



Escalator Handrail Sterilizer

REN Clean
Escalator Cleaning Tools

UVC Sterilizer

Patent Number 10-0960216-00-00



- 01 Purpose
- 02 Escalators and moving walks installation facility
- 03 Configuration of sterilization equipment
- 04 Principle of operation of sterilizer
- 05 Advantage of sterilization management
- 06 Features of sterilization equipment
- 07 Effects

ESCALATORS
AND MOVING WALKWAYS INSTALLATION FACILITY



Tempered glass type

Such as Hospitals, Department Stores, Shopping Malls, Subway Stations etc.



It is installable anywhere
as long as the escalators
and moving walks are there.

Stainless steel type

External environment, such as a subway station.





Airports



Hospitals



Department stores & shopping malls



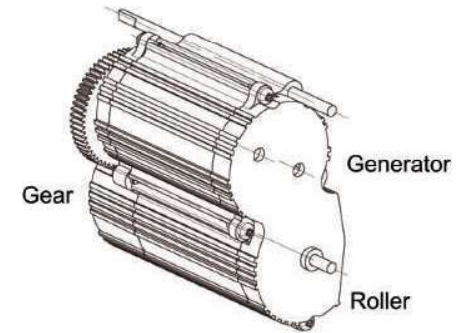
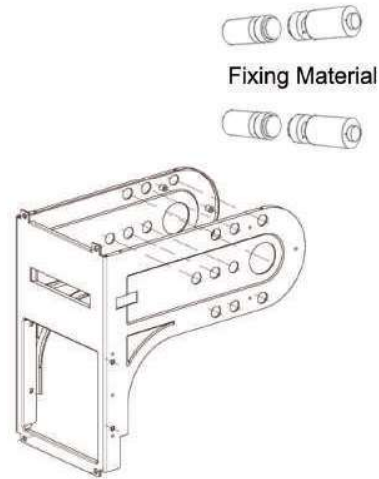
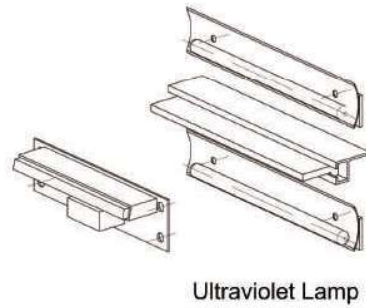
Subway Stations

CONFIGURATION OF
STERILIZATION EQUIPMENT



Black or White Color
Simple Design
Cover

Simple cover design and device
composed of a lamp,
housing, and power supply.



'L' shape can protect
the internal devices.

COVER

Sterilizes various types of bacteria
that inhabits the handrail.

