



# INSITE™ 8.0.0 - What's New?

Cummins

Electronic Service Tools



# What's New Topics?

- Installation
- Operating Systems Supported
- New Engines Supported
- New Features Supported
- New ECM Diagnostic Test Supported
- What's New Summary
- INSITE™ Overview

# Installation

## INSITE™ 8.0.0 installation

- INSITE™ 8.0.0 is available for download from the <https://insite.cummins.com/insite/downloads/index.html> on or after February 28<sup>th</sup> 2014.
- Administrative rights are NOT needed to install INSITE™ 8.0.0 via Update Manager (INSITE 7.6.X required on the machine to use this method)
- New licenses may be required should license migration fail from 7.6.X to 8.0.0. Launch INSITE™ first if INSITE was on the machine previously to perform the license migration.

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# Operating Systems

- Supported:
  - Windows® 7, 32-bit and 64-bit
  - Windows® 8.X 32-bit and 64-bit
- Not supported:
  - Windows® XP, 32-bit and 64-bit
  - Windows® Vista, 32-bit and 64-bit

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# New/Modified Base Features Supported

- - Product Based Licensing
  - INSITE 8.0.0 licensing has been updated to include licensing based on the engine support needed. All of the existing levels of Pro, Lite and RSGR/Industrial Pro and Basic are supported in all of the Product Levels.
  - Product Levels:
    - MR/HD Automotive - This will support all Mid Range and Heavy Duty automotive engines supported by the Service Information Rule (SIR) and Repair and Maintenance Information (RMI) regulations.
    - MR/HD Plus - This will support all Mid Range and Heavy Duty automotive and industrial engines including those supported by SIR and RMI. This does not include High Horsepower engines.
    - Service Plus – This will support all Mid Range and Heavy Duty automotive and industrial engines and High Horsepower engines. This functionality level will require High Horsepower Certification before it can be purchased.
  - Note: Higher functionality levels will not function without an active Basic license.



# New/Modified Base Features Supported

- **Reset Inactive Faults**
  - With INSITE 7.6.2, this function was disabled for the 2007 and above engine models. To reset inactive fault codes, the Reset All Faults option can be selected.
  
- **INSITE Integrated Simulator - Multi Module**
  - With INSITE 7.6.2, changes were made for 2007 models and above were combined into one single simulator called INSITE Integrated Simulator - Single Module.
  
  - With INSITE 8.0.0, for 2007 models and above multi module simulators are now combined into one single simulator called INSITE Integrated Simulator - Multi Module. This will display all the Features and Parameters, ECM Diagnostic Tests, and Advanced ECM Data that is supported for multi module engines.
  
  - The existing 2007 models and above multi module engine simulators will be removed. This will not impact the multi module engine simulators prior to 2007 models.
  
- **INSITE Data Packs**
  - Installed with 8.0 is the Data Pack program. This is a base program that will allow minor updates to be installed without the need of an INSITE Feature Pack release. This program, and the License Configuration Tool, is built into the INSITE installation and will install before INSITE. If they are removed after installation, INSITE will not function. INSITE Data Packs may include the support of a new engine product, new features and new monitors. These will be installed using the Cummins Inc. Update Manager.

# New/Modified Base Features Supported

- Calibration Selection and Download
  
- INCAL
  - The INCAL expiration date has been extended from six months to seven months. This change will also apply to calibrations that are downloaded from QuickServe Online.
  
- Calibration Passwords
  - If a calibration authorization is needed during a calibration download, a Fleet Calibration Count will be needed. Fleet Counts will be the only Calibration Authorization Password available with the Licensing Configuration Manager.
  
  - The single calibration password option is no longer available. The Calibration Authorization window will only display a check box to use a Fleet Calibration Count and display the current and requested ECM Code information.
  
- Programmable Datalink Device (PDD) Calibration
  - When selecting PDD under Calibration Selection, INSITE will disconnect from the ECM and open the reflash window in full screen.
  
  - Once the PDD reflash has completed, the PDD window must be closed by using the Close Button (X) on the window.
  
  - INSITE will not automatically reconnect to the ECM after the PDD window has been closed. A manual reconnection will be necessary.

# New/Modified Base Features Supported

## ■ Work Orders

- Work Orders and Images created in Simulator Mode on an earlier release, will be deleted on the upgrade to 8.0.0. This affects simulator only. Work Orders and Images created from an ECM will be retained.
- When connected in Simulator Mode, only Work Orders and Images created with the Integrated Simulator will be displayed.

# New ECM Diagnostic Test Supported

- \*\*\*This will only be displayed if it is supported by the calibration.
- Aftertreatment Diesel Particulate Filter Restriction Test
  - This test will aid in the evaluation of the Aftertreatment Diesel Particulate Filter to determine if it needs to be cleaned and if it meets reuse criteria after a cleaning event.

# Advanced ECM Data

- \*\*\*These will only be displayed if they are supported by the calibration.
- Aftertreatment Diesel Oxidation Catalyst Efficiency
  - Each time a regeneration is performed, the ECM calculates the efficiency of the Diesel Oxidation Catalyst. This value is logged in the ECM when there is a change from the previously calculated value. This feature will display the last ten log values.
- Aftertreatment Maintenance and Aftertreatment Maintenance Filter Installation
  - This feature has been updated to include two new monitors: Aftertreatment Diesel Particulate Filter Remaining Hours and Aftertreatment Diesel Particulate Filter Remaining Distance. These monitors provide the distance and hours remaining before the next Diesel Particulate Filter cleaning.



# Overview of INSITE Licensing Changes



# Overview of INSITE Licensing Changes

- INSITE will change how it is licensed with the release of INSITE 8.0.0
  - Requires an internet connection to activate a license and revalidate the license (every 90 days).
  - Introduces Product Based licensing
  - The active 7.5.X or higher licenses will migrate automatically to 8.0.0 license system
  - Allows for bulk license purchasing for larger customers (up to 100 licenses).
  - Introduces Simulator Mode
  - Allows the end user to activate, repair, revalidate, and transfer a license.
- Will only support Windows® 7 and Windows® 8 Operating Systems



# New Licensing Terminology

- **Activation Key** – A 12 character alpha-numeric string used as part of activating licenses via online and offline mode methods. A license administrator and/or Distributor will receive an activation key for each license purchase transaction.
- **Tool Instance** – Replaces the PCID. The Tool Instance will display everywhere the PCID displayed previously (Work Orders, Activity Logs, Images, Help About, etc.)

# Internet Connectivity Requirements

- Does the new licensing require INSITE to be connected to the internet all the times?
  - **No** – The internet is only needed when activating licenses, repairing licenses (corrupt / back dated), transferring licenses, and revalidating licenses.
    - Being connected to the internet at all times just limits the prompting INSITE will do as the system gets close to the revalidation period. (30, 15, 10-1 days remaining)
- **NOTE:** Requires everyone with an active INSITE license to connect to the internet at least once every 90 days.

# Revalidation Information

- Everyone with an active INSITE license must connect to the internet at least once every 90 days to revalidate their licenses and counts.
- If the revalidation period has passed (over 90 days), INSITE will revert to Basic functionality and all counts on the PC will be removed.
- The user can connect to the internet after the revalidation has passed and then functionality license will be activated back on to the PC.
- If the license has expired after the revalidation period, the user must purchase a new license and enter in the new activation keys.



# Product Based Licensing

- With the introduction of INSITE 8.0.0, licensing will be defined by product and functionality levels.
- INSITE Pro, Lite, RSGR/Industrial Pro, and Basic will still be available as functionality levels.
- New Product Levels
  - **Service Plus** – All supported engines
    - All 7.5.0 to 7.6.2 licenses will be migrated to the Service Plus level
  - **MR/HD Plus** – All supported engines minus HHP
  - **MR/HD Automotive** – EPA 2007 > (SIR) and Euro VI (RMI) products only
- Example: Currently have Pro, the license will migrate to 8.0.0 as Service Plus Pro.
- See screenshots on next two slides for more information.

# Product Levels and Functionality Levels

Product Level	Service Plus	MR/HD Plus	MR/HD Automotive
	<i>(All Supported)</i>	<i>(All minus HHP)</i>	<i>(SIR/RMI Only)</i>
Functionality Level			
Pro	X	X	X
Lite	X	X	X
RSGR/Industrial Pro	X	X	X
Basic	X	X	X
Simulator*	X	X	X
<i>*No licensing required.</i>			



# Functionality Levels

Functionality Level	SIMULATOR	BASIC	LITE	RSGR	PRO
	<i>No license required / No live ECM connection</i>	<i>Read Only ECM Access</i>	<i>No Calibration Download</i>	<i>No Calibration Download / Limited Special Features and Diagnostic Tests</i>	<i>Full Functionality</i>
Features					
View Trip Information		X	X	X	X
View Fault Trees		X	X	X	X
Fault Information System		X	X	X	X
View Troubleshooting Steps		X	X	X	X
View Parameter Settings		X	X	X	X
View Wiring Diagrams		X	X	X	X
View Engine Dataplate		X	X	X	X
Driver Rewards		X	X	X	X
Data Monitor / Logger		X	X	X	X
Reset Trip Information			X	X	X
Reset and Clear Fault Codes			X	X	X
Set Engine Features (on/off)			X	X	X
Set / Adjust Parameters			X	X	X
Set / Change ECM Passwords			X	X	X
Create Settings Templates			X	X	X
Create Work Orders / Jobs			X	X	X
ZAP-It Functionality			X	X	X
Run Special Features			X	Limited	X
Run Diagnostic Tests			X	Limited	X
Read / Retrieve Calibration Files					X
Load Engine Calibrations					X



# License Migration Information From Versions 7.5.X or Higher to 8.0.0

- All active INSITE licenses that are 7.5.X or higher will be migrated to the 8.0.0 licensing system.
- If the user only has a BASIC license and it is 7.5.X or 7.6.X, it will be migrated for free to get the user onto the new licensing system.
- All active INSITE licenses will be migrated to the Service Plus product level.
- The migrated licenses will keep the same functionality level.
- All fleet counts, Zap-Its, and OEM Zap-Its will be migrated.
- The expiration of the current licenses will remain the same once the licenses are migrated to the new licensing system.
- Migrated licenses will not be able to be renewed once they expire.
  - Once the migrated license has expired, a new license must be purchased in the new licensing system with the correct product level and functionality level.
  - Only those certified to work on HHP products will receive the Service Plus product level once the migrated license has expired.



# License Migration Information From Versions 7.5.X or Higher to 8.0.0 Continued

- To migrate the license from INSITE 7.5.X or 7.6.X (recommended) to 8.0.0 follow these steps:
  - Step 1: Install INSITE 8.0.0 and the License Configuration Tool on the PC
  - Step 2: Open INSITE 8.0.0 with an active internet connection
  - Step 3: The 7.X.X licenses and counts will be migrated, if an internet connection is on the PC.
  - Step 4: The migrated licenses will work on the PC until they expire.
  - Step 5. New licenses must be purchases once the migrated licenses have expired.

**NOTE:** The PC must be on Windows® 7 or Windows® 8 operating systems to install INSITE 8.0.0



# Bulk License Purchasing

- Distributors and License Administrators may purchase up to 100 INSITE licenses at one time.
  - Allows easier management of large accounts for the Distributors and License Administrators.
  - Can be broken up for a region or location for a particular customer.
    - Example: A business has 5 locations that need INSITE licenses with each one having different types and numbers of licenses.
      - Option 1: Could purchase 7 Pros and then 16 Lites in one transaction to track the whole business.
      - Option 2: Could purchase for each location separately but in bulk for the multiple licenses.

Location #1	Location #2	Location #3	Location #4	Location #5	Total
2 Pro	1 Pro	1 Pro	2 Pro	1 Pro	7 Pro
1 Lite	6 Lite	2 Lite	4 Lite	3 Lite	16 Lite



# Bulk License Information

- Licenses can be purchased in bulk from 2 to 99 at one time.
- The licenses are for the same functional type and product level type.
  - If purchasing 15 Service Plus Lite licenses in bulk, will receive 1 activation key for the 15 Service Plus Lite licenses and 1 activation key for the 15 Service Plus Basic licenses to go with those Service Plus Lite licenses.
- For bulk licenses, the first license to be activated will be the expiration date for all of the other licenses that were purchased in bulk.

# New Simulator Mode



- INSITE 8.0.0 introduces a Simulator Mode for showing INSITE to customers prior to purchasing.
  - Step 1: Install INSITE 8.0.0 or later on the user's PC and do not add licenses.
  - Step 2: In Help About, it will show NA for the tool instance.
  - Step 3: Can view INSITE features using Simulator Mode.

# New Simulator Mode Continued

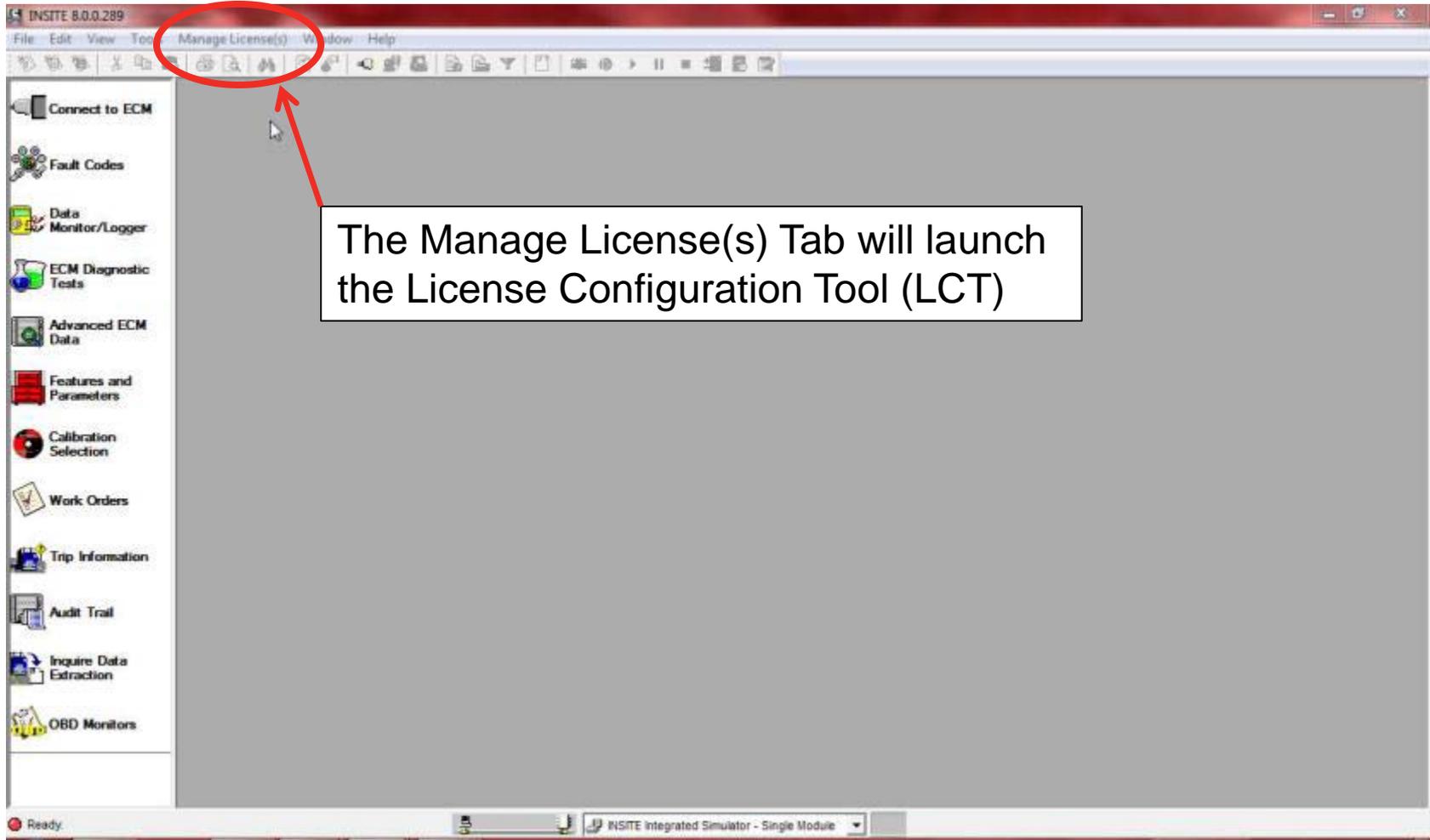
- Will not be able to connect to an ECM in Simulator Mode. No “Live” connection.
- Will not be able to view images and/or Work Orders created on a “Live” ECM.
- Will only be able to view information available in the Simulators.

# INSITE Screen Changes – Help About



- **INSITE Version:** Keeps the same format as previous INSITE releases.
- **Data Pack Version:** This is new and contains the data content version for this release of INSITE.
- **Tool Instance:** Replaces the PCID.

# INSITE Screen Changes – Manage Licenses



The licensing information has been removed from the Tools > Options location. All licensing must be done through the LCT.

# End User Ability to Activate, Repair, Revalidate, and Transfer Licenses

- Will have the ability to activate their licenses if provided the Activation Key or QuickServe Log In information.
- Will be able to repair the license for PC back-dating and if the license is corrupt.
- Will be able to revalidate the license every 90 days.
- Will be able to transfer a license from one PC to another.
- **NOTE:** All of these actions require a PC with internet access.

# INSITE 8.0.0 Release Information

- INSITE 8.0.0 will be released through DVD only starting in early January 2014.
- The user will be able to install INSITE 8.0.0 using Cummins Inc. Update Manager DVD/CD install and the DVD provided to them.
- The .iso file will be available on the INSITE website in mid-February for downloading and creating DVDs.

# INSITE 7.X.X Licensing System Information

- The renewal function for the current 7.X.X system will be turned off starting in May 2014.
  - The user will not be able to renew a 7.6.X license after May 2014.
    - If the user must be on 7.6.X due to a critical business need, please contact your Cummins Distributor, who will request a renewal from the Electronic Service Tools Product Marketing Team.
  - The system will still provide fleet counts, Zap-Its, and OEM Zap-Its after May 2014.
- The 7.X.X Licensing System will be phased out sometime in Q1/Q2 of 2015. All users must be on the new 8.0.0 Licensing System prior to the phased out in 2015.



# Introduction to the Cummins License Configuration Tool (LCT)



# Cummins License Configuration Tool (LCT) Overview

- The Cummins License Configuration Tool or LCT is a separate application from INSITE that handles all of the tool licensing for INSITE.
- The LCT can be launched from inside INSITE through the “Manage License(s)” tab or opened from the Cummins Folder on the start menu.
- The LCT requires revalidation of the INSITE functionality license once every 90 days.
- An internet connection is required to activate, repair, revalidate, and transfer a license using the LCT.

# View Active Licenses / Counts

No Licenses Activated

Licenses Activated

The screenshot shows the Cummins License Configuration Tool interface. The title bar reads "Cummins License Configuration Tool" and "INSITE Tool Instance: 8BF2F9DE". The main window is divided into a left sidebar and a main content area. The sidebar contains buttons for "View Active Licenses/Counts", "Transfer Licenses", "Activate Licenses/Counts", and "Offline Operations". The main content area has a header "Licenses/Counts must be returned to allow activation on another machine. Please select the licenses/counts to return." Below this, there are two sections: "Transfer Licenses" and "Transfer Counts". Both sections display the message "There are no active licenses/counts on this machine." At the bottom, there are three buttons: "Transfer Selected", "Transfer All", and "Reset".

