CT100

Injector Cleaner & Tester

Functions:

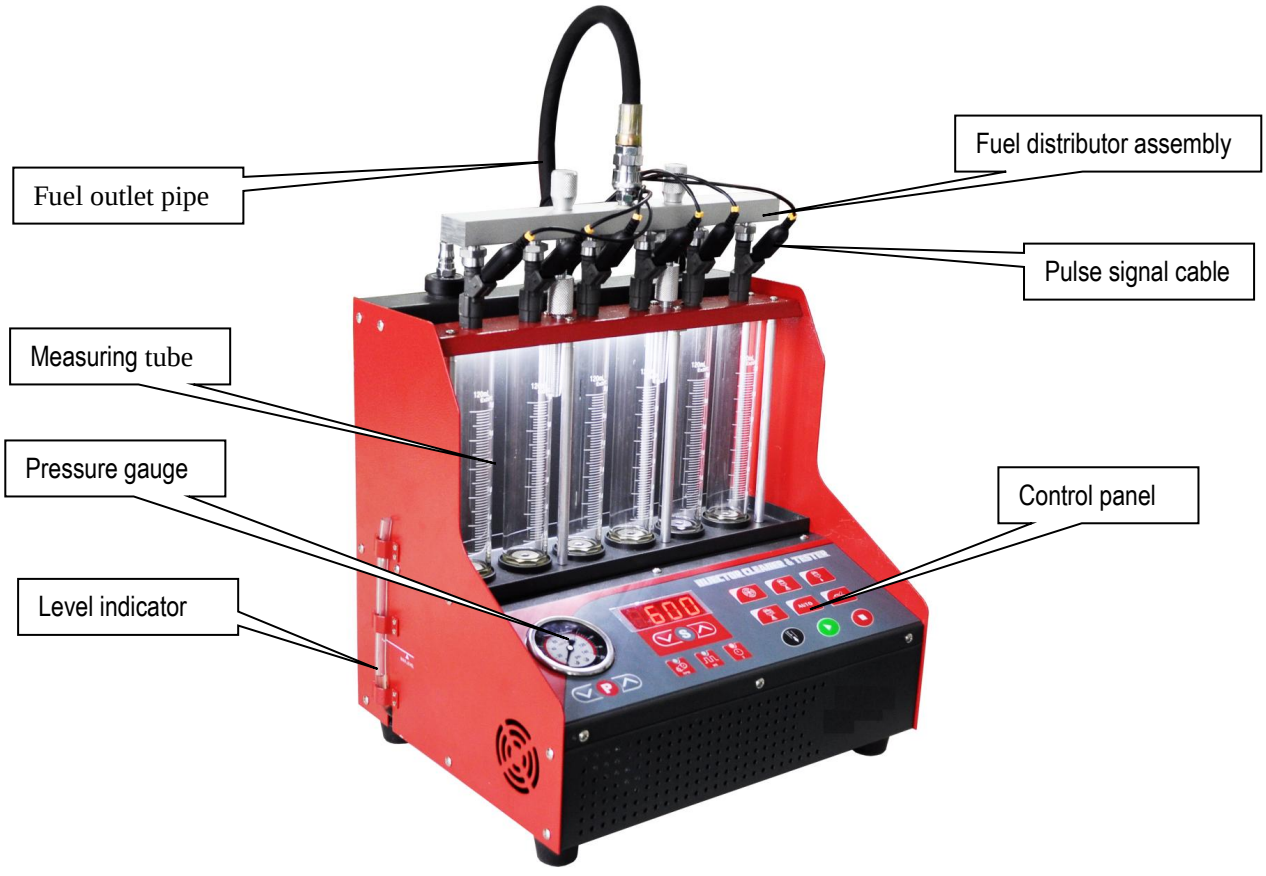
➢ Ultrasonic cleaning	➢ Uniformity test	➢ Sprayability test
➢ Leakage test	➢ Injecting flow test	➢ Auto. Mode test
➢ On-vehicle cleaning	➢ RPM setting & real-time adjustment	➢ PW setting & Real-time adjustment
➢ Time setting	➢ Auto. drain	➢ Lack of fuel alarm

Note：The connectors for on-vehicle cleaning function is optional.

