ORIGINAL INSTRUCTIONS

# Planer

RPL780

## Important!

It is essential that you read the instructions in this manual before operating this machine.

Subject to technical modifications.

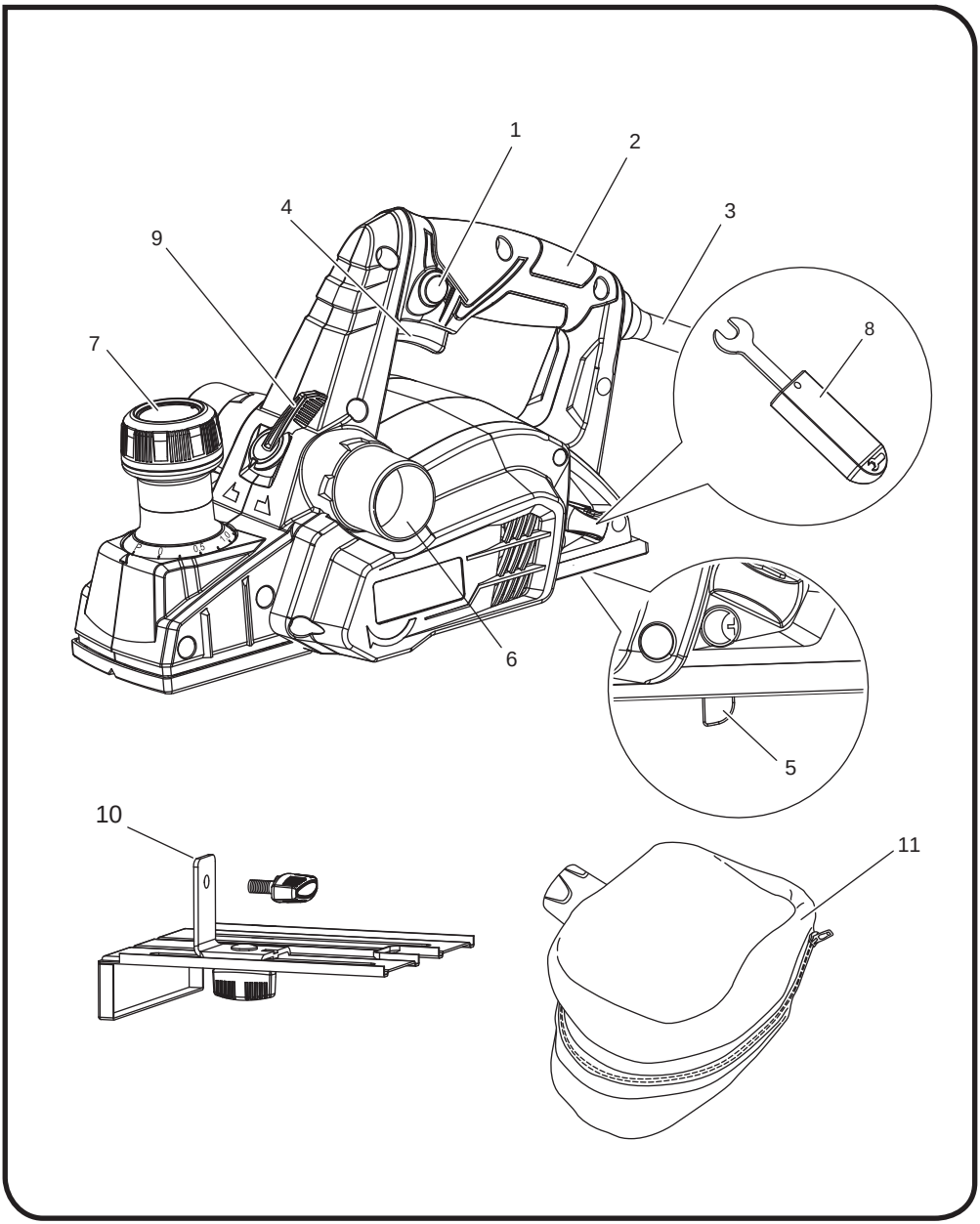
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Fig. 1

