



Technical Information TI05/v2

Subject	Teakdek maintenance and renovation - update March 2024
Header	Deck and superstructure
Introduction	This information describes what is important when maintaining a teak deck and how a partial or complete renovation can be carried out. The information is based on professional literature and personal and well-documented experiences of fellow sailors.

1. Introduction

Virtually all Trintels and Trintellas have one thing in common: they are equipped with a teak deck. A teak deck is beautiful but it requires a lot of work and care to keep it in good condition. With careful maintenance, a teak deck can last for decades, especially when the teak is of good quality and thickness. The teak deck used on Trintellas is generally of better quality and thickness than what is used on modern production yachts. This means that often, when the teak deck becomes worn out, and the screws become visible and the rubber seams begin to loosen, the teak is still thick enough to replace the screws and reseal them, and to deepen and re-rubberize the seams. Below are some recommendations and three well-documented experiences that may be useful when undertaking this extensive task.

With careful work, the end result can ensure that the deck lasts for many more years and looks as good as new.

2. Maintenance of a teak deck

Scrubbing and especially the use of a high-pressure washer are the worst things for a teak deck and will significantly shorten its lifespan. This removes the soft parts from the wood and makes it rough. The less you do to the deck, the better it will stay. Limit cleaning to using a very soft brush or a soft household scrubbing sponge, wiping with a rotating motion without applying much pressure. Using a scrub pad holder ensures even pressure. Green algae can be gently removed with this method, especially in freshwater environments. Regular rinsing with seawater is also good for a teak deck, and greying of the deck is normal and harmless. If sailing frequently in freshwater, cleaning with some soda or Biotex added to the water yields good results.

Older teak decks often show black streaks caused by mold and dead algae embedding into the soft teak deck. Scandinavian yacht yards have been swearing by treating them once a year with Boracol for years. After a longer period of treatment, a beautifully uniform grey teak deck is obtained.

3. Repair of a teak deck

Repair of a part or the entire teak deck is necessary when leaks occur and when the screws become visible. On Trintellas, the deck parts are often still 10 mm thick when leaks occur, which is thick enough to replace the screws and reseal them. If the rubber seams begin to loosen, the deck is usually still thick enough to deepen the seams and then apply new seam compound.

When leaks occur, it is important to investigate the condition of the construction under the teak deck, as leaks through the teak deck can affect the underlying structure. Leakage often occurs through deck fittings such as screw holes for cleats and stanchions, through-hulls, and filler caps. In decks with a sandwich construction with a balsa wood or foam core, it is advisable to "pot" all screw holes, meaning to provide the holes with a coat of epoxy so that no water can penetrate the filling material. This method is extensively described in the article by Aike van der Hoef, appendix 3. By wetting the teak deck, the seams that remain wet for a long time during drying are suspected of leakage between the teak wood and the deck; the seam compound is then no longer attached to the side of the rebate. By removing the rubber locally, you get an idea of the situation: if the rebate is still deep enough, at least 4-5 mm, and most of the seams still look good, you can apply new seam compound locally. If most of the seams are loose or dried out and the seam is shallow, then it is time to remove all the compound and deepen the seams again to a depth of 5-6 mm. This is also the moment to examine the condition of the underlying deck construction by drilling some holes in the rebate; you can see what is under the teak, whether it is wet or not. In steel Trintels, the teak deck is usually glued and screwed onto waterproof plywood; if there is leakage, this plywood often rots, which can also be seen from below deck. Polyester Trintellas have either a box construction consisting of 2 layers of polyester with balsa wood or foam in between or a solid glass deck. Construction with Balsa wood filling. In the construction with balsa wood filling, you can see from the drill if the balsa is still white, indicating it is dry; brown means it is moist, and brown sludge means the balsa is rotten. There can be large differences in the condition of the balsa wood in the deck. If the balsa is white, you can seal the holes with epoxy.

