Town Class Seminar #2

Peter Maitland
Adam Cook
Bill Key

Rudder Preparation

Bill Key

Plywood Rudder showing blade fairing. Use layers of plywood to identify the amount of fairing

Aft Edge of Blade Showing fairing taper

Closer look at the plywood layers for fairing taper

Inset Rudder Fitting

Mahogany rudder
Construction….
Glued with
Reinforcing Pins

Mahogany rudders put together with 2 bronze pins on bottom edge. Some are not centered well So fair carefully.

Forward bottom edge
Reinforcing pin

Remember Flow Off Transom goes above the lower Gudgeon
Be sure to shape the leading edge up to the gudgeon….not like this

Tiller Locking Pin..
A Must Have

Rudder Cracking Problem.

Varnishing Tips

Peter Maitland

Epifanes Varnish

Sources

On Line Stores
Defender, Hamilton, Jamestown

Brick & Mortar
West Marine

MinWax Helmsman Varnish

Sources

Home Depot, Lowes, Ace

Drip Solution

Drip Solution
Top View showing
Precision Duct Tape
Placement

B2

Milwaukee

750VT Industrial Heat Gun

★★★★★ Write the first Review Questions & Answers (1)

$59.97 /each

Feedback

Overview

The Milwaukee 750VT hand held heat tool is a variable temperature heat tool ranging from 750°F to 1000°F. The heat output is adjustable by turning the thumb screw on the adjustable a... See Full Description

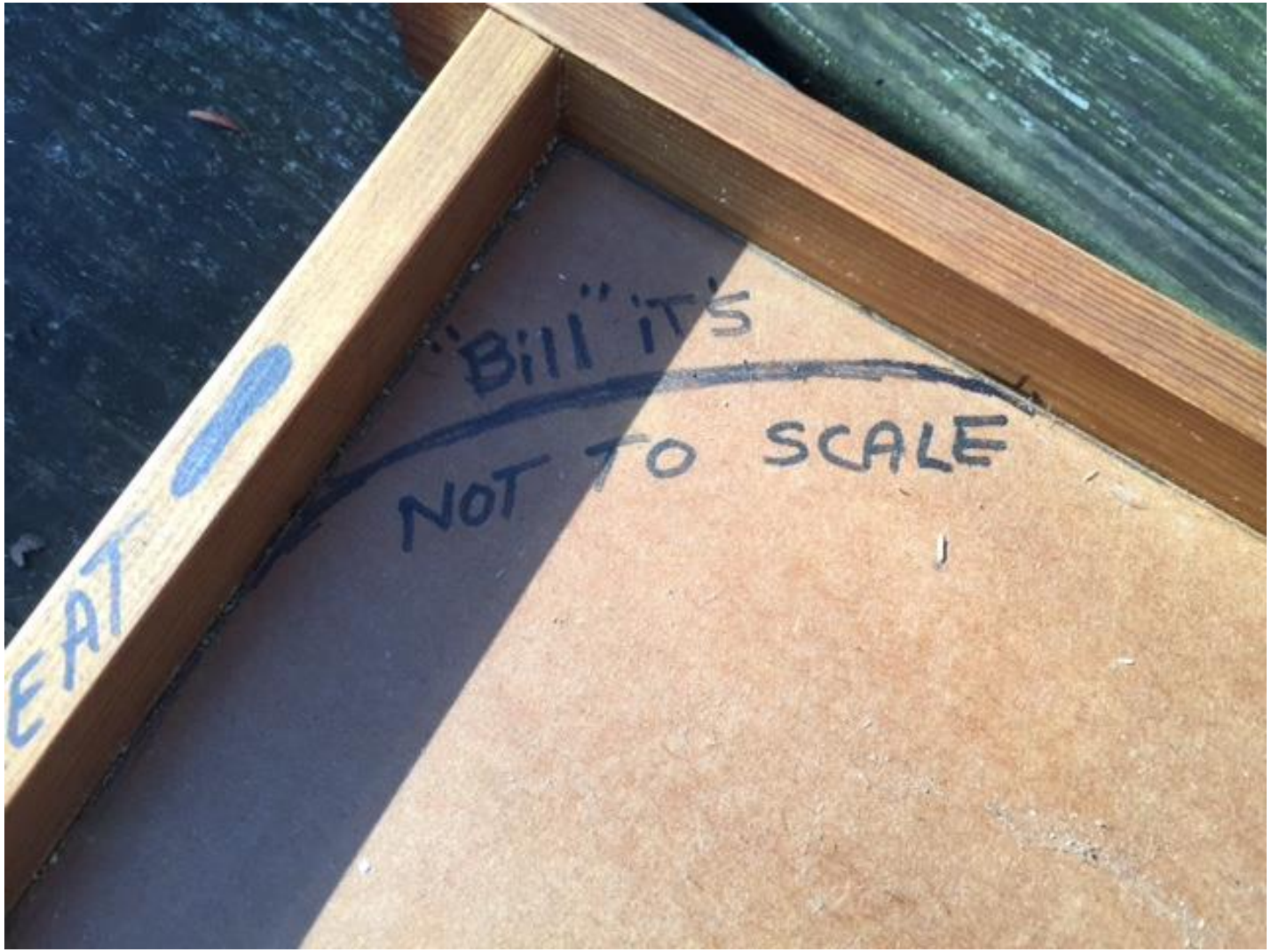
Hyde

1 in. Wide Blade,3 Scraping Edges Paint Scraper, Tungsten Talon

Centerboard Secrets

Peter Maitland

Centerboard Tackle Obstruction


"Bill" it's
NOT TO SCALE
EAT


"Bill" Its
NOT TO SCALE
FORWARD
CLEAT
STAINLESS STEEL
OR
MILD / STEEL / CENTER BOARD
EPOXY COATED
ANTI FOULING PAINT
STBD.
WATER LINE
DOWN
BLOCK
CHEEK BLOCK
CHEEK BLOCK


