



Scanners
High Performance OMR

| S C A N T R O N .

SelfScore[®] Scanners

Operator's Guide

Copyright © 2023
Scantron Corporation
All rights reserved.

Printed in the United States of America.

For Users in the United States

This equipment complies with the requirements in part 15 of FCC Rules for a Class A computing device. Operation of the equipment in a residential area may cause unacceptable interference to radio and television reception requiring the operator to take whatever steps are necessary to correct the interference.

For Users in Canada

The digital apparatus does not exceed the Class A limit for radio noise emission from digital apparatus set in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministre des Communications du Canada.

Trademarks

SelfScore, Scantron, and the logo are trademarks in the U.S. and/or other countries, of Scantron Corporation or its affiliate(s).

Pentium is a trademark of Intel Corporation.

PostScript is a trademark of Adobe Corporation.

Microsoft, Windows, Windows XP, and Vista are trademarks or registered trademarks of Microsoft Corporation in the United States and other countries.

Preface

About This Manual

This Operator's Guide is your guide for day to day use of your scanner. It provides the information you need to handle basic tasks related to scanner operation, simple maintenance, and troubleshooting.

Document Organization

This manual is organized as follows:

- Chapter 1, “Scanner Basics”, provides an overview of SelfScore scanner components, features, and system requirements, as well as safety and environmental information.
- Chapter 2, “Setting Up Your Scanner” describes how to set up your scanner and install the necessary driver software.
- Chapter 3, “Operating Your Scanner” explains how to scan sheets with your scanner, as well as where to find information on the background menu and display panel messages.
- Chapter 4, “Using the Background Menu” provides a flowchart of the background menu system, as well as explanations of each function.

- Chapter 5, “Transport Printers” describes printer features, how to set up and test the printers, as well as cleaning and troubleshooting.
- Chapter 6, “Cleaning the Scanner” explains how to clean the scanner.
- Chapter 7, “Troubleshooting” provides a troubleshooting chart designed to help you resolve any issues you encounter.
- Chapter 8, “Product Support and Services” provides information on registering your product, resources that are available to help you with your scanning project, how to order supplies and forms, and how to contact Scantron Customer Support.
- Chapter A, “Recalibration” explains when and how to recalibrate the scanner.

Related Documentation

This manual is part of a documentation set for the SelfScore scanners. The documentation set provides information on packaging, installation, setup, operation, and configuration for users and system administrators. The documentation set consists of the following:

- *SelfScore Operator's Guide* (part number 277 287 xxx*)
- *Scanning Tests, Surveys, and Ballots Using SelfScore* (part number 277 300 xxx*)
- *Elements of Data Collection* (part number 277 292 xxx*)
- *SelfScore Quick Start* (part number 277 297 xxx*)
- *SelfScore Quick Tips - Scanning Tests, Surveys, and Ballots* (part number 277 299 xxx*)

* Where xxx indicates the current revision number.

Contacting Customer Support

If you require assistance, see “Requesting Support” on page 99 for information on contacting Scantron Customer Support.

World Wide Web Access

You can access our Web site at **www.scantron.com**.



Table of Contents

Preface	iii
----------------	------------

Chapter 1:	
Scanner Basics	1

Scanner Components	2
Transport Bed Open View	2
Transport Bed Closed View	3
Side and Back View	5
SelfScore Standard Features	6
Standard Features	6
Options	6
Specifications	6
System Requirements	8
User Precautions	9

Environmental Information	10
Waste Electrical and Electronic Equipment (WEEE)	10
UL Regulatory Compliance Statement	11
CLASS 1 LED PRODUCT	11
 Chapter 2:	
Setting Up Your Scanner	13
<hr/>	
Selecting a Good Location	14
Assembling the Scanner	15
Installing or Replacing an Ink Cartridge	18
Positioning the Printers	20
Connecting the Power Supply	24
Installing the Drivers and Utilities Software (Optional)	26
Connecting the Scanner to the Computer (Optional)	27
Turning the Scanner On	29
Handling the “Recalibrate/See Manual” Message	30
Uninstalling the Drivers and Scanner Utilities Software	31
 Chapter 3:	
Operating Your Scanner	33
<hr/>	
Verifying Proper Setup	34

Configuring the Scanner	37
Scanning Sheets	38
Storing Information	41
Understanding Display Panel Messages	42
Clearing Document Jams	43
 Chapter 4:	
Using the Background Menu	45
<hr/>	
Entering the Background Menu	46
Background Menu Flowchart	47
Scanner Information	48
Scanner Model	48
Sheet Count	48
Defaults Menu	49
Defaults Menu	49
Show Comm Status	49
Power Saver	50
Utilities Menu	51
Utilities	51
Top Head Calibrate	51
Bot Head Calibrate	53
Comm Configuration	53
Display Brightness	57
Ldg Edge Skew	58
Print Offset	59

Diagnostics Menu	60
Diagnostics Menu	60
Feed/Print?	60
Top Read Validation	61
Bot Read Validation	63
 Exiting the Background Menu	 64
 Chapter 5:	
Transport Printers	65
<hr/>	
Getting Started	66
Installing or Replacing an Ink Cartridge	67
Positioning the Printers	70
Testing the Printers	74
Cleaning the Cartridge Holder	76
Troubleshooting	79
 Chapter 6:	
Cleaning the Scanner	81
<hr/>	
Schedule	82
Supplies	83
Procedure	84

Chapter 7:	
Troubleshooting	89
<hr/>	
Troubleshooting Chart	90
Chapter 8:	
Product Support and Services	93
<hr/>	
Registering Your Product	93
Online Registration	94
Printed Documentation	95
Internet Resources	96
Ordering Supplies	97
Ordering Forms and Print Services	98
Standard Forms	98
Requesting Support	99
Before calling:	99
Services	101
Appendix A:	
Recalibration	103
<hr/>	
Preparing for Recalibration	105
Navigating the Background Menu	106
Top Head Calibration	107

Bottom Head Calibration	108
Exiting the Background Menu	109
Index	111

In this chapter:

Scanner Components	page 2
SelfScore Standard Features	page 6
System Requirements	page 8
OUser Precautions	page 9
Environmental Information	page 10
UL Regulatory Compliance Statement	page 11

Chapter 1:

Scanner Basics



Congratulations on your purchase of a Scantron SelfScore scanner. This scanner represents the latest in OMR¹ test scoring technology.

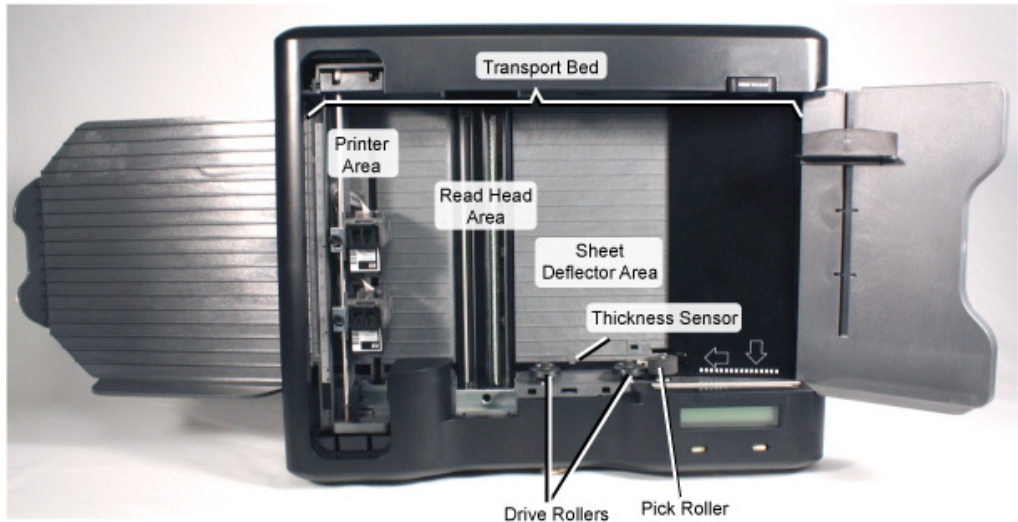
In this chapter you will find a description of your scanner's components, features, specifications, and system requirements, as well as safety and environmental information.

-
1. optical mark recognition

Scanner Components

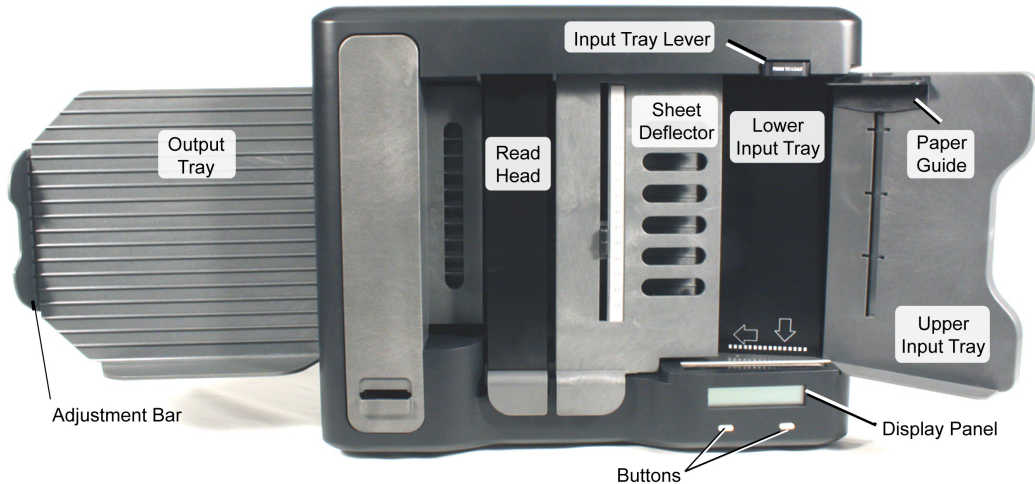
Use the illustration below to identify scanner components, then find the component description in the table below.

Transport Bed Open View



Component	Function
Drive rollers	Pull a sheet through the transport bed.
Pick roller	Pulls a sheet onto the transport bed.
Printer area	Dual transport printers print error or verification marks and scores on sheets as they pass through the scanner.
Read head area	Read head goes here.
Sheet deflector area	Sheet deflector goes here.
Thickness sensor	Used to detect thickness of forms to ensure only one sheet is being scanned at a time.
Transport bed	Supports the sheet as it moves through the scanner.

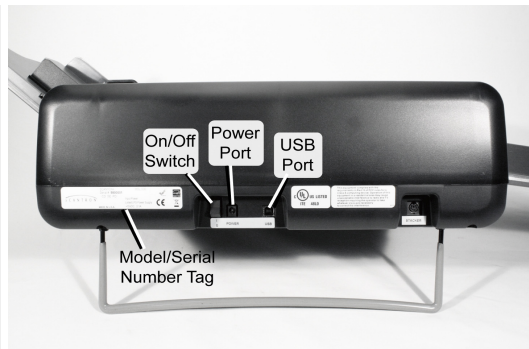
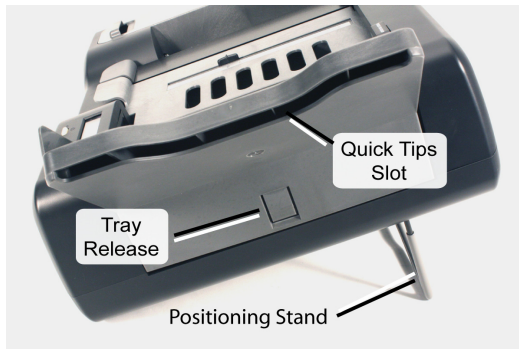
Transport Bed Closed View



Component	Function
Adjustment bar	Stops the sheet in the output tray as the sheet leaves the transport bed. Prior to scanning, the adjustment bar needs to be adjusted to the length of the sheets being scanned.
Buttons	Enable you to start and stop the scanner and perform other menu driven functions.
Display panel	Displays messages from the scanner and the host computer. Shows the status of the scanner and provides messages on how to change the status and resolve a scanner condition.
Input tray lever	Retains the input tray in the down position for easy loading of sheets. The input tray lever must be released for scanner to function properly.
Input trays (upper and lower)	Hold up to 100 sheets of paper for scanning. The lower input tray rises automatically as sheets feed. The upper tray has a pocket to hold the Quick Tips guides.

