

# Teradyne Pocket Tester

Installation & Set-up Guide

**TERADYNE**  
Diagnostic Solutions

Part Number 3557-9014-00 Revision 1.0

# Glossary

Abbreviation	Description
AC	Alternating Current
CD	Compact Disc
DC	Direct Current
DLC	Data Link Connector
EOBD	European Onboard Diagnostics
HDS	Honda Diagnostic System
HIM	Honda Interface Module
ISG	Installation & Set-up Guide
LED	Light Emitting Diode
OBDII	Onboard Diagnostics
O/S	Operating System Language
PC	Personal Computer
RAM	Random Access Memory
SD CARD	Secure Digital (Non-Volatile Memory) Card
USB	Universal Serial Bus
UST	User Self Test
VGA	Video Graphics Array

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# Contents

1	SAFETY NOTES	1
2	CARE AND MAINTENANCE	2
3	WARNINGS - SAFETY	3
4	WARRANTY	5
5	SPECIFICATIONS	6
6	INTRODUCTION	7
7	TERADYNE POCKET TESTER KIT	9
8	SETTING UP THE TERADYNE POCKET TESTER	15
9	RECOVERY OF SOFTWARE FROM THE SD CARD	19
10	BATTERY CHARGING	20
11	TROUBLESHOOTING	22

# 1 | Safety Notes

When using your equipment, basic safety precautions should always be followed, including the following:

- Read all instructions.
- Care must be taken as burns can occur from touching hot parts.
- **DO NOT** operate equipment with a damaged cord or if the equipment has been dropped or damaged until it has been examined by qualified service personnel.
- **DO NOT** let cord hang over edge of table, bench, or other counter surfaces or come in contact with hot manifolds or moving fan blades.
- If an extension cord is necessary, a cord with a current rating equal to or more than that of the equipment should be used. Cords rated for less current than the equipment may overheat. Care should always be taken to arrange the cord so that it will not be tripped over or pulled accidentally.
- Always unplug equipment from the electrical outlet when not in use for extended periods. Never use the cord to pull the plug from the outlet. Grasp plug and pull to disconnect.
- It is good practice to leave the Teradyne Pocket Tester connected to a suitable power supply when not in use, to keep the battery fully charged.
- Let equipment cool completely before putting away. Loop cord loosely around equipment when storing.
- To reduce the risk of fire, do not operate the equipment in the vicinity of open containers of flammable liquids.
- Adequate ventilation should be provided when working on operating internal combustion engines.
- Keep hair, loose clothing, fingers, and all body parts away from moving parts.
- To reduce the risk of electric shock do not use on wet surfaces, expose to rain or any other fluid type.
- Only use the equipment as directed in the manual. Use only equipment suppliers recommended attachments. Use of non-recommended parts may invalidate equipment warranty.
- ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- While using the Teradyne Pocket Tester please ensure that the auto DLC cable does not get trapped between the door and vehicle body, always use the window area.

# 2 | Care And Maintenance

## 2.1 Cleaning The Teradyne Pocket Tester

Switch OFF the power and unplug all electrical cables from the Teradyne Pocket Tester before cleaning the equipment. The Teradyne Pocket Tester should only be cleaned using a non-abrasive, mild cleaning agent. Do not use any form of polish on the unit.

Note: Dust and other particles should be lightly brushed from the surface of the unit. Cleaner should be applied to a soft lint free cleaning cloth and never directly to the Teradyne Pocket Tester. Do not soak the cleaning cloth and take care not to allow cleaning fluid to enter the electrical connectors.

## 2.2 Care Of The CD Software Installation Disc

Ensure the disc is free from dirt or contamination before use. Avoid exposing the disc to direct sunlight or high temperatures. If necessary, clean CD disks with approved cleaner and smooth clean lint free cloth, wiping from the centre to the edge.

- Never clean CDs with abrasive cleaning agents.

## 2.3 Care Of Cables

It is good practice to always return the cables to their appropriate storage place. The cables have been manufactured to high standards, but will be damaged if they are driven over or exposed to excessive temperatures. Avoid pulling the cables, which may damage the connectors.

## 2.4 Connector Covers

The top of the unit includes a plastic cover over the SD memory card slot. For protection against moisture and dust, always ensure that this cover is properly fitted.

## 2.5 Rugged Jacket

**DO NOT** open the red rugged jacket or remove the cable connectors at the bottom of the tester as this could cause damage to the Teradyne Pocket Tester.

