

Part No. 8374

LASER[®]

Fuel Injector Function Tester

— 12V & 5V Petrol Injectors

Instructions



CE UK
CA

www.lasertools.co.uk

Introduction

Designed to allow the user to electronically activate a petrol fuel injector and do a full function test as well as aid injector cleaning by combining the unit with use of a suitable carburettor cleaner.

The Laser 8374 is designed to be powered by a 12V battery and can be switched to output 12V or 5V depending on the injector being tested/activated. This allows the unit to be used on standard EFI injectors (12V) as well as GDI injectors (5V).

Selectable pulse activation modes including: short, medium, long and continuous switching pulse outputs. Can be used for injector cleaning use with an appropriate aerosol injector/carburettor cleaner.

Components

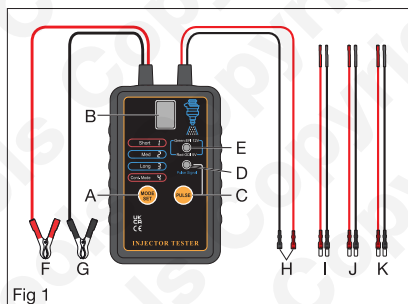


Fig 1

Ref.	Description
A	Mode set & EFI / GDI selector switch
B	Mode indicator screen
C	Pulse switch
D	Pulse activated indicator LED
E	EFI or GDI mode indicator LED
F	Positive (red) battery clip
G	Negative (black) battery clip
H	Output signal (to injector) terminals
I	Injector connectors (0.64mm)
J	Injector connectors (2.00mm)
K	Injector connectors (2.50mm)

Specifications

Input power:	12V (vehicle battery or 12V power source)
Output pulse voltage:	12V (EFI), 5V (GDI)
Operating temperature:	0-40°C (32-104°F) <80%RH
Storage temperature:	-10-50°C (14-122°F) <85%RH
Injector connector terminal sizes:	0.64mm, 2.00mm, 2.5mm

Operation

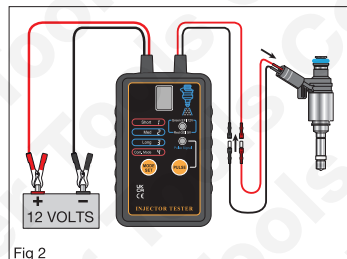


Fig 2



With the tester connected, operation of the injector can be tested (injector removed from the engine). It can also be used to facilitate injector cleaning when used with an appropriate aerosol injector/carburettor cleaner by opening (firing) the injector to allow the cleaner to be sprayed through.

- Refer to Figures 1 and 2: connect the positive battery clip (F) and negative battery clip (G) to a 12V vehicle battery or 12V power source.
- Choose the appropriately-sized injector connector leads (I, J or K) and connect up to the output signal terminals of the unit (H). Then connect the leads to the injector terminals. Be aware of correct polarity when connecting the leads.
- Press and hold the mode set & EFI / GDI selector switch (A) to choose the output voltage (12V -EFI or 5V -GDI). GREEN LED (E) will illuminate for 12V -EFI; RED LED (E) will illuminate for 5V -Gdi.
- Again press the mode set & EFI / GDI selector switch (A) to choose the desired pulse mode - the indicator screen (B) will display the pulse mode selected:

For GDI injector test:

- Mode 1: One pulse: the pulse duration is 100ms.
- Mode 2: 50 pulses: the pulse duration is 20ms.
- Mode 3: 100 pulses: the pulse duration is 15ms.
- Mode 4: Continuous: 50 pulses every 2500ms continuously (the pulse duration is 20ms). Press the pulse switch (C) to stop the signal.

For EFI injector test:

- Mode 1: One pulse: the pulse duration is 250ms.
- Mode 2: 50 pulses: the pulse duration is 8ms.
- Mode 3: 100 pulses: the pulse duration is 4ms.
- Mode 4: Continuous: 50 pulses every 1500ms continuously (the pulse duration is 8ms). Press the pulse switch (C) to stop the signal.

- After the desired pulse mode is selected, press the pulse switch (C) to generate the pulse and activate the injector. The pulse activated indicator LED will illuminate as the pulses are generated.

Precautions

- Read and understand these instructions before using the tool.
- Refer to vehicle manufacturer's advice and documentation regarding injector cleaning and maintenance.
- Wear appropriate PPE.
- **WARNING: FLAMMABLE LIQUID** (if using with aerosol injector/carburettor cleaner).
- When using with pressurised cleaner always ensure that the expelled fluid is collected in a suitable catch tank.
- Clean the tool components after use and store in a clean and dry environment (Storage temperature: -10-50°C (14-122°F) <85%RH)



Safety First. Be Protected.

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