Component	Function
Output tray	Holds up to 100 sheets after they have been scanned.
Paper guide	Aligns sheets in the input tray. Prior to scanning, the paper guide should be manually adjusted to the width of the sheets being scanned.
Read head	Captures data from sheets. (A label on the end of the read head shows the type of read head you have.) The read head must be down and latched for the scanner to function properly.
Sheet deflector	Keeps a sheet flat as it starts through the scanner. The sheet deflector must be down and latched for the scanner to function properly.

Side and Back View



Component	Function
On/Off switch	Turns the scanner on and off.
Positioning stand	Holds the scanner at the correct position for operation. When extended, the positioning stand places the scanner at an angle.
Power port	Provides a connection point for power input from the power supply.
Quick Tips slot	Provides a location on the scanner for the <i>Quick Tips</i> guides.
Tray release	Releases (when pressed) the input tray for removal from the scanner. Located on the back of the upper input tray under the Quick Tips slot.
USB port	Provides a connection point for the USB cable coming from the computer.

SelfScore Standard Features

Standard Features

- 2800 sheet per hour throughput
- Automatic-feed
- Pencil mark detection
- Jam, multiple-sheet, and skew detection
- 40 character alphanumeric display panel
- Dual printers (adjustable) with rescore capability print the entire length of the sheet in two columns.
- Integrated diagnostics system with messages sent to scanner display panel and optional host computer
- Optional communications with host computer through a USB virtual serial communications port
- Simultaneous transfer of data and scanning of forms
- Ability to read both Mark Reflex® and Trans-Optic® forms
- Reads .166 cell spacing
- Input tray and output tray capacity of up to 100 sheets
- Sheet-handling capacity of 2.5 x 5-inch to 9 x 14-inch, 60-100 lb. offset sheets

Options

- Dual side read head for two-sided form scanning

Specifications

- Physical Description
 - Length: 21.25" (54 cm)
 - Width: 14.5" (37 cm)
 - Height: 9" (23 cm)
 - Weight: 17 lbs. (7.7 kg)

- Operating Environment
 - Temperature: 60° to 85°F (16°C to 29°C)
 - Humidity: 40% to 60%, non-condensing
- Power
 - 100-240 volt operation: 100-240 volts AC (-10%, +6%); 47-63 Hz; US 3-prong plug; 15 amp dedicated circuit
- Communications
 - USB 1.1 or 2.0 - SelfScore can be operated asynchronously using a virtual com port with user-defined protocol
- Operation
 - Read Heads: Contact image sensor arrays, 16 level OMR, pencil or ink read capabilities
 - Scanning Rate: 2,800 sheets per hour (Actual scanning rate depends on quantity of data read from the form and the amount of processing done on the data while scanning)

System Requirements

For information about system requirements for the SelfScore scanner, go to www.scantron.com/scanners.

User Precautions

Users and their employers need to observe the common sense precautions applicable to the operation of any machinery. These include, but are not limited to, the following:

- Do not wear loose clothing, unbuttoned sleeves, etc.
- Do not wear loose jewelry, bracelets, bulky rings, long necklaces, etc.
- Hair length should be kept short, using a hair net if needed, or tying long hair up in a bundle.
- Remove all loose objects from the area that could be drawn into the machine.
- Take sufficient breaks to maintain mental alertness.
- The scanner and power supply must only be used indoors in a dry location.
- Use only the power supply that was provided with your Scantron scanner. Do not substitute another power supply model or another manufacturer's power supply.
- Use only the recommended cleaning supplies to prevent damage to scanner components.

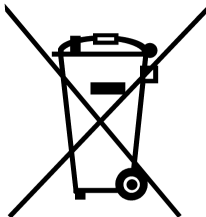
Supervisors should review their practices and make compliance with these precautions a part of the job description for operation of the scanner.

Environmental Information

- Scantron scanners are designed to meet worldwide environmental requirements.
- Guidelines are available for the disposal of consumable items that are replaced during maintenance or service. Follow local regulations or contact your local sales agent for more information.
- For disposal or recycling information, contact your local authorities or, in the U.S., visit the Electronics Industry Alliance Web site at www.eiae.org.
- The product packaging is recyclable (although it should be retained in case the scanner needs to be shipped for service).
- Scantron SelfScore scanners are Energy Star compliant.

Waste Electrical and Electronic Equipment (WEEE)

This symbol indicates that when the last user wishes to discard this product, it must be sent to appropriate facilities for recovery and recycling. Please contact your local sales agent for additional information on the collection and recovery programs available for this product.



Per European Union Directive 2002/96/EC this Category 1 IT and telecommunications equipment directive is not to be discarded but must be returned to the original producer/distributor for proper dismantlement and disposal. Additionally, with the receipt of this device, the producer/distributor will take for disposal one (1) other device manufactured by the producer from the same product family. Producer of this device is Pearson NCS, USA.

UL Regulatory Compliance Statement

CLASS 1 LED PRODUCT

- IEC 60825-1:1993 +A1:1997 +A2:2001
- This class is eye-safe under all operating conditions
- Array pulse duration 256usec, maximum power output 0.34mW.

CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



NOTES

In this chapter:

Selecting a Good Location	page 14
Assembling the Scanner	page 15
Installing or Replacing an Ink Cartridge	page 18
Positioning the Printers.	page 20
Connecting the Power Supply	page 24
Installing the Drivers and Utilities Software (Optional)	page 26
Connecting the Scanner to the Computer (Optional)	page 27
Turning the Scanner On	page 29
Handling the “Recalibrate/See Manual” Message.	page 30
Uninstalling the Drivers and Scanner Utilities Software	page 31

Chapter 2:

Setting Up Your Scanner

This chapter covers setup of your Scantron SelfScore scanner.

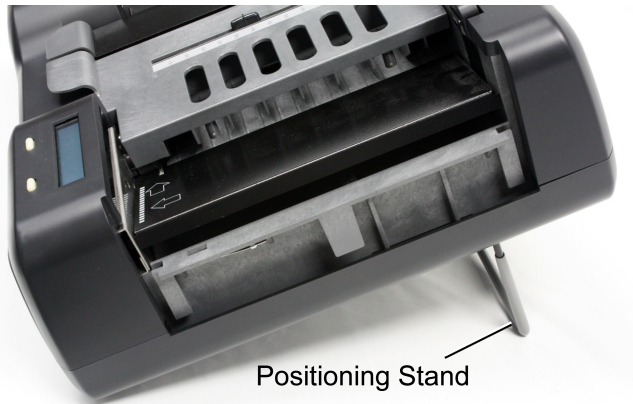
Selecting a Good Location

For best results, use the following general guidelines for placing your scanner:

1. **Air quality.** The scanner works better and lasts longer when it is not exposed to a lot of dust.
2. **Humidity.** Place the scanner in a location with 40% to 60% relative humidity. (If sheets have been in very humid or dry conditions, keep them in a climate controlled environment for 24 hours before you attempt to scan them.)
3. **Electrical noise.** Avoid locating the scanner near a generator or other type of large motor, such as an elevator, an air conditioner, or a refrigerator that produces electrical noise which might interfere with the scanner's electronics.
4. **Power source.** Use a separate source of power (with surge protection) for the scanner. The circuit from the source (breaker box) should not supply power to a major piece of equipment other than the scanner and computer (if used).
5. **Space.** Find a location that allows you plenty of working surface around the scanner. The scanner itself is 21 X 15 X 9 in. (54 X 37 X 23 cm).
6. **Temperature.** Place the scanner in a location with temperatures between 60° and 85° F (16° and 29° C).

Assembling the Scanner

1. Extend the positioning stand so that the scanner is placed at the proper angle for operation.



2. Install the paper guide by sliding it into the slot in the input tray.

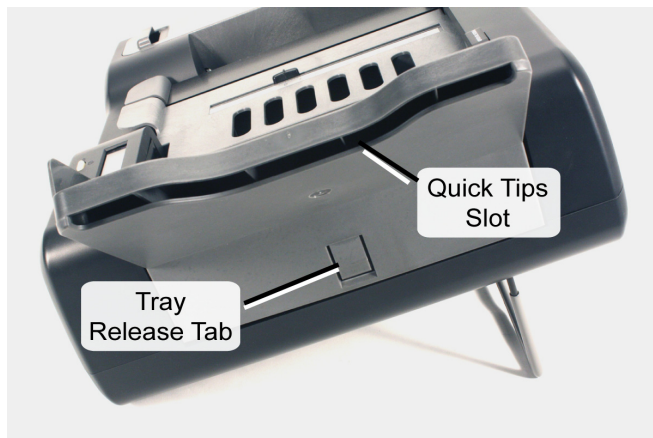


3. Install the input tray. Slide the end of the tray that has two prong-like tabs into the slots at the end of the scanner.

NOTE: When removing the tray from the scanner, depress the tray release tab.



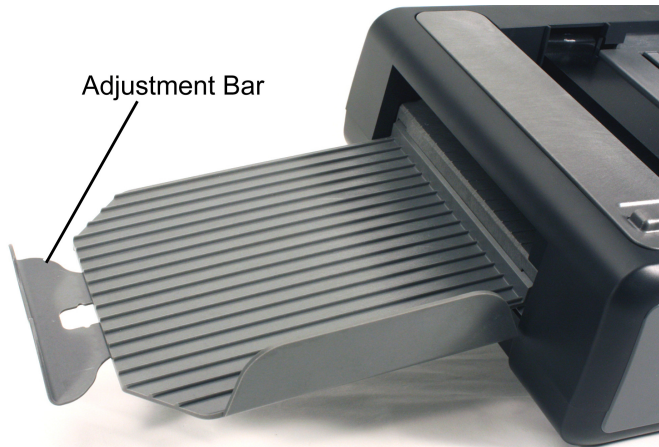
4. Insert the *Quick Tips* guide (shipped with your scanner) into the slot on the underside of the input tray. This helps prevent loss of the instructions.



5. Install the output tray by hooking the two prong-like tabs into the end of the scanner.



6. Adjust the adjustment bar to the length of the sheets that you will be scanning.



Installing or Replacing an Ink Cartridge

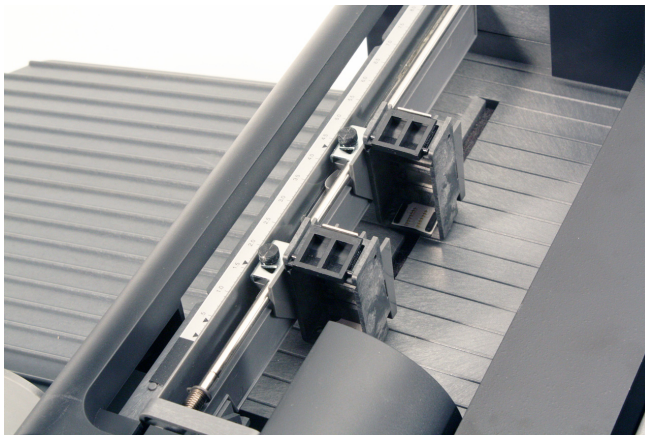
NOTE: The scanner does not come with the ink cartridges installed.

To install or replace an ink cartridge, follow these steps:

1. Unlatch the printer cover and remove it.



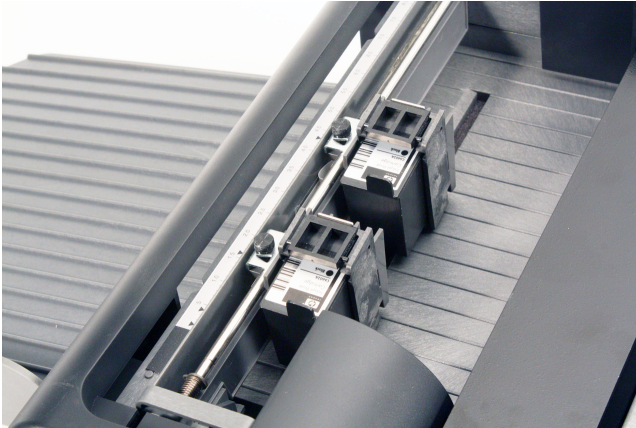
2. Locate the cartridge holders.



3. Slide the printer cartridge into the cartridge holder “feet first” then press the top of the cartridge firmly into the cartridge holder until you feel two clicks. This ensures that the cartridge is fully seated.



