



EDP 830 Diagnostic Workstation

OPERATING INSTRUCTIONS GENERAL SECTION

TES1466/A
May 2005

IMPORTANT

Every reasonable effort has been made to ensure that information within these Operating Instructions is correct at the time of release, but Crypton cannot accept-responsibility for any errors that may occur.

The information in these Operating Instructions is subject to change without notice, and does not represent a commitment on the part of Crypton.

Service & Warranty

The reliability of this equipment is fully supported by our service agents, with repair workshops and field service engineers to provide a full range of After-Sales Care, including installation, contract maintenance, factory overhaul and emergency repairs on site. Please refer to the page at the end of this manual for full details.

This product utilizes BLUETOOTH® wireless technology. Whilst the radio modules used have a designed maximum range of 100m in free space conditions, the actual, reliable, working range achieved will depend on the conditions prevalent at the time and location of use therefore no guarantee or warranty of usable working range is given or implied.

Note:

Your attention is drawn to our Terms & Conditions of Sale, particularly paragraph 2. If a service engineer is called out, under service warranty where, upon inspection and test the equipment is found to be in full working order and no fault found, the user is liable to be charged the cost incurred for this call out. Before calling out an engineer, ensure your equipment is faulty by checking its operation, particularly mains supply and fault codes/self test if applicable.

Software Licence

Further to our general Terms & Conditions of Sale, the software described in these Operating Instructions is furnished under the following Software Licence Agreement:

1. Licence: You may use the program on the machine provided. You may not copy, duplicate or transmit the program in any form, in whole or in part, without the express prior written permission of Crypton.
2. Term: The licence is effective until terminated. You may terminate the licence by destroying the program together with all copies, or returning the program to Crypton.
3. Crypton does not warrant that the program will meet your requirements or that its operation will be uninterrupted or error free.
4. In no event will Crypton be liable to you for any incidental or consequential damages, including lost profits, business operation and the like, arising out of the use or inability to use this program. You acknowledge that you have read this Agreement, understand it, and agree to be bound by its provisions.

WARNING:

Do not attempt to operate this equipment unless you have read and understood these instructions.

BLUETOOTH is a registered trademark of Bluetooth S.I.G Inc. and is used by Crypton Technology Group under licence.

MS-DOS® and WINDOWS® are registered trademarks of Microsoft® Corporation

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HEALTH AND SAFETY

1. The equipment is not weatherproof and should not be used outside in rain or snow.
2. The internal circuits and components of the analyser should not be tampered with. No internal parts are operator serviceable.
3. Operators should exercise due caution with regard to the engine fan and associated belts.
4. Always provide ventilation by using an exhaust gas extraction system or by having an adequate supply of fresh air.

Carbon Monoxide (CO) from a vehicle exhaust is a highly poisonous gas. If breathed in, it is absorbed by the blood and will result in greatly slowed reactions and if absorbed in sufficient quantity can be fatal. Published figures show that a concentration of 0.3% CO in the air can be fatal if inhaled for 30 minutes.

5. Before starting an engine, ensure that the gear selector is in neutral or park.
6. Care should be taken with regard to scalding from the cooling system, burns from the exhaust system and electric shocks from the ignition HT system.
7. When disconnecting the fuel system of a hot engine beware of the fire hazard caused by fuel spilling onto manifolds, ignition distributor, etc.
8. Position the mains cable and sampler pipe in such a manner that they do not present a hazard to anyone.
9. The earth lead of the mains supply cable **MUST ALWAYS** be connected to a good earth point.
10. Operators should not allow themselves to come into contact with water or other similar conductors when using the equipment.
11. Equipment should be sited in an area designated and clearly marked:

FOR USE BY AUTHORISED PERSONNEL ONLY

RECEPTION

This equipment leaves the factory set for 230V a.c. nominal, single phase 50/60 Hz. mains supply. Where the mains voltage differs from this, it is essential that the equipment is ordered for the specific voltage in your region.

