

B5 Panzer Plate Skid Plate Install

For 1996-2007 B5-B7 Audi A4 and 1998-2005 B5-5.5 VW Passat

Note: C5 Audi A6 owners should use any B6-B7 specific notes during install.

Tools Required

1. Car ramps and wheel chocks or jack, jack-stands and wheel chocks or a car lift
2. Safety goggles
3. Medium or large-bladed regular screwdriver for Dzus screws or you can use one inch diameter washers (Figure 1).



Figure 1 - One inch diameter washers

4. 10mm wrench or 10mm socket and socket wrench
5. 17mm combination wrench or socket in 3/8" or 1/2" drive size
6. Torque wrench for optimal rivnut setting
7. Brake cleaner for de-greasing area around rivnut mounting location
8. Optional: two part epoxy for rivnut "bulletproofing" --JB Weld brand works great!

Parts List

1. One 53" wide B5-B6-B7 Panzer skid plate
2. Two aluminum side pieces or "wings" (Figure 2). These double as install tools (Figure 3) for the rivnut anchors (Figure 4).



Figure 2 - Two aluminum side pieces or "wings"



Figure 3 - Install tools



Figure 4 - Rivnut anchors

3. Four 6mm black speed nuts (Figure 5)



Figure 5 - Black speed nuts

4. Four 6mm black screws (Figure 6) with integral washers



Figure 6 - Black screws

5. Seven silver OE Dzus screws (Figure 7) for B5 Audi A4, four silver OE Dzus screws for B6-B7 Audi A4 or Passat VW/Audi part number 8D0 805 121



Figure 7 - Silver OE Dzus screws

6. Four white nylon washers (Figure 8) to be used with the silver Dzus screws.



Figure 8 - White nylon washers

7. Six silver OE Dzus receptacles/clips (Figure 9) with VW/Audi part number 8D0 805 960



Figure 9 - Silver OE Dzus receptacles/clips

8. Two slightly longer black or brown OE Dzus screws (Figure 10) for Passat or B6-B7 Audi A4 only with VW/Audi part number 3B0 805 121.



Figure 10 - Black or brown OE Dzus screws

9. Two shiny 10mm bolts (Figure 11) with 17mm hex heads (10mm x 30mm long with 1.5 thread pitch, zinc plated)



Figure 11 - 10mm bolts

10. Five 1.5" diameter fender washers (Figure 12) (two are for bolts above, one is a spare (two are optional spacers for all vehicles with Sport suspension or Passat Wagon/A4 Avant)



Figure 12 - Fender washers

11. Two large black rivnuts (Figure 13) with Audi/VW part number N 909 147 01. These are the permanent threaded anchors for the subframe to be installed for the Panzer Plate.



Figure 13 - Back rivnuts

12. One 6mm gold-colored lock nut w/shoulder and stainless washer (Figure 14), Passat only. Audi B6-B7 owners can either discard these or keep them for other uses.



Figure 14 - Lock nut w/shoulder and stainless washer

13. Two self-tapping 6mm screws (Figure 15) with built-in washers for spoiler attachment, B5 Audi A4 only



Figure 15 - Self-tapping 6mm screws

First-time Install Procedure

Raise car in the air: Use either ramps and wheel chocks or a jack and a pair of jack stands, or a car lift. Car must be raised on both sides for procedure to work.

Remove old belly pan:

1. Put on safety goggles. Remove old plastic belly pan if you still have one installed on your car. Save all 1/4 turn Dzus screws, if present, since these are the same as the ones provided.
2. Remove rear mount of belly pan, if present, with a 10mm wrench (the one with three receptacles on it.). Remove all three 1/4 turn screw (Dzus) receptacles, if present, and save them as spares in provided ziploc bag.



Figure 16 - Remove rear mount of belly pan, if present, with a 10mm wrench

Install two rivnut threaded anchors:

1. Grease the threads of the provided large silver 10mm bolts (Figure 17). Also, grease one side of two of the provided large silver washers as shown in the preceding picture.



Figure 17 - Grease the threads of the provided large silver 10mm bolts

2. Insert one of the large greased bolts and washers through the hole of one of the side "wings" as shown here (Figure 18). The greased side of the large washer rests against the aluminum "wing".

