



Owner's Manual and Operating Instructions

# MODEL PT-110

8-INCH TRIM SAW



**Caution:** Read and Understand all Safety and Operating Instructions before using this equipment



# Introduction

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THANK YOU for selecting the Highland Park Lapidary PT-110 trim saw! Our dedicated team is confident that you will be pleased with your purchase. Highland Park Lapidary takes pride in producing top quality, highly dependable products for both hobby and commercial lapidary users throughout the world.

We designed the Highland Park Production Trim saw for the most demanding commercial cutting environment where accurate, fast cutting is essential. Precise enough to cut extremely expensive stones and durable enough to be used around the clock for high-volume repetitive cutting. The Model PT incorporates a replaceable toughened stainless steel cutting deck, precision blade stabilizers, and coolant injector manifold allowing thin-kerf blades to be run reliably at ultra-high speeds for all types of material.

Operated correctly, your PT-110 trim saw will provide you with years of quality service, and mountains of beautiful rocks. To help familiarize you with the features, maintenance and safe operation of the machine, we have included this owner's manual.

Please take the time to acquaint yourself with the PT-110 trim saw by reading and understanding this manual. If you have questions concerning your PT-110 trim saw, our customer service staff is waiting to help you - call 512-348-8528.

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# Safety Precautions

Used incorrectly, all electrical equipment carries some risk. To eliminate danger to either yourself or the machine, please read and follow all safety, operating and maintenance instructions! Failure to read, understand and follow these instructions could result in injury or death to you or others, or result in damage and/or reduced equipment life.

## EYE PROTECTION

Safety glasses should always be worn when operating this machine. Regular eyeglasses do not provide proper protection and may not prevent eye injury.

## HEARING PROTECTION

To reduce the possibility of hearing loss, always use hearing protection when operating this machine.

## PROTECT YOUR LUNGS

An OSHA certified respirator for dust (N95) should be always worn when running the machine, because rock dust can be hazardous to your health. While water on the wheels does reduce dust, dust particles can be carried in the mist coming off the wheels. This particle-filled mist can also be inhaled into the lungs, which is why we recommend always using a respirator when operating the machine.

**WARNING:** Some materials contain minerals or metals that can be more toxic. For instance, metallic ores may contain some toxic materials, so before grinding and polishing any unfamiliar material, make certain that it will not produce toxic fumes or dust. Extra protection may be necessary for more toxic materials.

## AVOID LOOSE CLOTHING AND HAIR

Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry that may be caught in moving parts. Wear protective hair covering to contain long hair. Non-slip footwear is also recommended.

## DO NOT OPERATE MACHINE WITH GUARDS REMOVED

To prevent injury, never operate the saw without the guards in place.

## CONNECTING AND DISCONNECTING POWER

- **DISCONNECTING** The machine should always be disconnected (unplugged) before servicing or when changing wheels.
- **CONNECTING - REDUCE THE RISK OF UNINTENTIONAL STARTS** Make sure the ON/OFF switch is in the OFF position before plugging in the machine.

## ELECTRICAL SAFETY

GFCI - When connecting this machine to power always use a GFCI (Ground Fault Circuit Interrupter). Because the cabbing machine uses water for lubrication, the GFCI will prevent risk of electrical shock.

Never touch electrical wires or motor components while the motor is running. Exposed, frayed or worn electrical wiring and plugs can be sources of electrical shock that could cause severe injury or burns.

- If an extension cord is used, it must not be longer than 12 feet and must be at least 14 gauge wire with a ground.
- Use this tool only with the proper power source 120V 60 Hz.
- If the wiring becomes damaged or frayed, replace it immediately.
- Do not allow water to come in contact with electrical components, and do not connect or disconnect the power with wet hands.
- Disconnect the power before servicing the machine or changing the wheels

## ROTATING OR MOVING PARTS

Keep hands, feet, hair, and clothing away from all moving parts to prevent injury. Never operate the motor with covers, shrouds or guards removed.

## KEEP WORK AREA CLEAN

- Cluttered work areas invite accidents. **Keep your work area clean and organized.**
- **DO NOT USE IN DANGEROUS OR HAZARDOUS ENVIRONMENTS** Do not operate equipment in dangerous or hazardous environments. Do not use power tools in damp or wet locations nor expose them to rain. Always keep the work area well lighted. Always work in a well-ventilated area.
- **KEEP CHILDREN AWAY** All visitors and children should be kept at a safe distance from the work area.

## WORK METHOD

- **DO NOT PRESS TOO HARD AGAINST THE WHEELS:** Your machine will do a better job, and the wheels will last longer, if you use the appropriate degree of pressure against the wheels. Pressing too hard can damage the wheels, especially the higher grit resin wheels.
- **USE THE RIGHT TOOLS TO SERVICE THE CABGING MACHINE:** Do not force a tool or an attachment when servicing or operating this power tool. Use the correct tools for service or adjustments.
- **DO NOT OVERREACH:** Keep proper footing and balance at all times by not overreaching.
- **DO NOT OPERATE A TOOL WHEN TIRED:** When tired, take a break and relax.
- **NEVER LEAVE A TOOL RUNNING UNATTENDED – TURN POWER OFF:** Always turn the tool off when leaving the work area or when work is finished.

## MAINTAINING THE MACHINE

- **CHECK FOR DAMAGED OR WORN PARTS** Before using the machine, check for damaged parts or wires. A guard or any other part that is damaged or worn should be replaced. Regularly check moving parts for proper alignment or binding.
- **USE RECOMMENDED ACCESSORIES AND PARTS** Consult the owner's manual for recommended accessories and parts. Using improper parts and accessories may increase the risk of personal and/or bystander injury.

# Specifications

<b>Trim Saw Model</b>	PT-110
<b>Machine Weight</b>	138 lbs
<b>MAIN MOTOR</b>	
<b>Horsepower</b>	1 HP
<b>Motor Voltage 110 volt / 60 Hz / Single phase</b>	110V/60Hz/ Single Phase
<b>Motor RPM</b>	1725 RPM
<b>Arbor Shaft</b>	5/8"
<b>Blade Capacity</b>	8" (203 mm) diameter

## HIGHLAND PARK TRIM SAW MODEL PT FEATURES AND SPECIFICATIONS:

**High-Speed Cutting:** Blade turns at 3500 RPM

**Arbor Shaft:** Cold rolled steel machined to 1-inch diameter. 5/8 inch diameter for diamond saw blade

**Underdeck Arbor:** Blade extends 2-1/2 inches above deck for unobstructed cutting of larger pieces  
1 Steel 2-inch outside diameter

**Blade:** ThinLine Agate Slicer sintered diamond blade

**Workpiece Size:** The Model PT-110 will cut pieces up to 2-1/2 inch thick

**Blade Guides:** Underdeck adjustable blade guides for precise blade stability

**Cutting Deck:** Removable toughened stainless steel for long cutting life

**Injector Manifold:** Delivers targeted coolant exactly to where the blade contacts the rock for maximum cutting efficiency. Coolant flow is adjustable. DUCT PORT – Allows below deck ventilation. This pulls all misting and oil/water back into the saw to be vented out of your shop. Even if you are using mild mineral oils, this can make cutting more pleasant and keep your workshop cleaner.

