

Print Shop

A component of the Wheel Shop Management Suite (WSMS)

User Guide



Contents

- System Requirements 1
- Introduction 2
- Log On 3
- Print Shop..... 4
 - Home Screen..... 4
 - Print Screen..... 5
 - Validate Screen 6
- Menu Bar 7
 - Menu 7
 - Reports..... 7
 - Help 8
- Database Connection Settings 9
 - Machine Settings..... 9
 - Connection Information..... 10
- Options..... 11
 - Application 11
 - General..... 11
 - Email..... 12
 - Barcodes..... 13
 - Scanners 13
 - Labels 14
 - Data Acquisition 15
 - Logging 15
 - Lookups 15
- Downtime..... 16
- Diagnostics 17
- Administrator Menu 18
- Appendix A: Frequently Asked Questions (FAQ) 19
- Appendix B: License 20

Appendix C: Press Settings..... 23
Appendix D: Contact Information 24

System Requirements

This application has minimum system requirements as described below. These requirements must be met in order for the application to operate as designed.

This application supports the following Microsoft Windows operating systems.

- Windows 7 ¹
- Windows Server 2008/2008 R2 1
- Windows Vista Business/Ultimate 1
- Windows Server 2003 SP2 1
- Windows XP SP3 1

The application requires the Microsoft .Net Framework 3.5 Full which can be obtained from Microsoft at <http://www.microsoft.com/en-us/download/details.aspx?id=17718>

The application requires the following hardware at a minimum.

- 2.0 GHz Processor
- 1 GB installed RAM
- 100 MB available disk space
- Ethernet Card

¹ When installed on a 64 bit operating system, the application will run in a subsystem of Windows called WOW64 (Windows-on-Windows 64 bit). WOW64 is included on all 64 bit versions of Windows and is designed to make differences between the operating systems transparent to the user.

Introduction

Overview

The Print Shop program allows you to print and validate AAR CID Bar Code Labels for Axles and Bearings.

Layout

Print Shop contains three main screen areas. The menu bar located across the top of the screen, the status bar located across the bottom of the screen, and the client area in between the menu bar and status bar. The menu bar is used for navigation between different functions. For more details see the topic on the [Menu Bar](#). The status bar indicates the copyright information and version number. The client area is where the data collection and display screens are displayed.

Interface

The day-to-day use is designed to be used with a touch-screen input device. Each data entry element provides an on-screen keyboard or numeric keypad to allow quick entry of data without the need to remove gloves or keep a keyboard clean. However, setting Options or administrative functions may require a mouse and keyboard.

Log On

Print Shop
A component of the Wheel Shop Management Suite™

Please Log On

Shift: Shift 1

Name:

Password:

Virtual keyboard layout:

·	1	2	3	4	5	6	7	8	9	0	-	=	<-----
Tab	q	w	e	r	t	y	u	i	o	p	[]	\
Caps Lock	a	s	d	f	g	h	j	k	l	;	'	Enter	
Shift	z	x	c	v	b	n	m	,	.	/	Shift		
Ctrl	Alt											Alt	Ctrl

WheelShop automation.com

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This is the login screen for Print Shop. You must enter your current shift number, username, and password. No screens may be accessed without a proper username and password being entered. Some screens are not available to certain authority levels.

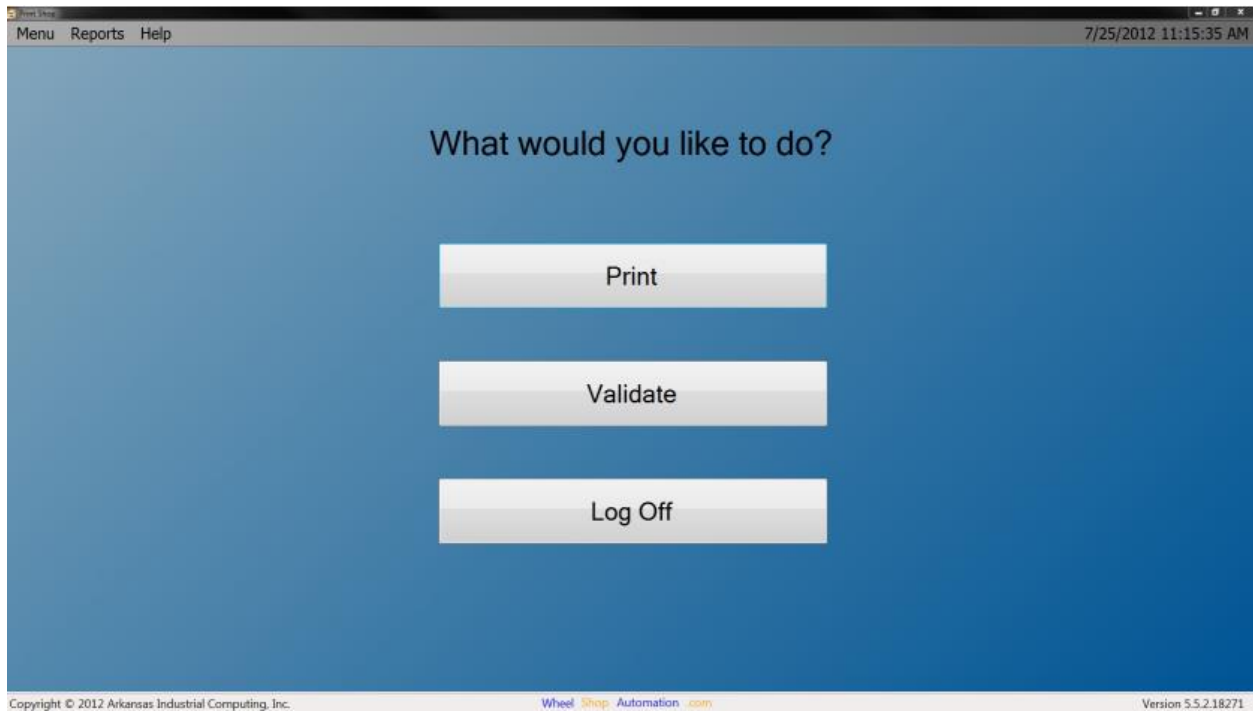
The authority levels are:

