

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to
Instruction
Manual



Wear eye
Protection



Wear
Protective
Gloves



Warning:
Hot
Surface

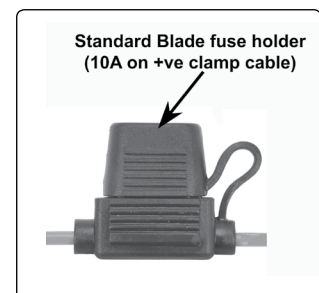
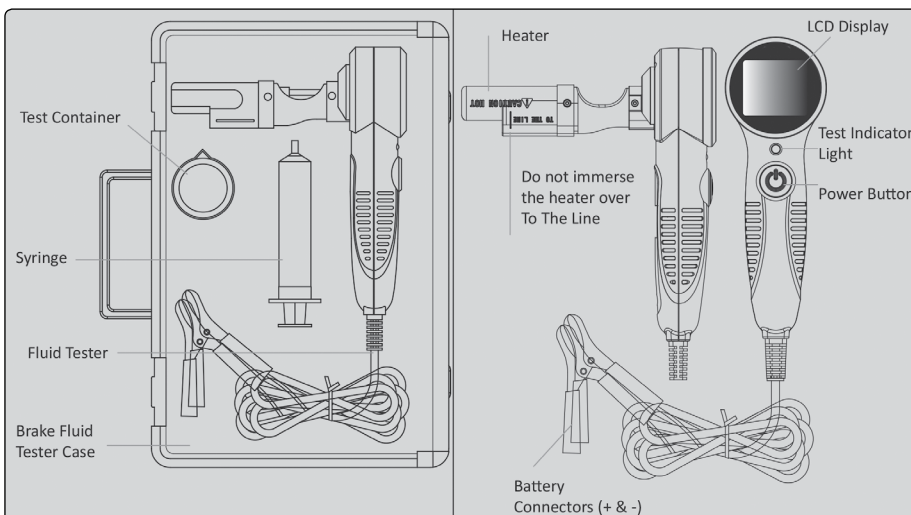
1. SAFETY

- ✓ Keep children and unauthorised persons away from the work area.
 - ✓ Keep work area clean and tidy and free from unrelated materials.
 - ✓ Ensure the work area has adequate lighting.
 - ✗ **DO NOT** touch the probe whilst switched on, it will be hot.
 - ✗ **DO NOT** use the tester to perform a task for which it is not designed.
 - ✗ **DO NOT** allow untrained persons to use the tester.
 - ✗ **DO NOT** use whilst under the influence of drugs, alcohol or intoxicating medication.
 - ✓ After use, clean equipment and store in a cool, dry, childproof area.
- 1.1. **BRAKE FLUID SAFETY**
- ✓ Always read and comply with the warnings on the brake fluid manufacturer's container.
 - ✓ Wear eye protection and keep skin contact to a minimum. If brake fluid enters eyes rinse with plenty of water and seek medical advice. If swallowed seek medical advice immediately.
 - ✓ Dispose of waste brake fluid in accordance with local authority regulations.
 - ☐ **WARNING!** Brake fluid will damage paintwork. Any spillage should be flushed with water immediately.
 - ☐ **WARNING!** Brake fluid is flammable - keep away from sources of ignition, including hot surfaces e.g. exhaust manifold.
- 1.2. **PERSONAL PRECAUTIONS (WORKING WITH BATTERIES)**
- ✓ Ensure there is another person within hearing range, or close enough to come to your aid should a problem arise, when working near a lead-acid battery.
 - ✓ Have fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.
 - ✓ Wear safety eye protection and protective clothing. Avoid touching eyes while working with a battery.
 - ✓ Wash immediately with soap and water if battery acid contacts skin or clothing. If acid enters eye, flush eye immediately with cool, clean running water for at least 15 minutes and seek immediate medical attention.
 - ✓ Remove personal metallic items such as rings, bracelets, necklaces and watches. A lead-acid battery can produce a short-circuit current high enough to weld a ring or the like to metal, which may cause severe burns.

2. INTRODUCTION

The approved method of testing the water content of brake fluid. Just 3% of moisture can lower the brake fluid boiling point by over 100°C. The best way to detect this small water content is to measure the boiling point of the fluid. The unit incorporates a heater element. LCD display and a power lead for use on 12v DC power supplies. Works on DOT 3, 4, 5 and 5.1 specification fluids. Supplied in carry case with full operating instructions.

3. CONTENTS



4. OPERATION

- 4.1. When using the car's battery as the power source, start the engine before connecting the tester in order to avoid the possibility of a low charged battery after testing the brake fluid.
- 4.2. Connect to the negative (-) electrode first and then the positive (+) electrode.
- 4.3. Avoid pressing the Power button without touching the liquid.
- 4.4. **DO NOT** immerse the heater over the 'To The Line' level, see fig.2.
- 4.4. If there is any abnormal situation during the test, remove the battery connectors immediately.

