The CarveWright System

The History

- 2001 – LHR Technologies founded by NASA Robotics Engineers Chris Lovchik & David Jochim

- 2005 – BETA Machine

- 2006 – Sears CompuCarve "A" model

- 2007 – CarveWright; "B" model; PatternDepot Launched

- 2008 & 09 – Distributors & Seminars; Introduced STL Importer, POM & CarversClub; downturn in economy

- 2010 – Version C, CarveTight; FaceBook; DXF Importers, Website & Forum Rebuild;

- 2011 – First CW Conference, START U; User's Groups; Third Party Store; Five Year Anniversary Price of $999

- 2012 – 3D Pattern Suite & 2D Vector Drawing Suite; Website & Store Rebuild, Tap-A-Talk for smart phone, Parts Online

- 2013 – Home Depot, Keyhole Function & Designer 2.0

The CarveWright System

The Goals

- Machine - small size with maximum output
- Software - full-featured, easy to learn & use
- Cost – affordable for Hobbyist & DIYer

The Version C

2010 Version C Goals:

- Run quieter & more smoothly
- Tougher system; enhance stability
- Minimize maintenance; simplify repairs
- Add powerful new software functions
- Maximum upgrade to previous versions

New Features

- CarveTight Spindle System*
- Base Reinforcements
- Vertical Guide Rod Stabilizer Feet
- Reinforced Strapping on Power Supply*
- Modified Board Tracking Sensor *
- Simplified X Gear Drive Assembly*
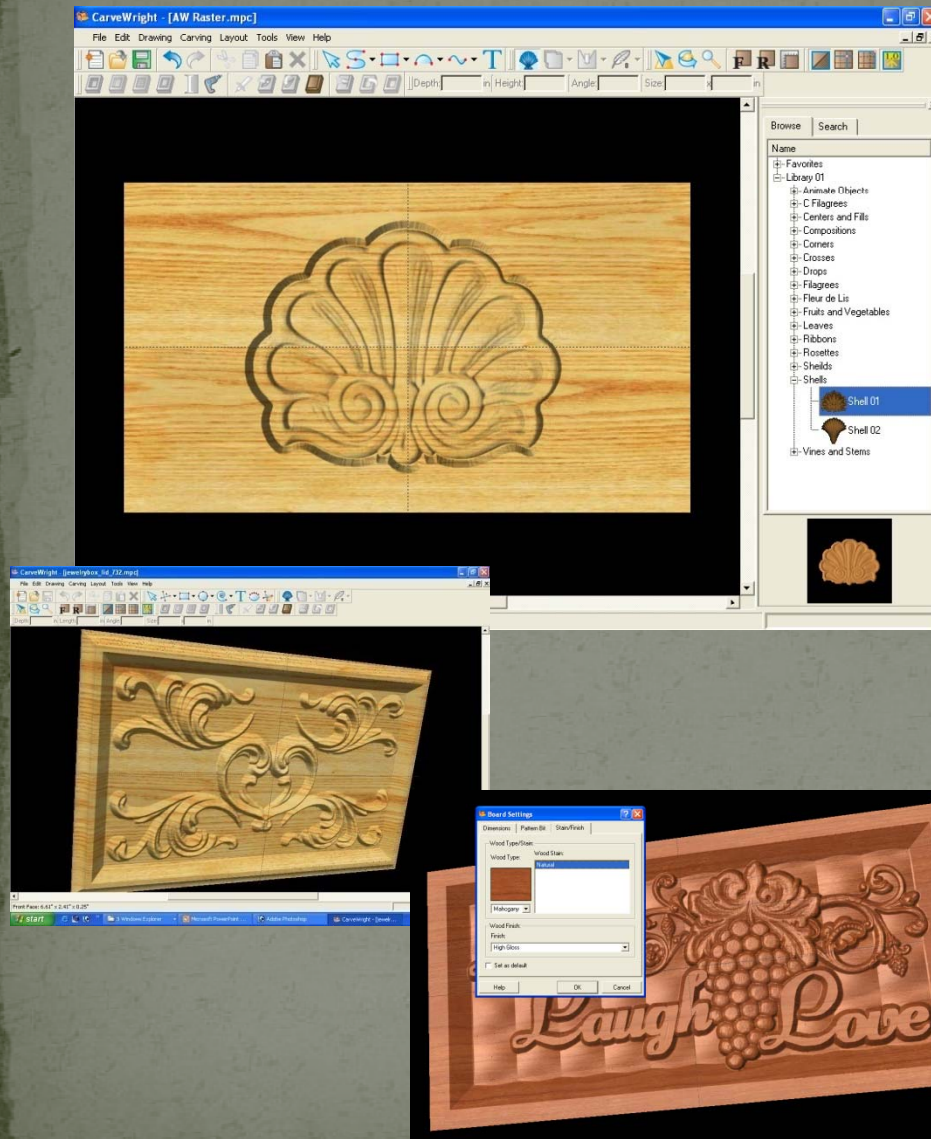- Software and Firmware Improvements*