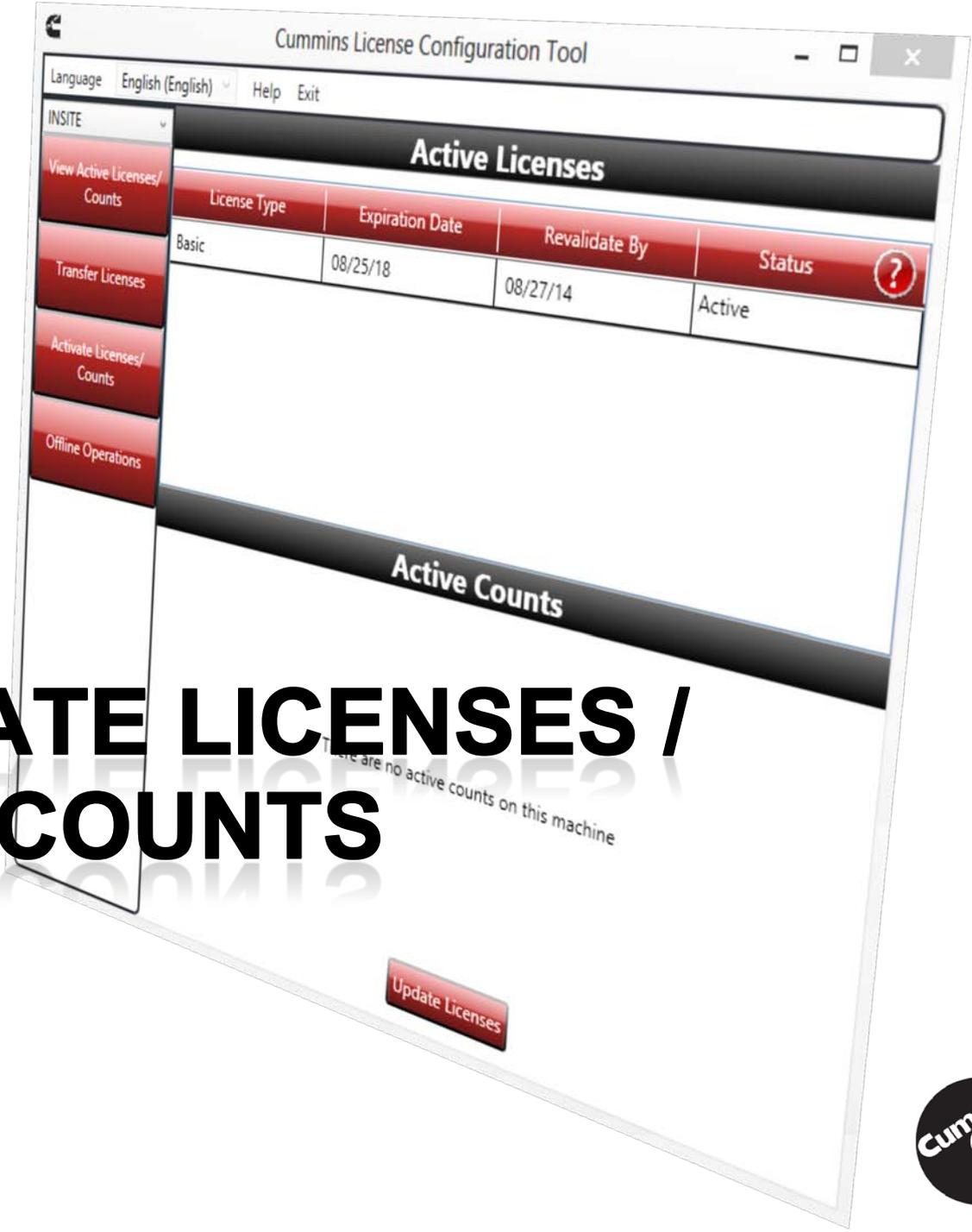
The screenshot shows the Cummins License Configuration Tool interface with active licenses and counts. The title bar reads "Cummins License Configuration Tool" and "INSITE Tool Instance: 8BF2F9DE". The main window is divided into a left sidebar and a main content area. The sidebar contains buttons for "View Active Licenses/Counts", "Transfer Licenses", "Activate Licenses/Counts", and "Offline Operations". The main content area has a header "Active Licenses" and a table with the following data:

License Type	Expiration Date	Revalidate By	Status
Service Plus Pro	09/18/14	03/13/14	Active
Service Plus Basic	09/17/18	12/13/14	Active

Below the table, there is a section "Active Counts" and a table with the following data:

Count Type	Counts Available	Revalidate By	Status
Zap-It	7	03/13/14	Active
Fleet Count	15	03/13/14	Active

At the bottom right, there is a button labeled "Update Licenses".



# ACTIVATE LICENSES / COUNTS

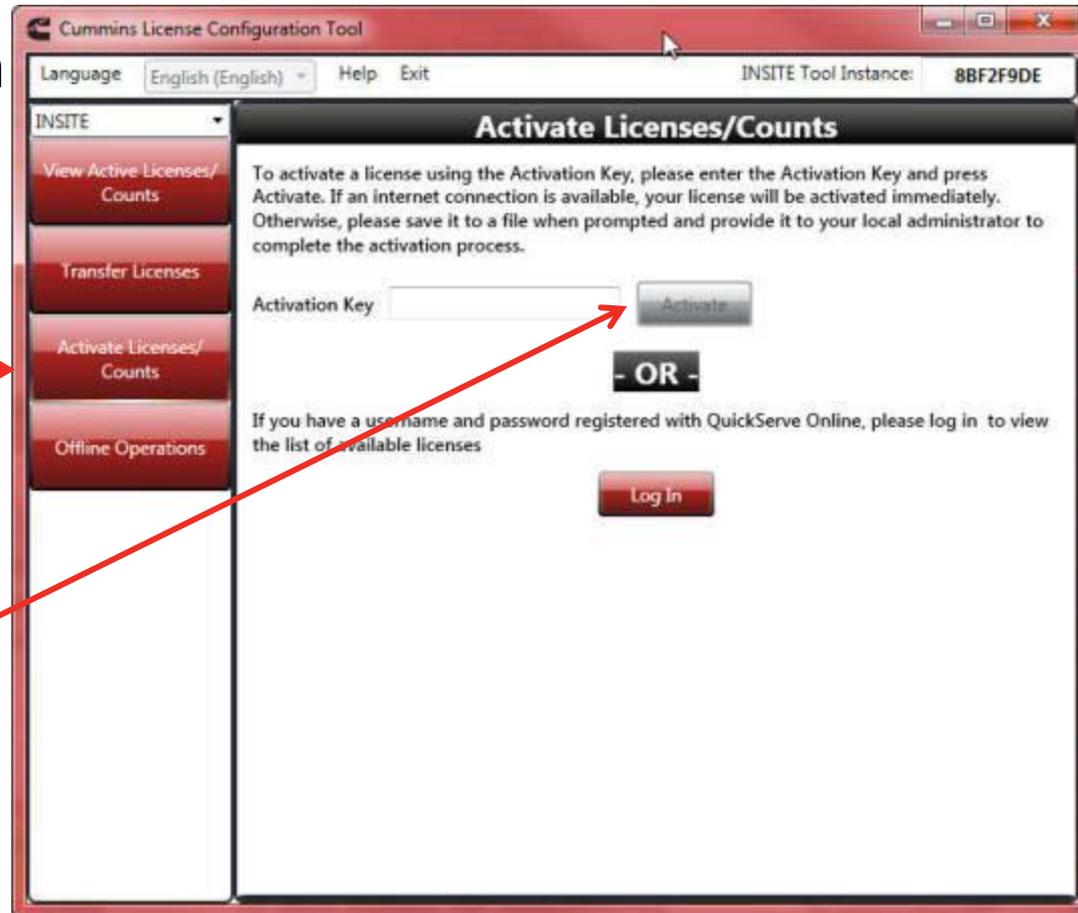
# Activate Licenses / Counts Methods

- There are two methods to active licenses and counts.
  - Activation Key Method
  - QuickServe Log In Method

# Activate Licenses / Counts – Activation Key Method

- Activate Licenses with an Activation Key

1. Select Activate Licenses / Counts button
2. Enter your Activation Key in the provided field
3. Select “Activate”
4. Repeat for each license (Basic, Functionality Level, and Fleet Counts, etc.)



# Activated Licenses Example

The screenshot displays the Cummins License Configuration Tool interface. The window title is "Cummins License Configuration Tool". The language is set to "English (English)". The INSITE Tool Instance ID is "8BF2F9DE".

The interface is divided into two main sections: "Active Licenses" and "Active Counts".

**Active Licenses Table:**

License Type	Expiration Date	Revalidate By	Status
Service Plus Pro	09/18/14	03/13/14	Active
Service Plus Basic	09/17/18	12/13/14	Active

**Active Counts Table:**

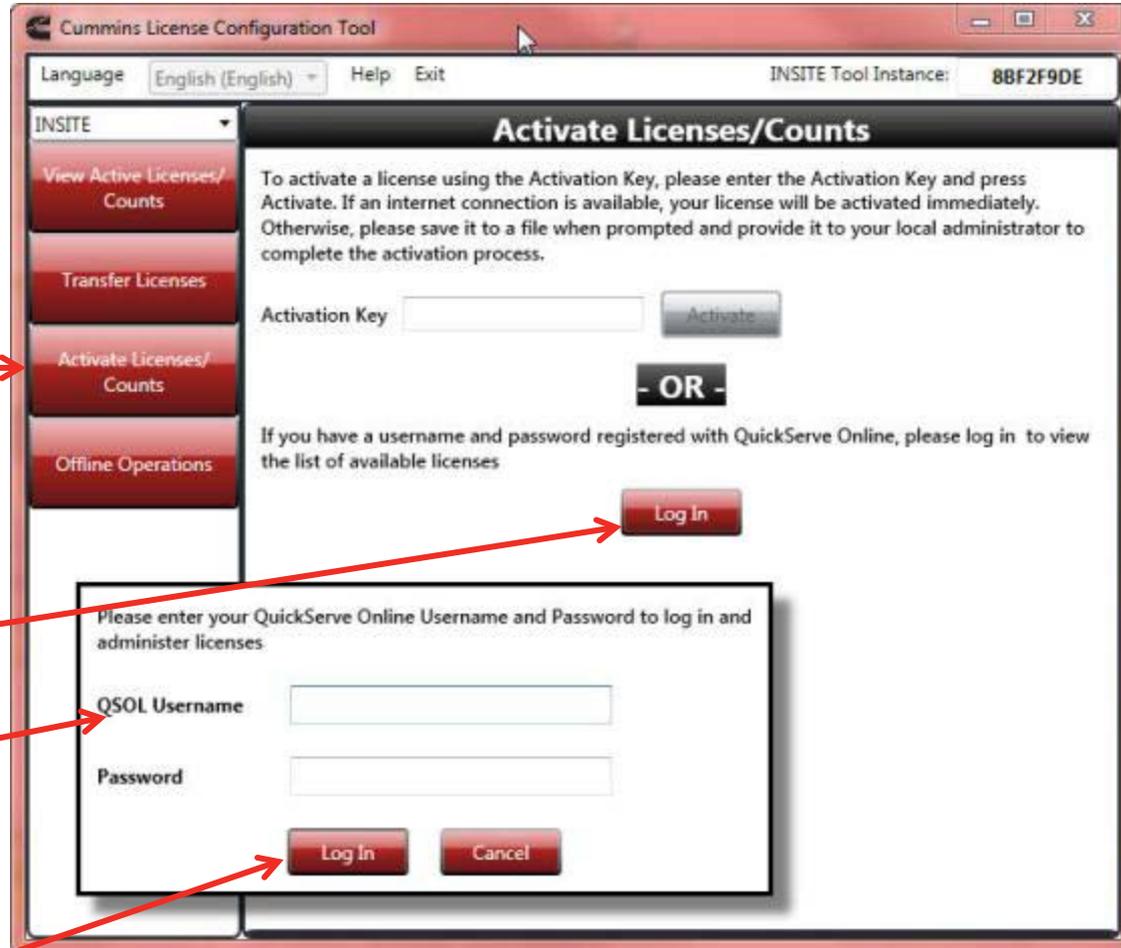
Count Type	Counts Available	Revalidate By	Status
Zap-It	7	03/13/14	Active
Fleet Count	15	03/13/14	Active

At the bottom of the interface, there is an "Update Licenses" button.

# Activate Licenses / Counts – QuickServe Log In Method Steps 1 to 4

## ■ Activate Licenses with a QuickServe Log In

1. Select the “Activate Licenses/Counts” button
2. Select “Log In”
3. Enter the QSOL Username and Password
4. Select “Log In”



# Activate Licenses / Counts – QuickServe Log In Method Steps 5 to 7

- Activate Licenses with QuickServe Log In
  5. Select the passwords you want to activate
  6. Select “Activate” to apply these passwords to the PC.
  7. Select “Yes” to confirm the activation of the license(s)

Note: “Reset” button will deselect all checked items.

Cummins License Configuration Tool

Language English (English) Help Exit INSITE Tool Instance: 8BF2F9DE

INSITE

View Active Licenses/Counts

Transfer Licenses

Activate Licenses/Counts

Offline Operations

### Activate Licenses/Counts

You are currently logged in as gy775. Please press the Log Out button to log out.

Log Out

### Licenses

Select	License Type	Duration/Expiration Date	Available Licenses
<input checked="" type="checkbox"/>	Service Plus Pro	09/18/14	1
<input checked="" type="checkbox"/>	Service Plus Basic	09/17/18	1

### Counts

Select	Count Type	Packages Available	Counts Per Package
<input checked="" type="checkbox"/>	Fleet Count	1	15
<input type="checkbox"/>	Zap-It OEM	1	22
<input checked="" type="checkbox"/>	Zap-It	1	7

Activate Reset

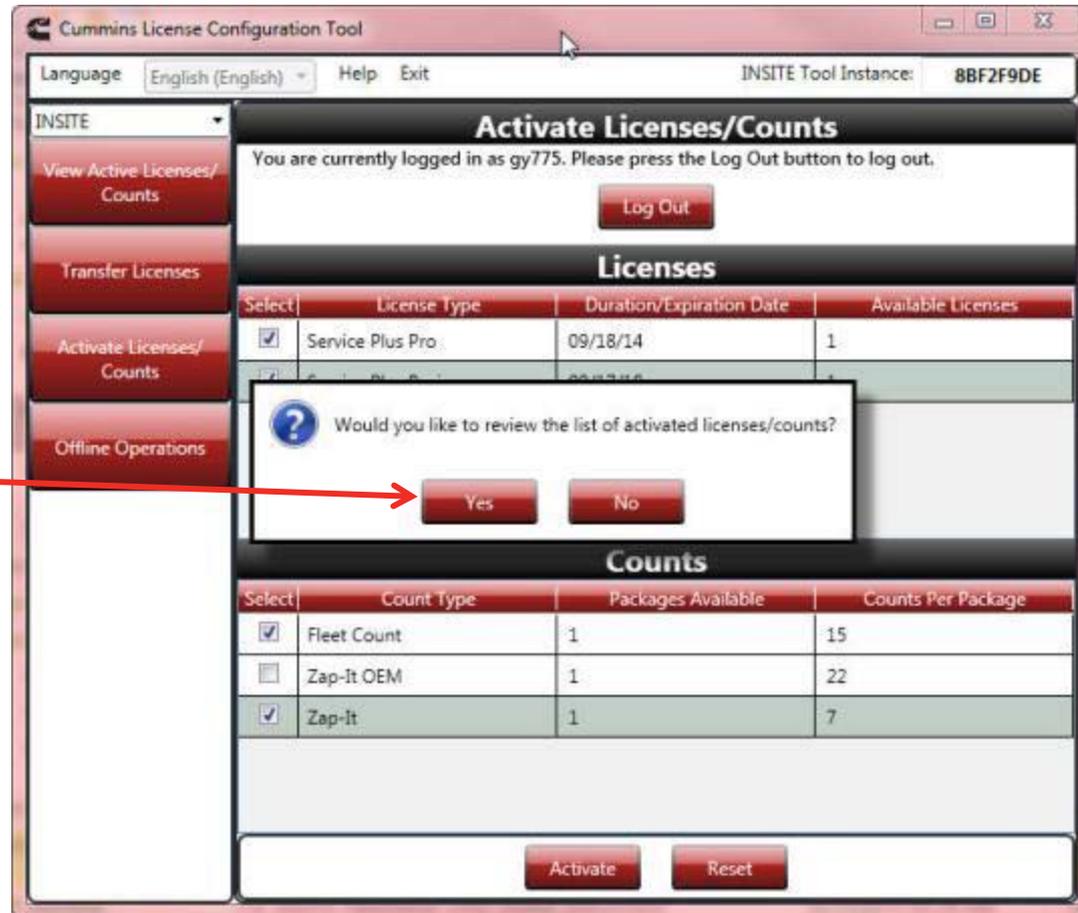
Activate selected licenses?

Yes No



# Activate Licenses / Counts – QuickServe Log In Method Step 8

- Activate Licenses with QuickServe Log In
  8. Review the activated licenses by clicking “Yes”



# Activated Licenses Example

The screenshot displays the Cummins License Configuration Tool interface. The window title is "Cummins License Configuration Tool". The top menu bar includes "Language" (set to English (English)), "Help", and "Exit". The "INSITE Tool Instance" is identified as "88F2F9DE".

The main content area is divided into two sections:

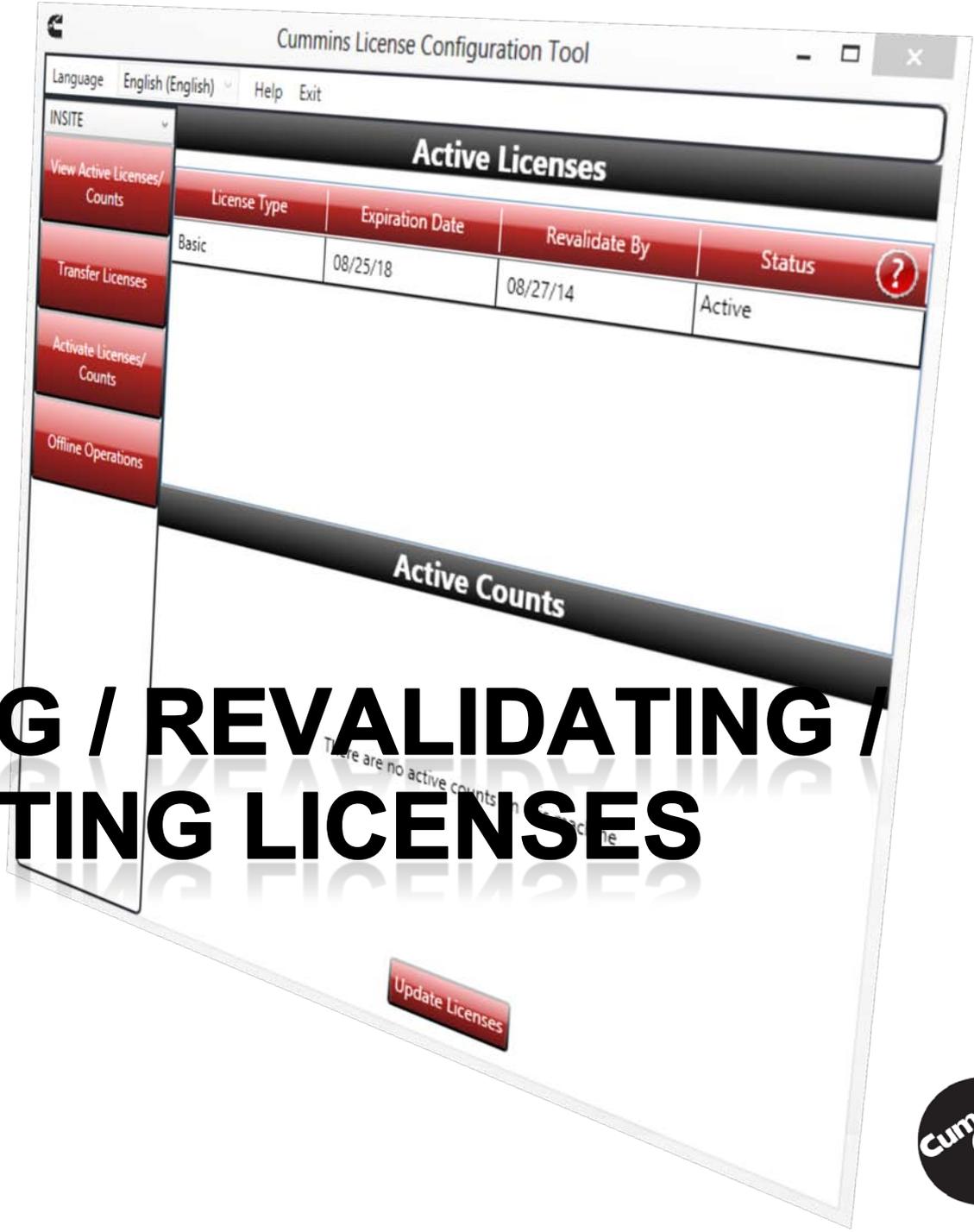
- Active Licenses:** A table with columns for License Type, Expiration Date, Revalidate By, and Status. It lists two active licenses: "Service Plus Pro" (expires 09/18/14, revalidate by 03/13/14) and "Service Plus Basic" (expires 09/17/18, revalidate by 12/13/14).
- Active Counts:** A table with columns for Count Type, Counts Available, Revalidate By, and Status. It lists two active counts: "Zap-It" (7 counts available, revalidate by 03/13/14) and "Fleet Count" (15 counts available, revalidate by 03/13/14).

A sidebar on the left contains navigation options: "View Active Licenses/Counts", "Transfer Licenses", "Activate Licenses/Counts", and "Offline Operations". An "Update Licenses" button is located at the bottom center of the interface.

