

Gluteal Intramuscular Injection Model II

LM-057

Instruction Manual

Thank you for purchasing the LM-057 Gluteal Intramuscular Injection Model II.
Please read this instruction manual carefully to ensure correct use of the product,
and store it in a safe place for easy access.

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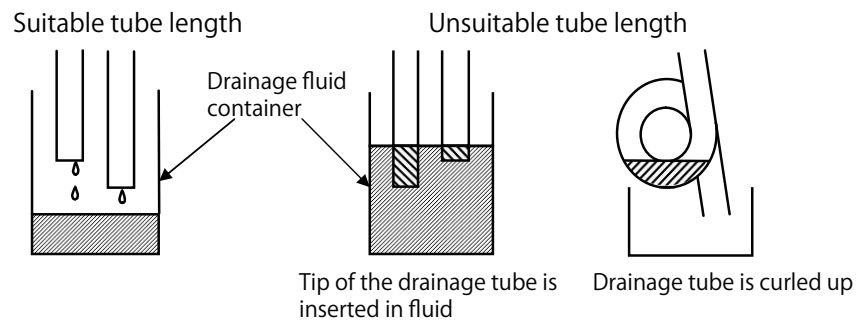
Handling and Safety Precautions

These precautions should be strictly observed in order to ensure safe, long-term use of the product.

The following precautions should be observed particularly strictly:

1. Only use water for the simulated injection fluid, as colored fluids may stain the model.
2. Only use AA size batteries.
3. The model is made with special silicone rubber to simulate the texture of human skin, so we recommend that it be handled carefully in the same manner as an actual person.
4. Inserting an injection needle in any part of the alarm sensor site will cause the alarm to sound. If this occurs, please remove the needle immediately. Proceeding to inject the simulated injection fluid (water) into an area other than the correct injection site may cause the model to malfunction.
5. Fill the syringe with the simulated injection fluid (water) before attempting to use the model. Failing to use a full syringe may prevent the alarm from sounding when the needle is inserted outside of the correct injection site.
6. If the alarm fails to sound after injecting the alarm sensor site while the power lamp is illuminated, check to see if the low battery (LOW BATT) lamp is lit up. If the LOW BATT lamp is lit up, please replace the batteries. If the LOW BATT lamp is not lit up, please contact the supplier to have the model repaired.
7. The simulated injection fluid (water) should only be injected after the needle tip has been inserted at least 20 mm into the correct injection site. If the needle is inserted less than 20 mm into the injection site, the model cannot absorb the simulated injection fluid (water) and the fatty layer may also be damaged.
8. Use injection needles with a size of 22~23G, and with a total length of 20 mm or more.

9. The supplied drainage tube is 2 meters in length, so please cut it to a suitable length before use. Using the tube in its original length may impede drainage and cause injection fluid to overflow from the injection site.



10. Do not wash or submerge the model in water.
11. Apply baby powder or a similar product to the epidermis if it feels oily to the touch.
12. To clean the epidermis, remove it from the model and use a neutral solvent diluted with water. If this fails, wipe the epidermis with a piece of gauze moistened with ethanol. Do not use thinners, benzene or similar solvents.
13. Attached batteries are for the usage of operation check. There is a possibility that battery life is short.

1. Description & features

Description

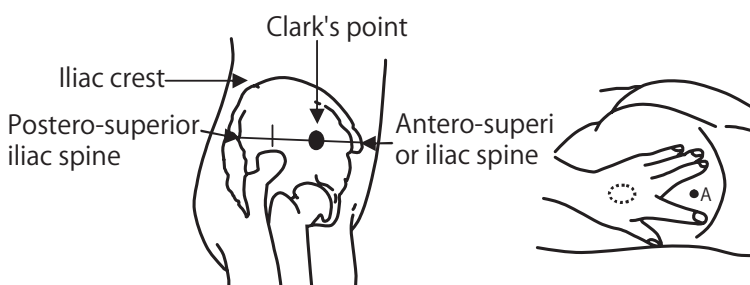
The model's injection sites correspond to the measurement methods of von Hochstetter and Clark, and it is designed to simulate the actual sensation of the human skeletal structure required to determine the correct injection site.