* upgrades available for A or B

The Machine

- Compact at 15 x 18 x 26
- Fast Carving Speeds
- Carving Length 12'
- 14.5" width & 5" height
- Carve up to 8/10" depth
- Cut up to 1" depth

The Designer Software

Works on PC or MAC
- PC – MS Windows 7, 8, XP; 2000 or Vista
- Mac – Mac OS X Version 10.4 or higher

WYSIWYG 3-D View of Workpiece
- Rotate, Pan or Zoom
- Change Wood Type/Stain/Finish

Familiar Look & Operational Features
- Similar look and feel of Major Software Products
- Operational Features of Major Design Software
- Element Library with Drag & Drop Ease
- Advanced design features & capabilities

The Science

- **Benefits of Full Servo Motor over Stepper**

  - Machine IQ

  - Faster Start Stop Ability (10 times)
    - Light Weight Cutting Head
    - Multiple Axis Feed
    - Spindle Speed (20,000 RPMs)

- **Benefits of CarveWright over other Servo & Stepper Machines**

  - Lower Cost

  - Smallest footprint

  - Maximum Project Capacity

  - User Friendly Software: No G-Code

The Art

- Sign Making Big & Small
- Embellishments
- Custom Furniture Decoration
- Furniture Restoration
- Lithos & Light Boxes
- Toys & Games
- Home Décor
- Instruments
- Parts & Prototype
- Molds
- 360º Carvings
- Lamps & Clocks
- Limitless…

The CarveWright System

Spindle Types

Quick Change Adapter

CarveTight Spindle

CarveTight Spindle

Features:
- **Solid One-Piece Construction**
- **Made of Hardened Ground Steel**
- **Internally Balanced Design**
- **Off-Axis Paw**

Benefits:

Drastically reduces:
- **Run-out**
- **Vibration**
- **Heat-buildup**
- **Noise**
- **Tolerance stack-up**
- **Bit slippage**
- **Maintenance**

Improves overall quality of the CarveWright System

Calculating Cost

- Customer Upgrades
- Factory Upgrade
- Evaluating Used Machine Purchase

STEP 1 — CarveWright Upgrade Options - FACTORY UPGRADE

Is your machine working? — NO → Contact LHR at 713-473-6572 for troubleshooting and an estimate.

YES ↓

Do you still have the box & shipping materials? — NO → It is important to use the box and all the packing foam your CarveWright machine came in. This packaging is tested and approved by UPS to be fully insured. If you do not have all of these items, you will need to order this before you can send your machine in. ORDER BELOW

YES ↓

Do you know what model machine you have? — NO → You can identify the "Version" of your machine by the letter "A, B, or C" that begins the serial number of your machine. (ie: **A**E.000.000)

YES ↓

STEP 2

NOTE: All of these upgrades may be done by the customer themselves to save on shipping and labor costs. We have extensive documentation to show you how to do them in our support section.

