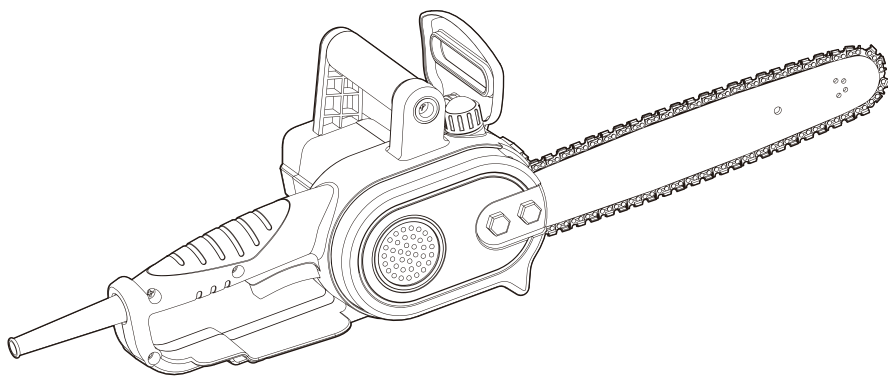


**deli**

**DGE190**  
**DGE191**  
**POWER CHAIN SAW**



Please read this manual carefully before use  
and keep it in a safe place

# Contents

1. Diagram of power chain saw .....	1
2. General safety warning for power tools .....	1
3. Special requirements for AC chain saws .....	4
4. Operating instructions .....	9
5. Maintenance .....	11
6. Description of accessory .....	14
7. Common faults and troubleshooting .....	15

## 2. General safety warning for power tools



### Warning

**Read all warnings and instructions. Failure to follow the warnings and instructions below may result in electric shock, fire and/or serious injury. The term "power tool" refers to mains-operated (corded) power tools or battery-operated (cordless) power tools in all the following warnings.**

### Work area safety

1. Keep working areas clean and well lit. Cluttered or dark areas invite accidents.
2. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Sparks produced by power tools may ignite the dust or gases.
3. Do not operate any power tool until children and bystanders leave the working area. Distractions can cause you to lose control of tools.

### Electrical safety

1. The connector plug of power tool must match the corresponding socket. Never modify the plug in any way. Power tools that require grounding cannot use any conversion plugs. Use of unmodified connector plugs and their matching sockets helps reduce the risk of electric shock.
2. Protect human body from contact with the grounding surfaces, such as pipes, heat sinks, and refrigerators. The risk of electric shock may increase if your body comes into contact with the grounding surfaces.
3. Do not expose power tools to rain or damp environments. Ingress of water into the power tools may increase the risk of electric shock.
4. Do not abuse the wires. Never transport and pull the power tools or remove the plugs with wires. Keep the wires away from heat sources, oil, sharp edges, or moving parts. Damaged or twisted wires increase the risk of electric shock.
5. When the power tool is used outdoors, use external flexible cords suitable for outdoor use. The flexible cords suitable for outdoor use can reduce the risk of electric shock.
6. If it is unavoidable to operate the power tool in a damp location, a residual current operated protective device (RCD) should be used. It can reduce the risk of electric shock if RCD is used.

### Personal safety

1. Stay alert. Watch what you are doing and use common sense when operating the 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 personal protective equipment. Always wear protective goggles and safety equipment. The safety equipment such as dust mask, non-skid safety shoes helmets or hearing protection can reduce personal injury under appropriate conditions.
3. Avoid accidental starts. Ensure that the switch is in the OFF position before connecting the power supply and/or battery case, picking up or transporting tools. Placing your fingers on a switch that has been turned on or inserting the plug while the switch is turned on may cause danger.
4. Remove any adjusting key or wrench before turning the power 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. Don't overextend your hands and keep proper footing and body balance at all times. In this way, the power tool can be well controlled in unexpected situations.
6. Dress properly, and do not wear loose clothing or jewelry. Keep your clothing, gloves and hair away from moving parts. Loose clothes, jewelry and long hair can get caught in moving parts.
7. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these facilities may reduce dust-related hazards.
8. Do not take it lightly because of familiarity gained from frequent use of tools and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

### Use and precautions of power tools

1. Do not use the power tool at will. 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 is 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. Before making any adjustment, changing accessories or storing power tools, the charger plug must be unplugged from the power supply. 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 for untrained users.
5. Maintain power tool and accessories. Check whether the moving parts are installed with deviation or stuck, check the damage of the parts and other conditions that affect the operation of power tool. If damaged, the power tool should be 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 get stuck and are easier to control.
7. Use power tools, accessories and tool bits, etc., in the manner specified in instruction manual and required by the particular type of power tool to be used, 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.
8. Keep the handle and the gripping surface dry, clean and free of grease. Slippery handles do not allow for safe handling and control of the tool in unexpected situations.

