



XOPlate

Transmission Skid Plate

For Jeep Grand Cherokee (WK2)

(XO-WK2-TRANS)

Installation and Owners Guide

Revision A

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Welcome to the Gleaming Alloy Family!

We'd like to sincerely thank you for purchasing this XOPlate Transmission Skid Plate for the Jeep Grand Cherokee WK2! It is our third product in the XOPlate line and, with your continued support, the first of many such products for the Jeep Grand Cherokee WK2 and other platforms.

This transmission skid plate is the result of several collective years of off-roading the Jeep Grand Cherokee WK2 platform. While the Grand Cherokee Trailhawk features strong skid plates, the transmission is inexplicably left unprotected. While the transmission pan itself is somewhat recessed, climbing over rocks can easily lead to catastrophic damage due to the transmission being located directly behind the front wheels. This XOPlate is extremely tough and designed to protect against glancing blows as well as crushing strikes. These are the kind of hits that occur when sliding off of rock or a v-notch and falling onto obstacles such as sharp boulders. With the XOPlate installed, you can rest assured that your transmission is as protected as it possibly can be!

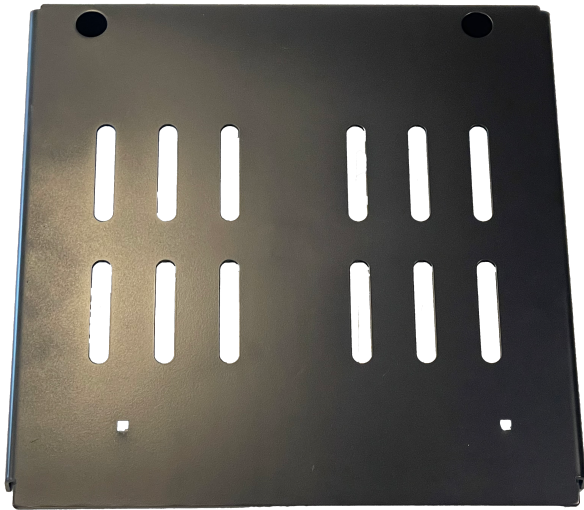
We're very confident that this XOPlate Transmission Skid Plate will enhance your off-road experience. We hope you enjoy it as much as we enjoyed developing it and bringing it to market!



Get to Know Your XOPlate Transmission Skid Plate...



Front of Vehicle



Main Plate
Bottom View

Tubular Stand-offs



Main Plate
Top View



Rear Mounting
Brackets

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 transmission skid plate. Overall, it is not particularly complicated and should require less than an hour. Having an assistant can make the task easier.

This installation guide is targeted at the DIY'er who is installing the transmission 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 will obviously be able to replace many of the steps with more efficient techniques and equipment. All the more reason to read through the instructions first to plan your strategy!

Parts List

- 1 Main Transmission Skid Plate
- 2 Rear mounting brackets
- 2 Square washer plates
- 2 M10x1.5 30mm flanged-head bolts
- 2 M8x1.25 20mm carriage bolts
- 2 M8x1.25 serrated flange nuts
- 2 M8x1.25 30mm hex-head bolts
- 2 M8 washers
- 2 M8x1.25 Clip-on barrel nuts

Required Tools

- 13mm deep socket (or shallow socket w/extension)
- 13mm open-end wrench (ratcheting box wrench is preferred)
- 15mm socket
- 16mm socket

Note: All M8 nuts and bolts should be torqued to 25. Ft-lbs (34 Nm), which is equivalent to a strong (but not excessive) hand-tightening with an 8" wrench. The M10 bolts should be torqued to 50 ft-lbs (68 Nm), which is equivalent to a strong (but not excessive) hand-tightening with an 10" wrench.

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: Raise the front of your Jeep

While you can install the XOPlate Transmission Skid Plate without lifting the vehicle, we highly recommend driving the vehicle up some auto ramps or similar device. If you don't have a ramp, pulling onto paving bricks or even blocks of wood can help give you some breathing room. If you have air suspension, setting it in Offroad 2 will also help.

If you decide to jack the vehicle up, be sure to use some jack stands to prevent the vehicle from falling on you! Use of multiple jack stands is encouraged.

Step 2: Secure the vehicle

Using wheel chocks, blocks of wood or similar devices, secure the rear wheels of your Jeep to keep it from rolling. You should also engage the parking brake.

