

This is the install procedure for the Dieselgeek MK6, B7, & 2012-13 Beetle Panzer Plate Skid Plate Kits. These instructions are for the following vehicles, regardless of engine type or transmission type:

2011-2013 Jetta Sedan
2012-2013 Passat
2012-2013 Beetle

Included Parts List:

1. One large aluminum skid plate with either "MK5-MK6 Panzer Plate" or "B7P Panzer Plate" stamped into it.
2. Left and right stainless steel mounting brackets marked "Left V2" and "Right V2."



3. Two giant 12mm nuts with 30mm flats (or 1 3/16"). These nuts are conical or domed on one end.



4. Two silver or gold 12mm x 30mm long bolts with 19mm heads (or 3/4").



5. Two thick gold washers with "1/2" stamped into one side of them.



6. Two thin silver or gold 12mm jam nuts.



7. Four 10mm x 30mm long bolts with 17mm heads (or 11/16).



8. Four 10mm large diameter thick silver fender washers to go with the 10x30 bolts above



9. Four hex body rivnuts with 13mm flats These will be the anchors for the two mounting brackets



10. Rivnut install tool. This is the 4.5" x 1.5" flat aluminum bar.
11. Permatex thread locking compound



Tools Required:

1. Torx T25 screwdriver or ratchet driver bit (T20 will work in a pinch)
2. Torx T40 or T45 screwdriver or driver bits for rear belly pan screws (For TDI only. See Step 2 in first section to determine which size you need.)
3. 30mm socket (A crescent wrench or box end wrench will not work.) 1 3/16" works as well.



4. 1/2" ratchet for driving the 30mm socket
5. 3/8" ratchet
6. M8 triple square socket in 3/8" drive (included in parts kit)
7. 12" extension bar in 3/8" drive (A wobble ended extension is even better.)
8. 17mm or 11/16" socket in 3/8" drive
9. 2x 19mm or 3/4" wrenches or sockets
10. Any automotive or heavy duty grease
11. Permanent marker



12. Brand new razor blade (included in parts kit)

Not required, but handy:

1. Universal joint adapter in 3/8" drive or 17mm universal-jointed socket



2. 12" wobble extension in 3/8" drive to substitute for universal joint adapter



Let's Get Started:

1. The install is performed under the front part of the car so you will need to put the car on two ramps or two jack stands. You can also perform the procedure on a lift. Please use two wheel chocks if you are not using a lift. You must raise both sides of the car for this procedure. A flattened skid plate box makes a nice pad to provide some added comfort while lying on the ground.
2. Once the car is raised, remove the factory plastic belly pan screws with your T25 Torx screwdriver. (T20 will work on these). On TDI cars only there will be three rear Torx screws. Some cars will have T40 screws and some will have T45 screws. Also, remove the two front speed nuts from the side plastic pieces. These speed nuts are anchors for the two front T25 belly pan screws. You will not need the two front Torx screws when using the Panzer Plate. After the clips are removed, remove the plastic ridge guides for the speed nuts with your new razor blade. This will allow the belly pan to lie flat when installed. Be very careful with the razor blade!





3. **Passat Only:** On the driver side of the car, remove the **front most** plastic gusset on the side trim piece as shown in the picture. To do so, pull down on the trim piece and this will often tear the gusset cleanly from its vertical attachment. If not, then cut it vertically with the razor blade. Second, make a 45 degree cut in the gusset down to the corner. Finally, make a horizontal cut on the bottom attachment for the gusset to remove it completely from the side trim piece. Repeat this process on the other side of the car for the **forward gusset**. The mounting brackets will not fit properly if the plastic gussets are not removed. Some early Passats will require the second gusset be removed as well for the passenger side mounting bracket to bolt up correctly. It will be obvious when you mount the bracket.



4. Prepare the forward mounting brackets. Get the 12mm x 30mm bolts and place the ½" thick gold washers onto them. The bolts go into the lower forward holes like this:



5. Shake the provided tube of threadlocker vigorously. Unscrew the white cap and cut the tip off of the tube of threadlocker at the embossed ridge near the tip of the tube. Place one drop of thread locking compound on each of the 12mm x 30mm bolts at about the point where the nut will sit on the other side of the mounting bracket (see picture above).



6. Next, thread each of the thin 12mm jam nuts onto the 12mm bolts and tighten them to 60 lb-ft. or until they are very tight.

7. You may also use a vise to hold the 19mm bolt heads while you tighten the jam nuts.



The protruding section of the two 12mm bolts will be the forward mounting points of the Dieselgeek Panzer Plate:



Installing Rivnut Anchors into the Frame Rails:

For the rivnut install you will be using our new rivnut tool designed specifically for the job. The rivnuts are 10mm threaded hexagonal tubes that mushroom out after they have been inserted into the hexagonal holes in the left and right frame rails. The mushrooming will occur when you tighten the 10mm bolts into them during the procedure. Check out a [YouTube video](#) illustrating how rivnuts work.

1. Prepare the four 10mm bolts by applying wheel bearing grease or similar to the bottom 1/2" of threads. Place one thick fender washer onto each bolt.
2. The two holes that are near the ends of the tool and are **diagonal** from each other are the holes to be used to install rivnuts in the **driver** side frame rail. Insert one greased bolt into one of these holes and then thread a hex rivnut onto the greased bolt. Repeat for the opposite diagonal hole. Leave the bolts very slightly loose so that the rivnuts can still rotate.



3. On the driver side of the car, push the hex rivnuts into the two hex holes in the underside of the frame rail. The rivnuts will likely need to turn a little to line up with the hex holes in the frame rail.



