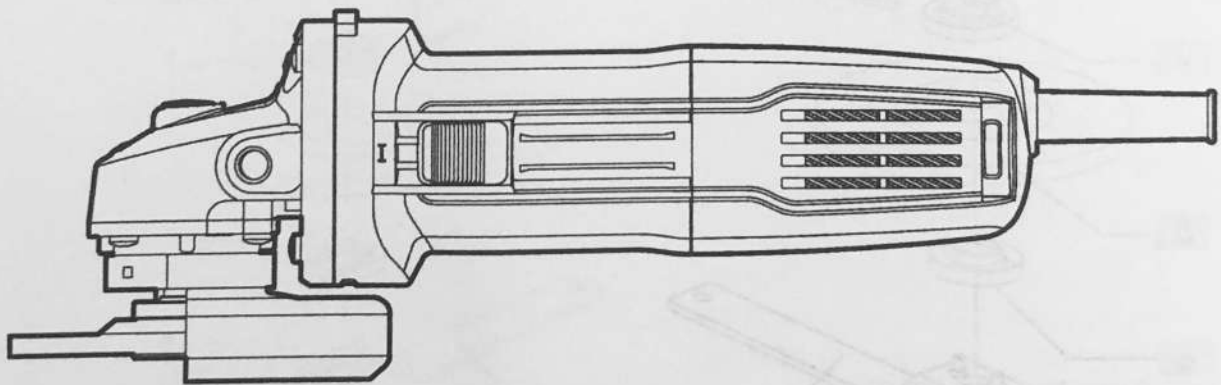


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User Manual

ANGLE GRINDER



- 1. Grind lock button
- 2. Switch
- 3. Non-cutting guard
- 4. Trigger switch
- 5. Wheel
- 6. Side handle
- 7. Trigger
- 8. Motor

