

BEEDAHBUN

1985 Nauticat

Deck Replacement Project

2013

- After 28 years the teak decks had deteriorated significantly
- Replacement options included:
 - Replace old teak with new (most expensive);
 - Remove teak & coat decks with Awl Grip Nonskid paint;
 - Replace old teak with synthetic teak products. (recycled plastic or PVC); or,
 - Replace teak with CORK!



Old Teak Example # 1

- Teak bungs had popped off
- Teak planks were cracking
- Teak planks had almost completely delaminated from the fibreglass



Old Teak Example # 2



Old Teak Example # 3

- Note how the caulking sits above the teak due to diminished thickness of the planks
- In some places the caulking has popped out



Old Teak Example # 4

- Deep grooves in teak resulting from over-scrubbing with the grain



Old Teak Example # 5

- Another example of how the teak was deeply etched and the caulking was sitting above the teak



Removing Teak Bungs & Screws

- A hammer and flat-headed screwdriver proved to be the easiest tools for removing the bungs, and an electric drill with reversible capacity worked beautifully on the screws.
- Many screws that had been previously re-set in epoxy broke off had to be ground flush with the fiberglass with an electric grinder.



Teak Deck Removal Begins

- most physically demanding component of the entire project was the removal of the teak
- Once the screws were removed, the planks could be easily removed in sections due to the delamination that had occurred



Bung & Screw Removal Continues

- Removal of bungs and screws in sections and then sawing across a section was easier than attempting to lift long planks in their entirety



