



Startup guide

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Thank you for choosing the Patmark to meet your marking and traceability needs. This manual contains detailed information to help you use your Patmark. Please read these instructions carefully and keep this document for future reference.

TOCHO MARKING SYSTEMS, Inc.

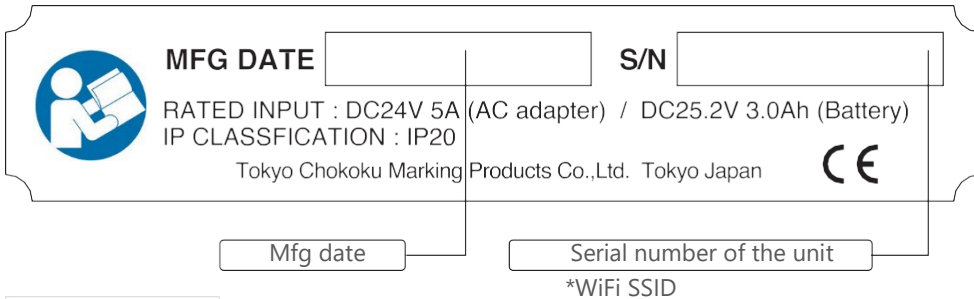
This is a translation of the original instruction in Japanese.

Introduction & Safety information

System requirements



Computer OS	Higher than Windows 10
Computer Memory	Higher than 8GB
CPU	Equal to or greater than Intel Core i5, the 10 th generation
Monitor Resolution	Higher than 1920×1080
Power supply	AC100V~240V 50/60Hz
Electricity Consumption	120W

Copy of the marking plate



General Safety Information

	<p>Beware of high temperature</p> <p>Prolonged continued use would heat up the solenoid. This will not affect the quality of marking. However, do not touch the area around the stylus pin or the solenoid with bare hands after continued use. In particular, refrain from using the system around small children. *Continued use (non-stop run) at marking force 99 (maximum power) causes the surface temperature to rise to approx. 130°C. Avoid non-stop marking for more than 60 minutes.</p>
	<p>Beware of loud noise</p> <p>Loud noise will occur when the marking force is set high or depending on material properties and the shape of the workpiece especially thin and hollow ones such as pipes. Therefore, always wear an ear plug when operating the system.</p>

	<p>Using near water and in a humid area is prohibited</p> <p>Patmark series are IP20 classification</p> <p>To prevent fire, electric shock, and damage, do not use the system around water. Also, do not touch the system with wet hands.</p>
	<p>Beware of unwearing property gears</p> <p>For your safety, wear a protection glass when operating the tool and wear PPE for hearing protection when operating the tool</p>

General Power Tool Safety Warnings

WARNING: Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire, and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refer to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

- a) Keep the work area clean and well lit.
Cluttered or dark areas invite accidents.
- b) 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.
- c) Keep children and bystanders away while operating a power tool.
Distractions can cause you to lose control.

Note : Not expected to use or produce under potentially explosive atmosphere, as well as toxic, corrosive, flammable and explosive substances. Not expected to use under ATEX.

2) Electrical safety

- a) 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.
- b) 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.
- c) Do not expose power tools to rain or wet conditions.

Water entering a power tool will increase the risk of electric shock.

- d) 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.
- e) 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.
- f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.
Use of an RCD reduces the risk of electric shock.

Note : The term "residual current device (RCD)" may be replaced by the term "grounded fault circuit interrupter (GFCI)" or "earth leakage circuit breaker (ELCB)".

3) **Personal safety**

- a) 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.
- b) Use personal protective equipment. Always wear eye protection.
Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injury.
- c) 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.
- d) Remove any adjusting key or wrench before turning the power tool on.
A wrench or key left attached to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all time.
This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.
Loose clothes, jewelry or long hair can be caught in moving parts.
- g) If devices are provided for the connections of dust extraction and collections facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

4) **Power tool use and care**

- a) 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.
- b) 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.
- c) 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.
- d) Store idle power tools out of the reach of children and do not allow people unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) 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.
- f) Keep cutting tools sharp and clean.
Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) 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.

5) **Service**

- a) 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 Information for the use of Patmark

1) **Properly manage the work space and keep children away.**

- a) Be sure to keep the work space clean and tidy at all times. Do not use the battery and the battery charger in a disorderly environment, as doing so could lead to an accident.

2) **Do not allow anyone not concerned with actual work, to touch the battery or the battery charger.**

- a) Allowing such person to touch the battery or the battery charger could result in injury (especially dangerous for small kids).
- 3) **When not in use, be sure to store and manage the battery and the battery charger in a proper manner.**
 - a) Be sure to store the battery and the battery charger in a dry environment that is out of the reach of children or can be locked, as not doing so could lead to an accident.
- 4) **Do not handle the power cord attached to the battery charger in a rough manner.**
 - a) Do not carry the battery charger around by grabbing the power cord or disconnect the battery charger from the power socket by pulling the power cord.
 - b) Do not bring the power cord near heat, oil, or any sharp edge.
 - c) Carefully select a space where the battery charger will be used, so that its power cord won't be damaged by being stepped on, getting caught, or otherwise being subjected to an excessive force.
 - d) Be sure to periodically inspect the power cord attached to the battery charger. If any damage is found, please contact the distributor to arrange replacement service.
 - e) If an extension cord is used with the power cord, be sure to periodically inspect it, and, if any damage is found, stop using it. Not following this precaution could cause an electric shock or a fire.
- 5) **If any abnormality is found, please contact the distributor to request inspection and repair service.**
 - a) Do not perform unauthorized disassembly or repair of the lithium-ion battery or the battery charger, as doing so would not only prevent them from performing at their full capacity but also could cause an accident or injury.



Safety precautions for the lithium-ion battery and the battery charger

- 1) **Please use the battery charger and lithium-ion battery that are specified for the equipment.**
 - a) Please use the battery charger and lithium-ion battery that are specified in the operation manual. Using any other type of battery charger or lithium-ion battery could cause the battery to explode and cause bodily injury or property damage.
- 2) **Recharge the battery correctly by following the proper procedure.**
 - a) The battery charger must be plugged into a power socket where the voltage is indicated (AC100V-240V). Do not use the battery charger with any DC power supply, engine generator, transformer, etc., as it could lead to overheating or cause a fire.

