Agilent E5071CU Option 018 Hard Disk Drive Kit

User's Guide

Fifth Edition

Agilent Technologies

Notices

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Manual Printing History

The manual's printing date and part number indicate its current edition. The printing date changes when a new edition is printed. (Minor corrections and updates that are incorporated at reprint do not cause the date to change.) The manual part number changes when extensive technical changes are incorporated.

Oct 2006	First Edition
May 2007	Second Edition
Jun 2007	Third Edition
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Typeface Conventions

Sample (bold)	Boldface type is used when a term is defined or emphasis.
Sample (Italic)	Italic type is used for emphasis.
Sample key	Indicates a hardkey (key on the front panel or external keyboard) labeled "Sample." "key" may be omitted.
Sample menu/button/box	Indicates a menu/button/box on the screen labeled "Sample" which can be selected/executed by clicking. "menu," "button," or "box" may be omitted.
Sample block/toolbar	Indicates a block (group of hardkeys) or a toolbar (setup toolbar) labeled "Sample."
Sample 1 - **Sample 2** - **Sample 3**	Indicates a sequential operation of **Sample 1**, **Sample 2**, and **Sample 3** (menu, button, or box). "-" may be omitted.

1   General Information

This chapter describes the Hard Disk Drive Kit, contents of the kit, and required tools to install the Option 018 into the Agilent E5071C.

Option 018 Hard Disk Drive Kit

The purpose of this kit is to install the option 018 into the Agilent E5071C.

Contents of the Agilent E5071CU Option 018 Upgrade Kit

The kit includes the parts listed in Table 1-1. If anything is missing, contact the nearest Agilent Technologies office.

Table 1-1   **Contents of the Agilent E5071CU Option 018 Upgrade Kit**

Description	Qty.
Upgrade Manual (This manual)	1
Hard Disk for E5071C	1

2   Option Installation

This chapter describes the procedure to install the option 018 into the Agilent E5071C.

Introduction

This chapter describes the procedure to install Option 018 into the E5071C. The procedure consists of the following items.

- Installation Requirement
- Removal Procedure
- Replacement Procedure
- Writing System Correction Data of Backup Memory to Removable HDD
- Initial Registration of E5071C
- Reconfiguring Touch Panel Settings

Update Procedure for Hard disk Type 1

This procedure is for Non-screw type hard disk (Type 1).

Installation Requirement

- 0960-2562 Key for Hard Disk Carrier

Preparation

It is required to replace the front plate before installing this removable hard disk to Type 1 user's system.

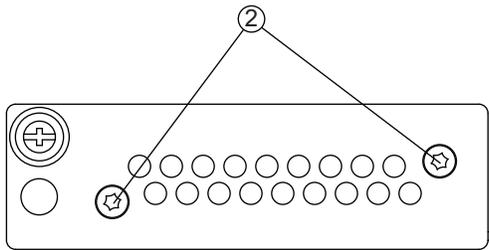**Step 1.** Remove the two stickers (item 1).

Figure 2-1
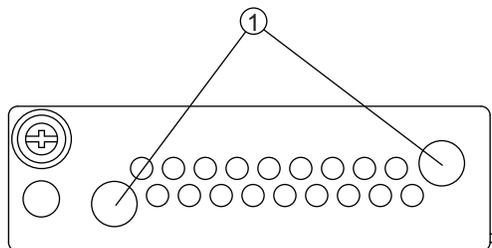
Item 1: E5070-87303

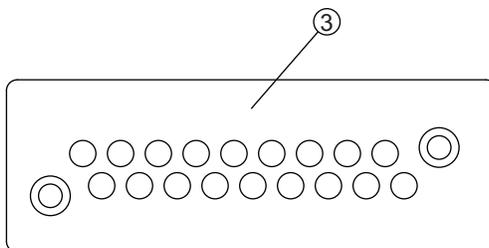**Step 2.** Remove the two TORX T10 screws (item 2) that are fastening the frnt plate.
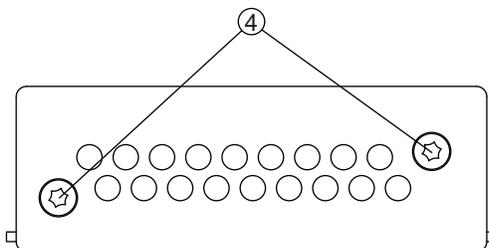
Figure 2-2

Item 2: 0515-2146

Step 3. Fasten the front plate for Typ 1 user (item 3) with TORX T10 screw (item 4).
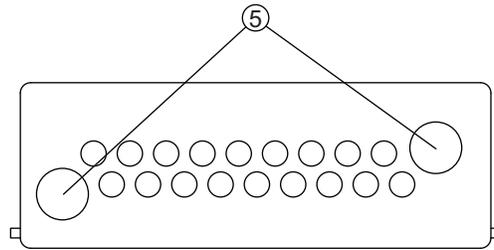
Figure 2-3

Item 3: E5070-00657

Figure 2-4

Item 4: 0515-2146

Step 4. Put the stickers (item 5) on the TORX T10 screws in the front plate..

Figure 2-5

Item 5: E5070-87303

Removal Procedure

Step 1. Turn off the power.

Step 2. Inset the key in the lock and turn crockwise.

Step 3. Push the button under the lock and remove the hard disk.

Replacement Procedure

Step 1. Insert the hard disk into the slot.

Step 2. Turn the key to the left until it is locked.

Step 3. Remove the key.

Writing System Correction Data of Backup Memory to Removable HDD

The following is a description of the procedures to write the system correction data stored in the backup memory to the mounted removable HDD.

Step 1. Turn on the E5071C.

CAUTION The function for Factory image making window is only displayed when the E5071C is turned on for the first time.

It is required to make a factory image based on "Procedure to execute the factory recovery (HDD Revision: CN924 or below)" of the average of "System Recovery" before advancing to Step 2.

Step 2. Press Macro Setup

Step 3. Press **Load Project...** on the softkey menu.

Step 4. A dialog box appears to allow you to select a program to be loaded. Select RestoreSysCorFile.vba from the D:\Agilent\Service folder, and then press **Open** button.

Step 5. Press Macro Run

Step 6. RestoreSysCorFile dialog box appears (Figure 2-6). Click **OK**.

Figure 2-6   **RestoreSysCorFile Dialog Box**

CAUTION Once the program has ended, restart the E5071C to enable the system correction data.

Step 7. After restart, the screen for initial registration appears. Execute initial registration. For information on the execution procedure, refer to "Initial Registration Procedure (HDD Revision: CN924 or below)" on page 39.

NOTE If the touch screen does not work after the installaiton, refer to "Reconfiguring Touch Panel Settings" on page 37.

Update Procedure for Hard Disk Type 2

This procedure is for screw type hard disk (Type 2).

Installation Requirement

- 5188-4426 Key for Hard Disk Carrier

Removal Procedure

Step 1. Turn off the power.

Step 2. Inset the key in the lock and turn anti-clockwise.

Step 3. Open the screw in clockwise direction.

Step 4. Press the button under the screw.

Step 5. Remove the hard disk.

Replacement Procedure

Step 1. Insert the hard disk into the slot.

Step 2. Turn the screw in anti-clockwise direction until it is locked..

