





Dell™ XFR630 with Touch

Fully Rugged Notebook

Quick Reference Guide

Notes, Notices, and Cautions

-  **NOTE:** A **NOTE** indicates important information that helps you make better use of your computer.
-  **NOTICE:** A **NOTICE** indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.
-  **CAUTION:** A **CAUTION** indicates a potential for property damage, personal injury, or death.
-  **WARNING:** A **WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

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1 Finding Information

 **NOTE:** Some features or media may be optional and may not ship with your computer. Some features or media may not be available in certain countries.

 **NOTE:** Additional information may ship with your computer.

 **CAUTION:** The *XFR630 with Touch Fully Rugged Notebook User's Guide* provides important safety and regulatory information. The *XFR630 with Touch Fully Rugged Notebook User's Guide* is located in the 'Open Me First' envelope provided in your ship container, and can also be located on the *Documentation and Drivers CD*.

Documentation	Purpose	Document Location
'Open Me First' Envelope	Provides a single location where the documentation and CDs shipped with the XFR630 Notebook can be located	<ul style="list-style-type: none"> In the ship container
XFR630 with Touch Fully Rugged Notebook Quick Reference Guide	Guides you through your initial XFR630 with Touch Notebook setup	<ul style="list-style-type: none"> In the ship container Available on the <i>Documentation and Driver CD</i>
XFR630 with Touch Fully Rugged Notebook User's Guide	<ul style="list-style-type: none"> How to configure your system settings How to troubleshoot and solve problems How to remove/replace parts Specifications Safety and regulatory information Customer Care Program information 	<ul style="list-style-type: none"> Available in the 'Open Me First' envelope Available on the <i>Documentation and Driver CD</i> Available online¹
Documentation and Drivers CD	The <i>Documentation and Drivers CD</i> contains: <ul style="list-style-type: none"> Product documentation Supplemental Dell documentation 	<ul style="list-style-type: none"> Available in the 'Open Me First' envelope
Dell Drivers and Utilities CD (optional)	<p>NOTE: The <i>Drivers and Utilities CD</i> is optional and may not ship with your computer.</p> <p>Documentation and drivers are already installed on your computer. You can use the media to reinstall drivers and to run Dell Diagnostics (see "Dell Diagnostics"). Readme files may be included on your media to provide last-minute updates about technical changes to your computer or advanced technical reference material for technicians or experienced users.</p>	<ul style="list-style-type: none"> Optionally available in the 'Open Me First' envelope
Operating System CD (optional)	<p>NOTE: The <i>Operating System CD</i> is optional and may not ship with your computer.</p> <p>How to reinstall your operating system</p>	<p>Optionally available in the 'Open Me First' envelope.</p> <p>The operating system is already installed on your computer. To reinstall your operating system, use the Operating System CD. See "Restoring Your Operating System" in your <i>XFR630 with Touch Fully Rugged Notebook User's Guide</i>. After you reinstall your operating system, use the optional <i>Drivers and Utilities</i> media to reinstall drivers for the devices that came with your computer. Your operating system product key label is located in the 'Open Me First' envelope.</p>
Windows Help and Support Center	<ul style="list-style-type: none"> How to use Windows operating system How to work with programs and files How to personalize your desktop 	<ol style="list-style-type: none"> Click Start or  → Help and Support Type a word or phrase that describes your problem and click the arrow icon Click the topic that describes you problem Follow the instructions on the screen
Service Tag	The Service Tag is located on the bottom of your computer. Use the Serial Number on	This label is located on your computer.

	your Service Tag to identify your computer when you contact Customer Support	 <p>Augmentix MODEL NO: X116 SERIAL NO: XT0F0X801 INPUT: 18.5V / 4.62A</p>
Microsoft Windows License Label	This label contains your Microsoft Windows License information.	This label is located on your computer. 
Dell Support Utility	Software upgrades and troubleshooting hints, frequently asked questions, hot topics, and general health of your computer	The Dell Support Utility automated upgrade and notification system is installed on your computer. This utility provides real-time health scans of your computing environment, software updates, and relevant self-support information. Access the Dell Support Utility from the  icon in the taskbar. For more information, see "Dell Support Utility" in your <i>XFR630 with Touch Fully Rugged Notebook User's Guide</i> .
Dell Quickset Help	Information on network activity, the Power Management Wizard, hotkeys, and other items controlled by Dell QuickSet	To view <i>Dell QuickSet Help</i> , right-click the QuickSet icon in the Microsoft Windows taskbar. For more information on Dell QuickSet, see "Dell QuickSet" in your <i>XFR630 with Touch Fully Rugged Notebook User's Guide</i> .
Warranty Document	Limited Warranty for the XFR630 with Touch	<ul style="list-style-type: none"> Available in the 'Open Me First' envelope Available on the <i>Documentation and Driver CD</i>

2 Setting Up Your Computer

 **CAUTION:** Before you begin any of the procedures in this section, follow the Safety Information in the *XFR630 with Touch Fully Rugged Notebook User's Guide*.

2.1 Protective Doors

The XFR630 utilizes 3 types of doors to provide a secure and protected environment for the connectors and devices of the notebook. The 3 types of doors are:

- Compartment Door
- Hinged Door
- Friction Fit Door

For further information regarding replacing a door, refer to the *XFR630 with Touch Fully Rugged Notebook User's Guide*.

2.1.1 Compartment Door

Compartment doors are utilized to protect devices located on the bottom of the computer, such as those used for the battery and hard disk drive.

Figure 2 1 Removing a Compartment Door



Step 1



Step 2



Step 3

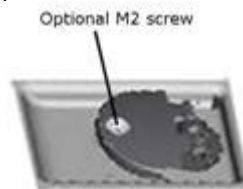


Step 4

The figure above shows the sequence to remove a compartment door. Two quarter-turn latches are used to secure each compartment door to the computer. The removal of both the battery and disk compartment doors is shown.

