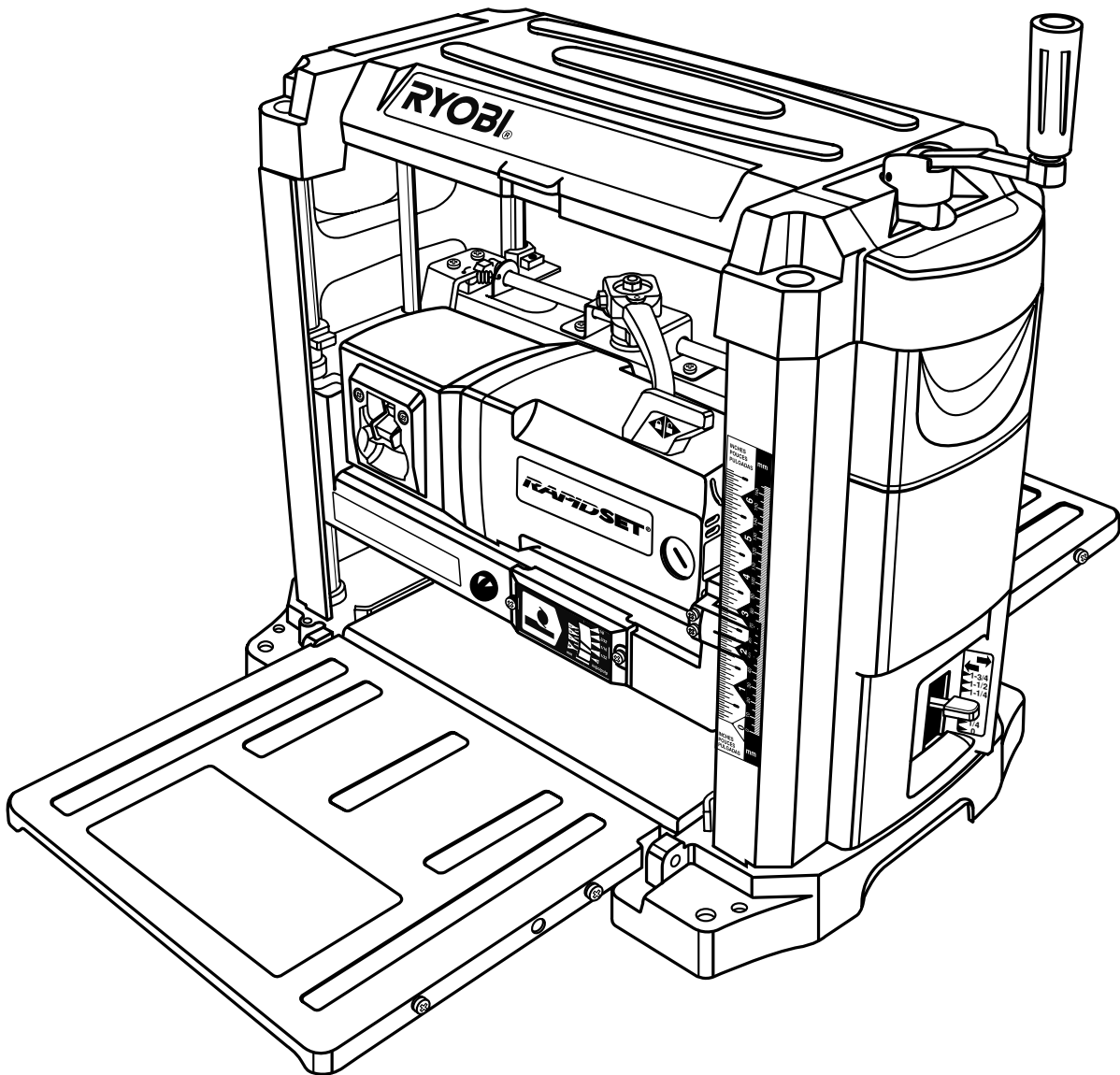


RYOBI® OPERATOR'S MANUAL

13 in. (330 mm) Portable Planer

Model AP1300



THANK YOU FOR BUYING A RYOBI PORTABLE PLANER.

Your new planer has been engineered and manufactured to Ryobi's high standards for dependability, ease of operation, and operator safety. Properly cared for, it will give you years of rugged, trouble-free performance.

⚠ CAUTION: Carefully read through this entire operator's manual before using your new planer.

Pay close attention to the Rules for Safe Operation, Warnings, and Cautions. If you use your tool properly and only for what it is intended, you will enjoy years of safe, reliable service.

Please fill out and return the Warranty Registration Card so we can be of future service to you.

Thank you again for buying Ryobi tools.

SAVE THIS MANUAL FOR FUTURE REFERENCE

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INTRODUCTION

Your portable planer has many features for making cutting operations more pleasant and enjoyable. Safety, performance, and dependability have been given top priority in the design of this planer making it easy to maintain and operate.

CAUTION:

Carefully read through this entire operator's manual before using your new tool. Pay close attention to the Rules for Safe Operation, and all Safety Alert Symbols including Danger, Warning and Caution. If you use your tool properly and only for what it is intended, you will enjoy years of safe, reliable service.

PRODUCT SPECIFICATIONS

SPECIFICATIONS:

Feed Rate	25 FPM
Rating	15 Amperes
No Load Speed	9,900 RPM
Input	120 volts, 60Hz, AC Only
Max. Planing Height	6 in. (152 mm)
Max. Planing Width	13 in. (330 mm)
Max Planing Depth	1/8 in. (3 mm)
Net Weight	77 lbs. (35 kg.)



Look for this symbol to point out important safety precautions. It means attention!!! Your safety is involved.

RULES FOR SAFE OPERATION

Safe operation of this power tool requires that you read and understand this operator's manual and all labels affixed to the tool. Safety is a combination of common sense, staying alert, and knowing how your tool works.

READ ALL INSTRUCTIONS

- **KNOW YOUR POWER TOOL.** Read the operator's manual carefully. Learn the machine's applications and limitations as well as the specific potential hazards related to this tool.
- **GUARD AGAINST ELECTRICAL SHOCK** by preventing body contact with grounded surfaces such as pipes, radiators, ranges, refrigerator enclosures.
- **KEEP GUARDS IN PLACE** and in good working order.
- **REMOVE WRENCHES AND ADJUSTING KEYS.** Get in the habit - before turning on tool - that hex keys and adjusting wrenches are removed from tool.
- **KEEP THE WORK AREA CLEAN.** Cluttered work areas and work benches invite accidents. **DO NOT** leave tools or pieces of wood on the machine while it is in operation.
- **DO NOT USE IN DANGEROUS ENVIRONMENTS.** Do not use power tools near gasoline or other flammable liquids, in damp or wet locations, or expose them to rain. Keep the work area well lit.
- **KEEP CHILDREN AND VISITORS AWAY.** All visitors should wear safety glasses and be kept a safe distance from work area. Do not let visitors contact tool or extension cord while operating.
- **MAKE WORKSHOP CHILDPROOF** with padlocks and master switches or by removing starter keys.
- **DO NOT FORCE THE TOOL.** It will do the job better and safer at the rate for which it was designed.
- **USE THE RIGHT TOOL FOR THE JOB.** Do not force the tool or attachment to do a job it was not designed for. Use it only the way it was intended.
- **USE THE PROPER EXTENSION CORD.** Make sure your extension cord is in good condition. Use only a cord heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. A wire gage size (A.W.G.) of at least **14** is recommended for an extension cord 25 feet or less in length. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.
- **INSPECT TOOL CORDS AND EXTENSION CORDS PERIODICALLY** and, if damaged, have repaired at your nearest authorized service center. Stay constantly aware of cord location and keep it well away from the moving blade.
- **DRESS PROPERLY.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that can get caught and draw you into moving parts. Nonslip footwear is recommended. Also wear protective hair covering to contain long hair.
- **ALWAYS WEAR SAFETY GLASSES WITH SIDE SHIELDS.** Everyday eyeglasses have only impact-resistant lenses; they are **NOT** safety glasses.
- **WEAR A DUST MASK** to keep from inhaling fine particles.
- **PROTECT YOUR HEARING.** Wear hearing protection during extended periods of operation.
- **SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.
- **DO NOT OVERREACH.** Keep proper footing and balance at all times.
- **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories.
- **DISCONNECT ALL TOOLS.** When not in use, before servicing, or when changing attachments, all tools should be disconnected.
- **AVOID ACCIDENTAL STARTING.** Be sure switch is off when plugging in any tool.
- **USE RECOMMENDED ACCESSORIES.** Consult the operator's manual for recommended accessories. The use of improper accessories may cause risk of injury.
- **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the blade is unintentionally contacted.
- **CHECK DAMAGED PARTS.** Before using the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged must be properly repaired or replaced by an authorized service center to avoid risk of personal injury.
- **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction or rotation of the blade or cutter only.
- **NEVER LEAVE TOOL RUNNING UNATTENDED, TURN THE POWER OFF.** Do not leave tool until it comes to a complete stop.
- **FIRMLY CLAMP OR BOLT** your tool to a workbench or table at approximately hip height.
- **KEEP HANDS AWAY FROM CUTTING AREA.** Do not reach underneath work or in blade cutting path with your hands and fingers for any reason. Always turn the power off.
- **DO NOT ABUSE CORD.** Never yank cord to disconnect it from receptacle. Keep cord from heat, oil, and sharp edges.
- **USE ONLY OUTDOOR EXTENSION CORDS.** Use only extension cords with the marking "Acceptable for use with outdoor appliances; store cords indoors while not in use". Use extension cords with an electrical rating not less than the planer's electrical rating. Always disconnect the extension cord from the outlet before disconnecting the product from the extension cord.
- **DO NOT USE TOOL IF SWITCH DOES NOT TURN IT ON AND OFF.** Have defective switches replaced by an authorized service center.