Step 3. Turn the key to the right until it is locked.

Step 4. Remove the key.

Step 5. Turn on the E5071C.

Writing System Correction Data of Backup Memory to Removable HDD

The following is a description of the procedures to write the system correction data stored in the backup memory to the mounted removable HDD.

Step 1. Turn on the E5071C.

Step 2. Press Macro Setup

Step 3. Press **Load Project...** on the softkey menu.

Step 4. A dialog box appears to allow you to select a program to be loaded. Select RestoreSysCorFile.vba from the D:\Agilent\Service folder, and then press **Open** button.

Step 5. Press Macro Run

Step 6. RestoreSysCorFile dialog box appears (Figure 2-7). Click **OK**.

Figure 2-7 **RestoreSysCorFile Dialog Box**

e5070buj7017

CAUTION Once the program has ended, restart the E5071C to enable the system correction data.

Step 7. After restart, the screen for initial registration appears. Execute initial registration. For information on the execution procedure, refer to "Initial Registration Procedure (HDD Revision: CN925 or above)" on page 35 for HDD revision: CN925 or above. If HDD revision is CN924 or below, refer to "Initial Registration Procedure (HDD Revision: CN924 or below)" on page 39

NOTE If the touch screen does not work after the installaiton, refer to "Reconfiguring Touch Panel Settings" on page 37.
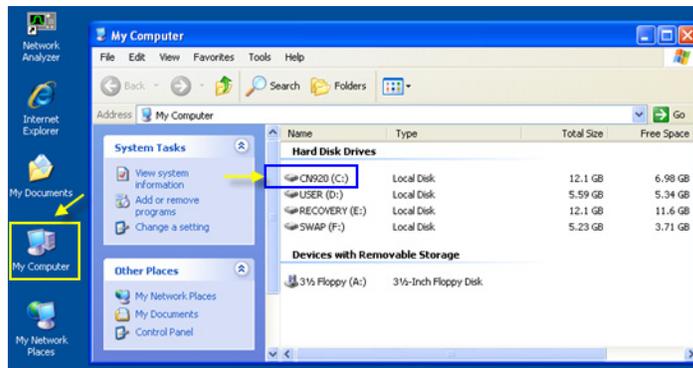
System Recovery

By executing system recovery, you can return the system of the E5071C (the Windows operating system) to the factory state (at the time of purchase[1]).

NOTE   System recovery is a function of Windows and not a function of the E5071C Firmware.

The system recovery procedure is different in accordance with the HDD revision. The HDD revision can be checked using the following procedure:

Step 1.   In E5071C, from Windows Start Menu, click on My Computer.

Step 2.   The volume label for C: drive is displayed in Hard Disc Drive area.

CAUTION   Strictly follow the steps described below. If you do any operation other than the following steps, the system may not be recovered.

Types of system recoveries

The following 2 types of system recoveries are available.

❏   Factory recovery

Returns the contents of the C drive to the factory state.

❏   User recovery (available only when HDD revision is CN924 or below)

Returns the contents of the C and D drives to a user-specified state. To use this function, you must prepare for recovery in advance. For information on the preparation, see "Procedure to execute the factory recovery (HDD Revision: CN924 or below)" on page 16 for information on the execution, see "Procedure to execute the factory recovery (HDD Revision: CN924 or below)" on page 16.

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[1]. If the hard disk failed and has been replaced after purchase, the state when the replacement was performed is recovered.

Notes on executing the factory recovery function

Executing the factory recovery function causes the following conditions:

❏ In addition to the Windows operating system, the following settings of the E5071C are returned to the factory state.

- Network setting
- GPIB setting
- Printer setting

❏ The driver for the supported printer installed after purchase is deleted.

❏ You need to execute initial registration again.

❏ The firmware revision you installed remains even if you perform factory recovery.

Files you created using the save function (files in the D drive) are not affected, but we recommend backing them up before executing system recovery for precautionary purposes. For more information on backup, refer to "Backing Up the Data" as described in E5071C Online Help.

Procedure to execute the factory recovery (HDD Revision: CN925 or above)

NOTE	The recovery function for Factory image is only loaded.
	The User back up function is not available.

Step 1. Turn ON the E5071C.

Step 2. The boot option is displayed. Use the downward arrow key to select the "Agilent Recovery Solution" and press Enter

Step 3. Windows PE starts up and "Agilent Recovery Program" window is displayed. Press 1, and then press Enter.

Figure 2-8 **Agilent Recovery Program(1/1)**

e5071cs003
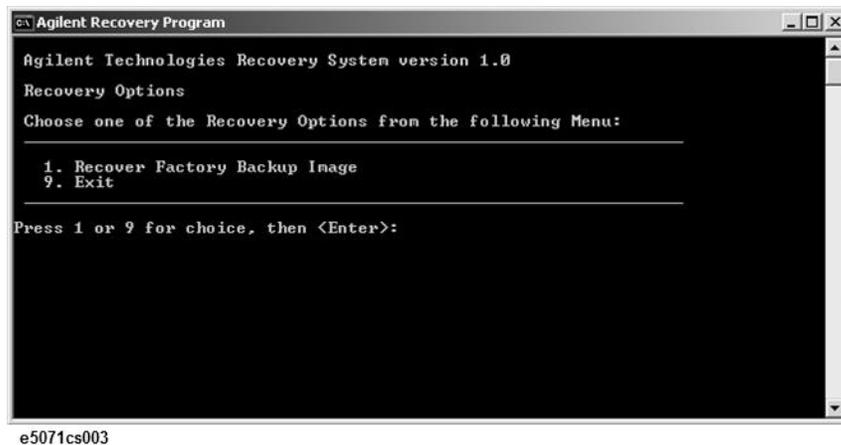
Step 4. A warning message is displayed. Press 1, and then press Enter.

Figure 2-9 **Agilent Recovery Program(1/2)**

e5071c004
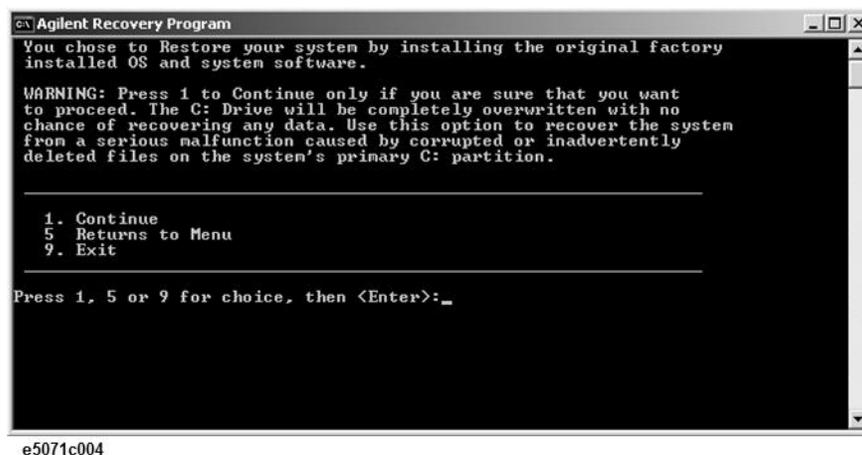
Step 5. Caution is displayed. Press 1, and then press Enter.

