

Heute mal die beiden Wischermotoren ausgebaut. Lager zerlegt und neu gefettet. Waren trockengelaufen und der Beifahrerwischer ging schwer hin und her.

Also, höchste Zeit für die Mechanik vor dem Totalausfall bei Regen. Bei Sonnenschein gehen komischer weise die Dinger nie kaputt 😊

Bammel hatte ich nur vor der Demontage der Plastikabdeckung unter der Windschutzscheibe. Nachdem ich ca. 1/4 Stunde rumprobiert hatte, wusste ich wie es geht. Diese sind zusätzlich noch mit 3 Blechklammern befestigt, die sich von Hand leicht abziehen lassen. Sie sind an den Stellen, die das Plastikteil im Motorraum links, rechts und in der Mitte fixieren. Danach war alles nur noch ein Kinderspiel. Gleichzeitig mal dahinter ordentlich "aufgeräumt".

Die Wischerwellen lassen sich ohne Demontage des Gestänges zum Motor relativ gut mit einer 10mm Messingstange aus dem Baumarkt austreiben. Zuvor an der Unterseite mit einem schmalen Schraubendreher den Klemmring von der Welle entfernen. Bei Bedarf von Hand entrostet und mal mit einem 12 mm Bohrer den Knaster aus der Lagerbuchse entfernen. Gut durchwischen mit einem Stoffstreifen und anschließend geölt und gefettet wieder zusammenbauen.

Ist wirklich keine Wissenschaft. Bin begeistert, wie gut beide Teile sich ausbauen ließen. Ist in Zukunft kein Problem mehr.

Einen ganzen Nachmittag sollte man veranschlagen, wenn es ordentlich gemacht wird.

Kleine Hilfe mit Bildern vom Ausbau.

Wenn man die Teile in den Händen hält ist der Rest wie gesagt kein Problem.

Ein paar Tips:

Dass Plastikteil beim Windschutzscheibe kann man auch ohne Hebel los kriegen. Einfach von unten heraus drücken. Heizungskabel beachten. AC vorher auf Umluft schalten und Eingang mit Lappen abdecken und mit Einweckgummi sichern!!!. Sonst fallen Blätter herein. Bei neu montieren von Stangengelenke ist die Position auf Motorwelle unwichtig. Motor kalibriert sich selbst. Also einfach die liegende Position der Wischerblätter mit Klebeband markieren

Vor Montage der Wischer einmal kurz laufen lassen.!!! Dann Wischer aufstecken, entlang der am Anfang markierten Lage müssen sie zu liegen kommen. Festziehen.

Wichtig: Achsen bei neuem und altem Wischergestänge auseinanderbauen und mit Seewasserfett !!! massiv einschmieren, ebenso die Kugelgelenke unter den Gummimanschetten, hierzu Fett auf eine Spritze ziehen. Alles muß schön vor fett überquellen :-). Auch auf die Scheibenwischerarmaufnahme etwas fett, korrodiert dann nicht so schnell.



**Once you have the first 6 inches released, the rest is easy.**

*After you remove the whole cover, flood the clip at the base of the windshield with soapy water before you re-install the cover. This will flush sand, dirt, etc. out of the retaining clip, making re-installation MUCH easier.*

Hier etwas aufpassen !



