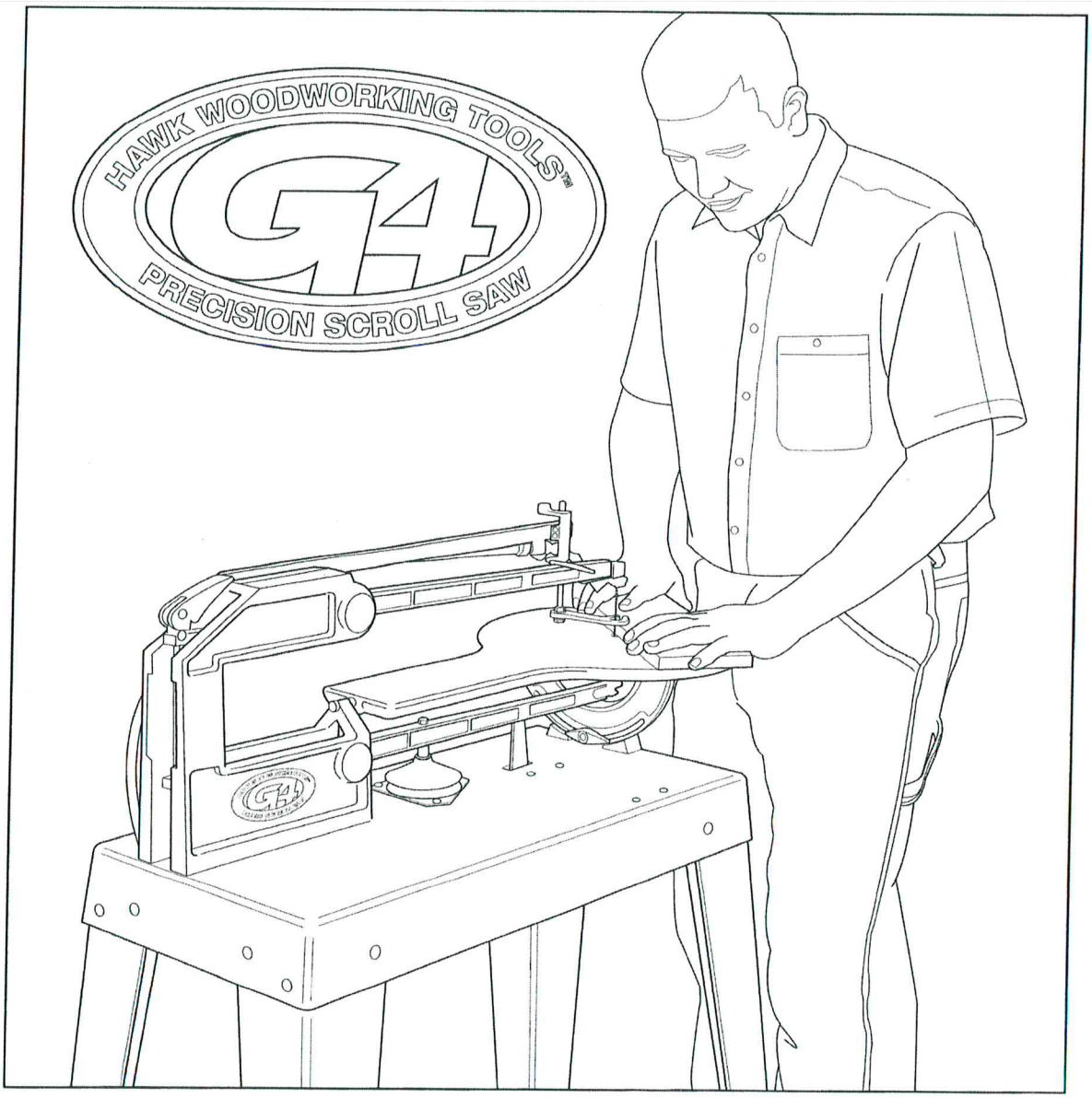
HAWK®
Woodworking Tools

Hawk G4 Precision Scroll Saw

Operators Manual - Model G426



READ THOROUGHLY BEFORE OPERATING SCROLL SAW

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PLEASE NOTE: The specifications and drawings illustrated in this manual represent the Hawk G4 Precision Scroll Saw as supplied when the manual was prepared. However, owing to Hawk Woodworking Tools policy of continuous improvement, changes may be made at any time with no obligation on the part of Hawk Woodworking Tools. Whenever possible, though, we send manual updates to all owners of a particular tool or machine. Should you receive one, we urge you to insert the new information with the old and keep it for reference.

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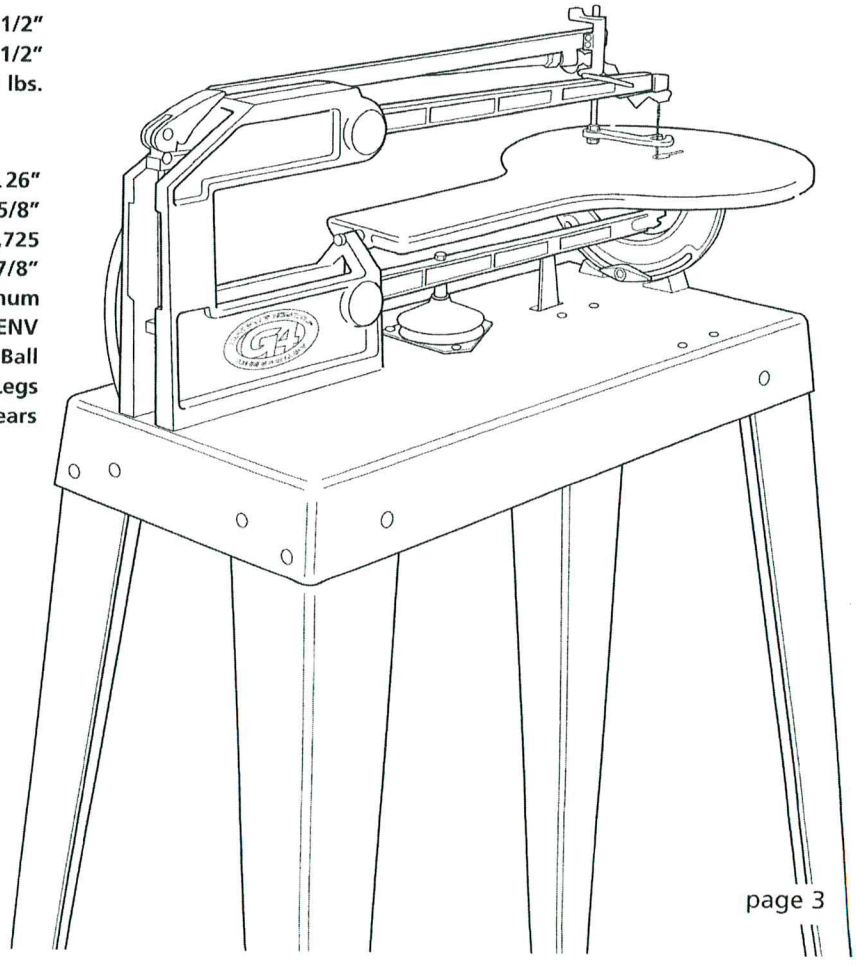
The Hawk G4 Precision Scroll Saw Specifications

Footprint Dimensions:

Maximum Width	19 1/2"
Maximum Depth	39 1/2"
Weight	97 lbs.

Specifications:

Throat Capacity	26"
Maximum Cutting Thickness	2 5/8"
Cutting Strokes Per Minute	30 - 1,725
Stroke Length	7/8"
Work Table	14 1/2" Round Aluminum
Motor	DC-TENV
Bearings	Thrust Ball
Mounting	10 Gauge Steel Legs
Manufacturer's Warranty	6 Years

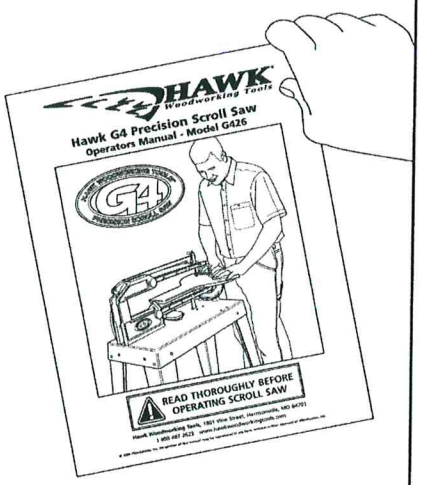


WARNING

Safety Instructions for the Hawk G4 Precision Scroll Saw

The Hawk G4 Precision Scroll Saw is designed for both the professional and hobby shop enthusiast. It is designed for ease of operation, maintenance, and adjustment by the operator with their safety in mind. As with any piece of equipment, the operator should become familiar with it. To do this, the operator's manual should be thoroughly read and understood.

CAUTION!
Safety doesn't just happen, it is planned!
Accidents don't just happen, they are caused!



Read the manual before assembly and operation. Become familiar with the machine and its operation before beginning any work. Serious personal injury may result if safety or operational information is not understood or followed.

WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement, and other masonry products.**
- **Arsenic and chromium from chemically treated lumber.**

Your risk from these exposures varies, depending on how often you so this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to follow guidelines could result in serious personal injury, damage to equipment or poor work results.

Safety Procedures:

1. **DO NOT PLUG SAW INTO A GFI BREAKER.** (Ground Fault Interrupter receptical). The saw uses a DC brush type motor and may cause the breaker to 'trip'. This will not affect the operation of the saw, it just shuts it off. Whenever possible, plug your saw into a standard 3-pin grounded receptical. See page 6 for further information.

2. **SUPERVISE CHILDREN & VISITORS.** Never allow anyone to use your Hawk G4 without proper training. Although the Hawk G4 is more than safe for children to use, they should always be carefully supervised.

3. **CHILD-PROOF YOUR WORKSHOP** with padlocks, master switches, and by removing starter keys. Each Hawk G4 comes equipped with a red locking safety switch key. Remove the red key when the saw is not in use.

4. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents. Be sure to remove all tools and wood scraps before starting the machine.

5. **KEEP HANDS AND FINGERS AWAY** from moving parts. Always disconnect from power source before adjusting or servicing. Make sure switch is in OFF position before re-connecting.

6. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.

7. **TO AVOID ELECTRIC SHOCK,** do not operate your Hawk G4 in a damp or wet area.

Continued on Page 5

WARNING

Safety Instructions for the Hawk G4 Precision Scroll Saw

Safety Procedures Cont:

8. **DO NOT FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.

9. **HOLD WORK SECURELY ON TABLE.** Use constant light down pressure while cutting to avoid wood jumping. Use hold-down foot, if you prefer.

10. **ALWAYS WEAR SAFETY GLASSES.** Everyday eye glasses only have impact resistant lenses, they are NOT safety glasses.

11. **DON'T OVER-REACH.** Keep proper footing and balance at all times.

12. **MAINTAIN SAW WITH CARE.** Use sharp blades and keep saw clean for best and safest performance. Follow recommended maintenance procedures in this operators manual. It is the owners responsibility to maintain equipment to Hawk's manual specifications.

13. **USE PROPER EXTENSION CORD.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current load your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and over-heating

14. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

15. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Do not leave tool until it comes to a complete stop.

16. **NEVER STAND ON TOOL.** Serious injury can occur if the tool is tipped or if the cutting blade is unintentionally contacted.

17. **USE RECOMMENDED ACCESSORIES.** Consult owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to the operator.

18. **NEVER OPERATE A MACHINE WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Full mental alertness is required at all times when running a machine.

19. **NEVER ALLOW UNSUPERVISED OR INEXPERIENCED PERSONNEL TO OPERATE THE MACHINE.** Make sure any instructions you give in regards to machine operation are approved, correct, safe, and clearly understood.

20. **IF AT ANY TIME YOU ARE EXPERIENCING DIFFICULTIES** performing the intended operation, stop using the machine! Then contact our service department or ask a qualified expert how the operation should be performed.

Site Considerations:

FLOOR TYPE

Your Hawk G4 Precision Scroll Saw will operate with less vibration if it is placed on a concrete floor surface, such as a garage or workshop. You will experience excessive vibration if placed on a wooden surface, or surface other than concrete. The use of rubber mats under the saw may also help with vibration. If your saw is properly assembled following the procedures in this manual and then placed on a concrete floor, you should experience little or no vibration.

WORKING CLEARANCES

Working clearances can be thought of as the distances between machines and obstacles that allow safe operation of every machine without limitation. Consider existing and anticipated machine needs, size of material to be processed through each machine, and space for auxiliary stands and/or work tables. Also, consider the relative position of each machine to one another for efficient material handling. Be sure to allow yourself sufficient room to safely run your machines in any foreseeable operation and keep dust collection hoses off the floor and out of the way.

LIGHTING AND OUTLETS

Lighting should be bright enough to eliminate shadows and prevent eye strain. Electrical circuits should be dedicated or large enough to handle combined motor amp loads. Outlets should be located near each machine so power or extension cords are not obstructing high traffic areas. Be sure to observe local electrical codes for proper installation of new lighting, outlets, or circuits.

WARNING

Safety Instructions for the Hawk G4 Precision Scroll Saw

Grounding:

In the event of an electrical short, grounding provides electric current a path of least resistance to reduce the risk of electrical shock. This tool is equipped with an electric cord having an equipment-grounding conductor which must be properly connected to a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Improper connections of the electrical-grounding conductor can result in risk of electric shock. The conductor with green or green and yellow striped insulation is the electrical-grounding conductor. If repair or replacement of the electrical cord or plug is necessary, do not connect the equipment grounding conductor to a live terminal.

WARNING

This equipment must be grounded. Verify that any existing electrical outlet and circuit you intend to plug into is actually grounded. Under no circumstances should the grounding pin from any three-pronged plug be removed. Serious injury may occur.