4. Repeat step 3 for the second printer.



5. Adjust the position of the printers as described in the next section.

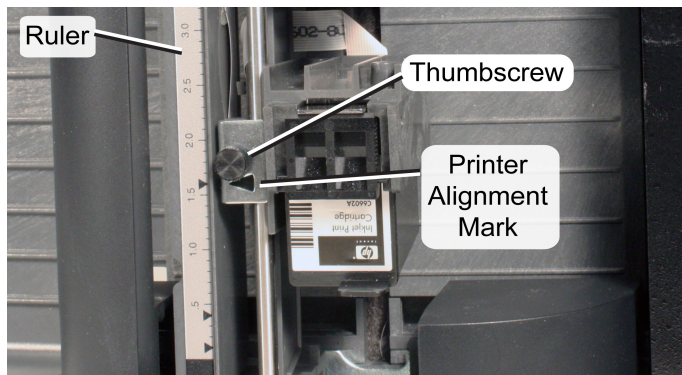
NOTE: For more printer information, see Chapter 5, “Transport Printers”.

Positioning the Printers

1. If the printer cover is not already removed (from a previous procedure) unlatch it and remove it.



2. Notice the location of the cartridge holder that is inside the printer assembly. Also notice the ruler, the printer alignment mark, and the thumbscrew that sit beside the cartridge holder. These are the elements used to position the printer(s).



3. SelfScore forms require that the printers are positioned to 1.6 and 4.3 inches. There are small triangles on the scanner printer ruler indicating these two locations.

Check the printer(s) to see if they are in the correct position. If not, use the following steps to position the printer(s).



4. Loosen the thumbscrew so that you can move the printer.



Chapter 2: Setting Up Your Scanner

Positioning the Printers

5. Move the printer to the 1.6 inch mark and lightly tighten the thumbscrew.



6. Adjust the position of the second printer to 4.3 inches.

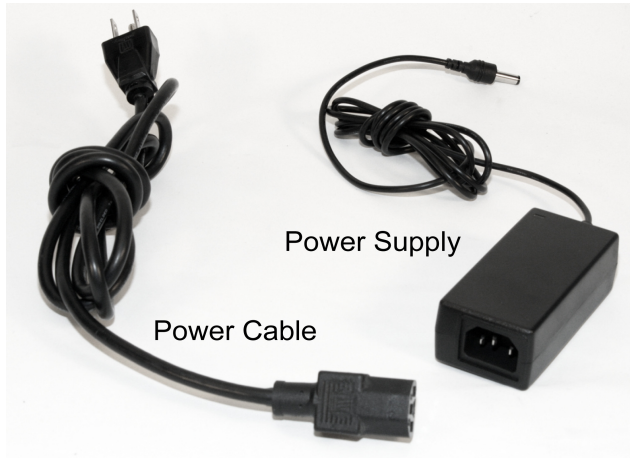


7. Replace the printer cover, making sure that it is firmly seated.



Connecting the Power Supply

1. Find the power cable and the power supply that came with your scanner.

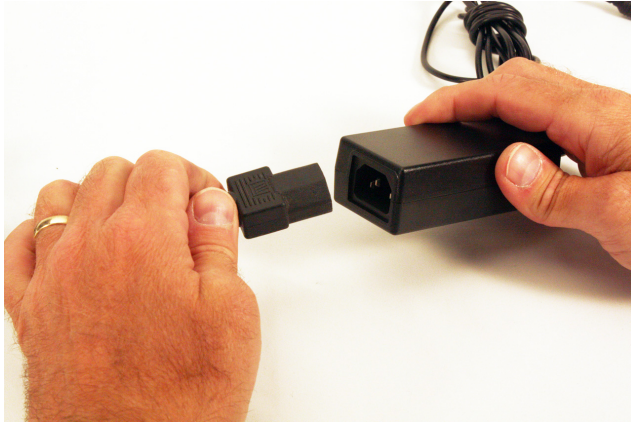


2. Plug the end of the power cable (three-prong plug) into a properly grounded electrical outlet providing alternating current (AC).

CAUTION: If lightning damage is a possibility, use a power strip with surge protection.

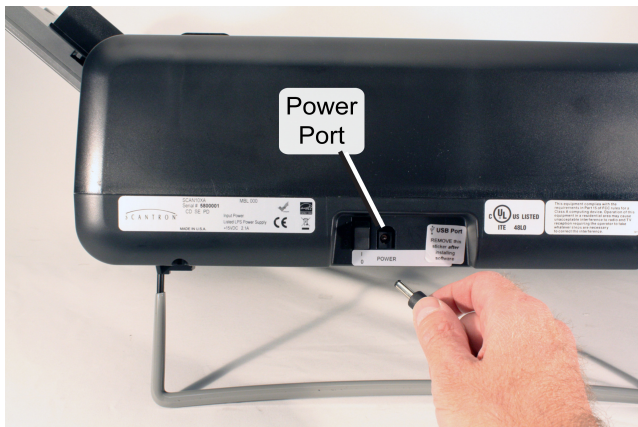
CAUTION: Do not connect the scanner to an outlet that also serves another major piece of equipment other than the computer (if used).

3. Plug the rectangular end (three receptacles) of the power cable into the open end (with three prongs) of the power supply.



4. Plug the rounded end of the power supply into the power port on the back of the scanner.

CAUTION: Do not plug the rounded end of the power supply into any part of the computer.



Installing the Drivers and Utilities Software (Optional)

Your SelfScore scanner can be operated as a standalone test scoring machine. However, if you like, you can also attach it to a computer with ScanTools Plus software to capture and manage the scanned data. Use the following instructions only if you wish to connect your scanner to a computer.

IMPORTANT: Before connecting your scanner to the computer, install the drivers and utilities software as described below.

1. Find the CD labeled **OpScan 4 ES and iNSIGHT 4 ES Scanner Utilities**.

The CD contains the drivers and scanner utilities software and is packed with the documentation and sample forms that accompany your scanner.

2. Insert the CD into the CD drive on your computer.
3. Browse to your CD-ROM drive.
4. Double-click the **setup.exe** file to run the setup program.
5. Follow the on-screen instructions to install the drivers and utilities appropriate for your computer.
6. Click **Finish** when setup is complete.

Connecting the Scanner to the Computer (Optional)

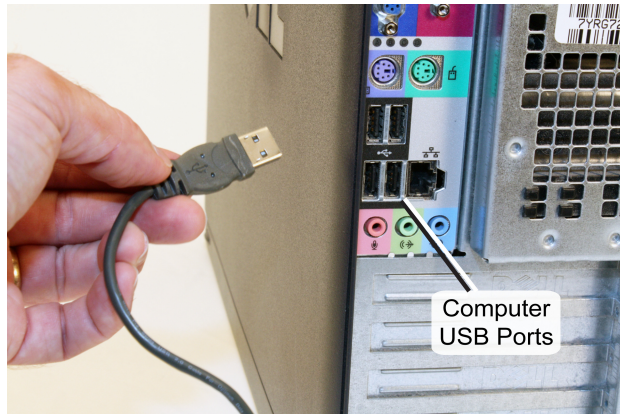
If you are using your SelfScore scanner as a standalone test scoring machine and will not be connecting it to a computer, skip this section.

IMPORTANT: Before connecting the scanner to the computer, be sure to install the drivers and scanner utilities as described in the previous section.

1. Locate the USB ports on the back of your computer. Plug the A end (flat end) of the USB cable into the USB communications port

NOTE: A USB 1.1 or 2.0 communications port is required.

NOTE: Do not connect more than one OpScan 4 ES, iNSIGHT 4 ES, or SelfScore scanner to the host computer at a time.

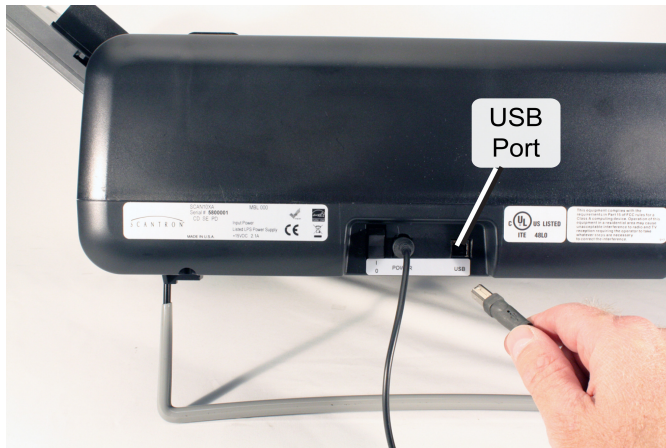


Chapter 2: Setting Up Your Scanner

Connecting the Scanner to the Computer (Optional)

2. Plug the USB B connector (square end) into the USB port on the back of the scanner.

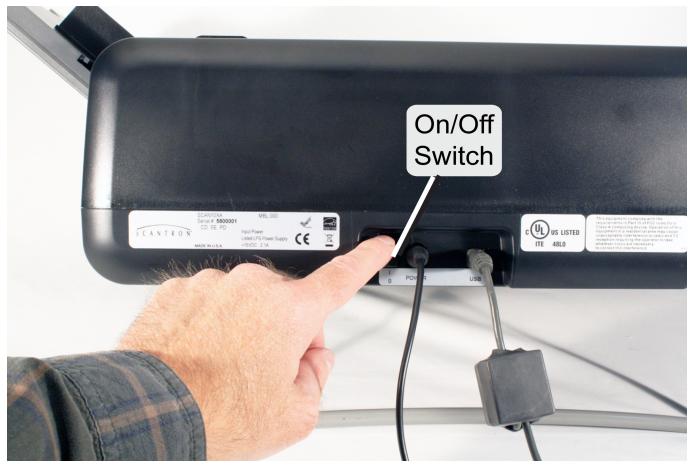
IMPORTANT: There may be a sticker covering the USB port. If so, remove it before plugging in the USB cable.



Turning the Scanner On

CAUTION: If you are connecting the scanner to a computer, do not turn on the scanner before installing the drivers and scanner utilities software. Doing so may result in incorrect drivers being loaded.

1. Press the switch on the back of the scanner to turn the scanner on (1).



2. After you turn on the scanner, wait for it to complete the self-test. The message “Initializing...” will appear on the display panel. After a few seconds, another message will appear indicating what action needs to be taken next.

Handling the “Recalibrate/See Manual” Message

The scanner firmware does diagnostics checks each time the unit is powered on and during scanning. If the firmware determines that the read heads need to be recalibrated, you will get the following messages on the display panel.



RECALIBRATE.



SEE MANUAL

If you get these messages, see [Appendix A](#) for instructions regarding calibration.

Uninstalling the Drivers and Scanner Utilities Software

NOTE: This step is not part of setup. It is included in case you want to remove the drivers and scanner utilities software from your PC (e.g. if you move the scanner to a different computer).

If you want to uninstall the drivers and scanner utilities software, use the following procedure:

1. Before uninstalling the software, close all programs and turn off the scanner.
2. Select **Start→Settings→Control Panel→Add or Remove Programs**. Wait for the list to populate.
3. Select **OpScan 4 ES and iNSIGHT 4 ES Scanner Utilities** from the Add or Remove Programs list, then click **Remove**.
4. You will get a message asking if you want to remove the selected application and all of its features. Click **Yes**.
5. You will get a message stating Uninstall Complete. Click **Finish** and close the Add or Remove Programs dialog box to complete uninstallation.

Chapter 2: Setting Up Your Scanner

Uninstalling the Drivers and Scanner Utilities Software

NOTES

In this chapter:

Verifying Proper Setup	page 34
Configuring the Scanner	page 37
Scanning Sheets	page 38
Storing Information	page 41
Understanding Display Panel Messages	page 42
Clearing Document Jams	page 43

Chapter 3:

Operating Your Scanner

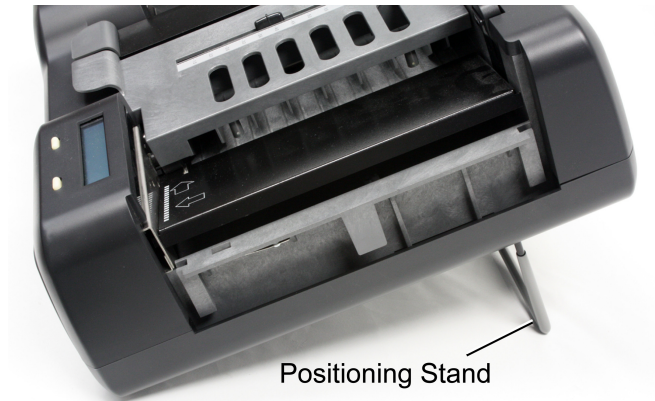
This section covers how to use your scanner for data collection.