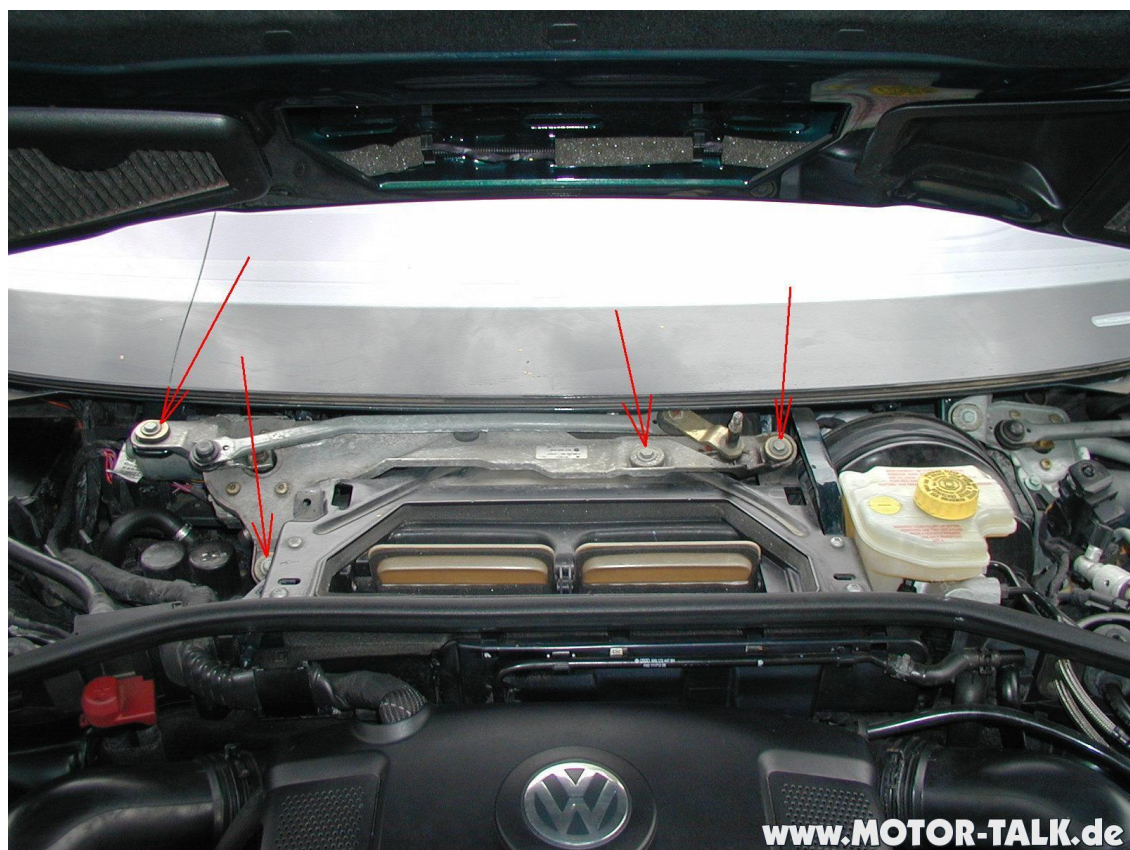




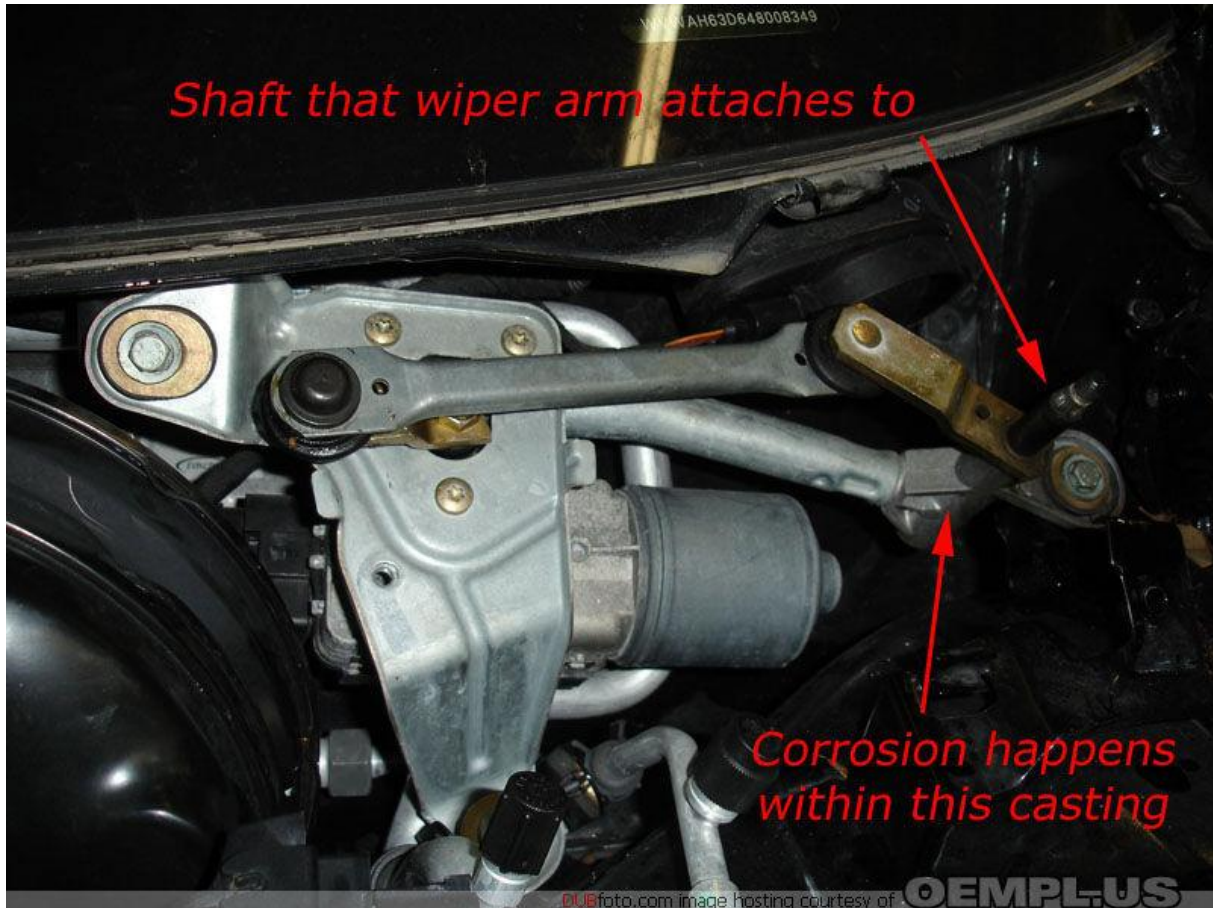
Nun geht es weiter.