**Saw Box:** Welded 7 gauge steel. Inside dimensions are 14 inches wide x 11-3/4" deep x 18-3/4" long. Overall height – 30

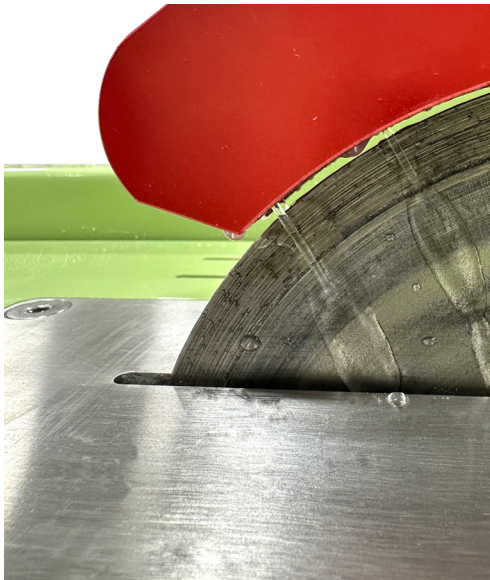
inches

**V-Belt:** Connects the motor to the saw blade

**Motor:** 110 volts 1 H.P. motor with start and run capacitors and thermal protection (220/230 volt 50/60 Hz available)

**Shipping Weight:** 218 lbs. FREE CRATE INCLUDED 28 x 24 x 39 inches (14.37 pcf)

**Workpiece Size:** The Highland Park PT-110 will accommodate manual cutting of specimens up to 2.5" (63.6 mm) in height, and has a 13.15" (334 mm) x 18.15" (461 mm) work tray.



#### COOLANT DELIVERY

This machine is best used with either an external plumbed water source or an external coolant reservoir pumping either water or oil through the injection manifold. The manifold is designed to inject the coolant right at the cut, which keeps the stone and the blade cool while allowing very fast cutting. The machine also can be used with the machine tank as a reservoir, but it won't produce the best results, because most of the coolant will be thrown off the blade before it enters the cut, and won't be as clean.

#### COOLANT SELECTION

**OIL-**The use of thin viscosity mineral oil (6-7 cst at 40 deg C) is advised. No other oil types are recommended since other types of oils may contain additives that will damage the seals, resulting

in premature bearing failure. When cutting hard materials like agate and jasper, we highly recommend using mineral oil.

**WATER** – Some stones that are very soft or may absorb oil cannot be cut in oil without degrading the stone. In these cases, using water is acceptable. When water is used, then the water must be drained out of the saw every day when you are done cutting. The blade is made from steel and will rust less if the machine can dry out at the end of the day.

**WATER SOLUBLE OILS** – We don't recommend the use of water-soluble oils, since they will not prevent rust from forming on the steel components and simply add cost with minimal value.

**If you are running water or water-soluble oils and you get some rust forming on your blade. Blade rust is not covered by warranty.** Light rust is not a big concern; simply use some steel wool or Scotch Brite to clean the blade, and then apply a coat of rust inhibitor.

# Setting Up Your Machine

The Highland Park PT-110 8-inch Trim Saw has been carefully packaged for protection during transit from the factory to you. The blade has been factory installed and the arbor nut securely tightened. You should have the following when you unpack your unit:

1. Highland Park PT-110 Trim Saw with Blade
2. Splash Guard & Mounting Screws
3. Saw Fence
4. Saw Guide Plate

## TOOLS NEEDED

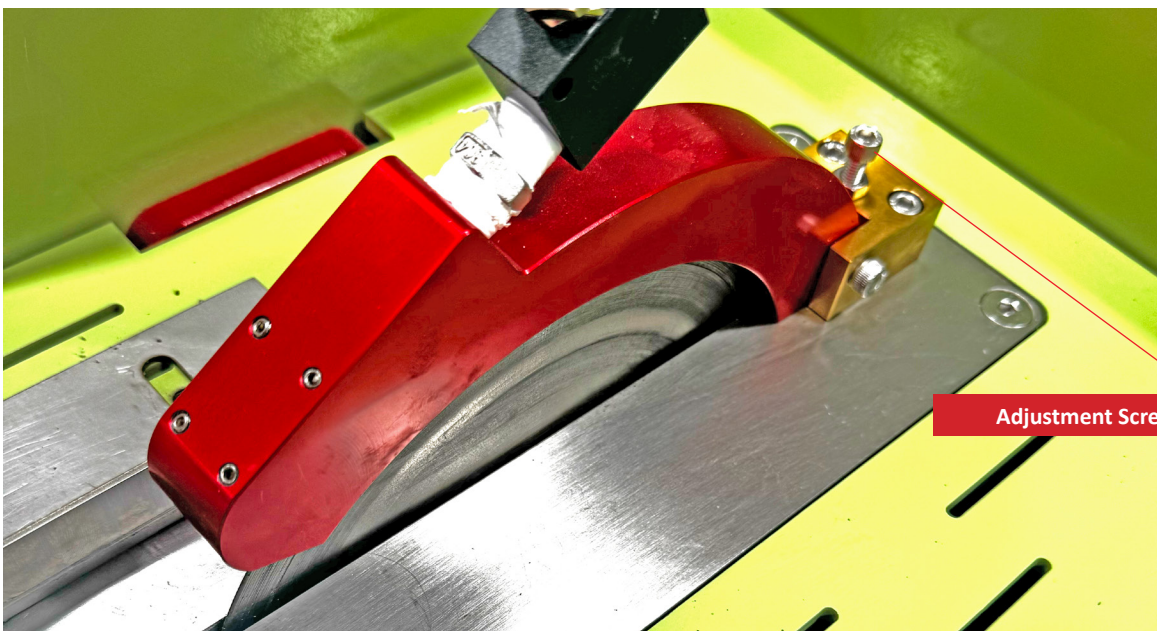
1. Phillips Screwdriver
2. 5 mm Allen wrench

## UNPACKING THE SAW

The 8-inch Trim Saw weighs approximately 138 lbs. (62.5 kg). Take care when lifting the unit from the box, as improper lifting might cause personal injury or cause damage to the machine.

Your Highland Park PT-110 Production Trim saw has been shipped from the factory thoroughly tested and inspected. Choose a place in your workspace for your saw that allows adequate working space and has a convenient power outlet. Avoid using an extension cord; it's much safer to connect the machine directly to a wall power outlet.

Place the 8-inch Trim Saw on a flat surface, adjusting the legs so that the unit sits level on the floor and does not rock. The PT-110 is designed to allow you to sit while working.



## SPRAY GUARD ADJUSTMENT

The spray guard covers the top of the blade during cutting and can be adjusted to control the amount of the blade that is exposed when cutting.

Turn the adjusting screw to raise and lower the spray guard. When the desired position is achieved, tighten the securing nut.

## COOLANT DELIVERY SETUP

There are three ways to set up the coolant on the PT-110.

1. Plumb a water line directly to the spray guard with a hose assembly for the PT-110 (PT0031). This part is available through the Highland Park Lapidary website.
2. Use an external reservoir and a pump (MT0047) using the same line kit (PT0031). The pump is suspended over the reservoir so it can feed clean water or oil to the spray guard.
3. Fill the PT-110 reservoir with water or oil until the blade is submerged 1/2". This is the least desirable coolant delivery system, as the fast blade speed doesn't allow enough coolant to remain on the blade to deliver the best quality cut. If you choose to run coolant in your reservoir, make sure that the drain cap is installed in the reservoir using Teflon tape to prevent leaks. Do not overfill the reservoir, as this will cause unnecessary spray while using the machine. Replace the top tray and carefully lower the tray down over the blade and into place, being careful not to bend the blade.

