



WORX



SAFETY AND OPERATING MANUAL

Cordless drill WX153 WX158 WX165 WX365 WX369

SAFETY INSTRUCTIONS



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) **Recommendation for the use of a residual current device with a rated residual current of 30 mA or less.**

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 these devices 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 tools 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 and in the manner intended for the particular type of power tool, 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.

5) BATTERY TOOL USE AND CARE

- a) Ensure the switch is in the off position before inserting battery pack.** Inserting the battery pack into power tools that have the switch on invites accidents.
- b) Recharge only with the charger**

specified by the manufacturer. A charger that is suitable for one type of battery pack.

- c) Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- d) When battery pack is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screw, or other small metal objects that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or fire.
- e) Under abusive conditions, liquid may be ejected from the battery; avoid contact, if contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.


6) SERVICE

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

ADDITIONAL SAFETY RULES FOR YOUR CORDLESS DRILL

1. Remove the battery pack from the drill before carrying out adjustments.
2. Do not expose to rain or water.
3. Do not store the battery pack in temperatures over 40°C.
4. Always charge the battery pack between temperatures 0°C to 30°C. Ideal charging temperature is 18°C to 24°C.
5. Only use the charger and the battery pack provided no others.
6. Avoid short circuit of the battery pack connections (screws & nails).
7. Do not incinerate or burn the battery pack, it may explode.
8. Do not charge a damaged battery pack.
9. Replace any damaged supply cords on your charger.

10. Always disconnect the charger power supply before making or breaking the connections to the battery pack.
11. Battery pack and charger will be warm during charging this is normal.
12. When not in use, remove a charged battery pack from the charger.
13. Always remove the battery pack from the charger immediately after re-charging is completed.
14. Your drill and battery pack will be warm when working, this is normal.
15. Do not dispose of batteries in fire, or with household waste. Return exhausted batteries to your local collection or recycling point.
16. Always check walls, floors and ceilings for hidden power cables and pipes.
17. Use auxiliary handles supplied with the tool. Loss of control can cause personal injury.
18. Wear ear protection with cordless drill. Exposure to noise can cause hearing loss.
19. Accessories and metal parts can become very hot.
20. Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring. Contact with a 'live' wire will also make exposed metal parts of the tool 'live' and shock the operator.

 **WARNING: If a small amount of electrolyte should leak from the battery pack under extremes of temperature or after heavy use, then wash off immediately from your skin and hands using clean water.** For eye contact, rinse thoroughly with clean water and seek medical treatment immediately.

 **WARNINGS FOR THE CHARGER:**

1. Before using the tool, read the instruction book carefully.
2. Charger is for indoor use only. Do not expose to rain or water.
3. Do not charge non-rechargeable batteries.
4. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

SYMBOLS



To reduce the risk of injury, user must read instruction manual



Warning



Wear ear protection



Wear eye protection



Wear dust mask



Indoor use only



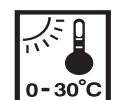
Do not expose to rain or water



Do not burn



Do not dispose of batteries. Return exhausted batteries to your local collection or recycling point