- b) Do not use the lithium-ion battery in a temperature below 0°C (32° F) or above 40°C(104°F), as it could cause an explosion or a fire.
 - c) Be sure to recharge the lithium-ion battery in a well-ventilated area. Do not cover up the vent holes on the lithium-ion battery or the battery charger. Not following these precautions could possibly cause an explosion or a fire.
 - d) If any smoke, foul odor, or other abnormality is detected while recharging the battery, immediately pull the power plug out of the power socket.
 - e) When not in use, be sure to keep the battery charger unplugged from the power socket. If any dust or dirt on the power plug or socket must be removed, be sure to wipe it off using a dry cloth. Not following this precaution could cause an electric shock or a fire.
- 3) **Do not cause a short circuit between the terminals on the lithium-ion battery.**
- a) If any foreign object that is made of a material that conducts electricity such as metal, comes in contact with the lithium-ion battery, a short circuit could occur to cause heat, smoke, or a fire. Therefore, be sure to follow the precautions below when storing the lithium-ion battery.
 - Keep any electricity-conducting material out of the storage case such as metal debris, nail, wire, copper line, etc.
 - To prevent a short circuit, be sure to keep the lithium-ion battery inserted into the marking equipment or store it in the battery cover.
- 4) **Use caution to avoid electric shock.**
- a) Do not touch the power plug of the battery charger with wet hands, as it could cause an electric shock.
- 5) **Please also pay attention to creating and maintaining a proper work environment.**
- a) Do not use the battery charger or lithium-ion battery in the rain or in a moist or wet environment, as it could cause an electric shock or smoke.
 - b) Make sure that that work space is well-lit, as working in a dark place could lead to an accident.
 - c) Refrain from using the product near inflammable liquid or gas, as it could cause an explosion or a fire.
 - d) When lightning is occurring, do not use the product and make sure that the power plug is pulled out of the power socket, as not doing so could lead to a fire or electric shock caused by a lightning strike.
 - e) Refrain from using or storing the product in a place where there is a large amount of dust or other fine particles. If any such particles or other foreign objects enter into the product, it could cause overheating, a fire, or other accident.

- 6) **Do not throw the lithium-ion battery into a fire.**
 - a) Do not subject the lithium-ion battery to excessive heat or high pressure by putting it into a microwave oven or high-pressure container, as doing so could cause a fire, explosion, or leakage of hazardous substances.
- 7) **Be careful when handling the lithium-ion battery and the battery charger.**
 - a) Do not drop the lithium-ion battery or the battery charger to the ground or otherwise subject it to a strong impact. Also, do not cause a large amount of shock to the lithium-ion battery by stabbing it with a nail, striking it with a hammer, stomping on it, throwing it onto a hard surface, dropping it to the ground, etc., as doing so could cause excessive heat, a fire, electric shock, etc.
 - b) Please do not use any lithium-ion battery that is apparently damaged or deformed significantly, as doing so could cause excessive heat, a fire, electric shock, etc.
 - c) Do not disassemble or modify the lithium-ion battery or the battery charger, as doing so could cause excessive heat, a fire, electric shock, bodily injury, or other accident.
- 8) **Be sure to follow the precautions specified below to prevent electrolyte leakage, heat, smoke, or ignition of the lithium-ion battery.**
 - a) Make sure that metal debris or dust does not accumulate on the lithium-ion battery. When not in use, do not keep the lithium-ion battery in an environment where dust may accumulate on it. Also, when storing the lithium-ion battery, remove any metal debris and dust that may have collected on it, and keep it away from any metal parts (screws, nails, etc.) so that they do not touch each other. Not following these precautions could result in a short circuit that could cause the battery to generate heat, ignite, or explode.
 - b) Do not directly connect the lithium-ion battery to a power socket or a cigarette lighter receptacle in an automobile.
 - c) Refrain from using the lithium-ion battery for any purpose other than to operate the marking equipment.
 - d) If any electrolyte leakage or foul odor from the lithium-ion battery is detected, immediately keep the battery away from any fire and stop using it. If the lithium-ion battery is left in a high temperature or other harsh environment, it could lead to electrolyte leakage.
 - e) Do not recharge the lithium-ion battery in a temperature below 0°C (32° F) or above 40°C(104°F), as doing so could cause an explosion or a fire.
 - f) Refrain from using the lithium-ion battery in an environment where strong static electricity exists.
 - g) Do not recharge, use, or store the lithium-ion battery in a high-temperature environment

such as near a fire or in the hot sun. Do not store the lithium-ion battery in a place where the ambient temperature could rise above 50°C(122°F) *i.e., in a steel box or inside an automobile during summer. Not following these precautions might not only lead to deterioration of the battery but also could cause smoke or a fire.

- h) If any abnormality such as a foul odor, heating, discoloration, and deformation is detected while using, recharging, or storing the lithium-ion battery, immediately stop using the battery and contact the distributor for a consultation.
- i) If any electrolyte leaked from the lithium-ion battery and gets into eyes, thoroughly wash the eyes using tap water or any clean water, without rubbing the eyes, and then quickly visit a doctor for treatment. Leaving the eye untreated after it has come into contact with battery electrolyte could possibly lead to vision disability.
- j) If any electrolyte leaked from the lithium-ion battery comes in contact with the skin or clothes, immediately wash it using tap water or other clean water. Not doing so could cause skin irritation.

Procedure for recharging the lithium-ion battery

1) **Check the electrical specification of the power socket.**

- 1) Check and make sure that the power socket that will be used is AC100V-240V. Use of any other type of power socket will cause the battery charger to become abnormally hot and malfunction. Also do not try to recharge the battery by connecting to DC power supply or a gasoline-powered generator.

2) **Connect the battery charger and the power cord, and then insert the power plug into the power socket.**

- a) LED lamp [OFF]







3) **Set the lithium-ion battery.**

Slide the battery all the way in through the insertion port of the battery charger.

