

**DIESEL & GASOLINE equipment**

# Engine Equipment & Tools

Modern engine servicing calls for time-saving, easy-to-use and cost-effective solutions.



CARBON ZAPP

Automotive  
Injection  
Service  
Solutions

## ENGINE TECH

### Diesel & Gasoline - Engine Treatment Unit

► **application** (systems)

**Common-Rail** and conventional **Diesel Gasoline Direct Injection** (GDI, FSI, HPI)  
 Conventional Fuel Injection (MPFI / TBI / CIS)  
 Carbureted  
 Marine  
 Motorcycle  
 Truck / Bus / Train  
 Industrial / Mining / Agricultural

► **features**

- Dual-Tank system (optional)
- Automatic Pressure adjustment
- Adaptability to all makes and models
- Automatic /manual functions
- On-Display guide
- Language localization
- Upgradeable
- User-friendly
- Portable & Lightweight
- Quality & robust

► **benefits**

- Exhaust emissions reduction more than 70%
- Maximum restoration of engine's performance
- Reduction of fuel consumption
- Common-Rail system cleaning
- High Pressure pump's conditioning
- De-carbonization of the combustion chamber
- Optimum fuel combustion
- Blocked valves and piston rings release
- De-carbonization of the catalytic converter
- Improved idle-speed stability
- Disappearance of engine knocking
- Prevention of long term expensive repairs.



**Adapters**

### Detergent

The ENGINE TECH detergent activates the inert carbon molecules, resins, dust varnish and gums that accumulate inside the engine components, and burns them with the combustion process.

- Safe for the user
- Harmless to all engine parts
- Non-Flammable
- Non-Carcinogenic product and friendly to the environment
- Efficient to all types of engines.

Technical Specifications	ETU-2200	ETU-2202
	[ Common tank ]	[ Dual tank ]
Gasoline / Diesel Fuel Filter (FF5074 or equivalent) (µm)	10	10 / 10
Fuel Tank Capacity (Lt)	5	5 / 5
Fuel Feed / Fuel Return Hoses	(2) 3m / 10ft	(4) 3m / 10ft
12V Power Cable	3m / 10ft	3m / 10ft
Fuel Pressure Gauge (Gasoline / Diesel)	0-10 Bar / 0-150Psi	0-10 Bar / 0-150Psi
Input power (Volts)	12 DC	12 DC
Packaged Dimensions WxDxH (cm) / Weight (Kg)	40x50x90 / 32	40x50x90 / 35

*Dimensions and weight values are subject to change without notice*

## FST

### Diesel & Gasoline - Fuel System Tester

- ▶ **application** (systems)  
**Common-Rail** and conventional **Diesel Gasoline Direct Injection** (GDI, FSI, HPI)  
Conventional Fuel Injection (MPFI / TBI / CIS)  
Carburated  
Marine  
Motorcycle  
Truck / Bus / Train  
Industrial / Mining / Agricultural

- ▶ **diagnosis**
  - Incorrect fuel pressure (Low)
  - Incorrect fuel flow at the system
  - Plugged fuel filter
  - Faulty fuel pump
  - Plugged fuel pump inlet strainer
  - Faulty fuel pump check valve
  - Leaky fuel injectors
  - Incorrect operation of the fuel pressure regulator
  - Fuel foaming and/or contamination
  - Restrictions in supply/return fuel lines
  - Intake manifold vacuum fluctuation
  - Exhaust back-pressure for testing catalytic converter operation
  - Turbo-boost pressure operation

- ▶ **features**
  - Compact & Portable
  - Easy readable analog gauges
    - System Pressure
    - Manifold Vacuum
    - Exhaust Back Pressure / Turbo Boost
  - Durable clear flow tube
  - Quick & safe connectors for all lines
  - Robust for the work-shop
  - Adaptability for all makes and models
  - Repeatable and fast.



#### Technical Specifications

Technical Specifications	FST
Fuel Pressure Gauge	0-100 Psi / 0-7 Bar
Manifold Vacuum Gauge	0-30 inHg / 0-100 kPa vac
Exhaust Backpressure Gauge	0-15 Psi / 0-100 kPa
Scaled Fuel Flow Tube	0.3 - 3.3 Lt/min // 0.1 - 0.87 gal/min
Case Dimensions WxDxH (cm) / Weight (Kg)	53x43x14 / 5

*Dimensions and weight values are subject to change without notice*

#### Troubleshooting In The "Engines Heart"

All automobiles using EFI (Electronic Fuel Injection) system require accurate control of the fuel system. If the fuel pressure or flow rate fall out of the manufacturer specifications, the engine performance will be affected and, in extreme conditions, have a no start or an unacceptable fuel ratio. Testing the fuel system of an automobile for incorrect fuel pressure, insufficient fuel flow, fuel aeration, incorrect manifold vacuum and other may be informative to avoid long term expensive repairs, such as catalytic converter failure, HP pump failure, detonation, loss of performance, burned valves etc. The FST fuel system tester can effectively identify fuel system faults.

#### Technical Specifications

Technical Specifications	Di-FST
Fuel Pressure Gauge with glycerin	0-3600Psi / 0-250 Bar
High Pressure Flexible Lines (2pcs)/Dimensions:	20000Psi/1400Bar / 70cm
Low Pressure Relief Line / Dimensions	145Psi/10Bar / 50cm
Case Dimensions WxDxH (cm) / Weight (Kg)	53x43x14 / 5

*Dimensions and weight values are subject to change without notice*



## Di-FST

### Gasoline Direct Injection - Fuel System Tester

- ▶ **application** (systems)  
**Gasoline Direct Injection** (GDI, FSI, HPI)  
Conventional Fuel Injection (MPFI / TBI / CIS)  
Marine  
Truck / Bus / Train  
Industrial / Mining / Agricultural

- ▶ **diagnosis**
  - Incorrect fuel pressure (High)
  - Faulty fuel pump
  - Faulty fuel pump check valve
  - HP Pump response
  - System Leaks
  - Leaky fuel injectors (individual)
  - Full Diagnostic capabilities when paired with the FST tool

- ▶ **features**
  - Compact & Portable
  - Dynamic & Static tests
  - High Pressure relief valve for safe disconnect
  - Easy readable analog gauge for High System Pressure
  - Robust for the work-shop
  - Adaptability for all Direct Injection Systems
  - Connects IN-LINE, HP-pump to Injection-Rail
  - Easy hook for mounting on engine hood
  - Repeatable and fast.

# CRST-100

## Diesel Common Rail - Fuel System Tester

► **application** (systems)

**Bosch**  
**Delphi**  
**Denso**  
**Siemens**

► **diagnosis**

- Common-Rail HP Pump / Lines
- Common-Rail LP Pump / Lines
- HP Pump capacity
- Injector Rail Pressure control Valve
- Injector Back-Leak
- Common-Rail Injector operation
- Total Injector's return capacity

► **features**

- Comprehensive Pressure diagnosis
  - Dynamic Injector Rail pressure
  - RPM vs Pressure
- Easy readable analog gauges
- Durable clear back-leak tubes
- Quick & safe connectors for all lines
- Robust for the work-shop
- Adaptability for all systems
- Repeatable and fast operation
- Compact & Portable



### Technical Specifications

### CRST-100

LCD Display (mm)	12
DC Power Supply (Volts)	9-12
Measuring Pressure (Bar / Psi)	0-1600 / 0-23000
Case Dimensions WxDxH (cm) / Weight (Kg)	50x42x11 / 4

*Dimensions and weight values are subject to change without notice*



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