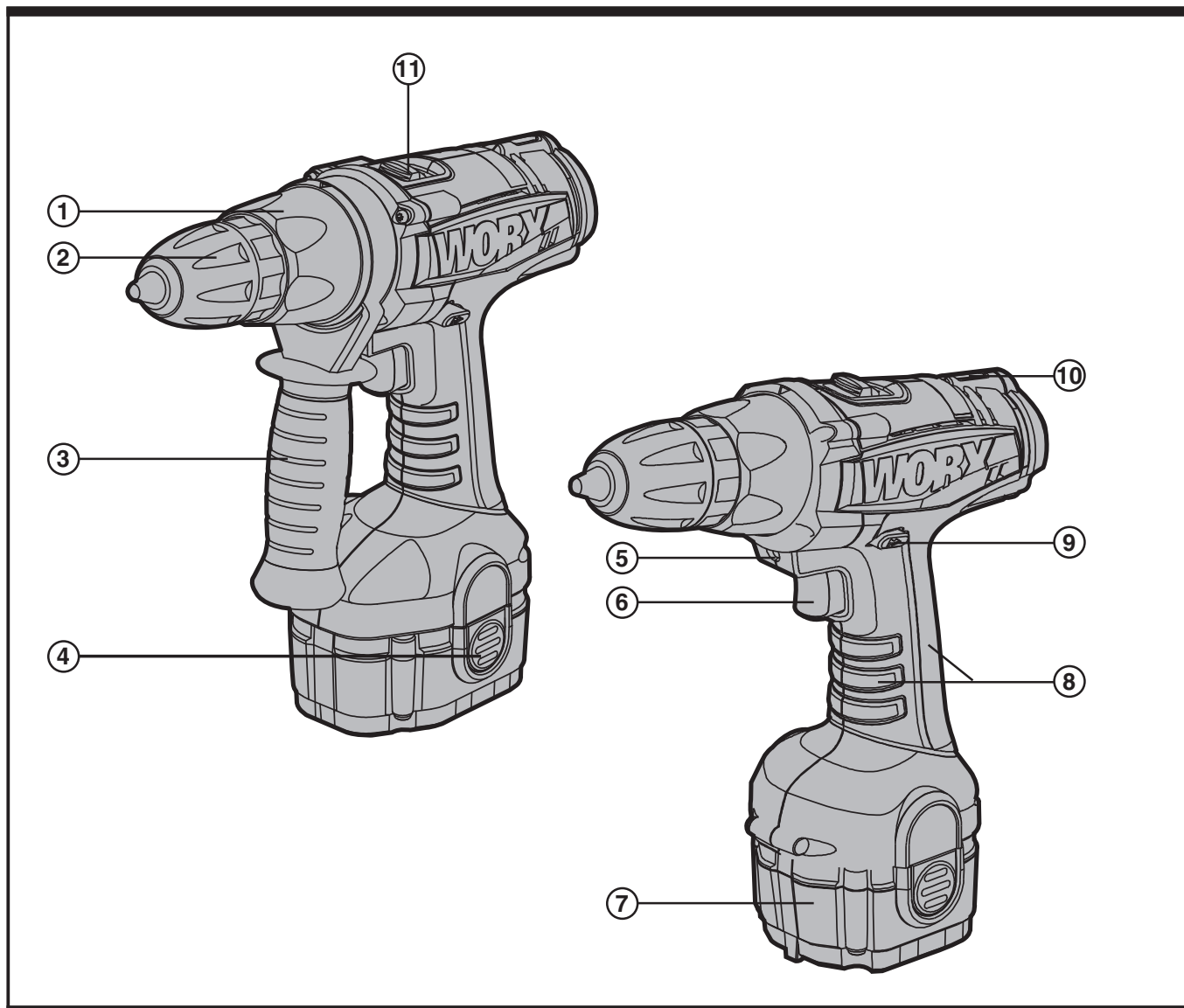
Always charge the battery pack between temperatures 0°C to 30°C



1 hour charging time



RCM approval mark



1. VARIABLE CLUTCH

2. CHUCK

3. AUXILIARY HANDLE

4. BATTERY PACK LATCH

5. SIGHT LIGHT

6. ON/OFF SWITCH WITH VARIABLE SPEED CONTROL

7. BATTERY PACK

8. SOFT GRIP HANDLE

9. FORWARD, REVERSE ROTATION AND LOCK CONTROL

10. BUBBLE LEVEL

11. GEAR CONTROL

Not all the accessories illustrated or described are included in standard delivery.

Cordless drill WX153 WX158 WX165 WX365 WX369


TECHNICAL DATA

Model no.		WX153	WX158	WX165
Rated voltage		12V ---	14.4V ---	18V ---
Rated no load speed		0-350 / 0-1300/min		
Number of clutch position		23+1		
Max torque		25N.m	30N.m	50N.m
Chuck capacity		10mm	10mm	13mm
Max. drilling capacity	Steel	10mm	10mm	13mm
	Wood	25mm	28mm	35mm
Machine weight		1.8Kg	1.95Kg	2.3Kg

Model no.		WX365	WX369
Rated voltage		14.4V ---	18V ---
Rated no load speed		0-350 / 0-1300 /min	
No load impact frequency		0-5600 / 0-20800 /min	
Number of clutch position		20+1+1	
Max torque		40N.m	50N.m
Chuck capacity		13mm	13mm
Max. drilling capacity	Steel	13mm	13mm
	Wood	30mm	38mm
	Concrete	13mm	16mm
Machine weight		2.3Kg	2.4Kg