Figure 2-10   **Agilent Recovery Program(1/3)**

e5071c005
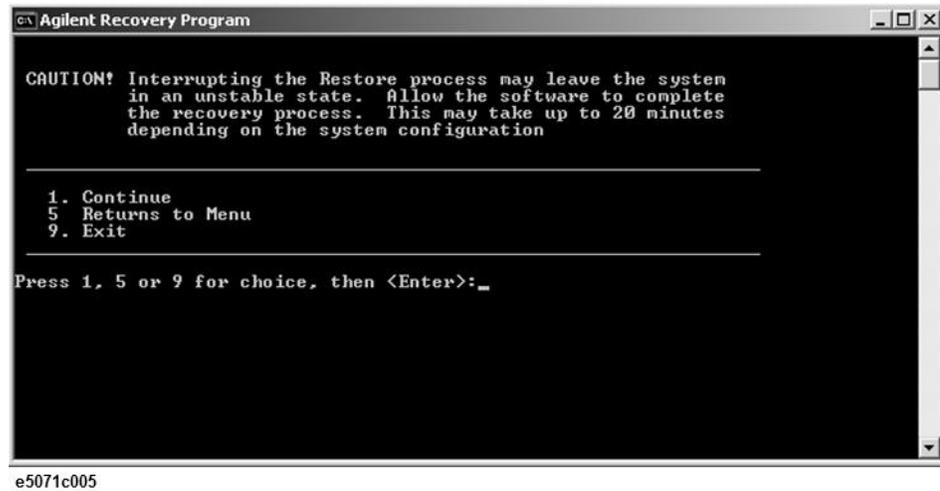
     Step 6. Recovery function is performed.

     Step 7. A message box appears after the completion of recovery process. Press any key to continue.

Figure 2-11   **Agilent Recovery Program(1/4)**

e5071cs006
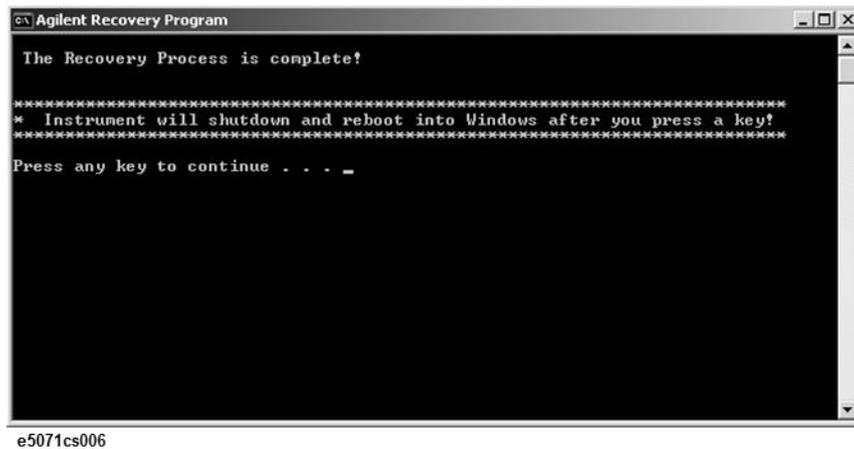
     Step 8. When the recovery is finished, E5071C restarts.

     Step 9. After restart, the screen for initial registration appears. Execute initial registration. For information on the execution procedure, refer to "Initial Registration Procedure (HDD Revision: CN925 or above)" on page 35.

NOTE   If the touch screen does not work after System Recovery, refer to "Reconfiguring Touch Panel Settings" on page 37.

Procedure to execute the factory recovery (HDD Revision: CN924 or below)

This section describes how to return the contents of the C drive to the factory state.

NOTE   You need a keyboard for this operation.

Step 1. Shut down the E5071C.

Step 2. Disconnect all of the USB device from the USB ports.

Step 3. Connect the keyboard to the E5071C.

Step 4. Press the standby switch of the E5071C to turn it on.

Step 5. When the screen as shown in the figure below appears, press ⌷F11⌷ of the keyboard.
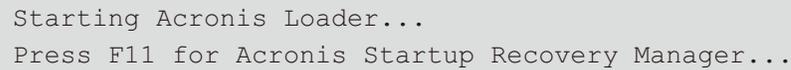
```
Starting Acronis Loader...
Press F11 for Acronis Startup Recovery Manager...
```

e5071cse1055

CAUTION   Press F11 only once. If you press F11 twice or more and a screen which is not mentioned in this manual appears, reboot the instrument and restart the process from the first.

NOTE   After several seconds, the next screen appears automatically even if you do not press any key, so do not miss it.

NOTE   After Step 5, if the E5071C freezes with the cursor does not blink, turn the off and remove unnecessary USB devices. Then, replace the keyboard with a PS/2 keyboard to execute the process again.

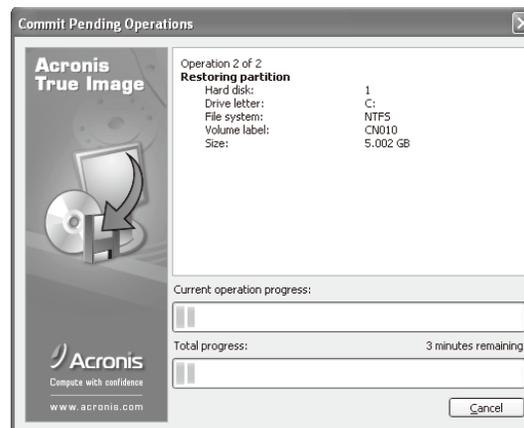**Step 6.** Select **Restore**.

Figure 2-12 **Activate Acronis Startup Recovery Manager**

e5071cse1079

Step 7. A confirmation dialog box is displayed. Push the enter to select **Yes** to start the recovery of the factory backup. The recovery takes a few minutes depending on the amount of data.

Figure 2-13 **Recover Factory Backup**

e5071cse1034

Step 8. When the recovery is finished, push the enter select OK. The E5071C restarts automatically.

Step 9. After restart, the screen for initial registration appears. Execute initial registration. For information on the execution procedure, refer to "Initial Registration Procedure (HDD Revision: CN924 or below)" on page 39.

Step 10. Execute the calibration of the touch screen. For information on the execution procedure, refer to "Calibration of the Touch Screen" on page 41.

CAUTION **Never turn off the power during the system recovery because doing so may cause serious damage to the E5071C.**

Procedure to create the user backup image (HDD Revision: CN924 or below)

This section describes how to create the user backup image. The C and D drives' contents saved in this procedure are recalled when the user recovery function is executed.

Step 1. Close the E5071C application by pressing **System** > Service Menu > Exit.

Step 2. Close all other applications you currently open.

Step 3. From the Windows start menu, select All Programs > Acronis > Acronis True Image.

Step 4. Click "No, Thanks" button.

