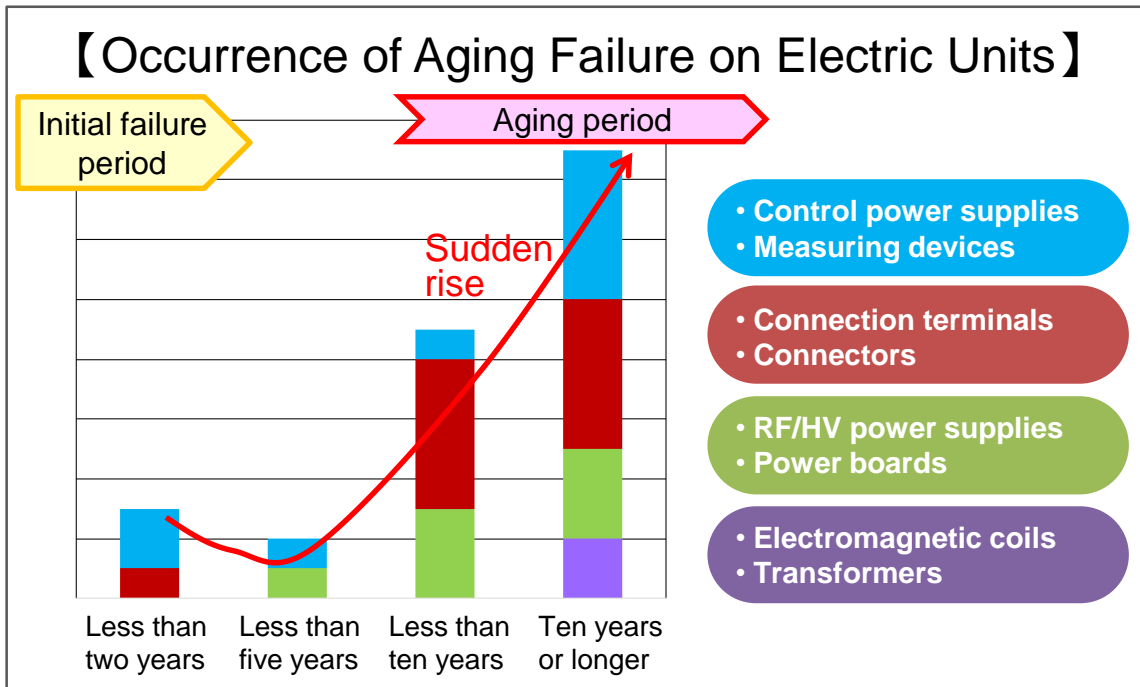


Considering the current failure information, we'd like to notify the cautions regarding electric units with a risk of aging for a safe use of our systems.



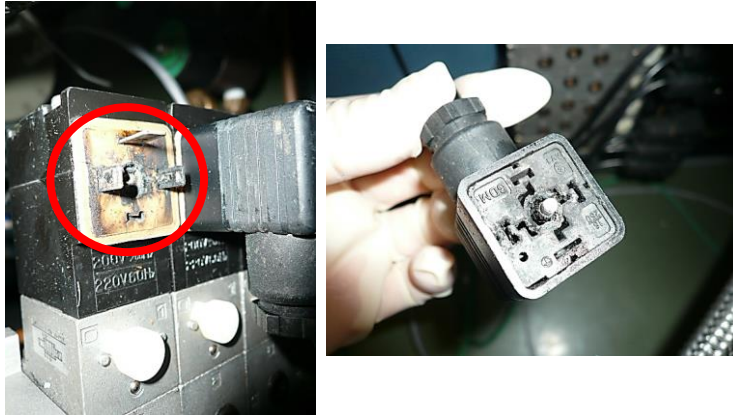
In case of aging failure, the following checks are required:

- Regarding power supplies:  
Selection of substitute power supplies, evaluation of products regarding processing and so on are required.
- Regarding wiring:  
Arrangement and replacement of wiring, and evaluation of radio frequency (RF) properties and so on are required.

