

**DRAPER**<sup>®</sup>  
*Expert*



32 PIECE

# COOLING SYSTEM PRESSURE TEST KIT

23420



These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

# 1. INTRODUCTION

## 1.1 SCOPE

Part of our Expert range, this product is intended for trade use with the quality & features to meet and exceed the expectations of the most demanding user. Any application other than that it was intended for, is considered misuse.

This product is not a toy and must not be used by children or any person with reduced physical, sensory or mental capabilities or lack of experience and knowledge, or people unfamiliar with these instructions.

Local regulations may restrict the age of the operator.

## 1.2 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

**IMPORTANT:** For detailed and concise instructions on the correct use of this kit, refer to the vehicle manufacturer's manual.

**Warning!** Do not over pressurize the system, as excessive pressure may cause failure of the radiator, hoses etc.

# 2. UNPACKING AND CHECKING

## 2.1 PACKAGING

Carefully remove the product from the packaging and examine it for any sign of damage. Check contents against the parts shown in Fig A. If any part is damaged or missing, please contact the Draper Help Line (see warranty). Do not attempt to use the product!

The packaging material should be retained during the warranty period, in case the product needs to be returned for repair.

**Warning!**

- Some of the packaging materials may be harmful to children. Do not leave any of these materials in reach of children.
- If any of the packaging is to be thrown away, make sure they are disposed of correctly, according to local regulations.

# 3. TESTING

## 3.1 MANUAL PRESSURE TESTING INSTRUCTIONS - FIG. 1

1. Carefully undo and remove the radiator or expansion tank pressure cap (use a cloth or gloves and arm protection if the radiator cap is known to be hot).
2. Select the correct adaptor and configuration of the stationary seat accessories and ensure it is securely fitted to the filler neck of the radiator or expansion tank.

3. Attach the quick-coupling connector (1) onto the male tailpiece of the adaptor fitted to the radiator.
4. Depress the hand pump handle (2) and check the reading indicated on the pressure gauge (3). Ideal readings should range between 12-15PSI (always check relevant manufacturer's manual), if the pressure level is below this range or the pressure drops during testing, a leak in the coolant system (radiator, hose, etc.) is the most likely source of the problem.
5. Once the test is complete, release the air pressure by depressing the quick release valve (4). Disconnect the quick-coupling connector (1) and adaptor assembly and replace the radiator filler cap securely.



FIG. 1

## 3.2 USING KIT WITH COMPRESSED AIR LINE

**Warning!**

Input air pressure must be set to below 25psi on compressed air line BEFORE connecting to cooling system. Failure to do so will cause damage to the system and danger to the user.

- Proceed as in steps 1-4 of manual testing.
- Ensure air tap (5) is in closed position (right angle to coupling).
- Connect compressed air line to air inlet (6).
- Connect to adaptor using quick-coupling (1).
- Slowly open air tap (5) until air pressure gauge (3) shows the required test pressure (always check relevant manufacturer's manual).
- Once the test is complete, completely close air tap (5), disconnect compressed air line (6) then carefully re-open air tap (5) to release stored pressure and remove from cooling system. Finally, replace the cap securely.

## 4. IDENTIFICATION – FIG.A



- ① Quick-coupling.
- ② Hand pump handle.
- ③ Pressure gauge.
- ④ Depressurisation pin.
- ⑤ Air tap.
- ⑥ Compressed air connection.

**Note:** For details of our full range of accessories and consumables, please visit [drapertools.com](http://drapertools.com)

FIG.A

## 5. ADAPTORS AND ACCESSORIES

### Adaptor 1

Mercedes Benz, for 60mm external cap thread.



### Adaptor 2

Audi (new A4, A5, A6) for 62mm internal threaded cap.



### Adaptor 3

Vauxhall/Opel, Ford universal for 48mm external cap thread.



### Adaptor 4

BMW for 57mm internal cap thread.



### Adaptor 5

BMW for 49mm external cap thread.



### Adaptor 6

Volvo, Citroen, Fiat, Renault, Peugeot universal for 45mm external cap thread.



### Adaptor 7

Audi/VW universal for 43mm external cap thread.



### Adaptor 8

Universal adjustable sprung adaptor seat.



### Adaptor 9

Adaptor pin for adaptor 8 with 50mm diameter base for main Japanese & European vehicles.



### Adaptor 10

Adaptor pin for adaptor 8 with 35mm diameter base for main Japanese & European vehicles.



### Adaptor 11

Adaptor pin for adaptor 8 with 27mm diameter base for main Japanese & European vehicles.



### Adaptor 12

Universal cap adaptor.



### Adaptor 13

Universal cap adaptor.



### Adaptor 14

U-piece stainless steel cap clamp.



### Adaptor 15

Honda/Toyota sprung clamp cap - 42mm.



### Adaptor 16

Mitsubishi/Ford/Nissan/Mazda sprung clamp - 44mm.



### Adaptor 17

Ford - for use with adaptors 9, 10, 11 - 52mm external cap thread.



### Adaptor 18

Ford - for use with adaptors 9, 10, 11 - 56mm for standard lug cap.



### Adaptor 19

Mercedes Benz for 50mm external cap thread.



### Adaptor 20

Ford - for 49mm external cap thread.



### Adaptor 21

Adaptor for Ford (after 2010) pressure caps.



### Adaptor 22

Adaptor for Toyota and Honda pressure caps.



### Adaptor 23

Adaptor for Mitsubishi, Ford, Nissan and Mazda pressure caps.



### Adaptor 24

Adaptor for Nippon and Hino pressure caps.



### Adaptor 25

Adaptor for Renault, Audi and VW pressure caps.



### Adaptor 26

Adaptor for Volvo, Citroen, Renault, Fiat and Peugeot pressure caps.



### Adaptor 27

Adaptor for Opel, VW and Ford pressure caps.



### Adaptor 28

Adaptor for Volvo and Renault pressure caps.



### Adaptor 29

Adaptor for BMW pressure caps.



### Adaptor 30

Adaptor for Mercedes pressure caps.



Configuration of universal adjustable seats for European cars.



Configuration of universal adjustable seats for Japanese cars.



## 6. MAINTENANCE

### 6.2 MAINTENANCE

Regular inspection and cleaning reduces the necessity for maintenance operations and will keep your tool in good working condition.

Do not use solvents or fuels to clean the product. When not in use, store the product in a safe, dry place.

## 7. WARRANTY

### 7.1 WARRANTY

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact:

Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.

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

Product Helpline +44 (0)23 8049 4344.

A proof of purchase must be provided.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This warranty period covering labour is 12 months from the date of purchase except where tools are hired out when the warranty period is 90 days from the date of purchase. This warranty does not apply to any consumable parts, any type of battery or normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

**Note:** If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This warranty applies in lieu of any other warranty expressed or implied and variations of its terms are not authorised.

Your Draper warranty is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the warranty period.

Please note that this warranty is an additional benefit and does not affect your statutory rights.

**Draper Tools Limited.**

## 8. DISPOSAL

### 8.1 DISPOSAL

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.