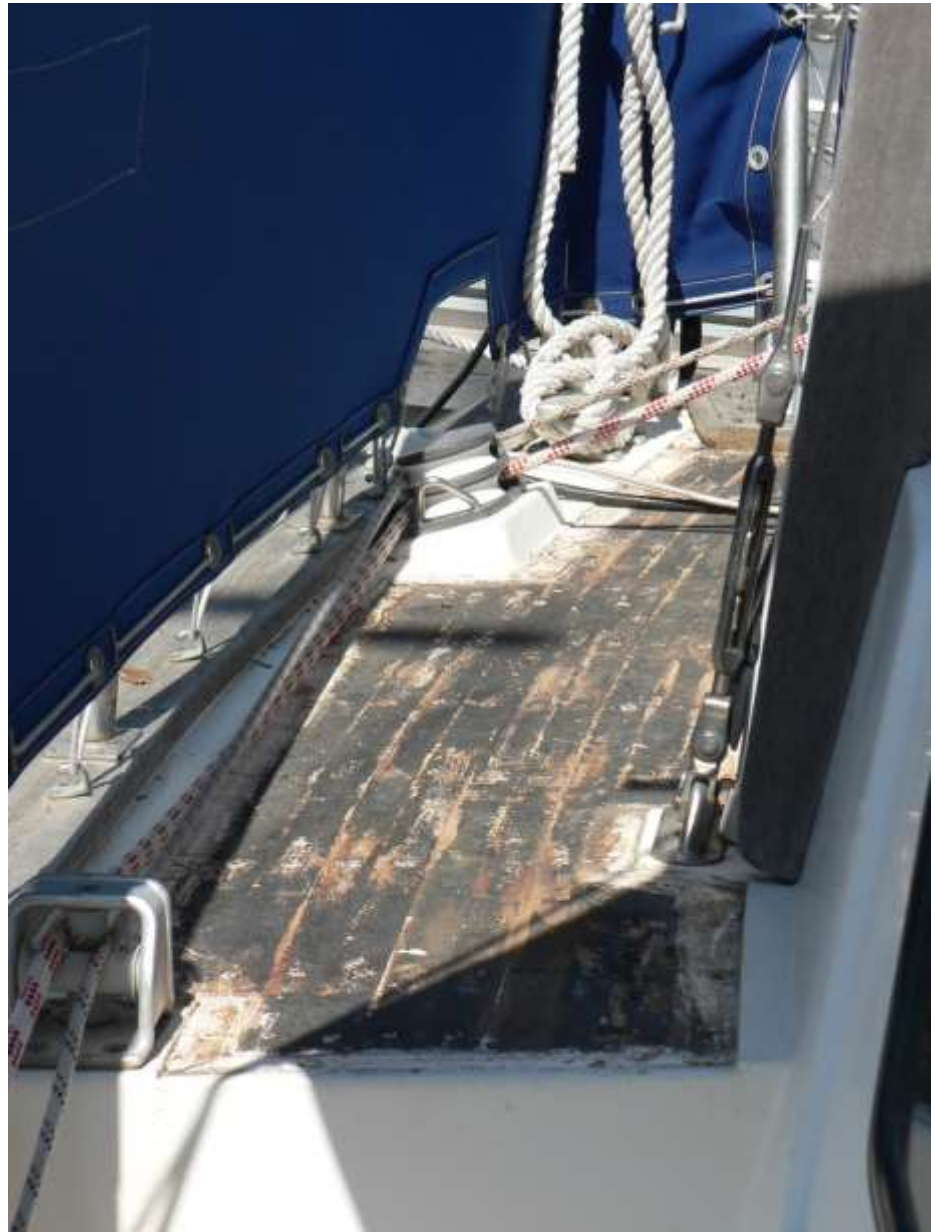
Outside Edges - Removal

- A different type of adhesive (white) had been used to affix teak along the outside edges. As a consequence, the planks butting up to the outside edge were more challenging to remove.
- A chisel proved to be the tool of choice for removing the outside edge planks.



