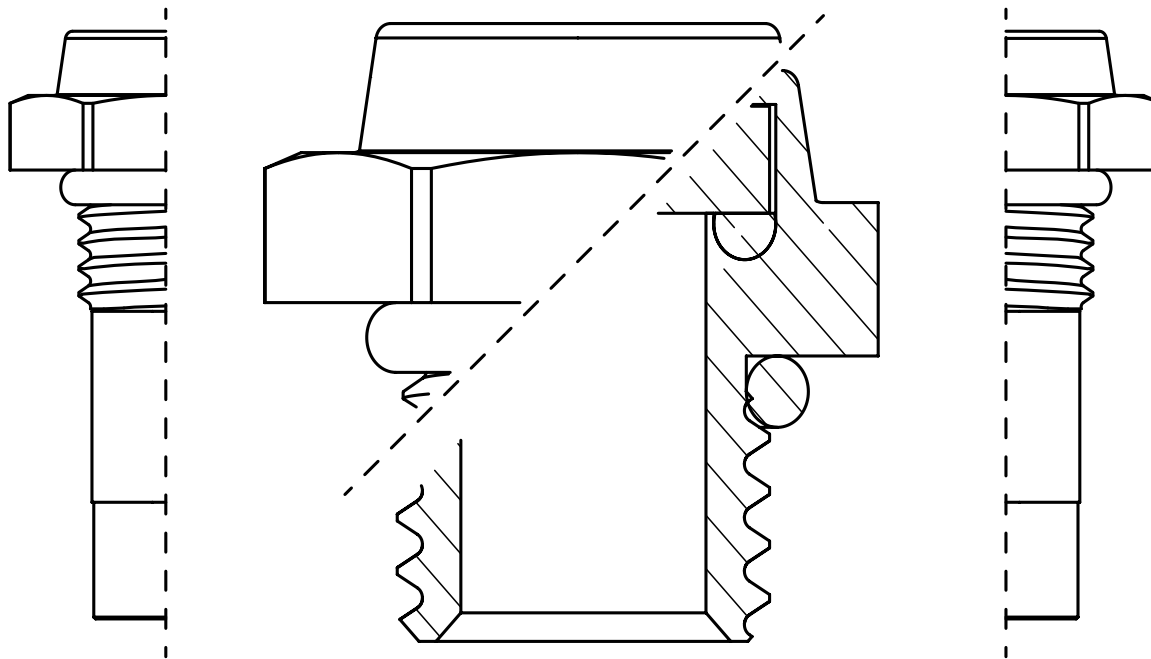


# EasyAnode<sup>®</sup>

Corrosion control


## ASSEMBLY MANUAL FOR CLIENTS



EA-ASSEMBLY MANUAL FOR CLIENTS-ED00

# MANUFACTURING AND VERIFICATION PROCESS

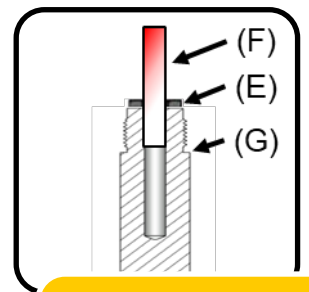
**EXPLODED VIEW**



(A) - Viewer  
 (B) - O-Ring  
 (C) - Wick  
 (D) - Support  
 (E) - Rubber Seal  
 (F) - Foam  
 (G) - Anode

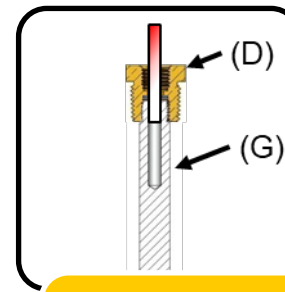
**EasyAnode®**  
 Corrosion control

[www.easyanode.com](http://www.easyanode.com)



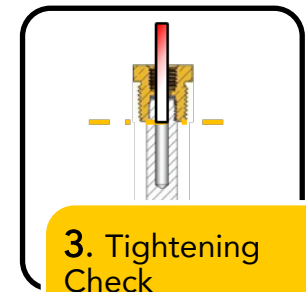
## 1. Prepare Anode

- Insert 25% of the foam.
- Place rubber seal over the foam.



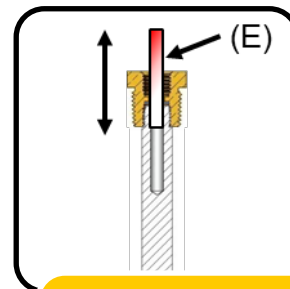
## 2. Support Assembly

- Screw support onto anode.
- Tighten using hands only.



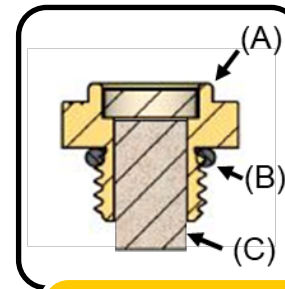
## 3. Tightening Check

- Check with paper along the line indicated in the image.
- If the paper cannot enter, it is sufficiently tight.



