

# Operation Manual

## Petrol Engine Compression Tester Kit

61483



Similar to image, may vary depending on model

Read and follow the operating instructions and safety information before using for the first time.

Technical changes reserved!

Due to further developments, illustrations, functioning steps, and technical data can differ insignificantly.

Updating the documentation

If you have suggestions for improvement or have found any irregularities, please contact us.



The information contained in this document may alter at any time without previous notice. It is prohibited to copy or spread any parts of this document in any way without prior written allowance. All rights reserved.

The WilTec Wildanger Technik GmbH cannot be held accountable for any possible mistakes in this operating manual, nor in the diagrams and figures shown.

Even though, the WilTec Wildanger Technik GmbH has undergone biggest possible efforts to ensure that the operating manual is complete, faultless, and up to date, mistakes cannot be entirely avoided.

If you should find a mistake or wish to make a suggestion for improvement, we look forward to hearing from you.

Send an e-mail to:

[service@wiltec.info](mailto:service@wiltec.info)

or use our contact form:

<https://www.wiltec.de/contacts/>

The most recent version of this manual in various languages can be found in our online shop via:

<https://www.wiltec.de/docsearch>

Our postal address is:

WilTec Wildanger Technik GmbH  
Königsbenden 12  
52249 Eschweiler  
Germany

To return orders for exchange, repair, or other purposes, please use the following address. Attention! To allow for a smooth execution of your complaint or return, it is important to contact our customer service team before returning the goods.

Returns Department  
WilTec Wildanger Technik GmbH  
Königsbenden 28  
52249 Eschweiler

E-mail: **service@wiltec.info**

Tel: +49 2403 55592-0

Fax: +49 2403 55592-15



## Introduction

Thank you for purchasing this quality product. **To minimise the risk of injury we urge that our clients take some basic safety precautions when using this device. Please read the operation instructions carefully and make sure you have understood its content.**

Keep these operation instructions safe.

## Unpacking

When unpacking the device, ensure that all parts stated in the parts list are included. If parts should be missing or damaged, please contact the seller immediately.

## Technical Data

|                             |                                |   |
|-----------------------------|--------------------------------|---|
| <b>Dimensions (mm)</b>      | <b>Diameter pressure gauge</b> | 70  |
|                             | <b>Hose length</b>             | approx. 320   |
|                             | <b>Brass connections</b>       | 14 / 18   |
| <b>Weight (kg)</b>          |                                | 0.58  |
| <b>Pressure range (bar)</b> |                                | 0–20 (0–300 psi)  |
| <b>Equipment</b>            |                                | 1 × pressure gauge of 0–20 bar (0–300 psi)<br>1 × hose, length 320 mm approx.<br>1 × adapter M14 × 1.25 (on the hose)<br>1 × adapter M18 x 1.5<br>1 × pressure pipe with rubber attachment (150 mm) |

## Safety notes

### General safety notes

- **Always keep your working area tidy and well illuminated.** Untidy and badly lit work areas can lead to accidents.
- **Do not operate devices and equipment in an explosive surrounding,** e.g., close to flammable liquids, gasses, or dusts. The device and its equipment can create sparks, which could ignite flammable materials.
- **Keep bystanders, children, and visitors away from your working area,** when operating the devices or equipment. Distractions can lead to loss of control over the device. Protect other people in your working area, e.g., with separating walls or protection shields.
- **Always stay focused and pay attention to your actions.** Always use the devices and equipment with care. Do not use devices and equipment, when you are tired or under the influence of alcohol, drugs or other medicaments which can affect your consciousness. A short moment of inattentiveness can lead to accidents and serious injury.
- **Wear clothing appropriate for the work being carried out.** Do not wear loose clothing or jewellery. Tie long hair together. Keep hair, clothing, gloves, etc. away from moving parts, as these can get stuck and thus lead to injury.
- **Ensure you have a secure positioning and can always keep your balance.** This allows for better control over the device in unexpected situations.
- **Wear adequate protective gear when using the device,** e.g., protective glasses, gloves, etc.
- **Do not use the device with force.** Always use the right device/tool for the work needing to be carried out. The right device/tool will do the work better and safer, if it is used according to its purpose.
- **Store unused devices, tools, and equipment out of reach of children and other inexperienced people.** These can be dangerous in the hands of inexperienced people.