IMPORTANT: Before using your scanner for high stakes testing, be sure to perform a test to ensure that your scanner is working properly.

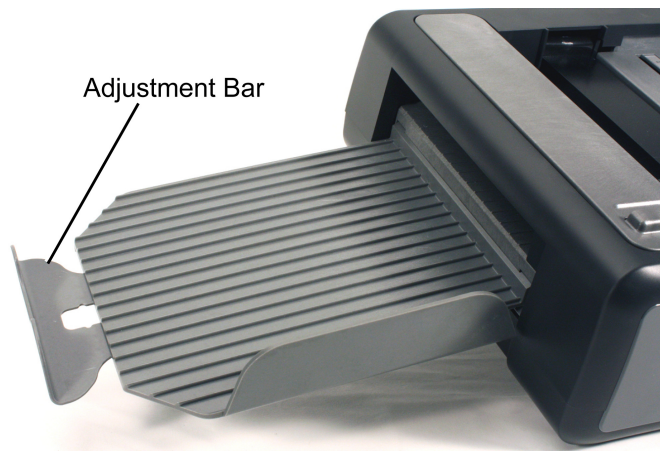
Verifying Proper Setup

Before starting your scanning session, you may want to verify that the scanner is set up properly.

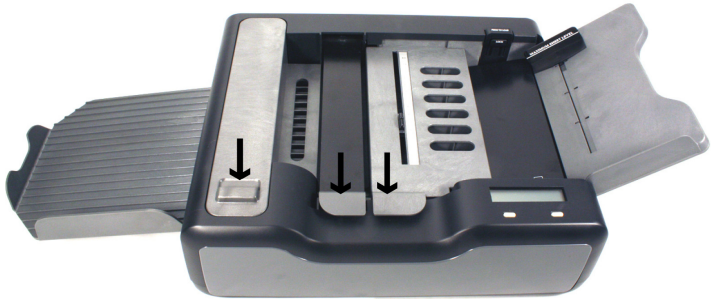
1. Ensure that the positioning stand is in the down position.



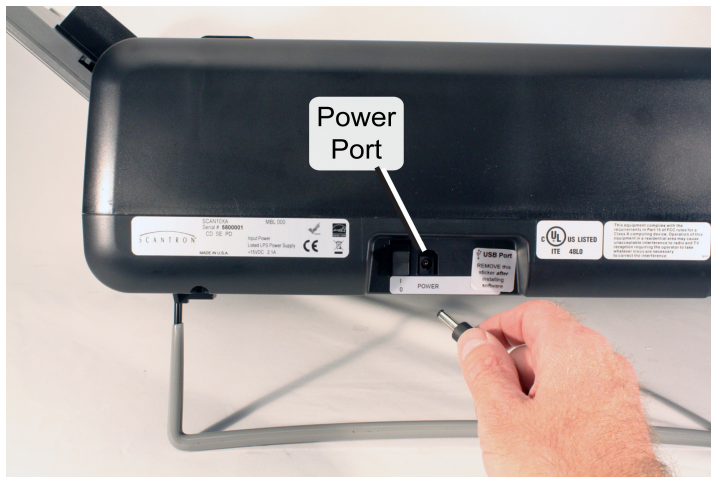
2. Ensure that the input tray and output tray (or Select Stacker) are in place and that the adjustment bar is properly positioned for the sheets being scanned.



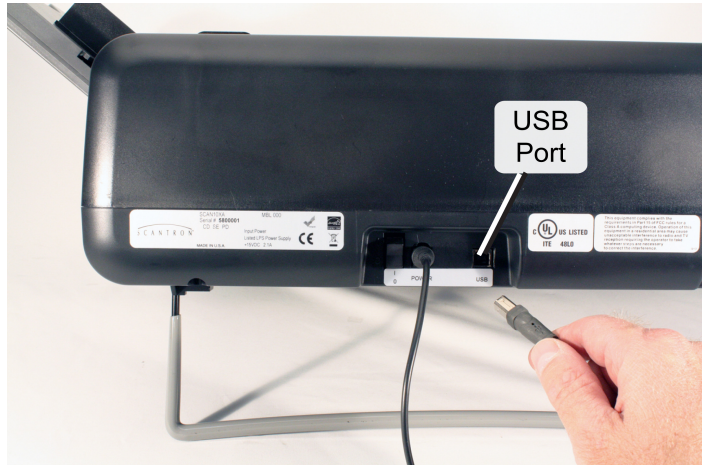
3. Ensure that the covers on the sheet deflector, read head, and printers are closed and fully seated.



4. Ensure that the power supply is plugged into both a wall outlet or power strip and the back of the scanner.



5. **(optional)** Ensure that the scanner is connected to the computer via USB cable if you will be collecting data with ScanTools Plus software.



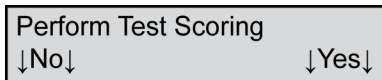
Configuring the Scanner

Your scanner comes preconfigured by Scantron ready to meet most scanning needs. However, should you have special requirements, use the background menus to configure the scanner. See Chapter 4, “Using the Background Menu” for information on how to configure the scanner.

Scanning Sheets

Use the following procedure to scan a stack of sheets:

1. Verify that the scanner is ready to scan. The display panel should display the following message:

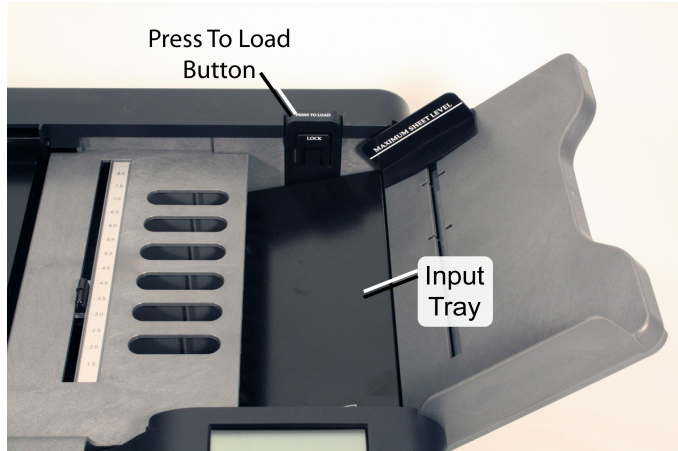


If there is nothing in the display, verify that you have pressed a button (for about 2 seconds) to bring the scanner out of sleep mode. If there is still nothing in the display, verify that the unit is plugged in and turned on. If necessary, see Chapter 2, “Setting Up Your Scanner”.

If the message is different from the one shown above, refer to the *Scanning Tests, Surveys, and Ballots Using SelfScore* guide (included with your scanner) for instructions on display panel messages.

2. Press the **Press To Load** button on the side of the input tray and while holding it down, complete steps 3 (optional), 4, and 5 in this procedure. Depressing this lever allows the sheets you load to slide as far into the

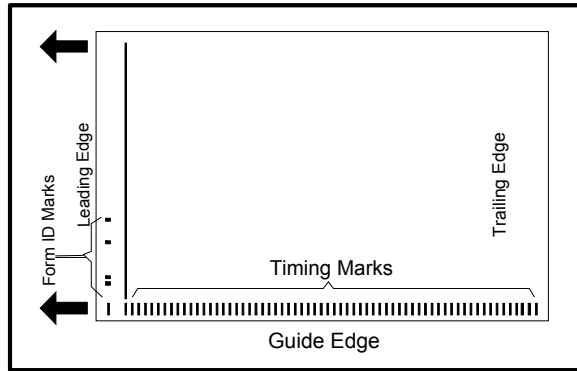
input tray area as possible. This is important for proper feeding.



3. (Optional) If you have a large number of sheets to load, you can secure the input tray in the down position by pushing in the tray lock while the **Press To Load** button is depressed. To release the lock after you have loaded sheets, depress the **Press To Load** button and release it.

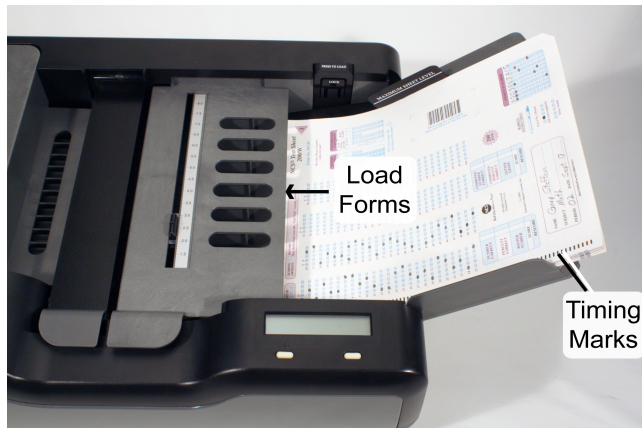


4. Load the input tray by stacking all sheets the same way as shown.



5. Verify that the sheets are as far to the left in the input tray as possible.
6. Slide the paper guide so that it just touches the sheets.

IMPORTANT: Release the **Press To Load** button if locked.



7. Follow the instructions in the *Scanning Tests, Ballots, and Surveys Using SelfScore* guide to scan the type sheets that you just loaded.

Storing Information

The scanner can store information for one batch of tests, ballots, or surveys at a time. Once the batch is scanned and **Quit** is pressed, the results are erased.

Understanding Display Panel Messages

The display panel displays information regarding:

- Scanner status
- Errors
- What to do next
- Button functionality

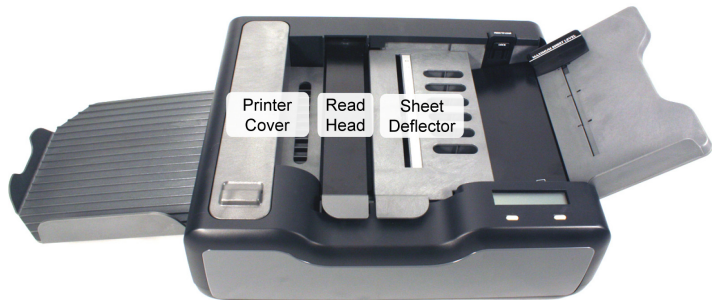
See the *Scanning Tests, Surveys, and Ballots Using SelfScore* guide (included with your scanner) for explanations of all display panel messages. The messages are listed alphabetically.

Clearing Document Jams

If documents jam during scanning, the display panel will display an error message. You can use the following general procedure for clearing jams, or see the chapter on display panel messages in the *Scanning Tests, Surveys, and Ballots Using SelfScore* guide (included with your scanner) for more information on the specific error message that you received.

1. Lift the following:

- Sheet deflector
- Read head
- Printer cover



2. Remove any sheets on the transport bed.
3. Close all covers making sure that each is fully seated.
4. Return any unscanned sheets to the input tray.
5. Press **START** to resume scanning.

NOTES

In this chapter:

Entering the Background Menu	page 46
Background Menu Flowchart	page 47
Scanner Information	page 48
Defaults Menu	page 49
Utilities Menu	page 51
Diagnostics Menu	page 60
Exiting the Background Menu	page 64

Chapter 4:

Using the Background Menu

The background menu gives you access to functions that include:

- Default Settings
- Utility Functions
- Diagnostic Functions

The background menu is designed for quick navigation. Press the right button (usually “Next”) to bypass functions and to leave selections unchanged. Press the left button to enter submenus, run functions, or change selections.

This chapter gives you an overview of the entire background menu system in the form of a flowchart. It also covers details for each menu item. The menu items are listed in the order that they appear in the background menu.

