defective part only**.
- F. 4XGUARD is not responsible for any costs, losses or damages incurred as the result of the installation and use of this product.

IMPORTANT PRODUCT USE INFORMATION

This product is designed, manufactured and installed for off-road use, and as such 4XGUARD makes no claims regarding this device and excludes any and all implied claims. 4XGUARD will not be responsible for any altered products and any improper installation or use of our products. Specifically, the products are not designed to withstand more than 1,000 pounds of vehicle weight without the potential of breakage, and are not intended to increase occupant protection in the case of an accident or off-road incident.

IMPORTANT PRODUCT MAINTENANCE INFORMATION

Because of its off-road intended use this product is potentially subject to abnormal vibrations and stresses that can cause the product to loosen over time. It is the buyer’s ultimate and sole responsibility to use the supplied **Threadlocker** during the installation of this product, and to have all bolts/nuts checked for tightness after the first 100 miles, after each period of extensive off-road use, and then as part of routine vehicle maintenance for off-road use, which is Schedule B. **WARNING:** Failure to adhere to this maintenance requirement could result in the product falling from the vehicle resulting in vehicle damage or even a serious accident.

“Thank you, best wishes, and please tread lightly so we and future generations can continue to experience and enjoy the wonderful world of four-wheeling.”

—4XGUARD Management