# CORDLESS RANDOM ORBITAL SPOT SANDER

NT09EC-405

**OPERATION MANUAL** 







ATTENTION! PLEASE READ THIS MANUAL BEFORE OPERATING THE TOOL.



INAPPROPRIATE USE OF THE TOOL MAY RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE!

ONLY QUALIFIED AND SPECIALLY TRAINED PERSONNEL FAMILIARIZED WITH THESE INSTRUCTIONS IS ALLOWED TO OPERATE AND PERFORM MAINTENANCE OF THE TOOL.

Safety recommendations contained in present manual shall be observed in addition to the general safety regulations in force in the region of tool usage, and do not replace them.



- Risk of contact with moving parts.
- > Increased noise and vibration levels may occur.
- > Risk of increased dust content in the air of the work area.



- > Risk of fire and short circuit if the wires are exposed to a source of fire or heat.
- > Electric shock hazard.



> To reduce the risk of injury, user must read and understand operator's manual.











# 1. IMPORTANT SAFETY INSTRUCTIONS

### **WORK AREA SAFETY**

- Keep your working area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools produce sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

### **ELECTRICAL SAFETY**

- 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.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

# **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 personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the trigger is in the OFF (depressed) position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the trigger or energizing power tools that have the trigger in the ON (pressed) position invites accidents.
- Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.



### **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 it was designed.
- Do not use the power tool if the trigger does not turn it ON and OFF. Any power tool that cannot be controlled with the trigger is dangerous and must be repaired.
- Disconnect the plug from the power source and/or the battery pack 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.
- 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.
- Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's 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, 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.
- Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

### **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.

### SAFETY RULES FOR BATTERY PACK AND CHARGER

Important safety and operating instructions for your battery and charger.

- Before using the charger, read all instructions and warnings on the charger, the battery pack and the tool.
- If the battery pack casing is cracked or damaged, do not insert into charger. There is a danger of electric shock or electrocution.
- Do not allow any liquid to get inside the charger. Electric shock may result.
- This charger is not intended for any uses other than charging rechargeable batteries.
- Do not place any object on top of the charger, do not place the charger near any heat source or on a soft surface e that might block the ventilation slots and result in excessive internal heat.
- Make sure the cord is located so it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- Do not use the charger if it has received a sharp blow, been dropped or otherwise damaged in any way.
- Do not store or use the tool and battery pack in locations where the temperature may reach or exceed 40 °C.
- The charger is designed to operate on standard household electrical power (100 240 VAC). Do not attempt to use it on any other voltage.
- 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.
- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another type of battery pack.
- Use power tools only with specifically designated battery packs. The use of any other battery packs may create a risk of injury and fire.
- When the battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- Under abusive conditions, liquid may be ejected from the battery. Avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, immediately discontinue its use and do not recharge.

# **ADDITIONAL SAFETY WARNINGS**



### WARNING!

When working in dusty environment, wear appropriate respiratory protection to reduce the risk of injury.

- Always use common sense and be cautious when using tools. It is not possible to anticipate every situation that could result in a dangerous outcome. Do not use this tool if you do not understand these operating instructions or you feel the work is beyond your capability; contact ONETECH representative or a trained professional for additional information or training.
- Maintain labels and nameplates. These carry important information. If they are unreadable or missing, please contact a ONETECH representative or service facility for assistance.

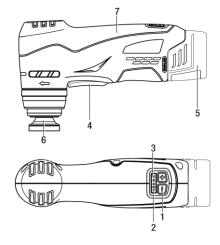
### WARNING!

- Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
- lead from lead-based paints;
- crystalline silica from bricks and cement and other masonry products, and arsenic and chromium from chemically treated 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, such as those dust masks that are specially designed to filter out microscopic particles.
- Always ensure that the work piece to be sanded is firmly fixed in place.
- Always remove the battery pack during any transportation of the tool.
- Do not allow the tool to free speed without taking precautions to protect surrounding people and objects in the event that the abrasive or backing pad should come loose.
- Read all instructions before using this tool. All operators must be fully trained in the proper, safe use of this tool.
- All maintenance must be carried out by trained personnel. For service, contact a ONETECH authorized service centre.
- If the tool appears to malfunction, stop using it immediately and arrange for service and repair.
- Before changing the accessories always disconnect the power source.
- Never carry, store or leave the tool unattended with the power source connected.
- Keep hands clear of the spinning pad during use.
- Always wear required personal safety protection in accordance with manufacturer's instructions and local/national standards while using this tool.
- If you experience any physical hand/wrist discomfort, stop working and seek medical attention. Hand, wrist and arm injury may result from repetitive work, motion and overexposure to vibrations.