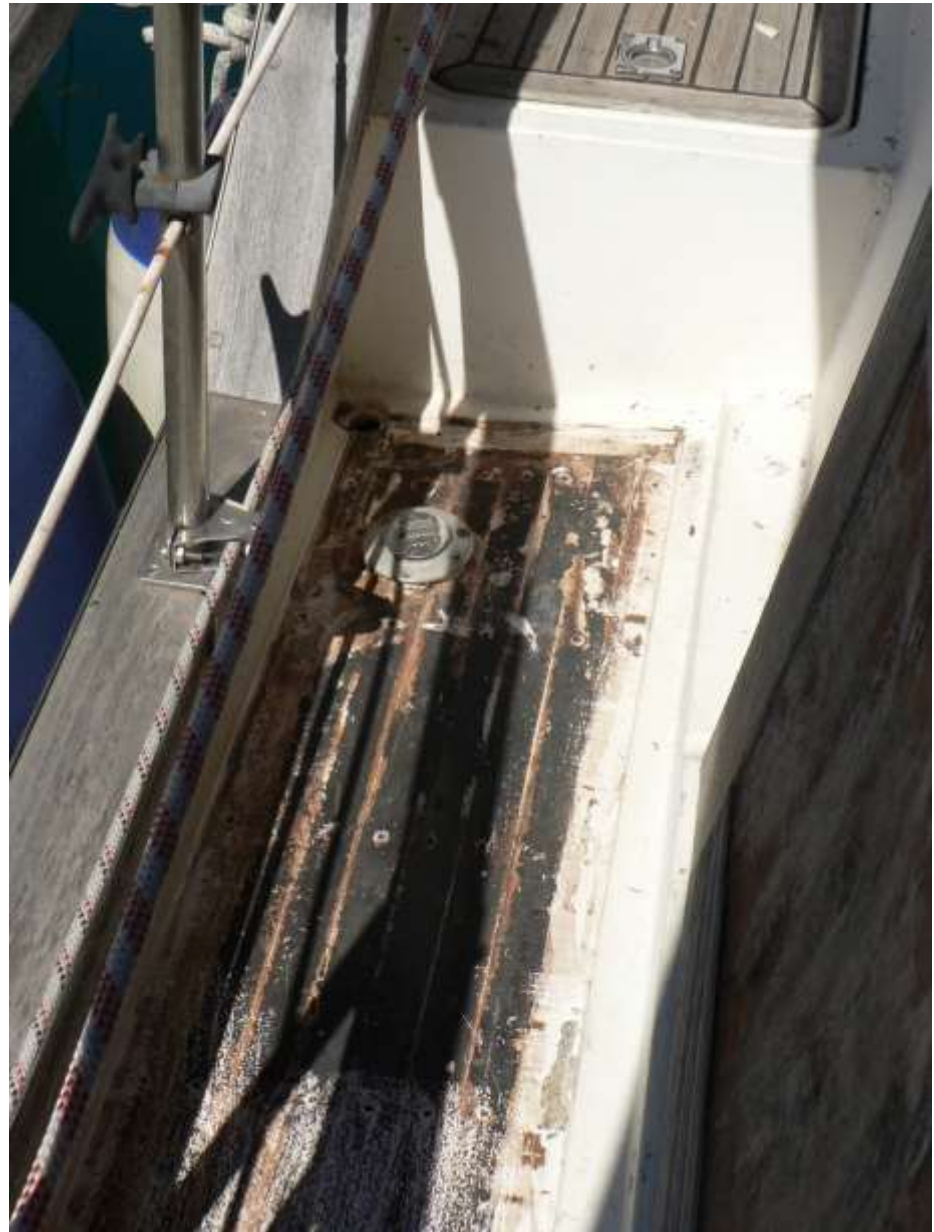
Old Adhesive on Fibreglass Deck

- Example of old, black adhesive that remained adhered to the deck



Old Adhesive on Fibreglass

- Note the fitting for the starboard fuel intake. The old teak butted up to the fitting and therefore the cork was installed the same.
- More caulking was used to close the slightly bigger gap between the cork and the fitting because the original teak was slightly thicker



Sanding Adhesive from Coachroof

- Scrapping of adhesive from fibreglass with a chisel was followed by sanding with an orbital sander



Sanding Completed!

- Sanding of coachroof completed!
- An additional wash with acetone removed any residual
- Note: the black patches that remain are stains from the adhesive that are forever embedded in the fibreglass



Port Side Sanded

- Sail slider track was mounted on raised fibreglass and therefore was left in place; cork butted up to it the same way the original teak had
- Stanchions were unscrewed but not removed; the cork was installed under each stanchion
- The teak was slightly thicker than the cork therefore plexiglass 'pads' were placed between the cork and each stanchion base



Flexibility of Cork

- The pliability of cork means the strips can be bent and fitted with considerable ease. The cork can also be curled into a circle and transported in a very small space.
- We transported 19 sq. metres of cork, 19 tubes of adhesive (600 ml each) and 48 tubes of caulking in the trunk of our Nissan Micro and still had room to pick up several cases of wine on our drive back to the port!



Laying First Strips

- We used 47 millimetre wide strips (1 13/16 inches) of 8 millimetre thickness (5/16 inch)
- SeaCork can also be purchased in pre-caulked sheets (with white or black caulking) measuring approximately 1 and 3/4 feet' by 6 and 1/2 feet



Rolling Strips on Adhesive

- A four-inch rubber roller was used to apply consistent pressure that removed any air bubbles that may have been trapped between cork and fibreglass



Progress at End of Day 1

- First strips laid were straight – and good practice!
- Note: First strips are always laid on an outside edge



Improvised Adhesive Applicator

- The adhesive comes in plastic bags that are normally inserted into a commercial caulking gun. We improvised and simply taped a plastic tip to the bag with masking tape, cut the tip to make a $\frac{1}{4}$ inch opening, pierced the bag with an ice pick and voila!



Spreading Adhesive for Individual Strips

- Adhesive was applied with a 2-inch square notched trowel in areas where single strips were to be laid



Adhesive – Close Up

- Note the screw hole on the left and just above the adhesive. These were filled with adhesive



Cork on Adhesive

- Fitting first straight strips to raised fibreglass edge on coachroof
- Note the adhesive applied on the end of the strip in preparation for a butt joint



Butt Joining Strips

- Adhesive applied to end of each strip; once dry, seam is sanded and it becomes invisible. It is near-impossible to pull the two ends apart



Preparing Adhesive for Multiple Strips

- Measuring, cutting, and then taping pieces of cork together is a bit like creating a jigsaw puzzle



Trowel Size Important

- One of the essential tools for laying cork is a 3 mm square-notched trowel - the spacing of the notches is critical for even-spreading of the adhesive