Appendix 3 contains the visual report by Jeroen Noot, who removed the teak deck, the polyester sub-deck, and the balsa wood because they were completely rotten due to leakage. He could scoop it out with a spoon. If the balsa wood is moist but not completely rotten, you can impregnate and preserve it as much as possible by removing free water and injecting PU resin. Because we do not yet have a detailed report of this method, here is a brief explanation. If the balsa wood is brown and moist, you can drill multiple holes in those areas, let it dry for a period; you need heating in the boat and/or blow a lot of air in with a compressor to blow out free water through the other holes. Be careful not to blow oil with your compressor. Repeat this frequently until you no longer see free water coming out. You can also drill a few holes below deck to let the water drain when you apply compressed air to it from the deck with the compressor. Then you can impregnate the balsa wood as well as possible by injecting PU resin with a syringe placed on the drilled holes; the amount of resin per hole varies considerably because there are hollow spaces between the balsa wood. This resin hardens in humid conditions. PU resin shows some air

bubble formation in very humid conditions, so do not push in a lot of resin at once, but try again a day later, after drilling out the holes, until the resin runs out of neighboring holes or you can no longer inject it. You can close the holes with a bolt after injection. Then clean the seams again with the multitool, remove the resin by sanding the deck, rout out the seams, and apply new seam compound.

For a solid glass deck, you can remove the screws and rout out the seams or remove the entire deck, close the screw holes, and reapply the deck and glue it back. An example of this latter method is described in the TVK Techniekforum (accessible to members).

4. Examples of teak deck renovations

Below are well-documented experiences that may be useful when undertaking deck renovation tasks yourself.

The renovations described here are personal experiences, and sometimes choices have been made for solutions that deviate from what is described in the professional literature. An example of this is the choice not to use polyethylene tape in the bottom of the seam compound, although this is recommended by most manufacturers. Both methods have achieved good results, and this remains a choice that each owner must consider and make for themselves.

Teak deck renovation: Below are the contributions from:

Attachment 1: Thomas de Baets with a Trintella Ia about removing the seam compound, routing out the seams deeper, and reapplying the seam compound.

Attachment 2: Jeroen Noot: The internet links to the visual report of Jeroen Noot's Trintella Ia, where the balsa wood of the underlying structure was rotten due to leakage, the teak deck and balsa wood were removed, the balsa wood was replaced with foam panels, and provided with a polyester/epoxy sub-deck, and the original teak was reapplied.

Attachment 3: Aike van der Hoef with a very detailed report on the renovation of his teak deck of a Victoire 1044.

During this update, some annotations have been added to the articles by the editorial team and placed in parentheses.

Attachment 4 – Gerard Hoogewerff

Compiled by: W. de Graaf

Contributors: Thomas de Baets, Aike van der Hoef, and others.

January 2018 - update March 2024 - Gerard Hoogewerff

Note: Technical Information Bulletins are issued by the Trintella Vriendenkring to advise members and other Trintella owners on the maintenance of their boats. Many of these bulletins are based on the experiences that Trintella owners themselves have gained with the maintenance of their boats. Although the publications have been compiled with the utmost care, no rights can be derived from them. The TVK welcomes comments that can improve the content of these publications.

Attachment 1

Teak deck renovation of a Trintella Ia by Thomas de Baets

Some annotations have been added to the update by the editorial team and placed in parentheses.

Bringing teak deck seams back to depth.

On our newly purchased Trintella Ia, the deck urgently needed attention. The seam compound was loose in many places, and some grooves were too shallow.

I wasn't keen on removing the old compound and reapplying it. However, deepening the seams (from 2mm back to 5mm) did concern me. The groove must have sufficient depth for good adhesion of the compound. When gathering information to perform this skillfully, we received many conflicting pieces of advice.

At the start of the task, the deck was lightly sanded with a (rotating sander such as a) Rotex from Festool to remove dirt and some coarser imperfections.

The old compound was removed with a Fein (or another multitool with special teak seam blades available online) with adapted chisels (available for this purpose). This requires some practice, patience, and concentration. Sometimes it's better to remove a seam in two phases, first shallowly and then to the bottom.

The chisel of the Fein is U-shaped. Afterwards, it was quite a job to clean the seam completely to the corners. This was done with a sanding block and scraper. (Removing remnants of old rubber from the sides of the seams works well with a half-round diamond saw blade for the multitool).



We alternated this task with stripping the varnished wood, otherwise, it would become a dull task in the same position.

The method that gave us the most confidence to deepen the grooves was using a trim router with a custom-made guide plate.

