

JVC



LYT2232-001A

WR-MG270

マリンケース

取扱説明書

Marine Case

INSTRUCTIONS

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Boîtier sous-marin

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GEBRUIKSAANWIJZING

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Obudowa podwodna

INSTRUKCJA OBSŁUGI

潜水盒

使用説明書

日本語

ENGLISH

DEUTSCH

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NEDERLANDS

CASTE.ESP.

ITALIANO

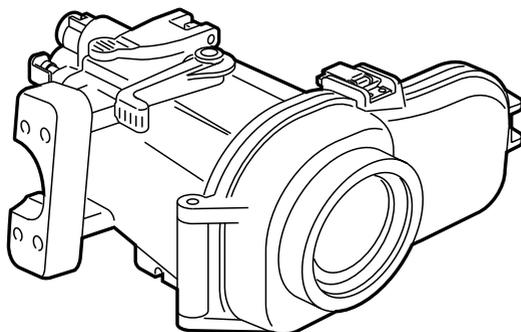
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In order to use this product safely

Preparation (Pg. 16)

- Check that there is no dirt, cracks, or damage to the O-ring.
- Always apply grease to the O-ring.



Attaching the Marine Case to the Camera (Pg. 17, 18)

- Attach the power button cap depending on the camera used.
- Make sure that the O-ring is not twisted, and that you do not forget to attach it.
- When tightening the seal, make sure there are no foreign objects caught in the seal.



Recording the Video/Still Image Files (Pg. 18, 19)

- Avoid opening and closing the marine case in the shooting location.
- When holding the marine case, lower it gently into the water.



Detaching the Marine Case/Maintenance (Pg. 19, 20, 21)

- Always wash the marine case in fresh water after use.
- Perform maintenance on the O-ring.

If water leaks into the case due to careless use of the marine case, JVC cannot accept responsibility for any damage that may occur to the internal equipment and materials (video camera, SD card, etc.), or any expenses incurred in taking the photographs/video. Therefore, please be careful when using the marine case.

Safety Precaution



Before use, this unit must be pre-tested to check if there is any water leakage.

Please read before use

This marine case is a precision instrument designed to permit safe video recording under high water pressure. Please pay careful attention when handling the unit before and after use, as explained in this user's manual.

Each part of the marine case has been subject to strict controls during the manufacturing process, and the individual functions have faced stringent tests during the assembly process. Each marine case has also had to pass waterproof inspections using high-pressure water testers. However, damage can sometimes occur during transport and distribution, or during storage after purchase, so before diving always carry out the following pre-use test to verify safety.

Pre-use test

Be sure to perform the following pre-use test before diving.

- 1. Before mounting the camera inside the marine case, dive with only the empty marine case and test for water leaks.**
Allow 5 or 6 minutes to ensure there are no leaks.
Be sure to perform this test to ensure the safety of your camera.
- 2. The following are some common causes of water leaks:**
 - A.** The marine case is used without attaching the O-ring.
 - B.** The O-ring is not mounted in the correct position.
 - C.** The O-ring is damaged or deformed.
 - D.** There is sand, dirt, hair or other foreign matter on the O-ring.
 - E.** There is sand, dirt, hair or other foreign matter on the contact surface of the O-ring or on the inside of the lid.
 - F.** The provided strap or drying agent bag is pinched inside the marine case when the lid is closed.

3. Check that there are no scratches or cracks on the marine case every time you use it.

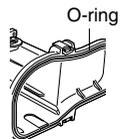
The marine case must withstand water pressure with use. Repeated exposure to pressure eventually leads to material fatigue, which may result in damage of the marine case. Every time you use the marine case, check in advance that there are no scratches or cracks. If you frequently use the marine case, be sure to ask for maintenance at the store of purchase. (There is a charge for maintenance.)

To protect your camera and ensure optimum use, keep the examples listed above in mind when using the marine case.