  Read and comply with state and local regulations.

# 2. PRODUCT DESCRIPTION

### 2.1 Components



- 1. Speed Adjustment Button
- 2. Battery Indicator Light
- 3. Speed Level Indicator
- Trigger
- 5. Battery Pack (not included)
- 6. Backing Plate
- 7. Soft Grip



# 2.2 Technical Specifications

Model	Orbit size, mm	Rated speed, rpm	Rated voltage, V DC	Backing plate, mm	Net weight*,	Output shaft	Dimensions, mm
NT09EC-405	3	4 000 – 10 000 oscillation only (no spinning)	10.8	31 (1.25")	475	1/4"-20 (M)	169 x 114.5 x 48.5

<sup>\*</sup> Tool only, no accessories or battery pack.

PLEASE NOTE! The specifications are subject to change without prior notice. Model range may vary between markets.

Information about noise and vibration levels. Measured values are determined according to EN 62841.

	NT09EC-405
Sound pressure level (LpA), dB(A):	56.5
Sound power level (LWA), dB(A):	64.5
Sound measurement uncertainty (K), dB(A):	3.0
Vibration emission value (ah)*, m/s²:	2.391
Vibration emission uncertainty (K), m/s <sup>2</sup> :	1.5

<sup>\*</sup> The values provided in the table are derived from laboratory testing in conformity with state codes and standards and are not sufficient for risk evaluation. Values measured in a particular work place may be higher than the declared values.

The actual exposure values and amount of risk or harm experienced to an individual is unique to each situation and depends upon the surrounding environment, the way in which the individual works, the particular material being worked, work station

ONETECH cannot be held responsible for the consequences of using declared values instead of actual exposure values for any individual risk assessment.

# 3. INTENDED USE

The tool is designed for polishing painted surfaces.

### WARNING!

To guarantee electrical safety, the tool must not be damp or operated in a damp environment. The user bears the responsibility for any damage and accidents caused by its improper use.

# 4. PROPER USE OF THE TOOL

- > This sander is designed for sanding all types of materials such as paints, metals, wood, stone, plastics, etc., using abrasives specially designed for this purpose.
- > Do not use this sander for any other purpose than that specified without consulting the manufacturer or the manufacturer's authorized supplier.
- > Do not use backing plates with an operating speed of less than 10 000 rpm free speed.

design, as well as upon the exposure time and the physical condition of the user.

> Any maintenance or repair work requiring the motor housing to be opened may only be carried out by an authorized service centre.

### 4.1 How To Get Started

- > When unpacking the tool, make sure it is intact, complete and has not been damaged in transport. Never use a damaged tool.
- > Before use, check that the backing plate is correctly mounted.
- > Install a fully charged battery pack into the sander until it locks in place with a click.

### 4.2 Starting/Stopping the Tool

> This tool is intended to be used as a hand held tool.



- > Select a suitable abrasive and secure it to the backing plate. Make sure the abrasive is centered on the backing plate.
- > Install the battery pack and the tool will switch to sleep mode by default. No indicator light is on, and the tool is not powered on. At this time, certain buttons are not working, and the speed cannot be adjusted.

# 4.3 Activating the Tool

The tool can be activated through the trigger or the speed adjustment button. After the tool is successfully activated, the battery indicator LED lights up, and the tool is now powered on and ready for operation; the speed indicator lights up at the same time. In the activated mode, regardless of whether the tool is running or not, you can press the "+" or "-" button to adjust the speed.

# 4.4 Using the Trigger to Activate and Control the Tool

- 1. Pull the trigger once, and the tool will enter the activated mode.
- 2. Pull the trigger twice (within approx. 0.3 seconds), the tool will start and keep running; click again to stop.
- 3. Pull and hold the trigger, the tools will keep running, and release it to stop.
- 4. In the sleep mode, performing step (2) or (3) can directly activate the tool and maintain the corresponding operation.
- ➤ Use the speed adjustment button to activate the tool. In addition, the tool can be activated directly by "+" or "-" button (speed adjustment button) without touching the trigger.
- > Press any of the "+" and "-" buttons to enter the activated mode, at this time the speed can be adjusted.

# 4.5 Sleep Mode

The tool will automatically enter the sleep mode if there is no action for 30 seconds.