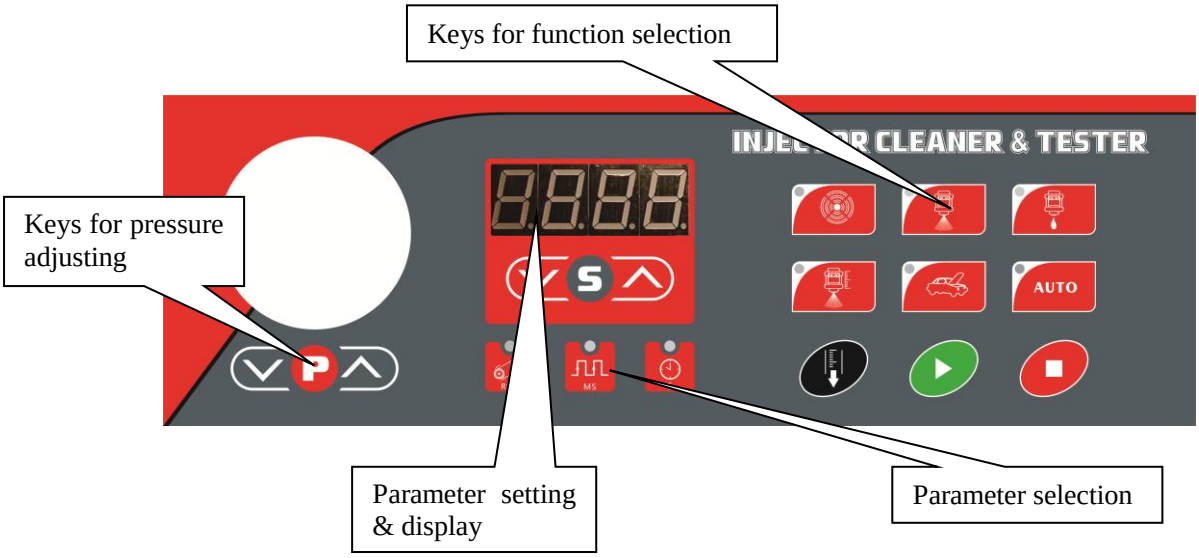
Specifications:

Power supply: AC220V±10% 50Hz/60Hz or AC110V±10% 60Hz
Input power: 230W
Ultrasonic cleaner power: 100W
Simulated RPM range:100～9900rpm, step:100rpm
Time range: 60～5400s, step: 60s
Pulse width: 0.5～25ms,step: 0.1ms
Fuel tank capacity: 4000ml
Temperature:-10℃~+40℃
Relative humidity:＜85%
Intensity of outer magnetic field:＜400A/m
No naked flame within 2m.

Overview:

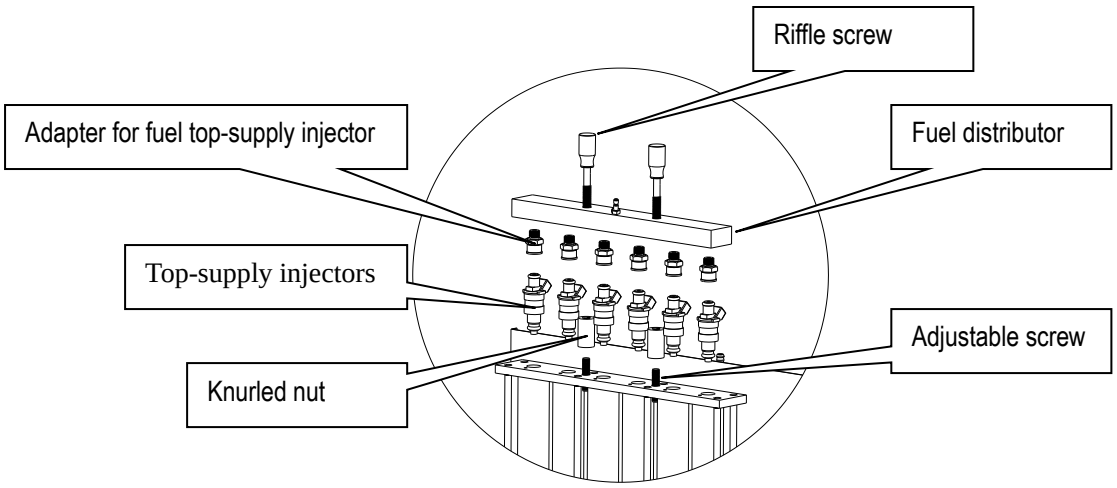


Note: The illustrations in this manual may be slightly different from the actual product!