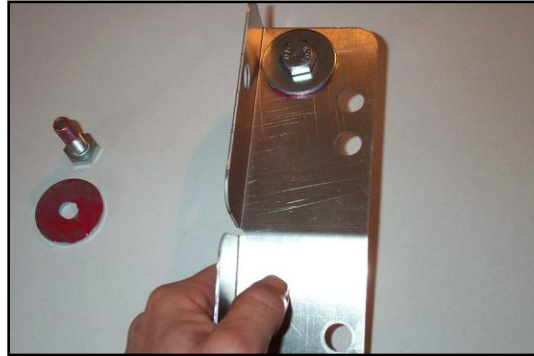


Figure 18 - Insert one of the large greased bolts and washers through the hole of one of the side "wings" as shown here.

3. Thread one of the large black rivnuts onto the greased bolt (Figure 19) and thread it until it is snug against the aluminum "wing" (Figure 20 . Here is a Top view (Figure 21).

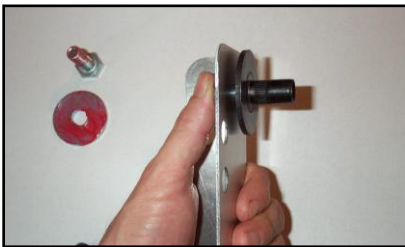


Figure 19 - Thread one of the large black rivnuts onto the greased bolt



Figure 20 - Snug against the aluminum "wing"

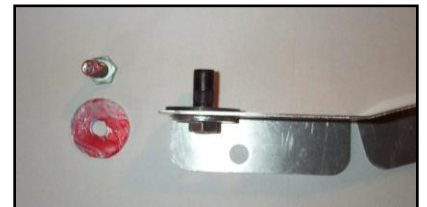


Figure 21 - Top view

4. Locate the two 13mm hexagonal holes in your subframe (Figure 22). The subframe is the large black steel structure behind your oil pan. Thoroughly degrease and clean **two** inches of the area surrounding these two hexagonal holes. Brake cleaner works great for this task.



Figure 22 - Locate the two 13mm hexagonal holes in your subframe

Rivnut "Bulletproofing": Mounting the rivnut anchors without epoxy bonding is perfectly fine but you might consider bonding the rivnut anchors to the subframe with a two-part epoxy mixture for super-anal peace of mind (sorry if this isn't PC enough for you). The purpose of the epoxy is to keep any road salt out of the area in between the rivnut and subframe and to further strengthen the bond between the rivnut and subframe. To do this you begin by mixing 1/2 ounce of a two-part epoxy on a paperboard or plastic sheet (Figure 23). You then coat the topside washer (shank side) of two of the rivnuts (Figure 24). Keep the epoxy away from the threads of the rivnut. Remember that the rivnuts must be installed into the subframe within 15 minutes after the epoxy has been applied to them as the epoxy sets quickly. Also, make sure to remove any grease or dirt from subframe before installing rivnuts. This resulting bond will last for eons!



Figure 23 - Mixing 1/2 ounce of a two-part epoxy on a paperboard or plastic sheet

Figure 24 - Coat the topside washer of two of the rivnuts

5. Insert the 13mm tubular projecting shank of the black rivnut with the "wing" assembly into one of the hexagonal holes in the car's subframe. Push it into the hole until the rivnut's large built-in washer contacts the subframe. You may have to bump it in with a hammer. If you chose to use epoxy on the rivnuts, the epoxy will ooze out a little when you press (and torque) the rivnut against the subframe. Just wipe off any excess.
6. With a 17mm box end wrench or socket, start tightening the greased 10mm bolt (Figure 25). As you tighten the bolt, the rivnut's tubular section will "mushroom" (Figure 26) inside the subframe, locking it into place. Finish tightening the bolt with a torque wrench set to 30 lb/ft (Figure 27). After the bolt/rivnut is torqued, remove the bolt and "wing". Repeat the process with the other greased bolt, a rivnut, and the second hexagonal subframe hole.



Figure 25 - With a 17mm box end wrench or socket, start tightening the greased 10mm bolt



Figure 26 - Mushroom

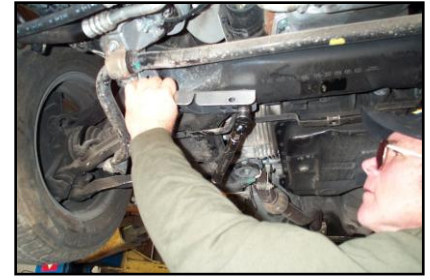


Figure 27 - Torque wrench set to 30 lb/ft.