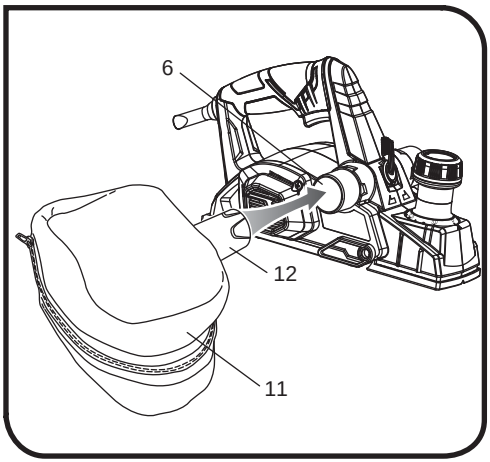
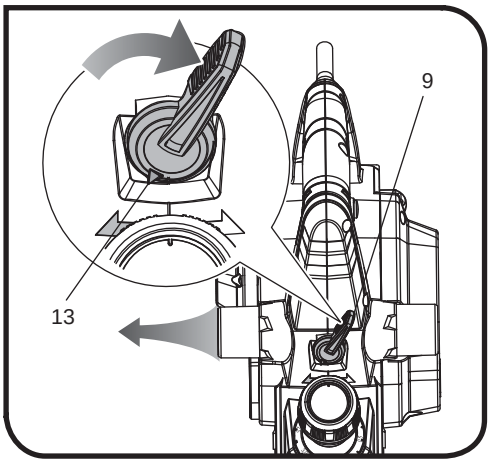



Fig. 2

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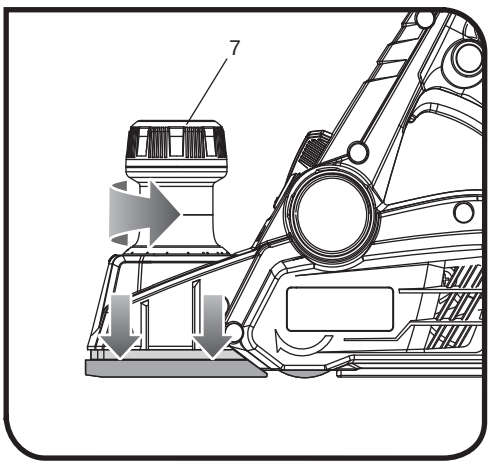


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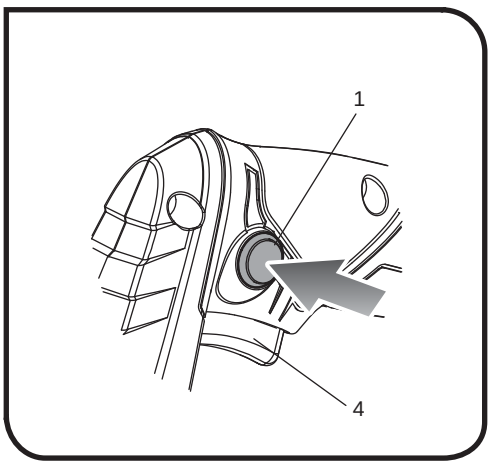

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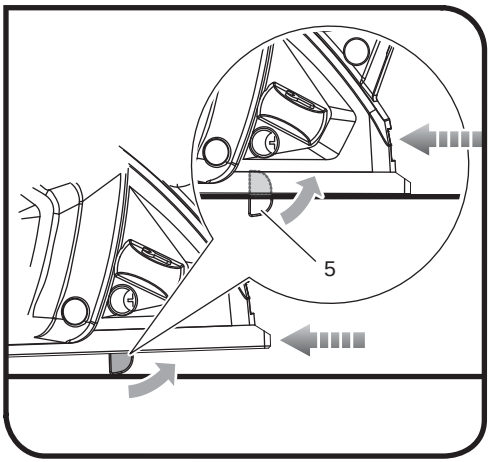