- Operator – Cannot enter calibration screen or setup screen.
- Technician – Operator level access with the addition of calibration
- Supervisor – Can access all setup screens except Assembly Builder.
- Administrator – Can access all screens.

Print Shop

Print Shop is designed to print AAR CID Bar Code Labels for Axles and Bearings.

Home Screen



After Log On, the home screen is displayed. This screen allows the user to navigate between the [Print Screen](#) and [Validate Screen](#).

Print Screen

The screenshot shows the 'Print Shop' application window. The title bar indicates the date and time as 7/25/2012 11:17:24 AM. The main window has a blue header with 'Print Shop' and 'Print Bearing Labels'. Below the header, there are several input fields for configuration: Condition, Journal Size, Certificate #, Cage Type, Seal Type, Grease Type, Backing Ring Type, Cup Serial #, Cup Mfg Date (with Month and Year sub-fields), Timestamp (with a radio button for 'Use Current Date/Time' and a time selector), and Component ID (with the value 000000000). To the right, there are fields for Batch #, Specification, and Label Format (set to 'CEPM Bearing - Serialized 2.5x4'). A preview window titled 'Serialized Label' shows a QR code, the text 'BEARING', and fields for Batch # and Size. Below the preview, there is a list of fields: Facility: AIC, Cert, Cage, Seal, Ring, Grease, ComponentID, and Date: 2012-07-25T16:17:13. At the bottom, there are fields for Quantity and an 'Include pallet label' checkbox, along with a 'Print' button. Navigation buttons for '<-- Back' and 'Clear All' are at the bottom left. The footer contains copyright information for Arkansas Industrial Computing, Inc. and the version number 5.5.2.18271.

This screen is intended to print AAR CID Bar Code labels for axles and bearings.

To print a bar code label, first select the label format from the 'Label Format' drop down field and populate the bearing properties on the left hand side of the screen as well as the Batch Number and Specification. The drop down fields on this screen are populated from the database lookup tables. For information on editing the lookup tables, see the [Lookups](#) section. If printing more than one label with serialized Component IDs, enter the component ID for the first label in the 'Component ID' field, each subsequent label printed will increment this number by one. The quantity field determines the number of labels to be printed if printing serialized labels. If the 'Include pallet label' is checked, an extra label will be printed for the pallet. Press the 'Print' button to send the job to the label printer.

Validate Screen

Menu Reports Help 7/25/2012 11:17:42 AM

Print Shop

A component of the Wheel Shop Management Suite™

Validate Bearing Labels

View as: Simple View

Facility Code :

Condition :

Journal Size :

Certificate # :

Cage Type :

Seal Type :

Backing Ring Type :

Grease Type :

Cup Serial # :

Cup Mfg Date : /

Timestamp :

Component ID:

Barcode Data

Batch # :

Specification
Select ...

Comment :

Quantity :

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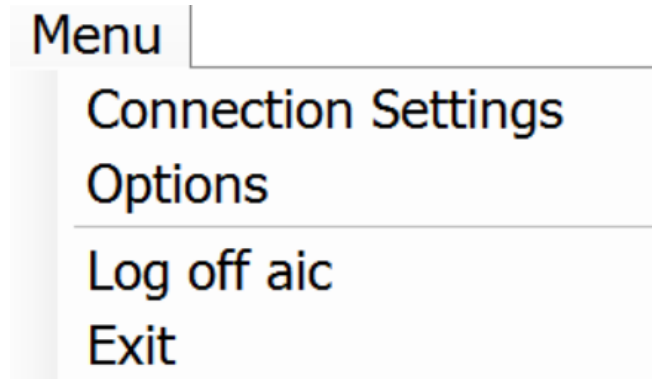
This screen is intended to validate existing labels.

To validate a label, scan the bar code on the label. If the bar code is a valid AAR Bar Code, the bar code data will appear in the 'Barcode Data' field, and the other fields will be automatically populated. Any field which does not match an existing value in the [Lookup](#) tables will be highlighted yellow. Press the 'Save' button to save the scanned bar code to the database.

Menu Bar

The Menu Bar is used to navigate the different features of the Print Shop application.