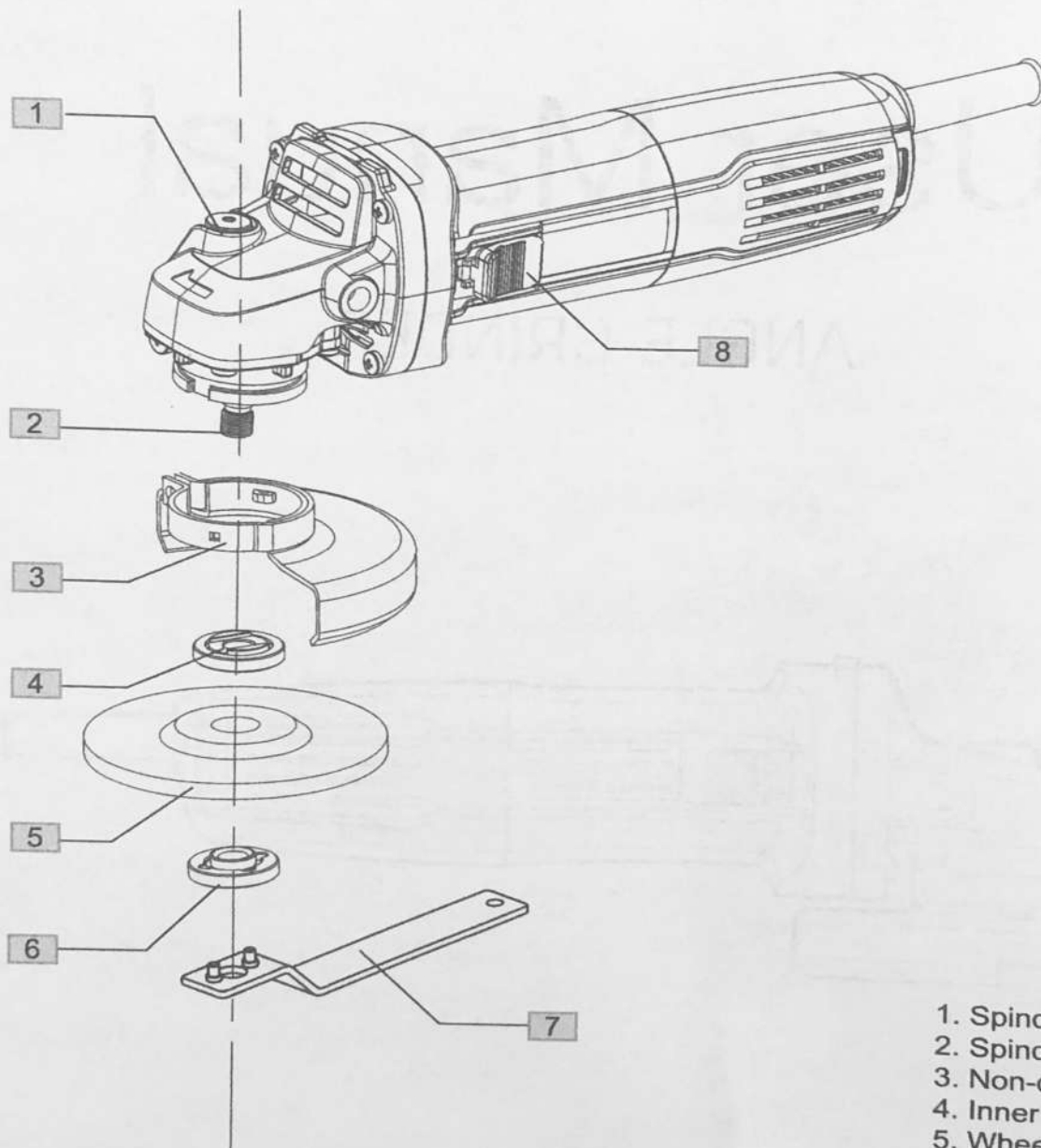
DESCRIPTION OF THE TOOL

1. MAIN PARTS



The grinder is intended for roughing metal and stone materials.

Read, understand and follow all safety rules and instructions before using this tool.



