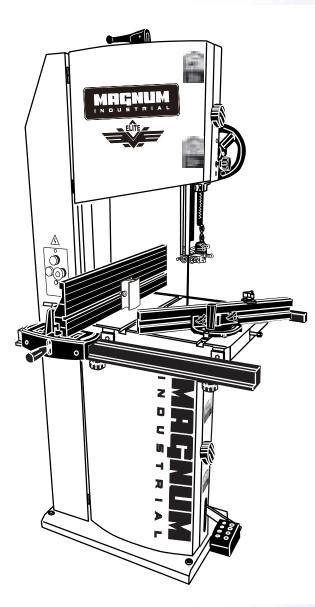


MODEL NO.: MI-91520



OPERATING MANUAL

RULES for SAFE OPERATION MAGNUM INDUSTRIAL MI-91520 DELUXE 14" BAND SAW

To help ensure safe operation, please take a moment to learn the how to operate the machine and understand its applications and limitations, as well as potential hazards. KMS Tools and Equipment disclaims any real or implied warranty and holds itself harmless for any injury that may result from the improper use of its equipment.

- Do not operate the band saw when tired, distracted or under the effects of drugs, alcohol or any medica tion that impairs reflexes or alertness.
- Ensure your working area is well lit and free of de bris.
- Keep children and visitors at a safe distance when the band saw is in operation. Do not permit them to operate the band saw.
- Prevent unauthorized or unsupervised use by child proofing and tamper proofing your shop and all ma chinery with locks, master electrical switches and switch keys.
- Stay alert! Give your work your undivided attention. Even a momentary distraction can lead to serious in jury.
- Fine particulate dust is a carcinogen that can be haz ardous to health. Work in a well-ventilated area and whenever possible use a dust collector. Wear face, eye, ear, respiratory and body protection devices.
- Do not wear loose clothing, gloves, bracelets, neck laces or other jewelry while the band saw is in opera tion.
- Remove adjusting wrenches, tools and other clutter from the machine and the table surface before using the machine.
- Keep hands well away from the blade and all moving parts. Use a brush, not hands, to clear away chips and dust.
- Adjust and position upper and lower blade guides before cutting. Upper blade guide should be adjusted to approximately 1/8" above the material to be cut.
- Adjust blade tension and tracking before cutting.
- Saw teeth must point down toward the table.
- Be sure that the blade reaches full operating speed before starting your cut.
- Always use a clean, properly sharpened blade. Dirty or dull blades are unsafe and can lead to accidents.

- Use suitable workpiece support if the workpiece does not have a flat surface.
- Hold material firmly against the table.
- Do not work on long stock without adequate support on the outfeed end of the table.
- If using a power feeder, stop the feeder before stopping the band saw.
- Do not push or force stock into the blade. The band saw will perform better and more safely when working at the rate for which it was designed.
- Avoid working from awkward or off balance positions. Do not overreach and keep both feet on foor.
- Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning, properly reattach it before using the tool again.
- Never leave the machine unattended while it is running or with the power on.
- Never stand on machinery. Serious injury could result if the tool is tipped over or if the cutting tool is unintentionally contacted.
- Always disconnect the machine from the power source before servicing or changing accessories such as blades, or before performing any maintenance or cleaning, or if the machine will be left unattended.
- Ensure the switch is in the OFF position before plugging in the power cord.
- Make sure the tool is properly grounded. If equipped with a three-prong plug it should be used with a three-pole receptacle. Never remove the third prong.
- Do not use this band saw for other than its intended use. If used for other purposes, KMS Tools and Equipment disclaims any real or implied warranty and holds itself harmless for any injury that may result from that use.

SPECIFICATION

MODEL MI-91520- 14" WOOD BAND SAW

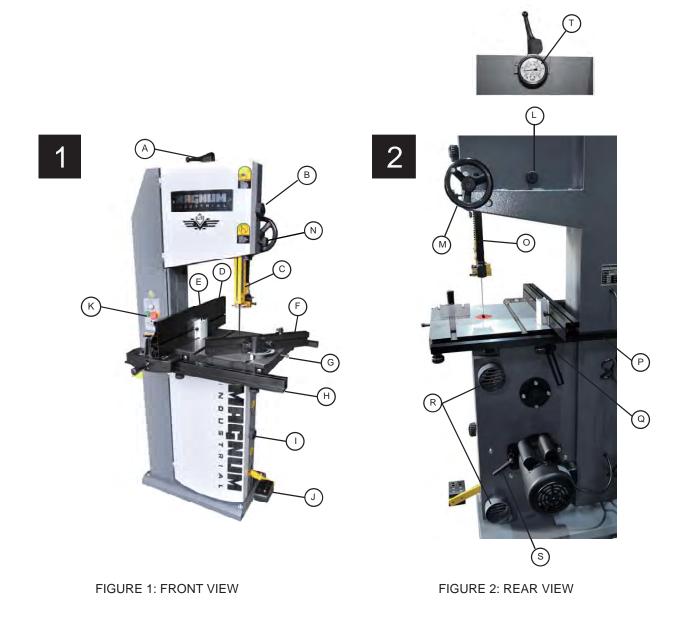
Motor	.2.5HP, 220V, 60-Hz, Single Phase
Amps	. 11 Amps
Blade Speed	2300, 3250 FPM
Table Size	16" x 20" Precision Cast Iron
Table Tilt	0° ∼ 45° Right
Wheel Size	14"
Maximum Blade Width	.3/4"
Minimum Blade Width	.1/8"
Floor to Table Height	36-1/2"
Cutting Capacity/Throat	13-1/2"
Maximum Width of Cut	.13-1/2"
Maximum Depth of Cut	.12", Ideal for Ripping
Dust Collection Ports	2 Ports @ 4"
Blade Length	.112"
Blade Width	3/4"
Bearings	.Sealed and Permanently Lubricated
Computer Balanced Cast Iron Wheels	.Yes
Overall Size	.73.5x51.3x195 CM
Approximate Weight	.155 Kgs

TOOL OVERVIEW MAGNUM INDUSTRIAL MI-91520 DELUXE 14" BAND SAW

MAIN COMPONENTS

- (A) BLADE TENSION ADJUSTMENT HANDLE
- (B) UPPER WHEEL COVER DOOR LOCK KNOB (M) BLADE GUARD ADJUSTMENT
- (C) BLADE GUARD
- (D) RIP FENCE
- (E) RESAW GUIDE BLOCK
- (F) MITER GAUGE
- (G) TABLE ALIGNMENT PIN
- (H) FENCE FRONT RAIL
- (I) LOWER WHEEL COVER DOOR LOCK KNOB (S) MOTOR PIVOT LOCKING LEVER
- (J) FOOT BRAKE

- (K) MAGNETIC SAFETY SWITCH
- (L) BLADE TRACKING ADJUSTMENT KNOB
- HANDWHEEL
- (N) BLADE GUARD LOCK KNOB
- (O) UPPER BLADE GUIDES
- (P) REAR FENCE RAIL
- (Q) TABLE TILT LOCK KNOB
- (R) DUST OUTLET
- (T) HYDRAULIC BLADE TENSION GAUGE



- Before you assemble your band saw, review the parts breakdown and keep it ready for reference.
- Start by removing the parts from the packaging.
- Carefully check the packaging for small pieces before you continue.
- Lay out the parts on a large, clear and unobstructed area and ensure that all parts are accounted for.
- If you have any questions or require further information, please contact the KMS Tools Service De partment at 604.395.4134 or email repairs@kmstools.com



LIST OF CONTENTS

For your convenience this band saw is shipped from the factory partially assembled and requires only minimal assembly and set up. In addition to your new band saw (not shown), the carton should contain the following:

- (A) BAND SAW (not shown)
- (B) TABLE
- (C) TABLE LOCK KNOB (x2)
- (D) MITER GAUGE
- (E) MITER GAUGE STORAGE BRACKET
- (F) RIP FENCE STORAGE BRACKET
- (G) 8 MM ALLEN KEY
- (H) 3 MM ALLEN KEY
- (I) 10-12 MM OPEN END WRENCH
- (J) FOOT BRAKE

FIGURE 3: CONTENTS

ADDITIONAL REQUIREMENTS FOR SET UP

- Extra person to help
- Phillips screwdriver
- Flat head screwdriver
- 10 mm wrench
- 15 mm wrench
- Feeler gauge set
- Combination square

WARNING

Serious personal injury could occur if you connect the saw to the power source before you have completed the installation and assembly steps!

WARNING!

This saw is heavy. You will need the help of at least one other person or a hoist for the following steps! To limit the risk of serious injury or damage to the machine, any equipment used to lift this machine must have a rated capacity in excess of 297 lbs (133 kg)!

LIFTING AND HANDLING THE MACHINE

To limit the potential for damage in transport, this band saw is shipped from the factory bolted to its crate in a vertical position. With a forklift for hydraulic pallet jack, move the entire crate as close to the final installation location as possible, and then uncrate the saw and remove the four bolts that secure it to the crate using a 15 mm wrench.

PLACING THE BAND SAW IN YOUR SHOP

This machine should be installed and operated on a solid, and stable floor that can support the weight of the band saw and the operator. Using the dimensions shown as a guideline, plan for placement within your shop that will allow the operator to work unencumbered and unobstructed by foot traffic(either passing shop visitors or other shop workers) or other tools or machinery.

ESTABLISHING A SAFETY ZONE

Shops with frequent visitors or multiple operators should establish a safety zone around machinery. A clearly defined safety zone on the floor around each machine can help avoid accidents that could cause injury to either the operator or the shop visitor. Mark out the safety zone with nonslip paint or tape. Take steps to ensure that all operators and shop visitors are aware that these areas are off limits whenever a machine is running.

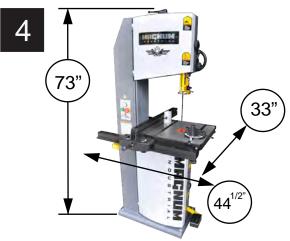


FIGURE 4: SAFETY ZONE

CLEANING THE SAW

The protective coating on the saw table prevents rust from forming during shipping and storage. Remove it with a rag dipped in environmentally friendly degreaser and dispose of the rag according to the degreaser manufacturer's safety recommendations. To clean the T-slots, push the rag through the slots with a screwdriver. If necessary, scrape the coating with a putty knife held !at to avoid scratching the surface and then clean with degreaser. Avoid rubbing the saw's painted surfaces. To prevent rust, apply a light coating of paste wax or use regular applications of any aftermarket surface protectant or rust inhibitor.

WARNING! Do not connect the saw to the power source until instructed to do so!

ATTACHING THE STORAGE BRACKETS

The MI-91520 is equipped with onboard storage brackets to store the rip fence and miter gauge when not in use. Attach the rip fence storage bracket and miter gauge storage brackets to the back of the saw as shown in Figures 5 and 6, using the bolts and washers already mounted to the saw.



FIGURES 5 and 6: STORAGE

ATTACHING THE TABLE

The worktable mounts on a bracket. This bracket can adjust from 0° to 45° to the right. These adjustments are easy to make with the angle scale and lock knobs.

- Remove the RED INSERT (A) from the centre of the table and the TABLE ALIGNMENT PIN (B) from the table slot. See Figure 7.
- 2. Turn the table right side up.Verify that the LONG BOLTS (C) in the

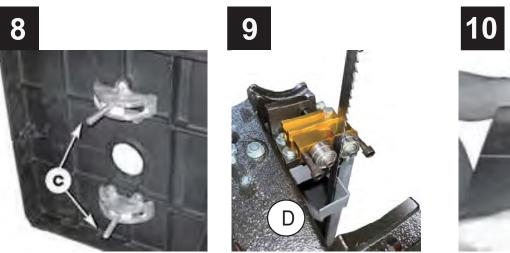
7

FIGURE 7: TABLE INSTALLATION

centre of each trunnion are pointing down. See Figure 8.

3. Carefully position the table over the TABLE"TILT BRACKET (D), guiding the saw blade through the TABLE SLOT (E). See Figures 9 and 10.

Note: If the long bolts have moved out of position, have an assistant tap them into place with a screw driver.



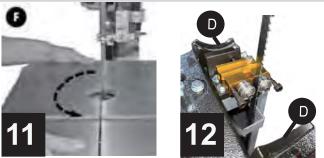
ATTACHING THE TABLE CONTINUED

- Rotate the table 1/4 turn counterclockwise so that the saw blade is now perpendicular to the TABLE SLOT (F). See Figure 11.
- Gently lower the table onto the bracket so the LONG BOLTS (C) in the centre of the trunnlons pass through the holes in the TABLE-TILT BRACKET (G). See Figure 12.
- Tread the two small LOCK KNOBS (H) onto the LONG BOLTS (I) now protruding from the underside of the tabletilt bracket and tighten carefully. See Figure 13.
- Attach the TABLE TILT SUPPORT BRACKET

 (J) to the rear of the saw using the BIG LOCK
 KNOB (K) with the two FLAT WASHERS (L)
 already mounted on the frame. See Figure 14.
- Make sure that the blade is centered in the TABLE OPENING (M). If the blade is not centered, slide the table back or forward until the blade is centered in the table opening. Then fully tighten the two LOCK KNOBS (H). See Figure 15.
- Reinstall the insert into the centre of the table, with the opening in the SLOT (O) facing the rear of the saw. See Figure 16.
- 10. Reinstall the table alignment pin into the TABLE SLOT (P). See Figure 17.

WARNING!

Serious personal injury could occur if you connect the saw to the power source before you have completed the installation and assembly steps!