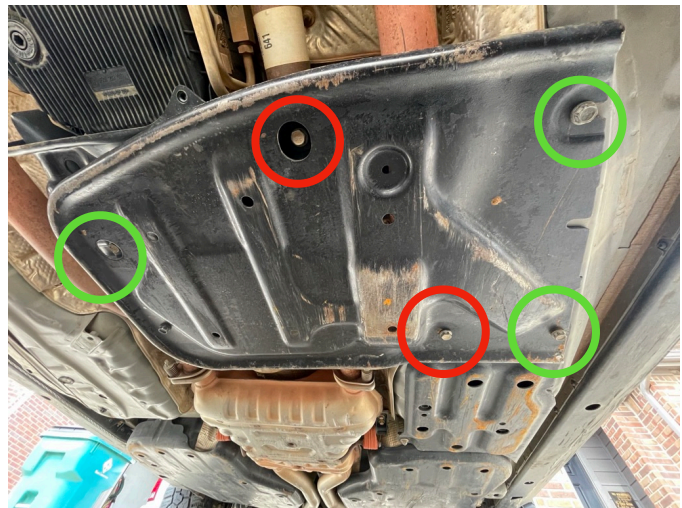


Step 3: Locate and remove the transfer case skid plate

Assuming you have a Trailhawk or other trim-level with a transfer case skid plate installed, you will need to remove it. If you do not have a transfer case skid plate, proceed to Step 4.

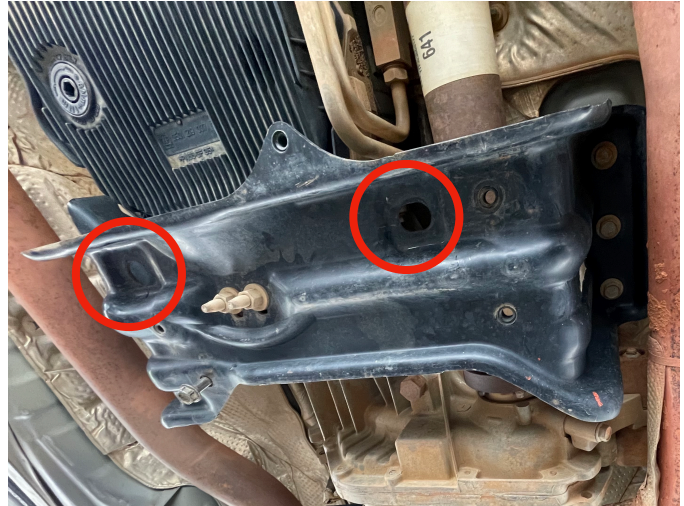
The bolts that hold the transfer case skid plate are circled in the photo. Use a 16mm socket to completely remove the bolts in the red circles. The bolts in the green circles only need to be loosened and unthreaded about 1/2" (12mm). The entire skid plate can then be slid towards the right side of the vehicle to remove it.

Your transfer case crossmember is now exposed.



Step 4: Locate the transfer case crossmember

The crossmember holds the rear of the transmission and front of the transfer case in place. On the crossmember itself, on the transmission-side, locate the two recessed openings circled in the photo.



Step 5: Install the rear mounting brackets

The two rear mounting brackets are installed above the two recessed openings in the crossmember. The brackets are positioned over the top of the crossmember with the slotted end pointing towards the front of the vehicle. On the bottom of the crossmember, use the square washer plate and an M10 bolt to pass through the opening and into the nut that is welded onto the mounting bracket. The square washer plate should fit nicely into the recessed opening. Use a 15mm socket to tighten the bolt but **do not fully torque at this time**. You want the mounting bracket to be able to move a little towards the left and right of the vehicle.

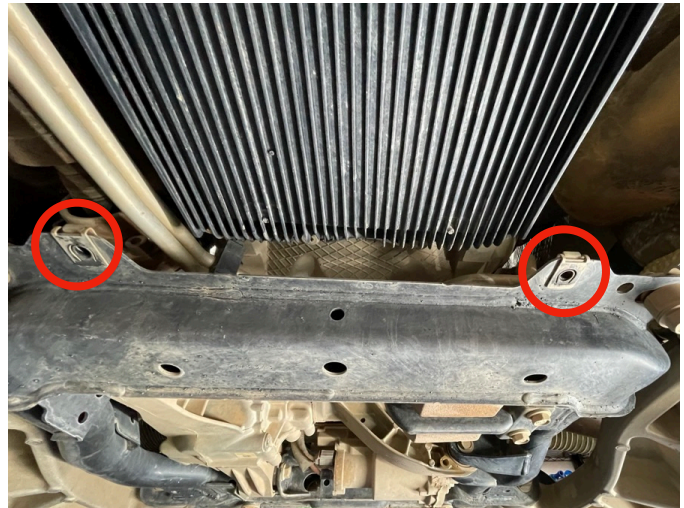


Do this for both brackets, at the locations circled in the photo in Step 4.

