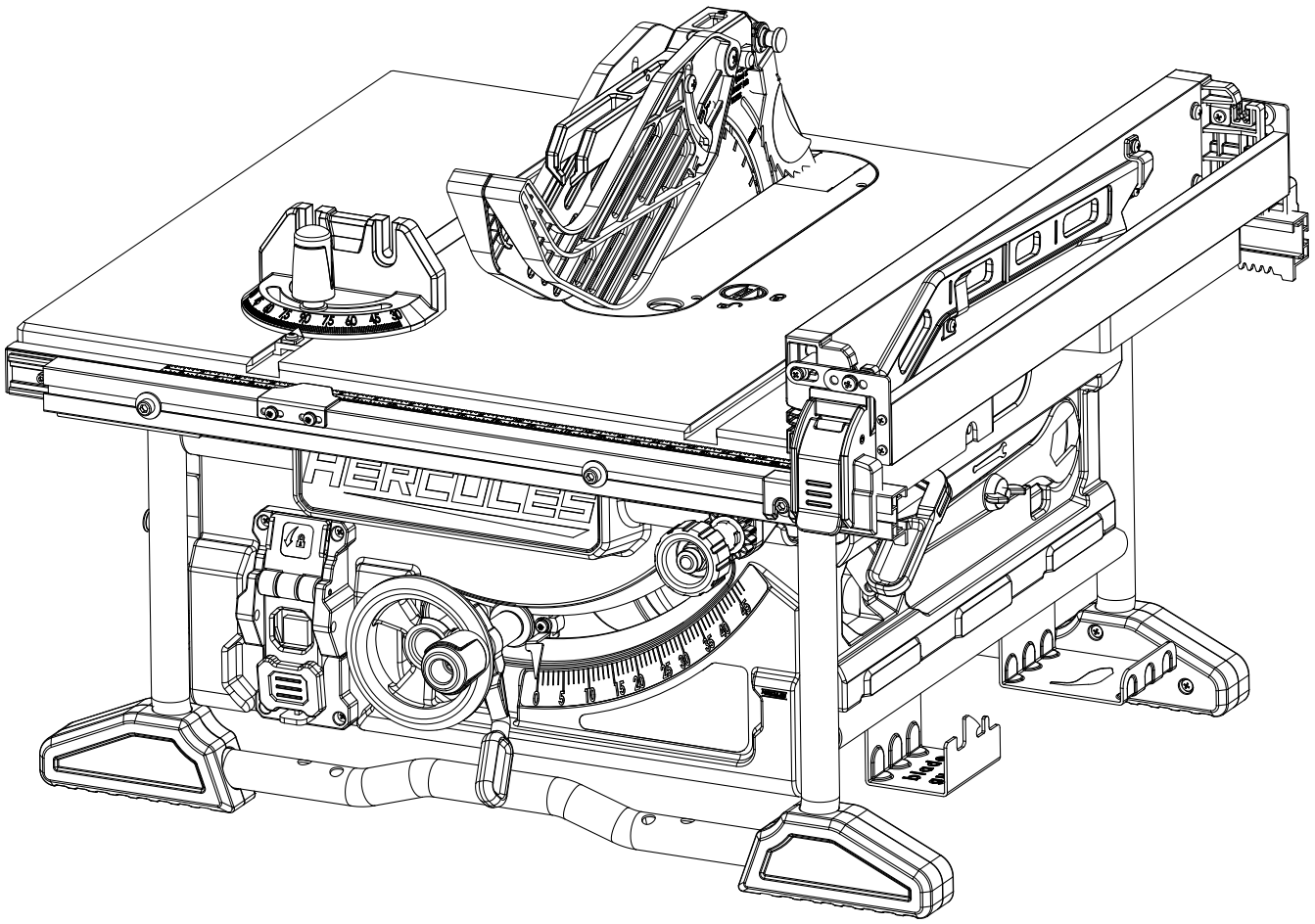
HERCULES®

Owner's Manual & Safety Instructions

20i



Model
HE77

10″ COMPACT JOBSITE TABLE SAW WITH RACK & PINION FENCE

⚠WARNING: To prevent serious injury, user must read and understand Owner's Manual. SAVE THIS MANUAL.

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible. Reference 57673

IMPORTANT SAFETY INFORMATION

⚠WARNING

Read all safety warnings and all instructions. *Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.* **Save all warnings and instructions for future reference.**

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1. **Work area safety**
   a. **Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*
   b. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** *Power tools create sparks which may ignite the dust or fumes.*
   c. **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*
2. **Electrical safety**
   a. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*
   b. **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*
   c. **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
   d. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
   e. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*
   f. **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** *Use of a GFCI reduces the risk of electric shock.*
3. **Personal safety**
   a. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
   b. **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
   c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** *Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.*
   d. **Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*
   e. **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
   f. **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewelry or long hair can be caught in moving parts.*
   g. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust-related hazards.*
   h. **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** *A careless action can cause severe injury within a fraction of a second.*
   i. Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.
   j. Avoid unintentional starting. Prepare to begin work before turning on the tool.
   k. Do not leave the tool unattended when it is plugged into an electrical outlet. Turn off the tool, and unplug it from its electrical outlet before leaving.
   l. This product is not a toy. Keep it out of reach of children.

m. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:
• Avoid operating alone.
• Do not use with Trigger locked on.
• Properly maintain and inspect to avoid electrical shock.
• Properly ground power cord.
Ground Fault Circuit Interrupter (GFCI) should also be implemented – it prevents sustained electrical shock.

n. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

4. **Power tool use and care**

a. **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*

b. **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*

c. **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*

d. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*

e. **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*

f. **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*

g. **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

h. **Keep handles and grasping surfaces dry, clean and free from oil and grease.** *Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.*

5. **Service**

a. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

b. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

6. **Safety instructions for mitre saws**

a. **Mitre saws are intended to cut wood or wood-like products, they cannot be used with abrasive cut-off wheels for cutting ferrous material such as bars, rods, studs, etc.** *Abrasive dust causes moving parts such as the lower guard to jam. Sparks from abrasive cutting will burn the lower guard, the kerf insert and other parts.*

b. **Use clamps to support the workpiece whenever possible. If supporting the workpiece by hand, you must always keep your hand at least 100 mm from either side of the saw blade. Do not use this saw to cut pieces that are too small to be securely clamped or held by hand.** *If your hand is placed too close to the saw blade, there is an increased risk of injury from blade contact.*

c. **The workpiece must be stationary and clamped or held against both the fence and the table. Do not feed the workpiece into the blade or cut "freehand" in any way.** *Unrestrained or moving workpieces could be thrown at high speeds, causing injury.*

d. **Push the saw through the workpiece. Do not pull the saw through the workpiece. To make a cut, raise the saw head and pull it out over the workpiece without cutting, start the motor, press the saw head down and push the saw through the workpiece.** *Cutting on the pull stroke is likely to cause the saw blade to climb on top of the workpiece and violently throw the blade assembly towards the operator.*

e. **Never cross your hand over the intended line of cutting either in front or behind the saw blade.** *Supporting the workpiece "cross handed" i.e. holding the workpiece to the right of the saw blade with your left hand or vice versa is very dangerous.*

f. **Do not reach behind the fence with either hand closer than 100 mm from either side of the saw blade, to remove wood scraps, or for any other reason while the blade is spinning.** *The proximity of the spinning saw blade to your hand may not be obvious and you may be seriously injured.*

g. **Inspect your workpiece before cutting. If the workpiece is bowed or warped, clamp it with the outside bowed face toward the fence. Always make certain that there is no gap between the workpiece, fence and table along the line of the cut.** *Bent or warped workpieces can twist or shift and may cause binding on the spinning saw blade while cutting. There should be no nails or foreign objects in the workpiece.*

h. **Do not use the saw until the table is clear of all tools, wood scraps, etc., except for the workpiece.** *Small debris or loose pieces of wood or other objects that contact the revolving blade can be thrown with high speed.*

i. **Cut only one workpiece at a time.** *Stacked multiple workpieces cannot be adequately clamped or braced and may bind on the blade or shift during cutting.*

j. **Ensure the mitre saw is mounted or placed on a level, firm work surface before use.** *A level and firm work surface reduces the risk of the mitre saw becoming unstable.*

k. **Plan your work. Every time you change the bevel or mitre angle setting, make sure the adjustable fence is set correctly to support the workpiece and will not interfere with the blade or the guarding system.** *Without turning the tool "ON" and with no workpiece on the table, move the saw blade through a complete simulated cut to assure there will be no interference or danger of cutting the fence.*