RULES FOR SAFE OPERATION

- **KEEP TOOL DRY, CLEAN, AND FREE FROM OIL AND GREASE.** Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any solvents to clean tool.
- **NEVER PERFORM THE PLANING OPERATION** with the cutter head or drive guard removed.
- **NEVER MAKE A PLANING CUT** deeper than 1/8 in. (3 mm)
- **DO NOT PLANE MATERIAL** shorter than 14 in. (356 mm) or narrower than 3/4 in. (19 mm).
- **MAINTAIN THE PROPER RELATIONSHIP** between the infeed and outfeed surfaces and the cutter head knife path.
- **SUPPORT THE WORKPIECE ADEQUATELY** at all times during operation; maintain control of the work at all times.
- **DO NOT BACK THE WORK** toward the infeed table.
- **DO NOT ATTEMPT TO PERFORM** an abnormal or little used operation without the use of sturdy and adequate jigs, fixtures, stops, and the like.
- **NEVER** cut more than one piece at a time. **DO NOT STACK** more than one workpiece on the planer table at a time.
- **BEFORE STARTING UP**, recheck to make certain all holding screws are tight.
- **STOP THE MACHINE** and recheck the cutter head gib screws and knives for tightness after about 50 hours of operation.
- **DO NOT FORCE FEED THE WORKPIECE** through the machine. Let the planer apply the proper feed rate
- **CHECK THE FEED ROLLERS** occasionally to be sure there are no chips or sawdust between any components. If the rollers are not seated firmly, they will not hold the stock firmly against the bed and are likely to cause kickback.
- **PLANE ONLY SOUND LUMBER**; there should be no loose knots and as few tight knots as possible. Make sure the workpiece is free from nails, screws, stones, or other foreign objects that could break or chip the knives.
- **NEVER STAND DIRECTLY IN LINE** with either the infeed or outfeed sides. Stand off to one side.
- **MAKE SURE THE KNIVES ARE ATTACHED** as described in the operation section. The knives are sharp and can easily cut your hand. Use caution in handling the knives and cutter head guard.
- **NEVER PUT YOUR FINGERS** into the dust chute or under the knife guard.
- **ALLOW THE CUTTER HEAD** to reach full speed before using the planer.
- **REPLACEMENT PARTS.** All repairs, whether electrical or mechanical, should be made at your nearest authorized service center.
- **DO NOT** attempt to turn cutter-head with hands.
- **WHEN SERVICING**, use only identical Ryobi replacement parts. Use of any other parts may create a hazard or cause product damage.
- **NEVER USE THIS TOOL IN AN EXPLOSIVE ATMOSPHERE.** Normal sparking of the motor could ignite fumes.
- **IF ANY PART OF THIS TOOL IS MISSING** or should break, bend, or fail in any way, or should any electrical component fail to perform properly, shut off the power switch, remove the plug from the power source and have damaged, missing, or failed parts replaced before resuming operation.
- **DO NOT OPERATE THIS TOOL WHILE UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR ANY MEDICATION.**
- **ALWAYS STAY ALERT!** Do not allow familiarity (gained from frequent use of your planer) to cause a careless mistake. **ALWAYS REMEMBER** that a careless fraction of a second is sufficient to inflict serious injury.
- **STAY ALERT AND EXERCISE CONTROL.** Watch what you are doing and use common sense. **Do not operate tool when you are tired. Do not rush.**
- **MAKE SURE THE WORK AREA HAS AMPLE LIGHTING** to see the work and that no obstructions will interfere with safe operation **BEFORE** performing any work using your planer.
- **ALWAYS TURN OFF THE TOOL** before disconnecting it to avoid accidental starting when reconnecting to power supply. **NEVER** leave the tool unattended while connected to a power source.
- **SAVE THESE INSTRUCTIONS.** Refer to them frequently and use them to instruct other users. If you loan someone this tool, loan them these instructions also.

WARNING:

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

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

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

SAVE THESE INSTRUCTIONS

RULES FOR SAFE OPERATION

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

SYMBOL MEANING



SAFETY ALERT SYMBOL:

Indicates danger, warning or caution. May be used in conjunction with other symbols or pictographs.



DANGER: Failure to obey a safety warning will result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



WARNING: Failure to obey a safety warning can result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



CAUTION: Failure to obey a safety warning may result in property damage or personal injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

Note: Advises you of information or instructions vital to the operation or maintenance of the equipment.

IMPORTANT

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the tool to your nearest **RYOBI AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical Ryobi replacement parts.



WARNING:

Do not attempt to operate this tool until you have read thoroughly and understand completely all instructions, safety rules, etc., contained in this manual. Failure to comply can result in accidents involving fire, electric shock, or serious personal injury. Save operator's manual and review frequently for continuing safe operation, and instructing others who may use this tool.

SAFETY AND INTERNATIONAL SYMBOLS

This operator's manual describes safety and international symbols and pictographs that may appear on this product. Read the operator's manual for complete safety, assembly, operating and maintenance, and repair information.



MEANING

Do not expose to rain or use in damp locations



WARNING:



The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning tool operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always wear eye protection which is marked to comply with ANSI Z87.1.

ELECTRICAL

EXTENSION CORDS

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug. When using a power tool at a considerable distance from the power source, use an extension cord heavy enough to carry the current that the tool will draw. An undersized extension cord will cause a drop in line voltage, resulting in a loss of power and causing the motor to overheat. Use the chart provided below to determine the minimum wire size required in an extension cord. Only round jacketed cords listed by Underwriter's Laboratories (UL) should be used.

Length of Extension Cord Wire Size (A.W.G.)

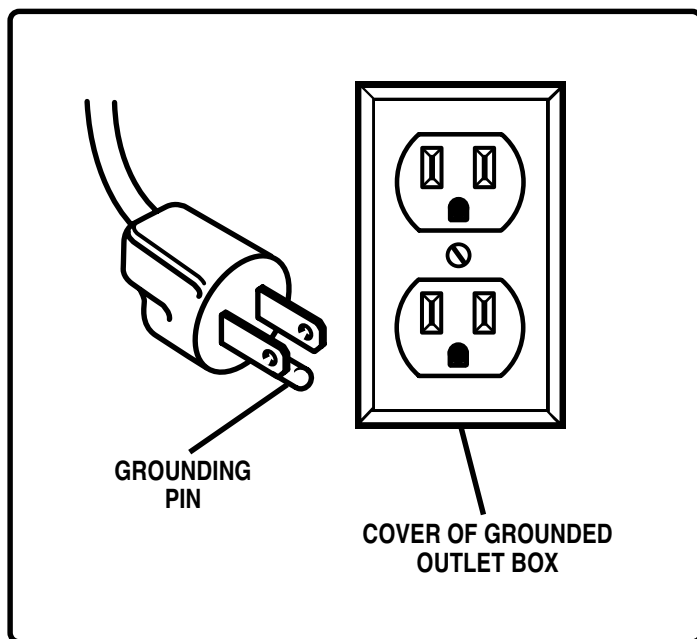
Up to 25 feet	14
26-50 feet	12

When working with the tool outdoors, use an extension cord that is designed for outside use. This is indicated by the letters **WA** on the cord's jacket.

Before using an extension cord, inspect it for loose or exposed wires and cut or worn insulation. Repair or replace a damaged or worn cord immediately.

⚠ CAUTION:

Keep the cord away from the cutting area and position the cord so that it will not be caught on material, tools, or other objects during cutting.



ELECTRICAL CONNECTION

Your Ryobi Portable Planer is powered by a precision built electric motor. It should be connected to a **power supply that is 120 volts, 60 Hz**. If the machine does not operate when plugged into an outlet, double check the power supply.

GROUNDING INSTRUCTIONS

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

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

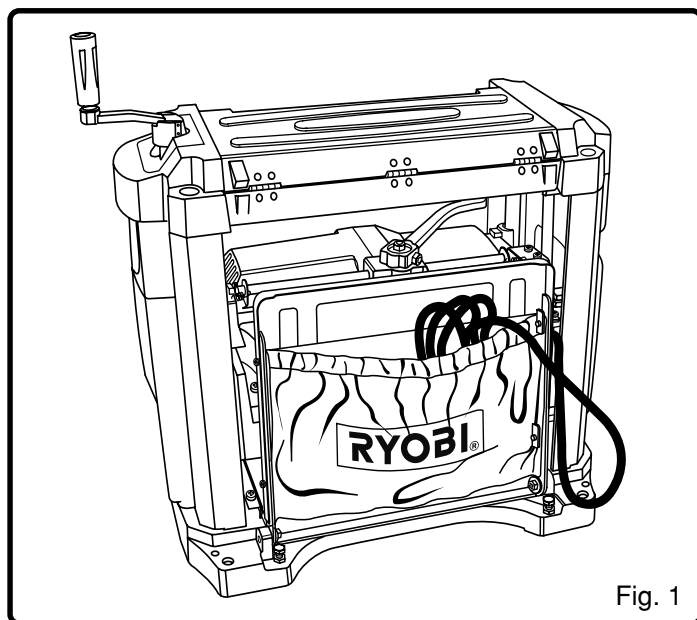
Repair or replace a damaged or worn cord immediately.

