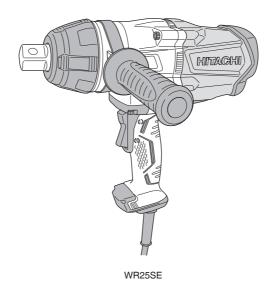
HITACHI

WR 22SE · WR 25SE





Handling instructions



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 mainsoperated (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
 - 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

- 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.
 - 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.
- 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
 - 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

4) Power tool use and care

hazards.

- 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
 - 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.

5) 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.

PRECAUTION

Keep children and infirm persons away.

When not in use, tools should be stored out of reach of children and infirm persons.

IMPACT WRENCH SAFETY WARNINGS

 Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring or its own cord.

Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

ADDITIONAL SAFETY WARNINGS

- When using the tool at a hight, make sure that there is nobody below.
- 2. Use earplugs if using for a long time use.
- Switch the reversing switch only after the motor has stoped when it is necessary to change the direction of the rotation.
- Use a step up transformer when a long extension cable is used.
- Confirm the tightening torque by a torque wrench before use in order to assertain the correct tightening torque to be used.
- Assemble the socket securely to the impact wrench with the socket pin and ring.
- 7. Confirm whether the socket has any cracks in it.
- Always hold the handle and side handle of the impact wrench firmly. Otherwise the counterforce produced may result in inaccurate and even dangerous operation.
- 9. RCD

The use of a residual current device with a rated residual current of 30 mA or less at all times is recommended.

SYMBOLS

WARNING

The following show symbols used for the machine. Be sure that you understand their meaning before use.

sure that you understand their meaning before use.			
	WR22SE / WR25SE : Impact Wrench		
	Read all safety warnings and all instructions.		
I	Switching ON		
0	Switching OFF		
(F)	Clockwise rotation		
Û	Counterclockwise rotation		
	Disconnect mains plug from electrical outlet		
	Class II tool		

STANDARD ACCESSORIES

In addition to the main unit (1 unit), the package contains the accessories listed in the below.

O Case1

Standard accessories are subject to change without notice.

APPLICATIONS

O Tightening and loosing various kinds of bolt and nut.

SPECIFICATIONS

Model		WR22SE	WR25SE	
Voltage (by areas)*		(110V, 120V, 230V, 240V) ~		
Power input*		800 W	900 W	
No load speed / Impact rate		1400 / 2000 /min	1100 / 1500 /min	
Square drive		19 mm	25.4 mm	
Capacities (size of bolts)	High tension bolt	M16 — M22	M22 — M24	
	Ordinary bolt	M14 — M24	M22 — M30	
Tightening torque (Max.)**		620 N·m	1000 N⋅m	
Weight		4.6 kg	7.7 kg	

- Be sure to check the nameplate on product as it is subject to change by areas.
- ** Tightening the bolt without extension cord at rated voltage.

NOTE

Due to HITACHI's continuing program of research and development, the specifications herein are subject to change without prior notice.

MOUNTING AND OPERATION

CAUTION

To prevent accidents, make sure to turn the switch off and disconnect the plug from the receptacle.

Action	Figure	Page
Mounting the socket (1)	1	5
Mounting the side handle	2	5
Changing the rotation direction	3	5
Dismounting the hook hanger (WR25SE)	4	5
Selecting accessories*	_	7

* Select accessories that are suited to a specific task. For details contact Hitachi Authorized Service Center.

1. Switch operation (Fig. 3)

The switch (2) in this machine functions as a motor switch and rotational direction selector switch. When the switch is set to R indicated on the handle cover, the motor rotates clockwise to tighten the bolt.

When the switch is set to L, the motor rotates counterclockwise to loosen the bolt. When the switch is released, the motor stops.

2. Operating time

The tightening torque increases when the operating time increases. But the tightening torque does not increase above a certain value even if the tool is driven for a long time (See Fig. 5).