- a) LED lamp [Red ON]: Recharging start.
- b) LED lamp [Green ON]: Recharging complete.

4) **Remove the lithium-ion battery.**

- a) Remove the power plug attached to the battery charger from the power socket.

LED indication patterns		
Color	Lamp status	Recharging status
No lit	 OFF	The power plug is inserted into the power socket.
Red	 Continuously Turned ON	The battery is being recharged.
Green	 Flashing	The battery has been recharged to a practically useable level (80%).
Green	 Continuously Turned ON	The battery has been fully recharged.
Orange	 Flashing	Waiting until it becomes ready for the recharging process (when the temperature of the lithium-ion battery is too high or low).
Red	 Flashing	Unable to recharge the lithium-ion battery (due to any abnormality with the battery, etc.).

Self-Protection function of the lithium-ion battery

The lithium-ion battery is equipped with a self-protection function to suspend the power output for the purpose of extending the life of the battery. If any of the following circumstances occurs when a Patmark series product is being used, the product could stop operating even when the switch is pressed down. However, this is simply a result of the self-protection function being turned on, and not a product malfunction.

- 1) **The marking operation stops when the remaining power in the battery becomes low.**
 - a) In this case, please swiftly recharge the battery.
- 2) **If the level of the load being put on the marking equipment becomes too high, it may stop working.**
 - a) In such case, let go of the switch for the time being, and remove the cause of the overload.
- 3) **If the lithium-ion battery becomes overheated, the marking equipment may stop its working.**
 - a) In such case, stop using the lithium-ion battery and remove it from the marking equipment. Then, let the battery cool down to a sufficiently low temperature in a well-ventilated area where there is no direct sunlight, etc.

Long-term storage of the lithium-ion battery

When the lithium-ion battery is left sitting without being used for an extended period of time, it could cause over discharge that might lead to deterioration or some sort of technical issue. Therefore, be sure to recharge the battery at least once every six months from the time it was last recharged, using the specified battery charger, even when the product won't be used for a long period of time. Not following this precaution could cause an abnormality with the battery due to over discharge.

Recycling of lithium-ion batteries

Lithium-ion batteries are the type of battery that can be recycled. Therefore, if there are any lithium-ion batteries that are no longer in use, please bring them to the distributor.

Noise prevention regulations

There are various regulations on noise management in the form of laws and prefectural ordinances, etc. Be sure to use the product while keeping the level of the noise being emitted below the regulation threshold not to disturb people in the surrounding area. If the circumstances require it, consider putting up sound insulation walls around where the work is performed.

Replacement of lithium-ion batteries

When replacing an old lithium-ion battery with a new one, be sure to use the product that is specified by Tocho Marking Systems, Inc. Using any other battery not specified by us (including use of a battery after unauthorized disassembly and modification) not only violates the warranty terms but also creates a condition where we are no longer able to offer any safety- or product-related warranty.

Lithium-ion battery and battery charger specifications

Lithium-ion battery	
Item name	BPL-2520A
Electrical specification	DC25.2V, 2.0Ah
Dimensions	76mm (3in) × 119mm (4.6in) × 64mm (2.5in)
Mass	450g (1lbs)
Recharge time	120 minutes
Protection function	Over-charge and over-discharge prevention function
Temperature range for product use	Recharge: 0°C (32° F) - 40°C(104°F) Discharge: -10°C(14°F) - 40°C(104°F)

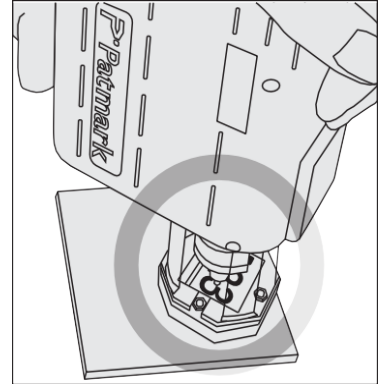
Battery charger	
Item name	BC0075G
Input voltage specification	AC100-240V
Recharge current specification	2A *During rapid charge
Protection function	Over-charge prevention function
Operating function	Cooling fan, LED indicator (three colors, six-level operation mode)
Dimensions	200mm (7.8in) × 130mm (5.1in) × 84mm (3.3in)
Mass	945g (2lbs)
Temperature range for product use	0°C (32° F) - 40°C(104°F)



Contains precautions against actions that are prohibited at all time. Negligence could result in death or serious injury.

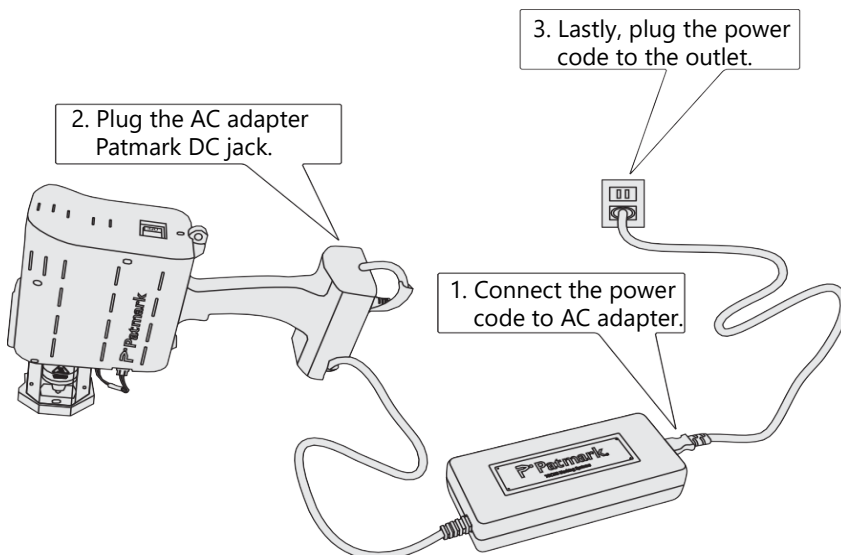
USING SYSTEM FOR PURPOSES OTHER THAN MARKING IS PROHIBITED

The Patmark series is a marking machine. Using the machine for purposes other than marking may result in unexpected accidents and injury, which will not be covered by the warranty.

