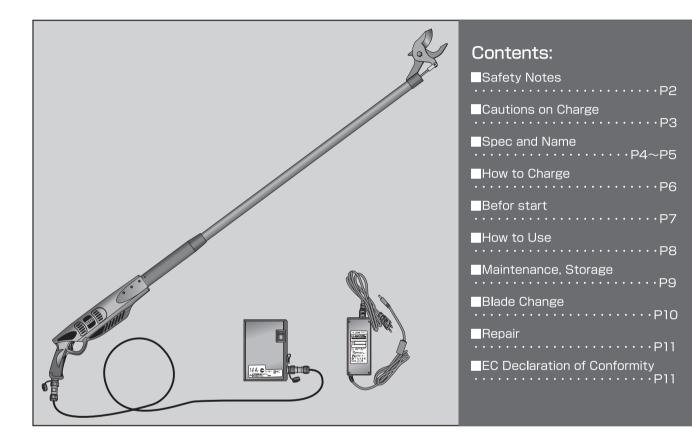




Futomaru 40, battery-powered Instruction Manual

N-910/N-911/N-912/N-913 Models with battery and charger N-914/N-915/N-916/N-917 Models without battery and charger



Thank you for your purchasing.

Befor use, please read this Instruction Manual for proper use, and keep it.



Li-ion batteries need to be recycled.

Note: Any changes may be applied for improvement without prior notice.

Safety Notes

- Wrong use may result in electric shock, and/or serious injury or death.
- ■Do not work at the area of electric shock possibility such as nearby electric wires.
- ■Do not apply water to the shears.
- ■Do not expose the shears to rain or wet condition.
- Do not cut power cord while using. If you cut the cord by accident, turn off the battery's switch immediately and remove the cord from the battery.
- Using the shears continuously for hours tires a user. Please keep good working position and take a break regularly.
 When you feel tired, please stop working.
- ■Keep all parts of the body away from the blade.
- ■When working with the shears, always hold them firmly with both hands.
- ■Use by children should be supervised.
- ■The blade is very sharp and never point it at people in any circumstances.
- ■Use personal protective equipment. Always wear eye-protection, helmet and gloves.
- Do not attempt to repair, disassemble or convert the product unless you are qualified to do so.
- Switch off immediately in case of unusual vibration or sound, and contact your shop.
- Please use the tool for its intended purpose (pruning) only.
- ■Check cable and the tool for damage.
- ■Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.
 Non-skid safety shoes and cap & hair band for long hair are recommended.
- Keep proper footing and balance. Do not work at unstable position such as roof, stepladder, etc.
- ■Turn off the switch after use and remove the cord from the battery.

 After confirming the blade do not move, clean and lubricate the blade.

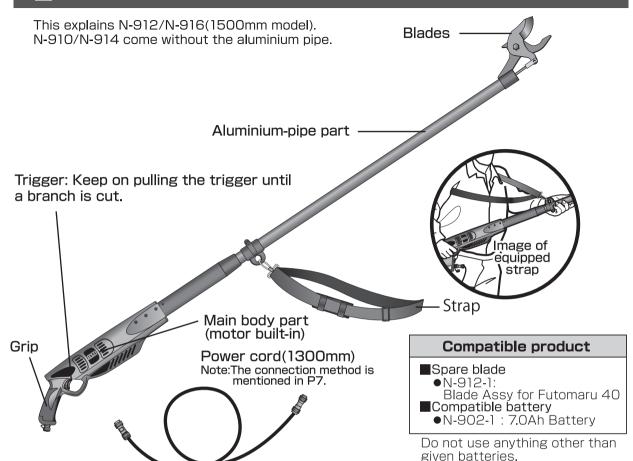
 Also clean the tool body.
 - Do not use gasoline, thinner, benzene or kerosene, which may melt the plastic part.
- Store the tool in dry condition and away from children. Do not expose the tool to rain, high humidity or direct sunlight.

Cautions on Charge

- ■Use the designated battery and charger only for FUTOMARU 40.
- ■Never attempt to modify the battery and charger.
- Protect battery from heat and fire. Never attempt to dry the battery with a heating apparatus like micro wave oven.
- \blacksquare Do not use or leave the battery near a heat source (>60°C).
- Never damage the battery.
- ■Keep the battery clean and dry.
- ■Do not short-circuit battery terminals with metal like materials.
- Never attempt to charge a damaged or defective battery.
- ■Use the dedicated charger only to charge the battery.
- Never try to charge a battery which is wet.
- When not in use, disconnect the charger from the power outlet.
- If the eyes are exposed to the liquid from the battery, wash with clean water and see an ophthalmologist for due treatment.
- ■In the case of suspicious smoke or breakage, disconnect the charger at first, then remove the battery after it is cooled.
- Never expose the battery or the charger to high temperatures (direct sunlight, heating, etc.) $> 60^{\circ}$ C.
- ■Keep the battery out of the reach of children.
- ■Do not store the battery with metal which may cause electrical short circuit.
- If the liquid leaking from the battery contacts the skin, wash affected areas with plenty of water and soap.