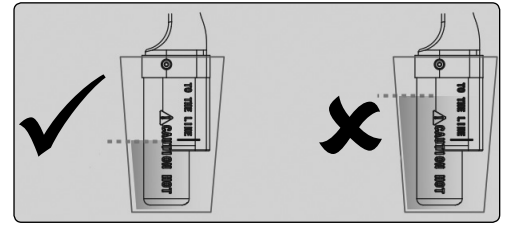


Fig.2

- 4.5. **CLEANING**
- 4.5.1. When the test is completed, drip the remaining brake fluid from the heater, wash it with clean water and wipe dry. **DO NOT** immerse the heater over the 'To The Line' level.
- 4.5.2. Wipe and dry the test container and syringe, replace both carefully in the case.

- 4.6. **TESTING**
- 4.6.1. Confirm the battery is 12V.
- 4.6.2. Connect the clamps to the battery.
- 4.6.3. LCD display refer to fig.3.

IMPORTANT:

- If the battery is low the tester will not work and the indicator light will be red.
- Power save: after 1 minute without use, the tester will turn off automatically to save power.
- Air burning preventing design: when heating without touching the fluid the display will show "E-1" after 5 seconds which means air-burning.
- If there is no display after battery connection, make sure the clamps are fitted the correct way round.

- 4.6.4. **PREPARING BRAKE FLUID**
- 4.6.4.1. Use the syringe to extract the brake fluid from the brake master cylinder reservoir.
- 4.6.4.2. Discharge the fluid (about 25ml) into the test container.

- 4.6.4.3. Put the heater into the test container.
- 4.6.4.3. **DO NOT** immerse the heater over the 'To The Line' level, see fig.2.

- 4.6.4.4. Press the power button, see fig.4, to heat the brake fluid. The indicator light will now be green.

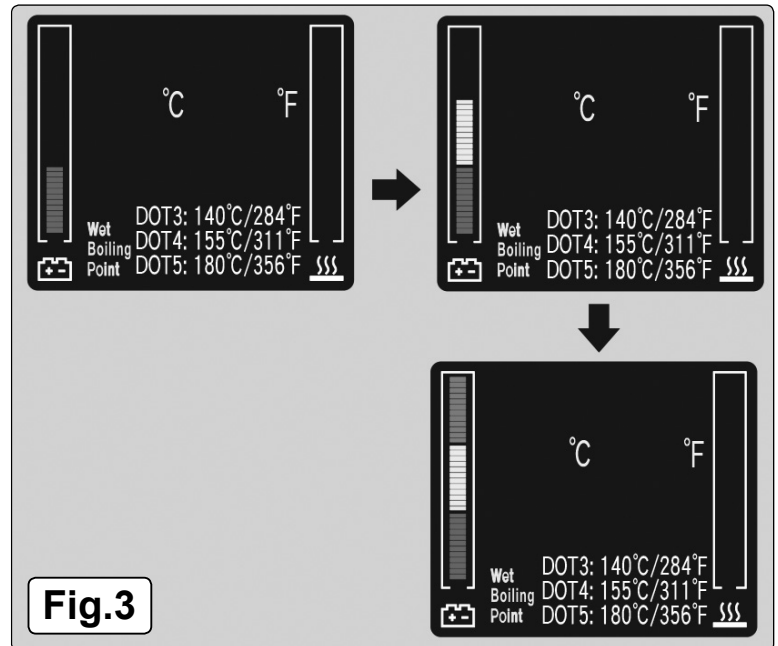


Fig.3

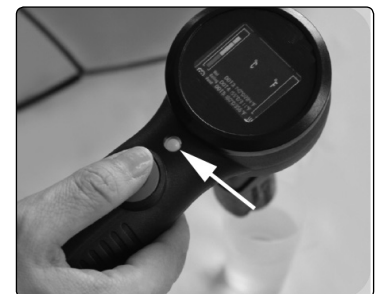
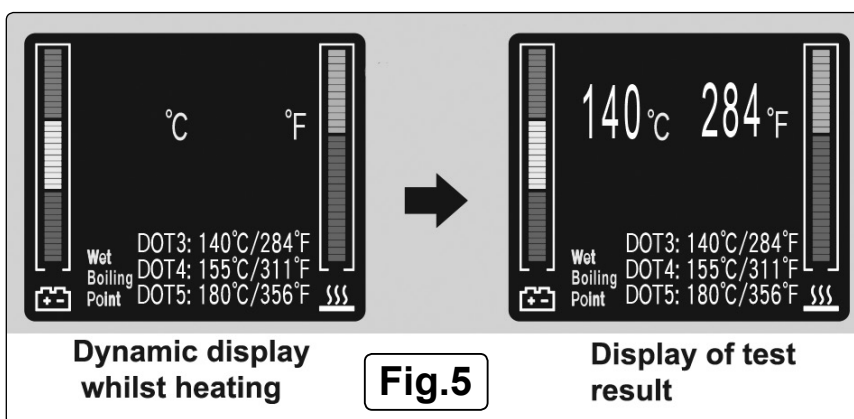


