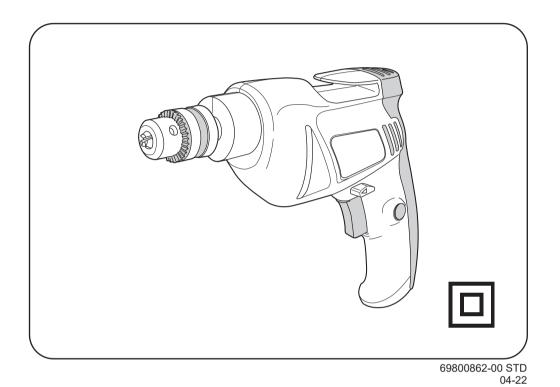
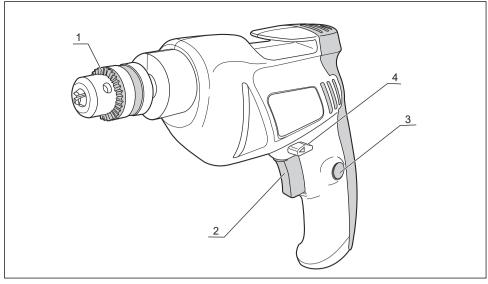


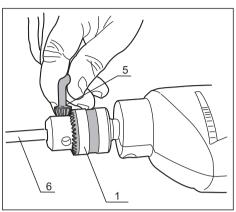
# **D-110VR**

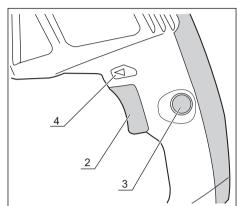
**(B)** OWNER'S OPERATING MANUAL

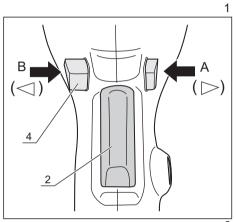


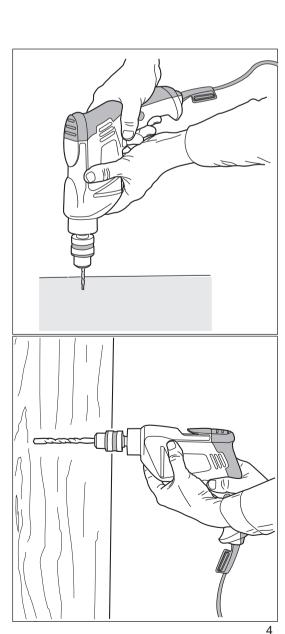
KYOCERA Industrial Tools Corporation 2-2-54 Matsuhama-cho, Fukuyama-shi, Hiroshima-ken, 720-0802 Japan













#### THANK YOU FOR BUYING OUR PRODUCT.

To ensure your safety and satisfaction, carefully read through this OWNER'S MANUAL before using the product.

#### General power tool safety warnings

**MARNING Read all safety warnings, instructions, il**lustrations and specifications provided with this power tool. Failure to follow all instructions listed below 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 mainsoperated (corded) power tool or battery-operated (cordless)

#### 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

#### 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 condi-tions. 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 elec-
- 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

- 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 a 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 turn-ing the power tool on. A wrench or a key left at-tached to a rotating part of the power tool may result in personal iniury.

- in personal injury.

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

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

  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.

  Do not let familiarity gained from frequent use of
- h) Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

#### 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.
- 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
- Disconnect the plug from the power source and/ or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools and accessories. Check for Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- 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
- Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

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

#### **Drill safety warnings**

#### Safety instructions for all operations

a) Hold the power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

# (GB) ENGLISH -

# Safety instructions when using long drill bits a) Never operate at higher speed than the maximum

- speed rating of the drill bit. At higher speeds, the bit is likely to bend if allowed to rotate freely without contacting the workpiece, resulting in personal injury.
  b) Always start drilling at low speed and with the bit
- tip in contact with the workpiece. At higher speeds, the bit is likely to bend if allowed to rotate freely without contacting the workpiece, resulting in personal injury.
  c) Apply pressure only in direct line with the bit and do
- not apply excessive pressure. Bits can bend causing breakage or loss of control, resulting in personal injury.