The equipment should be stored and kept in a dry condition.

The EDP 830 is supplied with all main parts (i.e. Computer, Gas Analyser etc.) fitted, with the exception of the Keyboard, Mouse and Monitor. Details for fitting these items are covered later in this manual.

Carefully unpack all items and examine for damage. Check contents against the packing list enclosed for any loss or discrepancy. Report any loss, breakage or discrepancy to the supplier immediately.

IMPORTANT NOTE

Do not disconnect or reconnect any leads between the various parts of the EDP 830 without first SWITCHING OFF the mains supply; this does not include any connections to the vehicle under test.

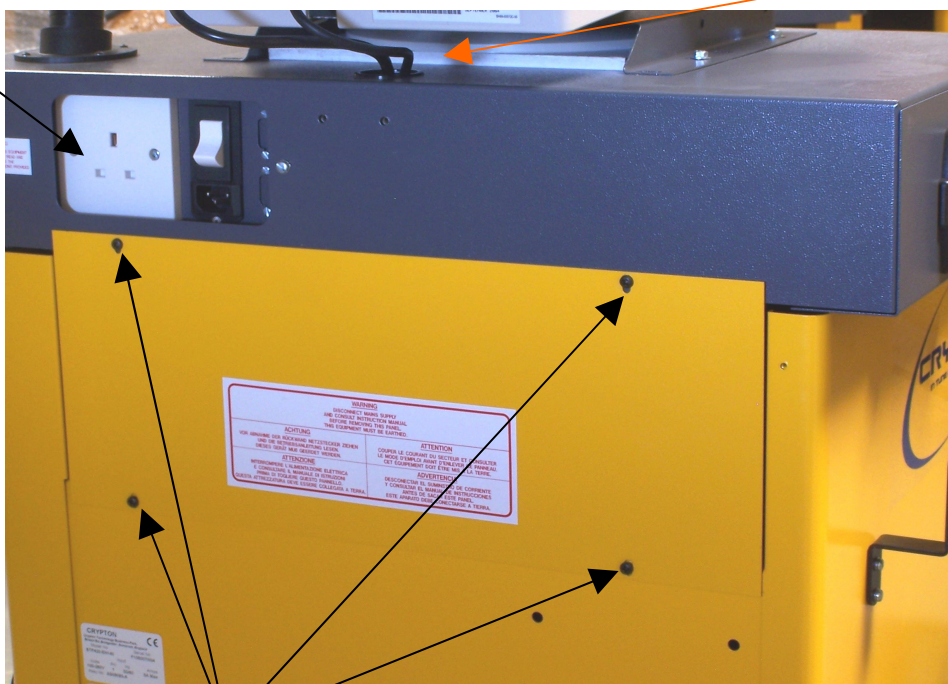
FITTING THE KEYBOARD AND MOUSE

To fit the Keyboard, Mouse and Monitor follow the procedure detailed below, observing the correct sequence of actions:

1. Remove the back panel as shown in Fig. 1 by unscrewing the 4 earth nib Philips screws.
Note the plastic grommet for the monitor cables, this will need to be removed later when fitting the monitor.

13A Socket
reserved for
Vehicle
Inspectorate
Smartcard
reader

Note plastic
grommet for
monitor cables



Unscrew the four earth nib screws and
remove the back panel

Fig. 1

2. Place the keyboard and Mouse on the front tray of the trolley (Fig. 2). Feed the cables through the hole at the back of the tray, over the top of the Computer and plug in to the colour coded connectors on the back of the computer, green for the mouse and purple for the Keyboard. Refer to Fig. 3