Repair







Ask the professional maintenance staff to repair the power tools with the same spare parts. This will ensure the safety of the repaired power tool.

Wear earmuffs properly. Exposure to noise can cause hearing damage.


Use the auxiliary handle provided with the tool.

Improper operation or losing control of the tool can cause personal injury.

When operating in conditions where the cutting accessory may touch hidden wires or its own flexible cord, hold the tool through the insulating grip. When the cutting accessory touches a live wire, the exposed metal parts of the tool will become electrically live, causing the operator to suffer electric shock.

	Carefully read the instruction manual		Wear protective goggles
	Wear ear defenders		Avoid exposure to water
	Unplug the power cord when the tool is not in use		A symbol of Class II tool, indicating that the power tool is a double-insulated tool.

3. Special requirements for AC chain saws



Warning

**When using the power chain saw, safety precautions must be taken to reduce the risk of fire, electric shock, and injury. Please read the following safety precautions carefully before operation. Do not neglect to strictly follow safety regulations due to sufficient familiarity with the power chain saw. If you use the power chain saw unsafely or incorrectly, you may get injured!**

1. Keep the work area clean
 

A cluttered work area can lead to injury. Before cutting, it is necessary to clean up the work area, ensure that your feet can stand firmly, and plan a route of retreat to avoid fallen trees.
2. Consider the environment of work area
 

Pay special attention when cutting small shrubs and small trees, as slender objects may entangle the chain saw and may strike you or cause you to lose balance. Do not operate the chain saw to cut trees without special training. When cutting a tensioned large branch, beware of its kickback, so as not to hit yourself when the tension is released. Do not expose the chain saw to rainwater and do not use it in damp places. Do not use the chain saw in areas with flammable liquids or gases.
3. Prevent electric shock
 

Avoid touching the surface of grounded objects, such as metal pipes and barbed wire.
4. Properly store unused chain saws
 

When not in use, store the chain saw in a dry, high place or in a lockable location out of reach of children. When storing the chain saw, use a guide plate sleeve or a carrying case.
5. Do not push the chain saw forcefully
 

If the chain saw works at its rated speed, it will work better and safer.
6. Carrying chain saw
 

Grasp the chain saw by the front handle, then turn off the switch to make the guide plate and saw chain face forward