FIGURES 11 and 12: TABLE INSTALLATION

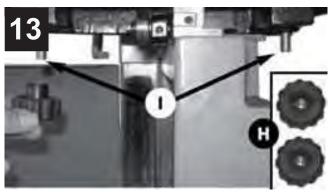
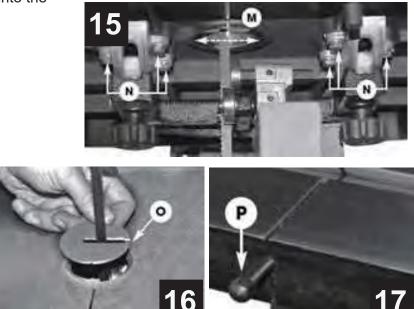


FIGURE 13: TABLE INSTALLATION



FIGURES 14 and 15: TABLE INSTALLATION



FIGURES 16 and 17: TABLE INSTALLATION

INSTALLING THE FENCE ASSEMBLY

The MI-91520 is equipped with a deluxe T-fence and guide rail system. Follow all assembly and adjustment instructions

INSTALLATION OF THE FRONT AND REAR MOUNTING BRACKETS TO THE BANDSAW'S TABLE on page 18~23

INSTALLING THE FENCE ASSEMBLY

This band saw is equipped with a foot brake located at the bottom of the machine. The foot brake FIGURE 18: FENCE INSTALLATION allows for immediate immobilization of the blade and machine shut off.

1. Open the lower wheel cover door.

2. Attach the foot brake to the FOOT BRAKE MOUNTING BAR (Q) using the two supplied CAP SCREWS AND LOCK WASHERS (R), in the assembly order shown in Figure 20.

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3. Firmly tighten with the supplied 8 mm Allen key. FIGURE 19: FOOT BRAKE LOCATION

The foot brake is not designed to function as the primary stop mechanism of this saw. The foot brake should be used for emergency situations or any time it is necessary to immobilize the blade guicker than normal. Under normal working conditions the red stop button should be used as the primary stop mechanism. Continuously using the foot brake as the primary stop mechanism can lead to premature wear of the brake and may cause damage to the motor.

EMERGENCY FOOT PEDAL STOP MAY NEED TO BE ADJUSTED MACHINE WILL NOT START IF THE LIMIT SWITCH **IS ACTIVATED**

WARNING! This tool is for indoor use only. Do not expose to rain or use in wet or damp locations.

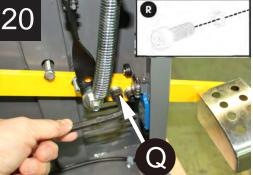


FIGURE 20: FOOT BRAKE INSTALLATION

WARNING! Do not operate the unit with a damaged power cord or plug.





WARNING!

Ensure power switch is in the OFF position before connecting to a power source.

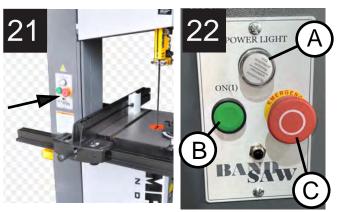
CONNECTING TO A POWER SOURCE

Before connecting the machine to the power source, verify that the voltage of your power supply corresponds with the voltage specified on the motor nameplate. A power source with greater voltage than needed can result in serious injury to the user as well as damage to the machine. If in doubt, contact a qualified electrician before connecting to the power source.

MAGNETIC SAFETY SWITCH

The MI-91520 features a MAGNETIC SAFETY SWITCH, which is mounted to the machine's frame. This magnetic switch is designed to protect the unit and the user from power surges, power outages and unwanted or unintentional start-up. The switch has a green ON BUTTON WITH PRO-TECTIVE CAP (B) to prevent unwanted or unintentional start-up, and a RED spring loaded OFF BUTTON (C). Once the red OFF button has been

ing the red button to the right to release the stop button. When you have finished using the machine be sure to unplug the band saw from the power source.



pressed, the machine can only be started by turn- FIGURES 21 and 22: MAGNETIC SAFETY SWITCH

Once the assembly has been completed, plug the power cord into an appropriate outlet. The POW-ER-IN INDICATOR LIGHT (A) will illuminate. See Figures 21 and 22.

THERMAL RELAY / CIRCUIT BREAKER

The unit features a thermal relay / circuit breaker (See Figure 23) located under the magnetic switch to protect the motor from power surges or spikes in line voltage. In the event of a power surge, the thermal relay will automatically trip and cut off power to the motor.

BASARD 23

To reset the thermal relay after it has been tripped, complete the following steps:

FIGURE 23: CIRCUIT BREAKER / THERMAL RELAY

- 1. Set the power switch to the OFF position.
- 2. Press the THERMAL RELAY RESET BUTTON (D).
- 3. Restart the machine.

WARNING!

To avoid unexpected or unintentional start-up be certain that the power switch has been set to the off position before resetting the thermal relay.

BASIC ADJUSTMENTS MAGNUM INDUSTRIAL MI-91520 DELUXE 14" BAND SAW

WARNING!

To avoid injury, ensure the power switch is OFF and the power cord is unplugged before adjusting the band saw.

TILTING THE TABLE

The table can tilt from 0° to 45° to the right to allow for bevel cutting. To set the table angle refer to the TABLE TILT ANGLE INDICATOR (A) located under the band saw table.

- Loosen LOCK KNOBS (C) (See Figure 25) and LOCK KNOB (B) (See Figure 24) located under the band saw table.
- 2. Tilt the table to desired angle. Refer to the ANGLE INDICATOR (A).
- 3. Tighten the LOCK KNOBS to lock the table in position.

ADJUSTING 90° TABLE STOP AND RE-ALIGNING ANGLE POINTER

To ensure accurate cuts, align the table so the angle pointer reads 0 when the table is set to 90°, the default position. Begin by setting the table-stop bolt:

- 1. Loosen LOCK KNOBS (C) and LOCK KNOB (B).
- Place a COMBINATION SQUARE (D) !at on the table with the heel of the square !at against the SAW BLADE (E). See Figure 26.
- 3. Level the table until it is exactly 90° to the blade, then tighten LOCK KNOBS.
- 4. Using the supplied open-end wrench, loosen the JAM NUT (F) on the 90° table-stop bolt then adjust the height of the BOLT until it touches the underside of the table as shown in Figure 28.
- 5. Loosen the LOCK KNOBS (B AND C) and make sure the table is resting on the table-stop bolt.
- Check the square and make sure the table is still at 90° to the blade. If not, re-adjust the table-stop bolt.
- 7. Re-tighten JAM NUT (F).

With the table set to 90° and the stop bolt at the correct height, check that the table tilt angle indicator pointer on the front trunnion is set to 0. See Figure 29. To adjust the pointer, loosen the SCREW (H) on the pointer and align the POINTER (I) to 0 on the scale. Then re-tighten the screw to secure the pointer in place. See Figure 30. You will now be able to accurately return the table to the 90° position automatically without further adjustments and scale reading for any angle other than 0° will also be accurate.



FIGURE 24: TABLE TILT ADJUSTMENT

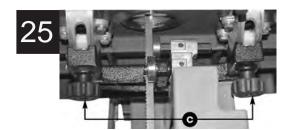
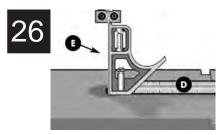


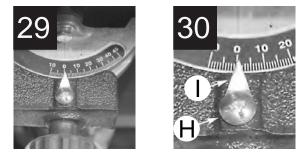
FIGURE 25: TABLE TILT ADJUSTMENT



FIGURES 26, 27 and 28: ANGLE POINTER ADJUSTMENT







FIGURES 29 and 30: ANGLE POINTER ADJUSTMENT

BASIC ADJUSTMENTS MAGNUM INDUSTRIAL MI-91520 DELUXE 14" BAND SAW

WARNING!

To avoid injury, ensure the power switch is OFF and the power cord is unplugged before adjusting the band saw.

CHANGING SPEED SETTINGS

The MI-91520 has two speed settings: 2,300 LFM (low) and 3,250 LFM (high).

- Low speed is ideal for cutting **Soft** woods over 4" in height or hardwoods over 2" in height.
- High speed is best for cutting soft woods under 4" in height or hardwoods under 2" in height.

If wood starts to burn at high speed, stop and change to the lower speed setting.

To change the speed of your band saw complete the following steps:

At the back of the band saw, next to the motor, there is a RATCHET LEVER (A) for loosening the tension on the drive belt. When you pull it out as shown in Figure 37, it disengages. When you release it, it engages the bolt for screwing or unscrewing. See Figure 38.

- Unscrew the bolt a few turns counterclockwise then lift the MOTOR (D) by hand and tighten RATCHET LEVER (A) to lock the motor in position. This will loosen the drive belt enough to move it between one set of pulleys and the other.
- 2. Open the lower wheel cover door.
- 3. To set the band saw speed to low (2,300 LFM), place the belt on the front set of pulleys. See Figure 39.
- 4. To set the band saw speed to high (3,250 LFM), place the belt on the rear set of pulleys. See Figure 40.
- 5. After the belts are in position, set the motor back to its initial position to tighten the belt around the pulleys
- To secure the motor, turn the RATCHET LEVER (A) clockwise until it is tight and the motor does not move.

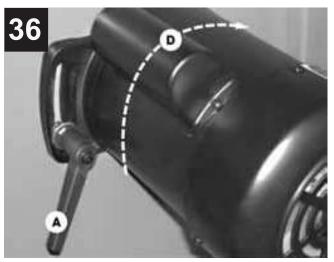
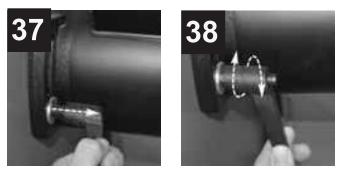
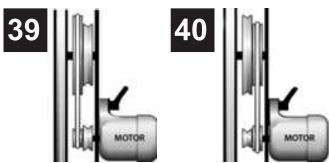


FIGURE 36: SPEED ADJUSTMENT



FIGURES 37 and 38: SPEED ADJUSTMENT



FIGURES 39 and 40: SPEED ADJUSTMENT

BASIC ADJUSTMENTS MAGNUM INDUSTRIAL MI-91520 DELUXE 14" BAND SAW

WARNING!

To avoid injury, ensure the power switch is OFF and the power cord is unplugged before adjusting the band saw.

ADJUSTING BLADE GUARD

The BLADE GUARD (A) can be adjusted to accommodate the height of the workpiece. To prevent the blade (which is fexible and which would not otherwise be supported) from slipping out of position during cutting, and to reduce risks of injuries, expose a minimum amount of blade.

The blade guard should be set 1/8" to 1/4" above the workpiece to prevent the blade from flexing out of position or offine during cutting. See Figure 41.

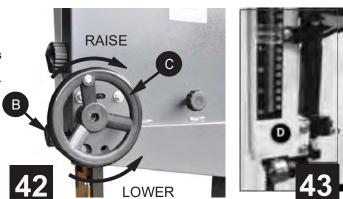
To adjust the height of the blade guard

- 1. Make sure the band saw is turned off and the power cord is disconnected from the power source.
- 2. Loosen the LOCK KNOB (B). See Figure 42.
- Move the blade guide assembly up or down by turning the HAND WHEEL (C). Then re-tighten the lock knob C.

The DEPTH GAUGE (D) on the blade guard can be used as a reference but it is not intended for precise measurements. See Figure 43.



FIGURE 41: BLADE GUARD ADJUSTMENT



FIGURES 42 and 43: BLADE GUARD ADJUSTMENTS

MAINTENANCE MAGNUM INDUSTRIAL MI-91520 DELUXE 14" BAND SAW

WARNING!

Always disconnect the machine from the power source before performing any lubrication or maintenance.

PERIODIC MAINTENANCE and LUBRICATION

Lubrication

Keep the RACK AND PINION (A), BLADE TENSION AD-JUSTMENT SCREW (B), and the TABLE TRUNNION (C) well greased and free of dust and debris.

Clean and remove dust, debris and old grease after every 10 to 15 hours of use. After cleaning, re-apply grease as needed. Use any all-purpose grease.

The motor and all bearings are sealed and permanently lubricated. They require no further lubrication. No other part of this band saw needs lubrication.

WARNING!

If any part is damaged, do not use the band saw. Replace any damaged part as soon as you notice the damage.

PERIODIC MAINTENANCE

- Inspect and test the ON/OFF switch before each use. Do not operate the band saw with a damaged switch. Replace a damaged switch immediately.
- Periodically inspect the power cord, plug and the blade for damage.
- Keep the machine clean and free of sawdust. Frequently blow out or vacuum up the sawdust and wipe down the machine occasionally with a damp rag.

Keep the band saw wheels and tires clean. Dirt and debris on the wheels can cause the blade to slip.

- Do not allow dirt, pitch or gum to build up on the table, blade, guide and thrust bearings. Clean as needed with gum and pitch remover. But do not immerse the bearings in gum and pitch remover.
- To prevent rust from forming on the unpainted cast iron of the table, and so that the wood slides easily while cutting, apply a light coating of paste wax or use regular applications of any aftermarket surface protectant or rust inhibitor.

WARNING!

To avoid eye injury from blowing debris, wear safety goggles when blowing out sawdust.

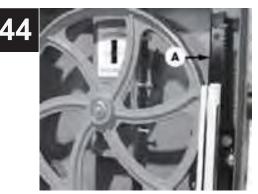


FIGURE 44: MAINTENANCE and LUBRICATION

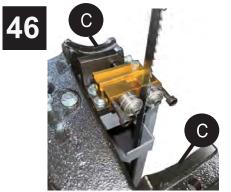


FIGURE 46: MAINTENANCE and LUBRICATION

MAINTENANCE MAGNUM INDUSTRIAL MI-91520 DELUXE 14" BAND SAW

WARNING!