Menu



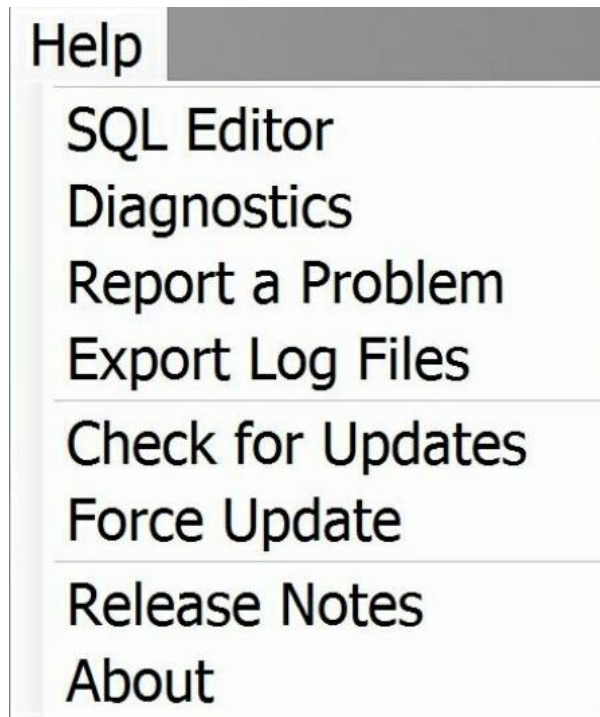
- **Connection Settings** – Opens a menu to change the database connection settings.
 - **Options** – Open the Options dialog to configure the application.
 - **Log Off** – Logs off the currently logged on user and disables all menu items that require security permissions
 - **Exit** – Close the application and return to the Windows Desktop
- **All options except 'Log Off' require administrator privileges.

Reports



The reports tab shows all the reports stored on the database, which can be in separate categories. Selecting one of the reports will display the report. If there are no reports under the tab, some must be uploaded to the database.

Help

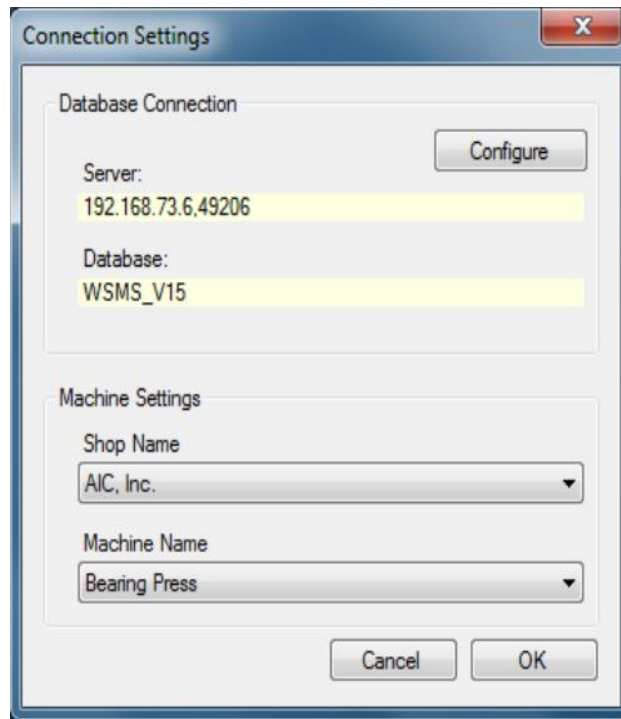


- **SQL Editor** – a diagnostic tool for troubleshooting database related issues.
 - **Diagnostics** – Opens the Diagnostics screen.
 - **Report a Problem** – Opens an email dialog allowing the user to report a problem by email. The email will include a .zip archive containing the application log files.
 - **Export Log Files** – Allows the user to export log files to a .zip archive in a user-selected director.
 - **Force Update** – Updates the application to the currently available version, even if that version is older than the currently running version.
 - **Release Notes** – Displays the Release Notes dialog.
 - **About** – Displays the About dialog.
- **Administrator privileges required to use SQL Editor and Force Update

Database Connection Settings

Machine Settings

To set the Shop and Machine names, the database connection information must be set.



- **Configure** – Opens the connection information to set database connection settings.
- **Shop Name** – The name of the shop this instance of the application belongs to.
- **Machine Name** – The name of the machine this instance of the application should be configured to collect data for.

Connection Information

The screenshot shows a 'Configure Server Connection' dialog box. It is divided into three main sections. The first section, 'Server Name', has a dropdown menu with the value '192.168.73.6,49206' and a 'Refresh' button. The second section, 'Log on to the server', has two radio buttons: 'Use Windows Authentication' (unselected) and 'Use SQL Server Authentication' (selected). Below these are text boxes for 'User Name' (containing 'wsmlogin') and 'Password' (masked with dots), and a checked checkbox for 'Save my password'. The third section, 'Connect to a database', has two radio buttons: 'Select or enter a database name' (selected) and 'Attach to a database file' (unselected). Below these are a dropdown menu with 'WSMS_V15', a 'Browse' button, and a 'Logical Name' text box. At the bottom of the dialog are three buttons: 'Test Connection', 'OK', and 'Cancel'.

- **Server Name** – The name or address of the server hosting the Wheel Shop Management Suite Database. For Print Shop, this is typically 'localhost\WSA'
- **Log on to the server** – The log on information for the selected server.
- **Connect to a database** – The name of the Wheel Shop Management Suite database; typically 'WSMS'
- **Test Connection** – Attempts to open a connection to a database using the specified parameters. Displays a message indicating success or failure.