A VERSION MACHINES	B VERSION MACHINES	C VERSION MACHINES
Available Upgrades	**Available Upgrades**	**Available Upgrades**
· CarveTight Spindle	· CarveTight Spindle	· Heavy Duty Traction Belts
· Heavy Duty Traction Belts	· Heavy Duty Traction Belts	
· Z-Motor Bundle (A907)*	· Board Tracking Encoder (A2076)*	
· DC Motor Cable (C1012)*	· X-Drive Gear Assbly (A2129)	
· Board Tracking Encoder (A2076)*		
· X-Drive Gear Assbly (A2129)	* Required Upgrade for use of the CarveTight Spindle	
* Required Upgrade for use of the CarveTight Spindle		
The price for ALL of these upgrades including labor and shipping	The price for ALL of these upgrades including labor and shipping	The price for ALL of these upgrades including labor and shipping
$755.08	**$618.23**	**$439.99**
Some of these upgrades may already be done or are optional, and the price would be adjusted down accordingly.	Some of these upgrades may already be done or are optional, and the price would be adjusted down accordingly.	C Version machines have all of the available upgrades installed at the factory except the Heavy Duty Traction Belts.

Possible Additional Costs - Depending on the amount of hours and, if the machine needs further repairs, there will be additional costs asociated with getting the machine in good working order. Additionally, the CarveTight upgrade will require new bits and adaptors to use with the new spindle chuck system.
For the sections below, you will be contacted by CarveWright staff with an estimate for these repairs.

Maintenace & Repairs	Maintenace & Repairs	Maintenace & Repairs
· Replacement of damaged parts	· Replacement of damaged parts	· Replacement of damaged parts
· Consumables (bearings, brushes, etc.)	· Consumables (bearings, brushes, etc.)	· Consumables (bearings, brushes, etc.)
Accessory Upgrades	**Accessory Upgrades**	C Version machines are sold with the

CarveTight Service Upgrade Package

- $100 Savings
- Includes:
  - Shipping & Insurance both ways
  - Coordination with UPS
  - Purchase & Installation of the CarveTight Spindle
  - Purchase & Installation of the Heavy Duty Traction Belts
  - Free 1/16" carving bit
- Timeframe – 1 week each way plus 7 to 10 days (3 weeks)
- May also need:
  - New carving & cutting bits w/hard pressed adapter
  - ¼" split collet (1)
  - ¼" & ½" rubber stop collars
  - Scanning Probe Adapter
- Need Box & Packaging

Build Your Own
At Your Own Pace

Basic CarveWright System

- Version C Machine
- CarveTight Spindle
- 1/16" Carving Bit
- Memory Card
- Memory Card Programmer
- Sand Paper Traction Belts
- T-Allen Wrench
- Project Designer Software
- 45 minute Instructional Video (QC)
- Soft version of manual (all online)

Traction Belts

Sandpaper Belts

Upgrade Option

Warranty Options

- Minimum Warranty – 30d / 10h
- Standard Warranty – 1y / 200h
- Extended Warranty – 2y / 400h
- Standard to Extended

- Order with machine & discounted $100
- 90 days after purchase

Advanced Software

- Centerline Text

- Conforming Vectors

- Pattern Editor

- DXF Importer

- STL Importer

- 3D Pattern Modeling Suite

- Vector Drawing Tools Suite

- Keyhole Function*
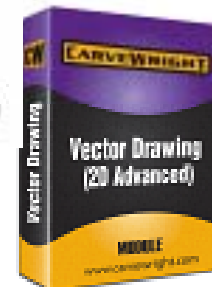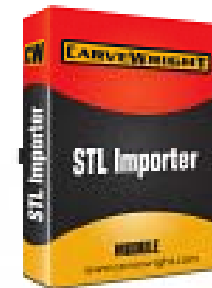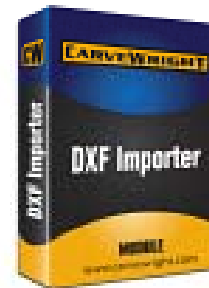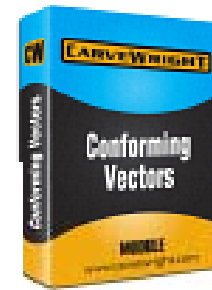
Carbide Bits