Alternatives such as working with templates and routers, deepening with the Fein, or manual methods all seemed impractical to us.

The Makita trim router is affordable (about 120 Euros), and we replaced the standard base plate with an aluminum attachment (made from a 5mm thick L-profile). We used a 2mm depth guide in front of the router bit and a 5mm guide behind it.

This all went very smoothly on a test piece. However, to use it on the boat, some filing work was needed to allow it to slide smoothly through the old grooves (rounding off corners, making it slightly conical).

Ultimately, deepening the grooves with the Makita was the least time-consuming task when tackling the deck. The entire deck was routed in less than a day!

I always had sufficient control over the machine, and stop and start points are not visible. I slipped once with the router, causing a minor damage, but I could have avoided it if I hadn't been distracted. I could also deepen the few grooves that were so shallow that the 2mm front piece didn't grip without any problems. The tailpiece had enough 'grip' so the router didn't veer off in the wrong direction.

For sealing, we chose Bostik, MSR Deck Caulk (formerly Simson kit). Based on experience, better than other brands. It's easier to work with and remains flexible over time. (Sikaflex 290DC pro is also well-regarded)

The seams should not have a strip at the bottom (not for a 5 by 5mm joint). However, thorough degreasing and applying primer are necessary.

Apply the compound slightly in excess. Ensure the spray tip has a beveled edge tailored to the joint, apply excess compound and hold the caulking gun so that you apply the compound to the bottom of the seam. Immediately after application, flatten the compound with a putty knife. (You can file a little hollow in your putty knife, giving you a rounded seam, as the compound shrinks slightly during curing). This ensures that the seam is evenly filled to the bottom, compensates for shrinkage, and ensures good adhesion to the edges.

Applying tape along the seams to catch excess compound, etc., is pointless, time-consuming, and increases the chance of errors. (Others have had good experiences with applying tape, reducing the need for extensive sanding of the deck afterward).

After the compound has dried (about a week), you can easily remove the excess compound with a 'chisel' (spatula) on the Fein (strips on the right side in the photo), without damaging the teak.



Sand again with a rotating sander such as a Festool Rotex. Another task that is more time-consuming than anticipated and takes a toll on your planning and your physique.

I sanded the compound seams smooth but didn't try to remove all the greying (it will come back anyway).

Attachment 2

Jeroen Noot

Trintella la-BN 440-Vrouwe Cornelia-Visual report deck renovation by Jeroen Noot. Jeroen experienced serious leakage due to his teak deck.

Part 1: <https://imgur.com/gallery/6yT9NZc>

Part 2: <https://imgur.com/gallery/nODTfeG>

Part 3: <https://imgur.com/gallery/RB9gd7g>

Part4: <https://imgur.com/gallery/3cg5lGS>

Part 5: <https://imgur.com/gallery/LlZ4U6F>

Part 6: <https://imgur.com/gallery/OczFDL0>

Part 7: <https://imgur.com/gallery/PXmjTyH>

End result and summary:

<https://imgur.com/gallery/ObwiBTT?s=wa>

Attachment 3

Aike van der Hoeft: Teak deck renovation of a polyester cabin sailboat.

Source: Internet

Introduction

An older teak deck on a sailboat can be a burden. It's worn down and therefore thinner. It leaks here and there, and some of the plugs are broken. However, removing the teak is a massive operation, which many are reluctant to do. Besides, sailing and moving on a teak deck is delightful. Always grippy, whether wet or dry, with shoes, boots, or bare feet.

So, renovation it is. That's what I did during the winter of 2013-2014.

In any case, you must remove all the rubber from the grooves and re-rubber them.

There's a good chance you'll also need to deepen the grooves because they've become shallower due to the deck's wear and tear. The practice based on which I've written this article is a teak deck that's 25 years old, on a 10.40 meters long and 3.25 meters wide boat. Only the flat part of the deck has teak, not on the superstructure. And on the benches in the cockpit, and on the bridge deck. Removing fittings

To begin, all the fittings must be removed. I left the aluminum toe rail that's on ours in place. The bow fitting also remained, as did the windlass because it had just been installed a year ago.

