



IMT-PRO RAIL SAW FOR GRANITE IP500S



General Power Tool Safety

Warnings

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.

The term "power tool" in the warnings refers to your (corded) power tool.

Work area safety

1. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
2. 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.
3. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical Safety

4. Power tool (GFCI) protected plug must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plug and matching outlets will reduce risk of electric shock.
5. **Avoid body contact with earthed or grounded surfaces. There is an increased risk of electric shock if your body is earthed or grounded.**
6. **Always wear rubber gloves when handling the power tool. Failure to wear protective gloves when the power tool is connected to the power source will increase the risk of electric shock.**
7. **Do not expose power tool to rain or wet conditions. Water entering a power tool will increase the risk of electric shock. Direct the water to the blade only. The motor must remain dry at all times.**
8. 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.
9. 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.
10. **Always use a ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

Personal Safety

11. 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.
 12. 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.**
 13. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tool that have the switch on invites accidents.
 14. 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.
 15. **Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.**
 16. 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.
 17. 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.
- Power tool use and care
18. Do not force the power tool.
 19. 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.
 20. Disconnect the plug from the power source 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.
 21. 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.
 22. Maintain power tool. 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.
 23. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
 24. Use the power tool, accessories, 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.

SERVICE

24. 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.

25. Follow instruction for lubricating and changing accessories.

26. Keep handles dry, clean and free from oil and grease.

USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current the power tool will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Use 14 AWG extension cord for up to 25ft and 12 AWG cord for up to 50ft. Using extension cord longer than 50ft is not recommended. The smaller the gage number, the heavier the cord.

SPECIFIC SAFETY RULES

DO NOT let comfort or familiarity with product(gained from repeated use) replace strict adherence to power saw safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

DANGER:

1. Keep hands away from cutting area and the blade. Keep your second hand on grip handle at all times. If both hands are holding the saw, they cannot be cut by the blade.

2. Do not reach underneath the material. There is no guard to protect you from the blade below the material.

3. Adjust the cutting depth to the full thickness of the material to be cut. Lower the blade to the maximum.

4. Secure the material to be cut to stable platform. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.

5. **Wear rubber gloves at all times when operating this power tool.** When in operation the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will also make exposed metal parts of the power tool "live" and shock the operator.

6. Always use blades with correct size and shape (diamond versus round) of arbor holes. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.

7. Never use damaged or incorrect blade washers or bolt. The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

8. Blade stalling.

If the blade becomes twisted or misaligned in the cut or when blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Investigate and take corrective actions to eliminate the cause of blade binding.

- Do not use dull or damaged blades. Unsharpened or improperly set blades cause excessive friction, blade binding and kickback.

- Blade depth lever must be tight and secure before making cut. If blade adjustment shifts while cutting, it may cause binding and kickback.

10. **There is no lower guard to protect the operator from the blade. Take extra precaution when power tool is in operation. Be aware of the time it takes for the blade to stop after switch is released.**

11. ALWAYS hold the tool firmly with both hands. NEVER place your hand or fingers behind the saw. If kickback occurs, the saw could easily slide backwards, leading to serious personal injury.

12. Never force the saw. Push the saw forward at a speed so that the blade cuts without slowing. Forcing the saw can cause uneven cuts, loss of accuracy, and possible kickback.

13. Use extra caution when cutting hard materials. Adjust speed of cut to maintain smooth advancement of tool without decrease in blade speed.

14. Do not attempt to remove cut material when blade is moving. Wait until blade stops before grasping cut material. CAUTION: Blades coast after turn off.

15. Wear a dust mask and hearing protection when using the tool.

16. Do not remove the carriage from the rail with power tool still attached. Detach power tool from carriage first before sliding the carriage off the rail.

SAVE THESE INSTRUCTIONS.

WARNING:

MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

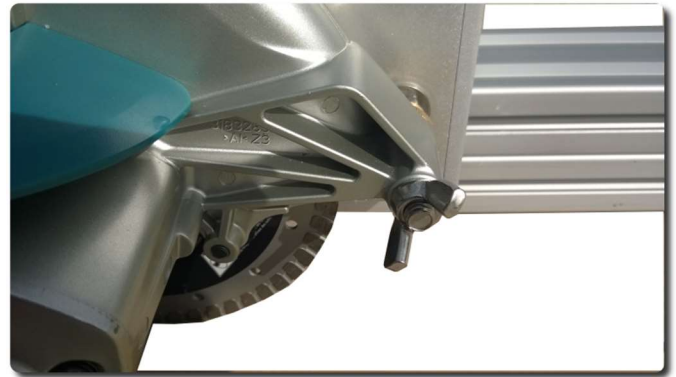
CAUTION!

ROUTINELY INSPECT AND REPLACE WORN CUTTING BLADES!