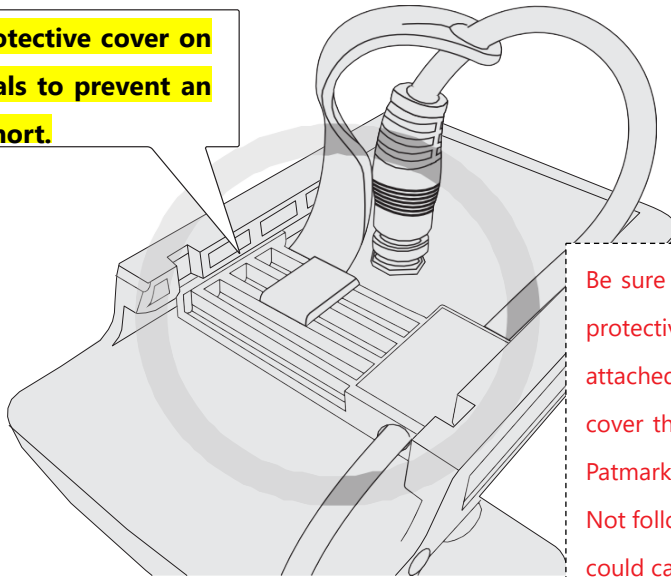


HANDLE POWER WITH CARE

When you connect the AC adapter to the Patmark, please follow the proper sequence by which it should be connected. Otherwise, static charge could be created in the DC output plug of the AC adapter, potentially resulting in electric shock or weak injury. Also, make sure the adapter's plug does not touch metal parts other than the Patmark's AC/DC jack.



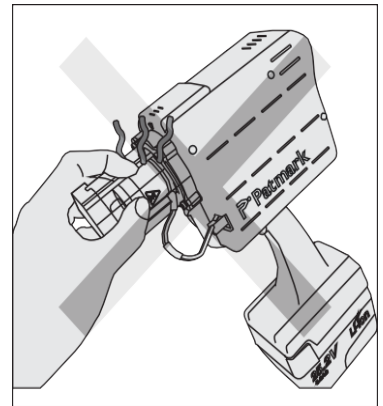
Use the protective cover on the terminals to prevent an electrical short.



Be sure to use the protective cover that is attached the AC adapter and cover the terminal on the Patmark before turning on. Not following these steps could cause a short circuit.

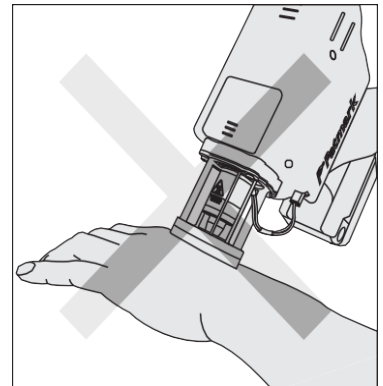
BEWARE OF HIGH TEMPERATURE

Prolonged continued use would heat up the solenoid. This will not affect the quality of marking. However, do not touch the area around the stylus pin or the solenoid with bare hands after continued use. In particular, refrain from using the system around small children. Continued use (non-stop run) at marking force 99 (maximum power) causes the surface temperature to rise to approx. 130°C. Avoid non-stop marking for more than 60 minutes.



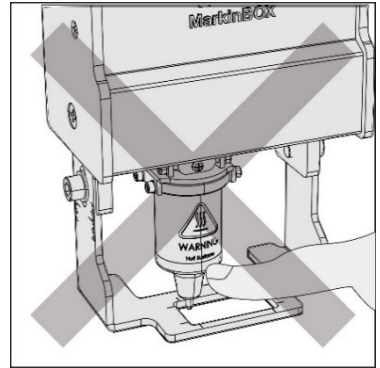
DO NOT PERFORM MARKING OPERATION ON A HUMAN OR ANIMAL

Performance of marking operation on any human or animal is strictly prohibited. Not obeying this rule would not only cause bodily harm but also could result in a critical condition. Especially avoid using and storing the product in a place that is accessible to small children.



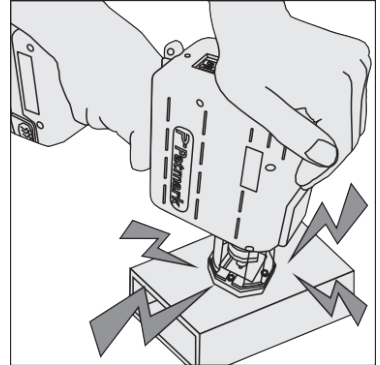
TAKE CARE NOT INJURY FINGER

The distance between the stylus pin and the workpiece is approximately between **0.1mm and 5mm**. Be careful not to get your finger stuck between the pin and the workpiece. In particular, refrain from using the system around small children.



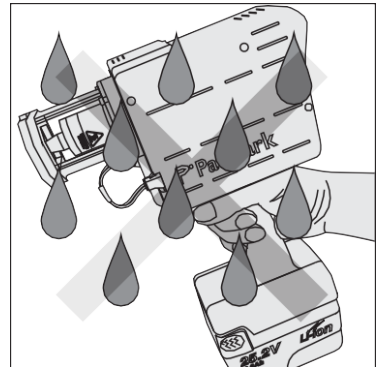
BEWARE OF LOUD NOISE

Loud noise will occur when the marking force is set high or depending on material properties and the shape of the workpiece especially thin and hollow ones such as pipes. Therefore, always wear an ear plug when operating the system.



USING NEAR WATER IN A HUMID AREA IS PROHIBITED

To prevent fire, electric shock, and damage, do not use the system around water. Also, do not touch the system with wet hands. Patmark series are IP20 classification.

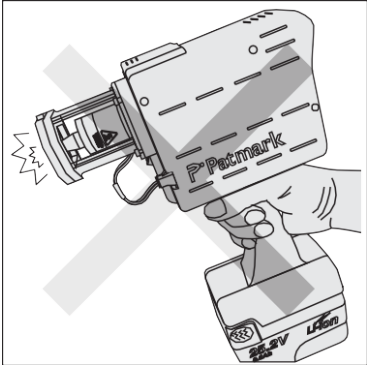




Contains precautions against actions that could result in injury and damage to the system if they are neglected.