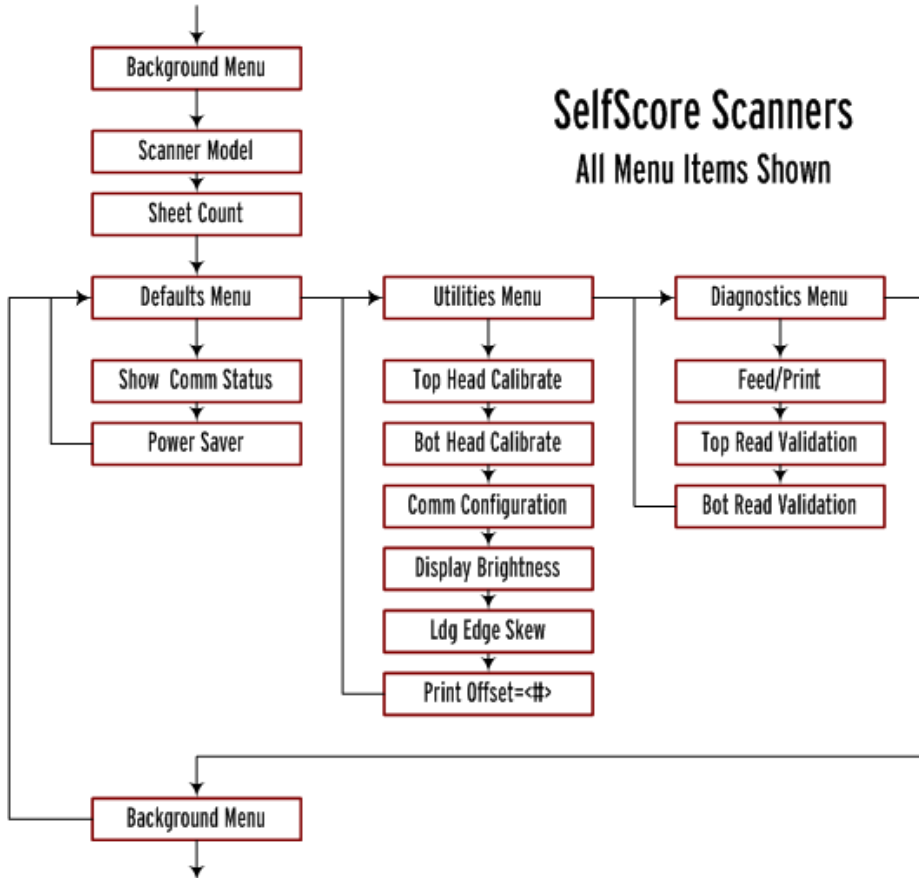
Entering the Background Menu

Enter the background menu by holding down both buttons for about five seconds. When the message “Background Menu” appears briefly, release the buttons.



Background Menu Flowchart

The background menu is organized as shown on the below.



Scanner Information

Scanner information is displayed immediately after you enter the background menu. These two menu items are “display only” information that cannot be changed.

Scanner Model

<Scanner Model> Ver <#> ↓Next↓

Variables Where <Scanner Model>=

- SelfScore

And where <#>=

- Version number of the scanner firmware

Description The scanner model is displayed immediately after entering the background menu.

Press **Next** to advance to the next menu item.

Sheet Count

Sheet Count=<Count> ↓Next↓

Variables Where <Count>=

- Number of sheets

Description Sheet count refers to the number of sheets that have been scanned since the scanner was put into service.

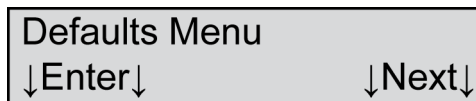
Press **Next** to advance to the next menu item.

Defaults Menu

The Defaults menu is the first of three submenus within the background menu system. Using the Defaults menu, you can set display of comm status and power saver parameters. See below for a full description of each menu item.

NOTE: See “Background Menu Flowchart” on page 47 for a flowchart of the entire background menu.

Defaults Menu



Description This menu item allows you to enter the defaults menu.

Press **Enter** to enter the Defaults menu.

Press **Next** to advance to the Utilities menu (See “Utilities Menu” on page 51.)

Show Comm Status



Variables Where <Status>=

- On
- Off

Description This menu item allows you to either display or not display communication status. If you select “On,” characters appear in the display panel indicating communication status. The status indicators are:

- **t** for Transmitting

- **r** for Receiving
- **b** for Busy

Press **Change** to change the status.

Press **Next** to advance to the next menu itm.

Power Saver

Power Saver=<Time>	
↓Change↓	↓Next↓

Variables Where <Time>=

- 5, 10, 15, 30, 45, 60, or Off

Description This menu item allows you to change the power saver setting. The time shown indicates the amount of time that will elapse before the scanner goes into sleep mode.

Press **Change** to change the power saver time. The power saver time will:

- Cycle through 5, 10, 15, 30, 45, and 60 minute settings
- Reset to Off
- Start over at 5 minutes

NOTE: The default setting for the power saver is 5 minutes.

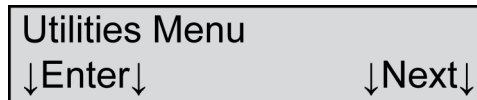
Press **Next** to accept the displayed setting and to advance to the next menu item.

Utilities Menu

The Utilities menu is the second of three submenus in the background menu. In it, you will find utility programs that allow you to calibrate the read heads, view and set communications parameters, adjust the display brightness, turn on and off the leading edge skew check, and adjust the printer offset. See below for a full description of each menu item.

NOTE: See “Background Menu Flowchart” on page 47 for a flowchart of the entire background menu items.

Utilities

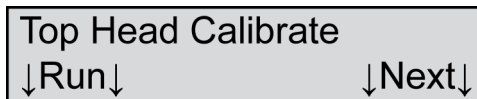


Description This menu item allows you to enter the Utilities menu.

Press **Enter** to enter the Utilities menu.

Press **Next** to advance to the Diagnostics menu (See “Diagnostics Menu” on page 60.)

Top Head Calibrate



Description This dialog allows you to run the top head calibration program.

Press **Next** to skip this function and to advance to the next menu item.

The following describes how to calibrate the top read head.

Calibration automatically adjusts the scanner read system to compensate for variations in scanner components. Your scanner comes calibrated and ready for use.

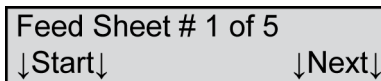
You should calibrate if you have:

- Received a “Recalibrate Scanner...” message on the scanner display
- Moved the scanner to a new location.
- Been instructed to do so by Scantron Customer Support.

For best results, perform the following before calibrating:

- Clean the scanner and the read heads. See Chapter 6, “Cleaning the Scanner” for details.
- Ensure that the calibration sheets are clean and undamaged.

Press **Run** to calibrate the top read head. The following menu item appears.



NOTE: If you run out of calibration sheets, reload the ones that are in the output tray.

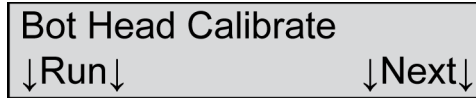
Load the calibration forms (part # 202-989-008) that came with your scanner by placing them in the input tray and depressing the **Press To Load** button. The orientation of the calibration sheets does not matter. Press **Start** to begin calibration. Press **Next** at any time to abort calibration.

When calibration is complete, the following menu item appears.



Press **Next** to complete calibration and to advance to the next menu item.

Bot Head Calibrate

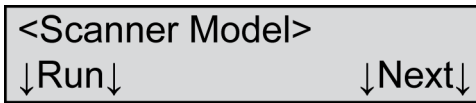
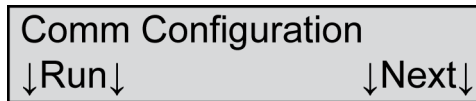


Description This menu item allows you to calibrate the bottom read head.

Press **Next** to skip this function and to advance to the next menu item.

For instructions on calibrating the bottom read head, refer to the instructions for the top read head above.

Comm Configuration



Variables Where <Scanner Model>=
 • SelfScore

Description This menu item allows you to display and configure the communications parameters.

NOTE: The Comm Configuration menu item is not displayed if the scanner is displaying the “Recalibrate... See Manual” message.

Press **Next** to skip this function and to advance to the next menu item.

The following describes how to configure the communications parameters.

Press **Run** to enter a submenu that allows you to display communications parameters, set the communications parameters to the factory default or to a custom configuration. The following menu items appear.

Default Config - Set

Default Config	
↓Set↓	↓Next↓

<Scanner Model>	
↓Set↓	↓Next↓

Variables Where <Scanner Model>=

- SelfScore

Description This menu item allows you to set the communications parameters to the factory default. The factory default configuration is:

- Start Record 1 = FF
- Start Record 2 = FF
- Start Record 3 = FF
- Start Record 4 = FF
- Start Record 5 = FF
- Start Record 6 = FF
- End Record 1 = 0D
- End Record 2 = 0A
- End Record 3 = FF
- End Record 4 = FF
- End Record 5 = FF
- End Record 6 = FF

- End Document = FF
- Compress = 15
- Record Length = FFFF
- Check Char = FF
- Initiate From = CPU
- Initiate Code = 11
- Positive = 11
- Negative = 1A
- X-On = FF
- X-Off = FF
- Start = 72
- Stop = 0E
- Release = 12
- Select Stacker = 1B
- Download = 1C
- Runtime = 1D
- Status = 73
- Scanner Ctrl = 65
- Print Position = 31
- Print Data = 32
- Display Data = 07
- End of Info = 04
- End of Batch = FF
- OCR = 1E

Press **Next** to skip this function and advance to the next menu item.

Press **Set** to set the communications parameters to the default configuration shown above.

A Comm Config Complete message will display. Press **Next** to complete communications configuration and to exit this submenu.

Config Sheet - Scan

Config Sheet	
↓Scan↓	↓Next↓

Form # 202-879-003	
↓Scan↓	↓Next↓

Description

This menu item in the Comm Configuration submenu allows you to scan a completed Scantron Configuration Sheet (form # 202-879-003).

Press **Next** to skip this function and to advance to the next menu item.

Press **Scan** to scan a configuration sheet. The following menu item appears.

Feed ComConfig Sheet	
↓Next↓	

Press **Next** to abort this function and to advance to the next menu item.

To proceed with scanner configuration, feed the Scantron Configuration Sheet by simply placing it in the input tray after marking the sheet. It will automatically scan. A Comm Config Complete message will display. Press **Next** to complete communications configuration and to exit the Comm Configuration submenu.

Comm Config - Display

Comm Config	
↓Display↓	↓Next↓

<Scanner Model>	
↓Display↓	↓Next↓

Variables

Where <Scanner Model>=

- SelfScore

Description

This menu item allows you to display the communications configuration.

Press **Next** to skip this function and advance to the next menu item.

Press **Display** if you want the scanner to display each of the communications parameters on the display panel. There are a total of 35 parameters.

Press **Show Next** to show the next parameter.

Press **Next** at any time to abort the function and advance to the next menu item.

Display Brightness

Display Brightness	
↓Change↓	↓Next↓

Description

This menu item allows you to adjust the display brightness.

Press **Next** to advance to the next menu item.

Press **Change** to increment the display brightness until you find the best setting. When the brightness reaches its minimum, it resets to its maximum.

Ldg Edge Skew

Ldg Edge Skew=<Status>	
↓Change↓	↓Next↓

Variables Where <Status>=

- On
- Off

Description This menu item allows you to turn leading edge skew detection on or off.

Leading edge skew detection checks to ensure that the leading edge of the sheet is aligned properly during scanning. It helps ensure that your data collection results are accurate.

However, if you are using forms that are not cut perfectly square, leading edge skew detection can result in unwanted error messages. If that occurs, this function allows you to turn leading edge skew detection off to suppress the errors. However, Scantron cannot guarantee the accuracy of the data collected when leading edge skew detection is turned off.

NOTE: The default setting for Ldg Edge Skew Detection is on.

Press **Next** to advance to the next menu item.

Press **Change** to change the leading edge skew detection status.

Print Offset

Print Offset = <Position #>	
↓Change↓	↓Next↓

Variables Where <Position #>=

- Whole numbers from +10 to -10

Description This menu item allows you to adjust the printer offset. Printer offset helps ensure that the error marks or answer verification marks are printed next to the question.

Press **Next** to advance to the next menu item.

Press **Change** to increment the printer offset by one. Each time you press **Change**, the offset indicator number increments by 1 up to +10, then it resets to -10. Continue pressing **Change** until you have reached the setting that you want to test. Once you have chosen a setting, score a test to determine if the alignment is correct. Readjust as necessary.

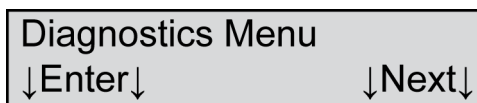
NOTE: The default setting for print offset is 00.

Diagnostics Menu

The Diagnostics menu is the third of three submenus in the background menu. In it, you will find programs that allow you to test the printer and the top and bottom read heads. See below for a full description of each menu item.

NOTE: See “Background Menu Flowchart” on page 47 for a flowchart of the entire background menu.

Diagnostics Menu



Description This menu item allows you to enter the Diagnostics menu.

Press **Enter** to enter the Diagnostics menu.