l. **Provide adequate support such as table extensions, saw horses, etc. for a workpiece that is wider or longer than the table top.** *Workpieces longer or wider than the mitre saw table can tip if not securely supported. If the cut-off piece or workpiece tips, it can lift the lower guard or be thrown by the spinning blade.*

m. **Do not use another person as a substitute for a table extension or as additional support.** *Unstable support for the workpiece can cause the blade to bind or the workpiece to shift during the cutting operation pulling you and the helper into the spinning blade.*

n. **The cut-off piece must not be jammed or pressed by any means against the spinning saw blade.** *If confined, i.e. using length stops, the cut-off piece could get wedged against them blade and thrown violently.*

o. **Always use a clamp or a fixture designed to properly support round material such as rods or tubing.** *Rods have a tendency to roll while being cut, causing the blade to "bite" and pull the work with your hand into the blade.*

p. **Let the blade reach full speed before contacting the workpiece.** *This will reduce the risk of the workpiece being thrown.*

q. **If the workpiece or blade becomes jammed, turn the mitre saw off. Wait for all moving parts to stop and disconnect the plug from the power source and/or remove the battery pack. Then work to free the jammed material.** *Continued sawing with a jammed workpiece could cause loss of control or damage to the .mitre saw.*

r. **After finishing the cut, release the switch, hold the saw head down and wait for the blade to stop before removing the cut-off piece.** *Reaching with your hand near the coasting blade is dangerous.*

s. **Hold the handle firmly when making an incomplete cut or when releasing the switch before the saw head is completely in the down position.** *The braking action of the saw may cause the saw head to be suddenly pulled downward, causing a risk of injury.*

7. **Guarding related warnings**

a. **Keep guards in place. Guards must be in working order and be properly mounted.** *A guard that is loose, damaged, or is not functioning correctly must be repaired or replaced.*

b. **Always use saw blade guard, Riving Knife and anti-kickback device for every through-cutting operation.** *For through-cutting operations where the saw blade cuts completely through the thickness of the workpiece, the guard and other safety devices help reduce the risk of injury.*

c. **Immediately reattach the guarding system after completing an operation (such as rabbeting, dadoing or resawing cuts) which requires removal of the guard, Riving Knife and/or anti-kickback device.** *The guard, Riving Knife, and anti-kickback device help to reduce the risk of injury.*

d. **Make sure the saw blade is not contacting the guard, Riving Knife or the workpiece before the switch is turned on.** *Inadvertent contact of these items with the saw blade could cause a hazardous condition.*

e. **Adjust the Riving Knife as described in this instruction manual.** *Incorrect spacing, positioning and alignment can make the Riving Knife ineffective in reducing the likelihood of kickback.*

f. **For the Riving Knife and anti-kickback device to work, they must be engaged in the workpiece.** *The Riving Knife and anti-kickback device are ineffective when cutting workpieces that are too short to be engaged with the Riving Knife and anti-kickback device. Under these conditions a kickback cannot be prevented by the Riving Knife and anti-kickback device.*

g. **Use the appropriate saw blade for the Riving Knife.** *For the Riving Knife to function properly, the saw blade diameter must match the appropriate Riving Knife and the body of the saw blade must be thinner than the thickness of the Riving Knife and the cutting width of the saw blade must be wider than the thickness of the Riving Knife.*

8. **Cutting procedures warnings**

a. **⚠DANGER: Never place your fingers or hands In the vicinity or in line with the saw blade.** *A moment of inattention or a slip could direct your hand towards the saw blade and result in serious personal injury.*

b. **Feed the workpiece into the saw blade only against the direction of rotation.** *Feeding the workpiece in the same direction that the saw blade is rotating above the table may result in the workpiece, and your hand, being pulled into the saw blade.*

c. **Never use the miter gauge to feed the workpiece when ripping and do not use the Rip Fence as a length stop when cross cutting with the miter gauge.** *Guiding the workpiece with the Rip Fence and the miter gauge at the same time increases the likelihood of saw blade binding and kickback.*

d. **When ripping, always apply the workpiece feeding force between the fence and the saw blade.** *Use a push stick when the distance between the fence and the saw blade is less than 150mm, and use a push block when this distance is less than 50mm. "Work helping" devices will keep your hand at a safe distance from the saw blade.*

e. **Use only the push stick provided by the manufacturer or constructed in accordance with the instructions.** *This push stick provides sufficient distance of the hand from the saw blade.*

f. **Never use a damaged or cut push stick.** *A damaged push stick may break causing your hand to slip into the saw blade.*

g. **Do not perform any operation "freehand".** *Always use either the Rip Fence or the miter gauge to position and guide the workpiece. "Freehand' means using your hands to support or guide the workpiece, in lieu of a Rip Fence or miter gauge. Freehand sawing leads to misalignment, binding and kickback.*

h. **Never reach around or over a rotating saw blade.** *Reaching for a workpiece may lead to accidental contact with the moving saw blade.*

i. **Provide auxiliary workpiece support to the rear and/or sides of the saw table for long and/or wide workpieces to keep them level.** *A long and/or wide workpiece has a tendency to pivot on the table's edge, causing loss of control, saw blade binding and kickback.*

j. **Feed workpiece at an even pace.** *Do not bend or twist the workpiece. If jamming occurs, turn the tool off Immediately, unplug the tool then clear the jam. Jamming the saw blade by the workpiece can cause kickback or stall the motor.*

k. **Do not remove pieces of cut-off material while the saw is running.** *The material may become trapped between the fence or inside the saw blade guard and the saw blade pulling your fingers into the saw blade. Turn the saw off and wait until the saw blade stops before removing material.*

l. **Use an auxiliary fence in contact with the table top when ripping workpieces less than 2mm thick.** *A thin workpiece may wedge under the Rip Fence and create a kickback.*

9. **Kickback causes and related warnings**

Kickback is a sudden reaction of the workpiece due to a pinched, jammed saw blade or misaligned line of cut in the workpiece with respect to the saw blade or when a part of the workpiece binds between the saw blade and the **Rip Fence** or other fixed object.

Most frequently during **kickback**, the workpiece is lifted from the table by the rear portion of the saw blade and is propelled towards the operator.

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

a. **Never stand directly in line with the saw blade.** *Always position your body on the same side of the saw blade as the fence. Kickback may propel the workpiece at high velocity towards anyone standing in front and in line with the saw blade.*

b. **Never reach over or in back of the saw blade to pull or to support the workpiece.** *Accidental contact with the saw blade may occur or kickback may drag your fingers into the saw blade.*

c. **Never hold and press the workpiece that is being cut off against the rotating saw blade.** *Pressing the workpiece being cut off against the saw blade will create a binding condition and kickback.*

d. **Align the fence to be parallel with the saw blade.** *A misaligned fence will pinch the workpiece against the saw blade and create kickback.*

e. **Use a featherboard to guide the workpiece against the table and fence when making non-through cuts such as rabbeting, dadoing or resawing cuts.** *A featherboard helps to control the workpiece in the event of a kickback.*

f. **Use extra caution when making a cut into blind areas of assembled workpieces.** *The protruding saw blade may cut objects that can cause kickback.*

g. **Support large panels to minimise the risk of saw blade pinching and kickback.** *Large panels tend to sag under their own weight. Support(s) must be placed under all portions of the panel overhanging the table top.*

h. **Use extra caution when cutting a workpiece that is twisted, knotted, warped or does not have a straight edge to guide it with a miter gauge or along the fence.** *A warped, knotted, or twisted workpiece is unstable and causes misalignment of the kerf with the saw blade, binding and kickback.*

i. **Never cut more than one workpiece, stacked vertically or horizontally.** *The saw blade could pick up one or more pieces and cause kickback.*

j. **When restarting the saw with the saw blade in the workpiece, center the saw blade In the kerf so that the saw teeth are not engaged in the material.** *If the saw blade binds, it may lift up the workpiece and cause kickback when the saw is restarted.*

k. **Keep saw blades clean, sharp, and with sufficient set.** *Never use warped saw blades or saw blades with cracked or broken teeth. Sharp and properly set saw blades minimize binding, stalling and kickback.*

