## **Treadmaster repair July,2005** *door Pieter van Wingerden\* May, 2005*

\*zie opmerking webredactie, aan het eind van deze tekst

The Treadmaster on the Seepaert is nearly 29 years old and needed attention.

For following reasons I decided in favour of a repair instead of a replacement:

1. Where the Treadmaster still sticks it really sticks and is hard to remove. I have heard about several methods. All of them are time-consuming as well and damage the deck's gelcoat.

2. The new material and the glue is expensive. My F30 measured about 11,5 square meters on the deck, cabin top, cockpit and pilot house. As far as I know Treadmaster comes in sheets of 3 by 4 feet. I estimated I would had to buy about 14 square meters.

3. Cutting and gluing single handed might have been a problem and if you do not have the experience you easily can spoil the material or due to a wrong gluing technique everything stands up again in a year or two.



The repair was time-consuming as well but the total costs added up to about C\$300 only. (2ltr. Traedcote renewal paint, epoxy raisin and micro balloons.)

It was not necessary to have the boat on the hard.

Most of the damage was found on the fore deck and cabin roof, where about 30-40% of the surface needed repair (mainly around the mast). Less damage in the cockpit and pilothouse and hardly any damage between the gunnels and cabin.

### A few simple tools are necessary

1. A piece of wood, about 4 by 4 by 15 cm covered with a 50 or 60 grain sandpaper (type beltsander), attached with crazy-glue. Used to detect the hollow spots in the Treadmaster and sanding the epoxy filler flush with the surrounding Treadmaster surface.

2. Two pieces of wood, about 1.5 cm thick (one piece about 6 cm long, the other one about 15 cm). Sand away one side of the pieces so that they will finally have the width of the grooves of the Treadmaster (5,5 to 6 mm). Both edges of the longer piece are rounded (for easier sanding). The shorter piece has one round edge while the other one is straight. These sides are also covered with a 50 or 60 grid sandpaper. Used to sand the diamond pattern in the epoxy filler.

3. A few strips of flexible 3mm plywood. Used as a ruler to sand the pattern over longer stretches.

4. A piece of plywood about 3 by 4 cm with a strip of 100 grid sandpaper glued on one side.

This piece is intended to smoothen the edges and corners of the rebuild Treadmaster, without damaging the deck.

#### How to proceed

1. Remove all loose Treadmaster including corners and the straight edges. The best way to detect loose Treadmaster is to move the sanding block over the entire surface. Any loose Treadmaster (even smaller spots) is indicated by a pitch change of the sound while moving the block over the Treadmaster. Most of the loose Treadmaster came of with the glue sticking on the Treadmaster. Wide up the areas with a screwdriver as far as possible.

2. Clean the areas of removed Treadmaster and V-shape the edges for better contact with the epoxy filler. Best results were obtained with a Dremel sandpaper drum (abt. 15mm diameter). Finally clean the areas with Acetone.

3. Mix epoxy raisin and add so called Glass Bubbles or Micro balloons until you obtain a filler which is not too thin. First start to fill those areas which are surrounded by Treadmaster and let it cure. The proper filling needs some exercise. This epoxy filler is very easy to sand. Now sand all the areas flush to the Treadmaster using the sanding block. You might find that some areas need a second filling.

4. Use the pattern sanding tool to sand in the diamond pattern. For smaller repair areas the tool will be guided by the surrounding grooves of the Treadmaster. Do not sand all the way down to the gelcoat of the deck but leave some epoxy filler in the grooves.(The Treadcote Renewal Paint sticks better on the epoxy as it does on the gelcoat!). For longer distances you might want to use the plywood ruler strips.

5. More time-consuming is the reconstruction of missing corners and edges. For all missing corners you have to make templates. I could make a few templates from the symmetric corners at the other side of the boat (otherwise use eye-sight). All the templates (for the corners as well as the straight edges) are made of about 1 cm wide pieces of 2.5 or 3 mm carton board. Wrap the templates with Seran (kitchen cellophane folio) strips.

6. Mask all missing corners and straight edges with masking tape. Mask the corners a little smaller, place the template over top and draw the curve on the masking tape with a marker. Cut the inner curve of the masking tape away with a sharp knife or razor blade.

7. Put all the templates in place and secure them with masking tape. Fill the areas from the outside to the inside (into the direction of the Treadmaster fields) to prevent epoxy spills on the deck and avoiding the risk of moving the templates out of position. Wait till the filler starts to cure and find the proper moment to remove the templates. Before you remove the templates you might want to apply a fine cut with a wetted razorblade along the template edges to obtain a cleaner separation of the templates. Eventual raw separations can be smoothened after curing with the sanding tool mentioned before.

8. Sand the areas flush and sand in the diamond pattern.

I found it easier to fill the seems between Treadmaster sections as well . If you are lucky the sections are cut so that the pattern matches (at least in one direction). It takes a little more time to sand in a nearly regular pattern in these areas. Use the straight edge of the smaller pattern sanding tool.

As it came to painting, I was in doubt whether the paint would cover the white epoxy filler as well. An alternative would have been priming the epoxy patches before applying Treadcote. At the other hand I was not certain how the Treadcote would go on the primer. I called the factory in U.K. but they did not have any experience and could not advise me. I put the

Treadmaster right away over the epoxy and covered these areas in one coat!. The surface structure of the epoxy pattern however is slightly different to that of the Treadmaster. The first few days you could slightly see the repaired areas (by knowing they were there) under a certain angle of the sunlight.

The six patches between the gunnels and the cabin roof still have to be done. The Treadcote paint left, would have been enough to paint one side only, so unfortunately you need 2 litres of paint.

I red about another method of repair. There, the pattern is pressed in the epoxy by means of a pattern stamp. If your stamp is too small it will be even more time consuming, a stamp made too big can hardly be pressed. With the experience I have made I think I can say that this method will produce a mess, especially at the corners and edges.

Pieter van Wingerden F30 "Seepart" Hull 136 (1976) Snug Cove, Bowenisland B.C. 49 22.734N 123 19.959W

## \*Opmerking redactie: Pieter van Wingerden is enige tijd geleden overleden. Hij was lid van de Fisherownersgroup North America. Zijn boot Seepaert is nog steeds varend. Webredactie FS voorjaar 2016

\*Notice: Pieter passed away in Germany, recently.

# Fotoreportage van de reparatie: zie volgende pagina's