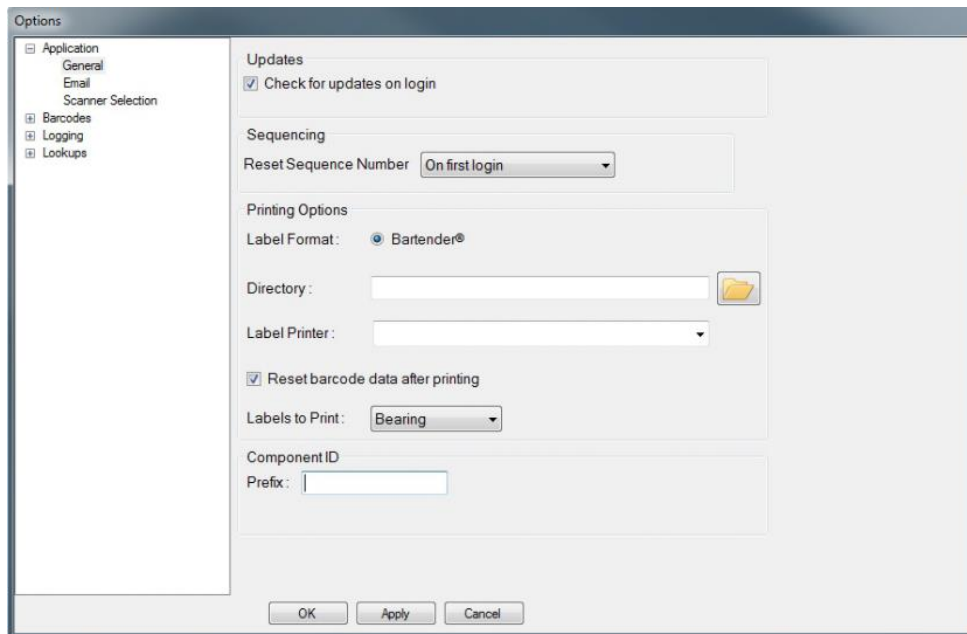
Options

The Options dialog is used to configure certain aspects of the application, described below.

- **General – Barcodes** – Options related to barcode scanners or labels.
- **Charts** – Options related to displaying mounting charts or tonnage trend charts.
- **Database** – Options related to the database connection or machine configuration.
- **Data Acquisition** – Options related to the data acquisition device(s) connected to this machine
- **Logging** – Options related to the log file generated by this application.

Application

General



- **Check for updates on login** – When checked, the application will check to see if a newer version exists each time a user logs in. If a newer version exists, the operator is prompted to update.
- **Request Sequence number** – Determines when to reset the machine's sequence number, if relevant.
- **Directory** – Set the directory containing labels.
- **Label Printer** – Select the printer to use.
- **Reset barcode data after printing** – When checked, bar code data will be reset after printing
- **Labels to Print** – Select the type of label to print.
- **Component ID Prefix** – Defines the prefix for the component ID.

Email

The screenshot shows the 'Options' dialog box with the 'Email' tab selected. The left sidebar contains a tree view with the following items: Application, General, Email (selected), Barcodes, Charts, Data Acquisition, Logging, and Lookups. The main content area is divided into two sections:

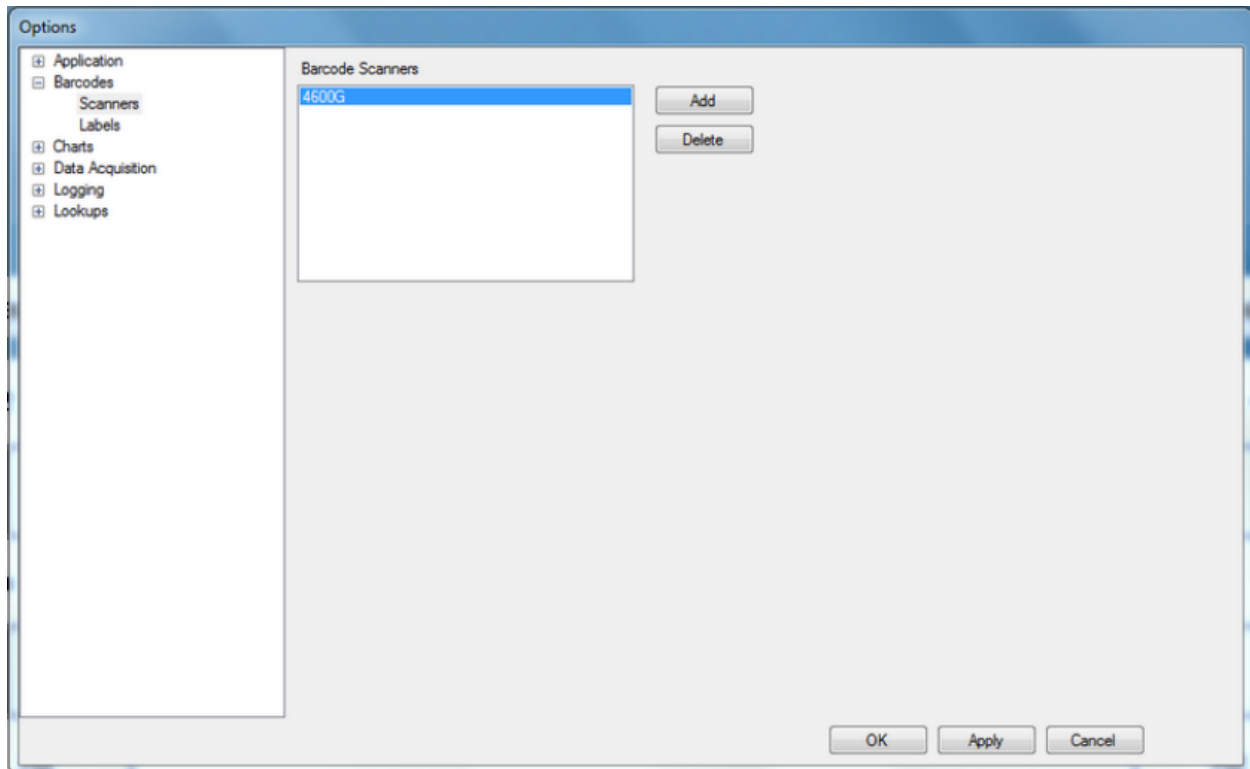
- SMTP Server**:
 - Server host name: [Text Input]
 - Port: [Text Input]
 - Requires SSL
 - User name: [Text Input]
 - User password: [Text Input]
 - Confirm password: [Text Input]
- Email Settings**:
 - Reply To Address: [Text Input]
 - Display Name: [Text Input]
 - Use as default

