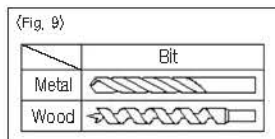


► Screwdriing operation (Refer to Fig. 9)



Adjust the clutch cap to the proper torque level for your work.  
Use well polished HSS drill bit when operating in drilling metal.  
Otherwise, the product will cause performance degradation.



## 【Maintenance & Storage】

Always be sure that the tool is switched off and the battery is removed before attempting to perform inspection or maintenance.

- Keep the tool clean and inspect it regularly.

## 【Guarantee】

- It is warranted 1 year to be free of defects from workmanship and materials for the period of origin purchase. Some states do not allow the exclusion or limitation or incidental or consequential damages, so the limitation or exclusion below may not apply to you.
- Motor, battery is warranted 6 months since the period of origin purchase.
  - Battery is consumable item so must pay for a new battery.

- This warranty does not apply where
- repairs have been made or attempted by others ; (such as immersion, external shock, overload operation)
  - natural disasters (fire, earthquake, flood etc)
  - repairs are required because of normal wear and tear ;
  - the tool has been abused, misused or improperly maintained ;
  - alterations have been made the tool.

Use within the scope of the tasks listed in the manual.  
Otherwise, the equipment get damaged, shorten life or get injured.  
We do not have the responsibility and not able to repair your power tool.

MEMO

[www.aimsak.com](http://www.aimsak.com)

# Aimsak

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**MADE IN KOREA**

< 2010-11 >

# Aimsak

## Operation Instructions



## AD 310R / AD 414R AD 310RS / AD 414RS

### CORDLESS DRIVER DRILL

## Index

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⚠ For your personal safety, READ and UNDERSTAND before using.  
SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

**Aimsak Co., Ltd.**  
[www.aimsak.com](http://www.aimsak.com)

## 【 Tool Specification 】

### ► Specification

	AD 310R	AD 310RS	AD 414R	AD 414RS
Voltage	DC 10.8V		DC 14.4V	
Chuck capacity	10mm	6.35mm (1/4" HEX)	10mm	6.35mm (1/4" HEX)
No load speed	1 : 0~400 $\text{min}^{-1}$ / 2 : 0~1,300 $\text{min}^{-1}$		1 : 0~450 $\text{min}^{-1}$ / 2 : 0~1,500 $\text{min}^{-1}$	
Max. Torque	30N·m / 306kgf·cm		33N·m / 336kgf·cm	
Switch	Variable Speed Control		Variable Speed Control	
Battery	Li-ion / 10.8V / 1.3Ah		Li-ion / 14.4V / 1.3Ah	
Net. Weight	0.90 kg	0.78 kg	0.97 kg	0.84 kg
Charger	ALC 3425		ALC 3425	

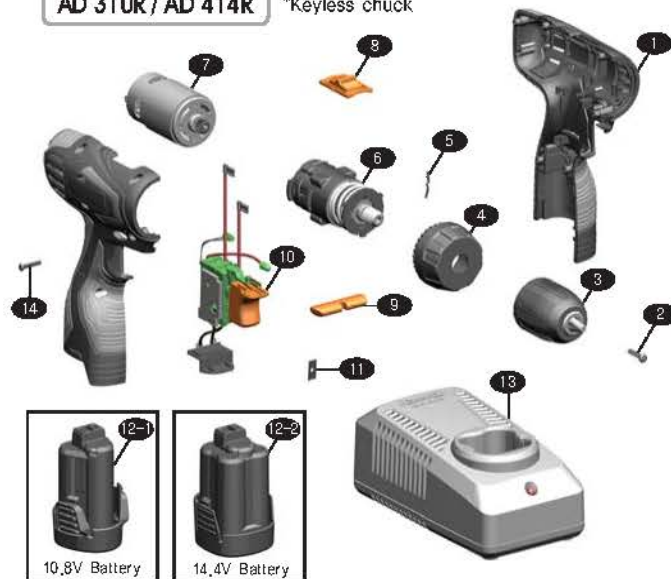
### ► Contents

	AD 310R	AD 310RS	AD 414R	AD 414RS
Cordless Driver Drill	1 EA	1 EA	1 EA	1 EA
Battery	2 EA		2 EA	
Charger		1 EA		
Operation Manual		1 EA		
Warranty		1 EA		
Plastic Case		1 EA		