To remove a compartment door follow these steps:

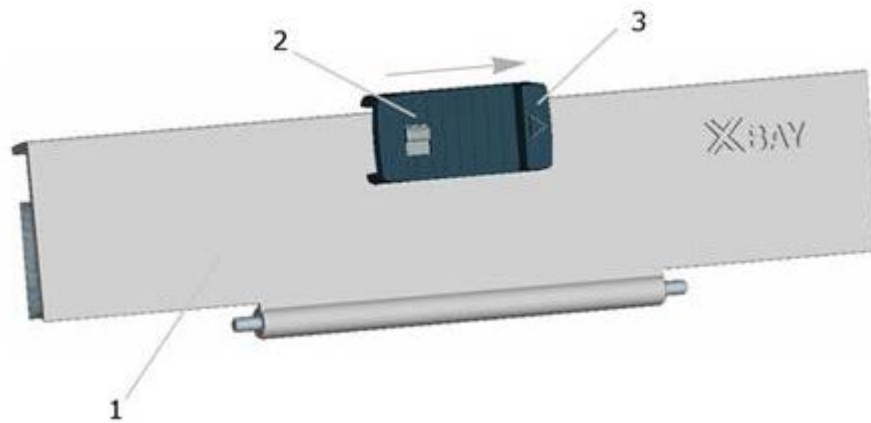
1. The two quarter-turn latches on the compartment door can be secured with optional M2 screws. If the screws are present, remove them using a #1 Philips screw driver. If not, proceed to step 2.



2. Lift the handle on the latch.
3. Turn the latch a quarter-turn in the direction of the 'unlock' icon.
4. Lift the compartment door away from the system.
5. Reverse this procedure to replace and secure the compartment door.

2.1.2 Hinged Door

Figure 2 2 Sample Hinged Door



1	Hinged door	2	Latch locking mechanism	3	Arrow shows latch release direction
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The hinged door is utilized on doors on the back and side panels of the computer. The hinged door is secured by a sliding latch

The devices and/or connectors protected by these doors can be accessed by pushing the latch in the direction indicated by the arrow and then rotating the door away from the computer along its hinge. The door can be closed by rotating the door back along its hinge toward the computer, and pushing the latch until it is secured.

The latch on the hinged door can also be locked by sliding the lock on the latch up to the locked position as shown in the figure above.

2.1.3 Friction Fit Door

Figure 2 3 Sample Friction Fit Door



This type of door is utilized on connectors and devices on the back and side panels of the computer.

The devices and/or connectors protected by these doors can be accessed by lifting the door away from the system and rotating it along the seam. Reverse this procedure to close and secure the friction fit door.

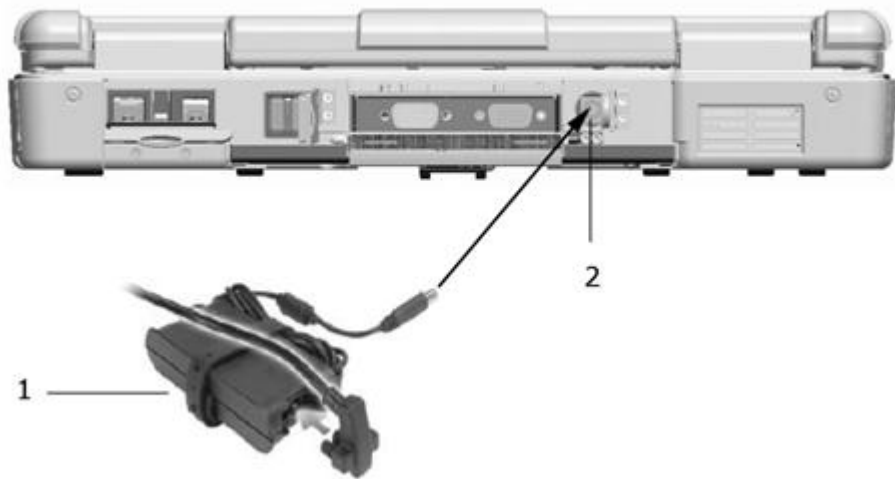
2.2 Initial Computer Setup

1. Unpack the accessories box and the 'Open Me First' envelope.
2. Set aside the contents of the accessories box and the 'Open Me First' envelope, which you will need to complete the setup of your computer.

The accessories box and 'Open Me First' envelope also contain user documentation and any software or additional hardware (such as PC Cards, drives, or batteries) that you have ordered.

3. Connect the AC adapter to the AC adapter connector on the back of the computer and to the electrical outlet. To access the AC adapter connector on the back of the computer, the cover over the connector will need to be rotated away from the connector. See the figure below for the location of the AC adapter connector.

Figure 2 4 Connecting the AC Adapter



1	AC adapter	2	AC adapter connector
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4. Open the computer display by pressing on the display latch and lifting the display. Then press the power button to turn on the computer. See "[Front View](#)" for the power button's location.

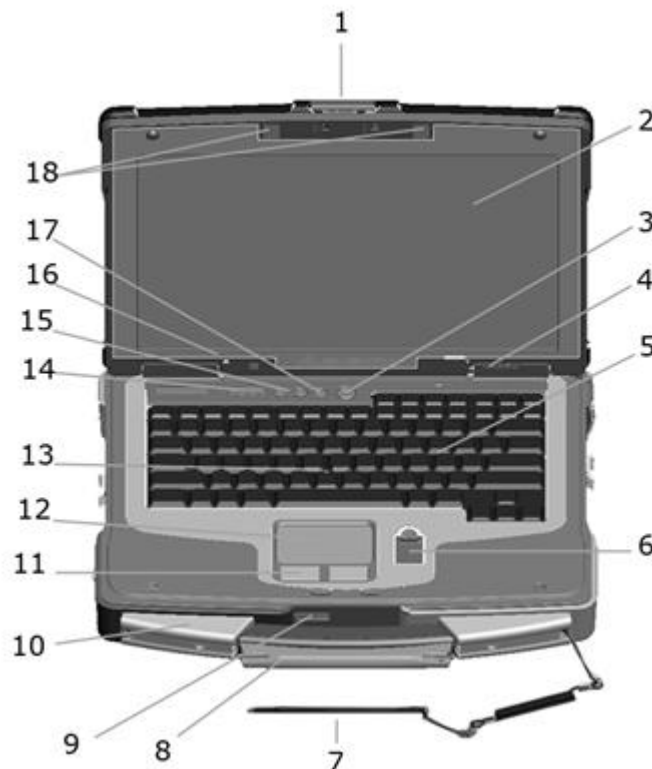
NOTE: It is recommended that you turn on and shut down your computer at least once before you install any cards or connect the computer to a docking device or other external device, such as a printer.

