



## ZENRIDE OPTIMIZER™ INSTALLATION MANUAL

Version 1.0

**Transforming Fuel into Smart Energy**

Applicable for diesel engines in trucks and construction machinery.

### 1. Introduction

The Zenride Optimizer™ is designed to improve combustion efficiency in diesel engines by optimizing the molecular structure of the fuel before injection.

Correct installation ensures maximum performance and documented savings in fuel consumption and emissions.

### 2. Component Overview

- Zenride Optimizer main module (anodized aluminum)
- Fuel hoses (diesel-approved)
- Mounting brackets and hose clamps
- Flow direction arrow on housing (towards the engine)

### 3. General Installation

Install on the **low-pressure side** (between the tank and the high-pressure pump).

- **Optimal distance:** 30 cm before the high-pressure pump.
- **At 1 meter distance,** the effect is reduced by approximately 5%.

#### **Step-by-step:**

1. Turn off the engine and disconnect the fuel pump.
2. Locate the low-pressure hose between the filter and the pump.
3. Cut the hose and insert the Zenride Optimizer in the direction of flow (arrow pointing toward the pump).
4. Fasten with hose clamps and check for leaks.
5. Start the engine and check again after 10 minutes.

## **4. Scania Installation**

Install approx. 30 cm before the pump on the side of the engine block.

Flow direction must be toward the engine.

Used on the low-pressure side.

(Insert illustration of Scania engine here.)

## **5. Volvo Installation**

Install approx. 30 cm before the pump at the front of the engine, between the filter and the pump.

Flow direction must be toward the engine.

(Insert illustration of Volvo engine here.)

## **6. Inspection and Maintenance**

- Regularly check for leaks and vibrations.
- Inspect hose connections after the first 1,000 km.
- Record serial number and installation date.

## **7. Technical Specifications**

- Material: Anodized aluminum (metal housing)
- Operating temperature: -40 °C to +120 °C
- Maximum pressure: 10 bar
- Compatible with EN590 diesel
- CE / ECE R10 certified

## **8. Safety**

- Use only diesel-approved hoses.
- Keep away from open flames during installation.
- The unit must not be opened.

## 9. Installation Record

Installed by: \_\_\_\_\_  
Date: \_\_\_\_\_  
Serial number: \_\_\_\_\_  
Vehicle / engine: \_\_\_\_\_

(The installer's signature confirms that the installation has been performed correctly according to instructions.)

## 10. Dealer / Installer Information

Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Contact person: \_\_\_\_\_  
Phone / Email: \_\_\_\_\_  
Stamp / Signature: \_\_\_\_\_

Only authorized ZenRide installers may install and verify the device.

## Warranty and Disclaimer

Zenride Energy guarantees the product's quality and performance when installed correctly in accordance with this manual.

Incorrect installation, modifications, or use outside the manufacturer's instructions may result in loss of warranty and liability.

Zenride Energy assumes no responsibility for indirect damages or operational losses.