Extension Cords:

Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current load your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and over-heating

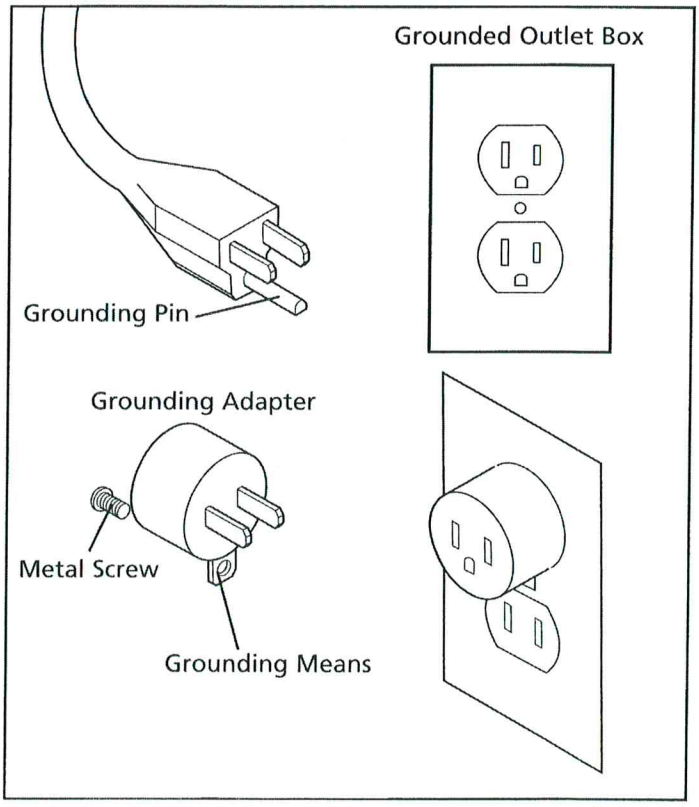
CAUTION

We have covered some basic electrical requirements for the safe operation of your machine. These requirements are not necessarily comprehensive. You must be sure that your particular electrical configuration complies with local and state codes. Ensure compliance by checking with your local municipality or a licensed electrician.

110V Operation:

This tool is intended for use on a circuit that has an outlet that looks like the one illustrated below. **DO NOT PLUG SAW INTO A GFI BREAKER.** (Ground Fault Interrupter receptical). The saw uses a DC brush type motor and may cause the breaker to 'trip'. This will not affect the operation of the saw, it just shuts it off. Whenever possible, plug your saw into a standard 3-pin grounded receptical. A temporary adapter may be used to connect the plug to a 2-pole receptacle if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green colored rigid ear, lug, and the like extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

Please note: The use of grounding adapters is prohibited in Canada by the Canadian Electrical Code.



Unpacking Your Machine:

All Hawk G4 Precision Scroll Saws are test run, checked, and adjusted at the factory before shipment. All adjustments have been made except for a few minor assembly procedures. After these procedures are completed, you'll be on your way to scrolling in no time!

Remove the Hawk G4 Precision Scroll Saw from the two shipping cartons and check to see that all parts were received without damage. If you find your saw is damaged in any way, do not operate the saw and immediately call Customer Service for advice at **1 800 487 2623**.

Occasionally we may ship additional items in each carton, such as accessories, if ordered. Be sure to compare the items received with the packing list attached to each shipment. There will be one packing list for an entire shipment

When you are completely satisfied with the condition of your shipment, you should inventory its parts.

Keep All Cartons!

In the event the Hawk G4 Precision Scroll Saw needs to be returned, it MUST be shipped in original box and packaging.

CAUTION

The Hawk G4 Precision Scroll Saw represents a heavy load. Seek assistance before moving.

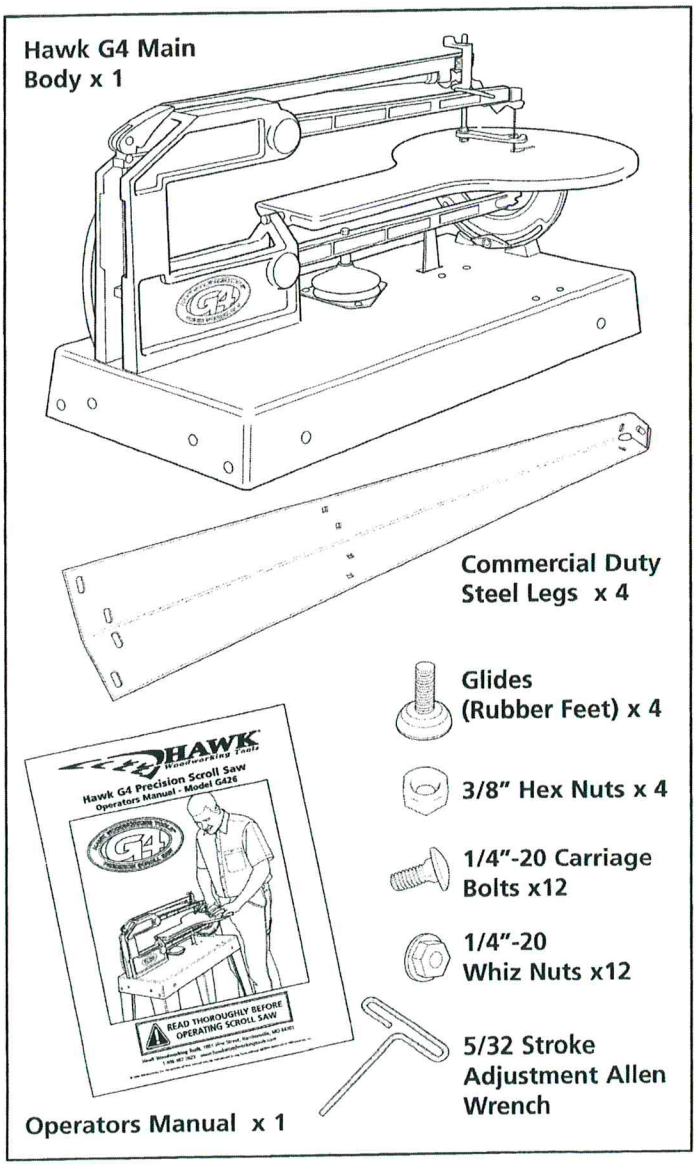
CAUTION

Some metal parts may have sharp edges on them after they are formed. Please examine the edges of all metal parts before handling them. Failure to do so could result in injury.

Parts Inventory:

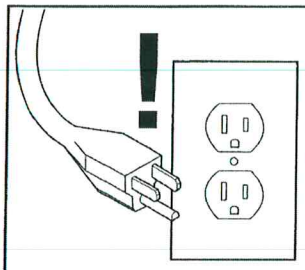
After all the parts have been removed from the two cartons, you should have:

(1) Hawk G4 Precision Scroll Saw
(pre-assembled main body)
(1) Operators Manual
(4) Commercial Duty 36" Steel Legs
(4) Glides (Rubber Feet)
(8) 3/8" Hex Nuts
(12) 1/4"-20 Carriage Bolts
(12) 1/4"-20 Whiz Nuts
(1) 5/32 Stroke Adjustment Allen Wrench



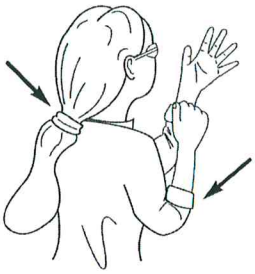
Turn the page for instructions on how to install and adjust the saw legs.

Beginning Assembly:



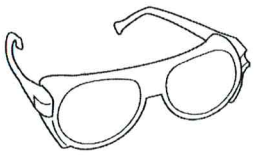
WARNING

Disconnect power to the machine when performing any maintenance, assembly or adjustments. Failure to do this may result in serious personal injury.



WARNING

Keep loose clothing rolled up and out of the way of machinery and keep hair pulled back.



WARNING

Wear safety glasses during the entire assembly process. Failure to comply may result in serious personal injury.

CAUTION

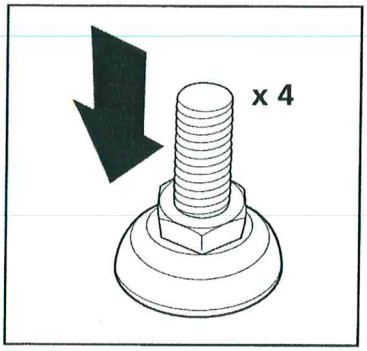
Some metal parts may have sharp edges on them after they are formed. Please examine the edges of all metal parts before handling them. Failure to do so could result in injury.

Most of your Hawk G4 Precision Scroll Saw has been assembled in the factory, but some parts must be assembled or installed after delivery. We have organized the assembly process into steps. Please follow along in the order presented here.

TOOLS REQUIRED:

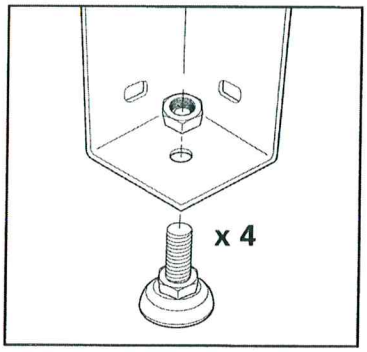
Tools required are: 7/16" wrench or ratchet, 9/16" open end wrench and a pair of standard pliers.

Leg Installation and Adjustment:



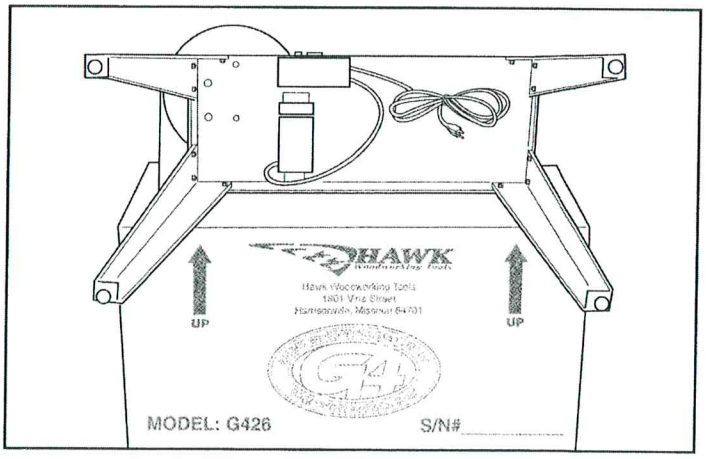
1. Install hex nut on glide feet.

Remove the assembly hardware from the plastic pouch and install one 3/8" hex nut on each glide (rubber foot). Tighten each all the way down until they are touching rubber on glide stem.



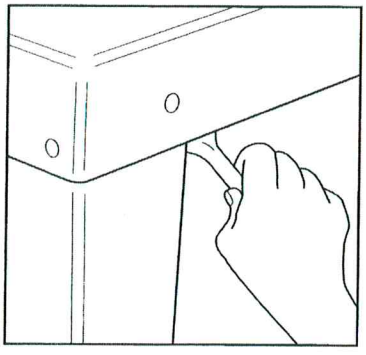
2. Insert glide into bottom of each leg.

Insert each glide through the hole in the bottom of each leg. Install another 3/8" hex nut on the glide to hold it in place. Tighten nut down securely. By tightening the nut down securely, your machines vibration will be minimized.



3. Use saw box as bench.

Close the saw box and use it as a bench. Turn your saw body on its side and carefully lay it on the box, **switch/controller side up.** Install one leg on each corner of the base, using the carriage bolts and 1/4" whiz nuts. Hand tighten all nuts at this stage. Ensure leg sits inside the base and whiz nuts are inside.

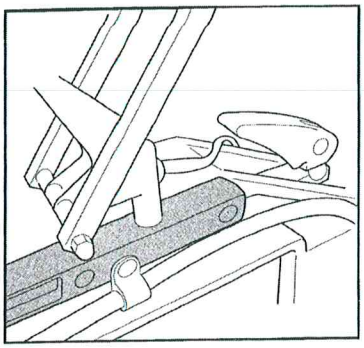


4. Stand saw and tighten nuts.

Stand your saw upright and place on concrete floor where you will operate saw. Kick out all legs to spread them and tighten all whiz nuts using 7/16" wrench or ratchet. This will ensure saw is level with floor.

Optional Accessory Installation:

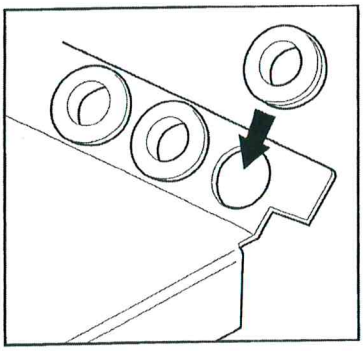
WORKLIGHT/MAGNIFIER LIGHT INSTALLATION:



Installation of worklight/magnifier light is simple. There is a pre-drilled whole located to rear of accessory arm. Slide bottom pin of light straight into this hole, you will not need the bracket that came with the light. Plug light into nearest socket and adjust arm to shine light on the saw table.

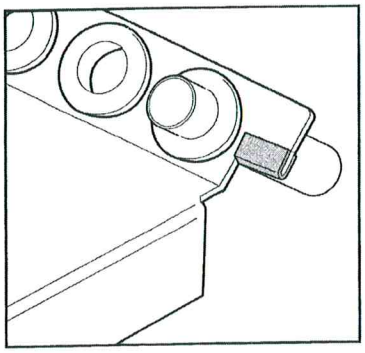
Order Item #865-0200 if you would like to purchase Work Light, and item #865-2210 for Magnifier Light.

DELUXE ACCESSORY TRAY INSTALLATION:



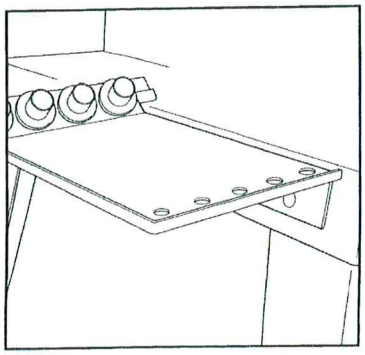
1. Install grommets.

Insert groove of each of four grommets into four large holes in rear of tray. Press the inside diameter of each grommet outward to ensure each one is seated correctly.



2. Install blade tubes.

Slide blade tubes into grommets open end first using a twisting motion as you push. Blade tubes will slide in easier if inside diameter of grommet is coated with liquid dishwashing detergent. Also slide edge trim on to tray as shown in illustration.

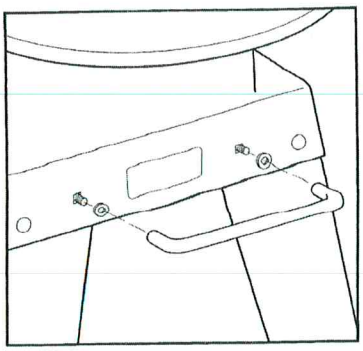


3. Install tray on saw.

Remove left, front side bolt from saw. This will be used to attach tray. Slide carriage bolt through hole in tray and through leg. Re-attach whiz nut. Edge trim will rest on base top. Lay ribbed mat on tray and you're finished.