This tool is intended for use on a circuit that has an outlet like the one shown in *Figure 1*. It also has a grounding pin like the one shown.

CORD STORAGE BAG

See *Figure 1*.

For convenience and safety, your planer comes equipped with a cord storage bag. This storage bag is on the underneath side of the rear table extension and allows you to fold the cord and place it in the bag for storage or transport.



UNPACKING

⚠ WARNING:

To prevent accidental starting that could cause possible serious personal injury, assemble all parts, make sure all adjustments are complete, and make sure all fasteners are secure before connecting portable planer to power supply. Portable planer should never be connected to power supply when you are assembling parts, making adjustments, installing or removing blades, or when not in use.

Your portable planer has been shipped completely assembled except for the dust chute and dust chute knobs.

- Remove all loose parts from the carton.
- Separate and check with the list of loose parts. See *Figure 2*.
- Remove the packing materials from around your planer.

- Carefully lift the tool from the carton and place it on a level work surface. This machine is heavy. Avoid back injury and get help when needed.
- Do not discard the packing materials until you have carefully inspected the tool, identified all loose parts, and satisfactorily operated your new planer.
- Examine all parts to make sure no breakage or damage has occurred during shipping.

If any parts are damaged or missing, do not attempt to plug in the power cord and turn the switch on until the damaged or missing parts are obtained and are installed correctly.

⚠ WARNING:

If any parts are missing, do not operate this tool until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

LOOSE PARTS LIST

The following items are included with your Portable Planer:

- Hex Key
- Dust Chute
- Dust Chute Knobs
- Operator's Manual
- Warranty Registration Card

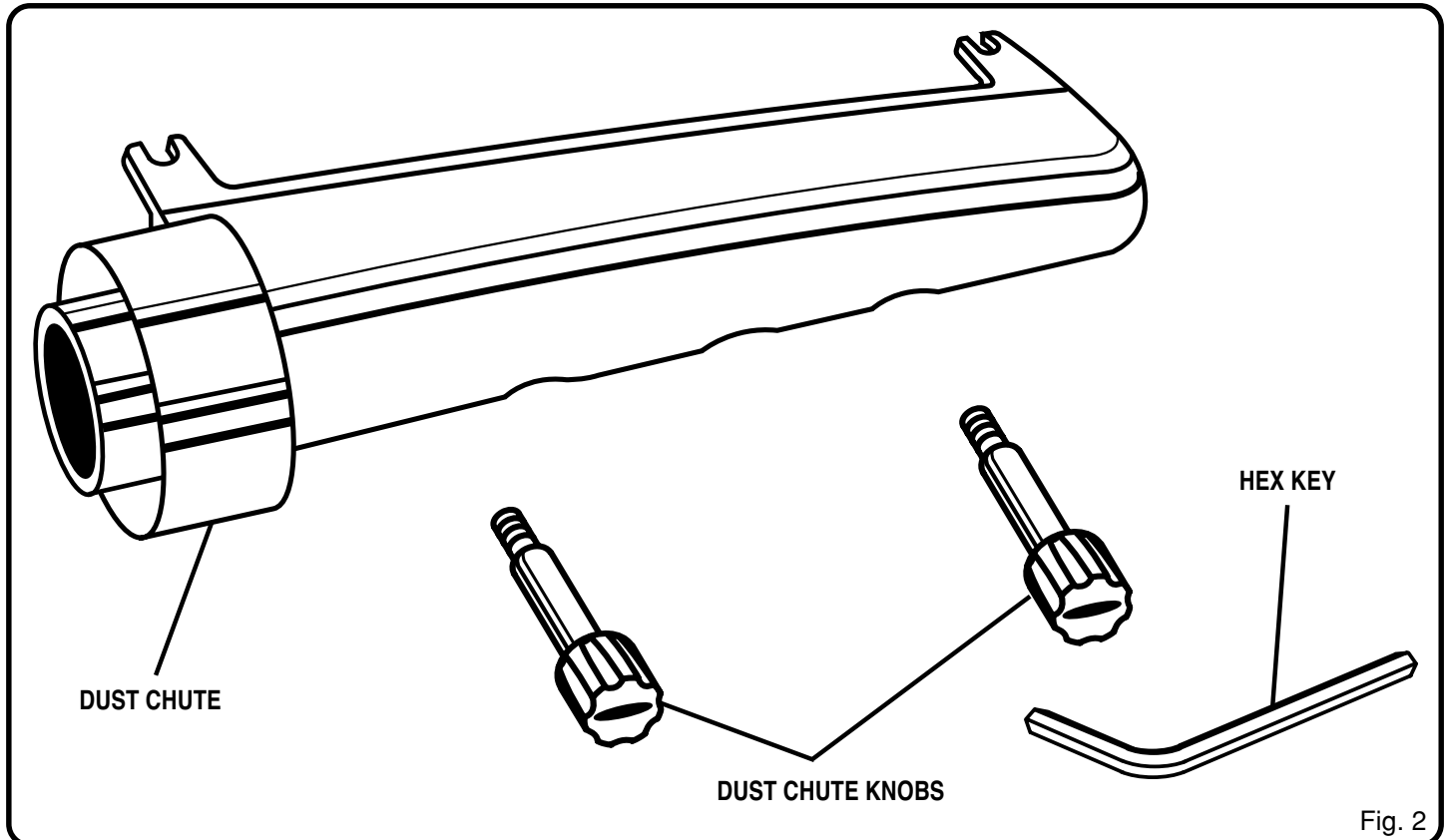


Fig. 2

⚠ WARNING: The use of attachments or accessories not listed might be hazardous and could cause serious personal injury.

FEATURES

KNOW YOUR PORTABLE PLANER

See Figure 3.

Before attempting to use your planer, familiarize yourself with all operating Features and Rules for Safe Operation.

⚠ WARNING:

Do not allow familiarity with your planer to make you careless. Remember that a careless fraction of a second is sufficient to inflict severe injury.

15 AMP MOTOR

Your planer has a powerful 15 amp motor with sufficient power to handle tough cutting jobs.

AUTOMATIC FEED

Infeed and outfeed rollers feed the wood through the planer.

CUTTER HEAD ASSEMBLY AND CUTTER LOCK

The cutter head assembly controls the depth of cut and can be locked into place by moving the cutter lock to the right.

DEPTH ADJUSTMENT HANDLE

The depth adjustment handle is used to raise and lower the cutter head assembly.

DEPTH GAGE

A depth gage is located on the front of your planer and measures depth of cuts up to 1/8 in. (3 mm).

RAPID SET SYSTEM

Your planer is equipped with an exclusive Ryobi Rapid Set blade changing system which is designed to reduce time when changing blades. It also helps to eliminate score marks produced by nicks or chips in blades.

REPLANE INDICATOR

The replane indicator, located on the right side of the machine housing, has preset measurements for repetitive planing.

STORAGE TRAY

For your convenience, a handy storage tray is located on top of the planer.

SWITCH AND SWITCH KEY

Your planer has an easy access power switch. To lock in the **OFF** position, remove the switch key. Place the key in a location inaccessible to children and others not qualified to use the tool.

TABLE EXTENSIONS

Infeed and outfeed table extensions are attached to the machine and fold "upright" for easy storage. These table extensions are helpful when planing long workpieces.

THICKNESS SCALE

The thickness scale accurately displays the height of the cutter blades to a maximum of 6 in. (152 mm).