Adhesive Application with Wide Trowel

- Spreading the adhesive in both directions helps to fill screw holes and maximizes stick



Fitting Like a Puzzle

- Fitting around a hatch.
- Note the thin strips –each measured, cut and taped into place



Masking Tape Keeps Cork Flat Until Caulked

- Once the cork is laid on the adhesive, the pieces are held in place with masking tape until the adhesive is set. This prevents the pieces from shifting



Masking Tape Adds Stability

- Masking tape to keep pieces together until laid on adhesive allows for easier maneuverability
- The taping technique eliminates the need to number the pieces



Cut, Taped & Ready to Lay

- Note the half circles on each of two strips that when joined together will be placed over/around the dorade vent



Laid & Taped While Adhesive Sets

- Example of outside final strips laid on adhesive and held in place with masking tape



Rolling Cork On Fresh Adhesive Removes Air Bubbles

- Cork has been fit around fixed deck hardware



Joint Example

- Joint ready for caulking



Fitting Around Dorade

- Cork can be cut with ease to fit around deck hardware



Last Pieces on Coachroof

- Laying the last piece of cork on the coachroof



Improvising

- A piece of sand paper wrapped around a pen proved to be the perfect tool for sanding a curved edge



Precision Fitting

- Fitting cork around the coachroof storm sail traveller base
- Note the old teak visible beneath the traveller. The old teak was cut flush with the base using a multi tool thus eliminating the need to remove the hardware.



Sun Shade

- Note how the red of the umbrella is reflected on the cork giving it a 'reddish' glow. In fact, the cork has no red hues whatsoever



Rocks for Weight on Curves

- Rocks from nearby beach proved to be excellent weights for holding cork in place in curved areas (the inside edge tended to lift without weight applied)



More rocks!

- Rocks on strips in curved areas remained in place for a few hours



Curved Areas

- Rocks were used at a number of junctures to keep cork flat until adhesive dried
- Note: Once laid with adhesive, cork could be walked on approx. 2 hours later



Caulking

- We started with a manual caulking gun...



Caulking – 2

...and this was taking a lot of time



Electric Caulking Gun

- An electric caulking gun takes a little practice to regulate in terms of the amount of caulking dispersed. It is however an incredible time-saver!



Caulking on Aft Deck

- The entire aft deck was caulked before finishing
- An electric multi-tool with a scraper blade was used to remove the caulking prior to sanding
- Note that the cork laid beneath the stanchion was caulked.
- Note that the davits were not removed – the old teak was cut flush with the davit bases. The cork was fitted with a 4 mm gap that was caulked



Sanding the Caulking

- An orbital sander is the only sander that should be used



Caulked & Sanded Coachroof

- Freshly sanded coachroof



King Planks

- Preparing the king plank for the fore deck



King Plank Detailing

- Note the 6 x 1 inch plank being used as a cutting board
- The mess of pen marks on the cork will eventually sand off with ease



Woodworking Gouge

- A curved gouge tool worked beautifully for the curved corners



King Plank Detail

- This first king plank took some time to get perfect
- Detailed instructions with additional photographs are available on request



King Plank Joints

- Joints ready for caulking!