Besides, you can switch the tool into sleep mode by pressing and holding either "+" or "-" button.

When the tool is in sleep mode, the battery indicator lights is off.

### 4.6 Activated Mode

In Activated Mode, the Left LED Displays the Battery Status:

- ✓ Green: Sufficient battery charge / light load.
- ✓ Yellow: Medium battery charge / medium load.
- ✓ Red: Low battery charge / heavy load.
- ➤ In activated mode, max rpm can be adjusted using the speed adjustment button. The rpm can be adjusted in steps of 4 000; 5 400; 6 800; 7 200; 8 600 and 10 000 rpm.
- > Speed memory function. Turn off the tool and turn it on again, the speed will be kept at the same level as before the tool was switched off.
- ➤ When sanding, always place the tool on the work surface before starting it. Always remove the tool from the work surface before stopping it. This will prevent gouging of the work surface due to excess speed of the abrasive.
- > After the sanding operation is finished, press the buttons on both sides of the battery pack and remove it.

# 4.7 Replacing the Backing Plate

- 1. Use the 10 mm open-end wrench provided with the product to secure the output shaft of the tool (NT09EC-406 does not require the use of a wrench)
- 2. Turn the backing plate counter clockwise to remove it.
- 3. Fit and tighten the new backing plate.

# WARNING!

Always remove the battery pack before maintenance! Only use original spare parts!

### 4.8 Cleaning

Use a soft brush to remove any accumulated dust. Wear safety glasses to protect your eyes while cleaning. If the body of the tool needs cleaning, wipe it with a soft damp cloth.

### WARNING!

Never use alcohol, petrol or other cleaning agent.

Never use caustic agents to clean plastic parts.



# 4.9 Charger Cleaning Instructions

Dirt and grease may be removed from the exterior of the charger using a cloth or soft non-metallic brush. Do not use water or any cleaning solutions.

# 5. BATTERY PACK AND CHARGER

- First read the safety instructions and then charge your battery pack according to the instructions. The following battery packs can be used with this tool:
  - NT09E-105 Li-ion Battery Pack (10.8 VDC, 2.5 Ah);
  - NT09E-106 Li-ion Battery Pack (10.8 VDC, 5.0 Ah).
     The use of any other battery packs may create a risk of injury and fire.
- For optimal charging capacity, the battery pack should be charged at an ambient temperature between 18 °C and 24 °C. To prevent damage to the battery pack, do not charge the battery pack where the air temperature is below 4 °C or above 40 °C.
- > A charger that is suitable for one type of battery pack may create a risk of fire when used with another type of battery pack. Battery packs can only be charged using ONETECH chargers:
  - NT09E-103 Rapid Charger (input 100-240 VAC, output 18 VDC, 3 A)
  - NT09E-104 Dual-Channel Simultaneous Rapid Charger (input 100-240 VAC, output 18 VDC, 3 A, 2 bay);
- > To ensure the longest possible battery life, please follow the recommendations below:
  - Store and charge your battery pack in a cool area. Temperatures above or below normal room temperature will shorten battery life.
  - Never store the battery pack in a discharged condition. Recharge it immediately after it has been discharged.
- > All battery packs gradually lose their charge. The higher the temperature, the quicker they lose their charge.
- ➤ If you store your tool for long periods of time without use, recharge the battery every month. This practice will prolong battery life.
- ➤ When the battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- ➤ Under abusive conditions, liquid may be ejected from the battery. Avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- > Do not use a battery pack or tool that has been damaged or modified in any way. Damaged or modified battery packs may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- > Do not expose the battery pack or the tool to fire or heat. Exposure to fire or temperature above 130 °C may cause explosion.

### 5.1 Charging Procedure

- > Connect the power cord to the charger, and then plug into an outlet before inserting the battery pack. All two charging lights will be on for two seconds and then turn off.
- > Insert the battery pack into the charger. The charging light will start to flash within 30 seconds.
- > During the charging process, the charging light will indicate the status as follows:
  - The green charging light will flash during the charging process.
  - Once the battery pack is fully charged, the green light will remain on continuously.

PLEASE NOTE! Charging times may be longer depending on the ambient temperature and condition of the battery pack.

# 5.2 Charger Diagnostics

The charger will indicate if:

- > The battery pack is overheated. All two charging lights will flash. Remove the battery pack and allow it to cool down for 15-30 min and re-insert.
- > A malfunction occurs in the battery or the charger. All two charging lights will flash. Remove the battery pack and allow it to cool down. Re-insert the battery pack into the charger. If two charging lights still flash, the battery or charger may require maintenance.



