ELECTRIC BRUSHLESS

ORBITAL SANDER

NT09E-211

OPERATION MANUAL

ONETECH

Tools

ATTENTION! PLEASE READ THIS MANUAL BEFORE USING THE TOOL.

IMPROPER USE OF TOOL MAY CAUSE INJURY AND/OR PROPERTY DAMAGE!

ONLY QUALIFIED AND SPECIALLY TRAINED PERSONNEL FAMILIED WITH THESE INSTRUCTIONS IS ALLOWED TO USE AND MAINTENANCE OF THE TOOL.

Safety recommendations contained in present manual are in addition to general safety regulation in force in the region of tool usage, and do not replace it.

- **Risk of hit by moving parts.**
- **Increased noise and vibration level may occur.**
- **Risk of increased dust content in the air of working zone.**
- **Risk of fire and short circuit if the wire contacts source of fire and heat.**
- **Electric shock hazard.**





1. IMPORTANT SAFETY INSTRUCTIONS

WORK AREA SAFETY

- Keep work 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 create 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.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock
- If operating a power tool in a damp location is unavoidable use a residual current device (RCD) protected supply.

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 switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on 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 jewelry. Keep your hair and clothing away from moving parts. Loose clothes, jewelry 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 switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired
- Disconnect the plug from the power source and/or remove the battery pack, if detachable, 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 and accessories. 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.

SAFETY INSTRUCTIONS FOR SANDER

SAFETY INSTRUCTIONS FOR ALL OPERATIONS

- This power tool is intended to function as a sander. Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.
- Operations such as wire brushing or cutting and similar operations must not be performed with this power tool. Operations for which the power tool was not designed may create a hazard and cause personal injury.
- Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.
- The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.
- The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly, sized accessories cannot be adequately guarded or controlled.
- Threaded mounting of accessories must match spindle thread. For accessories mounted by flanges, the arbor hole of the accessory must fit the locating diameter of the flange. Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may loss of control.
- Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, backing pads for cracks, tear or excess wear. If power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged accessories will normally break apart during this test time.
- Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop apron capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtrating particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.
- Position the cord clear of the spinning accessory. If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.
- Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control.
- Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
- Regularly clean the power tool's air vents. The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- Do not operate the power tool near flammable materials. Sparks could ignite these materials.
- Never place your hand near the rotating accessory. Accessory may kickback over your hand.
- Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.

ADDITIONAL SAFETY WARNINGS

WARNING!

To reduce the risk of injury, when working in dusty situations, wear appropriate respiratory.

- 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 unreadable or missing, please contact ONETECH representative or service facility for assistance.

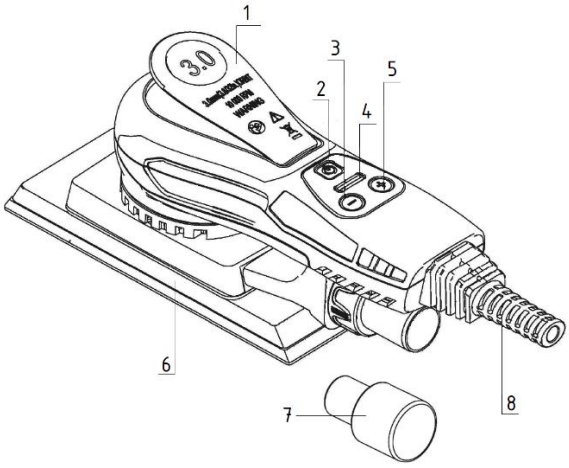
WARNING!

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 paint

– 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.

2. PRODUCT DESCRIPTION



1. Lever
2. On/Off Key
3. Speed Control (rpm «–»)
4. LED
5. Speed Control (rpm «+»)
6. Backing Pad
7. Connect Adaptor Ø35
8. Power Supply Cord (5 m.)

Technical Data

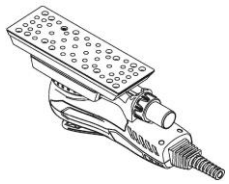
Model	Pad size, mm	Orbit, mm	Speed (no load), rpm	Vacuum mode	Protection class	Voltage, V ~	Power, W	Net weight, kg
NT09E-211	198 x 70	3	4 000 – 10 000	Central Vacuum	⧈	220 – 240 (50 Hz)	350	1.65

3. FEATURES AND INSTALLATION

3.1 Attaching and changing the sanding paper

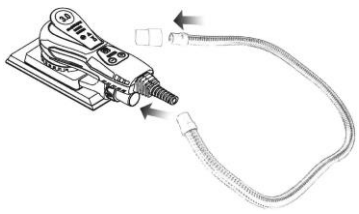
- Place the sanding paper in the center of the sanding pad and press on. The holes in the sanding paper must be in alignment with the holes in the sanding pad.
- For round sanding pad only: conduct a test run to check that the sanding disc is clamped in the center.

