MK5/MK6 Panzer Plate Install Instructions

This is the install procedure for the dieselgeek.com MK5/MK6 Panzer Plate Skid Plate Kits. These instructions are for the following vehicles, regardless of engine type or transmission type:

2005.5-2010 Jetta Sedan
2009-2013 Jetta Sportwagen
2010-2013 Golf and Golf Wagon
Mid-2006-2008 GTI and 2006-2009 Rabbit

Parts list:
1. One large aluminum skid plate
2. Left and right stainless steel mounting brackets (marked Left V1 and Right V1)
3. Two giant 12mm nuts with 30mm flats (or 1 3/16"). These nuts are flat on both ends.

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

5. Two long 12mm greenish threaded studs (approx. 4 inches long)

6. Two silver or gold 12mm x 30mm long bolts with 19mm heads (or ¾")

7. Two thick gold washers with "½" stamped into one side of them

8. Two thin silver or gold 12mm jam nuts

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

10. Three very thin gold washers. These have much larger holes than the 10mm thick washers (item #11)

11. Three 10mm large diameter thick silver fender washers

12. Three hex body gold-colored rivnuts with 13mm flats

13. Three black 8mm nuts with 13mm flats and large integral washers

Tools required:

1. Torx T25 screwdriver or ratchet driver bit (T20 will work)
2. Torx T30 screwdriver or ratchet driver bit (TDI only)
3. Regular screwdriver (2.0 Turbo gasoline only)
4. 30mm socket (A crescent wrench or box end wrench will not work.) 30mm happens to be the same size as VW front and rear axle nuts. 1 3/16" works as well.

5. 6” and/or 12” extension bar in 3/8” drive (A wobble ended extension is even better.)

6. Torque wrench that measures up to 70Nm or 55 lb-ft
7. 13mm or ½” deep and shallow sockets
8. 16mm or 5/8” socket
9. 17mm or 11/16” socket
10. 18mm socket
11. 2x 19mm or ¾” wrenches or sockets
12. Locktite (included with kit) or equivalent Medium strength thread locking compound.

13. Any automotive grease
14. Permanent marker

Not required, but handy:

1a. Universal joint adapter in 3/8” drive or 13mm universal-jointed socket

 or 

2a. 12" wobble extension in 3/8” drive to substitute for #1a

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 or 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 lay on the ground for comfort.

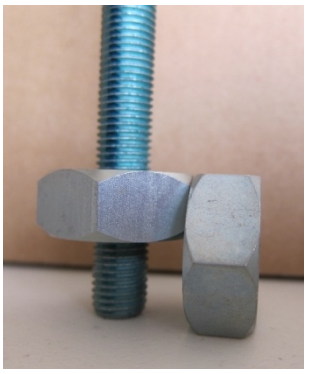
2. Once the car is raised, remove the factory plastic belly pan screws with your T25 Torx screwdriver.

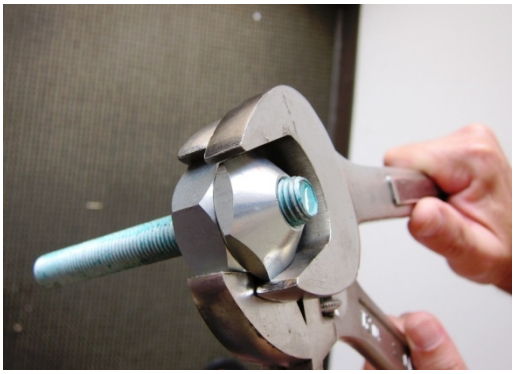
(T20 will work on these). On TDI cars you will also need to remove the three rear T30 screws. Also, remove the two front speed nuts from the side plastic pieces.

These speed nuts are an anchor for the two front T25 screws. You will not need the two front Torx screws for use with the MK5/MK6 Panzer Plate.

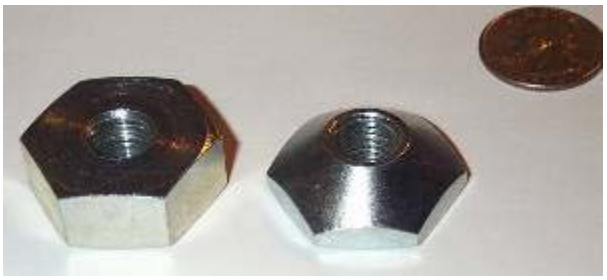
3. With an 18mm socket and breaker bar remove the left and right **front** 18mm headed bolts in the rear aluminum subframe. Please use pictures below as a guide. You may also use an impact gun to remove these bolts.

4. Prepare the four inch long (100mm) greenish 12mm studs. First, locate the ends with the straight lines (below, left). Thread one of the large flat sided nuts onto that end until it is at a depth that is even with the other 30mm nut as shown (below, center). Next, thread a conical nut on the stud and jam it against the flat nut, which is sometimes known as "double nutting" (below, right). Alternatively, you can use a vise to hold the flat nut. Repeat the process for the other stud. Finally, thread both studs into the holes left from removing the 18mm-headed bolts. Finish installing the stud by driving the conical nut with a 30mm socket until the large flat nut is tight against the subframe. You will torque the nuts in the next step.