Note - Using any implement other than the stylus supplied may damage the screen.

## 3 | Warnings - Safety

**CAUTION** - Use of this equipment in a manner not specified by the manufacturer may impair the protection provided by this equipment.

**CAUTION** - Do ensure that only those cables which are required by the diagnostic procedure in use are connected to Teradyne Pocket Tester while the diagnostic is running.

**CAUTION** - There are no user serviceable parts under the covers unless specifically indicated. Always isolate this equipment from the 230/110v AC electrical power source (unplug the power cord at the electrical socket outlet) before removing any covers and ensure that all covers are replaced and correctly secured before reconnecting this equipment to the electrical power source.

**DO** use this equipment in accordance with the operating procedures. For further details on the operation of this equipment or any details relating to the use of it contact the equipment manufacturer.

**DO** switch this equipment off (unplug the Teradyne Pocket Tester AC charger power cord at the electrical socket outlet if necessary) before carrying out maintenance & cleaning operations (refer to Care & Maintenance section). Use only a well diluted, mild, non-abrasive cleaning agent applied using a soft lint free cloth.

**DO NOT** use equipment outside the supplier specification.

**DO NOT** use or apply undiluted cleaning agent directly to the equipment surface and do not soak the cloth. Take care that cleaning fluid does not enter electrical connector receptacles.

**DO NOT** immerse equipment in water.

**DO NOT** continue to use this equipment if you have **ANY** doubt that it may not be working properly or it is damaged in any way. Remove the power source to the equipment and contact the service hotline.

**DO NOT** connect any equipment to the PC compatible signal interface connections of the Teradyne Pocket Tester until you are satisfied that the equipment is safe.

**DO NOT** remove any fixed covers unless you are authorised/qualified to do so for the preparation of this equipment.

**DO NOT** expose this equipment to spilled liquids or any type of fluid.

**DO NOT** replace detachable power cords with a different type (or fuse rating) from that detailed in the documentation or supplied with this equipment.

### 3.1 Proper Installation And Use Of This Equipment

This equipment has been designed, manufactured, and tested to meet the requirements of international standards; however, like any apparatus, care must be taken in its installation and use.

The Teradyne Pocket Tester has a 230/110 AC volts connection to the charger unit and is supplied with a 1.8m (6 ft) long power cord. The electrical power source outlet socket must be located adjacent to the equipment, be easily accessible and readily identifiable to the operator as the means of disconnection of the electrical power source to this equipment.

For continued protection against electric shock certain parts of this equipment, including the PC compatible signal interface connections have been designed such that the voltage is limited to a safe value. In order to maintain this level of protection it is essential that any equipment connected to this equipment shall have interface connections, which are similarly protected.

**DO NOT** allow the Teradyne Pocket Tester to operate below or within 460mm (18 in) of garage floor level.

**WARNING** - Teradyne Pocket Tester is NOT to be used by the operator of a moving vehicle.

## 4 | Warranty

The warranty of the Teradyne Pocket Tester will be null and void if it has been damaged by misuse, liquid or heat. Full terms and conditions of the warranty, including the limitations, are defined separately. See warranty card contained in the product kit.

## 5 | Specifications

Description	Specification
AC Adaptor	Universal AC input - 100-240V _0.4A 50-60Hz
DLC Cable	+7V - +18V, 0.5A DC
UST Power Adaptor	+7V - +18V, 0.5A DC
Rechargeable Battery	1400 mAh Lithium-Ion
Operating Temperature	0 - +35°C (32°F- 95°F)
Weight	700g (1.54lbs)
Processor	Intel 400 MHz Xscale
RAM	64 MB
ROM	32 MB
SD Memory Card	256 MB
Display	16-bit colour Transflective TFT
Operating System	Microsoft Pocket PC 2003
Connectivity	USB, RS232

## 6 | Introduction



The Pocket Tester is a lightweight rugged diagnostic tool for use in the automotive service bay. The tool will enable technicians to carry out DTC reading and clearing and other data monitoring and control functions using the serial communications interface.

The tester is designed as an intelligent vehicle diagnostic system and allows communication to specific OEM vehicle Electronic Control Units (ECUs), dependent upon availability of applicable software and to OBDII compatible vehicles.

# 7 | Teradyne Pocket Tester Kit



**7.1 Teradyne Pocket Tester  
(3557-1145-01)**



**7.4 12V Accessory Socket Power Cable  
(3557-1082-00)**

Connects the Teradyne Pocket Tester to the vehicle power via the vehicle accessory connector.