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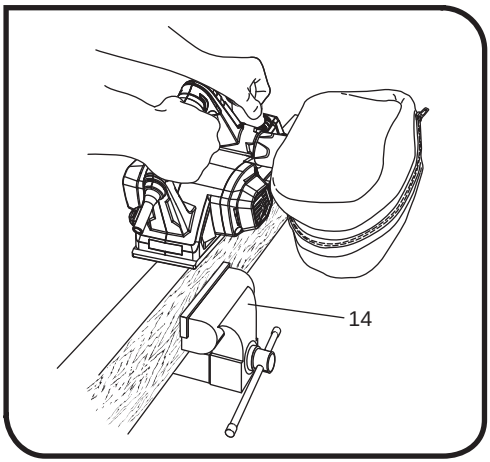


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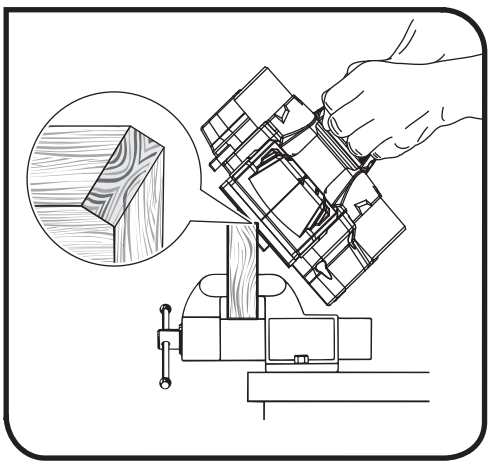

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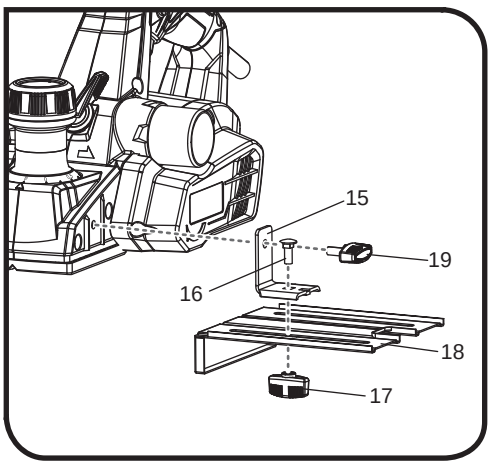

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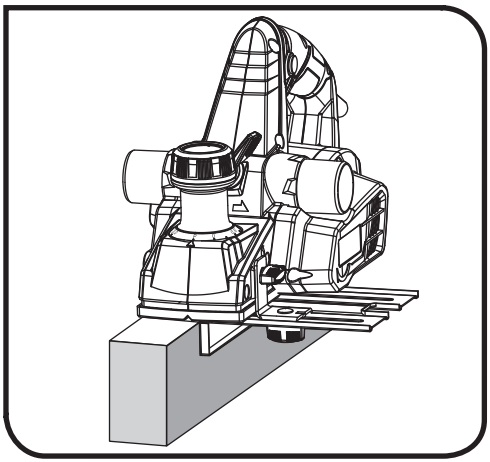

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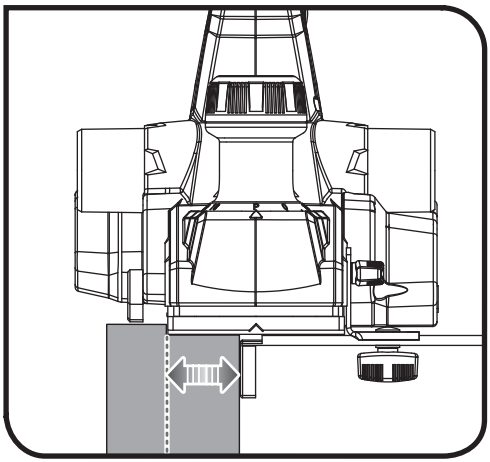