Figure 2-14 **Recover User Backup**
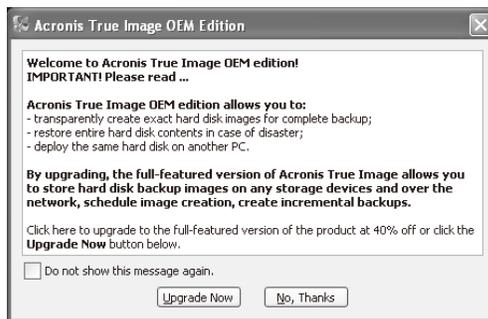
e5071cse1080

Step 5. Click **Backup**
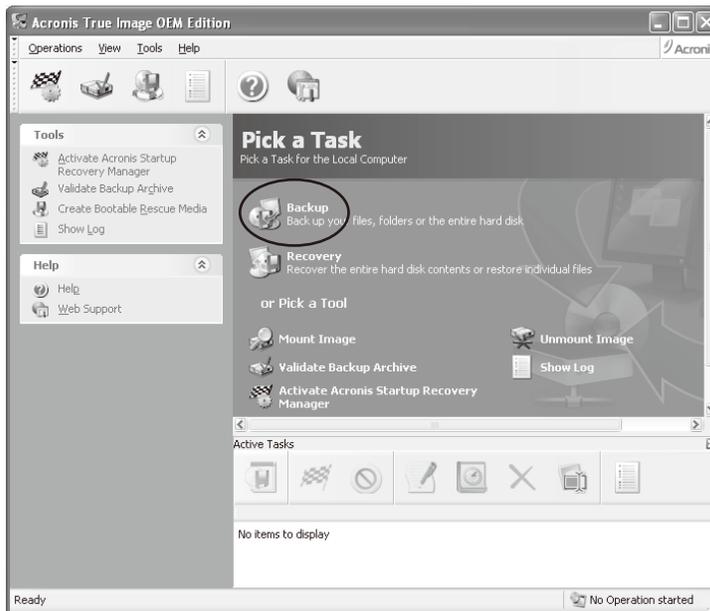
e5071cse1125

Step 6. Click **Next** button.

e5071cse1126

Step 7. Select "The entire disk contents or individual partition," then click **Next** button.

e5071cse1127

Step 8. Select the C drive and D drive.
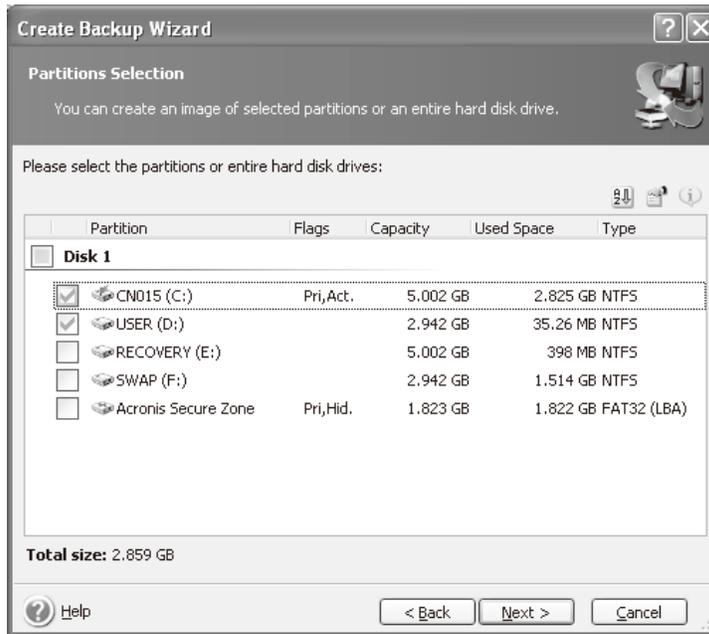
e5071cse1128

Step 9. Select the destination folder and input a file name, then click **Next** button. It is recommended to save the file to a directory which has enough space like the E drive. Also, never save the contents of the drive to the C, D or F drive.
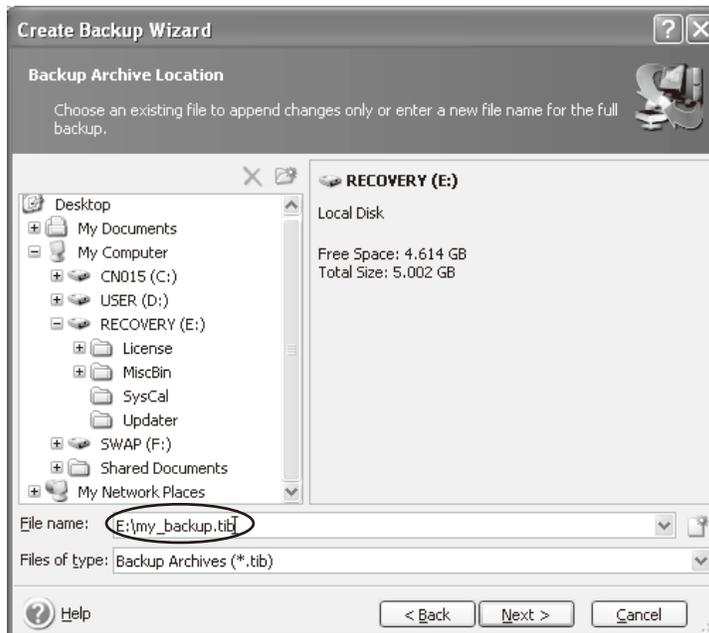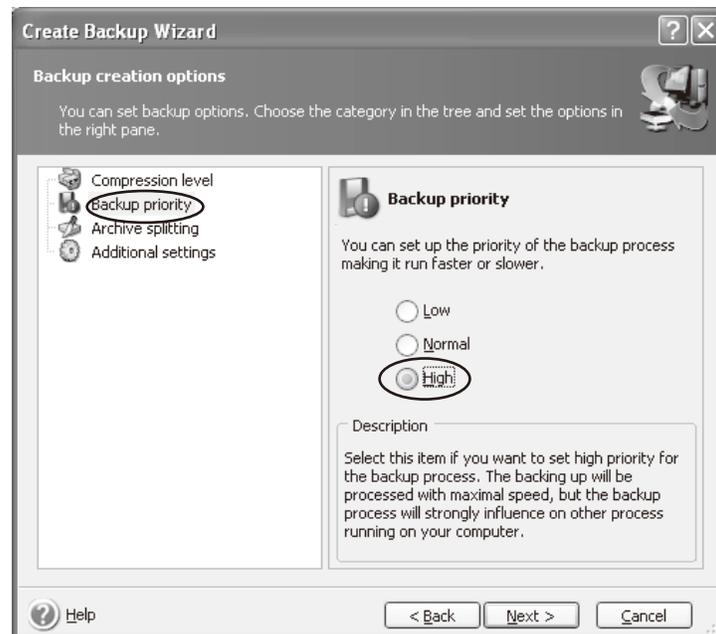

e5071cse1129

Step 10. Select "Set the options manually" and click **Next** button.

