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Introduction

Dear Mechanic,

We would like to thank you for choosing our tool for your garage. We are sure that you will obtain the greatest satisfaction and a significant help from it in your work.

Please read carefully the instructions included in this operation manual, and keep it in a safe, handy place for future reference.

The data, features and descriptions included in this manual are provided for indication only with reference to a certain software version; they do not commit the manufacturer who reserves the right to make, at any time and without notice, all the changes considered useful to improve the product or to meet any technical or commercial need. Supplements to this manual, useful to describe new versions of the program and related new functions, may be also provided through TEXA S.p.A. technical newsletters.

No parts of this manual may be reproduced in any form or by any means without the prior permission in writing of the manufacturer.

© **Copyright and Database Rights 2007**. The material included in this manual is protected by copyright and database rights. All rights reserved under national and international law.

This manual illustrates and describes both standard and optional features. Therefore, the tool you purchase might not feature some of the functions or components described herein.

This manual should be considered as part of the tool it refers to. If you transfer the tool to a third party, please include the manual as well.

Reading and understanding this manual may help to prevent damage to things and injuries to people deriving from the incorrect operation of the tool it refers to, but cannot replace the competence and skills of the professional profile this tool was designed for.

The content of this manual may undergo changes without notice and should be considered guide lines. Therefore, the information provided could be incomplete.

Texa S.p.A. is not liable of any damage or injuries deriving from operations carried out on the basis of possibly incorrect or inaccurate information included in this manual.

No parts of this manual may be reproduced in any form or by any means without the prior permission in writing of the manufacturer.



DANGER

It indicates a potential hazard which, if not avoided, might cause serious or fatal injuries.



WARNING

It indicates a potential hazard which, if not avoided, might cause mild or limited damage and injuries.

WARNING

Without alarm symbol, it indicates a potential hazard which, if not avoided, might cause mild or limited damage.



HIGH VOLTAGE

It indicates general hazardous conditions connected to the presence of dangerous energy sources which could cause burns and shock.

General Rules for the Operator's Safety

This product was designed and developed to be used by specializing technical personnel in the field of automotive, such as electricians, mechanics, technicians and engineers specializing in automotive. Never allow this equipment to be used by unqualified personnel in order to prevent personal injuries and damage to the tool or to the Vehicle's electronic systems to which the tool is connected to.

The workplace shall be dry, with sufficient light and proper air circulation.

In particular, the diagnostic operations requiring to start the engine shall be carried out in facilities equipped with exhaust gas system.

We remind you that inhaling carbon monoxide (which is odourless) may cause serious body injuries.

WARNING

1. Unless otherwise specified in the technical characteristics of the usable peripherals, the solution should only be used on vehicles featuring 12 / 24 Volt DC supply and frame connected to the negative pole.



DANGER

2. Do not place the interfaces possibly used to connect NAVIGATOR TXS to the vehicle over the airbag or next to the airbag deployment area. The airbags tend to deploy with great force. If placed within the airbag deployment area and the airbag deploys, the unit might be thrown away with violence causing serious injuries to the people in the vehicle.

WARNING

3. Place the unit so to guarantee proper ventilation. Do not place the unit close to heat sources or high temperature surfaces and/or components.



DANGER

4. The electromagnetic compatibility tests performed on the product guarantee that it is compatible with the technologies normally used on the vehicles (e.g., engine control, ABS, airbags, air conditioner, navigator, radio, Hi-Fi system) however, should any failure occur, it will be necessary to contact the vehicle's dealer.

WARNING

5. Do not wet NAVIGATOR TXS, as rain, moisture, and any liquid or condensation might damage its electronic circuits.

WARNING

6. Do not open the NAVIGATOR TXS device. Any operations carried out by unqualified personnel might damage the device itself.

WARNING

7. Do not drop, hit or shake the unit, as this might damage irreparably its internal circuits. Do not use corrosive chemicals, solvents or aggressive detergents to use NAVIGATOR TXS.

Work Environment



DANGER

The workplace should be dry, with enough light and proper air circulation. Particularly, the vehicle diagnostic operations that provide the engines' startup, should be carried out in an environment provided with a exhaust gas intake facility.

We remind you that inhaling carbon monoxide (which is odourless) may cause serious body injuries.