Press **Next** to advance to the Background Menu menu item.

Feed/Print?



Description This menu item allows you to test the scanner's feed and print capabilities. The test feeds sheets loaded in the input tray, and the printers print a string of characters.

Press **Next** to skip this test and to advance to the next menu item.

Press **Run** to proceed with the test. The following menu item appears.

Feed/Print	
↓Start↓	↓Next↓

Load an expendable form or two into the input tray. (Do not use the calibration sheets that came with your scanner as you may need these in the future.)

Press **Start** to scan the sheet(s). The sheet should feed and each installed printer should print a string of characters. The test will continue as long as there are sheets in the input tray.

Press **Next** if you wish to abort the test or if you have completed the test. You will be advanced to the next menu item.

Top Read Validation

Top Read Validation	
↓Run↓	↓Next↓

Description

This menu item allows you to validate the calibration and operation of the top read head.

NOTE: This test requires Scantron Reflective Calibration sheets (part number 202-171-989).

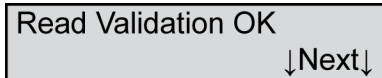
Press **Next** to skip this test and to advance to the next menu item.

Press **Run** to proceed with the test. The following menu item appears.

Feed Sheet # 1 of 5	
↓Start↓	↓Next↓

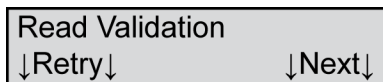
Place a stack of five, Scantron Reflective Calibration Sheets (part number 202-171-989) into the input tray so that the words “Scantron Reflective” are **on top and enter the scanner first**.

Press **Start** to perform the test. The scanner scans the sheets. If the scanner passes the test, the following menu item appears.



Press **Next** to advance to the next menu item.

If the scanner fails the test, the following three menu items appear.



Where **x** =

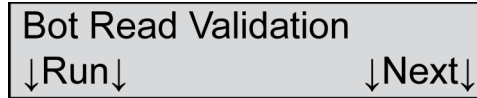
- Paper
- Light Mark
- Dark Mark

and **y** = hex value (0-9 and A-F)

If the scanner fails the test, first ensure that the calibration sheets are not dirty or damaged. If they are not, clean the scanner read head, then retest by pressing **Retry**. If the scanner still fails the test after these measures, contact Scantron Customer Support as described in “Requesting Support” on page 99.

Press **Next** to exit the test and to advance to the next menu item.

Bot Read Validation



NOTE: This menu item displays only if your scanner is equipped with a bottom read head.

Description

This menu item allows you to validate the calibration and operation of the bottom read head.

Refer to the instructions for Top Read Validation above with the following exception:

Place the Calibration Sheets in the input tray so that the words “Scantron Reflective” are **face down and enter the scanner last**.

Exiting the Background Menu



Description After you have navigated through the background menu, the menu item shown above appears.

Press **Enter** to re-enter the background menu.

Press **Exit** to exit the background menu.

In this chapter:

Getting Started	page 66
Installing or Replacing an Ink Cartridge	page 67
Positioning the Printers.	page 70
Testing the Printers.	page 74
Cleaning the Cartridge Holder	page 76
Troubleshooting	page 79

Chapter 5:

Transport Printers

This chapter covers setting up and using the dual transport printers for SelfScore scanners.

IMPORTANT: Remove the cartridges from the printers and store in a sealed container in a cool place if:

- The scanner is not going to be used for a period greater than two weeks.
- The scanner is going to be transported.
- The scanner is going to be turned off or unplugged. (It is not necessary to remove the cartridge when allowing the scanner to go into Energy Star sleep mode.)

Getting Started

To prepare your scanner for printing while scanning, perform the following:

- Install the printer cartridges
- Position the printers
- (optional) Test the printers

Instructions for each of these tasks are found in the sections that follow.

Installing or Replacing an Ink Cartridge

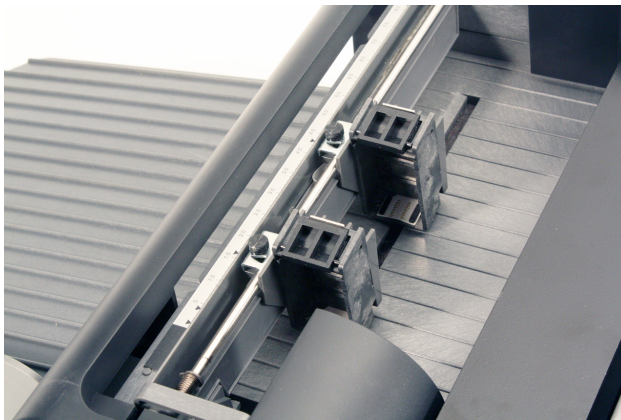
NOTE: The scanner does not come with the ink cartridges installed.

To install or replace an ink cartridge, follow these steps:

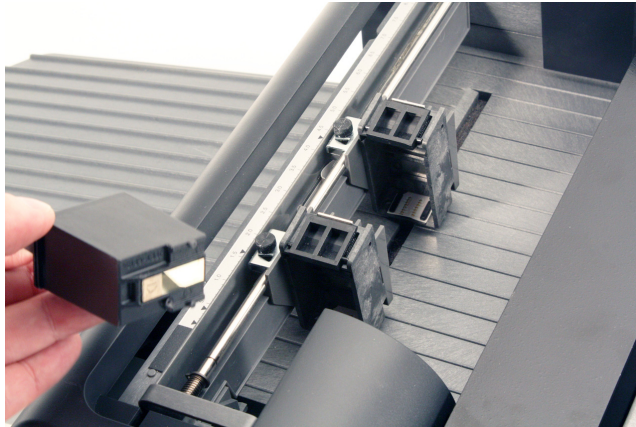
1. Unlatch the printer cover and remove it.



2. If replacing a used cartridge, remove it by holding the printer cartridge tab and pivoting the used cartridge out of the cartridge holder.



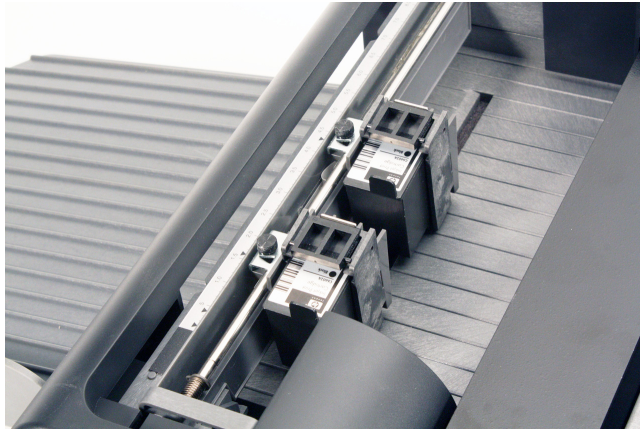
3. Prepare the new cartridge.
 - Remove the new cartridge from the box and peel off the tape that covers the ink cartridge nozzles.
 - Be careful to not touch the cartridge contacts with your fingers.
4. Install the new cartridge.



Slide the cartridge into the cartridge holder “feet first” then press the top of the cartridge firmly into the cartridge holder until you feel two clicks. This ensures that the cartridge is fully seated.



5. Repeat step 4 for the second printer.



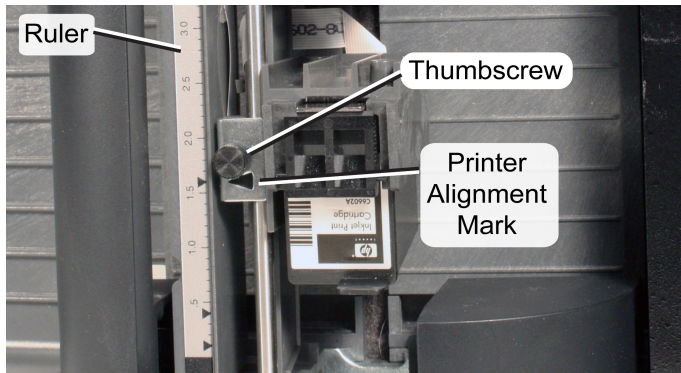
6. Adjust the position of the printers as described in the next section.

Positioning the Printers

1. If the printer cover is not already removed (from a previous procedure) unlatch it and remove it.



2. Notice the location of the cartridge holder that is inside the printer assembly. Also notice the ruler, the printer alignment mark, and the thumbscrew that sit beside the cartridge holder. These are the elements used to position the printer(s).



3. SelfScore forms require that the printers are positioned to 1.6 and 4.3 inches. There are small triangles on the scanner printer ruler indicating these two locations.

Check the printer(s) to see if they are in the correct position. If not, use the following steps to position the printer(s).



4. Loosen the thumbscrew so that you can move the printer.



Chapter 5: Transport Printers

Positioning the Printers

5. Move the printer to the 1.6 inch position and lightly tighten the thumbscrew.



6. Adjust the position of the second printer to 4.3 inches.



7. Replace the printer cover, making sure that it is firmly seated.



8. Perform a test of the printer using the procedure that follows.

Testing the Printers

To test the printer, perform the following steps:

1. Load five expendable 8.5 by 11-inch data collection sheets in the input tray. (Do not use Calibration Sheets as you may need those in the future.)
2. Hold down (at the same time) the left and right buttons found under the display panel for about five seconds to enter the background menu. The message Background Menu appears briefly. Release the buttons.



3. Press the **Next** button five times or until the following menu item appears.

Diagnostics Menu	
↓Enter↓	↓Next↓

4. Press **Enter** to enter the Diagnostics menu. The following menu item appears.

Feed/Print	
↓Run↓	↓Next↓

5. Press **Run** to run the Feed/Print test.

For the printers to successfully pass the test, sheets must feed through the scanner and the printers must print characters on the sheets. As the sheets move through the scanner, the following message is displayed:

Feed/Print	
↓Start↓	↓Next↓

6. If the printer prints on the sheets it has passed the test. Press **Next** until the following menu item appears.

Background Menu	
↓Enter↓	↓Exit↓

Press **Exit** to exit the background menu

If the printer does not print on the sheets, verify that you have installed the ink cartridge as directed. Repeat the testing procedure.

If printing still does not appear, call Scantron Customer Support for assistance as described in “Requesting Support” on page 99.

Cleaning the Cartridge Holder

If ink leaks from the cartridge, it may be necessary to clean the cartridge holder.

NOTE: Perform this procedure only if you are experiencing problems. You can damage the electrical contacts in the cartridge holder if you clean them too frequently.

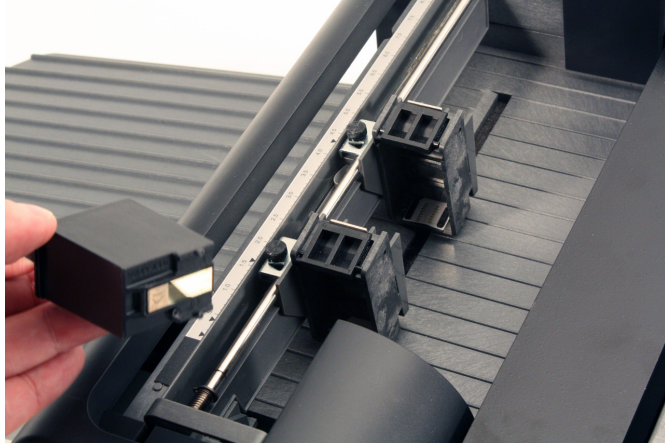
To clean the cartridge holder:

1. Unlatch the printer cover and remove it.



2. Remove the printer cartridge.

CAUTION: Watch for loose ink on the cartridge that can soil your hands, clothes, or other items.



3. Using a clean swab, gently wipe the area of the cartridge holder that contains the electrical contacts.

CAUTION: Do not spray any substance directly into or on the cartridge holder.



4. Slide the cartridge into the cartridge holder “feet first” then press the top of the cartridge firmly into the cartridge holder until you feel two clicks. This ensures that the cartridge is fully seated.

Troubleshooting

1. Use the following table to troubleshoot most printer problems. If after trying the table, you are not able to resolve your difficulty, contact, Scantron Customer Support as described in “Requesting Support” on page 99.