License Type	Expiration Date	Revalidate By	Status
Service Plus Pro	09/18/14	03/13/14	Active
Service Plus Basic	09/17/18	12/13/14	Active

Count Type	Counts Available	Revalidate By	Status
Zap-It	7	03/13/14	Active
Fleet Count	15	03/13/14	Active



# REPAIRING / REVALIDATING / UPDATING LICENSES

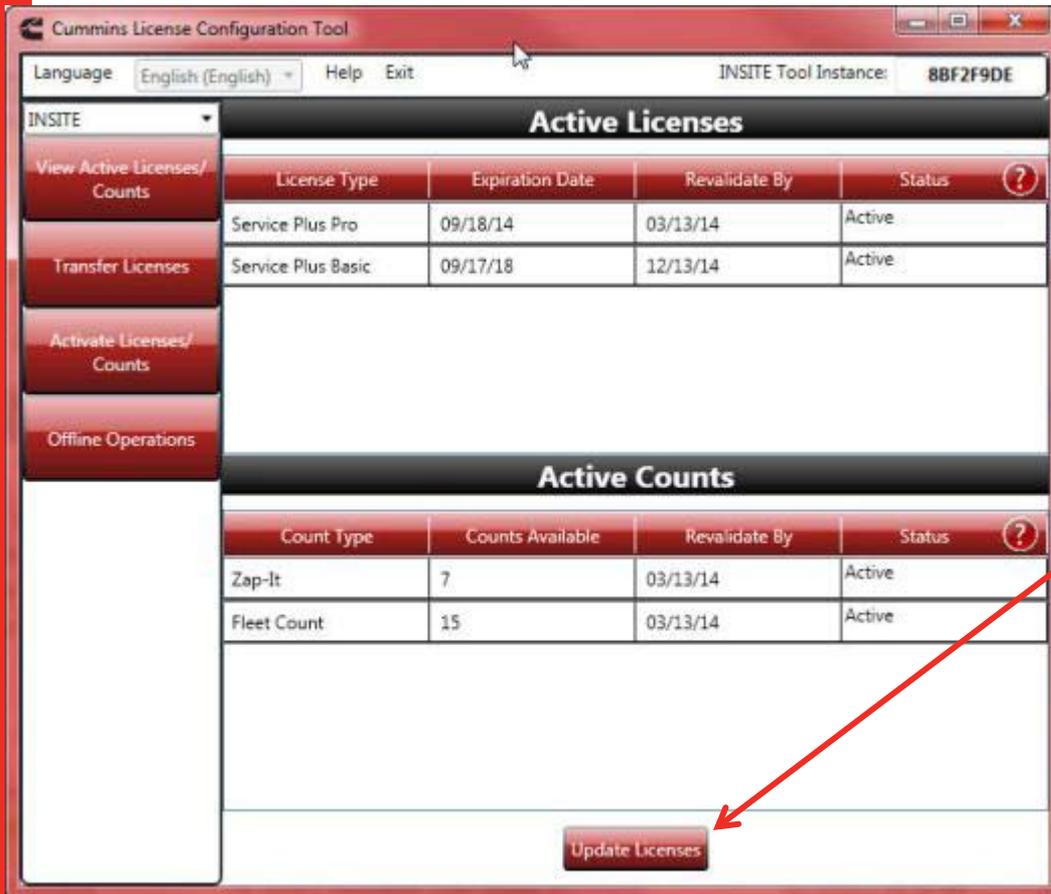
# Repairing and Revalidating Licenses

- Repairing a license will happen automatically when LCT detects a condition that requires the license to be repaired with the server
  - Corrupt local license
  - Backdated licenses
  - Tampered licenses
- Revalidation of the license happens every 90 days. If the PC is always connected to the internet, LCT will perform this action on it's own. However, if the PC is only on the internet for short periods of time, the user can trigger a manual revalidation by selecting “Update Licenses” on the Active License Page.

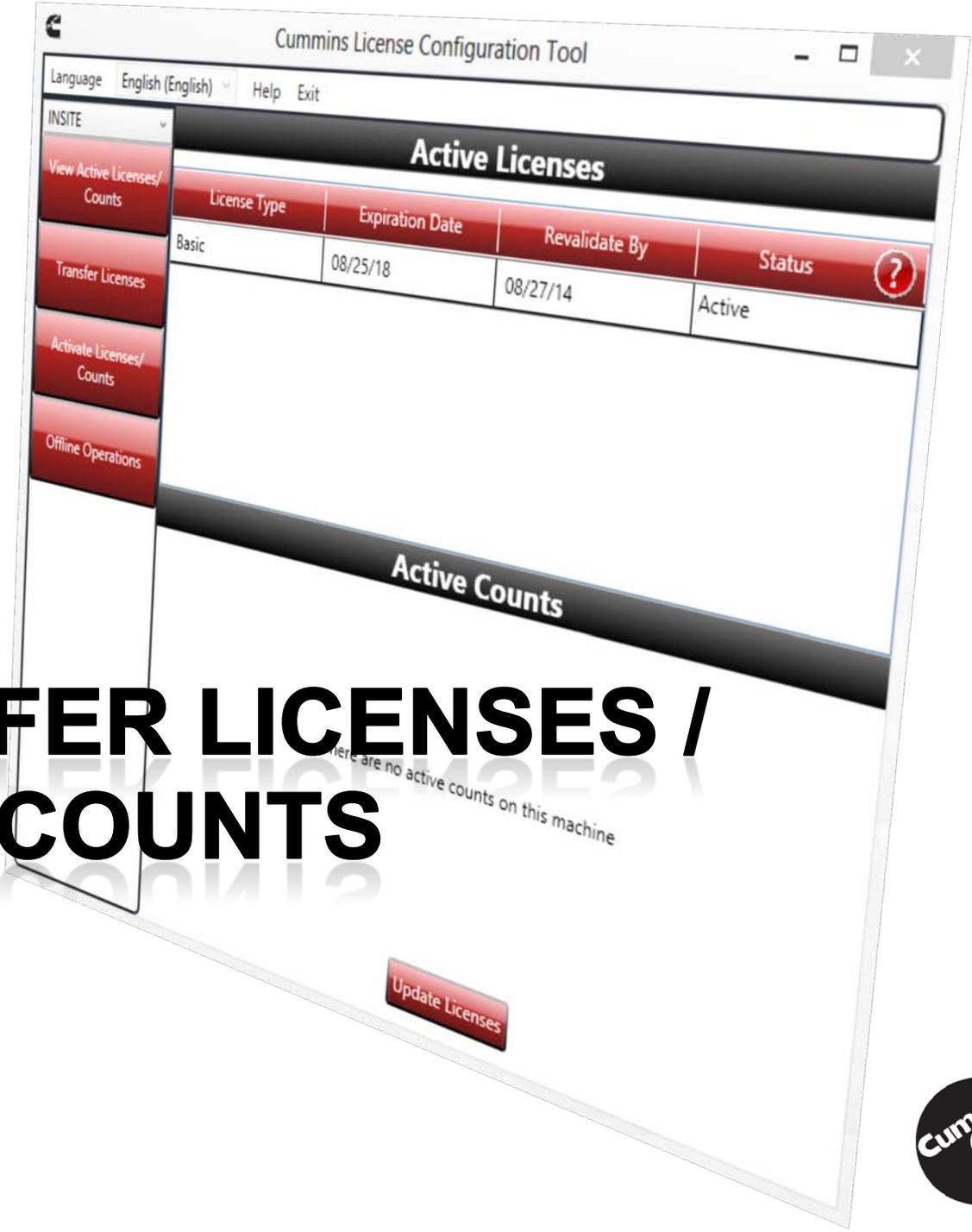
# Updating Licenses

- Updating licenses will happen every time LCT connects to the server and sees changes to your active licenses. For example, if you renew a license and extend the license for another year, the next time LCT checks, then it will update your local license to reflect the new expiration date.
- If for any reason this update does not happen, the user can trigger a manual update by selecting “Update License” on the Active Licenses/Counts page. (Screenshot example on next slide)

# Updating Licenses Manually



- The user can trigger a manual update by selecting “Update Licenses” on the Active Licenses/Counts page.

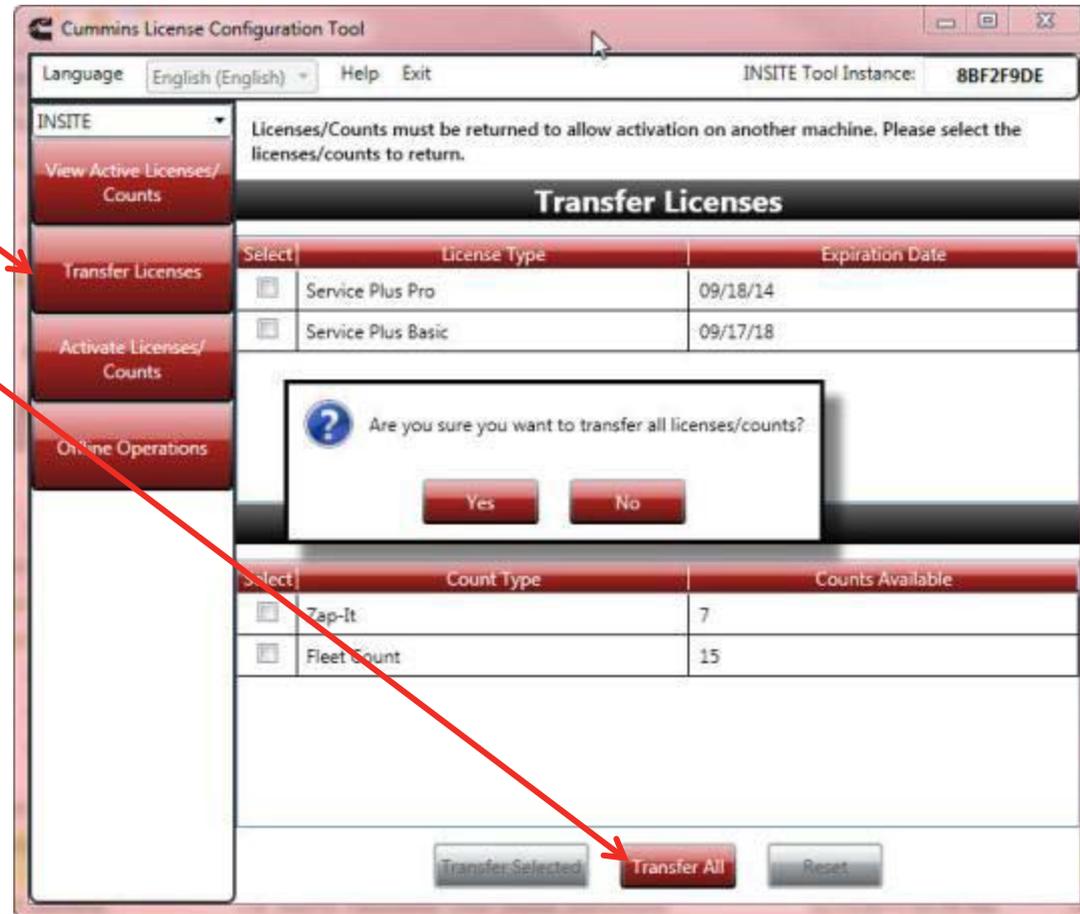


# TRANSFER LICENSES / COUNTS

# Transfer Licenses / Counts – Transfer All Method

- Select “Transfer Licenses” Button
- Select “Transfer All” button
- Select “Yes” to transfer all licenses and counts off of Machine #1

**NOTE:** This will remove all licenses from Machine #1



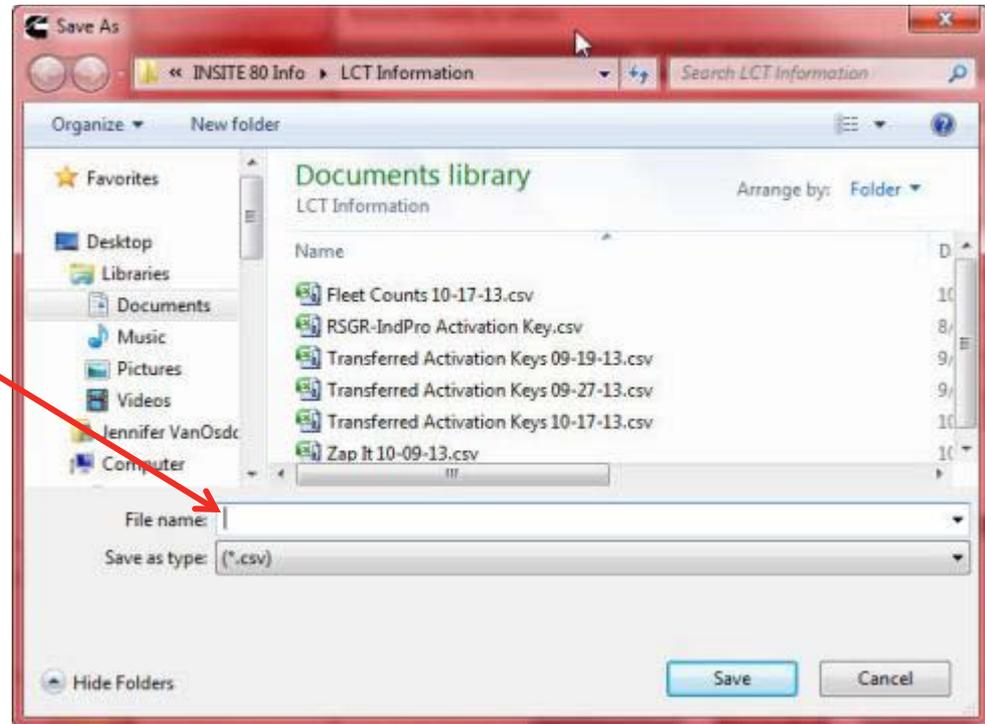
# Transfer Licenses / Counts – Save Activation Keys

- **Recommended:** Save the Activation Key information, by clicking on “Save Keys” button
- This will save the Activation Key(s) information to a file for future reference.
- Once the Activation Key(s) file has been saved, click “OK” to continue



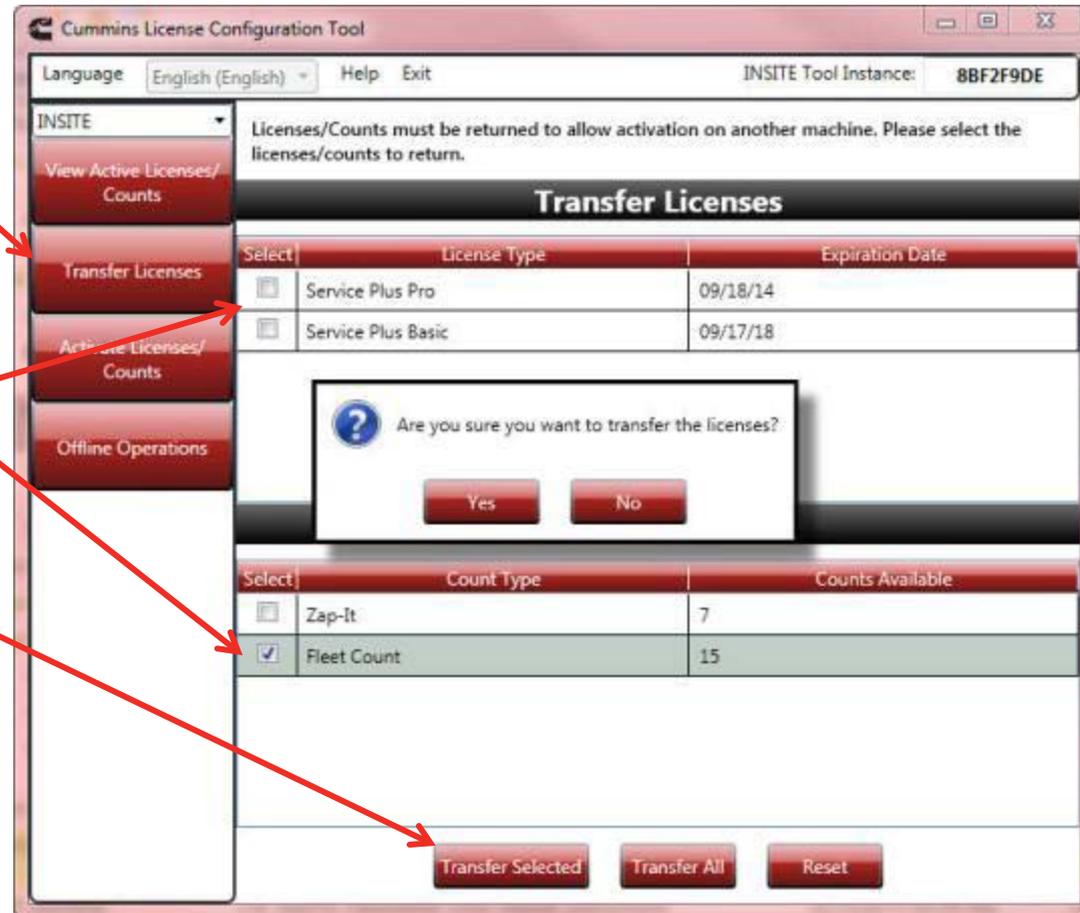
# Transfer Licenses / Counts – Save Activation Keys Continued

- Enter a unique name for the Activation Keys and then click “Save”.
- Once the Activation Key(s) file has been saved, the location information will be displayed, click “OK” to continue



# Transfer Licenses / Counts – Selected Method

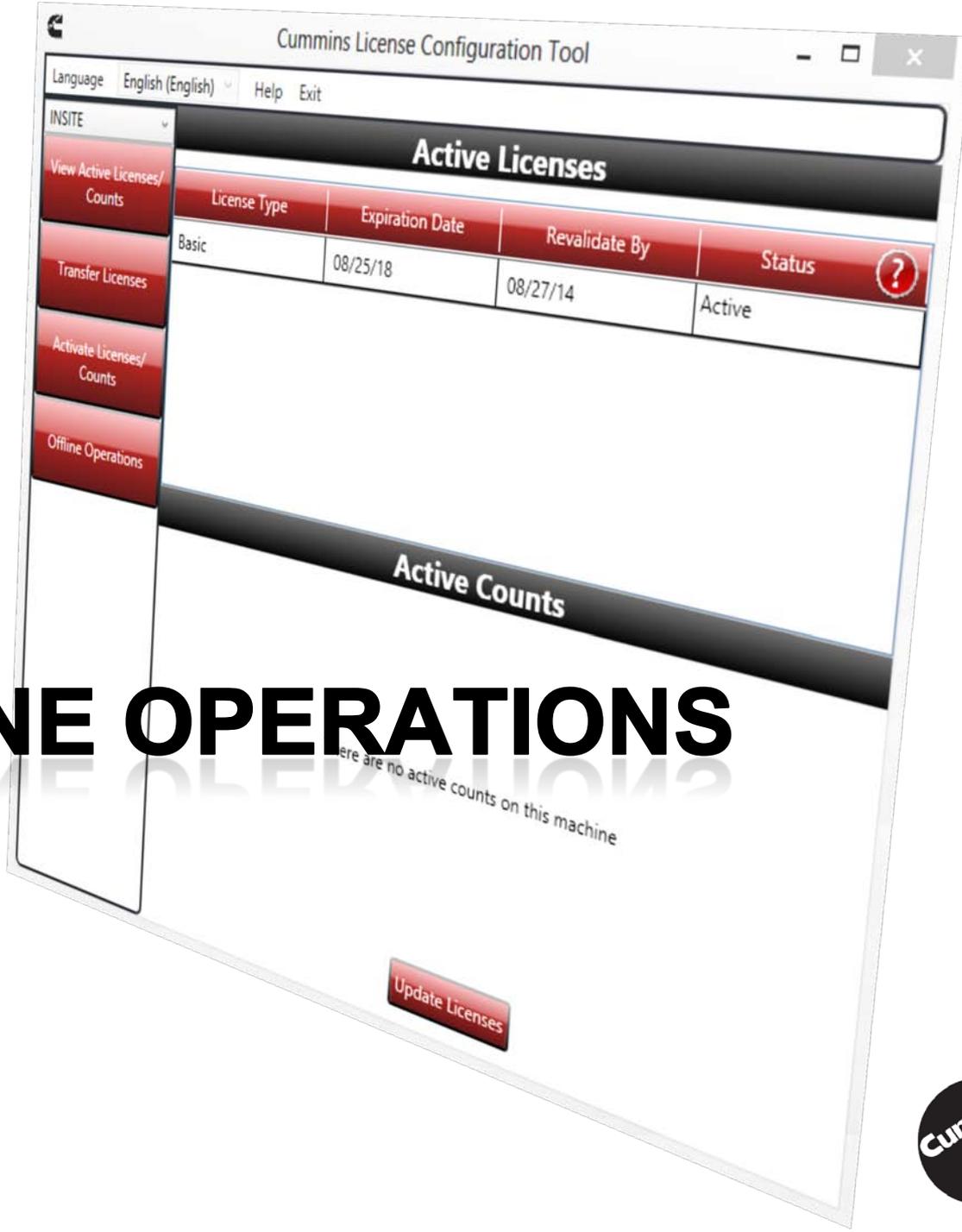
- Select “Transfer Licenses” Button
- Select the Licenses and/or Counts to be transferred off of Machine #1.
- Select the “Transfer Selected” button
- Select “Yes” to confirm the transfers
- Same process as “Transfer All” Method from this point forward.