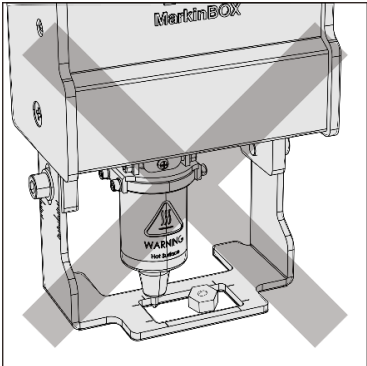
CHECK FOR WORKPIECE BEFORE MARKING

Do not conduct marking without a workpiece. Always set the workpiece so that the stylus pin touches the workpiece, including during the test run. Negligence could result in damage to the stylus pin.

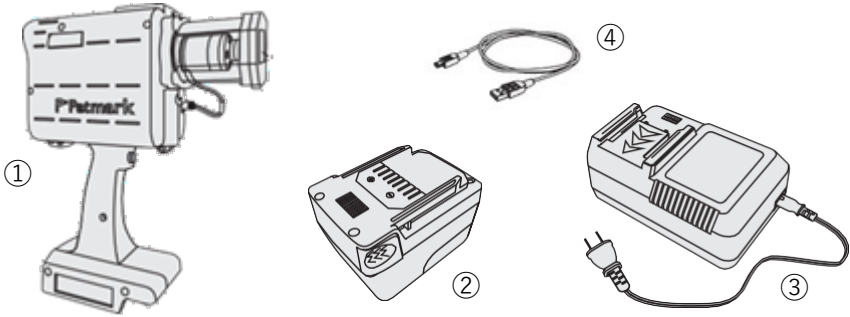


BEWARE OF ANY OBSTRUCTIONS

Patmark will operate automatically upon applying power. Because the stylus pin will automatically reposition itself to the origin, do not put objects in the marking area that would obstruct the stylus pin from repositioning. Negligence could result in damage to the system.



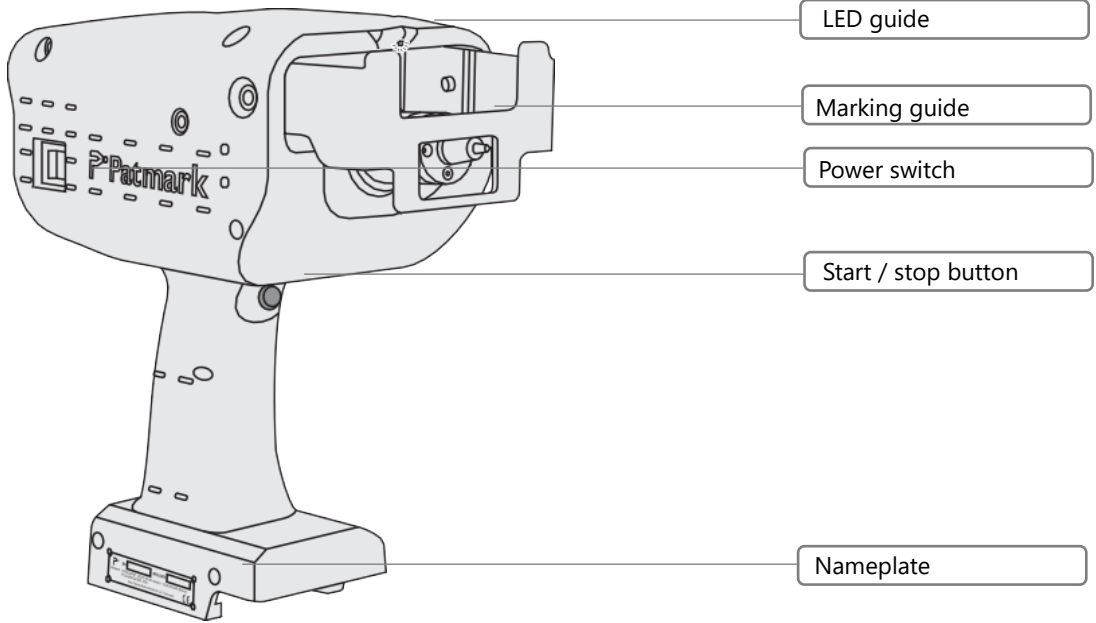
Contents in Patmark series (standard package) *Images may vary depending on the model.



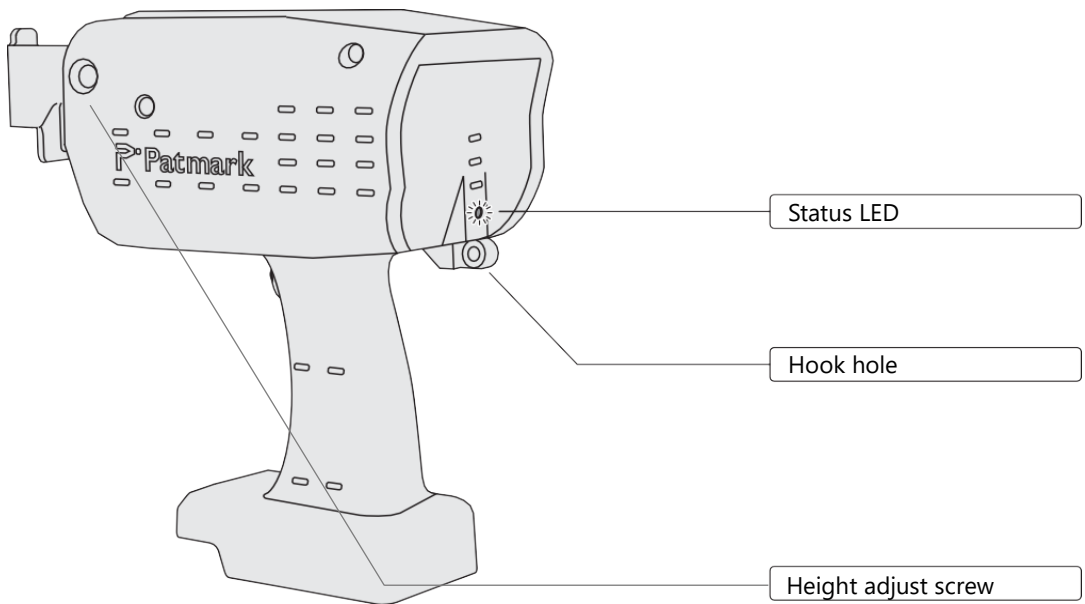
No.	Name	No.	Name
1	Marking head	3	Battery charger w/power code
2	Li-ion battery	4	USB cable - Type C

Names of the part *Images may vary depending on the model.