When operating on engines or other parts of the vehicles remember the following:



DANGER

- Wear suitable clothing and keep a behaviour fit to prevent accidents.
- Before starting, make sure that the vehicle's gearbox is placed in neutral (or parking, in case of automatic transmission); engage the safety or parking brake of the vehicle to be examined, and make sure that the vehicle's wheels are locked.
- Protect your face, hands and feet, and avoid contact with hot surfaces, such as spark plugs, exhaust pipes, radiators, cooling system pipe fittings.
- Do not smoke and do not light flames when working on the vehicle.
- Make sure that all electrical connections are insulated and tight.
- Do not stare into the intake pipe of the carburettor from a close distance when the engine is running.
- Keep hands and hair away from parts in motion.
- Never wear ties, loose clothing, bracelets and watches when working on a vehicle, especially when the engine is running.

- Keep away from the fan. The cooling fan is controlled by a thermal circuit-breaker depending on the coolant temperature: therefore, please disconnect the fan cable every time you work on a still hot engine , in order to avoid that the fan starts suddenly even if the engine is stopped.
- Do not pour fuel directly into the carburettor to facilitate the engine start-up.
- Do not unscrew the radiator's cap before the engine temperature has decreased together with the cooling system pressure.
- Do not touch high voltage wiring when the engine is running.
- Handle with care portable lamps and use only those with metal protection.
- Wear safety goggles to protect your eyes from gasoline, dust and metals.
- It is necessary to remember that the catalytic converter reaches an extremely high temperature, able to cause serious burns and start a fire.

It is therefore necessary to pay attention that no oil drippings, rags, paper or other inflammable materials are close to the catalytic converter.

When you work on the batteries, it is necessary to remember that:



DANGER

Car batteries contain sulphuric acid, and produce explosive gas. Therefore, it is necessary to heed the following instructions:

- Always wear protective goggles.
- Never place tools on the battery as they might create accidental contacts.
- Before testing or recharging the battery, cover its openings with a wet cloth, so as to prevent explosive gas from leaking.
- Avoid sparking when connecting the cables to the battery.
- Avoid the electrolyte to get in contact with your skin, eyes and clothing, as it is a corrosive, very toxic compound.

When operating with equipment supplied at line voltage



DANGER



HIGH VOLTAGE

- Make sure the unit is earthed.
- Cut off the supply voltage before connecting and disconnecting cables.
- Avoid contact with wet hands.
- Work in a condition of insulation from the earth.

Operation of the Equipment Radio Devices

WARNING

Place the unit so as to ensure the correct operation of the radio devices contained in it. In particular, do not cover it with shielding materials or metal in general, and do not place it inside the trunk, engine bay or glove compartment; if you place it inside the passenger compartment, make sure that the vehicle's windows are not shielded.

Operation of the Equipment Radio Devices

WARNING



Wireless connection with Bluetooth technology, Wi-Fi and GPRS

The Wireless connection with Bluetooth technology, Wi-Fi and GPRS, is a technology providing a standard and safe method to exchange data between different devices using radio wave. Besides Texa's tools, other products use this technology, such as: mobile phones, laptops, computers, printers, cameras, pocket PC's, etc.

The Bluetooth, Wi-Fi and GPRS interfaces search for compatible electronic devices on the basis of the radio signal they generate establishing a connection between them. Texa's tools make a selection only proposing the Texa compatible devices. This does not exclude the possibility of other communication or interference sources.

THE EFFECTIVENESS AND QUALITY OF BLUETOOTH, WIFI AND GPRS COMMUNICATION CAN BE EFFECTED BY SOURCES OF RADIO INTERFERENCE. THE COMMUNICATION PROTOCOL INCLUDES ERROR MANAGEMENT, BUT MIGHT ENCOUNTER COMMUNICATION PROBLEMS SOMETIMES MAKING IT NECESSARY TO ATTEMPT NEW CONNECTIONS.

IF WIRELESS COMMUNICATION PROVES DIFFICULT TO THE EXTENT THAT REGULAR OPERATION IS COMPROMISED, IT IS NECESSARY TO IDENTIFY THE SOURCE OF THE ENVIRONMENTAL ELECTROMAGNETIC INTERFERENCE AND REDUCE ITS INTENSITY.

Place the unit in order to ensure the correct operation of the radio devices contained in it. In particular, do not cover it with shielding materials or metal in general.

Warning

Use of Texa Software for Pocket PC is subject to the acceptance of the following conditions:

1. Liability

The customer is responsible of the use of any tool and software application provided by TEXA S.p.A. and sold by the dealer.

The customer accepts to indemnify and hold harmless TEXA S.p.A. and its dealer, against any liability and damage deriving from the improper use of products, software and information contained in them, and TEXA's services and products sold by the dealer and purchased by the customer, and from their use not complying with all the instructions, sequences and operational steps indicated in the programs and user's manual.