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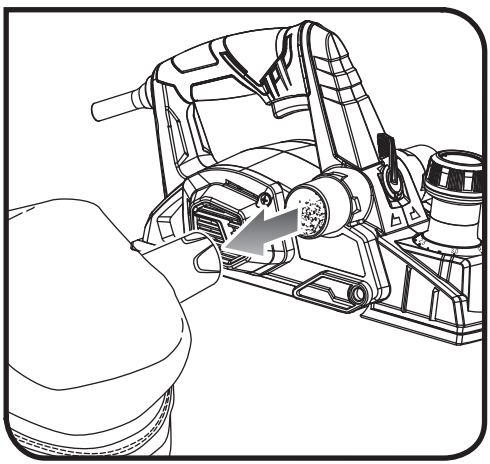

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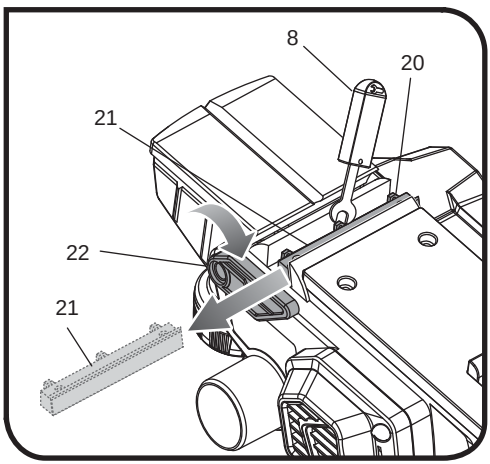

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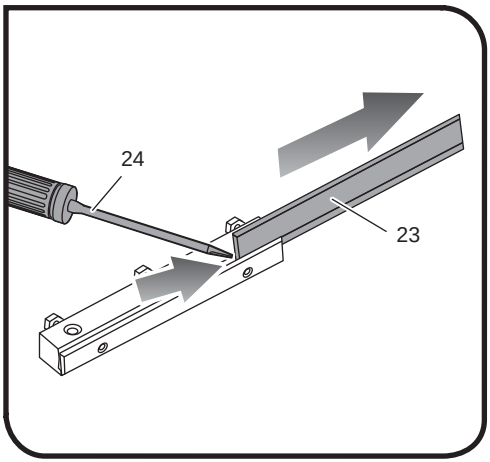
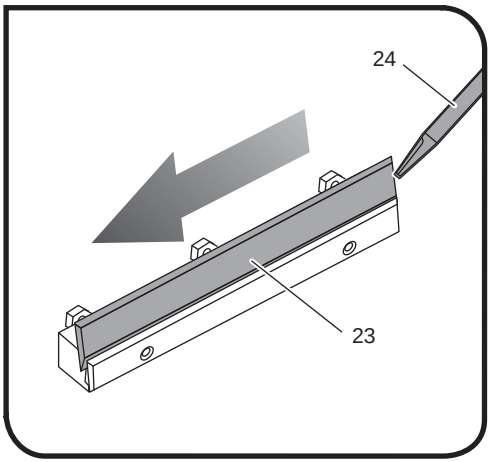



Fig. 14

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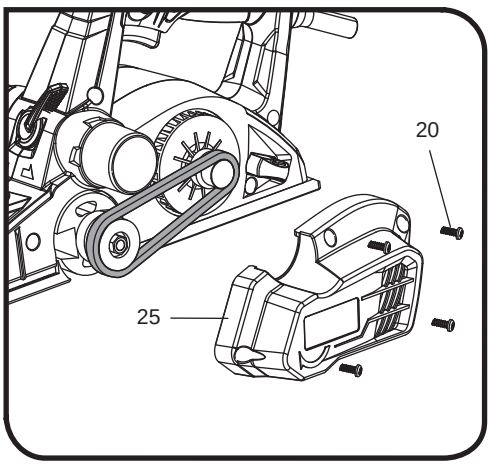
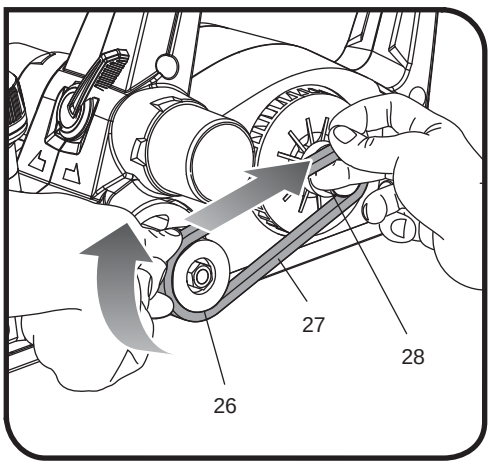