Specifications and Name of the Parts

Futomaru 40 Main Parts



[Product Number / Dimension·Weight·Cord Length]

Model	Product Number	Product Name	Body Dimension(mm)	Body Weight	Cord Length(mm)
0.75M	N-910	Futomaru 40-750 (with Battery Battery Charger)	750×162×56	1.85kg	1300
	N-914	Futomaru 40-750 (Main Part only)	7502162256		
1.OM	N-911	Futomaru 40-1000 (with Battery Battery Charger)	1000×100×E0	1.93kg	1300
	N-915	Futomaru 40-1000 (Main Part only)	1000×162×56		
1.5M	N-912	Futomaru 40-1500 (with Battery Battery Charger)	1500/100/50	2.06kg	1300
	N-916	Futomaru 40-1500 (Main Part only)	1500×162×56		
2.0M	N-913	Futomaru 40-2000 (with Battery Battery Charger)	0000010000	2.46kg	1300
	N-917	Futomaru 40-2000 (Main Part only)	2000×162×56		

[Motor•Other Specifications]

Content	Specification
Motor Rated Voltage	DC 14.4V
Motor Power Dissipation	264W
Cutting Capacity	Live Tree approx. 40mm
Cutting Speed	Approx. 2 seconds / 1 cycle
Number of cutting at fully charged	40mm diameter branch-approx. 900 15mm diameter branch-approx. 2000

(Life span of the motor)

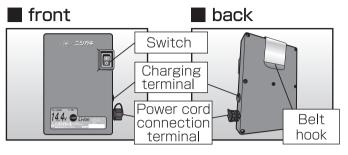
Motor: This motor is a carbon brush type and when the carbon brush runs out, the motor does not work and should be replaced with a new motor. For a new motor, please contact your shop. For reference, it cuts about 120,000pcs. of branches(40mm) before the carbon brush runs out.

N-910/N-911/N-912/N-913 Battery/Battery charger

Battery (Rechargeable Battery)

Product Number: N-902-1

• Switch
ON=[1]
OFF=[O]
ON OFF



(Specification)

Voltage: DC14.4VBattery: Li-ion batteryCapacity: 7.0AhMass: 0.6kg

· Built-in overcurrent protective device

· Standard number of charging cycle: approx. 500 times

(Life span of the battery)

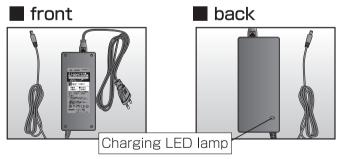
Please get a new battery when the operating time becomes shorter with proper charging. (Work efficiency also lowers if the blade got blunt.)

Storing the battery (Important/Caution)

- · Do not leave the battery with less charged situation as over discharge damages the battery.
- · Do not try to charge the battery which is already fully charged.
- ·Store the battery after sufficiently charged when it is not used for a long time.
- ·When the battery is sorted for a long time, detach it from the main body/charger and keep it away from high temperature/high humidity.

Battery Charger

Product Number: N-902-3



●Charging···
Red LED lamp ON
○Charged···

Green LED lamp ON

(Specification)

Input ------ AC100V~AC240V 50/60Hz

This is a dedicated battery charger for attached 7.0Ah battery. Do not use other batteries since it may lead to trouble.

- ·Output------ DC16.8V/DC6.0A
- · Charging time *approx. 2 hours · Mass approx. 0.3kg
- * Actual charging time differs by the temperature and status of the battery.

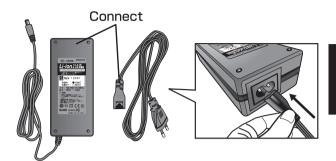
How to Charge

For the 1st time use, charge the battery fully before start.

Battery charger gets slightly hot while charging, but it will not affect the performance.

The lamp of the charger indicates the status of the charging.

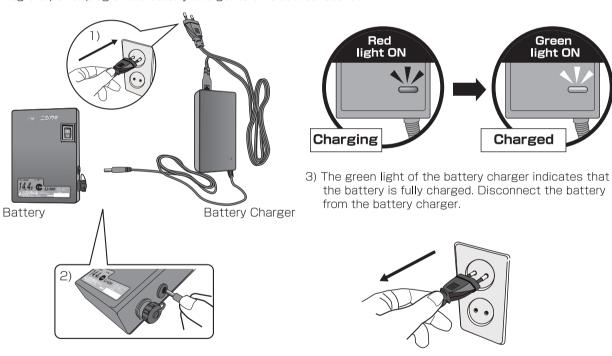
(Connecting plug cord) Connect the plug cord to the charger.