**Note:** *If you plan to run water in your machine, we suggest putting a ball valve on the drain port. This will make it much easier to drain the water at the end of each day. If you are running water, be sure to drain the reservoir after each use.*



## INSTALLING THE SPLASH GUARD

The splash guard helps to reduce splash from coming out of the front of the trim saw when you are cutting. The splash guard comes uninstalled and can be installed using a Phillips screwdriver and the provided screws as shown at left. **DO NOT OVER-TIGHTEN THE SCREWS**, as this can cause the guard to fracture.



### GUIDE PLATE and FENCE

The PT-110 trim saw includes both the guide plate and guide fence. The guides can be used by fastening them to the deck with the provided screw and setting them parallel to the blade to cut slabs or strips of consistent width. Using a 5 mm Allen wrench, the screw can be loosened and the distance from the blade can be adjusted to cut different thicknesses.

### USING THE GUIDE FENCE

The guide fence allows cutting slabs of consistent width or thickness, as shown. It's important that the guide fence is parallel to the blade to prevent binding.

## Maintaining Your Machine

Your Highland Park PT-110 8-inch Trim Saw has been designed to require minimal upkeep. The following easy, routine maintenance will keep it running smoothly.

### ADDING COOLANT

Maintaining the Coolant:

Regardless of whether you run coolant in the tank or in an external reservoir, when it starts to get too muddy, you need to change the coolant. If the coolant gets too dirty, it will start to affect the cutting performance, sometimes making it difficult to see the workpiece. Thicker oil also will cool less efficiently, making the injector less effective. If the coolant you are running is no longer translucent and starting to look thick, it is probably time to change the coolant.

1. To change the coolant, you will need to remove the **tray**, and then drain and clean out all the dirt, and replace the coolant with clean oil as follows:
2. Unplug the machine from the electrical outlet.
3. Remove the four Phillips head screws that hold the top tray to the **reservoir tank**

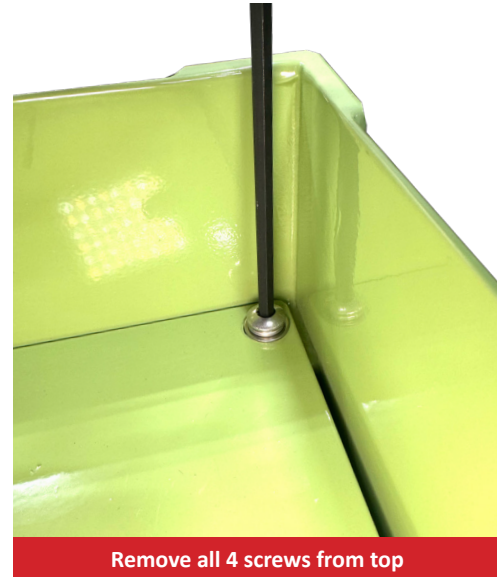
4. Once you remove the 4 screws, carefully lift the tray straight up, being careful not to damage the blade as you lift it off the **reservoir tank**.
5. If there is a thick layer of mud in the bottom of the reservoir, use a putty knife to carefully scrape the thick mud out. Avoid pushing thick mud into the drain port.

- Position a container under the drain and open the drain to let the dirty coolant out.
- Wipe out the reservoir and clean up the remaining mud and coolant.
- Use Teflon tape on the threads of the drain plug before putting it back in the drain port. If you are using a ball valve on your drain, then simply close the valve.

#### **Adding Coolant (If you run your machine using the internal reservoir):**

If you run your PT-110 with coolant in the internal reservoir, you also will lose some coolant with each cut. Coolant, both water and oil, will remain on the stone you are cutting, and

eventually the level in the reservoir will drop. If you notice that not as much oil or water is coming into your cut as you work, this is an indicator that it's time to add some coolant. There is no need to remove the tray each time; simply slowly add coolant as the saw is running until you see the coolant being delivered to your cut. Add the coolant slowly so you don't overfill it.



#### **SERVICING THE BLADE**

- If it becomes necessary to change the blade, then remove it, being careful to not bend the *blade* when you undo the **arbor nut**. The **arbor nut** is a right-hand thread. Note which way the *flanges* are installed so you can put them back together correctly.
- Clean the **blade** and inspect it for any damage. Replace damaged **blades**, as running a damaged **blade** can cause serious injury.
- Carefully clean both **arbor flanges** and the exposed end of the **arbor shaft** and wipe both sides of the blade off carefully. Grit or rock chips can make the blade wobble if they are on the flanges or **blade** when you reassemble it.
- Replace the first **flange** with the flat side of the **flange** against the **arbor shaft** and the recess towards the **blade**. The flange has built-in bushing. If using a blade with one-inch hole, use the other flange or use a bushing.
- If your blade requires a **blade bushing**, put the blade bushing on and locate the **blade** properly on the bushing.

- Put the second **flange** on with the recess towards the blade, then install the arbor nut. Rotate the **blade** by turning the **arbor shaft** with the **arbor nut** to verify that the **blade** is turning true. If it isn't turning true, take the **arbor nut** and flanges back off and make sure that the **blade** and **blade bush-**



Place 1st flange flat side against arbor shaft, recessed side against blade.



Place second flange with the recess against the saw blade and secure with the arbor nut.

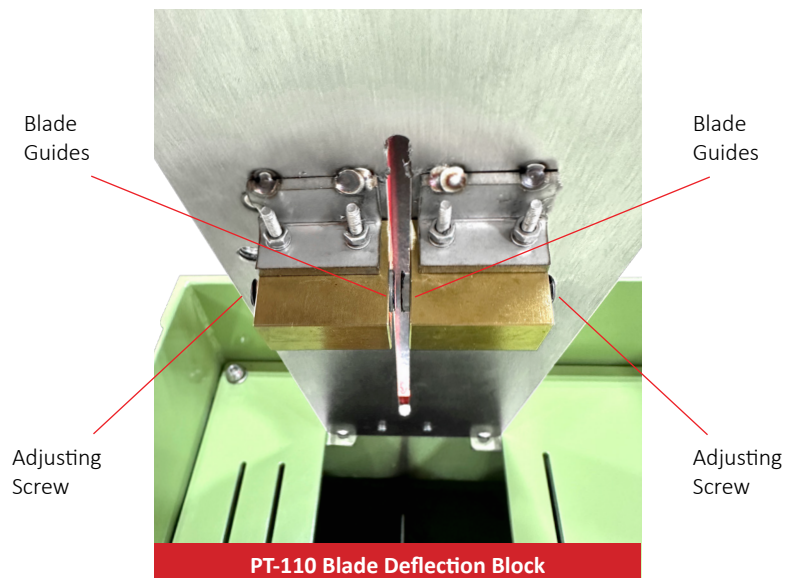
**ing** are in the correct position.

- Once the **blade** is running true, tighten the arbor nut. Don't over-tighten the arbor nut, because doing so may damage the **flanges** and cause the **blade** to not run true.
- Carefully lower the tray back down onto the **reservoir**, being careful not to bend the **blade**. Replace the 4 screws.

## ADJUSTING THE BLADE GUIDES

The PT comes with the unique feature of blade deflection guides. These guides help to prevent the blade from moving left and right during cutting. They are adjusted with set screws through the ports on the left and right hand side of the saw.