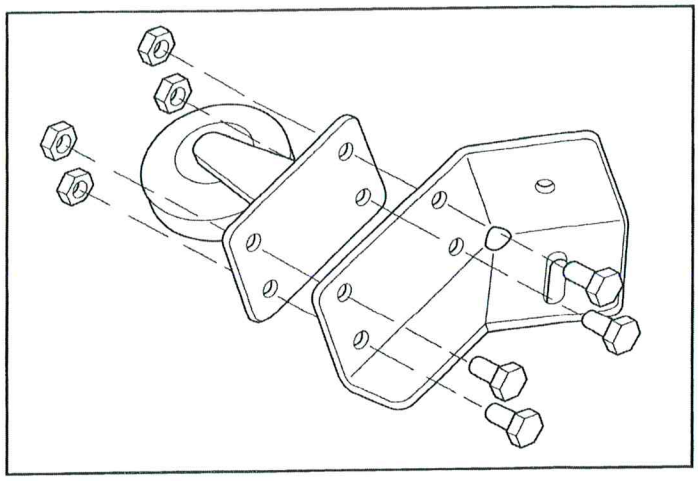
Order Item #615-1256 if you would like to purchase the Deluxe Accessory Tray.

CASTER SET INSTALLATION:



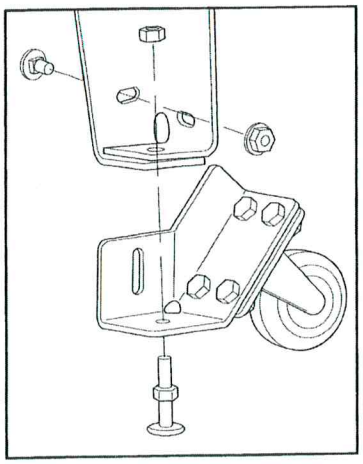
1. Install handle.

Remove front two inside carriage bolts and nuts on the front of scroll saw. Keep the two nuts and bolts for use in step 3. Attach handle to base as shown in illustration using 1/4-20 long flange bolts and 1/4" SAE flat washer.



2. Assemble caster wheels.

Attach one caster wheel to the left and right caster bracket using 1/4-20 hex bolts and nuts. Securely tighten all bolts.



3. Attach to rear legs.

Remove glides from rear legs of scroll saw. Secure the caster assembly to the corresponding leg using the carriage bolt and nut that was removed in step 1. Re-insert glides positioning the bottom of each glide 7/8" from the bottom of caster bracket. Securely tighten all bolts.

Order Item #965-1910 if you would like to purchase the Caster Set.

Before Using the Scroll Saw. Final Checklist:

☑ **Check Scroll Saw is properly assembled.** Look over your Hawk G4 Scroll Saw and double check that all parts have been assembled correctly according to the instructions on pages 8 - 9.

☑ **Check Scroll Saw is placed on correct floor type.** We strongly recommend that you place your new Hawk G4 Scroll Saw on a concrete floor, such as in a garage or workshop. You will experience excessive vibration if placed on a wooden, or other type of floor surface.

☑ **Check you have a blade installed.** Your saw should have come with a #7 skip tooth blade already installed at the factory. If there is no blade installed, refer to **pages 16 - 17** for blade installation.

☑ **Check the blade tension.** If your saw has a blade installed you will need to check that it is tensioned correctly before starting to scroll saw. Please refer to **page 18** for instructions on how to check and adjust tension to your blade.

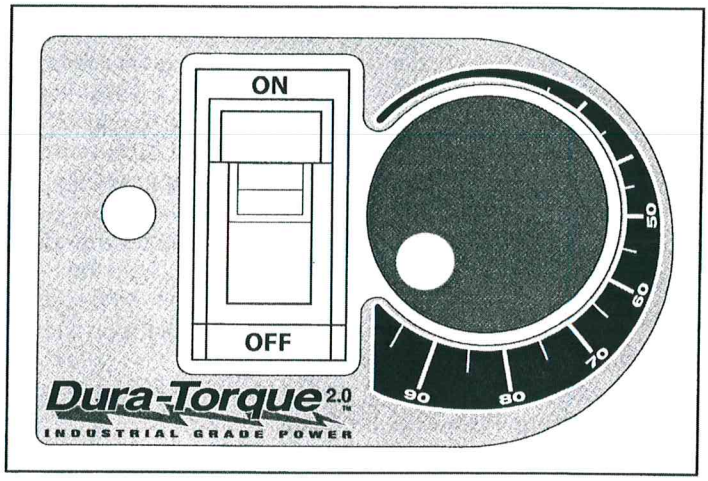
☑ **Check Scroll Saw is plugged into correct electrical outlet.** Do not plug saw into GFI Breaker (Ground Fault Interrupter receptical). The saw uses a DC brush type motor and may cause the breaker to 'trip'. Always plug your saw into a standard 3-pin grounded receptical. Refer to **page 6** for more detailed information about 110V operation and grounding.

☑ **Check red safety switch is in place.** Each Hawk G4 comes with a red locking safety switch that must be in place to operate saw. You can remove the red key to prevent unauthorized usage of saw. The red safety switch is located at the on/off switch, just pull to remove.

If all looks good:
If you have followed the checklist above and all looks good, then you are ready to begin the first practice exercise. Please refer to next section for some basic operating instructions before you begin.

Basic Operating Instructions:

The G4 Precision Scroll Saw boasts very easy to operate controls. There is an on/off switch and a variable speed control knob located on side of saw base, see illustration below.



It is always good practice to set the variable speed control to zero before turning the saw on. This will stop your workpiece from 'jumping' if you are half way through cutting a project and need to turn on the saw. You may notice a short delay after turning the saw on. Each new Hawk G4 is equipped with a 'soft start' motor/controller assembly. This allows the electrical system to become fully charged before coming up to full power or speed, thereby reducing motor burn-out. It is also a safety factor that allows the operator time to return both hands to the project before full speed is achieved. Soft start is the preferred operating procedure on good quality machinery.

To familiarize yourself with the operation of your saw, set the variable speed to zero and turn the saw on. The saw will start and move very slowly at this point - around 300rpm. Now turn the variable speed control knob slowly. The saw will now gain speed until it reaches its peak at 1750 rpm.

The Hold Down Foot:

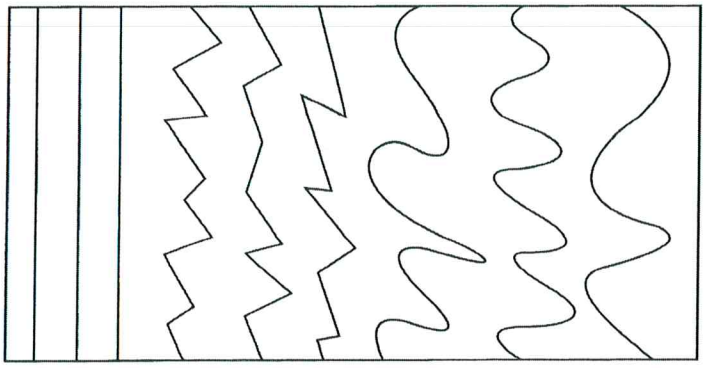
The hold down foot is the black nylon piece that surrounds the blade on your saw. It is used to keep light pressure on your workpiece as you saw. To adjust the height to your workpiece, loosen the knob on the right hand side of the hold down foot and raise or lower the foot. Re-tighten the knob, thereby lightly securing the project under the hold-down foot. As you become more confident using your scroll saw, you may not need to use the hold-down foot to hold your workpiece as you cut. Usually, light hand pressure will keep your workpiece from jumping as you cut.

Now you are familiar with how the G4 Precision Scroll Saw operates, you are ready to begin a practice exercise. The next section shows you how to cut simple lines using your saw. Follow the techniques for cutting straight lines, zig-zag lines and curves. Repeat the exercise until you are confident enough to cut your very first project.

Practice Exercise:

Over the years, we've learned several ways to help beginners enjoy working with their new Hawk right away. Here's a technique building tip that has helped many get started:

Take a piece of wood, roughly 6 inches by 12 inches and around 1 inch thick. Copy the drawing below on to the wood using a pen or pencil. You don't need to be an artist.



Remember - most important thing is to relax while sawing. Don't be afraid of the saw - It is a very safe tool - but it must be respected.

1. Cutting a Straight Line

Place the piece of wood on the table and adjust the Hold Down Foot. Check to make sure the Variable Control Knob is set to 0 (Zero), and turn on the saw. Adjust the Variable Control Knob to a speed you are comfortable with. We suggest somewhere between half-way and three-quarters until you get used to cutting. Now start cutting the straight lines, slowly pushing the wood forward through the blade and letting the blade do the work. Cut all three lines trying to keep as close to the line as possible.

2. Cutting a Zig-Zag Line

Start by making your cut all the way to the point where you want to make a sharp turn. Now, without feeding the wood into the blade, slowly spin the wood around the blade in its own 'kerf'. Continue cutting the next straight part until you reach the turning point again. Use this process and cut through to the other side of the wood. If there is smoke while you turn the wood you may be applying pressure to the side of the blade when cutting.

3. Cutting a Wavy Line

Start making a cut in the wood and turn the piece using your hands to follow the curve of the wavy line. Don't forget, the blade will only cut in one direction, you must turn the wood as you cut. If your project clatters on the table or tries to pull from your hands while making turns, you may want to go to a smaller blade size. The smaller the blade size, the smaller the turning radius capacity. For very intricate projects, the smallest size blade that you are comfortable with is best. See our blade recommendation chart on page 14-15.

Cutting Your First Project:

For this project you will need one 1" x 9" x11" piece of soft clear wood (pine will work great). Before you begin, you will need to transfer the Killer Whale pattern located on page 12 to your wood. There are several ways to transfer patterns to your project material. Here are a couple of inexpensive ways:

1. Carbon Method

Using a sheet of carbon paper, place it directly on the surface you plan to cut. Lay the original pattern or a photocopy directly on top of the carbon paper and carefully trace the pattern using a pencil or ball point pen. Note: Depending on the material you plan to cut, the carbon from the paper may be very difficult to remove from the surface. Be sure to carefully sand away all carbon or it will tend to bleed when applying stain or finish sealer later.

2. Spray Adhesive Method

This is the most popular method. Make a photocopy of the pattern and carefully spray aerosol adhesive directly to the back side of the pattern. Never spray the wood itself. Leave to dry for a couple of seconds and then apply to wood surface rubbing gently all over. You may also want to cover the pattern with clear packing tape. This will help lubricate the blade while cutting and also make it easier to remove the pattern after cutting. Always remember to make a photocopy of your pattern so that you always have a copy on file. Hawk Woodworking Tools has Aerosol Spray Adhesive available for purchase if you can't find it locally. **Order item # 865-1950.**

Cutting the Killer Whale project.

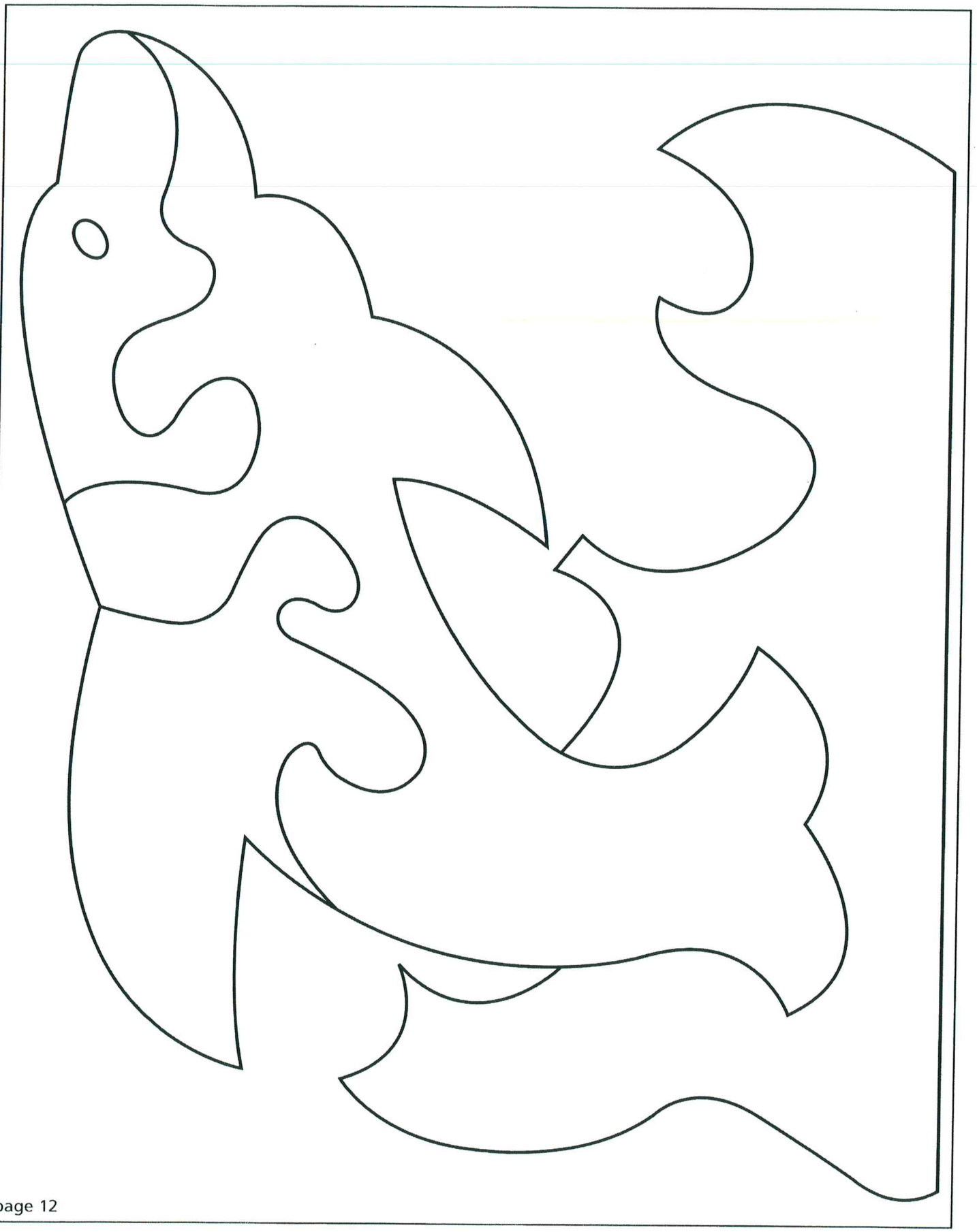
Begin at a corner of the pattern and cut across the grain when you first start. Follow the line around; if you're right handed, you will probably be most comfortable feeding your project counter-clockwise (vice-versa for a left handed scroller). It really doesn't matter which direction you cut. Go in the direction that feels most comfortable to you. Start at the outside of the pattern and work you way inward.