# Transfer Licenses/Counts Summary

- Once the licenses and/or counts have been transferred back to the server from Machine #1, the user can use either the Activation Keys created during the transfer process (in saved file) or the QuickServe Log In Method to activate the transferred licenses on Machine #2.
- See the Activate Licenses/Counts Section for more information on how to activate the transferred licenses and/or counts.
- There is a transfer limit for licenses and counts.
- **NOTE:** Transferring the licenses back to the license server does not stop the expiration count down.





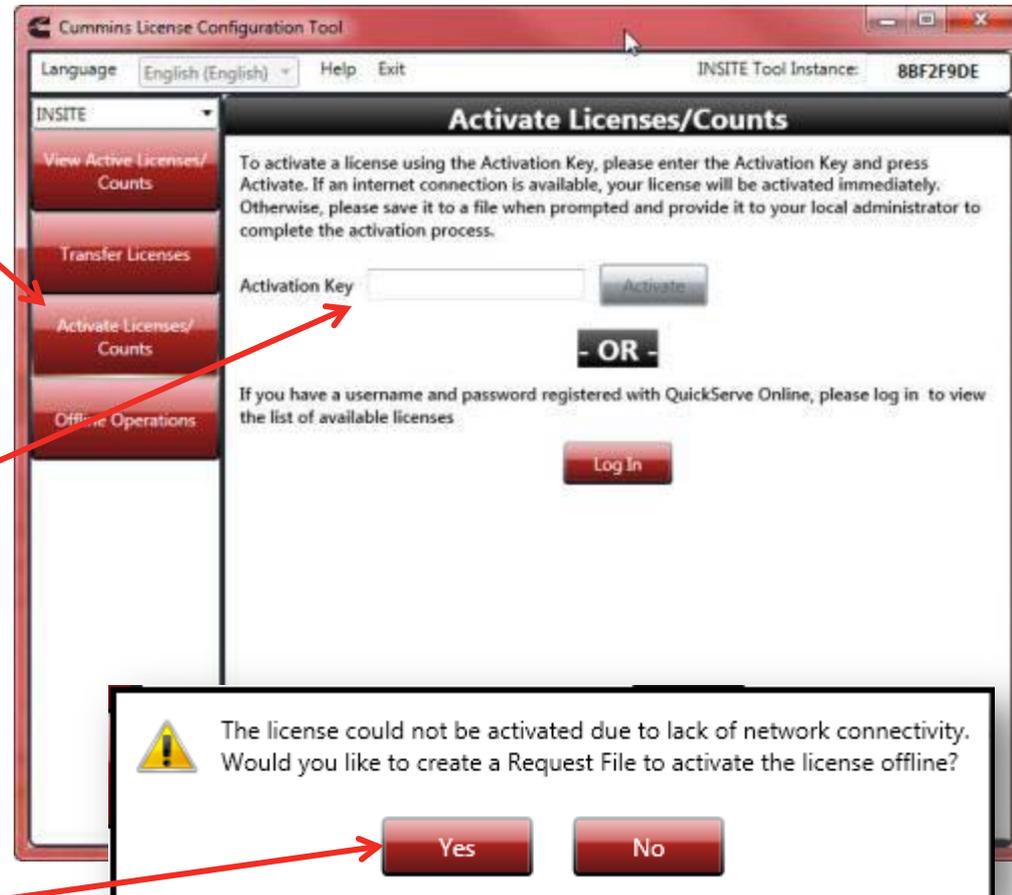
# OFFLINE OPERATIONS

# Offline Operations – Activate License Items Needed

- The following is needed to perform offline activations:
  1. PC without Internet Connection (INSITE and LCT Loaded)
  2. PC with Internet Connection (Only Need LCT for this machine)
  3. The Activation Keys you want to activate on the offline machine
  4. A method to transfer files between the 2 PCs.
    - USB Drive, Android Phone in Mass Storage Mode, etc

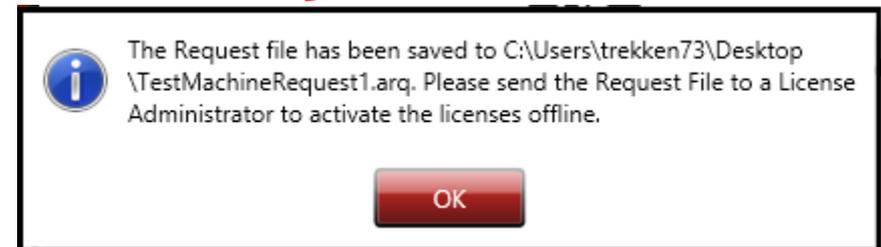
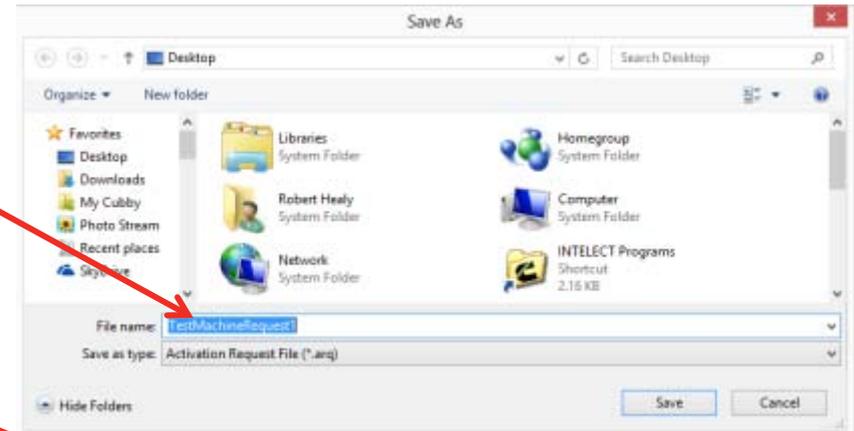
# Offline Operations – Activate License Steps 1 to 4

1. Select “Activate Licenses / Counts” on Machine without internet connectivity; and with INSITE and LCT installed
2. Enter the Activation Key in the provided field
3. Select “Activate”
4. Select “Yes” to the message that is displayed



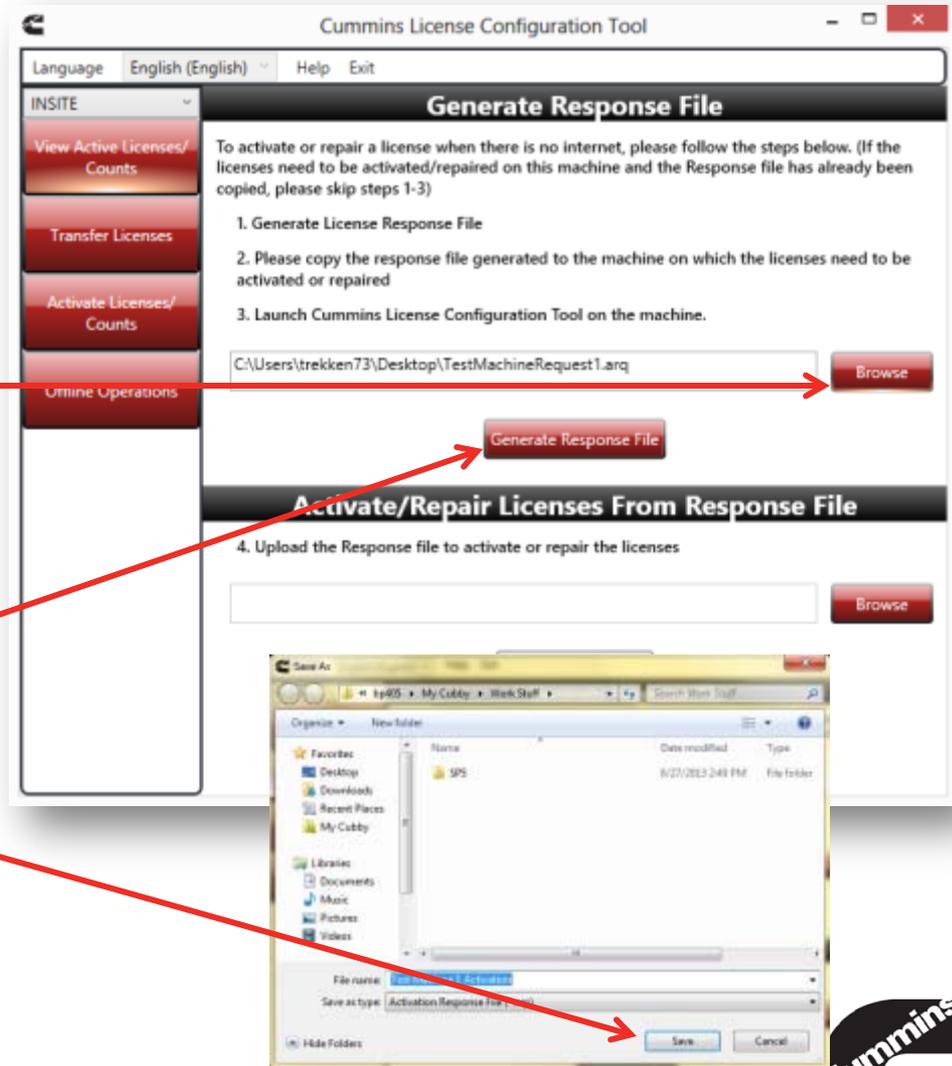
# Offline Operations – Activate License Steps 5 to 8

5. Provide a name for the request file.
6. Select “Save”
7. Select “OK”
8. Repeat Steps 2 through Steps 7 for each License that needs to be activated on the Machine.  
(Basic, Functionality Level, Fleet Counts, etc.) Be sure and use a different file name for the Request File.



# Offline Operations – Activate License Steps 9 to 13

9. Open LCT on the Machine with an Internet connection
10. Select “Browse” and select the Request file generated in Step 6
11. Select “Generate Response File”
12. Name the Activations file and Select “Save”
13. Repeat for each Request file created



# Offline Operations – Activate License Steps 14 to 15

14. Select “OK” for confirmation dialog

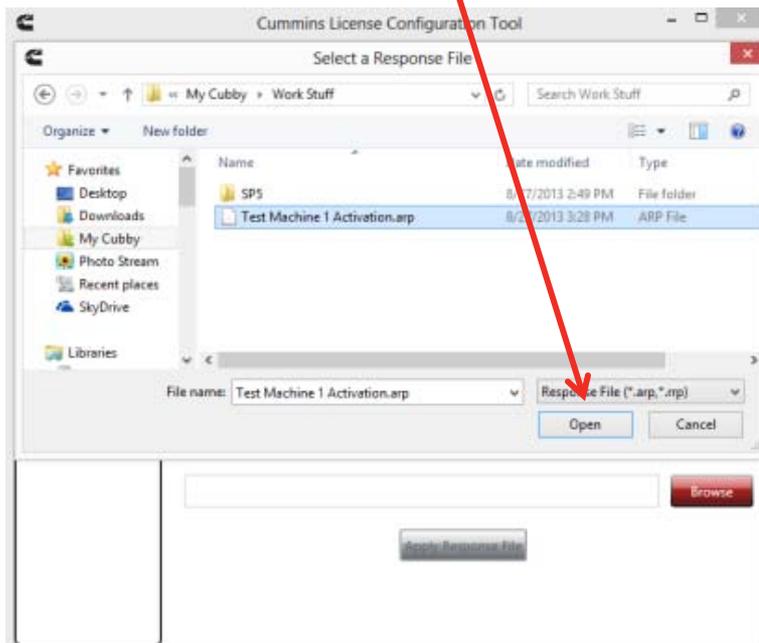
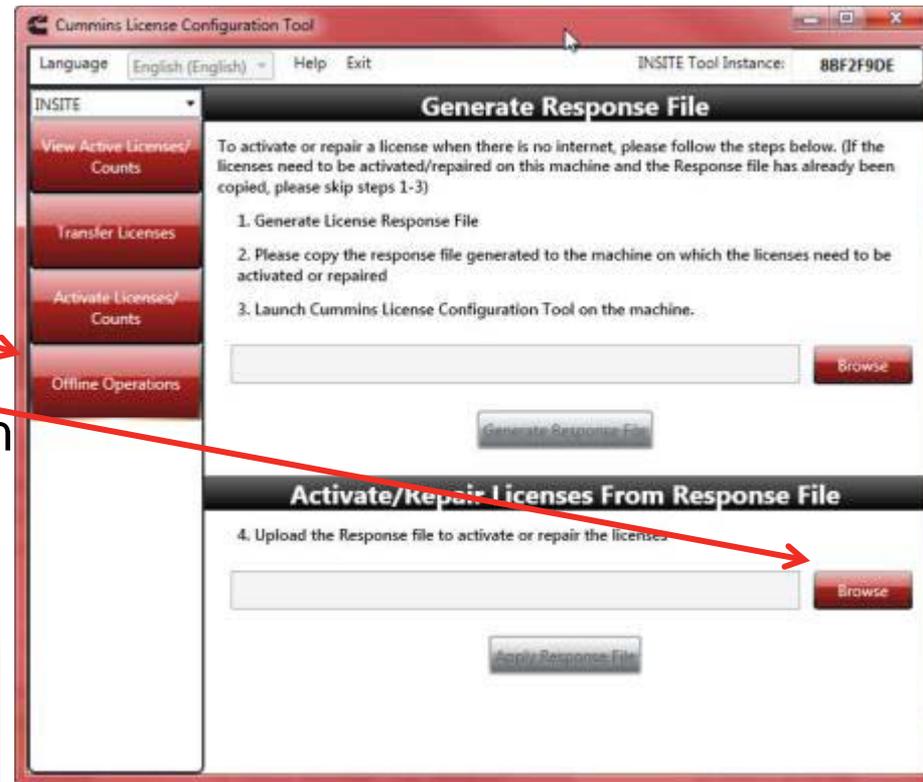


15. Transfer the files via USB drive or other means to the Machine without Internet

**NOTE:** Remember to transfer ALL files created.

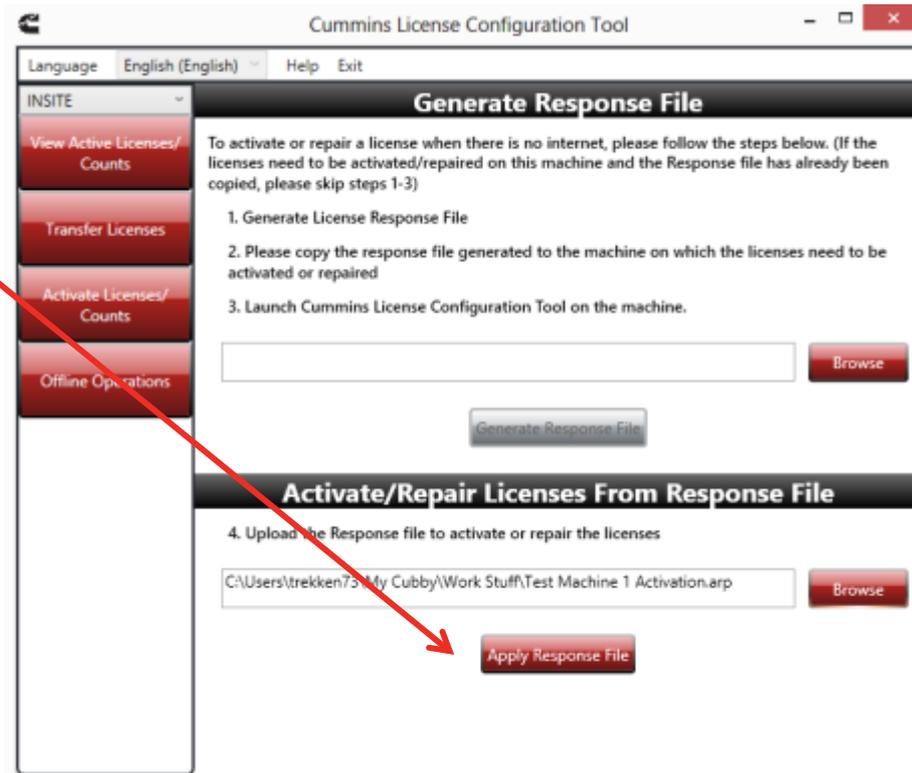
# Offline Operations – Activate License Steps 16 to 18

- 16. On the PC without Internet connectivity, go to the Offline Operations tab
- 17. Select “Browse”
- 18. Find and select the Activation file from the other Machine and Select “Open”



# Offline Operations – Activate License Steps 19 to 21

19. Select “Apply Response File”
20. Select “Yes” or “No” to view the activated License
21. If you have more than one key to enter select “No” and repeat Step 16 thru Step 20 until all Activation Files have been applied



# Offline Operations

- Offline operations only work for activating and repairing licenses or counts, not for revalidating a license.
- The user must connect to the internet to revalidate the license once every 90 days.



# Licensing: Frequently Asked Questions



# Does the LCT take the place of the Tools/Options/Security process for passwords used for the old 7.X.X licensing system?

- Yes, the older system has been replaced. INSITE licensing is no longer under the Tools/Option/Security section of INSITE.
- The LCT is a separate application from INSITE.
- The LCT can be launched through INSITE under the “Manage License(s)” tab or through the PC start menu under the “Cummins” folder.

# Will the technician need to use the LCT?

- It will depend on the location and what the Service Manager allows the technician to do on his or her own.
  - If the technician is provided the activation key or QSOL Login to activate the license(s), then yes the technician will need to know how to use the tool to activate the license.
  - The technician will have the ability to repair the license using the LCT through the “Update License” button.
  - The technician will have the ability to transfer the license off of the PC through the LCT.
  - The technician will be able to manually revalidate the license(s) through the “Update License” button.

# Will the use of Update Manager also take care of the licensing internet connection requirement?

- Sort of, the LCT works similarly to Update Manager where Update Manager checks the servers for updates at a set time designated by the user.
- The LCT does a maintenance check daily with no user interaction, so if the user is connected to the internet at any time, even if they are not using INSITE, the LCT will revalidate and move the date out by a day.
- They are separate applications.
  - Update Manager for updates and software installation
  - License Configuration Tool for the licensing

# How will the INSITE user (technician) be notified the 90 day revalidation is needed?

- There is a pop up that will let the technician know about the 90 day revalidation starting at 30 days out, then 15 days, then 10 days, and then every day past 9 days.
- If it is after the revalidation date, INSITE will revert to Basic and will provide a pop-up that the user needs to connect to the internet to continue using INSITE. Once the user connects to the internet, INSITE will revert to the previous functionality unless the license has expired during that time.

**NOTE:** If the revalidation period has passed the user will lose the counts that are on the PC, since there is no way to verify if the counts were used during the last 90 days.



# When will our dealers activate subscriptions be migrated to the new licensing system?

- When the user installs INSITE 8.0.0 and goes to open INSITE for the first time, the migration process will be attempted at that time.
- If the user is not connected to the internet, a pop-up will ask if they want to activate using the offline mode method or not.
- The user can either connect to the internet to migrate the license or use the offline mode process to activate the license with the activation key(s).

# What happens when a dealer with an active INSITE 7.6.X subscription upgrades to INSITE 8.0.0?

- The license will be migrated to the INSITE 8.0.0 licensing system and will keep the same expiration date as the INSITE 7.6.X license.
- The expiration of the current licenses will remain the same once the licenses are migrated to the new licensing system.
- All active INSITE licenses will be migrated to the Service Plus product level.
- The migrated license will keep the same functionality level.
- All fleet counts, Zap-Its, and OEM Zap-Its will be migrated.
- The migrated license cannot be renewed in the new licensing system. A new license must be purchased in the new system once the migrated license has expired.

# **The Distributor supplies the dealer a new functionality password when their subscription expires with the old system, what will we supply the dealer with the new system when their subscription expires?**

- Once the subscription has expired in the new system, if the license is not a migrated license, the system will update the license on the PC without user interaction once it is connected to the internet.
- For the migrated licenses from 7.X.X, a new license must be activated on the PC. Once a new license has been activated, no technician interaction is needed as long as there is an internet connection to the PC.
- The offline mode activation is also available for renewal for those without internet connectivity.



# What will happen to a dealer subscription that expires the day after the change to the new licensing system?

- They will revert to Basic and will have to purchase a new license in the new licensing system.