The PT-110 comes from the factory with the blade guides adjusted properly. After some use,



PT-110 Blade Deflection Block

the guide pins will experience wear. They can be adjusted to keep the blade from deflecting by turning the set screws on either side of the blade.

To adjust the **guides** properly, remove the **port plug** (at left) and turn the machine on without the coolant pump running. Using a 5/32" Allen wrench, begin very slowly turning the **set screw** clockwise until you hear the pin lightly rubbing against the blade. Do this for both sides, and the adjustment is complete. Now replace the **port plugs**.



Guide Block Adjustment Port Plug

## BELT TENSION

The drive belt is adjusted and tensioned at the factory. However, after some amount of use, it may be necessary to adjust the tension on the belt if it begins slipping. To adjust the tension, first unplug the machine. Next, remove the side cover for the belt guard, loosen the motor mounting nuts, and move the motor back more so that no more than 1/2" (12.7 mm) of belt deflection occurs when the belt is depressed by fingertip pressure



Testing Belt Tension

## GENERAL CLEANING

With use, your Highland Park PT-110 Trim Saw may get some dust and oil residue on it. Keeping your machine clean is a good way to keep it looking great and avoid issues. Unplug the saw before wiping it down. You can use a mild cleaning solution like Formula 409 or Simple Green, but don't spray the cleaner directly on the machine. Instead, spray the solution on your cleaning rag, and then use the rag to wipe the surfaces of the machine.



# Trim Saw Tips

Whether you're a seasoned professional, new to the lapidary field, or somewhere in between, the HP Lapidary PT-110 trim saw will provide you with hours of enjoyment as you explore the fascinating world of rocks and minerals. Here are a few tips that will help you use your new saw successfully:

## AVOID BLADE WOBBLE

For a video on blade wobble, see "[Causes of Blade Wobble](#)" on the Highland Park Lapidary YouTube channel.

### Blade Should Run True

Your blade should be tight on the arbor and run without wobbling. Blade wobble will reduce the blade's effectiveness, make your cuts rougher, and in some cases, damage the diamond blade itself. Fortunately, it's easy to avoid - just make sure your blade is running true! Wobble generally can be identified by looking at the blade straight on and from the side. If it's wobbling, the blade will appear to be moving either slightly side-to-side motion or front to back. If it appears to be wobbling, the first thing to check is that your blade bushing is in the proper position, as this is the primary cause of blade wobble. If the bushing is properly in place, there are other issues that can cause blade wobble.

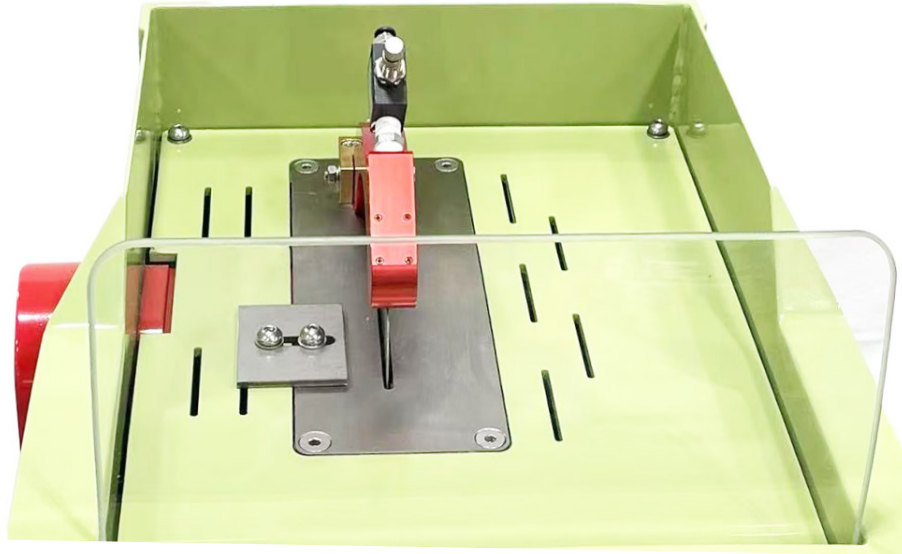
### Debris Between Shaft And Arbor

Even though it looks like it's caused by a bent blade, a wobble sometimes can be caused by small pieces of debris trapped between the shaft and the arbor or an improperly installed blade bushing. Even a tiny speck can keep your blade from running smoothly. To fix non-bushing-related wobble issues, take your blade off the shaft. Clean the shaft carefully, and run your fingers along the edges and surface of the arbor. If you find a small bur, use a file or wet/dry sandpaper to smooth the surface. Clean the saw blade's center hole, and make sure all the pieces are free from contamination. Make sure the blade bushing is in the proper position when reinstalling the saw blade, perfectly centered. Turn the blade by hand to verify that it is now running straight and true.

## COOLANT

Coolant is crucial to keeping the blade running smoothly and cleanly. Friction between the rock and the blade causes heat to build up, and the blade cools down again as it dips down into the coolant. Be sure to keep your coolant flowing properly into your cut.

If using oil, use thin viscosity mineral oil (6-7 cst at 40 deg C) as coolant is advantageous (but not required) when cutting hard materials such as jasper and agate. The trim saw may be used with water, but the water should be drained from the holding reservoir after each session to prevent rust buildup on the blade. Note: If you are running water or water-soluble oils and you get some rust forming on your blade, blade rust is not covered by warranty. A minor amount of surface rust will not affect the performance of the saw.



## Using The Trim Saw

### HOW TO CUT PREFORMS AND SLABS

#### TRIMMING CABOCHON PREFORM

Creating a cabochon pre-form is the first step to making beautiful jewelry, and is a job your trim saw will do beautifully. You will find that trimming a slab allows the blade to move substantially faster through the rock than cutting rough, because the slab is thinner. There are a few things to remember when cutting pre-forms:



Move the template around the slab until you find a shape and color that you like.



Trace the shape onto the slab with a stylus or fine-tip Sharpie.

1. Highland Park Lapidary offers a variety of well-designed templates to trace geometric shapes on your slab in preparation for cutting. You also can create shapes using masking tape or contact paper, or draw a shape freeform. Choose the shape you want, then move the template around on the slab until you find the perfect pattern. Use a fine-point Sharpie, or an aluminum or brass scribe, to trace the shape onto the slab.
2. Next step is to prepare your pre-form, cutting it from the slab. Turn on the saw and make sure the coolant is running freely. When pushing the rock into the blade, your fingers should hold the slab firmly on both sides. Avoid pushing your finger into the blade to eliminate chance of injury. The flat diamond-embedded edge will grind rock away, but it will not cut a finger off, unlike a wood saw. However, it can injure skin if used improperly.



YES

Hold rock or slab firmly with both hands, keeping fingers away from the blade



NO

While the blade grinds rather than cuts, pushing your finger against it can still result in injury if force is great enough.

3. Some beginners make the mistake of trying to cut around curves, which can damage both the blade and the cabochon. Your blade is hard, flat, and does not bend around corners. Cut round objects by making straight cuts around them first, freeing them from the main slab. Then, use your trim saw to trim off the corners to make the

piece more rounded. Patience is key here; trimming too quickly can result in fractured, uneven pre-forms .



Cut straight lines all around your shape.



Cut increasingly smaller straight lines to round the edges.