Fig. 16



## GENERAL POWER TOOL SAFETY WARNINGS

**⚠ WARNING**

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

**Save all warnings and instructions for future reference**.

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

**1) WORK AREA SAFETY**

a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.

b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.

c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

**2) ELECTRICAL SAFETY**

a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.

b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.

c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.

e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

**3) PERSONAL SAFETY**

a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.

b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.

c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.

d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.

f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.

g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

**4) POWER TOOL USE AND CARE**

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

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

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

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

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

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

g) **Use the power tool, accessories and tool bits etc, in accordance with these instructions, taking into account the working conditions and**

**the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

**SERVICE**

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

## PLANER SAFETY WARNINGS

- **Wait for the cutter to stop before setting the tool down.** An exposed rotating cutter may engage the surface leading to possible loss of control and serious injury.
- **Hold the power tool by insulated gripping surfaces only, because the cutter may contact its own cord.** Cutting a "live" wire may make the exposed metal parts of the power tool "live" and could give the operator an electric shock.
- **Use clamps or another practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against the body leaves it unstable and may lead to loss of control.

**ADDITIONAL SAFETY RULES**

- Do not remove splinters or saw dust while tool is running.
- Only plane with sharp blades, avoid metals (nails, screws).
- Do not reach into the danger area of the tool when plugged in.

**⚠ WARNING**

**The product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the product by a person responsible for their safety.**

**Children should be supervised to ensure that they do not play with the product.**

- **Keep children and visitors away.** Visitors should wear safety glasses and be kept at a safe distance from the work area. Do not let visitors contact the product or extension cord.
- We recommend the use of a residual current device with a residual current rating of 30 mA or less.

## INTENDED USE

- Planing wood (removing an even layer to provide a smooth, flat finish)
- Rebating wood

The product is not intended to be used for stationary planing.

## DESCRIPTION

1. Lock-off button
2. Rear handle
3. Power cord
4. Switch trigger
5. Kickstand
6. Exhaust port
7. Depth adjustment knob/front handle
8. Blade wrench
9. Exhaust direction dial
10. Edge guide/rabbet guide
11. Dust bag
12. Collar
13. Directional arrow
14. Clamp
15. Bracket
16. Carriage head bolt
17. Knob nut
18. Edge guide
19. Knob bolt
20. Screw
21. Blade holder
22. Spring-loaded blade guard
23. Blade
24. Screwdriver
25. Belt cover
26. Large pulley
27. Belt
28. Small pulley

## ASSEMBLY

**⚠ WARNING**

Do not use this product if it is not completely assembled or if any parts appear to be missing or damaged. Use of a product that is not properly and completely assembled or with damaged or missing parts could result in serious personal injury.

**⚠ WARNING**

Do not attempt to modify this product or create accessories or attachments not recommended for use with this product. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

## OPERATION

**⚠ WARNING**

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

**⚠ WARNING**

Always wear eye protection with side shield. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

### ATTACHING THE DUST BAG

*See Figure 1.*

- Unplug the planer.
- Slide the collar of the dust bag onto the exhaust port.

