Snap-on®

LEVEL 5 ATC™

Tool Control System

INSTALLATION AND OPERATION

Form ZEAK0289J00A rev c

SAFETY INFORMATION

For your safety, read this manual thoroughly before installation of the equipment.

Installation is intended to be performed by properly trained technicians. The safety messages presented here are reminders to the installer to exercise extreme caution during installation and training on the system.

There are many variations in procedures, techniques, tools, and parts for installation due to varied shop configurations. Because of the vast versatility of installation the manufacturer cannot possibly anticipate or provide advice or safety messages to cover every situation. It is the technician's responsibility to be knowledgeable of the equipment to be installed. It is essential to use proper service methods and perform installation in an appropriate and acceptable manner that does not endanger your safety, the safety of others in the work area, the end user, or the equipment being serviced.

It is assumed that, prior to installation of the system, the operator has a thorough understanding of Automated Tool Control Systems in general. In addition, it is assumed he/she has the proper hand and power tools necessary to perform the installation, operation and training in a safe manor.

These safety precautions should always be followed, including:

1. Read all instructions.
2. Care must be taken as burns can occur from touching hot parts.
3. Do not operate power tools or equipment with a damaged power cord or if the equipment has been dropped or damaged until it has been examined by a qualified serviceman.
4. Do not let cord hang over edge of table, bench or counter or come in contact with hot manifolds or moving fan blades.
5. If an extension cord is necessary, a cord with a current rating equal to or more than that of the equipment should be used. Cords rated for less than the equipment may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
6. Always unplug equipment from electrical outlet when not in use. Never use the cord to pull the plug from the outlet. Grasp plug and pull to disconnect.
7. Let equipment cool completely before putting away. Loop cord loosely around equipment when storing.
8. To reduce the risk of fire, do not operate equipment in the vicinity of open containers of flammable liquids, such as gasoline.
9. Adequate ventilation should be provided when working on operating internal combustion engines.
10. Keep hair, loose clothing, fingers, and all parts of body away from moving parts.
11. To reduce the risk of electrical shock, do not use on wet surfaces or expose to rain.
12. Use only as described in this manual. Use only manufacturer's recommended attachments.
13. ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
14. Know and understand the proper operating procedures for all power tools used.
15. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

IMPORTANT!! SAVE THESE INSTRUCTIONS
DO NOT DISCARD!!

⚠ WARNING!

SAFETY INSTRUCTIONS
IMPORTANT!! SAVE THESE INSTRUCTIONS

Risk of electrical shock.

- Do not operate equipment with a damaged power cord or if the equipment has been dropped or damaged, until it has been examined by a qualified service person.
- If an extension cord is necessary, a cord with a current rating equal to or greater than that of the equipment should be used. Cords rated for less current than the equipment can overheat.
- Unplug equipment from electrical outlet when not in use. Never use the cord to pull the plug from the outlet. Grasp plug and pull to disconnect.
- Do not expose the equipment to rain. Do not use on wet surfaces.
- Plug unit into correct power supply.
- Do not remove or bypass grounding pin.

Contact with high voltages can cause death or serious injury.

Risk of electrical shock. High voltages are present within the console unit.

- Service on the unit must be performed by qualified personnel.
- Do not open any part of the control shelf other than noted areas.
- Turn power switch off and unplug the unit before servicing.

Contact with high voltages can cause death or serious injury.

Units can tip or strike you.

- Do not open more than one loaded drawer at a time.
- Keep children away
- Close lid and lock drawers and doors before moving.
- Apply brakes on locking casters when not moving unit.
- Do not step in or on drawers.
- Secure units together with fasteners.
- Read instruction manual.

Tipping of storage unit or unit striking you can cause injury.

Units edges can cut or pinch.

- Do not pull unit, push to move.
- Wear gloves when lifting by edges.
- Keep feet and fingers clear of edges when stacking hanging or moving units.

Units edges can cause injury.

SAVE THESE INSTRUCTIONS

SPECIFICATIONS

ATC LEVEL 5 TOOL BOX SPECIFICATIONS

ELECTRICAL SPECIFICATIONS:

- AC Input: 100-240~, 4-2A, 60-50 Hz.(+10%/-6%), 1-Phase.
- Connect to a grounded (Earthed) electrical outlet using a detachable cordset. The electrical outlet must be readily accessible.
- Maximum cord length shall be 3 meters.

Power Supply Rating:

- AC Input: 100-240~, 4-2A, 60-50 Hz. 1-Phase

ENVIRONMENTAL OPERATING SPECIFICATIONS:

- Indoor Use Only
- Temperature Range: 0-55 °C .
- Humidity Range: Maximum relative humidity 80 % for temperatures up to 31 °C, decreasing linearly to 50 % relative humidity at 40 °C.
- Altitude Range: 0-2000 Meters
- Pollution Degree: 2
- Over voltage Category: II
- Ingress Protection: IPX

SOUND PRESSURE LEVEL:

- On the drawer (operator) side @ 1 meter distance = 59.4 dBA
- On the back side @ 1 meter distance = 62.5 dBA

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INTRODUCTION

Snap-on Automatic Tool Control boxes are designed as accountability systems for users of tools in environments where safety is of utmost importance. ATC systems encourages tool responsibility while maintaining an organized inventory of tools. Advantages of the ATC system include the ability to train the unit to accept various lighting environments. The unit can adapt to tool wear and contaminants over time. Systems are setup to the unique requirements of each user work station.

A box can be configured to audit box contents by one or two users required to verify the return of tools. This is a fail safe buddy system to double check tool return. Both users will login when directed.

On delivery of the ATC system, the box needs to be trained for the environment. While the box already knows what the tool inventory is it needs to become familiar with ambient lighting and shadows. The installation technician will perform this vital procedure. The training can then be performed by the user/administrator whenever the lighting or environment changes to enhance tool recognition.

Setup also requires the Box Administrator to be determined and assigned. Box users are then assigned as well and their respective user control level (permissions).

ATC systems are connected to the Local area network or LAN, either wired or wireless, for monitoring of the box usage and inventory and reporting features.

Box sizes and configurations and inventory will vary depending on job requirements.

After configuration a user can log-in and select tools for the job. He then logs out of the system. ATC systems log the tools removed from the box by this user. Another user can login and remove tools. Any number of registered users can remove and return tools regardless of the order they were removed. The ATC unit keeps a log of each tool user for accountability.

An ATC box uses video cameras to record tool activity. Drawer activity is recorded as a JPG image and retained for record or audit by the administrator.

INSTALLATION OUTLINE OF THE LEVEL 5 TOOL CONTROL SYSTEM - ATC

1. Prior to ATC Tool Box installation the site inspection must be verified to ensure the facility is conducive to proper Box operation. The Following Inspection points must be verified:
   a. The facility must be reasonably free from moisture and condensation.
   b. Location must be indoors out of the rain.
   c. Adequate power must be available where the box is to be utilized. A UPS option is available.
   d. A single PC or laptop must be dedicated for the administration software.
   d. A local area network (wired or wireless) must be available for Administration PC to box communication.
   e. A “Secure-card” reader must be used to assign users.
   f. An adequate number of RFID cards must be available for administrator and users. One “Master Admin Badge” is included with each box for administration setup. Subsequent cards are purchased as required for the number of employees requiring box access.

2. Remove Tool Control Box Assembly from shipping pallet or container. Use care and caution as the assembly is fully loaded and heavy. The use of a lift truck is recommended. Place unit where to be installed.

NOTE: ATC Level 5 Boxes require 100-240VAC, 4-2 Amp service, 60-50 Hz.. A standard wall outlet is all that is generally required. However it is recommended the unit be placed on a dedicated circuit to eliminate any line noise.

3. Inspect each drawer for damage or misplaced tools as shipped from factory. A manual key, provided, can be used to open the drawers until which time the unit is setup for users.

4. Power up the box and allow unit to boot up, this may take several moments.

5. Box Setup

6. Connect Network at box location

7. Load Administration Software and Setup

8. Add users and permissions and card programming.
   a. Connect to ATC Box
   b. Import user photos
      I. Store to: local drive “c:\Snap-on\ATC\EmployeePhotos”
   c. Program cards
   d. Edit cards and user permissions

9. Train on administration software features and reports.

10. Explain how to secure a backup of the system configuration and other files.

11. Synchronize the box and Administrators PC.

12. Train on ACT Box screen navigation and features.
    a. Box do’s and don’t’s
    b. Box indicators:
       - Border surrounding the screen: green OK, flashing green - Tools checked out, red with a verbal “attention” meaning drawer is open or serious error that requires attention. Generally if this happens the unit cannot be logged out until the error is corrected.
       - Drawer indicators: Clear drawers are OK and tools accounted for, yellow tools checked out, red a drawer is open, candy cane strip incomplete or error in drawer scan.

13. Perform drawer calibration.

14. Box maintenance procedures

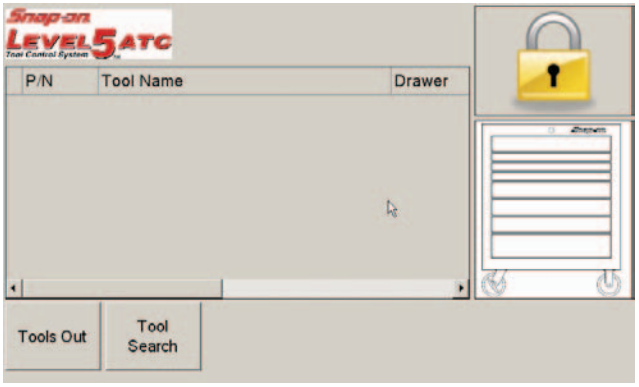
NETWORKING ATC

A requirement for the ATC system is a wireless or wired local area network. The system WILL NOT operate properly when both a wired connection and wireless connection to the same network is used. The person(s) responsible for the local network should be on hand to answer any questions that might come up while connecting the ATC to the network. The ATC toolbox can use the following wireless security encryption “WEP, WAP, WPA2, WPA-PSK”. This security will keep outside intruders from entering the system.

ADDING THE TOOLBOX TO A WIRELESS NETWORK:

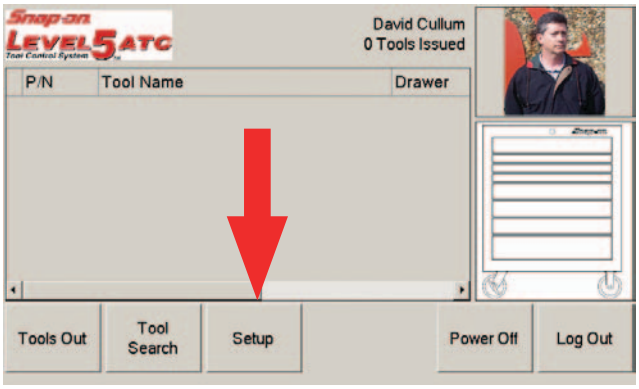
It is highly recommended that both an external USB keyboard and a USB mouse be used when setting up the wireless network connections. This will simplify the process. There are 2 USB ports on the back of the unit for this purpose. The wireless network must be active to complete the following procedure.

1. Plug the power cord into an appropriate wall outlet.
2. From the back of the unit switch the power switch to the on position.
3. After several seconds the ATC’s Home Menu will appear.



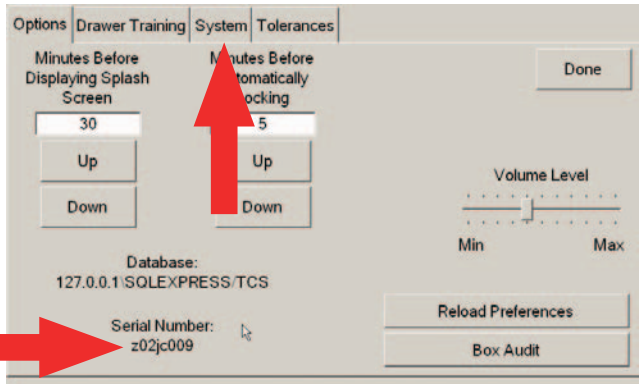
4. If this is the initial ATC installation a Snap-on service representative will enter the ATC service code on the keyboard to gain access to the box. If this is not the initial installation use a previously configured user card and the card reader on the front right of the ATC to log into the system. This user card must have been given full administration privileges to this ATC unit.

5. Using your mouse pointer click on <Setup> button. If a mouse is not used a simple finger touch will select any button when touched.

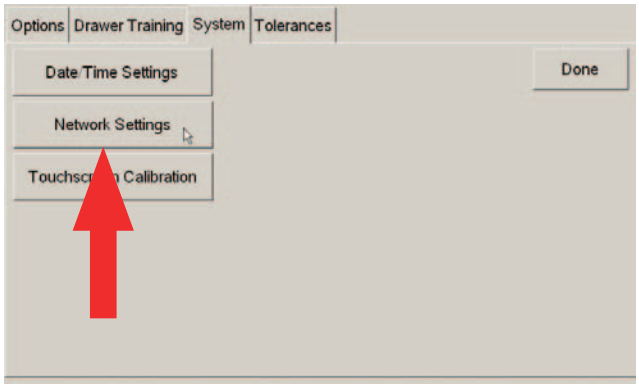


6. Select the “Systems” tab at the top of the page.

NOTE: THE SERIAL NUMBER AT THE BOTTOM OF THE SCREEN. MAKE NOTE OF THIS SERIAL NUMBER AS IT WILL BE USED WHEN CONNECTING THE SYSTEM ADMINISTRATOR PC WITH THE ATC TOOLBOX.

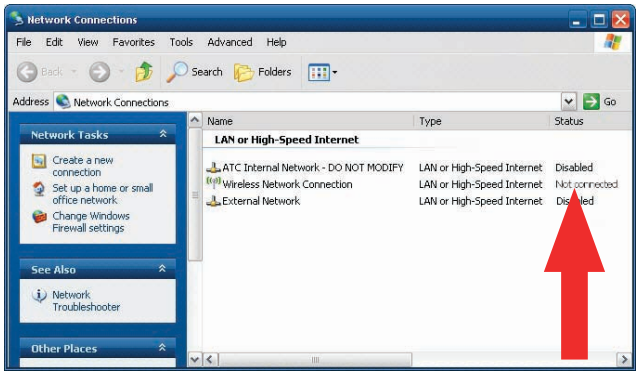


7. Select the <Network Settings> button.



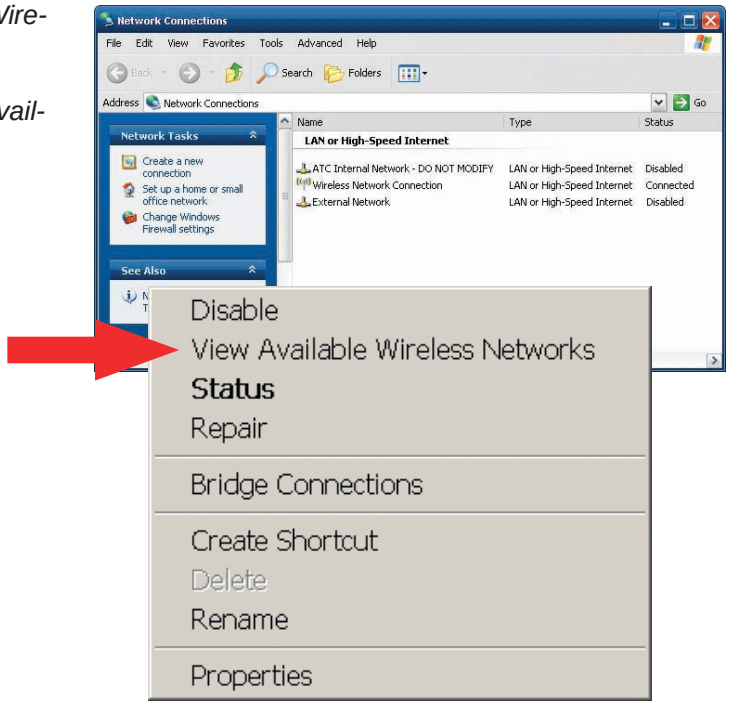
8. The User is presented with a Windows Network Connections menu. The illustration to the right shows that the toolbox is ***NOT CONNECTED*** to a wireless network.

9. Any specialized network configuration changes required by the individual responsible for the ATC local area network should be performed at this time.

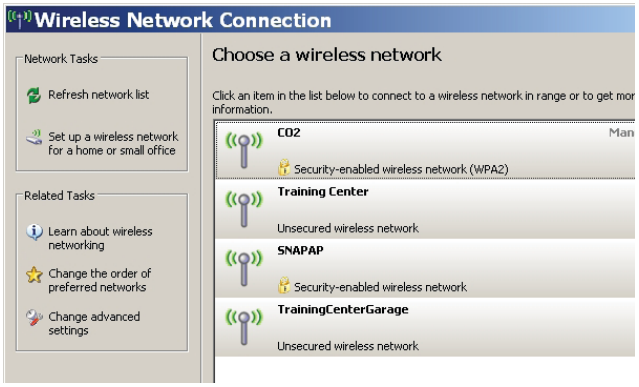


10. Using the mouse pointer right click on the "*Wireless Network Connection*".

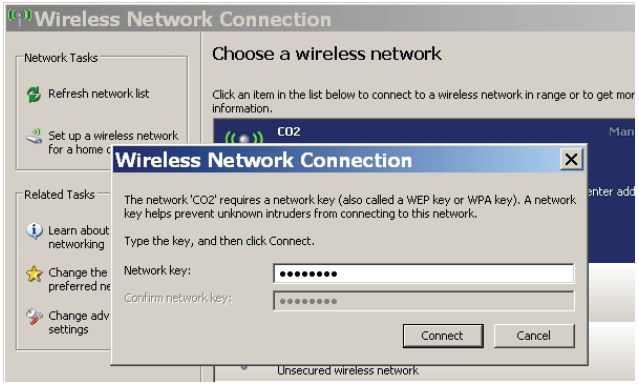
11. Using the mouse click on the option "*View Available Wireless Networks*".



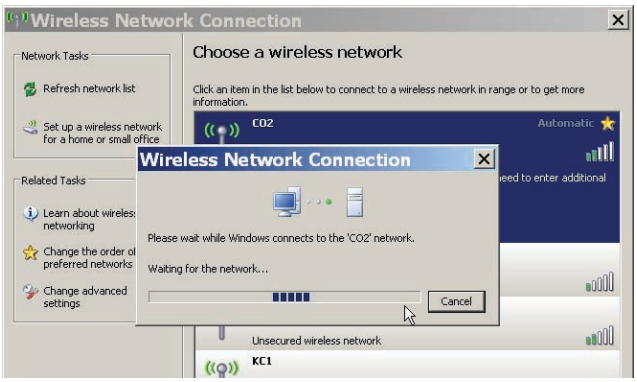
12. The system will pull up all network connections that are available within it's wireless range. This range is dependent on the location of the Wireless Access Point better known as a WAP. For this manual our system located several Networks. We will be using the "CO2" Wireless network.



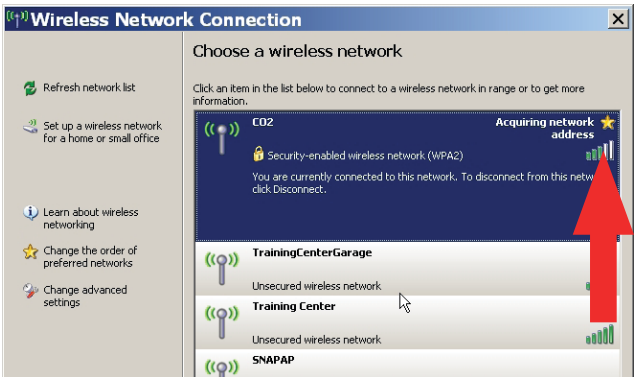
13. Double click on the desired network. The wireless security used at the job site will determine if a password will be required to join the network. For our system a password is required. Carefully enter that password. The network password is case sensitive and must be entered exactly to connect. Once entered click on the <Connect> button.



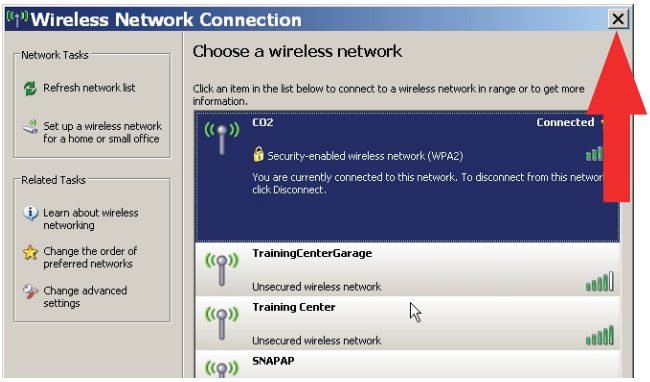
14. The system will automatically connect to the network providing the correct Password is used.



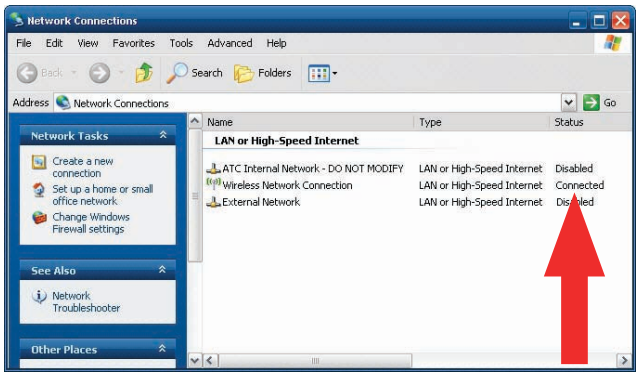
15. After connecting the system will acquire all wireless information needed.



16. After all requirements are met the ATC system will display that it has connected to the wireless network. Click on the “X” in the upper right corner to exit this menu.

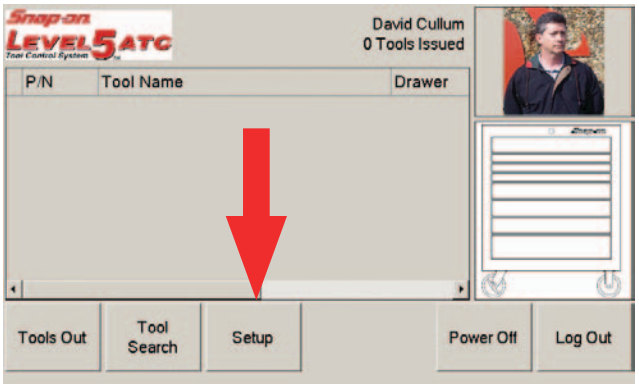


17. The Windows LAN connection menu will now display that the unit is connected to the system. Click on the “X” in the upper right corner to exit this menu.



ADDING THE TOOLBOX TO A WIRED NETWORK

Both an external USB keyboard and a USB mouse may be required when setting up the wired network connections. There are 2 USB ports on the back of the unit for this purpose. The wired network must be active to complete the following procedure.



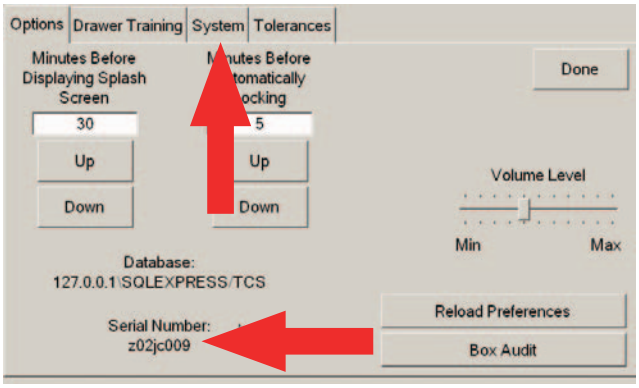
1. Connect the wired network to the ethernet port on the back of the ATC unit.

2. Plug the power cord into a 100-240~ volt, 4-2A, 60-50 Hz.wall outlet.

3. From the back of the unit switch the power switch to the on position.

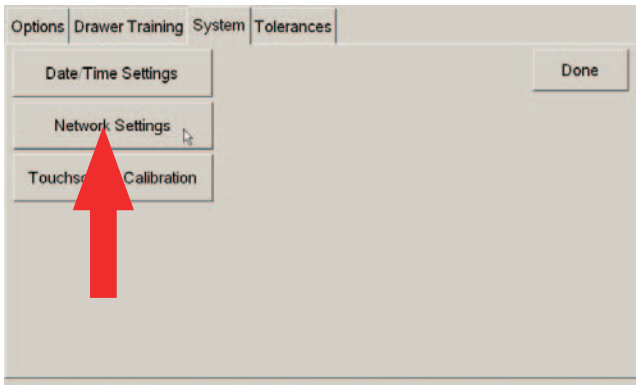
4. After several seconds the ATC's Home Menu will appear.

