

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

PROLOGUE

FORWARD

<i>CHAPTERS</i>	<i>PAGE</i>
<i>One</i> Tape Trick Fix and Surfboard Value	9
<i>Two</i> Materials, Hazards & Safety, Tools, and Work Location	11
<i>Three</i> Flat Area Repairs: Preparation, Cloth Cutting, and Resin Mixing	19
<i>Four</i> Rail Area Repairs: Preparation, Cloth Cutting, and Resin Mixing	27
<i>Five</i> Finish Work	35
<i>Six</i> Special Repairs: Pressure Dents, Stress Cracks, and Shatters	39
<i>Seven</i> Broken Fins: Single, Trailing, and Side Fins	45
<i>Eight</i> Broken Fin Box	53
<i>Nine</i> Broken Boards	57

ABOUT THE AUTHOR

CHAPTER 1

TEMPORARY TAPE TRICK FIX

Lack of time and know-how generally keep many of us from doing repairs on our boards. Postponing a repair can totally thrash our boards. The best way I know to describe a surfboard is that it's **like a sponge inside an eggshell**. Holes or cracks let corrosive salt water in, but there's no way to squeeze it out. The saltwater breaks down the core foam cell structure, discoloration occurs, delamination occurs and more saltwater soaks in. In the end, the board takes on so much water it becomes truly "a log" with delaminating over large areas of the board. Eventually, the board will either snap, or be so heavy that the dumpster is its grave. Not a very pretty picture for that once picture perfect surfboard.

Not to worry though, here's the scoop. You're on this awesome surfari, getting some really sick tubes and this "gnarly ding" just happens. Here is a temporary solution.

1. Dry off the board as well as possible.
2. Fill the damaged area by rubbing or melting wax into the ding. Try to match the board contour.
3. If possible, clean off any excess wax from around the damaged area with a solvent.
4. For small dings that don't have jagged cloth, you can use pressure sensitive, clear plastic tape like 3M #3758. Or, if it's pretty rough, you can use duct tape, but it doesn't keep the water out. Cowabunga dude; you're back into the line up. The wax and plastic tape, if sealed well around the edges, will protect your stick.

Also, one other thought about quick repairs. There is a product called "Solarez". It is a sun catalyzed cloth-resin mix available in a tube, which cures quickly and works well on small repairs, if you use the suggested preparation steps discussed in this book. Also, when traveling, be sure the Solarez is not in the same pack as your T shirts and skives.

BOARD DEVALUATION

A Mike Henson wall hanger---Hawaiian big wave gun with classic 60's era artwork, came into our shop. It was in good condition except for a fin that had been busted-off, and unfortunately, a very sloppy repair job had been done. The board was priceless (because of the artwork and his reputation in the industry), and worthless at the same time, (because of the lousy repair work). We had to practically give the board away. Shortly after, we received a beautiful Tom Parish gun that had been air flight damaged. When finished, the repairs were nearly invisible. The value of that classic board was maintained. Quality craftsmanship in repairs can make a tremendous difference in the value of your boards.

So, whatever you have tied-up in your board, we think it pays to keep it in good shape. You'll be glad you did, whether it's for your own use, or when it comes to trade-in time.

BOARD EVALUATION

When buying a surfboard, here are some recommendations:

1. Try to stay away from unusual designs, unless you know the shaper. Choose either currently popular shapes, or "classics"---known to be functional.
2. It's best to buy a brand name, because they generally hold their resale value.
3. When picking a board variety, i.e. long board, short board, or fun board shape, choose one that is suited to your ability.
4. Pick a board similar to one you have been riding, unless you specifically want to develop other areas of your surfing abilities.
5. Feel the rails.
6. View the board from a distance to get perspective about its appearance.
7. In the specific case of used boards, you may want to write down a list of all dings. Each repair takes away from the value of the board. If you decide to do the repair work yourself, it can be fun and profitable.

BEFORE BEGINNING

We would like to suggest that you read the "THE ART OF FIBERGLASS DING REPAIR," all the way through. When you are actually doing the restoration work, we hope that you'll have a handle on most of the basic information and a familiarity with the book. This will help you to locate information that may be applicable to specific aspects of the repairs. Study the drawings and photos carefully because there is info there that may not be covered in the text. If you photocopy the MATERIALS' CHECK LIST and the TOOLS' CHECK LIST, that will be helpful when you're ready to pick up those items. Getting everything set up is very helpful before beginning to do the repair work.