3.2 Replacing the backing pad



- Flip the sander over and place on a flat, level surface.
- Use the S6 wrench to unscrew the screw in the center of the disk counterclockwise.
- Remove the old pad and change to the new one.
- Tighten the screw clockwise.

3.3 Vacuum pipe installation



- Choose one end of the vacuum pipe, connected to the dust outlet of the machine.
- Choose another end of the vacuum pipe, connect with 35 mm adapter first, then connected with the vacuum cleaner.

4. OPERATING INSTRUCTIONS

Note! The sander can develop a torque reaction when started.

1. Make sure the sander is switched off. Select a suitable abrasive and secure it to the backing pad. Make sure the abrasive is centered on the backing pad.
2. Switch on the sander by pressing the «**On/Off**» button, The sander «**LED**» is now green.
3. The sander can now be started by pressing the lever.
4. The speed can be adjusted between 4 000 rpm and max by adjusting the position of the «**Lever**».

5. The max rpm can be adjusted by pressing **rpm «+»** or **rpm «–»**. Each press increases or reduces the speed by 1 200 rpm until it reaches the limits. The rpm can be adjusted in the range 4 000 to 10 000 rpm.
6. The tool has two speed control modes. In the default mode the speed can be adjusted linearly by changing the position of the «**Lever**». In the other mode the speed remains fixed at the set max rpm when the tool is running. When the **rpm «+»** and **rpm «-»** buttons are pressed simultaneously the tool toggles between the two controlling modes.
7. When sanding, always place the tool on the work surface before starting the tool. 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.
8. When sanding is finished, tum off the sander by pressing the «**On/Off**» button. The sander «**LED»** is now turned off.

5. MAINTENANCE AND CARE

WARNING!

Always disconnect the mains plug from the socket before performing maintenance work on the machine!

- Protect the tool from impact, shock and grease.
- Disconnect the plug before cleaning.
- Regularly clean the power tool and ventilation slots with air compressor. But not too close, or high-speed airstream damage internal parts. Do not attempt to clean ventilation slots by inserting pointed objects through openings.
- Do not bends the power cord at will. Check the power cord frequently and replace it in time if it is damaged.

6. TROUBLESHOOTING

Symptom	Possible cause	Solution
The sander **LED** shows normal, the **rpm «–»** and **rpm «+»** buttons are normal, but the switch does not work	Damaged Hall components.	Send machine back to after sales service, changing hall components.
After plugging in, no matter what button is pressed, the **LED** light will not light up.	Switch damaged.	Change switch components.
The **LED** light does not light up and the machine stops working.	Input voltage is lower than 170V ±10V, the machine enters low voltage protection.	Change to the right input voltage, above 180V and below 285V
The **LED1**, **LED3**, **LED5** light up, other lights off.	Input voltage is higher than 275V ±10V, the machine enters high voltage protection.	Change to the right input voltage, above 180V and below 285V
The **LED1**, **LED6** light up, other lights off	The three wires of the motor are loose or broken.	Send machine back to after sales service for repair.

7. DISPOSAL

To protect the environment and human, damaged power tools must be recycled or reused in an environmentally friendly manner!

1. Do not dispose of electric power tools in household waste! Recycle devices, accessories and packaging. Observe applicable country-specific regulations.
2. Before scrapping of machine, be sure to cut off the power cord so that the machine cannot be reused.
3. For more information on product recycling, consult your local government, waste treatment center or dealer.