## 【 Exploded View 】

AD 310R / AD 414R

\*Keyless chuck



### Part Name

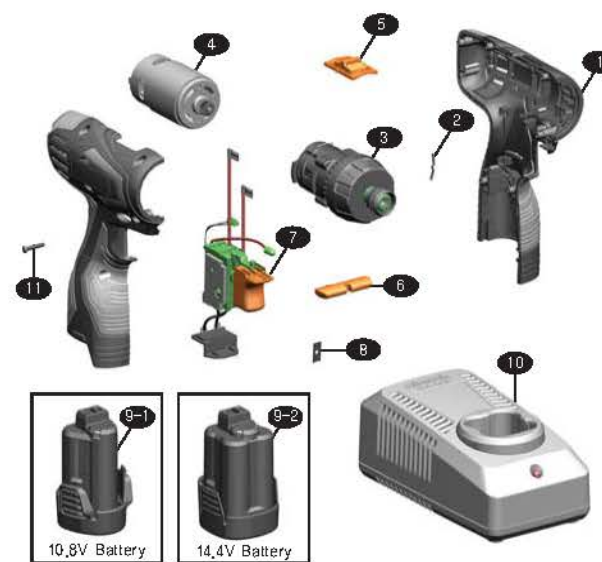
NO.	Part Name	Q'ty
1	Housing	1
2	Left Hand Screw	1
3	Keyless Chuck	1
4	Torque Cap	1
5	Clicker Spring	1
6	Gear Box	1
7	Motor	1
8	Shift Lever	1
9	Reversing Lever	1
10	Switch	1
11	Housing clamp	2
12-1	Battery (B13P12)	2
12-2	Battery (B13P14)	2
13	Charger	1
14	Star Screw	6

• Due to our continuing program of research and development, the specifications herein are subject to change without notice.  
• Note: Specifications may be changed by the requirement of country.

## 【 Exploded View 】

AD 310RS / AD 414RS

\*Bit Holder



### Part Name

NO.	Part Name	Q'ty
1	Housing	1
2	Clicker Spring	1
3	Gear Box	1
4	Motor	1
5	Shift Lever	1
6	Reversing Lever	1
7	Switch	1
8	Housing clamp	2
9-1	Battery (B13P12)	2
9-2	Battery (B13P14)	2
10	Charger	1
11	Star Screw	6

## 【 Safety Instructions 】

For your personal safety, read and understand before using.

Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTION FOR FUTURE REFERENCE.

### 1. Work area

- Keep work area clean and well lit. Cluttered and dark area invites injuries.
- 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.
- Keep children and bystanders away while operating power tools. Distractions can cause you to lose control.

### 2. Electrical safety

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

### 3. Personal safety

- 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.
- Use safety equipment. Always wear eye protection. Safety equipment such as dust-mask, non-skid safety shoes, hard hat or hearing protection must be used for appropriate conditions. These will reduce personal injuries.



- ▶ 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.
- ▶ Avoid accidental starting.  
Ensure the switch is in the off-position before plugging in.  
Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
- ▶ Do not overreach. Keep proper footing and balance at all time.  
This enables better control of the power tool in unexpected situations.

#### 4. Power tool use and care

- ▶ 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 was designed.
- ▶ Stop using tool when the tool stops due to overload. It reduces the damage of motor.
- ▶ Do not use the power tool if the switch does not turn it on or off.  
Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- ▶ 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 hand of untrained users.
- ▶ 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.
- ▶ 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.
- ▶ Tie the tool while operating.  
It can cause injuries if you hand-hold while operation.

#### 5. Battery use and care

- ▶ 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.
- ▶ Use power tools with specifically designated battery packs.  
Use of any other battery packs may create a risk of injury and fire.
- ▶ Ensure that the outside surface of battery terminal is clean.  
It causes firing, explosion.
- ▶ Cool the power tool for 10 minutes before you replace to a new battery if you operated until discharged.  
Heat leads to damage of tool and battery.

#### 6. 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.

#### ◆ Li-ion battery using instruction





- Li-ion battery exercise 100% when recharge even it is not full discharged.  
※ Li-ion battery has not memory effect.  
Memory effect : After first use, or neglect long-term use 70~80% of the exercise becomes ability phenomenon.
- ▶ Under no circumstances shall not disassemble the battery, and protect against shock.  
Short circuits occurs and may cause fires and explosions.
- ▶ Allow heated batteries to cool before charging.  
Please refer to the enclosed with an NTC temperature monitor which allows charging only within a temperature range of 3~55°C. Or it will cause serious damaged to the battery pack, and after returning to the normal temperature range the charge is done.  
This will prolong the useful life of the battery and can be recharged up to 2,000 times when used properly.