Broadly speaking, the fittings that need to be removed can be broken down into:

1. Cleats
2. Chainplate fittings
3. Genoa tracks
4. Stanchion bases
5. Winches (on the cockpit coaming)
6. Bow pulpit and stern pulpit
7. Handrails (in my case, only those for the mast)
8. Hinges and closures of lids (foredeck anchor locker and cockpit lockers)
9. Freshwater, wastewater, and diesel fill caps
10. Boom attachment (on our deck)
11. Cable penetration at the mast base

In total, I counted one hundred (100) holes in the deck, most of them passing through, each with a screw and below deck, a backing plate and a nut.



Fig. 1 Starboard side, with chainplates, stanchion bases, genoa track, handrails, and water fill caps



Fig. 2 Port side, stanchion bases and chainplates removed, genoa track still in place

If you can divide yourself into two people when dismantling fittings, that's handy because there's always a nut turning below deck. Furthermore, while dismantling, I already planned to put large body washers under all the nuts to get a firmer attachment later on. I also wanted to pot all the holes in the deck, meaning to widen them below deck, fill them with thickened epoxy, and then drill them again. This prevents water from ever getting into the deck core (foam, balsa, or plywood) afterwards.

To remove the winches on the starboard side of the cockpit, we had to remove the starboard storage compartment (also called a 'bird's nest'), otherwise, I couldn't reach the nuts on the underside. My, oh my,

that thing was stuck tight, with sealant. Putty knives, regular knives, guitar strings, utility knives, I used everything to cut through the sealant and get the compartment out.



Fig. 3 The hole from the starboard storage compartment

Once it was out, I decided to start using Butyl sealant as much as possible from now on, instead of the common Simson or Sikaflex. This sealant remains flexible, sticks to everything without a primer, is cheap, and lasts for up to 30 years. You can even clean it with turpentine and thin it with it. Recently, I stumbled upon Simson Butyl sealant at Polyservice, in a cartridge for a caulking gun. I haven't had any experience with it yet.

Teak deck no longer flat

A teak deck that hasn't had fittings removed for 10 or 20 years is no longer flat. In places where fittings have been, it's less worn than in areas where there haven't been any fittings. So, when cleats, genoa tracks, and stanchion bases are removed, protrusions appear, assuming they were partially or fully mounted on the teak.

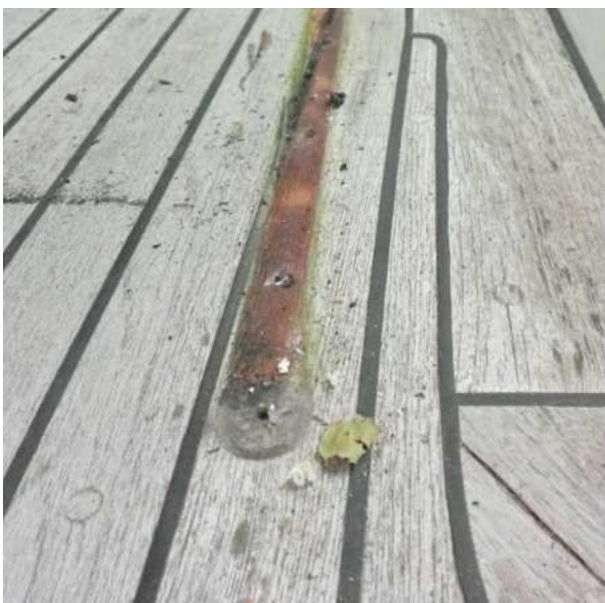


Fig. 4 Teak is higher where the genoa track was

Before removing rubber, but certainly before deepening the grooves, you must sand down these protrusions. It saves removing sealant, and if you deepen the grooves first and then sand down the protrusions, the grooves become shallower in those spots.

Removing Rubber

After removing all the fittings, the rubber must be removed from the seams of the teak deck.

I use a so-called multitool for this, a machine with a quickly vibrating shaft on which you can mount various tools. Sawing, sanding, cutting, grinding, everything is possible with it. Various brands offer multitools, besides Fein, the inventor of the multitool, other suppliers can also be found on the internet who provide special blades for removing rubber from teak deck seams. And in three widths: 5, 4, and 3 mm.