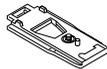
JVC accepts no responsibility for water leakage or damage to anything inside the marine case (camera, SD card, etc.) due to careless usage of this product. Be sure to follow correct procedures when using the marine case.

Accessories

- Anti-fog liquid
- Silicone grease (5 g) x 1
- Silicone cloth
- Drying agent (2 g) x 5
- Strap
- 2 O-rings
One spare O-ring.



- Base
To attach to the camera.



- Grip
Commercially available lights and weights can also be attached.



- ★ When there is a need for buoyancy adjustment, attach commercially available weights to the grip.

- Pick



- Screw tightening key



- 2 hexagonal wrenches
Large: for screwing the grip
Small: buckle opener



- Power button cap



Maintenance Kit - Sold Separately (Part Number: MG270_MTKIT)

You can purchase the following set of expendable parts.

Please contact your local JVC service representative.

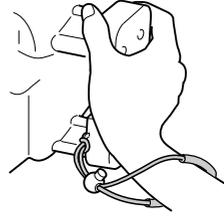
- O-rings x 2
- Silicone grease (5 g) x 1
- Drying agent (2 g) x 5
- Lens tissue paper (50 sheets) x 1
- Power button cap x 2

Procedures for Using the Supplied Maintenance Kit

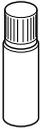
Strap



Pass the strap through the strap attachment hole before using the marine case to maintain a firm grip in water.



Anti-fog liquid

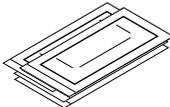


Apply the anti-fog liquid on the inner side of front glass before using the marine case. Add two to three drops of the liquid on a lens tissue paper (commercially available) or a clean cloth, and apply on the inner side of the front glass.

Front glass

Marine case

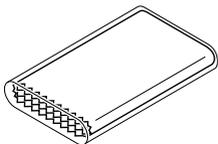
Drying agent



Prevents fogging inside the marine case. Insert it at the back of the base attached to the camera.

★ The moisture absorption ability of drying agent that has previously been used may deteriorate depending on the conditions of use. As such, we recommend that the drying agent be replaced each time.

Silicone cloth



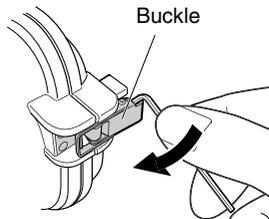
Wash the marine case with fresh water, and wipe the outer side of the whole case with the silicone cloth after drying.

Buckle

Hexagonal wrench (small) (Buckle opener)



For use when you have difficulty opening the buckle.
Hook the wrench to the buckle and pull towards you.



Buckle

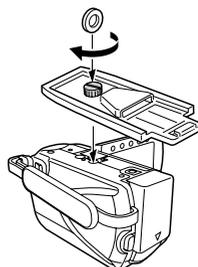
Grip belt of camera

Base

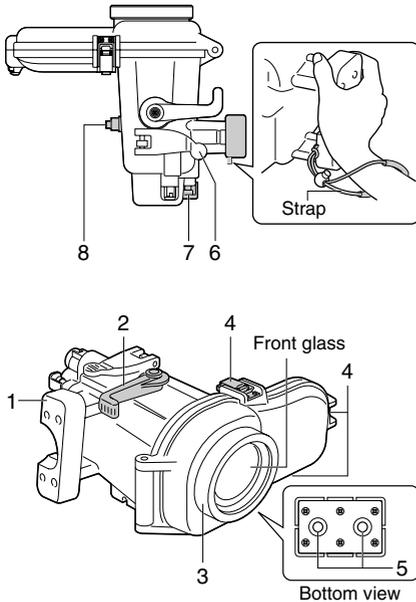
Screw tightening key



Use the key to tighten the screw of the base.



Parts and Functions



1. Main casing grip

Attach the strap provided as shown in the diagram above.

2. Zoom lever

Zoom (tele/wide) while shooting.

