

**EN**

Original Instructions  
Version 1



# CAN BUS 13 AND 7 PIN **TOWBAR SOCKET TESTER**

**27198**



These are the original product instructions. This document is part of the product; retain it for the life of the product, passing it on to subsequent holders. Read this manual in full before attempting to assemble, operate or maintain this product.

## 1.1 Product Reference

**User Manual for:** CAN Bus 13 and 7 Pin Towbar  
Socket Tester

**Stock No:** 27198

**Part No:** TST13C

## 1.2 Revisions

**Version 1:** April 2024

First release

As our manuals are continually updated, always ensure that the latest version is used.

Please visit [drapertools.com/manuals](https://drapertools.com/manuals) for the latest version of this manual and the associated parts list, if applicable.

## 1.3 Understanding the Safety Content of This Manual



**WARNING!** – Situations or actions that may result in personal injury or death.



**CAUTION!** – Situations or actions that may result in damage to the product or surroundings.

**Important:** – Information or instructions of particular importance.

## 2. Product Introduction

### 2.1 Intended Use

This towing socket tester is designed to test bulbs, indicators and diagnose wiring faults on 12 volt controller network (CAN BUS) systems on towing vehicles. Suitable for quickly and easily testing 7 pin and 13 pin sockets fitted to the rear of vehicles. Compatible with cars, 4x4's, caravans, trailers and light commercial vehicles.

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 intended for domestic and infrequent light-duty trade use.

### 2.2 Specification

Stock No.	27198
Part No.	TST13C
Power Supply	12V DC
Test System	CAN BUS
Connection	7-pin & 13-pin
Cable Length	5m
Cable Diameter	9mm
Dimensions (LxWxH)	140 x 90 x 35mm
Net Weight	1kg

**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.

- Ensure all Health and Safety, Local Authority and general workshop regulations are followed when using this tester.
- **DO NOT** connect or disconnect the tester when the ignition is turned on or the engine is running.
- **ALWAYS** remove the tester after use and ensure all wiring is reconnected correctly.
- Keep this product 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** modify any parts and only use accessories and spare parts supplied by Draper Tools.
- Keep this product out of reach of children and keep children and unauthorised persons away from the work area.
- Keep the work area clear and ensure that there is adequate lighting.
- **DO NOT** immerse this device in water or expose it to wet or damp conditions.
- **DO NOT** use the tester to perform a task for which it is not designed.
- **DO NOT** expose the tester to strong sunlight or dust.
- Take care when using the tester and avoid strong impacts or shocks.
- **DO NOT** disassemble the tester. The tester must be checked by qualified service personnel only.

### 3.1 Explanation of symbols



Read the instruction manual



**Warning!**



WEEE –

Waste Electrical & Electronic Equipment  
Do not dispose of this product with domestic waste



European conformity



UK Conformity Assessed

# 4. Product Overview

EN

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) Test button           | (5) Connector cable                |
| (2) 13-pin connector      | (6) Resistive load area            |
| (3) 7-pin connector       | (7) 12V continuous indicator light |
| (4) Test indicator lights |                                    |

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

**Important:** Before operating this product, read and understand all the safety instructions listed in this manual. Ensure that the product is fully assembled and correctly prepared for use.

## 5.1 Selecting the Connector Adaptor

- **To select the 13-pin adaptor** – twist the outer ring clockwise and lift off the 7-pin adaptor.

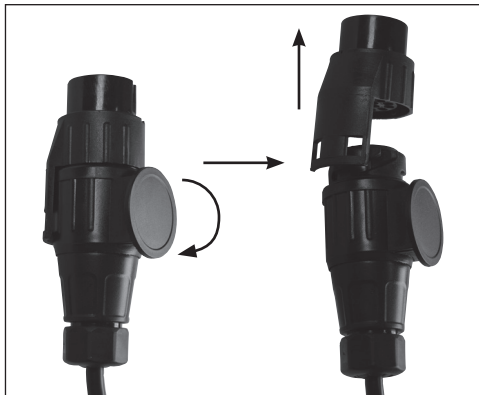


Fig. 1

- **To select the 7-pin adaptor** – fit the 7-pin adaptor to the 13-pin adaptor and twist the outer ring anti-clockwise to lock in place.