- ▶ Even it is second battery, battery life is associated. Replace the battery when operating time is getting short.
- ▶ (+) and (-) terminal avoid to contact with metal. Also do not keep and move with metal necklace and hairpin.  
Due to risk of fires, burns and explosion by short-circuit.
- ▶ Do not connect (+) and (-) in reverse, do not charge as (+) and (-) polarity in changed.  
Charging as the change of polarity is a risk of fire or explosion.
- ▶ Do not expose battery to water or rain.  
Battery short-circuit current to flow into the thermal, fire and causes of failure.
- ▶ Never completely discharge the battery pack. Not using for long time, please recharge once in 3 months.  
It can not be charged when completely discharged. If so, please contact to nearest A/S center.
- ▶ Do not quick charging the battery several times in succession. Do not recharge the battery again after using it for a short period.(ex, 5 mins)
- ▶ Ensure that batteries are charged using the correct charger recommended by the manufacturer.  
Otherwise, It may current the risk of fire or explosion.
- ▶ Do not expose the battery to the strong sun rays for a long time period. Due to risk of fire and explosion.
- ▶ Overloading or using in high temperature causes electrolyte of battery leak.  
If the seal is broken device and flowing leakage contact with skin wash immediately with soap and water.  
Ensure that if electrolyte gets in to your eyes, rinse them out with water and seek medical attention right away.  
Liquid comes out from the battery irritates skin and causes fire.
- ▶ Do not put next to fire or burn it even if it is damaged badly or completely discharged.  
Due to risk of fire and explosion.
- ▶ Ensure battery is disposed of safely as instructed by manufacturer.  
Do not throw the battery away in household garbage, fire or water.  
Due to risk of fire, explosion and environmental pollution.

#### ◆ Li-ion Battery Charger Instructions.

- WARNING! Use the correct voltage of charger.
- ▶ Do not charge other manufacturer batteries only except Aimsak's one.  
The appliance is only suitable for charging Aimsak batteries. Due to risk of fire and explosion.
- ▶ Ensure that the plug and power code is abnormalities. Do not use damaged charger. Due to electric shock.
- ▶ Keep the battery charger in a dry and frost - free place.  
Enter water in the battery charger currents failure and electric shock.
- ▶ Do not carry the battery charger with power code and not to plug out with the wire.  
Protect from heat, water and sharp edge. Due to risk of short-circuit.
- ▶ Plug out immediately if battery charger is damaged or heated.  
Due to firing and explosion when continue charging.
- ▶ Ensure that charger terminal is clean. Pollution causes electric shock.
- ▶ Do not charge and operate the battery charger on combustible ground or surroundings  
due to its heating during the charging process. Heated battery charger currents to fire.
- ▶ Do not use the battery charger connect to transformers as DC power charger or engine generator.  
Due to failure and fire.
- ▶ This charger has been designed to stop for the battery in cold weather below 0°C.  
Do charge the battery cartridge at room temperature - 0°C ~ 45°C (32°F ~ 113°F).
- ▶ Please avoid enclosed-place while charging and use in well-ventilated place.  
Also, do not cover with fabrics and vinyl while charging. Due to risk of fire.
- ▶ Do not disassemble the battery charger randomly. Due to risk of failure.
- ▶ Have your battery charger repaired by an authorized Aimsak Service Center.

## ◆ Indicators, Symbols and Meaning

Symbol	Meaning
<b>Stand by</b> 	▶ Battery charging is acceptable.
<b>Charging</b> 	▶ Battery is being charged.
<b>Fully charged</b> 	▶ Reach to fully charged condition.
<b>Temperature protection</b> 	▶ Battery is not ready to be charged due to beyond the normal temp. range (0~45°C). Charging will be automatically started when allowable temperature is reached.

## 【 Operating Instructions 】

### ◆ Tool operating precaution

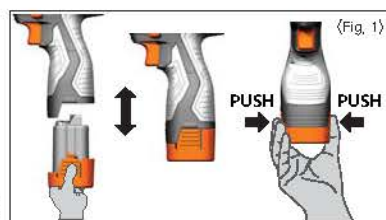
#### ⚠ Caution

- ▶ If high currents are flowing through this tools, it stops the operation working automatically for prevention of the Lithium-ion battery. It is normal that the tool suddenly paused from overload in working.