#### Additional safety warnings for all operations

- Make sure drill bit is securely mounted. An incorrectly mounted bit is extremely dangerous since it can fly off or break during drilling.
- 2. Do not wear cloth gloves or a necktie since they could become caught in a rotating bit.
- Hold the tool securely with both hands.
- If not held securely, accidents or injury may result.

  Never touch the chuck or metal body parts when drilling walls, floors, or other surfaces covering electrical wiring. Hold the drill only by the plastic handle to prevent electric check.
- 5. The tool must be installed an auxiliary handle in use

### INSTRUCTIONS FOR SAFE HANDLING

- 1. Make sure that the tool is only connected to the voltage
- marked on the name plate.

  2. Never use the tool if its cover or any bolts are missing. If the cover or bolts have been removed, replace them prior to use. Maintain all parts in good working order.
- Always secure tools when working in elevated posi-
- 4. Never touch the blade, drill bit, grinding wheel or other moving parts during use.

  5. Never start a tool when its rotating component is in
- contact with the work piece. Never lay a tool down before its moving parts have come to a complete stop.
- ACCESSORIES: The use of accessories or attachments other than those recommended in this manual
- might present a hazard. 8. REPLACEMENT PARTS: When servicing use only identical replacement parts.

#### DESCRIPTION

- 1. Drill chuck
- 2. Switch 3. Lock button
- 4. Reversing switch
- Chuck key
- 6. Drill bit

# **SPECIFICATIONS**

Chuck capacity 10 mm (3/8") Drilling capacity in wood 25 mm (1") 10 mm (3/8") Input 500 W No load speed 0 - 2,800 min 245 mm (9-5/8") Overall length 1.4 kg (3.1 lbs.) Net weight

#### STANDARD ACCESSORIES

Chuck key

**APPLICATIONS** (Use only for the purposes listed below.)
1. Drilling wood, metal and resin boards.

#### **MOUNTING OF BIT(Fig. 1)**

When mounting the drill bit (6), insert the bit into chuck (1) as far as it will go and tighten securely using the chuck key (5) provided. There are three holes into which the chuck key should be inserted. Tighten each one equally in turn.

The bit can be removed by following the above method in

## SWITCH(Fig. 2)

This tool starts and stops by depressing and releasing the switch(2).

The speed can be adjusted from 0 through 2,800 min<sup>-1</sup> by regulating the trigger-squeezing force.

For continuous operation, press the lock button(3) while switch is depressed. Depress again to release the lock.

### **CHANGING DIRECTION(Fig. 3)**

To reverse the direction of rotation, stop the drill by releasing the trigger and push the reversing switch (4) to the right or

When the reversing switch is in the position marked "\[\sigma\]", the direction of rotation will be clockwise when viewed from the handle end of the drill. When the reversing switch is in the position marked "\[\sigma\]", the direction of rotation will be counterclockwise. counterclockwise.

#### OPERATING(Fig. 4)

NEVER COVER AIR VENTS SINCE THEY MUST ALWAYS BE OPEN FOR PROPER MOTOR COOLING.

### DRILLING IN WOOD

To prevent ugly splits around the drillhole on the reverse side of the workpiece, place a scrap piece of lumber beneath the material to be drilled.

# DRILLING IN METAL

Metals such as steel brass, aluminum sheets, stainless steel, and pipe may also be drilled. Mark the point to be drilled with a nail or a punch.

#### **MAINTENANCE**

After use, check the tool to make sure that it is in top condition.

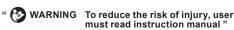
It is recommended that you take this tool to an Authorized Service Center for a through cleaning and lubrication at least once a year.

DO NOT MAKE ANY ADJUSTMENTS WHILE THE

MOTOR IS IN MOTION.
ALWAYS DISCONNECT THE POWER CORD FROM THE
RECEPTACLE BEFORE CHANGING REMOVABLE OR
EXPENDABLE PARTS (BLADE, BIT, SANDING PAPER
ETC.), LUBRICATING OR WORKING ON THE UNIT.

To ensure safety and reliability, all repairs should be performed by an AUTHORIZED SERVICE CENTER or other QUALIFIED SERVICE ORGANIZATION.

### SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.



Class II construction tool in which protection against electric shock does not rely on basic in-sulation only, but in which additional safety pre-caution, such as double insulation or reinforced insulation, are provided."