\*In case of aging failure, there may be no substitute part available and the recovery may require two to three months; significant damage could arise if you have to stop manufacturing meanwhile.

For renewal of electric units with more than ten years elapsed, please contact our service representatives in charge for a safe use of our system.

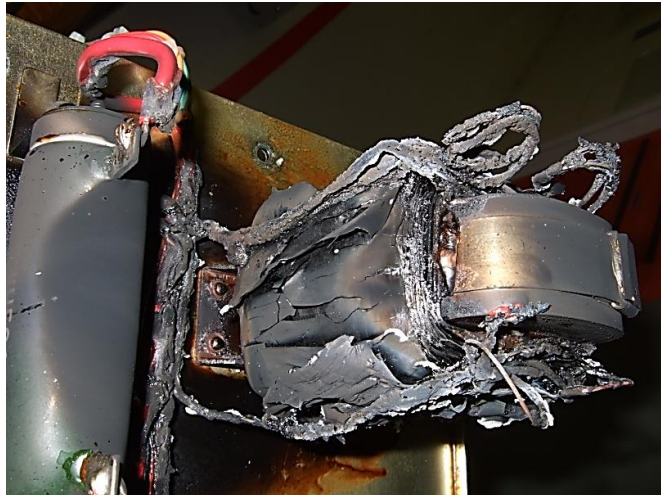
## Electromagnetic coils



Is there an increase of roaring sound, change of color, or deformation?

Considering the structure of coils and transformers, heat can be easily accumulated and gradually deteriorate their insulators, leading to short circuit and ground fault.

## Transformers



If you found any increase of roaring sound, change of color, or deformation, immediately stop using; please consider replacing the units.

[Click here to contact our service representatives.](#)

Click

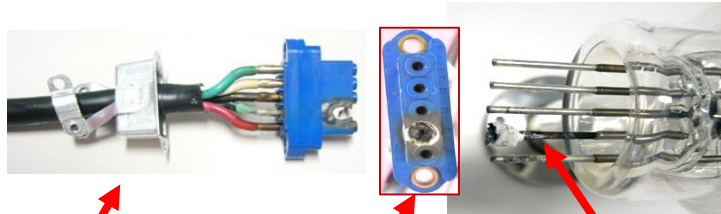
### Connecting terminals



Is there looseness or change of color on screws and terminals?

Looseness of screws or oxidation of terminals can increase the contact resistance, which could lead to burnout.

### Connectors



Connector

Fitting surface of connector

Burnout connection pins

Is there looseness, change of color, or deformation on connectors?

Deformation by improper handling or oxidation of terminals can increase the contact resistance of connectors, which could lead to burnout.

[Click here to contact our service representatives.](#)

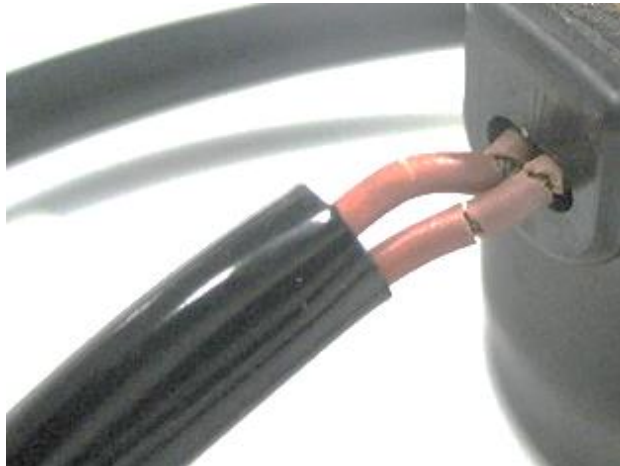
Click

Electrical wires and cables



Are there cracks or change of color on covering of electrical wires and cables?