STAINLESS STEEL
OR
MILD STEEL
EPOXY COATED
CENTER BOARD
ANTI FOULING PAINT
1/2" P
LEADING EDGE
CHEEK BLOCK

Not sure what
It is, but
Nice Work
Peter

Galvanized ½” Bolt with Washers and Rubber Grommet

Ace Hardware Source

Float Your Boat

Bill Key


Crewsaver

Fiberglass Presentation

Adam Cook

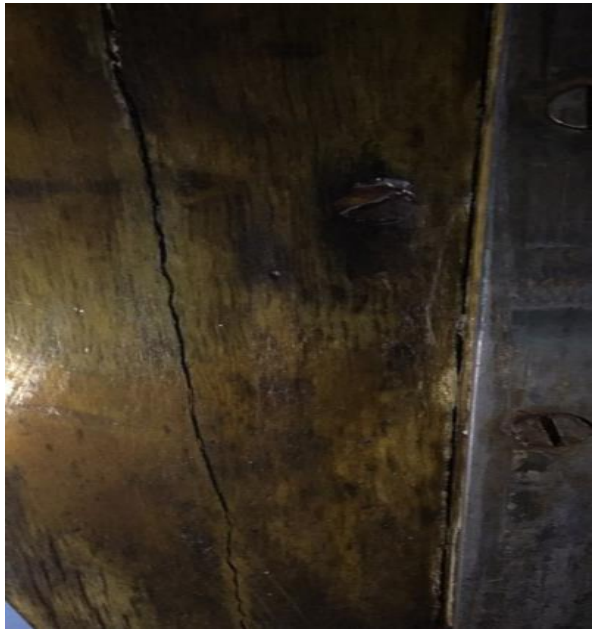
Before and After

Work completed with epoxy/fiberglass:

- Fully repaired and faired bottom with extended skeg
- Re-connected hull/deck separation on starboard side
- Removed ½” soaking wet plywood (200 lbs!!) that was in cockpit floor and re-glassed with 3 athwartship supports
- Fully replaced transom
- Fully stripped and repainted deck
- Mast step forward and rebuilt starboard rail and bow/hull connection
- Removed athwartship seating and added additional forward seat support.

- **On the schedule this spring with epoxy/fiberglass:**
- Refabricating and installing under deck supports
- Narrowing CB slot

When a tree falls...



New Transom

Before

After

Process:

1. Build frame to ensure boat doesn't open up
2. Remove old transom: circular saw and multi-tool
3. Grinder & sander to remove remaining bits, paint (outside, inside) & smooth surface
4. Jig saw to cut out new transom (1/2" marine ply) – build a mold first!
5. Layup 1 layer of glass on transom (pre-install)
6. Bed new transom in with thickened epoxy (404)
7. Build up internal fillet with thickened epoxy and fill gaps/round over outside corner
8. Layup additional layer of glass on inside of transom, overlapping 2" onto cockpit floor/gunwales
9. Layup 2 layers of glass on outside wrapping around edge 2"
10. Sand, sand and sand more (and fill air bubble holes)
11. Epoxy primer (1 coat) and Brightsides paint (4 coats – roller and tip)

Tools:

- 4.5” Circular Saw
- 4.5” Grinder w/ 60-grit flap discs
- Oscillating Multi-Tool
- Orbital sander
- Jig saw
- Fiberglass roller
- Plastic spreader
- Paint brushes
- Safety Gear: lungs, hands, ears, eyes

Materials:

- ½” Marine Grade Plywood
- Epoxy and Hardener (fast)
- Silica additive (404)
- Fiberglass Cloth (4oz)
- Epoxy primer
- Brightsides paint
- Acetone

Fiberglassing Tips & Process by a non-expert

Tips

- There is nothing you cannot learn by watching YouTube
- Sand everything smooth, then sand again
- Acetone everything
- Fillet for inside bends and round corners– fiberglass doesn’t like 90° angles
- Pay a bit extra and get the pumps for epoxy and hardener

Tips (cont)

- Use dedicated mixing cups (or coffee cups) – not cheap plastic cups which will melt…
- Make sure all supplies and tools are easily accessible and available BEFORE starting to work
- Make sure you wear gloves and long sleeves!
- Mix epoxy in small batches (10-20 oz at a time)
- Work quickly but thoroughly
- Before using grinder, make sure epoxy is fully cured, otherwise you will have a huge mess
- Work only when its above 60° - but if 75° or above you will need to work VERY quickly

Process:

- Sand smooth, vacuum and clean with acetone
- Cut fiberglass to fit, leaving a little extra all the way around
- Wet surface with mixed epoxy
- Place fiberglass
- Wet fiberglass in place
  - If horizontal surface: pour mixed epoxy on top and use plastic spreader to work epoxy into fiberglass
  - If vertical surface: use paint brush to goop epoxy onto fiberglass and then paintbrush or plastic spreader to work it into fiberglass

Process (Cont)

- Use aluminum fiberglass roller to work glass flat, around corners and remove air bubbles
- If laying up more than 1 layer, do so immediately before epoxy starts to set.
- Sand hardened glass (orbital sander) and use grinder as needed for edges/extra glass
- Clean with vacuum and acetone
- Apply epoxy primer
- Apply paint (roll and tip)

Fiberglassing

Tools


BLACK+
DECKER


FLEXSTEEL
WALTER


BLACK+
DECKER


WORX
24


RIDGID
RIDGID


DEWALT
DEWALT

Materials & Safety