3. Ring

Commercially available filters (67 mm diameter) can be attached.

4. Buckle (3 locations)

Seal the marine case.

5. Grip attachment holes

You can attach the grip provided, or commercially available weights.

6. Still image lever

Press to take still images.

7. Video recording start/stop button

Press once to start recording a video. Press again to stop.

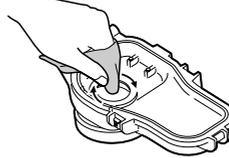
8. Power button

Turns camera's power on/off.

Preparation

1 Inspect the main casing for scratches and cracks.

Apply 2 or 3 drops of the anti-fog liquid provided onto a lens tissue paper (commercially available) or a clean cloth, and wipe the inner side of the marine case front glass.



2 Check the O-ring.

Using the pick provided, remove the O-ring from the main case.



Check the O-ring, O-ring contact surface, and groove in which the O-ring fits for foreign matter, nicks, cracks, etc.

Be sure to remove any foreign matter (dirt, sand, salt crystals, hair, lint, etc.).

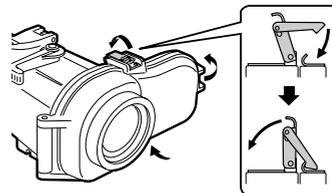
★ For details, refer to the "O-ring Maintenance Manual".

Caution

- Never use the O-ring in case of nicks and cracks.
- If the O-ring is handled inappropriately, it can cause water leakage .

3 Apply grease to the O-ring and re-attach.

4 Close the empty marine case (no camera inside).



5 Submerge the marine case in water and check that there are no water leaks.

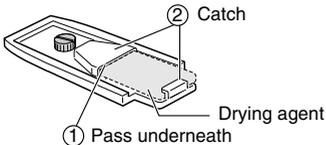
(Pg. 18)

Attaching the Marine Case to the Camera

1 Setup the camera.

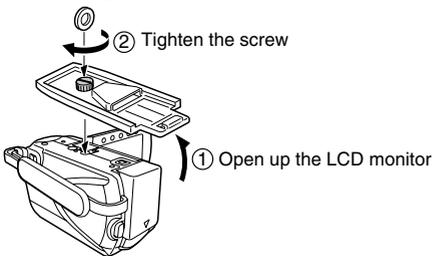
- For models equipped with light, turn off the light.
- Open the lens cover.
- Set to the shooting mode (video/still image).
- ★ Even when the shooting mode is set to “video”, still images can be captured by pressing the still image lever during video recording.
- It is recommended to set to the auto shooting mode.
- Insert the battery and the microSD/microSDHC card or SD/SDHC card beforehand if needed.
- To turn off the camera, press and hold the power button for more than 2 seconds.

2 Insert the drying agent at the back of the base.



3 Attach the base to the bottom of the camera.

- Align the tripod screw hole at the bottom of your camera with the screw of the base, and tighten the screw.



Caution

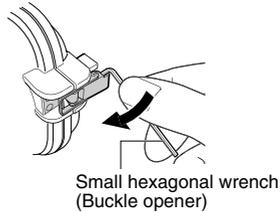
- The camera turns on automatically when the LCD monitor is opened. To turn off the camera, press and hold the power button for more than 2 seconds.

4 Fold the grip belt.

- Make sure the grip belt is not caught between the marine case when sealing.

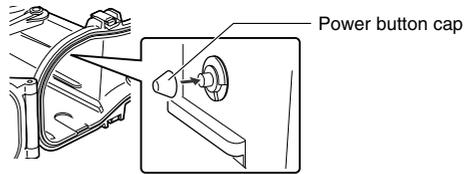
5 Open the marine case.

- If it is difficult to open buckles, use the small hexagonal wrench (buckle opener).