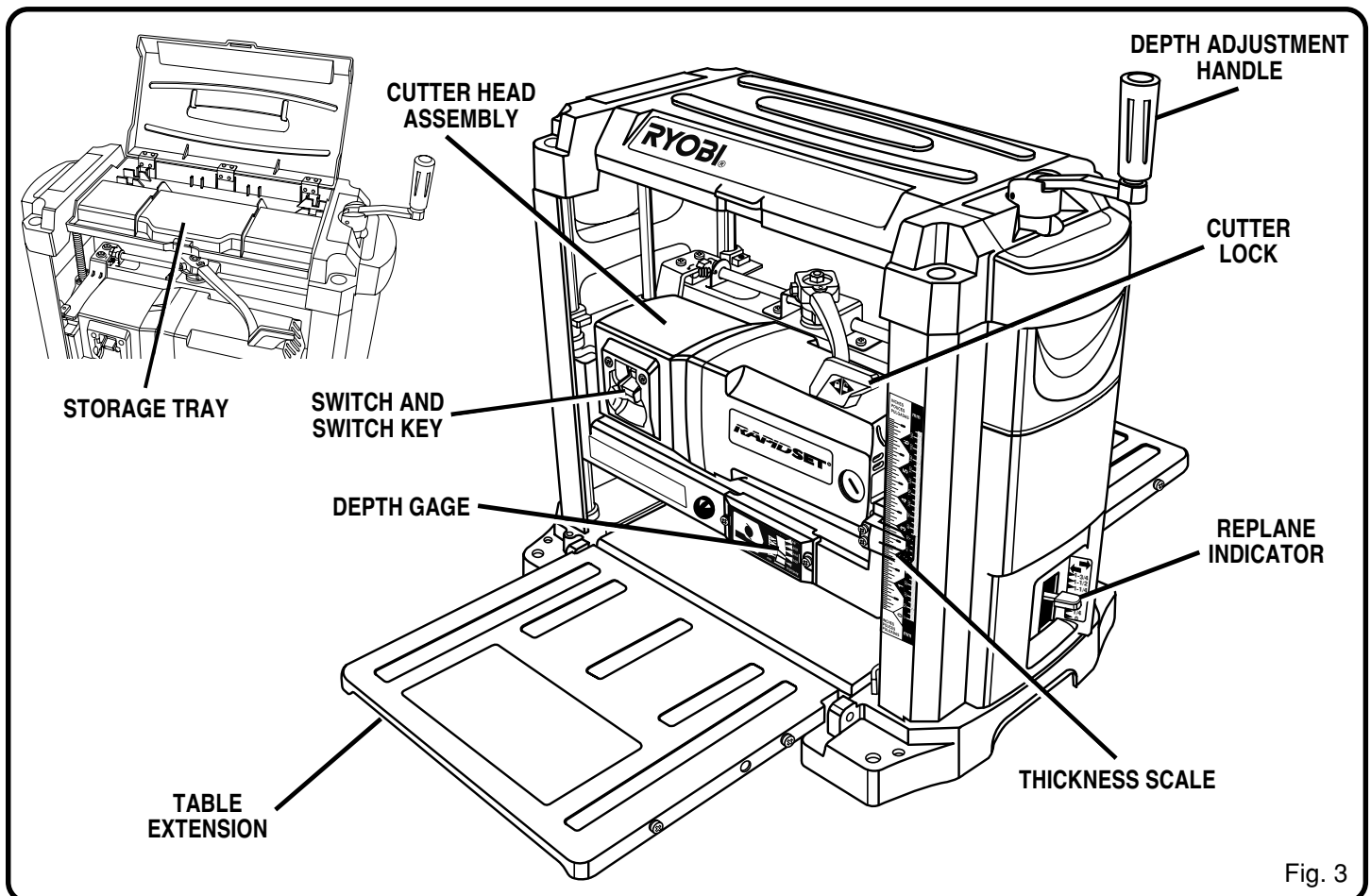


Fig. 3

ASSEMBLY

INSTALLING THE DUST CHUTE

See Figure 4.

- Unplug your planer.

⚠ WARNING:

Failure to turn the planer off, remove the switch key, and unplug the planer before servicing or making adjustments could result in accidental starting causing possible serious personal injury.

- From the back of the machine, locate the two screws on the cutter head assembly. See Figure 4. Turning counterclockwise, loosen each screw.
- Slide the dust chute between the lock washer and the cutter head assembly, resting the dust chute on the rubber bumper.
- Insert the two dust chute knobs, turning clockwise.
- Securely tighten the screws and dust chute knobs.

Note: To minimize sawdust accumulation on your workpiece, attach either a 2-1/2 in. (64 mm) or 4 in. (102 mm) shop vac hose to the end of the dust chute.

MOUNTING PLANER TO WORKBENCH

If your planer is to be used in a permanent location, it is recommended you secure it to a workbench or other stable surface. When mounting the planer to a workbench, holes should be drilled through the supporting surface of the workbench.

- Mark holes on workbench where planer is to be mounted using holes in planer base as a template for hole pattern.
- Drill four holes through workbench.
- Place planer on workbench aligning holes in the planer base with holes drilled in the workbench.
- Insert four bolts (not included) and tighten securely with lock washers and hex nuts (not included).

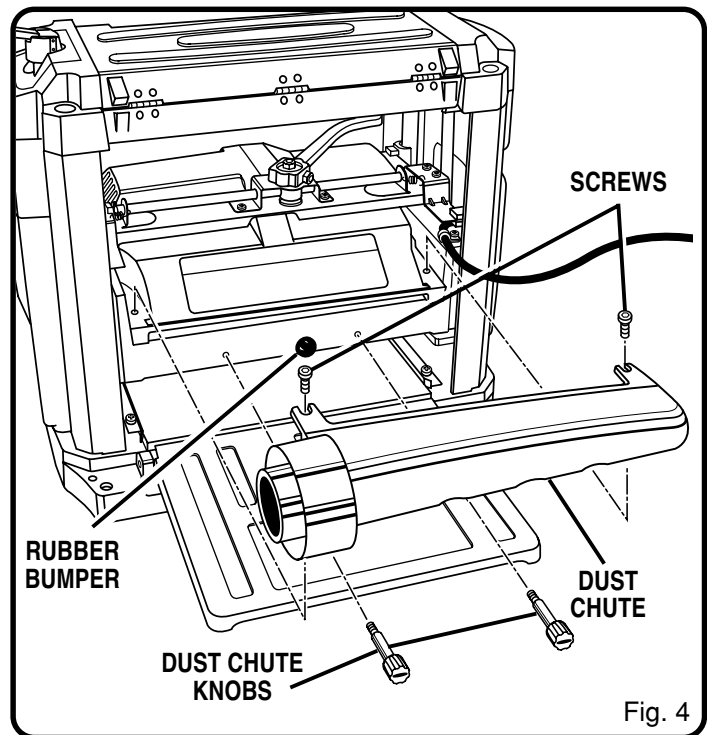
Note: All bolts should be inserted from the top. Install the lock washers and hex nuts from the underside of the workbench.

Supporting surface where planer is mounted should be examined carefully after mounting to insure that no movement during use can result. If any tipping or walking is noted, secure workbench or support surface before beginning planing operation.

CLAMPING PLANER TO WORKBENCH

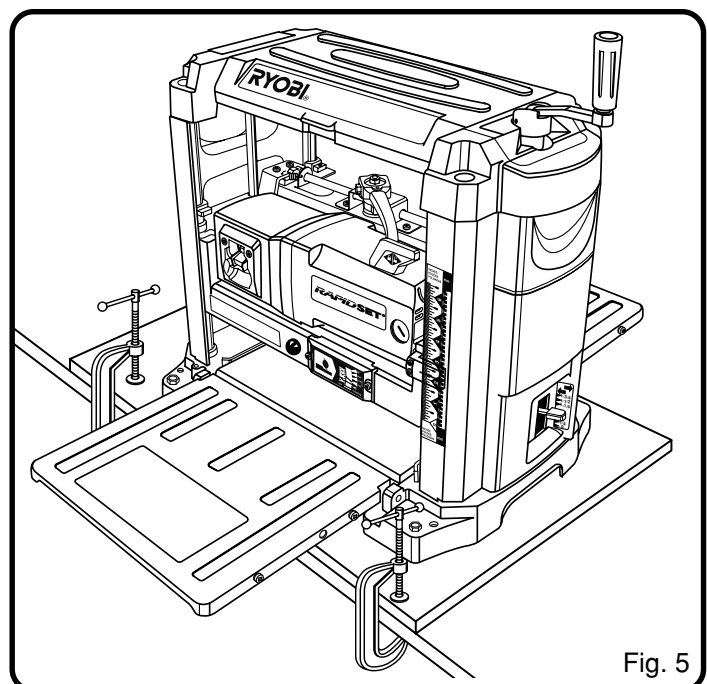
See Figure 5.

If the planer is to be used as a portable tool, it is recommended you fasten it permanently to a mounting board that can easily be clamped to a workbench or other stable surface. The mounting board should be of sufficient size to avoid tipping while planer is in use. Any good grade plywood or chipboard with a 3/4 in. (19 mm) thickness is recommended.



- Mark holes on board where planer is to be mounted using holes in planer base as a template for hole pattern.
- Follow last three steps in section *Mounting Planer to Workbench*.

If lag bolts are used, make sure they are long enough to go through holes in planer base and material the planer is being mounted to. If machine bolts are used, make sure bolts are long enough to go through holes in planer base, the material being mounted to, and the lock washers and hex nuts.



ADJUSTMENTS

LEVELING THE TABLE EXTENSIONS

See Figure 6.

The infeed and outfeed table extensions are attached to the planer. Shipped in a folded, "upright" position, the table extensions must be in the "down" position before planing can begin. For accurate planing, table extensions must be level with the planer table.

Note: For optimum performance, always check to make sure the table extensions are level before beginning planing operations.

To Level:

- Unplug your planer.

⚠ WARNING:

Failure to unplug your planer could result in accidental starting causing possible serious personal injury.

- Place a straight edge or level across both the planer table and table extensions.
- If adjustment is necessary, lift table extensions and loosen lock nuts. Adjust stop screws (one on each side) until extension table is level with planer table.
- Press down on the table extension to ensure the table extension is properly seated.
- Tighten lock nuts securely when adjustments are complete.

Note: Four screws attach table extensions to support bars; loosening these screws may aid in leveling table extensions.

BLADE HEIGHT ADJUSTMENT

See Figure 7.

Raising and lowering the depth adjustment handle controls the depth of cut on your planer.

Note: Never adjust blade height with cutter lock in the "locked" position (pushed to the far right).

To Raise:

- Push cutter lock to the left to unlock cutter head assembly.
- Turn the depth adjustment handle clockwise to desired height.
- Once cutter head is in desired position, lock cutter head assembly in place by pushing cutter lock handle to the right.

To Lower:

- Push cutter lock to the left to unlock cutter head assembly.
- Turn the depth adjustment handle counterclockwise to desired height.
- Once cutter head assembly is in the desired position, lock cutter head in place by pushing cutter lock handle to the right.

Note: Each complete rotation of the handle moves the cutter head assembly 5/64 in. (2 mm).