**NOTE:** To remove the dust bag, pull it straight out of the exhaust port.

**NOTE:** The dust bag fills quickly. Empty it often to prevent damage to the product.

### ADJUSTING THE EXHAUST DIRECTION

*See Figure 2.*

**⚠ WARNING**

Collected dust from planing surface coatings such as polyurethanes, linseed oil, etc., can self-ignite in the planer dust bag or elsewhere and cause fire. To reduce the risk of fire, always empty the dust bag frequently while planing. NEVER store or leave a planer without totally emptying its dust bag. Also follow the recommendations of the coatings manufacturers.

Change the direction of the exhaust to either the right or left to control the direction of debris when working in confined areas.

**To adjust the exhaust direction and dust bag:**

- Unplug the planer.
- **To adjust exhaust to the right:** Move the exhaust direction knob so the arrow points right (the handle will point left). Install the dust bag on the right exhaust port.
- **To adjust exhaust to the left:** Move the exhaust direction knob so the arrow points left (the handle will point right). Install the dust bag on the left exhaust port.

### PLANING DEPTH

*See Figure 3.*

When you begin planing a rough piece of material, the planer will only remove the high spots at first. Successive passes will remove more and more material. By removing no more than 0.25 mm. with each pass, you will achieve the smoothest finish, even from the roughest workpiece.

Always begin by making test cuts in scrap wood to make sure that the planer is removing the desired amount of wood.

**To set the planing depth:**

- Unplug the planer.
- Turn the depth adjustment knob clockwise to reach the maximum depth of cut up to 3.0 mm.

**NOTE:** To protect the blades during storage, transporting, etc., turn the depth adjustment knob counterclockwise to P to park the blade.

### STARTING/STOPPING THE PLANER

*See Figure 4.*

- To start the planer: Push the lock-off button, and then depress the switch trigger.
- To stop the planer: Release the switch trigger.

### OPERATING THE PLANER

- Clamp the workpiece securely.
- Support the workpiece so that the operation is to your side.

**⚠ WARNING**

Work moving during a cut could result in loss of control of the planer and cause serious injury.

- Hold the planer with both hands. Hold the depth adjustment knob with one hand and the handle with your other hand.
- Plane slowly and empty the dust bag often.

**NOTE:** Planing too fast results in a poor finish and increases chip build-up in the chip exhaust. Chip build-up restricts air flow and can cause motor overheating.

**⚠ WARNING**

Do not attempt to clear a blocked chip exhaust until the blades stop and you have disconnected the product from the power source. Failure to heed this warning can result in serious personal injury.

**⚠ WARNING**

Keep the cord away from the work area and the blades. Do not allow the cord to hang on the work while planing. Using the planer with a damaged or hanging cord could result in an electric shock or serious personal injury.

### KICKSTAND

*See Figure 5.*

The planer has been equipped with an automatic pivoting kickstand that will prevent the blades from contacting the workbench when not in use. As you begin the planing operation, the kickstand will automatically retract as it passes over the edge of the workpiece. When setting the planer down on the workbench, the kickstand will automatically pivot down to prevent the blade from making any contact.

**⚠ WARNING**

Make sure the kickstand operates freely at all times and that the area surrounding the kickstand is clear of debris. Failure to do so could result in serious personal injury.

**PLANING**

*See Figure 6.*

- Clamp the workpiece securely.
- Adjust the planing depth. Refer to Planing Depth earlier in this manual.
- Hold the depth adjustment knob with one hand and the handle with your other hand.

**⚠ WARNING**

Always use two hands on the tool for any operation; this assures that you maintain control and avoid risk of serious personal injury. Always properly support and clamp the workpiece so that both hands are free to control the planer. Never operate the tool overhead or inverted from the proper operating position; serious personal injury may result.

- Place the front shoe on the edge of workpiece to be planed.

**NOTE:** Make sure the blades are not touching the workpiece.

- Apply pressure to the depth adjustment knob so that the front shoe is completely flat on the workpiece.
- Start the planer and let the motor reach maximum speed.
- Hold the planer firmly and push it forward into the workpiece, using a slow, steady motion.
- Apply downward pressure toward the rear handle as you reach the end of the planed cut. This helps keep the rear section of the planer base in contact with the workpiece and prevents the front of the planer from gouging the cut.