At the bottom right of the dialog are three buttons: OK, Apply, and Cancel.

- **Server Host Name** – Determines the SMTP server host domain name to use for outgoing mail.
- **Port** – Sets the port to use for outgoing mail.
- **Require SSL** – Determines whether outgoing mail should use Secure Socket Layer encryption.
- **User Name** – Sets the user name to use for authentication when connecting to the outgoing mail SMTP server.
- **Password** – Sets the user password to use for authentication when connecting to the outgoing mail SMTP server.
- **Reply to Address** – Sets the Reply-To mail address for outgoing mail messages.
- **Display Name** – Sets the display name for outgoing mail messages.
- **Use as Default** – Determines whether these settings should be used by default for all users.

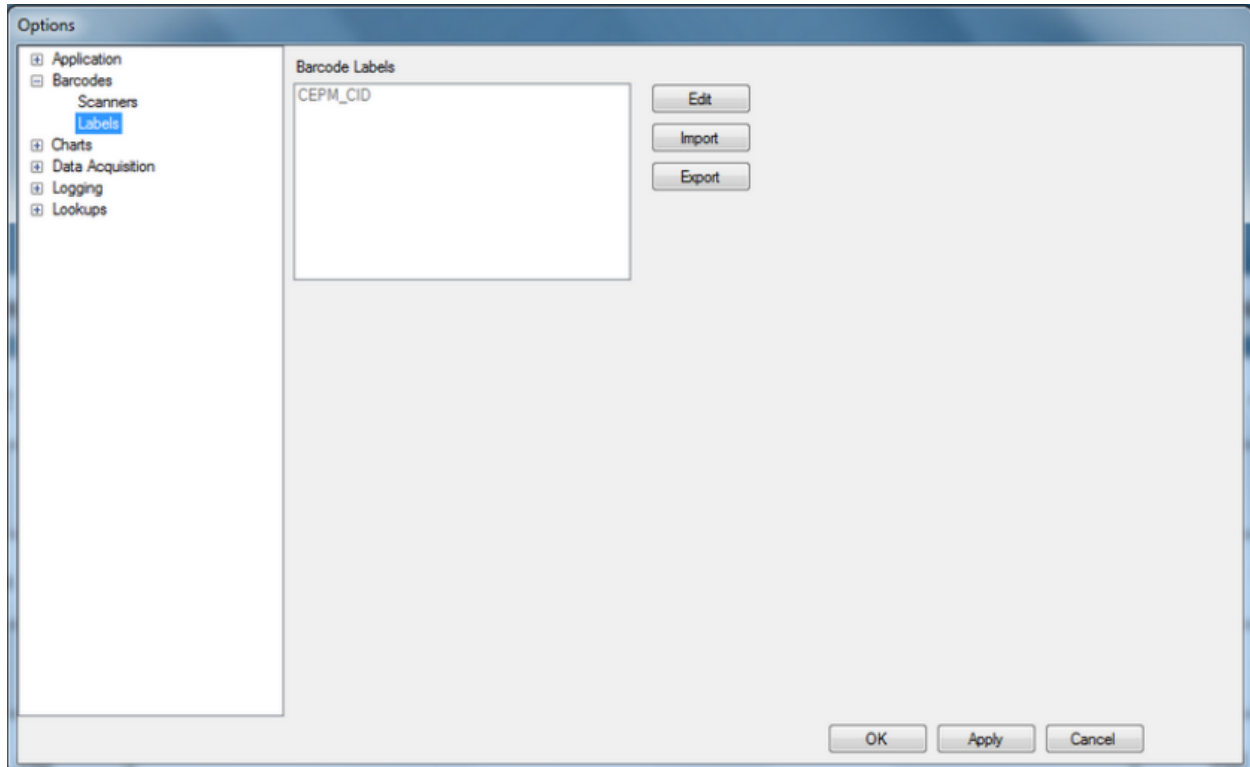
Barcodes

Scanners



- **Barcode Scanners** – Lists all scanners currently configured for use with the application.
- **Add** – Configure a new barcode scanner for use with the application.
- **Delete** – Remove a barcode scanner from use.

Labels



- **Barcode Labels** – Lists all barcode labels currently configured for use with the application.
- **Edit** – Opens the Define Barcode Label Pattern wizard dialog.
- **Import** – Opens the Import Barcode Definitions dialog.
- **Export** – Opens the Export Barcode Definitions dialog.