Fig. 5 Fein blade for rubber removal

Cutting rubber from the seams of a teak deck takes 4 man-days for a 10.5-meter boat, without teak on the superstructure. You can cut a thick strip out of a seam at once, but that is slow, and you cannot see well if you might be cutting too deep, so cutting in two passes gives more control. After that, there is often still rubber on the sides of the groove, so you have to carefully go over it twice as well. After cutting with the multitool blade, the groove still needs to be sanded.

Most grooves in a teak deck run fairly straight, but there are also places where grooves make sharp turns. In those bends, I worked with the 3 mm Fein blade, and then with a grinding stone (see fig. 13).

Potting Holes

Potting holes, i.e., letting them fill with thickened epoxy and then drilling again, does not belong to the subject of renovating a teak deck. However, you cannot avoid thinking about it when all the fittings are removed. An older teak deck always leaked in places where the rubber no longer sealed properly. The water runs into the seams, sometimes even under the teak if it is not glued completely well, and then comes through to the places where the screws protrude through the deck. And if it doesn't leak inside, it runs in between the top surface and the bottom surface of the sandwich deck, where the deck core is located. That deck core consists of foam, balsa wood, or plywood. Result: rotting of the deck core. You don't want that because your deck will start moving and creaking.

And so, potting holes.

First, widen the hole between the top surface (polyester laminate) and bottom surface (polyester laminate), so remove some of the deck core using a Dremel milling cutter. Then seal the bottom with tape and pour the hole full of thickened epoxy. Then drill the screw hole again.



Fig. 6. A potted hole and newly drilled



Fig. 7. Now mounted with bolt

If there is water coming through the deck again afterwards, it will never run into the deck core sideways, but only come down into the boat.

In our boat, there were a total of 100 holes, including pulpit, pushpit, and winches.

Deepening Grooves

In a teak deck that has worn down over the years, the grooves have become shallower on the surface, and therefore also the amount of rubber in them. As a result, the sealing becomes worse. When the rubber is removed, you can see if the grooves need to be deepened first. A 5 mm wide groove should certainly be 5 mm deep, preferably even a little more.

Deepening grooves can be done with a router, but the big problem with that is guiding the router. I was advised to attach a batten in an adjacent groove for each groove and guide the router along that. Terribly much work because you have to reposition that batten carefully for each groove. Fortunately, I discovered a much better advice via the internet from a Trintella owner who had the same problem and received a different solution from a shipyard.

Use an edge router, which is a router with a small head. I bought a Makita 3710. (3711 is the latest variant with a slightly narrower base, allowing you to get closer to the edge)



Fig. 8 The Makita 3710

Such a router is still affordable, about 200,-. You cannot regulate the speed, it's either on or off, and there is also no downward pressure mechanism, so when you place it on the wood, the router engages immediately. Of course, you can adjust the depth you want to rout.

The shaft where the router bit is clamped is 6 mm. The larger routers work with the more common 8 mm shaft. I wanted a router with which I could make a 4.5 mm wide groove because the grooves on our deck are mostly 4 mm wide. However, in the 6 mm shaft routers, there were only 4 or 5 mm available, so I chose 5.

In terms of depth, I wanted to go up to 5 mm. This creates a 5 x 5 mm caulk groove.

Attachment for guiding the router

To achieve good guidance, you make an attachment under the router that follows the groove, thus keeping the router in the right place.



Fig. 9 Router (upside down) with router bit and attached guide

You see in fig. 9 - the router upside down - a plastic plate and an aluminum attachment on it. That attachment is the key. On the left, a ridge of 2 mm high, which slides in front of the router during routing. On the right, a ridge of 5 mm high, which slides behind the router during routing. The attachment is made of an aluminum angle profile, 50 x 50 mm with a plate thickness of 5 mm. In the middle, an opening for the router bit (fig. 10).

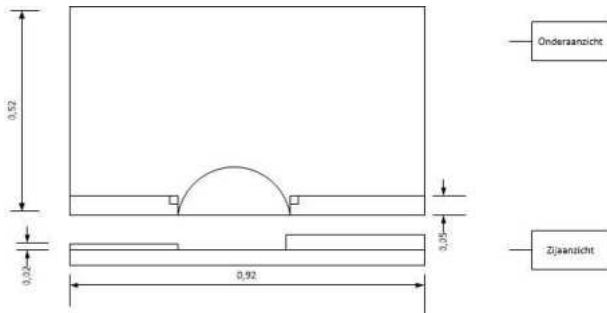


Fig. 10 Drawing of attachment

The attachment is fastened with two bolts to the plastic base plate of the router. The Makita 3710 already has holes for this, so you don't have to drill them yourself.

