

## Instruction Manual

# Emergency Shut-off Valve (Shear-Valve)



www.zeppini.com.br

Zeppini Ecoflex

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## 1. Warnings

Throughout this manual, you will find the warnings illustrated below. Be aware, since these are important indications that can facilitate certain processes and point out important care measures.



#### TIP:

 Indicates that the featured information facilitates equipment installation, operation or maintenance.



#### **ATTENTION:**

• Indicates that the featured information includes details that should be observed about the processes that are being performed and for the proper operation of the product.



#### **IMPORTANT:**

• Indicates that the featured information is of extreme importance for the integrity of the equipment, its proper operation and the safety of those involved.

It is essential to be aware of these warnings.

Are there any questions?

If you have any difficulty during equipment installation, operation, or maintenance, feel free to contact us!

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C/O Technical Support

We will be pleased to help you!

## 2. Introduction

The objective of this manual is to instruct on the proper procedures and best practices for the installation, operation, and maintenance of the Emergency Shut-off Valve (Shear-Valve) to ensure its perfect operation and provide greater equipment durability.

#### **IMPORTANT:**

- We point out that the non-compliance with any of the instructions detailed in this manual may cause irreversible damages to the product and subsequent loss of warranty.
- While performing the installation, operation and maintenance of this equipment, use adequate PPEs to perform these services.
- The installation, operation and maintenance processes should be performed by a specialized company, following all the steps, and using the tools specified in this manual.
- If any non-compliance is detected during the installation, operation, or maintenance of the equipment, please contact the Zeppini Ecoflex technical support team immediately for guidance on how to proceed.

## 3. About the Emergency Shut-off Valve (Shear-Valve)

#### 3.1 Application

The Emergency Shut-off Valve (Shear-Valve) is an equipment used in pressure lines and has as main objective to prevent large fuel leaks in accidents where the supplying unit is collapsed.

#### 3.2 About the Zeppini Ecoflex Product

The Zeppini Ecoflex Emergency Shut-off Valve (Shear-Valve) is essential for use in pressure systems because its quick-action trigger ensures that in the event of a collision with the fuel supply unit the fuel outlet is quickly closed.

The equipment has 2 closing stages that block the fuel in the piping system and in the supply unit, avoiding leaks in the runway.

#### 3.3 Available Models

The Zeppini Ecoflex Emergency Shut-off Valve (Shear-Valve) is available in one model:



Emergency Shut-off Valve (Shear-Valve)

#### 3.4 Components

Quantity	Component
01	Fixing bush
01	Metal body
01	Axis
01	Lock plunger
03	Stabilizer Bar Inputs
01	Drive Trigger
01	Drive spring
03	Fixing screws 14mm
03	Attachment screws Allen
01	Trigger nut
01	Trigger Latch



#### **ATTENTION:**

• During the receipt, check the physical integrity of the equipment. Reject materials delivered out of the manufacturer's specification!

#### 3.5 Operation

At the time of collision with the supply unit, the superior body of the Valve ruptures releasing the quick-action trigger of the equipment, which will act in two stages, immediately blocking the flow of fuel in the piping system and in the supplying unit, thus avoiding large spills on the supply island.

In cases of fire, the trigger of the Valve has a device that melts as a result of the increase in temperature, triggering the equipment.

To ensure proper operation of the Emergency Shut-off Valve (Shear-Valve), the lower valve body must be attached to a Stabilizer Bar which, in turn, will be attached to the Dispenser Sump by means of internal metal rails.

## 4. Transport and Storage

During the transport and storage of the Emergency Shut-off Valve (Shear-Valve), some important care measures must be taken to ensure equipment's integrity:

- Transport the Emergency Shut-off Valve (Shear-Valve) inside its packaging, in appropriate vehicles and away from objects that could damage it.
- When transporting the product, avoid impacts which might compromise its structures.
- Store the Emergency Shut-off Valve (Shear-Valve) carefully, protecting it against collision, sharp objects, and compression.
- Protect the Emergency Shut-off Valve (Shear-Valve) from natural events.
- Do not place heavy objects on top of the Emergency Shut-off Valve (Shear-Valve).



#### **IMPORTANT:**

If it becomes necessary to stack the Emergency Shut-off Valve (Shear-Valve), do it carefully.
 Poorly stacked equipment can slip, and cause accidents involving people and damage the product.