5. If this is the initial ATC installation a Snap-on service representative will enter the ATC service code on the keyboard to gain access to the box. If this is not the initial installation use a previously configured user card and the card reader on the front right of the ATC to log into the system. This user card must have been given full administration privileges to this ATC unit.



6. Using your mouse pointer click on <Setup> button. If a mouse is not used a simple finger touch will select any button when touched.

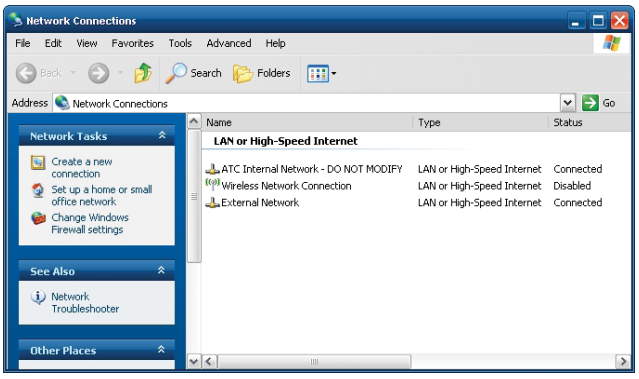
NOTE: THE SERIAL NUMBER IS AT THE BOTTOM OF THE OPTIONS SCREEN. MAKE NOTE OF THIS SERIAL NUMBER AS IT WILL BE USED WHEN CONNECTING THE SYSTEM ADMINISTRATOR PC WITH THE ATC TOOLBOX.



7. Select the "Systems" tab at the top of the page.

8. Select the <Network Settings> button.

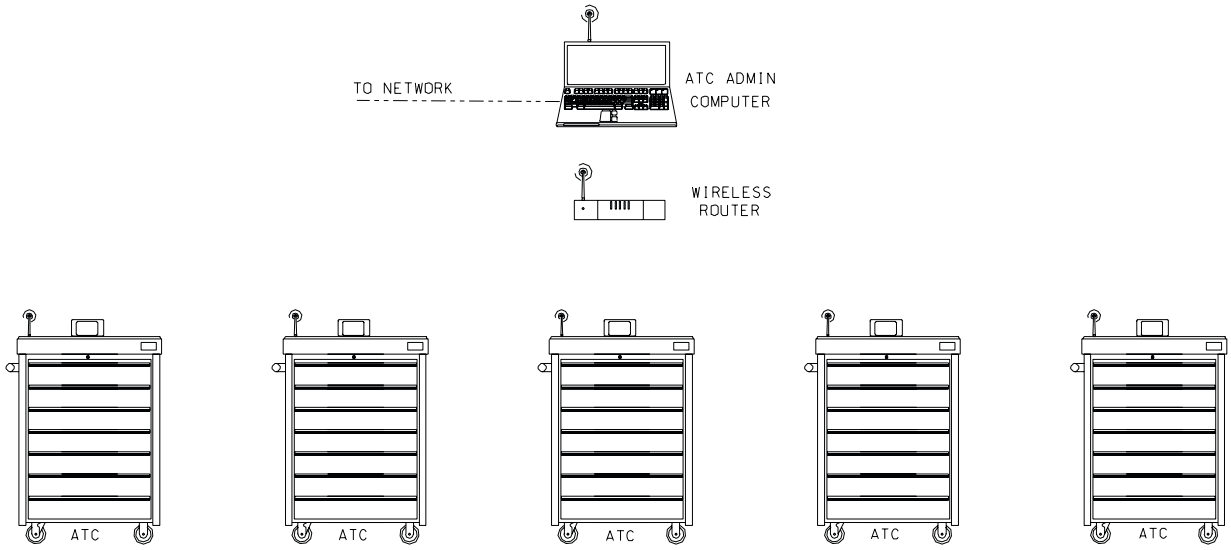
9. Any specialized network configuration changes required by the individual responsible for the ATC local area network should be performed at this time.



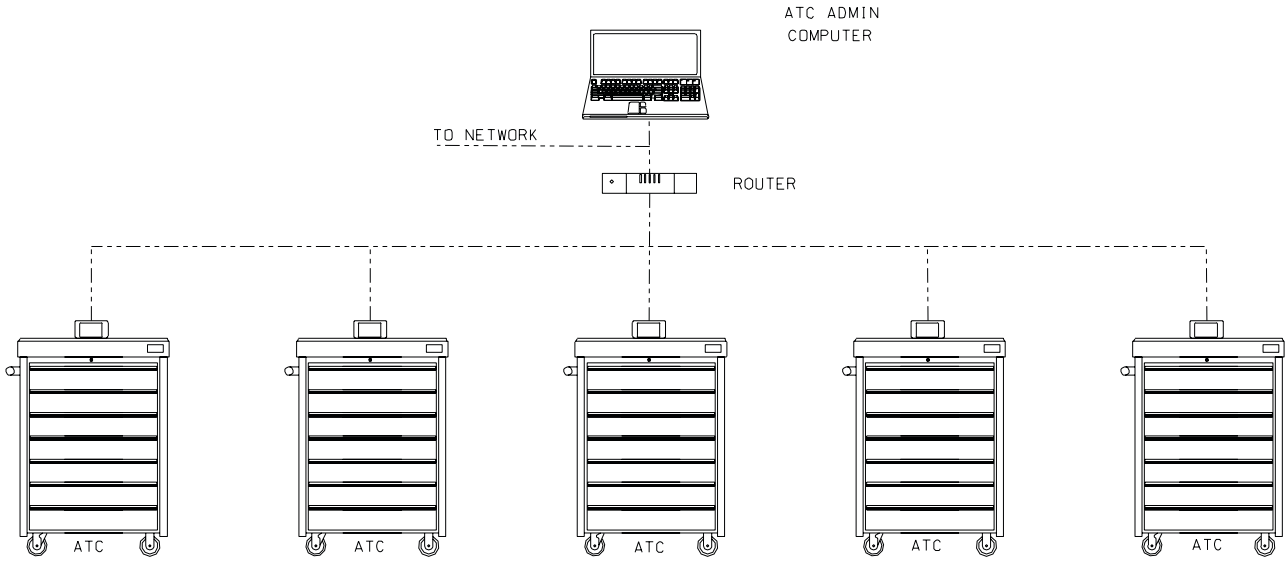
10. The Windows LAN connection menu will now display that the unit is connected to the system. Click on the "X" in the upper right corner to exit this menu.

Networking Multiple ATC Units

Wireless Network



Wired Network



ATC BOX SETUP

DRAWER TRAINING

Although each tool box has drawer training performed during manufacturing, the procedure must be performed again upon installation on the job site. Drawer training ensures optimized camera efficiency when tools are removed and returned. Every job site has unique lighting conditions which necessitate the training. Follow these detailed instructions for proper training.

The Drawer training procedures can be performed when the foam molding gets dirty and/or changes color, when the tools are worn, or light conditions have changed from last training.

Three drawer training procedures are available:

First is a complete training procedure required when new drawer liners, tools or cameras are installed.

The second procedure is a much quicker or Abbreviated procedure that skips several steps including tool removal. This procedure allows the box user to again optimize changing light or tool conditions to optimize performance.

The third procedure produces the highest level of training accuracy and should be used to achieve the highest level of performance.

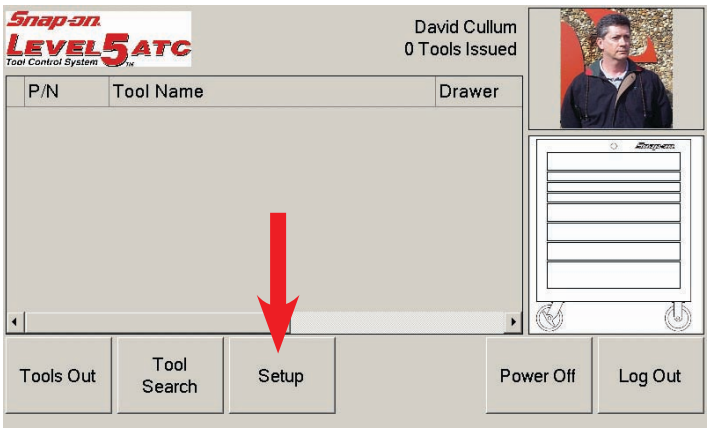
All new boxes when setup for the first time will display a note stating the cameras have already been trained. This is because they are trained during the manufacturing procedures to ensure proper operation.

NOTE: A USER MUST HAVE TRAINING PERMISSIONS TO PERFORM DRAWER OR BOX MAINTENANCE.

NOTE: ALL TOOLS CONTAINED IN THE DRAWER(S) BEING TRAINED MUST BE AVAILABLE AND PRESENT FOR PROPER TRAINING.

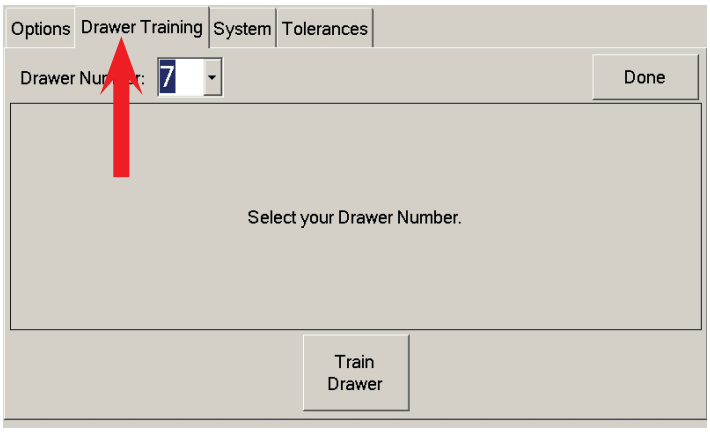
COMPLETE DRAWER TRAINING

From the Main screen select “Setup”.



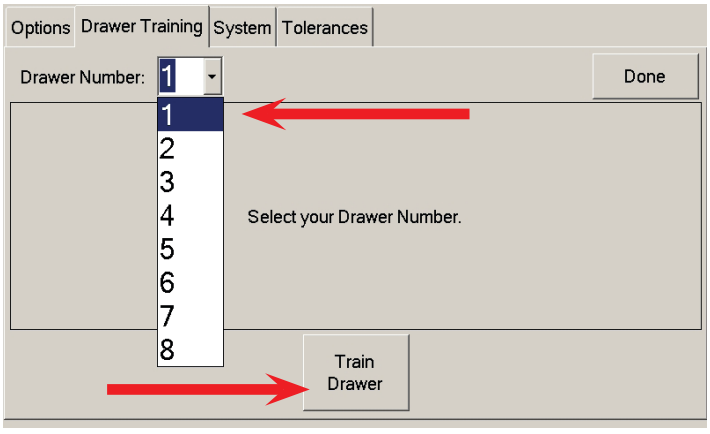
Select “Drawer Training”.

Select the drawer requiring training. If all drawers require training select drawer one.

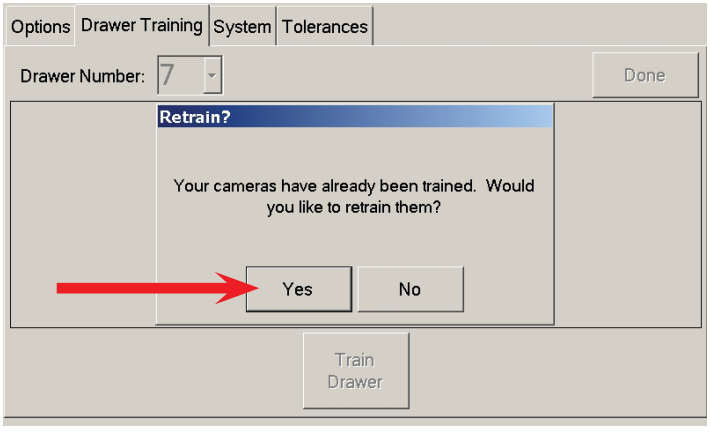


Select “Train Drawer” to begin.

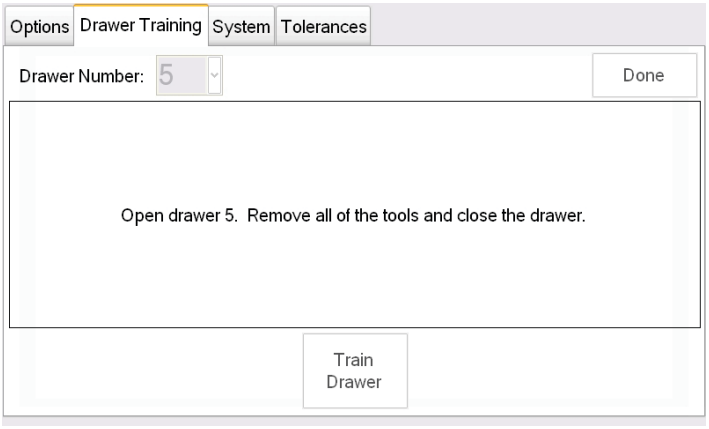
Most boxes will display the message to the right stating that the cameras have already been trained and do you wish to proceed. Select “Yes” ***ONLY*** if you are sure you wish to proceed.



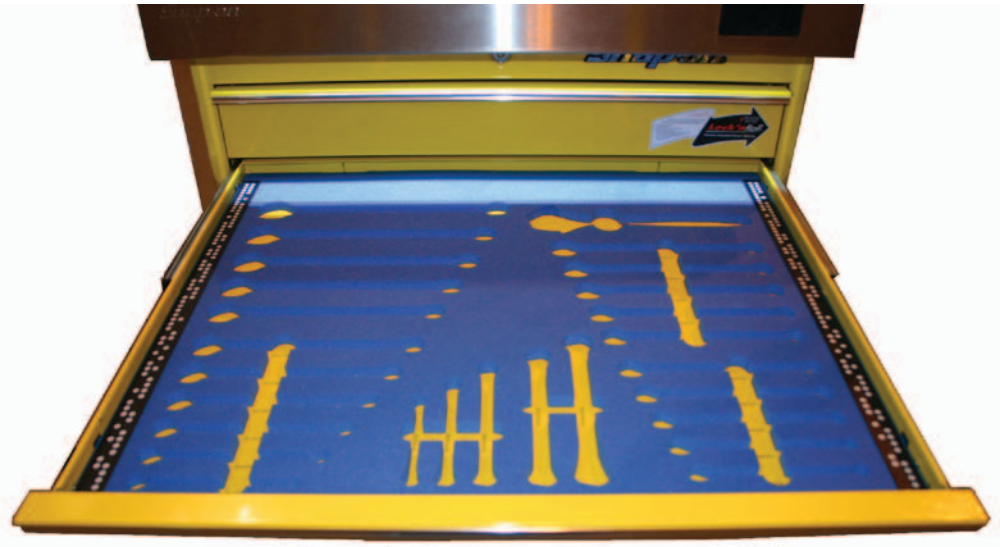
NOTE: ***THIS PROCEDURE WILL COMPLETELY RETRAIN THE CAMERAS WHICH CAN BE A LENGTHY PROCESS. IF YOUARE NOT SURE THIS IS THE PROCEDURE TO FOLLOW GO TO SECTION II FOR THE ABBREVIATED PROCEDURE.***



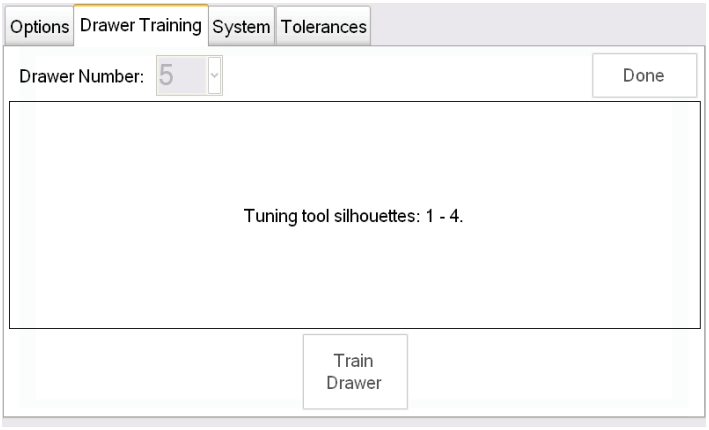
The next step requests for all tools to be removed from the selected drawer. However, it is ***NOT*** required to do so. You may leave all of the tools in the drawer unless the system requests that you remove a specific tool group.



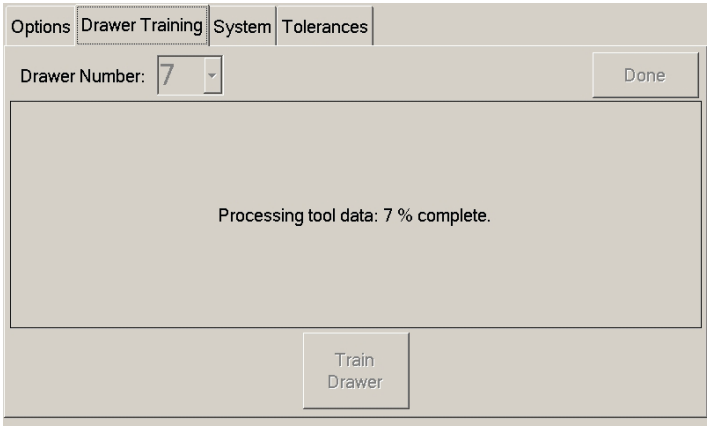
Slowly close the drawer.



Images will be processed to align the system cameras. Each cutout or silhouette position will be precisely tuned.



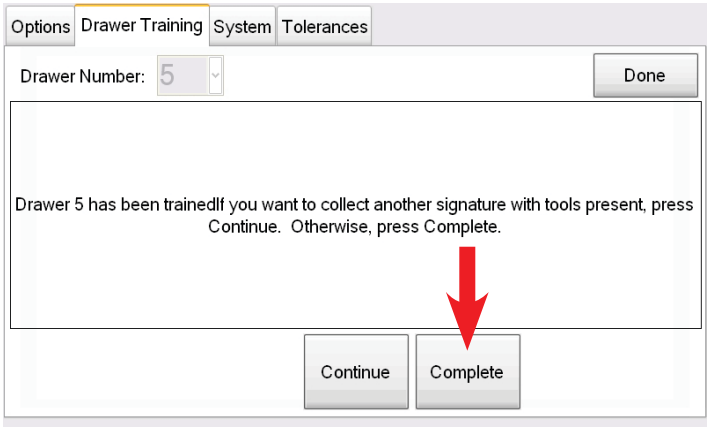
Please wait while the data is processed. This may take several moments.



Open the drawer being trained and check that all tools are present. Close the drawer slowly. The toolbox will momentarily lock and then unlock in order to capture all necessary data.

This drawer has been trained. If additional signatures are required with tools present, press “Continue, otherwise select “Complete”. When collecting additional present signatures the box will not lock and unlock like it did during the collecting of the first present signature. Collecting additional present signatures is recommended to increase the accuracy of the system.

NOTE: ADDITIONAL SIGNATURES MAY BE REQUIRED WHEN TOOLS WITH MULTIPLE SIDES OR IMAGES ARE POSSIBLE, SUCH AS A SCREWDRIVER WITH TWO COLORS OR THREE SIDES. ROTATE OR RE-POSITION THOSE TOOLS TO COLLECT ADDITIONAL IMAGES.

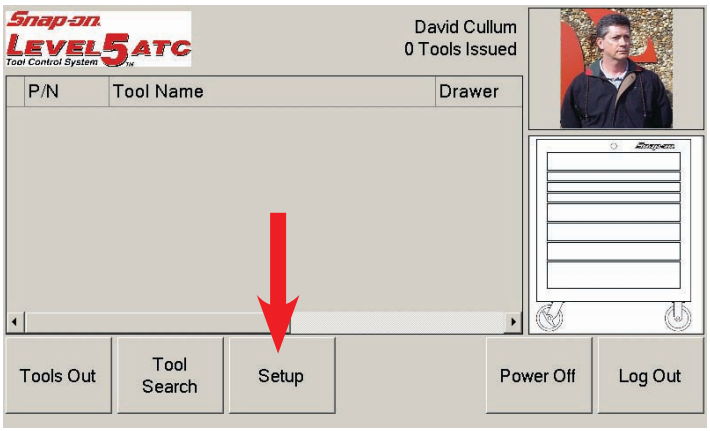


ABBREVIATED DRAWER TRAINING

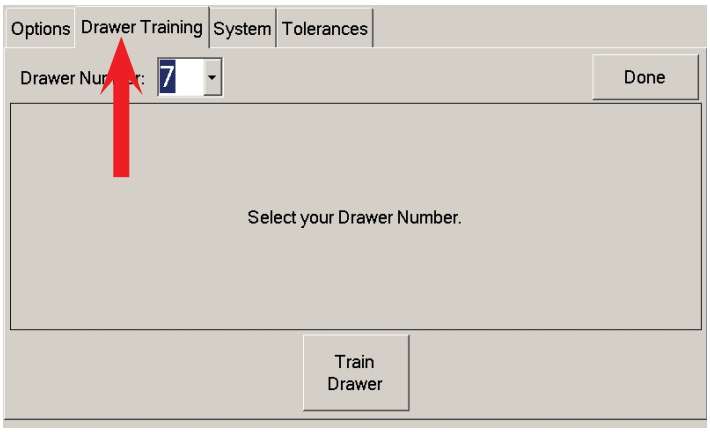
Once a Tool Box has had its drawers trained once, an Abbreviated training is generally all that is required to maximize its efficiency.

Follow these steps to complete the abbreviated procedures.

From the Main screen select “Setup”.

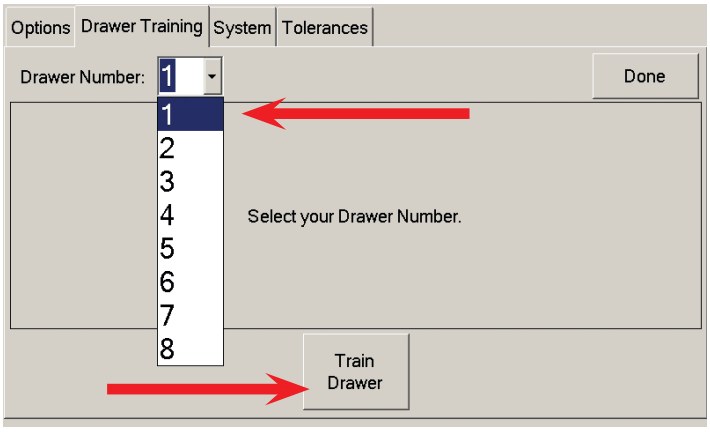


Select “Drawer Training”.



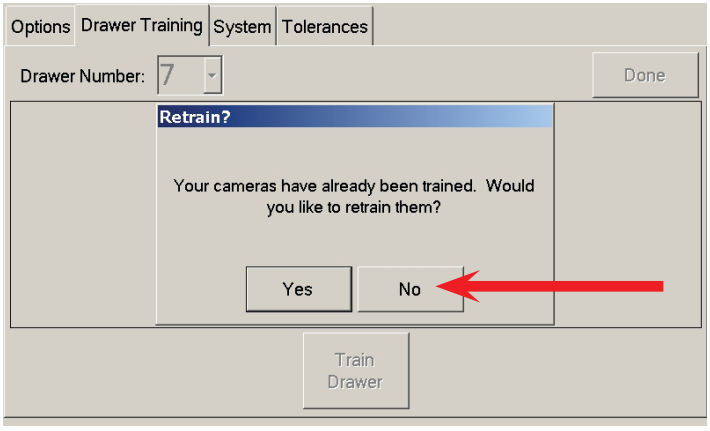
Select the drawer requiring training. If all drawers require training select drawer one.

Select “Train Drawer” to begin.

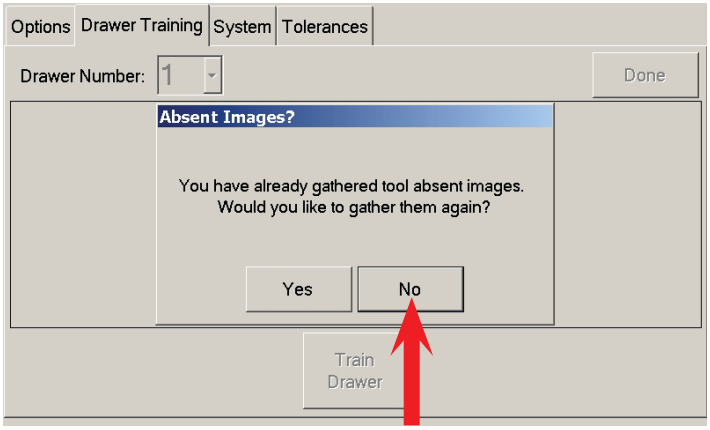


NOTE: THE NEXT 2 STEPS ARE VERY IMPORTANT!