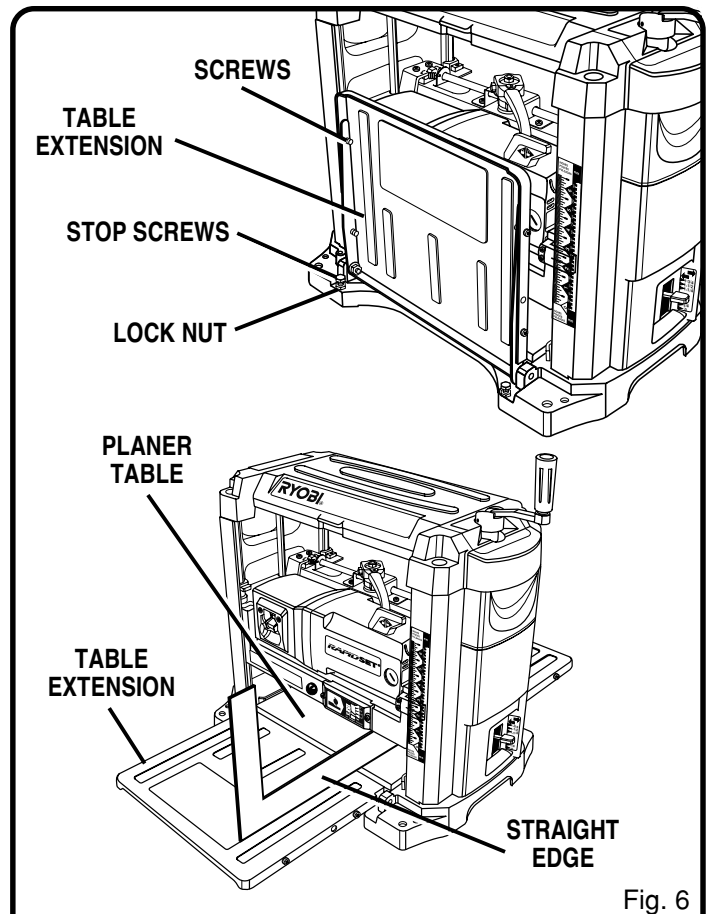


Fig. 6

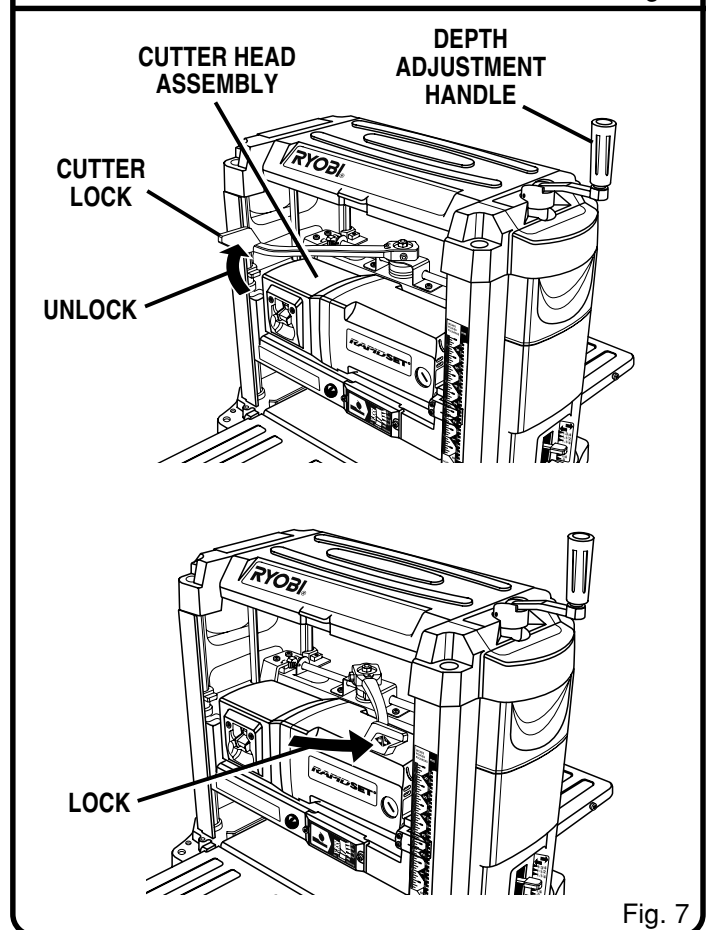


Fig. 7

ADJUSTMENTS

THICKNESS SCALE ADJUSTMENT

See Figure 8.

Located on the right front of the planer, the thickness scale shows the depth of the finished workpiece. Inaccurate cuts can be prevented by routinely checking the alignment of the thickness scale.

- Table extensions must be level with planer table.
- Plane a scrap piece of wood and measure the depth of the finished piece.
- If properly adjusted, the depth of the finished piece should be the same as indicated on the thickness scale.
- If out of adjustment, loosen the two screws holding the scale indicator and adjust the thickness indicator to the correct setting.
- Retighten screws securely.

REPLANE INDICATOR ADJUSTMENT

See Figure 9.

Plane a scrap piece of wood and measure the depth of the finished piece. If an adjustment is needed:

- Unplug your planer.

⚠ WARNING:

Failure to turn the planer off, remove the switch key, and unplug the planer could result in accidental starting causing possible serious personal injury.

- Push cutter lock to the left to unlock the cutter head assembly.
- Loosen the depth adjustment handle by unscrewing the phillips screw that holds it in place. Do not completely unthread the screw.
- Remove the two socket head screws on the top (right-hand side) of the planer.
- Lift the top of the housing and carefully pull the right side of the housing up and off the planer base.
- Lower the cutter head assembly until it stops against the stop screw.
- Using an accurate ruler, check the measurement against the replane indicator setting.
- If adjustment is necessary, use a wrench to loosen the lock nut and adjust the stop screw to the correct height.
- Once the adjustment is made, retighten the lock nut and stop screw securely.
- Replace the right side of the housing and secure using the two socket head screws.
- Securely retighten the phillips screw holding the depth adjustment handle.

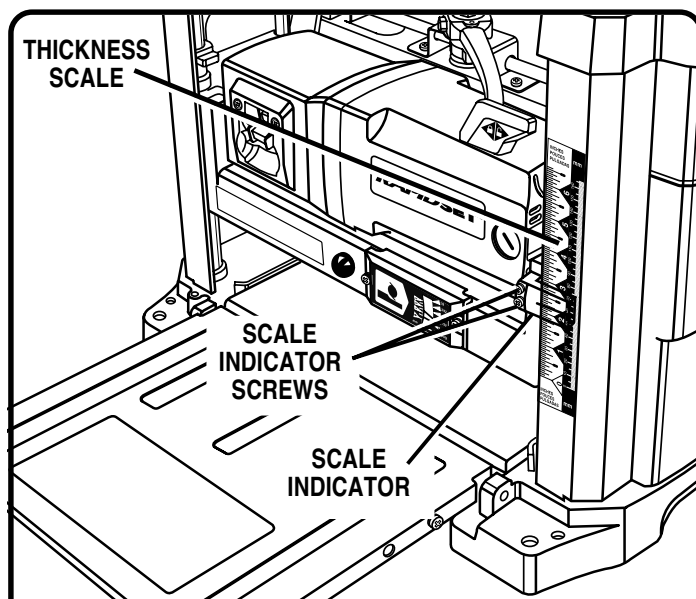


Fig. 8

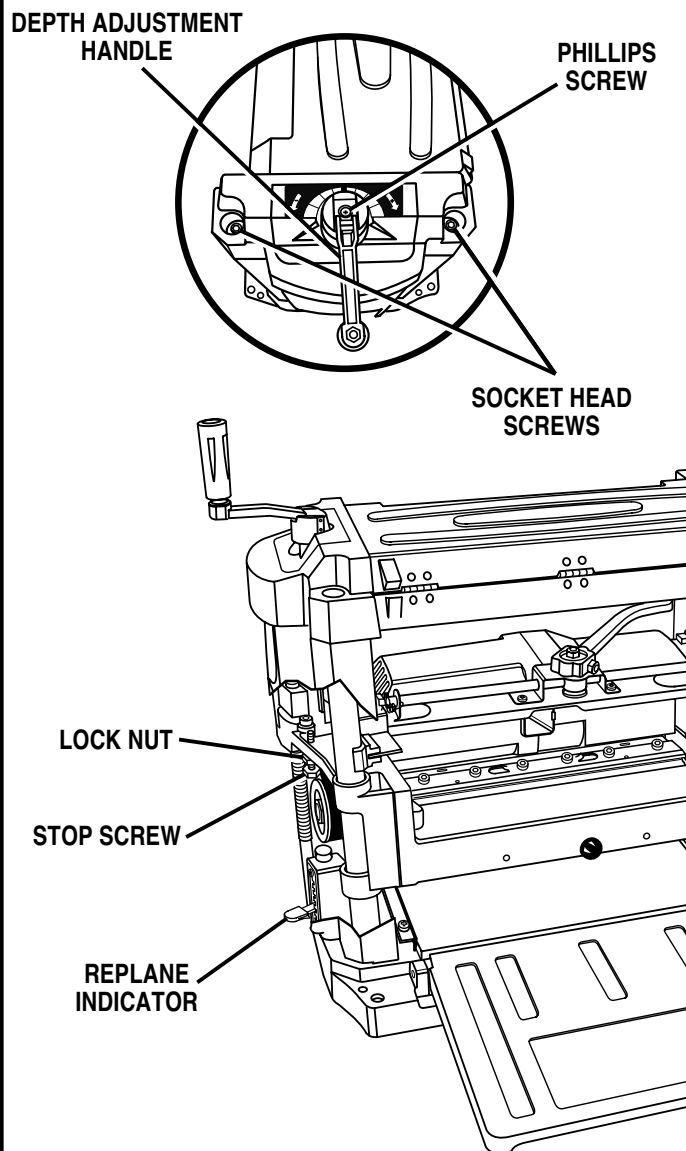


Fig. 9

ADJUSTMENTS

CUTTER BLADE SIDEWAYS ADJUSTMENT

See Figures 10 and 11.