- **Maintain and care for your devices and tools.** Do not use damaged and broken devices. Mark broken devices and tools until they have been repaired, so that other people will not use them.
- **Have damages repaired immediately before using the device or tool.** Frequently check all devices and tools for loose parts and attachments, tears, or broken parts, as well as the overall condition, which could affect a safe operation. A lot of accidents happen, due to improper maintenance.
- **Only use equipment recommended by the manufacturer.** The use of unsuitable equipment poses a danger.
- **Repair work needing to be carried out, should only be done by a qualified technician.** Repair work carried out by unqualified people can pose a risk.
- **When maintaining a product, only use identical spare parts.** Follow the instructions in the section “Check-up, maintenance and cleaning” of this manual. The use of unauthorised equipment or non-compliance with the instructions can lead to injury.

#### *Specific safety notes*

- **Warning!** Never exceed the maximal pressure performance of this device (20 bar/300 psi). Exceeding the maximal pressure can lead to serious injury and/or damage of objects.
- **Warning!** Only use the compression tester in well ventilated areas. A running petrol engine produces carbon monoxide. Carbon monoxide vapour is a colourless, odourless gas, which can lead to serious injury and even death when inhaled.
- Take care of the type labels on the compression tester. These contain important information.
- Make sure, you have read and understood all warnings, precaution measures and instructions of the engine being tested, before using the compression tester.
- When warming up the engine for testing, ensure that the vehicle transmission is in the “parking”/neutral position (with manual transmission). Additionally ensure, that the handbrake is engaged.
- Keep hands and fingers away of moving parts, as well as heated parts of the car engine.
- **Warning!** People with pacemakers should consult their doctor before use. Electro-magnetic fields near a pacemaker can lead to errors or malfunctions. Additionally, people with pacemakers should regard the following: Near the coil, spark plug cables or the ignition distributor of a running motor, be careful. The engine should always be switched off, when adjustments on the ignition distributor are performed.
- **Warning!** All warnings and safety precautions cannot cover all possible situations. Always use the device carefully and with caution.

#### **Operation**

1. **Note!** Carrying out a compression tester requires two people, one operating the ignition switch of the vehicle, whilst the other operates the compression tester.
2. The compression tester has an adapter connection **(2)** with rubber cone, which can be used with all variations of spark plug hole. Further, it has a hose connection **(4)**, which is suitable for 14 mm and 18 mm spark plug hole (see fig. 1).
3. To carry out a typical compression tests, the engine is prepared for the compression tester by starting the engine and heat it to a normal working temperature. Then switch the ignition off.  
**Warning!** Avoid a carbon monoxide poisoning! Never let a petrol engine run in a closed garage or another closed area!
4. After turning the motor off, both coil wires need to be separated from the motor coil and remove the spark plugs. **Note!** Isolate the coil wires or remove them from each other and all metal surfaces. Note down, which spark plug wires lead to which spark plug positions.

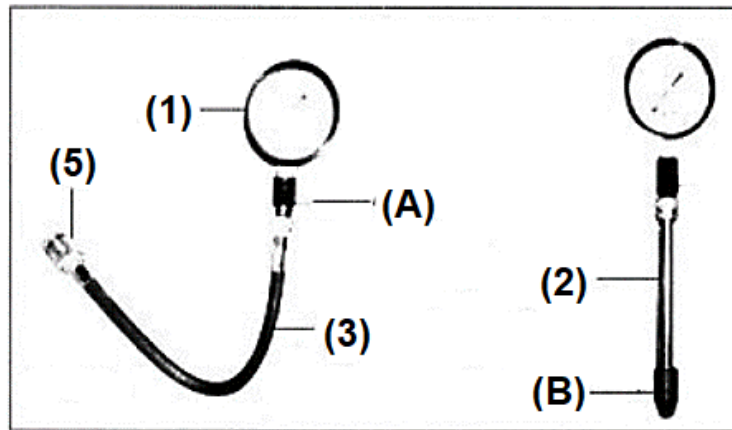


Figure 1

| No | Name               | No/letter | Name              |
|----|--------------------|-----------|-------------------|
| 1  | Pressure gauge     | 5         | Hose connection   |
| 2  | Adapter connection | A         | Air outlet button |
| 3  | Hose               | B         | Rubber cone       |

5. Either attach the adapter connection (2) or the hose (3), as well as the hose connection (5) to the pressure gauge (1) (see fig. 1).
6. Connect the compression tester with the first cylinder of the motor. Start the engine with at least eight revolutions when the accelerator needs to be pushed down entirely (see fig. 3).
7. When switching the engine on, watch the maximal measured value on the pressure gauge (1) of the compression tester and write it down (see fig. 3).
8. As soon as the maximal value is written down, do not switch the engine on again. Then let the air pressure of the pressure gauge (1) out, by pushing the air outlet button (see fig. 3).
9. Remove the compression tester from the first cylinder. Repeat the steps 6 to 8 for the rest of the engine cylinders (see fig 2 and 3).
10. **Note!** A good cylinder compression of the engine is shown with a high starting value and a progressive build-up to the final maximal value. A bad compression of the engine cylinders is shown with a low starting value and a much slower build-up to the maximal value. The compression measure values for all engine cylinders should not vary by more than 10 %. **Note!** Check your operating/maintenance instructions for acceptable pressure ranges.