ULTRAVIOLET LAMP

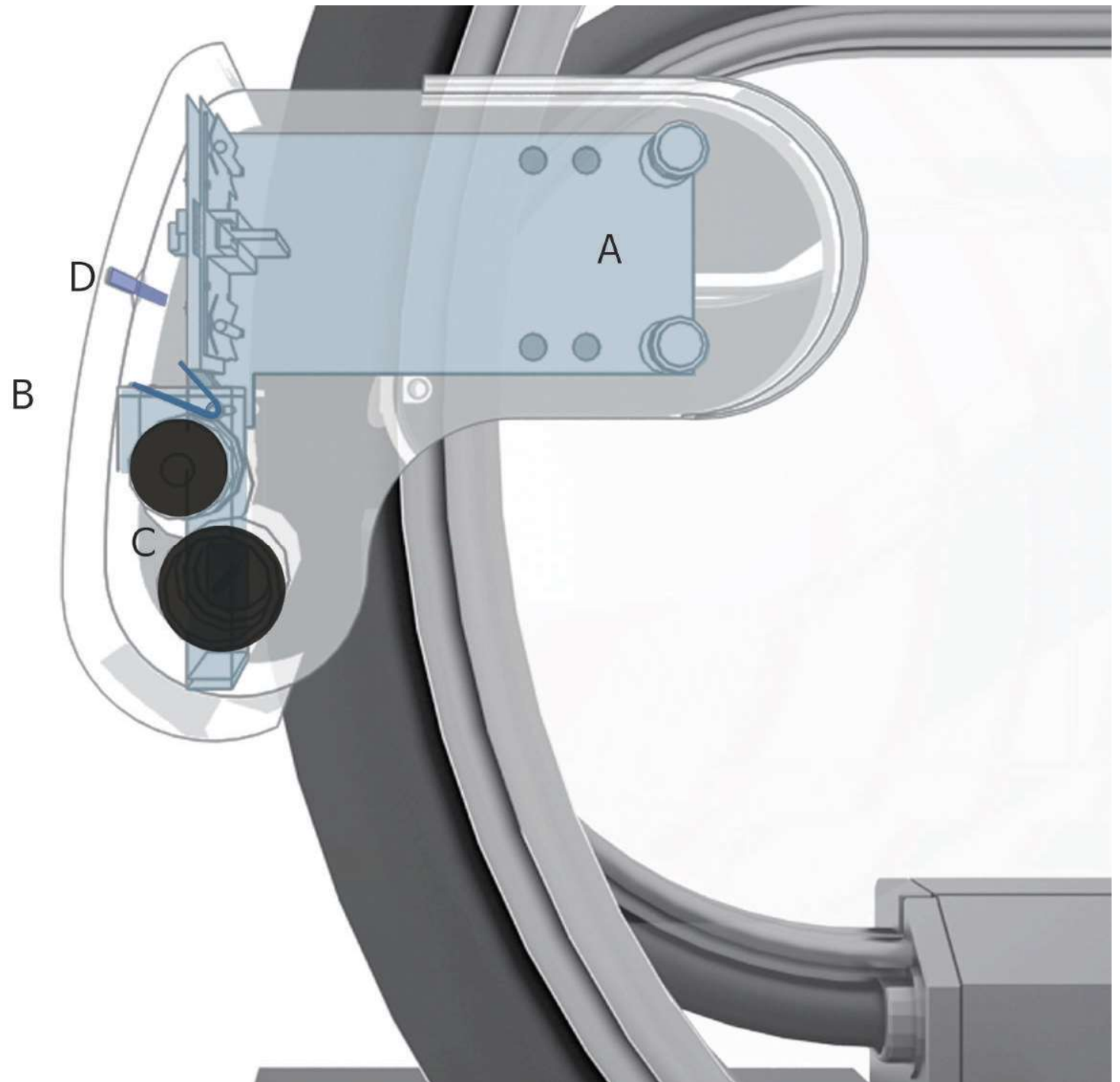
It is engaged with a fixed frame of the
handrail through the pressure.

HOUSING

Converts the rotational motion
of the handrail into electricity.