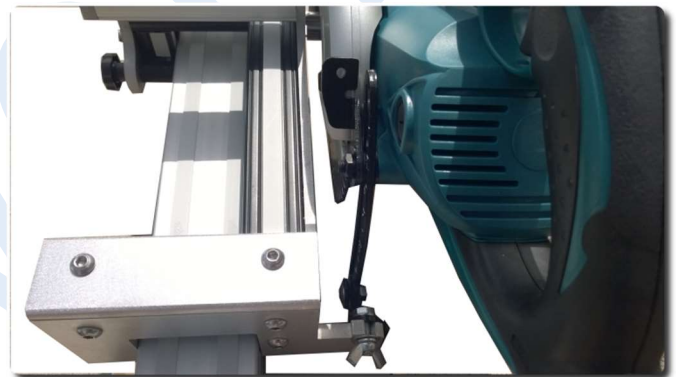
DO NOT APPLY TOO MUCH FORCE TO THE MACHINE WHILE CUTTING MATERIAL!

Let the machine do the work. Too much force applied to the machine while cutting hard materials with dull blade can cause premature failure of the motor and VOID THE WARRANTY!

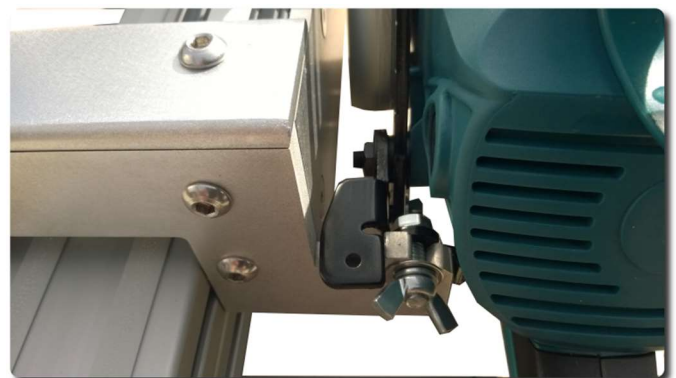
2. Using one hand slowly slide the motor onto the shaft located in front of the carriage. Insert the wing nut and tighten securely while holding the back of the tool with the other hand.



3. Locate the second point of attachment in the back side of the carriage.
4. Loosen the lever on the depth guide and lift the cutting blade.



5. Gently lower the back of the motor until the mounting bolt sits firmly in the place.
6. Make sure the mounting bolt sits all the way down in the slot.
7. Tighten the wing nut and the level on the depth guide.

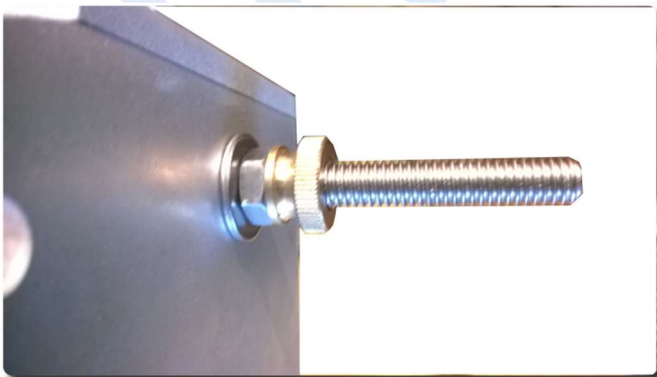


POWER TOOL SET UP

Detach motor from the carriage before attaching carriage to the rail.

Move the carriage to the front and back of the rail at least two times before the first set up.

1. Locate the first point of attachment in the front side of the carriage



SET UP

1. Lock the brakes. Detach motor from the carriage.



2. Slide the clamps toward each end of the rail.
3. Place the rail with the carriage on top of the material to be cut.



4. Slide both rail clamps closer to the edge of material.
5. Unlock the brakes. Slide carriage to one side of material
6. Line up reference point on the carriage with first marked cutting location
7. Make necessary adjustments to the rail
8. Slide carriage to the opposite side of material
9. Line up reference point on the carriage with second marked cutting location
10. Make necessary adjustment to the rail

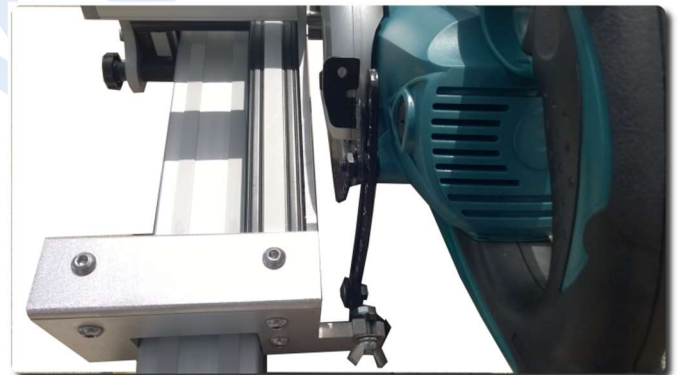
11. Lock down both rail clamps. Make sure the clamping force holding the rail in place is sufficient for proper saw operation