3 About Your Computer

NOTE: For additional information about the functions and use of the features identified in this section, see the *XFR630 with Touch Fully Rugged Notebook User's Guide*.

3.1 Front View

Figure 3 1 Front View of XFR630



		DirectVue™ Display or	
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1	Display latch	2	DirectVue™ Touch Display	3	Power button
4	Device status lights	5	Keyboard	6	Biometric (fingerprint) reader - optional
7	Stylus and stylus tether (with Touch Display option)	8	Stylus housing (with Touch Display option)	9	Speaker
10	Handle	11	Touch pad/Track stick buttons	12	Touch pad
13	Track stick	14	Keyboard status lights	15	Volume control buttons
16	Ambient light sensor (ALS)	17	Mute button	18	Keyboard illumination lights

CAUTION: The optional DirectVue™ Touch Display has been designed to accept finger touch as well as passive stylus input directly onto the screen. With the optional DirectVue™ Touch Display, a stylus is included with the XFR630 for use in selecting items on the touch screen. Other pointing devices can be used with the touch screen such as any non-abrasive, smooth or blunt object that will not damage the touch screen display. The touch screen surface can be damaged by ink pens, marker pens or other pointed or abrasive objects. The use of non-approved input devices that cause damage to the digitizer or LCD may not be covered by the limited warranty.

NOTE: For further information on the use and configuration of the DirectVue Touch Display, please refer to the *XFR630 with Touch Fully Rugged Notebook User's Guide*.

3.2 Left Side View

CAUTION: Do not block, push objects into, or allow dust to accumulate in the air vents. Do not store your computer in a low-airflow environment, such as a closed briefcase, while it is running. Restricting the airflow can damage the computer or cause a fire.

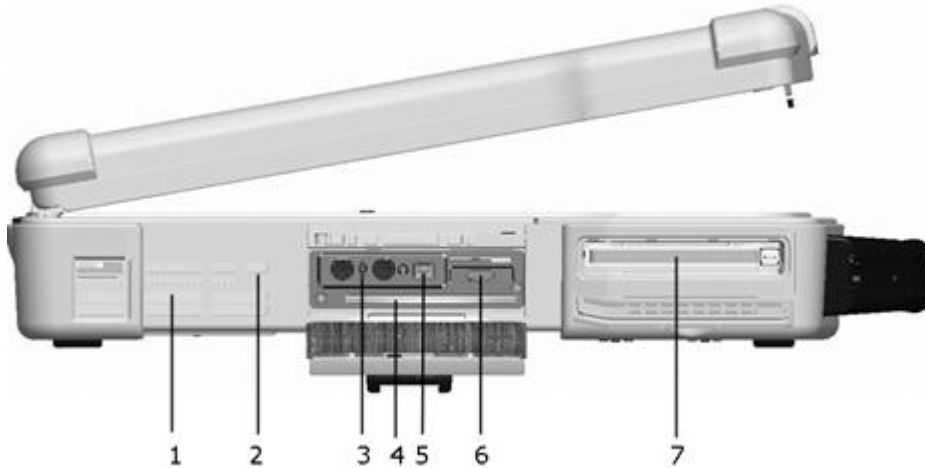
The Air Vents are part of the QuadCool™ Thermal Management System. They provide external venting of internal heat via the enhanced convection cooling system.

Figure 3 2 XFR630 Left Side with Connectors/Devices Protected



The connectors and devices on the computer are protected from ingress by dense magnesium hinged and friction fit doors. This protection is a component of the Armored Protection System™ (APS).

Figure 3 3 XFR630 Left Panel with Connectors/Devices Revealed



1	Air vents (protected from ingress)	2	Security cable slot	3	Audio connectors (2)
4	Smart card slot (with blank)	5	1394 connector	6	Wireless switch
7	PC card/ExpressCard slot				

The following is applicable to UL 1604 and CSA C22.2 No. 213 compliant systems:

- ⚠ WARNING - Explosion Hazard - Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous**
- ⚠ WARNING - Explosion Hazard - Do not utilize any of the connectors/hubs unless area is known to be non-hazardous**

3.3 Right Side View

Figure 3 4 XFR630 Right Side with Connectors/Devices Protected



The connectors and devices on the computer are protected from ingress by dense magnesium hinged and friction fit doors. This protection is a component of the Armored Protection System (APS).

Figure 3 5 XFR630 Right Side with Connectors/Devices Revealed



1	XBay expansion bay	2	XBay device latch release	3	USB connectors (2)
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The following is applicable to UL 1604 and CSA C22.2 No. 213 compliant systems:

- ⚠ WARNING - Explosion Hazard - Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous**
- ⚠ WARNING - Explosion Hazard - Do not utilize any of the connectors/hubs unless area is known to be non-hazardous**

3.4 Back View

- ⚠ CAUTION: Do not block, push objects into, or allow dust to accumulate in the air vents. Do not store your computer in a low-airflow environment, such as a closed briefcase, while it is running. Restricting the airflow can damage the computer or cause a fire.**

The Air Vents are part of the QuadCool™ Thermal Management System. They provide external venting of internal heat via the enhanced convection cooling system.

Figure 3 6 XFR630 Back View with Connectors Protected



The connectors and devices on the computer are protected from ingress by dense magnesium hinged and friction fit doors. This protection is a component of the Armored Protection System™ (APS).