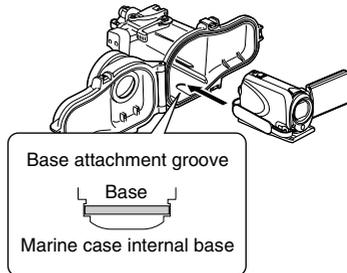
6 Attach the power button cap. (Not required for GZ-HM545 to GZ-HM570.)

- Fit the hollow of the power button cap to the protrusion of the power button on the case.



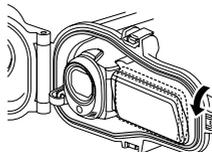
7 Insert the camera into the marine case.

- Align the base attachment groove with the base to insert.



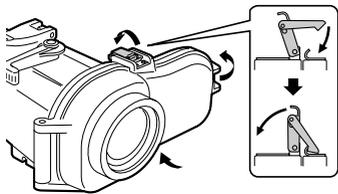
8 Adjust the angle of the LCD monitor.

- The LCD monitor can be tilt upwards to a maximum angle of 30 degrees.



9 Seal the marine case.

- Make sure that the O-ring is not twisted, and that you did not forget to attach it.
- Make sure that foreign objects (strap, belt, dirt, etc.) have not been caught in between.



Caution

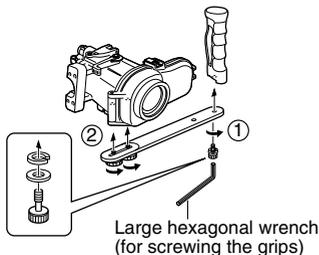
- The risk of water leakage is extremely high if the O-ring is twisted, if you forget to attach it, or if something is trapped in the seal.

10 Check that all the operation buttons of the camera are functioning properly.

- If it is not functioning, take out the camera and insert again.

11 Attach the grips.

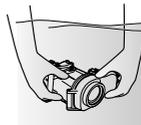
- Attach the grips, lights or weights on the bottom of the marine case.



Recording the Video/Still Image Files

Before recording

Submerge the marine case with the camera inserted into a bathtub or water tank full of fresh water. Gradually prolong the time the marine case is submerged as follows.



- 1st time: 5 ~ 10 seconds
- 2nd time: 30 seconds ~ 1 minute
- 3rd time: 3 minutes ~ 5 minutes (try operating the levers and buttons while the marine case is submerged).

Caution

- Always have someone hold the marine case for you when diving into, or getting out of water, to prevent loss or damages.
- If for any reason water leakage occurs, remove the camera battery. It may cause the camera to explode.

1 Turn on the camera's power.

- Press and hold the power button for more than 2 seconds to turn on the power. (The camera's power lamp lights and the monitor turns on.)

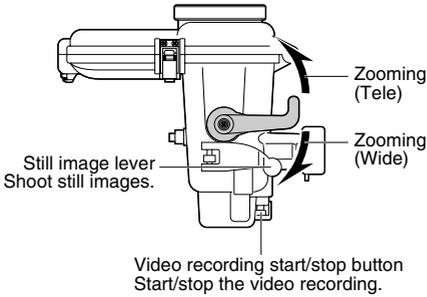
ON/OFF



Note

- Sometimes, due to sudden shaking or impact to the marine case, the camera's drop detection function operates to turn off the camera's power. When the camera's power is turned off, turn it on again.

- 2 Press the video recording start/stop button or the still image lever to start recording.



- 3 When you have finished recording, press and hold the power button for more than 2 seconds to turn off the camera.
 - The camera's power lamp goes out and the monitor turns off.

Detaching the camera

If there is a need to detach immediately:

- 1 Submerge the marine case in fresh water and shake the marine case in the upward, downward, left and right directions for at least 10 times, followed by rinsing it.
- 2 Remove the marine case and wipe off water droplets on the case surface using a dry towel.
- 3 Face the front glass of the marine case upwards, and open the buckles to remove the camera, while paying attention not to let water droplets enter the case.
- 4 Upon removing the camera, close the marine case again while paying attention not to allow water droplets enter the case, followed by tightening all the buckles.
 - * Always perform maintenance on the marine case after using. (Pg. 20)

If there is no need to detach immediately:

Perform maintenance on the marine case.
(Pg. 20)

Maintenance on the marine case

Always perform maintenance on the marine case after you have finished recording.