SET UP- ALTERNATE METHOD

1. Place the rails on top of the material to be cut.
2. Using the ruler or any other measuring guide- position the rail at the exact cutting location minus the distance between the cutting blade and the rail.
3. Slide both clamps to the edge of material
4. Lock down both rail clamps. Make sure the clamping force holding the rail in place is sufficient for proper saw operation

SET UP- ALTERNATE METHOD 2

1. Place the rail on top of the material to be cut. Move the rail closer to cutting location.
2. Slide both clamps to the edge of material.
3. Lock down both rail clamps.



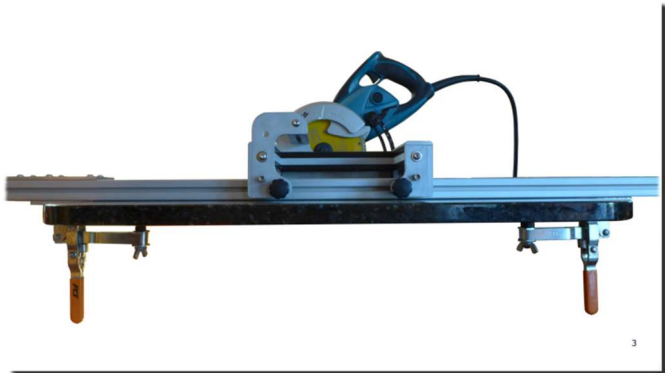
4. Loosen the lever on the depth guide of the motor and lift the cutting blade to above Makita saw plate. Make sure the edge of the blade sits above the material to prevent any potential scratching of material when sliding the carriage with the motor. Tighten the level on the depth guide.
5. Slide the carriage with the motor on the rail. Make sure the edge of the blade sits above the material to prevent any potential scratching of material when sliding the carriage with the motor. Move the carriage with the motor to the middle of the rail.
6. Adjust the feet on both clamps and lock both clamps down without exerting any pressure on material. The rail should be firmly attached to the material but still be allowed to slide sideways to perform rail adjustments.
7. Slide the carriage with the motor to the side of the material where you plan to start the cut.
8. Slide the carriage with the motor closer to the material.

9. Make necessary adjustment to the rail. Line up the cutting blade with cutting location.

10. Make adjustments to the first clamp and lock it down securely. Make sure the clamping force holding the rail in place is sufficient.

11. Slide the carriage with the motor to the opposite side of material. Line up the cutting blade with the second cutting location.

12. Make adjustments to the second clamp and lock it down securely. Make sure the clamping force holding the rail in place is sufficient.



6. Wear rubber gloves when handling machine under power to prevent any accidental electrical shock.

7. Plug in the power tool. Switch GFCI on.

8. Open the valve. Adjust the nozzle to direct continuous stream of water to the edge of the cutting blade. Adjust the flow. The motor and all electrical components of the motor must remain dry at all times.

9. Position left hand on the grip handle while placing the right hand on the power tool handle.

10. Pull the switch trigger to start the motor.

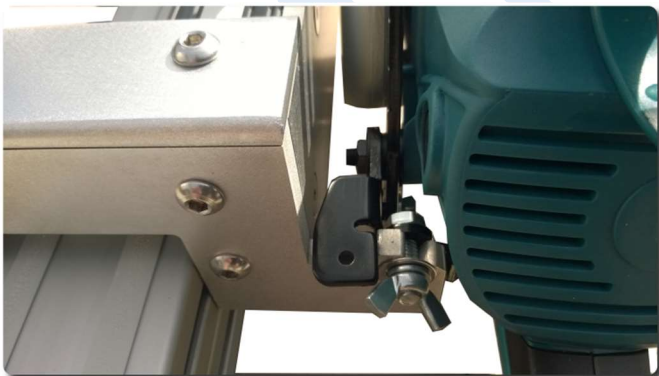
11. Try to apply even pressure when cutting material. Push the saw forward at a speed so that the blade cuts without slowing. Adjust speed of cut to maintain smooth advancement of tool without decrease in blade speed.

OPERATION

1. Make sure material is properly supported on all sides. Slide the carriage to the side of the material where you plan to start the cut.

2. Lock the brakes. Attach the power tool to the carriage.

3. Loosen the lever on the depth guide and lower the cutting blade. Tighten the level on the depth guide.



4. Cut full depth of the material in one pass.

5. Hook up the water hose.

CAUTION!