4. To finish the preform, clean up the sides by rubbing them against the edges of the running blade. Your pre-form is ready!



Continue cutting in small, straight cuts until you have a rough shape, leaving a small border outside of your line.



Your preform is now ready for the next step- polishing.

## CUTTING SLABS ON THE PT-110

Your PT-110 trim saw can be used to cut slabs from rocks up to 2.5" in height. Cutting a flat surface on the rock and using that surface on the bottom can help the stone move more smoothly as you cut slabs.



Do not hold rock at an angle with an empty space (or your finger!) between the rock and the blade. This can catch and pinch.



Instead, put the flattest part of the rock against the cutting table, allowing you to move the rock against the blade smoothly.

Cutting a decent slab from a rock on a trim saw requires patience and the ability to allow the blade to do the work, rather than pushing or twisting the rock. To cut a slab:

1. Examine your stone for a flat area that can sit securely against the cutting deck. This will be the bottom for your slab cuts and will sit flat against the machine. Avoid trying to cut at an angle; if you catch part of the rock on the saw and your finger is in the way, it can result in a nasty pinch!
2. Progress SLOWLY, with just a little pressure on the rock, allowing the blade to do the work. When the first cut falls off, it likely will have a little nub where the rock breaks off; use the saw to remove it.
3. After you have the first face cut, decide how thick you want your slab to be. Use a ruler to measure, and place a mark on the stone where you want to cut. Be sure to take the blade thickness into account, and place the measured mark so that it will just line up with the left edge of the blade as you face the saw.
4. Place the rock with the mark in line with the blade, making sure the flat cut is flush against the table of the saw. Be sure the flat surface is parallel to the blade, and keep it steady as the blade moves through the rock. With the PT-110 trim saw, the guide fence can be used to keep the rock at a consistent width once a flat side is cut on the stone.
5. Remember, keep up slow, steady, light pressure on the rock to reduce blade marks and fracturing. Pushing the rock too fast through the trim saw, or turning it over to cut from a variety of angles, will create little microfractures in the rock that often won't go away with polishing.

6. Once you are finished, use the edge of the saw to trim off the nub that occurs when the slab falls from the stone (or, to avoid the nub, cut even more slowly as the slab nears the end). You have cut a slab on your trim saw!

**Enjoy your Highland Park  
PT-110 Trim Saw**

**HAPPY CUTTING! :)**

# Warranty Coverage

## **Machines, Polishers, Diamond Blades & Core Bits and Motors**

Highland Park warrants to the original purchaser for a period of one year except as noted, from the date of purchase all products covered by this Warranty to be free of defects in materials and workmanship. This warranty is non-transferable and applies only to the original purchaser.

This Warranty shall not apply to any parts that have been subjected to misuse or improper service, that had been damaged in transit or handling, or that have been altered or repaired by unauthorized representatives. This Warranty does not cover defects caused by or resulting from misuse, abuse, neglect, or damage caused by accident or the failure to provide reasonable maintenance. This Warranty is void if the product or any of its individual components is altered or modified by the purchaser or if the product is used in a manner or with a blade not recommended by the manufacturer.

Any claim arising under this Warranty must be submitted by the original purchaser within the warranty period specified above and shall include proof of purchase. During said warranty period Highland Park shall, at its option, either replace or repair, at no charge to the original purchaser, any parts or components that are found to be defective by Highland Park. Highland Park shall not be responsible for or obligated to pay for freight or other transportation-related costs or expenses in connection with any defective products or components that are either returned to Highland Parks facility or any authorized repair station and/or any replacement products or components that are shipped from Highland Park pursuant to this Warranty.

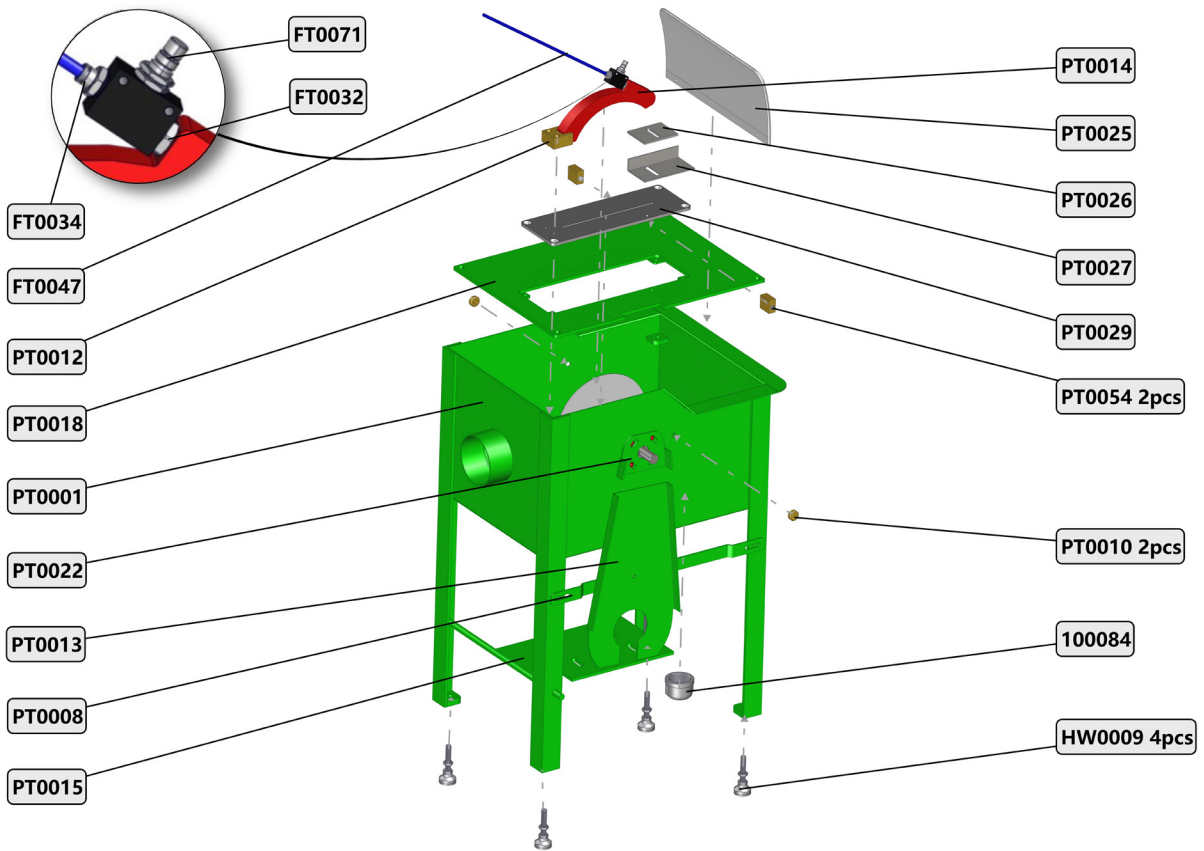
Parts and labor needed to maintain products and the replacement of components due to normal use are the purchaser's responsibility and are not covered by this Warranty. All products or components replaced under warranty become the property of Highland Park. All replacement parts will be considered to be part of the original product and any warranty on such parts will expire coincidentally with the original Warranty. Replacement part(s) installed by anyone else will be provided without a charge for such replacement part(s), but this Warranty will not apply to labor charges in connection therewith.