Install Dzus Receptacles and 6mm Speed Nuts onto "Wings" And Attach Them to the Car

The "wings" (Figure 28) are permanent fixtures that attach to the wheel housing plastic on the driver's and passenger's side of the car. They never need to be removed once installed. The Panzer Plate attaches to these "wings".



Figure 28 - Wings

1. **For all cars:** There are two Dzus receptacles (Figure 29) to install per wing. On the shorter flange with two holes only, install one Dzus clip per hole (Figure 30).



Figure 29 - Receptacles



Figure 30 - Install one Dzus clip per hole

2. **For 1996-2001 B5 Audi A4 and 1998-2005 Passat only:** The two supplied wings are identical but there are holes in each that correspond to the driver's side and passenger side. On the longer flange with six holes, one side will have two 6mm speed nuts installed in the left holes and one side will have two clips in the right side (Figure 31). To install the speed nuts just slide them onto the wings (Figure 32) until they click into the hole.

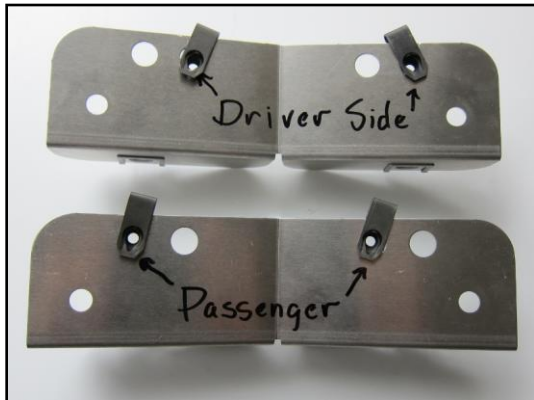


Figure 31



Figure 32

3. **For 2002-2007 B6 and B7 Audi A4 only:** On the longer flange with six holes, the speed nuts will install into the outside holes on both wings (Figure 33). To install the speed nuts just slide them onto the wings (Figure 34) until they click into the hole.

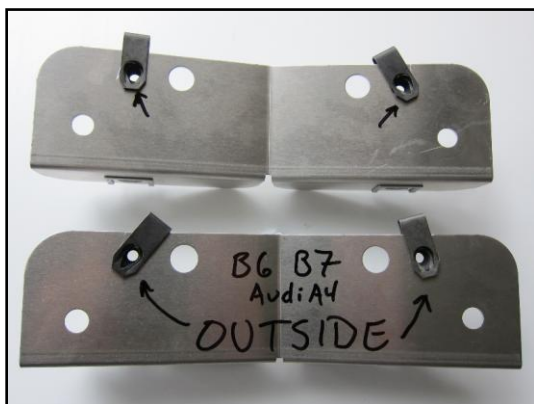


Figure 33



Figure 34

4. **For 1996-2001 B5 Audi A4 and 1998-2005 Passat only:** Use the crease on the wheel housings and the crease in the wings as a guide for alignment (The yellow line in this picture is where the crease is (Figure 35)). Place the wings against the front side of the wheel housings and *loosely* attach them to the wheel housings by threading in the black 6mm screws (Figure 36). Leaving them loose at this point will allow the maximum amount of adjustment. You will fully tighten

the 6mm screws at the very end of the install. Please note that the wings must not touch the sway bar (Figure 37).



Figure 35 - The yellow line in this picture is where the crease is



Figure 36 - Threading in the black 6mm screws

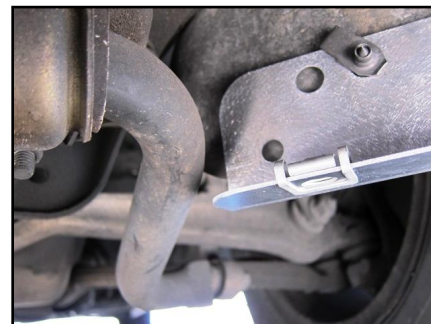


Figure 37 - The wings must not touch the sway bar

- 5. For 2002-2007 B6 and B7 Audi A4 only:** Position a wing behind the plastic wheel house liner and line up the holes to the speed nuts (Figure 38). Hand thread two 6mm screws (Figure 39) through the plastic into each of the speed nuts and leave them loose! Leaving them loose at this point will allow the maximum amount of adjustment. You will fully tighten the 6mm screws at the very end of the install. You might have to press pretty firmly (Figure 40) on the wing to get the screws started on the later Audi A4. Once the first wing is attached, attach the other wing on the other side of the car. Please note that the wings must not touch the sway bar (Figure 41).



