Instructions

Gryphon Diamond Band Saw

C–40

C-40 Tall

C-40 CR (AquaSaw)

C-40 CR Tall (AquaSaw XL)

Gryphon Corporation

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Unpacking

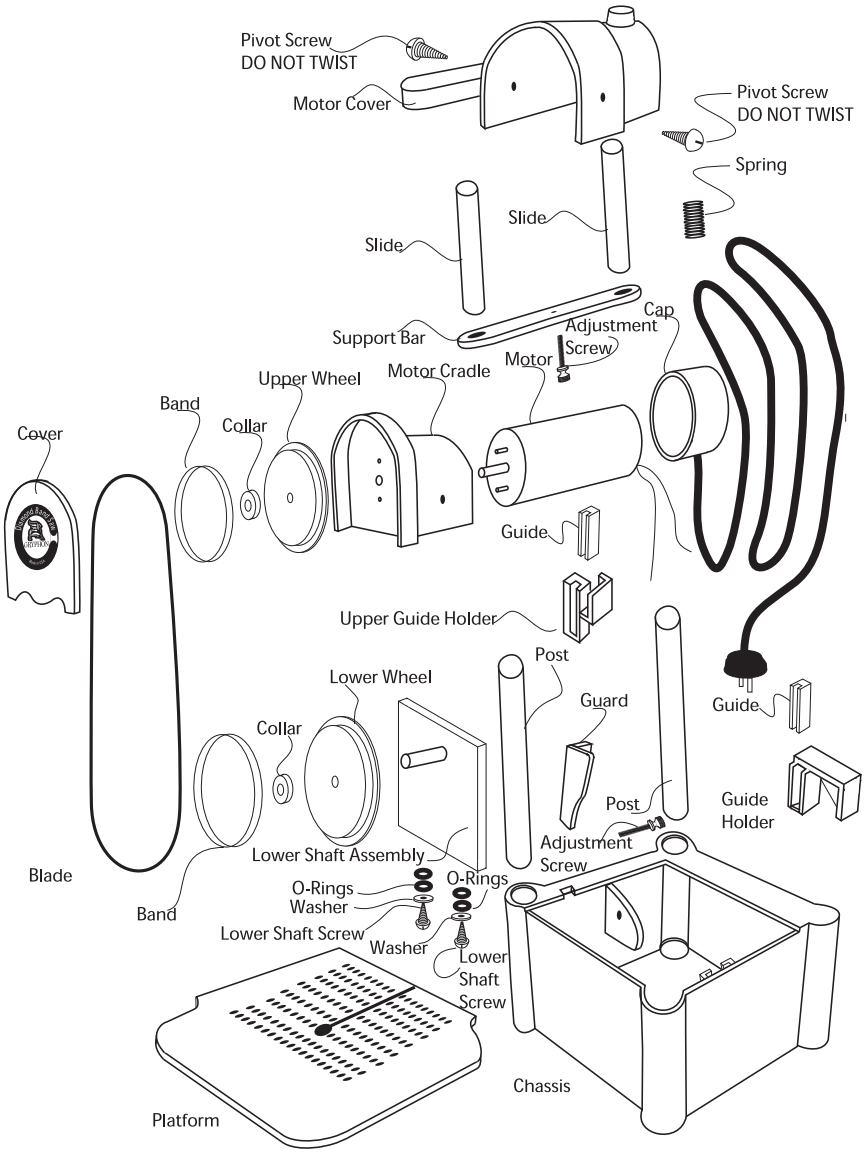
Your shipping carton contains the following parts:

- Top Assembly with motor
- Bottom Assembly with Guide Holder installed
- Platform
- Blade (coiled in box)
- Upper Blade Guide Holder
- 4 Guides (one installed in Lower Guide Holder)
- Two Sponges
- Spare Lower Adjustment Screw and two nuts*
- These Instructions

DO NOT turn either Adjustment Screw.
These are preset for your Blade at the factory.
*The use of these Adjustment Screws is explained further on in this booklet.

• Always wear eye protection •
• Do not run blade dry — use plenty of water•
• Keep fingers clear of moving parts •
• Lift off motor when cleaning •