Always disconnect the machine from the power source before performing any lubrication or maintenance.

REMOVING/INSTALLING BLADES

This bandsaw comes with a 112" long x 14mm wide wood cutting bandsaw blade. A wide range of blade widths can be installed on this bandsaw, 1/8"- 3/8" wide blades can be used for small tighter radius curves, 1/2" - 1" wide blades can be used for larger radius curves or cutting thicker workpieces.

To remove and install different blade:

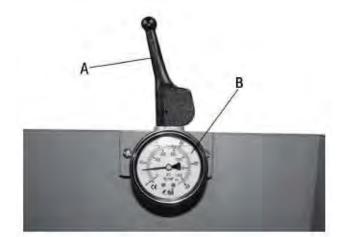
- 1. Make sure the power cord is diconnected from the power source.
- 2. Remove the table insert and table pin from the table.
- 3. Open upper and lower wheel covers.
- 4. Adjust the upper and lower ball bearing blade guides away from the blade for blade clearance.
- 5. Loosen blade tension by lifting blade tension handle (A), turn it counterclockwise to decrease blade tension.
- 6. Remove the blade by guiding it through the guards and table slot.

Important: When installing a new or different blade, make sure the teeth of the blade are pointing downwards before installation.

- 7. Guide the new blade through the gaurds and table slot, place blade in upper and lower ball bearing guide systems.
- 8. Place blade in the middle of the upper and lower wheels, tension the blade by turning blade tension handle (A) clockwise to tension and lowering handle to secure tension adjustment.
- 9. The blade tension must be set depending on the blade width, at the rear of the bandsaw is a hydraulic blade tension gauge (B). Turn the blade tension handle (A) clockwise until the tension reaches the recommended blade tension as indicated below.

Blade width 1/4" 3/8" 1/2" 3/4" 1"

Recommended blade tension (kg/cm2) 5-10 kg/cm2 10-13 kg/cm2 15-17 kg/cm2 18-20 kg/cm2 21-23 kg/cm2



10. Replace the table insert and table pin.

Important: To prolong the life, avoid deforming, weakening or stretching the blade when the bandsaw is not in use, always release blade tension at the end of each work day.

MAINTENANCE MAGNUM INDUSTRIAL MI-91520 DELUXE 14" BAND SAW

Wheel Alignment

When wheels are aligned, or coplanar, the bandsaw cuts straighter, with much less vibration, heat, and blade wear because the blade is automatically balanced on the wheel. See Figure 55 to better understand coplanarity. If your bandsaw develops tracking problems that can't be fixed by adjusting the upper wheel tracking knobs, then check the wheel alignment before taking any other steps. Verifying Upper/Lower Wheels are Coplanar

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. With the blade on and properly tensioned, hold a straight edge or a self-made "coplanar gauge" (Figure 55) close to the center of both wheels. Make sure the straightedge or gauge fully extends across the wheels as shown in Figure 55.
- If the wheels are coplanar, the straightedge will evenly touch the top and bottom of both wheels.
- If the wheels are not coplanar, place the straightedge on the lower wheel first (ensuring that it touches both the top and bottom rim), then adjust the upper wheel tracking knob to make the upper wheel parallel with the lower wheel.
- If the straightedge does not touch both wheels evenly, the upper wheel needs to be shimmed or the lower wheel needs to be adjusted.

Shimming Upper Wheel

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Make sure the top wheel is adjusted parallel with the bottom wheel.
- 3. With the straightedge touching both points of the wheel that does not need to be adjusted, measure the distance away from the incorrect wheel with a fine ruler (see Figure 56).
- 4. Remove the blade from the saw, then remove the wheel that needs to be shimm
- 5. Determine how many shim washers you need to compensate for the distance measured in Step 3 and place them on the wheel shaft.
- 6. Replace the wheel, the original washers, and the securing nut.
- 7. Tighten the blade, then check the wheels. (Coplanar wheels may pull out of alignment when the blade is tightened.)
- 8. When the wheels are coplanar, place a mark on each wheel where you held the straightedge. This assures repeated accuracy every time you adjust your wheels

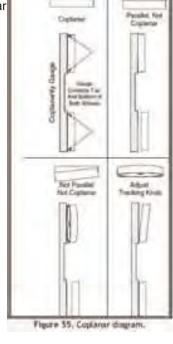
Note: When wheels are properly coplanar, the blade may not be centered on Figure 56. Measuring wheel difference, balanced.

Adjusting Lower Wheel

Only do this procedure if you cannot make the wheels coplanar with the tracking knob or by shimming the upper wheel. Make sure the upper wheel is adjusted as close as possible to being coplanar with the lower wheel before beginning. Do this procedure with the blade fully tensioned.

To adjust the lower wheel, do these steps:

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Loosen the four hex bolts on the lower wheel adjustment hub (Figure 57).
- 3. Rotate the wheel adjustment sleeves to tilt the lower wheel as necessary to make it coplanar with the upper wheel.
- 4. Tighten the hex bolts to lock the wheel adjustment sleeves in position.





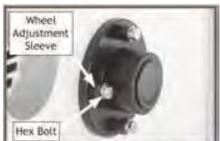
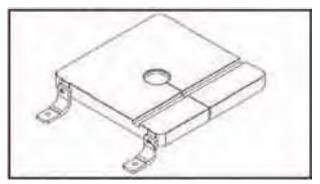


Figure 57. Wheel adjustment hub.

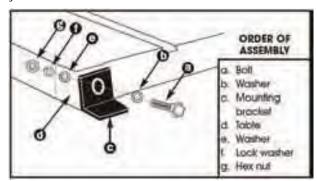
INSTALLATION OF THE FRONT AND REAR MOUNTING BRACKETS TO THE BANDSAW'S TABLE

Note: The M6 bolts, washers, lock washers and hex nuts required for this step are provided with your Excalibur® Universal Bandsaw Rip Fence System. However, if they do not fit into the mounting holes on your table, use the fasteners provided with your original fence.

1. The image above shows the positioning of the mounting brackets when properly installed to the table (front and rear brackets are installed at opposite sides of the table).



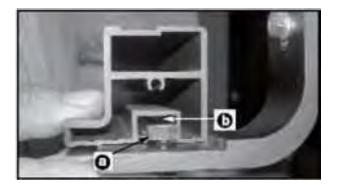
2. Place the bolts, washers, lock washers and hex nuts as shown above to attach the mounting brackets (front and rear) to the table. Don't tighten the nuts yet.



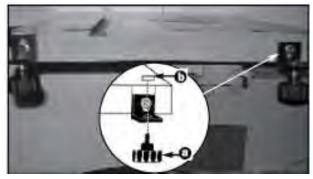
INSTALLATION OF THE FRONT AND REAR RAILS

Note: The front rail is the wider one of the two rails.

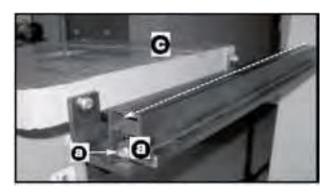
- 1. Install a 5/16" screw (a) , and asquare nut (b) on both front mounting brackets.
- 3. Insert the square nut a of the first front mounting bracket into the T-slot of the front rail b.



2. Install a 5/16" x 5/8" lock knob (a) and a square nut (b) on both rear mounting brackets.

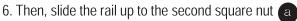


4. Then, slide the rail onto the second square nut (a).

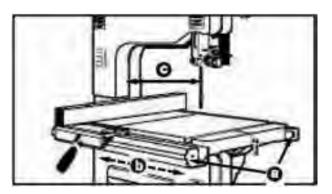


5. Insert the square nut (a) of the first rear mounting bracket into the T-slot of the rear rail (b).

acket into the T-slot of the rear rail (b).







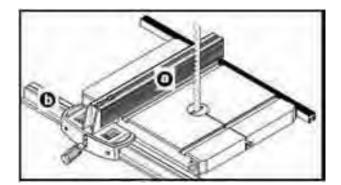
7. Position the rails a to the left or right of the table
b ,depending upon the size of your bandsaw c
i.e. the space between the frame of the saw and the blade (see image left), and your personal preferences, then tighten the nuts to lock the rails in position.

Tip: You can adjust the rail positioning in relation to the blade as needed to accommodate the need for more cutting capacity. For example, if you intend to use this fence for cutting longer or wider workpieces, it may be preferable to position the fence rails further to the right. For shorter workpieces (that fit between the frame of the saw and the blade), position the rails further to the left.

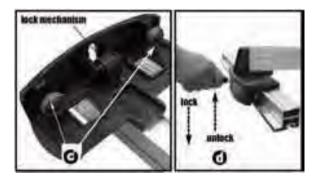
Note: You can always reposition the fence rails further left or right as needed. However, once the measuring tape is installed (see "Installation of the measuring tape and pointer" on page 8) on the front rail, you'll be able to use the zero reference of the tape only when the rail is positioned as it was during initial alignment. When the rails are repositioned, you will need to use a separate measuring tape (or ruler) to determine the distance between the fence and the blade. You will still be able to use the tape as a reference, but not for accurate measurements from the zero point.

INSTALLATION OF THE FENCE

1. Position the fence a firmly down on top of the front b rail .

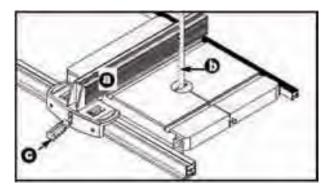


2. Make sure the bearings a are sitting flush on the rail, then lock down the fence locking handle d.



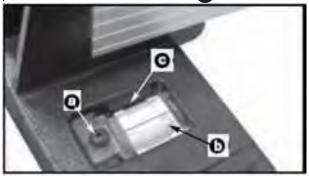
INSTALLATION OF THE MEASURING TAPE AND POINTER

1. Place the fence a to the right of the saw blade, so it touches the blade b, then lock down the fence c.



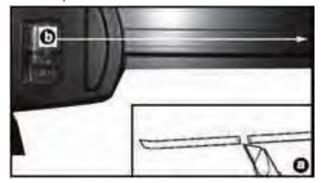
3. Make a pencil mark on the rail, in line with the pointer's center mark. Then, unlock the fence and put aside the pointer, screw and fence for now.

2. With a 3 mm Allen key, unscrew and remove the screw a that holds the pointer b into the right pointer's window of the fence base c.



4. Cut the measuring tape between both zeros (a). Remove the backing strip from the first half of the measuring tape (the one with the zero on the left) and carefully install along the rail slot, using your pencil mark as the zero-point of the tape (b). Trim off excess tape wih a knife or scissors.





Tip: Try removing only an inch of backing strip from the start of the tape, stick that down, then remove the rest of the backing and pull the measuring tape taut to the end of the rail slot and carefully lower it against the slot.

Note: For accurate readings, the tape must be placed straight parallel with the rail slot, with no folds along its length.

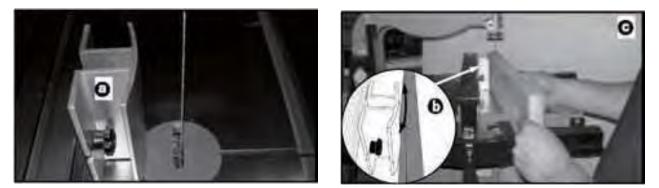


5. Reinstall the fence on the front rail and lock it down. Then, reinstall the pointer (place the screw in the middle of the hole to allow maximum adjustment capacity on the left or right afterward), and slide the pointer right or left, so that its center mark a is in line with the zero-point of the tape. Tighten the screw to lock the pointer in place.

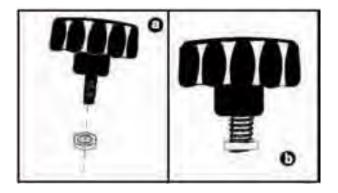
6. Unlock the guide fence and repeat steps 1 to 5 with the fence to the left of the blade this time, aligning the center mark of the left pointer with the zero of the second half of the measuring tape.

Note: Recheck and, if necessary, readjust the left and right pointers against the zero-point of both measuring tapes whenever you change blades. Different blades have different thicknesses, which can throw off the pointer a few fractions.

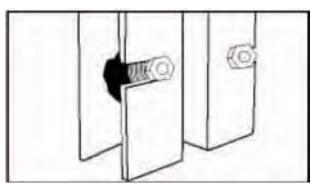
INSTALLATION OF THE RESAW GUIDE



The 3 1/2" resaw guide a facilitates resawing of wide boards by allowing you to pivot your workpiece on its curved surface b to correct the line of the cut as you push the work piece into the blade c.



1. Screw a hex nut onto each of the 2 lock knobs a just a few turns only, leaving a good space between the nut and the knob (b).



2. Slide the nut/knob sets into the slots on the flat face of the resaw guide with the nuts on the outside face as shown above.



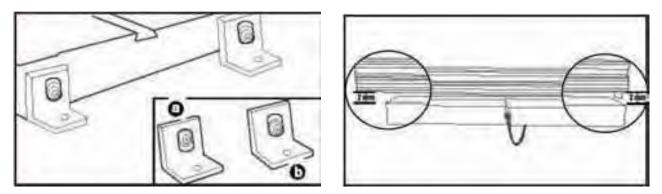
3. Slide the resaw guide onto the fence by sliding the nuts into the slot a in the fence, from the rear.



4. Position the resaw guide along the fence, lining up the center of the guide with the blade of the saw.

LEVELING THE FENCE

The fence should be parallel to the bandsaw's table and sit approximately 2 mm above the table's surface (so the fence will not scratch the table and a thin work piece will not get stuck or jammed under the fence.)