10. **Table saw operating procedure warnings**

a. **Turn off the table saw and disconnect the power cord when removing the table insert, changing the saw blade or making adjustments to the Riving Knife, anti-kickback device or saw blade guard, and when the machine Is left unattended.** *Precautionary measures will avoid accidents.*

b. **Never leave the table saw running unattended.** *Turn it off and don't leave the tool until it comes to a complete stop. An unattended running saw is an uncontrolled hazard.*

c. **Locate the table saw in a well-lit and level area where you can maintain good footing and balance.** *It should be installed in an area that provides enough room to easily handle the size of your workpiece. Cramped, dark areas, and uneven slippery floors invite accidents.*

d. **Frequently clean and remove sawdust from under the saw table and/or the dust collection device.** *Accumulated sawdust is combustible and may self-ignite.*

e. **The table saw must be secured.** *A table saw that is not properly secured may move or tip over.*

f. **Remove tools, wood scraps, etc. from the table before the table saw is turned on.** *Distraction or a potential jam can be dangerous.*

g. **Always use saw blades with correct size and shape (diamond versus round) of arbor holes.** *Saw blades that do not match the mounting hardware of the saw will run off-center, causing loss of control.*

h. **Never use damaged or incorrect saw blade mounting means such as flanges, saw blade washers, bolts or nuts.** *These mounting means were specially designed for your saw, for safe operation and optimum performance.*

i. **Never stand on the table saw, do not use it as a stepping stool.** *Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.*

j. **Make sure that the saw blade is installed to rotate in the proper direction.** *Do not use grinding wheels, wire brushes, or abrasive wheels on a table saw. Improper saw blade installation or use of accessories not recommended may cause serious injury.*

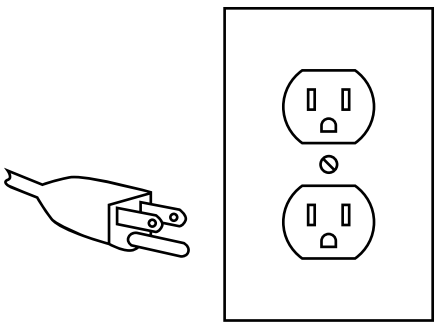
Grounding



⚠WARNING

TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION READ AND FOLLOW THESE INSTRUCTIONS:

Grounded Tools: Tools with Three Prong Plugs

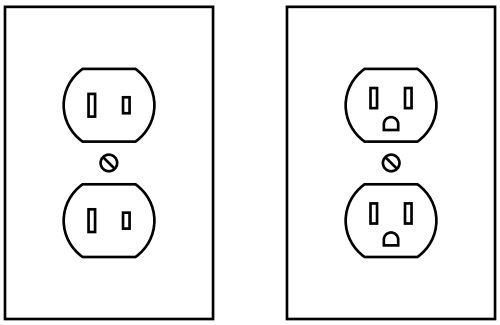


3-Prong Plug and Outlet

1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See 3-Prong Plug and Outlet.)**
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. **(See 3-Prong Plug and Outlet.)**

3. The tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the preceding illustration. **(See 3-Prong Plug and Outlet.)**

Double Insulated Tools: Tools with Two Prong Plugs



Outlets for 2-Prong Plug

1. Tools marked “Double Insulated” do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code.
2. Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. **(See Outlets for 2-Prong Plug.)**

Extension Cords

1. ***Grounded*** tools require a three wire extension cord. ***Double Insulated*** tools can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Table A.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Table A.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Table A.)**
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. **(See Table A.)**
6. If you are using an extension cord outdoors, make sure it is marked with the suffix “W-A” (“W” in Canada) to indicate it is acceptable for outdoor use.
7. Make sure the extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect the extension cords from sharp objects, excessive heat, and damp or wet areas.

TABLE A: RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120/240 VOLT)

NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH				
	25´	50´	75´	100´	150´
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

*** Based on limiting the line voltage drop to five volts at 150% of the rated amperes.**

Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud’s Disease should not use this tool. If you feel any medical or physical symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
3. Use tools with the lowest vibration when there is a choice between different processes.
4. Include vibration-free periods each day of work.
5. Grip workpiece as lightly as possible (while still keeping safe control of it). Let the tool do the work.
6. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.

Specifications

Electrical Rating	120VAC / 60Hz / 15A
Rated No. Load Speed	4800 RPM
Cutting Capacity at 90°	3-1/8″
Cutting Capacity at 45°	2-1/4″
Maximum Bevel	45°
Maximum Miter	90°
Saw Blade	10″ Diameter