5. Remove the conical nuts from the studs by holding the large flat nuts with a crescent wrench or open wrench. Once both conical nuts are removed, tighten the large flat nuts with the 30mm socket and torque wrench to 70Nm or about 55 lb-ft. Finish tightening the nuts with a long breaker bar by tightening the flat nut by an extra 90 degrees (quarter turn). Once the nuts are tight, the stud mounts for the rear of the Panzer Plate are complete!



The protruding threaded section of the two greenish studs will be the rear mounting points of the Dieselgeek Panzer Plate.

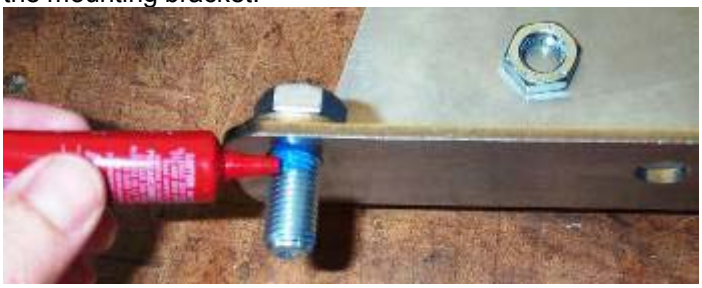
6. Prepare the forward mounting brackets. Get the 12mm x 30mm bolts and place the ½" thick gold washers onto them.

Stick these two bolts into the 13mm holes in the mounting brackets like this for the right side

and like this for the left side.

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 in the tube.

Place one drop of threadlocker 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.



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.

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.

Here is a picture of the right side mount's stud after the plastic belly pan has been installed (which comes later in the procedure).

7. If present, remove the dust caps from the two 8mm threaded studs in the underside of the left side frame rail. Next, push two of the hex body rivnuts into the 13mm hexagonal holes adjacent to the two 8mm studs. They should stay seated in their holes and barely protrude from the frame rail.

Note: Your car may not have dust caps on the painted studs.

8. Get two of the 9/16 washers. These are the thin gold washers with large holes, relatively speaking. On the underside of the frame rail there will be a waxy residue dripping from a few different places. Take a washer and lightly scrape off a little of this wax. Use the waxy side of the washer to stick the washer to the underside of the frame rail around each of the 8mm studs. If there is insufficient wax to perform this you may use silicone adhesive or wheel bearing grease. The washers **must** be in place before the mounting bracket can be bolted to the frame rail.

9. Place two of the black 8mm nuts with the integral washers near the left side frame rail within reach. Get the mounting bracket marked "Left V1" and with the four-hole side facing up, place the bracket onto the two 8mm studs on the underside of the frame rail. Thread the black 8mm nuts onto the protruding studs but don't fully tighten them yet.

The bolt that arrow above is pointing to will most likely be in the way to tighten the forward mounting bolt into the rivnut. The bolt with the arrow will need to be backed out. It is accessed through the front of the car as shown on the next page.

Back out the bumper bolt by reaching through the front driver's side grill with a 12 inch extension and 16 mm socket. Loosen the bolt just enough to access the forward bolt on the mounting bracket. Be sure to retighten this bolt after you've set the rivnut.

10. Take two of the silver 10mm x 30mm bolts and place a 10mm large diameter fender washer on each and grease the threads of each bolt.

Thread one of the 10mm bolts through the mounting bracket and into the **front** mounting bracket hex rivnut using the 17 mm socket. Thread the other bolt & washer through the mounting bracket and into the rear mounting bracket hex rivnut.

Tighten both bolts to 30 lb-ft. with a torque wrench.
Please note that you are setting the rivnuts into the body of the car during the first tightening so you must tighten them to 30 lb-ft. Finish by tightening the two 8mm nuts with a deep 13mm socket.
The left mounting bracket will look like this when installed:

We have had a few customers break a stud when tightening the bolts. This is not a big deal. The driver's side studs are weak. The rivnuts do all of the work on the driver's side. The passenger's side stud is much stronger.

11. If you have a TDI or 2.5 liter gas engine, **skip** to step 12. If you have a 2.0 Turbo gasoline-powered car then you will need to temporarily remove the intercooler hose which blocks the right side mounting bracket area.

To do this, use a regular head screwdriver to pry out the wire clips which hold the ends of the flexible intercooler pipe, as shown below. Once the clips are out of the grooves the flexible intercooler pipe will unplug from theintercooler on the front side and the hard metal pipe on the engine side. Put the wire clips back to their original positions *immediately* after you remove the flexible pipe and stuff clean paper towels into the open ends of the intercooler ducts.