The customer shall use all the data and information however obtained from TEXA S.p.A. or from the dealer, directly or through programs and user's manuals, being aware that these might be incomplete and that they need to be always used to integrate one's own professional knowledge. The customer is also aware of the necessity to update the product to guarantee its constant adjustment to the ever-developing market needs.

2. Software License

TEXA S.p.A. grants the customer the use of the software included in the purchased products on the basis of a non-exclusive license agreement and for the sole purposes described in this user's manual.

For the purpose of the license agreement, "Software" indicates the program included in the product and "License" the right to use or access to a determined copy of the specific software.

The licensee shall keep the license agreement as proof of the right of use granted by the licensor, Texa S.p.A. If the licensee does not intend to accept the terms of the license agreement, he shall immediately return to the dealer the product including the software covered by the license, together with all the material and documents sent to him.

The software included in the products is intellectual property of TEXA S.p.A. and its suppliers. The software architecture, arrangement and code are important trade secrets and confidential information owned by TEXA S.p.A. and its suppliers. The software is protected by national and international laws and regulations on copyright, as well as other laws and international treaties on intellectual property. For each purchased license, the customer may only use one copy of the software or of a previous version for the same operating system.

The customer may not:

A) Lease, sub-license, lend, copy, modify, reproduce, translate, redesign, decompile, disassemble the licensed software and the information contained in it.

B) Transmit by wire or over the air, or by any other means the software, in whole or part.

C) Create works or derive other works, partly or entirely on the basis of the software or of the information contained in it, or on information associated to it.

D) Use, reproduce, print or market the software and the information contained in it, in any forms, even not explicitly provided for by this agreement.

The Licence Agreement is valid for the entire period during which the software is used. It ends upon destroying the software and related documents. Furthermore, if the customer does not respect the terms of the agreement, the license is no longer deemed valid. At the end of use, the customer accepts to destroy all the copies of the software - stored in memory cards, CD-ROM/DVD, HARD DISK or any other storage device - and the related documents. The rights and obligation included in the Licence Agreement may not be transferred or delegated to third parties without prior permission in writing of TEXA S.p.A.

The customer installs and uses the software at one's own risk and in no event may TEXA S.p.A. be deemed liable for any loss or damage, including profit loss or other losses deriving from the use or inability to use the software, or from errors or defects in the software itself, even if caused by negligence, or from using the software in association with any other program. It is the customer's responsibility to check whether computer viruses are present in the products in which the software is to be installed. TEXA S.p.A. does not accept any liability for any losses, damage or costs, caused by computer viruses.

3. Warranty

SOFTWARE: Even though TEXA S.p.A. took all possible measures to ensure the accuracy of the information included or displayed by the software, it does not guarantee that the software, nor any information contained therein and displayed, meet the customer's needs, be error-free, feature unlimited operation or that the defects, possibly existing in the software, can be corrected. The data and material (in any forms) contained in the programs or in the files the programs access to, come from different sources, among which we mention as an example: original material distributed by the different suppliers, and material supplied to Texa S.p.A. by companies specializing in the development of this type of information. In general, the original material has anyhow been compiled for the purpose of publication in Europe and of use on vehicles manufactured according to European specifications. User should always be aware of the fact that in non-European countries model

names and descriptions as well as the relating specifications may differ from the ones listed and proposed in the programs and tools this manual refers to. The warranty does not cover problems possibly arising from software conflicts if the software is installed on hardware platforms other than those manufactured by Texa S.p.A. (e.g., commercial personal computers, pocket PCs, tablet PCs). As instances of problems which are not covered by the warranty, we mention the ones generated by: incompatibility between Texa programs and software environment whose requirements are not suitable or protected by anti-virus systems preventing the installation and regular operation of the programs; environments damaged by viruses, environments supported by inadequate hardware resources.

PLACE WHERE THE ASSISTANCE COVERED BY THE WARRANTY IS PERFORMED: All repairs referring to the warranty, unless otherwise agreed in writing, shall be carried out at TEXA S.p.A. or at the assistance center authorized by TEXA S.p.A. All expenses relating to shipping the product to be repair from the customer's premises to the assistance center and/or travelling costs of assistance personnel from TEXA S.p.A. or from the assistance center are payable by the customer.

TRASPORT: The warranty does not cover damage deriving from transport or inadequate packaging carried out by the customers when returning products for repair.