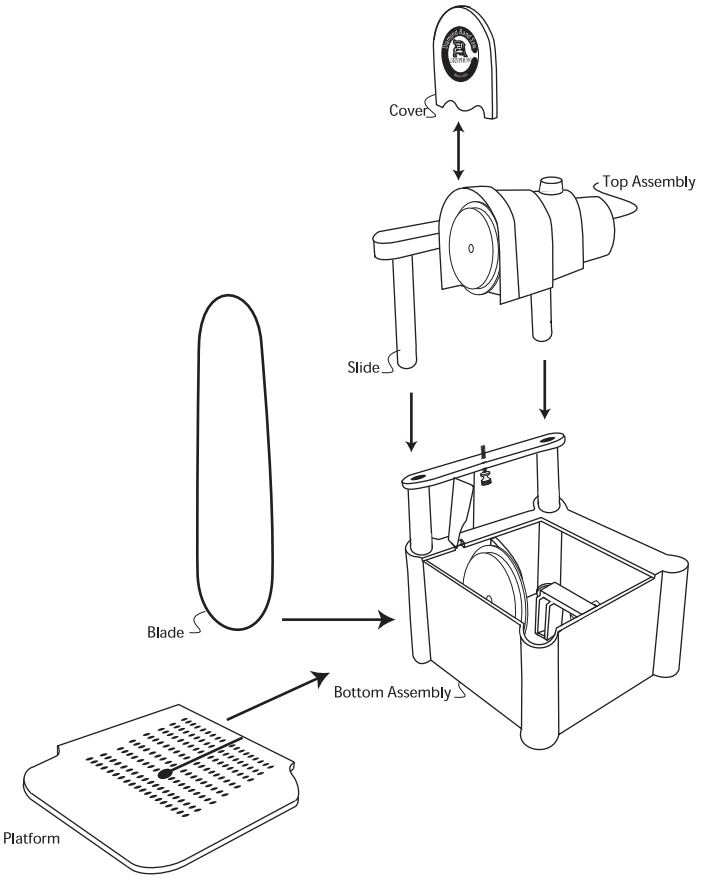
Refer to the drawing below when ordering parts



Assembly

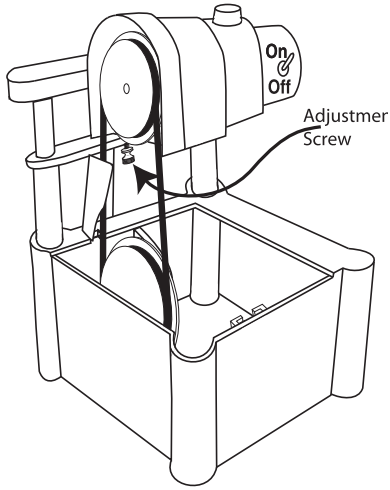
Assembly is very simple.
Refer to the drawing on this page.

- Remove tape used in packing.
- Insert the slides on the Top Assembly into Posts on Bottom Assembly as shown.
- Push the Top Assembly down as far as it will go (note that the Adjustment Screw controls how far down the Top Assembly will go). Do not turn the Upper Adjustment Screw yet.
- Remover the Cover by sliding it straight up.



Blade Installation

- Remove the coiled Blade from its box.
- Uncoil the blade. The easiest way to do this is to hold a section of the blade between your thumb and index finger and gently shake until the blade uncoils. Do not bend or kink the Blade.
- Place the Blade under Lower Wheel with diamond side towards the front of the saw.
- Place the Blade at the 9 O'clock position on the Upper Wheel and rotate the Upper Wheel by hand clockwise to wrap the Blade over the Upper Wheel. The Blade should pass through slot in Guide.
- Turn the Upper Wheel clockwise by hand until the Blade walks to the back of the Upper Wheel.



Trial Run & Blade Adjustment

- Route the power cord through the slot provided in the Top Assembly and plug it into a standard grounded outlet. The upper Adjustment Screw was factory set for the blade included with the saw, and should not need attention. If at a later time you wish to adjust the blade tension, use the following steps to make your own adjustment.
- While pressing down gently on the back of the Motor with your thumb (to keep tension on the Blade), flip the on/off switch to the "on" position.
- By tightening the Adjustment Screw you raise the back of the Motor and bring the Blade toward the front of the Upper Wheel. Loosening this screw will bring the Blade towards the back of the Upper Wheel.
- Tighten the Adjustment Screw until the Blade has minimum

wobble but stays in the Guides. If the saw becomes louder and vibrates, loosen the Adjustment Screw until the saw quiets down.

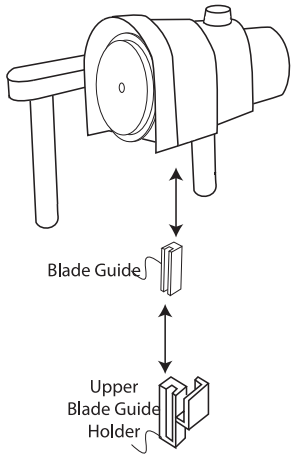
- You will not need to adjust the Lower Adjustment Screw. This control for the tilt of the Lower Wheel was set at the factory and should not require further attention. In the event that it becomes necessary to adjust the tilt of the lower wheel, instructions are provided below.
- Turn the saw off.