Features

1. Inserting the injection needle into an area other than the correct injection site causes the alarm to sound.
2. Users can practice a range of injection procedures, including needle puncture and infusion of simulated injection fluid (water). The injection fluid is discharged from the model via the drainage tube.
3. The model closely simulates the human body so that users can practice locating and maintaining the correct injection site and performing injections at various angles under realistic conditions.
4. The model features a stand so that injections with the patient in a lateral recumbent position can also be practiced.
5. The injection site components and epidermis are easy to replace.



Injection site

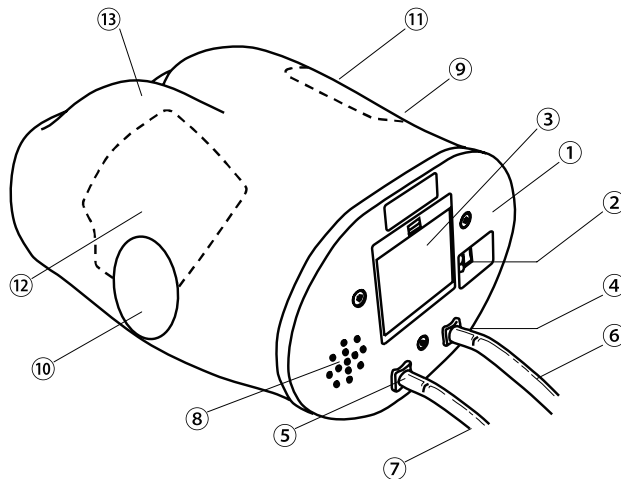


von Hochstetter's site

To locate von Hochstetter's injection site, place the center of the left palm on the greater trochanter and the tip of the index finger on the anterosuperior iliac spine. Spread the index and middle fingers as widely as possible. The central point between the index and middle fingers and the iliac crest is von Hochstetter's site (Point A).

2. Component names & functions

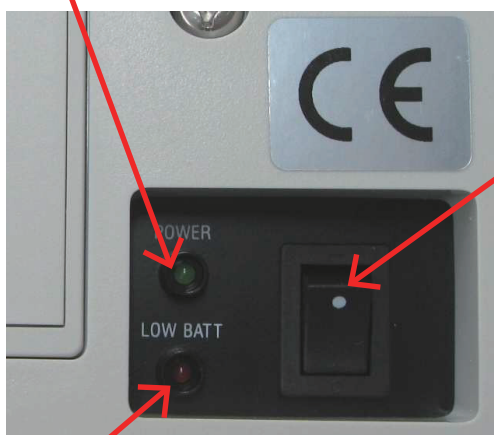
Component names



- ① Front panel
- ② Switch panel
- ③ Battery box
- ④ Drainage connector (left)
- ⑤ Drainage connector (right)
- ⑥ Drainage tube (left)
- ⑦ Drainage tube (right)
- ⑧ Alarm speaker
- ⑨ Injection site (left)
- ⑩ Injection site (right)
- ⑪ Alarm sensor site (left)
- ⑫ Alarm sensor site (right)
- ⑬ Epidermis

Operation switch

Power lamp (illuminated when power switch is on)



Power switch

LOW BATT lamp

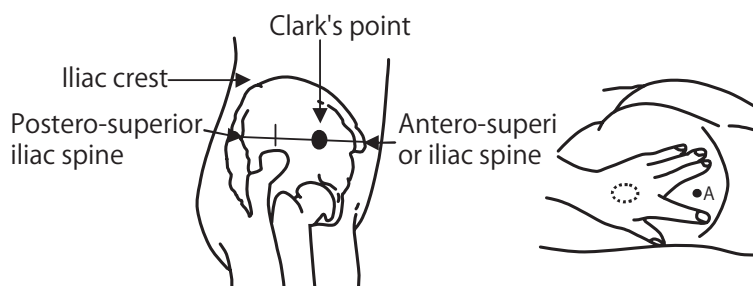
(illuminated when battery voltage is low)

* If the LOW BATT lamp lights up, please change the batteries immediately.