When cutting along the line, you can saw as fast or as slow as you want. You can adjust the variable speed knob to speed up or slow down your cutting speed. If you're cutting and you start to wander from the line, don't try to jerk back onto the line - you'll just end up with a bumpy project. The best technique is the 'near hit' method. In most cases you would have to wander more than 1/8" from your pattern line to make a noticeable variation.

Always remember that the blade of your new Hawk G4 is stationary and you control your project. You must spin the wood - the blade will not turn. This is how most people break blades when getting started. Remember, the saw blade has teeth on the front side only.

You will need to drill a small pilot hole and feed your blade through the project to cut the eye of the killer whale. Refer to pages 16-17 for details on how to do this.

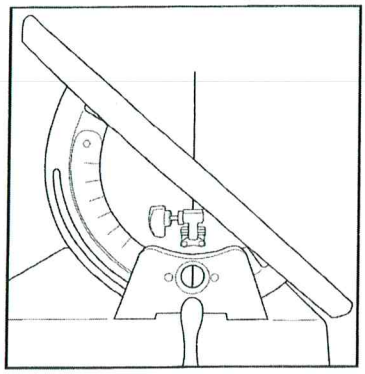
Killer Whale Project:



Scroll Sawing Techniques:

Bevel Sawing

Bevel sawing is a fun way to add another dimension to a project. To make a bevel cut, simply tilt the table of your Hawk G4 and begin cutting. Many crafters use the bevel technique to create inlays and 3-D pictures. There are many patterns available that use this technique.



NOTE: If you are tilting the table more than 15 degrees to the right, the lower blade holder must be reversed so the knob is on the left hand side of you lower arm. See illustration on left. This will allow the knob to clear the table.

Stack Cutting

This is a technique most pros use when they are making several projects of the same pattern. Your Hawk G4 has the ability to cut up to a full 2 5/8" thick material, so you can stack most projects at least 2" high. There are many ways to keep the projects from slipping while cutting. Here are a few of our favorites:

Hot Melt Glue:
Many times when pros are cutting they use a hot glue gun to glue all the pieces together. They put the pieces together in a stack (remember, not more than 2"), and run a bead of glue in a zig-zag down two sides of the project material. By making a zig-zag, the material will hold together when cutting in any direction.

Double Sided Tape:
Some Hawk owners tell us that they think the glue is messy and they prefer to use carpet layer's double stick tape. To hold your project together with tape, you just sandwich a couple of strips between each layer and you're ready to go.

Masking Tape:
Simply wrap the corners, thereby sandwiching multiple pieces together. Remove the tape when completed and lightly sand to remove any sticky tape residue.

Nails:
Simply stack your pieces and nail together to hold them. If you use this method, be sure your nails do not stick out of the bottom of your projects or they will scratch and mar the table surface. Make sure you nail in the waste area of your project. This is the most solid way to hold your stack together.

Always make sure your table top is completely square before making a stack cut project, or your projects will be smaller on the bottom than they are on the top.

Blade Selection:

Some Tips and Advice:

There are literally hundreds of types, styles, and sizes of blades available for cutting most any material you choose. On this and the next page are tips, advice & charts that will help you better understand the most popular types and sizes of blades for your saw.

Fret Saw Blades.
Originally designed for a hand fret saw, these blades are ideal for the power scroll saw. This is the best blade for general cutting. It is recommended for wood, plastics, rubber, fabric, paper, alabaster, and most other non-metallic materials.

Diamond Blades.
The diamond blade is the newest and most unique blade yet. This blade is manufactured by impregnating a round rod with diamond chips. For crafters who enjoy making stained glass projects, or do large amounts of ceramic or marble cutting, the diamond blade is the answer. The diamond blade must be kept wet at all times while cutting. Hawk Woodworking Tools stock a drip tank system to use with your Hawk G4 Scroll Saw. **Order Item #965-0300.** **DO NOT** attempt to cut tempered glass as this will shatter like a car windshield.

Metal Cutting/Jeweler's Saw Blades.
These blades are designed for use in the hand held jewelers saw frame still used frequently among jewelry designers. Its hardened steel composition and teeth configuration make it ideal for cutting non-ferrous metals such as gold, silver, steel, copper, brass, bronze, and aluminum. To cut metals using your Hawk G4, you will need to slow the saw down and cut at a slower speed. We also recommend that the thickness of the metal not exceed 1/4".

Select the Best Blade for the Job.
Your new Hawk G4 Scroll Saw uses standard 5 inch long, plain end (not pin end) scroll saw blades. Some of the many varieties and sizes are shown on the following pages and are available to order from Hawk Woodworking Tools. Make sure you use quality blades for best performance of your saw and achieve the best results with your project. Experiment with the various types and sizes of blades to determine which works best for your application, cutting style, speed and the type of material you are working with. Our blade guide is only a starting point and not a rule. Use the blade size you feel most comfortable with and gives you the best results.

Scroll Saw Blade Selection Chart:

KEY
Recommended = R
Usable = U

No.	Width	Thick	T.P.I	Entry Hole	HARDWOOD 1/2" - 3/4" THICK	HARDWOOD UP TO 2" THICK	SOFTWOOD 1/2" - 3/4" THICK	SOFTWOOD UP TO 2" THICK	VENEER, WOOD UP TO 3/16" THICK	PLYWOOD	MDF	PARTICLEBOARD	CORIAN	PLASTIC	NONFERROUS METAL	ALUMINUM	GIVES SMOOTH FINISH	GIVES SPLINTER-FREE FINISH	GIVES MEDIUM FINISH
Skip Tooth Cuts fast, smooth finish																			
3/0	.022"	.008"	33	1/32"			U		R								X		
2/0	.022"	.010"	28	1/32"			R	U	R								X		
2	.029"	.012"	20	3/64"			R	U	R	U				U			X		
4	.035"	.015"	15	1/16"			R	R	U	U	U	U		U			X		
5	.038"	.016"	12.5	1/16"	U	U	R	R		U	U	U		U			X		
7	.045"	.017"	11.5	1/16"	R	U	U	R		U	U	U		U			X		
9	.053"	.018"	11.5	1/16"	R	R	U	R		R	R	R		U			X		
12	.062"	.024"	9.5	5/64"	R	R	U	R		R	R	R					X		
Reverse Skip Tooth Eliminates underside tear-out																			
2/0	.022"	.010"	28	1/32"			R		R								X	X	
2R	.029"	.012"	20	3/64"			R	U	U								X	X	
5R	.038"	.016"	12.5	3/64"	U		R	R		U	U	U					X	X	
7R	.047"	.017"	11.5	1/16"	R	U	U	R		R	R	R					X	X	
9R	.054"	.019"	11.5	1/16"	R	R	U	U		R	R	R					X	X	
12R	.062"	.024"	9.5	1/8"	R	R	U	U		R	R	R					X	X	
Double Tooth Cuts fast, smooth finish																			
3/0	.023"	.008"	33	1/32"			U		R								X		
2/0	.023"	.011"	37	1/32"			R	U	R								X		
1	.026"	.013"	30	3/64"			R	U	R								X		
3	.032"	.014"	23	3/64"			R	R	U	U	U	U	U	U			X		
5	.038"	.016"	16	1/16"	U	U	R	R		U	U	U	U	U			X		
7	.044"	.018"	13	1/16"	R	U	U	R		U	U	U	U	U			X		
9	.053"	.018"	11	1/16"	R	R	U	U		R	R	R	U	U			X		
12	.061"	.022"	10	5/64"	R	R	U	U		R	R	R					X		

Scroll Saw Blade Selection Chart:

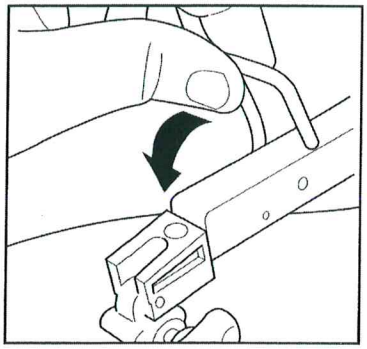
KEY
Recommended = R
Usable = U

No.	Width	Thick	T.P.I	Entry Hole	HARDWOOD 1/2" - 3/4" THICK	HARDWOOD UP TO 2" THICK	SOFTWOOD 1/2" - 3/4" THICK	SOFTWOOD UP TO 2" THICK	VENEER, WOOD UP TO 3/16" THICK	PLYWOOD	MDF	PARTICLEBOARD	CORIAN	PLASTIC	NONFERROUS METAL	ALUMINUM	GIVES SMOOTH FINISH	GIVES SPLINTER-FREE FINISH	GIVES MEDIUM FINISH
Crown Tooth Cuts on up and down stroke																			
2/0	.024"	.011"	20	1/32"			R		R				1/8"	1/8"			X	X	
2	.026"	.013"	20	3/64"			R		R				1/8"	1/8"			X	X	
3	.032"	.014"	16	3/64"			R	U	U	U			1/8"	3/16"			X	X	
5	.038"	.016"	16	1/16"			R	U	U	U	U		1/8"	1/4"			X	X	
7	.045"	.017"	11	1/16"	U		U	U		U	U	U	1/8"	3/4"			X	X	
9	.053"	.018"	6	1/16"	R	U	U	R		R	R	R	1/8"	3/4"			X	X	
12	.065"	.024"	6	5/64"	R	U	U	R		R	R	R	1/2"	3/4"			X	X	
Ground Skip, with reverse teeth (smoothest finish)																			
5RG	.045"	.018"	12	1/16"	U		R	R		U	U	U	1/8"	1/8"	U	U	X	X	
7RG	.047"	.018"	10	1/16"	U	U	R	U		R	R	R	3/8"	3/8"	U	U	X	X	
9RG	.049"	.018"	8	1/16"	R	R		U		R	R	R	1/2"	3/4"			X	X	
Ground Double Tooth (with reverse teeth)																			
5RG	.045"	.018"	12	1/16"	U		R	R		U	U	U	1/8"	1/8"	U	U	X	X	
7RG	.047"	.018"	10	1/16"	R	U	R	U		R	R	R	3/8"	3/8"	U	U	X	X	
9RG	.049"	.018"	8	1/16"	R	R		U		R	R	R	1/2"	3/4"			X	X	
Metal Cutting																			
7	.041"	.019"	30	1/16"											R	R			X
9	.049"	.022"	25	1/16"											R	R			X
12	.070"	.023"	20	5/64"											R	R			X

How to Change or Install a New Blade:

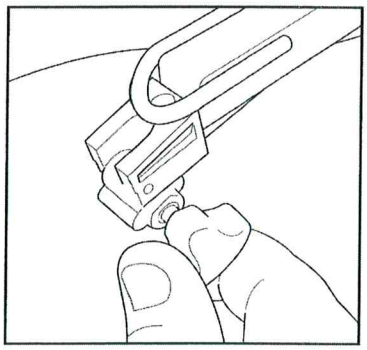
the Hawk G4 Precision Scroll Saw offers a unique feature to scrollers: the ability to feed your blade either from the top of the table down **OR** from the bottom of the table up. Both have their own benefits. Feeding from the bottom of the table up enables you to set the blade tighter. Feeding your blade from top to bottom allows easier feed through your workpiece if you are making inside cuts. No more fumbling around under the table! We will now look at both ways to install and feed your blade.

A. Feeding Your Blade from the Bottom Up:



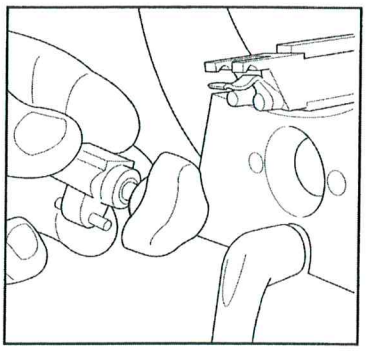
1. Pull Yellow Quick-Release Blade Tensioner Forward.

Before you can change a blade or replace a broken one, you need to release the tension to the blade. **Always pull the Quick Release Blade Tensioner forward before changing or installing a new blade.**



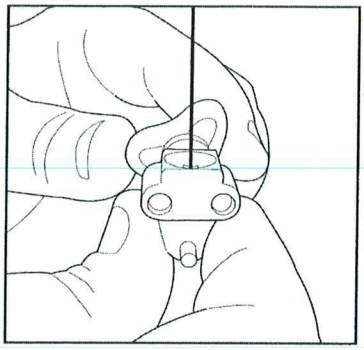
2. Loosen Upper Blade Holder

Turn the knob on the side of the Upper Blade Holder to loosen clamps that hold the blade. Ensure there is no part of blade still inside blade holder if a blade was broken during operation.



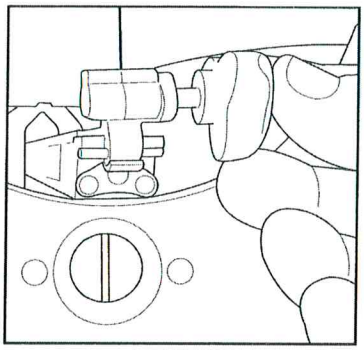
3. Remove Lower Blade Holder

Reach down under the table and completely remove Lower Blade Holder from Stroke Adjustment Cradle. Loosen Blade Holder knob and remove any used or broken blades.



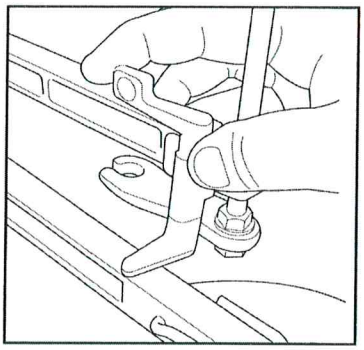
4. Insert New Blade.

Hold the Lower Blade Holder and insert new blade into the open jaws, ensuring it sits all the way to bottom of holder. Teeth of blade should face forward and down. Hand tighten knob to hold blade, ensuring blade is at 90° to holder.



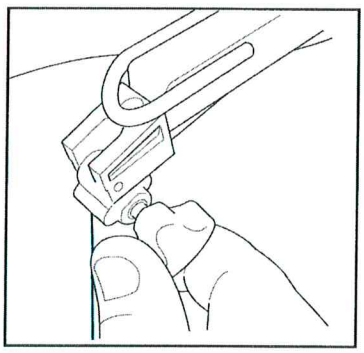
5. Re-install Lower Blade Holder.

