

XOPlate

Chin Guard Stage 0

For the Jeep Cherokee KL Second Generation (2019+)

(XO-KL2-CHIN-STG-0)

Installation and Owners Guide

Revision B

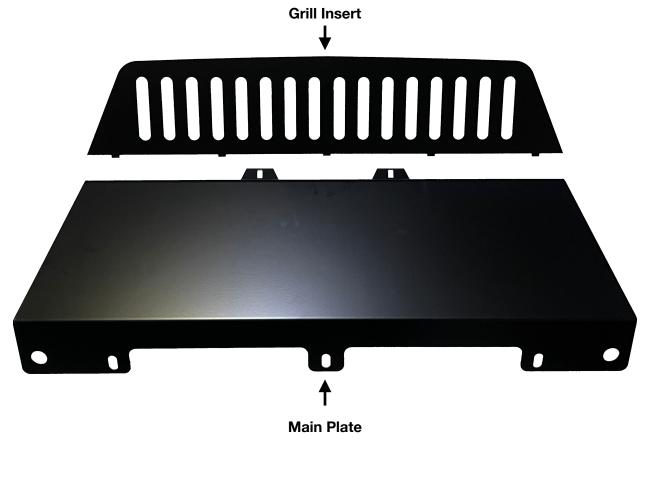
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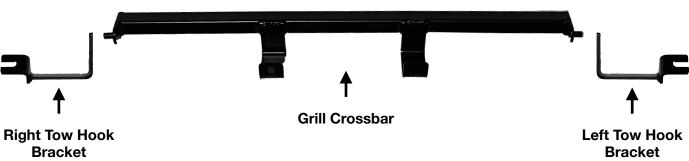
Welcome to the Gleaming Alloy Family!

We'd like to sincerely thank you for purchasing this XOPlate Chin Guard Stage 0 for the Jeep Cherokee KL! It is our fourth XOPlate product. It has been in conceptual development for a very long time. With your continued support, there will be many more similar products for the Jeep Cherokee KL and other platforms.



Get to Know Your XOPlate...





Installation Instructions

Please read completely through the following guide before attempting the installation. It will give you a good feel for what is involved to install the XOPlate. Some steps offer optional procedures and or tips, so reading through the entire steps first will prepare you if there are any alternate actions to take.

Parts List

- 1x XOPlate main plate
- 1x XOPlate grill insert
- 1x XOPlate left tow hook bracket
- 1x XOPlate right tow hook bracket
- 1x XOPlate grill crossbar
- Bag 6: 3x M8x1.25x40 flange head bolts, 3x oversized M8 washers, 3x large aluminum spacers.
- Bag 7: 2x M8x1.25x25 carriage bolts, 2x M8x1.25 flange nuts, 2x 6mm steel spacers Bag 9: 3x M8 rubber washers, 3x M8 oversize steel washers, 3x M8x1.25 flange nuts.

Required Tools

Socket wrench

13mm socket

16mm socket

13mm open end or box wrench (ratcheting box-end wrench strongly recommended)

Torque wrench

Optional

Two short ratchet straps (strongly recommended) Needle nose pliers An assistant

Estimated Install Time: Under one hour

This installation guide is targeted at the DIY'er who is installing the skid plate at a home workshop, either inside a garage or in the driveway. If you are a professional mechanic and/or have access to a professional facility and tools, you might be able to replace some of the steps with more efficient techniques and equipment.

Where To Get Help

Should you have any questions about installation, or problems during the installation process, feel free to reach out to us for assistance. You can send email to info@gleaming-alloy.com or use Facebook Messenger to message "Gleaming Alloy"directly. You can also message us on Instagram at @gleaming_alloy. If you have a particular issue, please accompany it with photographs showing the nature of the problem.

The following resources are also available on the internet. Just scan the QR code to take you there:







Gleaming Alloy
Owners Group

Gleaming Alloy
Support Documents

Gleaming Alloy
YouTube Channel

Step 1: Prepare the vehicle

Park your Jeep on level ground. This installation does not require you to raise the vehicle, but we still recommend engaging the parking brake. Open the hood to expose access to the front radiator area.

Note: this installation will require working very close to your radiator cooling fins, which are somewhat delicate. It would not be a bad idea to cut a piece of cardboard to place in front of your radiator to prevent an errant wrench from causing accidental damage to your radiator fins!