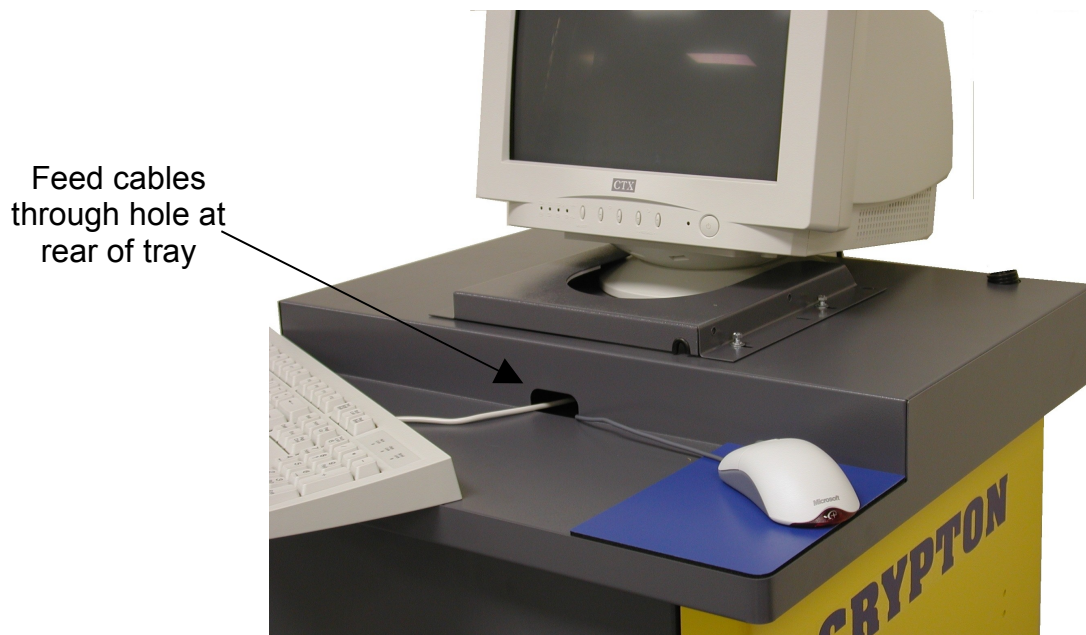


Fig. 2

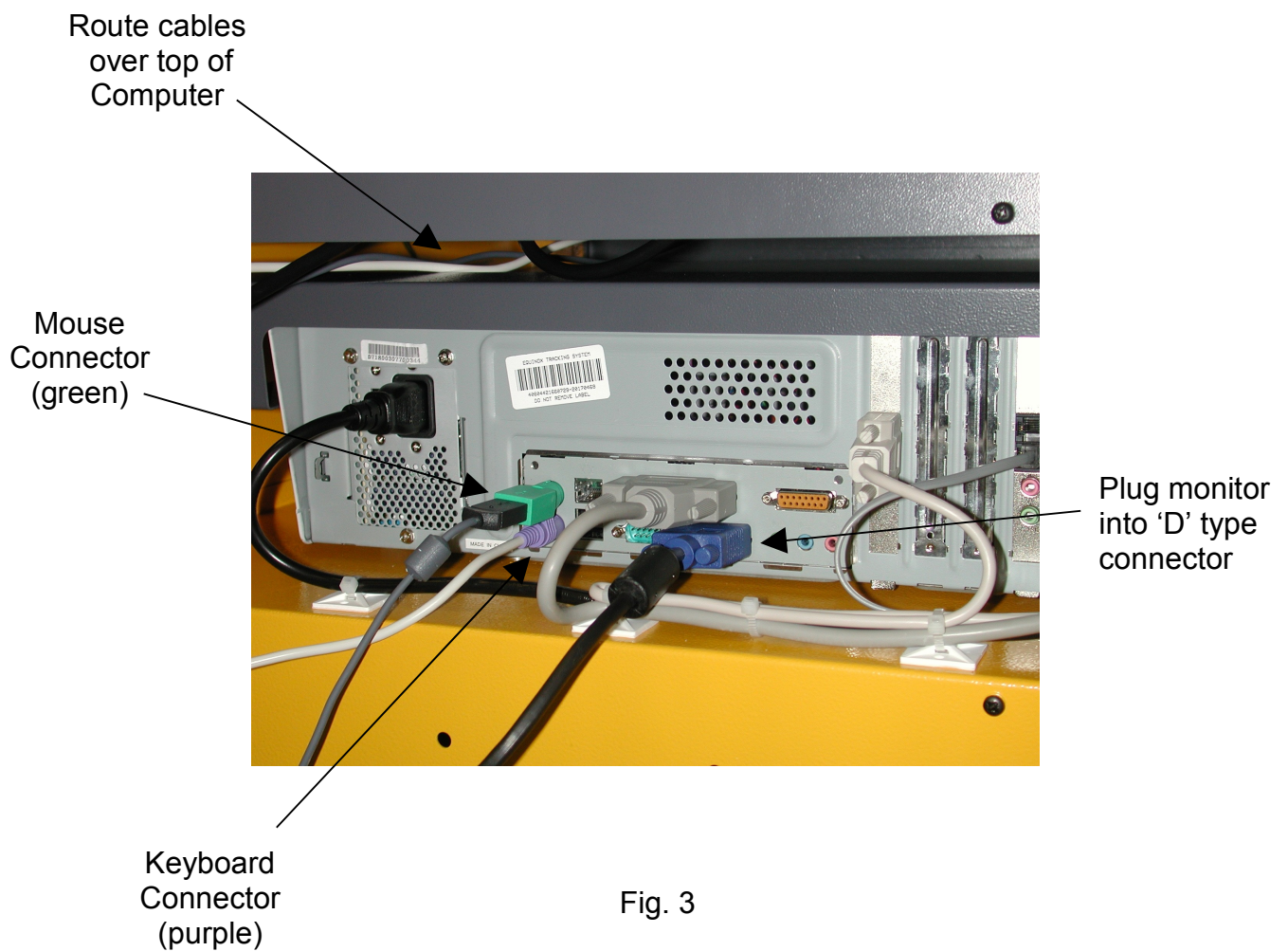


Fig. 3

FITTING THE MONITOR

3. Slacken the four screws (do not remove) securing the Monitor clamp to the top of the trolley. Fit the Monitor base to the Monitor and place on top of the trolley at the back with the screen facing the front. Slide into position