Here's the basic layout of the book. It's divided into three major repair groups:

1. *Flat Area Repairs*- (generally the simplest) includes both deck or bottom dings but only to where the rail area curves begin.
2. *Rail Area Repairs*- requires some additional knowledge and repair techniques.
3. *Specialty Repairs*- covers the restoration of Pressure Dent, Stress Cracks, Shatters, Delaminated Area, Leash Cut, Broken Fin, Broken Box, and Broken Board.

MATERIAL SAFETY DATA SHEETS

MSDS is a technical bulletin published by a manufacturer, distributor, or end-user of industrial chemicals and materials. For the safety of all, (thank God for the USA), the Occupational Safety and Health Administration (OSHA) of the Department of Labor requires companies to publish an emergency phone number, business name and address. Also included is: Product Identification, Hazardous Components, Physical Data, Fire and Explosive Data, Health Data, Reactivity Data, Spill or Leak Procedures, Protective Equipment to be Used, Special Precautions, and Other Comments. **MSD** Sheets should be available in surf shops that carry resin. If you're interested in more details regarding these products, they can put you in contact with distributors who will supply you with information from manufacturers, such as: Dow Chemicals, Sohio, Reichold, Ashland, just to name a few. To sum it up, as one company succinctly put it, when appropriate industrial hygiene procedures are followed, . . . studies have not demonstrated any carcinogenic effects. What that says to me is, if you think smart, and work clean, you shouldn't have any problems. And you're getting the thinking smart part right now that you're reading the FIBERGLASS DING REPAIR book. Congratulations!

TOOLS

The stuff listed on the next page will be about all that is needed to do just about any surfboard repair work. (Cool huh, there aren't a whole lot of tools required.) Here's a quick overview of some of the specific tool uses: the wallboard knife (non-retractable blade) is for cutting away cloth when opening up a damaged area; a well-sharpened paring knife works well for cutting and trimming cloth-resin when it is in the curing stages; single-edged razor blades work well too, for trimming or cleaning. Fiberglass cloth is difficult to cut, so we use a good pair of scissors we'll use for cloth cutting. Keep your eyes open for an old beater pair for cutting sanding discs. (As your experience grows, you'll probably collect other equipment that you find helpful.)

One other item is the board stand. The Illustration 2-1 shows how to build one. It's kind of a fun project that doesn't take a rocket scientist's mentality, or a whole lot of time; you know, something to do when it's blown-out, knee-high, wind-chip slop. It is a real plus, especially when it's ding repair time. The one in the photo, Illustration 2-3, has been in use for a long time. What a good investment of our energies, it has been.

The sander-polisher" (Illustration 2-2) is used both in preparation and finish work. Some home shop varieties work pretty well. One thing you want to check out when you get ready to purchase this equipment is to make sure that the bonnet and soft-pad nuts screw onto the sander drive shaft. A U-ground shop-type power cord is best, because it's generally designed to handle more power, and the ground wire is there to help protect us from the possibility of shock.