During the use of your planer, tiny nicks may appear on the cutter blades. This is a result of picking up sand or other particles on the workpiece and then running the workpiece through the planer. To eliminate any imperfections during the planing process, adjust one or both cutter blades laterally.

To Adjust:

- Unplug your planer.

⚠ WARNING:

Failure to turn the planer off, remove the switch key, and unplug the planer could result in accidental starting causing possible serious personal injury.

- Lower the cutter head assembly.
- From the back of the planer, remove the two screws holding the dust chute in place.
- Remove the dust chute then lift off the safety cover.
- Rotate the cutter block until it locks in place (every 180° turn).

Note: From beneath the cutter head assembly, using the planer table as a mirror, touch the threaded spindle where it meets the planer table. Carefully move your fingers up toward the drive belt until you touch it. Turn the drive belt with your fingers until the cutter head locks in place (see Figure 11.)

⚠ WARNING:

To avoid injury, NEVER rotate the cutter block by hand.

- Loosen the socket head bolts holding the blade binder and cutter blade to the cutter block.
- Move the cutter blade to the left or right side up to 3/64 in. (1 mm) laterally using a flat head screwdriver.
- Retighten the socket head bolts securely.
- Place the safety cover on the cutter head assembly leaving the screws loose.
- Reinstall the dust chute by slipping it under the screws and lock washers (see page 9).
- Tighten screws securely.

Note: Cutter blades require only slight adjustments to offset planing imperfections.

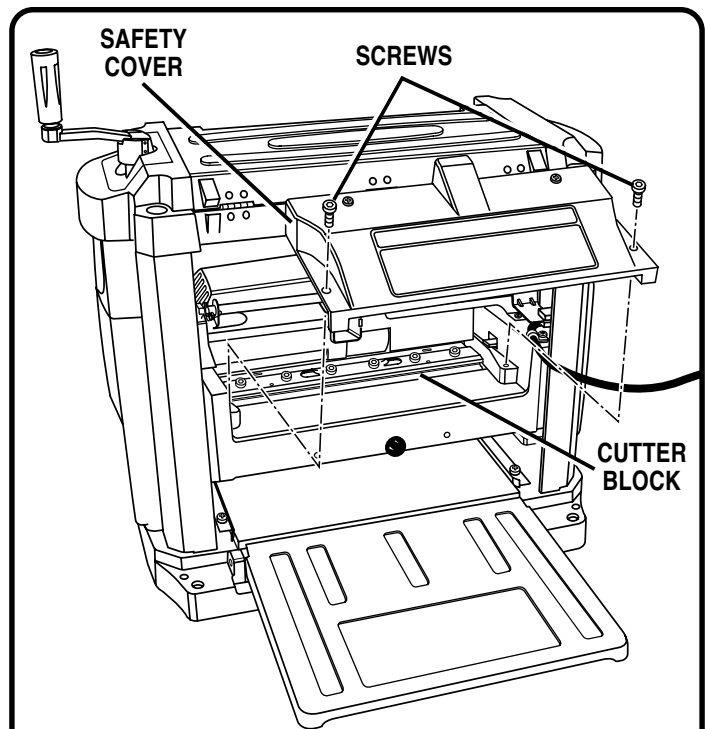


Fig. 10

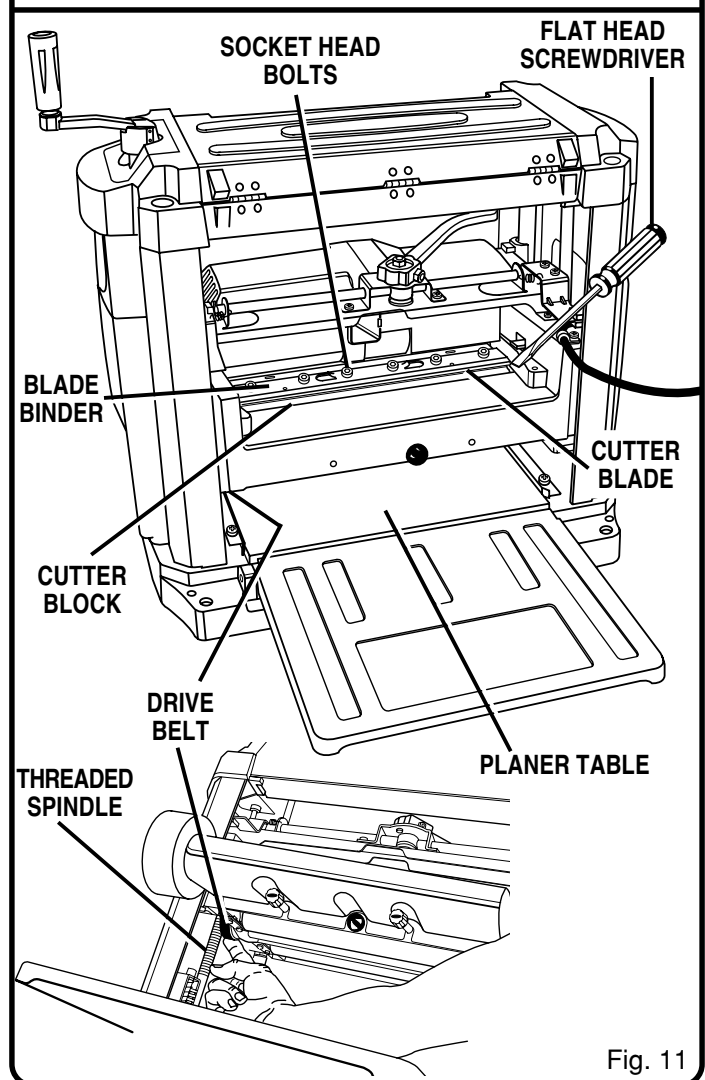


Fig. 11

OPERATION

GETTING STARTED

Before turning on the planer, check for loose fasteners, fittings, or hardware. Be sure the dust cover is securely mounted and that the blade cutter rotates freely.

Lower the cutter head assembly to approximately 1 in. (25 mm) above the planer table surface. Without putting any load on the planer, test the motor by turning the planer on and allowing it to reach full speed. If the planer sounds excessively loud or has excessive vibration, turn off the machine immediately and check again for any loose hardware, re-tightening any you may find.

THICKNESS PLANING

Thickness planing sizes workpiece to desired thickness while creating a smooth, level surface. Thickness of each cut will depend on type of wood (hardwood versus softwood), width of workpiece, straightness, dryness, and grain composition. Whenever working with a new type of wood, make thin test cuts on a scrap piece of wood first to determine potential problems with the workpiece.

PLANING

Thickness planers work best if at least one side of the workpiece has a flat surface. When both sides of a workpiece is rough, use a surface planer or jointer first to define the initial flat surface. Plane one side of the workpiece then flip the workpiece and plane the surface of the reverse side.

Always plane both sides of a workpiece to reach the desired thickness. This will leave the workpiece with uniform moisture to prevent warp during the drying process.

When one end of the workpiece is thicker than the opposite end by more than 1/8 in. (3 mm), make several cuts with the planer starting with light planing cuts first. Remember, light cuts create a finer finish than heavier cuts.

- Do not plane a workpiece less than 3/16 in. (5 mm) thick.
- Do not plane a workpiece less than 3/4 in. (19 mm) wide.
- Do not plane workpiece shorter than 14 in. (356 mm) long as this will cause kickback.
- Do not plane more than one workpiece at a time.
- Do not lower the cutter head assembly lower than 3/16 in. (5 mm)

Do not continuously use the planer set at the maximum depth of cut (1/8 in., 3 mm) and at full width of cut (13 in., 330 mm). Continuous use at maximum cutting capacity will damage the motor.

WARNING:

Never plane workpiece with loose knots or foreign objects. Do not plane workpieces that are severely bowed, twisted, or knotted. Cutter blades can dull, chip, or break causing possible serious personal injury.

WARNING:

Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If operation is dusty, also wear a dust mask.

Worn cutter blades will affect cutting accuracy. Planing with dull or nicked cutter blades may produce ridges or rough workpiece surfaces.

Gum and pitch on the cutter blades will cause them to wear prematurely. Using a gum and pitch remover to keep your cutter blades clean will prolong their wear.