underneath the clamp and retighten the four screws as shown in Fig. 4a.

Place Monitor on back of trolley and slide forward underneath retaining clamp

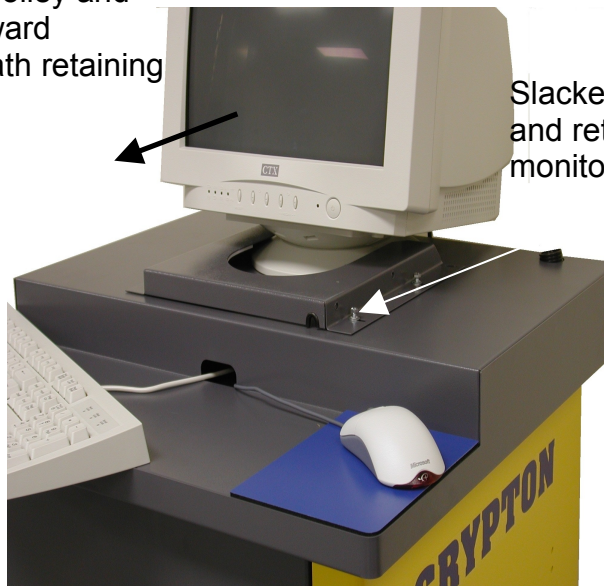


Fig. 4a

Slacken screws and retighten when monitor is in place

Clip Transit Bracket to rear of Monitor and secure to trolley with its retaining screws.