3. How to use the LM-057

1. Insert the connector of the supplied drainage tube into the model's drainage connector, and place the other end of the drainage tube into a bucket or container.
2. Turn the power switch to ON and make sure that the power lamp is illuminated. If the LOW BATT lamp is lit up, change the batteries before attempting to use the model.
3. Inserting an injection needle in any part of the alarm sensor site will cause the alarm to sound. If this occurs, please remove the needle immediately. The model's injection sites correspond to the measurement methods of von Hochstetter and Clark.
4. The simulated injection fluid (water) should only be injected after the needle tip has been inserted at least 20 mm into the correct injection site. If the needle is inserted less than 20 mm into the injection site, the model cannot absorb the simulated injection fluid (water).
5. After use, turn the power switch to OFF.
6. Refer to page 8 and 9 for instructions on how to care for the model after use.

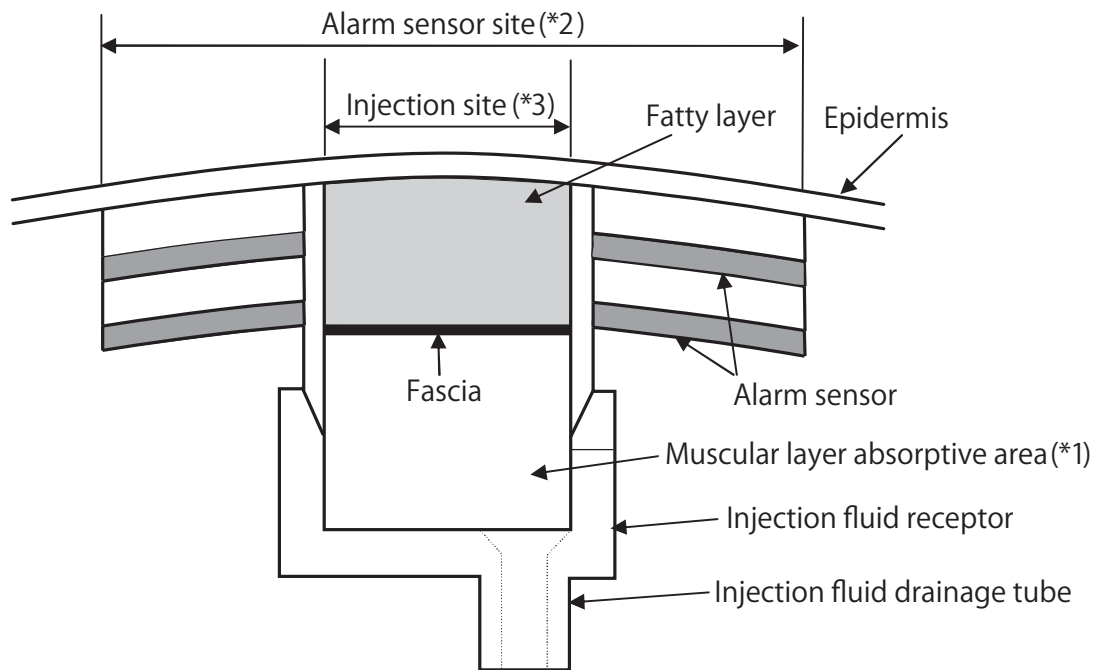
Injection site



von Hochstetter's site

To locate von Hochstetter's injection site, place the center of the left palm on the greater trochanter and the tip of the index finger on the anterosuperior iliac spine. Spread the index and middle fingers as widely as possible. The central point between the index and middle fingers and the iliac crest is von Hochstetter's site (Point A).