Step 6: Locate the front crossmember

This crossmember is located just in front of the transmission pan. If you have a front skid plate, the two rear mounting bolts of the skid plate are threaded into two nut-clips on this crossmember. The photo shows the front skid plate removed, but you do not have to remove the front skid plate. Use a 13mm socket to remove only the two bolts at the rear of the front skid plate.

If you do not have a front skid plate, you should still have the two nut clips installed in the crossmember. If for some reason you do not have those clips, we've provided two barrel nut clips that you should snap onto the circled locations.



Step 7: Raise the transmission skid plate into place

The two tubular stand-offs on the skid plate should be positioned towards the front of the vehicle. They should be aligned with the two nut-clips circled in the photo in Step 6.

If you removed two bolts from the front skid plate in Step 6, you can reuse them to fasten the transmission skid plate into place, or you can use the two supplied M8 hex head bolts w/washers. The photo shows how the transmission skid plate fits over the front skid plate, and the two M8 bolts hold both the front skid plate and the front of the transmission skid plate in place. Use a 13mm socket to tighten these bolts but **do not fully torque them just yet**. You want the bolts tight enough to hold the skid plate up but loose enough to be able to adjust the position of the skid plate, if necessary.

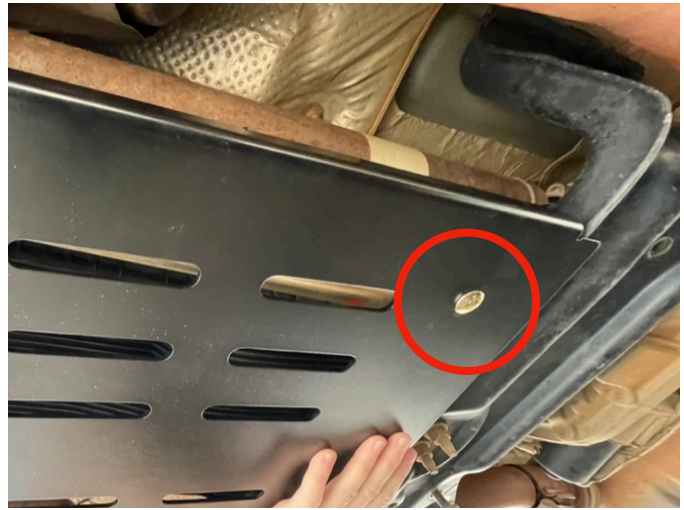


The photo to the right shows the top-side of the transmission skid plate and how the stand-off is bolted to the crossmember, with the front skid plate sandwiched in between.

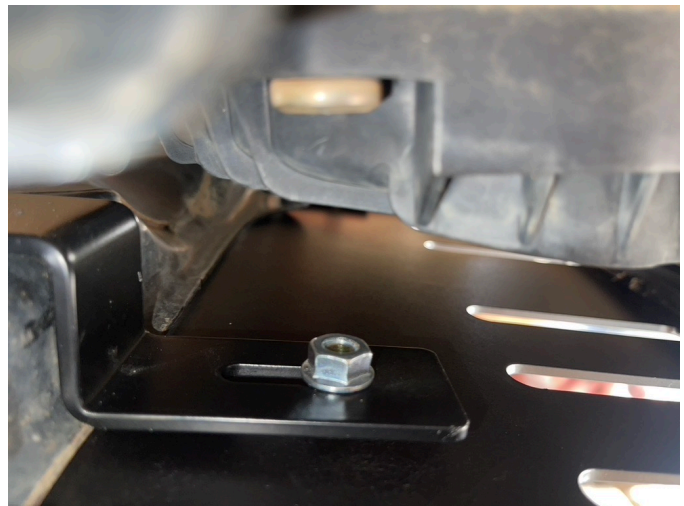
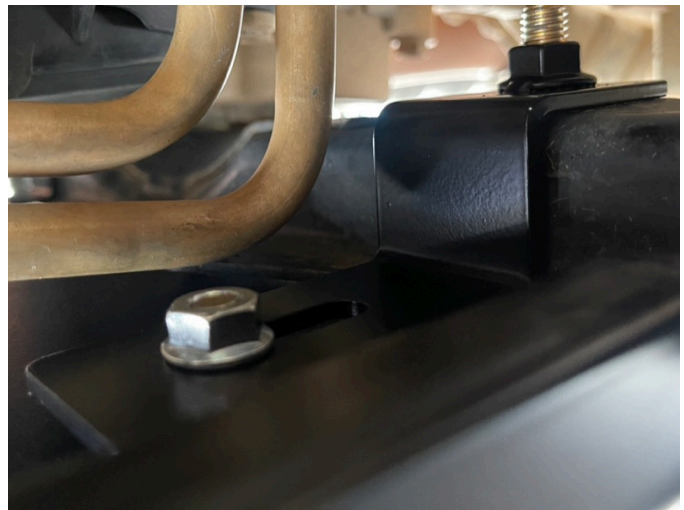


