

# 1. Precautions

The cautions below are items needed to keep in mind when maintaining and servicing.

Please read carefully and keep the contents in mind to prevent accidents while servicing and to prevent the machine from getting damaged.

## 1.1 Safety Warning

(1) Request service by qualified service person.

Service for this machine must be performed by a Qualified service person. It is dangerous if unqualified service personnel or users try to fix the machine.

(2) Do not rebuild.


Do not attach or change parts discretionary. Do not disassemble, fix or rebuilt it. If so, printer will abnormally work and electric shock or fire may occur.

(3) Laser Safety Statement

The Printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR, chapter 1 Subchapter J for Class 1(1) laser products, and elsewhere, is certified as a Class I laser product conforming to the requirements of IEC 825.

Class I laser products are not considered to be hazardous. The laser system and printer are designed so there is never any human access to laser radiation above a Class I level during normal operation, user maintenance, or prescribed service condition.

**Warning** >> *Never operate or service the printer with the protective cover removed from Laser/Scanner assembly. The reflected beam, although invisible, can damage your eyes. When using this product, these basic safety precautions should always be followed to reduce risk of fire, electric shock, and injury to persons.*



**CAUTION** - INVISIBLE LASER RADIATION WHEN THIS COVER OPEN. DO NOT OPEN THIS COVER.

**VORSICHT** - UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.

**ATTENTION** - RAYONNEMENT LASER INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.

**ATTENZIONE** - RADIAZIONE LASER INVISIBLE IN CASO DI APERTURA. EVITARE L'ESPOSIZIONE AL FASCIO.

**PRECAUCION** - RADIACION LASER IVISIBLE CUANDO SE ABRE. EVITAR EXPONERSE AL RAYO.

**ADVARSEL.** - USYNLIG LASERSTRÅLNING VED ÅBNING, NÅR SIKKERHEDSBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLNING.

**ADVARSEL.** - USYNLIG LASERSTRÅLNING NÅR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN. UNNGÅ EKSPONERING FOR STRÅLEN.

**VARNING** - OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRakta EJ STRÅLEN. STRÅLEN ÄR FARLIG.

**VARO!** - AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASER-SÄTEILYLLE ÄLÄ KATSO SÄTEESEEN.

**注意** - 严禁揭开此盖, 以免激光泄露灼伤

**주의** - 이 덮개를 열면 레이저광에 노출될 수 있으므로 주의하십시오.

## 1.2 Safety Caution

### 1.2.1 Noxious Material Precaution

The toner in a printer cartridge contains a chemical material, which may harm human body if it is swallowed. Please keep children out of reach of the toner cartridge.

### 1.2.2 Electric Shock or fire Precaution

It is possible to get electric shock or burn by fire if you don't follow the instructions of the manual.

- (1) Use exact voltage. Please use an exact voltage and wall socket. If not, a fire or an electric leakage can be caused.
- (2) Use authorized power cord. Do use the power cord supplied with PRINTER. A fire can happen when over current flows in the power cord.
- (3) Do not insert many cords in an outlet. A fire can be occurred due to flow over current in an outlet.
- (4) Do not put water or extraneous matter in the PRINTER. Please do not put water, other liquid, pin, clip, etc. It can cause a fire, electric shock, or malfunction. If this occurs, turn off the power and remove the power plug from outlet immediately.
- (5) Do not touch the power plug with wet hand. When servicing, remove the power plug from outlet. Do not insert or take off it with wet hand. Electric shock can be occur.
- (6) Caution when inserting or taking off the power plug. The power plug has to be inserted completely. If not, a fire can be caused due to poor contact. When taking off the power plug, grip the plug and take it off. If grip the line and pull over, it could be damaged. A fire or electric shock could happen.
- (7) Management of power cord. Do not bend, twist, or bind it and place other materials on it. Do not fix with staples. If the power cord gets damaged, a fire or electric shock can happen. A damaged power cord must be replaced immediately. Do not repair the damaged part and reuse it. A repaired part with plastic tape can be cause a fire or electric shock. Do not spread chemicals on the power cord. Do not spread insecticide on the power cord. A fire or electric shock can be happen due to thinner(weak) cover of the power cord.
- (8) Check whether the power outlet and the power plug are damaged, pressed, chopped, or blazing fire or not. When such inferiorities are found, repair it immediately. Do not make it pressed or chopped when moving the machine.
- (9) Caution when there is thundering or lightning, and being flash of lightening. It causes a fire or electric shock. Take the power plug off there is thunder. Do not touch cable and device when thundering and flash of lightning.
- (10) Avoid the place where is moisture or has dust. Do not install the printer where lots of dust or around humidifier. A fire can occurred. A plug part need to clean well with dried fabric to remove dust. If water drops are dripped on the place covered with dust, a fire can occurred.
- (11) Avoid direct sunlight. Do not install the printer near window where direct contacts to the sunlight. If the machine contacts sunlight long time, the machine cannot work properly because inner temperature of the machine is getting hotter. A fire can occur.
- (12) Turn off the power and take off the plug when smoke, strange smell, or sound from the machine. If you keep using it, a fire can be occurred.
- (13) Do not insert steel or metal piece inside/outside of the machine. Do not put steel or metal piece into a ventilator. An electric shock could happened.