1. To level and adjust the height of the fence, loosen the hex nuts that hold the mounting brackets to the table (see image left), and raise a or lower b the front and rear rails along the elongated holes in the mounting brackets. Level the fence, front and back as needed, and set the spacing between the bottom of the fence and the table to 2mm (approx.) as shown in image right. Then, tighten the hex nuts to lock the rails in position.

VERTICAL ADJUSTMENT OF THE FENCE 90° TO THE TABLE

Place a machinist square on the table against the fence (See Step 4 below) and, either by eye or with a feeler gauge, look for a gap between the square and the fence (bottom and top) or the table. If needed, adjust as follows.



1. Remove the fence from the rails and turn it up side down.



- 2. With a 5 mm Allen key, loosen the set screw (without removing it).
- 3. Put the fence back on the rails, but do not engage the locking handle to lock the fence.



4. Reposition the square on the table against the fence as a reference.



5. With a flat head screwdriver, slowly turn the screw (eccentric shaft) on the fence base. This will tilt the fence slightly, allowing you to eliminate the gap between the square and either the fence or the table.

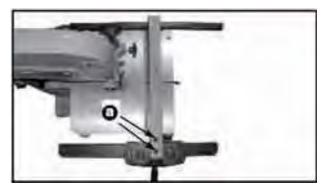
6. With the fence adjusted 90° to the table, remove it from the rails, turn it up side down and retighten the set screw to lock the fence in place.

ALIGNMENT OF THE FENCE PARALLEL TO THE MITER SLOT

To make satisfactory rip cuts, your fence must be aligned perfectly parallel with the miter slot in the table. Slide the fence over to the T-slot on your saw, as shown in the second diagram. Lock down the fence handle and make a visual check to verify if the fence is parallel with the T-slot along its entire length. You can also place a small block of wood, upright into the T-slot and slide it from front to back checking its distance from the face of the fence.

If the fence is not parallel, it can be adjusted as follows:

- 1. Make sure the guide fence is locked on the rails (locking handle down).
- 2. With a 8 mm Allen key, loosen (without removing) both screws a that attach the fence to the fence base.
- 3. Manually adjust the fence **b** , so that it is parallel with the miter slot **c** .





- 4. Hold the fence in place with one hand and tighten the first screw c
- 5. If needed, adjust a little further with the remaining bit of play, then tighten the second screw d.



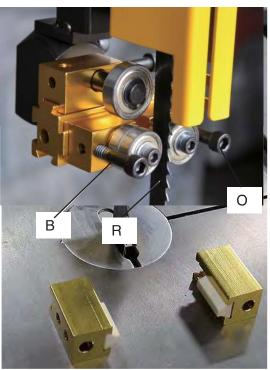
S TYPE BANDSAW BLADE GUIDE MANUAL



Adjust the positioning of the upper thrust bearing:

Note: Upper guide adjustment shown. Lower guides are similar. Adjusting the bearing or block is the same procedure. The difference will be the set dimension.

- 1. Disconnect the saw from the power source.
- 2. If not already done, adjust the blade tension and tracking.
- 3. Lower the blade guide assembly so that it is about 2" (50mm) above the table.
- 4. Loosen the set screw (A) to allow the guide block to slide side to side.
- 5. Place a feeler gauge between the bearing and the blade.
- a. Guide Bearing = 0.01"-0.02" (0.25-0.5mm)
- b. Ceramic Guides = 0.005"-0.007" (.127-.177mm)
- Slide the block up to the feeler gauge and blade without deflecting the blade.
- Hold the block in position and tighten the set screw (A).
- 8. Repeat the steps for the other side (B).
- 9. Recheck the gap between the blade and the guides taking note that the gap is equal on both sides and that the guide are not deflecting the blade.
- 10.Check that the guides are behind the blade teeth 1/64"-1/32" (mm).
- 11. If the guides are too close or far from the teeth, loosen set screw (D) and slide the entire guide assembly forward or aft until the front edge of the guide is within the set dimension behind the blade teeth.



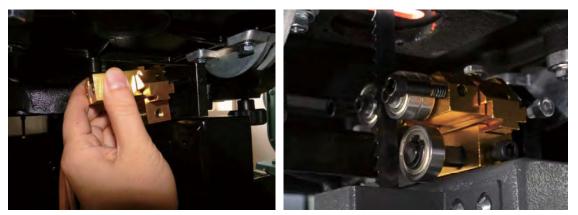
Thrust Bearing Adjustment

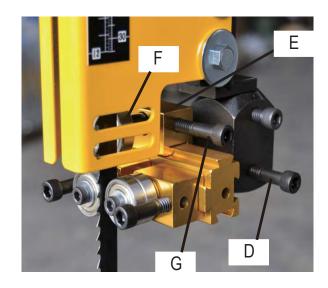
Q Note: Upper thrust bearing shown. Lower thrust bearing is similar.

- 1. Loosen the set screw (E) (hidden) to allow the thrust bearing block to slide side to side.
- 2. Slide the block to position the outer bearing cage just past the edge of the blade (F). You will just barely see the edge of the bearing side shield material.
- 3. Hold the block in position and tighten the set screw (E).
- 4. Loosen the set screw (G) and slide the bearing shaft forward or aft as needed until the edge of the bearing just touches the spine of the blade without deflecting the blade.
- 5. Hold the shaft in position and tighten the set screw (G).
- 6. Adjust the lower thrust bearing using the same steps.
 - 1. Change the lower S guide on 14" bandsaw
 - a. Put and fasten the plate on the base first.





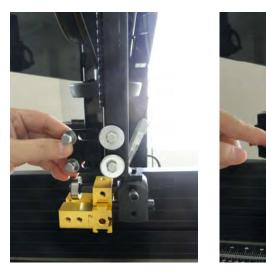




- 2. Change the new upper S guide on 14" bandsaw
 - a. Drill two holes on the guide bar

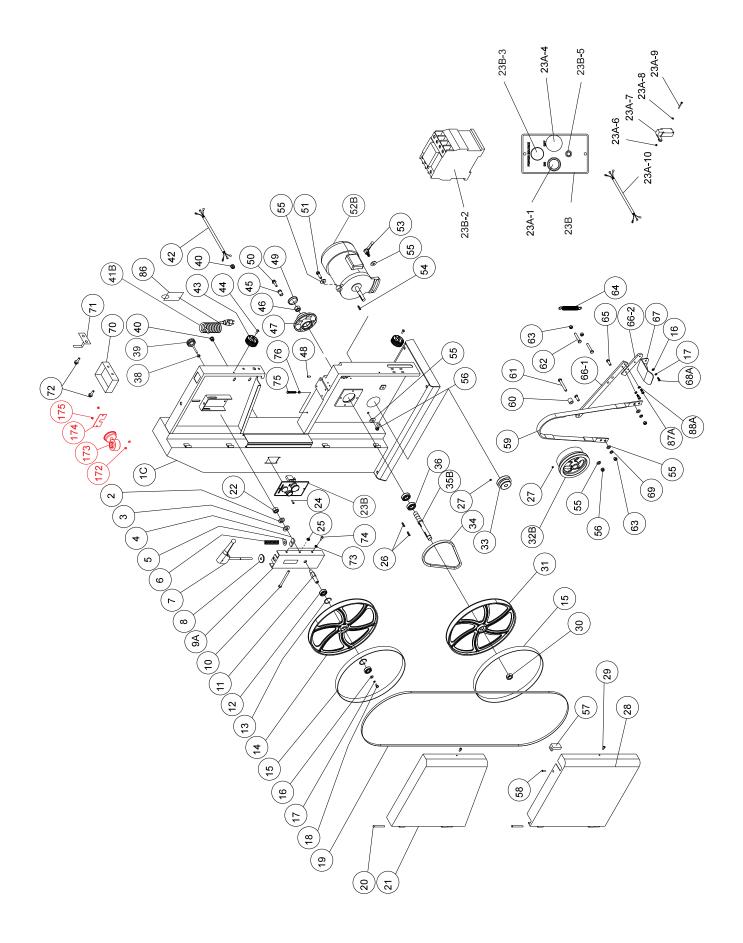


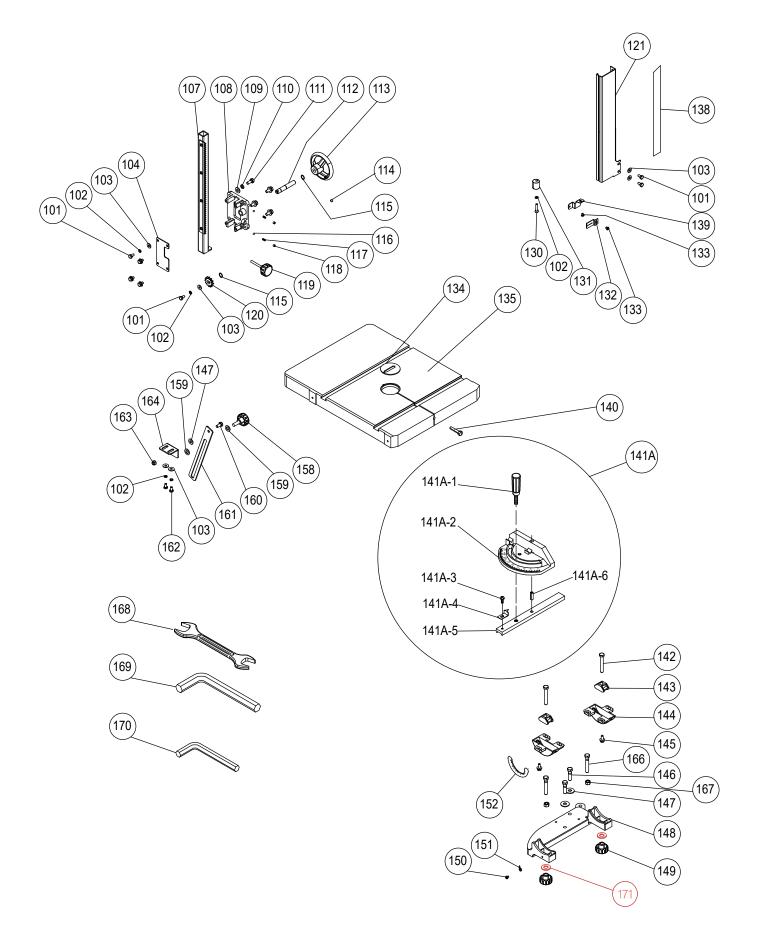
b. Use the extra plate and screws and washers



c. Fasten the original blade guard on the plate







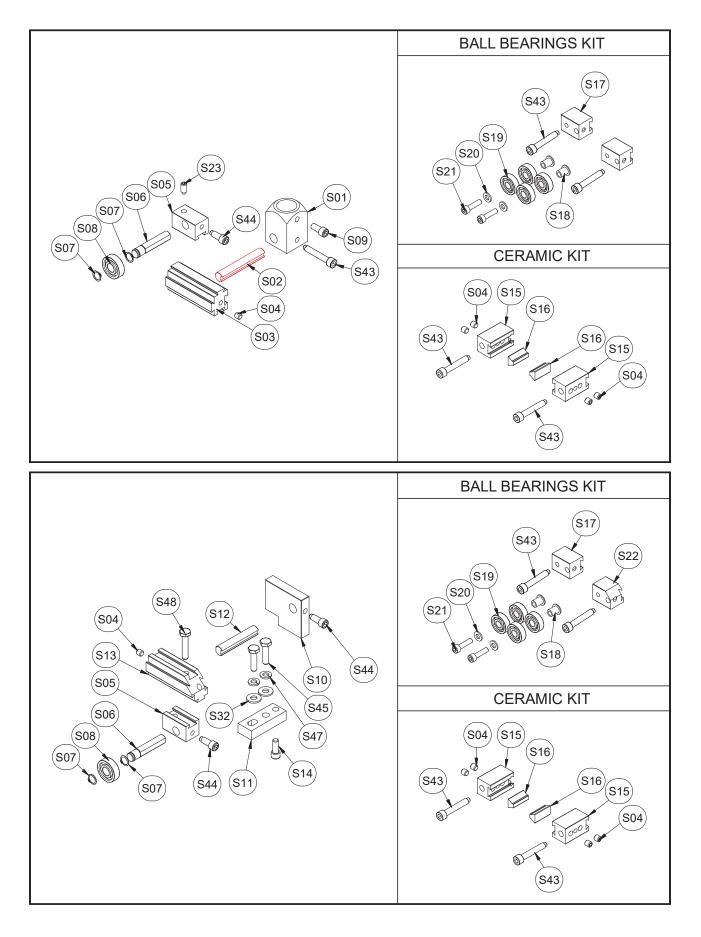
PART NO.	DESCRIPTION	SPECIFICATION
MI-91500-001C	SAW FRAME	
MI-91500-002	LOCK WASHER	1/2 "
MI-91500-003	WASHER	1/2 "
MI-91500-004	SQUARE NUT	
MI-91500-005	POINTER	
MI-91500-006	SPRING	
MI-91500-007	HANDLE	
MI-91500-008	WASHER	
MI-91500-009A	UPPER WHEEL BRACKET	
MI-91500-010	SCREW	
MI-91500-011	UPPER WHEEL SHAFT	
MI-91500-012	BEARING	6202ZZ
MI-91500-013	C-RING	R-35
MI-91500-014	UPPER WHEEL	
MI-91500-015	TIRE	
MI-91500-016	WASHER	1/4 "
MI-91500-017	LOCK WASHER	1/4 "
MI-91500-018	HEX BOLT	1/4-1/4"
MI-91500-019	BLADE (SEE MI-91500-B34)	
MI-91500-020	HINGE PIN	
MI-91500-021	UPPER DOOR	
MI-91500-022	NUT	1/2 "
MI-91500-023B	SWITCH ASSEMBLY FOR MI-91520	220V
MI-91500-023A-1	ON SWITCH	
MI-91500-023B-2	CONTACTOR	220V
MI-91500-023B-3	POWER LIGHT	220V
MI-91500-023A-4	OFF SWITCH	
MI-91500-023B-5	OVERLOAD SWITCH	220V / 7A
MI-91500-023A-6	NUT	M4
MI-91500-023A-7	LIMIT SWITCH	
MI-91500-023A-8	WASHER	M4
MI-91500-023A-9	SCREW	M4x35
MI-91500-023A-10	WIRE	
MI-91500-024	PHILLIPS HD. SCREW	M4
MI-91500-025	NUT	M8
MI-91500-026	KEY	5x5
MI-91500-027	SET SCREW	1/4-3/8"
MI-91500-028	LOWER DOOR	