# Does the new licensing require INSITE to be connected to the internet at all times?

- No, the internet is only needed when activating licenses, repairing licenses (corrupt / back dated), transferring licenses, and revalidating licenses.
- Being connected to the internet at all times just limits the prompting INSITE will do as the system gets close to the revalidation period. (30, 15, 10-1 days remaining)

# What's New Summary

- This has been an overview of INSITE™
- For further training on INSITE, please refer to the INSITE™ Virtual College CD, P/N **4091839**
- For Additional information and support:
  - Contact Cummins® local distributor
  - Visit <https://insite.cummins.com/insite/index.html>
  - INSITE™ Help Desk 1-800-433-9341  
Option 2 or 812-377-8136 Option 2

**[Back to What's New Agenda](#)**





# INSITE™

INSITE™ Functionality Breakdown and Details

# Table of Contents – Part 1

- Audit Trail
- Calibration Selection and Download
- ECM Connections
- Data Monitor Logger and OBD Monitors
- ECM Diagnostic Tests and Advanced ECM Data
- Fault Information and Fault Information System
- Feature and Parameters
- Inquire Data Extraction



# Table of Contents – Part 2

- Installation and Tool / ECM / User Security
- Trip Information
- Work Orders
  
- Cummins Inc. Update Manager





# **INSITE™ Audit Trail**

**Electronic Service Tools**

# Audit Trail

- Tracks changes made to ECM settings
  - INSITE Tool Version
  - User Identification
  - ECM Time
- Audit Trail displays the last four or eight times, if supported by the calibration, that the ECM was modified
- A single record can contain multiple changes





Disconnect from ECM

Fault Codes

Data Monitor/Logger

ECM Diagnostic Tests

Advanced ECM Data

Features and Parameters

Calibration Selection

Work Orders

Trip Information

Audit Trail

Inquire Data Extraction

OBD Monitors

Click on Audit Trail



- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

# Window Re-sizing

**Hold the mouse pointer anywhere on the top edge until the black arrow appears.**

**Hold the mouse pointer on the vertical lines until the black arrows appear**

**Click and hold the mouse on the black arrow and adjust the width of the column by moving the mouse to the left and right**

**Click and hold the mouse on the black arrow and adjust the size of the screen by moving the mouse up and down**

Record Number	Tool Name	Tool ID Code	User Type Description	User ID	ECM Time (Key on Time)	ECM Real Time
Signature/ISX - CM870						
CM870						
1	INSITE	950211112020	Software	95024444	Not Applicable	08-Jan-1996 18:29:52
2	Compulink	950877770020	Cartridge	23435120	Not Applicable	01-Jan-1996 18:52:22
3	Echek	950788881020	Cartridge	00000000	Not Applicable	31-Dec-1995 20:42:19
4	VEPS	CEC000600123	Software	00000000	Not Applicable	31-Dec-1995 19:10:43



- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

Record Number	Tool Name	Tool ID Code	User Type Description	User ID	ECM Time (Key on Time)	ECM Real Time
Signature/ISX - CM870						
CM870						
1	INSITE	950211112020	Software	95024444	Not Applicable	08-Jan-1996 18:29:52
		000	Unknown			
		003	Cruise Control			
		005	Road Speed			
		009	Maximum Velocity			
2	Compulink	950877770020	Cartridge	23435120	Not Applicable	01-Jan-1996 18:52:22
		000	Unknown			
		001	Idle Shutdown			
		002	Remote PTO			
		003	Cruise Control			
3	Echek	950788881020	Cartridge	00000000	Not Applicable	31-Dec-1995 20:42:19
		000	Unknown			
		003	Cruise Control			
4	VEPS	CEC000600123	Software	00000000	Not Applicable	31-Dec-1995 19:10:43
		002	Remote PTO			

Use + or - signs to expand or collapse each record

If the "Real Time Clock" option in INSITE is selected, Real Time will show instead of the ECM Time



- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

Record Number	Tool Name	Tool ID Code	User Type Description	User ID	ECM Time (Key on Time)	ECM Real Time
Signature/ISX - CM870						
CM870						
1	INSITE	950211112020	Software	95024444	Not Applicable	08-Jan-1996 18:29:52
		000	Unknown			
		003	Cruise Control			
		005	Road Speed			
		009	Maximum Velocity			
2	Compulink	950877770020	Cartridge	23435120	Not Applicable	01-Jan-1996 18:52:22
		000	Unknown			
		001	Idle Shutdown			
		002	Remote PTO			
		003	Cruise Control			
3	Echek	950788881020	Cartridge	00000000	Not Applicable	31-Dec-1995 20:42:19
		000	Unknown			
		003	Cruise Control			
4	VEPS	CEC000600123	Software	00000000	Not Applicable	31-Dec-1995 19:10:43
		002	Remote PTO			

**Software Version of the application**

**User ID who made the change**

**Codes that identify the type of ECM changes**

- New
- Open... Ctrl+O
- Close
- Save Ctrl+S
- Save As...
- Convert
- Export
- Import
- Connections
- Page Setup...
- Print Preview...
- Print... Ctrl+P
- Send To
- Properties Alt+Enter
- Exit

Tool Number	Tool Name	Tool ID Code	User Type Description	User ID	ECM Time (Key on Time)	ECM Real Time
	Signature/ISX - CM870					
1870						
	INSITE	950211112020	Software	95024444	Not Applicable	08-Jan-1996 18:29:52
		000	Unknown			
		003	Cruise Control			
		005	Road Speed			
		009	Maximum Velocity			
	Compulink	950877770020	Cartridge	23435120	Not Applicable	01-Jan-1996 18:52:22
		000	Unknown			
		001	Idle Shutdown			
		002	Remote PTO			
		003	Cruise Control			
	Echek	950788881020	Cartridge	00000000	Not Applicable	31-Dec-1995 20:42:19
		000	Unknown			
		003	Cruise Control			
4	VEPS	CEC000600123	Software	00000000	Not Applicable	31-Dec-1995 19:10:43
		002	Remote PTO			

- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

To Print :  
Click on File and  
choose Print



- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail**
- Inquire Data Extraction
- OBD Monitors

Record Number	Tool Name	Tool ID	User Type	User ID	ECM Time (Key on Time)	ECM Real Time
Signature/ISX - CM870						
CM870						
1	INSITE	950211112020	Software	95024444	Not Applicable	08-Jan-1996 18:29:52
		000	Unknown			
		003	Cruise Contr			
		005	Road Speed			
		009	Maximum Vel			
2	Compulink	950877770020	Cartridge	23435120	Not Applicable	01-Jan-1996 18:52:22
		000	Unknown			
		001	Idle Shutdow			
		002	Remote PTO			
		003	Cruise Contr			
3	Echek	950788881020	Cartridge	00000000	Not Applicable	31-Dec-1995 20:42:19
		000	Unknown			
		003	Cruise Contr			
4	VEPS	CEC000600123	Software	00000000	Not Applicable	31-Dec-1995 19:10:43
		002	Remote PTO			

- Expand
- Collapse
- Refresh
- Print...

**To Print :  
Alternate Click  
and chose Print**

# Audit Trail Wrap Up

- The most recent changes will appear under record number 1
- Multiple changes might be listed under each of the 4 or 8 records if supported by the calibration
- Audit Trail will automatically update as changes are made to the ECM
- User can perform refresh within INSITE™ by using the alternate click and choosing Refresh



You have concluded this section of the training.  
Please click to the next slide and continue or [Click Here](#) to return to  
the Table of Content.



# **INSITE™ Calibration Selection**

**Electronic Service Tools**

# Calibration Selection

## Programmable Datalink Device

- The Calibration Selection has been redesigned to include a separate section for Programmable Datalink Device (PDD) Calibrations such as the Aftertreatment Device or Turbocharger. This will allow users to bypass connecting to the ECM and download directly to a PDD.





- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

To download calibrations to an ECM, please select ECM.

ECM

Select ECM to download Calibrations to an ECM

To download calibrations to a programmable datalink device, please select PDD.

PDD

Select PDD to download Calibrations to a Programmable Datalink Device.

# Calibration Selection

Ability to update or change the rating of an Engine

The screenshot displays the INSITE 8.0.0.379 FT software interface. The title bar indicates the engine details: "INSITE 8.0.0.379 FT - Signature/ISX - CM870 - Engine Serial Number - 10101010 - ECM Code - AB1004000". The menu bar includes "File", "Edit", "View", "Tools", "Manage License(s)", "Window", and "Help".

The left sidebar contains the following menu items:

- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

The main window is divided into two panes. The left pane shows a file explorer view of "My Computer" with the following structure:

- C:\
- Calibration Workspace (C:\Intelect\INSITE\Cal)
- Lenovo\_Recovery (D:\)
- Dec2013HICAL\_2 (E:\)
- F:\
- G:\

The right pane displays a table with the following data:

Production Date
December 2013

The status bar at the bottom left shows "Connected to ECM." and the taskbar at the bottom right shows "Signature/ISX - CM870 Simulator".

# Calibration Selection

- Calibration Selection has products sorted into groups:
  - Automotive
  - Industrial
  - HHP/PowerGen
  - Other

***Back to What's New Agenda***





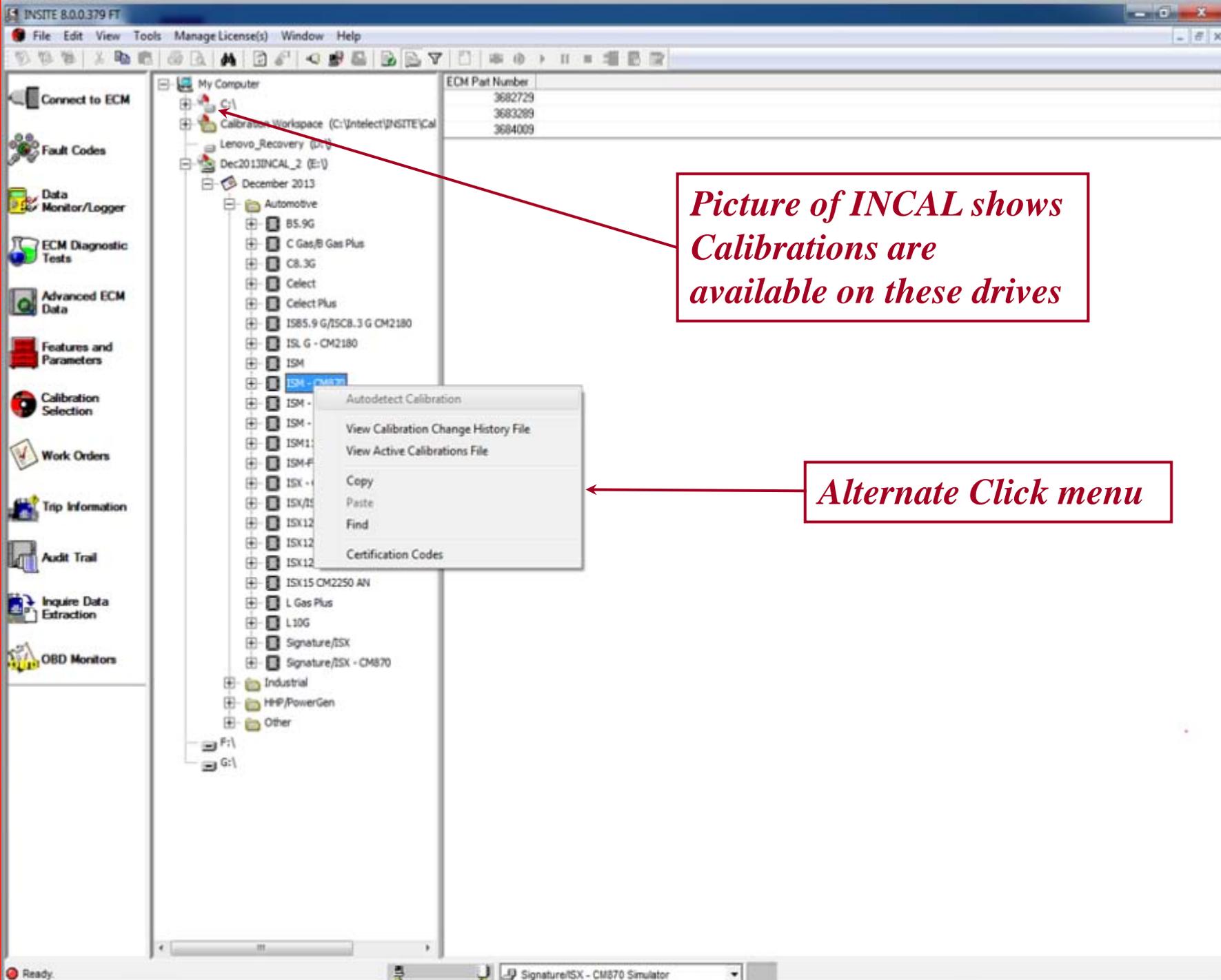
- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

My Computer

- C:\
- Calibration Workspace (C:\Intelect\INSITE\Cal)
- Lenovo\_Recovery (D:\)
- Dec2013\INCAL\_2 (E:\)
  - December 2013
    - Automotive
    - Industrial
      - 480C-E
      - CELECT Plus Ind.
      - CENSE
      - Centinel
      - CENTRY
      - Next Generation Cense CM2330
      - PIM
      - QSM11
      - QSX11.9/15 CM2250.ECF
      - QSX15
    - HHP/PowerGen
    - Other
- F:\
- G:\

Production Date
December 2013

**Expand each category to view the calibrations**

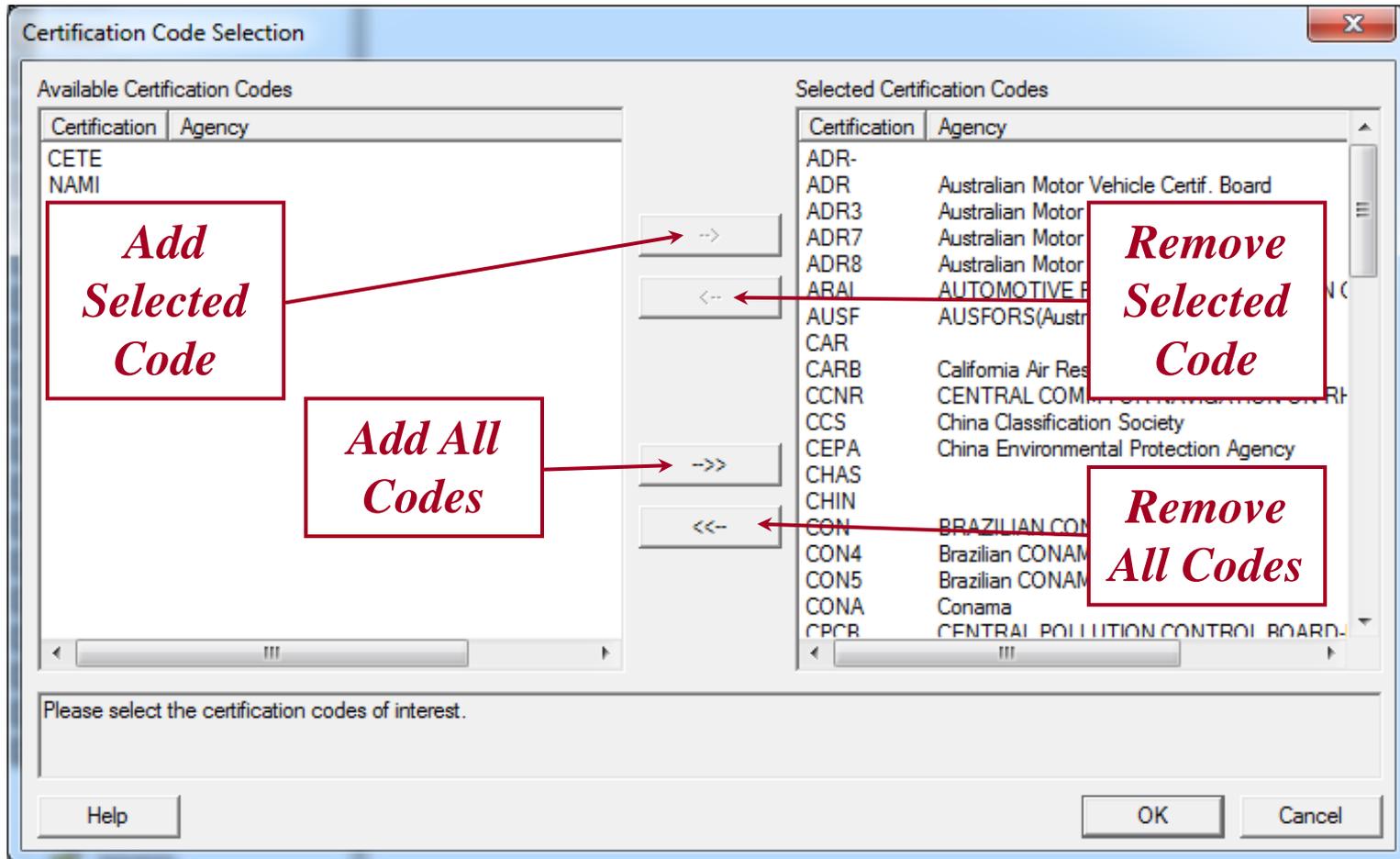


*Picture of INCAL shows Calibrations are available on these drives*

*Alternate Click menu*

# Calibration Selection

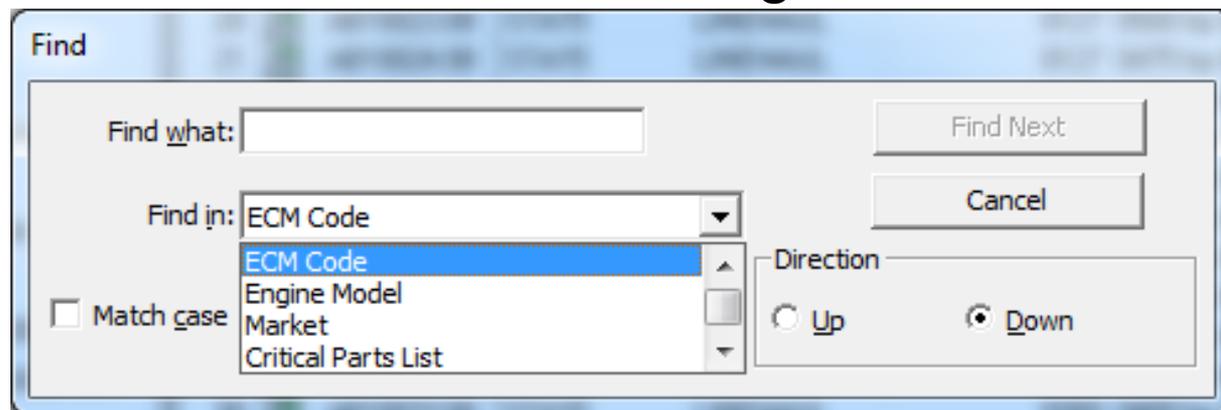
## Ability to Select Specific Certification Codes



# Calibration Selection

## Calibration Selection

- Search/Find Calibration Note Data
- Sort each Column in Ascending or Descending order
- Filter Calibrations according to HP, Torque, etc.
- Move Columns to better align Notes





- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

My Computer

- C:\
- Calibration Workspace (C:\Intelect\INSITE\Cal)
- Lenovo\_Recovery (D:\)
- Dec2013\INCAL\_2 (E:\)
- December 2013
  - Automotive
    - B5.9G
    - C Gas/B Gas Plus
    - C8.3G
    - Select
    - Select Plus
    - ISB5.9 G/ISC8.3 G CM2180
    - ISL G - CM2180
    - ISM
    - ISM - CM870
    - ISM - CM875
    - ISM - CM876
    - ISM11 CM876 SN
    - ISM-Fuel Control Module -CM570
    - ISX - CM871
    - ISX/ISZ13 CM2150 SN
    - ISX12 G CM2180 EJ
    - ISX12/11.9/15 CM2250
    - ISX12/15 CM2350 X102/X101
    - ISX15 CM2250 AN
    - L Gas Plus
    - L10G
    - Signature/ISX
    - Signature/ISX - CM870
      - 3682729
      - 3683289
      - 3684009
  - Industrial
  - HHP/PowerGen
  - Other
- F:\
- G:\