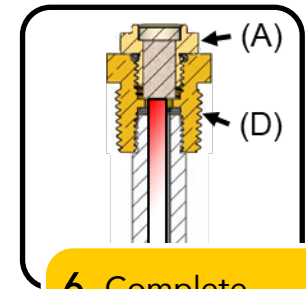
## 4. Checking foam

- Move the foam up and down to ensure that there is no constriction



## 5. Viewer assembly

- Insert wick into the viewer.
- Fit O-Ring



## 6. Complete assembly of the EasyAnode

- Screw the viewer into the support.
- Tighten using hands only

## DISCLAIMER

### **Warranty period**

The warranty period for component manufacturing defects is 2 years from purchase date.

The warranty period for assembly defects is 2 years from purchase date.

The warranty does not cover wear due to corrosion, since this is the designed function.

The warranty only includes replacement of a component with an identical new component, or the updated model that replaces it, as appropriate.

At EasyAnode's discretion, the customer may be given a complete anode instead of just sending the complete component.

Transportation and installation costs will always be borne by the customer.

### **Safe Handling and Storage**

#### **Temperature limits**

Store at room temperature between the ranges of 10oC to 40oC.

#### **Humidity limits**

Store in conditions below the local dew point (dependent on local temperature and humidity).

Mounting conditions; all parts should be at low moisture levels; less than 20%.

#### **Mechanical stresses**

Store in a location away from possible mechanical stresses or impacts.

In particular,

- Threads are normally sensitive to deformation.
- Viewers are sensitive to scratching.
- Foams are sensitive to compression.

#### **Chemical incompatibilities and precautions**

Store in a location away from contact with water and strong acids or bases. Keep the anodes clean and free from oil, grease or other surface contaminants.

#### **Storage disclaimer**

No responsibility can be accepted for incorrect function of the EasyAnode when stored outside of the conditions listed above.

#### **Grease and oil**

Grease or oil based products can prevent correct operation of the anode and/or prevent water ingress to the anode core when exposed. This can prevent the indicator turning red and alerting the technician. The protected system must be kept free of such materials for correct operation.

## DISCLAIMER

### **Assembly and Installation**

Follow assembly instructions for each type of anode.  
Use the appropriate type of anode for each type of marine equipment.  
Note that the instructions for low or high pressure circuits are different.  
Note that anodes can also be certified for corresponding fire grading and pressure rating of the system.

#### **Assembly from spares**

Each type of anode has its corresponding manufacturing part number and part numbers for replacements.  
Do not use similar parts with different part numbers without verifying with the manufacturer. This will void the warranty and may stop the anode from performing to its design specifications.

Only original parts from the supplier may be used. Parts used which are sourced elsewhere, or beyond expiration date, will render the warranty void.  
Assembly must follow the correct assembly protocol for the anode selected.

#### **Installation into vessel systems by customer**

Installation and inspection must follow the published protocol. No responsibility can be accepted by the supplier for incorrect installation by non-authorized personnel.  
Each type of anode has a corresponding mounting and operational manual.  
Installation by authorized personnel will be covered by an installation warranty.

### **Operating Conditions**

Each anode has an operational range stated in its corresponding manual.

### **Monitoring**

#### **Monitoring procedure**

A periodic visual check should be carried out. This will depend on the type of marine equipment protected and its operation. If the indicator does not change colour in a timescale that exceeds the normal lifetime expected, it must be disassembled for inspection and assess consumption. There are circumstances of pressure, temperature, contamination, overheating, improper storage, defects in manufactured parts that can lead to reduced or no colour change in the viewer.

To detect such a circumstance, anodes should be inspected periodically in case of anode wastage without activating a colour change.

#### **In the case of delay in changing after alarm**

The anode must be replaced when the viewfinder demonstrates any colouration by the red dye. Examples of the different levels of tinting can be provided to the customer.  
Failure to change the anode when the indicator changes colour could stop the corrosion protection and cause damage to the marine equipment under protection.

#### **In the case of false positives**

The entire EasyAnode assembly should be returned to the supplier for investigation. On receipt the EasyAnode will be replaced if a component or manufacturing failure is found.

## DISCLAIMER

### **In the case of false negatives**

The entire EasyAnode assembly must be returned to the supplier for investigation. Upon receipt, EasyAnode will be replaced if a component or manufacturing fault is found. In very rare cases, the spent EasyAnode may not show a color change. This may be due to heavy oil contamination in the water, high concentrations of oxidizing chemicals, or manufacturing defects.

However, the most common fault is that it is not installed according to the instructions provided and / or components are used which are not original spare parts.

If the anode is significantly beyond its normal wear time, the customer should verify this by disassembling and inspecting.

This situation can occur in cases of passivation of the sacrificial anode. In some cases, we have observed that a protective layer is deposited on the surface of the anodes that prevents normal wear.

In very rare cases, false negatives can be caused by a manufacturing defect within the anode material.

### **Limitations of protection**

The protection area is limited to the area around the anode. It is the responsibility of marine equipment manufacturers to dictate the anode positions for correct protection. No responsibility is assumed for the positioning of the anodes in the equipment.

In case of inadequate protection, EasyAnode can improve the level of protection by performing an accurate corrosion assessment. The resulting report will advise on the areas to be addressed and an attached budget will define the costs.

### **In the case of fire**

Each anode type has its own performance specifications which are suited to the different environments found in marine systems.

For example:

- Low pressure
- Medium pressure
- High pressure
- Standard temperature
- High temperature
- Fire resistant
- Class approved
- Etc.

Please refer to the documentation for selected type stability at high temperatures.