**7.2 AC Charger  
(8410-3578-01)**

This is the HP power charger that is supplied with the Teradyne Pocket Tester kit.



**7.5 Automotive DLC Cable - 3000mm  
(3557-1147-00)**

Connects the Teradyne Pocket Tester to a vehicle with a 16-pin DLC.



**7.3 Active Sync Cable  
(3557-1080-00)**

Used for transferring software and data between the Teradyne Pocket Tester and a host PC.



**7.6 User Self Test Power Adaptor Cable  
(3557-1119-00)**

Used in conjunction with the User Self Test Adaptor (3557-1108-00).

# 7 | Teradyne Pocket Tester Kit



**7.7 Automotive 3-Pin DLC Adaptor  
(3557-1022-00)**

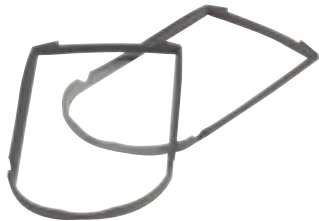
Enables the automotive DLC cable to be connected to a vehicle with a 3-pin diagnostic connector.



**7.8 Automotive 5-Pin DLC Adaptor  
(3557-1023-00)**

Enables the automotive DLC cable to be connected to a vehicle with a 5-pin diagnostic connector.

(This is an optional cable and is not part of the supplied kit)



**7.9 Spare Rugged Case Membranes  
(9021-1853-00)**

Replacement membranes supplied as extras (Quantity 2).



**7.10 256MB Secure Digital Memory Card  
(9021-1840-00)**

Used to store software for the Teradyne Pocket Tester and also files saved by the user.

In the event that the battery of the Teradyne Pocket Tester becomes fully discharged then it will be possible to re-install the purchased software from the SD Memory card.



**7.11 Installation Software CD  
(3557-0905-00)**

Contains all purchased software as well as detailed user guides and tutorials for the Teradyne Pocket Tester.



**7.12 User Self Test Adaptor  
(3557-1108-00)**

This "null cable" is used in the situation where an error has occurred with the test equipment. It allows the unit to run a self-test application.



# 7 | Teradyne Pocket Tester Kit



### 7.13 Charger Adaptor (3557-1111-00)

Allows the battery to be charged without connection to a vehicle or host PC.

[Note: It is attached to the AC Charger (8410-3578-01)]



### 7.14 Stylus (9021-1840-00)

Provided for use on the touch screen. Suitable replacements can be purchased from your local computer supplies store.



### 7.15 Carry Case (3557-1116-00)

Stores the Teradyne Pocket Tester and its cables.

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# 8 | Setting Up The Teradyne Pocket Tester

## 8.1 Initial Set Up

Before the Teradyne Pocket Tester is used for the first time you will need to charge the battery:

- a. Connect the AC charger (8410-3578-01) to the charger adaptor (3557-1111-00).
- b. Connect the charger adaptor assembly to the Teradyne Pocket Tester's 4-pin connector located at the rear of the unit.
- c. Connect the AC charger to a suitable AC power outlet.
- d. Charge the battery to minimum level of 3.2 Volts. This will take 5 to 30 minutes depending on the current charge level.
- e. Perform a normal reset (refer to "Performing a Normal Reset" in Chapter 1 of the User's Guide on the HP companion CD).
- f. Allow 4 hours for complete charging.

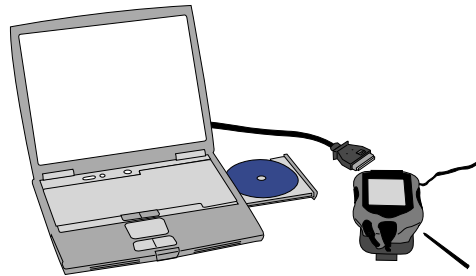
## 8.2 Installing The Software

The software is installed onto the Teradyne Pocket Tester via a host PC.

The Teradyne Pocket Tester can be connected to the host PC via RS232 or USB for software transfer depending on the interfaces available on the host PC. If both are available, USB should be used due to the higher data transfer speed.

The minimum requirements of the host PC are:

- Microsoft® Windows® 98, 2000 Professional, Millennium Edition, XP, with SP1 or later (does not support Windows NT® 4.0.)
- CD-ROM Drive.
- Either a USB port or RS232 serial port.



- Hard disk drive with at least 75MB of free space.
- Monitor capable of displaying in VGA mode or above.
- Keyboard & mouse.