	ECM Code	Engine Model	Market	Critical Parts List	Advised Power at RPM	Governed Power at RPM	Torque Peak at RPM	Applicat
1	AB10197.17	STA15	LINEHAUL	8283	(All)	0565 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
2	AB10205.17	STA15	LINEHAUL	8284	0385 hp @ 0000 rpm	0565 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
3	AB10227.17	STA15	LINEHAUL	8283	0400 hp @ 0000 rpm	0565 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
4	AB10234.17	STA15	LINEHAUL	8284	0435 hp @ 0000 rpm	0565 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
5	AB10234.17	STA15	LINEHAUL	8284	0450 hp @ 0000 rpm	0565 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
6	AB10234.17	STA15	LINEHAUL	8519	0465 hp @ 0000 rpm	0500 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
7	AB10234.17	STA15	LINEHAUL	8522	0475 hp @ 0000 rpm	0500 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
8	AB10234.17	STA15	LINEHAUL	8519	0500 hp @ 0000 rpm	0500 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
9	AB10234.17	STA15	LINEHAUL	8522	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
10	AB10234.17	STA15	LINEHAUL	8519	0530 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
11	AB10517.06	STA15	LINEHAUL	8522	0550 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
12	AB10518.06	STA15	LINEHAUL	8519	0550 hp @ 1800 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
13	AB10425.12	STA	LINEHAUL	8286	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
14	AB10426.12	STA	LINEHAUL	8286	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
15	AB10427.12	STA15	LINEHAUL	8285	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
16	AB10428.12	STA15	LINEHAUL	8285	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
17	AB10429.12	STA15	LINEHAUL	8285	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
18	AB10431.12	STA15	LINEHAUL	8285	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
19	AB10431.12	STA15	LINEHAUL	8285	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
20	AB10431.12	STA15	LINEHAUL	8286	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
21	AB10431.12	STA15	LINEHAUL	8286	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
22	AB10431.12	STA15	LINEHAUL	8286	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
23	AB10439.12	STA	LINEHAUL	8286	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
24	AB10440.12	STA15	LINEHAUL	8285	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
25	AB10442.12	STA	LINEHAUL	8286	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
26	AB10443.12	STA	LINEHAUL	8286	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
27	AB10444.12	STA15	LINEHAUL	8285	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
28	AB10445.12	STA	LINEHAUL	8286	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
29	AB10446.12	STA15	LINEHAUL	8285	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
30	AB10454.12	STA15	LINEHAUL	8285	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
31	AB10455.12	STA	LINEHAUL	8286	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
32	AB10456.12	STA	LINEHAUL	8286	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
33	AB10457.12	STA	LINEHAUL	8286	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
34	AB10458.12	STA15	LINEHAUL	8285	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
35	AB10459.12	STA15	LINEHAUL	8285	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
36	AB10460.12	STA15	LINEHAUL	8285	0550 hp @ 0000 rpm	0518 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
37	AB10196.17	STA15	LINEHAUL	8283	0530 hp @ 0000 rpm	0530 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
38	AB10204.17	STA15	LINEHAUL	8284	0530 hp @ 0000 rpm	0530 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
39	AB10226.17	STA15	LINEHAUL	8283	0530 hp @ 0000 rpm	0530 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
40	AB10233.17	STA15	LINEHAUL	8284	0530 hp @ 0000 rpm	0530 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
41	AB10040.04	STA15	LINEHAUL	8125	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
42	AB10041.04	STA15	LINEHAUL	8127	0525 hp @ 0000 rpm	0500 hp @ 1900 rpm	1650 lb-ft @ 1200 rpm	AUTOM
43	AB10048.25	STA15	LINEHAUL	8281	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
44	AB10057.25	STA15	FIRE TRUCK	8282	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
45	AB10058.25	STA15	LINEHAUL	8282	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
46	AB10130.18	STA15	LINEHAUL	8284	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
47	AB10131.18	STA15	FIRE TRUCK	8283	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
48	AB10132.18	STA15	FIRE TRUCK	8284	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
49	AB10133.18	STA15	LINEHAUL	8283	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
50	AB10200.17	STA15	FIRE TRUCK	8281	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
51	AB10209.17	STA15	FIRE TRUCK	8285	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
52	AB10217.17	STA	FIRE TRUCK	8286	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM

Select to Filter

Select filtered value



- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

My Computer

- C:\
- Calibration Workspace (C:\Intelect\INSITE\Cal)
- Lenovo\_Recovery (D:\)
- Dec2013\INCAL\_2 (E:\)
  - December 2013
    - Automotive
      - B5.9G
      - C Gas/B Gas Plus
      - C8.3G
      - Celect
      - Celect Plus
      - ISB5.9 G/ISC8.3 G CM2180
      - ISL G - CM2180
      - ISM
      - ISM - CM870
      - ISM - CM875
      - ISM - CM876
      - ISM11 CM876 SN
      - ISM-Fuel Control Module -CM570
      - ISX - CM871
      - ISX/IS213 CM2150 SN
      - ISX12 G CM2180 EJ
      - ISX12/11.9/15 CM2250
      - ISX12/15 CM2350 X102/X101
      - ISX15 CM2250 AN
      - L Gas Plus
      - L10G
      - Signature/ISX
      - Signature/ISX - CM870
        - 3682729
        - 3683289
        - 3684009
    - Industrial
    - HHP/PowerGen
    - Other
  - F:\
  - G:\

	ECM Code	Engine Model	Market	Critical Parts List	Advertised Power at RPM	Governed Power at RPM	Torque Peak at RPM	Application
	[All]	[All]	[All]	[All]	0550 hp @ 1800 rpm	[All]	[All]	[All]
1	AB10511.06	STA15	LINEHAUL	8519	0550 hp @ 1800 rpm	0500 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOMOTI
2	AB10512.06	STA15	LINEHAUL	8522	0550 hp @ 1800 rpm	0500 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOMOTI
3	AB10513.06	STA15	LINEHAUL	8519	0550 hp @ 1800 rpm	0500 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOMOTI
4	AB10514.06	STA15	LINEHAUL	8522	0550 hp @ 1800 rpm	0500 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOMOTI
5	AB10515.06	STA15	LINEHAUL	8519	0550 hp @ 1800 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOMOTI
6	AB10516.06	STA15	LINEHAUL	8522	0550 hp @ 1800 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOMOTI
7	AB10517.06	STA15	LINEHAUL	8519	0550 hp @ 1800 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOMOTI
8	AB10518.06	STA15	LINEHAUL	8522	0550 hp @ 1800 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOMOTI

*Only shows calibrations with selected parameter*

INSITE 8.0.0.379 FT - Signature/ISX - CM870 - Engine Serial Number - 10101010 - ECM Code - AB10040.00

File Edit View Tools Manage License(s) Window Help

Disconnect from ECM

My Computer

C:\

Calibration Workspace (C:\Inet\INSITE\Cal

recovery (D:\)

CAL\_2 (E:\)

2013

Automotive

B5.9G

C Gas/B Gas Plus

C8.3G

Celect

Celect Plus

ISB5.9 G/ISCB.3 G CM2180

ISL G - CM2180

ISM

ECM Diagnostic Tests

Advanced ECM Data

Features and Parameters

Audit Trail

Inquire Data Extraction

OBD Monitors

Industrial

HHP/PowerGen

Other

F:\

G:\

	ECM Code	Engine Model	Market	Critical Parts List	Advised Power at RPM	Governed Power at RPM	Torque Peak at RPM	Applicat
	(All)	(All)	(All)	(All)	(All)	(All)	(All)	(All)
19	AB10022.08	STA15	LINEHAUL	8259	0400 hp @ 0000			
20	AB10023.08	STA15	LINEHAUL	8127	0500 hp @ 0000			
21	AB10024.08	STA15	LINEHAUL	8127	0475 hp @ 0000			
22	AB10025.08	STA15	LINEHAUL	8127	0450 hp @ 0000			
23	AB10026.08	STA15	LINEHAUL	8127	0400 hp @ 0000			
24	AB10027.08	STA15	LINEHAUL	8127	0400 hp @ 0000			
25	AB10028.08	STA15	LINEHAUL	8260	0500 hp @ 0000			
26	AB10029.08	STA15	LINEHAUL	8260	0475 hp @ 0000			
27	AB10030.08	STA15	LINEHAUL	8260	0450 hp @ 0000			
28	AB10031.08	STA15	LINEHAUL	8260	0400 hp @ 0000			
29	AB10032.08	STA15	LINEHAUL	8260	0400 hp @ 0000			
30	AB10033.08	STA15	LINEHAUL	8260	0400 hp @ 0000			
31	AB10034.08	STA15	LINEHAUL	8259	0500 hp @ 0000 rpm	0511 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
32	AB10035.08	STA15	LINEHAUL	8259	0475 hp @ 0000 rpm	0499 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
33	AB10036.08	STA15	LINEHAUL	8259	0450 hp @ 0000 rpm	0450 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
34	AB10037.08	STA15	LINEHAUL	8259	0400 hp @ 0000 rpm	0400 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
35	AB10038.08	STA15	LINEHAUL	8259	0400 hp @ 0000 rpm	0400 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
36	AB10039.08	STA15	LINEHAUL	8125	0400 hp @ 0000 rpm	0400 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
37	AB10040.04	STA15	LINEHAUL	8125	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
38	AB10041.04	STA15	LINEHAUL	8127	0525 hp @ 0000 rpm	0500 hp @ 1900 rpm	1650 lb-ft @ 1200 rpm	AUTOM
39	AB10042.25	STA15	LINEHAUL	8281	0500 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
40	AB10043.25	STA15	LINEHAUL	8281	0500 hp @ 0000 rpm	0500 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
41	AB10044.21	STA15	LINEHAUL	8282	0500 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
42	AB10045.25	STA15	LINEHAUL	8282	0500 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
43	AB10046.25	STA15	LINEHAUL	8282	0500 hp @ 0000 rpm	0500 hp @ 2000 rpm	1850 lb-ft @ 1200 rpm	AUTOM
44	AB10047.12	STA15	FIRE TRUCK	8281	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
45	AB10048.25	STA15	LINEHAUL	8281	0525 hp @ 0000 rpm	0500 hp @ 2000 rpm	1650 lb-ft @ 1200 rpm	AUTOM
46	AB10049.25	STA15	LINEHAUL	8281	0400 hp @ 0000 rpm	0400 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
47	AB10050.25	STA15	LINEHAUL	8281	0400 hp @ 0000 rpm	0400 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
48	AB10051.25	STA15	LINEHAUL	8281	0400 hp @ 0000 rpm	0400 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
49	AB10052.13	STA15	LINEHAUL	8285	0475 hp @ 0000 rpm	0475 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
50	AB10053.14	STA15	LINEHAUL	8285	0475 hp @ 0000 rpm	0475 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
51	AB10054.21	STA15	LINEHAUL	8285	0500 hp @ 0000 rpm	0500 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
52	AB10055.13	STA15	LINEHAUL	8285	0500 hp @ 0000 rpm	0500 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
53	AB10056.13	STA15	LINEHAUL	8285	0500 hp @ 0000 rpm	0500 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
54	AB10057.25	STA15	FIRE TRUCK	8282	0525 hp @ 0000 rpm	0525 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
55	AB10058.25	STA15	LINEHAUL	8282	0525 hp @ 0000 rpm	0525 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
56	AB10059.25	STA15	LINEHAUL	8282	0400 hp @ 0000 rpm	0400 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
57	AB10060.25	STA15	LINEHAUL	8286	0475 hp @ 0000 rpm	0475 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
58	AB10061.25	STA15	LINEHAUL	8286	0475 hp @ 0000 rpm	0475 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
59	AB10062.25	STA15	LINEHAUL	8286	0500 hp @ 0000 rpm	0500 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
60	AB10063.25	STA15	LINEHAUL	8286	0500 hp @ 0000 rpm	0500 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
61	AB10064.27	STA	LINEHAUL	8286	0465 hp @ 0000 rpm	0465 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
62	AB10065.27	STA	VOCATIONAL	8286	0465 hp @ 0000 rpm	0465 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
63	AB10066.27	STA15	LINEHAUL	8285	0435 hp @ 0000 rpm	0435 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
64	AB10067.27	STA15	VOCATIONAL	8285	0465 hp @ 0000 rpm	0465 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
65	AB10068.11	STA	LINEHAUL	8286	0400 hp @ 0000 rpm	0400 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
66	AB10069.12	STA	LINEHAUL	8286	0400 hp @ 0000 rpm	0400 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
67	AB10070.12	STA	LINEHAUL	8286	0400 hp @ 0000 rpm	0400 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
68	AB10071.12	STA	LINEHAUL	8286	0450 hp @ 0000 rpm	0450 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
69	AB10072.12	STA	LINEHAUL	8286	0450 hp @ 0000 rpm	0450 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM
70	AB10073.11	STA15	LINEHAUL	8285	0400 hp @ 0000 rpm	0400 hp @ 2000 rpm	1450 lb-ft @ 1200 rpm	AUTOM

Transfer To ECM

Copy

Paste

Select All Calibrations

View Replacement Calibrations...

Show Compatible Calibrations

View Compatible ECM/FCM Calibrations

Show Active Calibrations

Show Installed Calibrations

Apply Custom Filter

Certification Codes...

Print

Properties

Find

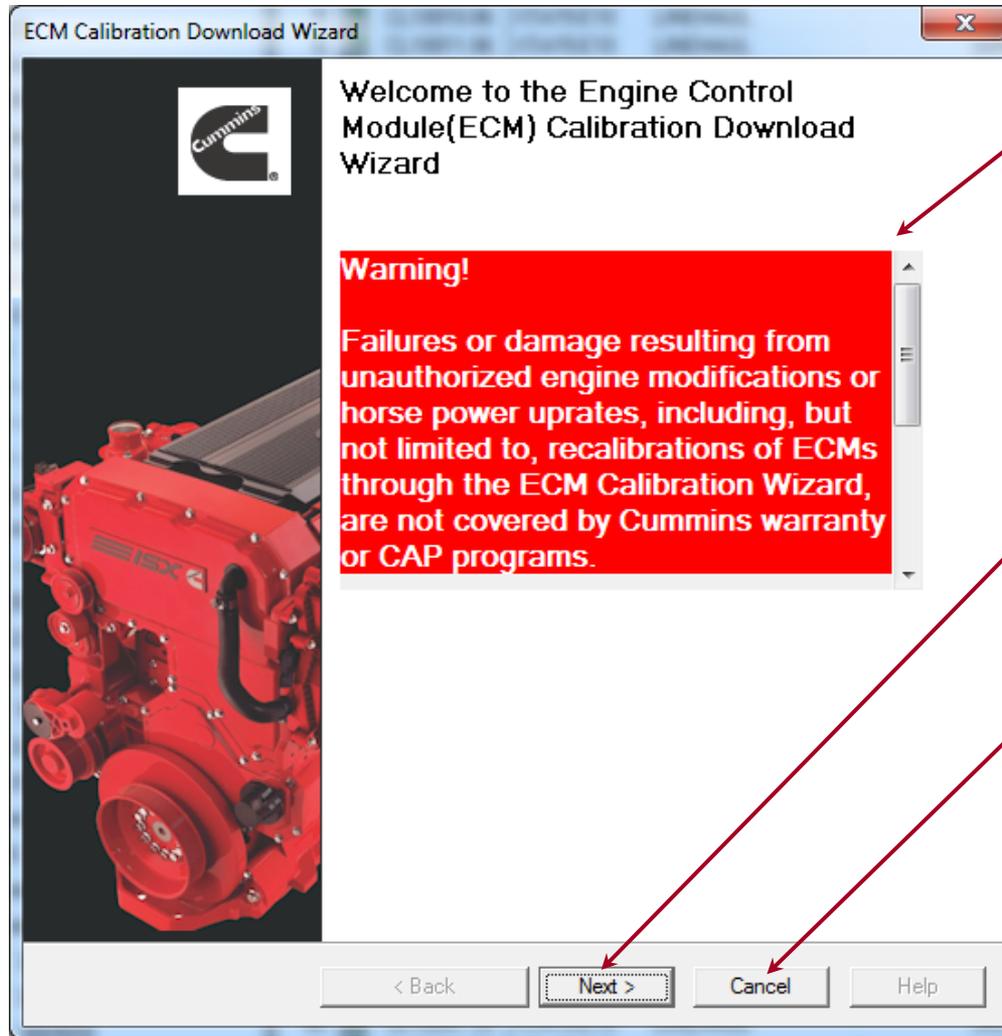
*Calibrations available on the CD*

*Double Click to transfer selected code to ECM or Alternate click*

*Superseded Calibrations and are not available on the CD*

*Alternate Click menu*

# Calibration Selection



*Read calibration warning*

*Next to continue*

*Cancel to stop*



# Calibration Selection: Authorization Passwords

Calibration Authorization Password is not required:

- Calibrating an ECM to a newer or older ECM Code revision
- Superseding ECM Codes
- Calibrating a Foot Printed ECM

Calibration Authorization Password is required:

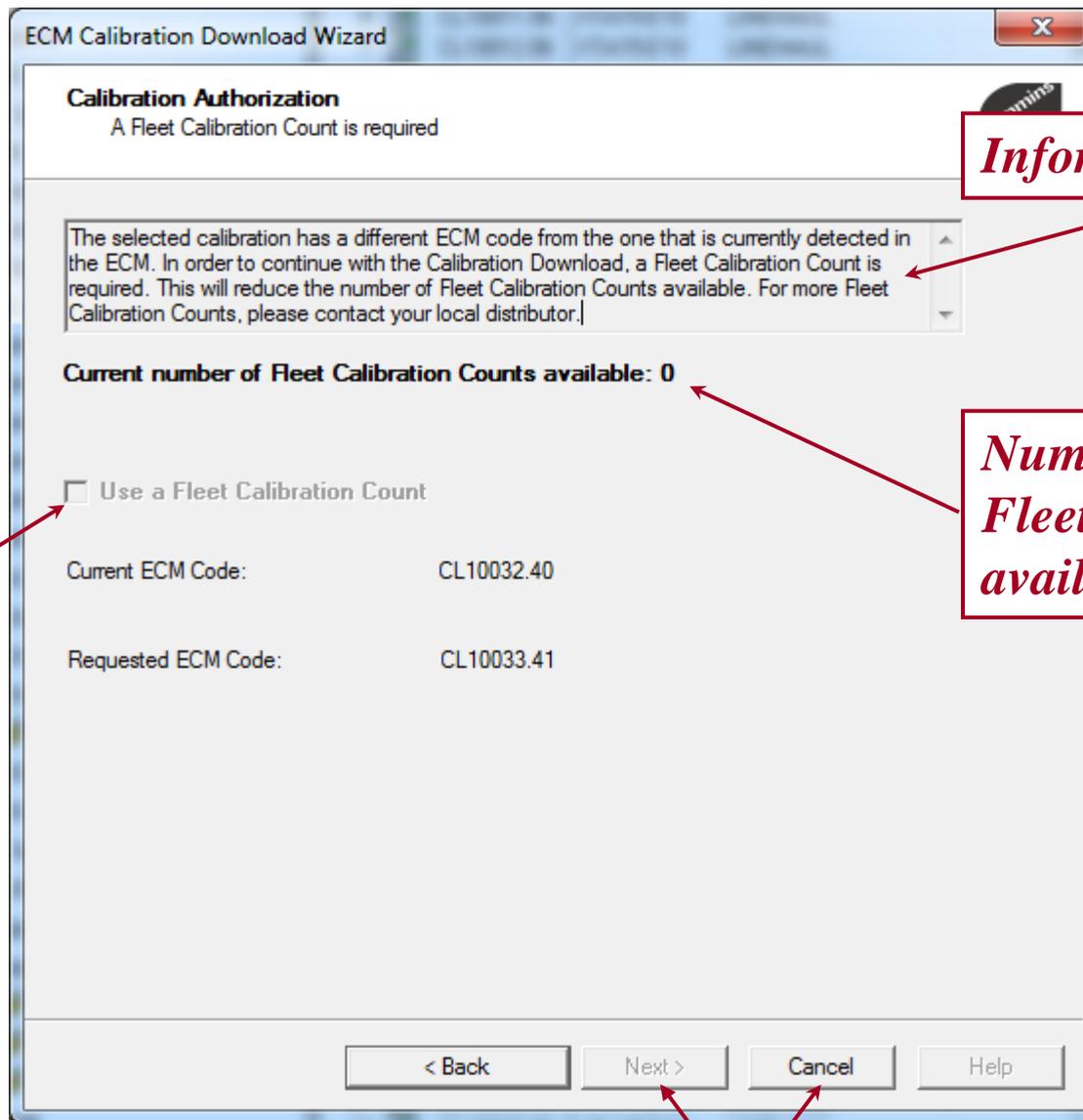
- Calibrating a ROM booted ECM
- Changing to a different ECM Code

Authorization can be done by using:

- Fleet Count
- Calibration Authorization Password

– **These are obtained from local distributors**





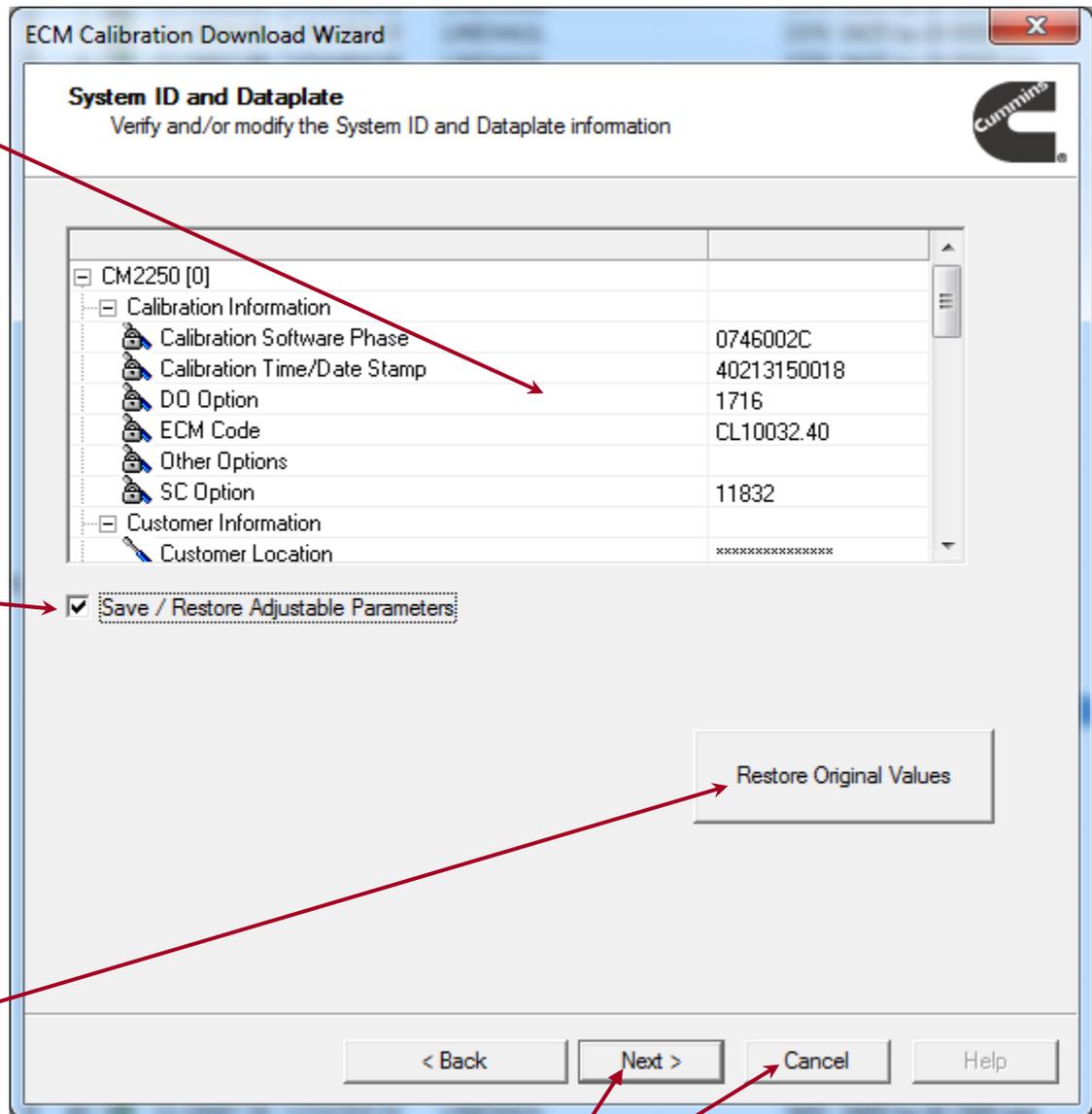
*Information given*

*If Fleet Count available, Check to use Fleet Count*

*Number of Fleet Counts available to use*

*Next to continue or Cancel to stop*





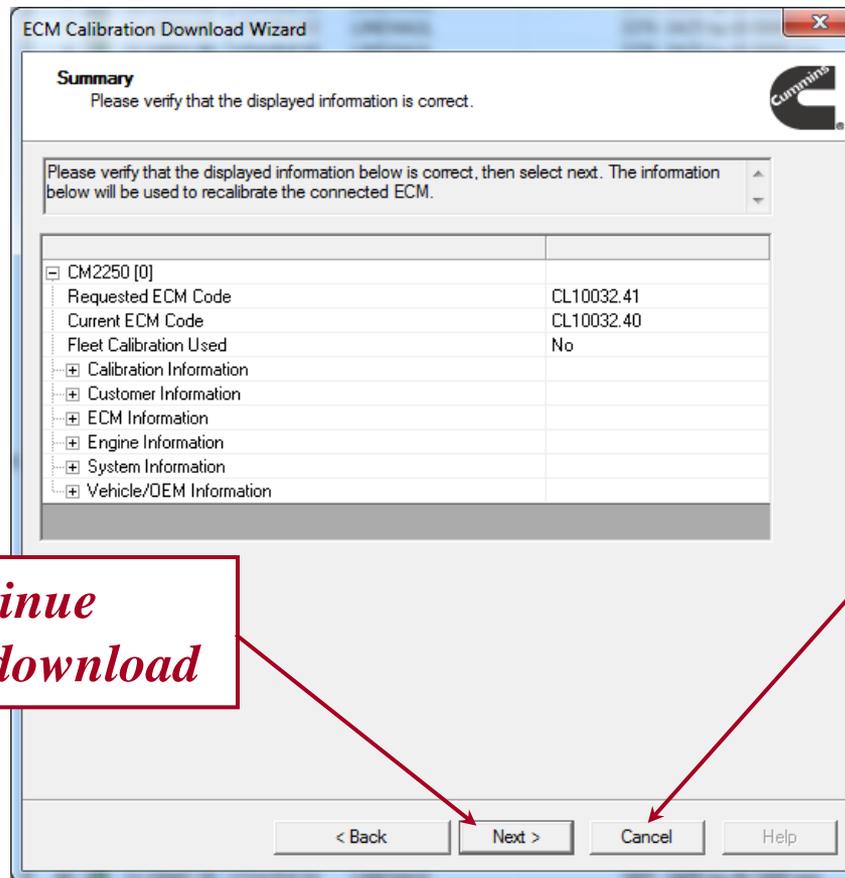
*Can edit Dataplate*

*Option to Save and Restore Adjustable parameters.  
For Industrial Applications this should not be checked*

*Undo Dataplate edits*

*Next to continue or Cancel to stop*

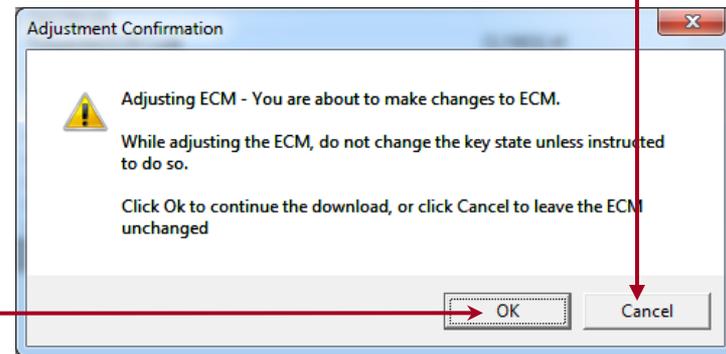




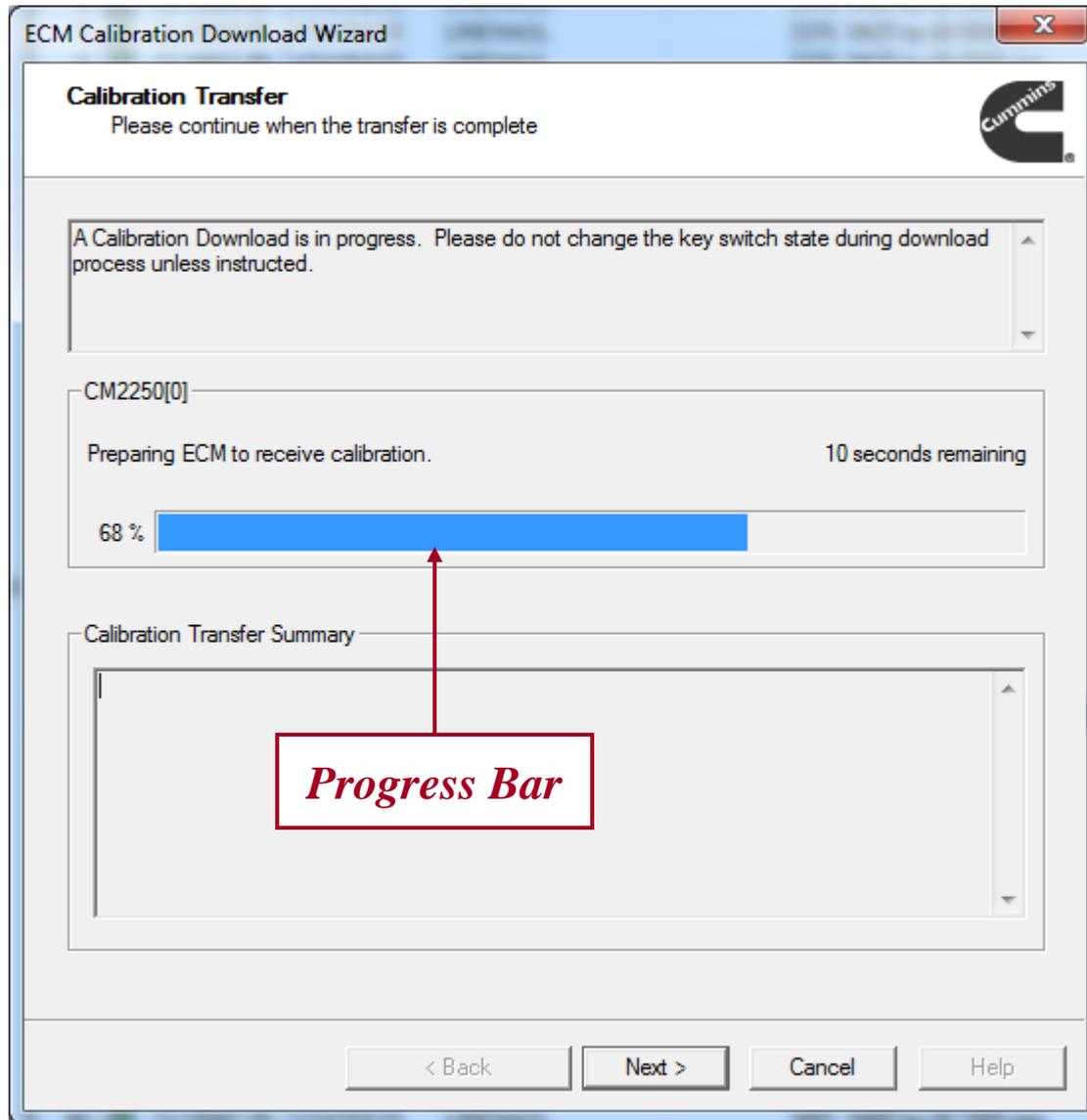
*Next to continue calibration download*

*Cancel to stop calibration download*

*OK to start calibration download*

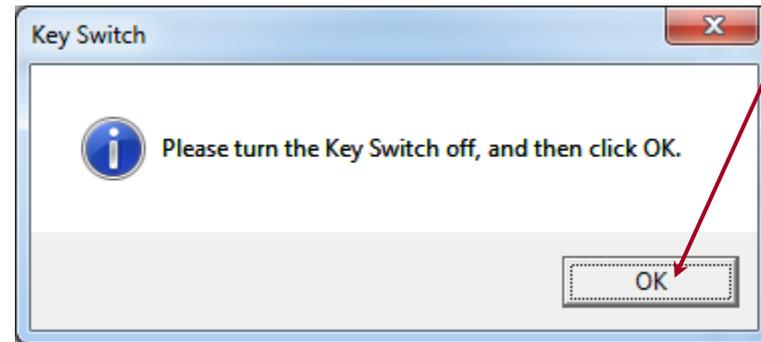
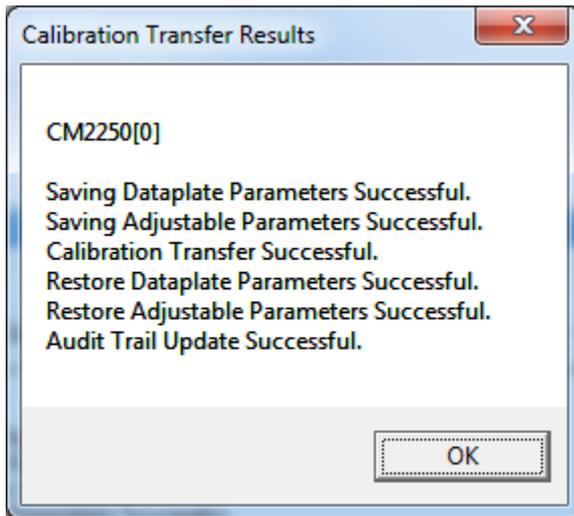


# Calibration Selection



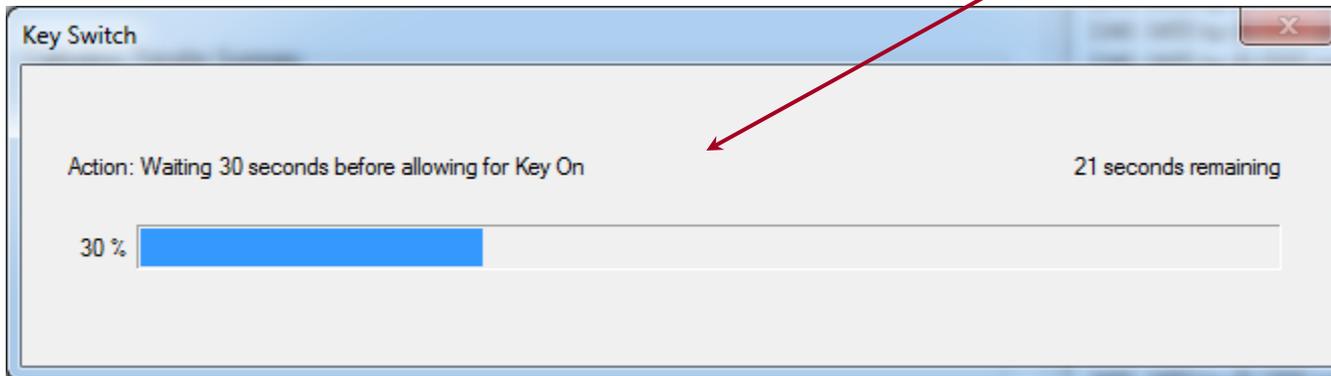
# Calibration Selection

- Follow all prompts through the calibration transfer process until the calibration transfer has been completed.