Fig.4



**Dynamic display
whilst heating**

Fig.5

**Display of test
result**

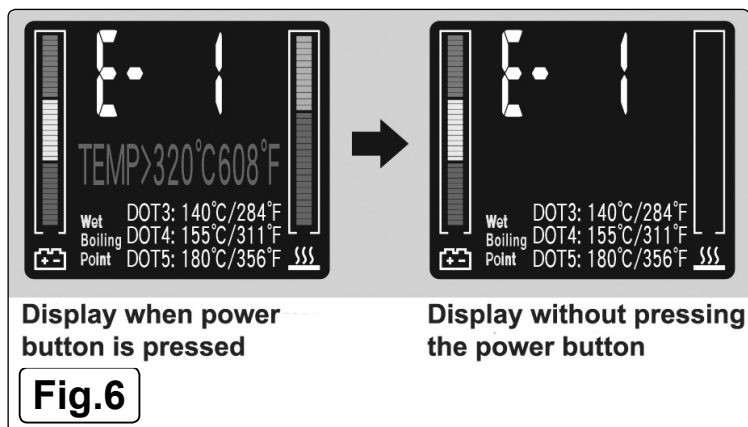
- 4.6.4.5. The green light will flash during heating. Keep pressing the Power button until the heating has completed. It takes about 19 to 30 seconds, depending on the moisture level of the brake fluid.
- 4.6.4.6. The tester will give a short 'beep' sound when the test is complete. The result will show on the LCD display.
- 4.6.4.7. The indicator light will be yellow when the test is complete. To start the test again, wait until the light turns red.

4.6.5. **ABNORMAL OPERATION DISPLAYS**

4.6.5.1. E-1: means the heater is not touching the fluid or the fluid does not reach to 'To The Line' mark.

IMPORTANT:

- When connected to the battery and heating without touching the fluid, the display will show "E-1" after pressing the power button for 5 seconds, (air-burning prevention).
- The indicator light will be red, accompanied by a long "beep" sound.
- Release the Power button, TEMP > 320°C/608°F (see fig.6) will disappear and show only "E-1".
- Disconnect and reconnect to the battery in order to use the tester again.



4.6.5.2. E-2: means either the voltage is too low (lower than 10.8V) or the voltage is too high (higher than 15.7V), see fig.7.

4.6.5.3. E-3: means either there is a problem with the heater or there is an internal fault. Contact your stockist for assistance, see fig.8.

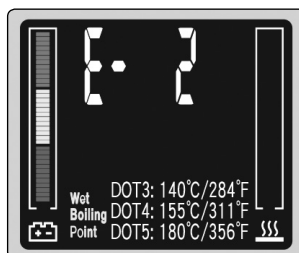


Fig.7

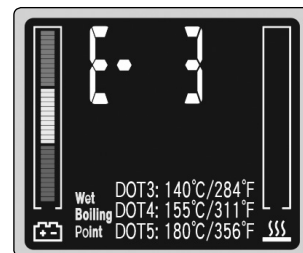


Fig.8

4.7. **CALIBRATION TEST**

4.7.1. To confirm the accuracy of the tester, carry out a test using clean water.

4.7.2. If the tester is working correctly the result will be Temp=100°C/212°F, see fig.9.

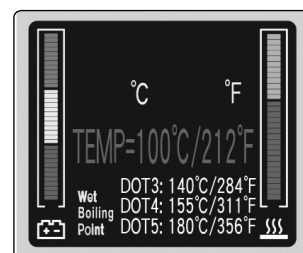


Fig.9

4.8. **INSPECTION STANDARD VALUE**

Wet	DOT3: 140°C/284°F
Boiling	DOT4: 155°C/311°F
Point	DOT5: 180°C/356°F

4.8.1. Please refer to the Wet Boiling Point of brake fluid on the LCD display to determine whether the brake fluid needs to be replaced.

When testing either DOT5 or DOT5.1 brake fluid, use the DOT5 reference data on screen. Both brake fluid types have virtually the same minimum boiling point, depending on brake fluid manufacturer.

Different manufacturers of brake fluid have different compositions, so the temperature can be slightly different. The real boiling point depends on the DOT type and manufacturer of brake fluid and is marked on the bottle.

The Wet Equilibrium Reflux Boiling Point should not be below the following temperatures:

DOT 3:	140°C (284°F)
DOT 4:	155°C (311°F)
SUPER DOT 4:	155°C (311°F)
DOT 5:	180°C (356°F)
DOT 5.1:	190°C (374°F)



ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

Sealey Group, Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk. IP32 7AR

01284 757500

01284 703534

sales@sealey.co.uk

www.sealey.co.uk