e5071cse1130

Step 11. Select "Backup priority" in the left field and "High" in the right field, then click **Next** button.
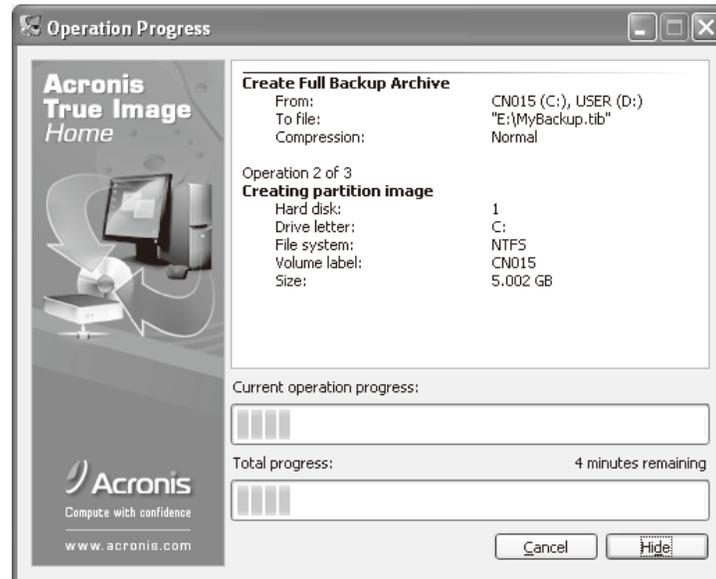

e5071cse1131

Step 12. If necessary, input comments and click **Next** button. The comments can be omitted.
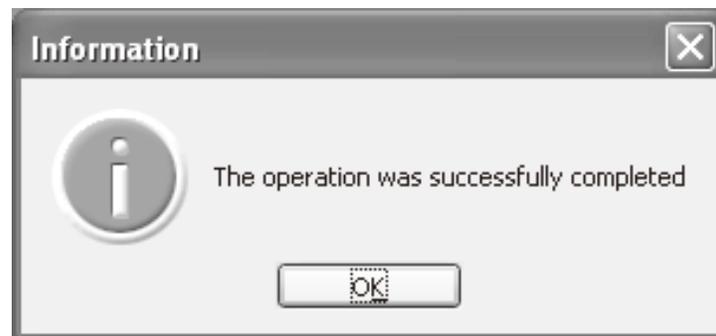

e5071cse1132

Step 13. Click **Proceed** button.
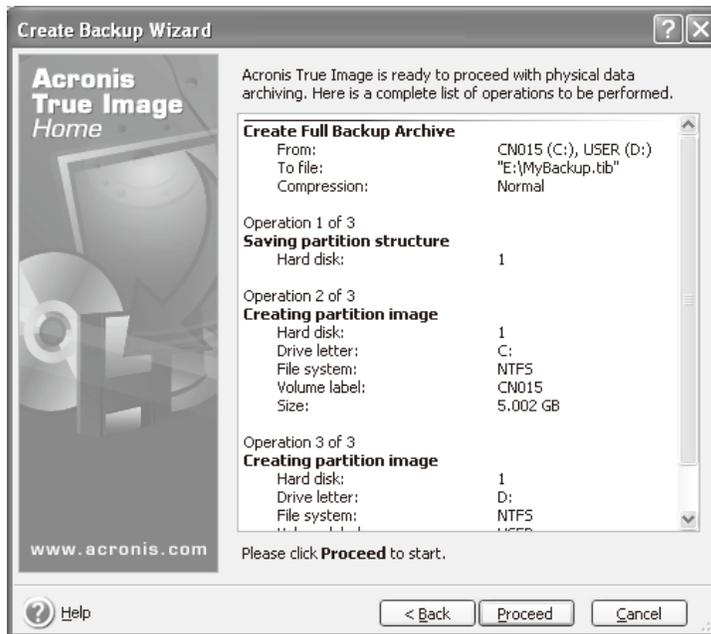
e5071cse1133

Step 14. The following screen appears during backup.

e5071cse1134

Step 15. The following screen appears when the user backup image was created. Click **OK**.
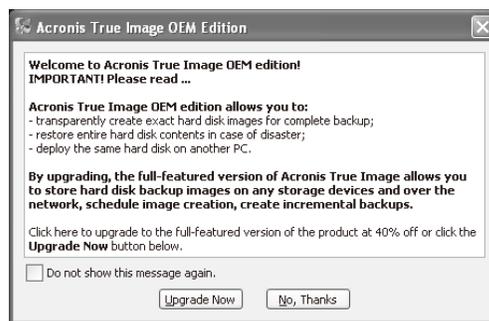

e5071cse1135

CAUTION	**Never turn off the power during creating the user backup image because doing so may cause serious damage to the E5071C.**

## Procedure to execute the user recovery function (HDD Revision: CN924 or below)

Returns the contents of the C and D drives to a user-specified state. To use this function, you must create the user backup image in advance. For more information, see the description "Procedure to create the user backup image (HDD Revision: CN924 or below)" on page 18.

Step 1. Close the E5071C application by pressing **System** > Service Menu > Exit.

Step 2. Close all other applications you currently open.

Step 3. From the Windows start menu, select All Programs > Acronis > Acronis True Image.

Step 4. Click "No, Thanks" button.

e5071cse1080
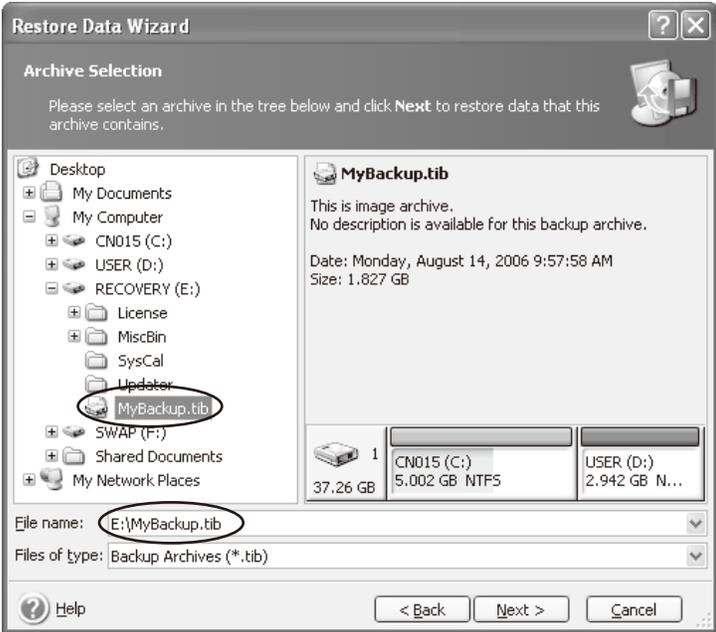
Step 5. Click **Recovery**.
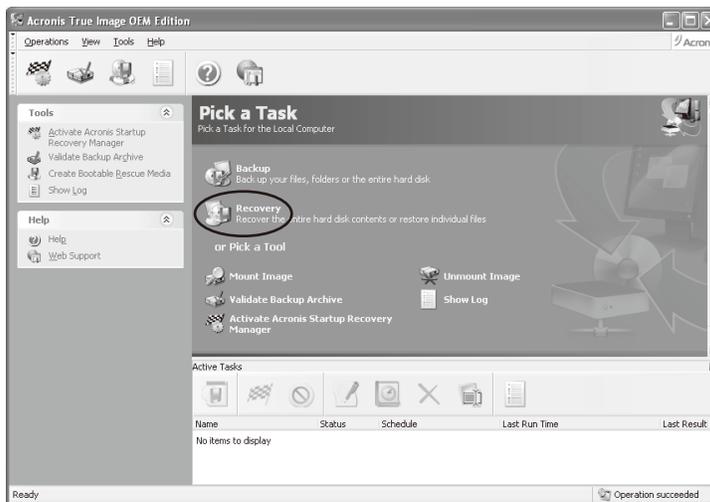
e5071cse1136