NOISE/VIBRATION INFORMATION

Model no.	WX153	WX158	WX165	WX365	WX369
A weighted sound pressure	89.6dB(A)				
A weighted sound power	100.6dB(A)				

Wear ear protection when sound pressure is over 85dB (A) 

Impact drilling into concrete	11.66m/s ² K=1.5m/s ²
Drilling into metal	2.76m/s ² K=1.5m/s ²

Cordless drill WX153 WX158 WX165 WX365 WX369

ACCESSORIES

Model no.	ACCESSORIES
WX153	1 x 1hr charger 2 x 1.5Ah Ni-Cd Battery
WX158	1 x 1h charger 2 x 1.5Ah Ni-Cd Battery
WX165	1 x 1h charger 2 x 1.5Ah Ni-Cd Battery 1 x Auxiliary Handle
WX365	1 x 1h charger 2 x 1.7Ah Ni-Cd Battery 1 x Auxiliary Handle
WX369	1 x 1h charger 2 x 1.7Ah Ni-Cd Battery 1 x Auxiliary Handle

We recommend that you purchase your accessories from the same store that sold you the tool. Use good quality accessories marked with a well-known brand name. Choose the type according to the work you intend to undertake. Refer to the accessory packaging for further details. Store personnel can assist you and offer advice.

OPERATING INSTRUCTIONS



NOTE: Before using the tool, read the instruction book carefully.

BEFORE PUTTING INTO OPERATION

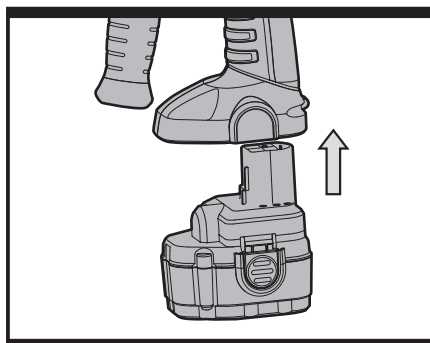
—BATTERY CHARGING

A battery that is new or has not been used for a longer period does not develop its full capacity until after several charging / discharging cycles.

A significantly reduced working period after charging indicates that the batteries are used and must be replaced.

—TO REMOVE OR INSTALL BATTERY PACK (See Fig. A)

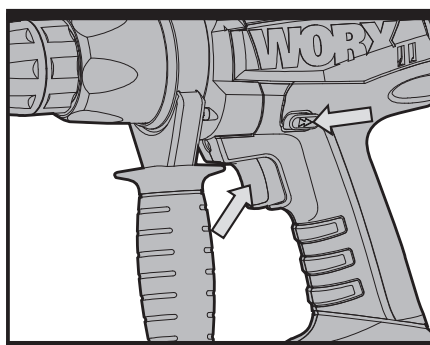
Locate latches on side of battery pack and depress both sides to release battery pack from your tool. Remove battery pack from your tool. After recharge insert the battery pack into the battery port. A simple push and slight pressure will be sufficient.



A

1. AUXILIARY HANDLE (FOR WX165/WX365/WX369)

Slide the handle onto the drill and rotate to the desired working position. To clamp the auxiliary handle, rotate the handgrip clockwise. To loosen it, rotate the handgrip anti-clockwise. Always use the handle during operation.



B

2. ON / OFF SWITCH (See Fig. B)

Depress to start and release to stop your drill. The on/off switch is fitted with a brake function which stops your chuck immediately when you quickly release the switch. It is also a variable speed switch that delivers higher speed and torque with increased trigger pressure. Speed is controlled by the amount of switch trigger depression.



WARNING: Do not operate for long periods at low speed because excess heat will be produced internally.

3. SWITCH LOCK (See Fig. B)

The switch trigger can be locked in the OFF position. This helps to reduce the possibility of accidental starting when not in use. To lock the switch trigger, place the direction of rotation selector in the center position.

4. REVERSIBLE (See Fig. B)

For drilling and screw driving use forward rotation marked "◀◀" (lever is moved to the left). Only use

reverse rotation marked "▷▷" (lever is moved to the right) to remove screws or release a jammed drill bit.



WARNING: Never change the direction of rotation when the chuck is rotating, wait until it has stopped!

5. TWO-SPEED GEAR TRAIN (See Fig. C)

The drill has a two-speed gear train designed for drilling or driving at LO (mark is 1) or HI (mark is 2) speeds. A slide switch is located on top of the drill to select either LO or HI speed. When using the drill in the LO speed range, the speed will decrease and the drill will have greater power and torque. When using the drill in the HI speed range, the speed will increase and the drill will have less power and torque.