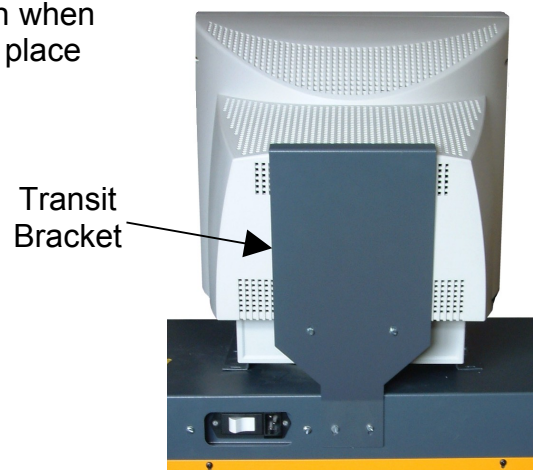


Fig. 4b

4. Remove the plastic grommet from the hole in the trolley immediately behind the Monitor (Fig. 1). Feed the monitor signal lead through the grommet from the top and then down through the hole in the metalwork. The monitor mains lead is already fitted and the free end will be lying with the computer. Feed this up through the metalwork and then through the grommet from the bottom. Replace the grommet.
5. Plug the mains lead into the socket on the back of the Monitor and the signal lead into the 15 way high density 'D' type connector on the computer as shown in Fig. 3. Tighten the screw locks finger tight. Ensure that there is enough slack left on the cables to allow the Monitor to swivel from side to side. The Transit Bracket must then be secured to the rear of the monitor as shown in Fig. 4b
6. Bundle cables neatly into the rear of the unit and replace the back panel, **taking care not to trap or damage any leads.**

FITTING THE CABLE HOOKS

Four hooks are provided for securing cables. Threaded inserts are fitted just below the 'Crypton' label on each side of the unit for this purpose. Fit hooks using hardware provided.

FITTING OPTIONAL EQUIPMENT

A number of optional devices may be fitted for use with the MOT Smoke Test (Diesel). Please refer to Dieseltune IN.2043 (Software) and IN.2044 (Hardware) smokemeter operating instructions (supplied) for details of usage.

DX211-11BT OIL TEMPERATURE PROBE

The Oil Temperature probe holster/recharging station is located on the top panel of the unit towards the right rear. Figures 5a and 5b illustrates how a DX211-11BT wireless probe is inserted into the holster. Note the red LED indicating the unit is charging.



Fig. 5a



Fig. 5b

Note on charging the DX211-11BT Wireless probe

The DX211-11BT wireless probe is both switched off and recharged by being inserted into its holster. In order to achieve a long battery service life in this sealed unit, the recharging current is deliberately set at a low level. It is imperative that the unit be returned to the holster immediately after each use. Failure to do this will cause the probe to cease operating during the working day and it will require a continuous, uninterrupted recharging period of 48 hours to fully recover.

FITTING THE DX211-13BT REMOTE INDICATOR HANDSET HOLDER

A plastic holder is provided for the DX211-13BT Handset. Threaded inserts are fitted to the left of the 'Crypton' label and CAS2 Inputs on the right hand side of the unit for this purpose. Fit the holder using hardware provided. Fig. 6 shows the Handset in its holder.

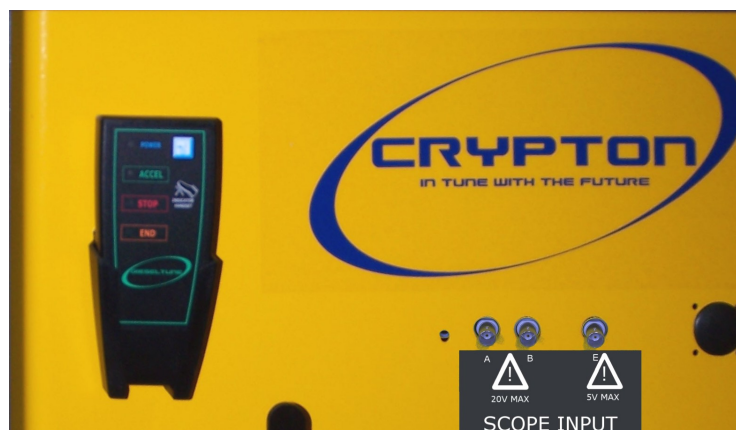


Fig. 6

FITTING THE CDSS6BT RPM ADAPTER

No special fittings are provided for the CDSS6BT wireless RPM adapter. When not in use, it may be hung by its handle on any of the hooks provided.