7. Remove the power plug of chain saw  
When the chain saw is not in use, before maintenance, and when replacing accessories such as saw chains and guide plates, make sure to unplug the power plug of the chain saw.
8. Extension cord for outdoor use  
Only extension cords for outdoor use can be used. It is recommended to use a mobile non-removable socket conforming to GB2099.1, which shall be equipped with a flexible cable conforming to IEC60227 or IEC60245. Use extension cords that can withstand the current of the tool. An undersized wire can cause a decrease in voltage, resulting in power loss and overheating. Before use, make sure that the extension cable is in good condition. Place the power cord in a suitable location away from the cutting area to avoid entanglement with branches or similar objects during cutting.
9. Power supply  
The voltage of chain saw should be correct. Before powering on the tool, confirm that the applied voltage is the same as the voltage specified on the tool nameplate. If the power supply voltage exceeds the voltage specified on the tool, it will cause serious injury to the user and damage to the tool. If in doubt, do not power on the tool. If the power supply voltage is lower than the one specified on the nameplate, it will cause damage to the motor.
10. Warning! Always wear earmuffs.
11. Before cutting down, remove the soil, stones, loose bark, nails, staples and iron wires from the tree.
12. Secure the wood to prevent sudden rotation or movement during operation.
13. Avoid sudden startup of the tool. Don't put your fingers on the switch to hold the powered-on tool. Be sure to confirm that the switch is in the "Off" position when connecting the power plug.
14. Attention! Do not expose the tool to rain!  
Never leave the chain saw outdoors when it rains. Never use the chain saw in wet areas.
15. If the power cord is damaged or cut, immediately unplug the power plug and replace it immediately.
16. Keep all parts of your body away from the saw chain when operating the chain saw. Before starting the chain saw, make sure that the saw chain does not touch any other object. When operating the chain saw carelessly, your clothes or body may get entangled in the chain saw.
17. Always hold the rear handle of the chain saw with your right hand and the front handle with your left hand. Holding the chain saw backhand will increase the risk of personal injury and should be absolutely prohibited.
18. Wear safety goggles and hearing protectors. It is recommended to provide protective equipment for your head, hands, legs and feet. Adequate protective clothing can reduce personal injury caused by flying debris or accidental contact with the saw chain.
19. Do not operate the chainsaw while standing on a tree. Operating the chain saw on a tree can cause personal injury.
20. Always maintain a good foothold and only operate the chain saw when standing on a firm, safe, and flat surface. A slippery or unstable ground, such as a ladder, can cause loss of balance or loss of control during chain saw operation.
21. Be aware of kickback when cutting taut branches. Once the tension of wood fibers is released, a bouncy branch may strike the operator and/or cause the chain saw to lose control.
22. Be extra careful when cutting shrubs and saplings. A branchlet may pinch the saw chain and hit the operator or pull the operator out of balance.
23. Carry the powered-off chain saw by the front handle and keep it away from your body. When transporting or storing the chain saw, it should always be put into the guide plate sleeve. Proper placement of chain saw will reduce the possibility of accidentally touching the moving saw chain.
24. Lubricate, tension the saw chain and replace accessories according to the instructions. Improper tensioning or lubrication of the saw chain may result in breakage or increase the likelihood of kickback.
25. Keep the handle dry, clean and free of oil and grease. A greasy handle can be slippery and cause loss of control.
26. Only cut wood. The chain saw cannot be used for other purposes. For example, never use the chain saw to cut plastics, stones, or non wooden building materials. Using the chain saw for unexpected operations can cause danger.
27. When using the chain saw for cutting, always ensure that the flexible cord is not hooked by branches or other similar objects to avoid unnecessary personal injury or accidents.
28. It is recommended that first-time users practice cutting logs on sawhorses or supports.

## 29. Causes of kickback and operator protection:

When the front or top of the guide plate touches an object, or when two wood merge and clamp the saw chain during cutting, kickback may occur. In some cases, the top contact may generate a sudden reacting force, throwing the guide plate upwards and backwards towards the operator. Pinching the saw chain along the top of guide plate will quickly push the guide plate back towards the operator. Each of these reacting forces can cause the chain saw to lose control, leading to serious personal injury. Do not rely solely on the safety device inside the chain saw. Chain saw users should take multiple steps to ensure that cutting operations do not result in accidents or injuries. Misuse of tools and/or incorrect operating procedures or conditions can lead to kickback, and the following preventive measures can be taken to avoid it.

- (1) Maintain a stable grip, use your thumb and other fingers to hold the handle of the chain saw, and use both hands that are holding the chain saw to position your body and arms so that you can withstand the kickback. If appropriate preventive measures are taken, the kickback can be controlled by the operator. Do not allow the chain saw operate uncontrollably.
- (2) Don't overextend your hands and do not cut above your shoulders. This helps prevent accidental top contact and better control the chain saw in case of unexpected situations.
- (3) Be sure to stand firm, maintain balance, and avoid cutting above your shoulders.
- (4) Do not let the top of guide plate touch the wood, branches, the ground, or other obstacles.
- (5) Use devices such as low-kickback saw chains, chain brakes, and special guide plates to reduce the risk of kickback. Only use the manufacturer's specified guide plates and saw chains for replacement. Incorrect guide plates and saw chains may cause chain breakage and/or kickback. Observe the manufacturer's instructions on sharpening and maintenance of saw chains. Reducing the height of depth gauge can lead to an increase in kickback.

### 3. Cutting

Note: Ensure that there is sufficient oil in the oil can before cutting.

Check the lubricating oil indication window before powering on, and inject oil when the indicated value of lubricating oil is low. During cutting, always observe the chain tension and confirm if the chain is well lubricated. If there is any abnormality, adjust them immediately.