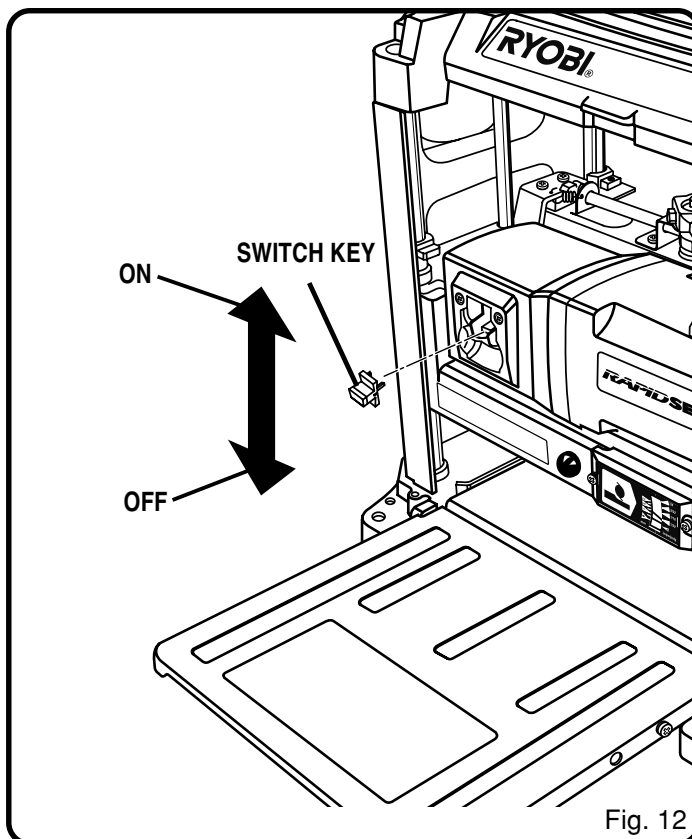
Refer to the *Maintenance Section* of this operator's manual for instructions on how to remove and replace or turn the cutter blades.

Note: Cutter blades are double-edged and can be turned once to the opposite, unused edge before replacement is required. Cutter blades must **ALWAYS** be replaced as a set.

LOCKING THE SWITCH

See Figure 12.

- Wait until the planer has come to a full and complete stop.
- Place the switch in the **OFF** position, remove the switch key from the switch assembly. Store key in safe place.



OPERATION

DEPTH GAGE

See Figure 13.

The depth gage indicates the amount of wood being removed in a planing pass. The workpiece must be positioned under the depth gage on the front of the planer.

Never make a planing cut deeper than:

- 1/8 in. (3 mm) for material up to 6 in. (152 mm) wide
- 1/16 in. (1.6 mm) for material 6 in. (152 mm) - 13 in. (330 mm) wide

Do not continuously use the planer at the maximum depth of cut, 1/8 in. (3 mm), as it will damage the motor.

REPLANING

See Figure 14.

Your planer has a replane feature using preset markers for repetitive planing. The replane indicator allows you to plane material at a set measurement of 1/4 in. (6 mm). The maximum depth of the replane indicator is 1-3/4 in. (44 mm).

- Push cutter lock to the left to unlock cutter head assembly.
- Raise cutter head assembly to a height greater than 1-3/4 in. (44 mm).
- Move the replane set knob to the desired height.
- Lower the cutter head assembly until it stops.
- Lock cutter head in place by pushing cutter lock handle to the right.

AVOIDING SNIPE

Snipes, or depressions made at either end of a workpiece by cutter blades, can occur when the board is not properly supported. Engaging the cutter lock before planing will minimize snipe. Although snipe may be barely noticeable, it is important to keep the workpiece parallel and flat with the planer table to minimize snipe. Butting workpieces end-to-end as they are fed through the planer will minimize the problem, especially for shorter pieces, because it provides a more stable feed.

For workpieces longer than 48 in. (122 cm), greater care must be taken to reduce the problem because the additional length means more of the total weight is unsupported by the planer table and rollers causing the shifting weight to work against keeping the stock flat.

To remove snipe from a finished workpiece, cut off the end of the workpiece where snipe is noticeable.

WARPED WOOD

Little or no warpage is the ideal condition for planing a workpiece. Simply turn the workpiece over and plane it to the desired thickness. Otherwise, plane the top flat first, turn the workpiece and plane the bottom half.

For a board that is cupped or bowed across its width, the best method is to rip the board lengthwise down the middle and plane the pieces separately. This method eliminates much of the waste in planing cupped or bowed workpieces.

The only way to remove the bow from a workpiece that is cupped or bowed down its length is to use a jointer.

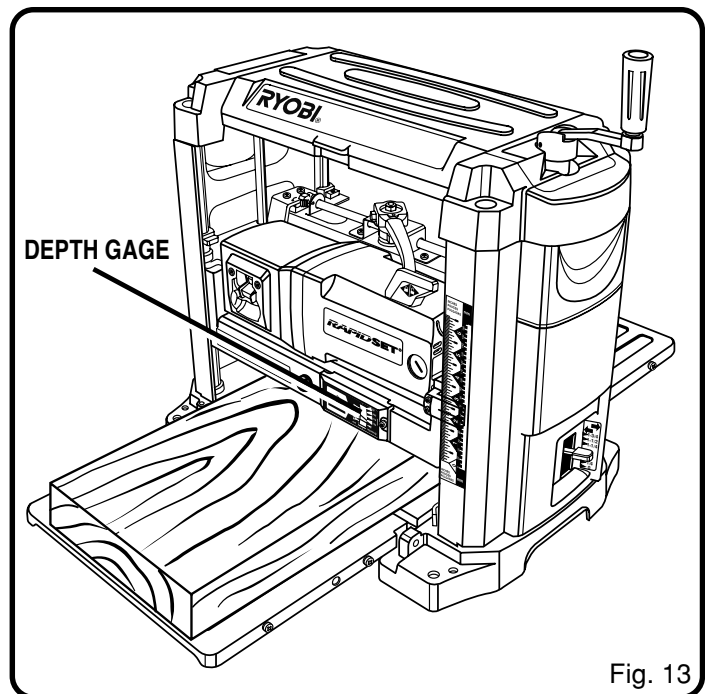


Fig. 13

Avoid using severely warped wood as it can jam the planer. If it must be used, rip it in half before planing to help minimize the possibility of jamming. If jamming does occur, turn the switch off and unplug the planer immediately. Raise the cutter head assembly high enough to remove the workpiece easily. Carefully check to make sure no damage to the tool has occurred before making the next planing pass.

Always feed the workpiece in the direction of the grain. This allows the cutter blades to sever the wood fibers instead of tearing them. Feeding against the grain can also cause the cutter blades to chip the workpiece.

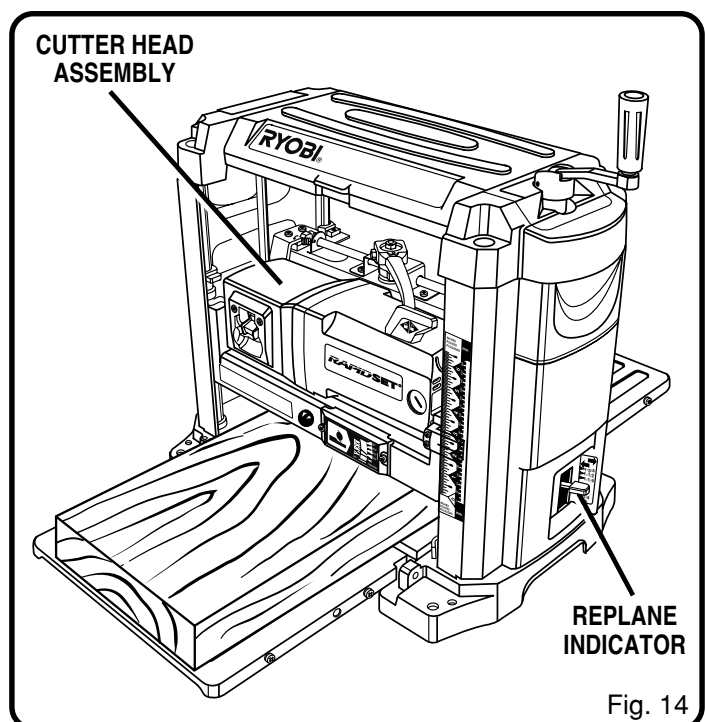


Fig. 14

MAINTENANCE

⚠ WARNING:

When servicing, use only identical Ryobi replacement parts. Use of any other part may create a hazard or cause product damage.

GENERAL

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, carbon dust, etc.

⚠ WARNING:

Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc. come in contact with plastic parts. They contain chemicals that can damage, weaken or destroy plastic.

CUTTER BLADE REPLACEMENT

See Figure 15.

Your planer is equipped with two double-edged cutter blades attached to a rotating cutter block. Worn cutter blades will affect cutting accuracy and may produce ridges on the workpiece.

To Replace:

- Unplug your planer.

⚠ WARNING:

Failure to turn the planer off, remove the switch key, and unplug the planer before servicing or making adjustments could result in accidental starting causing possible serious personal injury.

- Lower the cutter head assembly.
- From the back of the planer, remove the two socket head screws holding the dust chute in place.
- Remove the dust chute then lift off the safety cover.
- If necessary, rotate the cutter block until it locks in place (every 180° turn the cutter block will lock).

Note: Rotating the cutter block is accomplished from beneath the cutter head assembly. Using the planer table as a mirror, touch the threaded spindle where it attaches to the planer table. Carefully move your fingers up until you touch the drive belt. Turn the drive belt with your fingers until the cutter head locks in place (see Figure 11).

⚠ WARNING:

To avoid injury, never rotate the cutter block by hand.

- Carefully remove the socket head bolts.
- Place your thumb and index finger on the finger tabs and carefully lift the blade binder and cutter blade off the cutter block.
- Lightly oil new cutter blade. Align the cutter blade on the underside of the blade binder placing the cutter blade (sloped edge against the blade binder) in the small oval tabs.
- Place blade binder with cutter blades on the cutter block in the large oval tabs and aligning with the six socket head bolt holes.

