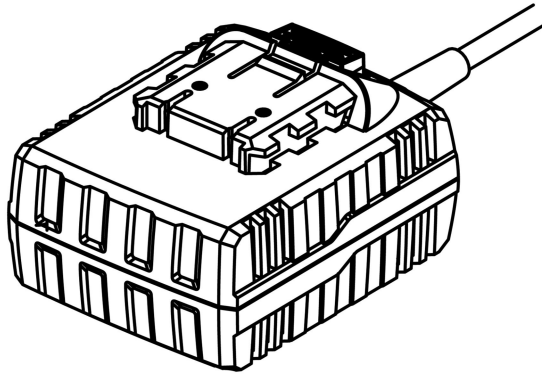


Minova

KD-03A/D AC/DC Adaptor



SAFETY INSTRUCTIONS

WARNING! IMPROPER OR UNSAFE USE OF THIS AC/DC ADAPTOR CAN RESULT IN DEATH OR SERIOUS BODILY INJURY!

THIS MANUAL CONTAINS IMPORTANT INFORMATION ABOUT PRODUCT SAFETY. PLEASE READ AND UNDERSTAND THIS MANUAL BEFORE OPERATING THE POWER TOOL. PLEASE KEEP THIS MANUAL AVAILABLE FOR OTHER USERS AND OWNERS BEFORE THEY USE THE AC/DC ADAPTOR. THIS MANUAL SHOULD BE STORED IN SAFE PLACE.

IMPORTANT SAFETY INSTRUCTIONS

- READ AND UNDERSTAND ALL OF THE SAFETY PRECAUTIONS, WARNINGS AND OPERATING INSTRUCTIONS IN THE INSTRUCTION MANUAL BEFORE OPERATING OR MAINTAINING THIS AC/DC ADAPTOR.
 - MOST ACCIDENTS THAT RESULT FROM AC/DC ADAPTOR OPERATION AND MAINTENANCE ARE CAUSED BY THE FAILURE TO OBSERVE BASIC SAFETY RULES OR PRECAUTIONS. AN ACCIDENT CAN OFTEN BE AVOIDED BY RECOGNIZING A POTENTIALLY HAZARDOUS SITUATION BEFORE IT OCCURS, AND BY OBSERVING APPROPRIATE SAFETY PROCEDURES.
 - BASIC SAFETY PRECAUTIONS ARE OUTLINED IN THE "SAFETY" SECTION OF THIS INSTRUCTION MANUAL AND IN THE SECTIONS WHICH CONTAIN THE OPERATION AND MAINTENANCE INSTRUCTIONS.
 - HAZARDS THAT MUST BE AVOIDED TO PREVENT BODILY INJURY OR MACHINE DAMAGE ARE IDENTIFIED BY WARNINGS ON THE AC/DC ADAPTOR AND IN THIS INSTRUCTION MANUAL.
- NEVER USE** THIS AC/DC ADAPTOR IN A MANNER THAT HAS NOT BEEN SPECIFICALLY RECOMMENDED BY MINOVA.

MEANINGS OF SIGNAL WORDS

WARNING INDICATES A POTENTIALLY HAZARDOUS SITUATIONS WHICH, IF IGNORED, COULD RESULT IN DEATH OR SERIOUS INJURY.

CAUTION INDICATES A POTENTIALLY HAZARDOUS SITUATIONS WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR OR MODERATE INJURY, OR MAY CAUSE MACHINE DAMAGE.

NOTE EMPHASIZES ESSENTIAL INFORMATION.

SAFETY INSTRUCTIONS

Important Safety Instructions For AC/DC Adaptor

WARNING: Death or serious bodily injury could result from improper or unsafe use of AC/DC adapter. To avoid these risks, follow these basic safety instructions:

READ ALL INSTRUCTIONS

- **SAVE THESE INSTRUCTIONS:** This manual contains important safety and operating instructions for Minova AC/DC adapter.
- Before using AC/DC adapter, read all instructions and cautionary markings on (1) AC/DC adapter and (2)

IMPORTANT SAFETY INSTRUCTIONS FOR USE OF THE AC/DC ADAPTER

Before using Minova AC/DC adapter, be sure to read all instructions and cautionary statements

on it and in this manual.

WARNING: Improper use of the AC/DC adapter can lead to serious injury.