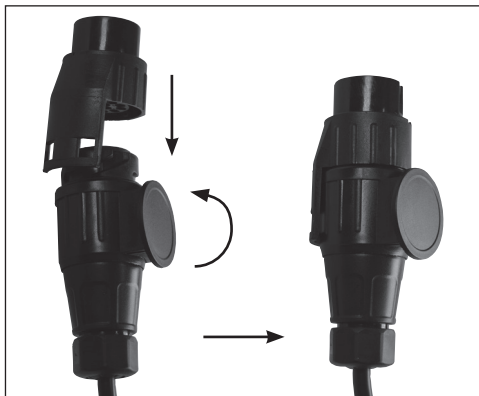


Fig. 2

## 5.2 Operating the Tester

- **Ensure the ignition and engine is switched off before attaching the connector.**

- The tester has a resistive tester internally load area (6) which generates some heat during operation. **DO NOT** hold this area for a long time and allow the tester to cool down after 15 minutes of operation.
1. Connect the tester to the vehicle towing socket. Take care to align the connector with the socket before insertion.
  2. Twist the outer plug ring clockwise to lock the adaptor plug in place.
    - **Note:** The cable supplied should be long enough to allow the test to be carried out while sitting in the vehicle.
    - When the tester socket is correctly connected, the vehicle's self-test may operate and the LED lights turn on sequentially. Carry out the manual test once this is completed.
  3. If the 12V power supply of the socket is working correctly, the '**12V Continuous**' indicator light (7) will come on.
  4. Then press the '**TEST**' button (1) to carry out the self-test to check the tester's circuit and LED indicators are working correctly.



### CAUTION!

- The self-test only operates with the 13-pin socket. The self-test is not available with the 7-pin adaptor as there is no continuous feed via the 7-pin socket.
  - If the vehicle has a towbar electrics self-test function, the tester indicators may flash during the self-test process. However, when carrying out the test with the ignition on the indicators will function correctly.
  - The tester when connected will draw the same power from the vehicle's battery as a vehicle light. Do not connect the tester for longer than necessary to avoid draining the battery.
5. Turn the vehicle's ignition to the '**ON**' position, but **DO NOT** start the engine. The '**12V IGNITION**' indicator will come on.
  6. The indicator and lights can be operated and checked in turn. The corresponding indicators will come on if functioning correctly.
  7. When testing is complete turn off the ignition. Remove the tester by twisting the outer ring anticlockwise to unlock the plug.

13-Pin & 7-Pin Function Table			
Wiring Description/function		13-Pin	7-Pin
1	Left hand indicator	✓	✓
2	Fog light	✓	✓
3	Earth (terminal 1-6 return path)	✓	✓
4	Right hand indicator	✓	✓
5	Right hand side/tail light	✓	✓
6	Brake light	✓	✓
7	Left hand side/tail light	✓	✓
8	Reversing light	✓	X
9	VBAT/Permanent light (CONTINUOUS)	✓	X
10	Ignition indicator	✓	X
11	Earth for terminal 10	✓	X
12	Not normal used	✓	X
13	Earth for terminal 9 (terminal 10 return path)	✓	X



Fig. 3

6. Maintenance, Storage and Disposal

**WARNING!** Do not attempt to repair or service this product. Any servicing or repairs must be carried out by a qualified person.

- Clean the tester frequently to maintain the tester in good condition.
- Clean the case with a dry cloth.
- Store the tester in a safe and dry area out of the reach of children.
- 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.



7. Warranty

Lifetime warranty - Visit [drapertools.com/warranty](https://www.drapertools.com/warranty) for full details.

## Contact Details

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