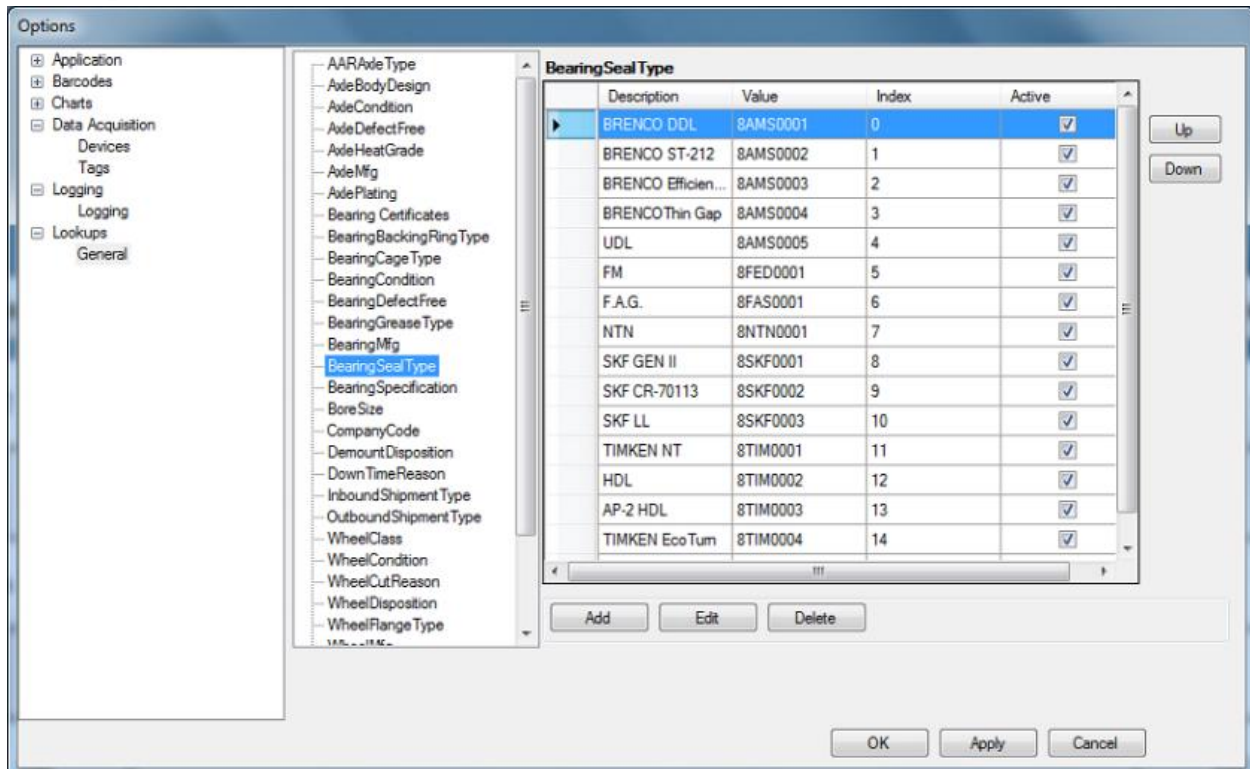
Data Acquisition

- These options are not applicable to Print Shop.

Logging

- Reserved for future use.

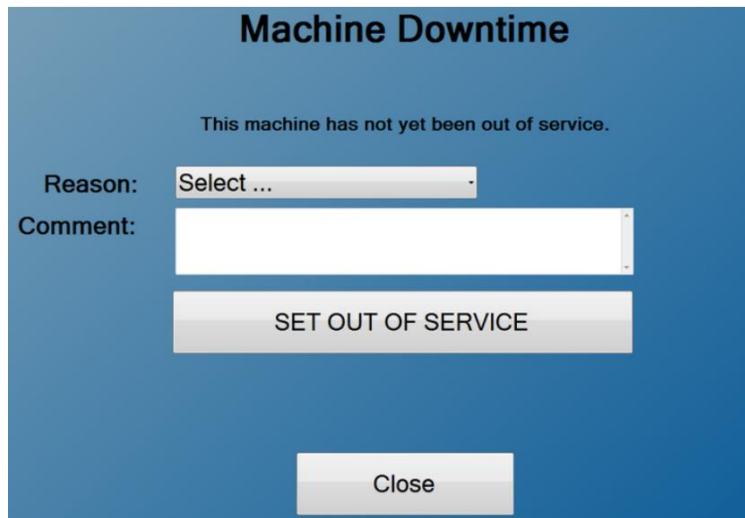
Lookups



Manages the lookup values for the dropdown selected

- **Add** – Adds a new lookup item to the selected lookup name.
- **Edit** – Modifies the selected lookup item.
- **Delete** – Removes the selected lookup item.
- **Up** – Moves the selected item up in the list.
- **Down** – Moves the selected item down in the list.

Downtime



Machine Downtime

This machine has not yet been out of service.