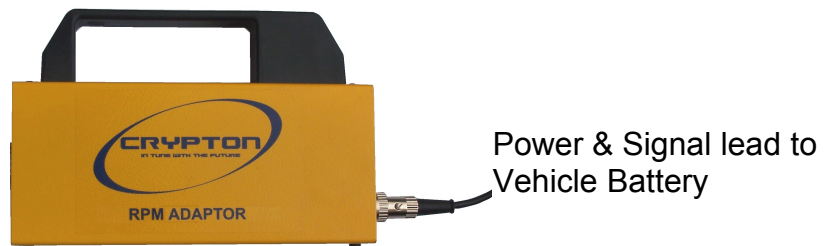


Fig. 7

OPERATION

Before switching on, ensure that the floppy disk drive(s) are empty so that the computer uses the hard disk as its program source.

The EDP 830 is switched ON by a rocker switch situated on the rear of the cabinet. Each time the power is switched on, a 'self-test' routine will be initiated to check important areas of the electronics circuitry. If a fault is detected, a statement will appear on the screen. This exact statement should be passed on to the Service Office (see back of manual), or Agent if overseas, to enable the Service Engineer to recognise the fault before arriving on site. If during normal usage the equipment appears to function abnormally, switch the mains supply off, wait 10 seconds then turn on again to perform a self-test and thereby determine if there is a circuit malfunction.

Switch on using the switch on the rear of the cabinet; the mains switches of the individual units (computer, VDU, printer, gas analyser, etc.) should normally be left on.

Note 1:

It is good practice to maintain computer equipment at an even temperature. If your garage is subject to large temperature variations it is recommended that you leave the unit ON at all times. Turn the VDU off at night using its own mains switch as this item, in common with all picture tubes, has a limited life. Continuous power gives two advantages - less thermal cycling of the computer and a faster gas module warm-up at low ambient temperatures.

Note 2:

ALWAYS exit the application program you are running, return to the Windows XP Home edition desktop screen and use the Shut down Icon (see the Operating System section below) to turn the computer off. This will ensure that all 'Windows' files are correctly closed and that the equipment programs are in a tidy condition before powering down the equipment.

OPERATING SYSTEM

After switch on, the computer will perform the start up sequence and the Windows® XP desktop will be displayed as shown below.

The EDP 830 is controlled by means of 'icons' on the desktop. Each application is accessed by double clicking on the individual icon for that application.



SHUT DOWN

Double click to shut the system down. This will take a short period of time during which the 'windows is shutting down' message will be displayed. When the computer has shut down it is safe to turn the power off.



WGTS2

M.O.T. Gas Test (PETROL). Please refer to TES1204, WGTS2 operating instructions (supplied) for further details on how to use this program. For details of connections and operation of the gas analyser, please refer to TES 1401, Emission Analyser operating instructions (supplied).

N.B. Do not run this program when the Smokemeter program is running.

**SMOKEMETER**

M.O.T. Smoke Test (Diesel). Please refer to Dieseltune [IN.2043 DX.260 \(Software\)](#) and [IN.2044 DX.260 \(Hardware\)](#) Smokemeter operating instructions (supplied) for further details.

N.B. Do not run this program when the Petrol Emissions program (WGTS2) is running.

**EMISSION ANALYSER SETUP**

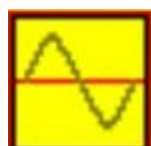
Causes the host computer to act as a remote terminal for the gas analyser allowing full control of the analyser through the computer keyboard. For details of connections and operation please refer to TES 1401, Emission Analyser operating instructions (supplied).