Salt crystal or dirt will accumulate inside the marine case if maintenance is not performed, and this can cause water leakage.

Wash the marine case in water while it is still sealed

- Do this within 30 minutes after diving.
- Pour in fresh water until the marine case is completely submerged in the container, and shake the marine case in the upward, downward, left and right directions.
- Move the buttons and levers while the marine case is submerged, and rinse the dirt out from any gaps or grooves. Proceed to ④
- If used in the sea
 - > Proceed to [Performing salt removal](#)

Performing salt removal

If the marine case was used in the sea, submerge the marine case in fresh water for at least 1 hour to remove salt.

- 1 Prepare a container that contains fresh water that is five times more than the volume of the marine case.**
 - The container must be big enough to allow the marine case to submerge fully.
 - If only small containers are available, pour in fresh water that is equivalent to at least five times the volume of the marine case over a few times.
 - Shaking the marine case in the upward, downward, left and right directions will be more effective.
 - Move the buttons and levers while the marine case is submerged, and rinse the salt out from any gaps or grooves etc.
 - Make sure the grip is also free of salt.
- 2 Put in fresh water for at least 1 hour.**
- 3 Remove the marine case and wipe off water droplets on the case surface using a dry towel.**
- 4 Remove the camera.**
 - Face the front glass of the marine case upwards, and open the buckles to remove the camera, while paying attention not to let water droplets at O-ring or buckles enter the case.

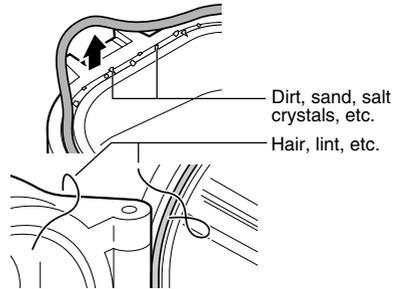
Caution

- The camera may fall out if the buckles are opened with the front glass facing down.
- If you cannot avoid opening the marine case at the diving location, pay attention not to let water droplets from your hair or your body enter the case.



5 Remove the O-ring, and wipe off salt, sand and other foreign matter.

- Also wipe the groove in which the O-ring was inserted, and the part of the marine case that was in contact with the O-ring, and allow them to dry.
- ★ For details on handling and storing the O-ring, refer to the "O-ring Maintenance Manual".



6 Wipe the inside and outside of the marine case with a dry cloth.

- ★ Use a lint-free cloth to wipe the inside of the marine case.

7 Wipe the inner side of the front glass.

- Add a few drops of the cleaner liquid (commercially available) onto the inner side of the front glass, and wipe off using a lens tissue paper, clean cloth, etc.



Caution

- The front glass will fog if it is dirty.
- 8 **Let it dry completely in a shaded area.**

Caution

- Do not leave the marine case in direct sunlight.
- Doing so may cause discoloration of the case, and may cause the O-ring to deteriorate more quickly.

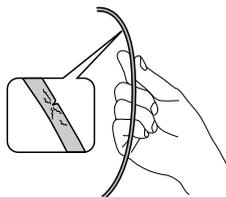
Note

- The conditions may vary depending on the environment of use such as temperature, humidity, water temperature, salinity and others.

Storing the O-ring

If you do not intend to use the marine case for longer than one month, remove and store the O-ring away.

- ★ For details, refer to the “O-ring Maintenance Manual”.



The O-ring is an expendable part. Replace the O-ring with a brand new one every year.

Caution

- When re-using an O-ring after storage, always check the condition of the O-ring. Never use an O-ring if it is deformed (crushed, distorted), cracked, or damaged in any way.