und der Wischermotor auf der Beifahrerseite.



The photo below shows the left hand (driver side in NAR) assembly in situ before removal. It is not particularly difficult or time-consuming to remove this assembly, however, like all other Phaeton repairs, you need to pay attention to what you are doing because the car is rather complex, and you run the risk of screwing up something else totally unrelated to the system you are working on if you don't put everything back together properly.



The photos below show where the corrosion takes place. This is the passenger side assembly from my Phaeton. Normally, the round shaft does not come out of the mechanism – I took it apart to find out why it was so difficult to move it.





So, [here's the removal and replacement guide](#), which is a combination of instructions provided in the North American Phaeton Service Manual (ELSA) and lessons learned from the 'School of Hard Knocks':

1) Before you take anything apart, you might as well order the parts. You will need the part described as “windshield wiper bracket with operating rod and crank arm (driver side)” or “windshield wiper bracket with operating rod and crank arm (passenger side)”. These correspond to items 6 and 7, respectively, on ETKA illustration 955-00. You do not need to order motors! You will most likely need a new set of Phaeton wiper blades – this as a result of consequential damage from the blades fouling against each other. These are items 17 and 18 on the same ETKA illustration. You might need two of the cosmetic caps that go on the end of the wiper arm – item 21 on that illustration. Don't forget to order one retaining clip (item 22) for each cosmetic cap (item 21) that you order. And, of course, you will need a new fuse to replace the fuse that blew.

In my own opinion, if you have sufficient corrosion on one side of the car to cause a failure, you probably have the beginnings of corrosion on the other side of the car as well, so it makes sense to replace both assemblies. Wipers can be considered a reasonably safety-critical part, and you might as well save the grief associated with waiting for the other side to fail. However, it is up to your VW dealer (or, perhaps, those who set policy at VW of America) to get the authorization to replace both sides at the same time.

2) Don't disassemble anything until you have all the required parts. Trust me on this one, you don't want to take everything apart on a Monday, then be scratching your head on Thursday wondering how everything originally fit together. This is an especially frustrating feeling if you don't happen to have another Phaeton handy that you can refer to for guidance about how to put it back together. 🤖

3) Before you begin any disassembly work, go get a replacement wiper motor fuse. Turn the ignition off, and replace the blown fuse. Make sure the wiper control arm on the right side of the steering wheel is in the OFF position (fully down position), and not in the INTERMITTENT (first notch up) position. Wet the windshield fully with warm soapy water, to minimize friction, then turn the ignition on. With luck, the failed wiper blade will move to the park position. Now, go to the Front Information Display and Control Head (the J523), press the SETTINGS hard-key, press the OTHER FUNCTIONS soft-key (lower left corner), then press the MAINTENANCE AND SERVICE soft-key (upper right corner). Finally, press the button that moves the wiper blades to the 'change blades' position – this being the extreme upward end of the stroke cycle for both wiper blades. Be aware that this button to move the wiper blades to the 'change blades' position will be disabled if the wiper stalk is in any position other than the OFF (full down) position.