MAINTENANCE: Prior to delivery to the client, the product was carefully tested by TEXA S.p.A. and by the dealer (if provided for). The manual supplied with the product includes minimum maintenance to be performed, failing which entitlement to right to warranty services might lapse.

Information about Regulations

Declaration of compliance



Texa S.p.A. hereby declares that this unit complies with the basic requirements and other relevant provisions set out by Directive 1999/5/EC

A copy of the full-length Declaration of Conformity is available at

Texa S.p.A., Via 1 Maggio 9, 31050 Monastier di Treviso (TV), Italy

Antenna

This product was designed and tested for use with the antenna provided. In order to guarantee compliance with the aforementioned regulations, please only use the unit with the antenna provided or another antenna approved by Texa S.p.A.

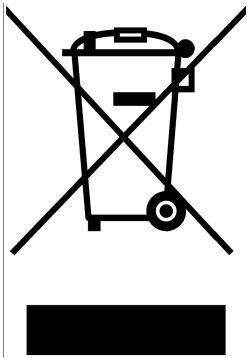
FCC

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Environmental Information (European Union)

This product contains substances which could be hazardous for the environment and human health if not properly disposed of.

We are therefore providing you with the following information to prevent such substances from being released and to improve the use of natural resources.



Electric and electronic equipment shall not be disposed of together with ordinary urban waste, but shall be taken to separate collection facilities for correct treatment.

The crossed out bin symbol displayed on the product and in this page reminds the user of the need to properly dispose of the product at the end of its life-time.

In this way, it will be possible to avoid that non specific treatment of the substances contained in these products, or the improper use of their parts, lead to hazardous consequences for the environment and human health. Moreover, it is a way to contribute to retrieve, recycle and reuse several materials contained in these products.

To this aim, producers and distributors of electric and electronic equipment arrange suitable collection and disposal systems.

At the end of the product's life-time, please contact your distributor for information on the collection system.

When you purchase this product, your distributor will also inform you of the possibility to return, free of charge, another unit at the end of its life time, as long as it is of an equivalent type, and has performed the same functions as the purchased product.

Disposing of the product in ways other than how described above will be subject to the fines provided for by the national regulations in force in the country where the product is disposed of.

Furthermore, we recommend the adoption of other environment-friendly measures: recycle the internal and external package in which the product is delivered, and properly dispose of old batteries (only if they are included in the product).

Your help will make it possible to reduce the quantity of natural resources used to produce electric and electronic equipment, minimize the use of wastelands for product disposal, and improve quality of life, preventing potentially hazardous substances from being released in the environment.

For a Correct Use of NAVIGATOR TXS

- In order to use your NAVIGATOR TXS correctly, it is necessary to heed the following rules:
- The unit shall be placed in a dry environment, avoiding its exposure or use near heat sources.
- Do not hit the NAVIGATOR TXS Central Unit.
- Do not wet the NAVIGATOR TXS Central Unit with water or other liquids.
- Do not place any objects on the cables, and do not bend the cables.
- The connection to supply NAVIGATOR TXS shall always be done through the battery system of the vehicle under examination. External batteries shall not be used.
- When using the terminals and cables for the connection to the vehicle, please pay the greatest attention to the quality of the connection itself, in order to prevent bad contacts and/or accidental connections between the cables and any metallic component of the vehicle itself. Use the provided rubber caps to protect the terminals not in use. Strictly follow all the indications supplied by the program.

1 DESCRIPTION OF NAVIGATOR TXS

NAVIGATOR TXS is a product designed for specific sectors, such as coachbuilding and air conditioning garages. It acts as an interface between the vehicle on which you want to perform the diagnosis and the processing palmtop unit.



Once NAVIGATOR TXS is connected to the vehicle's control unit through the EOBD cable, it is possible to connect to the processing/displaying central unit through a Bluetooth wireless connection or USB cable.

With NAVIGATOR TXS you need to use a special software included in a **Secure Digital** card to be inserted in your palmtop. The available software's are, for instance:



AIR CONDITIONING SERVICE DIAGNOSIS

Memory card to be inserted in the palmtop. It includes the program used by garages repairing, servicing and installing air conditioning systems.



BODY DIAGNOSIS

Memory card to be inserted in the palmtop. It includes the program used by garages to repair and replace parts of the body on damaged vehicles.