1/16 Carving
"A"

1/16 Carving
"P"

1/8 Cutting
"A"

1/8 Cutting
"P"

FOR CARVETIGHT

1/16 Cutting,
Collar & Collet

3/16 Carving

1/8 Carving

Decorative Bits

For QC

For CT

BVG60 BVG90 J0002 BRD25 BRD50 BRO125 BRO188 BBN25 BBN50 BCO375 BCO50

Keyhole Function MODULE
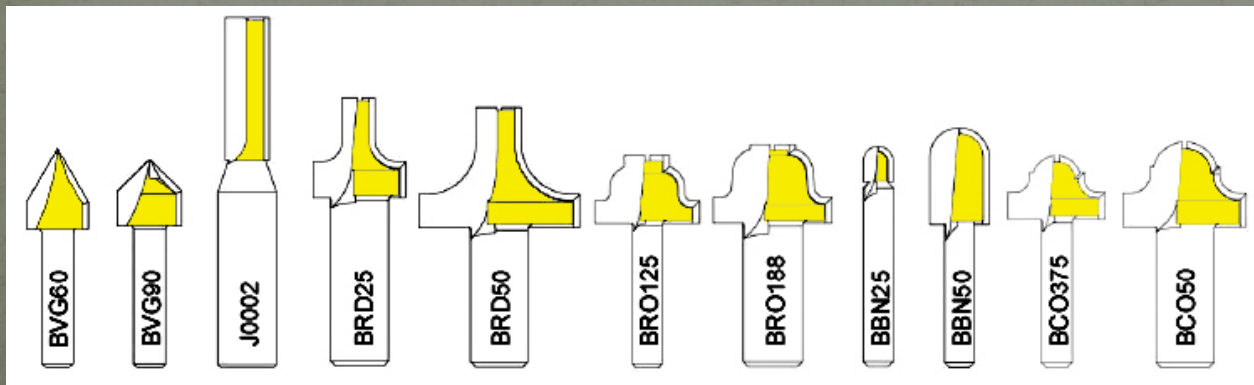
The Scanning Probe

- 3-D Scanning - .005"
- Step size by Quality Setting
  - Best = .010"
  - Normal = .020"
  - Draft = .040"
- Reproduce original pieces
- Hand Carvings
- Repair antique furniture
- Copy trim and moldings
- Create patterns
- Scanning Sled

PATTERN EDITOR INCLUDED

The CarveWright System

Sanding Mops

- 180 or 240 Grit
- 3" Double or 1.5" Single Spindle
- Replacement Packs Available

MOUNTS ON DRILL OR DRILL PRESS; NOT MACHINE

The Memory Card & Programmer

- Stores multiple projects
- Memory Card is manageable
- Keep Computer Clean in Office
- Keep Machine (Dust) in Garage or Woodshop
- Machine Off – Insert / Remove

Connects via USB

Third Party Options

- Ringneck Blues DC Insert
- Erwin's Dust Devil
- Alibre Design Personal Edition

Pattern Depot

- Buy or Sell patterns - 7,000
- Licensed patterns & projects that are protected from free distribution
- Individual Patterns or Collections usually discounted
- Complete Projects
- Subscriptions – monthly distribution for 1 year – POM or CarversClub

Project of the Month

- 1 Year Subscription
- New Complete Project Design
- List of Tools & Materials
- Complete Instructions
- Finishing suggestions
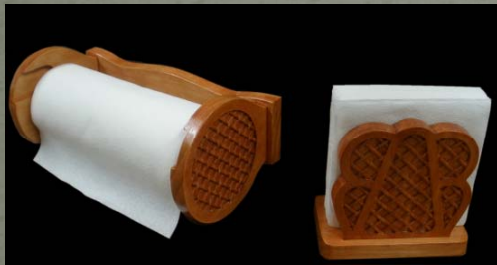
CarversClub