# 6. DISPOSAL CONSIDERATIONS

- > Observe applicable country-specific regulations regarding disposal and recycling of disused tools, packaging and accessories.
- ➤ EU only: Do not dispose of electric power tools with regular household waste. According to the EU Directive 2012/19/EC (on Waste Electrical and Electronic Equipment (also known as WEEE II) and its implementation under national law, electric tools that have reached the end of their service life must be collected separately and taken to an environmentally friendly and specially designed recycling facility.

# 7. SERVICE

# 7.1 Warranty Service

- 1. During the warranty period, the Seller shall only be held liable for any product defects in material or marksmanship. In such an event, the product shall be repaired at no charge. Any warranty claim of the part of the user must be accompanied with a proof of purchase and warranty card, a clear statement of the full name of the purchased product model, the product code indicated on the nameplate, the date of purchase. When returning the tool and accessories for warranty repair, they shall be inspected by the technical service centre in order to verify whether they are covered by the warranty.
- 2. During the warranty period, the following consumable parts are not covered by the warranty due to natural wear and tear in use:
  - Wear in service: commutator, bearing, bushing, gear, handle, shell, hose, hanger, hook, etc.;
  - Consumables: housing, polishing pads, backing plate, etc.
  - Non-warranty parts and maintenance labour costs are the responsibility of the user.
- 3. The warranty does not apply in the following cases:
- the user fails to present a valid warranty card and proof of purchase, or the information in the warranty card does not match the actual tool;
- the damage was caused by failure to operate, maintain and store the tool in accordance with the instructions for use;
- the damage was caused by dropping, water ingress, etc., due to improper use, storage or transportation of the tool;
- the damage was caused by failure to use original ONETECH parts;
- the user disassembled the tool on their own, or damage to the tool was caused in the process of repair, rebuilding,
   disassembly or maintenance at non-ONETECH authorized service points;
- the damage was caused by forcing the brake or exerting excessive pressure on the power tool when it is operated at high speed;
- the damage was caused by starting the power tool without reaching a constant speed or stopping it completely before it starts to process a work piece or change functions;
- the power tool is started without reaching a constant speed or not completely stopped, then use it to work or change the function resulting in damage;
- the power tool is operated in dusty or humid environments for long periods of time without timely maintenance due to the ingress of foreign objects;
- the damage is caused to the battery pack by frequent under-charging or under-discharging or by being hit or by unauthorized replacement of the charger plug.

ONETECH reserves the right to modify the above terms and conditions at any time without notice, and is entitled to the final interpretation of the above warranty terms.

Visit the official website www.onetech-tools.com for the latest product information.

### 7.2 EXEMPTION FROM LIABILITY

The manufacturer and his representative shall not be liable for any damage or lost profit due to an interruption in business caused by a malfunctioning or unusable product.

The manufacturer and his representative shall not be held liable for any damage which was caused by improper use of the power tool or by use of the power tool with products from other manufacturers.



# **8. DESCRIPTION OF SYMBOLS**



Before switching on the power tool, read the operating manual!



Wear eye protection.



Wear hearing protection.



Wear protective gloves.



Wear a dust mask.



Wear protective clothes.



Device is suitable for use indoors only. Store electric power tool in dry rooms.



Caution / Warning.



There is a risk of electric shock in case of incorrect use.



Only charge the battery pack at temperatures between 4 °C to 40 °C. Protect the battery pack from heat, e.g. from continuous exposure of sunlight and fire.



Do not throw device in the fire. There is a risk of explosion.



Do not expose the device to rain; keep the device away from water.



The product complies with the applicable European directives and an evaluation method of conformity for these directives was done.



The product complies with the applicable requirements.



The product complies with the applicable requirements.



The product complies with the applicable requirements.



Recycling can prevent the waste of potentially useful materials and reduce the consumption of fresh raw materials.

Do not dispose of electric power tools with regular household waste! Power tools must be collected separately and recycled in an environmentally friendly manner.