Figure 3 7 XFR630 Back View with Connectors Revealed



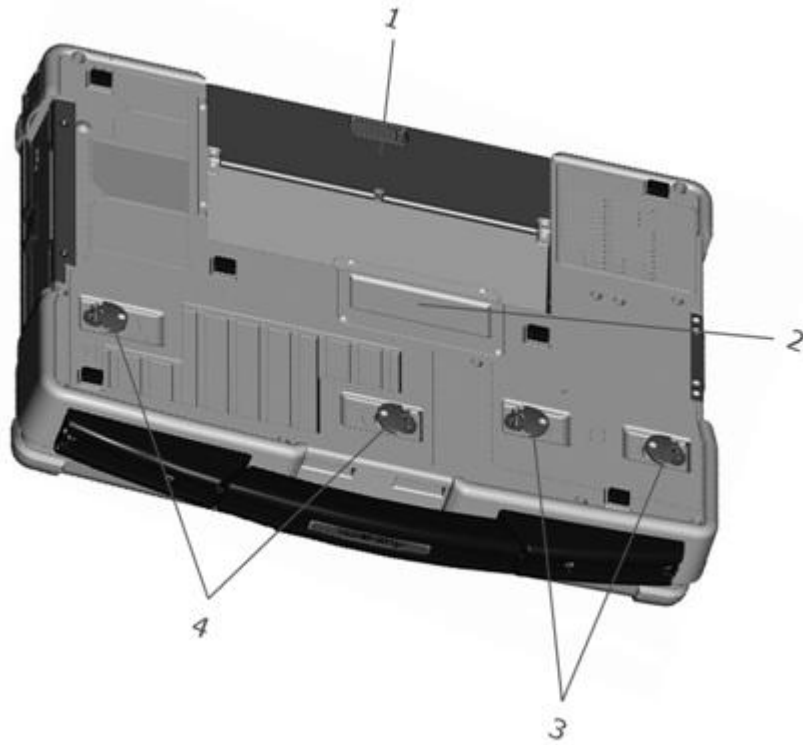
1	Network connector (RJ-45)	2	Modem connector (RJ-11)	3	USB connectors (2)
4	Serial connector	5	Video connector	6	AC adapter connector
7	Air vents (protected from ingress)				

The following is applicable to UL 1604 and CSA C22.2 No. 213 compliant systems:

- ⚠ WARNING - Explosion Hazard - Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous**
- ⚠ WARNING - Explosion Hazard - Do not utilize any of the connectors/hubs unless area is known to be non-hazardous**

3.5 Bottom View

Figure 3 8 XFR630 Bottom View with Connectors/Devices Protected



1	Docking device connector door	2	Memory module cover	3	Hard disk drive compartment cover
4	Battery compartment cover				

The compartments on the bottom of the computer are protected from ingress by dense magnesium compartment doors. This protection is a component of the Armored Protection System.

The following is applicable to UL 1604 and CSA C22.2 No. 213 compliant systems:




- ⚠ WARNING - Explosion Hazard - Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous**
- ⚠ WARNING - Explosion Hazard - Do not utilize any of the connectors/hubs unless area is known to be non-hazardous**

3.5.1 Accessing the Battery Compartment



Figure 3 9 Accessing the Battery Compartment



3.5.1.1 Removing the Battery

-  **CAUTION:** Before performing these procedures, turn off the computer, disconnect the AC adapter from the electrical outlet and the computer, disconnect the modem from the wall connector and computer, and remove any other external cables from the computer.
-  **CAUTION:** Using an incompatible battery may increase the risk of fire or explosion. Replace the battery only with a compatible battery purchased from Dell. The battery is designed to work with your computer. Do not use a battery from other computers with your computer.
-  **NOTICE:** You must remove all external cables from the computer to avoid possible connector damage. For information about replacing the second battery, if applicable, see "XBay" in your *XFR630 with Touch Fully Rugged Notebook User's Guide*.

The following is applicable to UL 1604 and CSA C22.2 No. 213 compliant systems:

-  **WARNING - Explosion Hazard - Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous**
-  **WARNING - To prevent ignition of a hazardous atmosphere, batteries must only be changed or charged in an area known to be non-hazardous**

To remove the battery:

1. If the computer is connected to a docking device (docked), undock it. See the documentation that came with your docking device for instructions.
2. Ensure that the computer is turned off.
3. If the 2 screws that secure the quarter-turn latches are installed, remove the 2 screws on the latches on the battery compartment utilizing a #1 Phillips screw driver. See "[Bottom View](#)" for the location of the battery compartment. If the 2 security screws are not installed, proceed to step 4.
4. Lift each latch and turn each a quarter-turn, toward the 'unlock' icon, to release the latching mechanism. Remove the compartment cover from the computer.
5. To remove the battery from the compartment, utilize the tab on the battery to assist in lifting the battery from the compartment.

To replace the battery, follow the removal procedure in the reverse order.

For additional information regarding battery operation, see the section '[Using a Battery](#)'.

3.5.2 Accessing the Docking Device Connector

You must prepare your XFR630 with Touch Notebook to be docked by exposing the docking device connector located on the bottom of the notebook.

Please note that the XFR630 docking door can remain in the open position exposing the docking connector for applications that require ongoing docking/undocking activity on an ongoing (daily) basis. See below for instructions on opening and closing the XFR630 docking door latch.

Figure 3 10 Opening the XFR630 Docking Device Connector Door – Step 1

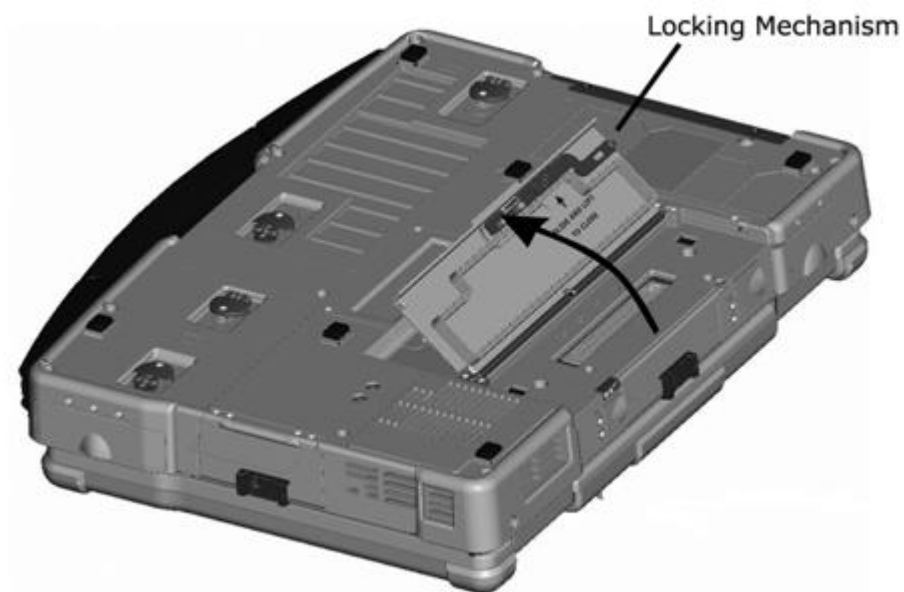


1	Docking device connector cover	2	Door Latch
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The following steps provide instructions on how to open the docking device connector door:

1. While sliding the door latch (2) to the open position, lift and push back the door.

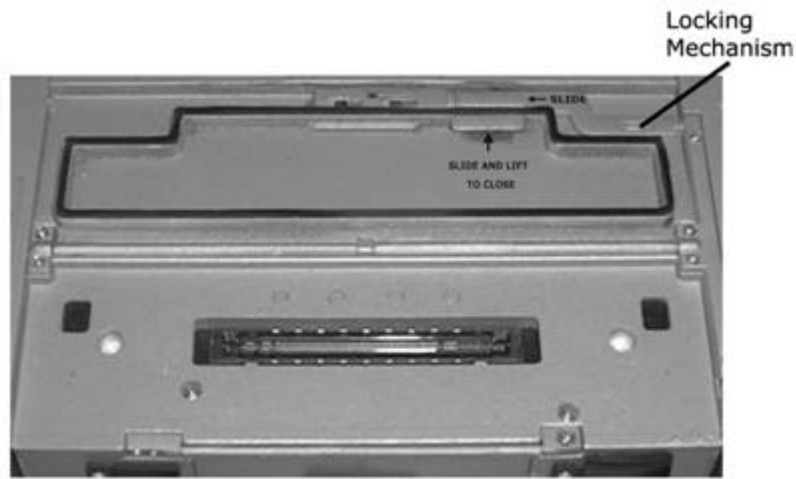
Figure 3 11 Opening the XFR630 Docking Device Connector Door – Step 2



2. Push the door backwards until it locks in place in the open position, flush with the bottom of the notebook. The door will remain in the open position, locked securely in place until disengaged or closed.
3. With the XFR630 docking door open and secure, the docking device connector is available for safe and secure docking.

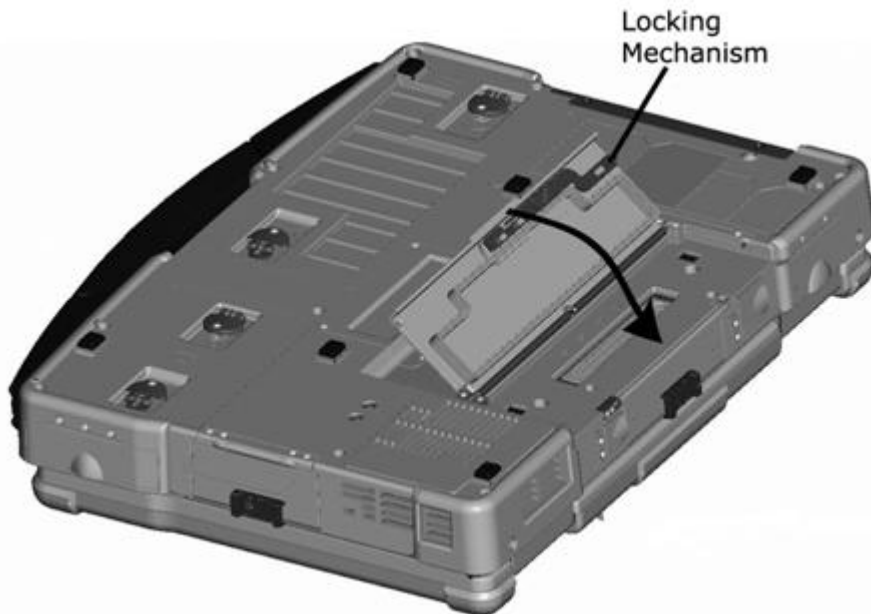
Follow these steps to close the XFR630 Notebook's docking device connector door:

Figure 3 12 XFR630 Docking Device Connector Door in Open/Secured Position



1. The locking mechanism that secures the XFR630 Notebook's docking device connector is disengaged by sliding the mechanism to the left.
2. As the locking mechanism is moved to the left, the door must be lifted and the door pulled forward until it securely latches back into its closed position.

Figure 3 13 Closing the XFR630 Docking Device Connector Door

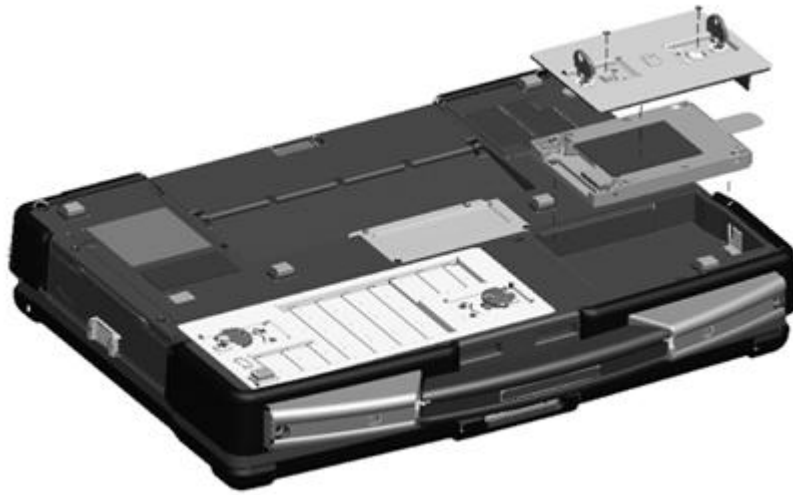


3.5.3 Accessing the Hard Disk Drive Compartment

⚠ CAUTION: Before performing these procedures, turn off the computer, disconnect the AC adapter from the electrical outlet and the computer, disconnect the modem from the wall connector and computer, remove the battery (see "[Removing the Battery](#)") and remove any other external cables from the computer.

👉 NOTICE: You must remove all external cables from the computer to avoid possible connector damage.

Figure 3 14 Accessing the Hard Disk Drive Compartment



To remove the hard disk drive:


1. If the computer is connected to a docking device (docked), undock it. See the documentation that came with your docking device for instructions.
2. Ensure that the computer is turned off.
3. See "[Bottom View](#)" for the location of the hard disk drive compartment. If the 2 optional screws that secure the quarter-turn latches are installed, remove the 2 screws on the latches on the hard disk drive compartment using a #1 Philips screw driver. If the 2 security screws are not installed, proceed to step 4.
4. Lift each latch and turn each a quarter-turn, towards the 'unlock' icon, to release the latching mechanism. Remove the compartment cover from the computer.
5. Locate the tab on the hard disk drive and pull it back to disconnect the hard disk drive from the motherboard.
6. Continue to utilize the tab to assist in removing the hard disk drive from the compartment.