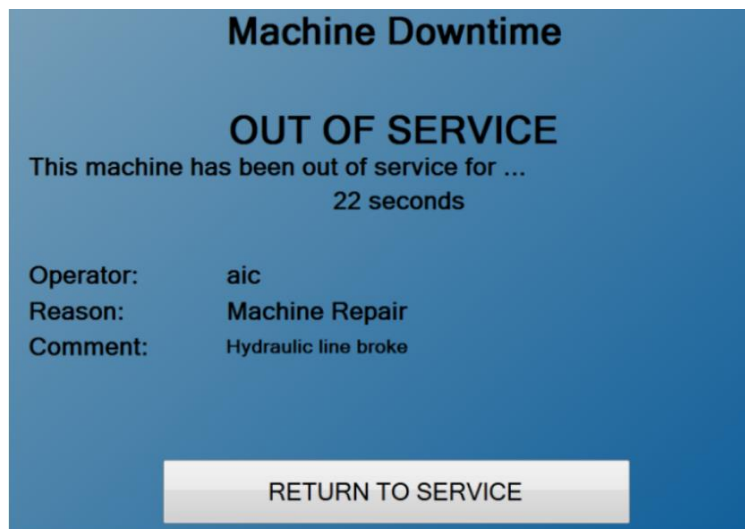
Reason:

Comment:

SET OUT OF SERVICE

Close

To set the machine out of service, select the Reason from the dropdown list. Additional reasons can be added via Shop Manager. You can also add a comment. Click on the comment box to pop up an on-screen keyboard. Once you have selected a reason and entered any optional comments, click 'SET OUT OF SERVICE'. The screen will be replaced with the following:



Machine Downtime

OUT OF SERVICE

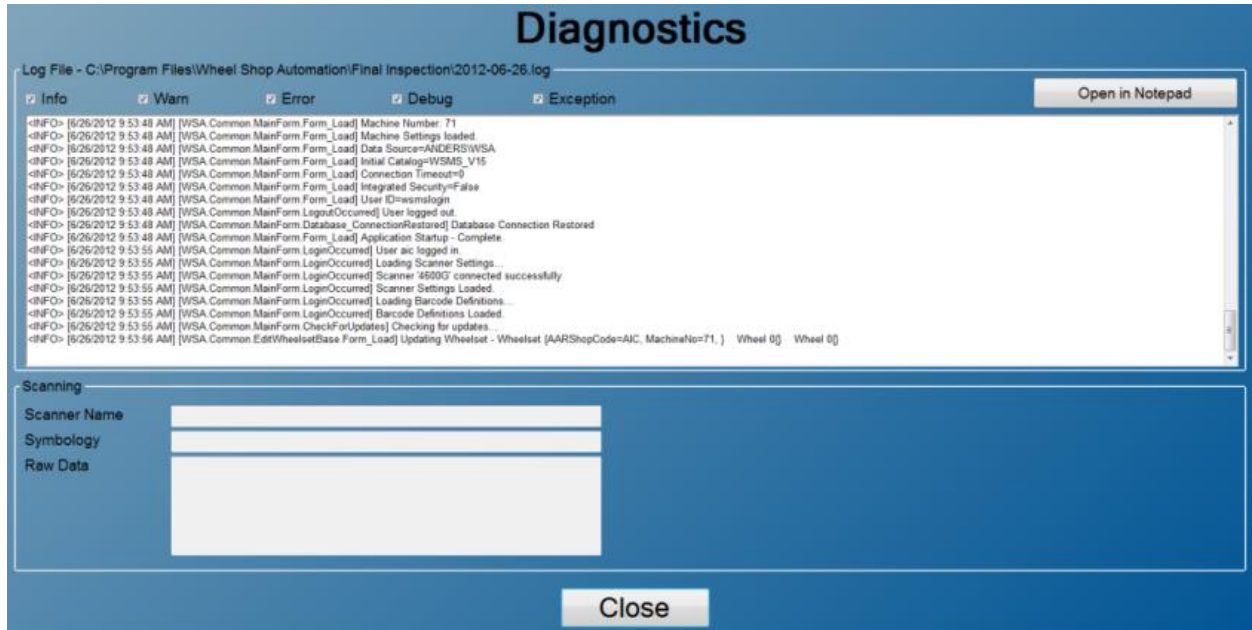
This machine has been out of service for ...
22 seconds

Operator: aic
Reason: Machine Repair
Comment: Hydraulic line broke

RETURN TO SERVICE

The Out of Service screen displays the duration of the current downtime, the user that placed the machine out of service, the reason it was placed out of service, and any comments entered. To return the machine to service, simply click the 'RETURN TO SERVICE' button.

Diagnostics



The diagnostics screen is a utility for viewing the application's log file and to test the barcode scanner(s).

To test the barcode scanner, simply scan any barcode. If the scanner is configured properly, you should see the name of the scanner, the type of barcode scanned (symbology) and the raw data that is contained in the barcode.

When you are finished using the diagnostics screen, click 'Close' to return to the previous screen.

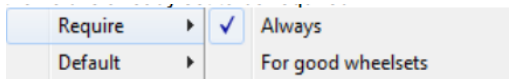
Administrator Menu

Most modes of operation allow a shop administrator to specify which fields the operators are required to enter. In some cases, fields can be required only for wheelsets that have a disposition of 'Good'. When a field has been marked as required it will either be outlined in red, or have a red background until data has been entered.

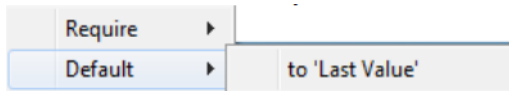


These options can only be changed by an administrator, and they can only be set with a mouse.