Replace Lower Blade Holder into Stroke Adjustment Cradle, while feeding blade through hole in table. Also feed blade through workpiece if making inside cuts. **Ensure blade teeth are facing forward.**



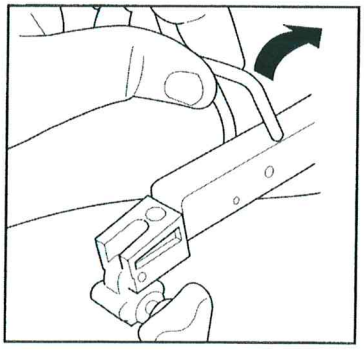
6. Flip Across Upper Arm Retainer.

You can flip across the Upper Arm Retainer while you insert blade into Upper Blade Holder. This ensures arms will not move while inserting blade. It is not necessary to use the Upper Arm Retainer for this operation. Do what you are most comfortable with.



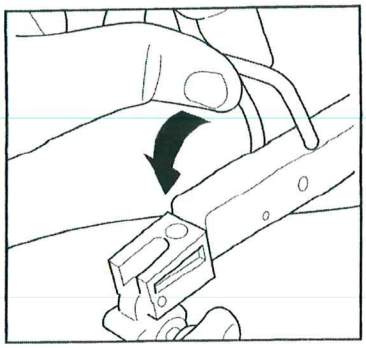
7. Insert Blade Into Upper Blade Holder.

Insert blade all the way into Upper Blade Holder jaws and hand tighten knob on side of holder.



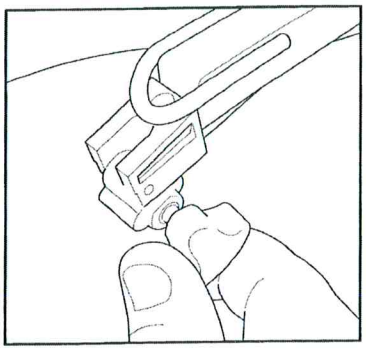
8. Flip Back Yellow Quick- Release Blade Tensioner. **ALWAYS flip back Quick Release Blade Tensioner before using saw.** This will tension blade correctly. If you feel you need more tension on blade, refer to page 18 for Blade Tension Adjustment or refer to chart on saw.

B. Feeding Your Blade from Top to Bottom:



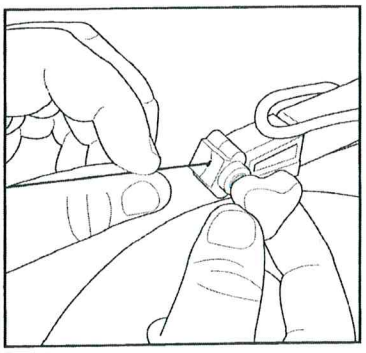
1. Pull Yellow Quick-Release Blade Tensioner Forward.

Before you can change a blade or replace a broken one, you need to release the tension to the blade. **Always pull the Quick Release Blade Tensioner forward before changing or installing a new blade.**



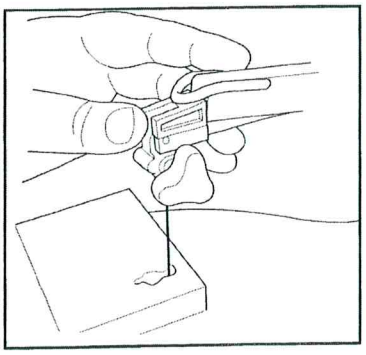
2. Leave both Top and Bottom Blade Holder in Place.

Remove any broken blades from both the top and bottom Blade Holders. Loosen knobs on both to ensure new blade will feed into each holder.



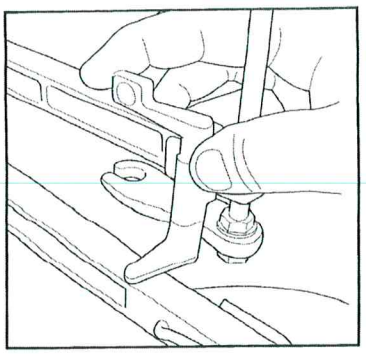
3. Insert New Blade into Top Blade Holder.

Select and install new blade into Upper Blade Holder. The holder will tilt upwards to ease in this operation. Ensure teeth of blade are facing down and forward and at 90° to holder. Hand tighten knob.



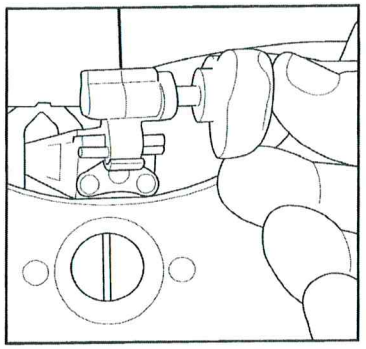
4. Feed Blade Through Workpiece and/or Hole in Table.

Feed your blade through your workpiece if you are making inside cuts, and then through hole in table, being careful not to bend the blade.



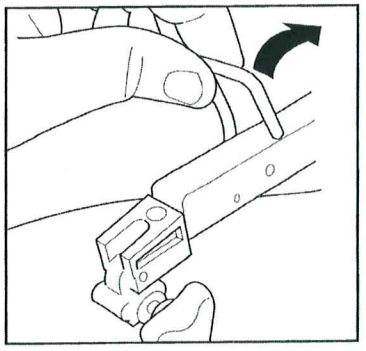
5. Flip Across Upper Arm Retainer.

Flip across Upper Arm Retainer. This will stop the arms from moving while you attach the blade to the Lower Blade Holder.



6. Insert Blade Into Lower Blade Holder.

Insert your blade into the Lower Blade Holder with it still installed in the Stroke Adjustment Cradle. **Ensure blade teeth are facing forward and down.** Tighten knob on side of Lower Blade Holder.



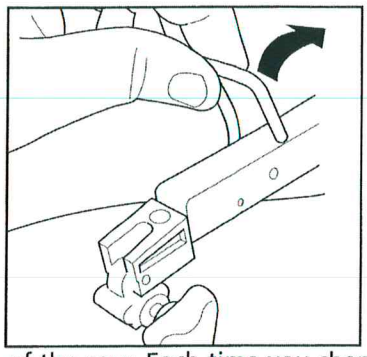
7. Flip Back Yellow Quick Release Blade Tensioner.

ALWAYS flip back Quick Release Blade Tensioner before using saw. This will tension blade and automatically push back the Upper Arm Retainer.

8. Check Blade Tension.

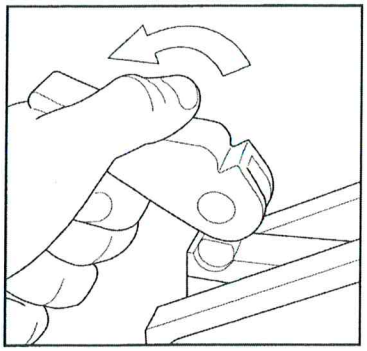
Adjust blade tension as necessary using the blue cam-overlever at the rear of saw. Refer to blade tensioning instructions on page 18, or use chart on saw.

Blade Tensioning:



1. Flip Back Yellow Quick- Release Blade Tensioner

ALWAYS flip back the Quick Release Blade Tensioner before adjusting tension to the blade. You will need to 'fine tune' blade tension using the blue cam-over lever situated towards the rear of the saw. Each time you change blade sizes, you will need to adjust and check the blade tension. It's always good practice to check the tension to the blade when you break a blade and when you change blades.



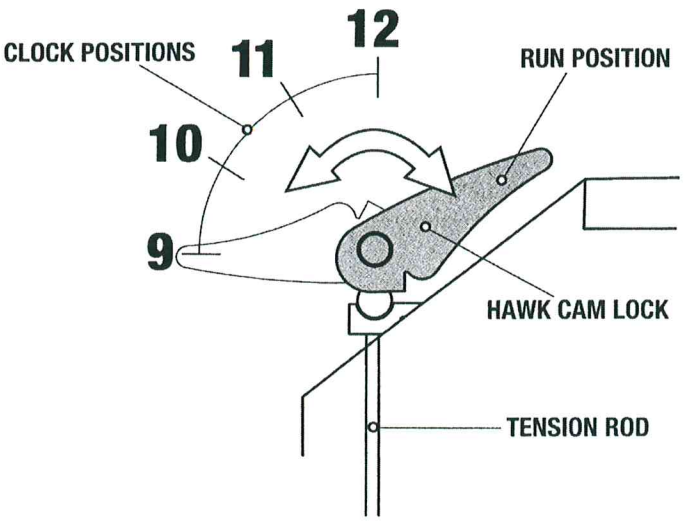
2. Release Blue Cam-Lever

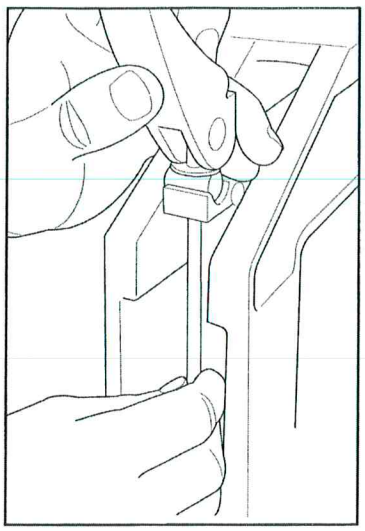
Release the cam-lever at the rear of saw by flipping the lever towards the back, or away from front of saw. This will release tension to the blade.

Blade Size	Clock Position
#12	9:00
#9	9:30
#7	10:00
#5	10:00
#3	10:00
#2	10:30
#2/0	11:00

3. Refer to Blade Size Chart & Clock Position

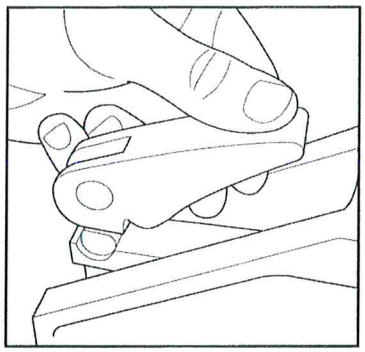
For example: If you want to install a #12 blade, flip the blue cam-over lever all the way back to the 9 o'clock position as illustrated below. You will then need to adjust the Blade Tension Rod.





4. Adjust Blade Tension Rod

With the blue cam-over lever at the correct clock position for your chosen blade, (in this case it's 9 o'clock for a #12 blade) adust the Blade Tension Rod by twisting it either clockwise or counter-clockwise until it becomes tight.



5. Flip Blue Cam-Lever to Forward Run Position

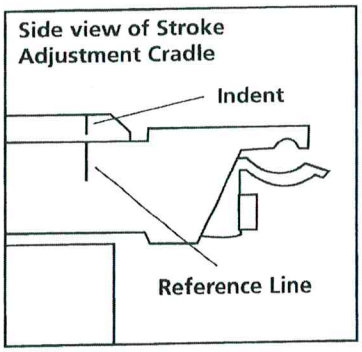
After adjusting the Blade Tension Rod, you will need to flip forward the blue cam-lever to the run position. This will now set the correct tension for your blade.

*Please note:

The clock positions on the diagram are to be used as a reference point only. You may want to use a little more, or a little less tension to the blade depending on your preference and cutting style. You will become more familiar with this technique with a little practice and be able to adjust your blade tension with ease the more you use your saw.

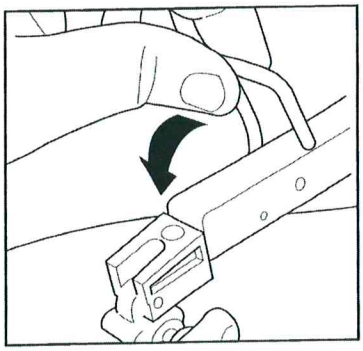
Stroke Adjustment:

The blade stroke of the Hawk G4 is infinitely adjustable and allows you to set the stroking action of the blade from exactly vertical to an aggressive action that will cut through hardwoods like butter.
You can set the blade to stroke exactly vertical when cutting thinner materials and softwoods to give you greater control while cutting. Alternatively, setting the blade at more of an angle will help greatly in cutting thicker hardwoods up to 2 5/8" thick.



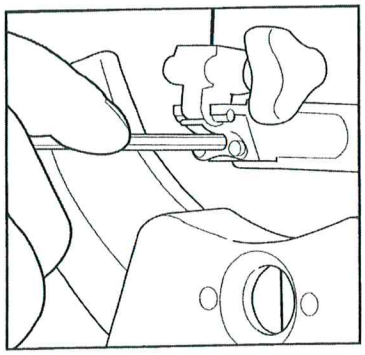
Each Hawk G4 leaves the factory pre-set at the vertical stroke position. You can double check the position by checking that the reference line marked on the Stroke Adjustment Cradle is in line with the indent on front of lower arm. See the illustration on left.

Adjusting the stroke is a simple process. You will need to use the 5/32 Stroke Adjustment Wrench that came with your saw. Follow the simple steps below.



1. Pull Yellow Quick-Release Blade Tensioner Forward.

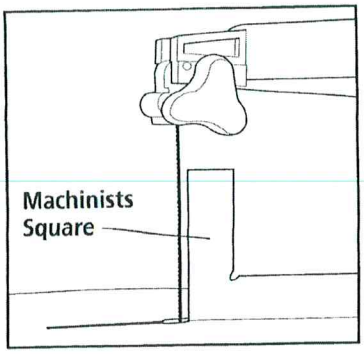
Before you can adjust the stroke you need to release the tension to the blade. **Always pull the Quick Release Blade Tensioner forward attempting to adjust the stroke.**



2. Insert 5/32 Allen Wrench

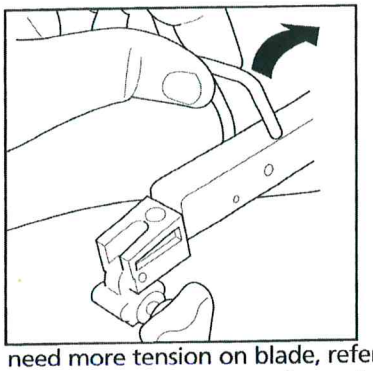
Take your 5/32 Stroke Adjustment Allen Wrench and insert into hole on front of Stroke Adjustment Cradle. See illustration on left. Turn the Allen Wrench clockwise to force the lower blade position backwards - thus giving a more aggressive blade stroke for cutting through thicker hardwoods.

If you wish to return to cutting with a vertical stroke, just re-insert your Allen Wrench and turn counter-clockwise until the reference line is back in line with indent on lower arm. Refer to first illustration above.



3. Check blade position.

You can easily check if your blade will stroke in the vertical position by using a machinists square. Place against blade to check for square or to check if you have desired stroke cutting angle. See illustration on left.