WARNING: To prevent gear damage, always allow the chuck to come to a complete stop before changing the direction of rotation or the two-speed gear train.


6. CHUCK ADJUSTMENT

To open the chuck jaws rotate the front section of the chuck. Insert the drill bit between the chuck jaws and rotate the front section in the opposite direction. Ensure the drill bit is in the center of the chuck jaws. Finally, firmly rotate the front chuck section in the opposite directions. Your drill bit is now clamped in the chuck.

7. TORQUE ADJUSTMENT AND HAMMER OR DRILLING CONTROL (See Fig. D1 & D2)

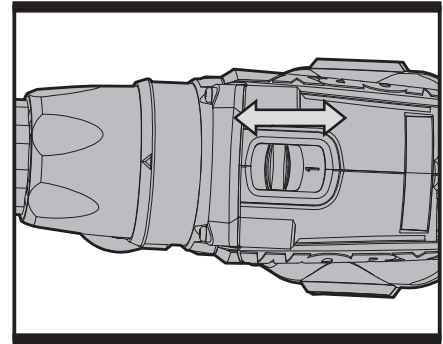
(Screw driving force of your drill driver)

The torque is adjusted by rotating the torque adjustment ring. The torque is greater when the torque adjustment ring is set on a higher setting. The torque is less when the torque adjustment ring is set on a lower setting.

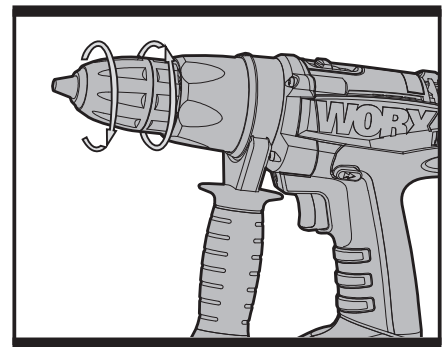
When drilling in masonry and concrete choose the hammer position . (for WX365/WX369)

When drilling in wood, metal, plastic and screwdriver choose the drill position .

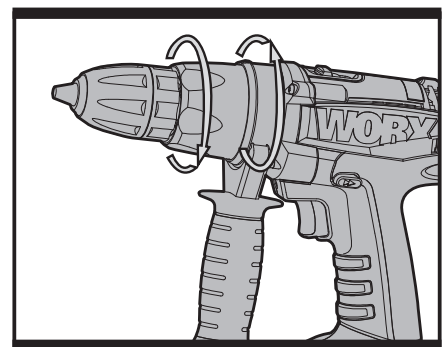
Make the setting as follows:





C

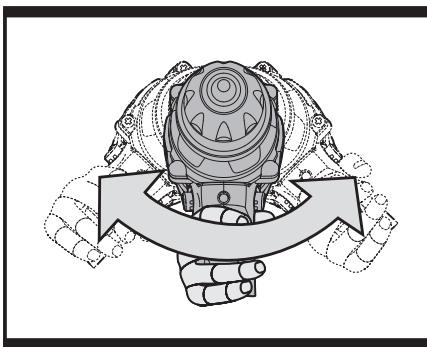


D1

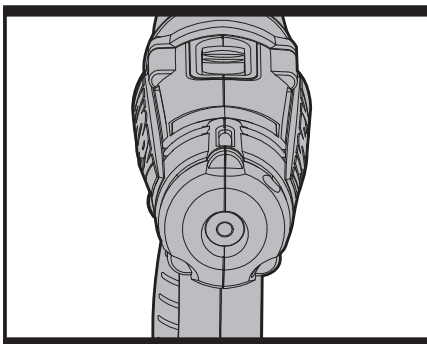


D2

1 - 4	for driving small screws
5 - 9	for driving screws into soft material
10 - 14	for driving screws into soft and hard material
15 - 19	for driving screws into hard wood
20 - 23	for driving larger screws
20	for driving larger screws (for WX365/WX369)
	for heavy drilling
	for drilling in masonry and concrete (for WX365/WX369)



E



F

8. AUTOMATIC SPINDLE LOCK (See Fig. E)

The automatic spindle lock allows you to use as a regular screwdriver. You can give an extra twist to firmly tighten a screw, loosen a very tight screw or continue working when the battery energy has expired. For manual screwdriver purposes, the chuck is automatically locked when the tool is off.