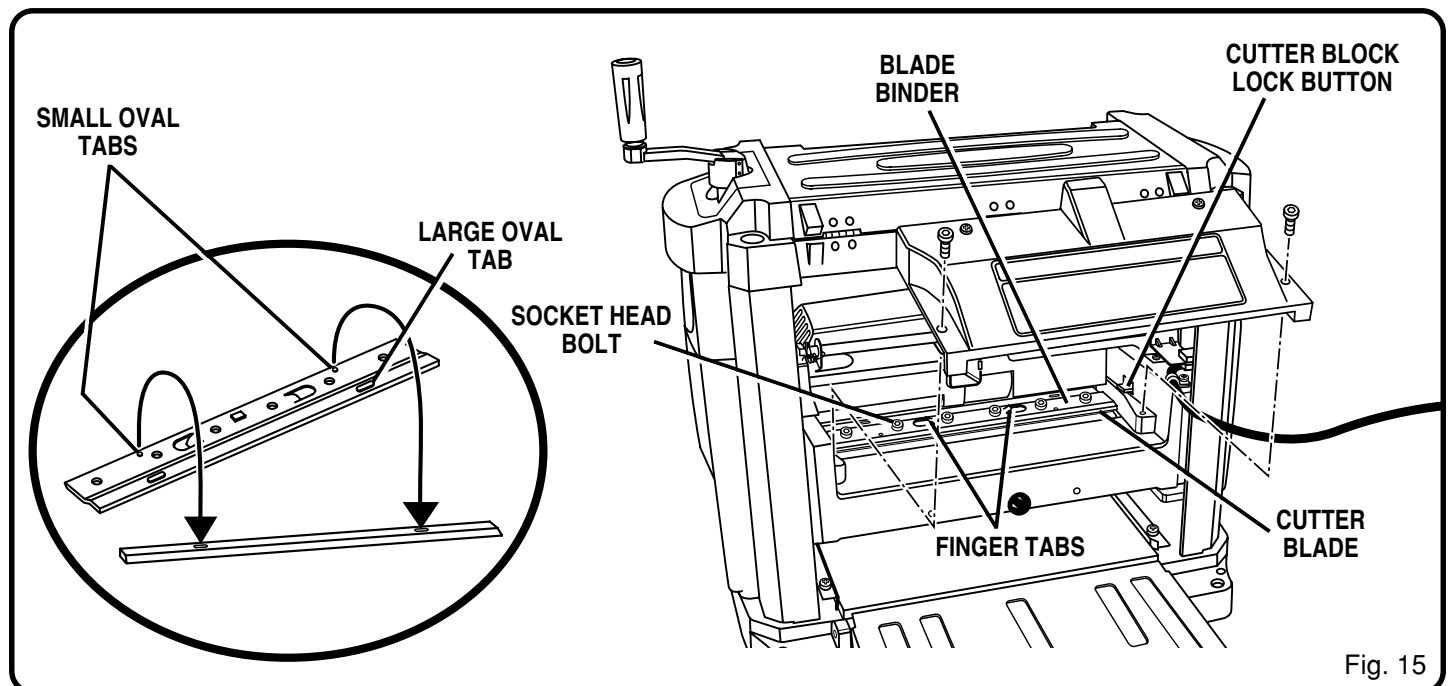


Fig. 15

MAINTENANCE

- Securely retighten the hex head bolts.
- Depress the cutter block lock button and rotate the cutter block 180°.
- Repeat the above steps for the second blade.
- Place the safety cover on the cutter head assembly leaving the socket head screws loose.
- Reinstall the dust chute by slipping it under the socket head screws and lock washers (see page 9).
- Tighten socket head screws securely.
Note: Cutter blades require only slight adjustments to offset planing imperfections.

LUBRICATION

Periodically, check all moving parts (spindle, roller surfaces, handles, etc.) to ensure they are clean and well lubricated. A light film of oil wiped on the face of the cutter blades will keep them rust-free. All of the bearings in this tool are lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions. No further lubrication is required.

MOTOR/ELECTRICAL

The universal motor is easy to maintain but must be kept clean. Do not allow water, oil or sawdust to accumulate on or in it. The sealed bearings are permanently lubricated and need no further attention.

BRUSH REPLACEMENT

See Figure 16.

Your planer has externally accessible brush assemblies that should be checked every 10 to 15 operating hours for wear. To inspect or replace these brushes, unscrew the brush cap located at the right front and left rear of the planer. Be sure to replace the brush cap securely after inspection or repairs.

CLEANING

Sawdust buildup and other debris can cause the tool to plane inaccurately. Periodic cleaning and waxing is needed for accurate, precision planing.

Do not allow sawdust to accumulate on the planer. Clean the dust chute after each use. Moving parts should be cleaned regularly with penetrating oil and lubricated with a light coating of medium-weight machine oil.

Paste wax should be applied to the planing table surface to ease the movement of workpieces across it. Paste wax can also be used on infeed and outfeed support surfaces but be careful not to use so much that it will be absorbed into the wood and interfere with staining.

Check feed rollers after each use for resin buildup because they must be clean to be effective. If buildup occurs, use a mild, nonflammable tar and pitch remover.

⚠ CAUTION:

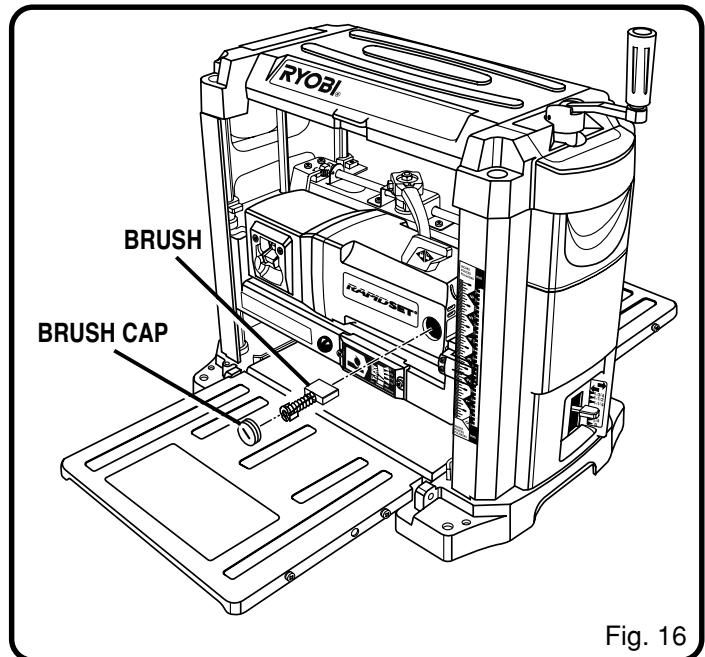
Check extension cords before each use. If damaged, replace immediately. Never use tool with a damaged cord since touching the damaged area could cause electrical shock resulting in serious injury.

⚠ WARNING:

Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If operation is dusty, also wear a dust mask.

⚠ WARNING:

To ensure safety and reliability, all repairs should be performed by a qualified service technician at a **Ryobi Authorized Service Center** to avoid risk of personal injury.



TROUBLESHOOTING

Problem	Cause	Solution
Snipe (depressions at ends of workpiece)	<ol style="list-style-type: none"> 1. Dull cutter blades 2. Incorrect butted stock 3. Unit not securely mounted 	<ol style="list-style-type: none"> 1. Replace, turn or sharpen cutter blades 2. Butt pieces end-to-end as they are fed into planer 3. Tighten lag bolts
Torn grain	<ol style="list-style-type: none"> 1. Too deep a blade setting 2. Workpiece being fed against grain 3. Dull cutter blades 	<ol style="list-style-type: none"> 1. Reduce depth of cut 2. Feed other end of board first 3. Replace, turn or sharpen cutter blades
Fuzzy/Rough grain	<ol style="list-style-type: none"> 1. High wood moisture content 2. Dull cutter blades 3. Too deep a blade setting 4. Incorrect feeding speed 	<ol style="list-style-type: none"> 1. Dry wood before planing 2. Replace, turn or sharpen cutter blades 3. Reduce depth of cut 4. Check for adequate power supply, check cord and plug for damage, check condition of motor brushes
Uneven depth of cut	<ol style="list-style-type: none"> 1. Cutter head assembly not level with planer surface 2. Unstable roller spring pressure 3. Feed roller worn unevenly 	<ol style="list-style-type: none"> 1. Adjust elevation screws 2. Have service performed by Ryobi Authorized Service Center 3. Have service performed by Ryobi Authorized Service Center
Board thickness does not match depth scale indicator	<ol style="list-style-type: none"> 1. Depth scale incorrectly set 2. Dirty planing table 	<ol style="list-style-type: none"> 1. Adjust depth scale 2. Clean and wax planing table
Cutter head height difficult to adjust	<ol style="list-style-type: none"> 1. Dirty spindle 2. Worn chain 	<ol style="list-style-type: none"> 1. Clean and lubricate 2. Have service performed by Ryobi Authorized Service Center
Will not start	<ol style="list-style-type: none"> 1. Not plugged in 2. Blown circuit 3. Motor failure 4. Loose wire 5. ON/OFF Switch malfunction 	<ol style="list-style-type: none"> 1. Check power source 2. Replace fuse, reset breaker or call Electrician 3. Have service performed by Ryobi Authorized Service Center 4. Have service performed by Ryobi Authorized Service Center 5. Have service performed by Ryobi Authorized Service Center
Interrupted operation	<ol style="list-style-type: none"> 1. Unit overloaded 2. Circuit overloaded 	<ol style="list-style-type: none"> 1. Reduce load 2. Operate on circuit separate from other appliances or motors or connect to circuit with adequate amp rating