## 5. Installation

#### 5.1 Required Tools and Materials

The installation of the Emergency Shut-off Valve (Shear-Valve) requires the use of the following tools and materials:

- Wrench / Pipe Wrench
- Thread Sealing Paste

#### 5.2 Step by Step



#### **ATTENTION:**

- To initiate the installation process of the Emergency Shut-off Valve, it is necessary that the stabilizer Bar is already installed in the Dispenser Sump.
- The Stabilizer Bar installation procedure is described in detail in the Dispenser Sump instruction manuals. This manual address only a few important points for completing the installation of the Emergency Shut-off Valve.
- Step 1 After installing the Stabilizer Bar on the rails of the Dispenser Sump, remove the protective cap of the shut-off valve threads.
- Step 2 Clean the threads of the Emergency Shut-off Valve (Shear-Valve), Pump inlet and Flexible Connector with a cloth.
- Step 3 Apply a uniform layer of Sealing Paste to the Valve threads and to the equipment connections to which it will be connected.
- Step 4 Thread the top connection of the Emergency Shut-off Valve (Shear-Valve) into the inlet of the supply unit.



#### **ATTENTION:**

- Do not over tighten the Emergency Shut-off Valve (Shear-Valve) as this may cause damage to the equipment structure.
- **Step 5** Tighten the fitting to ensure tightness.

- **Step 6** Attach the Emergency Shut-off Valve in the Stabilizer Bar, using three 14mm fixing screws.
- **Step 7** Remove the protective cap and thread the Flexible Connector into the lower connection of the Emergency Shut-off Valve (Shear-Valve).
- **Step 8 -** Tighten the connection to ensure tightness.
- **Step 9** Place the drive trigger in the armed position by means of the trigger lock.
- **Step 10** Activate the supply unit so that the line is filled and check for leaks in the connections.

## 6. Operation

#### 6.1 Frequency

Since it does not require any type of operation, the interaction with the Emergency Shut-off Valve (Shear-Valve) will take place according to the maintenance schedule of this equipment, as described under the maintenance item of this manual.

#### 6.2 Step by Step

The Emergency Shut-off Valve (Shear-Valve) does not require action for its operation. Strictly follow the steps described under the maintenance item of this manual, always according to the required frequency to perform the inspection and maintenance of this equipment.

## 7. Maintenance

#### 7.1 Frequency

The cleaning and inspection of the Emergency Shut-off Valve (Shear-Valve) must occur every six months.

#### 7.2 Step by Step

**Step 1** - Insulate the area and open the cover of the dispenser.



#### **IMPORTANT:**

- Before beginning the maintenance process, check the presence of vapors inside the dispenser Sump using an explosimeter. If this is the case, use forced ventilation for 10 minutes and proceed with maintenance.
- **Step 2 -** Clean the Emergency Shut-off Valve (Shear-Valve) body using a damp cloth.
- **Step 3 -** Inspect the Emergency Shut-off Valve (Shear-Valve) to check its integrity.
- **Step 4 -** Ensure proper tightening of equipment connections to ensure tightness.
- Step 5 Verify that the Emergency Shut-off Valve (Shear-Valve) is properly secured to the Stabilizer Bar, if necessary, retighten the 14mm fastening screws.
- Step 6 Test the Valve by pressing the trigger lock down, the trigger must move quickly blocking the flow of the fuel. After the test, place the trigger in the armed position.



#### **ATTENTION:**

- At the time of maintenance of the supply unit, the Emergency Shut-off Valve (Shear-Valve) can be actuated to interrupt the fuel flow and facilitate maintenance.
- Step 7 If any damage to the integrity of the equipment or its components is identified during inspections, perform the replacement.
- Step 8 Close the supply unit cover.

## 8. Additional Information

Model	Emergency Shut-off Valve (Shear-Valve)
Diameter	1.1/2"
Body Material	Cast iron
Sealant	Viton
Version	2 stages
Warranty	1 year

## 9. Zeppini Ecoflex Limited Warranty Terms

This document describes the warranty policy for the equipment supplied by Zeppini Ecoflex. By using Zeppini Ecoflex equipment, you agree to the terms outlined in this document.

All and any term described in the document "Zeppini Ecoflex Limited Warranty Terms" applies solely to original Zeppini Ecoflex products, sold by the company or by any of its channels in more than 80 countries.

Zeppini Ecoflex provides a 1-year limited warranty from the date of purchase of the product (invoice issuance), assuring that it is free of any defect with respect to materials and labor used during manufacturing.

Always maintain the original invoice delivered with the equipment as this is the only document accepted by Zeppini Ecoflex that proves the origin of the product.

#### Filing for Support Under Warranty

To receive support under warranty, the consumer must present the product's original invoice, answer questions regarding the conditions of installation, operation, and maintenance of the product in the period that it was being used and, if so requested, send additional material (such as images and documents) to assist in the diagnosis of potential problems, as well as following other Zeppini Ecoflex procedures that may not be described in this document.