Installation

Installation of top-supply injectors:

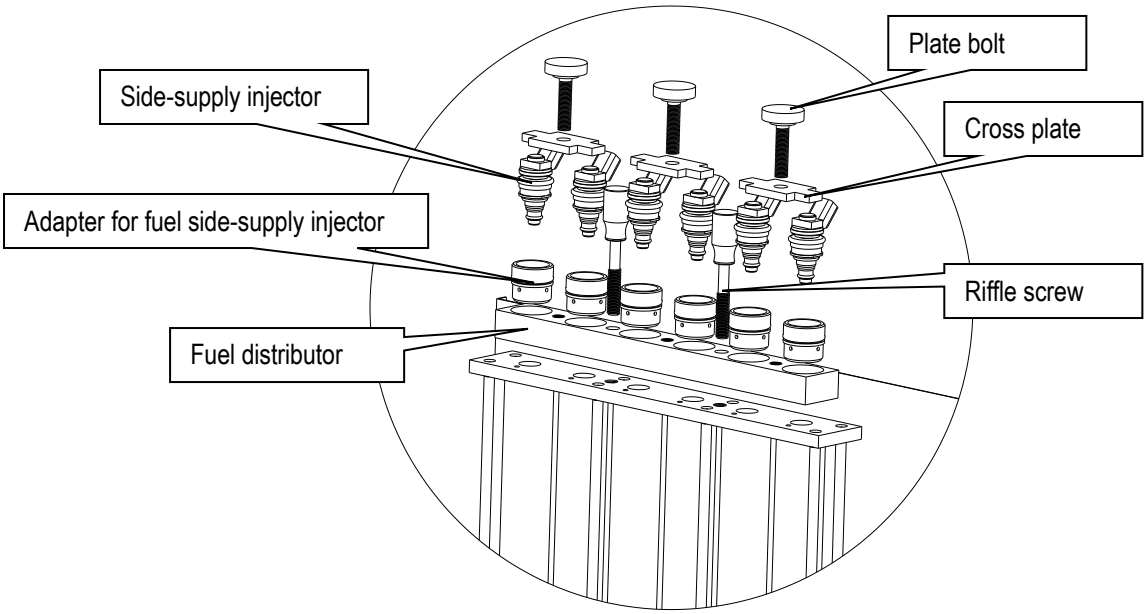


Note：

1. Choose the adapters according to the fuel top-supply injector from the coupler box and mount a proper O-ring on it. Remember to apply a little lubricating oil on the O-ring.
2. The adapters for fuel top-supply injector are 4 types:
   Thread sealing type: here are with coarse thread and fine thread.
   O-ring sealing type: here are with big hole and small hole.
3. If the injectors can't be fixed because of the hole being bigger than the injector, need to use the auxiliary support.
4. Need to adjust the relative position between the Knurled nut and Adjustable screw so that the injectors can be fixed well on the unit.

Installation of side-supply injectors:

Note：the connectors for Installation of side-supply injectors are optional.



Note:

1. Choose proper couplers for side-supply injectors and proper O-rings, and mount them together.
2. Before fixing, best to apply a little lubricating oil on the o-ring.
3. If some cylinder is not used, need to install the plug.

Operation points:

- **Ultrasonic cleaning:**
  1. The cleanser added into the ultrasonic cleaner just soaked the injectors' needle is suitable.
  2. *Before the ultrasonic cleanser is added into ultrasonic cleaner, do not turn on the ultrasonic cleaner. Otherwise, damage may be incurred.*
  3. Strictly prohibit to put the pulse signal cable or its connecter into the cleanser, otherwise damage will be incurred.
  4. The continue work time of the ultrasonic cleaner don't be more than 30min, otherwise it will shorten the life.
  5. Not in using, please put out the power plug.
- **Uniformity/Sprayability Test:**

  Under this function, the parameters of RPM, PW and time can be adjusted in real time.
- **Leakage Test:**