Specifications

Maximum pressure	Water depth up to 40 meters
Operations	Power on/off Video recording start/stop Still image shooting Zoom (tele/wide)
Filter diameter	67 mm
Main unit dimensions (W x D x H)	216 mm x 179 mm x 128 mm
Main unit weight	Approx. 890 g (excluding grip)

Applicable camera models

- From GZ-HM300 to GZ-HM350
- From GZ-HM545 to GZ-HM570
- From GZ-HD500 to GZ-HD620



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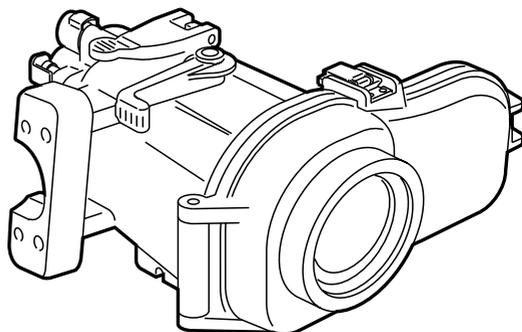
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O リングについて

O-ring Maintenance Manual

O-Ring-Wartungshandbuch

Manuel d'entretien du joint d'étanchéité

Onderhoudshandleiding voor de O-ring

Manual de mantenimiento de la junta tórica

Manuale di manutenzione dell'anello circolare

Руководство по уходу за уплотнительным
кольцом

Instrukcja konserwacji pierścienia uszczelniającego

O 型環維護手冊

日本語

ENGLISH

DEUTSCH

FRANÇAIS

NEDERLANDS

CASTE.ESP.

ITALIANO

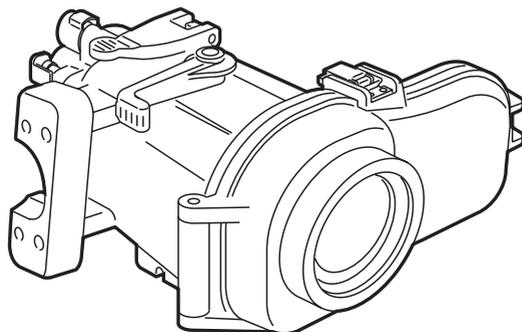
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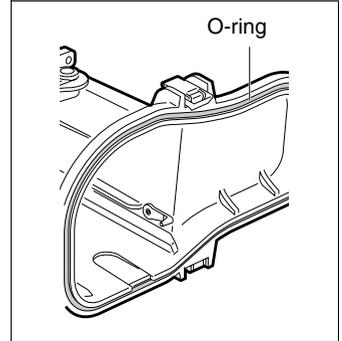
دليل صيانة الحلقة الدائرية



O-ring

What is O-ring?

- O-ring is a type of seal used to make underwater cameras, strobes and other diving instruments, waterproof.
It looks like a big, thick rubber band.
- The O-ring is an important component that protects the camera from water by keeping the marine case airtight.

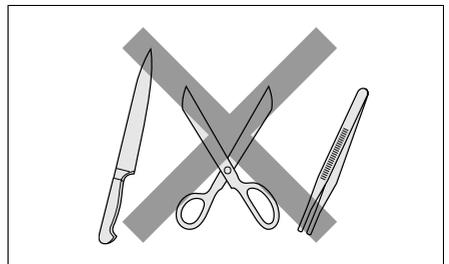
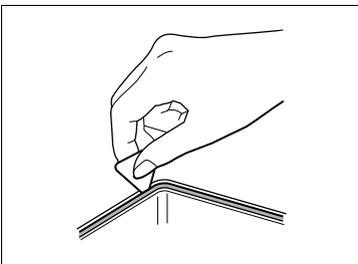


When should the O-ring be inspected?