### 8.2.1 When Installing The Software For The First Time

- Connect the active sync cable (3557-1080-00) to the host PC.
- Connect the AC charger to the Active Sync Cable (3557-1080-00) and to a suitable AC power outlet.
- Connect the Active Sync Cable (3557-1080-00) to the Teradyne Pocket Tester.
- Put the software installation CD into the CD ROM drive.
- The installation software will automatically run - follow the instructions on the PC screen.

### 8.2.2 Active Sync Via USB or RS232

The following steps should be followed to update software on to the Teradyne Pocket Tester from the host PC.

- Place the latest installation CD into the host PC.
- Connect the Active Sync Cable (3557-1080-00) to any free USB or RS232 connector on the PC to be used for software transfer.
- Connect the Active Sync Cable (3557-1080-00) to the Teradyne Pocket Tester.
- The Teradyne Pocket Tester should automatically detect that it has been connected to the host PC (after the initial installation).
- If the Teradyne Pocket Tester is not recognised, check all connections on the Teradyne Pocket Tester and host PC.
- Once the Teradyne Pocket Tester is recognised, follow the instructions on the host PC.

Note - Communication via the RS232 connection is much slower than the USB connection.

## 8 | Setting Up The Teradyne Pocket Tester



### 8.3 Touch Screen Calibration

When the Teradyne Pocket Tester is switched on for the first time you will be prompted to calibrate the touch screen. Follow the instructions on the screen.



### 8.4 Time Setting

To set the time select Settings from the Start menu. Tap System. Tap Clock. Tap Home. Adjust time tap OK and tap Yes to save.



### 8.5 Changing a Membrane Cover

Lift the membrane cover (9021-1853-00) from the bottom of the screen and peel off gently. Then press the replacement membrane into the groove that runs along the outside of the window to seal the membrane into the groove. Failure to create a complete seal may reduce water and dust resistance.

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## 9 | Recovery Of Software From The SD Card

If the Teradyne Pocket Tester battery becomes fully discharged then all the purchased software will be erased. The purchased software can be recovered from the SD Card.

Follow these instructions to recover the installation;

- Ensure battery is fully charged (see section 10 of this guide).
- Switch on the Teradyne Pocket Tester.
- Select Programs from the Start Menu.
- Tap File Explorer.
- Select the menu below the Windows icon and from the list displayed tap My Device.
- Tap Storage Card.
- Tap Recover Software.

## 10 | Battery Charging

### 10.1 General

The Teradyne Pocket Tester has a Lithium-Ion battery, which will need to be charged. The battery can be charged:

- By connecting to a vehicle using the correct DLC.
- By the AC Adaptor and the Charger Adaptor cable (3557-1111-00).
- Using the 12V Accessory Socket Power Cable (3557-1082-00).

Hint: The amount of charge available in the battery can be checked by following these instructions.

- Switch the Teradyne Pocket Tester ON.
- Press the Start Icon located at the top left of the screen.
- Press the Settings Icon located in the drop-down.
- Press the System Tab.
- Press the Power Icon.

After a few seconds the Battery Power Remaining bar-graph will update and show the percentage power available in the battery. If the Battery Power Remaining is less than 40%, you should charge the battery immediately. A full charge takes approximately 4 hours.

Once the Battery Power Remaining has been checked, press the OK icon located at the top right of the screen, then press the cross (X) icon also located at the top right of the screen to return to the Start menu.

Warning: If the Teradyne Pocket Tester battery is allowed to discharge fully, the software will be erased from the memory. If this happens, the

software can be restored from the SD Memory card, as described in section 9.

It is good practice to leave the Teradyne Pocket Tester connected to a suitable power supply when not in use, to keep the battery fully charged.

### 10.2 Battery Charging Using The AC Charger

#### 10.2.1 Charging Using The Active Sync Cable Assembly

To charge the Teradyne Pocket Tester using the AC Charger (8410-3578-01) and the Active Sync Cable Assembly:

- Connect the Active Sync Cable (3557-1080-00) to the 34-pin connector located on the rear of the Teradyne Pocket Tester.
- Connect the AC Charger to the DC jack located on the 9 pin 'D' connector on the Active Sync Cable.
- Connect the AC Charger into a suitably rated AC power outlet.
- After a few seconds, the Amber LED located to the left of the Standby switch will start to flash.
- Once the battery is fully charged, the Amber LED will stop flashing and remain lit.