4. Once the tool and rivnuts are flush with the frame rail, partially tighten one of the bolts with your 17mm socket, 12 inch extension and ratchet. Push up on the socket slightly as you tighten the bolts so that the rivnuts remain flush with the frame rail. Repeat for the other bolt but tighten slowly until it gets noticeably harder to turn. Repeat for the other bolt. Once both rivnuts are set, remove the bolts and rivnut tool from the frame rail.



5. Reload the rivnut tool with the unused greased bolts and rivnuts. For the passenger side you will use the hole on the end with a single hole PLUS the unused hole on the other end. Repeat the setting process on the passenger side. A 12" wobble extension or universal joint on the socket is very helpful to drive the bolt heads since access directly below the bolts is restricted. Remove the bolts and tool once the rivnuts are set.



6. Attach the left and right mounting brackets to the installed rivnuts by using the greased 10mm bolts. Leave the bolts ever so slightly loose so that the mounting brackets can be moved during the trial fitting of the skid plate. Please note that the threaded 8mm stud or studs on the driver side will not be used to attach the mounting bracket.



Test Fitting the Panzer Plate:

At the front, the Panzer skid plate will attach to the 12mm studs hanging from the left and right mounting brackets using the large 30mm conical nuts. At the rear of the plate you will use the stock 8mm threaded holes in the steel subframe with the three black screws provided in the kit. These are the same three holes that the stock plastic belly pan uses for attachment. You will be reusing the stock belly pan with the Panzer skid plate. The stock belly pan provides noise reduction, heat retention, and side splash protection for the lower engine bay. The Panzer skid plate will sit just below the stock belly pan.



1. Place the two large bevel nuts and permanent marker near the front of the car.
2. At the rear of the skid plate you will be using the three black triple square screws to attach the skid plate. You will also use the three aluminum spacers in between the skid plate and factory plastic belly pan. Get the three screws and spacers in one hand and raise the skid plate into place below the subframe holes. Insert the rear center screw through the skid plate and then place a spacer onto the screw and then thread the screw into the rear center hole in the subframe. Repeat for the outside rear holes while supporting the center of the skid plate.



3. Try to engage the two front studs with the two front holes in the skid plate. If the plate goes on easily then you will not need to adjust the position of the front mounting brackets.

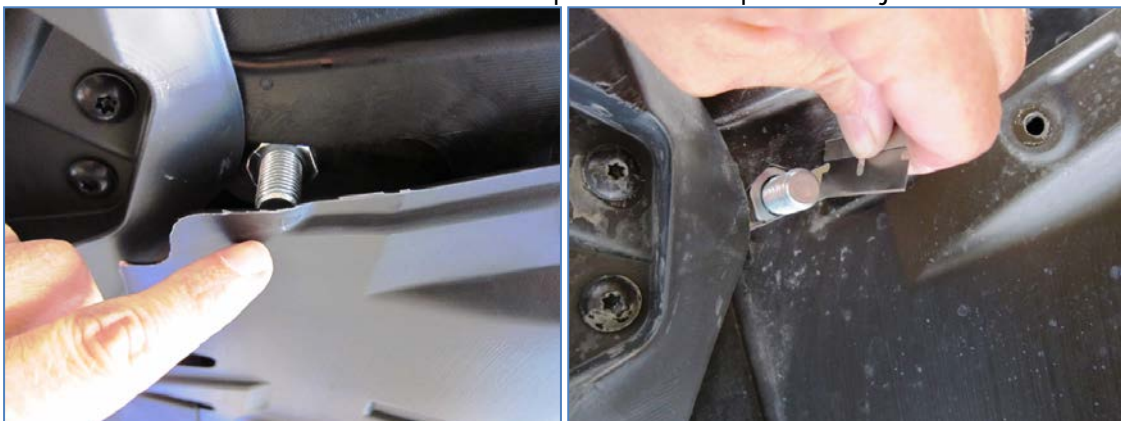
If the front studs are slightly out of place in relation to the skid plate, draw an arrow on the mounting bracket in the direction it needs to move to allow easy fitting. Remove the plate and move the mounting bracket(s) in the direction indicated by the arrows. Finish by fully tightening the four mounting bracket 10mm bolts (20 lb-ft. or "good and tight").



4. Once the plate mounts are correctly adjusted, you will need to notch the side plastic pieces to allow the 12mm jam nuts to be fully exposed so that the skid plate can be mounted to the studs with no plastic in the way.



5. Replace the factory plastic belly pan but do not replace the three stock rear screws. Trim the area around the two front 12mm studs with a razor blade to allow the skid plate to make full contact with the jam nuts on the front studs. A minimal amount of plastic will need to be removed to allow this. See above photo for complete trim job.





Final Fitting of the Panzer Plate:

To prevent losing the rear aluminum spacers you can use adhesive such as JB Weld or silicone to glue the spacers to the topside of the skid plate on the first final install. You should glue the spacers to the skid plate **just prior** to installing the skid plate as they need to be able to move freely during the initial install only. Once glued, they should never need to be removed.

1. The final install is pretty straightforward. You will need to put a generous amount of blue threadlocker on the threads of the 30mm bevel nuts and three rear M8 triple square screws to prevent them from loosening up over time. If you elected to glue the aluminum spacers to the topside of the skid plate you will need to let the glue set overnight before removing the plate.



Tightening Torques:

30mm bevel nuts:	50 lb-ft.
M8 triple square screws:	18 lb-ft.

Final Note:

If you have installed one of these skid plates and have found a better way to do things please let us know. Pictures always help! Please send any pictures or comments to jim at dieselgeek.com.