To replace the hard disk drive, follow the removal procedure in the reverse order.

For additional information regarding the hard disk drive, see the *XFR630 with Touch Fully Rugged Notebook User's Guide*.

4 DirectVue™ Touch Display Information

The XFR630 provides an optional touch screen display for entering and selecting data using an approved pointing device such as your finger, a passive stylus or any non-abrasive smooth blunt object that will not damage the touch display.


 **NOTICE:** For more detailed instructions on the use, care and configuration of your touch display, please refer to the *XFR630 with Touch User's Guide*.

 **CAUTION:** The optional DirectVue™ Touch Display has been designed to accept finger touch as well as passive stylus input directly onto the screen. With the optional DirectVue™ Touch Display, a stylus is included with the XFR630 for use in selecting items on the touch screen. Other pointing devices can be used with the touch screen such as any non-abrasive, smooth or blunt object that will not damage the touch screen display. The touch screen surface can be damaged by ink pens, marker pens or other pointed or abrasive objects. The use of non-approved input devices that cause damage to the digitizer or LCD may not be covered by the limited warranty.

The touch screen is pre-configured and pre-calibrated at the factory, but may require further calibration to improve accuracy for entering or selecting data on the touch display. Please refer to the 4 Points Calibration information provided below regarding calibrating your XFR630 Touch Display and using your stylus.

4.1.1 Touchkit Configuration Utility

Touchkit is a software utility tool that allows you to configure various touch features. You can launch *Touchkit* by clicking **Start -> Programs -> Touchkit -> Configure Utility**.

 **NOTE:** The touch screen is pre-configured and pre-calibrated at the factory, but may require further calibration to improve accuracy for entering or selecting data on the touch display, or to further configure it to your specific application.

The *Touchkit* software utility consists of tabs that allow you to determine the best settings for your touch screen configuration.

The **Tools** tab provides access to calibration and touch position tools.

NOTE: Your touch screen is configured and calibrated at the factory. However, if you notice that the calibration is not as precise as you would like, you can use the 4 Points Calibration tool to align the touch screen. For further details on providing more accurate calibration using the Linearization Tool, please refer to the *XFR630 with Touch User's Guide*.


4 Points Calibration – Calibration aligns the touch panel with the video screen. The touch screen must be calibrated to allow for positional accuracy of the stylus or finger touch inputs.

The 4 Points Calibration tool pops up a new window to guide you through the 4 points calibration. You should follow the guide to touch and hold the blinking X symbol in the calibration window until it does not blink to make sure that the utility can gather enough data for computation. In addition, a time line bar is shown in the bottom of the window to indicate time elapsed. If the touch screen is not touched before the time line bar reaches the right end, the calibration task will be terminated automatically.





5 Using a Battery

5.1 Battery Performance

 **NOTE:** For information about the warranty for your computer, see the Limited Warranty document.

For optimal computer performance and to help preserve BIOS settings, operate your portable computer with the main battery installed at all times. One battery is supplied as standard equipment in the battery bay.

 **NOTE:** Because the battery may not be fully charged, use the AC adapter to connect your new computer to an electrical outlet the first time you use the computer. For best results, operate the computer with the AC adapter until the battery is fully charged. To view the battery charge status, see 'Accessing Power Options Properties' in the *XFR630 with Touch Fully Rugged Notebook User's Guide*.


 **NOTE:** Battery operating time (the time the battery can hold a charge) decreases over time. Depending on how often the battery is used and the conditions under which it is used, you may need to purchase a new battery during the life of your computer.

Battery operating time varies depending on operating conditions. You can install an optional second battery in the XBay to significantly increase operating time.

Operating time is significantly reduced when you perform operations including, but not limited to, the following:

- Using optical drives
- Using wireless communications devices, PC Cards, ExpressCards, media memory cards, or USB devices
- Using high-brightness display settings, 3D screen savers, or other power-intensive programs such as complex 3D graphics applications


- Running the computer in maximum performance mode See "Configuring Power Management Settings" in the *XFR630 with Touch Fully Rugged Notebook User's Guide* for information about accessing Windows **Power Options Properties** or Dell QuickSet, which you can use to configure power management settings.

 **NOTE:** It is recommended that you connect your computer to an electrical outlet when writing to a CD or DVD.


You can check the battery charge (see "[Checking the Battery Charge](#)") before you insert the battery into the computer. You can also set power management options to alert you when the battery charge is low.

 **CAUTION:** Using an incompatible battery may increase the risk of fire or explosion. Replace the battery only with a compatible battery purchased from Dell. The battery is designed to work with your computer. Do not use a battery from other computers with your computer.

 **CAUTION:** Do not dispose of batteries with household waste. When your battery no longer holds a charge, call your local waste disposal or environmental agency for advice on disposing of a lithium-ion battery. See "Battery Disposal" in the *XFR630 with Touch Fully Rugged Notebook User's Guide*.

 **CAUTION:** Misuse of the battery may increase the risk of fire or chemical burn. Do not puncture, incinerate, disassemble, or expose the battery to temperatures above 65⁰C (149⁰F). Keep the battery away from children. Handle damaged or leaking batteries with extreme care. Damaged batteries may leak and cause personal injury or equipment damage. Maximum system storage temperature is 71⁰C (160⁰F) without the battery installed.

5.2 Checking the Battery Charge



The Dell QuickSet Battery Meter, the Microsoft Windows Power Meter window and  icon, the battery charge gauge and health gauge, and the low-battery warning provide information on the battery charge.

5.2.1 Dell™ QuickSet Battery Meter


If Dell QuickSet is installed, press <Fn><F3> to display the QuickSet Battery Meter. The Battery Meter displays status, battery health, charge level, and charge completion time for the battery in your computer.

For more information about QuickSet, right-click the Quickset icon in the taskbar, and click **Help**.

5.2.2 Microsoft® Windows® Power Meter

The Windows Power Meter indicates the remaining battery charge. To check the Power Meter, double-click the  icon on the taskbar. If the computer is connected to an electrical outlet, a  icon appears.