First, the administrator must log on and proceed to the data entry screen. Position the mouse cursor over the data entry field to be changed and right-click. The Administrator Menu will appear. A checkmark will indicate if the field is already set to be required.



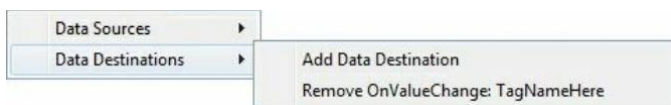
The administrator can also specify which fields can default to the value previously entered by the operator. Fields marked as 'Default' will retain their last value, unless the user changes it. This prevents the operators from having to enter the same information repeatedly, but it could also increase user errors if the user forgets to change the data entry when a change occurs. A checkmark will indicate if the field is already set to default to the last value.



The Administrator Menu also allows the administrator to add a data source or data destination to user controls, such as buttons and data entry fields. These menu items will only be displayed if a data tag has been added under the Options Dialog. Not all controls support this feature.



To add a data source to a control, right-click the control and select 'Add Data Source' from the 'Data Source' sub-menu. To add a data destination to a control, right-click the control and select 'Add Data Destination' from the 'Data Destination' sub-menu. After a data source or destination has been added to a control, it can be removed by right-clicking on the control, accessing the respective 'Data Sources' or 'Data Destinations' sub-menu, and clicking on the 'Remove' item that corresponds to the appropriate data source or data destination.



Appendix A: Frequently Asked Questions (FAQ)

Appendix B: License

WHEEL SHOP MANGEMENT SUITE END USER LICENCSE AGREEMENT

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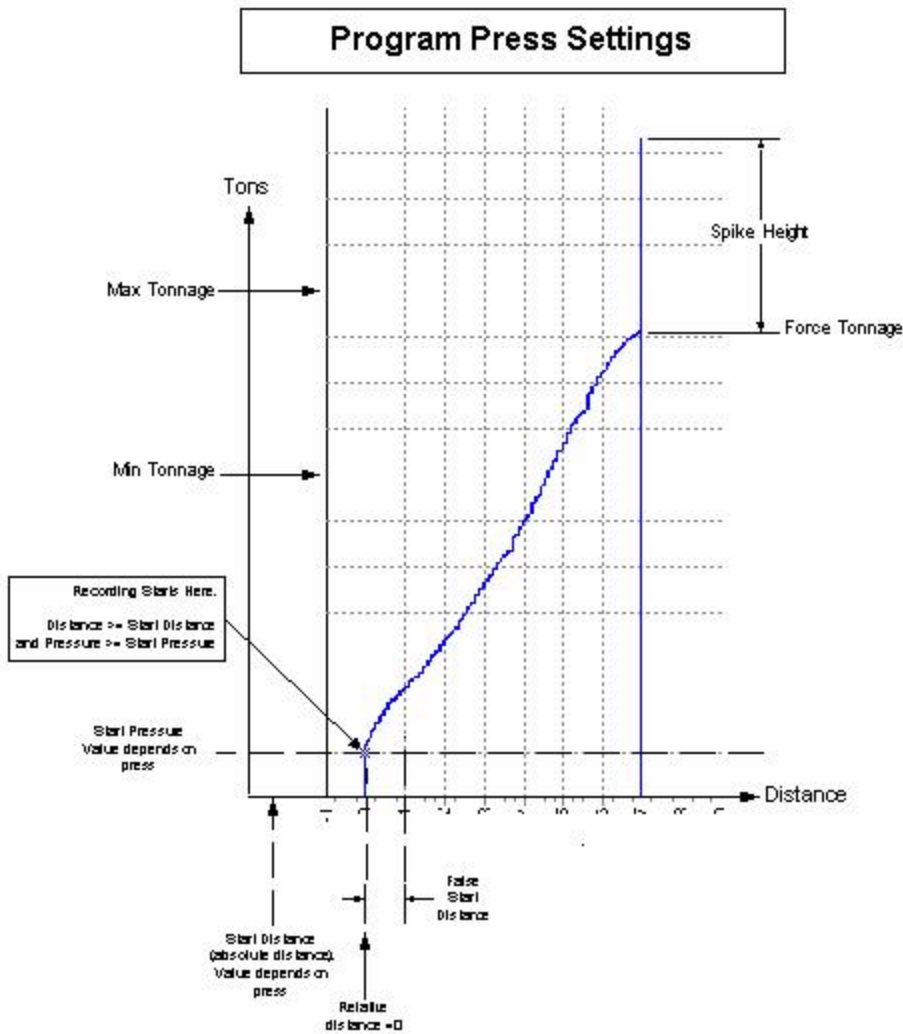
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Appendix C: Press Settings



Notes:

1. Must meet start distance (absolute distance) and start pressure to begin recording.
2. Once recording begins, if pressure drops to below start pressure before false start distance is reached, the recording stops and distance resets to 0. This is to prevent recording 'bumping'.
3. Once the false start distance is exceeded then the chart is stored as is.

Appendix D: Contact Information

Wheel Shop Automation
6100 Getty Drive
Suite N
Sherwood, AR 72117

Online Support

Visit our website at www.wheelshopautomation.com for 24/7 technical information and available downloads

Email us at support@wheelshopautomation.com

Phone Support (Existing support contract or credit card required)

Call 1-501-834-9540 or 1-877-834-9540 (toll free)