12. The right side mounting bracket (marked “Right V1") mounts in the same way as the left mount with the exception that there are just two attachment points. To get started, stick the last thin gold 9/16” washer to the area surrounding the 8mm stud on that side of the car.

Next, push the last 13mm hex rivnut into the hexagonal hole in the right side frame rail. Put the right side mounting bracket up into place and thread the last 8mm black nut onto the 8mm stud.

Next, put the last 10mm large diameter fender washer on the last 10mm bolt. Grease the threads of this 10mm bolt.

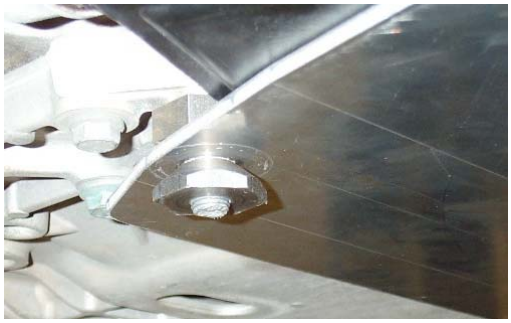
Thread the greased 10mm bolt by hand through the mounting bracket and into the rivnut and tighten the bolt to 30 lb-ft. Please note that you are setting the rivnut into the body of the car during the first tightening so you **must** tighten it to 30 lb-ft. Finally, tighten the last remaining 8mm black nut w/washer to 15 lb-ft. A universal joint adapter or 13mm universal-jointed socket in 3/8" drive makes this job easier. The mount will look like this after it is properly installed.

or

13. **2.0 Turbo gasoline-powered cars only**: After you finish installing the right side mounting bracket in the preceding step, remove all of the paper towels from the metal intercooler duct and intercooler and insert the flexible intercooler duct back into the intercooler and the hard metal duct. Try to pull the flexible rubber duct back out of each side to make sure it is fully seated.

Adjusting the forward mount brackets

Set all four of the large conical nuts under each of the 12mm threaded mounting points you have mounted to your car. Next, lay the Panzer Plate on your chest with the stamped side "MK5/MK6 PANZER PLATE WWW.DIESELGEEK.COM" at the front and facing the ground. Slide under the car and place the skid plate's rear two holes onto the rear mounting studs and then hold the plate up in the middle with one hand. Thread on the two rear 30mm conical nuts with the *conical side facing the skid plate* until they are snug and then slowly let go of the plate. Using the conical nuts in this way centers the plate for the adjustment process only.



Please note that the nuts will have their conical side facing the ground during regular service.

The two forward mounting studs may not initially engage the forward skid plate mounting holes. If they do match up then remove the plate. If they do not match up then take your permanent marker and draw an arrow on each of the mounting brackets and the skid plate showing which direction each of the mounting brackets must move for the skid plate to mount perfectly to both of the front studs. Remove the plate.

If your forward mounting brackets require adjustment, loosen the bolts and nuts holding the bracket(s) in need of adjustment. Re-position the brackets by using the arrow you drew on the brackets and re-tighten the mounting hardware (15 lb-ft for the nuts and 30 lb-ft for the 10mm bolts) for each bracket. Test fit the plate once again. If the 12mm mounting points line up well then remove the skid plate. Once this procedure is performed it will never have to be performed again.

Remove the two front speed nuts from the side plastic pieces if you have not already done so.

You will not reuse the two front Torx screws.

Finally, reattach the plastic original equipment belly pan with the remaining Torx screws.

For TDIs only, trim the rear of the factory plastic belly pan with a razor blade if any part of it covers the rear flat 30mm nuts. The amount of plastic to trim will be very, very small if any.

Mounting the Panzer Plate

Shake the tube of Locktite vigorously. Apply two drops of Locktite to the threads of all four of the conical 30mm nuts. This should be done every time you mount the skid plate to the car. Lastly, mount the skid plate to the car and thread the nuts of two *opposite* corners to hold the plate up. The flat sides of the large nuts mount against the skid plate and the conical sides of the nuts face the ground. Finish threading on the other two nuts. Tighten the nuts to 50 lb-ft. **You are finished!**

P.S. If you forgot to retighten the bumper bolt, please do so before hitting the road!

A Word to our Wise Customers
Please email us at jim@dieselgeek.com if you have any comments or questions regarding the install of this kit. Alternatively, you may call us **210-852-4819** during regular business hours if you have a question requiring immediate assistance. Please let us be the first to know if you encounter any difficulties as we are the best qualified to answer your questions.

We have provided you with a generous 6 ml tube of medium-strength removable thread locking compound which should last for many on/off cycles of the skid plate. This product is widely available online and from auto parts stores if you ever run out of it. We highly recommend that the tube of **Locktite and the 30mm socket be kept with the car** and in the heavy duty ziploc bag we provided with the kit. If you have your car serviced elsewhere you should make these parts available to the service manager and advise him or her of the need to use Locktite on the 30mm nuts when the plate is reinstalled on the car.

Thanks for buying our plate!

Jim