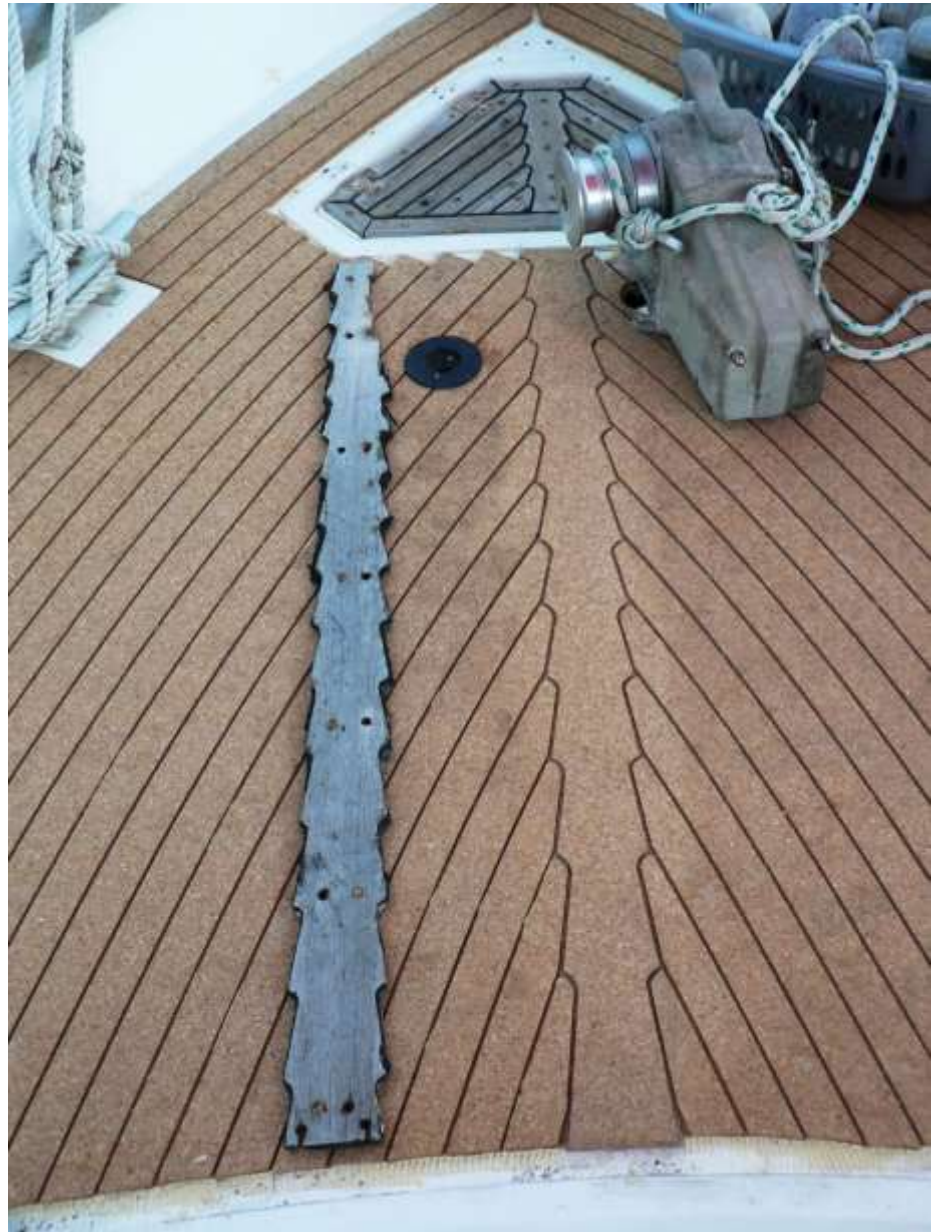
Short King Plank For Bow

- The short king plank prepared for the bow fore of the anchor locker bears less ink owing to lessons learned on the foredeck.
- Note: The red hue is from the red umbrella overhead that as used as a sun shield



Teak & Cork King Planks

- A comparison of the teak and cork king planks
- Note: the dark smudges on the cork are eventually removed after caulking and sanding



Example of Fibreglass in Need of Repair

- In places where the gel coat had been damaged we repaired these after removing the teak and before laying the cork



Teak Removal: Locker Lids

- The teak planks laid on the locker lids proved to be the most challenging to remove. These had been installed with the same white adhesive that had been used on the outside edge planks.



Aft Lockers With Old Teak

- Aft deck lockers and deck bearing original teak



Caulking Locker Lids



Aft Lockers & Deck Caulked



Caulked Joints



Port Side When Wet

- Freshly sanded cork; gel coat repairs to coachroof completed, cork just washed



Starboard Side When Wet

- A starboard view of the same



‘Wet Look’

- A few weeks following installation and prior to application of the sealer, the cork when wet looked quite dark



Six Months Post Installation

- Under the heat of the Mediterranean sun the cork has begun to 'age'. In time it will take on silver hues similar to that of teak that has been left to age naturally