MI-91500-029 CAP SCREW 1/4-3/8" MI-91500-030 HEX NUT (LH) 3/4 " MI-91500-031 LOWER WHEEL MI-91500-033 MOTOR PULLEY MI-91500-034 DRIVE BELT A-33 MI-91500-035 SHAFT A-33 MI-91500-036 BEARING 6005ZZ MI-91500-038 HEX NUT 5/16 " MI-91500-039 KNOB MI-91500-040 MI-91500-040 RETAINER MI-91500-041 MI-91500-040 RETAINER MI-91500-042 MI-91500-042 MOTOR CORD MI-91500-044 MI-91500-044 MOTOR CORD MI-91500-045 MI-91500-045 ADJUSTING SCREW MI-91500-046 MI-91500-046 HEX NUT 3/4" MI-91500-048 PIN 6mm MI-91500-048 PIN 6mm MI-91500-048 PIN 6mm MI-91500-051 HEX SCREW 3/8"-11/2 MI-91500-051 HEX SCREW 3/8"-21/2" MI-91500-055 WASHER 3/8" </th <th>PART NO.</th> <th>DESCRIPTION</th> <th>SPECIFICATION</th>	PART NO.	DESCRIPTION	SPECIFICATION
MI-91500-031 LOWER WHEEL MI-91500-032B PULLEY MI-91500-033 MOTOR PULLEY MI-91500-034 DRIVE BELT A-33 MI-91500-035B SHAFT MI-91500-036 BEARING 6005ZZ MI-91500-038 HEX NUT 5/16 " MI-91500-038 HEX NUT 5/16 " MI-91500-038 HEX NUT 5/16 " MI-91500-039 KNOB MI-91500-040 MI-91500-040 RETAINER MI-91520 MI-91500-041 POWER CORD FOR MI-91520 220V MI-91500-042 MOTOR CORD MI-91500-043 MI-91500-043 DOOR LOCK KNOB MI-91500-044 MI-91500-044 CAP SCREW MI-91500-045 MI-91500-045 ADJUSTING SCREW MI-91500-046 MI-91500-046 HEX NUT 3/4" MI-91500-047 BEARING HOUSING MI-91500-051 MI-91500-051 HEX SCREW 3/8"-11/2 MI-91500-052B MOTOR FOR MI-91520_2.5HP 220V MI-91500-054 KEY 5x	MI-91500-029	CAP SCREW	1/4-3/8"
MI-91500-032B PULLEY MI-91500-033 MOTOR PULLEY MI-91500-034 DRIVE BELT A-33 MI-91500-035B SHAFT MI-91500-036 BEARING 6005ZZ MI-91500-038 HEX NUT 5/16 " MI-91500-038 HEX NUT 5/16 " MI-91500-039 KNOB MI-91500-040 MI-91500-040 RETAINER MI-91500-042 MI-91500-041 POWER CORD FOR MI-91520 220V MI-91500-042 MOTOR CORD MI-91500-043 MI-91500-043 DOOR LOCK KNOB MI-91500-044 MI-91500-044 CAP SCREW 1/4-3/4" " MI-91500-045 ADJUSTING SCREW MI-91500-047 MI-91500-047 BEARING HOUSING MI-91500-047 MI-91500-047 BEARING HOUSING MI-91500-047 MI-91500-048 PIN 6mm MI-91500-050 HEX SCREW 3/8"-11/2 MI-91500-051 HEX SCREW 3/8"-11/2 MI-91500-052 MOTOR FOR MI-91520_2.5.5HP 220V MI-91500-053 <td>MI-91500-030</td> <td>HEX NUT (LH)</td> <td>3/4 "</td>	MI-91500-030	HEX NUT (LH)	3/4 "
MI-91500-033 MOTOR PULLEY MI-91500-034 DRIVE BELT A-33 MI-91500-035B SHAFT	MI-91500-031	LOWER WHEEL	
MI-91500-034 DRIVE BELT A-33 MI-91500-035B SHAFT MI-91500-036 BEARING 6005ZZ MI-91500-038 HEX NUT 5/16 " MI-91500-039 KNOB MI-91500-040 MI-91500-040 RETAINER MI-91500-041B MI-91500-042 MOTOR CORD MI-91500-042 MI-91500-043 DOOR LOCK KNOB MI-91500-044 MI-91500-043 DOOR LOCK KNOB MI-91500-045 MI-91500-045 ADJUSTING SCREW 1/4-3/4" " MI-91500-046 HEX NUT 3/4" MI-91500-047 BEARING HOUSING MI-91500-047 MI-91500-048 PIN 6mm MI-91500-049 COVER 3/8"-1 1/2 MI-91500-050 HEX SCREW 3/8"-2 1/2" MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91500-055 WASHER 3/8" MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH MI-91500-058 MI-915	MI-91500-032B	PULLEY	
MI-91500-035B SHAFT MI-91500-036 BEARING 6005ZZ MI-91500-038 HEX NUT 5/16 " MI-91500-039 KNOB MI-91500-039 MI-91500-040 RETAINER MI-91520 MI-91500-041B POWER CORD FOR MI-91520 220V MI-91500-042 MOTOR CORD MI-91500-043 MI-91500-043 DOOR LOCK KNOB MI-91500-044 MI-91500-044 CAP SCREW 1/4-3/4" " MI-91500-045 ADJUSTING SCREW MI-91500-046 MI-91500-046 HEX NUT 3/4" MI-91500-047 BEARING HOUSING MI-91500-047 MI-91500-048 PIN 6mm MI-91500-048 PIN 6mm MI-91500-050 HEX SCREW 3/8"-1 1/2 MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91500-052B MOTOR FOR MI-91520_2.5HP 220V MI-91500-053 LEVER 3/8" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056	MI-91500-033	MOTOR PULLEY	
MI-91500-036 BEARING 6005ZZ MI-91500-038 HEX NUT 5/16 " MI-91500-039 KNOB MI-91500-040 RETAINER MI-91500-041B POWER CORD FOR MI-91520 220V MI-91500-042 MOTOR CORD MI-91500-043 DOOR LOCK KNOB MI-91500-043 DOOR LOCK KNOB MI-91500-044 CAP SCREW MI-91500-044 CAP SCREW 1/4-3/4" " MI-91500-045 ADJUSTING SCREW MI-91500-046 MI-91500-046 HEX NUT 3/4" MI-91500-048 PIN 6mm MI-91500-048 PIN 6mm MI-91500-050 HEX SCREW 3/8"-1 1/2 MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91500-052B MOTOR FOR MI-91520_2.5HP 220V MI-91500-053 LEVER 3/8" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-058 HEX BOLT 3/16"	MI-91500-034	DRIVE BELT	A-33
MI-91500-038 HEX NUT 5/16 " MI-91500-039 KNOB MI-91500-040 RETAINER MI-91520-041B POWER CORD FOR MI-91520 220V MI-91500-042 MOTOR CORD MI-91500-043 DOOR LOCK KNOB MI-91500-043 DOOR LOCK KNOB MI-91500-044 CAP SCREW MI-91500-044 CAP SCREW 1/4-3/4" " MI-91500-045 ADJUSTING SCREW MI-91500-046 MI-91500-046 HEX NUT 3/4" MI-91500-046 HEX NUT 3/4" MI-91500-046 HEX NUT 3/4" MI-91500-046 HEX NUT 3/4" MI-91500-048 PIN 6mm MI-91500-049 COVER MI-91500-051 MI-91500-050 HEX SCREW 3/8"-1 1/2 MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91500-052 MOTOR FOR MI-91520_2.5HP 220V MI-91500-053 LEVER 3/8" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8"	MI-91500-035B	SHAFT	
MI-91500-039 KNOB MI-91500-040 RETAINER MI-91520-041B POWER CORD FOR MI-91520 220V MI-91500-042 MOTOR CORD MI-91500-043 DOOR LOCK KNOB MI-91500-044 CAP SCREW 1/4-3/4" " MI-91500-045 ADJUSTING SCREW MI-91500-046 MI-91500-046 HEX NUT 3/4" MI-91500-047 BEARING HOUSING MI-91500-048 MI-91500-048 PIN 6mm MI-91500-050 HEX SCREW 3/8"-1 1/2 MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91500-052B MOTOR FOR MI-91520_2.5HP 220V MI-91500-053 LEVER 3/8"-1" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH MI-91500-059 MI-91500-059 BRAKE BELT MI-91500-060 MI-91500-061 SCREW 3/8"-2" MI-91500-062 SCREW 3/8"-2" <td< td=""><td>MI-91500-036</td><td>BEARING</td><td>6005ZZ</td></td<>	MI-91500-036	BEARING	6005ZZ
MI-91500-039 KNOB MI-91500-040 RETAINER MI-91520-041B POWER CORD FOR MI-91520 220V MI-91500-042 MOTOR CORD MI-91500-043 DOOR LOCK KNOB MI-91500-044 CAP SCREW 1/4-3/4" " MI-91500-045 ADJUSTING SCREW MI-91500-046 MI-91500-046 HEX NUT 3/4" MI-91500-047 BEARING HOUSING MI-91500-048 MI-91500-048 PIN 6mm MI-91500-050 HEX SCREW 3/8"-1 1/2 MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91500-052B MOTOR FOR MI-91520_2.5HP 220V MI-91500-053 LEVER 3/8"-1" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH MI-91500-059 MI-91500-059 BRAKE BELT 3/16" MI-91500-060 SHAFT 3/8"-2" MI-91500-061 SCREW 3/8"-2" MI-915			
MI-91500-040 RETAINER MI-91520-041B POWER CORD FOR MI-91520 220V MI-91500-042 MOTOR CORD MI-91500-043 DOOR LOCK KNOB MI-91500-043 DOOR LOCK KNOB MI-91500-044 CAP SCREW 1/4-3/4" " MI-91500-044 CAP SCREW 1/4-3/4" " MI-91500-045 ADJUSTING SCREW MI-91500-046 HEX NUT 3/4" MI-91500-046 HEX NUT 3/4" MI-91500-047 BEARING HOUSING MI-91500-047 BEARING HOUSING MI-91500-048 PIN 6mm MI-91500-048 PIN 6mm MI-91500-049 COVER MI-91500-050 HEX SCREW 3/8"-11/2 MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91500-051 HEX SCREW 3/8"-2 MI-91500-053 LEVER 3/8" MI-91500-055 WASHER 3/8" MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-059 BRAKE BELT MI-91500-059 BRAKE BELT MI-91500-061	MI-91500-038	HEX NUT	5/16 "
MI-91520-041B POWER CORD FOR MI-91520 220V MI-91500-042 MOTOR CORD	MI-91500-039	KNOB	
MI-91500-042 MOTOR CORD MI-91500-043 DOOR LOCK KNOB MI-91500-044 CAP SCREW MI-91500-045 ADJUSTING SCREW MI-91500-046 HEX NUT MI-91500-047 BEARING HOUSING MI-91500-048 PIN MI-91500-049 COVER MI-91500-050 HEX SCREW MI-91500-051 HEX SCREW MI-91500-052B MOTOR FOR MI-91520_2.5HP MI-91500-053 LEVER MI-91500-054 KEY MI-91500-055 WASHER MI-91500-056 HEX NUT MI-91500-056 HEX NUT MI-91500-057 WHEEL BRUSH MI-91500-058 HEX BOLT MI-91500-059 BRAKE BELT MI-91500-060 SHAFT MI-91500-061 SCREW 3/8" 3/8"-2 MI-91500-064 SPRING MI-91500-065 SCREW 3/8" MI-91500-065	MI-91500-040	RETAINER	
MI-91500-043 DOOR LOCK KNOB MI-91500-044 CAP SCREW 1/4-3/4" " MI-91500-045 ADJUSTING SCREW 3/4" MI-91500-046 HEX NUT 3/4" MI-91500-047 BEARING HOUSING 6mm MI-91500-048 PIN 6mm MI-91500-049 COVER 3/8"-1 1/2 MI-91500-050 HEX SCREW 3/8"-2 1/2" MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91500-052B MOTOR FOR MI-91520_2.5HP 220V MI-91500-053 LEVER 3/8"-1" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH MI-91500-058 MI-91500-059 BRAKE BELT MI-91500-060 MI-91500-060 SHAFT 3/8"-2" MI-91500-061 SCREW 3/8"-2" MI-91500-063 NUT 3/8" MI-91500-064 SPRING MI-91500-065 MI-91500-065 SCREW </td <td>MI-91520-041B</td> <td>POWER CORD FOR MI-91520</td> <td>220V</td>	MI-91520-041B	POWER CORD FOR MI-91520	220V
MI-91500-044 CAP SCREW 1/4-3/4" " MI-91500-045 ADJUSTING SCREW 3/4" MI-91500-046 HEX NUT 3/4" MI-91500-047 BEARING HOUSING 6mm MI-91500-048 PIN 6mm MI-91500-049 COVER 3/8"-1 1/2 MI-91500-050 HEX SCREW 3/8"-2 1/2" MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91500-052B MOTOR FOR MI-91520_2.5HP 220V MI-91500-053 LEVER 3/8"-1" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH MI-91500-058 MI-91500-058 HEX BOLT 3/16" MI-91500-060 SHAFT MI-91500-061 MI-91500-061 SCREW 3/8"-2" MI-91500-062 SCREW 3/8" MI-91500-064 SPRING MI-91500-065 MI-91500-065 SCREW 3/8"-1 1/4"	MI-91500-042	MOTOR CORD	
MI-91500-045 ADJUSTING SCREW MI-91500-046 HEX NUT 3/4" MI-91500-047 BEARING HOUSING 6mm MI-91500-048 PIN 6mm MI-91500-049 COVER	MI-91500-043	DOOR LOCK KNOB	
MI-91500-046 HEX NUT 3/4" MI-91500-047 BEARING HOUSING 6mm MI-91500-048 PIN 6mm MI-91500-049 COVER 3/8"-1 MI-91500-050 HEX SCREW 3/8"-2 MI-91500-051 HEX SCREW 3/8"-2 MI-91500-053 LEVER 3/8"-1" MI-91500-053 LEVER 3/8"-1" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH MI-91500-058 MI-91500-058 HEX BOLT 3/16" MI-91500-060 SHAFT MI-91500-061 MI-91500-061 SCREW 3/8"-2 MI-91500-062 SCREW 3/8" MI-91500-063 NUT 3/8" MI-91500-064 SPRING MI-91500-065 MI-91500-065 SCREW 3/8"-1 MI-91500-065 SCREW 3/8"-1	MI-91500-044	CAP SCREW	1/4-3/4" "
MI-91500-047 BEARING HOUSING MI-91500-048 PIN 6mm MI-91500-049 COVER	MI-91500-045	ADJUSTING SCREW	
MI-91500-048 PIN 6mm MI-91500-049 COVER 3/8"-1 1/2 MI-91500-050 HEX SCREW 3/8"-1 1/2 MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91500-053 LEVER 3/8"-1" 3/8"-1" MI-91500-054 KEY 5x5 5 MI-91500-055 WASHER 3/8" 3/8" MI-91500-056 HEX NUT 3/8" 3/8" MI-91500-057 WHEEL BRUSH MI-91500-058 HEX BOLT MI-91500-059 BRAKE BELT 3/16" MI-91500-060 MI-91500-060 SHAFT MI-91500-061 SCREW 3/8"-2 1/2" MI-91500-062 SCREW 3/8" 3/8" MI-91500-063 NUT 3/8" MI-91500-064 SPRING MI-91500-065 SCREW 3/8"-1 1/4"	MI-91500-046	HEX NUT	3/4"
MI-91500-049 COVER MI-91500-050 HEX SCREW 3/8"-1 1/2 MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91520-052B MOTOR FOR MI-91520_2.5HP 220V MI-91500-053 LEVER 3/8"-1" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH 3/16" MI-91500-058 HEX BOLT 3/16" MI-91500-059 BRAKE BELT MI-91500-060 MI-91500-061 SCREW 3/8"-2 1/2" MI-91500-062 SCREW 3/8"-2" MI-91500-063 NUT 3/8" MI-91500-064 SPRING 3/8"-1 1/4"	MI-91500-047	BEARING HOUSING	
MI-91500-050 HEX SCREW 3/8"-1 1/2 MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91520-052B MOTOR FOR MI-91520_2.5HP 220V MI-91500-053 LEVER 3/8"-1" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH 3/16" MI-91500-058 HEX BOLT 3/16" MI-91500-059 BRAKE BELT MI-91500-060 MI-91500-061 SCREW 3/8"-2 1/2" MI-91500-062 SCREW 3/8" MI-91500-063 NUT 3/8" MI-91500-064 SPRING 3/8"-1 1/4"	MI-91500-048	PIN	6mm
MI-91500-051 HEX SCREW 3/8"-2 1/2" MI-91520-052B MOTOR FOR MI-91520_2.5HP 220V MI-91500-053 LEVER 3/8"-1" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH MI-91500-057 MI-91500-058 HEX BOLT 3/16" MI-91500-059 BRAKE BELT MI-91500-060 MI-91500-061 SCREW 3/8"-2 MI-91500-062 SCREW 3/8"-2" MI-91500-063 NUT 3/8" MI-91500-064 SPRING 3/8"-1 MI-91500-065 SCREW 3/8"-1	MI-91500-049	COVER	
MI-91520-052B MOTOR FOR MI-91520_2.5HP 220V MI-91500-053 LEVER 3/8"-1" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH 3/16" MI-91500-058 HEX BOLT 3/16" MI-91500-059 BRAKE BELT 3/8"-2 MI-91500-060 SHAFT 3/8"-2 MI-91500-061 SCREW 3/8"-2" MI-91500-062 SCREW 3/8" MI-91500-063 NUT 3/8" MI-91500-064 SPRING 3/8"-1 1/4"	MI-91500-050	HEX SCREW	3/8"-1 1/2
MI-91500-053 LEVER 3/8"-1" MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH	MI-91500-051	HEX SCREW	3/8"-2 1/2"
MI-91500-054 KEY 5x5 MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH 3/16" MI-91500-058 HEX BOLT 3/16" MI-91500-059 BRAKE BELT 3/16" MI-91500-060 SHAFT 3/8"-2 MI-91500-061 SCREW 3/8"-2 MI-91500-062 SCREW 3/8" MI-91500-063 NUT 3/8" MI-91500-064 SPRING 3/8"-1	MI-91520-052B	MOTOR FOR MI-91520_2.5HP	220V
MI-91500-055 WASHER 3/8" MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH 3/16" MI-91500-058 HEX BOLT 3/16" MI-91500-059 BRAKE BELT 3/8"-2 MI-91500-060 SHAFT 3/8"-2 MI-91500-061 SCREW 3/8"-2" MI-91500-062 SCREW 3/8"-2" MI-91500-063 NUT 3/8" MI-91500-064 SPRING 3/8"-1	MI-91500-053	LEVER	3/8"-1"
MI-91500-056 HEX NUT 3/8" MI-91500-057 WHEEL BRUSH 3/16" MI-91500-058 HEX BOLT 3/16" MI-91500-059 BRAKE BELT 1000000000000000000000000000000000000	MI-91500-054	KEY	5x5
MI-91500-057 WHEEL BRUSH MI-91500-058 HEX BOLT 3/16" MI-91500-059 BRAKE BELT MI-91500-060 SHAFT MI-91500-061 SCREW 3/8"-2 1/2" MI-91500-062 SCREW 3/8"-2" MI-91500-063 NUT 3/8" MI-91500-064 SPRING MI-91500-065 SCREW 3/8"-1 1/4"	MI-91500-055	WASHER	3/8"
MI-91500-058 HEX BOLT 3/16" MI-91500-059 BRAKE BELT	MI-91500-056	HEX NUT	3/8"
MI-91500-059 BRAKE BELT MI-91500-060 SHAFT MI-91500-061 SCREW MI-91500-062 SCREW MI-91500-063 NUT MI-91500-064 SPRING MI-91500-065 SCREW	MI-91500-057	WHEEL BRUSH	
MI-91500-060 SHAFT MI-91500-061 SCREW 3/8"-2 1/2" MI-91500-062 SCREW 3/8"-2" MI-91500-063 NUT 3/8" MI-91500-064 SPRING 3/8"-1 1/4"	MI-91500-058	HEX BOLT	3/16"
MI-91500-061 SCREW 3/8"-2 1/2" MI-91500-062 SCREW 3/8"-2" MI-91500-063 NUT 3/8" MI-91500-064 SPRING MI-91500-065 SCREW 3/8"-1	MI-91500-059	BRAKE BELT	
MI-91500-062 SCREW 3/8"-2" MI-91500-063 NUT 3/8" MI-91500-064 SPRING 3/8"-1 MI-91500-065 SCREW 3/8"-1	MI-91500-060	SHAFT	
MI-91500-063 NUT 3/8" MI-91500-064 SPRING MI-91500-065 SCREW 3/8"-1 1/4"	MI-91500-061	SCREW	3/8"-2 1/2"
MI-91500-064 SPRING MI-91500-065 SCREW 3/8"-1 1/4"	MI-91500-062	SCREW	3/8"-2"
MI-91500-065 SCREW 3/8"-1 1/4"	MI-91500-063	NUT	3/8"
	MI-91500-064	SPRING	
MI-91500-066-1 BRAKE BAR(LONG)	MI-91500-065	SCREW	3/8"-1 1/4"
	MI-91500-066-1	BRAKE BAR(LONG)	