Step 6. Click **Next** button.

e5071cse1137

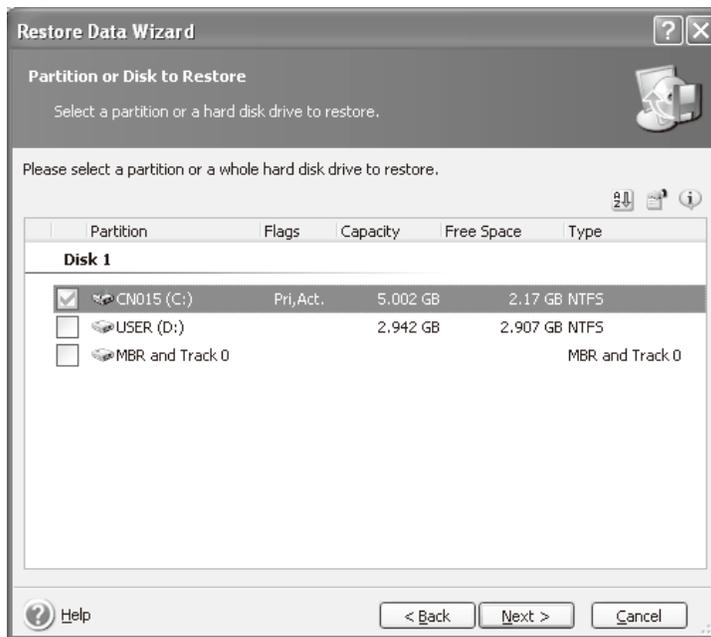**Step 7.** Select the saved backup image file, then click **Next** button.

e5071cse1138

Step 8. Select "Restore disks or partitions," then click **Next** button.
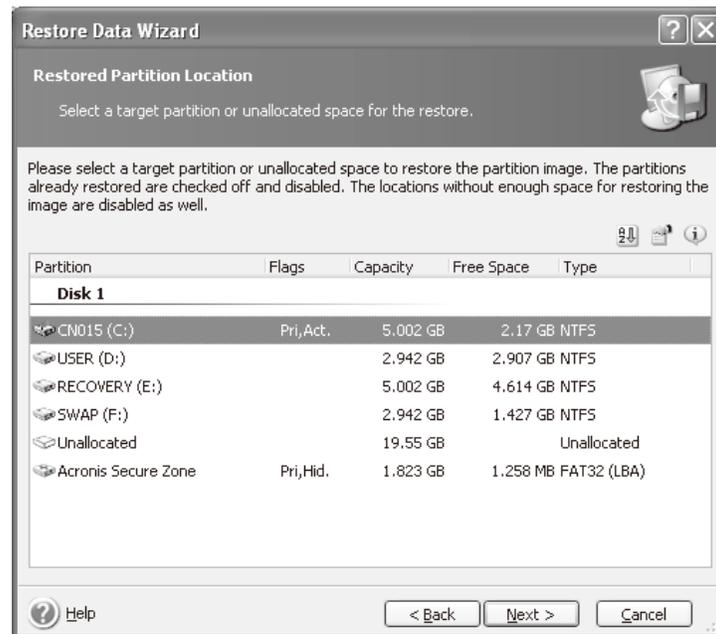

e5071cse1139

Step 9. Select the C drive, then click **Next** button.

e5071cse1143

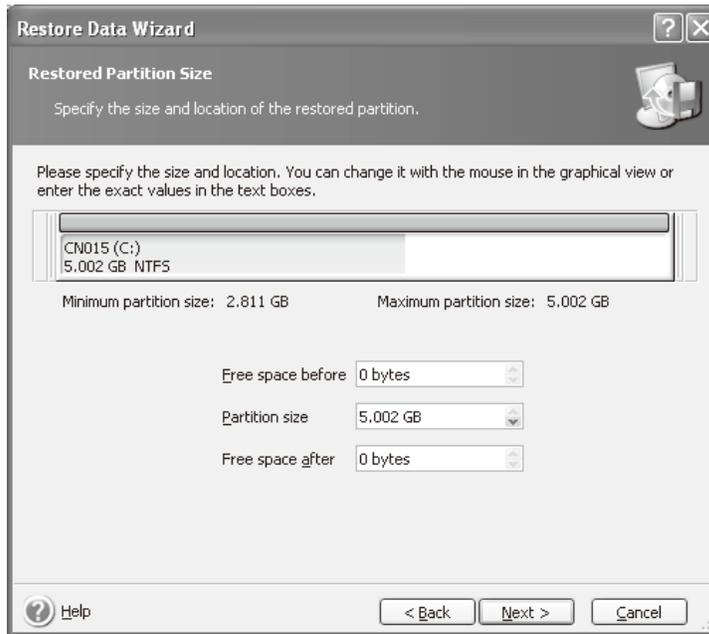**Step 10.** Select the C drive to restore, then click **Next** button.

e5071cse1144

Step 11. Select "Active" and click **Next** button.

e5071cse1145

Step 12. Click **Next** button.

e5071cse1146

Step 13. Select "Yes, I want to assign a logical drive letter to the restored partition" and click **Next** button.

e5071cse1147

Step 14. Select "Yes, I want to restore another partition or hard disk drive," then click **Next** button.
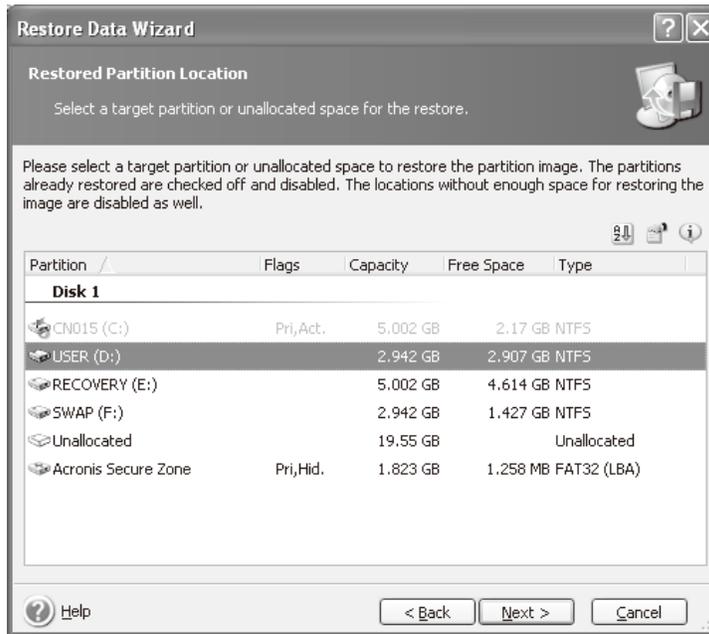

e5071cse1148

Step 15. Select the D drive to restore, then click **Next** button.

e5071cse1149

Step 16. Select the D drive to restore, then click **Nex**t button.

e5071cse1150

Step 17. Select "Logical" and click **Next** button.