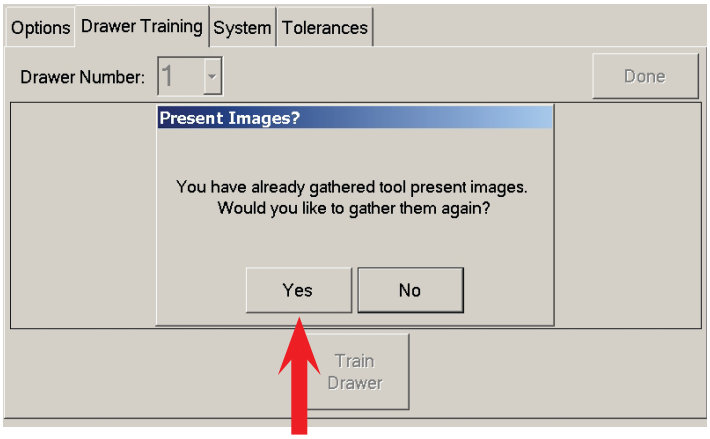
Most boxes will display the message to the right stating that the cameras have already been trained and do you wish to proceed. Select “No” to proceed. Selecting Yes will force you to perform a complete drawer training.



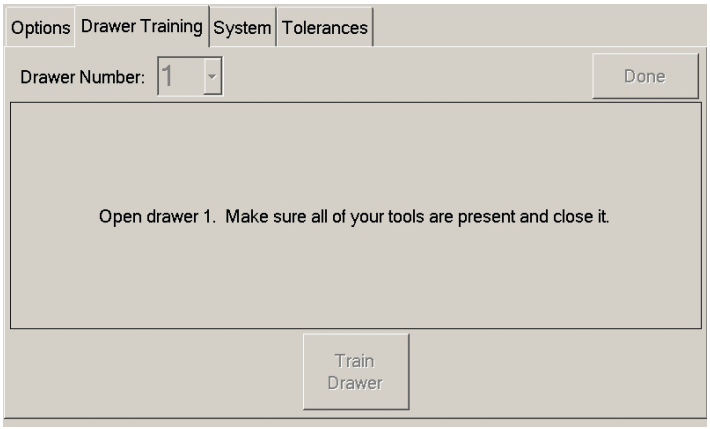
Select “No” when prompted. Selecting Yes will force you to perform a high reliability drawer training with tool removal.



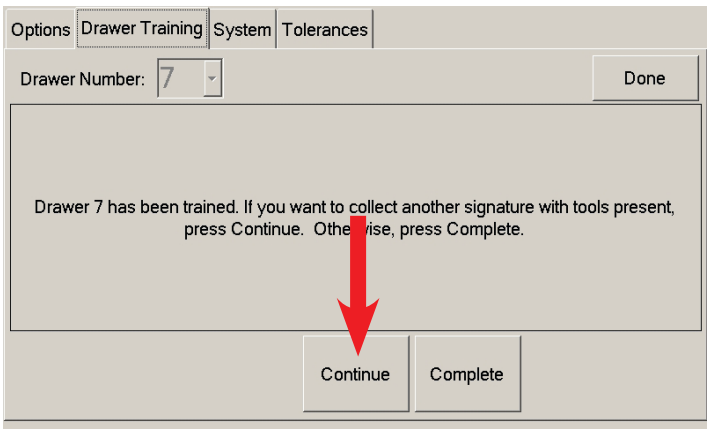
The next step asks if you would like to gather images with tools present. Select “Yes” to continue.



Open the selected drawer making sure ALL tools are present. Close the drawer normally. The toolbox will momentarily lock and then unlock in order to capture all necessary data.



This drawer has been trained. If additional signatures are required with tools present, press “Continue, otherwise select “Complete”. When collecting additional present signatures the box will not lock and unlock like it did during the collecting of the first present signature. Collecting additional present signatures is recommended to increase the accuracy of the system.



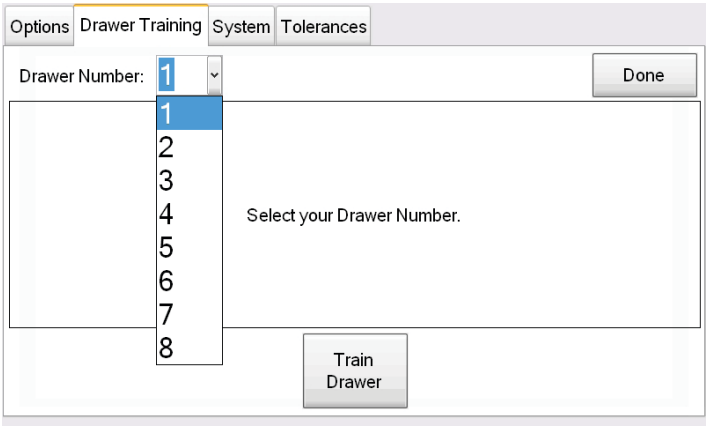
NOTE: ADDITIONAL SIGNATURES MAY BE REQUIRED WHEN TOOLS WITH MULTIPLE SIDES OR IMAGES ARE POSSIBLE, SUCH AS A SCREWDRIVER WITH TWO COLORS OR THREE SIDES. ROTATE OR RE-POSITION THOSE TOOLS TO COLLECT ADDITIONAL IMAGES.

HIGH ACCURACY DRAWER TRAINING

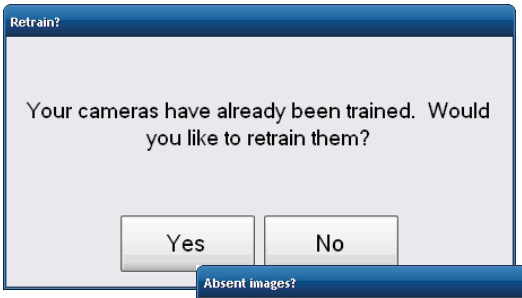
After completing either a Complete Drawer Training or an Abbreviated Drawer Training the following procedure may be used to achieve the highest level of accuracy. This procedure will require the removal of all tools from the drawer being trained.

Select the drawer requiring High Accuracy training.

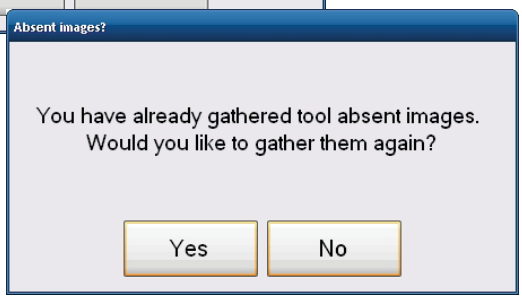
Select the drawer to be trained then select “Train Drawer” to begin.



The ATC unit will display the message to the right stating that the cameras have already been trained and do you wish to proceed. Select “No” to proceed.

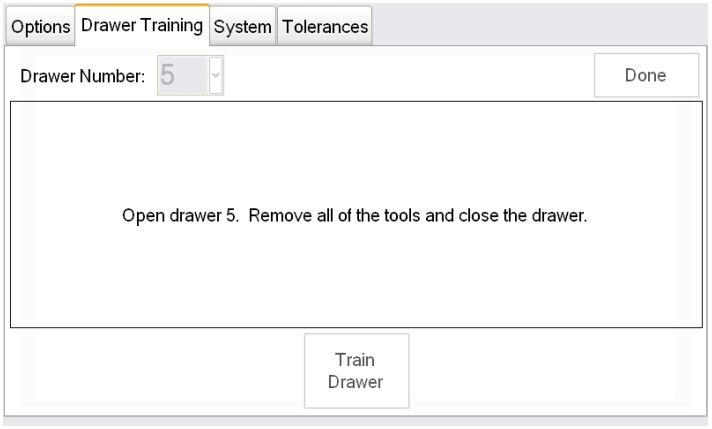


The next step asks if you would like to gather images with tools absent. Select “Yes” to continue.



The next step requires all tools to be removed from the selected drawer only.

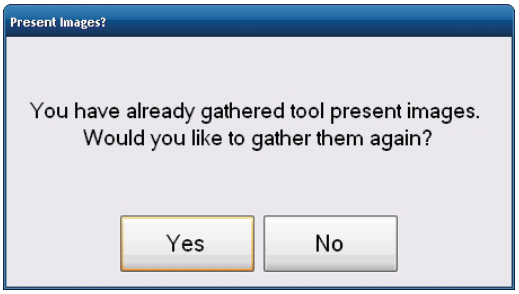
Slowly close the drawer.



The next step asks if you would like to gather images with tools present. Select “No” to continue.

This drawer has been trained.

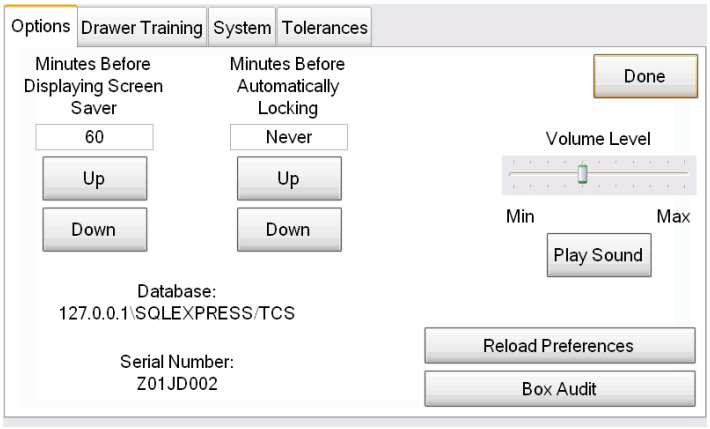
Press Done to return to the Home menu.



ADDITIONAL SETUP TABS

OPTIONS

This screen allows adjusting the screen time out delays. Select the Up or Down buttons to increase or decrease the time before Displaying the Splash Screen and the Automatic Locking feature.



The system speaker volume can be adjusted on this screen. Move the slider bar to the desired volume level. Click on “Play Sound” to test the volume.

The Box serial number and database name are displayed on this screen. This information must be recorded in order to set up Administration rights when the Admin software is loaded on a PC.

Select “Reload Preferences” to immediately load any changes synchronized from the administrator software.

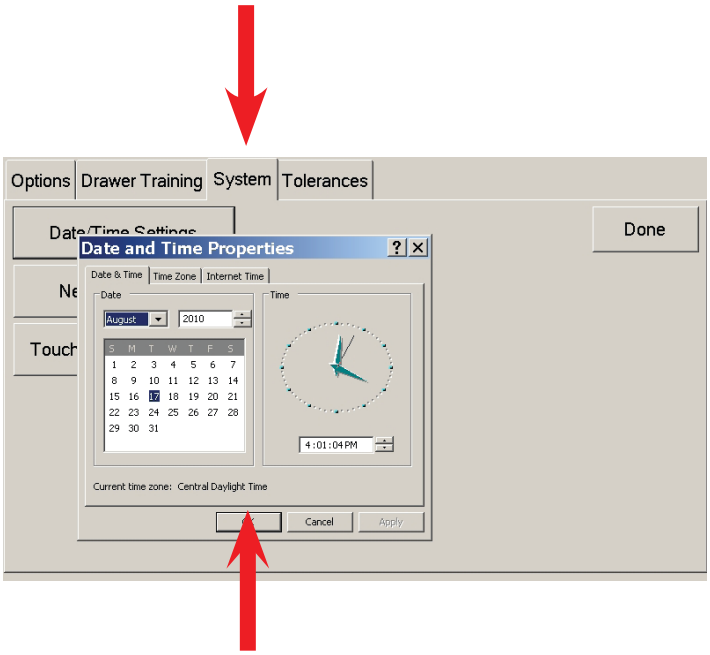
Selecting “Box Audit” requires the logged in user to open all drawers one at a time so the unit can audit all tools. A record of inventory is then created for that user.

When features on this screen are satisfactory select “Done” to save and return to the main screen.

SYSTEM

DATE/TIME SETTINGS

Select this button to open the Windows Date/Time application. Set the system time to the date, local time and time zone.

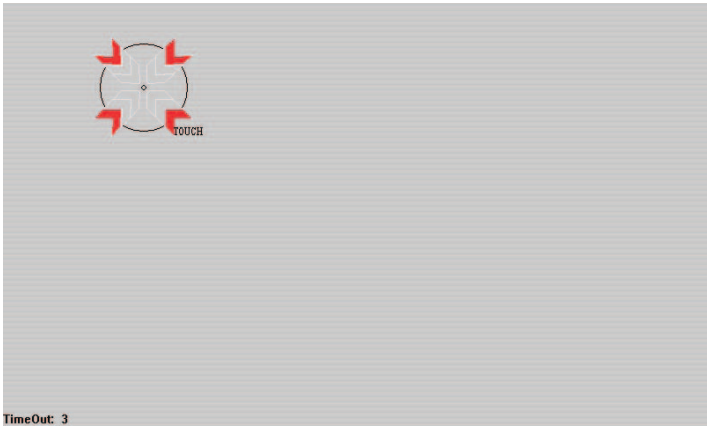


Select OK to close the application.

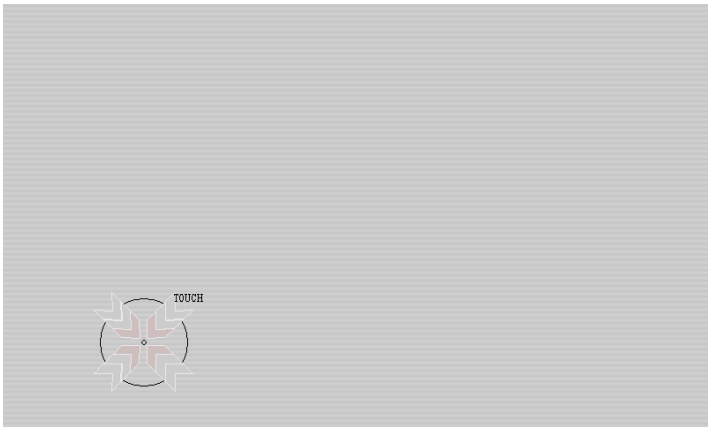
TOUCHSCREEN CALIBRATION

Select to calibrate or re-calibrate the touch screen. When prompted, touch the Target and hold until told to release.

The Target will move to four locations on the screen. Touch and release at each position.



Once all four positions have been selected, the calibration values are stored and the screen is ready for operation.



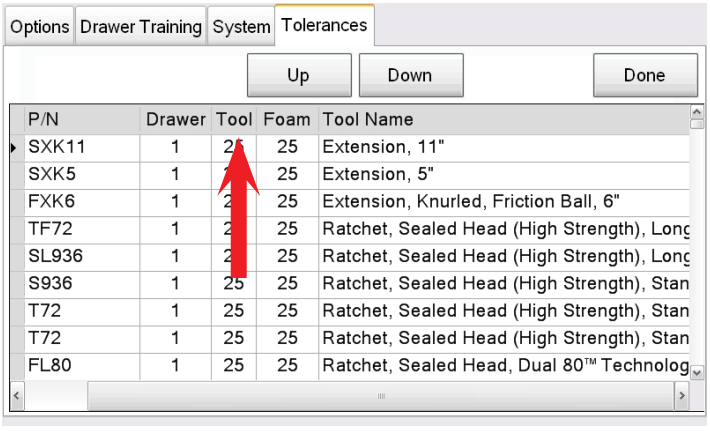
TOLERANCES

Tool detection tolerances for the tool silhouettes are programmed at the factory to achieve an optimum sensitivity balance. However, some tools may have inconsistent placement in its foam pocket. This inconsistent placement may cause inconsistent tool detection results. For example, if a long cord on a power tool is placed in its foam pocket differently from when the drawer was trained an incorrect tool warning might be generated. The tool detection tolerances should be adjusted to minimize these erroneous incorrect tool warnings.

The administrator has the ability to change the detection tolerances for each tool individually. First, find the tool requiring an adjustment. Tools can be sorted by drawer to ease the search.

Highlight the “Tool” column for the tool to be adjusted and click up to increase tolerance thus improving reliability. If increased sensitivity is desired the tolerance can be decreased by clicking the down button.

Select “Done” when adjustment is complete.



INTRODUCTION

The data and configuration of all of the toolboxes in the Automatic Tool Control (ATC) system is stored and managed by the ATC Administration software. However, before the Administration software can be installed a database system must be in place to store the system information. The ATC system uses ***Microsoft® SQL Server 2005/2008*** as its database management system. If an existing installation of ***SQL Server 2005/2008*** is available for use and an administrator user name and password is known skip ahead to the Using Administrator section of this manual. Otherwise, the following procedure will install ***Microsoft® SQL Server Express 2008*** that will be used specifically for the ATC system.

The ATC Administration software and all support applications, including ***Microsoft® SQL Server Express 2008,*** are provided on the supplied CD ROM. The software can be copied by the installer onto a thumb-drive for convenience. ***Microsoft® SQL Server Express 2008*** and its supporting software should be installed in the order as outlined in the following pages. Some required applications may already be present on the Administration PC depending on the operating system installed. Systems running ***Windows® Vista or 7*** come pre-loaded with most of the required components for complete installation. Systems operating with any variant of ***Windows® XP*** may require installation of some applications described below.

Tool boxes are shipped from the factory with software pre-installed and should not require loading. However the tool box software is included on the CD ROM if required for updates or service reinstallation.

FOLLOW THESE INSTRUCTIONS FOR SOFTWARE INSTALLATION

NOTE: *Before beginning the installation process make sure of the following:*

- *Make sure before you start that you have Administrator rights to the PC being loaded.*
- *You may need to turn off "Anti-virus" software that may be running, just remember to turn it back on after completing the install.*

Installation of ***SQL Server® Express*** on a Windows XP system has some prerequisites. These prerequisites are listed below. If you are installing ***SQL Server® Express*** on a Windows Vista or Windows 7 system skip to step 4.

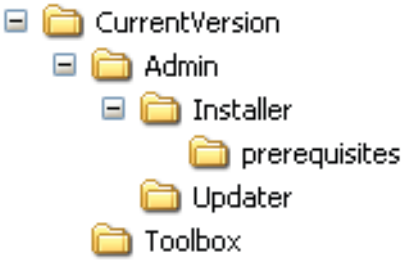
.NET Framework 3.5 SP1:
Listed as dotnetfx25.exe on the CD ROM.

Windows® Installer 4.5:
Listed as WindowsXP-KB942288-v3-x86.exe on the CD ROM.

Windows® Powershell 1.0:
Listed as WindowsXP-KB926139-v2-x86.exe on the CD ROM.

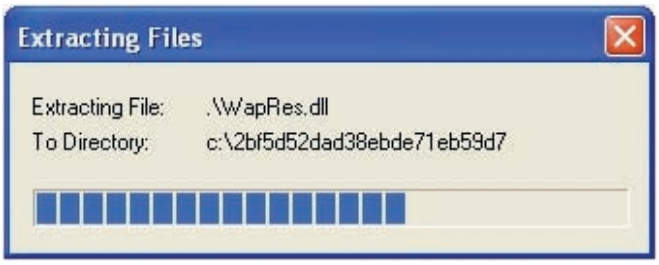
NOTE: Run the above applications in the order listed.

The directory structure of the CD ROM is shown to the right.

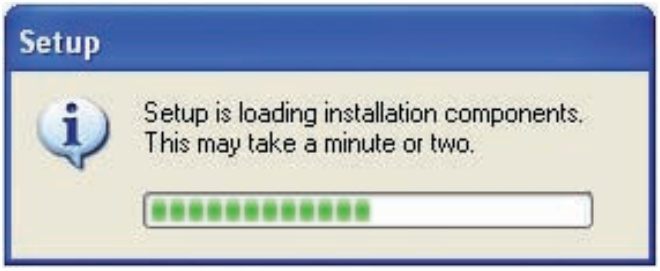


STEP 1 Installing .NET Framework 3.5 SP1.
Locate the file named dotnetfx25.exe on the CD ROM in the “Prerequisites” sub-directory.

Double click the application to begin the installation procedure. The “Extracting Files” dialog box will appear as shown here.

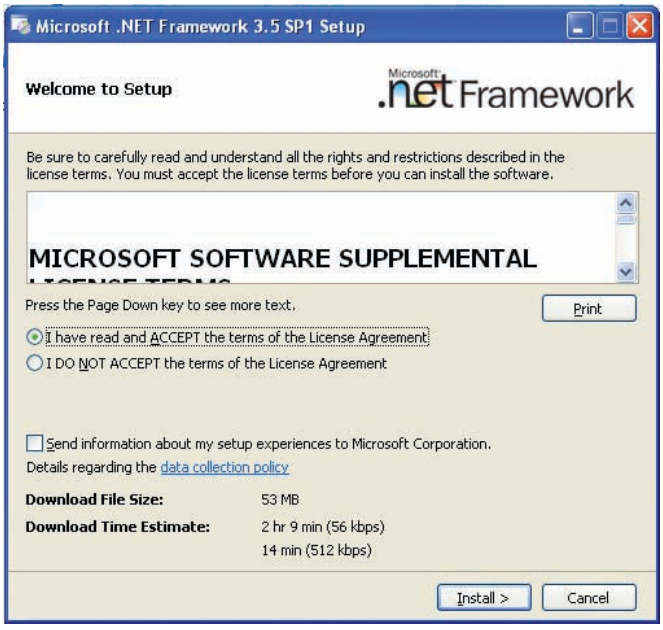


Once the Files are extracted “Setup” begins automatically with the status bar as shown to the right.

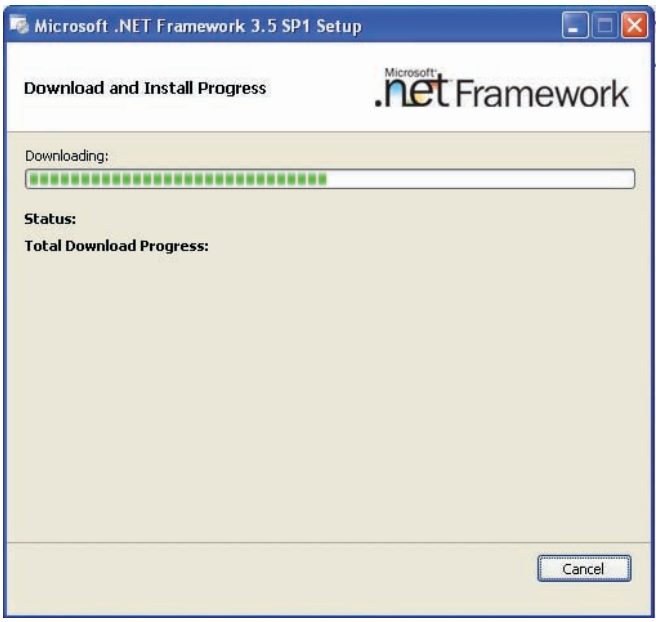


You will be required to read and understand the software license agreement. If you agree to the terms then select the “I agree” radio button followed by the “Install” button.

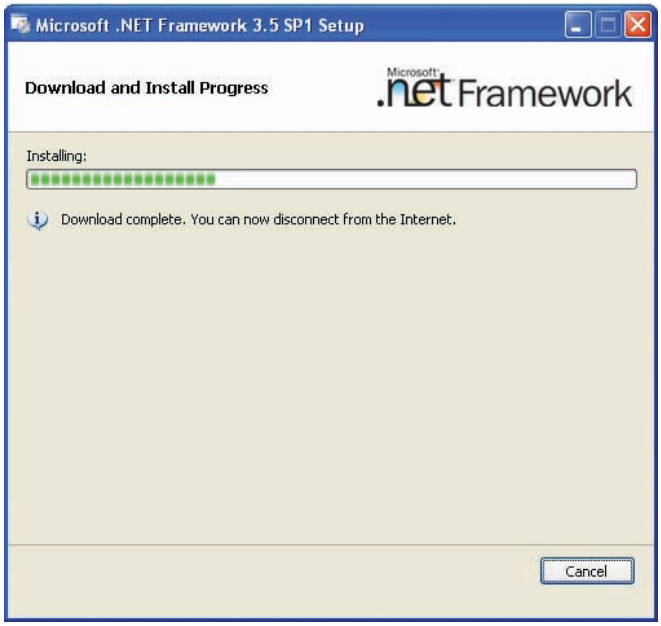
It is recommended to agree and select Next.



The status box as shown to the right opens letting the installer know the progress of download.