***IN NO EVENT SHALL ANY LIABILITY UNDER THIS WARRANTY EXCEED THE REPLACEMENT COST OF ANY DEFECTIVE PRODUCT OR COMPONENT THEREOF, AND HIGHLAND PARK SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR ANY OTHER DAMAGE OR LOSS NOT EXPRESSLY ASSUMED AS SET FORTH HEREIN.***

The foregoing constitutes an expressed warranty on the terms set forth above and is the only warranty or warranties applicable to the products it covers. All other warranties, including, without limitation, the implied warranty of merchantability and/or fitness for a particular purpose or use being denied. This limited warranty is expressly in lieu of all other warranties, whether expressed or implied.

# Exploded Views And Parts Lists

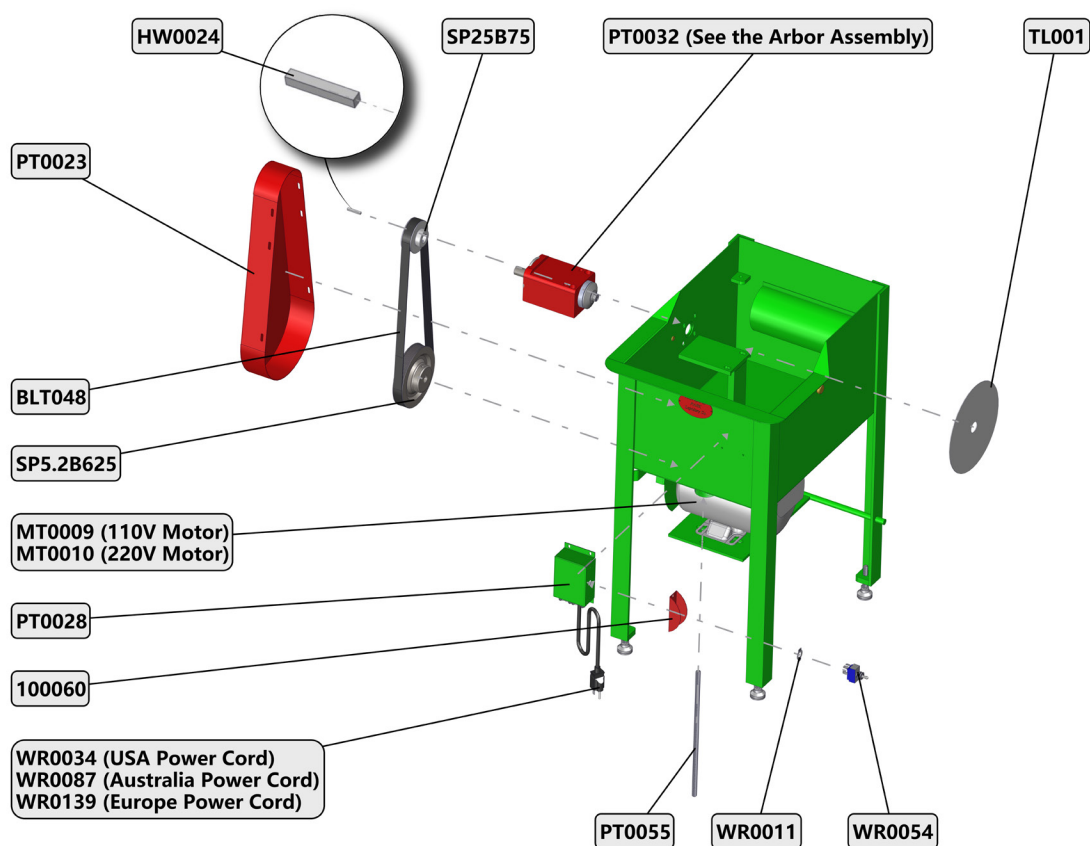
## PT-110 MAIN COMPONENTS #1



Part Number	Description	Quantity
100084	Drain Cap	1
FT0032	1/4 NPT Nipple	1
FT0034	1/4 NPT Male to 6mm QD Fitting	1
FT0047	6mm Blue Poly Tube	1
FT0071	Flow Control Valve	1
HW0009	10mm Leveling Foot	4
PT0001	Tank	1

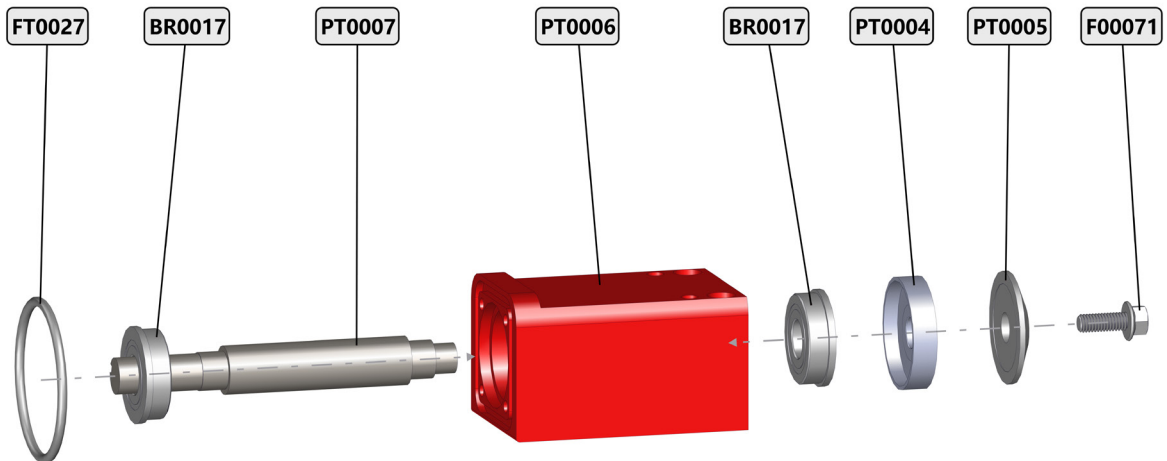
PT0008	Belt Guard Lower Bracket	1
PT0010	Hole Plug	2
PT0012	Spray Guard Mount	1
PT0013	Belt Guard Back	1
PT0014	Spray Guard	1
PT0015	Motor Mount Assembly	1
PT0018	Top Plate Assembly	1
PT0022	Belt Guard Upper Bracket	1
PT0025	Clear Plastic Splash Guard	1
PT0026	Guide Plate	1
PT0027	Guide Rail	1
PT0029	Slot Plate Assembly	1
PT0054	Guide Block Assembly	2