4. Flip Back Yellow Quick- Release Blade Tensioner

ALWAYS flip back Quick Release Blade Tensioner before using saw. Once you have finished adjusting the stroke, flip back the Quick Release Blade Tensioner. This will tension blade correctly. If you feel you need more tension on blade, refer to page 18 for Blade Tension Adjustment or refer to chart on saw.

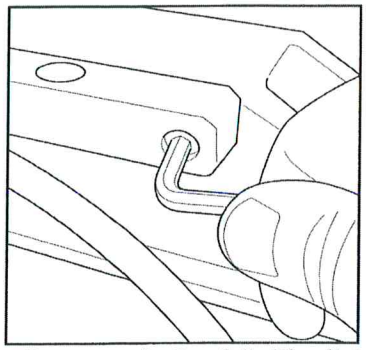
*Please note:

Once again, this is just a guide to help you adjust the stroke of your saw. If you feel more comfortable cutting all your projects with the stroke set vertically, then you can do so. You may find that you set the stroke adjustment at an angle that you are most comfortable with and leave it in that position.
What is great about the infinitely adjustable stroking action is that you can set it for your preferred cutting style. It is completely customizble for every user.
Please understand that you will get a more aggressive cut on thicker hardwoods if you set the stroke further back as described in step 2. This may help with burning of the wood and also give you a cleaner, smoother cut when cutting thicker hardwoods.

Right or Left-Handed Operation:

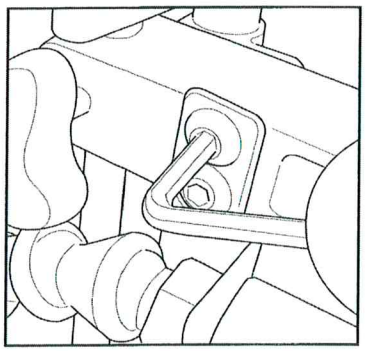
The accessory arm on your new Hawk G4 is completely customizable to suit your particular style of scrolling. You can change over the accessory arm and its components- from the factory installed right-handed position to the left-hand side of the saw. You can also turn the blade holders around so that the knob is on the left-hand side. You can set your saw up and customize it to operate in a way that you are most comfortable with. If you wish to change over the position of the accessory arm, just follow these simple steps.

Changing over Position of Accessory Arm:



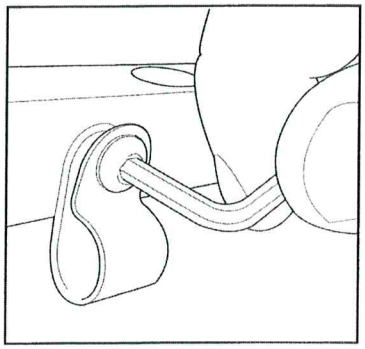
1. Remove Two Allen Screws

First remove hose from blower nozzle adapter by carefully pulling. Pull hose through clamp located to rear of arm. Next, locate and remove the two Allen Screws that hold the accessory arm on the rear arm support using a 3/16" Allen Wrench. Carefully lift off the accessory arm.



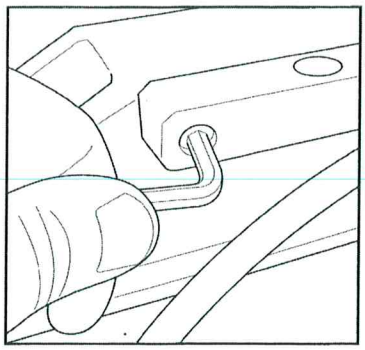
2. Swap Over Arm Components

Using a 1/8" Allen Wrench remove the two Allen screws that hold the Blower Nozzle Bracket and Upper Arm retainer. Swap components over and re-install. The Blower Nozzle should now be on the left-hand side of the arm.



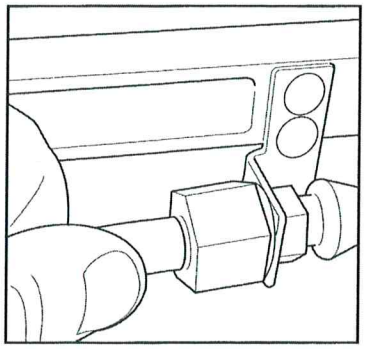
3. Swap Over Hold-Down Foot Knob and Rear Hose Clamp

Remove Hold-Down Foot Knob and re-install on left-hand side of Accessory Arm. Also remove rear Hose Clamp with 1/8" Allen Wrench and re-install on left side of arm. Ensure all allen screws are tight.



4. Re-install Accessory Arm on Left

Now that you have moved all Accessory Arm components over to left-handed operation, you can re-install the Accessory Arm on the left-hand side of the rear Arm Support.

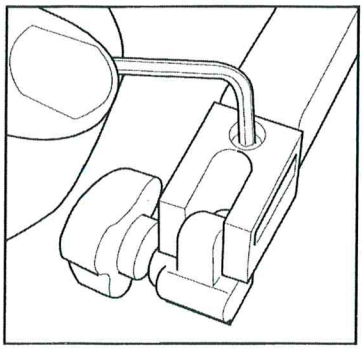


5. Feed Blower Hose

Swap rubber grommet to other side of Rear Arm Support and feed Blower Hose through hole. Feed hose through Rear Hose Clamp and re-attach to blower nozzle adapter. Check all connections.

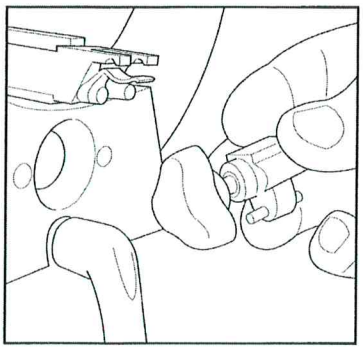
Changing over Position of Blade Holder Knobs from Right to Left:

You will first need to remove blade from Upper and Lower Blade Holders before starting this operation.



1. Upper Blade Holder

To swap Upper Blade Holder knob from right to left-hand side, you will need to remove to allen screw on top of arm using a 7/64"allen wrench. Remove top part of clamp and remove blade holder. Turn blade holder around so that knob is now on left and re-install.

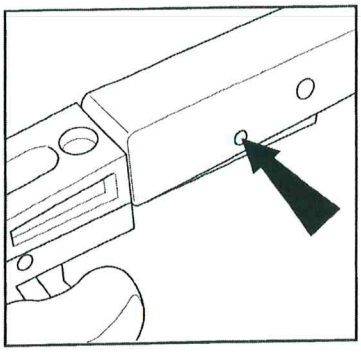


2. Lower Blade Holder

The Lower Blade Holder is completely removable. Just remove from cradle and turn blade holder around so that knob is now on left-hand side. Ensure teeth are facing forward and down when re-installing blade.

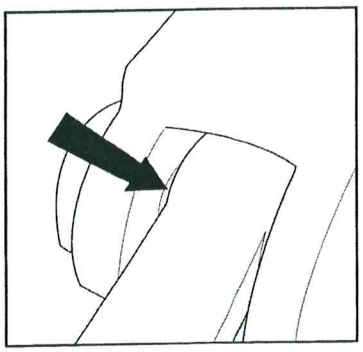
Hawk G4 Precision Scroll Saw Care & Maintenance:

There is very little maintenance required for your new Hawk G4 Precision Scroll Saw. Each saw has been carefully engineered to run thousands of hours with little or no maintenance required. Follow the simple steps below to keep your saw running perfectly.



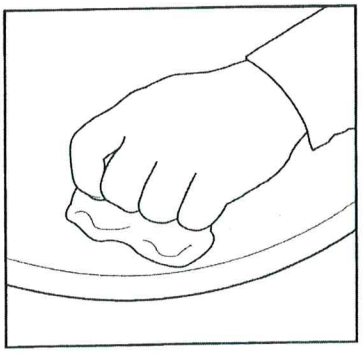
1. Spray Oil in Hole at Front Side of Top Arm

Spray lightweight oil, such as WD40, into hole located just in front and to side of the Quick Release Blade Tensioner. Do this after every 50 hrs of operation.



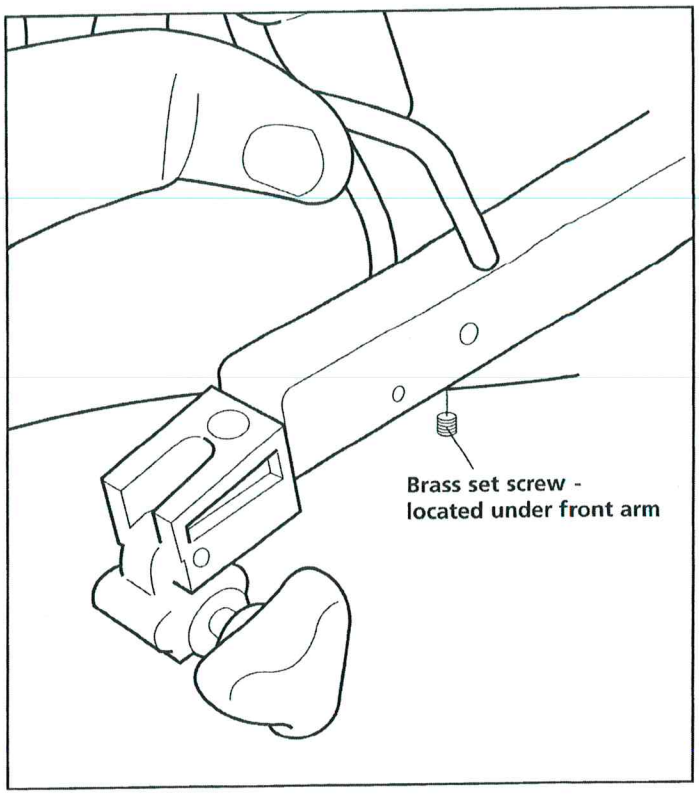
2. Spray Oil in Upper & Lower Arm Bearings

Spray lightweight oil, such as WD40, into upper and lower arm bearings about every 100 hours of use. Only spray a small amount of oil.



3. Apply Wax to Table

Apply a sealer wax polish to surface of table every 50-100 hours of use, or whenever necessary to keep the table surface smooth and slick. This will help when turning your projects as you cut.



4. Check Quick Release Blade Tensioner Set Screw

There is a set screw located under the front top arm which puts pressure on the Quick Release Blade Tensioner Cam. If this becomes loose, the yellow Quick Release Blade Tensioner may not sit down in the flipped back 'run position' correctly. This may result is excessive blade breakage, or the blade not being tensioned correctly. It's a good idea to check that your yellow Quick Release Blade Tensioner is operating correctly from time to time. If it flips back and forth easily with no 'bite' as your flip it back to the run position, then you will need to adjust the set screw.

Using a 3/32 allen wrench, turn the brass set screw 1/4 to 1/2 turn in a clockwise or tightening direction. By doing this, it applies pressure on the cam thereby holding it in the locked position.

Now check the yellow Quick Release Blade Tensioner by flipping it back and forth. If you have adjusted it correctly, you should meet resistance about 2/3 of the way back when you flip it back to the run position. If it is still loose, you may need to turn the set screw some more.

Trouble-Shooting:

1. EXCESSIVE BLADE BREAKAGE:

If you think you are breaking an excessive amount of blades, here are a few tips.

A. Be sure you are using the **RIGHT SIZE AND TYPE** of blade for the material you are trying to cut. You can make sure by checking the blade selection chart on pages 14-15.

B. If the blade tends to break right above the bottom blade holder, your blade is not installed in the lower blade holder correctly. Be sure your blade is installed at 90° to the blade holder and inserted all the way into the holder.

C. If the blade is breaking just below the upper blade holder, chances are you are not installing it in the upper blade holder correctly. Again, make sure your blade is installed at 90° to the blade holder and inserted all the way into the holder.

D. Excessive blade breakage may also be caused by the Quick Release Blade Tensioner set screw becoming loose. This will need to be checked and adjusted from time to time. Please refer to page 21 for instructions on how to do this.

***PLEASE NOTE:** You should expect to change your blade after about every 15 to 30 minutes of use. Your blade will become dull quickly. You will get better results if you change your blade frequently.
Always remember to drive the wood and not the blade. If you have trouble getting your workpiece to turn and the blade smokes while cutting, you will need to practice your technique. Remember, you must feed into the front of the blade only.

If you have poor control of your blade and it seems to wander and respond very slowly, you might not have quite enough tension to the blade. Please refer to page 18 for instructions on how to tension your blade correctly.

2. BLADE IS BURNING THE WOOD:

A. Be sure you are using the **RIGHT SIZE AND TYPE** of blade for the material you are trying to cut. You can make sure by checking the blade selection chart on pages 14-15.

B. It may take a little practice, but you're probably leaning on the blade from side to side when cutting. Remember that it's the project that moves and not the blade. Your cutting surface is on the front side of the blade only.

C. Some woods just seem to be more prone to burning than others. Of course, hardwoods like oak and walnut will burn if cut at too high of a RPM speed. Take advantage of your variable speed saw and slow it down. Slower speeds are recommended for metals, glass, plastics, some harder woods and thin metals. Cherry and mahogany are difficult woods to cut without burning because of their resin content.

3. BLADE KEEPS BENDING & TWISTING:

A. Be sure you are using the **RIGHT SIZE AND TYPE** of blade for the material you are trying to cut. You can make sure by checking the blade selection chart on pages 14-15.

B. If your blade is bending backwards farther than you feel it should, check your tensioning. Please refer to instructions on how to tension your blade correctly as described on page 18.

4. BLADE IS CUTTING TOO LARGE OF A RADIUS:

When you first get started using your saw, you may have difficulty making sharp turns. Here are a few pointers you'll want to keep in mind:

A. Feed your project right to the point where you want to make the turning point and stop feeding. Now, with the saw still running, spin the project around in the saw blade radius or kerf without feeding the wood. You may need to spin your project very slowly until you gain confidence. Keeping the saw running while you spin the project will stop the blade getting pinched and bending, or worse - breaking.

B. If your blade tends to 'swing' out when attempting a sharp point, you may have to increase tension to the blade. Please refer to instructions on how to tension your blade correctly as described on page 18.

Trouble-Shooting Cont:

5. WOOD IS JUMPING ON TABLE:

A. Constant down pressure must always be applied while cutting. In most cases, the weight of your hand is more than enough to keep your project on the table, but you must maintain the pressure during the entire cutting process.

B. If you prefer, every Hawk G4 comes complete with a hold-down foot that surrounds the blade and keeps the project securely on the table. (Be sure you have lowered the hold-down foot to lightly touch the top of the wood surface.)