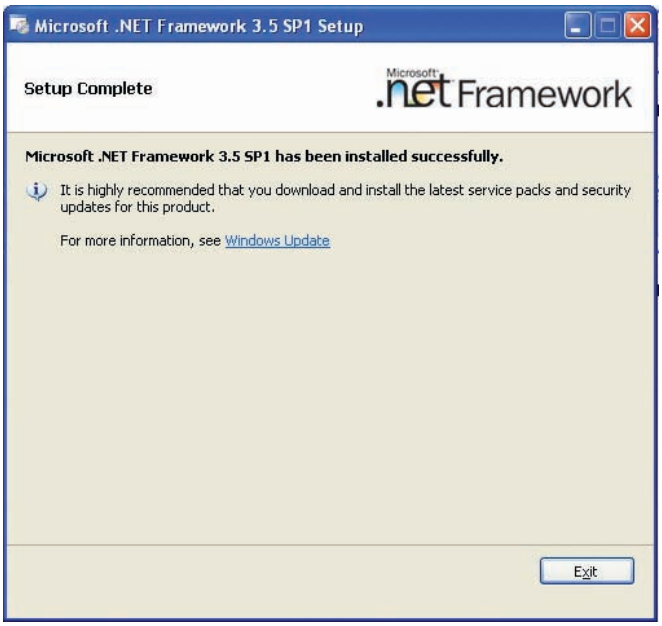


After the download is complete the application begins with the actual installation process of the program. The status bar indicates the progress.



After a few moments the box shown here opens to indicate that the program setup is complete.

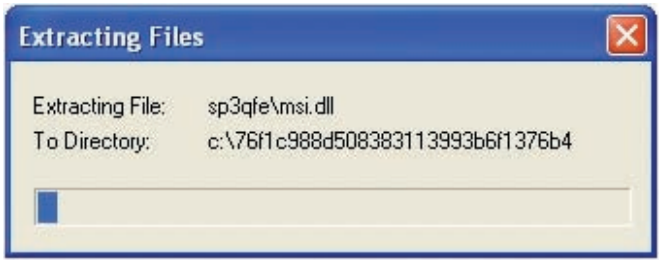
Select “Exit” to finish and close the installation application.



STEP 2 Installing Windows® Installer 4.5:
Locate the application listed as WindowsXP-KB942288-v3-x86.exe on the CD ROM also under the “Prerequisite” sub-directory.

Double click on the application

Double click the application to begin the installation procedure. The “Extracting Files” dialog box will appear as shown here.

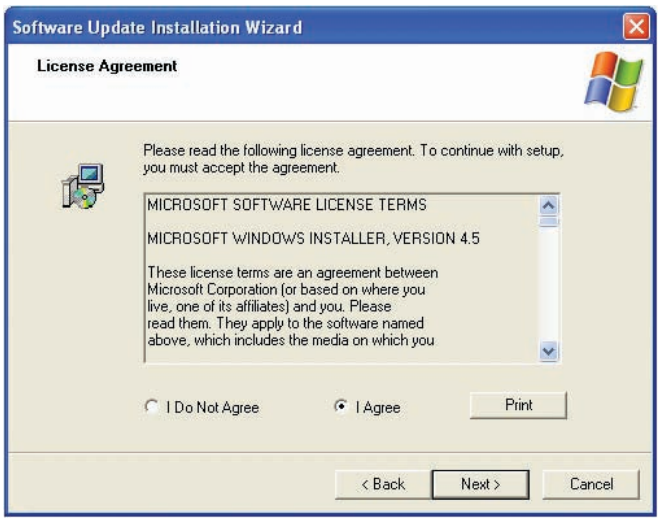


Once the Files are extracted “Setup” begins automatically with the status bar as shown to the right.

NOTE: *It is advised to Back up any pertinent files and Close all open programs before proceeding*

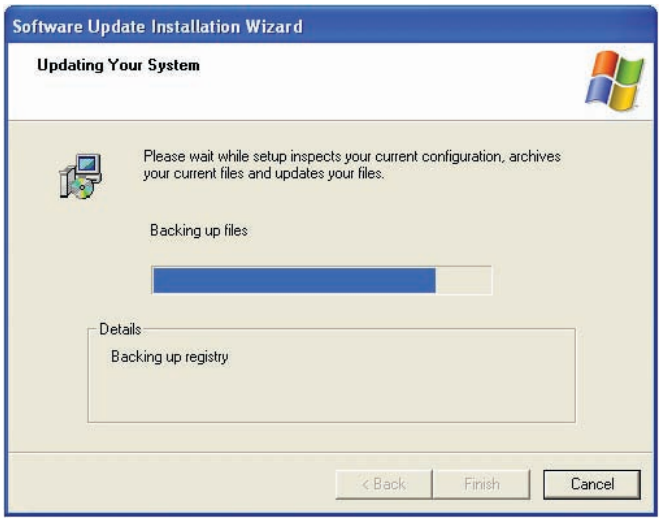
Click “Next” to continue.

You will be required to read and understand the software license agreement. If you agree to the terms then select the “I agree” radio button followed by the “Install” button.

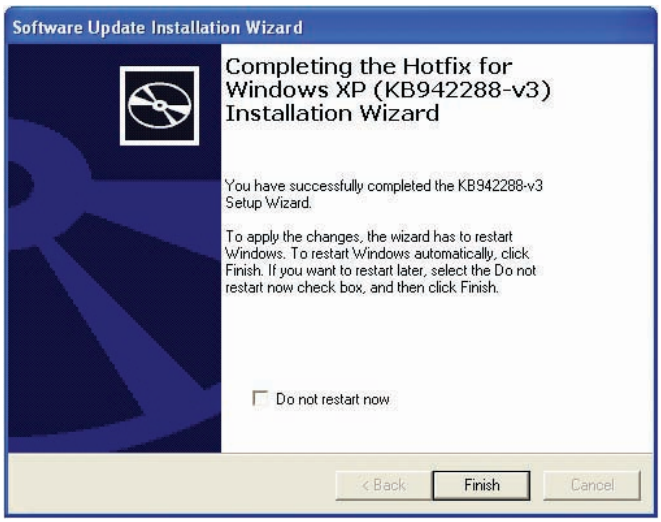


If there are any applications open that need to be closed the dialog box will alert the installer and close them before proceeding. Click on “Continue” to proceed.

A dialog box opens indicating that some files are being backed up



After files are properly backed up the software is completed. Click on “Finish” to complete the installation and restart Windows®.



STEP 3 Installing Windows® Powershell 1.0:

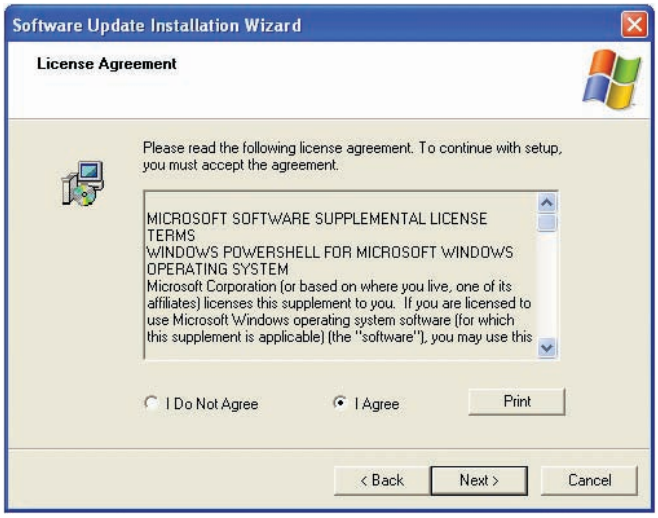
Locate the file named WindowsXP-KB926139-v2-x86.exe on the CD ROM also under the “Prerequisite” sub-directory as the previous files.

Double click the application to begin the installation procedure. The “Extracting Files” dialog box will appear as shown here.

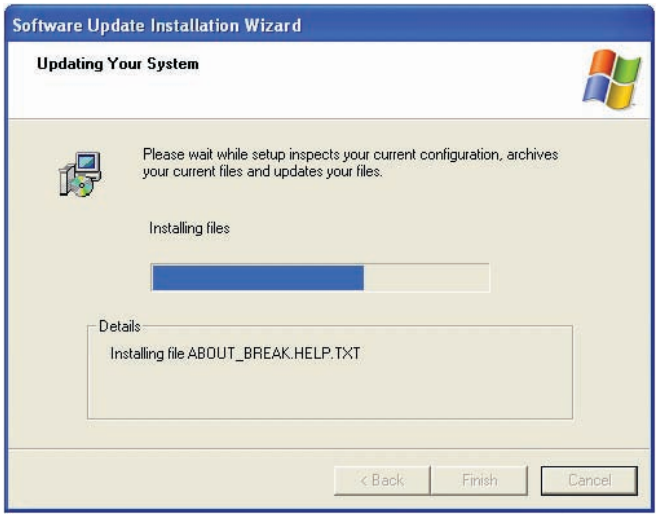
Once the Files are extracted “Update” begins automatically as shown to the right. Select “Next” to continue.

You will be required to read and understand the software license agreement. If you agree to the terms then select the “I agree” radio button followed by the “Install” button.

It is recommended to agree and select Next.



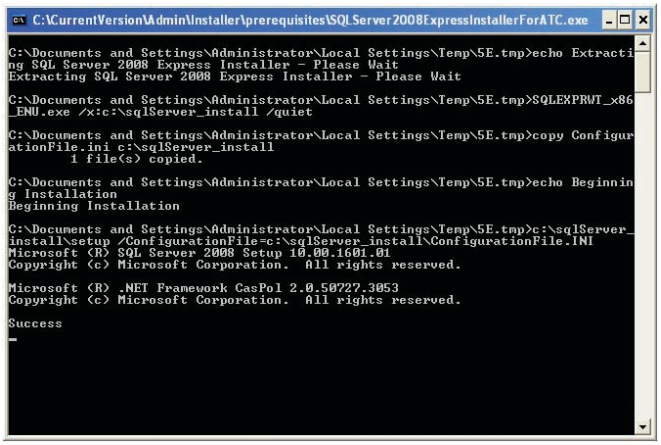
The status box as shown to the right opens letting the installer know the progress of update.



After a few moments the installation wizard completes the update and asks you to select “Finish” to finalize the process.

STEP 4 - Installing Windows® SQL Server 2008 Express

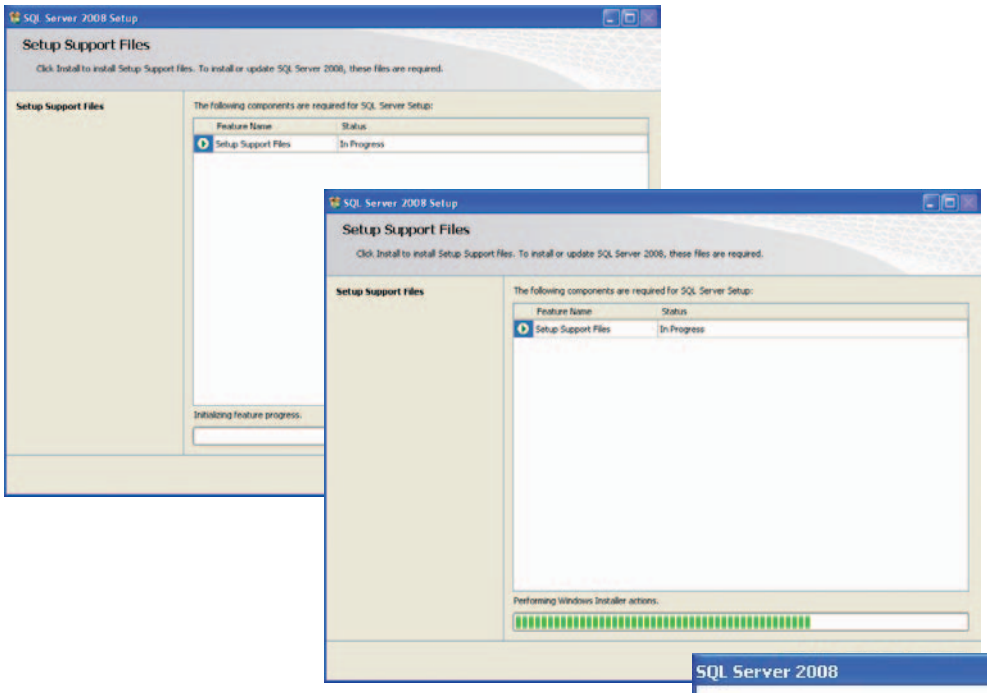
Locate and run the ***Microsoft® SQL Server® 2008 Express*** executable. The application is named SQLServer2008ExpressInstallerForATC.exe on the CD ROM under the "Prerequisite" sub-directory.



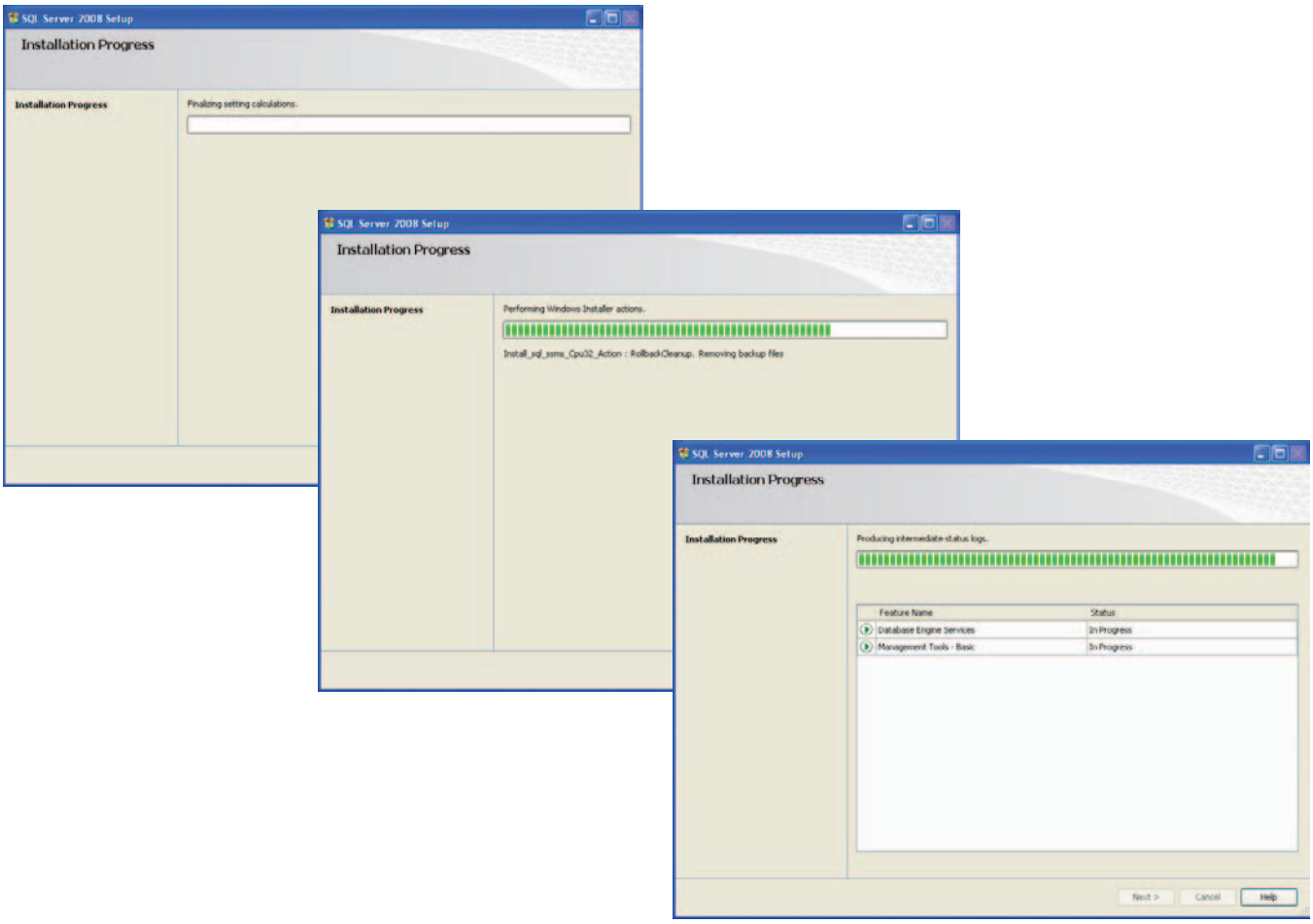
Double click the application, it is designed to "auto-install".

A "Command Prompt" window will open showing the extraction and installation as the required applications are loaded and setup.

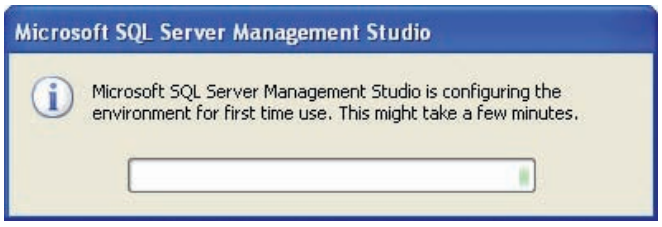
After a few moments, the note to the right appears alerting the installer to wait while the setup proceeds. These messages will appear a couple times during the loading procedure to ensure the user that the installation is proceeding.



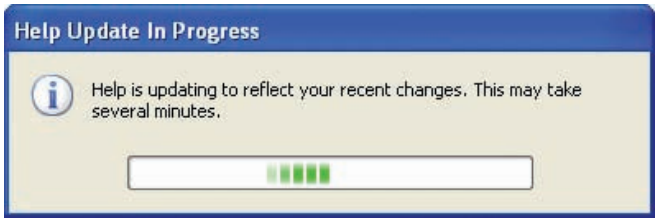
Allow the installation to auto-install. Several more screens will appear as the program installation wizard creates the environment required for proper operation on the selected computer.



Installation of the SQL Server program will take some time to complete. Do not interrupt installation.



The last dialog box indicates updates of the Help services. This only takes a few moments. This will complete the installation process.



USING ADMINISTRATOR

PC REQUIREMENTS

Snap-on Level 5 ATC utilizes a stand alone PC with Snap-on provided software to administer the ATC tool boxes.

PC Minimum Requirements:

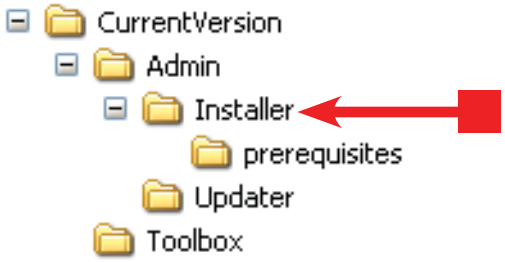
Operating Systems:
- Windows®XP Service Pack 2 or 3
- Windows®Vista
- Windows®7

Minimum Hardware Requirements:
- PC with 1.6 gigahertz or higher processor clock speed
- 1 GB RAM (Recommended: 2 GB or greater)
- 300 MB hard drive space (Recommended: additional 150MB per active box per month for archive images)
- Wired or Wireless Networking capabilities compatible with ATC toolbox network

NOTE:
The administrator PC should be connected to the same network as the ATC units that it will be administering before starting the installation procedure.

INSTALLING ADMINISTRATOR SOFTWARE

1. Locate the CD (3-60026AC) that comes with the Administrator S/W kit (EAK0298J02A). If several toolboxes are on site each CD contains the exact same software so access to only one is necessary. Insert the installation CD into the drive on the administrator PC.

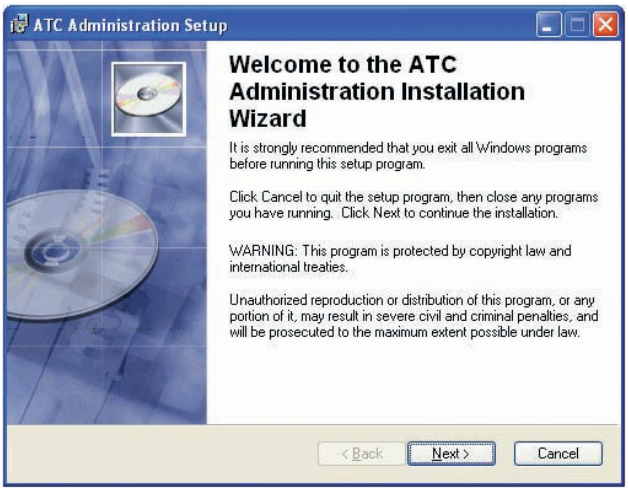


2. Using Windows® Explorer locate and double click on “ATC Admin.exe” icon. The Administrators software install program is located under <CurrentVersion\Admin\Installer>.

3. The system will extract some files to the hard drive for installation.

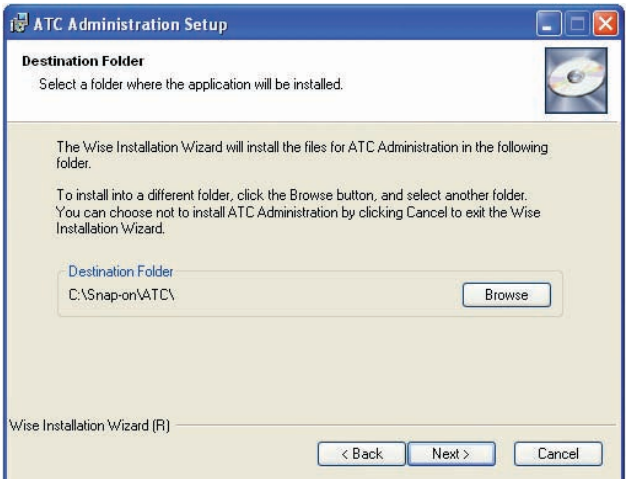
4. The ATC Administration Installer will appear while preparing for installation.

5. Once the Installer is loaded the screen to the right appears, select “Next” to continue.

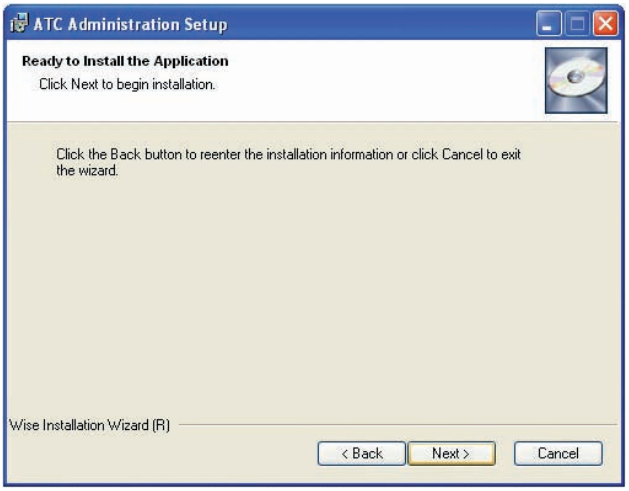


6. The default folder destination is C:\Snapon\ATC\. If a different hard drive location is necessary simply click on the <Browse> button replace the C drive location with the desired drive letter.

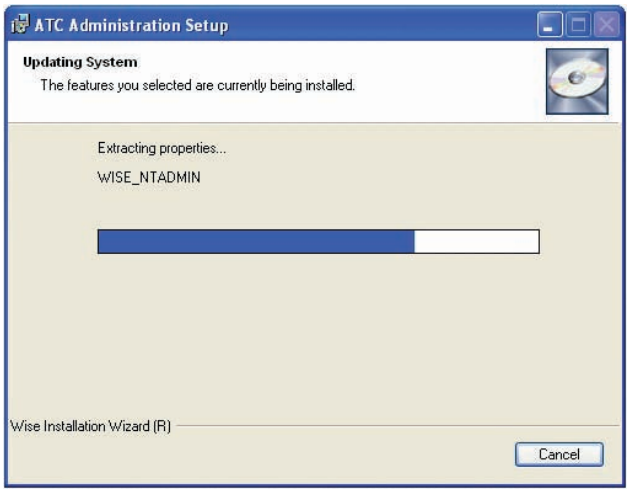
NOTE: It is recommended that defaults be used at all times. This simplifies any future updates.