To avoid these injuries:

- **NEVER** disassemble the AC/DC adapter.
 - **NEVER** incinerate the AC/DC adapter, even if it is damaged or is completely worn out. The AC/DC adapter can explode in a fire.
 - **NEVER** short the adapter terminals.
 - **NEVER** insert any objects into the AC/DC adapter's air vents. Electric shock or damage to the AC/DC adapter may result.
 - **NEVER** use when the temperature is below 14°F (-10°C) or above 104°F (40°C).
 - **NEVER** connect two AC/DC adapters together.
 - **NEVER** insert foreign objects into the hole for the AC/DC adapter.
 - **NEVER** use a booster transformer.
 - **NEVER** store the AC/DC adapter in places where the temperature may reach or exceed 104°F (40°C).
 - **ALWAYS** operate AC/DC adapter on standard household electrical power (120 volts). Using the AC/DC adapter on any other voltage may overheat and damage the charger.
 - **ALWAYS** disconnect the power cord from its receptacle when the AC/DC adapter is not in use.
 - **ALWAYS** use with the applicable cordless tools.
- Use with non-applicable cordless tools may cause abnormal heating and damage cordless tool.
- **ALWAYS** use the appropriate cordless tool for the job. Also, make sure to carefully read in the instruction manual for the cordless tool in use.
 - Do not expose to rain.
 - Do not use the product if the tool or the AC/DC adapter terminals (AC/DC adapter mount) are deformed.
 - Installing the AC/DC adapter could cause a short circuit that could result in smoke emission or ignition.
 - Keep the tool's terminals (AC/DC adapter mount) free of swarf and dust.
- Prior to use, make sure that swarf and dust have not collected in the area of the terminals. During use, try to avoid swarf or dust on the tool from falling on the AC/DC adapter. When suspending operation or after use, do not leave the tool in an area where it may be exposed to falling swarf or dust. Doing so could cause a short circuit that could result in smoke emission or ignition.
- The product is intended for Use in Pollution Degree 2 or PD2 environments.
- Operate only in areas of non-conductive pollution. A temporary conductivity caused by condensation is normally expected.
- This is a precision machine so do not drop or expose to impact.
 - Do not use this product near a pacemaker or other similar implanted device, which may be affected by a magnetic field produced by this product.
 - The adapter, power supply box and the inside of the DC cord generates a boosted high voltage of 380 V so please be careful of the following.

Do not disassemble the product.

Do not drop or expose to impact.

In the event the product is damaged from strong impact, do not use the product.

Do not use the product in areas exposed to rain, snow, iron powder or wet condition.

Do not touch the product with wet hands.

Do not spill or pour liquid onto the product.

Do not pull the cord with excessive force.

Use the product in a well-ordered work environment.

CAUTION:

- When the mesh of the vent is plugged by objects such as wood shavings, try to keep the objects out when you clear the mesh.

(If not properly maintained, the temperature protective feature could shut the product off)

- When the temperature protective feature frequently cuts the power off, do not overload the machine with continued work, but let the machine rest for a little before continuing operation.

- The machine does get hot. However, this does not indicate an abnormality.

Keep the electricity running and operate the internal fan to cool the machine before carrying it elsewhere.

When carrying the product, the case may be hot so please be careful.

- During use, do not pull the cord to move the Box. Doing so may result in damage.

- Do not use more than a single cord reel of 30 meters. Doing so may result in damage.

- During use, if the machine stops running after the Box's LED lamp blinks, confirm the power supply environment.

- Do not drag the cord when using or carrying the machine.

Doing so may tear the cord insulation or break the cord which could result in electric shock.

- Do not stretch the cord out any more than required.

When using tools such as gardening clippers or circular saws, always make sure of the power cord's position to avoid cutting the cord during operation.

- To use the AC/DC adapter after it shuts down due to high temperature, disconnect the box's power plug, wait for the LED lamp to go out and then reconnect the box's power plug. If the machine cuts off even after sufficiently cooling it off with the built-in fan, discontinue use as there may be a problem with the machine.

- Do not use this product near a radio. Doing so could cause noise from the radio, making it difficult to listen to a broadcast.

- This is a power source for multi volt products. Do not use with 18 V products or chargers. Doing so could result in damage.

- Overload behavior may differ when compared with battery use.

PRECAUTIONS FOR AC/DC ADAPTER

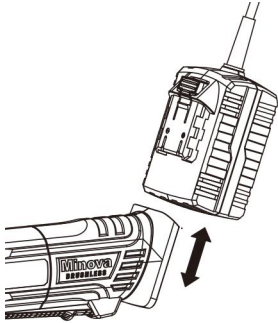
The adapter equips with the protection function to stop the output. In the cases of 1 to 2 described below, when using this product, even if you are pulling the switch, the motor may stop. This is not the trouble but the result of protection function.