If you have:	Do the following:
A cartridge that is leaking ink	Replace the cartridge and clean the cartridge holder. NOTE: If the scanner is operating in an excessively hot location [above 85° F.] or if it is not going to be used for more than two weeks, remove the cartridge from the scanner. Store the cartridge in a sealed container and place the container in a cool, dry location, such as inside a refrigerator.
A printer that previously printed but now does not print	Replace the cartridge.
Letters that are blurred or in a double image	Replace the cartridge if the quality of printing does not improve.
Letters that are not printing completely	Check to see if ink is accumulating on the silver plate on the bottom of the cartridge. If so, remove the ink using a dry, lint-free cloth. Clean the contacts on the cartridge holder.
No printing at all	Replace the cartridge.
Not used your printer for a long time	Replace the cartridge. NOTE: If the scanner is not going to be used for an more than two weeks, remove the cartridge from the scanner. Store the cartridge in a sealed container, and place the container in a cool, dry location, such as inside a refrigerator.

NOTES

In this chapter:

Schedule.....	page 82
Supplies	page 83
Procedure	page 84

Chapter 6:

Cleaning the Scanner

This chapter covers how to clean your scanner to keep it in top operating condition.

Schedule

In general, it is best to clean your scanner once a month. However, you may need to clean your scanner's read heads more frequently depending on the following:

- Paper dust - Sheets that generate more paper dust will necessitate more frequent cleaning. Perforated sheets generate a considerable amount of paper dust.
- Read head contamination - Eraser fragments and correction fluid, if used, can build up on the read head.

Supplies

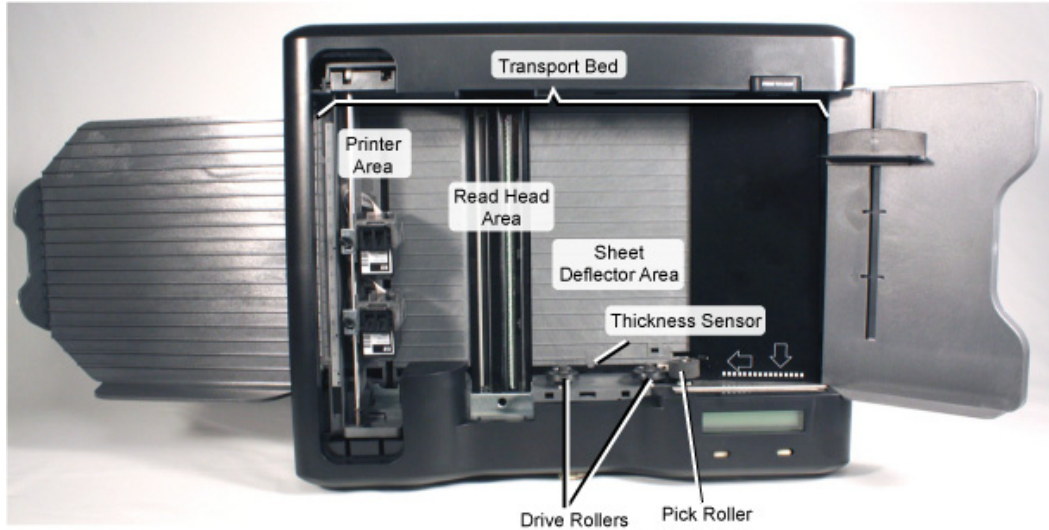
Recommended cleaning supplies are shown below.

- Ammonia-based glass-cleaning solution (do not spray directly on the scanner)
- Static reducing spray (do not spray directly on the scanner)
- Lint-free cloths
- Canned air (with non-condensing propellant)

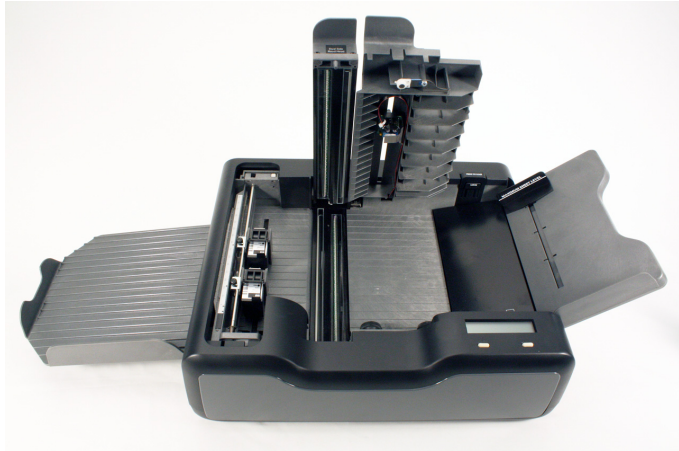
Procedure

IMPORTANT: Turn the scanner off before cleaning.

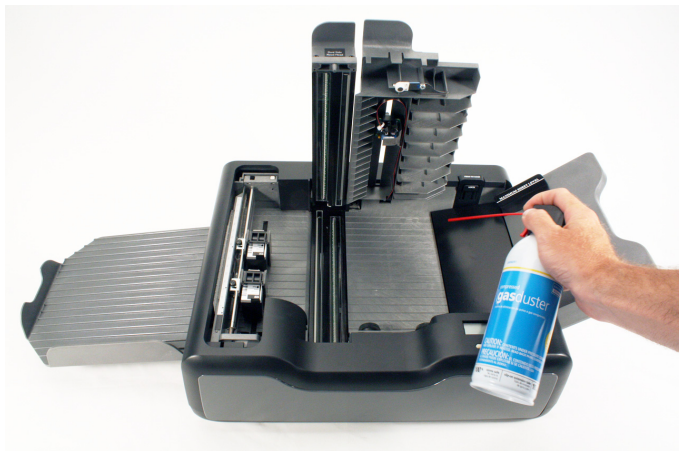
An illustration to help you identify key parts that need to be cleaned is shown below. The recommended cleaning procedure follows.



1. Raise the read head and sheet deflector. Also, remove the printer cover.



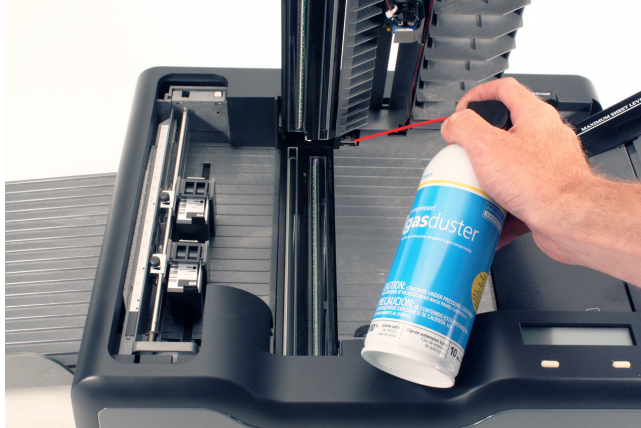
2. Spray canned air (with a non-condensing propellant) directly on the transport bed area. This removes large amounts of dust and other types of debris.



Chapter 6: Cleaning the Scanner

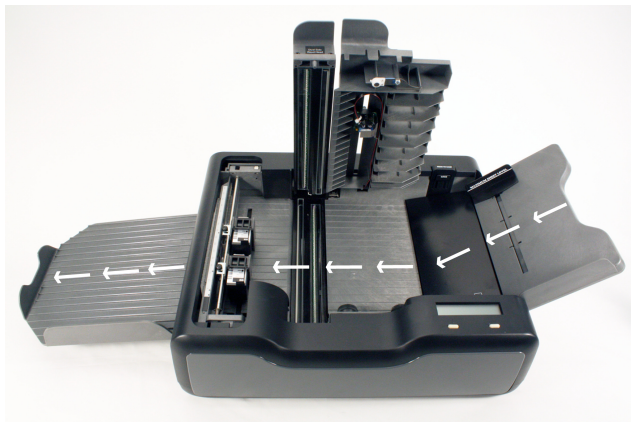
Procedure

3. Clean out any dust or debris that has collected in the area between the top and bottom read heads where it is hinged using canned air.



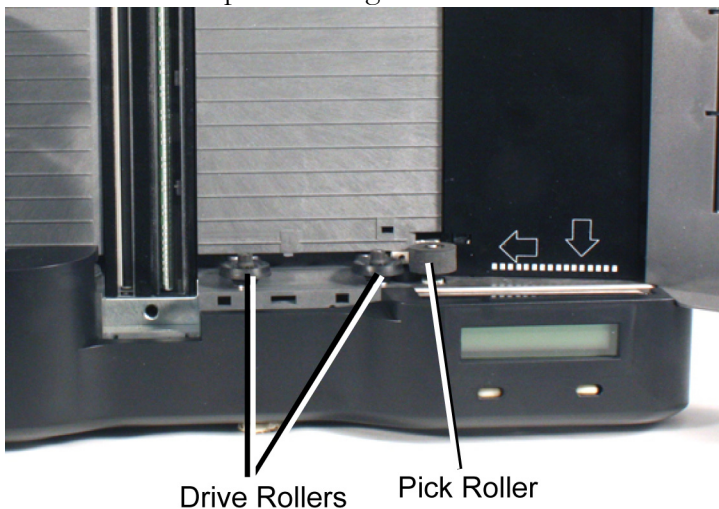
CAUTION: Do not use the canned air after this step as it can blow dust on areas that have been cleaned.

4. Lightly dampen a lint-free cloth with water or with a static-reducing spray.
5. Using the dampened cloth, wipe along the transport bed. Start at one end of the bed and work to the other.



6. Lightly dampen a lint-free cloth with soapy water.
7. Locate the drive rollers. Wipe the drive rollers using the lightly dampened cloth.

CAUTION: Do not touch the read head with the soapy cloth. Soap can damage the read head.



8. Locate the pick roller. Turn the pick roller with one finger, wiping off the roller as you turn it. This procedure removes graphite and other debris that collects on the roller.
9. Lightly dampen a fresh lint-free cloth with an ammonia-based glass cleaner.

CAUTION: Do not spray the cleaner directly on the read head.

10. Using the lightly dampened cloth, clean the glass on the top read head.

Chapter 6: Cleaning the Scanner

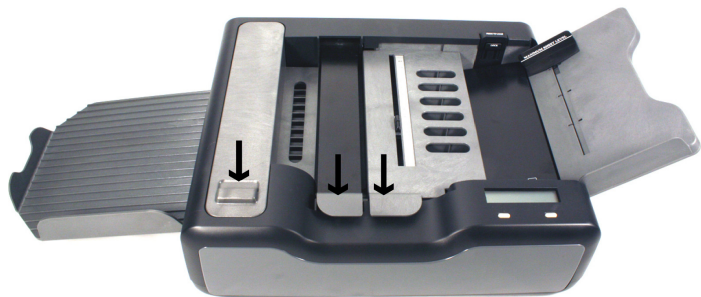
Procedure

11. Using the same cloth, clean the glass on the bottom read head.



NOTE: Single read head units do not have glass beneath the top read head. Instead, they have black, shiny strip. This must also be cleaned.

12. Close the read head and sheet deflector. Also replace the printer cover.



13. Turn the scanner back on after it has had a chance to dry.

Chapter 7:

Troubleshooting

Use the troubleshooting chart in this chapter to diagnose any issue you encounter with your scanner. If you are still unable to resolve the problem, contact Scantron Customer Support as described in “Requesting Support” on page 99.

NOTE: For information regarding error messages, see the Display Panel Messages chapter in the *Scanning Tests, Surveys, and Ballots Using SelfScore* guide.

Troubleshooting Chart

Problem	Possible Solution
The scanner will not scan/ feed documents	<p>Make sure that:</p> <ul style="list-style-type: none"> the wall outlet is not defective. the power cord is plugged in and the power is on. the scanner covers are completely closed. sheets in the input tray were lightly pushed all the way to the left with the PRESS TO LOAD button depressed during loading. the number of sheets in the input tray is less than approximately 100 sheets of 60-100 lb offset paper. you are using Scantron sheets designed for use with the SelfScore scanner you try powering the scanner down, and then up again.
Documents are jamming or multiple documents are feeding	<p>Make sure that:</p> <ul style="list-style-type: none"> the paper guide is adjusted for the width of the sheets you are scanning. the output tray is adjusted for the length of sheets you are scanning. the leading edge and timing track edges have been tapped on a hard surface (jogged). you are using Scantron sheets designed for use with the SelfScore scanner all staples and paper clips have been removed from the documents. all jammed sheets have been removed from the paper path. the scanner has been cleaned as outlined in Chapter 6, “Cleaning the Scanner”.