3. The protection function

To protect the tool, the protection function will be activated, automatically shutting down the unit in the event of any problems. (**Table 1**)

Table 1

Cause of Shutdown

Automatic shutdown initiated by excessive load (*1)

Automatic shutdown initiated due to the tool's internal temperature exceeding the specified temperature level (*2)

*1 Excessive load protection function

For excessive load conditions, the tool will shutdown to prevent damage.

Discontinue the heavy load task, unplug the power supply cord from the electrical outlet and plug it back in to reset

*2 Increased temperature protection function

Automatic shutdown is activated to prevent damage from high temperatures.

The tool's internal temperature will increase for tasks involving the use of large currents of electricity, or when used in high temperature environments.

Please allow the tool to rest for 10 to 15 minutes before continuing a task.

MAINTENANCE AND INSPECTION

1. Inspecting the socket

A worn or deformed hex or a square-holed socket will not give an adequate tightness to the fitting between the nut or anvil, consequently resulting in loss of tightening torque. Pay attention to wear of socket holes periodically, and replace with a new one if needed.

2. Inspecting the mounting screws

Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.

3. Maintenance of the motor

The motor unit winding is the very "heart" of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.

4. Replacing supply cord

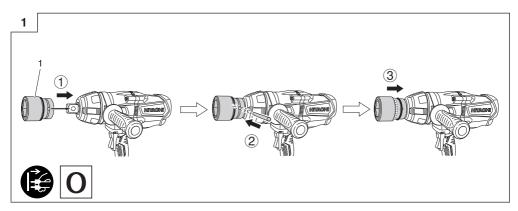
If the replacement of the supply cord is necessary, this has to be done by the manufacturer of this agent in order to avoid a safety hazard.

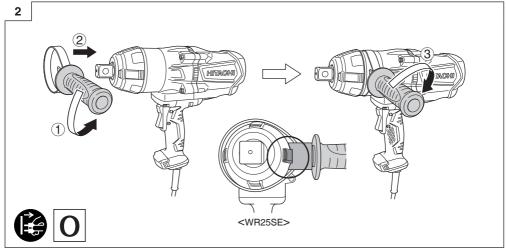
CAUTION

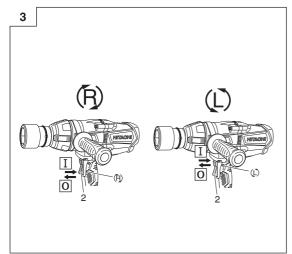
In the operation and maintenance of power tools, the safety regulations and standards prescribed in each country must be observed.

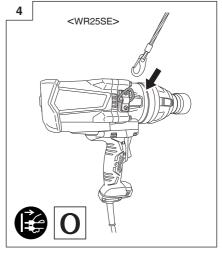
NOTE

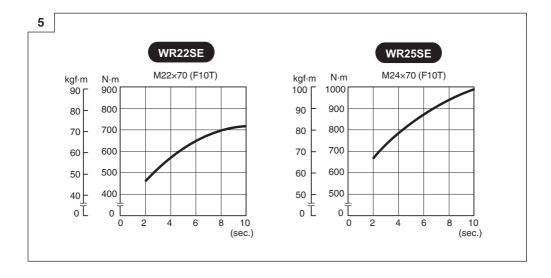
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B = 19.0 mm

S	D	Е	L	
23	38	15	55	874527
24	40	15	55	874528
26	42	16	55	874529
27	43	16	55	874530
30	47	19	55	874532
32	50	19	55	874523
35	52	19	55	874533
36	55	19	55	874534

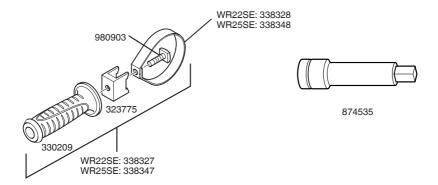
B = 19.0 mm

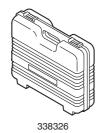
S	D	Е	L	
24	32	32	60	955033
26	38	57	85	955034
27	39	57	85	955035
30	43	57	85	955037
32	46	72	100	955038
36	55	72	100	955092

	D F	В
+ -○+	← ⊏ →	

B = 25.4 mm

S	D	Е	L	
36	58	40	72	956080
41	63	38	68	873636





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