Routing/Deepening

Of course, it was exciting when we (I had help) started deepening the grooves for the first time. It quickly became apparent that I should not push the router forward but pull it behind me. And we made some more rounding on the attachment so that it slid better through the groove. Ultimately, together with a friend, I deepened all the grooves that could be done with the router in one day. And keeping a tool vacuum cleaner nearby saved a lot of mess.

If you work alone, you can also attach a vacuum cleaner hose to the router with cable ties. Because you pull the router forward, the hose just drags behind (fig. 11).



Fig. 11 Router with vacuum cleaner hose, for material extraction



Fig. 12 First groove routed, and a sharp turn visible

In fig. 12, the first routed groove is visible, but also a sharp turn that cannot be routed with the router because the guiding attachment is 9 cm long and cannot negotiate the turn. The sharp turns must be deepened in a different way. It can be done with a Stanley knife to cut the edges and then a small chisel to chip away the wood. I found that to take too long. Eventually, I worked with a Dremel and either a 3.2 mm router bit or a 4 mm grinding stone (fig. 13).



Fig. 13 Dremel router (3.2 mm) and grinding stone (4 mm)

Especially a router in a Dremel must be handled with a steady hand, before you know it, it will slip. The grinding stone in fig. 13 is less aggressive but eventually breaks. You can buy sets of 3 pieces, so you can go a long way.

Deepening all parts of the grooves that could not be deepened with the edge router took me two days.



Fig. 14 Grooves routed

Caulking

For our 10.40 m boat (no teak on the superstructure, but on the deck and in the cockpit), I needed 32 cartridges of caulk. I considered doing the spraying hydraulically, but that cost me rent. In hindsight, doing it by hand went excellently.

The official way to caulk dictates that you stick special tape on the bottom of the groove, so that the caulk adheres only to the sides of the groove and is better able to absorb the movement of the wood. I heard from a ship's carpenter in Andijk a long time ago that it can also be done without, and he claimed that it is even stronger. It's a hassle, that taping of the tape, so I left it out.

Number the battens (fig. 15), so you can keep track of what you have already done when sanding and degreasing.



Fig. 15 Numbered battens

First sand the sides of the grooves. I did that with a piece of vertically placed steering wood wrapped with sandpaper 150. And in the sharp turns, a large screwdriver wrapped with sandpaper. (Also works well with multitool with diamond saw blade)

Then vacuum and degrease. Degreasing can be done with thinner, but Simson degreaser is better, it dries faster and hardly smells.

Stick tape along the grooves (fig. 16), that will save a lot of caulk on the wood later.

Do not tackle too many grooves at once, you cannot control that. You are then too late with removing the tape, or you can no longer reach the first groove well because you cannot reach over the other grooves.

I used Simson deck caulk, and therefore also the primer from that brand. Sikaflex can also be used.

Apply primer with a small sturdy brush, and let it dry for at least an hour.

Cut the nozzle so that it is wider than the groove.



Fig. 16 Taped along the grooves, and caulking ahead of you

Caulking ahead of you (fig. 16), so no air is trapped.

After the first caulk bead, immediately lay a second bead on top and press and smooth it with a putty knife. If you don't do this, you will get a dent in the caulk after drying because it shrinks slightly.

Remove the tape. That's a dirty job. You need something to pry up the beginning of a piece of tape to be able to grab it (fold ends of the tape double, then you can easily grab it), a awl, or a small screwdriver. This puts you close to the caulk, the awl quickly turns black, which sticks to your gloves. Always use gloves anyway. Have a large garbage bag/plastic bag on hand because you have to deposit each piece of tape in it, but everything sticks to your gloves, and to the inside of the plastic bag. Be careful not to step on the caulk. If you hear a ticking sound, something is wrong. It will happen at least once anyway (fig. 17).



Fig. 17 'Stepped in the caulk' and left traces

The first group of caulked grooves can be seen in Fig. 18.