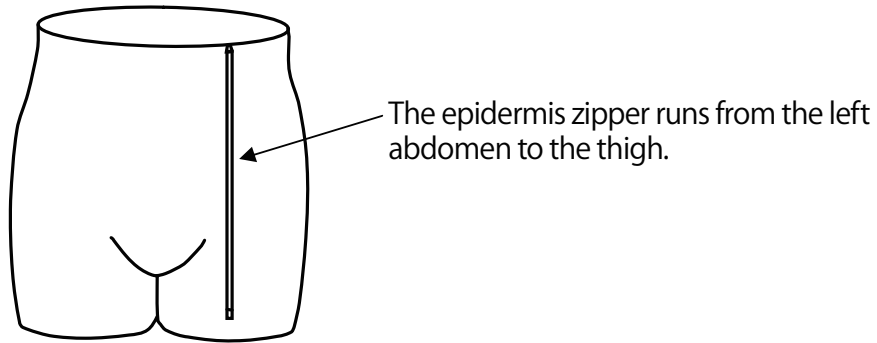
Internal structure of the injection site & alarm sensor site



- *1. The muscular layer absorptive area temporarily absorbs simulated injection fluid (i.e., water).
- *2. The alarm sensor site emits a warning sound when the injection needle is inserted in an area outside the correct injection site.
 - If the alarm sounds, please remove the injection needle immediately.
- *3. Injection site (6.0 × 8.0 cm elliptic cylindrical area)

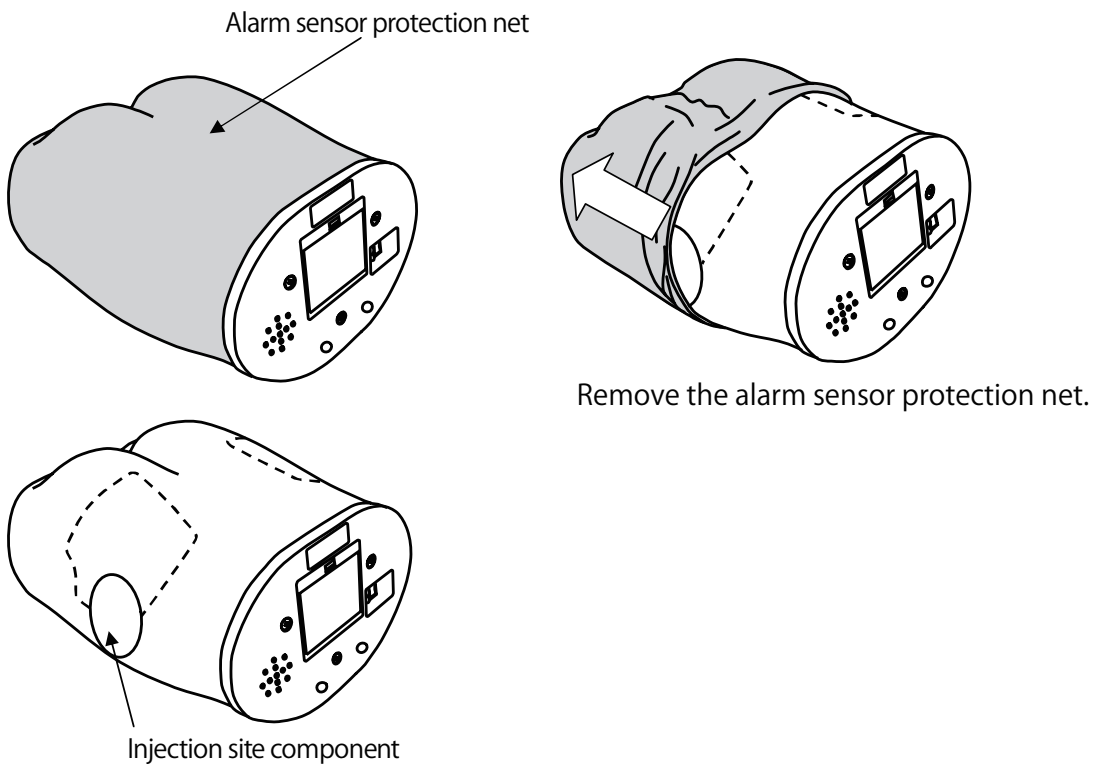
4. Caring for the model

1. To replace the epidermis, unzip the epidermis zipper and remove it from the model. Do not use excessive force when removing the epidermis to avoid damaging it.