- **As a general rule, each time before using**
(Salt crystals are formed when seawater that entered the O-ring groove dries. Salt crystals just like sand, can cause water leakage.)
- **When shooting on the sandy seabed, or when the camera is placed on the sand**
- **When not used for a long period of time**

Inspection and maintenance of the O-ring

- **Remove the O-ring**
 - ★ To inspect the O-ring, use the pick supplied to remove it from the O-ring groove.
 - ★ Do not use knives, scissors, tweezers, and other sharp objects which might damage the O-ring and the O-ring groove.

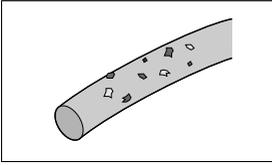


● **Check for hair, dirt, sand, salt, dust, and other foreign matter**

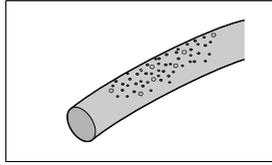
★ Even small foreign matter can cause water leakage.

● **Check for foreign matter that are not visible by rubbing gently with your fingers**

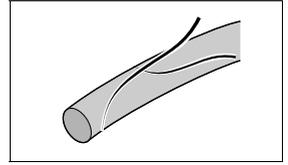
★ Be sure to remove all foreign matter.



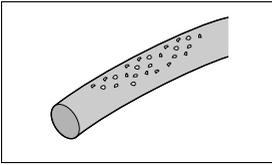
▲Dirt



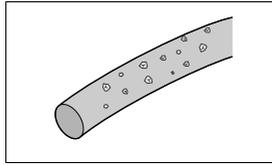
▲Sand



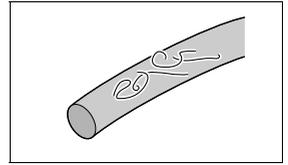
▲Hair



▲Dust



▲Salt



▲Lint

● **Wipe off any residual grease**

Wipe off gently with a soft cloth or tissue paper.

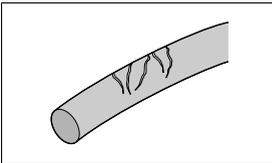
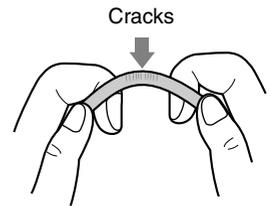
★ After wiping, make sure the fiber of the cloth or tissue paper is not adhered to the O-ring.

● **Check for any deforms (distorted, crushed), cracks or cuts on the surface**

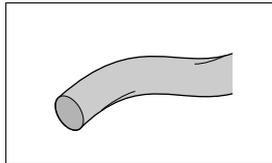
Cracks on the O-ring can be easily spotted by bending and twisting it gently.

★ Never use an O-ring if it is deformed, cracked, or damaged in any way. It can cause water leakage.

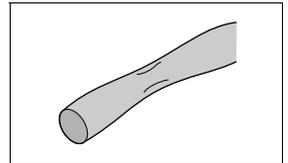
★ Replace the O-ring with a brand new one every year. Even if there are no nicks, cracks, etc., its effectiveness will deteriorate due to wear.



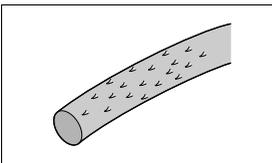
▲Cracks



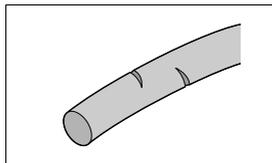
▲Distortion



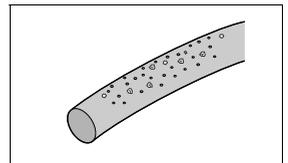
▲Crushed



▲Frayed



▲Nicks



▲Sand corrosion

- **Apply silicone grease on the O-ring**

The O-ring needs to be re-greased when its surface appears dry. Be sure to remove the O-ring and apply the silicone grease on it.

