

Canon

**Cleaning and
Disinfection Guide
for
MR Scanner**

CANON MEDICAL SYSTEMS CORPORATION

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FOR THOSE ENTERING THE **MR** ROOM



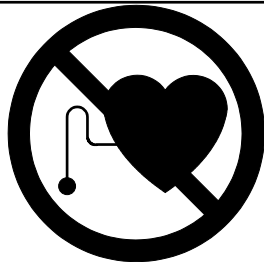
HIGH FREQUENCY
RF FIELD

DUE TO THE STRONG MAGNETIC FIELD
IN THE **MR** ROOM, OBSERVE THE FOLLOWING
SAFETY PRECAUTIONS

WARNING

NO ADMITTANCE

**NO ADMITTANCE WITHOUT
DOCTOR'S PERMISSION**



PACEMAKERS



BRAIN CLIPS
POWERED
ARTIFICIAL EYES

**FERROMAGNETIC
METALLIC IMPLANTS**

NOT PERMITTED



**METALLIC
OBJECTS
WORN ON THE
BODY**

HAIRPINS
SAFETY PINS
RINGS
EARRINGS



**LOOSE
FERROMAGNETIC
OBJECTS**

SCISSORS
PENS
KEYS
PAPER CLIPS
LIGHTERS



**IRON WHEEL CHAIRS
OR
OTHER FERROMAGNETIC
MEDICAL SUPPLIES**

WHEEL CHAIRS
CRUTCHES
STRETCHERS
STANDS
NEEDLES
HEARING AIDS
STETHOSCOPES
BLOOD PRESSURE
CUFFS



**FERROMAGNETIC
CONTAINERS**

FIRE
EXTIN-
GUISHERS
GAS
CYLINDERS
CRYOGEN
DEWARs



**PRECISION
ELECTRONIC
INSTRUMENTS**

WATCHES
CAMERAS
BEEPERS
CALCULATOR



* **MAGNETIC
MEMORY MEDIA**

CREDIT CARDS
FLOPPY DISKS
TELEPHONE
CARDS



**FERROMAGNETIC
TOOLS OR
CLEANING EQUIPMENT**

SCREW-
DRIVERS
SPANNERS
HAMMERS
VACUUM
CLEANERS
MOPS



**FERROMAGNETIC
CARTS**

CARRIERS
WAGONS
HAND
CARTS

* DATA AND/OR FUNCTIONS COULD BE LOST BECAUSE OF THE STRONG MAGNETIC FIELD.
"IRON" IS ONE EXAMPLE OF A *FERROMAGNETIC METAL*.

Figure 3-1a Warning plate

8.5 Cleaning and Disinfection

Procedures and precautions for cleaning and disinfection of the system are described in this subsection. After using the system, perform cleaning according to the procedures described in this subsection. This system is a noncritical medical device under the Spaulding classification scheme, and it has not been designed to allow disinfection or sterilization of the entire system.

However, it is possible to disinfect some parts of the system, such as exterior surfaces. If blood or other potentially infectious materials are present on the system, perform disinfection appropriately according to the procedures described in this subsection.

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- ⚠WARNING**
1. **Do not immerse parts of the system or its accessories in any solution such as disinfectant. Doing so may result in damage.**
 2. **The system is not explosion-proof. Do not use flammable or explosive gases near the system. If flammable or explosive gases enter the system, a fire or explosion may occur.**
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- ⚠CAUTION**
1. **In order to prevent infection, be sure to observe the following precautions.**
 - (1) **Wear protective gloves when performing cleaning or disinfection involving blood, vomit, or other potentially infectious materials.**
 - (2) **Wear new protective gloves each time cleaning or disinfection is performed.**
 2. **Do not clean or disinfect the system using a method or chemical other than those specified in this manual. Otherwise, the system may not be cleaned or disinfected properly, or the system may be damaged.**
 3. **The efficacy of cleaning solutions and disinfectants is not guaranteed by Canon Medical Systems Corporation. For information concerning efficacy, contact the manufacturer of the product.**
 4. **Do not sterilize this system. Otherwise, the system may be damaged.**
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8.5.1 Procedure for cleaning RF coils