9. USING THE SIGHT LIGHT (5)

The sight light allows you to keep a clear view under less illuminated circumstances. To turn on the light simply press the on/off switch. When you release the on/off switch, the light will go out.

10. LEVEL DRILLING (See Fig. F)

The Bubble level is recessed in the motor housing on the top of the drill. It can be used to keep the drill level during horizontal drilling operation. The Bubble level is recessed in the motor housing on the back of the drill. It can be used to keep the drill level during vertical drilling operation.

11. DRILLING


When drilling into a hard smooth surface, use a center punch to mark the desired hole location. This will prevent the drill bit from slipping off center as the hole is started. Hold the tool firmly and place the tip of the bit at the point to be drilled. Depress the switch trigger to start the tool. Move the drill bit into the workpiece, applying only enough pressure to keep the bit cutting. Do not force or apply side pressure to elongate a hole.



Tungsten carbide drill bits should always be used for concrete and masonry. When drilling in metal, only use HSS drill bits in good condition. Always use a magnetic bit holder (not included) when using short screwdriver

bits. When screw-driving, apply a small quantity of liquid soap or similar to the screw threads to ease insertion.

12. DISPOSAL OF AN EXHAUSTED BATTERY PACK

 To preserve natural resources, please recycle or dispose of the battery pack properly. This battery pack contains Ni-Cd batteries. Consult your local waste authority for information regarding available recycling and/or disposal options. Discharge your battery pack by operating your drill, then remove the battery pack from the drill housing and cover the battery pack connections with heavy-duty adhesive tape to prevent short circuit and energy discharge. Do not attempt to open or remove any of the components.

PROBLEM SOLUTION

1. WHY DOES THE DRILL NOT TURN ON WHEN YOU PRESS THE SWITCH?

The forward and reverse switch, which is on top of the trigger, is positioned in the lock function. Unlock the forward and reverse switch putting it into the required rotation position. Push the trigger and the drill will start to rotate (See Fig.B).

2. THE DRILL STOPS BEFORE THE SCREW IS COMPLETELY TIGHTENED. WHY?

Verify the torque position of the torque adjusting ring, you can find the torque-adjusting ring between the chuck and the drill body. Position 1 is the lowest torque (screw driving force) and position 23 (for WX153/WX158/WX165) / 20 (for WX365/WX369) is the highest torque (screw driving force). Position 24 (for WX153/WX158/WX165) / 21 (for WX365/WX369) is for drill operation. Regulate the torque adjusting ring to a higher position to reach the best result (See Fig.D1 & D2).

3. I CAN NOT FIT THE BATTERY INTO THE BATTERY CHARGER. WHY?

The battery can be inserted into the charger only in one direction. Turn the battery around until it can be inserted into the slot, the red

LED light should turn on when the battery is charging.

4. REASONS FOR DIFFERENT CHARGING TIMES

Your charge time can be affected by many reasons which are not defects in your product. If the battery pack is only partly discharged it may be re-charged in less than 1 hour. If the battery pack and ambient temperature are very cold then re-charging may take 1-1.5 hours. If the battery pack is very hot it will not re-charge because the internal temperature safety cutout will prevent it. If the battery pack is very hot you must remove your battery pack from the charger and allow your battery pack to cool first to ambient temperature and then recharging can be started. If you charge a second battery pack immediately after the first then the charger can be overheated. Always allow at least 15 minutes rest between battery pack charging.

5. REASONS FOR DIFFERENT BATTERY PACK WORKING TIMES

Charging time problems, as above, and having not used a battery pack for a prolonged time will reduce the battery pack working time. This can be corrected after several charge and discharge operations by charging & working with your drill. Heavy working conditions such as large screws into hard wood will use up the battery pack energy faster than lighter working conditions. Do not re-charge your battery pack below 0°C and above 30°C as this will affect performance.

MAINTENANCE

Your power tool requires no additional lubrication or maintenance.

There are no user serviceable parts in your power tool. Never use water or chemical cleaners to clean your power tool. Wipe clean with a dry cloth. Always store your power tool in a dry place. Keep the motor ventilation slots clean. Keep all working controls free of dust. Occasionally you may see sparks through the ventilation slots. This is normal and will not damage your power tool.

WORX
you've got the power