- If the tool is overloaded, output may stop. In this case, release the switch of tool and eliminate

causes of overloading.

- If the adapter is overheated under overload work, output may stop. In situations like this, discontinue use of the adapter and detach it from the tool. Allow the adapter to cool in a location such as a shaded area with good air circulation.

Operation and Maintenance



NOTE:

- The information contained in this instruction manual is designed to assist you in the safe operation and maintenance of the AC/DC adapter.
- **NEVER** operate, or attempt any maintenance on the AC/DC adapter unless you have first read and understood all safety instructions contained in this manual.
- Some illustrations in this instruction manual may show details or attachments that differ from those on your own AC/DC adapter.

SPECIFICATIONS:

AC ADAPTOR		
Input voltage	100-120VAC	220-240VAC
Output voltage	19VDC	19VDC
Rated power input	300W	300W
Cable length	3m	

APPLICATIONS:

Power source for 18V products compatible with multi volt battery

BEFORE USE

- **Check the working area to make sure that it is clear of debris and clutter.** Clear the area of unnecessary personnel. Ensure that lighting and ventilation are adequate.

- To prevent electric shock, connect to a power source equipped with a ground fault circuit breaker.
- Prior to use, make sure that the DC cord insulation is not torn or that the case is not cracked. Do not use the product if there is a break in the DC cord, the insulation is torn, or the case is damaged.
- Before starting operation, make sure that the vicinity of the box's vent is free from any wood shavings or iron powder. Also, do not use in locations where iron powder is abundant, or in areas where there is rain, snow or other water sources that could wet the product.
- Make sure there are no solid metal material or liquid in the adapter box. Failure to do so may result in damage.
- Be careful not to step on the box. Also, make sure the box is placed in a location where it won't be stepped on. Do not place in a location where the box could be immersed in water when it rains.

REMOVAL AND INSTALLATION METHOD OF ADAPTER

NOTE: Before plugging into the receptacle, make sure the following points.

The power source voltage is stated on the nameplate.

The cord is not damaged.

WARNING: Do not use at voltage higher than indicated on the nameplate.

If charged at voltage higher than indicated on the nameplate, the AC/DC adapter will burn up.

1. Connect the AC/DC adapter's power cord to the receptacle.

WARNING: Do not use the electrical cord if damaged. Have it repaired immediately.

CAUTION: Never short-circuit the battery.

2. Insert the adapter into the tool.
3. Firmly insert the adapter into the tool as shown in the figure below.
4. Adapter removal
5. Hold the handle tightly and push the battery latch to remove the adapter as shown in the figure below.

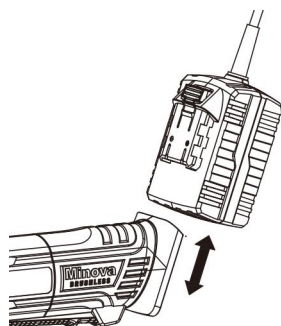
Maintenance and Service For AC/DC Adaptor

⚠ CAUTION: Pull out AC/DC adapter before doing any inspection or maintenance.

- Check the screws

Loose screws are dangerous. Regularly inspect them and make sure they are tight.

⚠ CAUTION: Using this AC/DC adapter with loosened screws is extremely dangerous.



- Check for dust

Dust may be removed with a soft cloth or a cloth dampened with soapy water.

Do not use bleach, chlorine, gasoline or thinner, for they may damage the plastics.

- Inspection of terminals (tool and battery)

Check to make sure that swarf and dust have not collected on the terminals.

On occasion check prior, during and after operation.

 **CAUTION:**

Remove any swarf or dust which may have collected on the terminals. Failure to do so may result in malfunction.

MODIFICATIONS

- Minova power tools are constantly being improved and modified to incorporate the latest technological advancements. Accordingly, some parts may be changed without prior notice.

STORAGE

Storing in a place below 104°F (40°C) and out of the reach of children.

SERVICE AND REPAIRS

All quality power tools will eventually require servicing or replacement of parts because of wear from normal use. To assure that only authorized replacement parts will be used, all service and repairs must be performed by Minova service, only.

NOTE: Specifications are subject to change without any obligation on the part of Minova.

TROUBLESHOOTING GUIDE

WARNING

To avoid injury from an accidental start, turn the switch OFF and remove the plug from the power source and remove the AC/DC adapter from the tool before making any adjustments.

All electrical or mechanical repairs should be done only by qualified service technicians.

Contact Minova.