① Squeeze about 1 cm onto your finger

② Apply it on the O-ring by holding the O-ring with your fingers.

If the amount applied is not enough, repeat the above step.

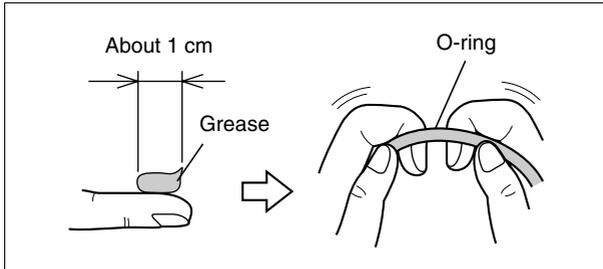
★ Make sure that you do not apply too much grease!

Dirt and dust will easily adhere if too much grease is applied.

Neither will it improve the waterproofing. Be sure to apply moderately.

★ Do not pull too strongly!

This will cause deformation.



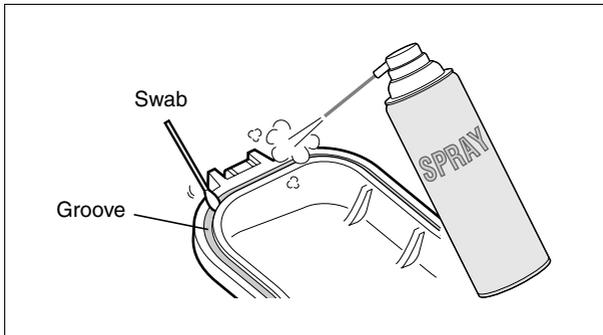
- **Check for any foreign matter in the O-ring groove**

Inspect thoroughly as it is usually not visible.

Grains of sand and crystallize salt may be stuck inside.

Remove them carefully by either using an air spray or a swab.

★ Make sure the fibers of the swab are not adhered.



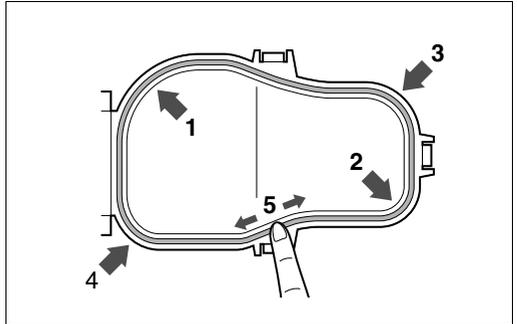
- **Insert the O-ring after inspection**

Make sure no foreign matter is adhered when placing the greased O-ring back to the groove.

Do not pull too strongly, and make sure the O-ring is placed evenly and not twisted.

<POINT>

Insert from the four diagonal corners and smooth out evenly.



Storing the O-ring

- **If you do not intend to use the marine case for a long period of time, remove the O-ring and allow it to rest.**

① Remove the O-ring.

★ Be sure to use the pick supplied.

② Wipe off the grease gently.

③ Check for any foreign matter that might be adhered to it.

④ Put the O-ring inside a clean plastic bag, and store in a way that it will not be subject to stress.

★ Do not put in moth balls and other insect repellents.

★ Do not leave the O-ring as-is in the marine case for a long period of time.

It may deform due to heat and pressure resulting from the locked and tightened state.

★ Do not store in hot and humid locations.

This will cause the O-ring to deteriorate more quickly.



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Oリングについて

ENGLISH

O-ring Maintenance Manual

DEUTSCH

O-Ring-Wartungshandbuch

FRANÇAIS

Manuel d'entretien du joint d'étanchéité

NEDERLANDS

Onderhoudshandleiding voor de O-ring

CASTE.ESP.

Manual de mantenimiento de la junta tórica

ITALIANO

Manuale di manutenzione dell'anello circolare

РУССКИЙ

Руководство по уходу за уплотнительным кольцом

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Instrukcja konserwacji pierścienia uszczelniającego

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