- 1 Year Subscription
- Unlimited Support
- 25% off Labor
- Complimentary Testing of Parts
- Monthly Exclusive Offer

NEW www.carvewright.com

Login & Passwords

- Store Account
  - Online Purchases & History
  - Forgot Password or set by LHR
- Customer Account – ONLY ONE
  - Management of machines, computers, software, patterns, projects & subscriptions
  - Forgot Password or set by LHR
- Forum Account
  - Online discussions & support from other users
  - Forgot Password or set by LHR

Quick Links

> Customer Account Login

> Store Account Login

> Forum Account Login

> Project Designer Download

> Software and Pattern Activation

> Educators

> Canada

Items: 1
Total: $39.99

Checkout

Sign in ▶
Register ▶

Help zone ▶
Contact us ▶

back to CarveWright homepage

3/16" Carving Bit

1   × $39.99   = $39.99

Update   Clear cart   Checkout

Search

or any project!

Registration & Activation

- Registration of software
  - Latest Version Online
    - Throw old disk in trash
    - Updating from 1.182 or ealier
    - Remove old installation
  - Operating System
    - Run As Admin
    - Advanced Settings – Always Run As Admin
    - MAC Lion – missing software
    - License Cleaner
- Managing Computers
  - Adding 2nd Computer
  - Update Licenses
  - Deactivation & deleting
  - Computer ID changes

- Patterns & Projects
  - Purchase
  - Activation
  - Download
  - Try before you buy
  - Red Background
  - 16 Bit Resolution
- Advanced Software
  - Demo mode
  - Serial number sent via email
  - Latest Version of software
- Subscriptions
  - Activate Subscriptions
  - Monthly POM or freebie only needs update licenses & download (not activation)

Resources

- Customer Support
  - Hours / Days / Lunch
  - Tier 1 vs Tier 2
  - Software or Hardware
- Website Support
  - FAQs
    - Machine, Software, Accessories
    - Purchasing & Shipping
  - Getting Started
    - Out of the Box
    - Install the Software
    - Registration
    - Learn How to Use It
  - Tutorials
    - Machine, Software, Accessories
    - Tips & Tricks
  - Maintenance
    - Care & Maintenance
    - Suggested Maintenance Schedule
    - Videos & Corresponding PDFs

- Troubleshooting
  - Machine, Software, Accessories
- Manuals & Repair Documents Community
- Forum
  - What is it & How to use it
  - Tap-a-talk Mobile app
  - A Carver Near You
- CarveWright Corner Newsletter 24/7
- Facebook
  - CarveWright Woodworking
  - CarveWright Systems
- START U & UsersGroups
  - Finding One
  - Becoming One
- 3rd Party Assistance
- AskBud
- YouTube Videos - CarvedIt
- www.CarveBuddy.com
- www.allcw.com