1. Spindle lock button
2. Spindle
3. Non-cutting guard
4. Inner flange
5. Wheel
6. Outer flange
7. Spanner
8. Switch

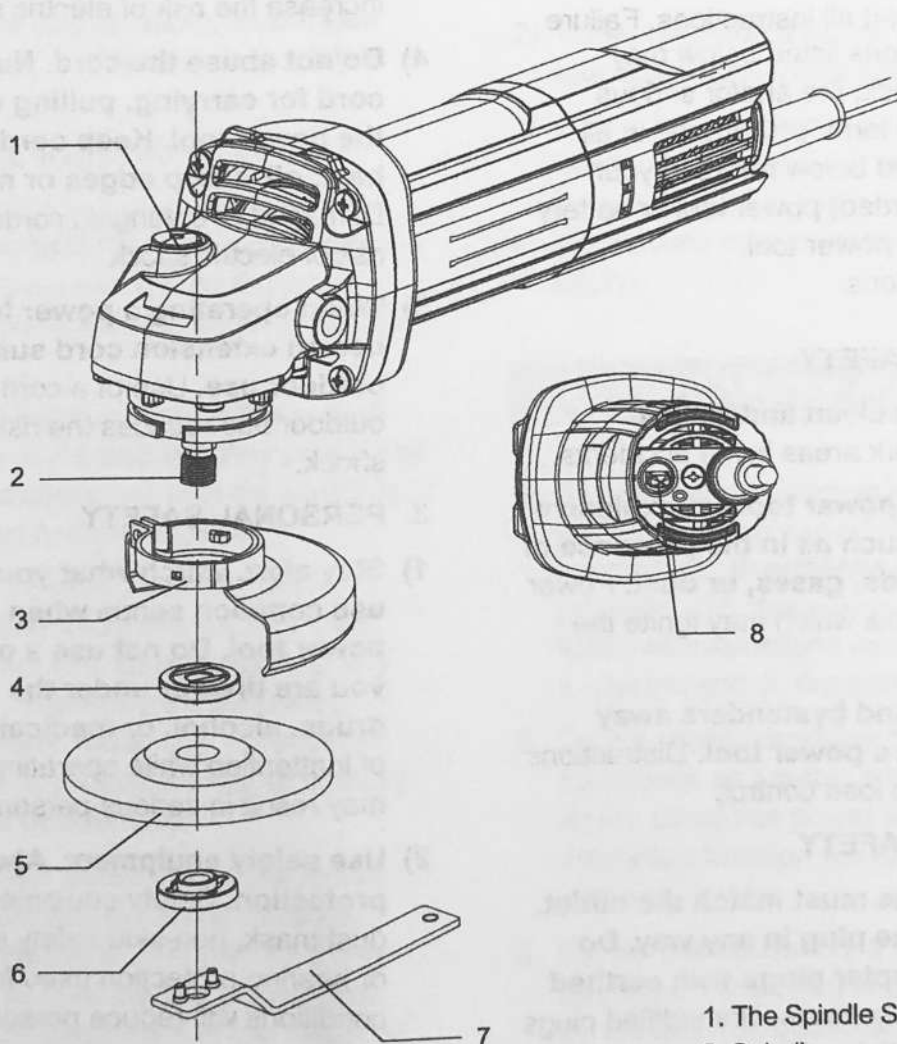
DESCRIPTION OF THE TOOL

2. MAIN PARTS



The grinder is intended for roughing metal and stone materials.

Read, understand and follow all safety rules and instructions before using this tool.



1. The Spindle Self-lock Button
2. Spindle
3. Grinding Wheel Piece Shield
4. Inner Flange
5. Grinding Wheel Piece
6. Outside Flange
7. Wrench
8. Rear Switch
9. Side Switch

2. TOOL SPECIFICATIONS

Model	DL-JM100-E1	DL-JM115-E1	DL-JM100-E2	DL-JM125-E1
No-load(/min)	12000	12000	12000	12000
Input Power(W)	750	750	900	900
Wheel diameter (mm)	100	115	100	125
Spindle screw thread	M10	M14	M10	M14
Weight(kg)	1.5	1.5	1.5	1.5
Protect grade	□ / II	□ / II	□ / II	□ / II
Insulated grade	E	E	E	E

GENERAL SAFETY RULES

⚠ WARNING: Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury. The term "power tool" in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool. Save these instructions.

1. WORK AREA SAFETY

- 1) **Keep work area clean and well lit.**
Cluttered and dark areas invite accidents.
- 2) **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.
- 3) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2. ELECTRICAL SAFETY

- 1) **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.
- 2) **Avoid body contact with earthed or grounded surfaces such as pipes, radiators and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.

- 3) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- 4) **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.
- 5) **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.

3. PERSONAL SAFETY

- 1) **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.
- 2) **Use safety equipment. Always wear eye protection.** Safety equipment such as a dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- 3) **Avoid accidental starting. Make sure that the switch is in the "OFF" position before plugging the tool into an electrical outlet.** Carrying power tools with your finger on the switch or plugging in power tools that have the power switch "ON" invites accidents.
- 4) **Remove any adjusting key or wrench before turning the tool on.** A wrench or a key that is left attached to a rotating part of

the power tool may result in personal injury.

- 5) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- 6) **Dress properly. Do not wear loose clothing or jewellery. Keep your clothing, gloves and hair away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- 7) **If devices are provided for the connection of dust extraction and collection facilities, ensure that these are connected and properly used.** Use of these devices can reduce dust-related hazards.

4. POWER TOOL USE AND CARE

- 1) **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.
- 2) **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.
- 3) **Disconnect the plug from the power source or come away the battery box 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.
- 4) **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.
- 5) **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.
- 6) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are

easier to control.

- 7) **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 intended could result in a hazardous situation.

5. SERVICE


- 1) Have your power tool serviced by a qualified repair person.
- 2) When servicing a power tool, use only identical replacement parts.
- 3) Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of shock or injury.

ALL OF SAFETY RULES

1. This power tool is intended to function as a grinder tool. Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.
2. Do not recommend use this power tool operations as sander, wire brush and so on. Used this power tool do besides appointed function will cause hazards and personal injuries.
3. Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.
4. The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can fly apart.
5. The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.