### ◆ Tool actions

#### ▶ Installing and removing battery (Refer to Fig. 1)

Do not use force when inserting the battery.  
To insert the battery, align the tongue on the battery with the groove in the housing and slip into place. Always insert it all the way until it locks in place with a little click. If not, it may accidentally fall out of the tool.



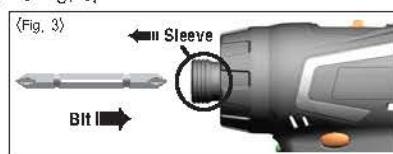
#### ▶ Installing or removing driver bit – AD 310R, AD 414R (Refer to Fig. 2)

- 1) Switch off the tool and put the reversing lever in neutral.
- 2) Turn the sleeve counterclockwise to open the chuck jaws.
- 3) Place the bit in the chuck as far as it will go.  
Turn the sleeve clockwise to tighten the chuck until it locks in place with "click"



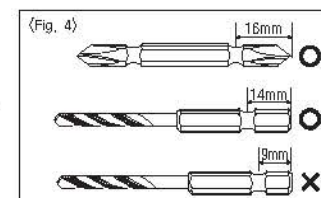
#### ▶ Installing or removing driver bit – AD 310RS, AD 414RS (Refer to Fig. 3)

- 1) Switch off the tool and put the reversing lever in neutral.
- 2) Pull the sleeve in the direction of the arrow and insert the bit-piece and bit into the sleeve as far as it will go.
- 3) Then release the sleeve to secure the bit.
- 4) Shake the socket to make sure it is properly fixed.



## ⚠ Caution

1. If the bit is not inserted deep enough into the sleeve, the sleeve will not return to its original position and the bit will not be secured. In this case, try re-inserting the bit according to the instructions above.
2. To install these types of bits (more than 14mm), follow the procedure. (Refer to Fig. 4)

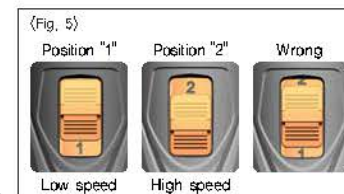


### ▶ Speed change (Refer to Fig. 5)

- ① Low speed (position "1") : Slow rotation / high torque
- ② High speed (position "2") : High-speed rotation / Small torque

※ If you need high torque, do operate power tools at position "1". Because it may give rise to the tool suddenly paused from overload in working.

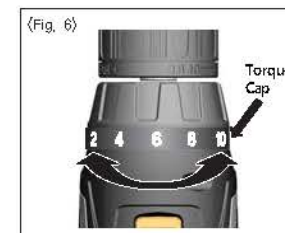
Caution! Switch off the tool before operate the speed change lever. Always set the speed change lever fully to the correct position. If you operate the tool with the speed change lever positioned halfway between the "1" side and "2" side, the tool may be damaged.



### ▶ Adjusting the fastening torque (Refer to Fig. 6)

- Adjust the adjusting ring to the proper torque level for your work.
- 1 speed (low set) : Working with small screws and soft materials.
  - 20 speed (high set) : Working with large screws and rigid materials.

Set to high torque or drill torque when releasing screw.  
(Before actual operation, drive a trial screw into your material or a piece of duplicate material to determine which torque level is required for a application.)

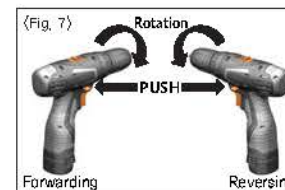


### ▶ Reversing switch action (Refer to Fig. 7)

Clockwise rotation : Depress the reversing lever as the picture, (Tightening screw operation)

Counterclockwise rotation : Depress the reversing lever as the picture, (Releasing screw operation)

**Caution!** Use the reversing switch only after the tool comes to a complete stop.







### ▶ Switch action

To start the tool, simply pull the switch trigger. Tool speed increases by increasing pressure on the switch trigger. Release the switch trigger to stop. Safety brake devices are set to the switch and stop immediately when you release the switch. Pull the switch trigger to light up the lamp. The lamp keeps on lighting while the switch trigger is being pulled. The lamp goes out after releasing the trigger.



### ▶ Fuel gauge (Refer to Fig. 8)

Lamp on the fuel gauge panel go out several seconds after releasing the switch trigger. Please refer to the following table for the LED indicator status and the remaining battery capacity.

LED indicator status	Remaining battery capacity
 Full light on	(Over) 80%
 light on	50 ~ 80%
 light on	20 ~ 50%
 OFF	(Below) 20%