Problem	Possible Solution
Documents are skewed during scanning	<p>Make sure that:</p> <ul style="list-style-type: none"> the paper guide is adjusted for the width of the documents you are scanning. the leading edge and timing track edges have been tapped on a hard surface (jogged). the scanner covers are firmly closed. the scanner has been cleaned as outlined in Chapter 6, “Cleaning the Scanner”. your forms are printed by Scantron.
Data is not captured as expected (if you are using the scanner with a PC)	<p>Make sure that:</p> <ul style="list-style-type: none"> respondents have properly filled out the form. the timing track edge of the sheets is positioned against the guide rail (edge of input tray closest to the front of the scanner). you are scanning the correct side of the sheet. you are scanning the correct form. there are no stray marks on the sheet. nothing is obstructing the read head glass. the read head is fully seated.

NOTES

In this chapter:

Registering Your Product	page 93
Printed Documentation	page 95
Internet Resources	page 96
Ordering Supplies	page 97
Ordering Forms and Print Services	page 98
Requesting Support.	page 99
Services	page 101

Chapter 8:

Product Support and Services

Registering Your Product

Outside the U.S. Contact your local sales agent for product support, registration, and update information.

Within the U.S. Product registration ensures timely notification of downloadable updates and upgrades which are provided to you as a benefit of an active hardware support agreement or software subscription.

Online registration is required for:

- Notification of downloadable updates and upgrades for drivers and utilities
- Downloading of the updates and upgrades for drivers and utilities
- Online support requests

NOTE: If you are entitled to updates or upgrades, you may obtain them on physical media for an extra fee.

Online Registration

1. Go to the Scantron Web site at **www.scantron.com**.
2. Select **Support→Product Registration**. The **Product Registration** page will appear.
3. Follow the on-screen instructions.

Printed Documentation

Your Scantron SelfScore scanner comes with printed documentation for the scanner and the included software. The documentation set provides information on packaging, installation, setup, operation, and configuration for users and system administrators.

For a list of the documentation included with your scanner, see the Preface.

Internet Resources

Go to **www.scantron.com** to access the Scantron Customer Support Web site. It gives you access to the following:

Outside the U.S.

- Frequently Asked Questions (FAQs) with answers about scanning hardware and software products.

Within the U.S.

- Online registration of your scanner or software product with Scantron Customer Support. This ensures you of timely notification of product updates and upgrades.
- Frequently Asked Questions (FAQs) with answers about scanning hardware and software products.
- Software updates (including driver and utility updates for scanners) that you can download if you have a current software subscription or hardware support agreement.

NOTE: New licensees of Scantron software products have access to these support resources. Continued access to some of these resources requires a continuing hardware or software subscription support agreement.

Ordering Supplies

Outside the U.S. Contact your local sales agent to order supplies.

Within the U.S. We offer quick, easy access to supplies and user manuals for your Scantron scanner and software. You can order online or by phone or fax:

Online

Scantron Online Store
www.scantronstore.com
Click **Supplies**

Phone or Fax

Scantron Supplies Business Center
1313 Lone Oak Road
Eagan, MN 55121
Phone 1-800-328-6290
Fax 1-651-683-6230

NOTE: Promotional offers are typically available for online purchases only.

Ordering Forms and Print Services

Outside the U.S. Contact your local sales agent for forms and print services information.

Within the U.S. Standard Forms

Scantron has a large variety of standard forms to meet your data collection needs. For an illustrated list of the forms available and to order online, visit the Web site below. To order by phone, contact Scantron Print Services at the numbers shown below.

Online

Scantron Online Store
www.scantronstore.com

Phone or Fax

Scantron Print Services
Phone 1-800-722-6876
Fax 1-949-639-7710

Requesting Support

Outside the U.S. Contact your local sales agent for support.

Within the U.S. If you have questions about your scanner that are not answered by the printed documentation, the Help system, or **www.scantron.com**, call Scantron Customer Support.

When you call Scantron, an operator will ask you to describe your problem. The operator will then relay information about the problem to an analyst who will call you back as soon as possible. You can reach Customer Support from 8:00 A.M. to 5:00 P.M. Monday through Friday, your local time (except for Alaska and Hawaii where support is available through 7:00 P.M. CST).

Before calling:

1. Know the serial number of the product you are calling about. The serial number for your SelfScore scanner can be found on the back of the scanner.
2. **Write down a description of your problem.** Include a sequence of the steps leading to the problem. Doing this ensures that you will have all the details you need when you talk to the analyst.
3. Note error messages that appear on the scanner display panel.
4. Have a description of your hardware ready.
 - Scanner model
 - Firmware version
 - Sheet count
5. Have a description of your software (if any) ready.
 - Software used
 - Version numbers

6. Be available with a phone at the scanner. This is so that the analyst will be able to guide you through the troubleshooting process.

Scantron Customer Support

Phone 1-800-338-5544 (U.S. only)

Scantron Customer Support can answer your questions about a variety of subjects, including:

- Installation and configuration
- Program features and operation
- Scanner and software troubleshooting
- Documentation
- Software/hardware errors

Services

Outside the U.S. Contact your local sales agent for services information.

Within the U.S. A variety of services are available including custom data collection solutions, survey research services, equipment maintenance, equipment installation, network installation, custom training solutions, custom application development, database support, software support for custom applications, and consulting services.

For information on any of these services, contact
Scantron:

Online
www.scantron.com

Phone
1-800-447-3269

NOTES

In this chapter:

Preparing for Recalibration.	page 105
Navigating the Background Menu	page 106
Top Head Calibration	page 107
Bottom Head Calibration	page 108
Exiting the Background Menu	page 109



Appendix A:

Recalibration

Calibration automatically adjusts the scanner read system to compensate for variations in scanner components. Your scanner comes calibrated and ready for use.

Reasons to Recalibrate

Recalibration should be performed for the following reasons:

- Received “Recalibrate.... See Manual” message on the scanner display panel
- Moved the scanner to a new location.
- Instructed to do so by Scantron Customer Support.

NOTE: Do not recalibrate unless required to do so. Recalibrating too often can produce less than optimal results.

Procedure Overview

To recalibrate, perform the following:

- Prepare for recalibration
- Navigate the background menu
- Perform a Top Head Calibrate function
- Perform a Bot Head Calibrate function (if your scanner is equipped with a bottom read head)
- Exit the background menu

Instructions for the above tasks are found in the pages that follow.

Preparing for Recalibration

For best results, perform the following before calibrating:

- Clean the scanner and the read head(s) as outlined in Chapter 6, “Cleaning the Scanner”.
- Ensure that the calibration forms are clean and undamaged.

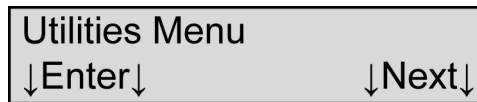
Navigating the Background Menu

In order to recalibrate, you need to navigate the background menu to get to the Top Head Calibrate and Bot Head Calibrate functions. Use the following procedure.

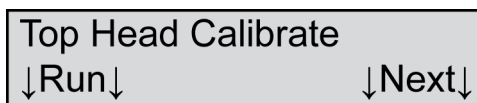
1. Enter the background menu by holding down both buttons for about five seconds. When the message “Background Menu” appears briefly, release the buttons.



2. Press **Next** five times or until you reach this menu item.



3. Press **Enter** to enter the Utilities submenu. The first menu item displayed is the one you need (shown below).



Top Head Calibration

From the menu item shown below, perform a top read head calibration using the following instructions.

Top Head Calibrate	
↓Run↓	↓Next↓

1. Press **Run** to calibrate the top read head. The following menu item appears.

Feed Sheet # 1 of 5	
↓Start↓	↓Next↓

NOTE: If you run out of calibration sheets, reload the ones that are in the output tray.

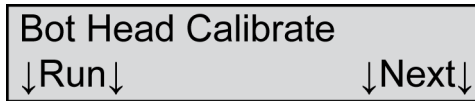
2. Load the calibration forms (part # 202-989-008) that came with your scanner by placing them in the input tray and depressing the **Press To Load** button. The orientation of the calibration sheets does not matter. Press **Start** to begin calibration. Press **Next** at any time to abort calibration.
3. When calibration is complete, the following menu item appears.

Calibration Complete	
↓Next↓	

4. Press **Next** to complete calibration and to advance to the next menu item.

Bottom Head Calibration

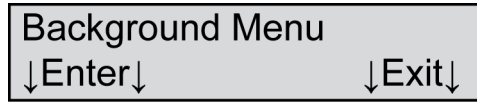
NOTE: Single read head scanners have only a top read head. If your scanner has a single read head, skip this part of the procedure.



From the menu item shown above, perform a bottom read head calibration using the Bot Head Calibrate function. Use the instructions for the Top Head Calibrate function to guide you through the process.

Exiting the Background Menu

1. Press **Next** until you reach the following menu item.



2. Press **Exit** to exit the background menu.

NOTES



Index

NOTES

A

Assembling the Scanner 15

B

Background Menu Flowchart 47
Bar Code Test 64
Before calling 99
Bot Head Calibrate 53, 108
Bot Read Validation 63

C

Cleaning the Cartridge Holder 76
Clearing Document Jams 43
Comm Config - Display 54
Comm Configuration (When in ES/ScanMark Mode) 57
Comm Configuration (When Not in ES/ScanMark Mode) 53
Config Sheet - Scan 56
Connecting the Power Supply 27
Connecting the Scanner 27

Connecting the Scanner to the Computer . 27
Custom Form Design and Other Services . 99

D

Default Config - Set 54
Defaults Menu 49
Defaults Submenu 49
Diagnostics Menu 60
Diagnostics Submenu 60
Display Brightness 57

E

Entering the Background Menu 46
Environmental Information 10
Exiting the Background Menu 64, 109

F

Feed/Print? 60
Feed/Select 61
Form Type 49

G

Getting Started 66

H

Handling the “Recalibrate/See Manual” Message
..... 30

I

Installing or Replacing an Ink Cartridge ... 67
Installing the Printer Cartridge(s) 18
Internet Resources 96

L

Ldg Edge Skew 58

N

Navigating the Background Menu 106

O

Online Registration 94
Optional Equipment View 6
Options 6
Ordering Forms and Print Services 98
Ordering Supplies 97

P

Positioning the Printer(s) 20, 70
Power Saver 50
Preparing for Recalibration 105
Print Offset= 59
Printed Documentation 95
Printer Features 66
Procedure 84
Procedure Overview 104

R

Reasons to Recalibrate 103
Registering Your Product 93
Requesting Support 99

S

Scanner Components 2
Scanner Information 48

Scanner Model 48
Scanning Procedure 38
Schedule 82
Selecting a Good Location 14
SelfScore option
 storing information 41
Services 101
Setting Up the Scanning Software for Printing
76
Sheet Count 48
Show Comm Status 49
Side and Back View 5
Specifications 6
Standard Features 6
Standard Forms 98
storing information 41
Supplies 83
System Requirements 8

T

Testing the Printer(s) 74
The Help System 96
Top Head Calibrate 51
Top Head Calibrate Function 107
Top Read Validation 61
Transport Bed Closed View 3
Transport Bed Open View 2
Troubleshooting 79
Troubleshooting Chart 90
Turning the Printer(s) On Or Off 74
Turning the Scanner On 29

U

Understanding Display Panel Messages ... 41
Uninstalling the Drivers and Scanner Utilities
Software 31
User Precautions 9
Utilities 51
Utilities Submenu 51

V

Verifying Proper Setup 34

W

Waste Electrical and Electronic Equipment
(WEEE) 10



Scantron® Scanners

Welcome to the Scantron family of high performance scanners. The Scantron SelfScore scanner significantly reduces the time that you spend processing tests, surveys, or ballots.

SelfScore is different from other test scoring machines because of its advanced features. Its integrated diagnostics system with 40 character display provides real-time plain English information regarding your scanning job. Its background menu allows you to configure the scanner to meet your specific needs. And, when you want to collect and store data electronically, simply connect the scanner to a PC with ScanTools software to grade and collect data in a single pass.

For over 30 years, Scantron has been delivering high-accuracy test scoring and data collection tools designed to streamline your processes. Trust Scantron to continue this tradition and to provide you with a springboard to take advantage of emerging technologies.

Please visit us at www.scantron.com for a complete overview of the Scantron family of scanners or call us at 1-800-SCANTRON (1-800-722-6876) for more information.

© 2023 Scantron Corporation. All rights reserved. Scantron and the Scantron logo are registered trademarks.
P/N 277 287 033



Scanners
High Performance OMR

SCANTRON.