6. The arbor size of wheels, flanges, backing pads or any other accessory must properly fit the spindle of the power tool. Accessories with arbor holes that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
7. Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, backing pads for cracks, tear or excessive wear. If the power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged accessories will normally break apart during this test time.
8. Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and shop apron capable of stopping small abrasive or work piece fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
9. Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of the work piece or of a broken accessory may fly away and cause injury beyond the immediate area of operation. Contact with "live" wire will also make exposed metal parts of the power tool "live" and shock the operator.
10. Hold the power tool only by the insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own power cord. Contact with a "live" wire will also make exposed metal parts of the power tool "live" and shock the operator.
11. Position the cord clear of the spinning accessory. If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.
12. Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control.
13. Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
14. Regularly clean the air vents of the power tool. The fan of the motor will draw dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
15. Do not operate the power tool near flammable materials. Sparks could ignite these materials.
16. Do not use accessories that require coolants. Using water or other coolants may result in electric cauterization or electric shock.

ADDITIONAL SAFETY WARNING

 Kickback and related warnings:

Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation at the point of the binding. For example, if an abrasive wheel is snagged or pinched by the work piece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on the direction of the wheel's movement at the point of pinching. Abrasive wheels may also break under these conditions.

Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

1. Maintain a firm grip with your hands on the power tool and position your body and arm to allow you to resist kickback forces. Always use the auxiliary handle, for maximum control over kick-back or torque reaction during start-up. The operator can

control torque reactions or kick back forces, if proper precautions are taken.

2. Never place your hand near the rotating accessory. The accessory may kickback over your hand.
3. Do not position your body in the area where the power tool will move if kickback occurs. Kickback will propel the tool in the direction opposite to the wheel's movement at the point of snagging.
4. Use special care when working sharp edges, sharp sides etc. Avoid bouncing and snagging the accessory. Sharp edges, sharp sides or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
5. Do not attach a saw chain, woodcarving blade or toothed saw blade. Such blades create frequent kickback and loss of control.

ADDITIONAL GRINDING SAFETY WARNING

1. Use only wheel types that are recommended for your power tool and the specific guard designed for the selected wheel. Wheel for which the power tool was not designed cannot be adequately guarded and are unsafe.
2. The guard must be firmly attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. The guard helps to protect the operator from broken wheel fragments and accidental contact with the wheel.
3. Wheels must be used only for recommended applications.
4. Always use undamaged wheel flanges that are of correct size and shape for your selected wheel. Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage.
5. Do not use worn down wheels from larger power tools. A wheel intended for a larger power tool is not suitable for the higher speed of a smaller tool and may burst.

USE CARE OF ANGLE GRINDER

1. The grinder is intended for grinding.
2. Avoid the wheel impact or force actions, if this condition occurs, stop the machine immediately and check the machine.
3. If there is considerable vibration or other defects are detected in operation, stop the machine immediately and check the machine to determine the cause.
4. When grinding metal, flying sparks are produced. Take care that sparks resulting from use do not hit persons.
5. Some dust created by power grinding contains chemicals known to birth defects. Do not work with materials containing asbestos.
6. Shorten the clean periods when working in dusty conditions.
7. The machine should only be used only for dry working.

SYMBOL



Danger area! Keep hands, fingers or arms away from this area.



Wear safety goggles.



Wear ear protectors. Exposure to noise can cause hearing loss.



Wear a dust respirator.



Wear protective gloves.



WARNING: Some dust created by power Cutting contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints
- Arsenics and chromium from chemically reacted 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.

STANDARD ACCESSORIES

● Spanner

Be sure to check the accessories as it is subject to change by areas and models.

OPERATION

POWER SUPPLY

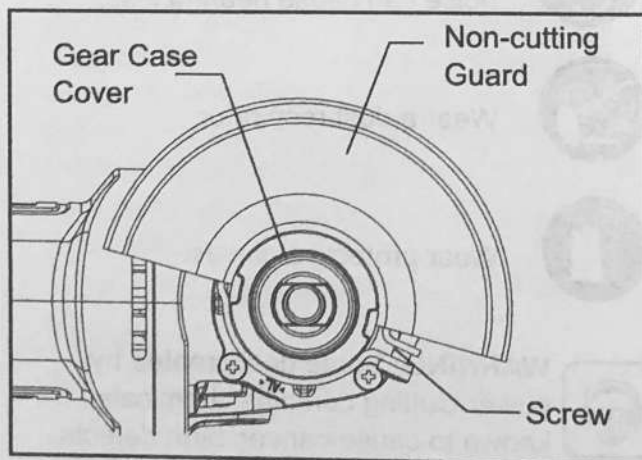
The power tool supply must match the nameplate date.