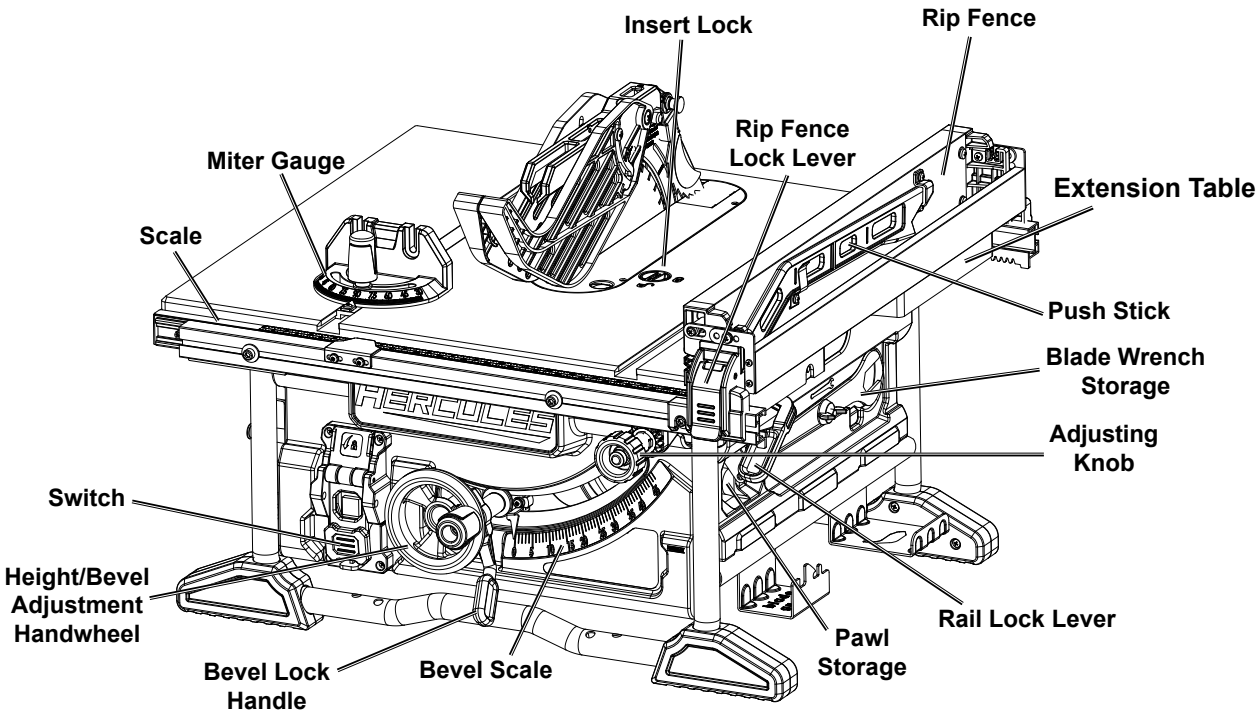
SETUP - BEFORE USE

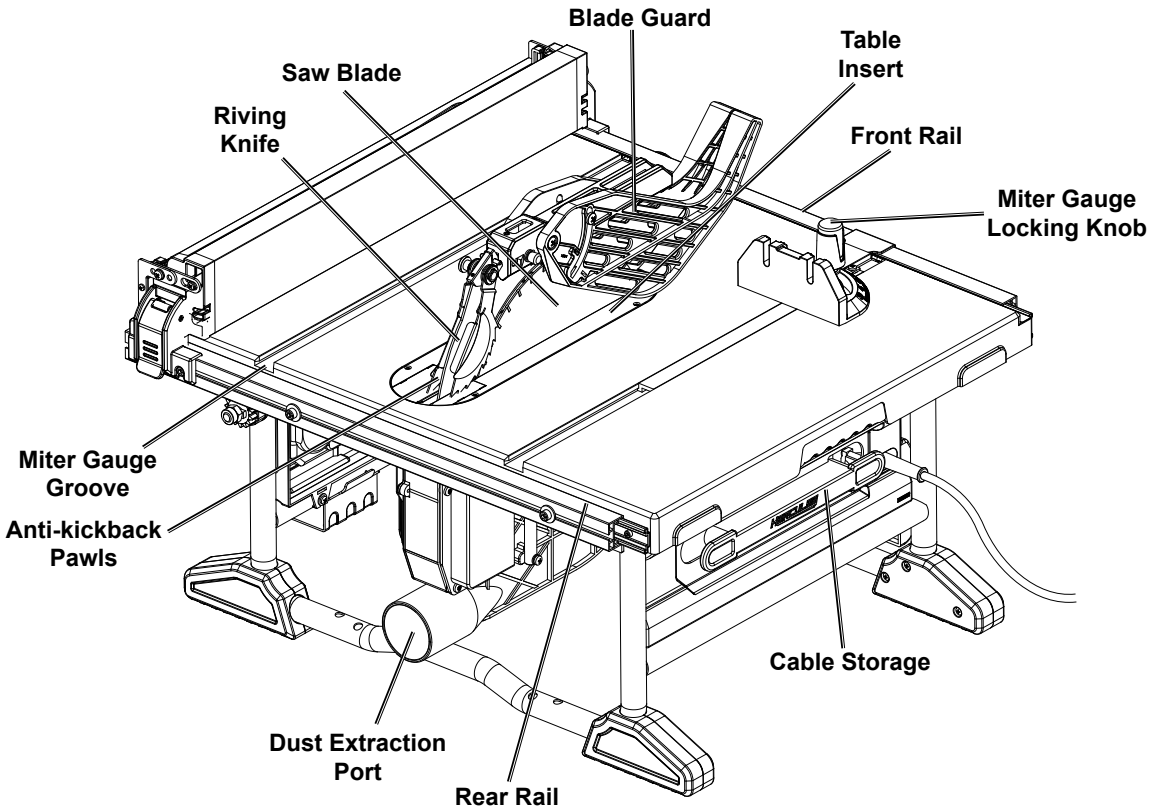
⚠WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Functional Description





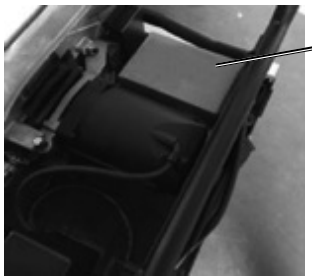
Assembly

Mounting Table Saw

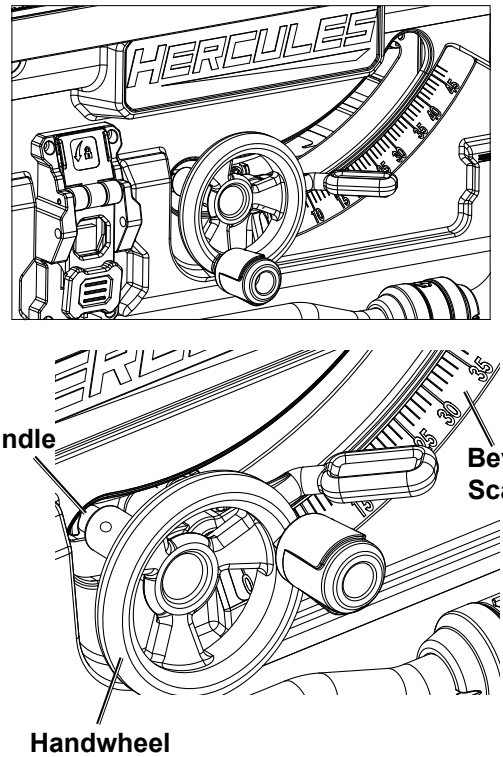
1. Select a workbench or mounting location that is able to support the weight of the Table Saw, plus any additional weight placed on it during use.
2. Make sure there are no hidden electric wires, cables or other obstructions that may interfere with the mounting procedure or cause a hazard.
3. Mark the mounting hole locations at the base of the Saw and drill the appropriate size holes for the mounting bolts (not included).
4. Mount the Saw using bolts, washers and nuts (not included).

Attaching the Handwheel

1. Remove Handwheel from its storage box located underneath the Table Saw.



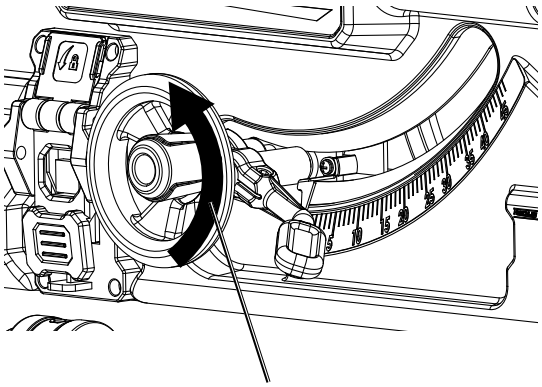
2. Remove tape and Set Screw from Handwheel.
3. Place Handwheel on Spindle and align holes on both the Spindle and Handwheel.



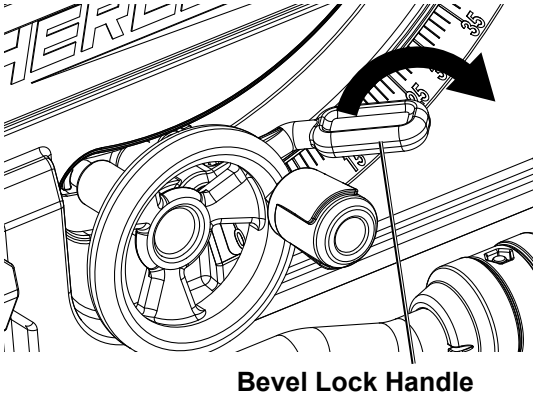
4. Use Set Screw to fasten Handwheel to the Spindle.
5. Tighten Set Screw.

Removing the Table Insert

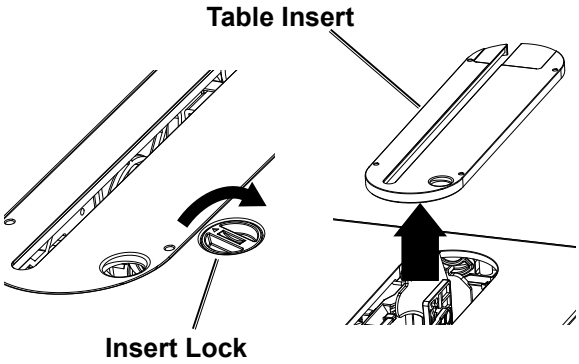
1. Lower the blade by turning the Height Adjustment Knob counter-clockwise.



2. Lock the blade by turning Bevel Lock Handle clockwise.



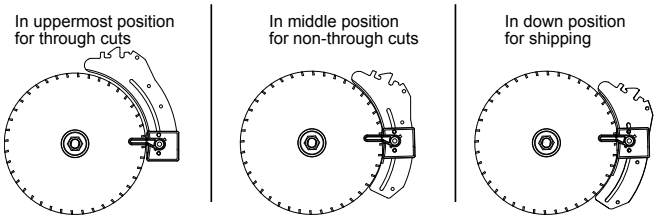
3. To remove Table Insert, turn the Insert Lock clockwise. Using finger hole on the insert, pull up and forward to expose the inside of the saw.



4. To reinstall the table insert: Push insert down in place and turn the Insert Lock counterclockwise.

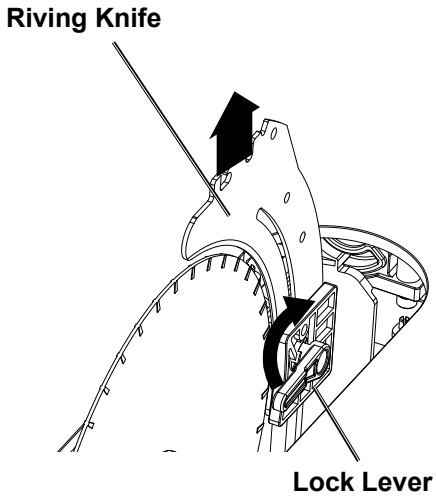
Adjusting Riving Knife

Note: Riving Knife has three mounting holes for three positions. The uppermost position is for all through cuts. The middle position is for non-through cuts (with blade guard and anti-kickback pawls removed). The down position is only used for shipping.

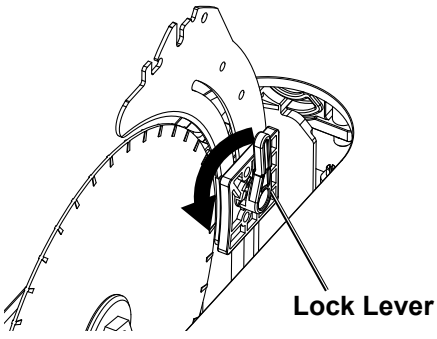


Note: Riving Knife follows the saw blade to keep the kerf (gap) from closing on the saw blade. Reposition the Riving Knife before initial use.

