

EN

Original Instructions
Version 1
April 2024

DRAPER[®]

5V & 12V

INJECTOR TESTER

24703



UK
CA CE

User Manual for: Injector Tester

Stock No: 24703

Part No: ETIT

Read this manual in full before using this product and retain it for future use. Always use the latest version of the manual. Please visit drapertools.com/manuals for the latest version.

1. Intended Use

This injector tester is designed to electronically operate injectors individually; for fault finding fuel delivery issues such as blocked, sticky or leaking injectors. Switchable 12V & 5V outputs depending on injector type being tested/activated and can also be used for injector cleaning in continuous mode.

Four selectable modes; Short / Medium / Long / Continuous and three pairs of extension leads included for restricted engine bays.

Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

This product is suitable for use by enthusiasts and tradespersons alike.

2. Specification

Stock No.	24703
Part No.	ETIT
Power Supply:	12V DC Vehicle battery
Injector Type 1:	12V EFI (Electronic fuel injection)
Injector Type 2:	5V GDI (Gasoline direct injection)
Fuel Type:	Petrol
Net Weight:	243g
Tester Dimensions (L X W X H):	140 X 90 X 135mm
Positive/Negative Injector Lead Length:	450mm
Positive/Negative Battery Lead Length:	450mm
Positive/Negative Extension Lead Length:	3 x 140mm

3. Health and Safety Information

Important: Read all the Health and Safety instructions before attempting to operate, maintain or repair this product. Failure to follow these instructions may result in injury or damage to the user, the product or the vehicle.



WARNING!

- Follow the vehicle manufacturer's instructions, warnings and service procedures.
- Wear eye protection during use of this tester.
- **ALWAYS** switch off the engine before using the tester to prevent any hazards or damage.
- Use in a well ventilated room and avoid breathing in the exhaust emission and vapour. **DO NOT** smoke in the vicinity and keep away from flames.
- **DO NOT** spill fuel on the hot engine.
- The tester is only suitable for use with electronic fuel injection (EFI) and gasoline direct injection (GDI) systems. It is not suitable for diesel or other systems.
- The current required to open the injector valve is not a fixed value and will vary depending on the fuel pressure. The higher the pressure the higher the current required to open the valve.
- **DO NOT** exceed the maximum current specified for the tester – 12V is 1A and 5V is 2A.
- Only use a 12V DC battery, **DO NOT** use 24V or any other voltage with this tester.
- **DO NOT** short contact either the positive or negative terminals of the battery.
- **DO NOT** contact any energised conductors.
- Restore the wire connection after testing.
- **DO NOT** use this device if the tester or leads are damaged in any way.
- **DO NOT** attempt to repair this device; it contains no user-serviceable parts.

4. Symbols



Read the instruction manual



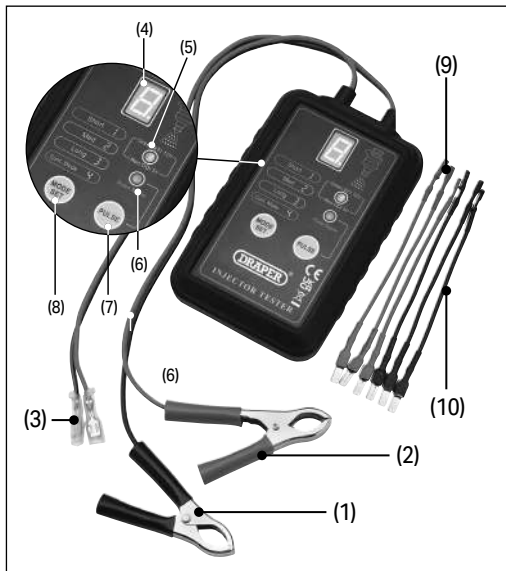
WEEE – Waste Electrical & Electronic Equipment

Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish.

5. Identification

Carefully remove the product from the packaging and examine it for any signs of damage that may have occurred during shipment. If any part is damaged or missing, do not attempt to use the product.

Please contact the Draper Helpline; contact details can be found at the back of this manual.



- (1) Black negative (-) battery clip
- (2) Red positive (+) battery lead and clip
- (3) 2 X Output signal connector
- (4) Mode Indicator
- (5) Injector type indicator
- (6) Pulse indicator
- (7) Pulse button
- (8) Mode/Injector type setting button
- (9) Red (+) Connector terminals
 - 9A - 1 X 0.64mm
 - 9B - 1 X 2mm
 - 9C - 1 X 2.5mm
- (10) 10. Black (-) Connector terminals
 - 10A - 1 X 0.64mm
 - 10B - 1 X 2mm
 - 10C - 1 X 2.5mm

Please visit drapertools.com for our full range of accessories and consumables.

6. Operation

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Important: Before operating this product, read and understand all the safety instructions listed in this manual.

1. Switch off the engine.

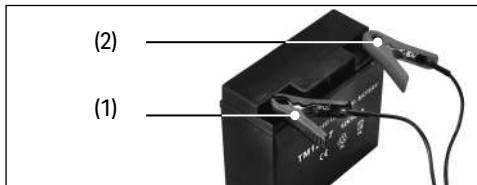


Fig. 1

2. Then connect the black (-) clip to the negative terminal of the car battery and the red (+) clip to the positive terminal of the battery.



Fig. 2

3. Check the injector type before connecting the tester to the injector. Press and hold down the **'Mode/Injector Type Setting'** button (8).
 - Indicator Red = gasoline direct injection (GDI)
 - Indicator Green = electronic fuel injection (EFI)
4. Disconnect the injector connector from the vehicle, then connect the 'Output signal connector' (3) to the injector.

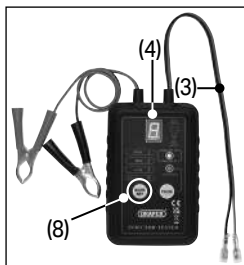


Fig. 3

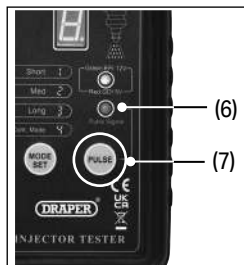


Fig. 4

5. Press the **'Mode/Injector Type Setting'** button (8) to select the output signal pulse mode between Short, Medium, Long and Continuous mode. The 'mode Indicator' screen (4) will display the mode number selected. Fig 3
6. Once the **'Pulse mode'** is selected press the **'Pulse'** button (7) to generate the pulse. The **'Pulse indicator'** (6) will flash as the signal is generated. Fig 4
7. Press **'Pulse'** button again to stop the signal.

GDI Injector Test		
Mode	Number of Pulses Generated	Width
1	1	100ms
2	50	20ms
3	100	15ms
4	50 pulse every 2500ms	20ms

EFI Injector Test		
Mode	Number of Pulses Generated	Width
1	1	250ms
2	50	8ms
3	100	4ms
4	50 pulse every 1500ms	8ms

7. Maintenance, Storage and Disposal

- Wipe the case with a damp cloth and a mild detergent. DO NOT use solvents or abrasives to clean the tester.
- At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.
- **DO NOT** dispose of this product with domestic waste; most local authorities provide appropriate recycling facilities.



8. Warranty

24 months

Visit drapertools.com/warranty for full details.

Contact Details

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Please contact the Draper Tools Product Helpline for repair and servicing enquiries.