## PT-110 MAIN COMPONENTS VIEW #2



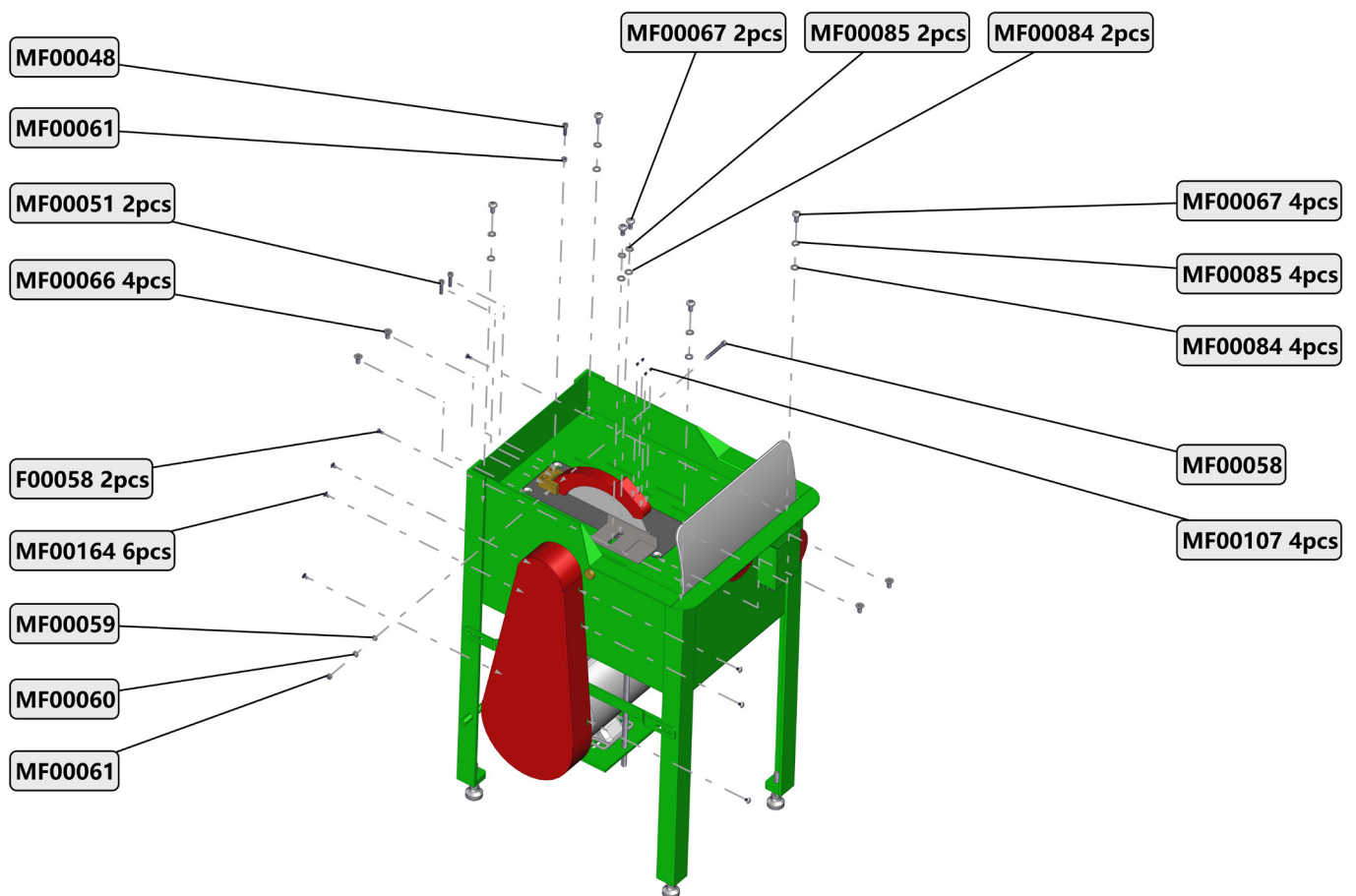
Part Number	Description	Quantity
100060	Toggle Switch Guard	1
BLT048	Serpentine Belt	1
HW0024	Key Stock	1
MT0009	110V 60 Hz Electric Motor	1
MT0010	220V 50 Hz Electric Motor	1
PT0023	Belt Guard Housing Assembly	1
PT0028	Switch Box	1
PT0032	Arbor Assembly	1
PT0055	Threaded Rod	1
SP25B75	Arbor Shaft Pulley	1
SP52B625	Motor Pulley	1
TL001	Thinline Blade	1
WR0034	USA Power Cord	1
WR0054	Heavy Duty Toggle Switch	1
WR0139	Europe Power Cord	1

## ARBOR ASSEMBLY



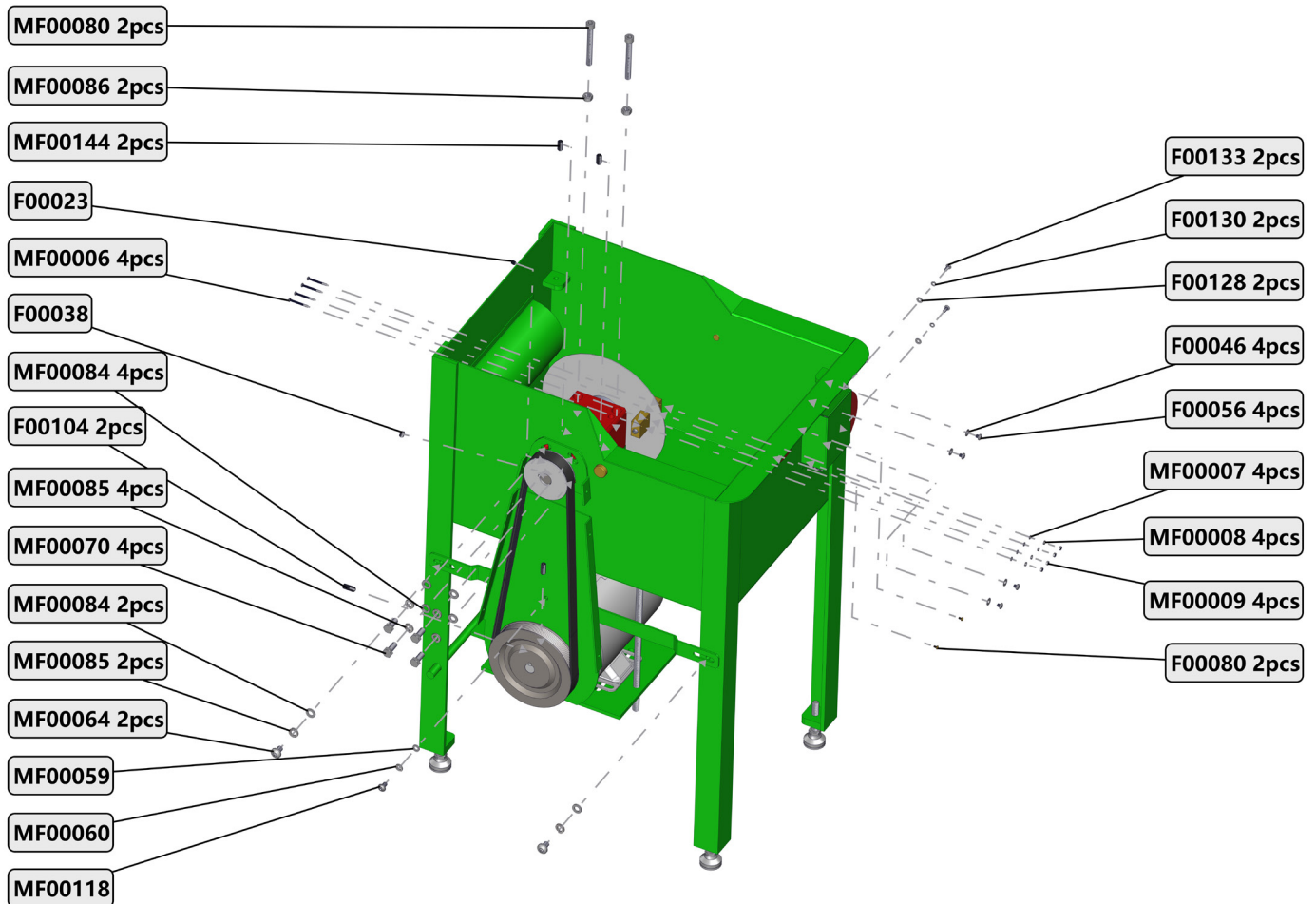
Part Number	Description	Quantity
BR0017	Arbor bearing	2
F00071	3/8-16 x 1" Flanged Hex Cap	1
FT0027	O Ring	1
PT0004	Arbor Inner Flange	1
PT0005	Arbor Outer Flange	1
PT0006	Arbor Housing	1
PT0007	Arbor Shaft	1