1. With Table Insert removed, rotate Lock Lever up and pull the Riving Knife toward right side of the saw to release it from lock pin. This will allow the knife to slide up and down.



2. Bring Riving Knife up so that the lock pin is re-engaged into bottom mounting hole.
3. Pull Lock Lever forward, locking Riving Knife in uppermost position.



4. Once the blade is installed and Riving Knife adjusted to its working setting, replace table insert.

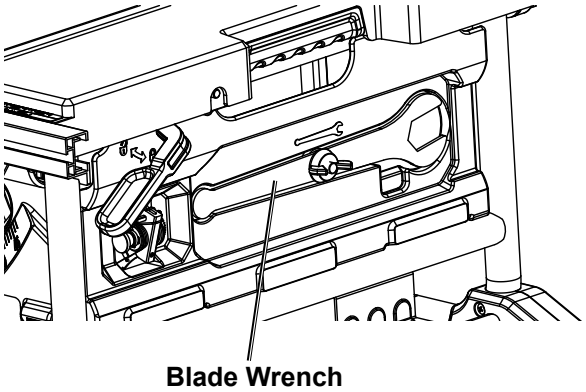
Removing and Installing the Blade

NOTICE: To work properly, the saw blade teeth must point down toward the front of the saw. Failure to heed this instruction could cause damage to the saw blade, the saw or the workpiece.

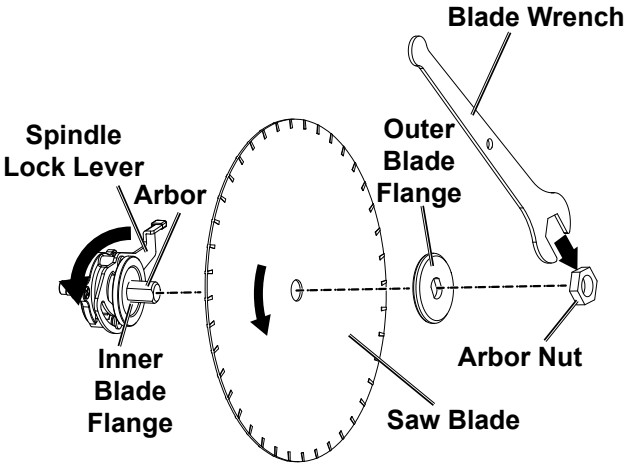
WARNING! Make sure that the saw blade is installed to rotate in the proper direction. Do not use grinding wheels, wire brushes, or abrasive wheels on a table saw. Improper saw blade installation or use of accessories not recommended may cause serious injury. When installing the saw blade, wear protective gloves. Danger of injury when touching the saw blade.

WARNING! Only use a 10″ saw blade with a 5/8″ arbor, rated to at least 4,800 RPM and intended for woodcutting. To avoid serious injury from an accidental start, make sure the switch is in the OFF position and the plug is not connected to the power source outlet.

1. To remove the blade, unplug saw. Turn Height Adjustment Knob clockwise to raise blade to maximum height. Remove Table Insert.
2. Remove the Blade Wrench from storage area.



3. Turn the Arbor Nut with the blade wrench and at the same time, pull Spindle Lock Lever until it engages. Keep lever pulled and loosen nut by turning in a counterclockwise direction.
4. Remove Arbor Nut, Outer Blade Flange and Saw Blade.



Note: All parts must be clean before assembly.

5. To install the blade, place new saw blade onto the Inner Blade Flange of the tool arbor.

WARNING! TO PREVENT SERIOUS INJURY: When installing the saw blade, make sure that the saw blade teeth point down at the front side of blade.

6. Place Outer Flange and Arbor Nut on arbor.
7. Turn Arbor Nut with the blade wrench and at the same time, pull the Spindle Lock Lever until it engages.
8. Tighten arbor nut in a clockwise direction. DO NOT overtighten.
9. Lower the saw blade completely and replace Table Insert.
10. Once the saw blade is secured, adjust the Riving Knife and install Anti-kickback Pawls and Blade Guard.

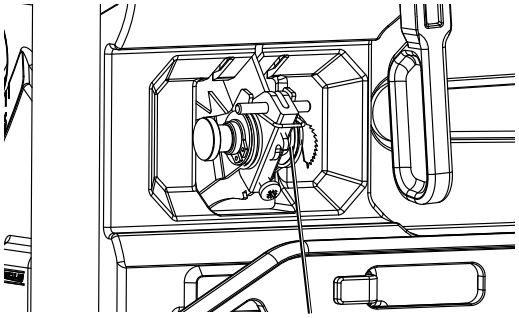
Installing Anti-Kickback Pawls

Note: Anti-kickback pawls should only be installed for through cuts.

WARNING! Make sure that the pawls are reinstalled immediately after finishing any non-through cut operations which require their removal.

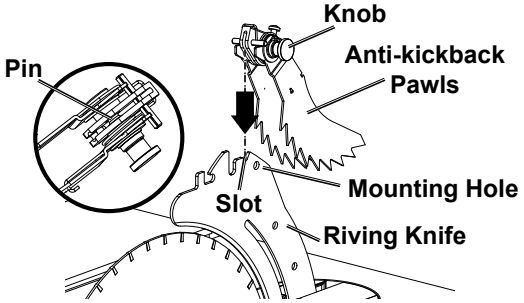
WARNING! Replace dull or damaged anti-kickback pawls. Dull or damaged anti-kickback pawls may not stop a kickback, increasing the risk of serious personal injury.

1. Unplug the saw.
2. Set the blade angle to 0°. Raise the saw blade to maximum height by turning Height Adjustment Knob clockwise. Lock the blade by turning Bevel Lock Handle clockwise.
3. Place Riving Knife in its highest position.
4. Remove pawls from the storage compartment by pulling out and holding knob, then pushing pawls down.



Anti-kickback Pawls

5. Secure pawls by placing over Riving Knife until they snap securely into the Mounting Hole.



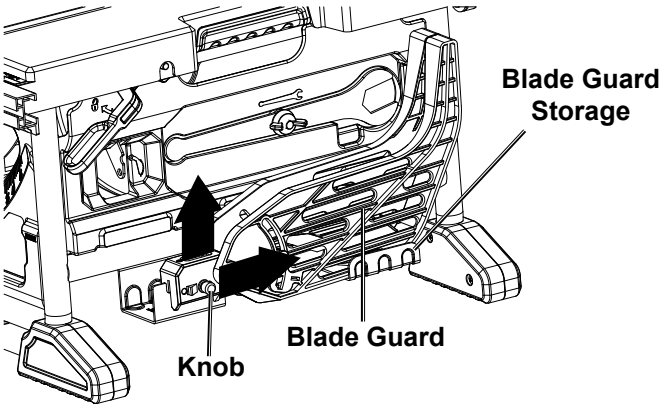
Note: Pull up on Pawls assembly to make sure it is secured to Riving Knife.

WARNING! TO PREVENT SERIOUS INJURY: Use extra caution when cutting wood with slippery surface as the anti-kickback pawls may not always be effective.

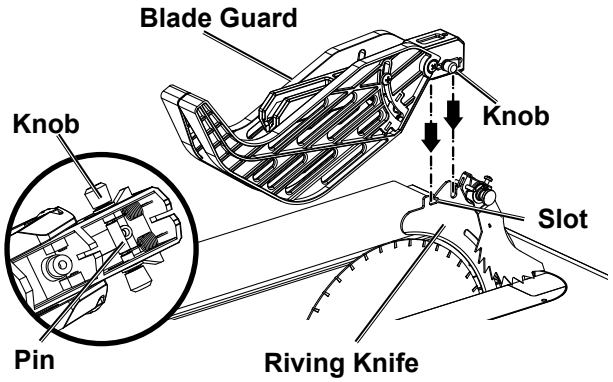
Installing the Blade Guard

WARNING! KEEP GUARD IN PLACE and in good working order for all through cut operations. Reinstall blade guard immediately after finishing any non-through cut operations which require removal of the blade guard. Failure to heed this instruction could result in serious personal injury.

1. Unplug the saw.
2. Hold the knobs (one on either side of the blade guard) and push knobs forward to the front of the Blade guard.
3. Push up until the pin comes out from the slot in the mounting bracket (blade guard storage) at bottom right side of the saw, then remove Blade Guard.