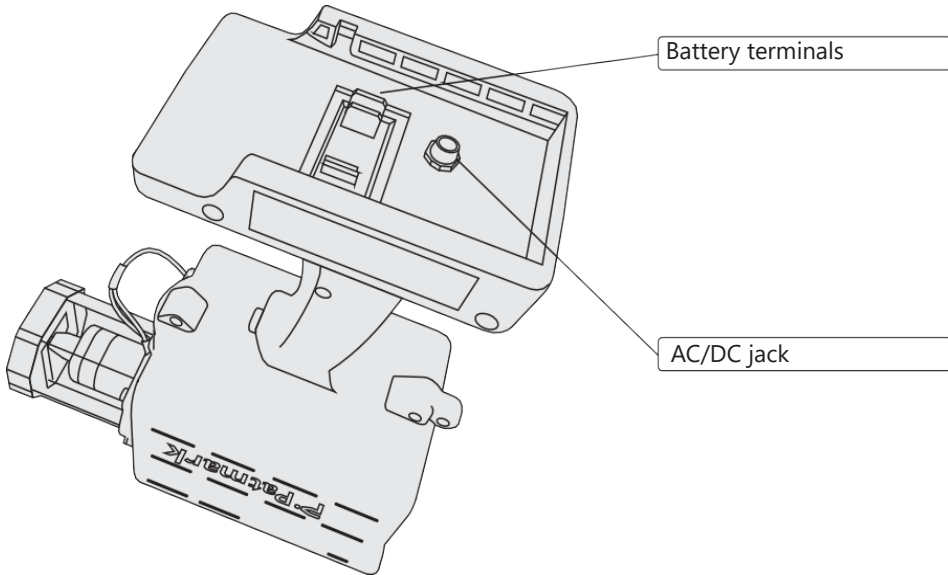
Left-side view



Right-side view

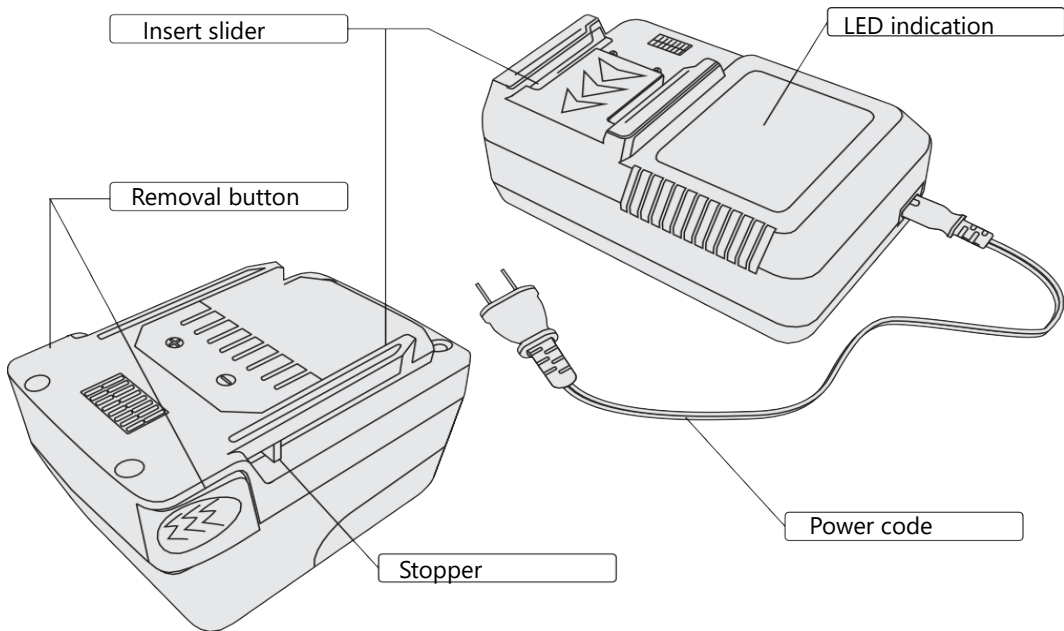


Bottom view

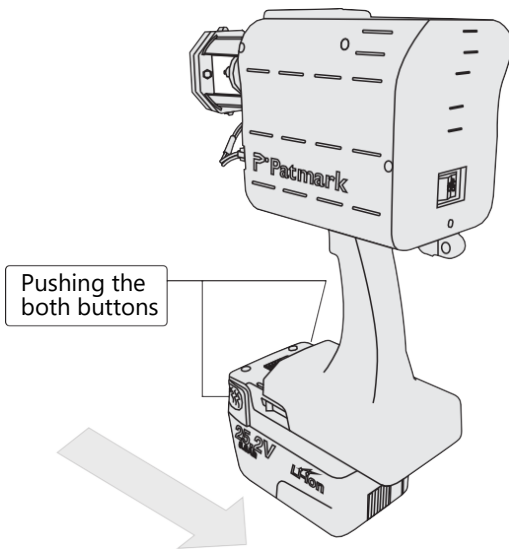


*No attach the AC/DC jack for Patmark-mini.

Li-ion Battery and Charger



Procedure for installing and removing the lithium-ion battery



Installation procedure

Slide the battery all the way until it makes a clicking sound.

Removal procedure

While pressing the battery removal buttons, slide the battery out in the opposite direction.