8. WARRANTY SERVICE

1. During the warranty period, Seller is only due to material defects in the product or process problems caused by the failure to give free repair, the user required warranty must be presented with purchasing bills and warranty cards, clear statement of the full name of the purchased product model, the body of the nameplate on the product code, the date of purchase, while providing the machine and accessories requires warranty, and are authorized by the maintenance center to verify, or do not have warranty rights.
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, O-ring, etc.;

– consumables: power cord, plug, cable sheath, handle, housing, backing pad, etc.;

– non-warranty parts and maintenance labor costs are the responsibility of user;

3. The following are not covered under warranty:

– failure to present a valid warranty card and proof of purchase, or the information on the warranty card does not match the physical object;

– damage caused by failure to use, maintain and store the product in accordance with the instructions for use;

– damage caused by drooping, water ingress, etc., due to improper use, storage or transportation;

– damage caused by failure to use original ONETECH parts;

– the user disassembles, or causes damage by repairing, rebuilding, disassembling, or maintaining in non-ONETECH authorized service points;

– damage caused by forcing the brakes or exerting excessive pressure on power tools when they are operated at high speed;

– damage caused by starting a power tool without reaching a constant speed or stopping it completely before it starts to process a work piece or change functions;

– working in dusty or humid environments for long periods of time without timely maintenance due to the entry of foreign objects;

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

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

Exemption from liability

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

9. SYMBOLOGY

On the product, the rating label and within these instructions you will ynd among others the following symbols and abbreviations. Familiarize yourself with them to reduce hazards like personal injuries and damage to property.


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, slipresistant footwear.


Switch the product off and disconnect it from the power supply before assembly, cleaning, adjustments, maintenance, storage and transportation.


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


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


Caution / Warning.


This product is of protection class II. That means it is equipped with enhanced or double insulation.


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.


Recycling raw materials instead of waste disposal.