4. Hold and push knobs forward to the front of the Blade Guard. Place the blade guard pin into the slot indicated on Riving Knife. Pull blade guard fully back onto knife. Push pin and release it to lock guard into position.



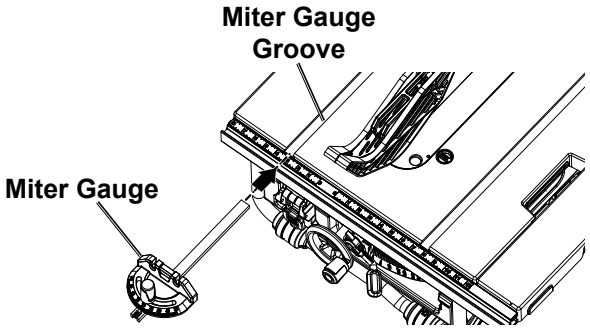
5. If blade guard is not parallel to working table when Riving Knife is in uppermost position (through cuts), adjust the set screw as necessary.

WARNING! TO PREVENT SERIOUS INJURY: After the installation, check the blade guard to ensure that it is properly placed and working before operation of the saw.

Installing the Miter Gauge

Note: The Miter Gauge can be installed in either miter gauge groove on either side of blade.

Slide the Miter Gauge into one of the guide grooves.



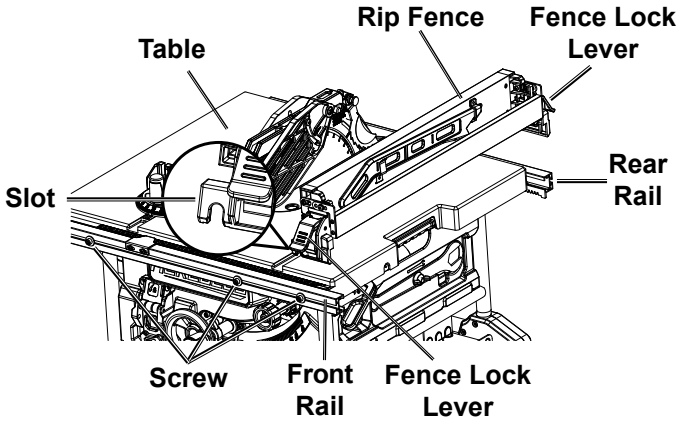
Installing the Rip Fence

Note: The Rip Fence can be installed on either side of blade.

1. Raise Rip Fence Lock Levers on each side of the Rip Fence.

Note: There are three Screws located on both the Front & Rear Rails. The Screws will be used to attach Rip Fence to rails.

2. Align the slot on Rip Fence with the corresponding screw.
3. Place Rip Fence on the rail so that the slot latches onto screw and secure Fence to Rails by pushing Fence Lock Levers down.



WARNING! Make sure Rip Fence is perfectly parallel to the blade and completely locked in place to prevent kickback.

WARNING! TO PREVENT SERIOUS INJURY: Do not use Rip Fence when cutting across wood grain (crosscutting).

Dust Collection System

The dust extraction port is located on the back of the table saw. This port can be connected directly to a dust collection system by connecting the pick up end of the dust collection hose to the dust port.

OPERATION

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

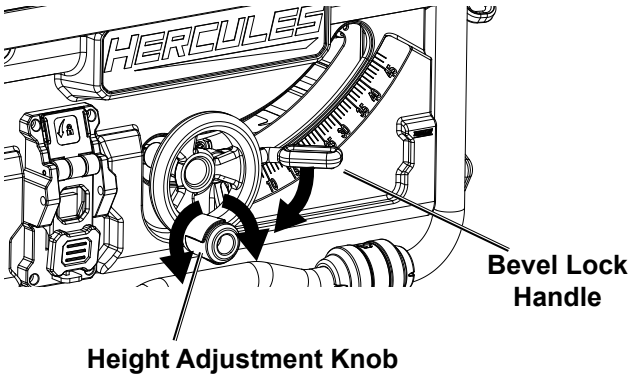
⚠WARNING

TO PREVENT SERIOUS INJURY: Read the miter saw manufacturer's instruction manual before use. Ensure that the miter saw is firmly secured to the stand. Use as a miter saw stand only – do not use with any other type of power tool. Do not exceed listed weight capacity. Do not use on uneven or slippery surfaces.

Changing Blade Depth

Note: Blade depth should be set so that outer points of blade are higher than workpiece by approximately 1/8″ to 1/4″ and bottom of gullets are below top surface of workpiece.

1. Turn Bevel Lock Handle clockwise to tighten it securely.
2. Raise blade by turning Height Adjustment Knob on the height/bevel adjusting handwheel clockwise. Lower blade by turning height knob counterclockwise. Make sure blade is at proper height.

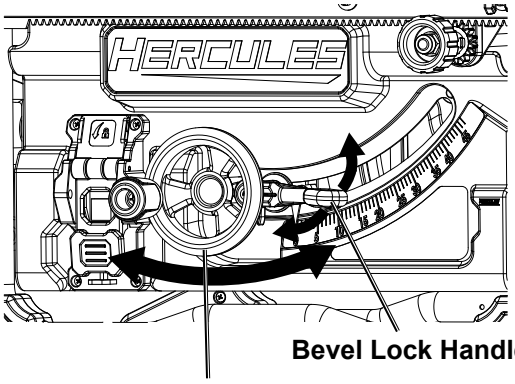


WARNING! Make sure the blade guard is in place after adjusting the blade depth. Failure to heed this instruction could result in serious personal injury.

Changing Blade Angle

Note: A 90° cut has a 0° bevel and a 45° cut has a 45° bevel.

1. Loosen the bevel lock handle counter-clockwise.
2. Adjust bevel angle by first pushing Height/ bevel Handwheel all the way to the left.
3. Hold handwheel and slide bevel indicator to the right to increase angle of blade (bringing blade closer to 45° from the tabletop).
4. Hold handwheel and slide bevel indicator to the left to decreases the angle (bringing blade closer to 90° from the tabletop).



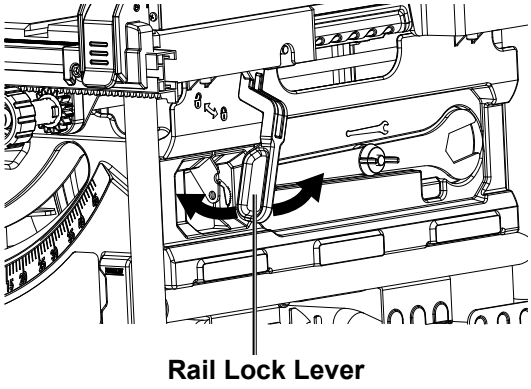
5. Make sure blade is at desired angle. Tighten Bevel Lock Handle clockwise.

Rip Fence Operation

Rail Lock Lever

Note: The Rail Lock Lever allows the customer to adjust the Rip Fence position by moving the Rail itself.

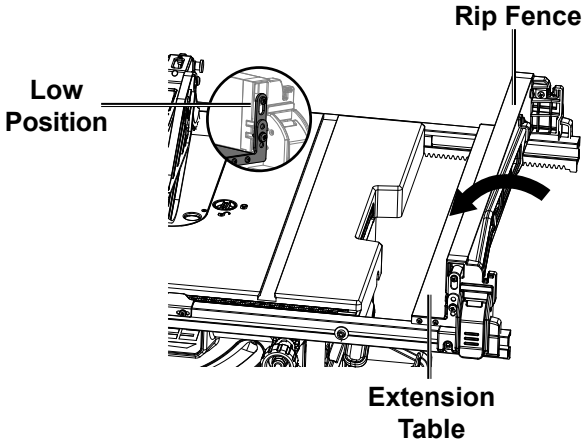
1. To lock the Rail Lock Lever, push lever up and towards the front of the Saw.
2. To unlock, push lever down and towards the back end of the Saw.



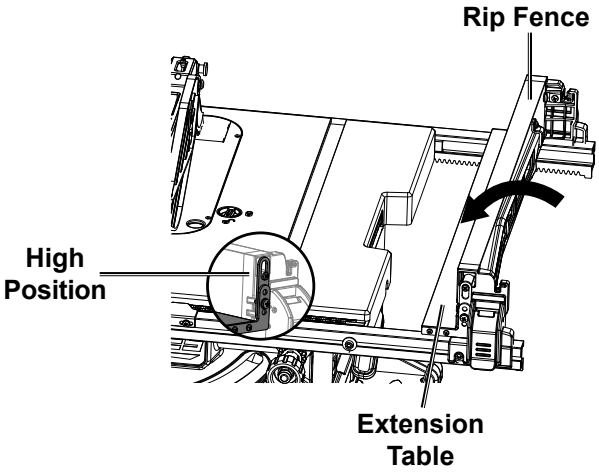
Extension Table

Note: The Extension Table can be used to support a workpiece that extends in size beyond the working table, or for a very narrow workpiece.