Accessory battery charger (N-902-3) for this product is a dedicated battery charger for attached 7.0Ah battery.

Do not use other batteries since it may lead to trouble

1) Plug the power plug of the battery charger to an electrical socket.



2) Connect the battery to the battery charger. (The red light of the battery charger turns on.)

4) Unplug the power plug of the battery charger from an electrical socket.

Charging time: approx. 2 hours*

*Actual charging time differs by the temperature and status of the battery.



- This charging may cause noise on radio and TV. In this case, keep the charger away from radio and TV or use a socket at a different place for charging.
- Recommendable ambient temperature for charging is 10-40°C.
- Detach the battery from the charger after charged.
- · Do not use while being charged.

Before start

These are pruning shears for fresh wood only. (Cutting capacity: 40mm dia.)

Do not cut other materials.

Pay attention to working area and make the working position good for safety.

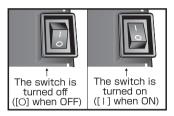
The range of the recommended temperature on an operation

Recommended ambient temperature for working and charging battery is $10 - 40^{\circ}$ C.

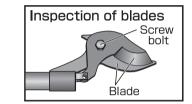
1) Make sure battery switch is off.

Be careful that the blades automatically open if connected with battery switch being on.

Batterv

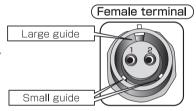


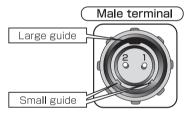
2)Inspect the blades for any defects with wearing gloves.

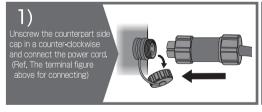


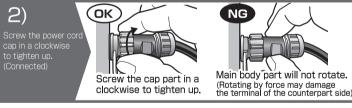
3)Connect the power cord.

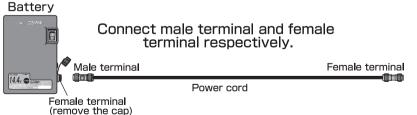
Remove the cap from the terminal of the battery and the main body grip, and connect male/female terminals along the guides.







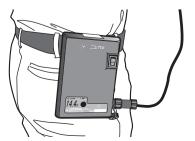






How to equip the product

· Equip the belt hook of the battery to a waist belt.



How to Use



- \cdot Do not impact hard on the blades while using. It may damage the blades or the main body.
- · If the main body (motor) gets heat on continuous use, stop the operation until it gets cool enough. (Further continuous use may cause motor burning or malfunction.)

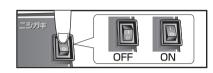
Pruning operation

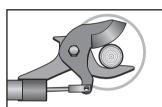
1) Push [] for turning on the battery and [O] for turning off

Attention: The blades automatically open when turned on with blade closed.

- 2) Please refer to the right figure for the position of a branch to be cut.
- A)Keep on pulling the trigger until a branch is cut.
- B)The blades open when the trigger is released.

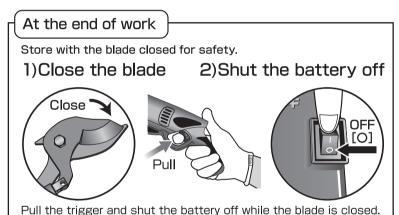
For continuous cutting operation, repeat the above A and B.

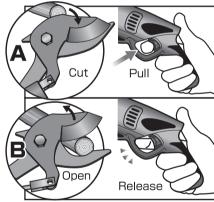




sure that a branch to be cut is positioned in the inner part of the blades

Note:You can't cut flexible leaf, ivy,



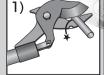


Apply oil (machine oil) to the blades after used for good maintenance.

Motor safety system (overcurrent protective device)

Overcurrent protective device built-in the battery will cut the power to protect the motor if the blades stopped working due to the jamming of objects like dead branched and metals while operating.

■Disarm the safety system…For re-start,remove the objects jammed in the blade and turn on the switch again.

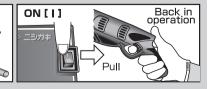












Release your finger from the trigger and turn the switch of the battery OFF, if the blades stopped working due to jammed objects.

Remove the objects and turning the switch of the battery ON to continue your operation.

Maintenance. Storage

⚠ Warning

Before maintenance/storage, please make sure the switch should be turned off.

For changing the blades, please wear gloves for your safety.