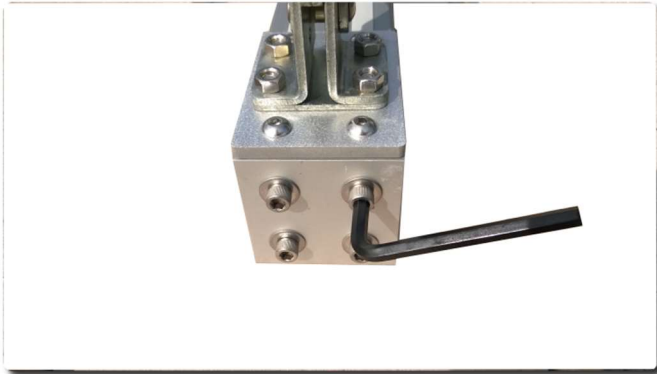
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STANDARD PROCEDURES & MAINTENANCE

1. Rail disconnection. Unscrew four bolts on each side of the rails and remove both rail plates. Detach the bottom rail. Install two smaller plates on both sides the rail. Use each rail separate. The rail plates must be attached to the rail at all times to accidental damage to the ends of the rail.



2. Carriage wheel tension adjustments. Using hex Allen wrench loosen the bearing bolt. 1/8th of the turn in counter clock direction should be sufficient for making tension adjustments. Insert hex Allen wrench in the tension knob screw. Clockwise rotation adds tension to the wheel. Counter clockwise rotation removes tension from the wheel. Tighten the bearing bolt when done.



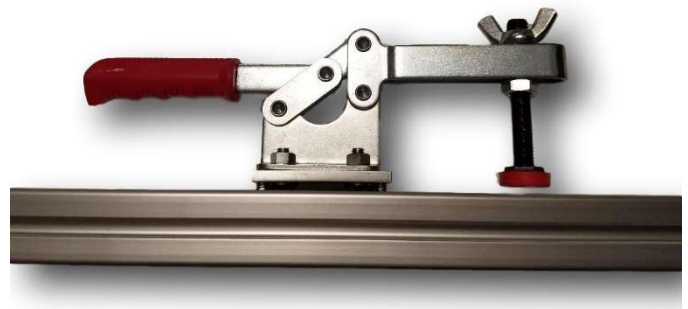
3. Rail clamps in three main positions.



Rail clamp in open position



Rail clamp in ready to lock position

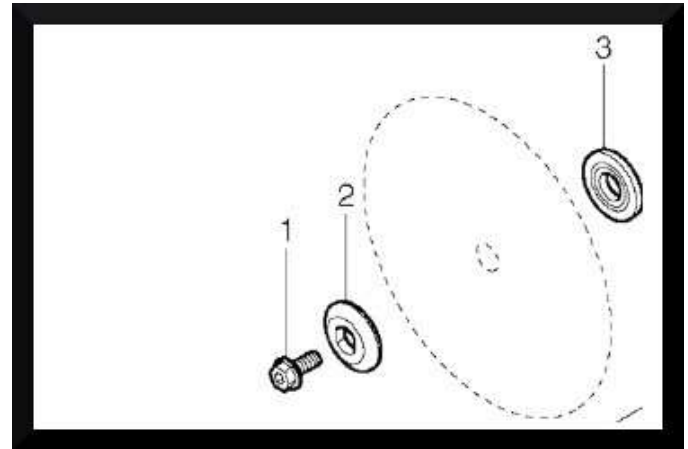


Rail clamp in locked position

The rail clamps in locked position can be used by two people as carrying handles to help in moving the rail with the carriage.

Caution! To carry the rail weight both clamps must be fully locked.

4. Use two rails with rail connector to extend the range of the cut. Slide the rail connector to one side of the rail. Make sure the connector extends half way over the edge of the rail. Butt up two rails together in line. Set a straight edge(level) next to both rails to make sure both rails are perfectly parallel to each other. Secure all bolts.



Caution! The rail connector is not meant or designed to be utilized as permanent fix to keep two rails together. Disconnect the rails after completion of the cut. Do not carry connected rails. Ideally- the connection, cutting operation and disconnection procedure should be done on the top of material.

5. Disconnecting carriage from the rail.

Detach the motor from the carriage. Unlock the brakes and slowly slide the carriage towards the end of the rail. Remove first set of the wheels from the rail while constantly maintaining support to the opposite side of the carriage.

6. Clean and maintain the machine after each use.

7. Carriage wheel maintenance. Apply penetrating oil (WD40) to all bearings after each use.

8. Makita motor drive shaft maintenance. Unscrew and remove bolt, outer flange, cutting blade (1 & 2) and inner flange no.3. Generously apply marine grease around bearing retainer to protect the main bearing from the moisture. This procedure should be performed after each use. Failure to follow this procedure shall void 1 year motor warranty.