7. Click on “Next” to Install.



8. A status bar will indicate the progress of installation.

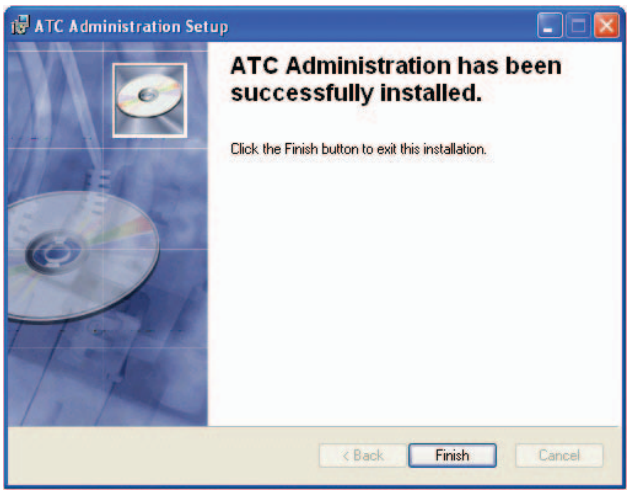


9. Once the install has completed Select “Finish to exit the installation. There will an additional icon on the desktop.

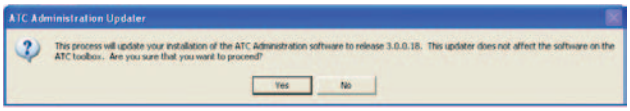
10. If a desktop shortcut has NOT been automatically created continue to step 11 to add.

11. Open Windows Explorer and browse to the installation directory that was specified previously in step 6.

12. Right click on the file named ATC Administration. exe and select Send To->Desktop (create shortcut)



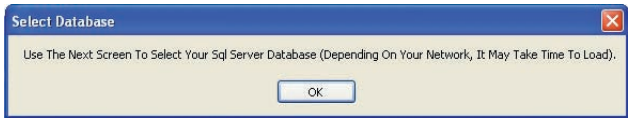
13. Run any updates that are available from Snap-on at this time by double clicking on the supplied file. Follow the on-screen instructions to complete the installation.



First Time Use

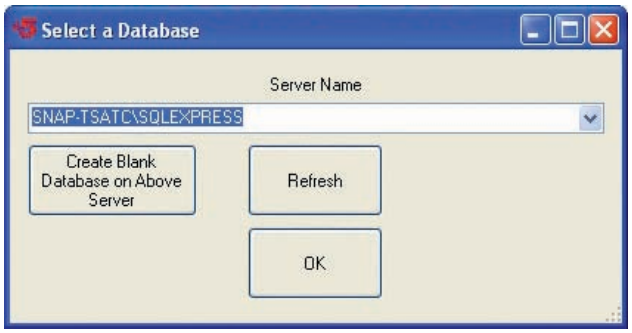
When “Admin” starts the screen shown to the right is shown briefly.

The first time the Administrator software is opened you will be prompted to select the database to be used. Select “OK” to continue.

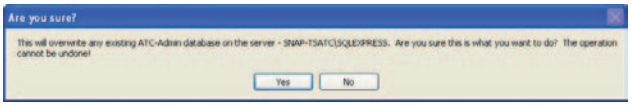


Select “Refresh” from the next dialog box to search the network for available SQL Server databases. Highlight the SQL server on which you want to install the ATC database. If a stand-alone SQL server was installed in a previous step the server name will match the PC name on which it was installed.

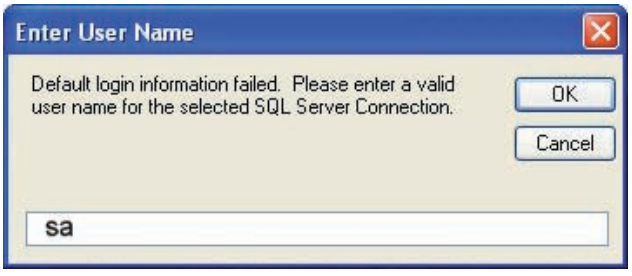
Select “Create Blank Database on Above Server”.



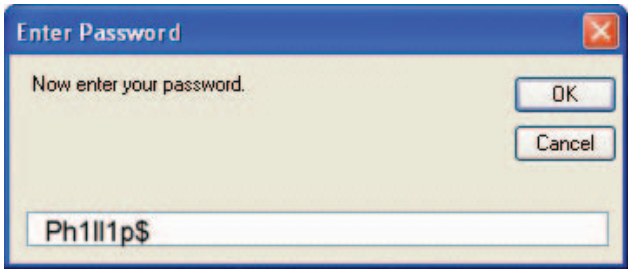
You will be warned that the action you have chosen will overwrite any existing database on the system. This is ok if the system has not been activated and this is a first time install. If the system is being reloaded for service or other reasons, then do not select to create a database and select “OK” in that situation.



Enter the username for the selected server and select “OK”. If the standalone SQL server is being used the default username “sa”.



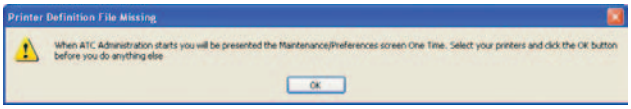
Enter the password for the selected server and select “OK”. If the standalone SQL server is being used the default password is “Ph1ll1p$”.



Next you will be asked to define location to place “PDF” copies of your reports to a default folder. Select “OK” to continue.

You can create a uniquely named folder or select one that already exists. A Browser opens that allows you to select the desired directory.

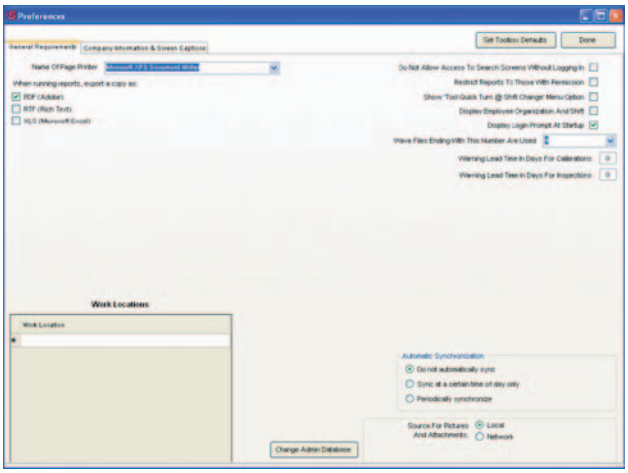
Next you are required to select the desired printer to use for printing of reports. Select “OK” to continue.



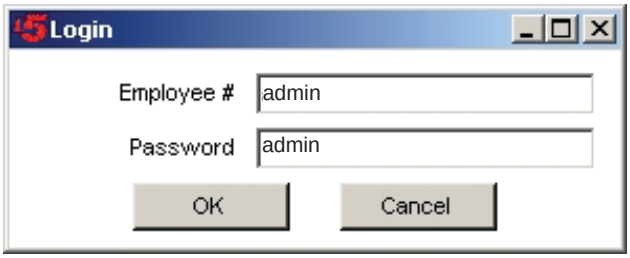
The screen to the right appears that allows the user to select the desired printer and other options as well.

Select “Done” when selections are complete.

Note: The Administrator can return to this screen at any time for selecting or changing options.



When the software launches for the first time use the default Employee # and password to log in as an administrator. We have chosen “admin” as the default employee # and “admin” as our default password. It is recommended to change the default password to something more secure. Instructions to change a user password is contained in the Setting Up Users section.

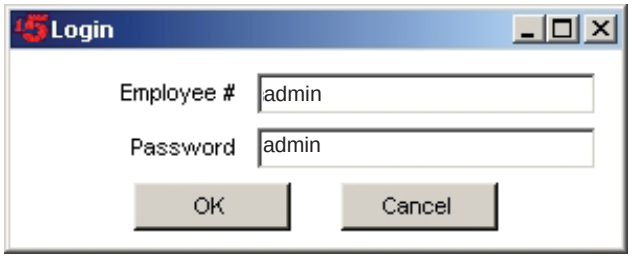


TOOLBOX SETUP AND ACCESS

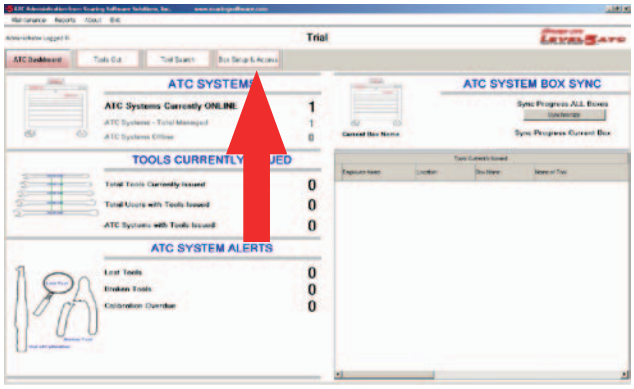
Before adding any users it is recommended that each toolbox is setup using the administration software. Once each toolbox has been added to the system users and preferences can be added. The Administration PC is capable of handling many users. Each user will have a unique ID card that allows them access to the ATC toolbox and various features of the toolbox. Some users may be granted full access. Having full access to the toolbox will allow that user to train the toolbox (see drawer training). However some users may have only access rights that will allow them to log into the toolbox and to check out and check it tools. The administration software allows the administer to set up each user with unique access and then duplicate that access for each box. This eliminates multiple setups of one user on multiple toolboxes.

1. If the Administration software is not already open click on the ATC Administration Icon on the computer desktop.

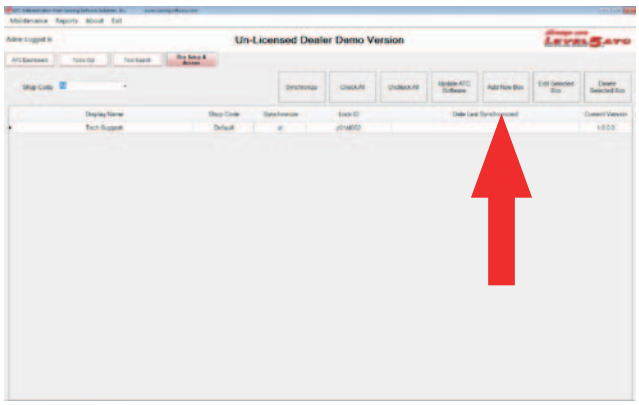
2. When the software launches for the first time use the default Employee # and password to log in as an administrator. We have chosen “admin” as the default employee # and “admin” as our default password. It is recommended to change the default password to something more secure. Instructions to change a user password is contained in the Setting Up Users section.



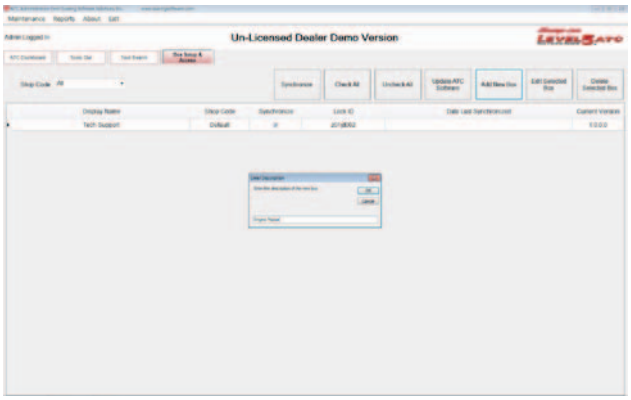
3. Click on the “Box Setup & Access”.



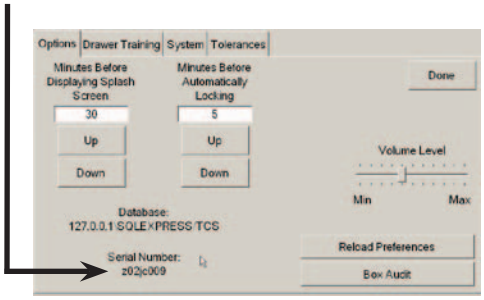
4. Click on the <Add New Box> button.

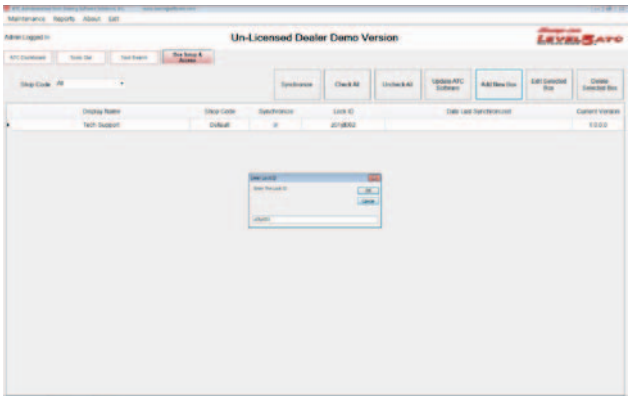


5. Enter a unique name that describes the toolbox, keeping in mind that if several boxes are online a user can quickly identify a particular toolbox. For this exercise we used “Yellow 54””.



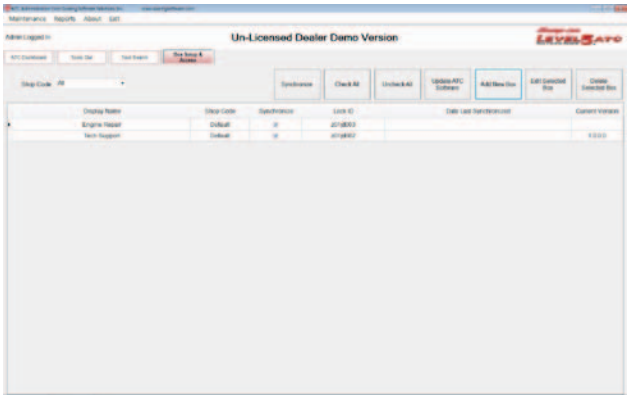
6. Enter the Serial Number noted in step 6 under the “Networking” chapter”. For this exercise we will enter “Z02JC009”.



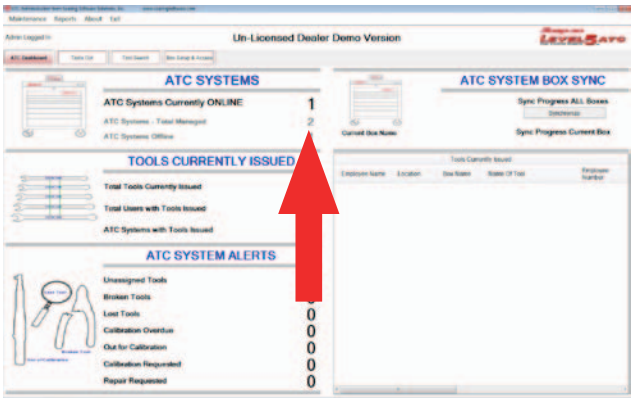


7. Depending on the number of toolboxes on line it will be necessary to select the correct database to correspond with the correct toolbox. Click on the “Refresh” button to update the list, click on the down arrow and choose the correct database. The name of the database will match the following format: SERIAL_NUMBER\SQLEXPRESS. Click on “OK” once the correct selection is made.

8. Repeat steps 3 through 7 to setup any additional toolbox. For this manual we have added an additional box. We have named it “Blue 36”.



9. If all information is properly entered and depending on the network speed the ATC system should come on line shortly.

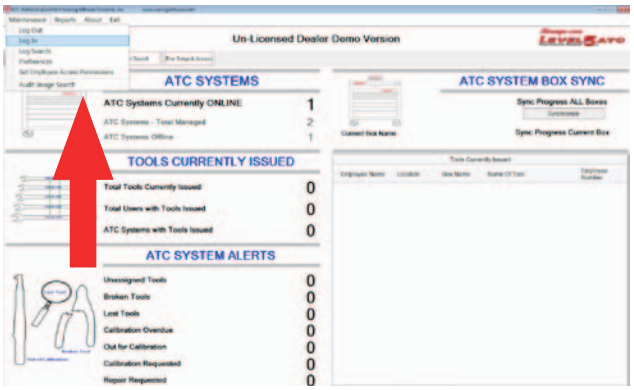


SETTING UP USERS

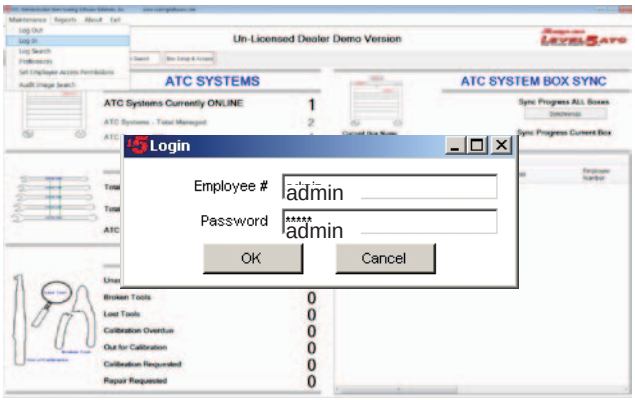
1. It is highly recommended that the 1st user that is setup in the system is the “Master”. This is the ID access card that was included with the toolbox.

NOTE: After the first synchronization the ATC service code can no longer be used to access the ATC unit.

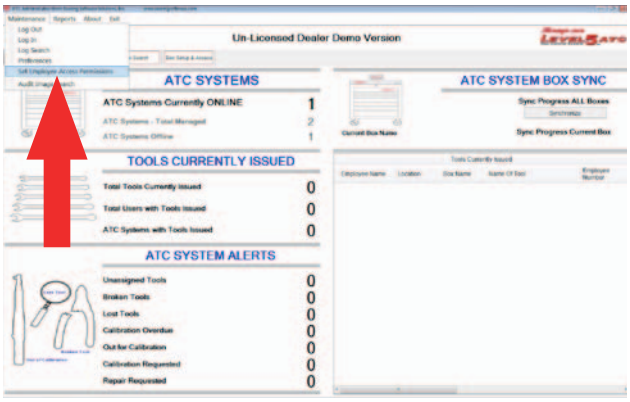
2. If no one is logged into the system click on the “Maintenance” menu at the top of the screen and select “Log In”.



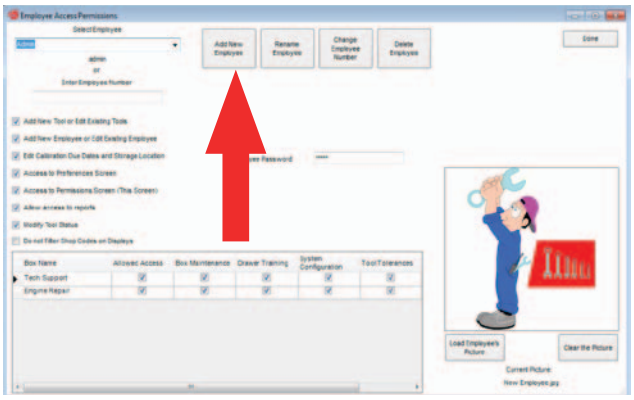
3. Log into the system using the Admin credentials.



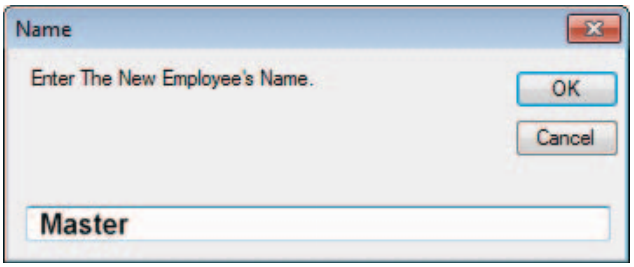
4. Click on “Maintenance” and select “Set Employee Access Permissions”



5. Select the <Add new Employee> button.

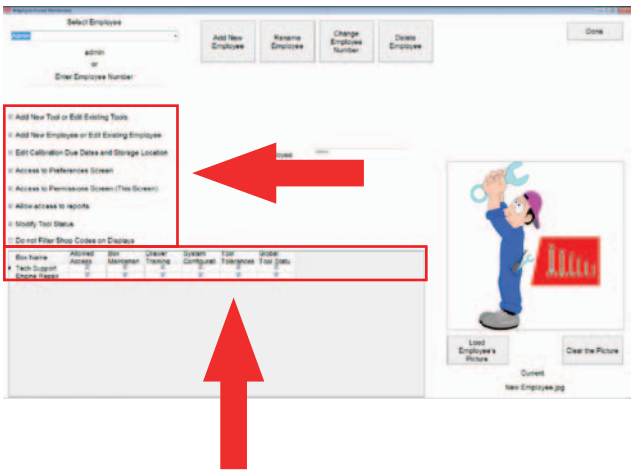


6. Type in “Master” for the Master Card employee name.



7. With the administrator card reader plugged into a USB port of the administrator PC touch the Master ID card to it to automatically enter the encoded number. The system will beep and jump back to the Employee Access Permissions screen.

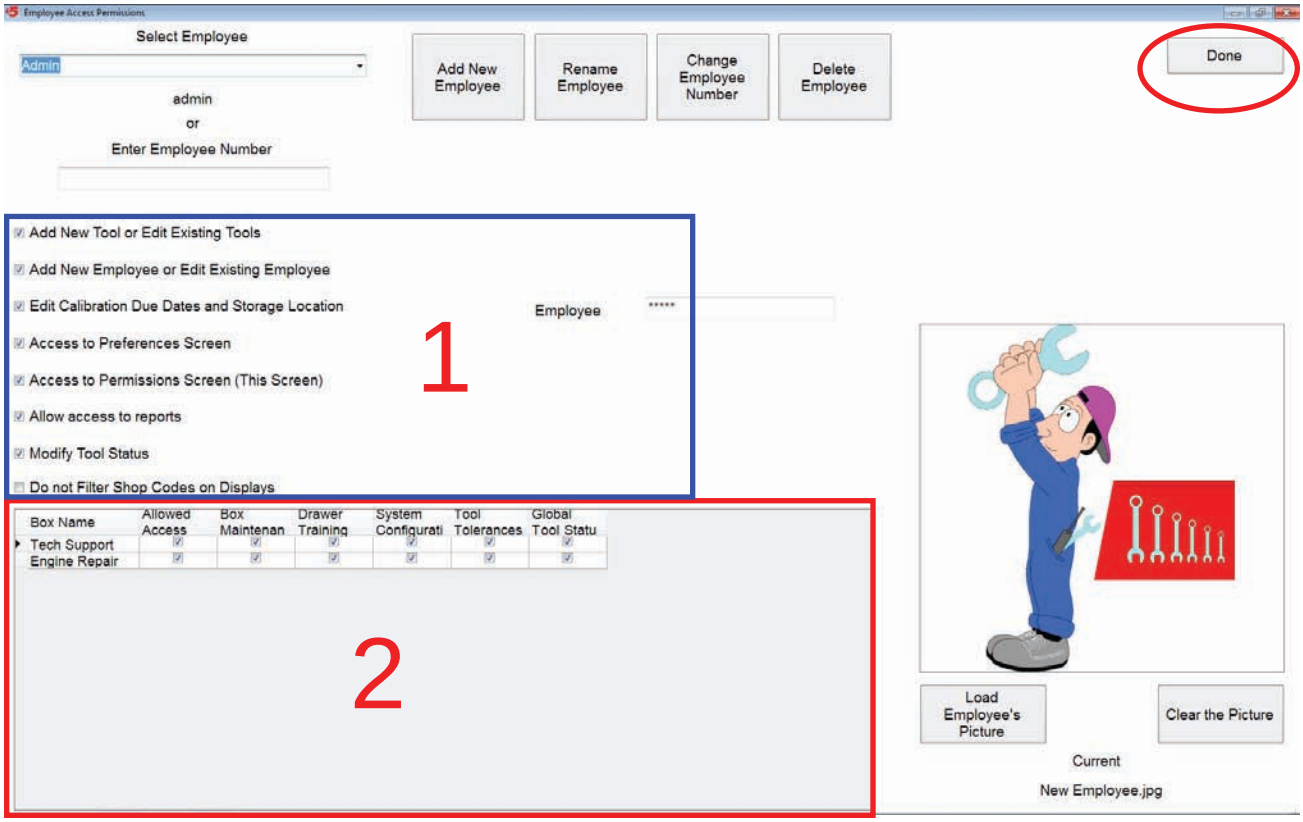
NOTE: THE MASTER CARD HAS NO PERMISSION AT THIS TIME.