Finally, get a wax crayon (from the kids play area in the front of the dealership, or get a tire crayon from the tire mounting machine) and put a mark on the outside of the glass windshield at the upper end of each wiper blade to show you where the blade should go when you replace them at the end of the job. This will save you having to remove and replace the blades several times to get the gap between the parked blades and the bottom of the windshield to the correct specification.

If you are successful in getting both of the wiper blades up to the 'change blades' position, great... this will save you quite a bit of time later on. If the new fuse blows and the problem blade won't move, this is not a big problem, I'll explain how to deal with it later.



4) Remove both wiper arms from the vehicle and set them aside. Now, remove the plenum cover that is aft of the engine. This is part number 2 on ETKA illustration 819-32. Next, remove the trim strip at the bottom of the windshield. This is a tricky task that brings with it the risk of breaking the windshield if you don't perform the task correctly, so, see this post for full illustrated instructions: [Plenum Chamber Cover – how to remove and replace](#). Part of the reason why you used warm soapy water on the windshield during step 3 is to make it easier to remove this trim strip – if it has been flooded with warm soapy water, it is much easier to get it out from the channel at the base of the windshield that it clips into. It can sometimes require a great deal of force to dislodge the first part of this trim cover.

5) Once those covers are off, the process is fairly straightforward. To get access to the passenger side mechanism, you will need to remove the three screws that hold the supplementary coolant overflow tank (W12 only) in place. You don't have to actually disconnect the tank, the hoses have enough play to let you move it out of the way. To get access to the driver side mechanism, you will need to remove one bolt that holds a very important temperature sensor in place. Pay attention to how this temperature sensor fits when you are taking it out – it is not difficult to remove and replace it, but getting it back together in the correct position is not intuitive. The photo below shows where it goes. You don't have to disconnect the electrical connector, just remove the bolt and set the sensor aside.



6) Below is a picture of the replacement part that you will get for the driver side. Compare the part below to the complete assembly above. It's best to do this comparison before you remove the complete assembly. 😊 As you can see, you will need to insert the lower tube-thing into the inboard side of the bracket, and remove the nut from the wiper drive motor and then fit the upper portion of the new part onto the wiper motor drive shaft. In the picture below, both of the arms are shown pointing out in the wrong direction. These two arms swivel freely, which



is why it is kind of important that you compare the replacement part with the old part before you remove the old part from the car – otherwise, it can be a bit confusing to figure it all out.



7) To actually get the assembly out of the car, you only have to remove three bolts. This is pretty easy, as you can see from the photo below.