**⚠ WARNING**

Be careful to avoid hitting nails or staples during planing operation; this action could nick, crack, or damage blades.

**NOTE:** We suggest that you always keep an extra set of blades on hand. As soon as the blades in the planer show signs of becoming dull, replace them. The blades are reversible and can be reversed until both sides become dull.

**CHAMFERING**

*See Figure 7.*

The planer is designed with a chamfering groove in the front shoe to chamfer corners of boards as shown. Before making a cut on good lumber, practice cutting on scrap lumber to determine the amount to be removed.

- Clamp the workpiece securely.
- Hold the depth adjustment knob with one hand and the handle with your other hand.
- Place the chamfering groove on the surface to be cut.
- Start the planer and let the motor reach maximum speed.
- Hold the planer firmly and push it forward into the workpiece, using a slow, steady motion.
- Apply downward pressure to keep the planer flat at the beginning and the end of the work surface.

**PLANING EDGES AND MAKING RABBET CUTS**

The planer comes with an adjustable edge guide for precision edge planing and rabbet cutting. Attach the edge guide to either side of the planer for planing edges and attach the edge guide to the left side for making rabbet cuts.

**ATTACHING THE EDGE GUIDE FOR PLANING EDGES**

*See Figure 8.*

- Unplug the planer.
- Attach the bracket to the desired side of the planer and tighten the knob bolt securely.
- Attach the edge guide to the bracket using the knob nut and the carriage head bolt.
- Tighten the knob nut securely.

**PLANING EDGES**

*See Figure 9.*

Follow the directions in the Planing section earlier in this manual. Hold the edge guide firmly against the edge of the workpiece surface.

**ATTACHING THE EDGE GUIDE FOR MAKING RABBET CUTS**

*See Figure 8.*

- Unplug the planer.
- Attach the bracket to the left side of the planer and tighten the knob bolt securely.
- Attach the edge guide loosely to the bracket using the knob nut and the carriage head bolt (do not tighten).
- Adjust the edge guide to the desired width for the rabbet cut.
- Tighten the knob nut securely.

**TO MAKE RABBET CUTS**

*See Figure 10.*

Follow the directions in the Planing section earlier in this manual. Rest the edge guide firmly against the edge of the workpiece surface.

The depth of the rabbet is determined by the depth of the cut and the number of passes made along the work surface. The maximum depth of the rabbet cut is 12 mm. The width of the rabbet cut is adjustable by moving the edge guide.

## MAINTENANCE

**⚠ WARNING**

The product should never be connected to a power supply when you are assembling parts, making adjustments, cleaning, performing maintenance, or when the product is not in use. Disconnecting the product will prevent accidental starting that could cause serious injury.

- When servicing, use only identical Ryobi replacement parts. Use of any other parts may create a hazard or cause product damage.
- Be sure to disconnect the tool from the power supply before attaching or removing the blade. Clean the tool and guarding system with clean cloths, or blow it clean with compressed air.
- Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, carbon dust, etc.
- 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.
- 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.
- If the power supply cord is damaged, it must be replaced only by the manufacturer or by an authorized service center to avoid risk. Contact authorized service center.
- For greater safety and reliability, all repairs should be performed by an Authorised Ryobi Service Centre.

### LUBRICATION

All of the bearings in the product are lubricated with a sufficient amount of high grade lubricant for the life span of the product under normal operating conditions. Therefore, no further lubrication is required.

### POWER SUPPLY CORD REPLACEMENT

If replacement of the power supply cord is necessary, this must be done by an authorized service center in order to avoid a safety hazard.

### CLEANING THE EXHAUST PORT AND EMPTYING THE DUST BAG

*See Figure 11.*

After using the planer for an extended period of time or when planing wet or green lumber, chips may build-up in the exhaust port and require cleaning. Chip build-up restricts air flow and causes the motor to overheat. Clean the exhaust port and empty the dust bag regularly.