- 1) Connect the machine to the extension cord first, and then connect the extension cord to the power supply.
- 2) Do not place the logs to be cut on the ground to prevent the chain from touching the ground after the log is cut. The moving chain is dangerous when it touches the ground, and can easily become dull.
- 3) Hold the chain saw with both hands. Grasp the front handle with your left hand and the rear handle with your right hand. Grasp them firmly with your hands. Your thumb and fingers must wrap around the chain saw handle to hold it.
- 4) Ensure that you stand firmly, with your feet shoulder-width apart, and both feet evenly supporting the weight.
- 5) When ready to cut, press the lock button switch fully with your thumb, grip it tightly, and then press the trigger to start the chain saw. Release the switch trigger and the saw chain will stop. Make sure that the saw chain reaches the maximum speed before cutting.
- 6) Slowly move the chain saw towards the wood to start cutting. Hold the chain saw tightly and keep your feet still to prevent the chain saw from bouncing or moving sideways.
- 7) Operate the chain saw with gentle pressure, avoiding excessive force. Otherwise, the motor will be overloaded and may burn out. It works better and safer within the rated parameters.
- 8) When removing the chain saw during cutting, ensure that the chain is running at full speed. Release the switch trigger to power off the machine, and wait for the chain to completely stop before putting it down. Release the trigger and wait until the chain saw stops completely before lowering it.

Note:

In a safe environment, practice cutting with a small piece of wood first, until you master the operating tricks of chain saw, you can operate it skillfully and keep a stable cutting speed.

### 4. Anti-kickback mechanism of chain saw

This product is equipped with a low-kickback chain and a low-kickback guide plate. Both can reduce the risk of kickback. However, kickback may still occur with this product. The following steps can reduce the risk of kickback.

- Operate with both hands, grip firmly, and ensure your thumb and fingers wrap around the chain saw handle.
- Ensure that all safety mechanisms on the chainsaw are in place and functioning properly.
- Do not extend your arms too far or use it above shoulder level.
- Ensure a stable footing and maintain balance when cutting.
- Stand on the left side of the chain saw to ensure your body is aligned with it.
- When the chain saw is running, avoid letting the front end of guide plate touch anything.
- Do not attempt to cut two logs at once, only cut one log per time.
- Do not insert the front end of chain saw into the wood or attempt to cut with the front end (drill a hole in the wood with the front end of the chain saw).
- Be cautious of wood displacement or other forces that may cause the chain saw to get stuck in the wood.
- Be particularly cautious when re-entering the wood to continue the previous cut.
- Be sure to use the low-kickback chain and low-kickback guide plate provided with this product.
- Do not use dull or loose chains; keep the chain sharp and properly tensioned.

## 5. Maintenance

### **Before performing any maintenance or repair on the tool, unplug it from the socket.**

- Regularly check for obvious defects, such as loose, detached, or damaged chains and guide plates, as looseness and wear can damage components.
- Check if the cover plate and protective guard are damaged and correctly installed. Perform necessary maintenance and repairs before using the chain saw.
- If the chain saw still fails after maintenance and testing, it should be repaired at an authorized customer service center.
- Before returning the chain saw, ensure that all oil in the tank has been drained.

### **Maintenance of chain guide plate**

- To maximize the lifespan of the chain guide plate, follow the following maintenance recommendations.
- Before storing the tool, clean the guide rail on the guide plate.
- The guide rail on the guide plate should be cleaned every time the chain is removed.

### **Clean the guide rail groove on the guide plate:**

1. Remove the chain cover plate, chain guide plate, and chain.
2. Use a wire brush, screwdriver, or similar tool to remove any residue from the groove.
3. Thoroughly clean the oil circuit.

### **The following situations require maintenance of the guide plate:**

- Cutting is biased towards one side or at a certain angle.
  - The chain runs slowly during cutting.
  - Insufficient lubrication of guide plate and chain
- Confirm if the chain is sharp when checking the guide plate. A worn guide plate can damage the chain, causing cutting to become difficult.

After each use, disconnect power supply and remove all sawdust from the guide plate and sprocket holes. When the guide rail groove of guide plate is worn, bent or deformed, or has cracks, replace the guide plate timely, otherwise overheating may occur or burrs may appear in the guide rail groove. If replacement is required, only use the guide plate specified in the product repair parts list, the Instruction Manual, or labels.