Step 2: Install Left Tow Hook Bracket

Using a 16mm socket, remove the inner bolt from your left tow hook.

Important Note: These instructions use standard automotive terminology referring to the left and right side of the vehicle as seen from the perspective of the driver. When installing the Chin Guard, you will be facing the vehicle, so your right will be the driver's left, and vice versa.

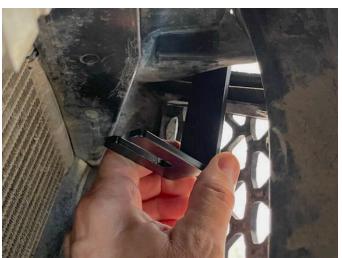


Looking inside the cavity in front of the radiator, locate the rubber shroud on the left side of the radiator, adjacent to the tow hook (which is on the other side of the shroud). You'll notice a gap at the front of the shroud, up against the bumper.



Investigating further, you'll notice that you can push the shroud to enlarge the gap. Take the left tow hook bracket and push it through this gap. Push the small forked end through the gap so it aligns with the side of the tow-hook where you removed the bolt. This may take some finagling, but it is not difficult once you figure out the correct angles to insert the bracket.





Reinstall the tow-hook bolt you removed but only lightly tighten it at this time. You want the bracket to be able to slide on this bolt until the grill crossbar is fully installed (Step 4).

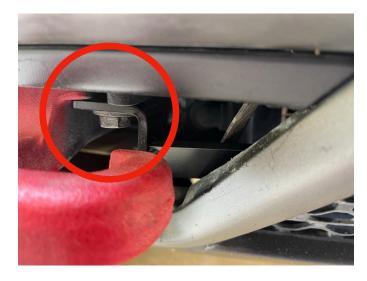


Step 3: Install the Right Tow Hook Bracket

Repeat the procedure in Step 2 for the rightside tow hook & tow hook bracket. If your Jeep is equipped with the Technology Package, be very careful not to damage the sensors in the grill. Those sensors make it a little more challenging, but it is still possible once you figure out the correct angle to insert the bracket through the gap.







Step 4: Install the Grill Crossbar

Make sure the tow hook brackets you installed in Steps 2 & 3 are oriented as shown in the photos below. The grill crossbar is designed to slide onto these brackets, which should be perpendicular to the mesh grill.





The grill crossbar has two M8 flanged head bolts pre-threaded onto the end caps, along with an M8 washer. The end caps feature a guide pin that is meant to slide onto the tow hook brackets. The M8 bolt will then engage the same slot as the guide pin. There is also an M8 washer that must go between the crossbar and the bracket, NOT on the same side as the head of the flange bolt. When installed, it should appear like the photo to the right.



Make sure about 1/2" (12mm) of thread is exposed on the end cap bolts and then carefully maneuver the crossbar into the radiator cavity. The two extension brackets at the middle of the crossbar should be pointing towards the front of the vehicle and away from the radiator. The slotted ends should also be pointing upward, as shown in this photo.



The guide pins on the end caps of the crossbar should be engaged in the slots of both the left and right tow hook brackets. The proper way to do this is to position the crossbar end caps at an angle from the slot. Once the guide pin has been inserted on both sides, rotate the entire crossbar about the guide pin and then push downwards so the M8 bolt engages the slot. Be sure to keep the M8 washer on the crossbar-side of the slot. The pictures to the right show the proper sequence.





When fully engaged, the end of the slotted tow hook bracket is more-or-less flush with the back of the crossbar.

Tip: you may want to use masking tape or quick drying glue to keep the washer flush with the crossbar. That will keep it from getting in the way when trying to engage the bolt into the slot.



When engaging the crossbar into both tow hook brackets **simultaneously**, you will almost certainly need to shift each tow hook bracket left-to-right in order for the crossbar to fit between them. If the tow hook bolts are too tight to do this, loosen them so you can get the crossbar to fit. Snug them back up when it comes time to fully engage the ends of the crossbar into the tow hook brackets.

Once the crossbar is seated fully into the tow hook slots, try to finger tighten the bolts as much as possible before switching to a 13mm open-end or box-end wrench to tighten the bolts. You will have VERY limited room to turn the wrench, so be patient. A ratcheting box-end wrench is very useful in this situation.

You don't want to fully tighten these bolts at this time. Just make them snug.