- Unplug the planer.
- Remove the dust bag from the exhaust port.
- Clean the chip or dust build-up from the exhaust port of the planer with a small piece of wood. Do not use your hands or fingers.
- Empty all debris from the dust bag and ensure that the collar is free of debris.
- Replace the dust bag.

### REPLACING BLADES

*See Figures 12 - 14.*

The planer blades are reversible. When one edge becomes dull, the blade can be reversed so that the other side can be used.

Always replace or reverse blades in pairs. Do not attempt to sharpen blades. If the blades in the planer show signs of becoming dull, chipped, or damaged in any way, replace them.

When replacing the blades, use recommended replacement blade only.

**⚠ WARNING**

Always wear heavy leather gloves and use caution when loosening blade screws and handling and/or changing blades. Blades are sharp and can cause serous personal injury.

- Unplug the planer.
- Secure the planer in an upside-down position.
- Loosen the three screws securing the blade on the blade holder by turning counterclockwise with the provided blade wrench.

**NOTE:** Do not over-loosen the screws. If screws are too loose, alignment of the new blade will not be accurate.

**NOTE:** Before removing the old blades, take notice of the direction of cut as well as how the tapered edge of the old blades are oriented. The tapered edge of the new blades must be in the same orientation as the original blades, with the tapered edge on the same side as the screw heads and the flat edge facing the cutter block.

- Depress the spring-loaded blade guard.
- Push the blade holder out of the cutter block assembly using the tip of a screwdriver.
- Remove the old blade from the blade holder by sliding the blade out.

**NOTE:** If blade cannot be easily pushed out of blade holder after loosening blade securing screws, use a block of wood to break the blade loose from the blade holder with a short sharp blow. Then push the blade with a screwdriver to remove. If necessary, tap the block of wood sharply with a small hammer to break the blade loose.

- Clean any sawdust or wood chips from around the blade area.
- Slide the new blade into the slot of the blade holder.

**⚠ CAUTION**

Do not attempt to adjust the depth of blade with the two screws on blade holder.

- Use a screwdriver to push the blade into the blade holder until it is centred into position.
- Depress the spring-loaded blade guard.
- Insert the blade holder into the cutter block assembly.
- Retighten the three blade securing screws using the blade wrench.
- Repeat the above procedure to change the other blade.

**REPLACING THE BELT**

*See Figures 15 - 16.*

When replacing the belt, use the recommended replacement belt only.

- Unplug the planer.
- Remove belt cover screws.
- Remove the belt cover.
- Force the old belt from the small pulley by turning in the direction shown. As you turn the belt, pull and work it off the small pulley until it has been completely removed from both pulleys.
- Install the new belt over the large pulley. As you turn the belt, push and work it onto the small pulley until it is in place.
- Replace the belt cover.
- Install belt cover screws and tighten securely.

**NOTE:** Do not overtighten the screws.

## ENVIRONMENTAL PROTECTION

Recycle raw materials instead of disposing of as waste. The machine, accessories and packaging should be sorted for environmental-friendly recycling.

## SYMBOLS

| | |
|---|---|
| | Safety alert |
| V | Volts |
| Hz | Hertz |
| ∿ | Alternating current |
| W | Watts |
| $n_o$ | No-load speed |
| $min^{-1}$ | Revolutions or reciprocations per minute |
| | Regulatory Compliance Mark (RCM). Product meets applicable regulatory requirements. |
| | Please read the instructions carefully before starting the machine. |
| | Wear eye protection |
| | Class II tool, double insulation |
| | Maximum planing capacity |
| | Maximum planing capacity |
| | Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice. |

## PRODUCT SPECIFICATIONS

| | |
|---|---|
| Model | RPL780 |
| Input | 220 V - 240 V ∿ 50/60 Hz |
| Wattage | 780 W |
| No-load speed | 17000 $min^{-1}$ |
| Max. planing depth | 3 mm |
| Max. planing width | 82 mm |
| Max. rebbate depth | 12 mm |
| Weight<br>(According to EPTA procedure 01/2003) | 3.1 kg |

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