C. You may find that you are using a blade that is too large for the type of cutting you are doing. If the blade is too coarse, the project will lift from the worktable when making turns. In addition, when using a reverse tooth blade, the reverse teeth will give added lift to your project on the upward stroke. Additional downward pressure, or use of the hold-down foot may be needed.

6. SAW DOES NOT START IMMEDIATELY:

A. Your new Hawk G4 is equipped with a 'soft start' motor/controller assembly. This short time delay after the switch has been turned on, allows for the electrical system to become fully charged before coming up to full power or speed, thereby reducing motor burnout. It is also a safety factor in that it allows the operator time to return both hands to the project before full speed is achieved. Soft start is the preferred operating procedure on better quality machinery.

REMEMBER

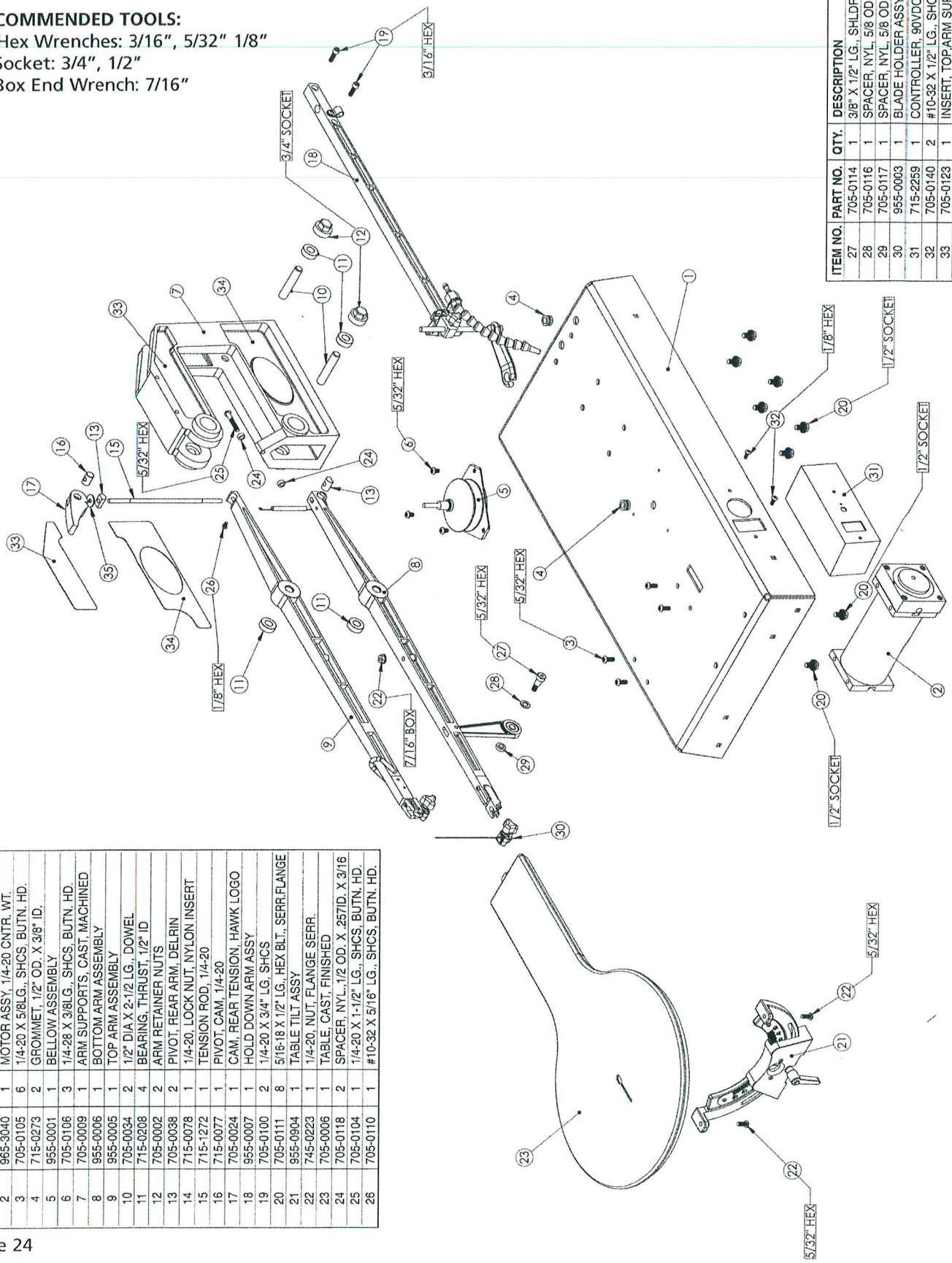
We are only a phone call away. If you ever have a question regarding your Hawk G4 Precision Scroll Saw, or its operation, just give us a call at the number below. our Technical Support Department is on call from 8.00am to 5pm (Central Time), Monday through Friday.

Hawk G426 Full Assembly Diagram & Parts List

Below is a diagram showing all parts to the Hawk G426 Precision Scroll Saw. If you need to order replacement parts, please note the part number and description of item.

RECOMMENDED TOOLS:

A. Hex Wrenches: 3/16", 5/32" 1/8"
B. Socket: 3/4", 1/2"
C. Box End Wrench: 7/16"



ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	605-0018	1	BASE, FINISHED, SHEET METAL
2	965-3040	1	MOTOR ASSY, 1/4-20 CNTR. WT.
3	705-0105	6	1/4-20 X 5/8LG., SHCS, BUTN. HD.
4	715-0273	2	GROMMET, 1/2" OD. X 3/8" ID.
5	955-0001	1	BELLOW ASSEMBLY
6	705-0106	3	1/4-28 X 3/8LG., SHCS, BUTN. HD.
7	705-0009	1	ARM SUPPORTS, CAST, MACHINED
8	955-0006	1	BOTTOM ARM ASSEMBLY
9	955-0005	1	TOP ARM ASSEMBLY
10	705-0034	2	1/2" DIA X 2-1/2 LG., DOWEL
11	715-0208	4	BEARING, THRUST, 1/2" ID
12	705-0002	2	ARM RETAINER NUTS
13	705-0038	2	PIVOT, REAR ARM, DELRIN
14	715-0078	1	1/4-20, LOCK NUT, NYLON INSERT
15	715-1272	1	TENSION ROD, 1/4-20
16	715-0077	1	PIVOT, CAM, 1/4-20
17	705-0024	1	CAM, REAR TENSION, HAWK LOGO
18	955-0007	1	HOLD DOWN ARM ASSY
19	705-0100	2	1/4-20 X 3/4" LG, SHCS
20	705-0111	8	5/16-18 X 1/2" LG., HEX BLT., SERR.FLANGE
21	955-0904	1	TABLE TILT ASSY
22	745-0223	1	1/4-20, NUT, FLANGE SERR.
23	705-0006	1	TABLE, CAST, FINISHED
24	705-0118	2	SPACER, NYL., 1/2 OD. X .257ID. X 3/16
25	705-0104	1	1/4-20 X 1-1/2" LG., SHCS, BUTN. HD.
26	705-0110	1	#10-32 X 5/16" LG., SHCS, BUTN. HD.

ITEM NO.	PART NO.	QTY.	DESCRIPTION
27	705-0114	1	3/8" X 1/2" LG., SHLDR BLT.
28	705-0116	1	SPACER, NYL., 5/8 OD. X 3/8 ID. X 1/16
29	705-0117	1	SPACER, NYL., 5/8 OD. X 3/8 ID. X .150
30	955-0003	1	BLADE HOLDER ASSY
31	715-2259	1	CONTROLLER, 90VDC
32	705-0140	2	#10-32 X 1/2" LG., SHCS, BUTN. HD.
33	705-0123	1	INSERT, TOP,ARM SUPPORT, ALUM.
34	705-0122	1	INSERT, BOT,ARM SUPPORT, ALUM.
35	715-0103	1	SPACER, NYL., .69 OD. X .26 ID. X 1/16
36	715-1274	36	1/4" ID., BLOWER TUBE, PER IN.

Hawk G426 Top Arm Assembly and Parts List

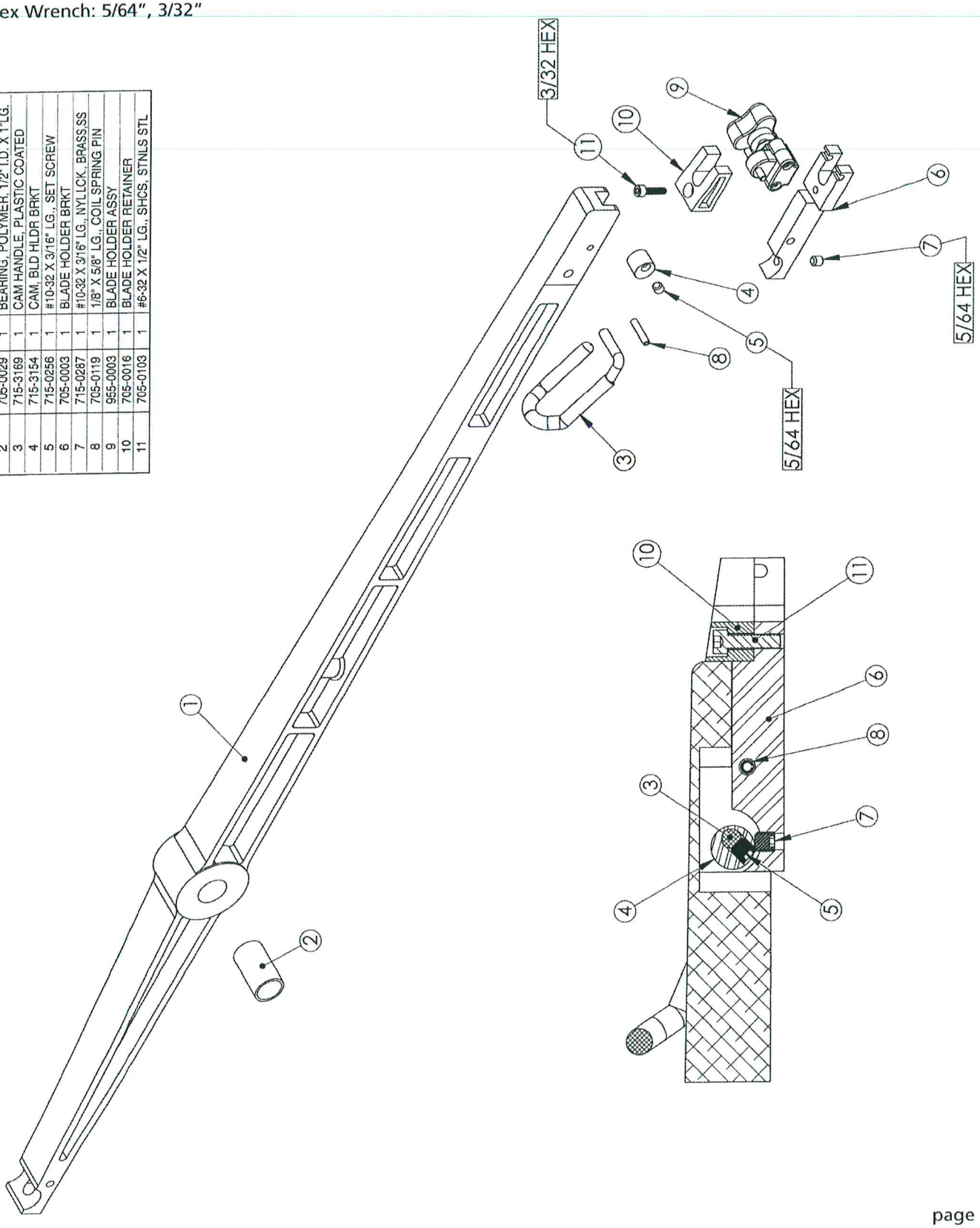
Below is a diagram showing all parts to the Hawk G426 Top Arm Assembly. If you need to order replacement parts, please note the part number and description of item.

RECOMMENDED TOOLS:

A. Arbor Press

B. Hex Wrench: 5/64", 3/32"

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	705-0007	1	ARM, TOP, CAST, MACHINED
2	705-0029	1	BEARING, POLYMER, 1/2" I.D. X 1"LG.
3	715-3169	1	CAM HANDLE, PLASTIC COATED
4	715-3154	1	CAM, BLD HLDR BRKT
5	715-0256	1	#10-32 X 3/16" LG., SET SCREW
6	705-0003	1	BLADE HOLDER BRKT
7	715-0287	1	#10-32 X 3/16" LG., NYL LOK, BRASS,SS
8	705-0119	1	1/8" X 5/8" LG., COIL SPRING PIN
9	955-0003	1	BLADE HOLDER ASSY
10	705-0016	1	BLADE HOLDER RETAINER
11	705-0103	1	#6-32 X 1/2" LG., SHCS, STNLS STL