#### 10.2.2 Charging Using The AC Charger

To charge the Teradyne Pocket Tester using the AC Charger (8410-3578-01) and the Charger Adaptor (3557-1111-00):

- Connect the AC Charger (8410-3578-01) to the charger adaptor (3557-1111-00).

## 10 | Battery Charging

- Connect the AC Adaptor into a suitably rated AC power outlet.
- Connect the Charger Adaptor (3557-1111-00) to the 4-pin connector located on the rear of the Teradyne Pocket Tester.
- After a few seconds, the Amber LED located to the left of the Standby switch will start to flash.
- Once the battery is fully charged, the Amber LED will stop flashing and remain lit.

### 10.3 Battery Charging From The Vehicle

Note: The Teradyne Pocket Tester battery will only charge when the vehicle battery is greater than +11 volts.

#### 10.3.1 Charging The Teradyne Pocket Tester Using The Automotive DLC Cable.

To charge the Teradyne Pocket Tester using the vehicle DLC Cable:

- Connect the Automotive DLC Cable (3557-1147-00) to the 34-pin connector located on the rear of the Teradyne Pocket Tester.
- Connect the 16-pin DLC to the vehicle's 16-pin DLC.
- After a few seconds, the Amber LED located to the left of the Standby switch will start to flash.
- Once the battery is fully charged, the Amber LED will stop flashing and remain lit.

### 10.4 Charging A Low Battery

If you use your Teradyne Pocket Tester for an extended period of time and find that your unit will not power on, it could be related to the battery reaching a low charge (below 3.2 Volts).

If this happens, fully charge the battery before using the Teradyne Pocket Tester again.

If the charge on the battery goes below 3.2 Volts as a result of not being connected to an appropriate power source, no damage will occur to the battery. However, the Teradyne Pocket Tester charge indicator light will not flash until the battery reaches the minimum charge of 3.2 Volts and you perform a normal reset.

To charge and reset the Teradyne Pocket Tester:

- a. Connect the AC Charger (8410-3578-01) to the Charger Adaptor (3557-1111-00).
- b. Connect the Charger Adaptor Assembly to the Teradyne Pocket Tester's 4-pin connector located at the rear of the unit.
- c. Connect the AC Charger to a suitable AC Power Outlet.
- d. Charge the battery to minimum level of 3.2 Volts. This will take 5 to 30 minutes depending on the current charge level.
- e. Perform a normal reset (refer to "Performing a Normal Reset" in Chapter 1 of the User's Guide on the HP companion CD).
- f. Allow 4 hours for complete charging.

It is recommended that you keep the Teradyne Pocket Tester connected to an appropriate power supply when not in use.

## 11 | Troubleshooting

### 11.1 Simple Checks

#### 11.1.1 Change The Backlight Setting

To conserve power the backlight setting can be adjusted. From the start menu, tap Settings, tap System, and tap Backlight.

The battery power tab shows settings used when the tester is on battery power.

The external power tab shows settings used when the tester is on external power.

On the brightness tab, select the level of brightness for the backlight.

Note: You can only change the backlight setting for battery when the Teradyne Pocket Tester is being powered by the battery. The external backlight setting can only be adjusted when the Teradyne Pocket Tester is powered by an external power supply.

#### 11.1.2 The Backlight Keeps Turning Off

The backlight is designed to turn off to conserve power. On the battery power tab, change the time setting for the backlight. Select to have the backlight turn on when you touch the screen.

#### 11.1.3 To Check Battery Status

When the battery is fully charged, the charge light does not flash. From the Start menu, tap Settings, System then Power.

### 11.2 The Tester Is Not Responding Or Keeps Locking Up

Perform a soft reset. To perform the soft reset insert the stylus into the unit reset switch at the bottom of the unit.

### 11.3 Difficulty In Operating The Touch Screen (Misaligned)

The screen alignment process can be activated at any time by pressing start, settings, system then screen. Tap the align screen icon to begin. Tap the cross at each location to re-align the screen. Ensure that the crosses are tapped precisely.

**If another problem is encountered, or the above troubleshooting guide does not cure the problem, a hard reset should be performed.**

### 11.4 Performing A Hard Reset

To perform a hard reset, disconnect the tester from all external power sources, then press and hold the two outside buttons on the front of the Teradyne Pocket Tester. At the same time insert the stylus into the unit reset switch at the bottom of the tester and hold pressed for 5 seconds. To reactivate the tester, insert the stylus into the reset switch and hold for 1 second, or connect the tester to the charger. Note that following a hard reset it will be necessary to re-install any purchased software.