Attach the Guard

⚠ WARNING: When using the angle grinder for roughing, never work without the guard.

⚠ CAUTION! Risk of injury! Wear protective gloves.

- 1) Pull out the mains plug.
- 2) Lugs on the guard hood must be located in the flange recesses.
- 3) Turn guard hood clockwise. Rotation is possible in one direction only!
- 4) Remove in reverse order.

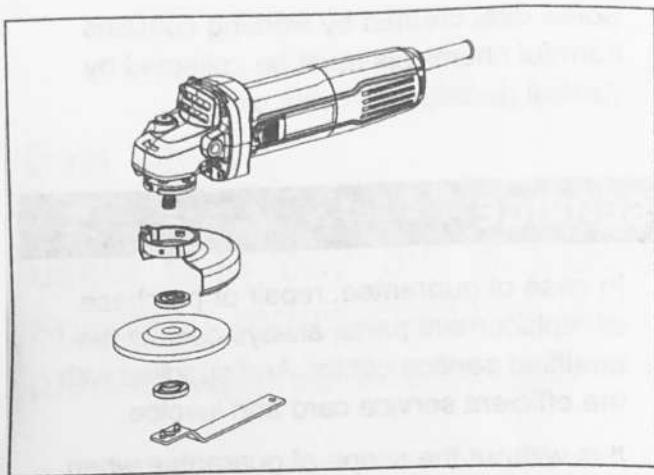


Attach the grinding wheel

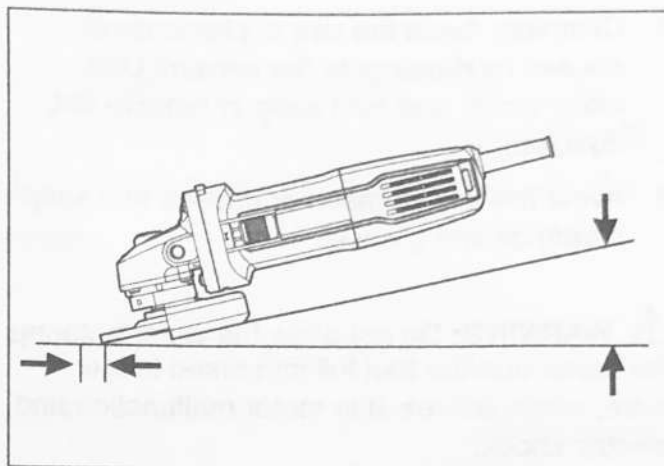
⚠ WARNING: Only use grinding wheels with maximum safe operating speed rated at or above 80m/s. Never use damaged or imbalance grinding wheels.

- 1) Press and hold down the spindle lock.
- 2) Using the face spanner, loosen the clamping nut on the spindle in an anti-clockwise direction and remove.
- 3) Insert the grinding wheel in the correct position.
- 4) Screw the clamping nut with flange face up, onto the spindle.
- 5) Press and hold down the spindle lock.
- 6) Tighten the clamping nut with the face spanner.
- 7) Carry out a test run to check that the tool is clamped in the centre.

NOTE: Switch on the angle grinder with the switch (without engaging it) and run the angle grinder for approx. 30seconds. Check for imbalances and vibrations.



⚠ WARNING: Sparks generated when grinding metal. Take care that no combustible material presented in the area of flying sparks.



APPLICATION

NOTE: Observe correct mains voltage!

Switching On and Off

- 1) Push the switch rocker forwards and hold in position.
- 2) To switch off the power tool, release the switch rocker.
- 3) For continuous operation, push the switch rocker forwards and engage by pressing the front end.
- 4) To switch off the power tool, release the switch rocker by pressing the rear end.