5.2.3 Charge Gauge

 **NOTE:** The battery on the XFR630 is housed behind a protected magnesium cover. To access the battery to access the charge gauge the protective cover will need to be removed. See "[Accessing the Battery Compartment](#)".

By either pressing once or *pressing and holding* the status button on the charge gauge on the battery, you can check:

- Battery charge (check by *pressing and releasing* the status button)
- Battery health (check by *pressing and holding* the status button)




1	Battery	2	Status button	3	Charge gauge
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The battery operating time is largely determined by the number of times it is charged. After hundreds of charge and discharge cycles, batteries lose some charge capacity — or battery health. That is, a battery can show a status of "charged" but maintain a reduced charge capacity (health).

5.2.3.1 Check the Battery Charge


To check the battery charge, *press and release* the status button on the battery charge gauge to illuminate the charge-level lights. Each light represents approximately 20 percent of the total battery charge. For example, if the battery has 80 percent of its charge remaining, four of the lights are on. If no lights appear, the battery has no charge.

5.2.3.2 Check the Battery Health

 **NOTE:** You can check battery health in one of two ways: by using the charge gauge on the battery as described below or by using the Battery Meter in Dell QuickSet. For information about QuickSet, right-click the icon in the taskbar, and click **Help**.

To check the battery health using the charge gauge, *press and hold* the status button on the battery charge gauge for at least 3 seconds. If no lights appear, the battery is in good condition, and more than 80 percent of its original charge capacity remains. Each light represents incremental degradation. If five lights appear, less than 60 percent of the charge capacity remains, and you should consider replacing the battery. See "Specifications" in your *XFR630 with Touch Fully Rugged Notebook User's Guide* for more information about the battery operating time.



5.3 Low-Battery Warning


 **NOTICE:** To avoid losing or corrupting data, save your work immediately after a low-battery warning. Then connect the computer to an electrical outlet, or install a second battery in the XBay. If the battery runs completely out of power, hibernate mode begins automatically.

A pop-up window warns you when the battery charge is approximately 90 percent depleted. If two batteries are installed, the low-battery warning means that the combined charge of both batteries is approximately 90 percent depleted. The computer enters hibernate mode when the battery charge is at a critically low level.

You can change the settings for the battery alarms in QuickSet or the **Power Options Properties** window. See "Configuring Power Management Settings" in the *XFR630 with Touch Fully Rugged Notebook User's Guide* for information about accessing QuickSet or the **Power Options Properties** window.

5.4 Charging the Battery

 **NOTICE:** The battery temperature must be between 0°C and 55°C (32°F and 131°F) to charge. If the battery is not in this temperature range when a charge is attempted, the  light flashes alternately green and orange. This may happen when the battery has gotten hot from being used in your computer or in a hot environment. Disconnect the computer from the electrical outlet and allow the computer and the battery to cool to the charging temperature range. Then connect the computer to an electrical outlet to continue charging the battery.

 **NOTE:** With Dell™ ExpressCharge™, when the computer is turned off, the AC adapter charges a completely discharged battery to 80 percent in approximately 1 hour and to 100 percent in approximately 2 hours. Charge time is longer with the computer turned on. You can leave the battery in the computer as long as you like. The battery's internal circuitry prevents the battery from overcharging. Battery charge times may vary dependent upon the ambient temperature.

When you connect the computer to an electrical outlet or install a battery while the computer is connected to an electrical outlet, the computer checks the battery charge and temperature. If necessary, the AC adapter then charges the battery and maintains the battery charge.

For more information about resolving problems with a battery, see "Power Problems" in your *XFR630 with Touch Fully Rugged Notebook User's Guide*.

5.5 Storing a Battery

Remove the battery when you store your computer for an extended period of time. A battery discharges during prolonged storage. After a long storage period, recharge the battery fully (see "[Charging the Battery](#)") before you use it.

6 Troubleshooting


6.1 Lockups and Software Problems

 **CAUTION:** Before you begin any of the procedures in this section, follow the Safety Information in the *XFR630 with Touch Fully Rugged Notebook User's Guide*.

6.1.1 The Computer Does Not Start Up


ENSURE THAT THE AC ADAPTER IS FIRMLY CONNECTED TO THE COMPUTER AND TO THE ELECTRICAL OUTLET.

6.1.2 The Computer Stops Responding

 **NOTICE:** You might lose data if you are unable to perform an operating system shutdown.

TURN THE COMPUTER OFF — If you are unable to get a response by pressing a key on your keyboard or moving your mouse, press and hold the power button for at least 8 to 10 seconds until the computer turns off. Then restart your computer.

6.1.3 A Program Stops Responding or Crashes Repeatedly

 **NOTE:** Software usually includes installation instructions in its documentation or on a floppy disk or CD.

END THE PROGRAM —

1. Press **<Ctrl><Alt>** simultaneously.
2. Click **Task Manager**.
3. Click the program that is no longer responding.
4. Click **End Task**.

CHECK THE SOFTWARE DOCUMENTATION — If necessary, uninstall and then reinstall the program.

6.1.4 A Program is Designed for an Earlier Microsoft® Windows® Operating System

RUN THE PROGRAM COMPATIBILITY WIZARD — The Program Compatibility Wizard configures a program so it runs in an environment similar to non-Windows XP operating system environments.

1. Click the **Start → All Programs → Accessories → Program Compatibility Wizard → Next**.
2. Follow the instructions on the screen.

6.1.5 A Solid Blue Screen Appears

TURN THE COMPUTER OFF — If you are unable to get a response by pressing a key on your keyboard or moving your mouse, press and hold the power button for at least 8 to 10 seconds until the computer turns off. Then restart your computer.

6.1.6 Other Software Problems

CHECK THE SOFTWARE DOCUMENTATION OR CONTACT THE SOFTWARE MANUFACTURER FOR TROUBLESHOOTING

INFORMATION —

- Ensure that the program is compatible with the operating system installed on your computer.
- Ensure that your computer meets the minimum hardware requirements needed to run the software. See the software documentation for information.
- Ensure that the program is installed and configured properly.
- Verify that the device drivers do not conflict with the program.
- If necessary, uninstall and then reinstall the program.