MI-91500-066-2 BRAKE BAR MI-91500-067 BRAKE BAR MI-91500-068A CAP SCREW MI-91500-070 MITER GAUGE STORAGE BRACKET MI-91500-071 RIP FE MI-91500-072 HEX HEND BOLT MI-91500-073 NUT MI-91500-074 HEX HEND BOLT MI-91500-075 HEX HEND BOLT MI-91500-076 NUT MI-91500-077 NUT MI-91500-076 NUT MI-91500-076 NUT MI-91500-0776 NUT MI-91500-076 NUT MI-91500-076 NUT MI-91500-076 NUT MI-91500-076 NUT MI-91500-076 NUT MI-91500-107 UCK WASHER 3/8" 3/8" MI-91500-102 LOCK WASHER MI-91500-103 WASHER MI-91500-104 GUIDE BAR MI-91500-107 GUIDE BAR MI-91500-110 LOCK WASHER MI-91500-110 LOCK WASHER MI-91500-111 <th>PART NO.</th> <th>DESCRIPTION</th> <th>SPECIFICATION</th>	PART NO.	DESCRIPTION	SPECIFICATION
MI-91500-068A CAP SCREW 1/4"-3/4" MI-91500-069 LOCK WASHER 3/8" MI-91500-070 MITER GAUGE STORAGE BRACKET MI-91500-071 RIP FE MI-91500-072 HEX HEND BOLT MI-91500-073 NUT MI-91500-074 HEX HEND BOLT MI-91500-075 HEX HEND BOLT MI-91500-076 NUT MI-91500-102 LOCK WASHER 1/4".3/8" MI-91500-102 MI-91500-103 WASHER MI-91500-104 GUIDE BAR MI-91500-107 GUIDE BAR MI-91500-110 LOCK WASHER MI-91500-110 LOCK WASHER MI-91500-111 HEX BOLT MI-91500-112 SH	MI-91500-066-2	BRAKE BAR(SHORT)	
MI-91500-069 LOCK WASHER 3/8" MI-91500-070 MITER GAUGE STORAGE BRACKET MI-91500-071 RIP FE MI-91500-072 HEX HEND BOLT MI-91500-073 NUT MI-91500-074 HEX HEND BOLT MI-91500-075 HEX HEND BOLT MI-91500-076 NUT MI-91500-102 LOCK WASHER J/4" MI-91500-103 WASHER 1/4" MI-91500-107 GUIDE BAR MI-91500-108 BRACKET MI-91500-110 LOCK WASHER MI-91500-111 HEX BOLT MI-91500-112 SHAFT MI-91500-113 HAND WHEEL MI-91500-1	MI-91500-067	BRAKE BAR	
MI-91500-070 MITER GAUGE STORAGE BRACKET MI-91500-071 RIP FE MI-91500-072 HEX HEND BOLT 1/4"-3/4" MI-91500-073 NUT MI-91500-074 HEX HEND BOLT MI-91500-075 HEX HEND BOLT MI-91500-076 NUT MI-91500-076 NUT MI-91500-087A CAP SCREW 3/8"-1" MI-91500-087A MI-91500-010 HEX BOLT MI-91500-011 HEX BOLT MI-91500-102 LOCK WASHER MI-91500-103 WASHER MI-91500-104 GUIDE BAR COVER MI-91500-107 GUIDE BAR MI-91500-108 BRACKET MI-91500-109 WASHER MI-91500-110 LOCK WASHER MI-91500-111 HEX BOLT MI-91500-112 SHAFT MI-91500-113 HAND WHEEL MI-91500-114 SET SCREW MI-91500-115 C-RING MI-91500-116 BALL MI-91500-117 SPRING MI-91500-120	MI-91500-068A	CAP SCREW	1/4"-3/4"
MI-91500-071 RIP FE MI-91500-072 HEX HEND BOLT 1/4"-3/4" MI-91500-073 NUT MI-91500-074 HEX HEND BOLT MI-91500-075 HEX HEND BOLT MI-91500-076 NUT MI-91500-076 NUT MI-91500-076 NUT MI-91500-087A CAP SCREW J/8" 3/8" MI-91500-101 HEX BOLT MI-91500-102 LOCK WASHER MI-91500-102 LOCK WASHER MI-91500-102 LOCK WASHER MI-91500-103 WASHER MI-91500-104 GUIDE BAR MI-91500-108 BRACKET MI-91500-109 WASHER MI-91500-110 LOCK WASHER MI-91500-110 LOCK WASHER MI-91500-110 LOCK WASHER MI-91500-111 HEX BOLT MI-91500-112 SHAFT MI-91500-113 HAND WHEEL MI-91500-114 SET SCREW MI-91500-115 C-RING MI-91500-116 BALL	MI-91500-069	LOCK WASHER	3/8"
MI-91500-072 HEX HEND BOLT 1/4"-3/4" MI-91500-073 NUT MI-91500-074 HEX HEND BOLT MI-91500-075 HEX HEND BOLT MI-91500-076 NUT MI-91500-076 NUT MI-91500-076 NUT MI-91500-087A CAP SCREW 3/8"-1" MI-91500-088A LOCK WASHER 3/8" MI-91500-102 LOCK WASHER 3/16" MI-91500-103 WASHER 1/4"-3/8" MI-91500-104 GUIDE BAR COVER 1/4" MI-91500-107 GUIDE BAR MI-91500-108 MI-91500-108 BRACKET MI-91500-109 MI-91500-109 WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-112 SHAFT MI-91500-113 MI-91500-113 HAND WHEEL MI-91500-114 MI-91500-115 C-RING S13 MI-91500-116 BALL MI-91500-116 MI-91500-117 SPRING MI-91500-120 MI-91500-120 GEAR MI	MI-91500-070	MITER GAUGE STORAGE BRACKET	
MI-91500-073 NUT MI-91500-074 HEX HEND BOLT MI-91500-075 HEX HEND BOLT MI-91500-076 NUT MI-91500-087A CAP SCREW MI-91500-088A LOCK WASHER MI-91500-101 HEX BOLT MI-91500-102 LOCK WASHER MI-91500-103 WASHER MI-91500-104 GUIDE BAR COVER MI-91500-107 GUIDE BAR MI-91500-108 BRACKET MI-91500-109 WASHER MI-91500-109 WASHER MI-91500-109 WASHER MI-91500-110 LOCK WASHER MI-91500-111 HEX BOLT MI-91500-112 SHAFT MI-91500-113 HAND WHEEL MI-91500-114 SET SCREW MI-91500-115 C-RING MI-91500-116 BALL MI-91500-117 SPRING MI-91500-118 SET SCREW MI-91500-120 GEAR MI-91500-121 BLADE GUARD MI-91500-120 GEAR <td< td=""><td>MI-91500-071</td><td>RIP FE</td><td></td></td<>	MI-91500-071	RIP FE	
MI-91500-074 HEX HEND BOLT MI-91500-075 HEX HEND BOLT MI-91500-076 NUT MI-91500-087A CAP SCREW 3/8" MI-91500-088A LOCK WASHER 3/8" MI-91500-101 HEX BOLT 3/16" MI-91500-102 LOCK WASHER 1/4"-3/8" MI-91500-103 WASHER 1/4" MI-91500-104 GUIDE BAR COVER 1/4" MI-91500-107 GUIDE BAR MI-91500-108 MI-91500-108 BRACKET MI-91500-108 MI-91500-109 WASHER 5/16" MI-91500-108 BRACKET MI-91500-110 MI-91500-109 WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-111 HEX BOLT 5/16"-5/8" MI-91500-112 SHAFT MI-91500-112 SHAFT MI-91500-113 HAND WHEEL MI-91500-114 SET SCREW 1/4 " MI-91500-116 BALL MI-91500-116 MI-91500-117 SPRING MI-91500-118 SET SCREW	MI-91500-072	HEX HEND BOLT	1/4"-3/4"
MI-91500-075 HEX HEND BOLT MI-91500-076 NUT MI-91500-087A CAP SCREW 3/8"-1" MI-91500-088A LOCK WASHER 3/8" MI-91500-101 HEX BOLT 3/16" MI-91500-102 LOCK WASHER 1/4"-3/8" MI-91500-103 WASHER 1/4" MI-91500-104 GUIDE BAR COVER 1/4" MI-91500-107 GUIDE BAR MI-91500-108 MI-91500-108 BRACKET MI-91500-109 MI-91500-109 WASHER 5/16" MI-91500-109 WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-112 SHAFT MI-91500-112 MI-91500-113 HAND WHEEL MI-91500-114 MI-91500-114 SET SCREW 1/4 " MI-91500-115 C-RING S13 MI-91500-118 SET SCREW 1/4 " MI-91500-119 KNOB MI-91500-120 MI-91500-120 GEAR MI-91500-1	MI-91500-073	NUT	
MI-91500-076 NUT MI-91500-087A CAP SCREW 3/8"-1" MI-91500-088A LOCK WASHER 3/8" MI-91500-101 HEX BOLT 3/16" MI-91500-102 LOCK WASHER 1/4"-3/8" MI-91500-103 WASHER 1/4" MI-91500-104 GUIDE BAR COVER 1/4" MI-91500-107 GUIDE BAR MI-91500-108 MI-91500-108 BRACKET MI-91500-109 MI-91500-109 WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-111 HEX BOLT 5/16" MI-91500-112 SHAFT MI-91500-112 MI-91500-113 HAND WHEEL MI-91500-114 MI-91500-114 SET SCREW 1/4 " MI-91500-116 BALL MI-91500-118 MI-91500-118 SET SCREW 1/4 " MI-91500-120 GEAR MI-91500-130 MI-91500-121 BL	MI-91500-074	HEX HEND BOLT	
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MI-91500-088A LOCK WASHER 3/8" MI-91500-101 HEX BOLT 3/16" MI-91500-102 LOCK WASHER 1/4"-3/8" MI-91500-103 WASHER 1/4" MI-91500-103 WASHER 1/4" MI-91500-104 GUIDE BAR COVER 1/4" MI-91500-107 GUIDE BAR 1/4" MI-91500-108 BRACKET 1/4" MI-91500-109 WASHER 5/16" MI-91500-109 WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-111 HEX BOLT 5/16" MI-91500-112 SHAFT MI-91500-114 MI-91500-113 HAND WHEEL MI-91500-116 MI-91500-117 SPRING MI-91500-117 MI-91500-118 SET SCREW 1/4 " MI-91500-120	MI-91500-076	NUT	
MI-91500-101 HEX BOLT 3/16" MI-91500-102 LOCK WASHER 1/4"-3/8" MI-91500-103 WASHER 1/4" MI-91500-104 GUIDE BAR COVER 1/4" MI-91500-107 GUIDE BAR 1/4" MI-91500-108 BRACKET 1/4" MI-91500-109 WASHER 5/16" MI-91500-109 WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-111 HEX BOLT 5/16" MI-91500-112 SHAFT 5/16" MI-91500-112 SHAFT 5/16" MI-91500-112 SHAFT 5/16" MI-91500-113 HAND WHEEL 1/4 " MI-91500-114 SET SCREW 1/4 " MI-91500-115 C-RING S13 MI-91500-116 BALL 1/4 " MI-91500-117 SPRING 1/4 " MI-91500-118 SET SCREW 1/4 " MI-91500-120 GEAR 1/4 " MI-91500-131 GUARD 1/4-3/4" " </td <td>MI-91500-087A</td> <td>CAP SCREW</td> <td>3/8"-1"</td>	MI-91500-087A	CAP SCREW	3/8"-1"
MI-91500-102 LOCK WASHER 1/4"-3/8" MI-91500-103 WASHER 1/4" MI-91500-104 GUIDE BAR COVER 1/4" MI-91500-107 GUIDE BAR 1/4" MI-91500-108 BRACKET 1/4" MI-91500-109 WASHER 5/16" MI-91500-109 WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-111 LOCK WASHER 5/16" MI-91500-112 SHAFT 5/16"-5/8" MI-91500-112 SHAFT MI-91500-113 MI-91500-113 HAND WHEEL MI-91500-114 MI-91500-114 SET SCREW 1/4 " MI-91500-116 BALL MI-91500-116 MI-91500-117 SPRING MI-91500-118 MI-91500-118 SET SCREW 1/4 " MI-91500-120 GEAR MI-91500-120 MI-91500-130 CAP SCREW 1/4-3/4" " MI-91500-131 GUARD POST MI-91500-132 MI-91500-132 POINTER MI-91500-133 MI-1LIPS HD. SCREW	MI-91500-088A	LOCK WASHER	3/8"
MI-91500-103 WASHER 1/4" MI-91500-104 GUIDE BAR COVER 1/4" MI-91500-107 GUIDE BAR 1/4" MI-91500-107 GUIDE BAR 1/4" MI-91500-108 BRACKET 1/4" MI-91500-109 WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-111 HEX BOLT 5/16"-5/8" MI-91500-112 SHAFT 1/4 " MI-91500-113 HAND WHEEL 1/4 " MI-91500-114 SET SCREW 1/4 " MI-91500-115 C-RING S13 MI-91500-116 BALL MI-91500-116 MI-91500-117 SPRING MI-91500-118 MI-91500-118 SET SCREW 1/4 " MI-91500-120 GEAR MI-91500-120 MI-91500-121 BLADE GUARD MI-91500-131 MI-91500-131 GUARD POST MI-91500-132 MI-91500-132 POINTER MI-91500-133 MI-91500-134 TABLE INSERT MI-91500-134	MI-91500-101	HEX BOLT	3/16"
MI-91500-104 GUIDE BAR COVER 1/4" MI-91500-107 GUIDE BAR MI-91500-108 BRACKET MI-91500-109 WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-111 HEX BOLT 5/16"-5/8" MI-91500-112 SHAFT MI-91500-113 HAND WHEEL MI-91500-114 SET SCREW 1/4 " MI-91500-115 C-RING S13 MI-91500-116 BALL MI-91500-117 SPRING MI-91500-118 SET SCREW 1/4 " MI-91500-119 KNOB MI-91500-120 GEAR MI-91500-131 GUARD POST MI-91500-131 GUARD POST MI-91500-132 POINTER MI-91500-133 PHILLIPS HD. SCREW 3/16 -1/2" " <td< td=""><td>MI-91500-102</td><td>LOCK WASHER</td><td>1/4"-3/8"</td></td<>	MI-91500-102	LOCK WASHER	1/4"-3/8"
MI-91500-107 GUIDE BAR MI-91500-108 BRACKET MI-91500-109 WASHER MI-91500-110 LOCK WASHER MI-91500-111 HEX BOLT MI-91500-112 SHAFT MI-91500-113 HAND WHEEL MI-91500-114 SET SCREW MI-91500-115 C-RING S13 MI-91500-116 MI-91500-117 SPRING MI-91500-118 SET SCREW MI-91500-119 KNOB MI-91500-119 KNOB MI-91500-120 GEAR MI-91500-130 CAP SCREW MI-91500-131 GUARD POST MI-91500-132 POINTER MI-91500-133 PHILLIPS HD. SCREW MI-91500-134 TABLE INSERT	MI-91500-103	WASHER	1/4"
MI-91500-108 BRACKET MI-91500-109 WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-111 HEX BOLT 5/16"-5/8" MI-91500-112 SHAFT 5/16"-5/8" MI-91500-112 SHAFT MI-91500-113 MI-91500-113 HAND WHEEL MI-91500-115 MI-91500-115 C-RING S13 MI-91500-116 BALL MI-91500-116 MI-91500-117 SPRING 1/4 " MI-91500-118 SET SCREW 1/4 " MI-91500-119 KNOB MI-91500-120 GEAR MI-91500-121 BLADE GUARD MI-91500-130 CAP SCREW 1/4-3/4" " MI-91500-131 GUARD POST MI-91500-132 POINTER MI-91500-133 PHILLIPS HD. SCREW 3/16 -1/2" " MI-91500-134 TABLE INSERT	MI-91500-104	GUIDE BAR COVER	1/4"
MI-91500-109 WASHER 5/16" MI-91500-110 LOCK WASHER 5/16" MI-91500-111 HEX BOLT 5/16"-5/8" MI-91500-112 SHAFT 5/16" MI-91500-113 HAND WHEEL 1/4 " MI-91500-114 SET SCREW 1/4 " MI-91500-115 C-RING S13 MI-91500-116 BALL 1/4 " MI-91500-117 SPRING 1/4 " MI-91500-118 SET SCREW 1/4 " MI-91500-119 KNOB 1/4 " MI-91500-120 GEAR 1/4 " MI-91500-121 BLADE GUARD 1/4-3/4" " MI-91500-130 CAP SCREW 1/4-3/4" " MI-91500-131 GUARD POST 1/4-3/4" " MI-91500-132 POINTER 1/91500-133 PHILLIPS HD. SCREW 3/16 -1/2" " MI-91500-134 TABLE INSERT 1/2" " 1/2" " 1/2" "	MI-91500-107	GUIDE BAR	
MI-91500-110 LOCK WASHER 5/16" MI-91500-111 HEX BOLT 5/16"-5/8" MI-91500-112 SHAFT	MI-91500-108	BRACKET	
MI-91500-111 HEX BOLT 5/16"-5/8" MI-91500-112 SHAFT	MI-91500-109	WASHER	5/16"
MI-91500-112 SHAFT MI-91500-113 HAND WHEEL MI-91500-114 SET SCREW MI-91500-115 C-RING MI-91500-116 BALL MI-91500-117 SPRING MI-91500-118 SET SCREW MI-91500-117 SPRING MI-91500-118 SET SCREW MI-91500-119 KNOB MI-91500-120 GEAR MI-91500-121 BLADE GUARD MI-91500-130 CAP SCREW MI-91500-131 GUARD POST MI-91500-132 POINTER MI-91500-133 PHILLIPS HD. SCREW MI-91500-134 TABLE INSERT	MI-91500-110	LOCK WASHER	5/16"
MI-91500-113 HAND WHEEL MI-91500-114 SET SCREW 1/4 " MI-91500-115 C-RING S13 MI-91500-116 BALL MI-91500-117 MI-91500-117 SPRING MI-91500-118 MI-91500-118 SET SCREW 1/4 " MI-91500-119 KNOB MI-91500-120 MI-91500-120 GEAR MI-91500-121 MI-91500-130 CAP SCREW 1/4-3/4" " MI-91500-131 GUARD POST MI-91500-132 MI-91500-133 PHILLIPS HD. SCREW 3/16 -1/2" " MI-91500-134 TABLE INSERT	MI-91500-111	HEX BOLT	5/16"-5/8"
MI-91500-114 SET SCREW 1/4 " MI-91500-115 C-RING \$13 MI-91500-116 BALL MI-91500-117 SPRING MI-91500-118 SET SCREW 1/4 " MI-91500-119 KNOB MI-91500-120 GEAR MI-91500-121 BLADE GUARD MI-91500-130 CAP SCREW 1/4-3/4" " MI-91500-131 GUARD POST MI-91500-132 POINTER MI-91500-133 PHILLIPS HD. SCREW 3/16 -1/2" " MI-91500-134 TABLE INSERT	MI-91500-112	SHAFT	
MI-91500-115 C-RING \$\$13 MI-91500-116 BALL	MI-91500-113	HAND WHEEL	
MI-91500-116 BALL MI-91500-117 SPRING MI-91500-118 SET SCREW MI-91500-119 KNOB MI-91500-120 GEAR MI-91500-121 BLADE GUARD MI-91500-130 CAP SCREW MI-91500-131 GUARD POST MI-91500-132 POINTER MI-91500-133 PHILLIPS HD. SCREW MI-91500-134 TABLE INSERT	MI-91500-114	SET SCREW	1/4 "
MI-91500-117 SPRING MI-91500-118 SET SCREW 1/4 " MI-91500-119 KNOB MI-91500-120 GEAR MI-91500-121 BLADE GUARD MI-91500-130 CAP SCREW 1/4-3/4" " MI-91500-131 GUARD POST MI-91500-132 POINTER MI-91500-133 PHILLIPS HD. SCREW 3/16 -1/2" " MI-91500-134 TABLE INSERT	MI-91500-115	C-RING	S13
MI-91500-118 SET SCREW 1/4 " MI-91500-119 KNOB MI-91500-120 GEAR MI-91500-121 BLADE GUARD MI-91500-130 CAP SCREW 1/4-3/4" " MI-91500-131 GUARD POST MI-91500-132 POINTER MI-91500-133 PHILLIPS HD. SCREW 3/16 -1/2" " MI-91500-134 TABLE INSERT	MI-91500-116	BALL	
MI-91500-119 KNOB MI-91500-120 GEAR MI-91500-121 BLADE GUARD MI-91500-130 CAP SCREW MI-91500-131 GUARD POST MI-91500-132 POINTER MI-91500-133 PHILLIPS HD. SCREW MI-91500-134 TABLE INSERT	MI-91500-117	SPRING	
MI-91500-120 GEAR MI-91500-121 BLADE GUARD MI-91500-130 CAP SCREW MI-91500-131 GUARD POST MI-91500-132 POINTER MI-91500-133 PHILLIPS HD. SCREW MI-91500-134 TABLE INSERT	MI-91500-118	SET SCREW	1/4 "
MI-91500-121 BLADE GUARD MI-91500-130 CAP SCREW 1/4-3/4" " MI-91500-131 GUARD POST 1/4-3/4" " MI-91500-132 POINTER 1/4-3/4" " MI-91500-133 PHILLIPS HD. SCREW 3/16 -1/2" " MI-91500-134 TABLE INSERT 1/4-3/4" "	MI-91500-119	KNOB	
MI-91500-130 CAP SCREW 1/4-3/4" " MI-91500-131 GUARD POST	MI-91500-120	GEAR	
MI-91500-131 GUARD POST MI-91500-132 POINTER MI-91500-133 PHILLIPS HD. SCREW MI-91500-134 TABLE INSERT	MI-91500-121	BLADE GUARD	
MI-91500-132 POINTER MI-91500-133 PHILLIPS HD. SCREW 3/16 -1/2" " MI-91500-134 TABLE INSERT	MI-91500-130	CAP SCREW	1/4-3/4" "
MI-91500-133 PHILLIPS HD. SCREW 3/16 -1/2" " MI-91500-134 TABLE INSERT	MI-91500-131	GUARD POST	
MI-91500-134 TABLE INSERT	MI-91500-132	POINTER	
	MI-91500-133	PHILLIPS HD. SCREW	3/16 -1/2" "
MI-91500-135 TABLE	MI-91500-134	TABLE INSERT	
	MI-91500-135	TABLE	