### 1.2.3 Handling Precautions

If you ignore this information, you could harm machine and could be damaged.

- (1) Do not install it on different levels, or slanted floor.  
Please confirm whether it is balanced or not after installation. If it is unbalanced, an accident can be happened due to the machine falling over.
- (2) Be careful not to insert a finger or hair in the rotating unit.  
Be careful not to insert a finger of hair in the rotating unit (motor, fan, paper feeding part, etc) while the machine is operating. Once it happens, you could be harmed.
- (3) Do not place a pot containing water/chemical or small metals. If they got caught into the inner side of machine, a fire or electric shock can be occurred.
- (4) Do not install it where lots of moisture or dust exists or where raindrop reaches. A fire or electric shock can be caused.
- (5) Do not place a candlelight, burning cigarette, and etc. on the machine. Do not install it near to heater. A fire can be occurred.

### 1.2.4 Assembly/Disassembly precaution

When replacing parts, do it very carefully. Memorize the location of each cable before replace parts for reconnecting it afterwards. Do memorize. Please perform the steps below before replace or disassembly the parts.

- (1) Check the contents stored in the memory. All the information will be erased after replacing main board.  
The information needed to keep has to be written down.
- (2) Before servicing or replacing electric parts, take off a plug.
- (3) Take off printer cables and power cord connected to printer.
- (4) Do use formal parts and same standardized goods when replacing parts. Must check the product name, part cord, rated voltage, rated current, operating temperature, etc.
- (5) Do not give an over-force when release or tighten up the plastic parts.
- (6) Be careful not to drop the small parts such as screws in the printer.
- (7) Be careful not to change the location of small parts such as screws when assembling and disassembling.
- (8) Do remove dust or foreign matters completely to prevent fire of tracking, short, or etc.
- (9) After finished repair, check the assembling state whether it is same as before the repair or not.

## 1.3 ESD Precautions

Certain semiconductor devices can be easily damaged by static electricity. Such components are commonly called “Electrostatically Sensitive (ES) Devices”, or ESDs. Examples of typical ESDs are: integrated circuits, some field effect transistors, and semiconductor “chip” components.

The techniques outlined below should be followed to help reduce the incidence of component damage caused by static electricity.

*Caution >>Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.*

1. Immediately before handling a semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, employ a commercially available wrist strap device, which should be removed for your personal safety reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ESDs, place the assembly on a conductive surface, such as aluminum or copper foil, or conductive foam, to prevent electrostatic charge buildup in the vicinity of the assembly.
3. Use only a grounded tip soldering iron to solder or desolder ESDs.
4. Use only an “anti-static” solder removal device. Some solder removal devices not classified as “anti-static” can generate electrical charges sufficient to damage ESDs.
5. Do not use Freon-propelled chemicals. When sprayed, these can generate electrical charges sufficient to damage ESDs.
6. Do not remove a replacement ESD from its protective packaging until immediately before installing it. Most replacement ESDs are packaged with all leads shorted together by conductive foam, aluminum foil, or a comparable conductive material.
7. Immediately before removing the protective shorting material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
8. Maintain continuous electrical contact between the ESD and the assembly into which it will be installed, until completely plugged or soldered into the circuit.
9. Minimize bodily motions when handling unpackaged replacement ESDs. Normal motions, such as the brushing together of clothing fabric and lifting one’s foot from a carpeted floor, can generate static electricity sufficient to damage an ESD.