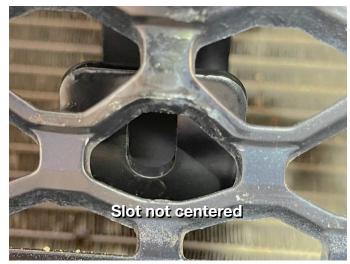


Step 5: Center the Grill Crossbar

In this step, you must position the crossbar so that the vertical slots on the crossbar extension brackets are horizontally centered behind the grill mesh holes shown in the picture to the right. Note: the tape in the picture is not part of the install. They are there to help locate these holes for this picture!

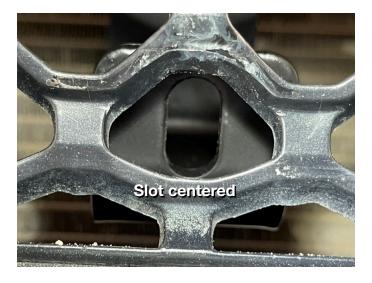


With the tow hook bolts loose, you should have enough left-to-right adjustability to center the slots. If the slots do not align perfectly with the center of the mesh holes, try to "split the difference" and make them line up as symmetrically as possible. They should be very close to centered but may be off by a millimeter or two.



Once centered, you may tighten the tow hook bolts to hold the crossbar firmly in place. Do not fully torque them just yet because you may need to make further adjustments after attaching the main plate.

You should also fully tighten the crossbar end cap bolts (from Step 4) at this time. Since space is tight, you will not be able to get a torque wrench in there. Two solid 'grunts' should do the job.



Step 6: Hang the Main Plate

Note: An extra set of hands is very useful for this next step, but it can be done solo if you are very careful.

Remove the three bolts from the front skid plate using a 13mm socket.

Hang the top flange of the Chin Guard's main plate on the lip of the lower mesh grill area as if you were going to bolt the upper tabs to the grill crossbar extension brackets. This will hold the main plate more-or-less in place. If you have a helper, have them push against the upper flange to keep it from falling off the lip.

Push the lower portion of the main plate back until the three slots in the lower main plate align with the three skid plate bolt holes you just exposed. Starting with the center bolt, place one of the large aluminum spacers between the main plate and the skid plate, then thread one of the supplied M8x1.25x40 flange head bolts (and oversized washer) into the hole. You simply want to start the bolt so the plate is held in place. You'll come back and tighten them later. Repeat this process for the outer two holes.







At this point, do your best to make sure the main plate is centered to the mesh grill. Look at both the left and right upper corners and make sure the distance to the edge of the mesh grill is the same. With the lower three bolts loose, you should have enough play to make sure the plate can be centered.





Step 7: Bolt the Upper Plate in Place

Insert the two M8 carriage bolts through the slots on the two tabs at the top of the main plate. You also need to pass these bolts through a 6mm spacer before they pass through the mesh grill and into the slot of the crossbar extension brackets.

We recommend holding the spacer behind the tab with needle nose pliers while pushing the carriage bolt through the slot, as shown to the right.



One at a time, push the carriage bolts through the mesh grill and through the slot on the crossbar extension bracket. You will need to push very hard and actually deform the mesh grill slightly in order to reach the bracket slot. Once inserted, and while continuing to push, reach into the radiator area and thread an M8 flange nut onto the other end of the carriage bolt. Repeat for the other carriage bolt.

Once both carriage bolts have been threaded through the extension bracket, hand tighten them as much as possible. Pushing the upper plate into the grill will make it easier to do this.



At this point, double check that the main plate is centered relative to the mesh grill. If it has shifted or just doesn't look right, you can loosen the tow hook bolts and slide the crossbar left-to-right to achieve the proper position. This wont be easy to do with the full weight of the main plate on the crossbar, but you can use a screwdriver to pry the bracket left or right as shown in this photo.



With the main plate properly centered, go ahead and fully tighten the flange nuts on the upper carriage bolts using a 13mm wrench. It's unlikely you can squeeze a torque wrench in there but if you do manage to do so, they should be torqued to 22 lb-ft (29 Nm). Otherwise, two 'grunts' with a small wrench will do.



Step 8: Push the Chin Guard Tight Against Bumper

You now want to push the bottom of the chin guard flush against the lower bumper and tighten the three skid plate bolts. One approach is to have a helper push as hard as possible while you tighten each bolt. If you do this, make sure they wear clean gloves and/or use a towel to keep them from accidentally marring the finish.