1.1 Tool Overview



1. **Green LED - Supply:** On, it indicates that the tool is supplied; Flashing, it indicates communication with the vehicle's control unit.
2. **Red LED - USB Communication Status:** it indicates the USB communication status.
3. **Blue LED - Bluetooth Communication Status:** it indicates the Bluetooth communication status.
4. **USB Device:** for connection to the display unit.
5. **USB Host:** for inputting the protection key and/or service or updating operations (*).
6. **PWR:** When required it allows to connect the device to the vehicle's battery.
7. **Bluetooth Antenna.**
8. **Diagnosis Connection Cable:** it allows the connection to the control unit of the vehicle under examination through the EOBD connector.

(*) Updates will require a specific assistance cable which is not included.

2 HOW TO SUPPLY NAVIGATOR TXS

NAVIGATOR TXS can be supplied:

1. **Through the connection of the diagnostic port of the vehicle under examination.**
2. **Through the auxiliary cable, for direct connection to the battery.**

If the tool is connected correctly, the green LED will turn on.

NOTE:

Since NAVIGATOR TXS does not have an internal battery, it is advisable to make sure that the tool is correctly supplied.

Do not use batteries external to the vehicle, and electrically disconnected from the vehicle undergoing diagnosis.

2.1 Supply Through the Diagnostic Port

Simply connect the tool to the diagnosis port of the vehicle under examination through the specific connector to supply NAVIGATOR TXS.

2.2 Supply Through Battery Auxiliary Cable

Power supply can be provided also through the auxiliary cables listed below. These cables need to be connected to the **PWR** connector of NAVIGATOR TXS.

2.2.1 Battery Cable

This cable allows to connect directly to the vehicle's battery.



WARNING

When connecting the cables clamps to the battery terminal, pay attention to the polarity.

A LED on the cable turning on indicates presence of power supply.

2.2.2 Cigar Lighter Cable

This cable allows to connect to the cigar lighter socket to supply TXS. The location of the socket varies according to vehicle's make and model.



A LED on the cable turning on indicates presence of power supply.

WARNING

Some electronic systems, during the autodiagnosis phase which can be carried out using TXS, might require to operate the starting key. Please make sure that the cigar lighter socket power supply is independent from the position of the starting key.

3 HOW TO CONNECT TO THE VEHICLE

To connect to the vehicle, it is first of all necessary to locate the control unit's connector on the basis of the information (picture or movie) provided by the operating program in use.

The location and type of connector on the vehicles vary depending on make and model. For this reason, the program provides all the necessary information.

WARNING

Strictly heed the instructions provided by the program.

If not specified otherwise, NAVIGATOR TXS will be supplied directly by the connection to the diagnostic port of the vehicle; the green LED will light up indicating correct power supply.

At this point, it is possible to continue with the analysis of the electronic system under examination, by using the functions and procedures made available by the autodiagnosis program in use.

4 CONNECTION TO THE DISPLAY UNIT (Communication Type)



4.1 Bluetooth Communication

If cables are not plugged in the **USB Device** connector, communication directly occurs in **Bluetooth** mode.

Simply select and activate this communication mode in the program installed on the displaying palmtop.

4.2 USB Communication

An optional communication mode is the one providing to use a cable for the connection to the USB port of the palmtop, if existing.

Simply connect, by means of a specific cable, the **USB Device** port to a USB port on the displaying unit, and then select this communication mode in the installed program.

5 TECHNICAL FEATURES

- **Main Processor:** INTEL PXA255 400MHz,
- **Internal memory:** 64 Mb SDRAM, 64 Mb FLASH

- **External power supply:** 8 ÷ 32 Volt
- **12V Consumption:** 0.25 A typical
- **24V Consumption:** 0.18 A typical
- **Power supply connector:** 4-pole power mini-din

- **USB Connections:** 1 USB 2.0 Device connection, 1 USB 2.0 Host connection, with possibility of SW update by means of USB storage pen.
- **Wireless connection to PC:** Bluetooth 2.0

- **Electronic changeover switch:** 13 K lines, L lines with 100 mA current protection controlled by FPGA.
- **Diagnostic connector:** EOBD standard

- **Operating temperature:** + 0 °C / + 45 °C.
- **Storage temperature:** - 20 °C / + 60 °C.
- **Operating and service humidity:** 10% ÷ 80% with no condensation.
- **Size:** 155x165x55 mm
- **Weight:** 1.0 Kg

5.1 Supported Communication Protocols

- **Blink codes;**
- **K, L, (with current protection) ISO9141-2, ISO14230;**
- **CAN, ISO11898, ISO11519-2;**
- **SAE J1850 PWM;**
- **SAE J1850 VPW.**