**CODEx**

Crypton On-board Diagnostics Expert. For details of connections and operation please refer to TES 1341, Getting Started with CODES (supplied).

**TOOLBOX**

Allows the host computer to perform automated and manual tests control using CAS2, Crypton Automotive Oscilloscope, and DMM1 or DMM2 Digital Multimeters. For details of connections and operation please refer to TES 1467 operating instructions (supplied).

**INFO200**

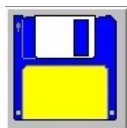
Vehicle Workshop Information. For details of operation please refer to the Help built into the application.

**CRYPTON WEBPAGE**

For machines with a modem and connection to a telephone line. This icon will access the CTG website via the internet.

**OPERATORS MANUALS**

Opens a folder containing equipment operators manuals in Adobe Portable Document Format. Clicking on any manual will open it in Adobe Acrobat Reader.

**INSTALL/UPDATE SOFTWARE**

Causes the host computer to run a program call Install.exe or Setup.exe on a disk in placed in the floppy disk drive. Place the Application Installation Disk (Disk 1 if there is more than one disk in the set) in the disk drive then double click on the icon

Note:

The disk must be placed in the drive BEFORE the option is selected or an error message will be displayed.

When installation is complete the new program icon will then appear on the Desktop.

Application software supplied on CD-ROM will automatically begin the install process when inserted into the CD-ROM drive.

IMPORTANT: KEEP ALL ORIGINAL DISKS FOR FUTURE USE. A PROGRAM MAY ONLY BE REMOVED OR UPDATED IF THE ORIGINAL DISK(S) IS AVAILABLE!

DISK INFORMATION

INSERTING A FLOPPY DISK

Additional software packs chosen for use with the EDP 830 will be accompanied by an application manual. This should be unpacked and put into the application section of this binder.

Carefully unpack the programme disk and slide the disk fully into the disk entry slot with the disk label uppermost. When correctly inserted the disk will 'click' downward and lock in the holder. At the same time the release button will move outward. To remove the disk, press the release button underneath the disk drive slot and slide out the disk.

DISK WRITE PROTECT

A small slide switch at the front corner of the disk can be moved to one of two positions. These are READ WRITE or WRITE PROTECT. A small window is CLOSED when the switch is in the READ WRITE mode and OPEN when in the WRITE PROTECT mode.

Application Programme Disks should normally be set to READ WRITE mode as data has to be written to the disk occasionally.

Vehicle Data Disks should normally be set to WRITE PROTECT mode to prevent accidentally over-writing any vehicle data.

SAFE DISK HANDLING

Once programmed, the protected floppy disk will give trouble-free use provided that reasonable care is taken in handling and general usage.

1. Ensure that the disk is not placed close to strong magnetic fields.
2. Do not expose the disk to excessive high or low temperatures, e.g. do not leave in direct sunlight.
3. Do not leave the disk in a wet environment.
4. Do not allow the disk to lie in an exposed position where it can collect dust.
5. Keep the disk as clean as possible.



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AFTER SALES SERVICE

Apart from the routine maintenance and adjustments stipulated in this manual the equipment must not be tampered with in any way. All further servicing must be carried out only by an engineer from an Authorised Agent. Failure to observe these conditions will invalidate the Guarantee.

On-Site Service / Overhaul / Spare Parts

If you require a Service Engineer to attend ON SITE, either due to an equipment fault, or for machine calibration, or if the equipment covered by this manual requires to be sent back for factory overhaul, or if you need spare parts, please contact our Product Support Helpline at the following number. Tel: +44(0)1278 436225 Fax: +44(0)1278 450567

Overseas

Service abroad is provided by the agent from whom your equipment was purchased.

Fully Comprehensive After-Sales Service

Call Crypton Helpline for details of local service agents. +44(0)1278 436225

Technical Information

Crypton provide information and contracts covering:

Car Data, Fault Code Information, Diagnostic Information, Software Support Contracts,
Software Updates & Accessories.