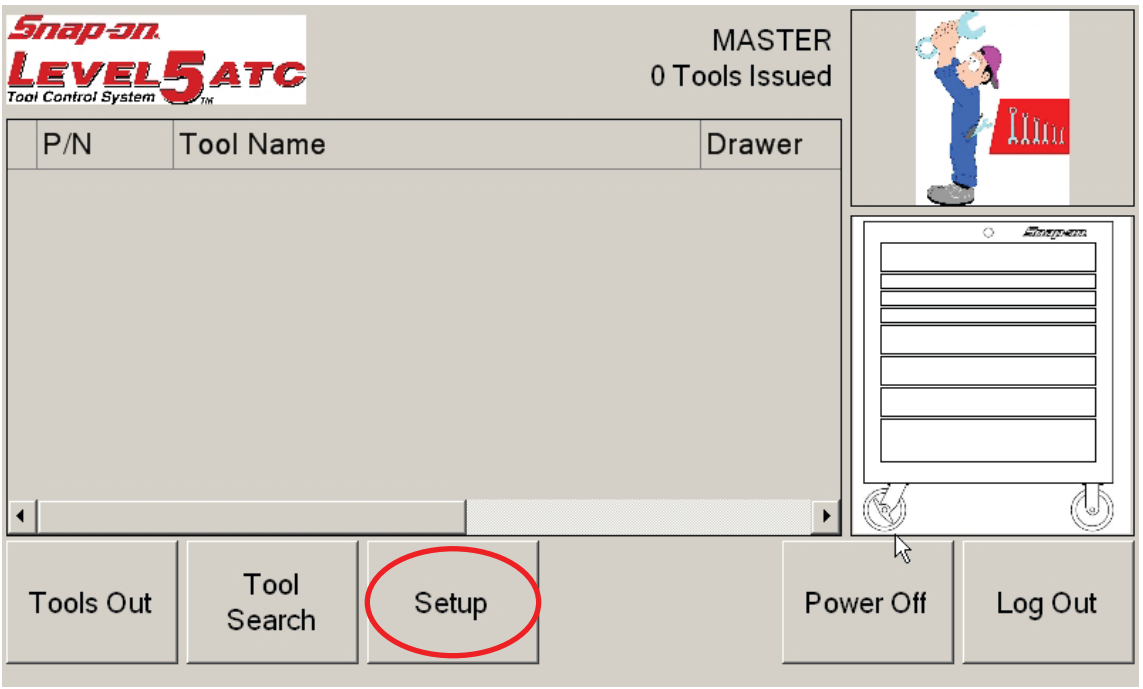


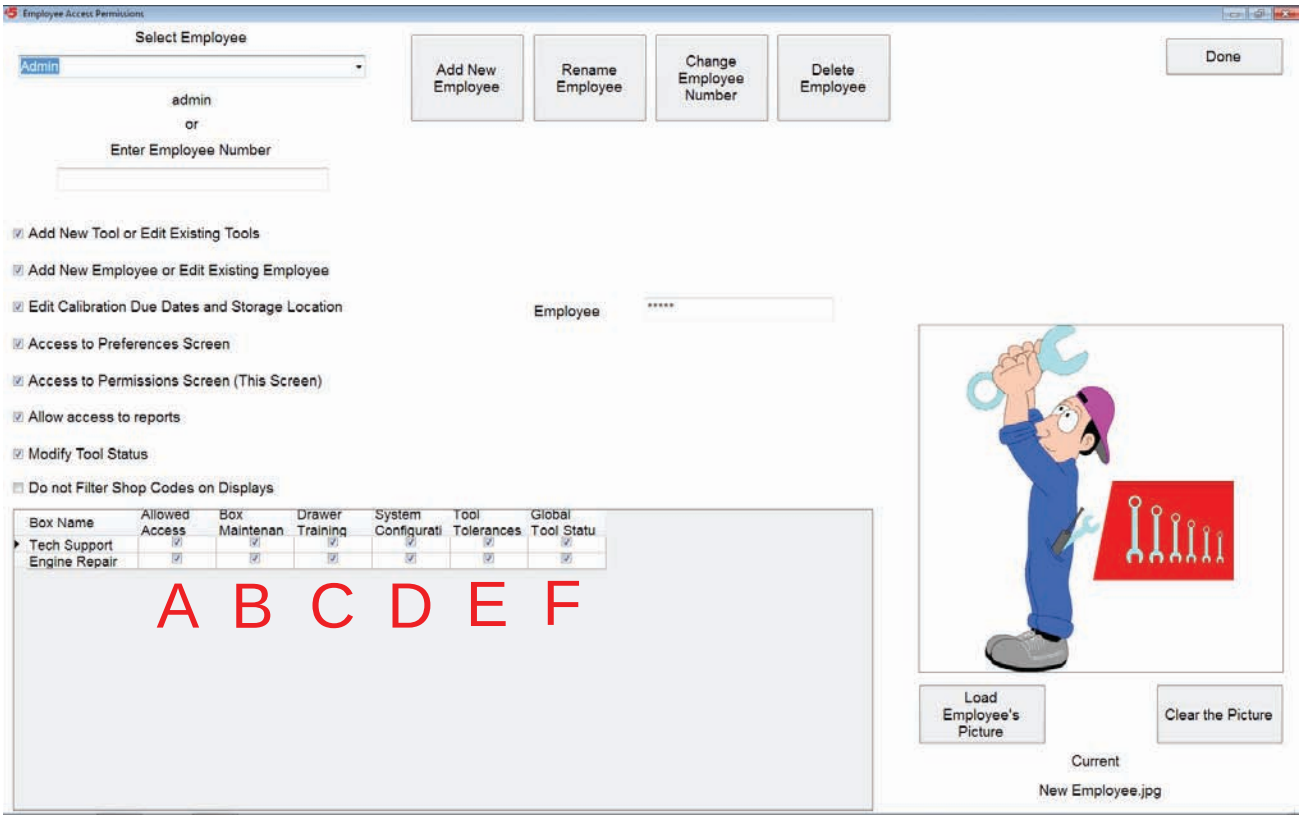
Administrator Card Reader

8. We have chosen the Master Card to have full access rights to both the Administrator PC and Toolbox so we have checked off all selections.
   - The area marked with a 1 allows the user to access various functions of the Administrator PC.
   - The area marked with a 2 allows the user to access the ***"Setup"*** functions of the toolbox (see below)

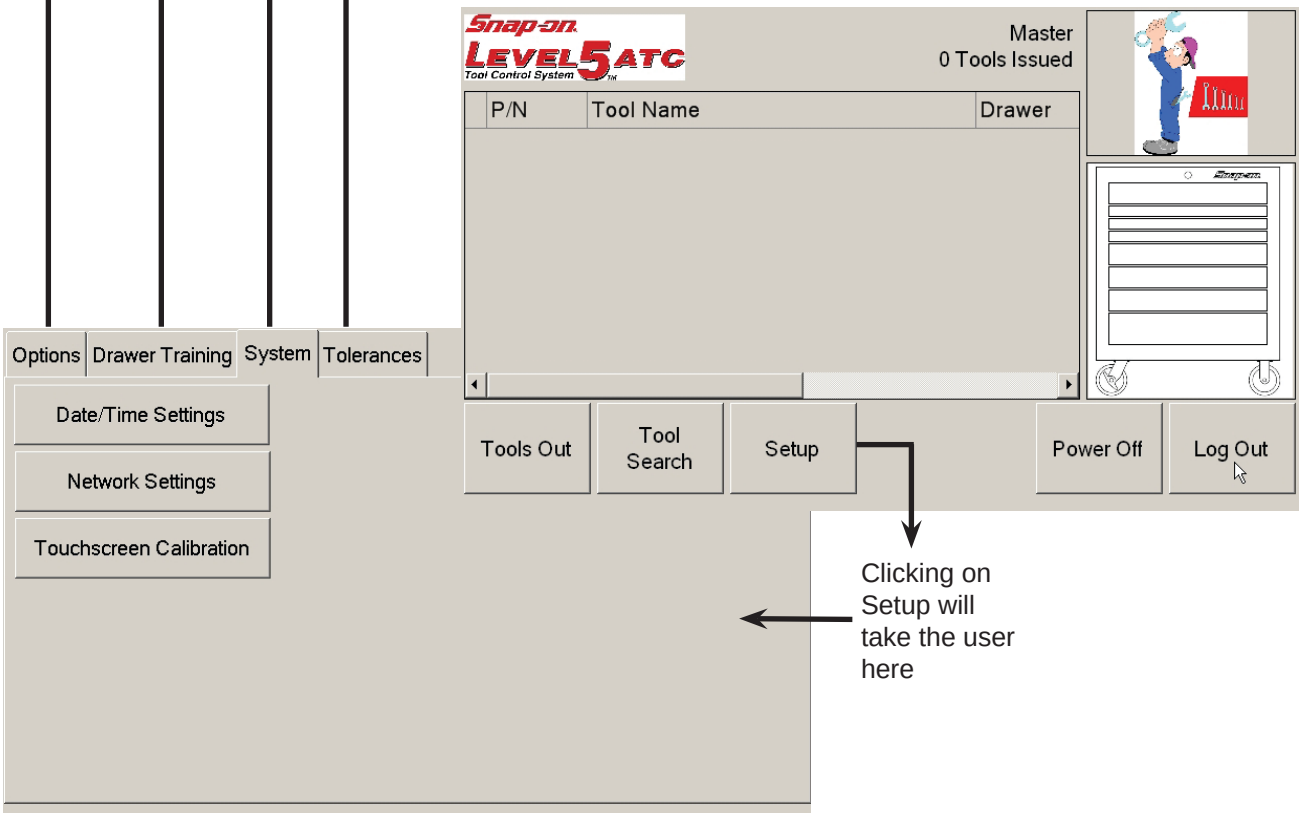
Select the desired permissions for the user. Once finished, click on the <Done> button.



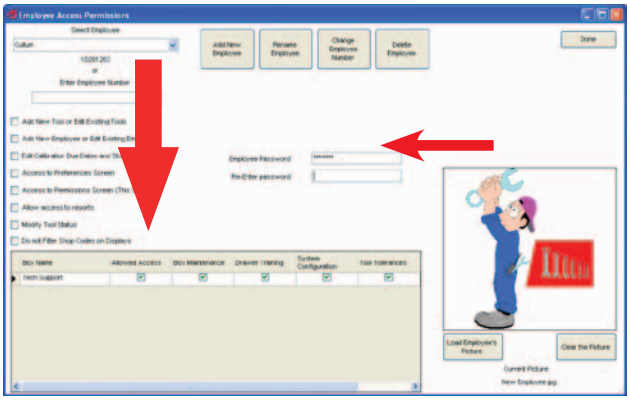




A. Allows the User to access the toolbox
B. Allows the User to access “Setup” in the box.
C. Allows the User to “Train” the drawers.
D. Allows the User to access the toolbox “System”
E. Allows the User to adjust tool tolerances.
F. Allows the User to modify the “Status” of tools that are checked out to other users.



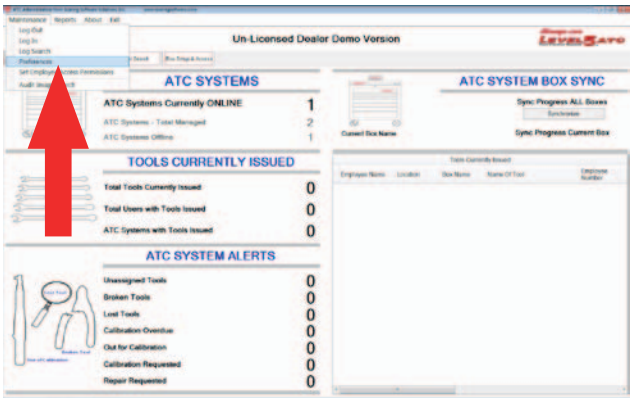
9. Repeat steps 1 through 7 to setup additional users remembering in step 8 separate credentials are given to each user. We have added an additional user and given this user rights to only access the toolbox.



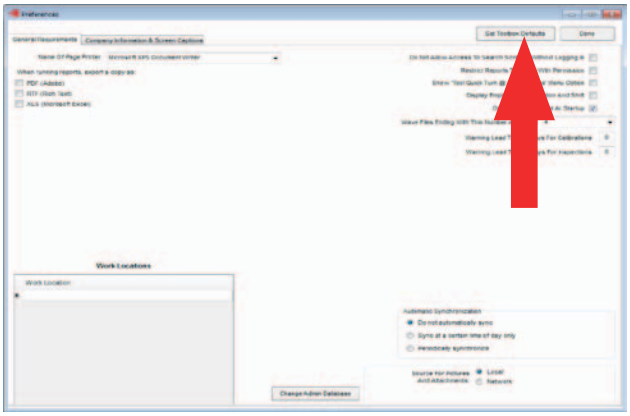
NOTE: To make it easier and faster for the “Administrator” to login, he can configure his permissions so he can just swipe his card one time to access. To do so click on the employee to be modified, and delete his password. Swipe his access card with the reader, the dialog box then says to “Re-enter” the password. Swipe the card one more time. The card can now enter the admin program with one swipe of his card.

To simplify maintaining multiple users and toolboxes we will give all of our users the exact same rights to all the toolboxes on the system. This eliminates the need to go from toolbox to toolbox giving the same user the same rights.

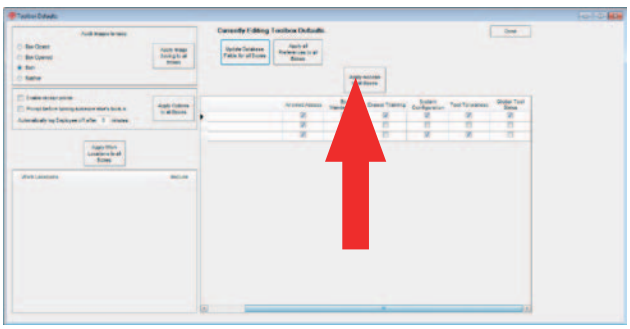
10. From the Main Menu click on ***“Maintenance”*** at the top of the screen and select ***“Preferences”.***



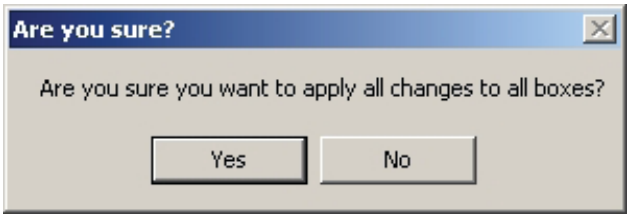
11. Click on the <***Select Toolbox Defaults***> button.



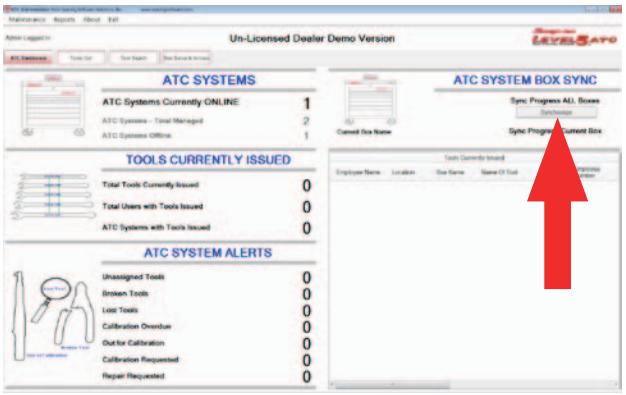
12. Select the options you would like for each user to have for ALL of the toolboxes. By selecting this these users will have these options for all boxes. After the selections are made click on the “***Apply all Preferences to all Boxes***”.



13. A dialogue box will appear asking if you are sure you want to apply these changes. If you are sure you want these changes click on the <Yes> button.
14. Click on the <Done> button to exit back to the main menu.



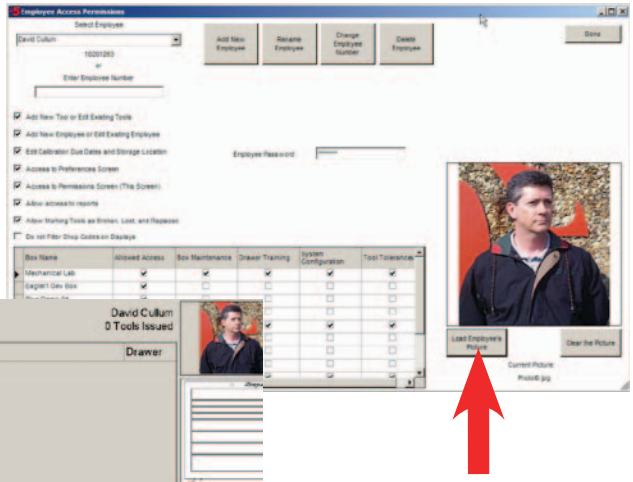
15. Before these changes can take affect it will be necessary to synchronize the System Administrator PC to the Toolboxes. From the main menu click on the <***Synchronize***> button. A progress bar will appear and show the progress. After this stops the Administrator PC and ALL toolboxes will be synchronized.
16. Test the system by scanning each ID card on the scanner mounted on the front of each toolbox.



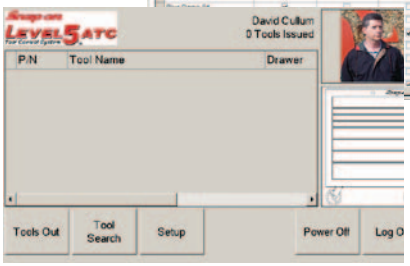
ADDING USER PHOTOS

The ATC system has the capability to display the users photo as additional identification if desired or required. To add photos follow these instructions:

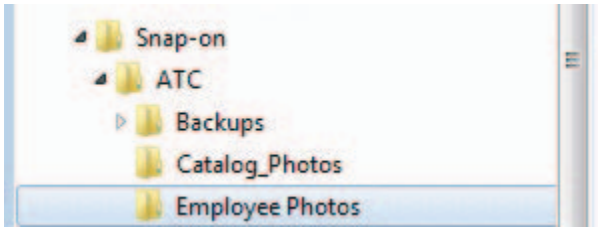
1. Click on “Maintenance” and select “Set Employee Access Permissions”
2. Click on “Load Employee’s Picture” as shown by the arrow to the right.



3. A Windows® Explorer box opens that allows the Administrator to browse to the location of stored photos.



4. A subdirectory is provided in the “Snap-on” directory on the C: drive. Select the desired photo and click on Open to save the photo. See screen shot to the right.



NOTE: Photos can be copied to the directory up to 1mb in size and in most common bit map formats such as BMP, JPG, PNG, etc. We recommend using JPG.

Photos of the user will not show up on the tool box until each box is synchronized.

NOTE: If this is the first time photos are added to employee permissions you will be asked to select a location to store the employee photos. The system will copy all employee photos to this location.

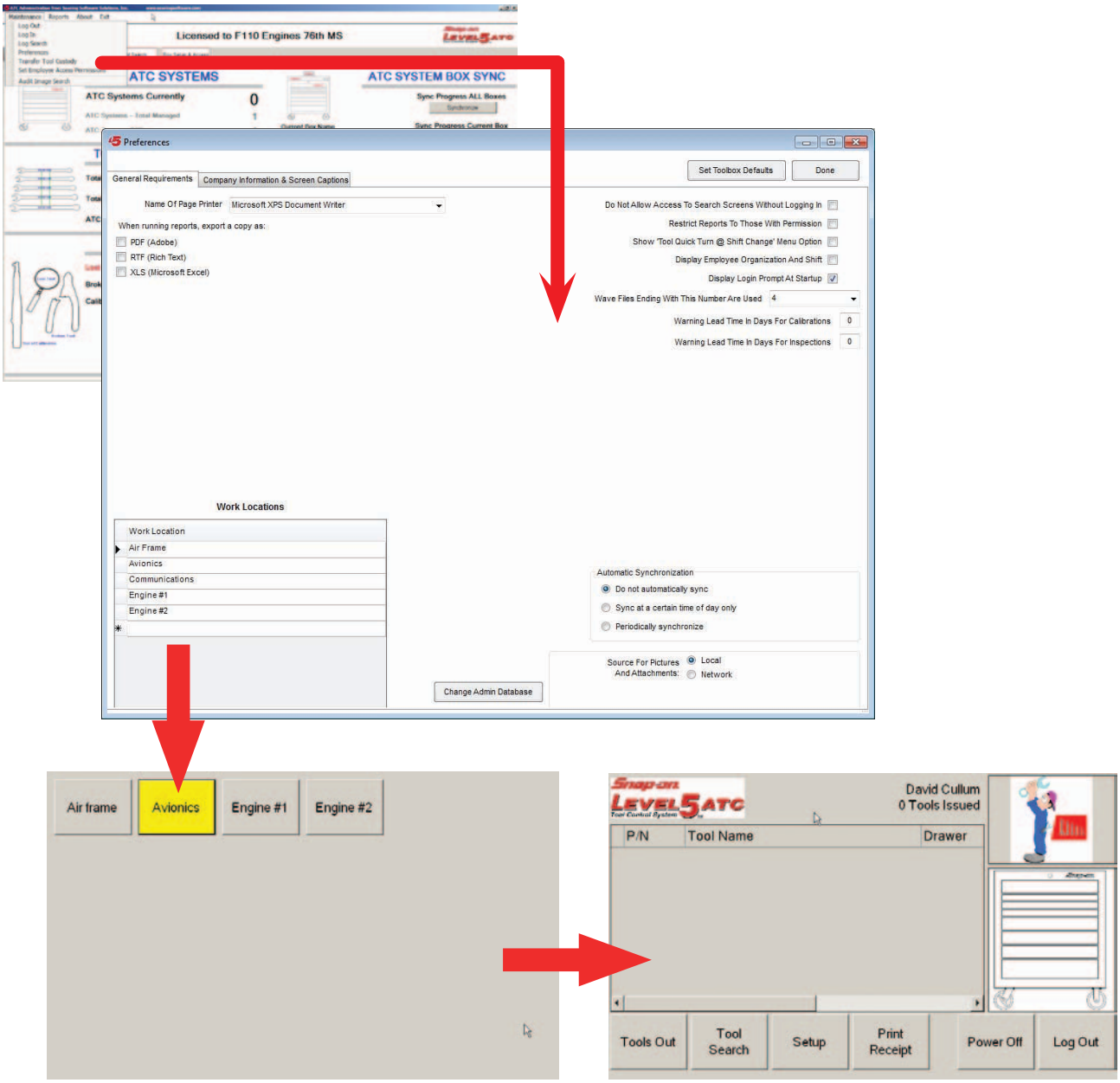
ADDITIONAL ADMINISTRATION FEATURES

Below are described additional features and functions that may or may not be functional at the time of this publication.

PREFERENCES

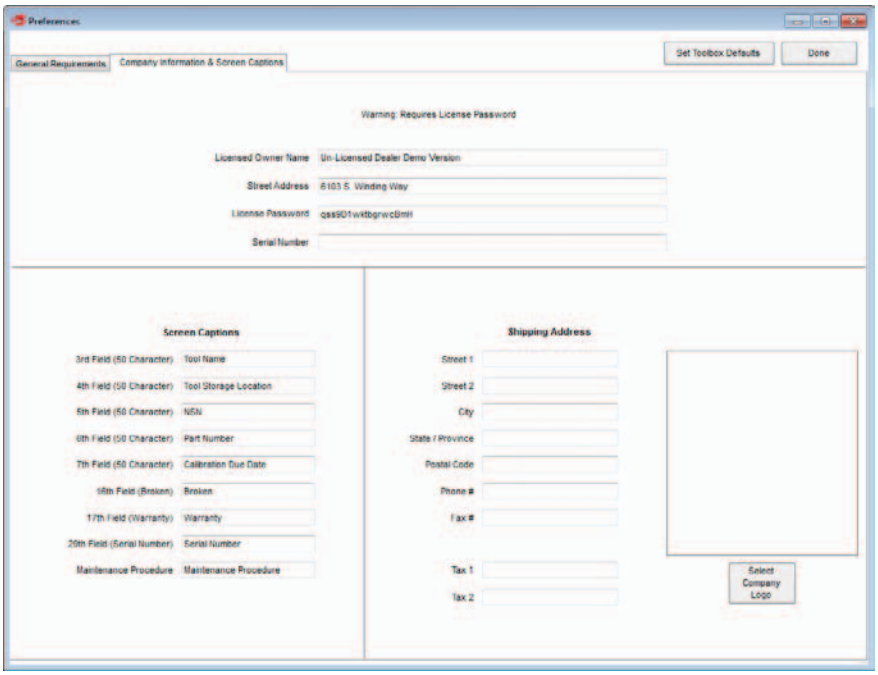
There are two Preferences screens, both are accessed from the “Maintenance” pull down tab on the home screen. The first Preferences Tab shown below, allows multiple work locations to be entered. When locations are entered, the first screen to appear on the tool box requires the user logging in to select the area he will be working. After the work locations are added here they must be selected in the toolbox preferences screen for each box before they will be active. Both screen tabs feature a “Set Toolbox Defaults” button described earlier in this chapter.

The desired Printer for reports are selected on this screen as well as the enabling of the report to be exported in several formats to be saved for later viewing. Those formats are “PDF”, “RTF” (an MS Word compatible format) and XLS to be used with a spreadsheet. Automatic box synchronization and the source for pictures and attachments are selected on this screen as well.



