

**DRAPER**

**EN**

Original Instructions  
Version 1  
May 2026

PETROL  
**COMPRESSION  
TESTER**

**35880**



## Product Reference

**User Manual for:** Petrol Compression Tester

**Stock No:** 35880

**Part No:** CTEP1

## Revisions

**Version 1:** May 2026  
First release

## 1. Intended Use

This product is designed to measure the pressure within a petrol engine's cylinders, helping to identify worn piston rings, faulty valves, or blown head gaskets. Compatible with direct and indirect petrol engines which use 14 and 18mm spark plug threads.

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

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](http://drapertools.com/manuals) for the latest version.

## 2. Specification

Stock No.	35880
Part No.	CTEP1
Gauge Pressure Range:	0-300PSI (0-20BAR)
Pressure Gauge Diameter:	62mm
Flexible Hose Length (approx):	280mm
Flexible Hose Diameter (approx):	12mm
Adaptor Internal Thread Size:	14 x 1.25mm
Adaptor External Thread Size:	18 x 1.50mm

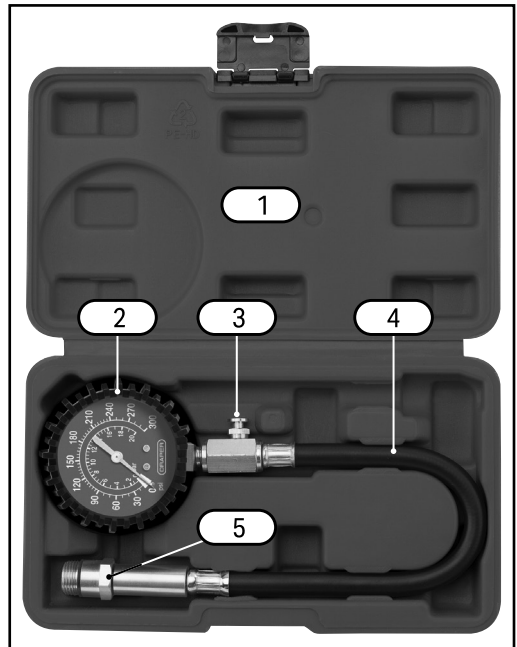
## 3. Health and Safety Information

**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 or the product.

- **ALWAYS** follow the vehicle manufacturer's instructions, warnings and service procedures.
- This tester should only be used by qualified trained personnel.

- Keep this tester kit in good working order and condition. **DO NOT** operate if any parts are damaged or missing as this may cause failure and/or personal injury.
- **DO NOT** leave any tools or part being used in or near the engine.
- **DO NOT** use the kit to perform a task for which it is not designed.
- Wear appropriate PPE (Personal Protective Equipment) included suitable eye protection.
- Wear suitable clothing to avoid snagging. **DO NOT** wear jewellery and tie back long hair.
- When **NOT** in use, place in protective case and store in a safe, dry, childproof area.

## 4. Identification



- 1 Storage case
- 2 Pressure gauge
- 3 Pressure release valve
- 4 Flexible hose with connector
- 5 Adaptor

Please visit [drapertools.com](http://drapertools.com) for our full range of accessories and consumables.

## 5. Operation

### 5.1 Preparation.


- Run the engine until normal operating temperature is achieved.
- Stop engine, loosen the spark plugs one turn. Then with an air hose, blow any dirt and debris from the spark plug wells.
- Remove all spark plugs.
- If fitted with a carburettor set the throttle valve wide open.



**WARNING! The ignition system MUST be disabled. Failure to disable could result in damage to the ignition system.**

- Unplug the low tension connections to the coil. Refer to the manufacturer's service manual before disabling the vehicle's ignition system. It is advisable to unplug the fuel injectors or disable the fuel pump, especially on cars fitted with a catalytic converter. This prevents unburnt fuel getting into the exhaust system during the test.

### 5.2 Compression Test.

- Use the appropriate threaded adaptor and screw the tester into a spark plug hole (finger-tight, **DO NOT** use a wrench). Hold the compression tester firmly against the spark plug aperture.
- Crank the engine until no increase in pressure is noted on the gauge reading; usually 3 or 4 revolutions is sufficient. Note the pressure reading.
- Decompress the tester by pressing the release valve  and remove the compression tester from the spark plug hole and proceed to the next cylinder.

#### Note:

- The actual psi figure is not important. It is important that all cylinders have approximately the same compression pressures.
- On high compression engines (150psi and higher) the pressure should not vary more than 15psi from the highest to the lowest cylinder reading.
- On low compression engines (under 150psi) the pressure should not vary more than 10psi from the highest to the lowest cylinder reading.

### 5.3 Unbalance Causes

- Compression readings are unbalanced when one or two cylinders are considerably higher or lower than the others.
- Low cylinder compression is caused by leakage from:
  - **Head Gasket** - explosive sound when running engine.
  - **Head Gasket between cylinders** - compression will be low in two adjacent cylinders and water may appear in cylinders or crankcase.
  - **Valves** that are not seating properly.
  - **Piston rings that are worn.** Pour 5ml of oil into the spark plug hole to seal the rings. Repeat test. If compression reading increases, the rings are worn; no increase indicates a bad valve.
- High cylinder compression is caused by accumulation of carbon in that cylinder.
  - High compression readings in all cylinders are caused by an even accumulation of carbon in all cylinders. This may cause detonation pinking that is difficult to eliminate.

## 6. Maintenance, Storage and Disposal

- After use, clean and store in the storage case supplied in a cool, dry, childproof area.
- At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.

## 7. Warranty

12months

Visit [drapertools.com/warranty](http://drapertools.com/warranty) for full details.

## Contact Details

### **Draper Tools**

Draper Tools Limited  
Hursley Road  
Chandler's Ford  
Eastleigh  
Hampshire  
SO53 1YF  
UK

**Website:** [drapertools.com](http://drapertools.com)

**Email:** [sales@drapertools.com](mailto:sales@drapertools.com)

**Product Helpline:** +44 (0) 23 8049 4344

**Telephone Sales Desk:** +44 (0) 23 8049 4333

**General Enquiries:** +44 (0) 23 8026 6355

### **Draper Tools Europe B.V.**

Oude Graaf 8  
6002 NL  
Weert  
Netherlands

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