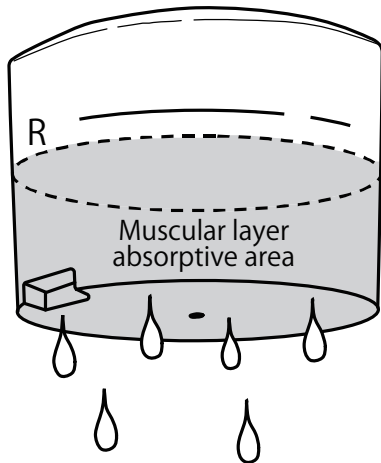


2. After use, remove the left and right injection site components from the model.

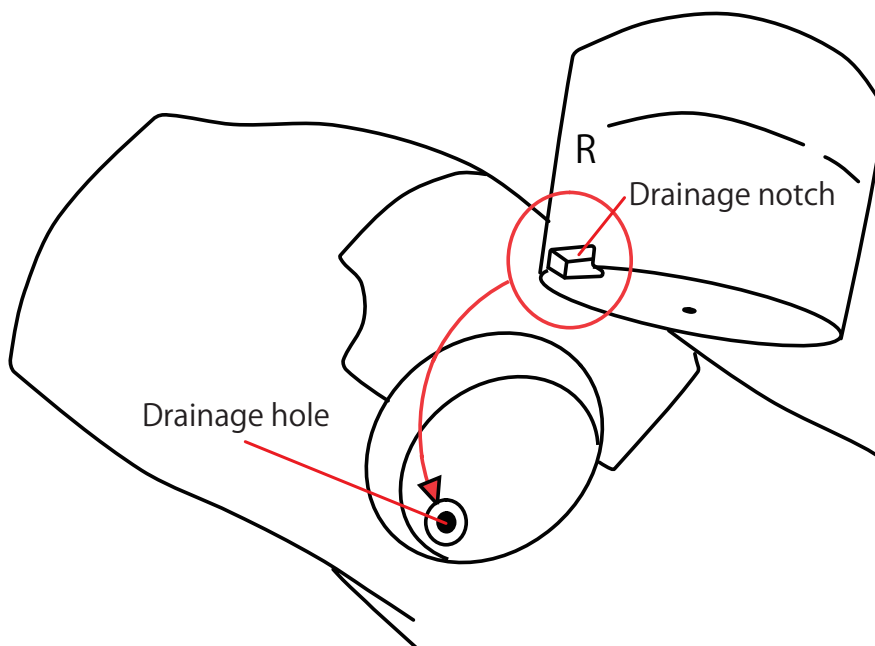
* Injection site components can be detached from the main body after first removing the alarm sensor protection net.



3. Dry the injection site component by squeezing out the simulated injection fluid (water) that has accumulated in the muscular layer absorptive area.



4. The left and right injection site components are different, so check for the left (L) or right (R) marking on the side of the component.
- 1) Make sure that the drainage notch on the side of the injection site component aligns with the drainage hole inside the main body before inserting it.
 - 2) Apply some baby powder to the side of the injection site component if it is difficult to insert.
 - 3) Be careful not to insert the injection site component upside down. Proceeding to inject the simulated injection fluid (water) into an area other than the correct injection site may cause the model to malfunction.



5. Model configuration chart

Item	Quantity
Main body	1 unit
AA size batteries	4 pcs
Spare injection sites (left & right)	1 pc each
Drainage tubes (left & right)	1 pc each
Storage case	1 pc
Stand	1 pc
Instruction manual (this document)	1 copy

6. Specifications

Item	Length	Width	Height	Weight
Main body	Approx. 19 cm	Approx. 37 cm	Approx. 29 cm	Approx. 4.0 kg
Storage case	Approx. 39 cm	Approx. 42 cm	Approx. 32 cm	Approx. 3.6 kg
Injection site	Approx. 6 cm	Approx. 8 cm	Approx. 6 cm	Approx. 70g/pc

7. Replacement parts (sold separately)

Item		Units
Injection site (left & right)	LM-0571	1 each/set
Epidermis (skin)	LM-0572	1 pc