Start button on marking head

Start	Push the start button once after sending marking data.
Pause	Push the start button once during marking.
Restart	Push the start button once during pause.
Cancel	Holding down the start button 3 seconds during pause, pin will be back to original position.

LED lamps for indicating the status of the Patmark

Color	LED	Status
Blue	Continuously turned ON	Power in On (standby)
Blue	Flashing	Marking
Red / Green	Flashing alternatively	Error in returning to the original position
Red	Flashing	No marking data available
Red	Continuously turned ON	Setting error
Green	Flashing	No font available
Yellow	Flashing	Low battery

Installation

1. Download the sketchbookDuo software

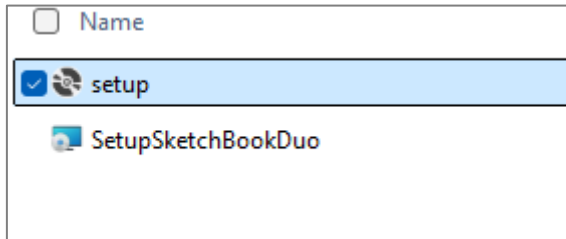
Access the following website and download the latest version software.

<https://www.tokyo-chokoku.co.jp/en/software/>

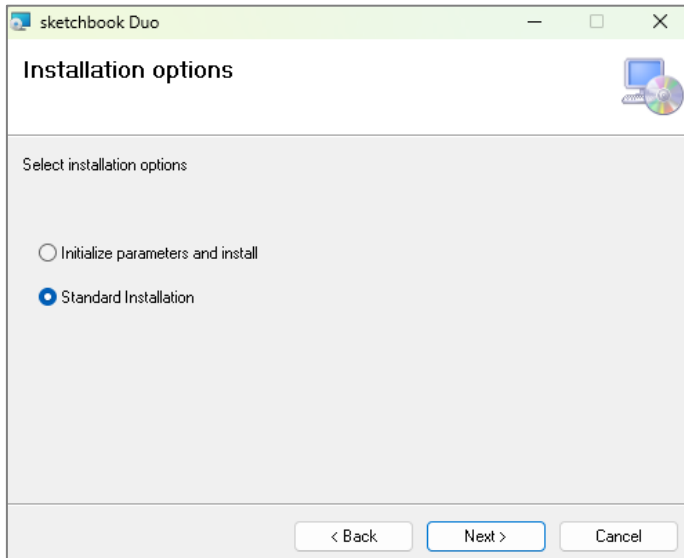


2. Install into the computer

Following unzipping, click the [Setup] application to start the installation. **You should unzip the folder and start the installation.**



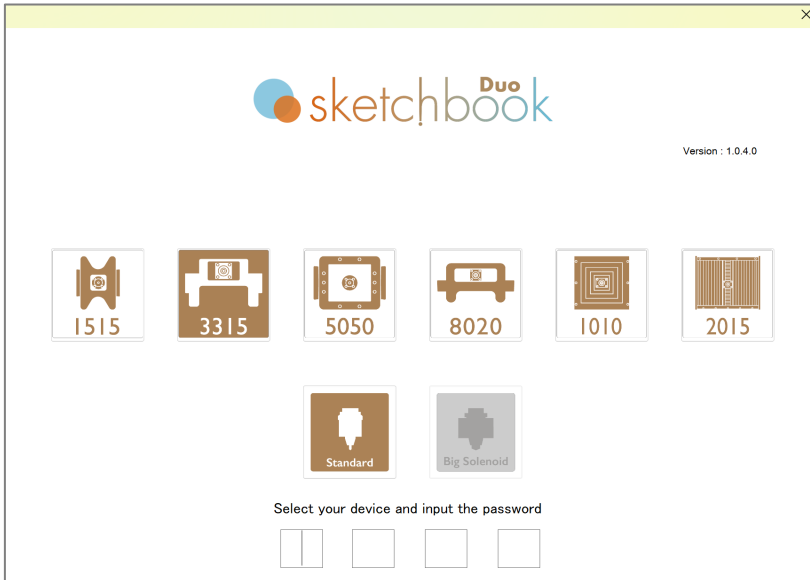
The following screen shows the installation option. If this is the first time to install, leave the default setting with "Standard Installation". If you are already a user and want to keep the saved parameters, font file etc., select "Standard Installation.". "Initialize parameters and install" will reset all saved data.



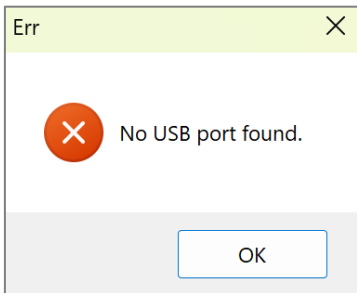
3. Start sketchbookDuo

Turn on the power on the Patmark. Then connect the USB cable to the PC and the Patmark and double-click the sketchbookDuo icon on the desktop to start the software. When the startup screen appears below, select the model and solenoid type, and enter the initial

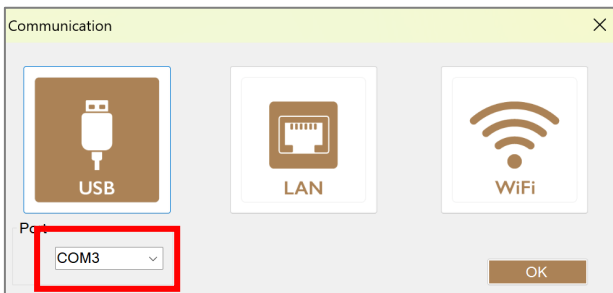
password [0000]. then



If the error message below appears, click "OK" and then reinsert the USB cable.



Go to "Communication" on the menu bar, and click "USB" as shown below, select the "Port number," and then click the "OK" button to connect.



*Port No. will vary depending on your PC environment.

WiFi communicaiton

To connect via WiFi (peer-to-peer), connect to the SSID "PM2-XXXXX" (the last five digits displayed

on the nameplate)" displayed in the device's WiFi list, and click the WiFi icon on the communication selection screen. You can make detailed settings in "Preferences" → "Communication".