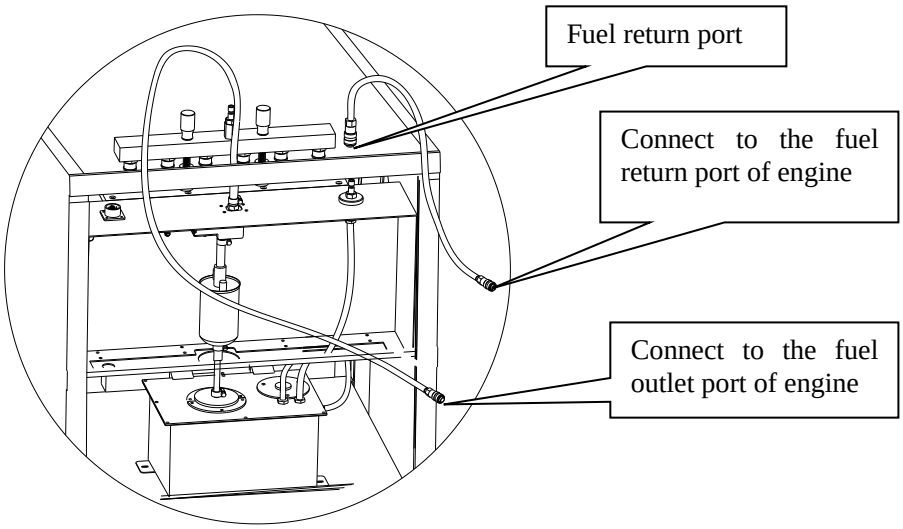
  Under this function, the parameter of fuel pressure can be adjusted in real time.
- **Injecting Flow Test:**

  Under this function, the parameter of fuel pressure can be adjusted in real time.
- **Auto. mode Test:**

Under this function, the parameter of fuel pressure can be adjusted in real time.

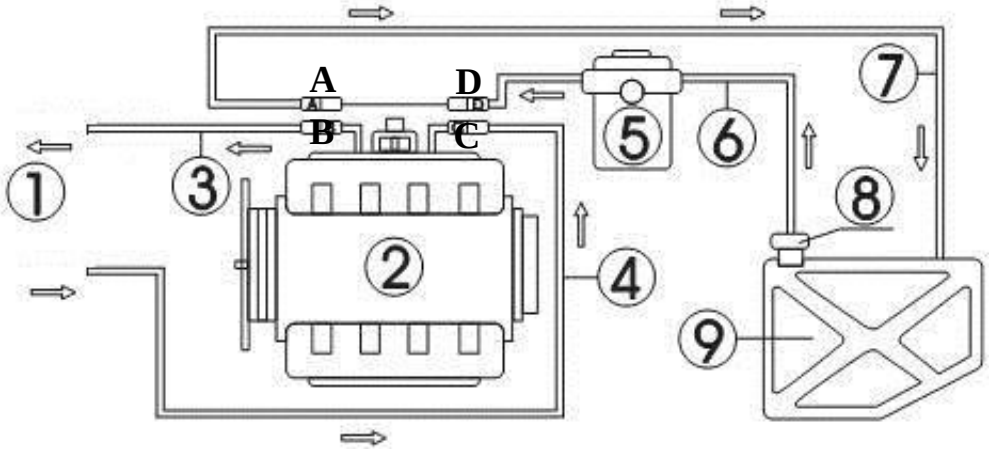
- **On-Vehicle Cleaning:**

1. Before running, need to set the cleaning time. And after running, the parameter of fuel pressure can be adjusted in real time.
2. Put about 3.5 L mixtures of the injector cleanser and fuel into the tank. The rate of the injector cleanser and fuel is 1:5.
3. The pipeline connection of the unit：



4. The pipeline connection of the engine：

Engine with fuel-return pipe



1-CT100；2-Engine；3-The fuel-return pipe of the CT100；

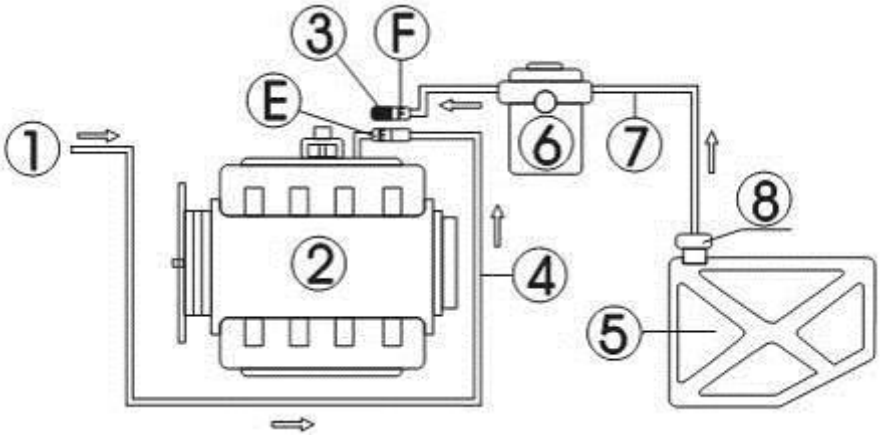
4- The fuel-outlet pipe of the CT100；5-Filter；6-Fuel-outlet pipe of engine；