A better approach, even if you have a helper, is to use a pair of ratchet straps to pull the Chin Guard tightly against the bumper. To do this, fasten one end of the ratchet strap to the large hole on the bottom of the Chin Guard, and the other to the subframe. Do this as shown in the photo, on both sides of the Chin Guard.



Slowly tighten each ratchet strap, alternating between sides to apply tension evenly to both sides of the Chin Guard. Monitor the bolt positions relative to the slots they pass through.

The photo to the right shows the center bolt's position before applying tension to the ratchet straps.



The photo to the right shows the same bolt's position after tightening the ratchet straps evenly.

With the Chin Guard main plate pulled snuggly against the bumper, go ahead and fully tighten the three skid plate bolts using a 13mm socket. They should be torqued to 22 lb-ft (29 Nm).

At this point you can also go ahead and fully tighten the tow hook bolts using a 16mm socket. They should be torqued to 50 lb-ft (68 Nm).



The upper grill insert is designed to slide into slots that are cut into the upper flange of the Chin Guard's main plate. Insert the tabs on the lower edge into the flange slots as shown here.





Once all the tabs have been fully inserted into the slots, pivot the grill insert into place so the three studs on the backside pass through the mesh holes in the grill. There may be some interference because you are pivoting at an angle. Just push down and force the studs through the mesh.

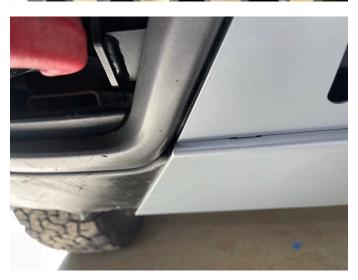


Reach around the back of the grill and place an M8 rubber washer and M8 oversized washer onto the center stud, then hand tighten an M8 flange nut onto the same stud. Repeat for the outer two studs of the grill insert.



Check the position of the grill insert relative to the lower main plate and the mesh grill opening. There should be enough left-to-right play to allow you to achieve perfect centering. If not, you may need to loosen the lower main plate again and adjust its position.

With everything properly positioned, go ahead and fully tighten the three M8 nuts using a 13mm wrench. You do not need to go crazy tightening them - just good and snug will suffice.



You have successfully completed installation of your XOPlate Chin Guard! Go have a beer!

Care and Use

Now that you've installed your XOPlate, you're probably anxious to head out onto the trails to put it to the test. Before you do that, however, there are a couple of steps you need to take to make sure that everything is performing properly.

The 'Bang' Test

Once the final nut has been fully torqued, you should proceed to "bang" the XOPlate with the ball of your fist. It should feel firm and solid. If there is any rattling (aside from the bumper itself), something is likely not tight and you should try to isolate the source of the sound.



300 Mile Inspection

After you have been driving your Jeep for about 300 miles, you should inspect your XOPlate to make sure everything looks properly fastened. Of particular interest are the nuts and bolts inside the radiator area that were difficult to reach and fully tighten. You should also re-torque the tow hook bolts and the three lower skid plate bolts.

Regular Maintenance

The XOPlate Chin Guard Stage 0 for Jeep Cherokee (KL) is generally maintenance-free. You will need to keep it clean, just like you would the rest of your front bumper. We recommend using a mild, all-purpose cleaner such as Simple Green to keep it clean.

You should also periodically check the upper grill insert to see if it is coming loose. If you find you have a problem with the three nuts working their way loose, you might want to consider using a thread locking compound to make sure those nuts stay good and tight.

If you do some hard-core off-roading, you eventually will strike obstacles and may scratch the finish. While the powder coating is tough and durable, hard strikes against sharp obstacles (such as small boulders) will eventually chip and scratch the finish. If these become noticeable and bothersome, you can periodically touch it up with some automotive spray paint.

If you manage to hit an obstacle hard enough to actually dent the main plate, consider yourself lucky that the Chin Guard was there! A strike hard enough to dent it would almost certainly have done damage to your bumper and/or the components behind it, including (possibly) your radiator. If this happens, you can sometimes have luck removing the main plate and "hammering it out" from behind to eliminate the dent.

Spare Parts

Every component of the XOPlate Chin Guard Stage 0 for the Jeep Cherokee KL is available for purchase from Gleaming Alloy and can be easily replaced should they become damaged. This includes the main plate, should you happen to severely damage it by hitting a large obstacle very hard.