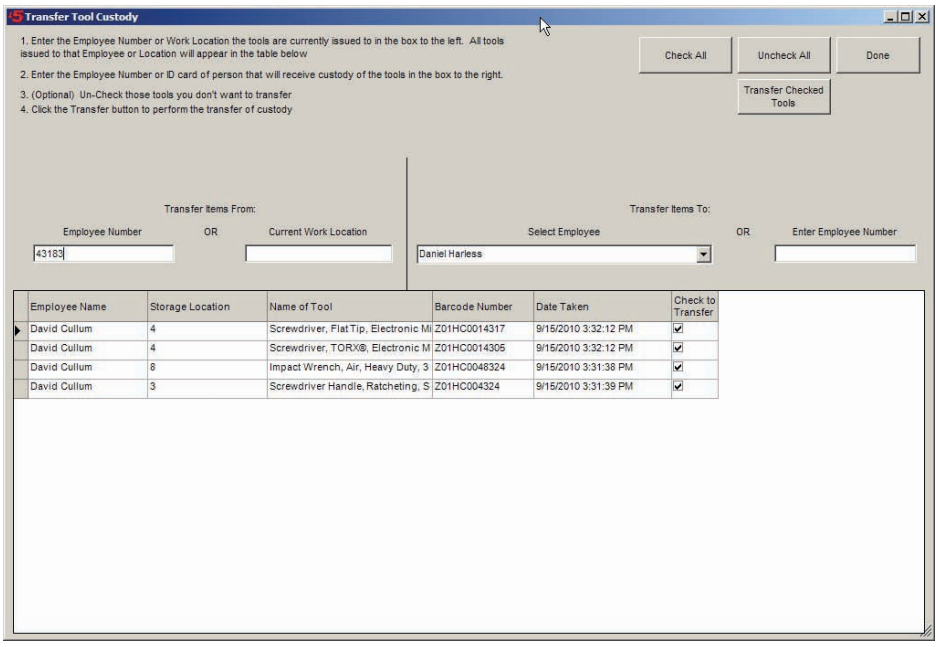
LICENSING

The second Preferences Tab shown here contains the licensing information for the Level Five ACT software. This information can be entered by Sales or Service organization or the Administrator and should never be altered. To do so may render the software unusable. Licensing information is obtained by contacting Snap-on Technical Support and providing the information they require. Information must be entered exactly as provided.



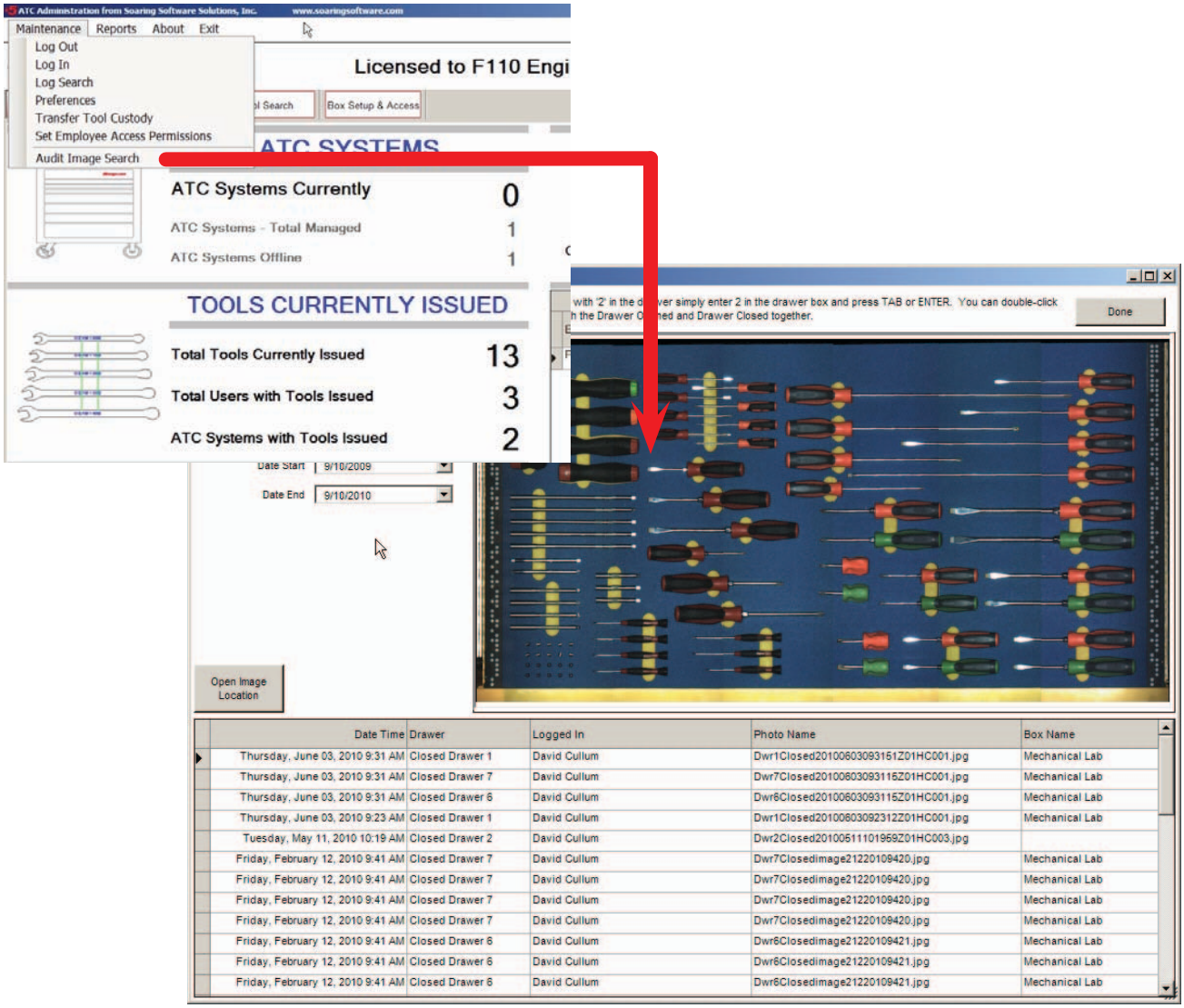
TRANSFER TOOL CUSTODY

This selection allows tools checked by a certain user to be transferred to another assigned user. This is useful if the tools are currently checked out for a specific job and a shift change occurs. The feature allows tools to be accounted for with out them being returned and re-selected at the toolbox. This maintenance is done at the Administrators PC.



AUDIT IMAGE SEARCH

This Selection allows the Administrator or another assigned with permissions to view the camera images of selected drawers. The Audit Image Search function is located at the bottom of the “Maintenance” drop down tab on the home screen. Images are selected by entering the desired information. Entering only the employee name, Drawer number or date narrows the selected image. Images show the presence or absence of a tool or condition of the drawer. If a drawer requires a closer look than the default image allows place the mouse pointer on the graphic and use the scroll button to zoom in and out.

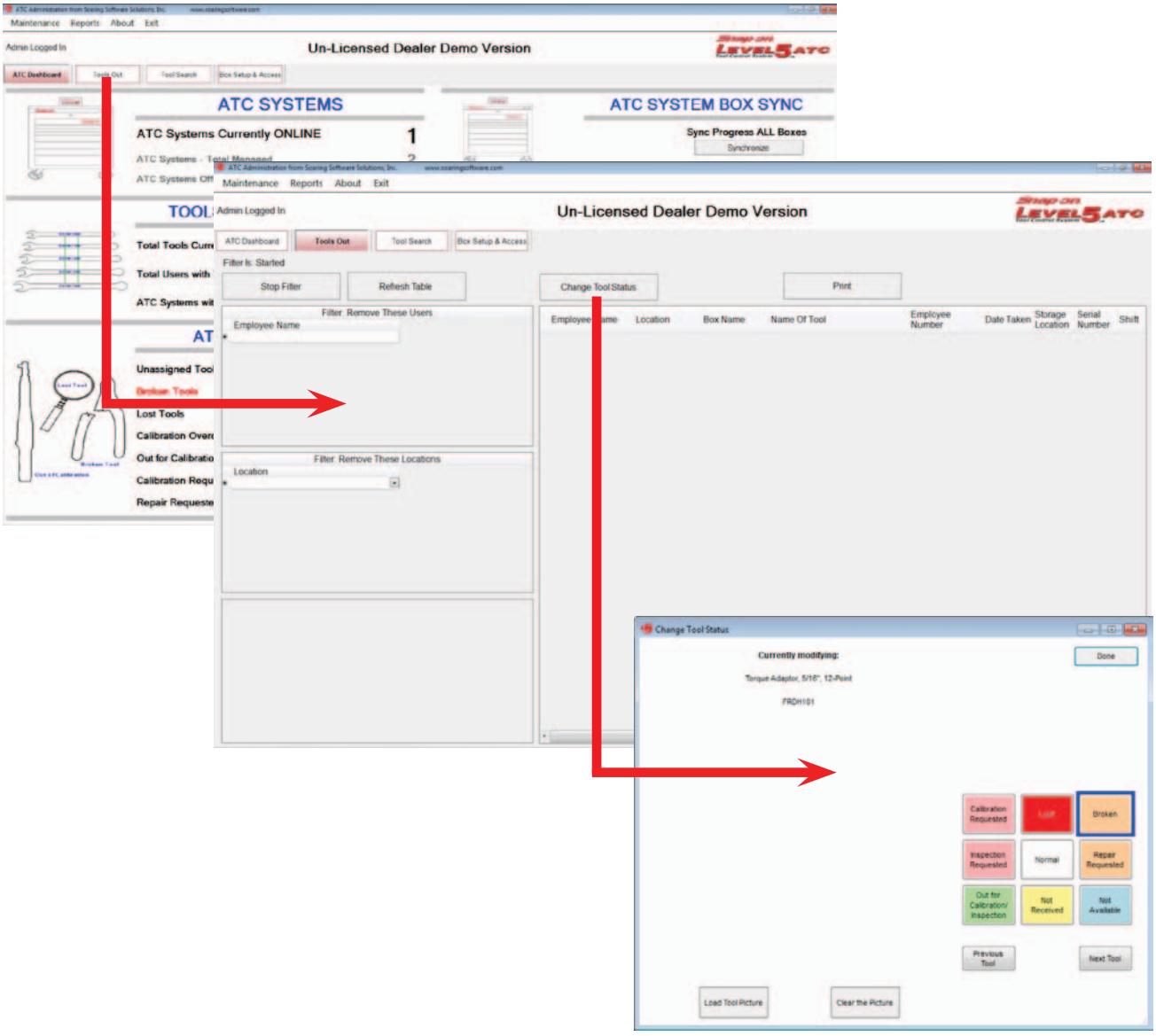


TOOLS OUT

Select the “Tools Out” tab from the ATC Dashboard screen to view tools that have been removed from the box. Several filters are available that allow the Administrator to view tools removed by Employee or Location.

By default the “Tools Out” search engine searches for ALL tools out. The Administrator can select one of two filters that allow him to remove Employees or remove Locations to narrow the search to a certain number of Employees or one or more locations.

Tool Status can also be altered in this screen by selecting the “Change Tool Status” button. This feature is also available on the “Tool Search” screen.

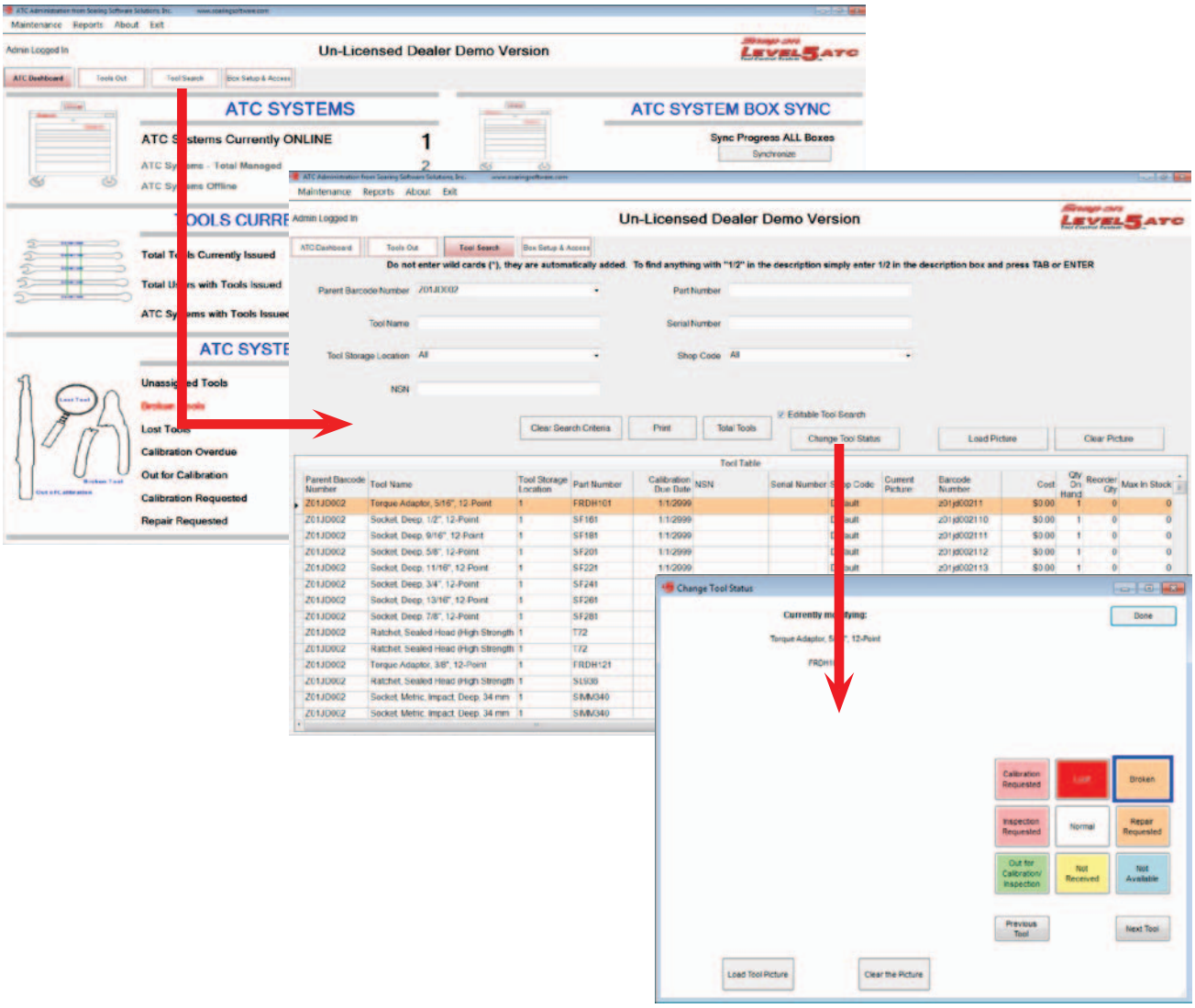


TOOL SEARCH

The entire inventory of the tool box is reported in this screen. A number of filters are available to narrow the search for a tool. You can search by tool name, its location, and other filters.

When entering a Tool Name for a search just simply type in any descriptor for that tool such as to find anything with 1/2” in the description just enter 1/2” in the description box and press enter to locate all tools with 1/2” in their description.

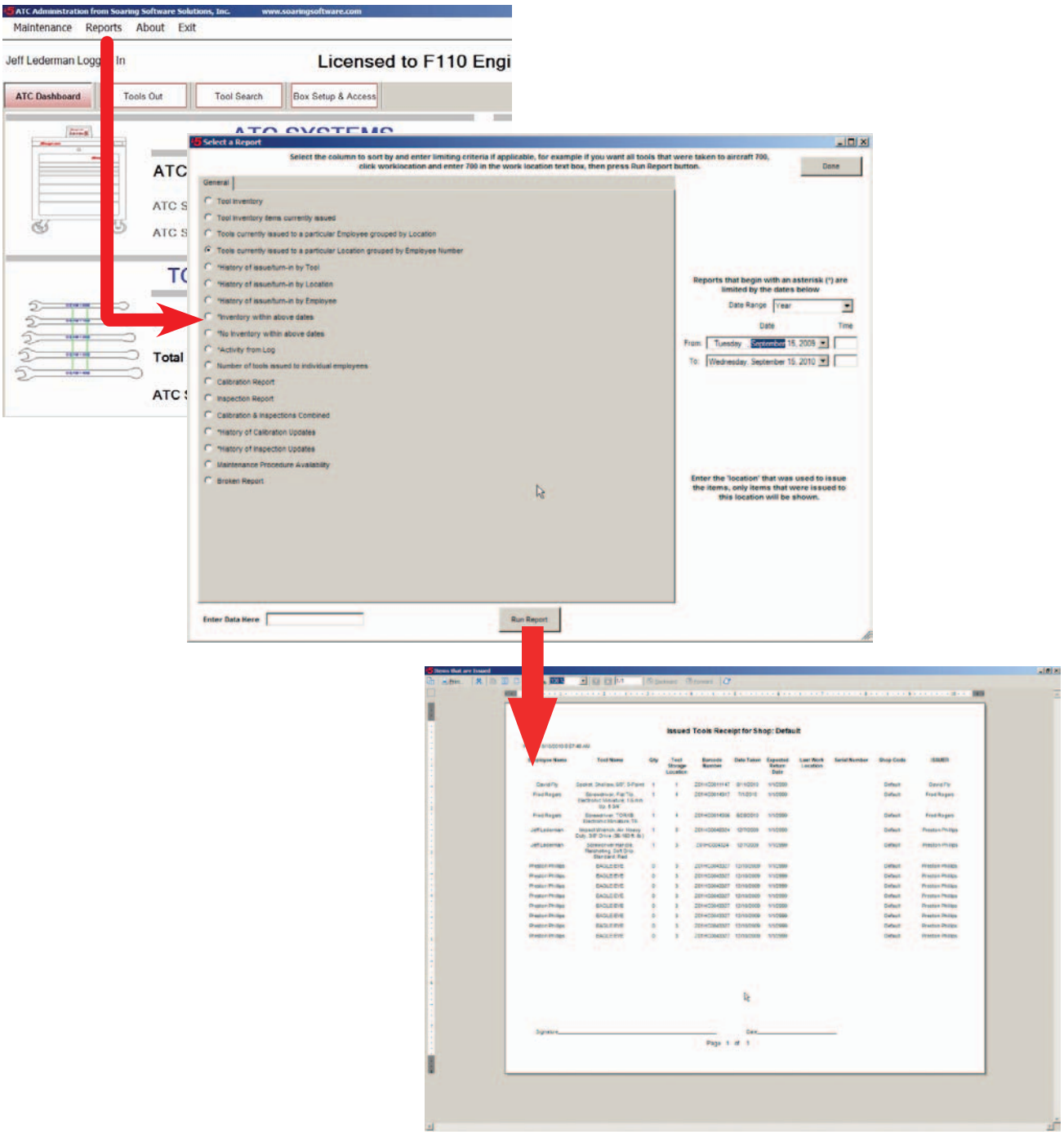
Tool Status can also be altered in this screen by selecting the “Change Tool Status” button. This feature is also available on the “Tools Out” screen.



REPORTS

This Main Menu selection allows a wide variety of reports to be generated. Select “Reports” from the home screen. Information will be required based on the desired report. Some reports may require only the date and time and others require data or an employee name to be entered. See the data entry location at the bottom of the reports screen.

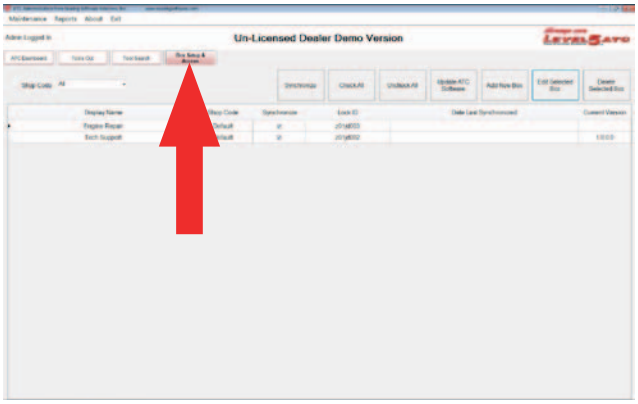
Select the desired filter and enter the required data followed by clicking on “Run Report” at the bottom of the screen. A report will be generated such as the one shown below. The report can be viewed and/or printed at this time.



FILE BACKUP

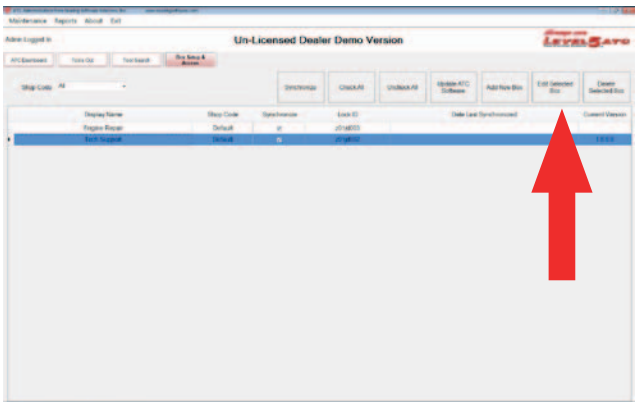
It is strongly recommended that the installer or Systems Administrator perform a file backup as soon as the ATC Admin software and ATC Boxes are installed and running. Backing up the operation files from the ATC boxes will enhance a recovery in the unlikely event of a PC failure in one of the boxes.

From the main or home menu, select the “Box Setup & Access” tab.



Highlight the box requiring a file backup.

Next select “Edit Selected Box”. You can only select one box at a time.

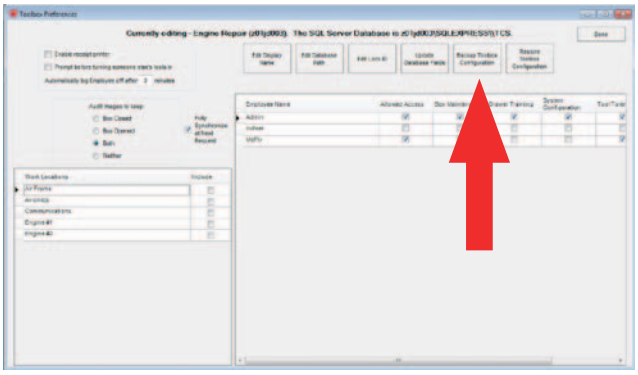


From this screen select “Backup Toolbox Configuration”.

Wait while the box files are written to the Admin computer.

Select additional boxes to be backed up as required and repeat the above procedures.

Backups are located at this address:
c:\snap-on\atc\backups



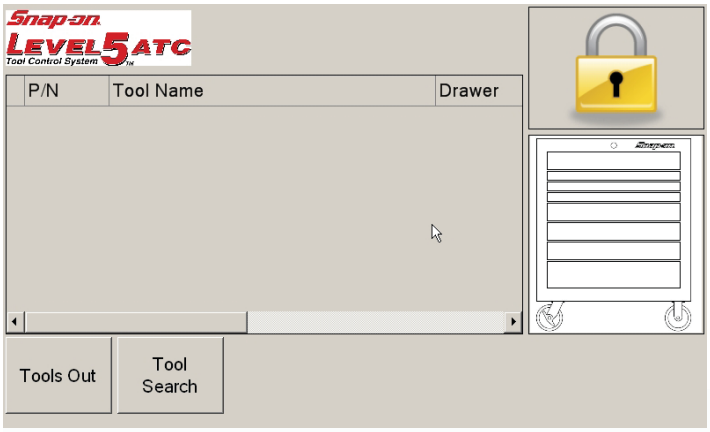
ATC BOX OPERATION

Once all system setup requirements have been met the box is ready for normal operation and tool usage. Box operation is simple and straight forward for use of use. Turn the power to the on position via a power switch on the rear of the cabinet adjacent to the power cord. The unit will require several moments to boot up.

The screen to the right is the home screen when no one is logged into the system. Only two functions are allowed with no login, “Tools Out” and “Tool Search”.

Tools out shows a list of all tools currently checked out of the box. Tool Search allows a user to search for a specific tool in the box inventory.

When desired to access more functions and features as well as check out tools, a user must have permissions set up by the box Administrator.



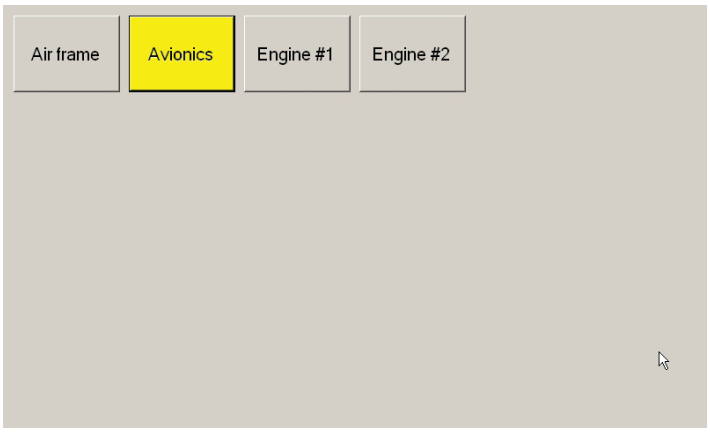
The user will pass his ID card in front of the RF ID reader located on the right front of the box top.