## PT-110 SCREWS & FASTENERS #1



Part Number	Description	Quantity
F00058	10-32 x 3/8" PHP Pan Head Phillips	2
MF00048	M6-1.0 x 20mm SHCS Socket Head	1
MF00051	M6-1.0 x 25mm SHCS Socket Head	2
MF00058	M6-1.0 x 50mm SHCS Socket Head	1
MF00059	M6-1.0 Flat Washer	1
MF00060	M6-1.0 Lock Washer	1
MF00061	M6-1.0 Hex Nut	2
MF00066	M8-1.25 x 16mm FHSCS Flat Head Socket	4
MF00067	M8-1.25 x 16mm PHSCS Pan Head Socket	6
MF00084	M8 Flat Washer	6
MF00085	M8 Lock Washer	6
MF00107	M4-0.7 x 6mm Set Screw	4

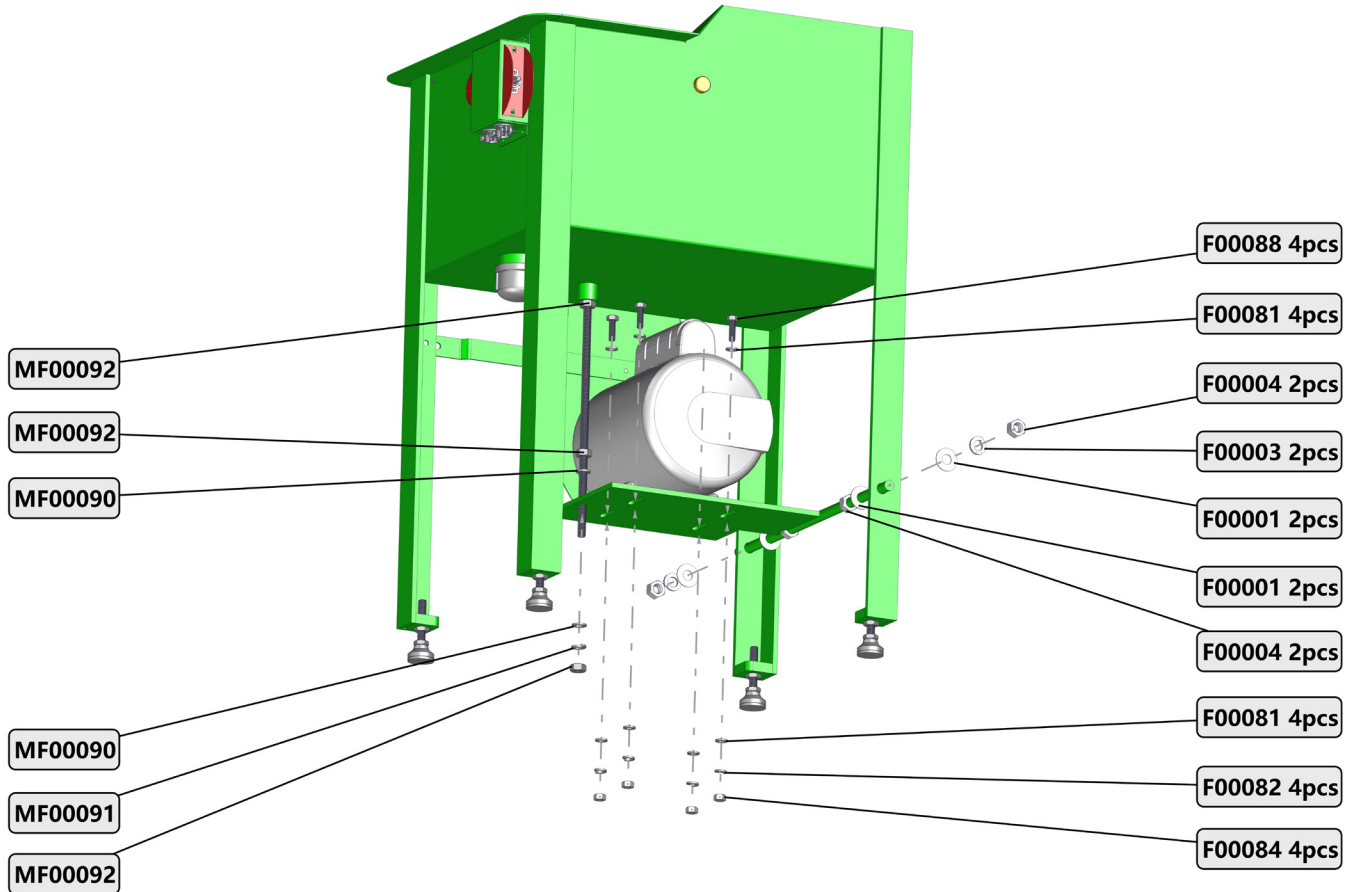
## PT-110 SCREWS & FASTENERS #2



Part Number	Description	Quantity
F00023	1/4-20 x 1/4" Set Screw	1
F00038	1/4-20 x 3/8" Set Screw	1
F00046	10-32 Flat Washer	4
F00056	10-32 x 3/16" PHP Pan Head Phillips	4
F00080	4-40 x 3/16" PHP Pan Head Phillips	2
F00104	5/16-18 x 3/4" Set Screw	2
F00128	8-32 Flat Washer	2

F00130	8-32 Lock Washer	2
F00133	8-32 x 3/8" PHP Pan Head Phillips	2
MF00006	M3-0.5 x 30mm PHP Pan Head Phillips	4
MF00007	M3-0.5 Flat Washer	4
MF00008	M3-0.5 Lock Washer	4
MF00009	M3-0.5 Hex Nut	4
MF00059	M6-1.0 Flat Washer	1
MF00060	M6-1.0 Lock Washer	1
MF00064	M8-1.25 x 12mm PHSCS Pan Head Socket	2
MF00070	M8-1.25 x 20mm HHCS Hex Bolt	4
MF00080	M8-1.25 x 70mm SHSCS Head Socket	2
MF00084	M8 Flat Washer	6
MF00085	M8 Lock Washer	6
MF00086	M8-1.25 Hex Nut	2
MF00118	M6-1.0 x 10mm PHP Pan Head Phillips	1
MF00144	M8-1.25 x 16mm Set Screw	2

## PT-110 SCREWS & FASTENERS #3



Part Number	Description	Quantity
F00001	1/2-13 Flat Washer	4
F00003	1/2-13 Lock Washer	2
F00004	1/2-13 Hex Nut	4
F00081	5/16-18 Flat Washer	8
F00082	5/16-18 Lock Washer	4
F00084	5/16-18 Hex Nut	4
F00088	5/16-18 x 1" HHCS Hex Bolt	4
MF00090	M10 Flat Washer	2
MF00091	M10 Lock Washer	1
MF00092	M10-1.5 Hex Nut	3

# PT-110: 8-Inch Trim Saw Owner's Manual & Operating Instructions







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Starts at 7:00 PM EST