Figure 38 - Line up the holes to the speed nuts



Figure 39 - 6mm screws



Figure 40 - Press pretty firmly

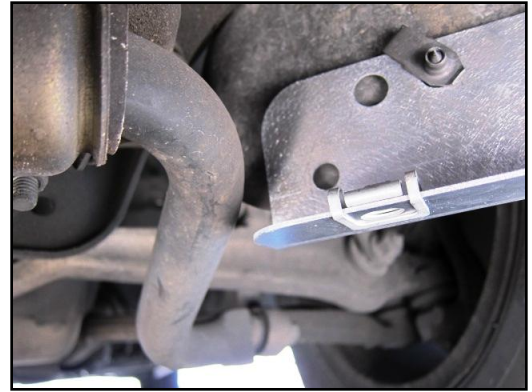


Figure 41 - The wings must not touch the sway bar

Install Panzer Plate

1. Place two of the large washers onto two of the large, previously greased bolts (Figure 42). Place these bolts/washers near the subframe where the rivnuts are installed so that they will be easy to reach during plate install. Familiarize yourself with the three front mounts (Audi A4 1.8T Picture - Figure 43, Figure 44, and Figure 45) (Passat 1.8T Figure 46, Figure 47, Figure 48). Install the provided Dzus receptacles/clips at these points if your car does not already have them installed. The flat side of the clip faces down. Passats only have left and right clips with a 6mm threaded stud in the center mounting point. B6-B7 Audi A4 with four cylinder turbo engines only will have a usable anchor point on the right side and center only. This is OK.



Figure 42 - Large, previously greased bolts



Figure 43



Figure 44



Figure 45



Figure 46



Figure 47



Figure 48

2. Raise the skid plate and slide it into place from the rear of the car. The Panzer's outside edges slip in above the front spoiler (Figure 49, Figure 50). Also, the plate slides in between the two outside front mounts and the spoiler. On Passat only, you might have to pull the front center of the plate down slightly to clear the 6mm stud attachment (Figure 51). On initial install for the on B6-B7 Audi A4, the Panzer will be a tight fit but in a week or two the front spoiler will mold itself to the Panzer Plate contours for an easy subsequent install.



Figure 49 - Above the front spoiler



Figure 50 - Another picture



Figure 51 - 6mm stud attachment

3. Once the skid plate is in place, loosely thread in the two greased 10mm bolts (Figure 52) (with 17mm heads). If you have a station wagon, Avant, B5 S4, or any car with Sport Suspension package or if you have a front sway bar larger than the stock 27mm diameter bar then you will need to place one of the extra supplied large washers in between **each** of the rivnuts and Panzer Plate (Figure 53). These extra washers act as spacers for the skid plate to clear the larger sway bar. If your car has a larger sway bar and requires the spacer washers, you may attach them to the top side of the skid plate with a dab each of black or clear silicone adhesive so the washers never get left out. (Permatex brand, for example, works perfectly.)



Figure 52 - Loosely thread in the two greased 10mm bolts

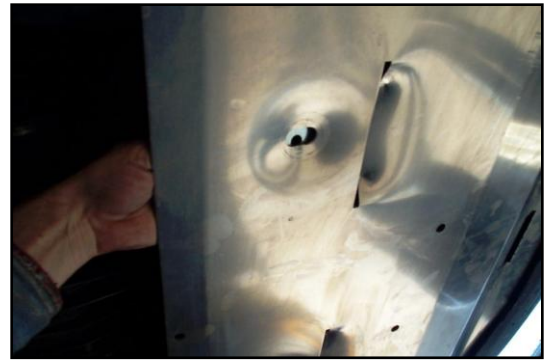


Figure 53 - Extra supplied large washers in between each of the rivnuts and Panzer Plate

4. Once the two large bolts are threaded through the plate and spacer washers (if specified), align the front of the plate with the three front mounts (Figure 58, Figure 59, Figure 60). The B6 and B7 Audi A4 will not use the front dimpled hole like the B5 cars but instead they will use the adjacent hole to the left on the closer to the front of the skid plate. Once the front mounts are visually aligned, attach the plate with two **black** Dzus screws on the outside and one 6mm **locknut and washer** in the center for all Passats (Figure 54) or with three **silver** Dzus screws (Figure 55) for all B5Audi A4 and S4. For 2002-2007 B6 and B7 Audi A4 once the front mounts are visually aligned, attach the plate with two **black** Dzus screws on the middle and passenger side front mounts. Turn all Dzus 1/4 turn fasteners clockwise to their stops (Figure 56). You may use a one inch diameter washer (Figure 57) as a screwdriver. For Passat, tighten the single 6mm nut to 10-15 lb/ft. or "pretty darn tight".