1. To support a workpiece that extends beyond the working table, secure Extension Table to Rip Fence in the lower position. See below.



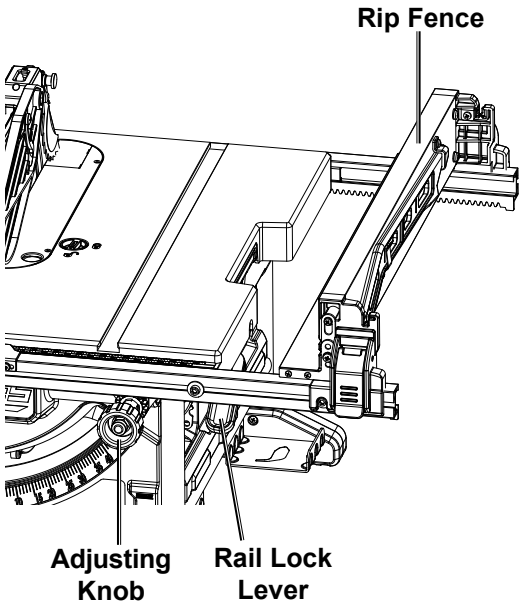
2. For work on a narrow workpiece, secure Extension Table to Rip Fence in the higher position. See below.



Adjusting Knob

Note: The Adjusting Knob allows the customer to make precise adjustments when setting the Rip Fence.

1. Unlock the Rail Lock Lever.
2. Slide Rip Fence close to the desired position.
3. Slowly turn the Adjusting Knob to fix the Rip Fence to desired position. Turn the Adjusting Knob clockwise to move Fence Rail to the right. Turn the Adjusting Knob counter-clockwise to move Fence Rail to the left.

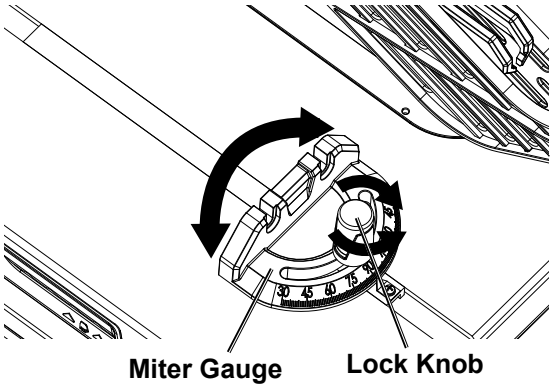


4. Lock the Rail Lock Lever.

Changing Miter Angle

Note: The miter gauge provides accuracy in angle cuts. For very close tolerances, test cuts are recommended. When making a 90° cross cut, use either miter gauge groove. When making a beveled cross cut (blade tilted in relation to working table) miter gauge should be located in groove on right so that blade is tilted away from the miter gauge and hands.

1. Loosen Lock Knob by turning counterclockwise.
2. With Miter Gauge in the miter gauge groove, rotate gauge until desired angle on scale is reached.



3. Tighten Lock Knob by turning it clockwise.

Workpiece and Work Area Set Up

1. Designate a work area that is clean and well lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage. The power cord must reach the work area with enough extra length to allow free movement while working.
3. Secure loose workpieces using a vise or clamps (not included) to prevent movement while working.
4. There must not be objects, such as utility lines, nearby that will present a hazard while working.
5. Cut only the following materials:

   dimensional lumber, plywood, particle board.

General Operating Instructions

Placement of Hands during Cutting Process

1. Review safety warnings at the beginning of the manual before performing any cutting procedure. Keep all guards in place and in working order.
2. Do not pass hands directly over the saw blade when cutting the workpiece. Push the workpiece into the saw blade using a push stick, push block or by holding the workpiece against the miter gauge.

WARNING! SAFE CUTTING PROCEDURES VARY DEPENDING ON THE TYPE OF CUT. TO PREVENT SERIOUS INJURY FROM KICKBACK:

Use Rip Fence for every Rip Cut (cut along with the grain).

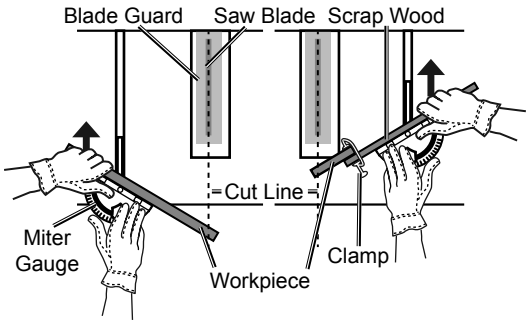
BUT

Do not use Fence for any crosscut (cut against the grain).

Rip Cuts

1. Rip cuts are straight cuts made parallel to (along with) the grain of the wood by sliding the workpiece along the fence.
2. For workpieces wider than 6″ hold the workpiece, staying clear of the saw blade. For workpieces 2″ and 6″, use the included push stick or make a push stick as described in the safety section of this manual. Use a push block (not included) when ripping widths under 2″.
3. When ripping, always use the Rip Fence. This improves the accuracy of the cut, and reduces the chance for saw blade binding.

Crosscuts/Miter Cuts



1. Adjust the miter gauge to the needed angle and place it in the left or right miter gauge groove on the working table.
2. Hold the workpiece against the miter gauge, and slide them together to make the cut. Clamp smaller workpieces to a piece of scrap wood that can reach beyond the miter gauge and hold the scrap against the gauge while making the cut. Keep the clamp clear of the saw blade.

Making a Cut

1. After adjusting the width and/or angle of the cut, make sure that the Trigger is in the off-position and plug the Table Saw into a grounded 120V outlet.
2. Insert the Switch Key and turn the Switch on.

WARNING! Avoid bevel ripping on bevelling side of the saw blade.

WARNING! TO PREVENT SERIOUS INJURY: The tool will restart automatically if stalled.

3. At the start of the cut, the left hand holds the workpiece firmly on the Work Table (and against the Fence, if used), and the right hand, with the aid of a Push-stick, pushes the workpiece toward the turning Saw Blade. Keep both hands out of the path of the Saw Blade.

WARNING! TO PREVENT SERIOUS INJURY: Throughout the cut, keep all body parts a safe distance from the spinning Blade.

4. After the cut is under way, use the Push Stick to continue guiding the workpiece forward. Just before the cut is completed, move the left hand safely farther away from the workpiece and the Saw Blade. Continue pushing the workpiece into the Saw Blade with the Push Stick until the cut is complete.
5. Once the cut is complete, continue to maintain control of the workpiece. Turn the Switch off. Then, wait until the Saw Blade completely stops rotating before removing the workpiece.
6. To prevent accidents, turn off the Table Saw, remove the key and disconnect its power supply after use. Clean, then store the Saw indoors out of children's reach.

MAINTENANCE AND SERVICING

Procedures not specifically explained in this manual must be performed only by a qualified technician.

⚠WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.
TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:
Do not use damaged equipment.
If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

1. **BEFORE EACH USE,** inspect the general condition of the tool. Check for:
   - loose hardware
   - misalignment or binding of moving parts
   - cracked or broken parts
   - damaged electrical wiring
   - any other condition that may affect its safe operation.
2. **AFTER USE,** wipe external surfaces of the tool with clean cloth.
3. ⚠**WARNING! TO PREVENT SERIOUS INJURY: If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.**

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

HERCULES®

PARTS LIST AND DIAGRAM

Parts List

Part	Description	Qty
1	Cross Head Tapping Screw	9
2	Emergency Stop Panel	1
3	Pin	1
4	Screw	1
5	Handle	1
6	Flat Washer	29
7	Wheel	1
8	Locknut	1
9	Pan Head Screw	3
10	Bevel Scale Label	1
11	Saddle Shape Washer	1
12	Lock Rod	1
13	Lock Handle	1
14	Big Flat Washer	3
15	Lock Washer	1
16	Pan Head Screw	9
17	Flat Washer	6
18	Angle Pointer	1
19	Front Panel	1
20	Big Flat Washer	9
21	Cross Head Tapping Screw	25
22	HS Bolt	2
23	Reinforced Panel	1
24	Eccentric Limit Block	2
25	HS Bolt	20
26	Spring Washer	24
27	Switch Box	1
28	Cord Clamp	1
29	Front-Left Foot,A	2
30	Main Frame	1
31	Front-Left Foot,B	2
32	Cross Head Tapping Screw	12
33	Back-Left Foot,A	2
34	Back-Left Foot,B	2
35	HS Bolt	8
36	Spring Washer	12
37	Flat Washer	14
38	Pad	4
39	Hex Bolt	1
40	Storage Clip Plate	1
41	Push Stick	1
42	Wing Nut	1
43	Wrench	1
44	Hex Thin Nut	4
45	Right Panel	1
46	Low Blade Guard Cover	1
47	Protection Plate	1