PART NO.	DESCRIPTION	SPECIFICATION
MI-91500-138	SCALE	
MI-91500-139	POINTER PLATE	
MI-91500-140	TABLE ALIGNMENT PIN	3/8-2/1/2"
MI-91500-141A	MITER GAUGE	
MI-91500-141A-1	LOCKING KNOB	
MI-91500-141A-2	GAUGE BODY	
MI-91500-141A-3	PHILLIPS HD. SCREW	3/16 - 1/4"
MI-91500-141A-4	POINTER	
MI-91500-141A-5	GAUGE BAR	
MI-91500-141A-6	BLOCK	
MI-91500-142	HEX BOLT	3/8 - 2-1/2"
MI-91500-143	TRUNNION CLAMP SHOE	5/16-3/4"
MI-91500-144	TRUNNION	5/16-1 1/4"
MI-91500-145	SHOULDER BOLT	1/4-20P*3/4"
MI-91500-146	HEX BOLT	5/16 - 1-1/4"
MI-91500-147	WASHER	3/8 "
MI-91500-148	TABLE TILT BRACKET	3/16 -3/4
MI-91500-149	LOCK KNOB	3/8 "
MI-91500-150	PHILLIPS HD. SCREW	3/16 - 1/4"
MI-91500-151	POINTER	
MI-91500-152	SCALE	1/4-3/4"
MI-91500-158	LOCK KNOB	5/16 "
MI-91500-159	WASHER	3/8 "
MI-91500-160	HEX BOLT	1/4 "
MI-91500-161	ANGLE ADJUSTMENT BRACKET	1/4 "
MI-91500-162	HEX BOLT	1/4 - 5/8"
MI-91500-163	HEX NUT	3/8-1 "
MI-91500-164	BASE	3/8 "
MI-91500-166	HEX BOLT	3/8-1 "
MI-91500-167	HEX NUT	3/8 "
MI-91500-168	OPEN END WRENCH	10 x 12
MI-91500-169	ALLEN KEY	5 mm
MI-91500-170	ALLEN KEY	3 mm
MI-91500-171	FLAT WASHER	3/8"-19
MI-91500-172	HEX NUT	
MI-91500-173	HYDRAULIC TENSION GAUGE	
MI-91500-174	GAUGE PLATE	
MI-91500-175	PAN HD SCREW	