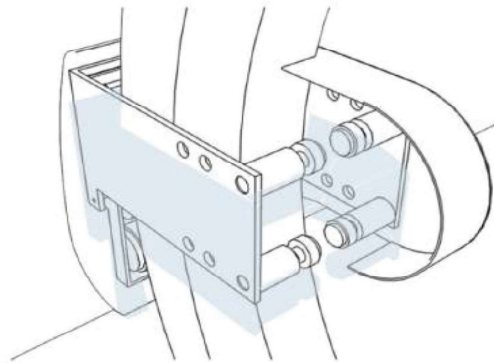
POWER

PRINCIPLE OF
OPERATION OF STERILIZER



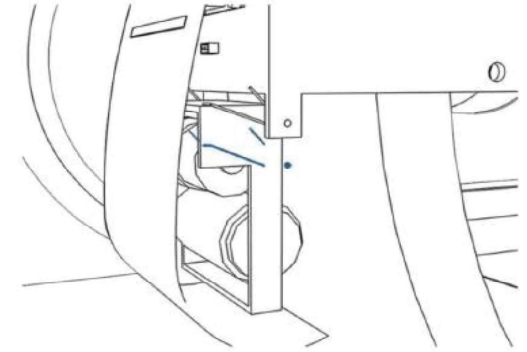


PRINCIPLE OF OPERATION OF STERILIZER



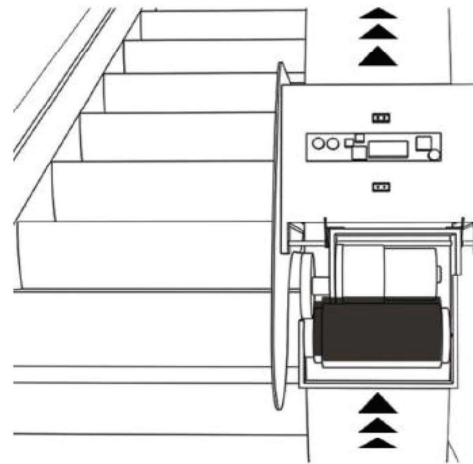
A

The main body is fixed to the balustrade of the moving walks.



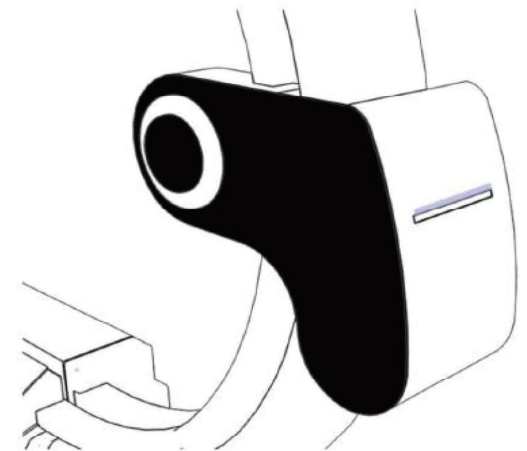
B

The torsion spring makes roller contact at a constant pressure on the handrail.



C

The rear roller and the handrail's rotational force, generates power.



D

The generated power activates the UV germicidal lamp and operation indicator.

ADVANTAGE OF
STERILIZATION MANAGEMENT



LIGHTWEIGHT

Easy to use with **lightweight device**.

01

SIMPLIFICATION OF THE STRUCTURE

Excellent maintain to **simplify the structure**.

02

LIFE OF GERMICIDAL LAMP 10,000 HOURS OR MORE

More than 10,000 hours of germicidal lamp life,
so it is easy to maintain.

03



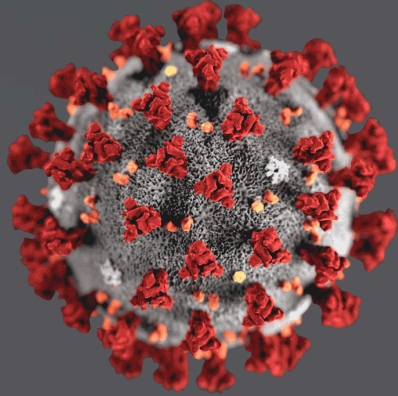
Easy, convenient with simple
and lightweight device.

Comfortable with more than
10,000 hours of germicidal lamp life.

FEATURES OF
STERILIZATION EQUIPMENT

Ultraviolet sterilizers
REN Clean
Escalator Cleaning Tools

Self-powered handrail UV sterilization device



E. coli
Staphylococcus
Candida
Influenza virus





Comparison between UV sterilization and other sterilization methods

	UV sterilization	Heat sterilization	Ozone sterilization	Chemical sterilization	Radio-sterilization
Sterilization of mycetoma	Effective against all	Effective against all	Effective against all mycetomas	Effective against specific	Effective against all
Physical property change (Handrail)	Little change	Occasional	Occasional	Occasional	Little change
Permeability	No permeability (except air and water)	Effective even inside the object	Effective on the object surface	Effective even inside the object	Effective even inside the object
Sterilization time	Short	Considerably	Long	Considerably	Short
Usage	Easy	Occasionally	Difficult	Easy	Difficult