# **CE DECLARATION OF CONFORMITY**

We declare under our sole responsibility that the product described in the "Technical Specifications" section conforms to the following standards or normative documents:

- ✓ EN62841-1
- ✓ EN62841-2-4
- ✓ EN IEC 55014-1
- ✓ EN IEC 55014-2
- ✓ 2006/42/EC
- ✓ 2014/30/EU

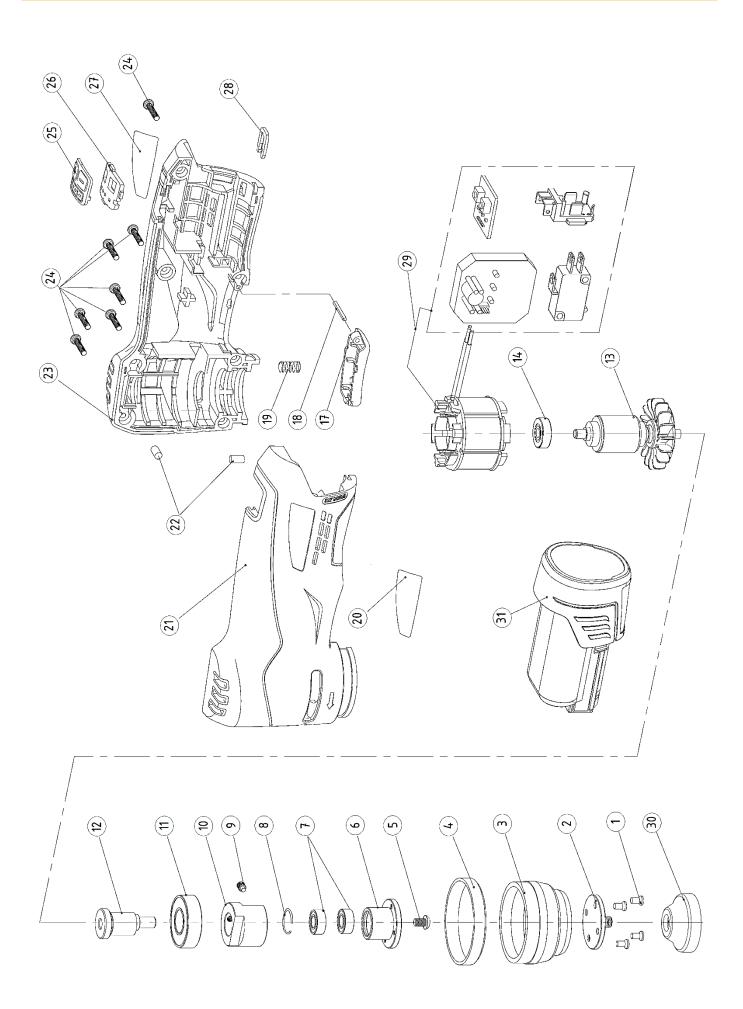


# <u>Parts</u>

No.	Description	Part No.	Q'ty
1.	Screw M3x6	NT09S-1383	4
2.	Backing Plate Support	NT09S-1384	1
3.	Swing Seat	NT09S-1385	1
4.	Retaining Ring	NT09S-1386	1
5.	Screw M4x6	NT09S-1387	1
6.	Bearing Seat	NT09S-1388	1
7.	Ball Bearing 686Z	NT09S-1389	2
8.	Circlip for Holes 13	NT09S-1390	1
9.	Screw M4x6	NT09S-1391	1
10.	Counterweight	NT09S-1392	1
11.	Ball Bearing 6001-2RS	NT09S-1334	1
12.	Eccentric Shaft	NT09S-1393	1
13.	Armature	NT09S-1394	1
14.	Ball Bearing 625-2RS	NT09S-1395	1
17.	Trigger	NT09S-1396	1

No.	Description	Part No.	Q'ty	
18.	Location Key	NT09S-1397	1	
19.	Spring 0.4x6x15	NT09S-1398	1	
20.	Brand Label	NT09S-1399	1	
21.	Housing (Left)	NT09S-1400	1	
22.	Rubber Key	NT09S-1344	2	
23.	Housing (Right)	NT09S-1401	1	
24.	Screw ST2.9x14	NT09S-1402	7	
25.	Switch Panel	NT09S-1403	1	
26.	Panel Support	NT09S-1404	1	
27.	Data Label	NT09S-1405	1	
28.	Clip	NT09S-1406	1	
29.	Stator-Controller Component	NT09S-1407	1	
30.	Backing Plate Ø 31 mm (1.25"), PSA	NT06-1001	1	
30.	Backing Plate Ø 31 mm (1.25"), Velcro	NT06-1002	1	
31.	Li-ion Battery Pack, 10.8 VDC, 2.5Ah	NT09E-105	1	
31.	Li-ion Battery Pack, 10.8 VDC, 5.0Ah	NT09E-106		







Other languages:





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www.onetech-auto.com

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