Carving a Project

Rastering

- Back & forth line by line
- Most used on CW
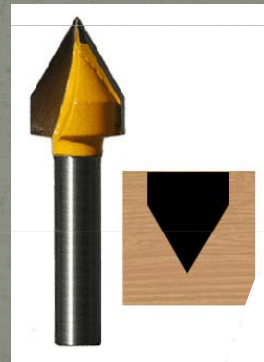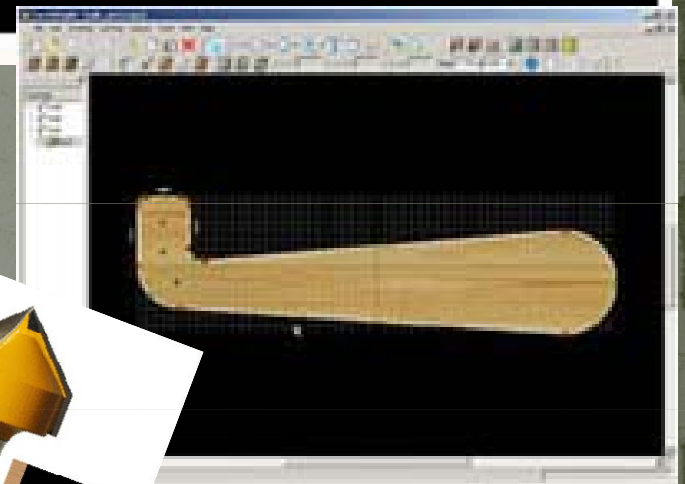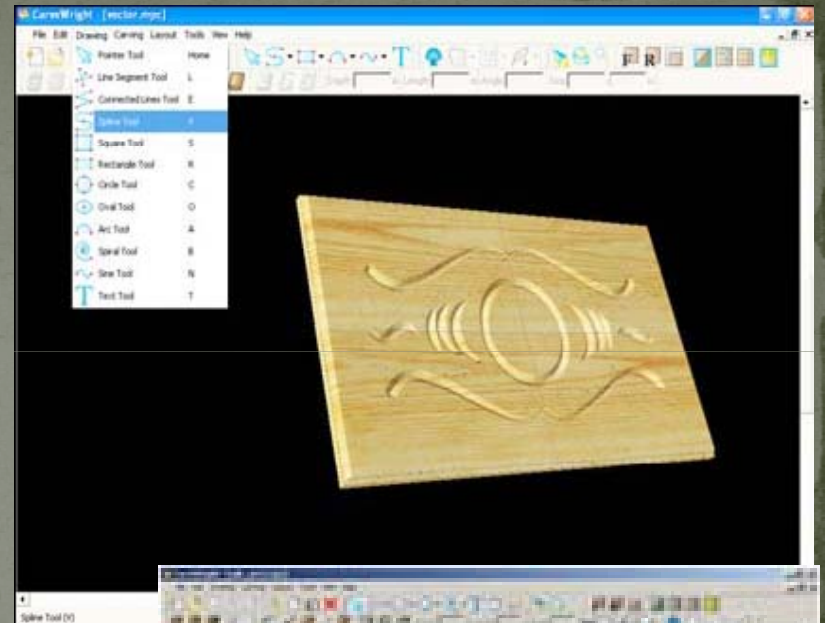- Pattern Library is 3-D raster images
- Imported images
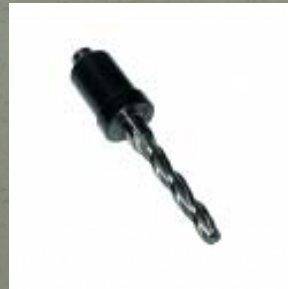
1/16", 1/8"or 3/16" carving bits

Designer > Edit > Board Settings > Pattern Bit

Vectoring

- **Vector cuts precisely follow a path**
- **Vector images can be created with the software drawing tools including sweeping curves, arcs or circles**
- **2D Vector Drawing Suite**
- **DXF Importer**
- **Centerline Text is a Vector Cut**
- **Conforming Vectors**

60 & 90 Degree V Bits
1/16", 1/8"or 3/16" Straight Cutting Bits

Effects on Carving Time

- Quality Setting
  - Optimum
  - Best
  - Normal
  - Draft

- Effects on Carve Time
  - Amount of wood removed
  - Size of Pattern
  - Depth of Cut

| Best Quality | Normal Quality | Draft Quality |
| 20 minutes | 12 minutes | 9 minutes |

Optimal – 2x Best
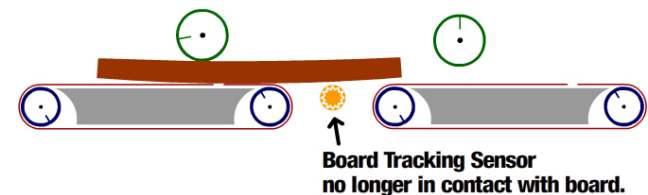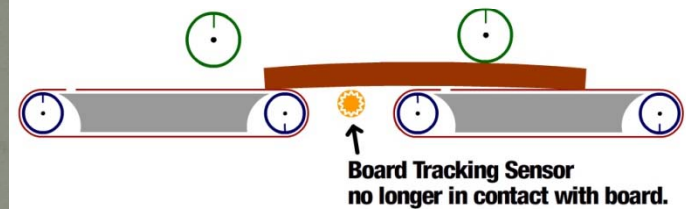Oak Samples – quality setting effects carving time.