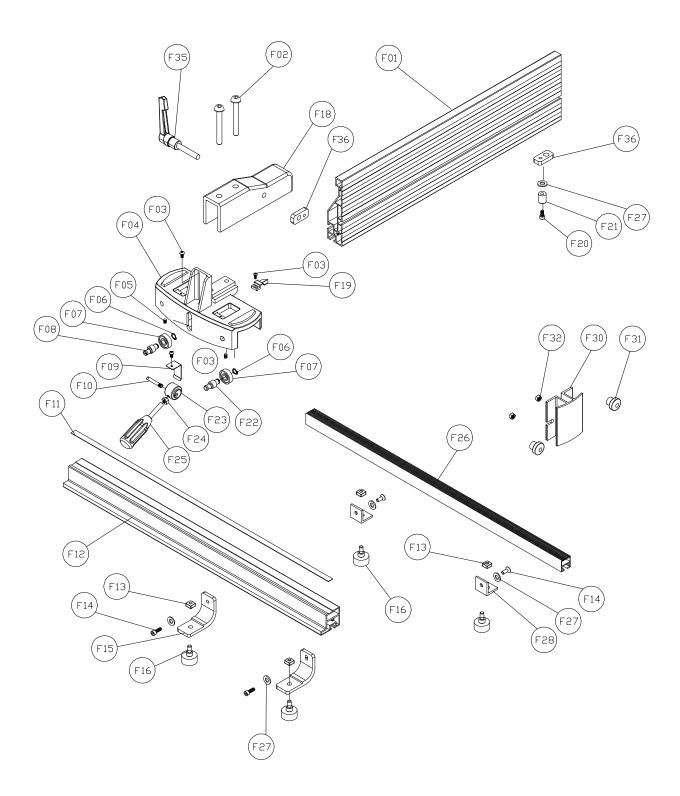
MI-91520 S-MODEL



PARTS LIST FOR MI-91520 UPPER DELUXE BEARING GUIDE

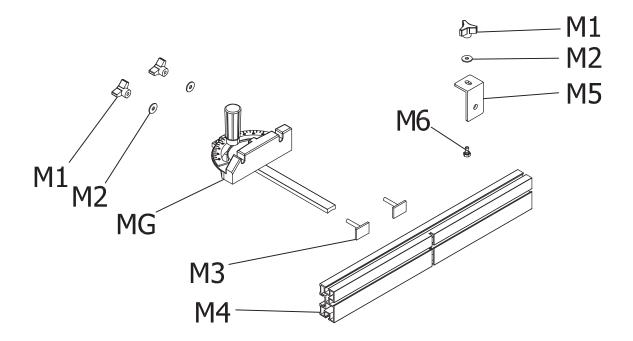
PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
MI-91520-S1	SLEEVE	MI-91520-S16	CERAMIC GUIDE
MI-91520-S2	SHAFT	MI-91520-S17	SLIDING BLOCK - S
MI-91520-S3	DOVETAIL BLOCK	MI-91520-S18	BUSHING
MI-91520-S4	SET SCREW 1/4" x 1/4"	MI-91520-S19	BALL BEARING 608ZZ
MI-91520-S5	SLIDING BLOCK - L	MI-91520-S20	FLAT WASHER 3/16-12
MI-91520-S6	BEARING SHAFT	MI-91520-S21	SOCKET HEAD CAP SCREW M5*16mm
MI-91520-S7	EXTERNAL RETAINING RING S10	MI-91520-S22	SLIDING BLOCK - CHAMFERING
MI-91520-S8	BALL BEARING 6000ZZ	MI-91520-S23	SET SCREW 1/4-20P*1/2"
MI-91520-S9	CAP SCREW 1/4" x 1/2"	MI-91520-S32	FLAT WASHER 1/4-16*1.2mm
MI-91520-S10	BASE - B	MI-91520-S43	CAP SCREW 1/4*1-1/2"
MI-91520-S11	BASE - S	MI-91520-S44	CAP SCREW 1/4*5/8"
MI-91520-S12	SHAFT	MI-91520-S45	HEX BOLT 1/4-20P*3/4"
MI-91520-S13	DOVETAIL BLOCK - CHAMFERING	MI-91520-S47	LOCK WASHER 1/4"
MI-91520-S14	CAP SCREW 1/4*5/8"	MI-91520-S48	HEX BOLT 1/4*1-1/4"
MI-91520-S15	SLIDING BLOCK OF CERAMIC GUIDE		

PARTS LISTS FOR RS-FENCE



PART NO.	DESCRIPTION SPECIFICATION
MI-91520-F01	6" FENCE
MI-91520-F02	FLAT HEAD CAP SCREW M10 x 70mm
MI-91520-F03	FLAT HEAD CAP SCREW M5 x 10mm
MI-91520-F04	FENCE BASE
MI-91520-F05	SET SCREW 1/4-20P x 1/4"
MI-91520-F06	EXTERNAL RETAINING RING S10
MI-91520-F07	BEARING 6200ZZ
MI-91520-F08	ECCENTRIC SHAFT
MI-91520-F09	PRESSURE PLATE
MI-91520-F10	PIN
MI-91520-F11	FENCE SCALE
MI-91520-F12	FRONT FENCE RAIL
MI-91520-F13	SQUARE NUT 5/16"
MI-91520-F14	HEX SCREW 1/4"*5/8"
MI-91520-F15	L TYPE PLATE
MI-91520-F16	KNOB 5/16-18 x 5/8
MI-91520-F18	FENCE HOLDER
MI-91520-F19	POINTER
MI-91520-F20	CAP SCREW 1/4 x 3/4"
MI-91520-F21	RUNNER
MI-91520-F22	BEARING SHAFT
MI-91520-F23	LOCK MECHANISM
MI-91520-F24	HEX NUT 8MM-1.25p
MI-91520-F25	FENCE HANDLE
MI-91520-F26	FENCE RAIL REAR
MI-91520-F27	FLAT WASHER 1/4-16 x 1.2mm
MI-91520-F28	L BRACKET
MI-91520-F30	RESAW ATTACHMENT
MI-91520-F31	KNOB 1/4"*3/8"
MI-91520-F32	HEX NUT 1/4"
MI-91520-F35	HANDLE LOCK
MI-91520-F36	SPECIAL SCREW 3/8 &1/4

MITER GAUGE FENCE JIG



PART NO.	DESCRIPTION	SPECIFICATION
MI-91520-M1	KNOB 1/4"	
MI-91520-M2	FLAT WASHER 1/4-16*1.2mm	
MI-91520-M3	SET SCREW 1/4-20P*1-1/2"	
MI-91520-M4	FENCE BODY	
MI-91520-M5	LOCK PLATE	
MI-91520-M6	HEX BOLT 1/4-20*1/2"	
MI-91520-MG	MITER GAUGE	