Figure 54 - For all Passats



Figure 55 - Dzus screws



Figure 56 - Turn all Dzus 1/4 turn fasteners clockwise to their stops

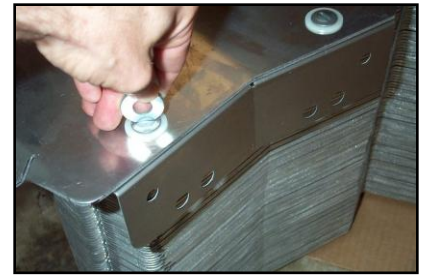


Figure 57 - A one inch diameter washer



Figure 58



Figure 59



Figure 60

5. Using the four silver Dzus screws and white plastic washers, attach the skid plate (Figure 61) to the left and right "wings". For the B6-B7 Audi A4 only you will use the smaller holes (Figure 62) in the Panzer skid plate to affix the wings to the skid plate.



Figure 61 - Attach the skid plate



Figure 62 - Smaller holes

6. Finish install by tightening the two 10mm center bolts to no more than 30 lb./ft (Figure 63) and then tighten the 6mm black wing screws (Figure 64) until they are good and tight. You won't ever have to touch these screws again.

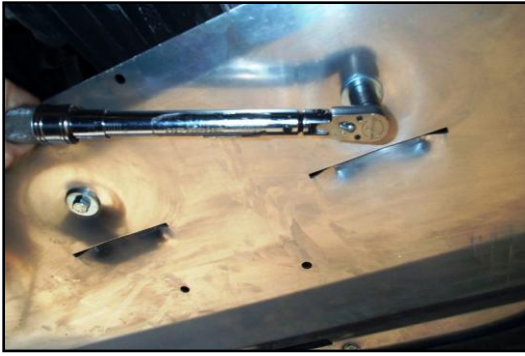


Figure 63 - Finish install by tightening the two 10mm center bolts to no more than 30 lb./ft



Figure 64 - Tighten the 6mm black wing screws

You are finished. Store all left-over hardware in the heavy-duty ziploc bag we supplied with the skid plate and store the spares bag in your glove box or trunk. Go forth and be protected!

B5 Audi A4 Spoiler Attachment Screws

The stock B5 Audi A4 plastic front spoiler can be easily hooked by parking curbs when you have accidentally run the front of your car beyond one of them. When you reverse the car, the spoiler catches on the parking curb which can either pull just the spoiler off or dislodge the entire front bumper cover. This is highly annoying and can be expensive to fix. We have provided 6mm self-tapping screws with built in washers (Figure 65) to stop this from happening. Installing these screws entails the following:



Figure 65 - 6mm self-tapping screws with built in washers

1. After your skid plate is fully installed, mark two spots, one to the left of the left front skid plate mount (Figure 66) and one mark to the right of the right side front skid plate mount (Figure 67). Do not drill in any other place.

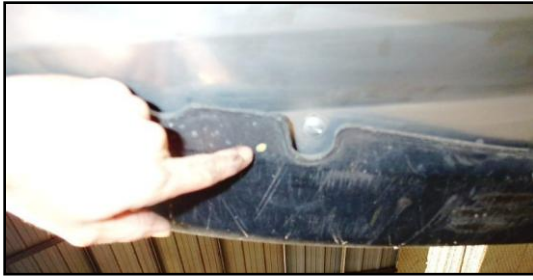


Figure 66 - Left front skid plate mount



Figure 67 - Right side front skid plate mount

2. Put on safety goggles. Using a 7/32" drill bit and drill motor, push the spoiler up against the skid plate where one of the marks are and drill a hole in the spoiler and then into the aluminum skid plate (Figure 68). Repeat for the other side of the car.



Figure 68 - Drill a hole in the spoiler and then into the aluminum skid plate

3. With a 10mm socket and socket wrench, screw the 6mm screws into the holes you have drilled. Do not over tighten them. You are finished (Figure 69). No more spoiler hang-ups!



Figure 69 - You are finished

Note: The spoilers on VW Passat are attached to the skid plate with the front black Dzus screws and don't require these extra screws...

- End of Instructions -