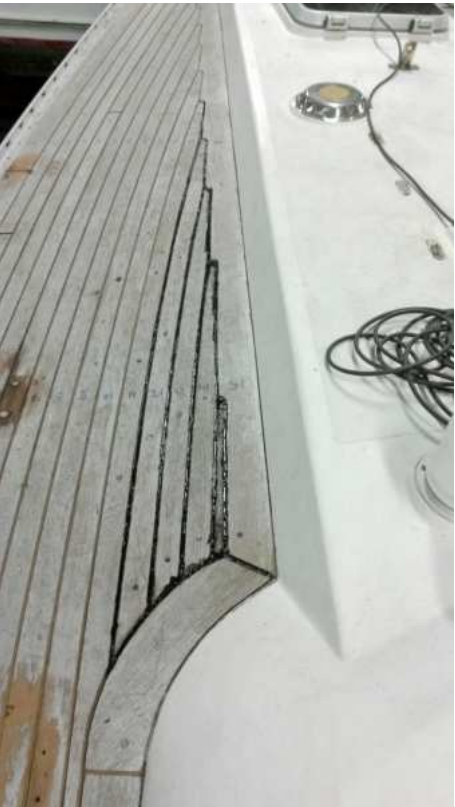


Fig. 18 The first caulked grooves

Drying, Cutting, and Sanding

After applying the caulk, let it dry for at least three days, but preferably a week. You can walk on it after a day, though. After that week, trim the excess caulk with a knife on the multitool; this saves a lot of sanding work. Then sand with an orbital sander using 40 or 60 grit, followed by 100 grit. A belt sander can also be used, but they are more aggressive, and you must keep them aligned with the wood grain, or else scratches will occur.

After Sanding

After sanding, you may notice in some places that there is still not enough caulk in the groove, despite the second bead and pressing with a putty knife. New caulk adheres easily to old caulk, so degrease and lightly sand the area, then refill as necessary.

Mounting Fittings

Re-drilling the holes for the fittings - in my case, because I've potted all the holes - is a task that requires careful attention. Determine the correct placement by using the fitting as a template, but ensure you drill perpendicular to the deck, especially to align properly below deck. The best method is to start with a thin drill bit, check from underneath to ensure accuracy, then adjust with a slightly larger bit, and if necessary, adjust further with the next size up. Before you know it, you've walked back and forth from outside to inside three times for one hole.

As mentioned, I mounted most fittings with Butyl caulk. For some parts, I was hesitant, such as the stanchion bases and chainplate fittings because I believe the caulk contributes to their strength; therefore, those were mounted with Simson caulk. Additionally, I countersunk every hole for a screw. This goes against the widespread, but incorrect, practice of not fully tightening the nuts immediately during installation, but rather halfway, then tightening further after a day. However, by countersinking the hole for the screw from the top, creating a chamfer, the caulk fills it, allowing you to immediately tighten the screw or bolt. It's as simple as that, and it's practiced by the better boat builders. Large washers, known as fender washers, were used under the nuts everywhere. If there were aluminum parts with stainless steel screws, I applied a bead of Butyl caulk under the screw heads to prevent aluminum corrosion from electrolysis.



Fig. 19 Ready for mounting the fitting

Looking Back

A big job. In terms of tools, you definitely need a multitool and an orbital sander.

Once the work described here is done, the screws start appearing, literally (if the teak deck is screwed, that is). Due to the final sanding of the caulk and the deck, a significant number of plugs end up being sanded away. These will need to be replaced.

Attachment 4.

Teak Deck Maintenance, Various Member Experiences.

1 - Regular deck maintenance

By regular maintenance, we mean regularly cleaning the deck. This should be done with a soft brush. It's better to use "Scotch Brite" cleaning sponges, available in various types. 3M offers a holder with a handle called the 3M hand pad and a swivel mop with a stick, the 3M Doodlebug pad. These can be equipped with one of the three types of pads: white for light work, blue for medium duty, and green for general work. Do not use a hard brush or a high-pressure sprayer, as they will remove the soft parts of the teak wood. There are also presentation products on the market, but the experience is that while they may look nice for the first season, if not continually maintained, they become very blotchy. The experience is to keep it plain and clean with just water, preferably with saltwater.