e5071cse1151

Step 18. Click **Next** button.

e5071cse1152

Step 19. Select "Yes, I want to assign a logical drive letter to the restored partition," then click **Next** button.

e5071cse1153

Step 20. Select "No, I do not." and click **Next** button.
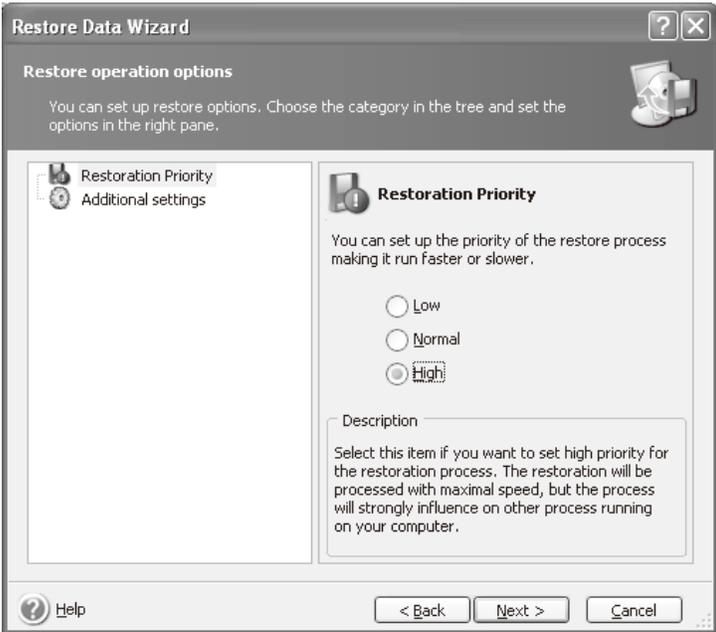

e5071cse1154

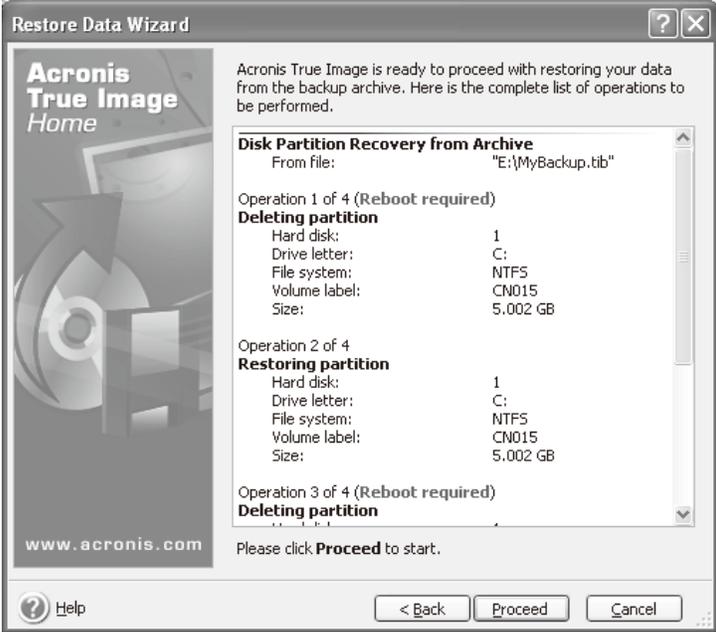**Step 21.** Select "Set the options manually" and click **Next** button.

e5071cse1155

Step 22. Select "Restoration Priority" in the left field and "High" in the right field, then click **Next**

button.

e5071cse1156

Step 23. Click **Proceed** button.

e5071cse1157

Step 24. Click **Reboot** button.

e5071cse1158

CAUTION   **Never turn off the power during the recovery of the user backup image because doing so may cause serious damage to the E5071C.**

Step 25. After boot up, perform "Initial Registration of E5071C" on page 35 and "Calibration of the Touch Screen" on page 41.

Initial Registration of E5071C

When you start up the E5071C at the first time, you need to perform the initial registration of the Windows XP operating system of the E5071C. There are two procedures in accordance with the HDD revision.

NOTE   It is not possible to check the HDD revision installed on your E5071C before Windows is booted. Therefore you should follow the procedure which you see on the E5071C.

NOTE   You cannot use the front panel keys during the initial registration of the E5071C therefore connect the mouse and the keyboard before turning on the power.

NOTE   If you perform the following procedure incorrectly, a message asking you whether to return to the previous registration screen and perform the registration appears. In this case, follow the instruction to return to the previous registration screen.

Initial Registration Procedure (HDD Revision: CN925 or above)

Step 1. Turns on the E5071C.

Step 2. The Windows XP Professional Setup wizard appears. Click the **Next >** button (Figure 2-15).

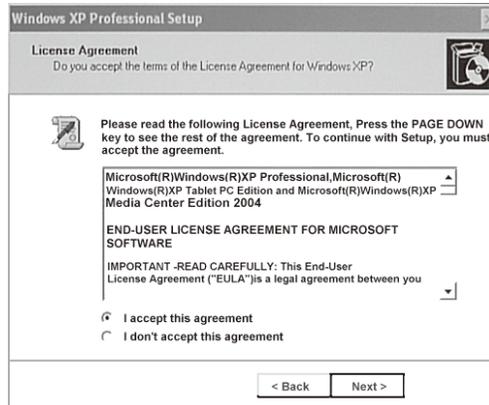**Figure 2-15**   **Windows XP Professional Setup wizard**

e5071cse1073

Step 3. In the Windows XP Professional Setup dialog box, read the license agreement, then select the **I accept this agreement** box and click the **Next >** button (Figure 2-16).
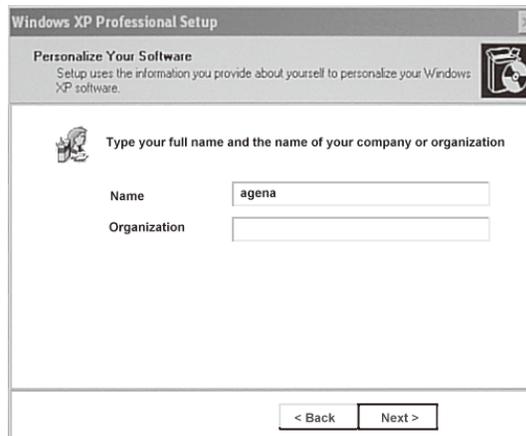
Figure 2-16 **Windows XP Professional Setup dialog box (1/2)**

e5071cse1074

Step 4. In the next dialog box, input **agena** in the **Name** box. Then, click the **Next>** button (Figure 2-17).

Figure 2-17 **Windows XP Professional Setup dialog box (2/2)**

e5071cse1075

Step 5. The E5071C restart automatically.

Step 6. The Agilent Recovery Image Setup screen (Figure 2-18) appears. Click OK to proceed.

Figure 2-18   **Agilent Recovery Image Setup Screen(1/1)**

e5071cs001

Step 7. A progress bar appears (Figure 2-19) indicating the progress of the Recovery Image setup. The complete process takes less than 5 minutes to finish.

Figure 2-19   **Agilent Recovery Image Setup Screen(1/2)**

e5071cs002

Step 8. A message dialog box appears after the completion of the Recovery Image Setup procedure. The dialog box disappears automatically after a few seconds.