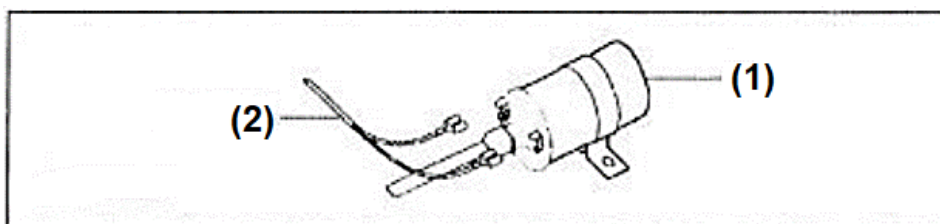


Figure 2

| No | Name       | No | Name      |
|----|------------|----|-----------|
| 1  | Spark coil | 2  | Coil wire |

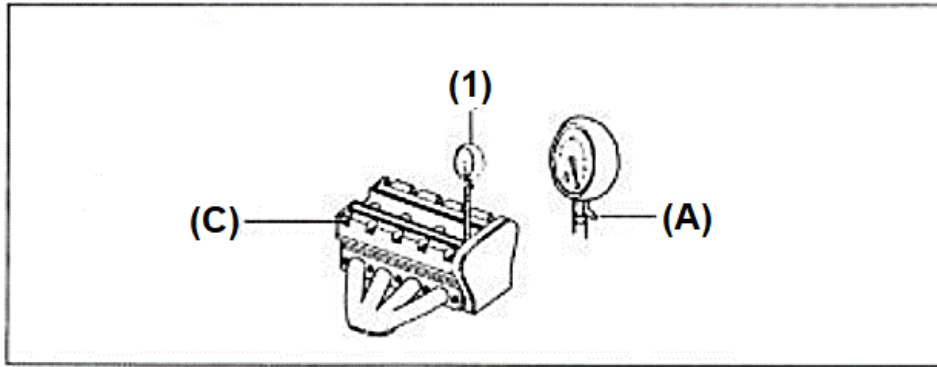


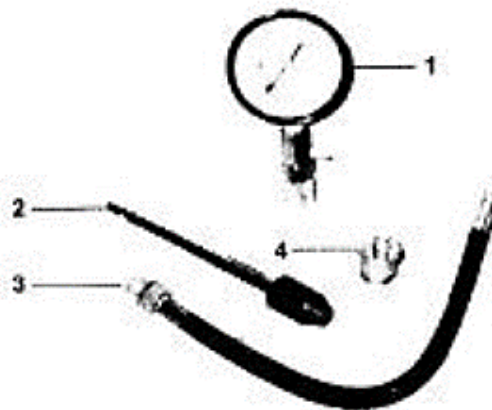
Figure 3

| No | Name           | Letter | Explanation            |
|----|----------------|--------|------------------------|
| 1  | Pressure gauge | A      | Air outlet button      |
|    |                | C      | Remove the spark plugs |

### Inspection, maintenance, and cleaning

1. **Before every use** check the general condition of the compression tester. Make sure that there are no broken, torn or bent parts, lose or missing parts or any other conditions, which can impact the proper use of this product. If any problem occurs, it needs to be taken care of before the next use. **Do not use any damaged devices!**
2. **To clean** the device, use a clean cloth with mild cleaning detergents. Do not use solvents, as the compression tester can be damaged by these. Do not immerse the manometer (**Fig. 1/3, 1**) into any liquids. Store the compression tester in a safe, dry area, out of reach of children and other unauthorised people.
3. **Attention!** All maintenance, check-up and repair work needing to be done, which is not stated in this operating manual may only be carried out by a qualified technician.

### Parts list



| No | Name               | Qty. | No | Name            | Qty. |
|----|--------------------|------|----|-----------------|------|
| 1  | Pressure gauge     | 1    | 3  | Hose            | 1    |
| 2  | Adapter connection | 1    | 4  | Hose connection | 1    |

### Important note:

The reprint or reproduction, even of excerpts, and any commercial use, even in part of this instruction manual requires the written permission of the WilTec Wildanger Technik GmbH.