BACK UP YOUR FILES IMMEDIATELY.

USE A VIRUS-SCANNING PROGRAM TO CHECK THE HARD DRIVE, FLOPPY DISKS, OR CDs.

SAVE AND CLOSE ANY OPEN FILES OR PROGRAMS AND SHUT DOWN YOUR COMPUTER THROUGH THE START MENU.

SCAN THE COMPUTER FOR SPYWARE — If you are experiencing slow computer performance, you frequently receive pop-up advertisements, or you are having problems connecting to the Internet, your computer might be infected with spyware. Use an anti-virus program that includes anti-spyware protection (your program may require an upgrade) to scan the computer and remove spyware.


RUN THE DELL DIAGNOSTICS — See "[Dell Diagnostics](#)". If all tests run successfully, the error condition is related to a software problem.

6.2 Dell Diagnostics

 **CAUTION:** Before you begin any of the procedures in this section, follow the Safety Information in the *XFR630 with Touch Fully Rugged Notebook User's Guide*.

6.2.1 When to Use the Dell Diagnostics

If you experience a problem with your computer, perform the checks in "[Lockups and Software Problems](#)" and run the Dell Diagnostics before you contact Dell for technical assistance. It is recommended that you print these procedures before you begin.

 **NOTICE:** The Dell Diagnostics work only on Dell™ computers.


 **NOTE:** The *Drivers and Utilities CD* is optional and may not ship with your computer.


See "System Setup Program" in your *XFR630 with Touch Fully Rugged Notebook User's Guide* to review your computer's configuration information, and ensure that the device you want to test displays in system setup and is active.

Start the Dell Diagnostics from either your hard drive or from the optional *Drivers and Utilities CD*.


6.2.2 Starting the Dell Diagnostics From Your Hard Drive

The Dell Diagnostics is located on a hidden diagnostic utility partition on your hard drive.


 **NOTE:** If your computer does not display a screen image, contact Dell.

 **NOTE:** If the computer is connected to a docking device (docked), undock it. See the documentation that came with your docking device for instructions.


1. Ensure that the computer is connected to an electrical outlet that is known to be working properly.
2. Turn on (or restart) your computer.
3. Start the Dell Diagnostics in one of the following two ways:

 **NOTE:** If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft® Windows® desktop; then shut down your computer and try again.

1. When the DELL™ logo appears, press <F12> immediately. Select **Diagnostics** from the boot menu and press <Enter>.

 **NOTE:** Before attempting option 'b', the computer must be powered down completely.

2. Press and hold the **<Fn>** key while powering the computer on.

 **NOTE:** If you see a message stating that no diagnostics utility partition has been found, run the Dell Diagnostics from the optional *Drivers and Utilities* CD.

The computer runs the Pre-boot System Assessment (PSA), a series of initial tests of your system board, keyboard, hard drive, and display.

- During the assessment, answer any questions that appear.
- If a failure is detected, the computer stops and beeps. To stop the assessment and restart the computer, press **<N>**; to continue to the next test, press **<Y>**; to retest the component that failed, press **<R>**.
- If failures are detected during the Pre-boot System Assessment, write down the error code(s) and contact Dell.


If the Pre-boot System Assessment completes successfully, the following message appears: "Booting Dell Diagnostic Utility Partition. Press any key to continue".


4. Press any key to start the Dell Diagnostics from the diagnostics utility partition on your hard drive.

6.2.3 Starting the Dell Diagnostics From the *Drivers and Utilities* CD

1. Insert the *Drivers and Utilities* CD.
2. Shut down and restart the computer.

When the DELL logo appears, press **<F12>** immediately.

 **NOTE:** If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft® Windows® desktop; then shut down your computer and try again.

 **NOTE:** The next steps change the boot sequence for one time only. On the next start-up, the computer boots according to the devices specified in the system setup program.

3. When the boot device list appears, highlight **CD/DVD/CD-RW Drive** and press **<Enter>**.
4. Select the **Boot from CD-ROM** option from the menu that appears and press **<Enter>**.
5. Type **1** to start the CD menu and press **<Enter>** to proceed.
6. Select **"Run the 32 Bit Dell Diagnostics"** from the numbered list. If multiple versions are listed, select the version appropriate for your computer.
7. When the Dell Diagnostics **Main Menu** appears, select the test you want to run.


6.2.4 Dell Diagnostics Main Menu

1. After the Dell Diagnostics loads and the **Main Menu** screen appears, click the button for the option you want.

 **NOTE:** It is recommended that you select **Test System** to run a complete test on your computer.

Option	Function
Test Memory	Run the stand-alone memory test
Test System	Run the System Diagnostics
Exit	Exit the Diagnostics

2. After you have selected the **Test System** option from the main menu the following menu appears:

 **NOTE:** It is recommended that you select **Extended Test** from the menu below to run a more thorough check of the devices in your computer.

Option	Function
Express Test	Performs a quick test of devices in the system. This typically can

	take 10 to 20 minutes
Extended Test	Performs a thorough check of devices in the system. This typically can take an hour or more.
Custom Test	Use to test a specific device or customize the tests to be run.
Symptom Tree	This option allows you to select tests based on a symptom of the problem you are having. This option lists the most common symptoms.

3. If a problem is encountered during a test, a message appears with an error code and a description of the problem. Write down the error code and problem description and contact Dell.



NOTE: The Service Tag for your computer is located on the bottom of your system. When you contact Dell, technical support will ask for your Service Tag.

4. If you run a test from the **Custom Test** or **Symptom Tree** option, click the applicable tab described in the following table for more information.

Tab	Function
Results	Displays the results of the test and any error conditions encountered
Errors	Displays error conditions encountered, error codes, and the problem description.
Help	Describes the test and may indicate requirements for running the test.
Configuration	Displays your hardware configuration for the selected device. The Dell Diagnostics obtains configuration information for all devices from the system setup program, memory, and various internal tests, and it displays the information in the device list in the left pane of the screen. The device list may not display the names of all the components installed on your computer or all devices attached to your computer.
Parameters	Allows you to customize the test by changing the test settings.

5. When the tests are completed, close the test screen to return to the **Main Menu** screen. To exit the Dell Diagnostics and restart the computer, close the **Main Menu** screen.
6. Remove the Dell *Drivers and Utilities CD* (if applicable).