Lower Guide Installation

- Your saw was shipped with the Lower Guide Holder in place. If it has become loose or fallen out in shipment, reinsert it into slot on inside wall of Chassis. Push firmly into place so that top of Guide Holder is flush with top of Chassis. A guide is installed in the Lower Guide Holder at the factory. When installing a fresh guide, pry the old guide out and slide the new guide into slot on Lower Guide Holder (the slot on the Guide must face out).
- The Blade will fit into the slot of the Guide.

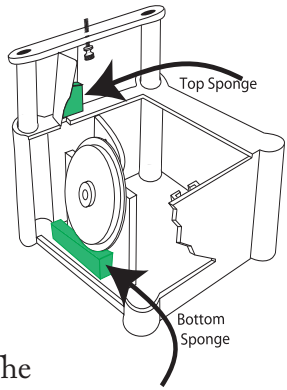
Upper Guide Installation

- Install a Guide into the Upper Blade Guide Holder by sliding the Guide into the Upper Guide Holder.
- Install the Upper Blade Guide Holder onto your band saw by inserting it over the rear right-hand corner of the Motor Cradle as shown.
- The Upper Blade Guide Holder may be removed or reinstalled at any time. Removing the Upper Blade Guide Holder will provide extra clearance for



cutting tall objects. Cutting without the Upper Guide in place will not damage the saw, however there will be more movement of the blade while cutting.

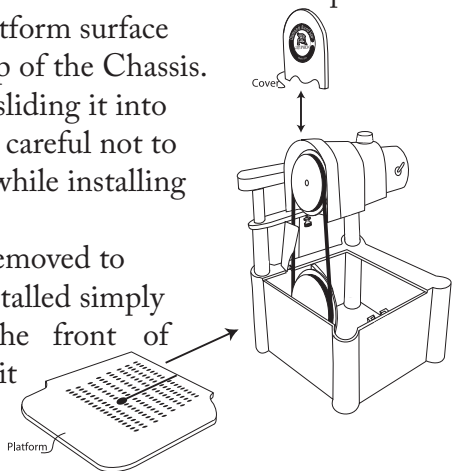
Sponge and Water Installation



- The sponges reduce the water splash.
- Wet both Sponges.
- Insert sponges in locations shown in cutaway drawing at right. Ridges are molded into the saw to keep the sponges in place.
- Pour water into chassis. The water level should not be higher than the top of the bottom sponge, otherwise you will experience a great deal of water splash. The use of a corrosion inhibitor or other additive in the water is not recommended as it will not benefit the function of the saw.
- Rotate or replace sponges when worn.
- Additional sponges can be cut from a standard kitchen sponge available at your grocery store.

Platform & Cover Installation

- The Platform is installed with the texture side up.
- When installed, the Platform surface will be flush with the top of the Chassis.
- Install the Platform by sliding it into place as shown. Be very careful not to nick or bend the Blade while installing the Platform.
- The Cover, which you removed to install the Blade, is reinstalled simply by sliding it down the front of the Top Assembly until it sits flush.



Marking your Pattern

The diamond blade is capable of cutting a large variety of materials. In many applications, such as glass, it is useful to mark a pattern on the material prior to cutting. Since the blade carries cooling water to the glass surface, your pattern will need to be resistant to water. The best technique is to mark your pattern on the glass with a thin-line paint marker. These can be obtained from office supply dealers. Patterns applied with regular ink markers such as Sharpies will wash away quickly, but some users have found that covering these patterns with Chap Stick or similar will provide some protection from the water.

Cutting Glass

When cutting, push your work with only a moderate pressure. Very heavy pressure will not result in faster cutting, and may bend the blade. When cutting curves, use only a light pressure and let the blade do the work. Aggressive pressure against the blade when cutting curves causes rapid wear to the back of the blade. Do not force the blade to follow a pattern, but rather guide the work through the blade. This will insure you of the longest possible blade life. When backing out of a slot, turn motor off. Hold your thumb against the front of the blade while carefully backing the glass. Remove your thumb and start the motor.

It is normal for a blade to cut more slowly as it wears. Some materials, such as lead crystal, load the blade and cutting action slows significantly after a time. Good cutting action will be immediately restored with only a little cutting into a dressing stone.

Cutting Other Materials

The diamond blade on your band saw is useful for cutting a variety of hard materials. Stone, tile, ceramics and similar materials can be cut as easily as glass. The speed at which the saw cuts will be determined by the thickness and the hardness of the material being cut. Harder materials will wear the blade faster. Metals are too soft to be routinely cut by a diamond blade and will gum up the blade, but limited cutting will do no harm.