Confirm the software version

Go to "Preferences" → "Information" to confirm the software version.

Uninstall sketchbookDuo

If you want to uninstall sketchbookDuo software, follow the steps below.

1. Close the sketchbookDuo software.
2. On your PC settings, select "Apps" → "Installed apps" → "sketchbookDuo" and select "Uninstall".
3. Go to the C drive and delete the "TOCHOMARKING" folder, which saved all created data and files.

Maintenance and inspection



When conducting maintenance, inspection and parts replacement, switch off the Patmark and remove the plug from the power socket without fail.

1. Inspection of tightening screws

Check for any loose screws. Retighten if there is any looseness.

2. Care after use

Wipe away any oil and grease stains and keep in a good condition for use. Wipe main unit with a dry cloth. Do not use gasoline, thinner or petroleum for cleaning, otherwise the main unit could be damaged. Concerning maintenance around pins and pin holders, refer to the "maintenance manual".

3. Storage after work

Store in a dry place away from high temperatures and high humidity. Do not store within reach of children or where there is a risk of falling.

Concerning overseas use of products purchased in Japan

We have prescribed the following regulations concerning cases where our products that have been purchased in Japan are used overseas. We would appreciate your understanding upon confirming these contents in advance.

1. Issue or failure occurring in a product purchased in Japan will be handled inside Japan. Please send it to our support desk via the dealer of purchase. If this occurs within one year of purchase, we will handle the problem free of charge, however, please understand that you

will be charged for transportation, customs or other incidental expenses, even if the warranty period is still in effect.

2. Following repair, we will send the product back to the place of purchase in Japan. Please understand that we do not make overseas deliveries.
3. If you wish to receive repair or other support from an overseas local agent due to circumstances, please understand that this will be charged, even if it is within the warranty period.
4. If you are using the product in a country that does not have a local agent of our company, problems can only be handled inside Japan. Please send it to our support desk via the dealer of purchase. If this occurs within one year of purchase, we will handle the problem free of charge, however, please understand that you will be charged for transportation, customs or other incidental expenses, even if the warranty period is still in effect.
5. Overseas local agents are sometimes subject to revision without prior notice. Please either confirm on our company's website or inquire at our sales department in advance.

Warranty

1. If the unit fails while in normal use according to the manual or service manual, etc., free repairs will be provided during warranty period. Please request repair at your store of purchase or our support desk.
2. Repairs will be charged in the following cases, even if they occur during the warranty period:
 - Failure and damage arising from wrong usage, remodeling or improper repair
 - Dropping after purchase or failure and damage arising during transportation
 - Failure and damage arising from fire, earthquake, flooding, lightning strike, other natural disasters, abnormal voltage and so on
 - Replacement of consumption parts (See appendix 2 Spare Parts List)

Model		S/N Marking Head	
Ship date			
Warranty Period	1 year		

Inquire about items

Please contact our distributor if you have an inquiry for operation and malfunction.

Manufacturer information:

Company : Tocho Marking Systems, Inc.

Address : 87-378 Yachimata-Ro, Yachimata, Chiba, Japan 289-1144

Tel : +81-43-308-4301 Fax : +81-43-308-4302

URL : <http://www.tokyo-chokoku.co.jp>

Tech & support

YouTube



Contact us



Appendix 1 : Distance between the stylus pin and the workpiece

The distance between the stylus pin and the workpiece will vary according to the material properties of the workpiece and the marking force. Always do a trial marking run and use the proper settings (marking force and distance).

Standard Solenoid		Gap between pin and workpart (mm)									
		~	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
Force	~9	△	○	○	○	△	△	×	×	×	×
	10~19	△	△	○	○	○	△	△	×	×	×
	20~29	△	△	○	○	○	○	○	△	×	×
	30~39	△	△	△	○	○	○	○	○	△	△
	40~49	△	△	△	○	○	○	○	○	○	△
	50~59	△	△	△	○	○	○	○	○	○	△
	60~69	△	△	△	△	○	○	○	○	○	○
	70~79	△	△	△	△	○	○	○	○	○	○
	80~89	△	△	△	△	△	○	○	○	○	○
	90~99	△	△	△	△	△	○	○	○	○	○

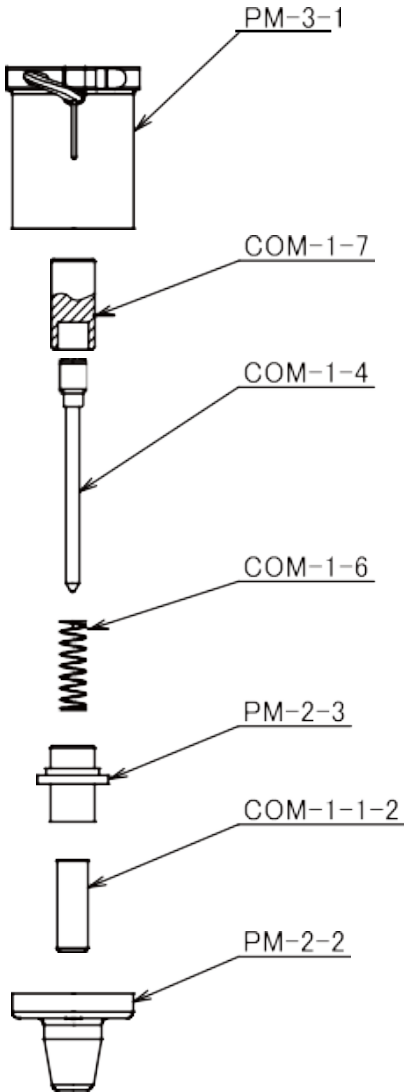
*The above is set speed 30.

○: recommended △: able to mark ×: cannot mark

Appendix 2 : Spare parts list

Please change the following consumption parts when you got some quality problems.

[Standard solenoid]



No.	Name
PM-3-1	Solenoid Assy
COM-1-7	Hammer
COM-1-4	Stylus Pin
COM-1-6	Spring
PM-2-3	Pin Guide
COM-1-1-2	Socket Bush
PM-2-2	Pin Holder

Tocho Marking Systems, Inc.

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