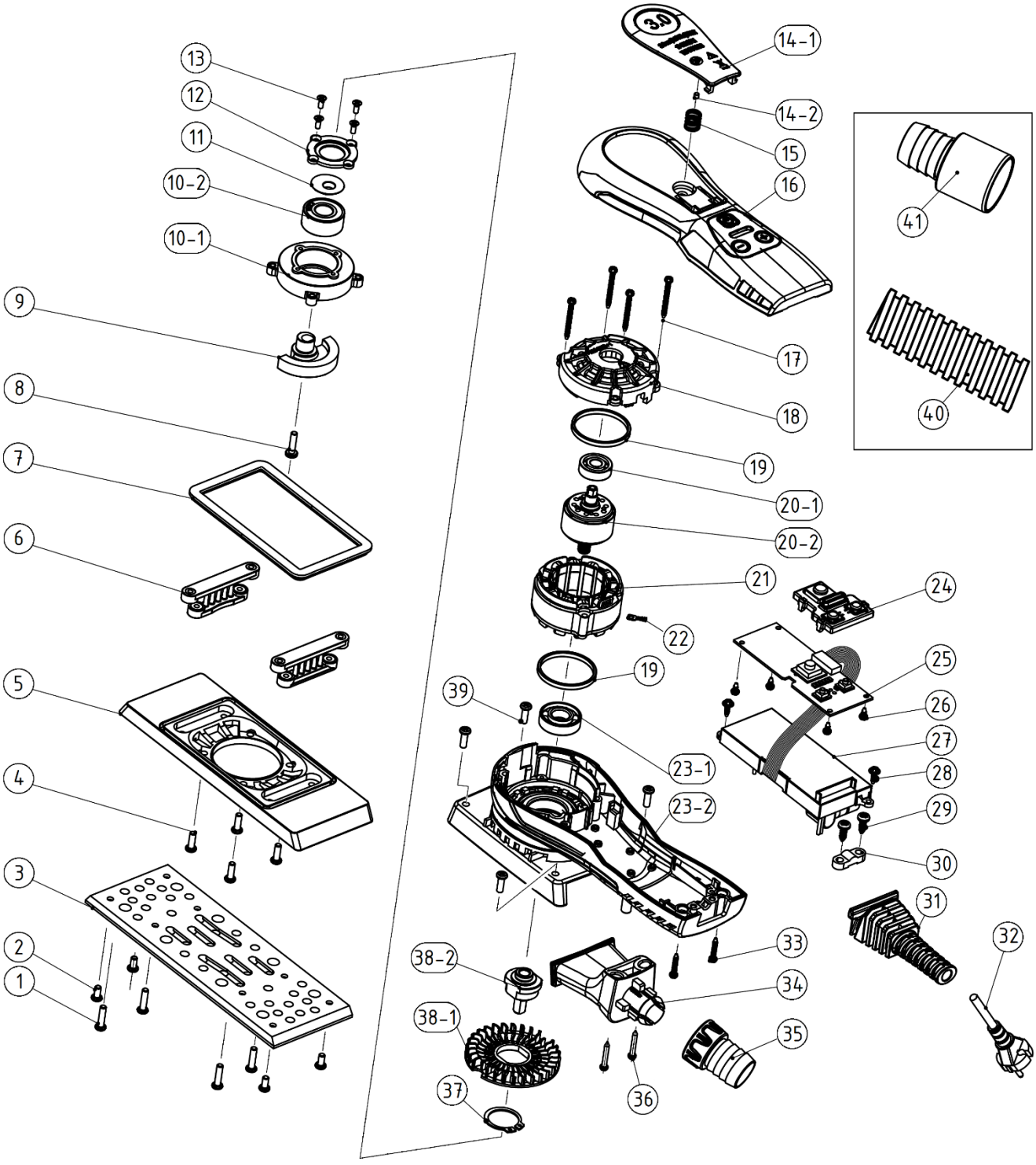

Do not throw the electric power tools into the household waste! Power tools must be collected separately and recycled in an environmentally friendly manner.

10. CE DECLARATION OF CONFORMITY

We declare under our sole responsibility that the product described under “Technical Data” conforms to the following standards or normative documents:

- ✓ **EN 62841-1;**
- ✓ **EN 62841-2-4;**
- ✓ **EN 61000-3-2;**
- ✓ **EN 61000-3-3;**
- ✓ **EN 55014-1;**
- ✓ **EN 55014-2;**
- ✓ **2014/30/EU;**
- ✓ **2006/42/EC**

11. SPARE PARTS POSITION DIAGRAM



No.	Description	Part No.	Q'ty
1.	Screw nail M4x16	NT09S-1507	4
2.	Screw M4x8	NT09S-1508	4
3.	Square sanding pad assy 198x70	NT06-8001	1
4.	Screw M4x12	NT09S-1509	4
5.	Square sanding pad base	NT09S-1540	1
6.	Swinging feet	NT09S-1541	2
7.	Rubber washer	NT09S-1542	1
8.	Pan head Screw M4x16	NT09S-1543	1
9.	Eccentric block (3 mm) assembly	NT09S-1544	1
10-1	Bearing base set	NT09S-1545	1
10-2	Bearing 63001RS	NT09S-1546	1
11.	Anti-dust cover	NT09S-1547	1
12.	Bearing cover	NT09S-1548	1
13.	Screw M3x8	NT09S-1549	4
14-1	Switch plate assy	NT09S-1550	1
14-2	Magnetic steel Ø 3x3	NT09S-1551	1
15.	Spring 16T Ø 8.6 × Ø 0.8×4-04	NT09S-1479	1
16.	Upper cover	NT09S-1552	1
17.	Screw ST3x30	NT09S-1481	4
18.	Rotor cover	NT09S-1482	1
19.	Dust-proof rubber gasket	NT09S-1483	2
20-1	Bearing 608.2RZ	NT09S-1553	1
20-2	Rotor assembly	NT09S-1554	1

No.	Description	Part No.	Q'ty
21.	Stator assembly	NT09S-1485	1
22.	Round buckle Ø 3.2	NT09S-1499	1
23-1	Deep groove ball Bearing 6001DU	NT09S-1555	1
23-2	Under cover	NT09S-1556	1
24.	LED light cover	NT09S-1557	1
25.	Switch controller	NT09S-1558	1
26.	Screw ST3x6	NT09S-1489	4
27.	PCB	NT09S-1559	1
28.	Screw ST3x10F(cap head 8)	NT09S-1497	2
29.	Screw ST4x16-F	NT09S-1560	2
30.	Cable plate	NT09S-1561	1
31.	Cable sleeve	NT09S-1562	1
32.	Rubber cable (5 m.)	NT09S-1563	1
33.	Screw	NT09S-1494	2
34.	Dust outlet connector	NT09S-1564	1
35.	Dust outlet adapter	NT09S-1492	1
36.	Screw ST3x20	NT09S-1491	2
37.	Circlip Ø 22	NT09S-1477	1
38-1	Fan	NT09S-1476	1
38-2	Output shaft	NT09S-1565	1
39.	Screw nail M4x12	NT09S-1566	4
40.	Dust hose (1 m)	NT09S-1501	1
41.	Dust adaptor Ø 35	NT09S-1502	1

NOTES

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