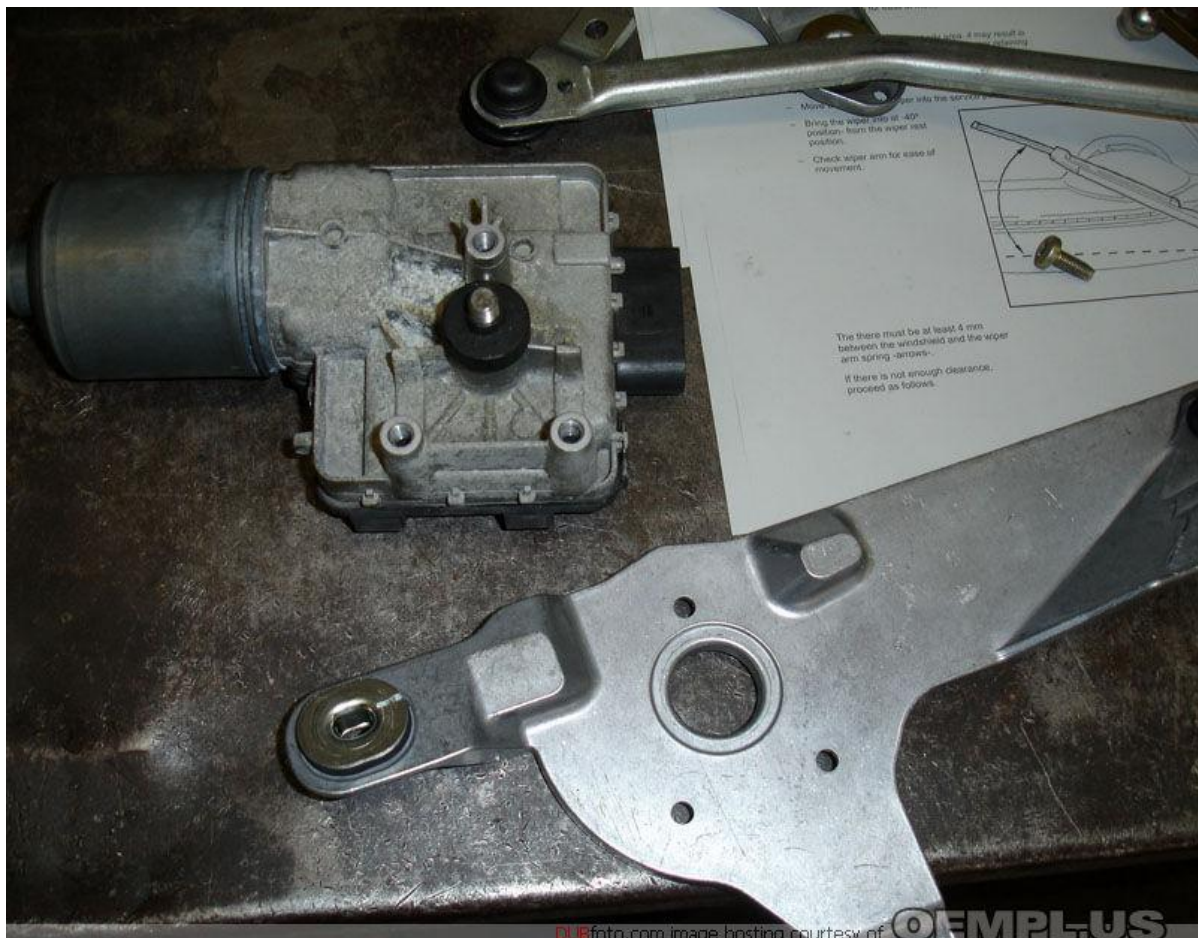


**8)** Once you get the complete original assembly out of the car, mark a reference line on the casting showing the alignment of the short, flat metal arm that attaches to the motor drive shaft. Because you put the wipers in the park position before you took the assembly out, and because you will be re-using the same motor, you want to get the alignment exactly the same – this will save you time and trouble later on, once you get everything back together. Now, take the nut off the end of the wiper motor drive shaft, loosen the three bolts that hold the wiper motor in place on the mechanism, pull the old tube out, and insert the tube portion of the new mechanism in the same place. From here on in, it is all re-assembly.

**9)** It can be a bit troublesome to fit the whole assembly back into the car, because there is not much extra space around it. Therefore, it is easiest to manipulate the assembly back into place first, then put the electrical connector into the wiper motor second. If you plug the motor in before you get everything in place, it limits your wiggle room. The remainder of the re-assembly process is pretty straightforward. Use a vacuum to clean out the channel at the bottom of the windshield before you try and put the trim piece back in – chances are that there will be all sorts of small stone chips in that channel. Flood the channel with warm soapy water (again!) before pressing the trim strip into place with your fingertips. If the channel is clean, you should be able to snap the strip into place with nothing more than just finger pressure.

**10)** Don't forget to put the flat spring clips in place on the trim strip before you install the plenum chamber cover (see photos at this post: [Plenum Chamber Cover – how to remove and replace](#)).

The process for replacing the passenger side wiper is very similar, but not quite identical because of differences in the design of the passenger side mechanism.





As mentioned earlier, you will probably have to replace both wiper blades because of consequential damage caused by the blades fouling against each other. Wiper blade replacement is quick and simple, but please don't forget to clean the windshield with a claybar before you put the new blades on – otherwise, the new blades will not perform at their best.

It is possible that the decorative caps on the ends of the wiper arms may also have been damaged when the blades hit each other. To replace these caps, you need to first remove a little retaining clip on the underside of the cap. The photos below tell the story.