Hawk G426 Bottom Arm Assembly and Parts List

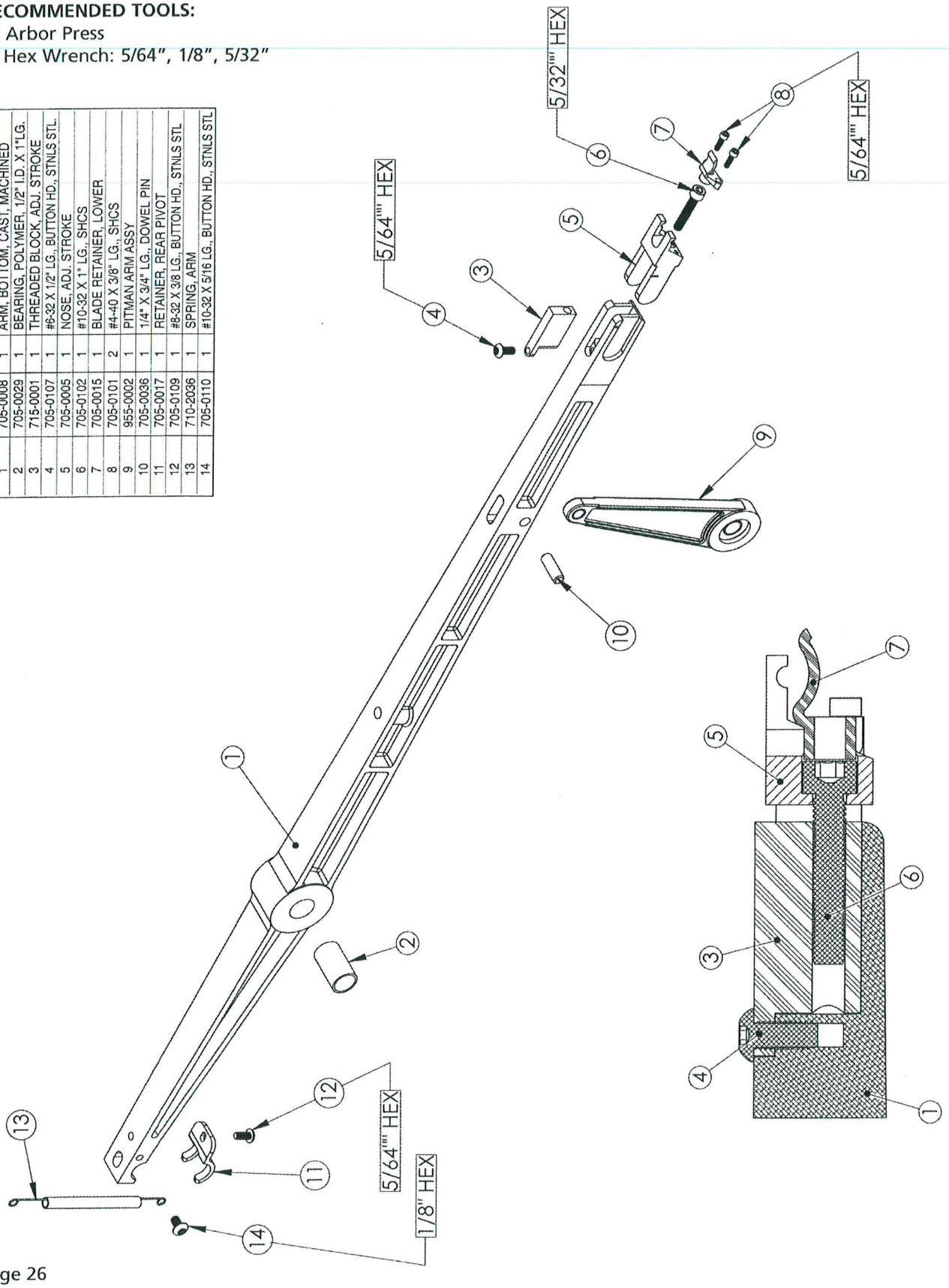
Below is a diagram showing all parts to the Hawk G426 Bottom Arm Assembly. If you need to order replacement parts, please note the part number and description of item.

RECOMMENDED TOOLS:

A. Arbor Press

B. Hex Wrench: 5/64", 1/8", 5/32"

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	705-0008	1	ARM, BOTTOM, CAST, MACHINED
2	705-0029	1	BEARING, POLYMER, 1/2" I.D. X 1"LG.
3	715-0001	1	THREADED BLOCK, ADJ. STROKE
4	705-0107	1	#6-32 X 1/2" LG., BUTTON HD., STNLS STL.
5	705-0005	1	NOSE, ADJ. STROKE
6	705-0102	1	#10-32 X 1" LG., SHCS
7	705-0015	1	BLADE RETAINER, LOWER
8	705-0101	2	#4-40 X 3/8" LG., SHCS
9	955-0002	1	PITMAN ARM ASSY
10	705-0036	1	1/4" X 3/4" LG., DOWEL PIN
11	705-0017	1	RETAINER, REAR PIVOT
12	705-0109	1	#8-32 X 3/8 LG., BUTTON HD., STNLS STL
13	710-2036	1	SPRING, ARM
14	705-0110	1	#10-32 X 5/16 LG., BUTTON HD., STNLS STL



Hawk G426 Hold-Down Arm Assembly and Parts List

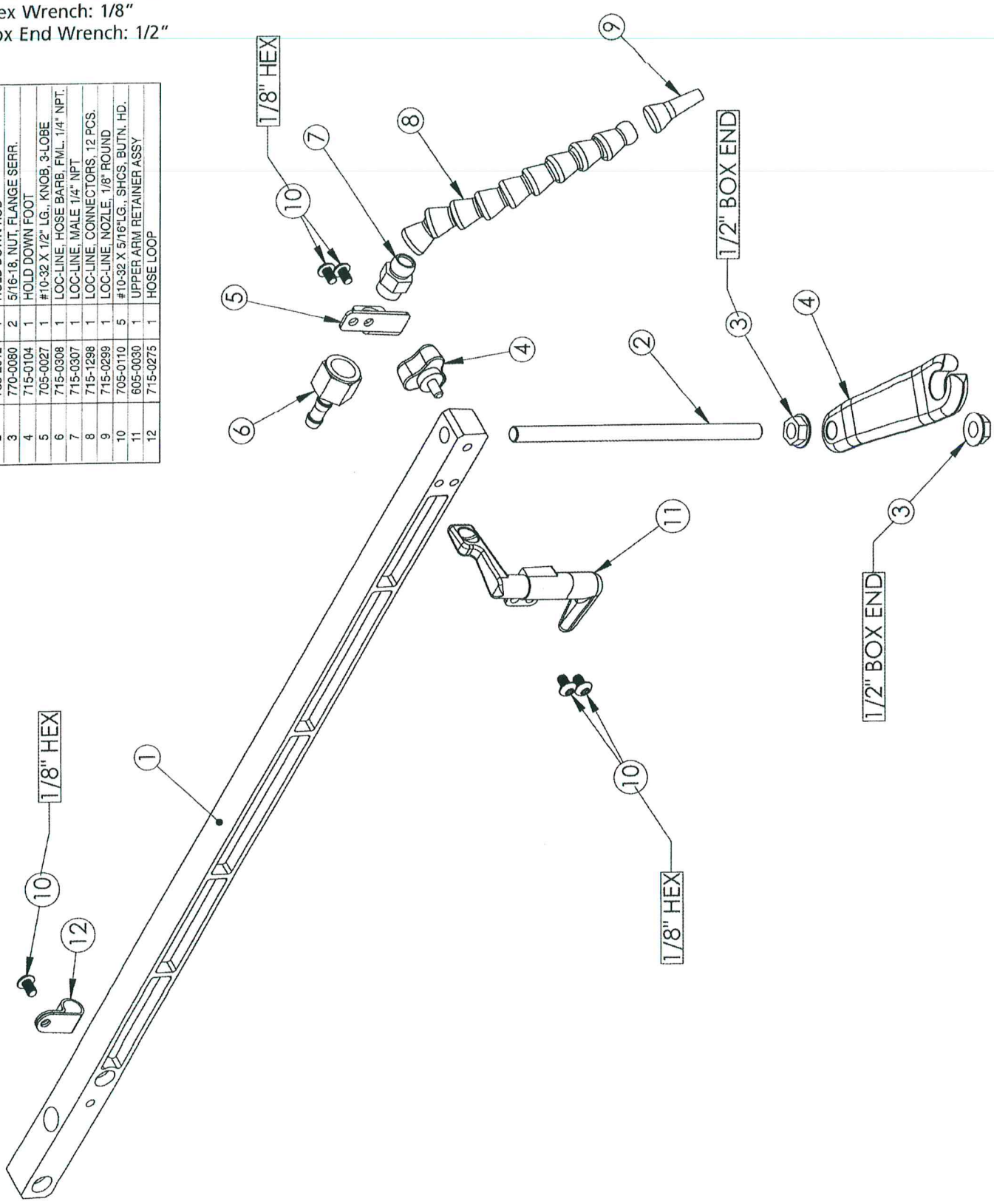
Below is a diagram showing all parts to the Hawk G426 Hold-Down Arm Assembly. If you need to order replacement parts, please note the part number and description of item.

RECOMMENDED TOOLS:

A. Hex Wrench: 1/8"

B. Box End Wrench: 1/2"

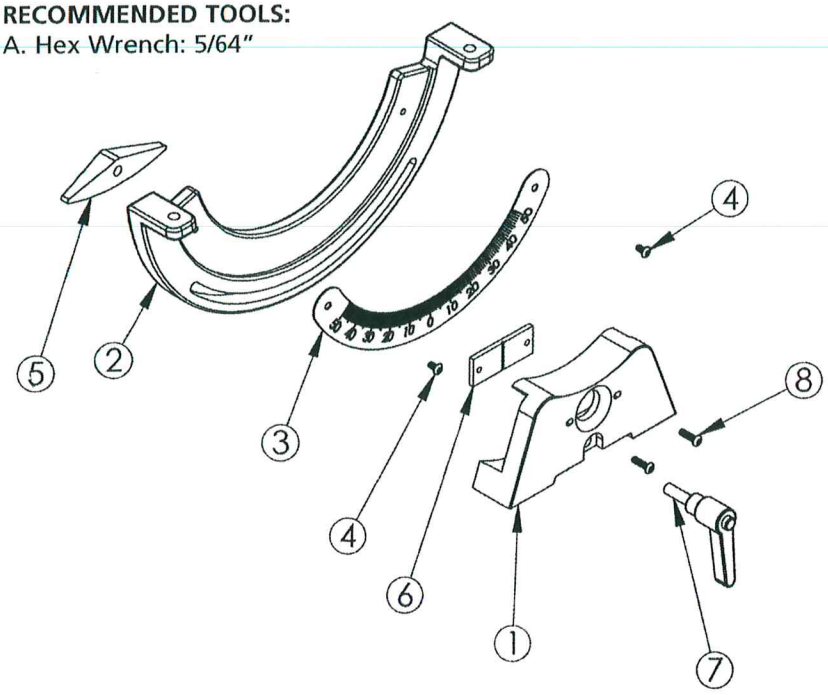
ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	705-0010	1	HOLD DOWN ARM, CAST, FINISHED
2	785-2012	1	HOLD DOWN ROD
3	770-0080	2	5/16-18, NUT, FLANGE SERR.
4	715-0104	1	HOLD DOWN FOOT
5	705-0027	1	#10-32 X 1/2" LG., KNOB, 3-LOBE
6	715-0308	1	LOC-LINE, HOSE BARB, FML. 1/4" NPT.
7	715-0307	1	LOC-LINE, MALE 1/4" NPT
8	715-1298	1	LOC-LINE, CONNECTORS, 12 PCS.
9	715-0299	1	LOC-LINE, NOZLE, 1/8" ROUND
10	705-0110	5	#10-32 X 5/16"LG., SHCS, BUTN. HD.
11	605-0030	1	UPPER ARM RETAINER ASSY
12	715-0275	1	HOSE LOOP



Hawk G426 Table Tilt Assembly and Parts List

Below is a diagram showing all parts to the Hawk G426 Table Tilt Assembly. If you need to order replacement parts, please note the part number and description of item.

RECOMMENDED TOOLS:
A. Hex Wrench: 5/64"

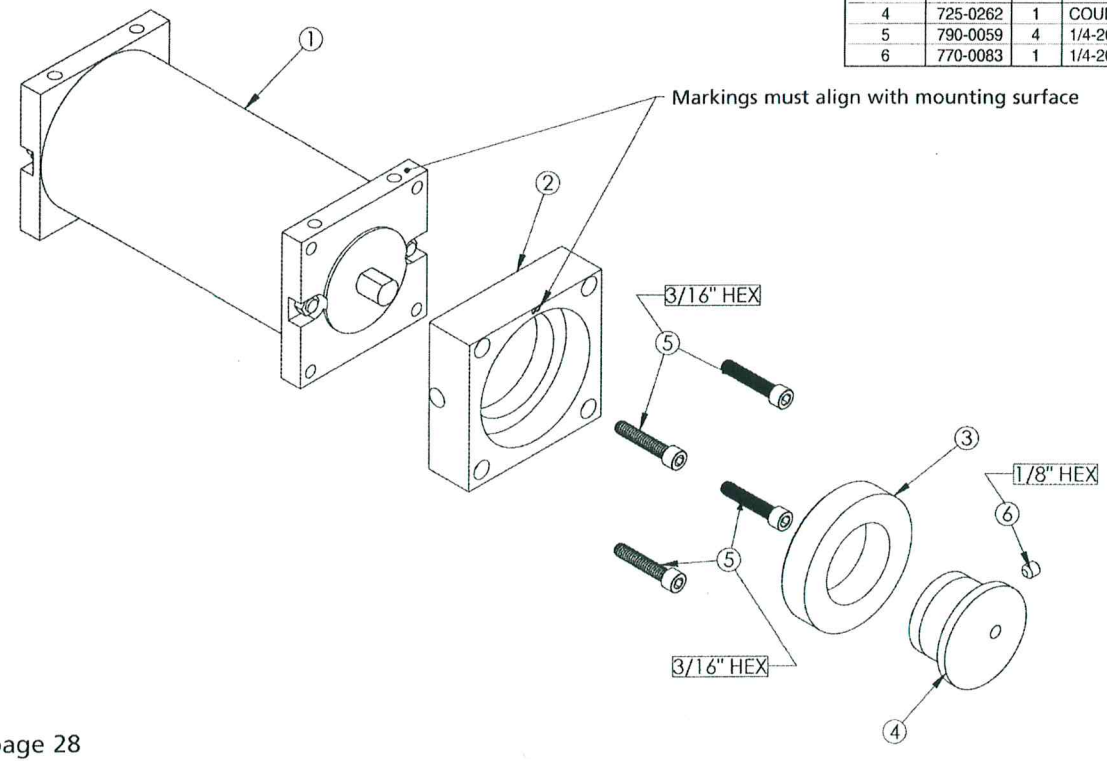


ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	715-0002	1	TABLE TILT, BASE MOUNT
2	705-0004	1	TABLE TILT, TABLE MOUNT
3	702-0060	1	TABLE TILT, GAUGE
4	705-0102	1	#6-32 X 1/4" LG., BUTTON HD., STNLS STL.
5	705-0025	1	TABLE TILT, CLAMP
6	715-0003	1	TABLE TILT, POINTER
7	705-0026	1	KNOB, ADJ. LEVER, 1/4-20 X 1-1/2" LG.
8	705-0016	2	#6-32 X 1/2" LG., BUTTON HD., STNLS STL.

Hawk G426 Motor Assembly and Parts List

Below is a diagram showing all parts to the Hawk G426 Motor Assembly. If you need to order replacement parts, please note the part number and description of item.

RECOMMENDED TOOLS:
A. Hex Wrench: 3/16", 1/8"



ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	704-3013	1	MOTOR, 1/5HP, 90 VDC
2	615- 2261	1	BEARING BLOCK
3	715-0262	1	BEARING, RADIAL
4	725-0262	1	COUNTER WEIGHT, 1/4-20 THRD
5	790-0059	4	1/4-20 X 1/1/4" LG., SHCS
6	770-0083	1	1/4-20 X 1/4" LG., SS

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