Electrical wires and cables



Cracks or change of color can deteriorate the insulation properties of covering, which could lead to electric leakage or short circuit.

[Click here to contact our service representatives.](#)

Click

Power boards on RF/DC power supplies



Power boards on RF/DC power supplies



High voltage (HV) power supplies and radiofrequency (RF) power supplies include coils, transformers, electrolytic capacitors, and so on.

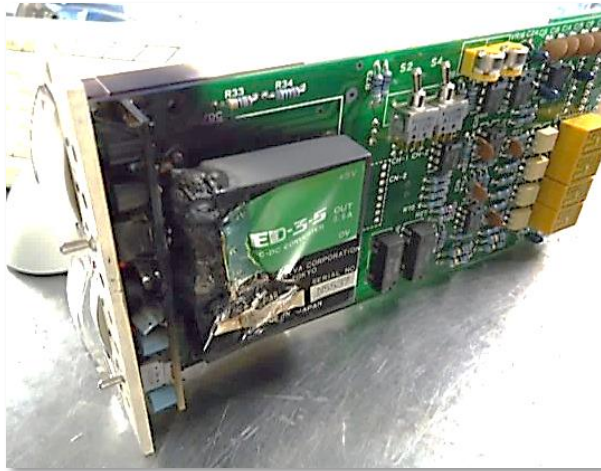
After the lifetime has elapsed, these parts could result in electrical breakdown or short circuit.

It is recommended to prepare spare parts for replacement.

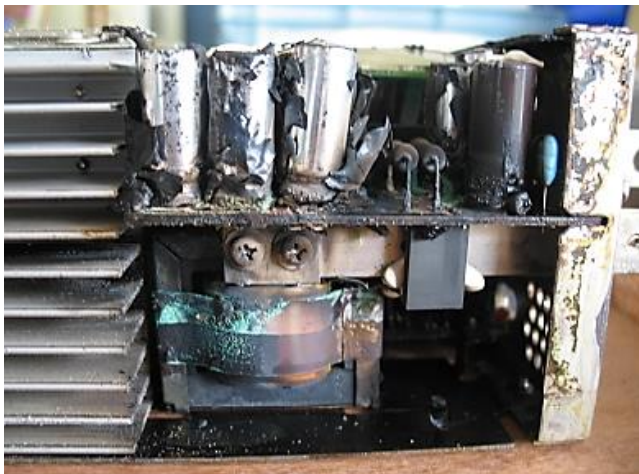
[Click here to contact our service representatives.](#)

Click

### Measuring devices and boards



### Control power supplies and boards



Electrolytic capacitors, which are widely used in power supply circuits, could be short-circuited after the lifetime has elapsed.

It is recommended to prepare spare parts for replacement.

[Click here to contact our service representatives.](#)

Click

Control devices and dry-cell batteries  
(primary batteries)



<Heating and burst by use of similar products>

Measuring devices and button batteries  
(primary batteries)



<Leakage by long-term use>

Rechargeable batteries (secondary battery)

\* The following is not the batteries used in our systems.



<Accidental product> <Normal product>

## ■ Consumption of batteries

- Dry-cell batteries (primary batteries) and rechargeable batteries (secondary battery) are widely used to save program data of devices such as vacuum gauges, PLCs, PCs. After the lifetime has elapsed, these parts could result in data loss of devices, leakage from batteries, heating, and cracks.

## ■ Replacement of batteries

- Periodically replace batteries according to device instruction manuals.
- Use manufacturer's genuine products.

## ■ Handling Precautions

- Pay attention not to apply pressures or shocks on secondary batteries (e.g. on Lithium ion batteries). Otherwise it may internally leak, leading to **abnormal heating** or **ignition**.
- Do not modify (e.g. decompose and solder) batteries.
- For disposal of batteries, contact the manufacturer of batteries or municipalities.

Click here to contact our service representatives.

Click