NOTE: The card shown is the “Master Admin Badge” supplied with the system. Your actual card may vary.

If the system has multiple work locations setup the first screen to appear will require the logging in user to select the work location.

Once the box recognizes the user the main screen will display additional functions as well as show the current user and his/her photo if supplied.

The logged in user can now perform functions that are permissible under his login. The user can now remove and return tools as required while the box records tool activity.



Only one user can be logged in at any one time. However multiple users can have tools checked out.

Refer to the “Using Administrator” and “Box Setup” sections of this manual for information regarding permissions and employee setup and other maintenance functions.

CHECKING OUT TOOLS

A user must be allowed box access permission in order to remove or return tools. Once logged in, the box will unlock.

Open the desired drawer, select and remove the desired tool or tools. Close the drawer normally.

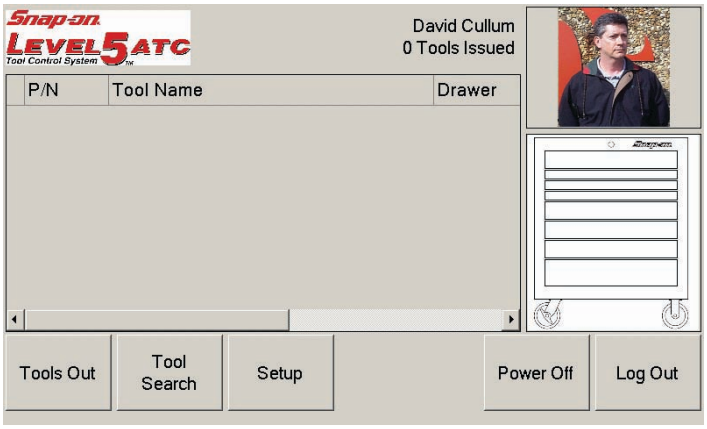
NOTE: A user does not have to treat the box unlike other boxes. However, the user should not slam the drawer shut causing the camera to not properly record the drawer contents. If this is the case the user will be alerted and requested to open and close the drawer again.

A voice prompt alerts the user of the status of his transaction such as “Two Tools removed” or “Returned 5”.

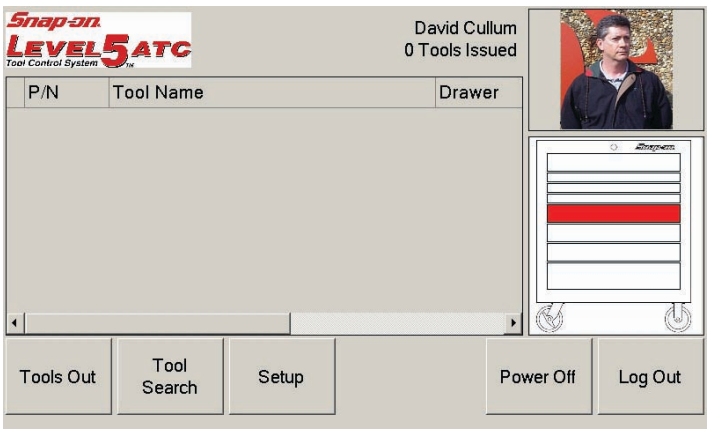
When desired tools have been removed the current user should logout allowing other users to access the box.

A drawer open time-out is featured for automatically locking the box after a determined time. See the “Box Setup” chapter for more information.

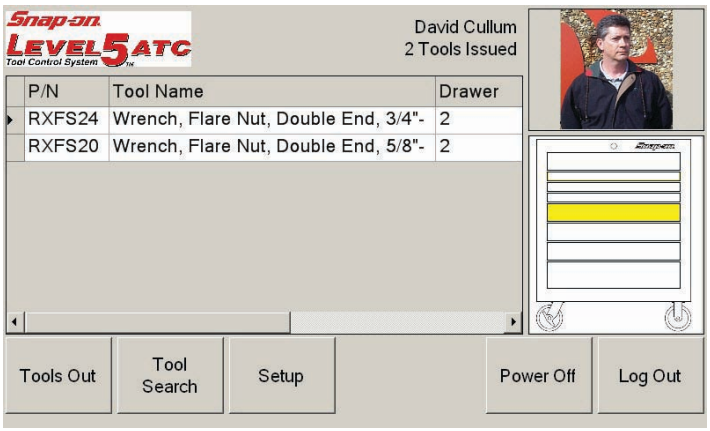
When a second user attempts to login to the box the first user is automatically logged out to allow the second users transactions to be recorded.



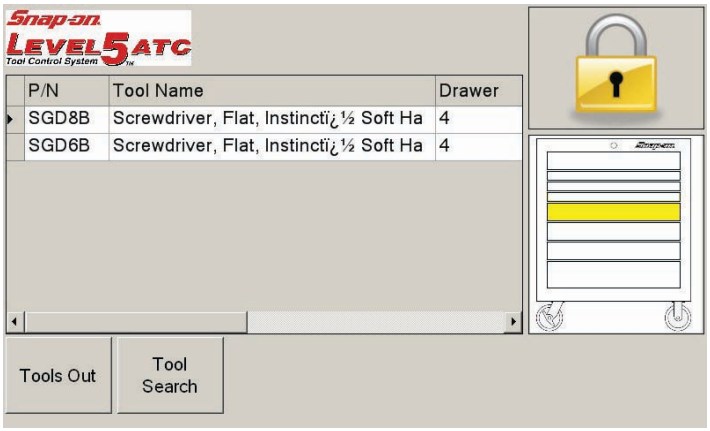
When the user has a drawer open, the box indicator graphic shows the open drawer in red. See screen sample to the right.



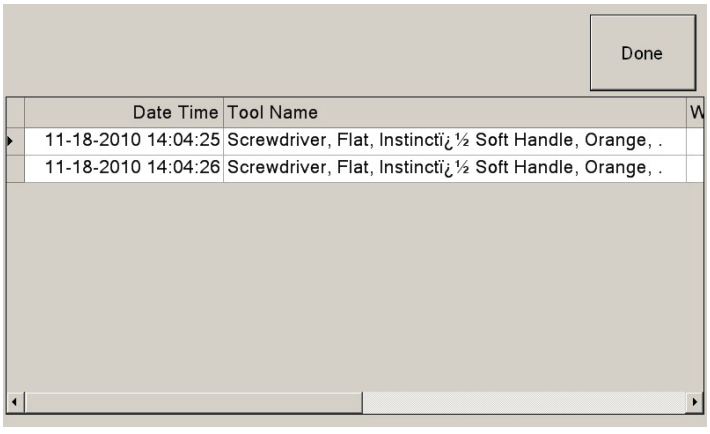
When the user has removed desired tools from the box and closed the drawer, the box indicator shows the drawer in yellow to indicate there are tools removed from that drawer. Also the tools removed are then listed as shown to the right.



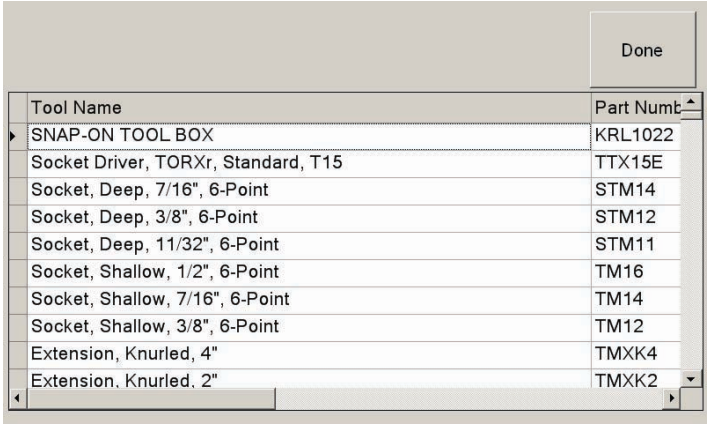
Removed tools will remain listed even though the user has logged out of the system. Drawers with missing tools will be colored yellow. See illustration to the right.



Anyone can view the removed tools by selecting the “Tools Out” button on the main screen. See screen sample to the right.

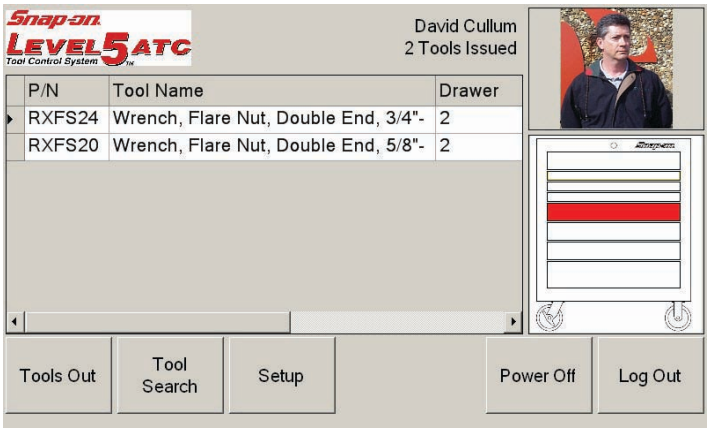


Anyone can view the box inventory or search for specific tools by selecting “Tool Search”. See screen sample to the right.

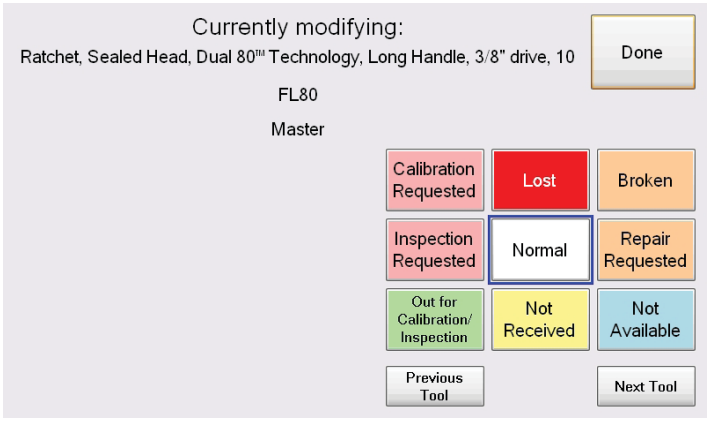


TOOL STATUS

If for some reason a tool has been compromised such as lost, broken or cannot be returned to the box for other reasons the user can now mark those tools accordingly for its current status.

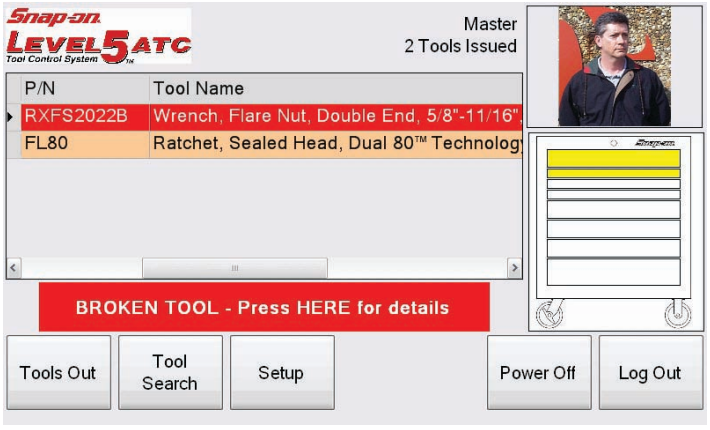


To mark a tool double click the tool affected. The screen to the right appears that allows the user to select the reason the tool requires attention. Highlight the status of the tool from the listing, select “Done” when selection is complete.



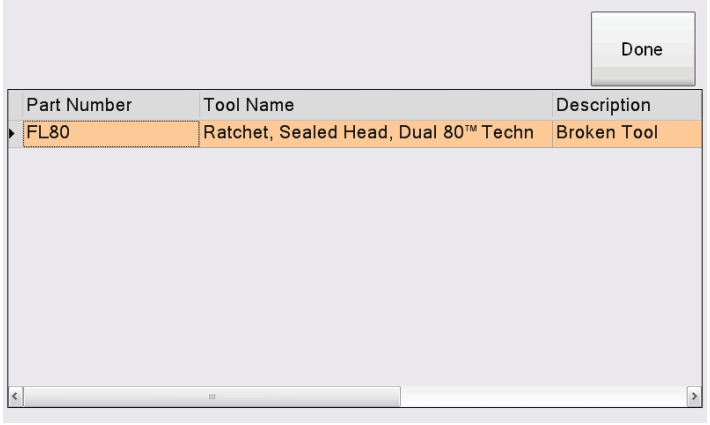
Once highlighted the tool listing will indicate its current status as shown in the screen to the right.

The Administrator will have full view of all tool status as he synchronizes the box. The Administrator can also change tool status from his Admin PC.



TOOL PROBLEM NOTIFICATION

For example: If a tool is broken a red indicator will appear that alerts the users. Click on the message for additional details of the tool in question.

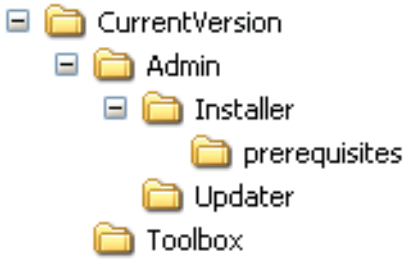


ATC TOOLBOX SOFTWARE UPDATE INSTALLATION

NOTE: This procedure assumes that the ATC Administration software has been installed in the default installation directory (c:\snap-on\atc). If a different installation directory was chosen you should contact Snap-on technical support for update instructions.

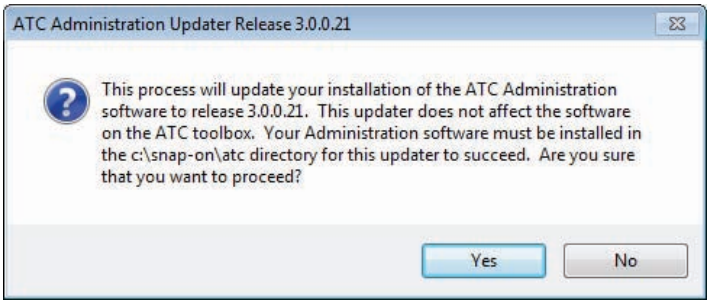
1. Turn the power on both the ATC Toolbox and the Administration PC

2. Copy the update files to the administration computer. These files should include the Administration Updater (ATCAdministrationOnlyUpdater-X.X.X.X.exe) and the toolbox update file (ATC-X.X.X.X.zip).

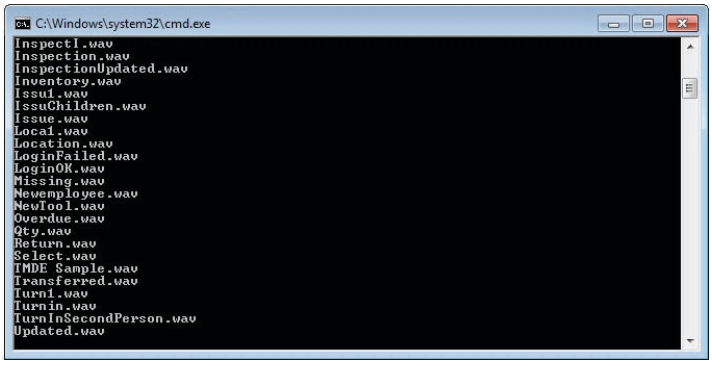


3. Double click on the Administration Updater to open the program.

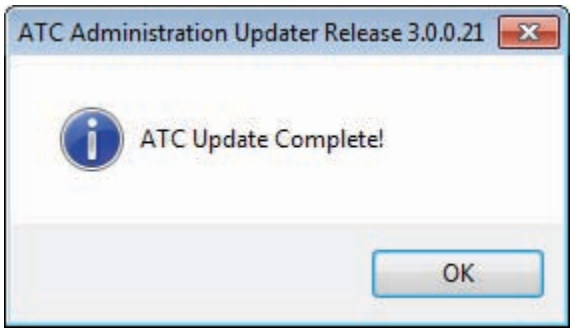
4. The program will display an installation prompt. Click Yes to begin the update process. Click No to exit the updater.



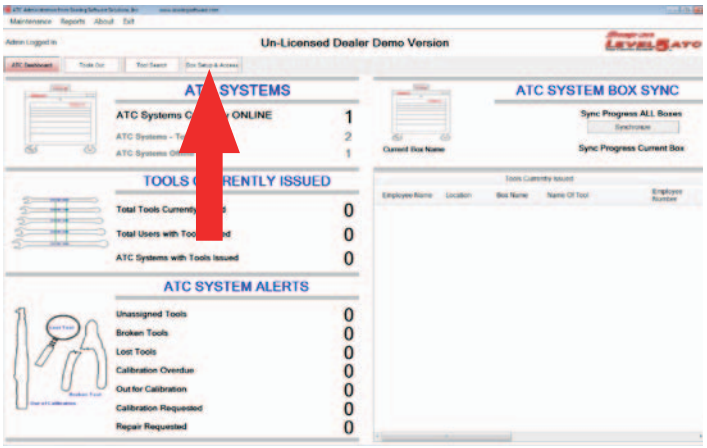
5. A “Command Prompt” dialog box quickly appears showing the status of file update.



6. At the end of the system update a message will appear confirming a successful operation. Click the OK button to exit.

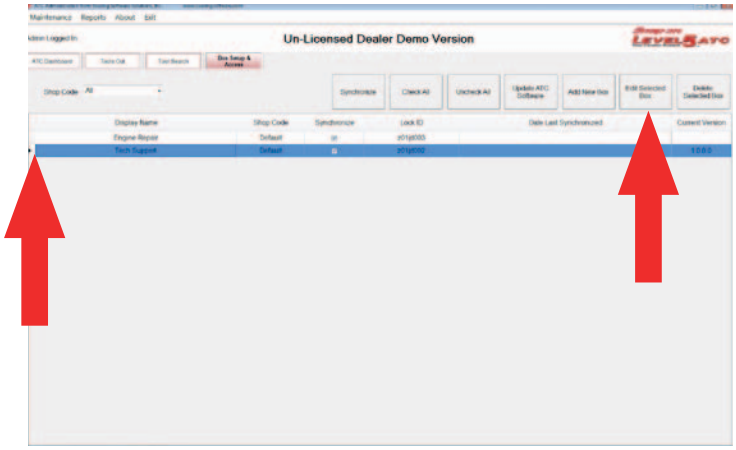


1. Open and login to the Administration software. Click on “Box Setup & Access”,



2. From the Box Setup & Access screen select the first box that you are updating. A small, right-pointing arrow will appear to the left of the toolbox that is selected.

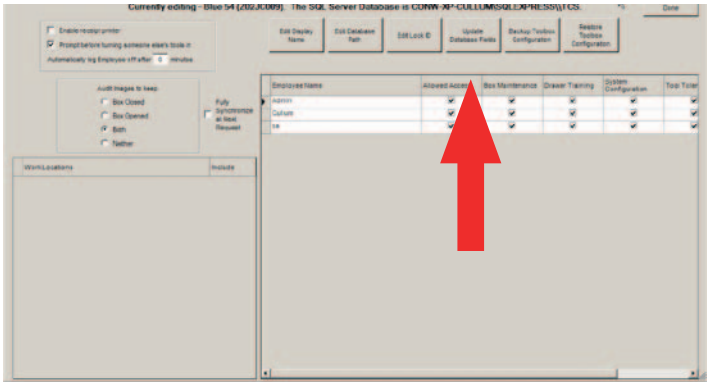
3. Press the Edit Selected Box button. This will open the Toolbox Preferences screen.



4. In the Toolbox Preferences screen press the Update Database Fields button. An “Update in Progress… Please Wait” message will appear below the button.

5. When the “Update in Progress… Please Wait” message disappears click the Done button in the Toolbox Preferences screen.

6. Repeat steps 7 through 10 for each toolbox that is being updated.

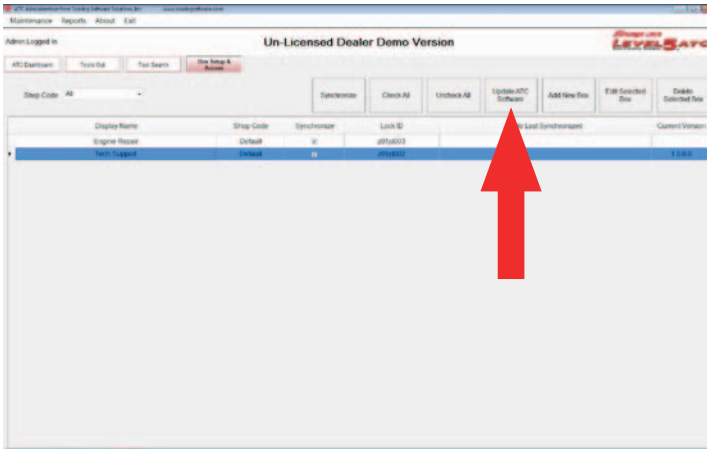


7. On the Box Setup & Access screen press the Update ATC Software button.

8. When the file dialog appears navigate to the location of the toolbox update file (ATC-X.X.X.X.zip).

9. Select the update file and click the Open button.

10. Select Yes to finalize the update file selection when prompted by the Administration software.



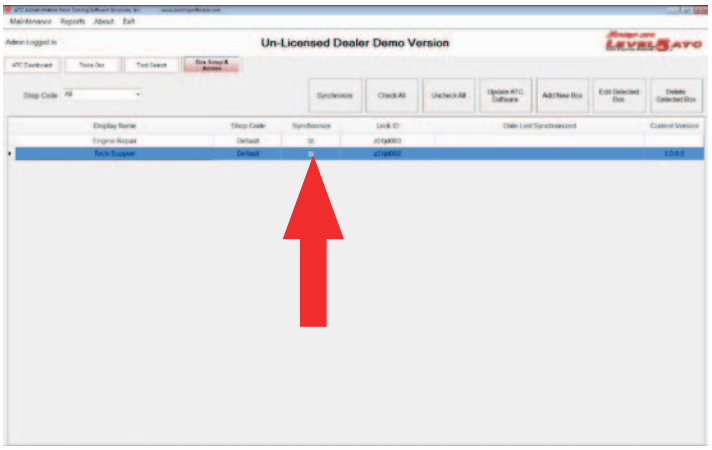
11. Click OK on the synchronization notification prompt.

12. On the Box Setup & Access screen make sure that the Synchronize checkbox is selected for all and only the toolboxes that are being updated.

13. On the ATC Dashboard screen press the Synchronize button.

14. After the synchronization is complete for each toolbox the box will automatically restart to finalize the update.

15. If any boxes are offline during the initial synchronization they will be updated on their next synchronization.



GENERAL INSTRUCTIONS

Normal operation requires common sense care of the ATC system. Below are some specific Do's and Don't's to follow.

DO

- Close drawers in a normal fashion
- Clean tools before replacing into foam cutouts
- Keep tool box clean
- Respect the ATC system for what is intended to do for you
- When touching the touch screen do so with clean hands
- Keep touch screen clean
- Use only your fingers on the touch screen
- Keep box locked when not in use
- Logout when not present at the box
- Lock wheels when in use
- Make sure all drawers are closed before moving box
- Only move box with attached handle

DON'T

- Slam drawers closed
- Place objects into drawers that do not have cutouts
- Allow the foam to get dirty
- Use in the rain or in wet conditions
- Reach inside drawer to retrieve tools beyond camera view
- Place tools directly onto foam, place tools in their cutout
- Modify cutouts
- Plug unit into a voltage source other than that specified
- Strike or beat on box
- Attempt to open the box top
- Plug any device into box USB ports
- Step onto or into open drawers
- Turn off power switch before shutting down the ATC system through the touch screen interface first

MAINTENANCE

- Clean the mirror regularly with window cleaner and a soft lint free rag. If the mirror requires cleaning, spray window cleaner on a soft lint free rag and wipe down making sure no liquids drip into the drawers or into the cabinet.
- Wipe down dot strips inside each drawer, make sure there are no obstructions on the strips.
- If the screen requires cleaning, spray window cleaner on a soft lint free rag and wipe down making sure no liquids drip into the edges of the screen. Do not spray any type of cleaner onto the touch screen.

Notes

Notes

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