7- Fuel-outlet pipe of engine；8-Fuel pump；9-Fuel tank。

1) Disconnect the fuel-outlet pipe（C、D） and the fuel-return pipe（A、B） of the engine, and select a suitable connector to separately connect the port B and port C to the return pipe and outlet pipe of the unit.
2) Connect the left two ports (A, D) by a suitable pipe. Or unplug the engine fuel pump fuse,

or disconnect the power cable of the engine fuel pump.

Engine without fuel-return pipe



1-CT100；2-Engine；3-Plug；4- The fuel-outlet pipe of the CT100；5-Fuel tank；
6-Filter；7- Fuel-outlet pipe of engine；8-Fuel pump；

1) Disconnect the fuel-outlet pipe（E、F） of the engine, and select a suitable connector to connect the port E to the outlet pipe of the unit.
2) Block the other port（F）（Warning: just when the fuel pump being with overflow port）. Or unplug the engine fuel pump fuse, or disconnect the power cable of the engine fuel pump.

Note:

1) When disconnecting any connector of the pressurized fuel pipe, wrap the connector with towel to prevent the fuel from spurting out. Spurted fuel may cause personal injury or fire.
2) Before cleaning, must affirm that all pipes connection being well and no any leakage.
3) Please prepare at least a fire extinguisher when doing on-vehicle cleaning.
4) Please lead the exhaust to outdoor when doing on-vehicle cleaning, because it contains a variety of toxic and hazardous gases.
5) Please put the transmission in N and pull the brake when doing on-vehicle cleaning.

Safety Precautions

- The unit should be kept more than 100mm away other object.
- In order to avoid electric shock, keep away from the damp part of a working unit and avoid exposing it to the rain.
- To ensure operation safety, please make sure that equipment has been connected to ground well.
- Do not operate equipment with a damaged cord or if the equipment has been dropped or damaged until it has been examined by qualified service personnel.
- Equipment use is strictly prohibited fireworks, and posted "No smoking" and " Flammable hazard warning" signs.
- Please operate the unit according to the operation procedures in the manual. Only use the accessories recommended by the manufacturer.
- ALWAYS WEAR SAFETY GOGGLES. Common used glasses are NOT safety glasses.

Appendix: Pressure Gauge of Injection System

COMPANY	MODEL	SYSTEM PRESSURE （MPa）
TOYOTA	TOYOTA 3.0	0.284
	PREVIA	0.27—0.33
	LEXUS 300 400	0.265—0.304
	CAMRY 3.0	0.265—0.304
	LAND CRUISER	0.30
	COROLLA	0.27—0.31
HONDA	ACCORD 2.0 2.2	0.285
	CIVIC 1.5L	0.255—0.285
	LEGEND 3.2L	0.27—0.304
NISSAN	BLUE BIRD	0.25
	MAXIMA	0.25
	300EX	0.206—0.255
MITSUBISHI	V63000	0.35
MAZDA	323	0.20—0.22
	626	0.25—0.29
	929	0.25—0.29
BMW	528	0.27—0.29
GM	BUICK CENTURY	0.29—0.33
	BUICK PARK AVENUE	0.29—0.33
	CADILLAC 5.7	0.29—0.33
	LUMINA	0.23—0.30
	CORSICA	0.25—0.30
FORD	TEMPO 2.3L	0.28

COMPANY	MODEL	SYSTEM PRESSURE （MPa）
	LINCOLN TOWN	0.206—0.308
CHRYSLER	CHEROKEE 213	0.273
	DODGE 3.3L DODGE CARAVAN	0.337
HYUNDAI	SONATA	0.265—0.275
DAEWOO	DAEWOO	0.28—0.30
AUDI	6 CYLINDER	0.24—0.27
	5, 4 CYLINDER	0.45—0.50
VOLKSWAGEN	JETTA	0.27—0.29
VOLVO	VOLVO	0.23—0.30