Step 8: Fasten the skid plate to the rear mounting brackets.

Hold the rear of the transmission skid plate up against the transfer case crossmember. Place an M8 carriage bolt through the square hole in the skid plate and try to engage the slot on the appropriate rear mounting bracket. You may need to shift the entire skid plate or slide the mounting bracket left-to-right in order to engage the slot.



Once engaged, reach over the side of the transmission skid plate and thread an M8 serrated flange nut onto the carriage bolt. **Finger tighten** the nut and then repeat the entire procedure for the other rear mounting bracket.



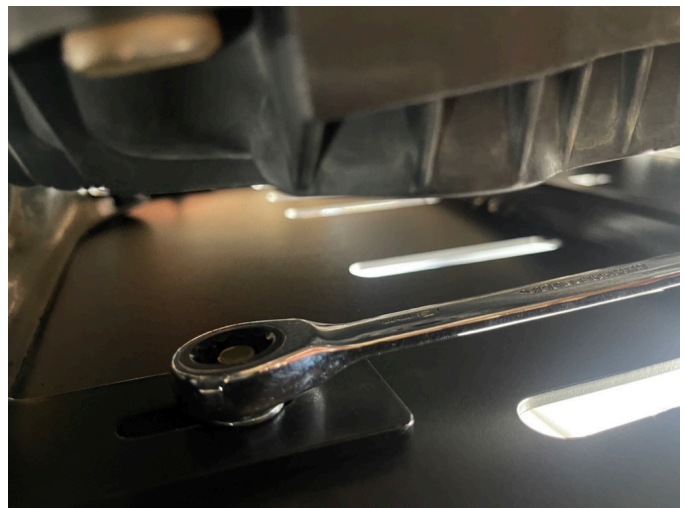
Step 9: Tighten all nuts & bolts

Make sure the transmission skid plate is sitting flat against the transfer case crossmember and squared up against the front skid plate/ crossmember.

Begin by using a 15mm socket to fully tighten the M10 bolts on the rear mounting brackets, through the transfer case crossmember.

Next, fully tighten the M8 Bolts at the front of the transmission skid plate using a 13mm deep socket.

Lastly, reach over the sides of the transmission skid plate and fully tighten the two M8 flange nuts that connect the rear of the transmission skid plate to the rear mounting brackets. Use a 13mm wrench to do this. A ratcheting box-end wrench is very helpful for this since the work area is tight.



Step 10: Reinstall the transfer case skid plate

Slide the transfer case skid plate onto the three bolts that you loosened in Step 3. Thread the two bolts you removed and fully tighten all five bolts to secure the transfer case skid plate in place. The final result should appear like the photo to the right.



**You have successfully completed installation of your
XOPlate Transmission Skid Plate! Go have a beer!**

Care and Use

The XOPlate Transmission Skid Plate is relatively maintenance free. After you have installed the skid plate and driven about 500 miles, double check all your bolts and re-tighten, if necessary. Periodically checking the tightness of the bolts, especially after a wheeling adventure, is a good idea.

To remove the transmission skid plate, you simply need to remove the two front M8 bolts and the two rear M8 nuts on the top side of the skid plate. There is no need to remove the transfer case skid plate or the front skid plate to gain access to your transmission.

To remove the front skid plate, remove the two M8 bolts at the front of the transmission skid plate and let it hang down slightly, allowing the front skid plate to be removed. There is no need to fully remove the transmission skid plate to gain access to the front axle/engine area.

After hitting many trails and encountering obstacles, your XOPlate will inevitably develop scratches and maybe even small dings if you've hit some hardcore trails. Periodically cleaning the transmission skid plate and hitting it with some spray paint will prevent rust from taking hold.