Plugs

Plugs in the teak deck can wear out or fall out. If the plugs are no longer watertight, the teak wood around the plug may turn black. In all these cases, it is necessary to replace the plugs with new ones. New plugs are available for purchase, but they can also be made using a plug cutter. These plug cutters are available for diameters of 8-10-12 mm. After removing the old plug and screw, drill the hole to the correct depth and diameter. The screws can be left in place; they served their purpose in bonding the teak wood to the deck and are no longer needed. The new plugs are glued with waterproof glue, then carefully trimmed and sanded flat after curing.

Rubber Seams

Rubber seams can also wear out or come loose. In such cases, you can choose to replace all the rubber seams or repair only the damaged sections. Completely replacing all the seams is a very time-consuming task! Do not underestimate it. In both cases, it is necessary to first remove the existing rubber joints. The following methods are known to us:

- Router or edge router
- Special blade in a "Fein" machine
- Angle grinder
- Custom-made paint scraper

When using a router or edge router, templates must be used. These templates can be easily made from 6 mm thick MDF sheets. The template must be accurate, and routing must be done precisely because the router works ruthlessly. The template must not shift during routing, so it should be made 25-30 cm wide, allowing you to rest your knees on the supports during routing. Additionally, secure the template with clamps, tension bars with wedges, etc. Sandpaper between the template and the surface also helps prevent shifting. Another way to secure the template is with screws in the grooves. The major advantage of using a router is that you can bring the joints to the correct depth in one pass, especially if the wood needs to be deepened as well. Where the router cannot reach, other methods must be used.

With a "Fein" machine, special blades can be used to cut away the rubber. These blades come in various widths. The Fein machine is used freehand, so it is important to pay attention to not accidentally cut into the wood. It's important to use the correct width blade and exercise patience. It's tempting to remove the entire joint in one go, but it's easier to do it in two or more passes. Set the Fein machine to a moderate speed; too low, and it won't cut through the joint, too high, and the rubber will burn due to friction. A good setting is around level 6. The machine can also be used to bring the joint to the correct depth.

An alternative is to use an angle grinder with a 3 mm thick disc. However, this method also requires freehand work and risks damaging the wood. Additionally, the joint must be brought to the correct width and depth after using this method. A custom-made paint scraper sharpened to the correct size can effectively remove small sections (for repairs) and bring the joint to the correct width and depth, even if the wood needs to be deepened. The width and depth of the joint are sharpened in the triangular paint scraper, with the remaining portion rounded to serve as a guide on the deck. The dimensions of the joints depend on the width of the teak planks. For planks of 35-45-50 mm width, the minimum joint depth is 6 mm. After the joints are brought to the correct size, they must be thoroughly cleaned with a vacuum cleaner and degreased with acetone or methyl ethyl ketone (MEK). Because the inserted rubber must move with the wood, the sides must be well bonded while the bottom remains loose. For this, tape is placed at the bottom of the joint. This tape is available in the correct width. Inserting this tape correctly can be challenging. You can use a self-made "pressing wheel" for this purpose. After inserting the tape, depending on the type of sealant used, a primer should be applied. Optionally, the deck next to the joints can be taped off with masking tape before applying the sealant. The sealant should be applied carefully to avoid trapping air. Hold the nozzle as deep as possible, move slowly backward after the joint is filled at the front. Above all, do not be stingy with the sealant! After the sealant has cured sufficiently, the joints can be finished. Excess sealant can be removed with a cheese slicer, followed by flat sanding.

Good types of sealants are: 3M (3m.com) and Sikaflex (sika.nl)

2 - Teak Deck Maintenance, Installing New Screws in the Deck After Drilling Holes

When the plugs become loose due to deck wear and the screws become visible, it is important to repair this reasonably quickly to prevent possible leakage from water ingress. Although some may choose only to replace the plugs because the deck is well glued, replacing the screws after drilling the hole provides more certainty.

Instead of the existing screws, the following so-called Torx screws are recommended for this purpose. With their wide and relatively flat head, they ensure optimal fastening while providing sufficient space for the plug. Dip the screw briefly in two-component adhesive, screw it in, then tap the plug into the two-component adhesive and the deck with a hammer with a plastic head. Perhaps a bit over the top, but absolutely leak-proof and indestructible.