Step 9. E5071C firmware is executed, then the measurement display appears.

NOTE   If the touch screen does not work after Initial Registration, refer to "Reconfiguring Touch Panel Settings" on page 37.

Reconfiguring Touch Panel Settings

Step 1. In E5071C, right click My Computer.

Step 2. Select Properties. The System Properties dialog box appears.

Step 3. Select Hardware tab.

Step 4. Click **Device Manager**. The Device Manager dialog box appears.

Step 5. Select Ports (COM & LPT).

Step 6. Check if two Communication Port (COM1) are displayed.

Step 7. Right click and select Unistall for both the COM1 ports.

e5071cse007
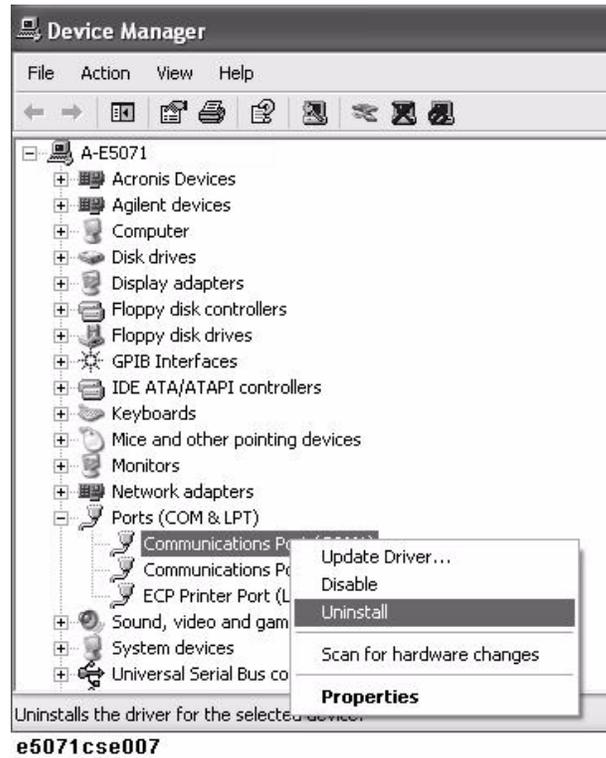
Step 8. The Confirm Device Removal message box appears. Click **OK**.

Step 9. Reboot the instrument.

Initial Registration Procedure (HDD Revision: CN924 or below)

Step 1. Turns on the E5071C.

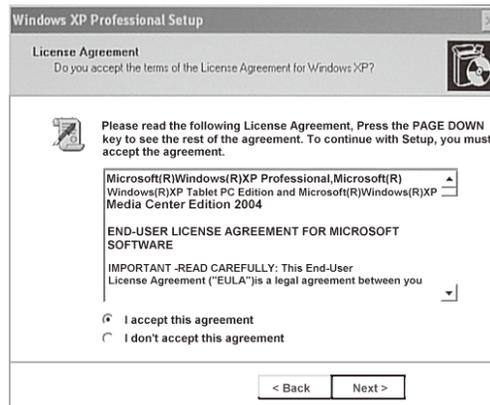**Step 2.** The Windows XP Professional Setup wizard appears. Click the **Next >** button (Figure 2-20).

Figure 2-20   **Windows XP Professional Setup wizard**

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Step 3. In the Windows XP Professional Setup dialog box, select the **I accept this agreement** box and click the **Next >** button (Figure 2-21).

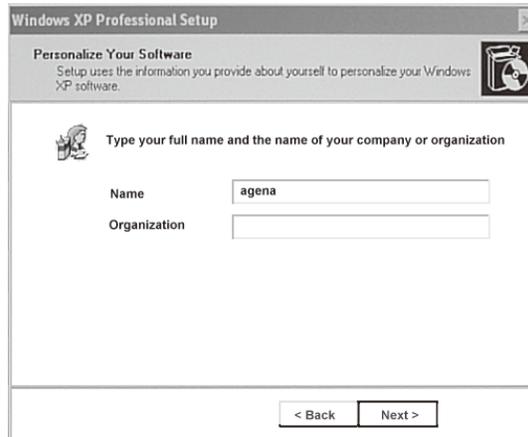**Figure 2-21**   **Windows XP Professional Setup dialog box (1/2)**

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Step 4. In the next dialog box, input **agena** in the **Name** box. Then, click the **Next>** button (Figure 2-22).

Figure 2-22   **Windows XP Professional Setup dialog box (2/2)**

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Step 5. After a while, the E5071C restart automatically.
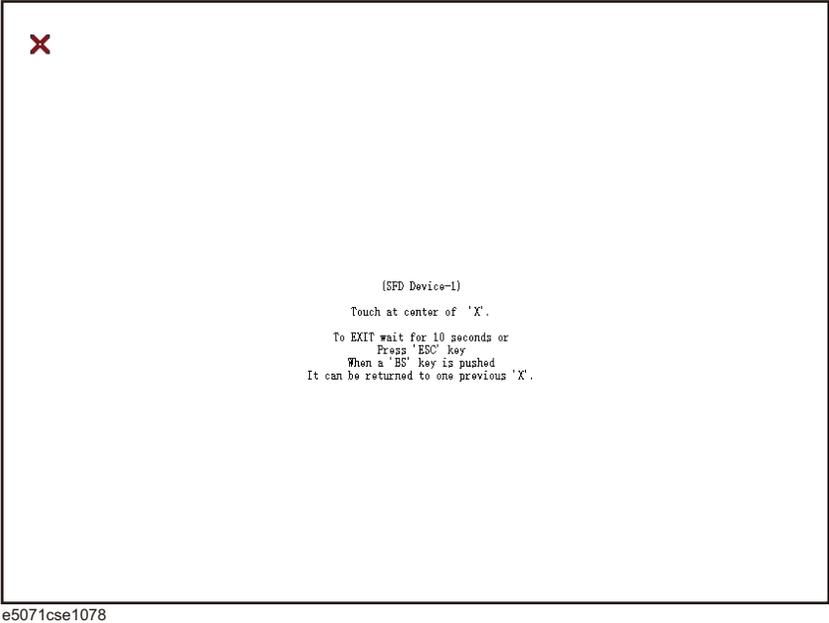
Calibration of the Touch Screen

After E5071C measurement screen appears, you have to calibrate the touch screen. Follow the procedure described below to calibrate the touch screen.

Step 1. Press ⌈System⌋ .

Step 2. Press **Service Menu**.

Step 3. Press **Test Menu**.

Step 4. Press **Adjust Touch Screen**.

The touch screen calibration screen (Figure 2-23) appears.

Figure 2-23   **Touch Panel Calibration Screen**

(SFD Device-1)

Touch at center of 'X'.

To EXIT wait for 10 seconds or
Press 'ESC' key
When a 'BS' key is pushed
It can be returned to one previous 'X'.

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Step 5. Touch the x mark on the upper left with your finger. The mark x appears also on the upper right, lower left, and lower right. Touch the x marks in that order with your finger.

Touching the four locations described above with your finger automatically concludes the touch screen calibration.

NOTE   With no operation on the touch screen calibration screen for a preset time, it automatically closes and the previous measurement screen reappears.

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