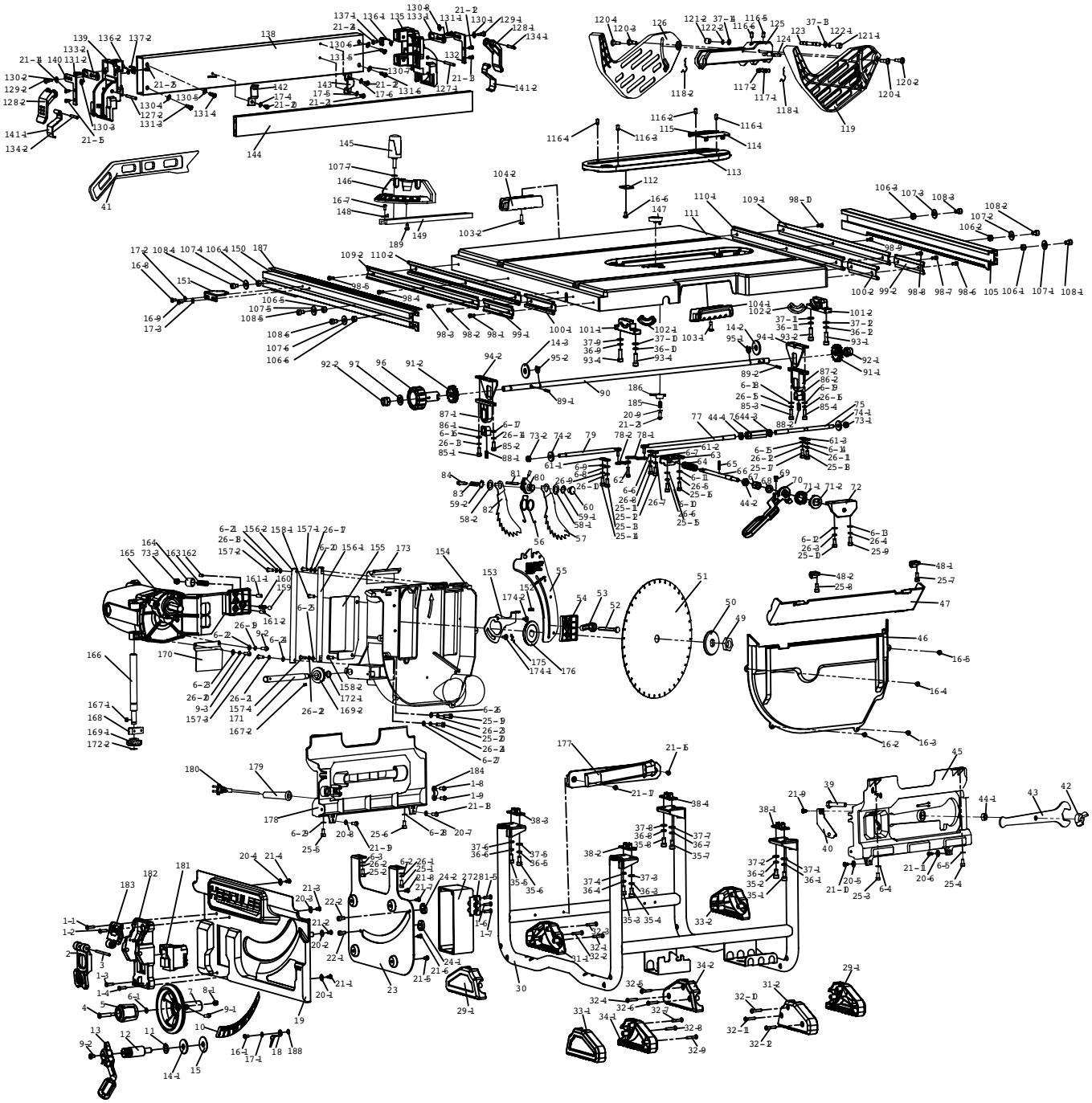
Part	Description	Qty
48	Bracket	2
49	Hex Thin Nut	1
50	Out Flange	1
51	Saw Blade	1
52	Bolt	1
53	Eccentric Handle	1
54	Cam Plate	1
55	Riving Knife	1
56	Spring	1
57	Paw	1
58	Washer	2
59	Ring	2
60	Pin Knob	1
61	HS Bolt	1
62	Plate	3
63	Limit Plate,B	1
64	Table Lock Spring	1
65	Elastic Pin	1
66	Lock Rod	1
67	Longer Nut,M8,B	1
68	Flat Washer	1
69	Bolt	1
70	Lock Handle	1
71	Lock Block A	2
72	Limit Plate A	1
73	Locknut	3
74	Washer	2
75	Table Locking Rod A	1
76	Longer Nut,M8	1
77	Lock Rod B,Assembly	1
78	Lock Link	2
79	Lock Rod C,Assembly	1
80	Bracket	1
81	Pin	1
82	Anti-Kick Back Palte Left	1
83	Spring	1
84	Pin	1
85	H.s.bolt	4
86	Adjusting Bracket,C	2
87	Adjusting Bracket	2
88	Spring	2
89	Pin	2
90	Rod	1
91	Gear	2
92	Nut	2
93	HS Bolt	4
94	Bracket A	2

Parts List (cont'd)

Part	Description	Qty
95	Ring	2
96	Knob	1
97	Flat Washer	1
98	HS Bolt	10
99	Fix Rail A	2
100	Friction Rule A	2
101	Fixed Seat	2
102	Sliding Plate	2
103	Cross Head Screw	2
104	Carry Handle	2
105	Back Rail	1
106	Nut	6
107	Big Flat Washer	6
108	Bolt	6
109	Fix Rail B	2
110	Friction Rule B	2
111	Working Table	1
112	Lock Plate	1
113	Table Insert	1
114	Protection Plate A	1
115	Protection Plate B	1
116	Bolt	6
117	Spring	2
118	Clip	2
119	Right Guard	1
120	Guard Bolt	4
121	Pin Cap	2
122	Ring	2
123	Pin	1
124	Limit Pin	1
125	Support Bracket	1
126	Left Guard	1
127	Pin	2
128	Handle	2
129	Screw	2
130	Washer	8
131	Cross Head Tapping Screw	6
132	Side Fence Cover B	1
133	Sid Fence Cover A	2
134	Pin	2
135	Fence Rear Cover	1
136	Position Clip	2
137	Position Plate	2
138	Fence	1
139	Fence Front Cover	1
140	Side Fence Cover C	1
141	Lock Plate	2
142	Fence Clip B	1

Part	Description	Qty
143	Fence Clip A	1
144	Side Fence	1
145	Miter Gauge Lock Handle	1
146	Miter Gauge	1
147	Lock A	1
148	Pointer	1
149	Sliding Bar	1
150	Front Rail	1
151	Pointer	1
152	Cap	1
153	Spindle Lock Plate	1
154	Main Body	1
155	Cover	1
156	Guide Pillar	2
157	Cross Head Screw	4
158	Cross Head Screw	2
159	Ball 8	1
160	Spring	1
161	Pin 6	2
162	Bolt	1
163	Spring	1
164	Sleeve	1
165	Motor	1
166	Ascent Adjusting Rod B	1
167	Key	2
168	Ascent Adjusting Bracket	1
169	Bevel Gear Wheel	2
170	Protection Plate	1
171	Adjusting Rod	1
172	Retaining Ring	2
173	Protection Plate	1
174	Screw B	2
175	Spring	1
176	Inner Flange	1
177	Miter Gauge Storage	
178	Left Panel	
179	Cord Sleeve	1
180	Cord & Plug	1
181	Switch	1
182	Switch Fix Bracket	1
183	Switch Lock	1
184	Cord Clamp	1
185	Spring	1
186	Lock Block A	1
187	Scale Label	1
188	Teeth Washer	1
189	Screw	1

Assembly Diagram



For technical questions, please call 1-888-866-5797.

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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