SURFBOARD STAND

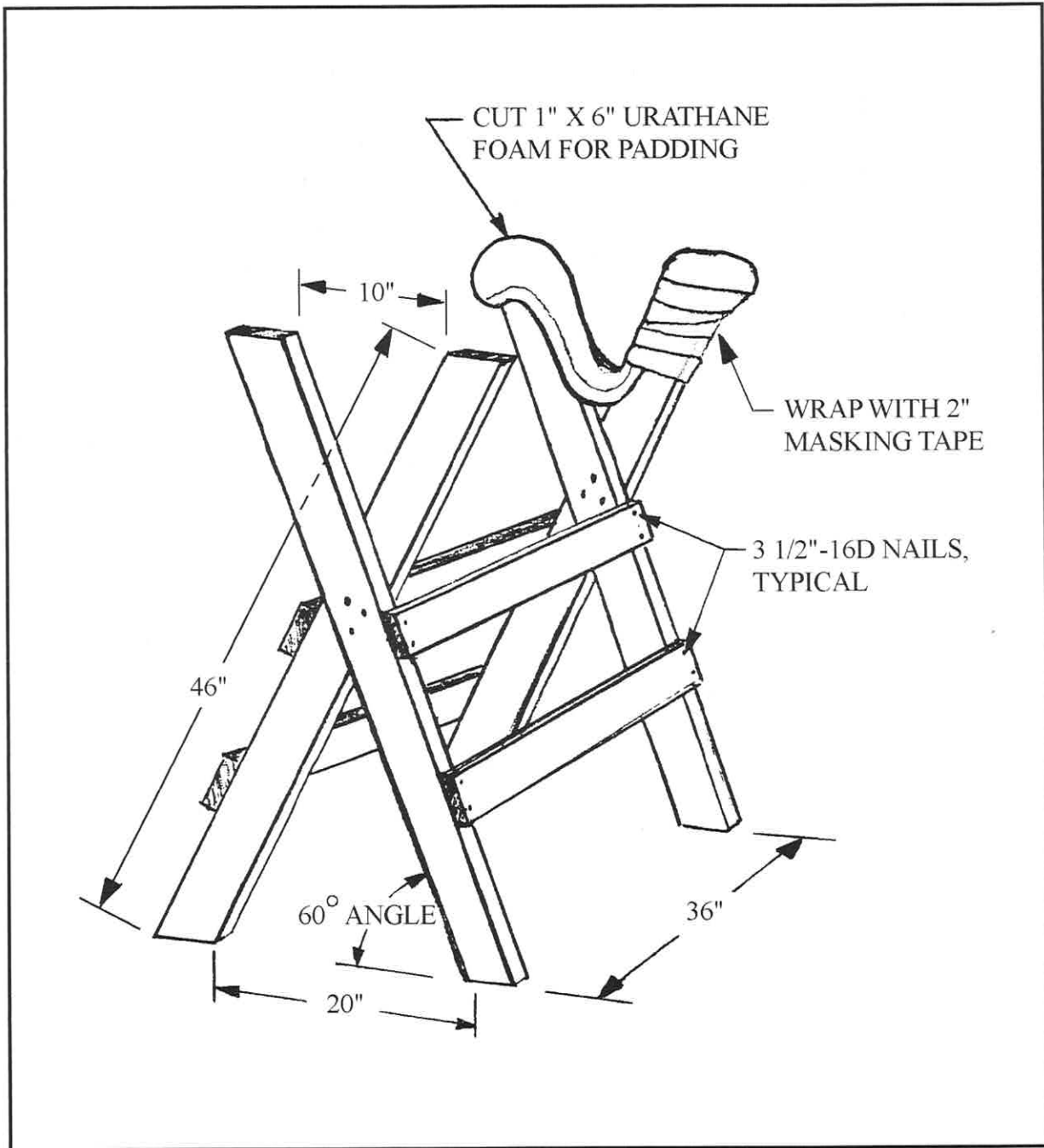


Illustration 2-1

Lots of surfboard repair work done on this horse. Even shaped quite a few boards on it.