### **Replacement of guide plate and chain**

When the chain teeth are worn, use the chain specified in the product manual to replace it timely, and it is best to replace the sprocket at the same time to ensure the normal driving of new chain. The sprocket should be replaced by an authorized repair agent. If the chain guide plate is worn or damaged, loosen the screw counterclockwise to remove the positioning protrusion of chain guide plate, and then install the guide plate positioning protrusion into a new guide plate. Tighten the screw clockwise, and the guide plate positioning protrusion must be in the guide plate hole.

### **Chain grinding**

Chain grinding can be done by a certified service agent or by users with a grinding tool following the instructions provided with the tool.

Lubrication of sprocket teeth

### **Warning**

Please wear thick and sturdy gloves when performing maintenance.

Always unplug the power cord before starting any maintenance.

Note:

It is not necessary to remove the chain and guide plate when lubricating the sprocket teeth.

1. Clean the guide plate and sprocket teeth
2. You can use a grease syringe, insert the front end of the syringe into the lubrication hole, and inject grease until the grease overflows from the other side.
3. Pull the chain by hand to rotate the sprocket teeth, causing the unlubricated sprocket teeth to rotate to one side of the grease hole, and repeat lubrication.

## Cleaning and storage

- Use a soft brush or clean cloth to thoroughly clean the plastic casing of the chain saw. Please avoid using water, solvents, or polishing agents. Remove all debris, especially from the motor's cooling air vents.
- After 1-3 hours of use, remove the chain cover plate, clean the cover plate, chain and chain guide plate with a brush, and clean the drive sprocket and chain guide plate assembly area under the cover plate with a soft brush. Clean the oil outlet with a clean cloth.
- If the chain saw is to be stored for a long period of time, please clean the chain and chain guide plate.
- Please store it in a safe and dry place, away from children.
- Please do not place any other objects on the chain saw.
- To prevent oil leakage, ensure that the tool is placed horizontally.
- When storing the tool in its original packaging, ensure that the oil tank is completely empty.

## 6. Description of accessory

### Standard accessories

DG193: Sleeve x 1, Guide plate x 1, Chain x 1, Bumper spike x 1, Carbon brushx1

### Optional accessories

Note:

- 1) These accessories or devices are designed for the power tools of Deli listed in this manual. Using accessories or devices from other brands may result in personal injury.
- 2) Accessories or devices can only be used for specified purposes.
- 3) If you need more information about these accessories, consult your local Deli Tool Repair Center.

## 7. Common faults and troubleshooting

Faults	Causes	Troubleshooting
Chain saw cannot start	1. In braking state 2. Not powered on 3. Damaged socket 4. Damaged power extension cable	1. Push the hand guard back to its original position 2. Check the power supply 3. Replace the socket 4. Check and replace the power cord
Intermittent starting of chain saw	1. Damaged power extension cable 2. Loose connection 3. Internal wiring fault 4. Switch fault	1. Check and replace the power cord 2. Contact the after-sales service agency 3. Contact the after-sales service agency 4. Contact the after-sales service agency
Dry chain	1. The oil tank is empty 2. The air vent of oil lid is blocked 3. The oil passage is blocked	1. Refill with oil 2. Clean up the oil lid 3. Clean up the oil outlet
Brake kickback/ malfunction	Brake failure	Contact the after-sales service agency
Chain and chain guide plate overheating	1. The oil tank is empty 2. The air vent of oil lid is blocked 3. The oil passage is blocked 4. Excessive chain tension 5. Dull chain	1. Refill with oil 2. Clean up the oil lid 3. Clean up the oil outlet 4. Re-adjust the chain lock catch 5. Grind or replace the chain
Chain bouncing and vibrating, unable to cut properly	1. Loose chain tension 2. Dull chain 3. Worn chain 4. Chain teeth installed backwards	1. Adjust the tensioning knob 2. Grind or replace the chain 3. Replace the chain 4. Install the chain in the correct direction

Note: Non professionals are not allowed to disassemble and repair the machine to avoid machine failure due to improper maintenance.



# 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)

## Product Certificate

Inspector:

01

Date of manufacture:

NINGBO DELI TOOLS CO., LTD.  
No. 128 Chezhan West Road, Huangtan Town,  
Ninghai County, Ningbo, Zhejiang, China  
[delitoolsglobal@nbdeli.com](mailto:delitoolsglobal@nbdeli.com)  
[www.delitoolsglobal.com](http://www.delitoolsglobal.com)  
+86 574 87562689  
MADE IN CHINA