If the Zeppini Ecoflex team establishes that the support under warranty request is valid and it is within the warranty period described in this document, Zeppini Ecoflex will, at its discretion, adopt one of the following procedures:

- Repair the Zeppini Ecoflex product, using new components, if necessary.
- Replace the Zeppini Ecoflex product by an equal one or with equivalent functionality.

If any warranty service is granted, the warranty period of the product will be equivalent to the remaining warranty period, considering the initial purchase date of the product or a period of 30 days after the repair, whichever is greater.

In the event of product exchange and parts replacement, the replaced item will become property of Zeppini Ecoflex.

#### Warranty Filing Options:

The support methods described below will only be provided when previously agreed with the Zeppini Ecoflex Application Engineering team and all the documents and information mentioned above have been properly presented.

Once agreed, Zeppini Ecoflex will provide warranty services in one of the following ways:

- Support by in-person delivery Applied when the consumer delivers the product and its respective invoice in person at the Zeppini Ecoflex headquarters. And as soon as service completion is notified, the consumer collects the product.
- Support by shipping Applied when the consumer sends the product to Zeppini Ecoflex. In this case,
  Zeppini Ecoflex will guide the consumer regarding the procedures to be followed and, if required, will send proper packaging for the product to be shipped.

Freight costs of the entire process will be paid by Zeppini Ecoflex if all agreed procedures are followed.

Upon receiving the product, if the Zeppini Ecoflex support team finds information other than that mentioned by the consumer when filing for warranty, all shipping costs will be passed on to the consumer.

 Self-support - Applied when Zeppini Ecoflex determines that the consumer can perform the repair or replace the components. In this case, Zeppini Ecoflex will send the replacement component to the consumer with all installation instructions.

In the event of Self-support, the Zeppini Ecoflex team may request to receive the part or component that is being replaced before sending a new component to the consumer, if it is neither essential for the operation of the equipment or for the commercial activities of its consumer.

If after the replacement process, the equipment or component received by Zeppini Ecoflex does not display the problems described by the consumer, the costs of the components or equipment sent, as well as freight costs, will be passed on to the consumer.

In case of Self-support, Zeppini Ecoflex is not responsible for additional labor costs or the quality of services provided by third parties.

#### What is not covered by the Zeppini Ecoflex Warranty:

- Damages caused by problems of external origin, such as misuse, fires, earthquakes, floods, among others.
- Damages caused by improper equipment transport, storage, or handling.
- Damages caused by use contrary to information contained in the instruction manual of the product.
- Damages caused by failures in the installation, maintenance and/or operation process of the product.
- Damages resulting from natural wear of the product and its components.
- Damages defined as cosmetic: scratches, cracks, dents, among others.
- Modifications or repairs carried out by third parties that are not accredited and/or without previous acknowledgement and authorization from Zeppini Ecoflex.
- Products being used alongside components that are not Zeppini Ecoflex original or indicated by the company.
- Requests made outside the period featured in this document.

#### Important:

Zeppini Ecoflex does not make any declaration, provides no guarantee, nor assumes any liability for services rendered by third parties.

#### Limitations due to Geographic Location:

The time limit for replying to a request may vary due to geographical differences, according to the request and limitation relative to the availability of components and parts.

The consumer may be responsible for complying with local import and export laws and all custom fees, taxes, among other taxes associated with the replacement or repair process.

#### **Liability Limitations:**

Zeppini Ecoflex will not be liable for any direct or incidental damages, or those resulting from misuse, nor loss of usefulness of the product, income, present or anticipated loss of profits, use of money, savings, business, commercial fund, loss or damage to reputation, fines, sanctions, or penalties of any kind to developments using the products, or any other aspect that is not related to the quality of its products.

#### **Additional Information:**

Zeppini Ecoflex representatives, dealers, agents and employees are not authorized to perform modifications, extensions, or additions of clauses to the terms of warranty described in this document.

Zeppini Ecoflex will not be liable in any way for any aspect beyond those described in this document.

All and any extension agreement of the terms described herein will be the sole responsibility of the professionals who made the agreement.

Zeppini Ecoflex offers its consumers a technical support department.

In case of questions or difficulties with Zeppini Ecoflex equipment, please contact:

• Telephone: +55 11 4393-3600

• E-mail: contato@zeppini.com.br / suporte@zeppini.com.br

Zeppini Ecoflex reserves the right to modify its warranty policy at any time, wherein consumers will be treated in accordance with the policy in effect during the purchase of their product.

## 10. Zeppini Ecoflex Support Contact

#### Zeppini Industrial e Comercial Ltda.

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