SANDER/POLISHER POWER TOOL

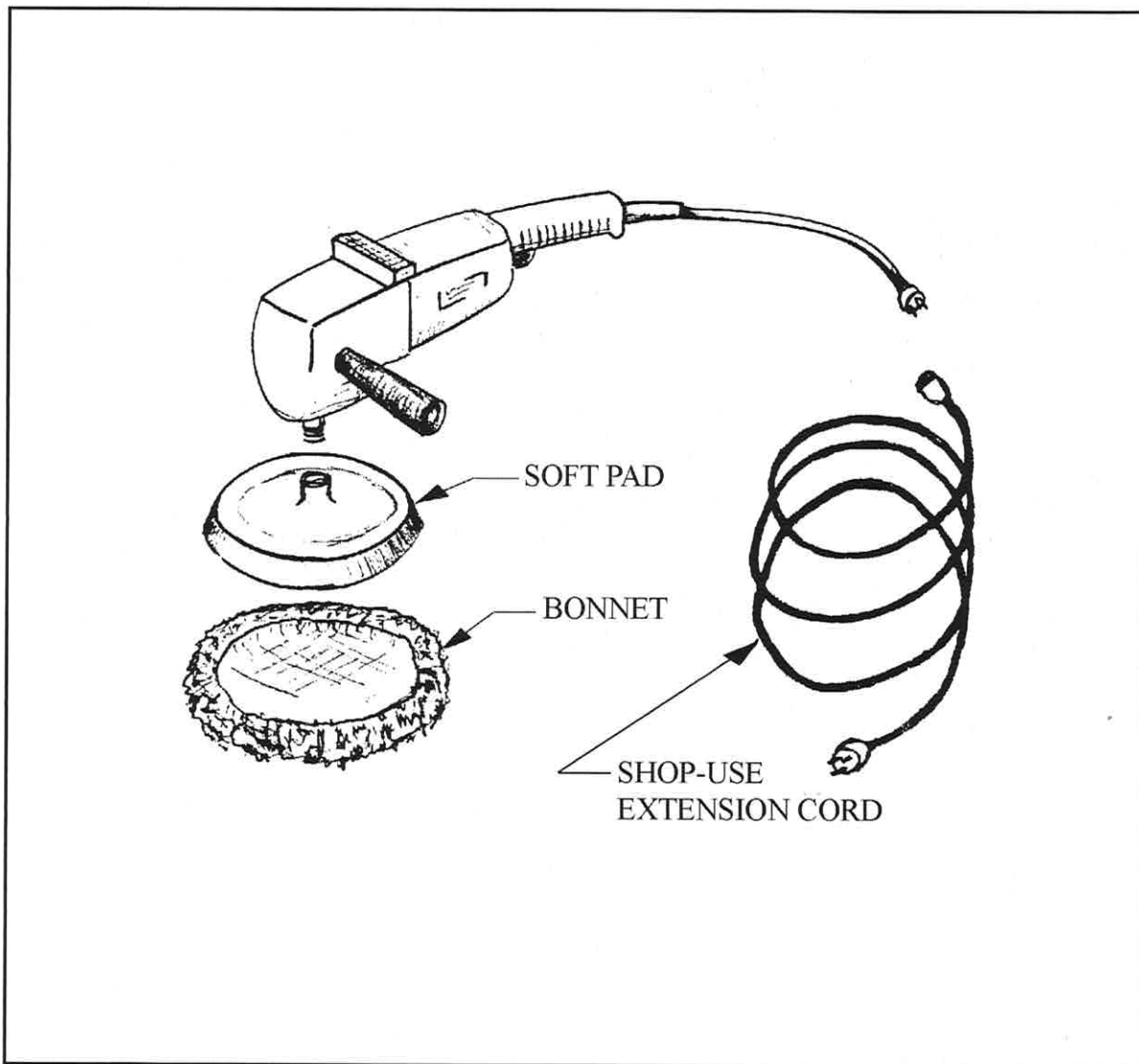


Illustration 2:2

There are a number of excellent quality power tool manufacturers. We think that probably the best is "Milwaukee"-model #5450, 9 amps, 1750 RPM. Many sanders have variable speed controls, which is a nice feature also. This is one of the more expensive purchases, so look for one that feels comfortable, seems balanced and fits your budget. Also, there are other varieties of polishing pads available that have their own backing plate and lock nut (not shown).

POLISH SANDING AND BUFFING

Polish sanding and buffing can be done about an hour or so after the finish coat has been applied. First start with 220 grit, wet and dry on the soft pad of your disc sander. Sand out masking edges, and sand lightly over the newly resined areas; then sand with the 440 grit disc, removing all visible scratches. The 440 grit paper should create a smooth, dull finish over the entire sanded areas, blending together both new and old.

Attach your buffing pad to the sander-polisher, and using fiberglass-buffing compound such as *Mirror Glaze*, (which is available in many auto parts stores) buff out all worked areas. As a final touch, wipe the board down with a soft rag and light oil polish. If, during polishing, you notice scratches that seem to be difficult to remove, they can be lightly hand sanded with 440, and then rebuffed. The finished job is a showroom polish over a solid repair.

Cowabunga! Like totally Rad Dude! Coolest repair to the max! Are we stoked or what!

Signed,

da fish man



Here we are looking at the finished board, and feeling good about a job well done.