Materials to Carve/Avoid

- Approved
  - Hard Woods
  - Soft Woods
  - MDF & Plywood
  - Foams
  - Formica
  - Hard Acrylics

- Not Approved
  - Glass
  - Ceramic
  - Stones
  - Metals
  - Concrete
  - Soft Plastics

Preparation of Materials

- Board is straight
- Surface is smoothly planed
- Widths are equal at both ends
- Edges are 90° angle

- Masking Tape!!

Warped Boards Create Tracking Problems

Board Tracking Sensor
no longer in contact with board.

Board Tracking Sensor
no longer in contact with board.

Inserting Medium

- Crank head up
- Top Notches
- Snug against squaring plate
- Careful with sandpaper belt
- Board Tracking Roller
- Under rollers and crank handle down
- Slide squaring plate

Acceptable Dimensions

Maximum Limitations

Width – 14.5" *(Tiling Technique)*
Depth – 5"
Length – 12' carving

Work pieces over 3' long will require additional support, such as out-feed rollers, at the appropriate height.

Maximum 20 lb. weight limit

Minimum Limitations

Width – 1.5"
Depth – .5"
Length – 7"

If any of these dimensions fall below the minimum limitations, the workpiece will require a jig.

SEE: *April 2008 Tips & Tricks*
Carving Jigs – Carrier Boards, Sleds & Rails

Set Up Controls

Insert Memory Card
Power Machine On
Select 1 – Project Menu
Select Project
Stay Under Rollers?
Machine Measures Board
Scaling the Project
Project Placement on Board
Cut Board to Size?
Check Bit is Correct & Secure
Machine Homing
Watch bit touch slap plate & board
Machine Begins Carving

Staying Under Rollers

- Prevents "snipe"
- Protects against broken bit

- 7 Inch Rule
- Carving Jigs – April 2008 Tips & Tricks
- Built into design

Starting & Stopping a Project

- Insert Memory Card label side up

- Turn on machine

- Never remove Memory Card during project

- Never turn off machine during project

- To stop, raise cover lid or press Stop ONCE

- Project can be resumed by lowering lid & pressing ENTER

- Pressing Stop a second time will ABORT project

Care of Your CarveWright

- **Dust Removal**
- Check Head Pressure
- Lubricate
- Environmental
- Consumables
- Spare Parts

Troubleshooting Your CarveWright

- **Online Tools**
  - Manuals
  - Troubleshooting Guide
  - Repair Documents
  - Videos
  - Exploded View
  - Parts List

- **Customer Service**
  - Under Warranty
  - CarversClub
  - Incident Fee
  - Parts Testing
- COMMUNITY FORUM!
- ~~Facebook~~

Service Parts
Mechanical Parts
Electronics and Motors
Cables
Exploded Parts List

Service Upgrades

Maintenance Products

CarversClub

Home ▶ Service & Parts ▶ Service Parts

Service Parts

You've asked and we have made available directly the parts necessary to repair your machines. As time passes, more parts will be made available directly. Any documentation associated with a part can be found on the detailed description of the part or by going to our main website at www.carvewright.com on the of the page under Support/Service Documentation.

The diagnosis of the necessary part is best facilitated by contacting a support technician. Use the Contact Page to find a method of contacting the CarveWright/CompuCarve Support Team.

Mechanical Parts	Electronics & Motors	Cables	EXPLODED PARTS LIST
Mechanical Parts 79	Electronics and Motors 27	Cables 13	Exploded Parts List 106