Main body

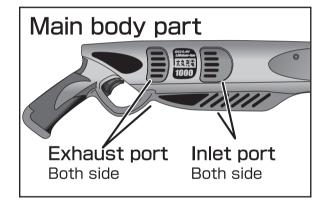
- ·Wipe with dry cloth.
- · Do not use gasoline, thinner, benzene, or lamp oil, it may melt plastics,
- · Remove dust of the inlet port and exhaust port.

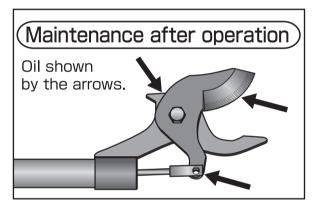
■Blades

Clean the blades with brush and apply oil to the parts shown.

Storage

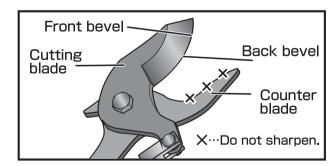
Turn off the switch after confirming the blades are closed (Ref. P8) and store without rain/direct rays/high humidity. Keep it away from children.

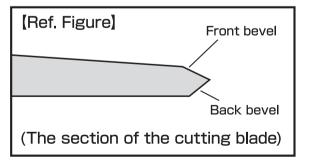




■How to sharpen the blade

When the blade edge gets dull, please sharpen the front bevel mainly. After the front bevel, please sharpen the back bevel with a few sharpening strokes only.





Blade change

Use "N-912-1 blade set.

Check the items supplied shown below.

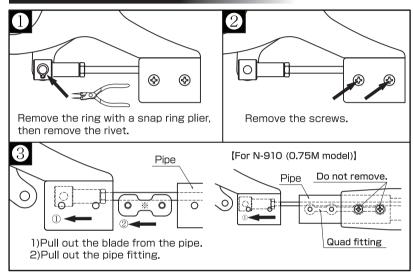
Blade exchange may be done easily while the blades are open. Pay attention to the sharp cutting edge and never touch it. Remove the cord from the battery before the changing work starts.

Tools necessary: flat and cross-head screwdrivers, and a snap ring plier.

Items supplied

Name	Shape	Q'ty
Blade	•	1
Pipe fitting	0 0	1
Not applicable to N-910 (0.75M model)		
Rivet		1
Snap ring		1
Screw		2

How to remove blade



How to set blade

Opposite procedure of removing.

REPAIR

Motor: When carbon brush build in runs out, the motor does not work and please prepare a new motor. Battery: When working time becomes very short after fully charged, it is the time for preparing a new battery.

For new motor and battery, please contact your dealer.

Do not attempt to repair by yourself when it does not work properly. Please contact your dealers for questions and repair.

Troubleshooting



Case	Possible cause Procedure	
	·Are the power cord and the battery attached properly?	·Connect the power cord to the battery.
	·Is the battery fully charged?	·Connect the battery to the charger and start charging.
The product won't start.	·Is the temperature of the battery or ambient temperature too low (or high)?	·Operating the product outside the range of optimal temperature (10~40°C) will not only make the product unable to operate but also affect the lifetime of the battery.
	·Is the motor still working?	·The motor is expendable.Replace the motor with a new one. (For a charge)
It is hard to	· Is the blades stuck with wood chips or saps?	·Turn off the switch and remove the objects.
prune due to a dull blade.	·lsn't the blade chipped or worn down?	·Replace the blades with a new one. (Option)

Ref. No.: NICO 19D011

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EC DECLARATION OF CONFORMITY

MANUFACTURER: NISHIGAKI INDUSTRIAL CO.,LTD ADDRESS: 500 OMURA, MIKI, HYOGO, JAPAN Declares under sole responsibility that

beclares under sole responsibility that						
CATEGORY	BATTERY POWERED PRUNNING SHEARS					
FUNCTION	INTENDED FOR PRUNING					
COMMERCIAL NAME	FUTOMARU 40					
TYPE	SELF CONTAINED					
MODEL	N-910, N-911, N-912, N-913, N-914, N-915, N-916, N-917					

conforms to the relevant provisions of Directives: MACHINES DIRECTIVE: 2006/42/CE, EMC: 2014/30/EU Following standards were used: EN55014-1, EN55014-2, EN61000-3-2, EN61000-3-3, EN60745-1 PERSON/ENTITY AUTHORISED TO COMPILE THE TECHNICAL DOUMENT: NISHIGAKI INDUSTRIAL CO.,LTD ADDRESS: 500 OMURA, MIKI, HYOGO, JAPAN Done at Miki, Hyogo, 05. 03. 2019

Done at Miki, Hyogo, 05. 03. 2019 NISHIGAKI INDUSTRIAL CO.,LTD







SATORU FUJIWARA, Director Product Development