Cleaning the Saw

The glass dust that results from your cutting is carried to the bottom of the saw where it combines with the water to form a slurry. When the water becomes objectionably dirty you should clean out this slurry as follows:

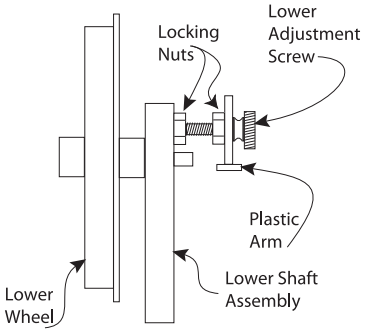
- Remove Platform & Cover.
- Remove Blade.
- Remove Top Assembly by pulling straight up.
- Pour out dirty water outside. Do not pour into plumbing as the slurry can cause clogs.
- Use a paper towel to remove heavy slurry if required.
- Rinse out Bottom Assembly with a garden hose if desired.
- Do not use solvents to clean any part of the saw. Soapy water is all that is required.
- If you remove the Guide Holder, clean it thoroughly before replacing to insure that it fits flush.

Replacing Lower Wheel Adjustment Screw

If it should ever become necessary to replace the Lower Adjustment Screw (used for adjusting the tilt on the Lower Wheel), proceed as follows:

(1) Remove old Lower Adjustment Screw and both nuts (the

rear nut is glued to the knob, and the easiest way to remove it is by cutting it off with a sharp knife).

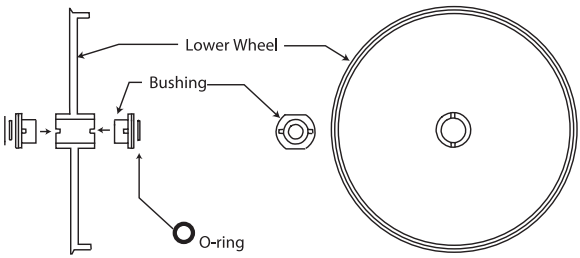


(2) Pass new Lower Adjustment Screw through hole in plastic arm.
(3) Twist two nuts half way onto Lower Adjustment Screw.
(4) Screw Lower Adjustment Screw into hole in Lower Shaft Assembly.
(5) Twist nut nearest the Plastic Arm so that it almost touches Plastic Arm, but still allows knob to turn.
(6) Install the Blade and rotate the Upper Wheel by hand while turning Lower Adjustment Screw in or out until the Blade runs near the shoulder at the back of the Lower Wheel.
(7) Turn saw on and twist Lower Adjustment Screw until blade runs quiet and almost touches shoulder of Lower Wheel.
(8) Tighten both Locking Nuts.

Replacing Lower Wheel Bushing

If it should ever become necessary to replace the Lower Wheel Bushing, proceed as follows:

(1) Remove the Lower Wheel by first removing the stainless steel collar at the front of the wheel shaft, then pull the Lower Wheel and all the washers and O-rings off of the shaft.



(2) Wipe the shaft clean and, if necessary, clean up the

shaft with steel wool. Lubricate the shaft thinly with Vaseline.
(3) Pull the old bushings out of the Lower Wheel with pliers.
(4) Push the new bushings into the Lower Wheel so that the bushing ears slip into the notches in the wheel hub. Put the assembly on the floor and step on it to firmly press the bushings into position.
(5) Push new O-rings into the recesses in each bushing.
(6) Place on shaft:
(a) Lower Wheel (be sure that the front O-ring stays in the recess)
(b) collar

Push the above group of parts tightly against the Lower Shaft Assembly. Tighten the set screw.

Replacement Parts

Genuine Gryphon Diamond Blades and Blade Guides are available through your dealer or directly from Gryphon. Replacement Sponges are available in most grocery stores.

Do not bend or kink your blade. Heavy saw vibrations result from running bent blades.

Use only Gryphon #301 blades on this high speed saw. Blades from other manufacturers cannot withstand 40 m.p.h. Other blades can make the saw vibrate and run at a high noise level because of their poor quality. After 2 to 4 hours of running time other blades will break.

For the 37-inch circumference blades, there is a choice of copper backed blades or stainless steel blades. In general, we recommend the copper based blades (301BD and 301F) unless you are cutting coral, in which case it is important to use the stainless steel blades as live coral can react badly to copper.

For other parts or warranty service, visit our web site, or contact the factory in Sylmar, California.

C-40

For all applications except salt water
Uses our number 301BD, 301F and
301SS 37-inch blades
Available in 110v or 220v

C-40 Tall

For all applications except salt water
Features increased clearance
Uses our number 301SS-42
42-inch blades
Available in 110v or 220v

C-40 CR

Corrosion Resistant construction for
use with salt water
Uses our number 301SS
37-inch blades
Available in 110v or 220v

C-40 CR Tall

Corrosion Resistant construction for
use with salt water
Features increased clearance
Uses our number 301SS-42
42-inch blades
Available in 110v or 220v