NOTE: Following a power failure, the switched on power tool does not restart.

Preselecting the Speed

To set the operating speed, move the dial to the required value.

⚠ CAUTION! Risk of injury due to destruction of the tool. Use the appropriate tool for the job.

NOTE: If an overload or overheating occurs during continuous operation, the power tool automatically reduces the speed until the power tool has cooled down adequately.

Rough-grinding

⚠ WARNING: Never use cutting-off wheels for rough-grinding.

Angle of wheel 20–40° for best performance.

Applying moderate pressure, move the angle grinder backwards and forwards. As a result, the workpiece will not become too hot and there will be no discoloration; nor will there be any grooves.

TOOL MAINTENANCE



WARNING: Before any work on the machine itself, unplug the saw from the power source.

1. Inspect bolts periodically. If the bolts loosen, tighten them immediately, or will result in serious accident.
2. Inspect tool cords periodically.
This tool was used with the . power cord as a particular structure; don't replace the power cord without authorization.
3. Keep the vents clean. Clean all parts of the tool, clean dust periodically. To prevent debris from entry.

4. Replace the carbon brush when the carbon brush is worn out in certain length and motor stops running.
5. Cleaning. Avoid the use of plastic cracks caused by damage to the solvent. Use clean cloths and mild soap to remove dirt, dust, etc.
6. Avoid the tool vibration or impact, and keep it from oil and grease.

⚠ WARNING: Do not allow the water entering the motor and the tool full immersed in the ware, which will result in motor malfunction and electric shock.

ENVIRONMENT PROTECTION



1. packaging should be sorted for environment-friendly recycling.
2. Power tools and accessories at the end of their service life still contain large amounts of valuable raw materials and plastics which can likewise be fed back into a recycling process.

3. Some dust created by working contains harmful chemicals must be collected by special garbage re-cycle site.

SERVICE

1. In case of guarantee, repair or purchase of replacement parts, always contact the qualified service center. And supplied with the efficient service card and invoice.
2. It is without the scope of guarantee when the tool was normal wear, overload or improper use of damage.

Trouble Shooting

Problems	Reasons	Ways to Solve The Problems
1. The motor stops running	1. Unconnected to power source	1. Connect to power source
	2. Plugs not fully connect	2. Check all plugs
	3. Switch out of work	3. Replace or repair the switch
	4. Brushes not touch the commutator	4. Replace the brushes with two new ones
2. Running slowly (Not running) with the noise at the beginning of power turn-on	1. Switch out of work	1. Replace or repair the switch
	2. Mechanical trouble	2. Check mechanical parts
3. Commutator sparkle	1. Armature short circuit	1. Repair the armature
	2. Poor connection between the brush and the commutator	2. Replace it with a new one
	3. Commutator surface not smooth	3. Clean the commutator surface
4. Running slowly with the noise in process of working	1. Bearing worn out	1. Replace it with a new one
	2. Grinding wheel touched reinforcing steel bar	2. Chose another work place

Product Warranty Card

Dear users :

Thank you for buying our products. In order to ensure your profit, users who buy our products can contact local distributor or Specified repair stations with invoice and warranty cards if the product failures due to quality problems.

Warranty Notice:

1.From _____ (Year/Month/Day) to _____
(Year/Month/Day),

If the failure happen in normal use, our company will provide free warranty, parts replacement and other services according to the failure situation.

2.This warranty card and purchase invoice are the voucher of after-sales service provided by our company to customers. The card must be detailed only after filling in the following form and affixing the official seal with the distributor.

3.In one of the following cases, free warranty service will be invalid, and maintenance fees will be required:

- (1) Exceed the expiration date;
- (2) Failure or damage caused by not following the requirements of the product manual, maintenance or improper storage;
- (3) Failure or damage caused by disassembling, repairing or modification of the product without the permission of our company ;
- (4) Machine breakdown or damage caused by force majeure;
- (5) Consumable accessories.

This card is issued with the product. One card for one machine, to ensure that you can fully enjoy the right to free warranty service provided by the company, please keep this card properly, lost will not be replaced.

Purchase Date: _____ (Year/Month/Day)