General procedures for cleaning and disinfecting the RF coils that are set and used on the patient body are described below. Depending on the type of the RF coil, cleaning or disinfection using other chemicals may be necessary. Refer to the operation manual for the applicable RF coil for details. Also refer to the operation manual for the applicable RF coil for cleaning or disinfection of coils intended for special use, such as RF coils for body cavities.

8.5.1.1 Procedure for cleaning RF coils

- NOTICE*
1. Do not sterilize the coil unit by subjecting it to high temperature or by using ethylene oxide gas. Otherwise, the elements inside the coil may deteriorate and the resin may become deformed.
 2. Do not use benzoin, thinner, etc. Volatile liquids may cause discoloration, distortion, deterioration, or damage to the resin section.
 3. Do not rub the coil surface strongly. The coil surface is covered with a soft cushioned material. If the coil surface is frequently rubbed strongly, it may be damaged.
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- (1) In order to prevent infection, wear protective gloves when performing cleaning involving blood, vomit, or other potentially infectious materials. Wear new protective gloves each time cleaning is performed.
- (2) Wipe off any dirt on the coil surface using a dry cloth.
- (3) If the stains are difficult to remove, perform cleaning by following the procedures described below.
Cleaning with mild detergent
Use a cotton cloth etc. moistened with mild detergent solution. Wring it out firmly and wipe off stains. After cleaning, allow the parts to air dry.

8.5.1.2 Procedure for disinfecting the RF coil

If blood, vomit, or other potentially infectious materials are present on the coil, perform disinfection according to the procedures described below. Be sure to perform cleaning before performing disinfection.

- (1) Wear protective gloves to prevent infection. Wear new protective gloves each time disinfection is performed.
 - (2) Use a piece of gauze moistened with ethyl alcohol diluted with water at a ratio of 7:3. Wring out the gauze firmly and wipe off stains. After disinfecting, allow the parts to air dry.
 - (3) Confirm that the stain has been completely removed.
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NOTICE Do not use alcohol to wipe sections to which adhesive is applied (label, Velcro fastener, etc.). Deterioration of these sections may result.

8.5.2 Cleaning and Disinfection of gantry, patient couch, and mats

- NOTICE*
1. Do not spill iodine tincture on the mat, patient couch, or gantry. Iodine tincture cannot be removed completely, even with alcohol. If the mat, patient couch, or gantry is stained with iodine tincture, contact your Canon Medical Systems service representative for the special cleaner.
 2. Do not use alcohol on acrylic parts. Alcohol causes deterioration of the acrylic and makes it fragile. Acrylic is used for the projector cover inside the gantry, phantoms, and some other parts.
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8.5.2.1 Procedures for cleaning the gantry, patient couch, and mats

- (1) In order to prevent infection, wear protective gloves when performing cleaning involving blood, vomit, or other potentially infectious materials. Wear new protective gloves each time cleaning is performed.
- (2) To remove stains, perform cleaning by following the procedures described below.
Use a cotton cloth etc. moistened with mild detergent solution. Wring it out firmly and wipe off stains. After cleaning, allow the parts to air dry.

8.5.2.2 Procedures for disinfecting the gantry, patient couch, and mats

If blood, vomit, or other potentially infectious materials are present, perform disinfection according to the procedures described below. Be sure to perform cleaning before performing disinfection.

- (1) Wear protective gloves to prevent infection. Wear new protective gloves each time disinfection is performed.
- (2) Use a piece of gauze moistened with ethyl alcohol diluted with water at a ratio of 7:3. Wring out the gauze firmly and wipe off stains. After disinfecting, allow the parts to air dry.
- (3) Confirm that the stain has been completely removed.