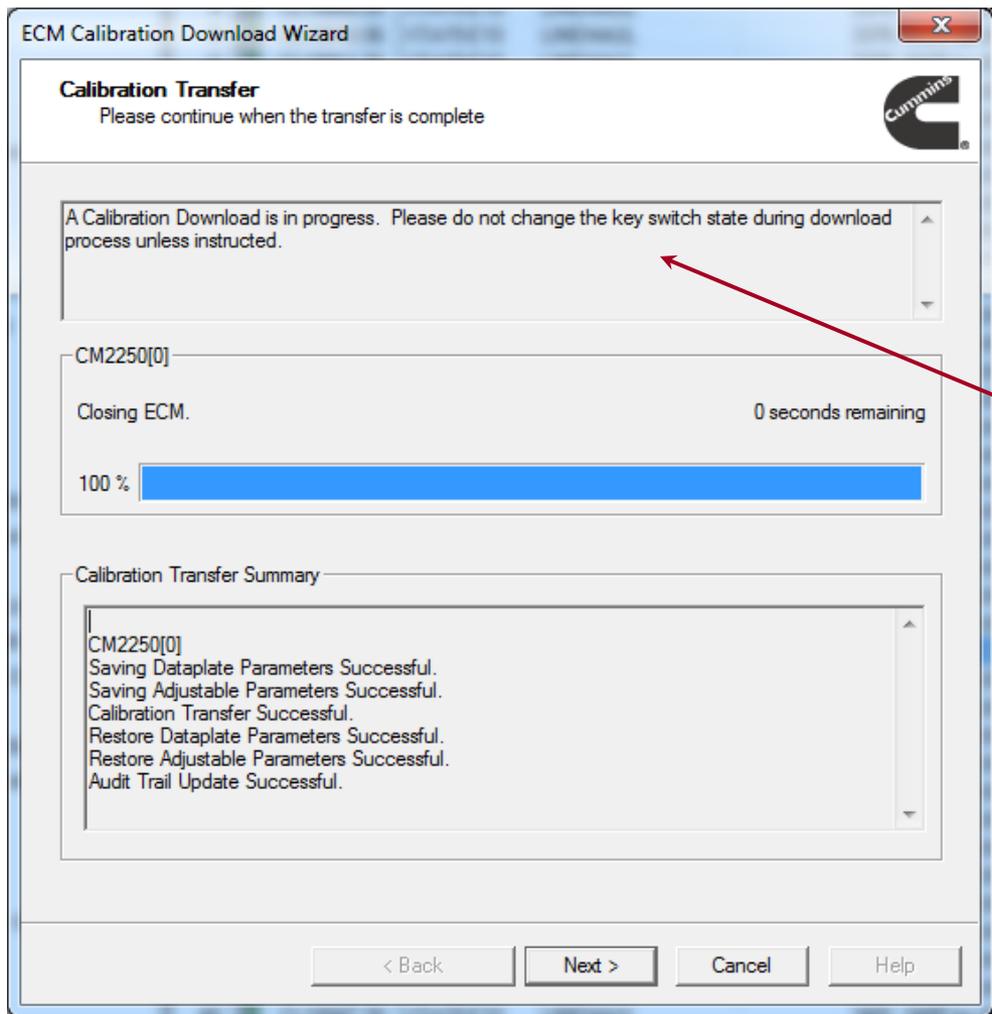


*Click OK*

*Turn key off , follow instructions, then key on and click OK*



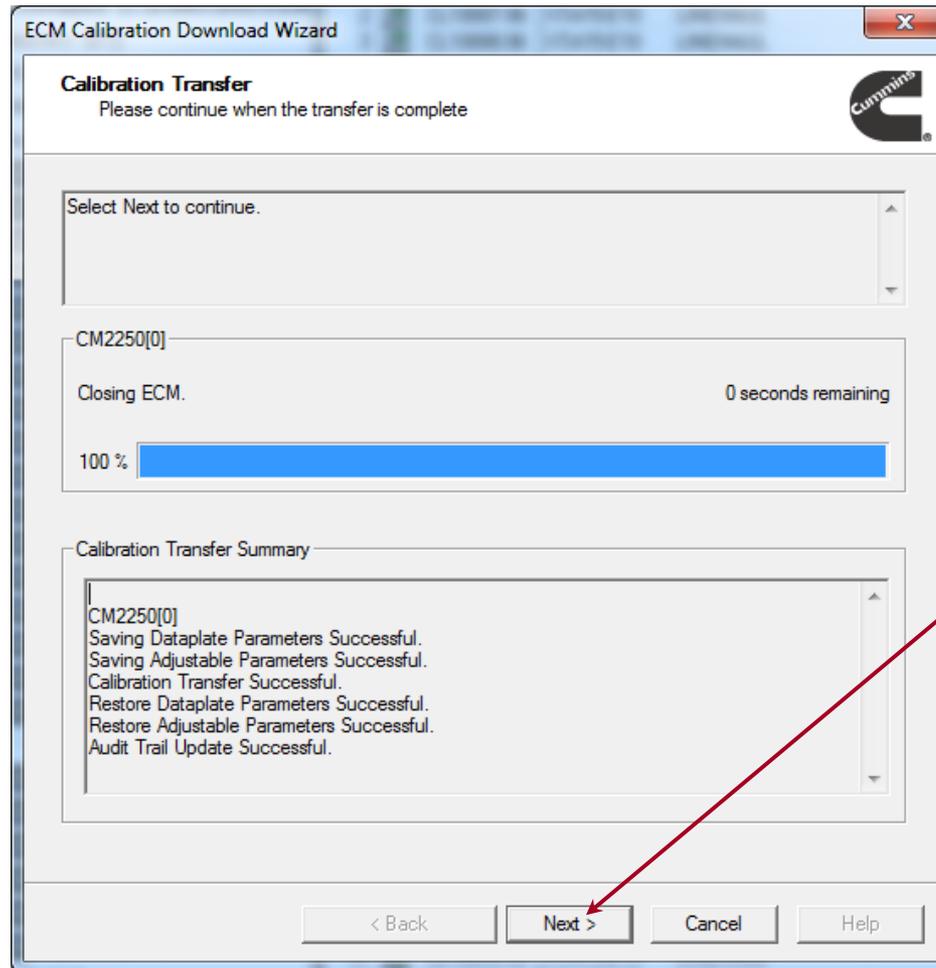
# Calibration Selection



*Follow instructions*



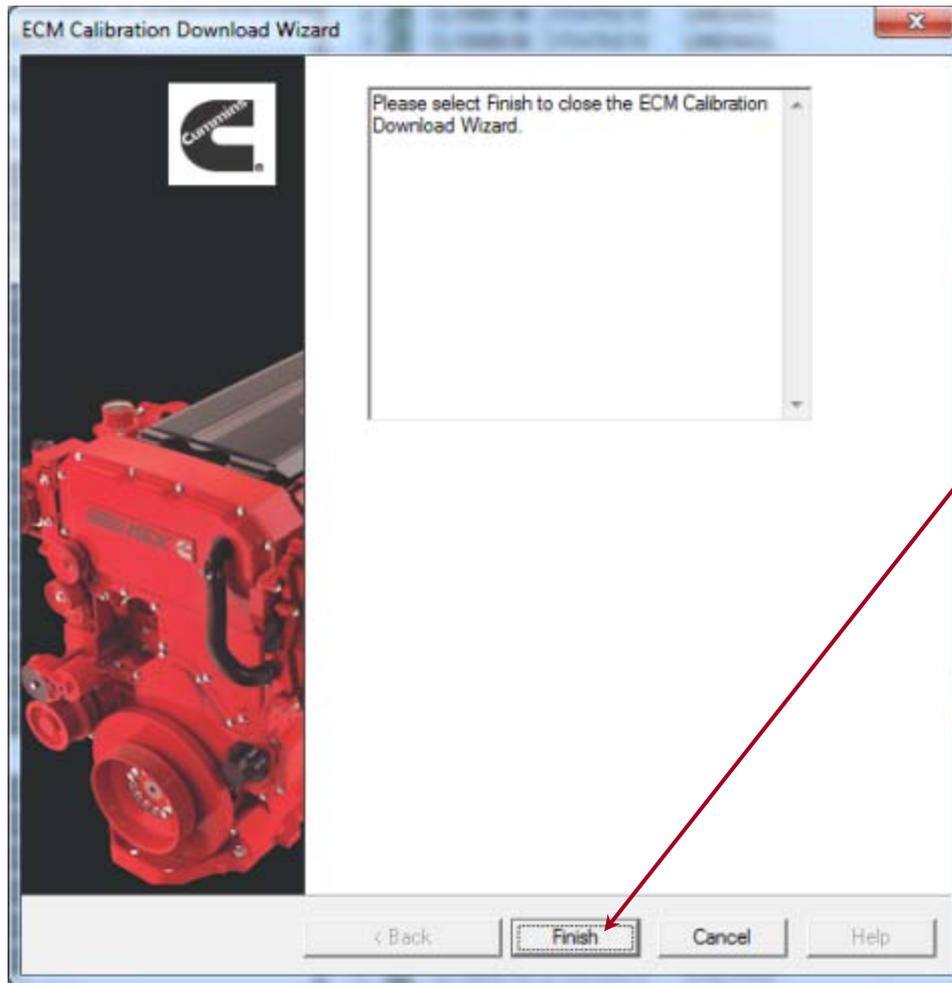
# Calibration Selection



*Click Next*



# Calibration Selection



*Click Finish to close the Calibration Download Wizard window*

# Programmable Datalink Device (PDD) Calibration Download Capability

- INSITE provides the capability to download a calibration to a PDD using any RP1210A adapter
- This capability is found in the Calibration Selection
- The latest INLINE 4/5 and INLINE 6 Drivers Firmware are needed to support the calibration download





- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

To download calibrations to an ECM, please select ECM.

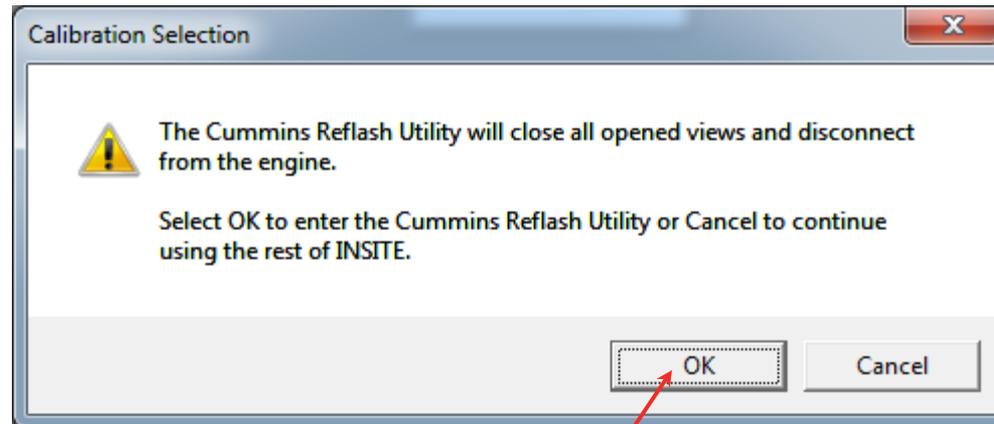
ECM

To download calibrations to a programmable datalink device, please select PDD.

PDD

Click on the PDD button.

# Programmable Datalink Device (PDD) Calibration Download



Acknowledge the  
warning dialog message.

### Calibration Selection

Select Database Location



Select Product

CA "June 2013"  
EA "December 2013"

Compatible Calibration



Refresh

### Reflash Status

Click on the drop down menu to select the Database Location.

### Calibration Selection

Select Database Location E:\ "December 2013" 

Select Product

- Compatible Calibration
- Aftertreatment Diesel Exhaust Controller
- Turbo Actuator Controller

Click on the drop down menu to select the Product type.

Reflash

### Reflash Status

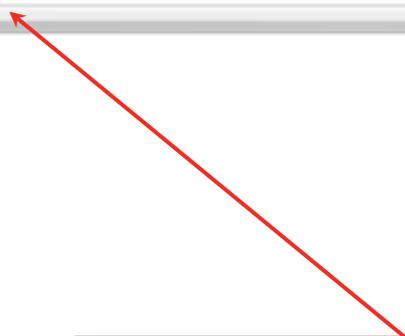
### Calibration Selection

Select Database Location EA "December 2013" 

Select Product Aftertreatment Diesel Exhaust Controller 

Compatible Calibration 

Detecting...



Detection Process Progress Bar

Refresh

### Reflash Status

### Calibration Selection

Select Database Location: E:\ "December 2013"

Select Product: Aftertreatment Diesel Exhaust Controller

#### Compatible Calibration

Device Address	Device PN	Software PN	Voltage	Version
0x3D	2880480	5283312	12V AND 24V	3.7.8

Device Information

Click on Reflash button to download

Reflash

### Reflash Status

### Calibration Selection

Select Database Location: E:\ "December 2013" 

Select Product: Aftertreatment Diesel Exhaust Controller

Compatible Calibration 

Device Address	Device PN	Software PN	Voltage	Version
0x3D	2880480	5283312	12V AND 24V	3.7.8

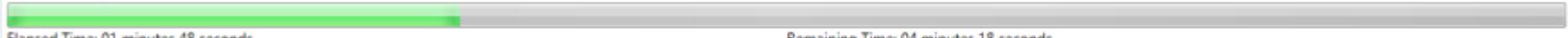
Reflash Status progress bar.



Reflash

### Reflash Status

5283312.dsr → 0x3D



## Calibration Selection

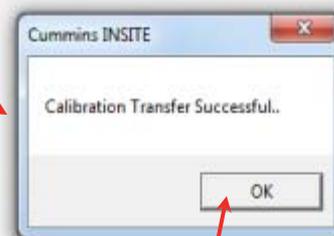
Select Database Location: EA\ "December 2013"

Select Product: Aftertreatment Diesel Exhaust Controller

## Compatible Calibration

Device Address	Device PN	Software PN	Voltage	Version
0x3D	2880480	5283312	12V AND 24V	3.7.8

INSITE displays Calibration Transfer Successful upon completing the reflash.



## Reflash Status

5283312.dsr → 0x3D

Reflash is completed successfully.

Elapsed Time: 04 minutes 39 seconds

Click the OK button on the information box.

### Calibration Selection

Select Database Location  

Select Product

Compatible Calibration 

Device Address	Device PN	Software PN	Voltage	Version
0x3D	2880480	5283312	12V AND 24V	3.7.8

Click on the red X button to close.

Reflash

### Reflash Status

5283312.dsr → 0x3D

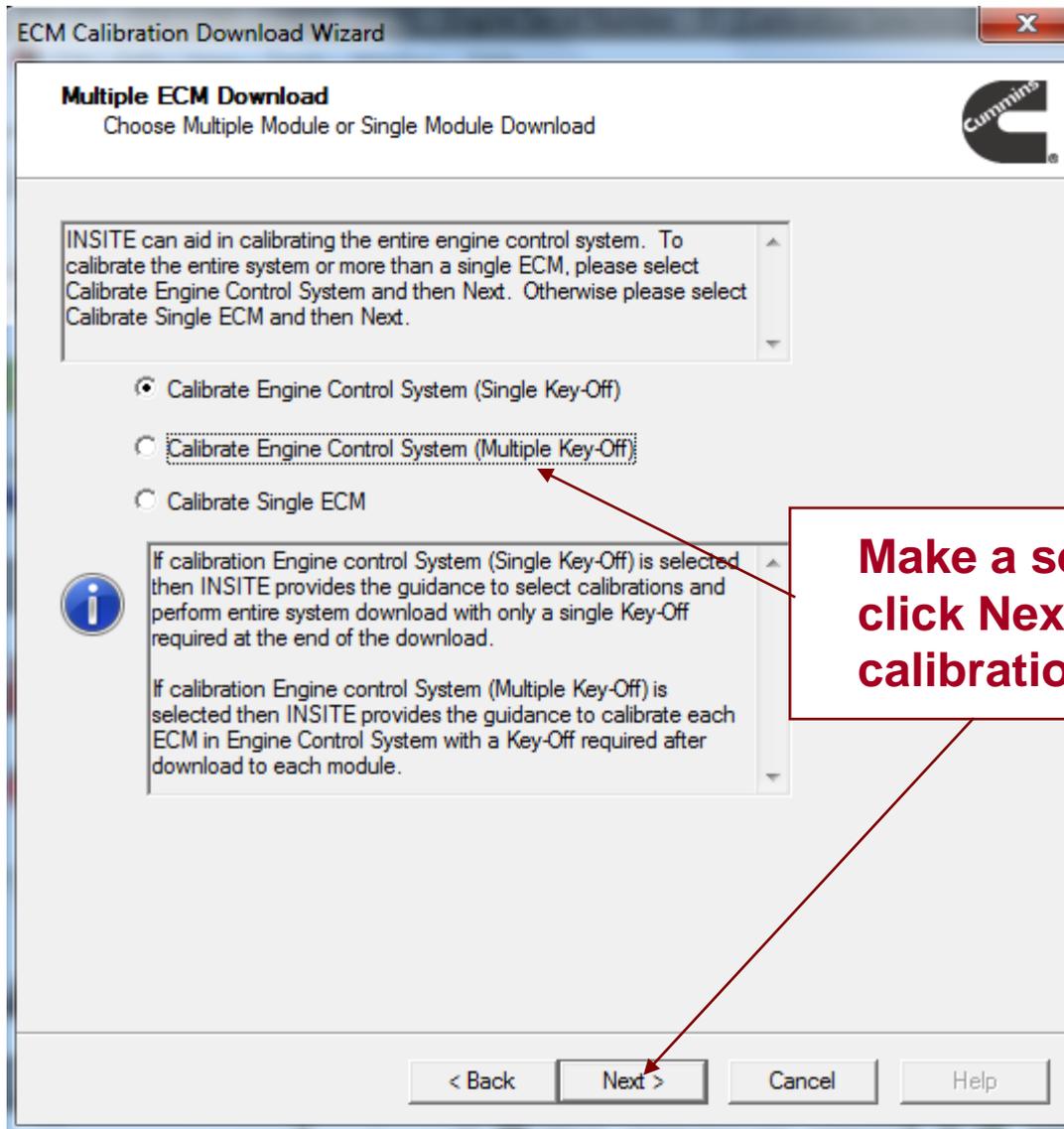
Reflash is completed successfully.

Elapsed Time: 04 minutes 39 seconds

# Single key off for multi-module downloads

- INSITE™ only requires a single key off at the end of a multi-module calibration download
- All ECM Codes to be downloaded can be selected before the calibration download begins





**Make a selection and click Next to begin the calibration download**



ECM Calibration Download Wizard

**Select Calibration**  
Please Select an ECM Code to be downloaded



ECMCodeExpr	FROption	PJOption	Environment	EngineModel	EmissionLevel	NumberOfCyl
AR60025.06	FR06545	PJ06769	TBD	QSKTA50-CE	TIER 2	
AR60026.07	FR06545	PJ06768	TBD	QSKTA50-CE	TIER 2	

ECM Part Number | ECM Code | ECM Serial Number | Address

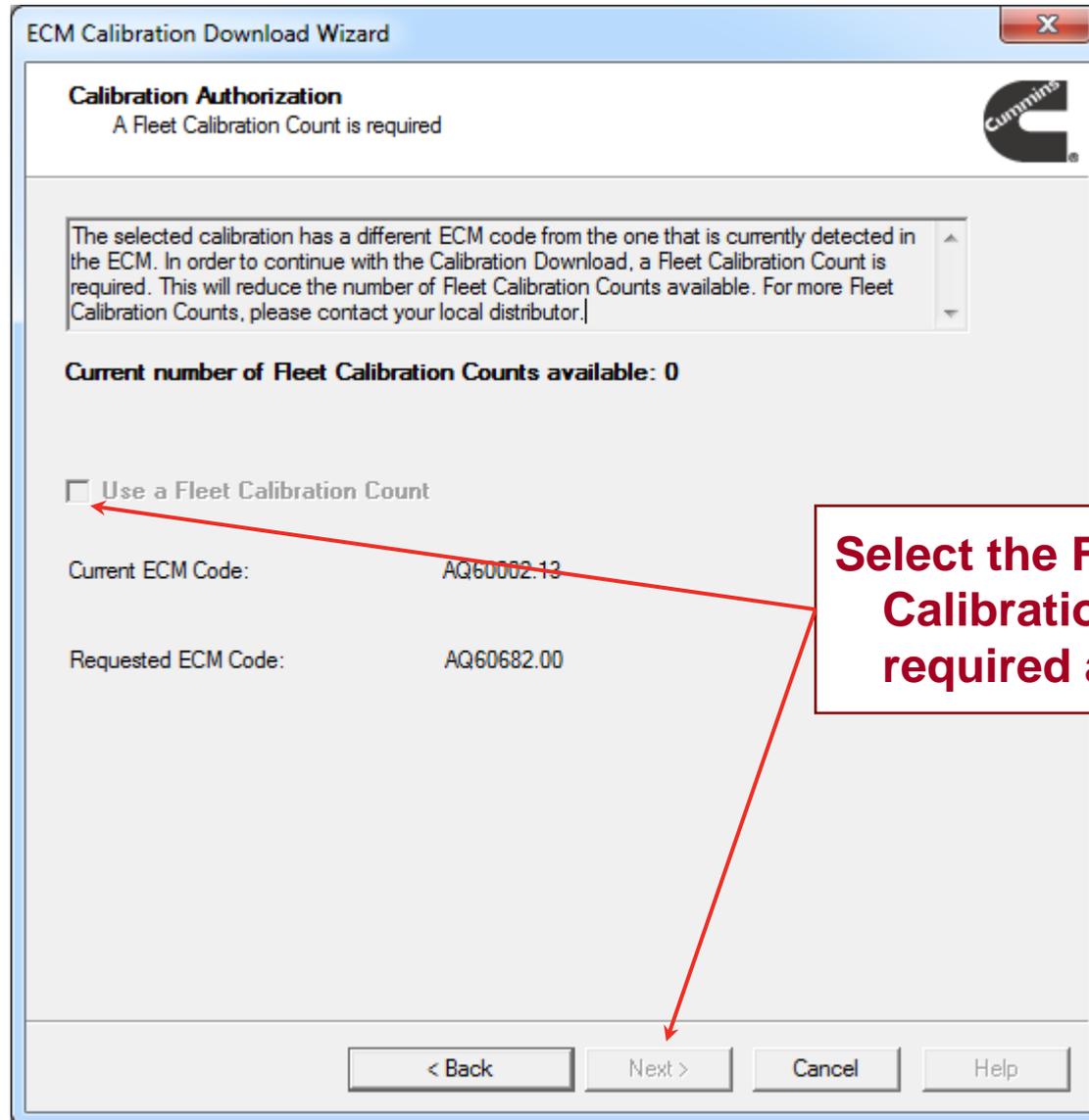
4921776	AR60040.05	26009982	1
---------	------------	----------	---

Show only compatible calibrations  
 Skip calibration download for this ECM

< Back   **Next >**   Cancel   Help

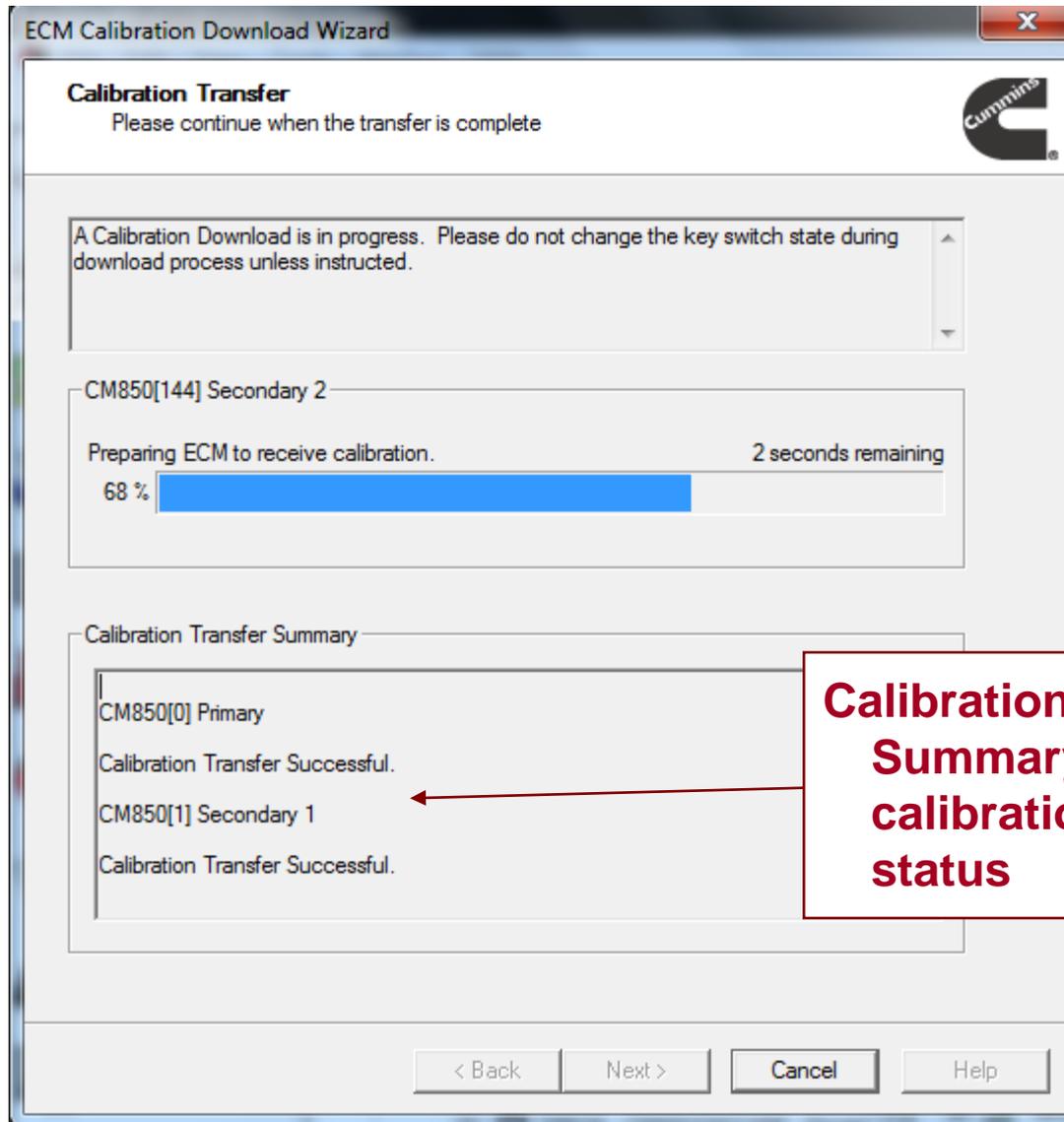
**Select the calibration and click Next**





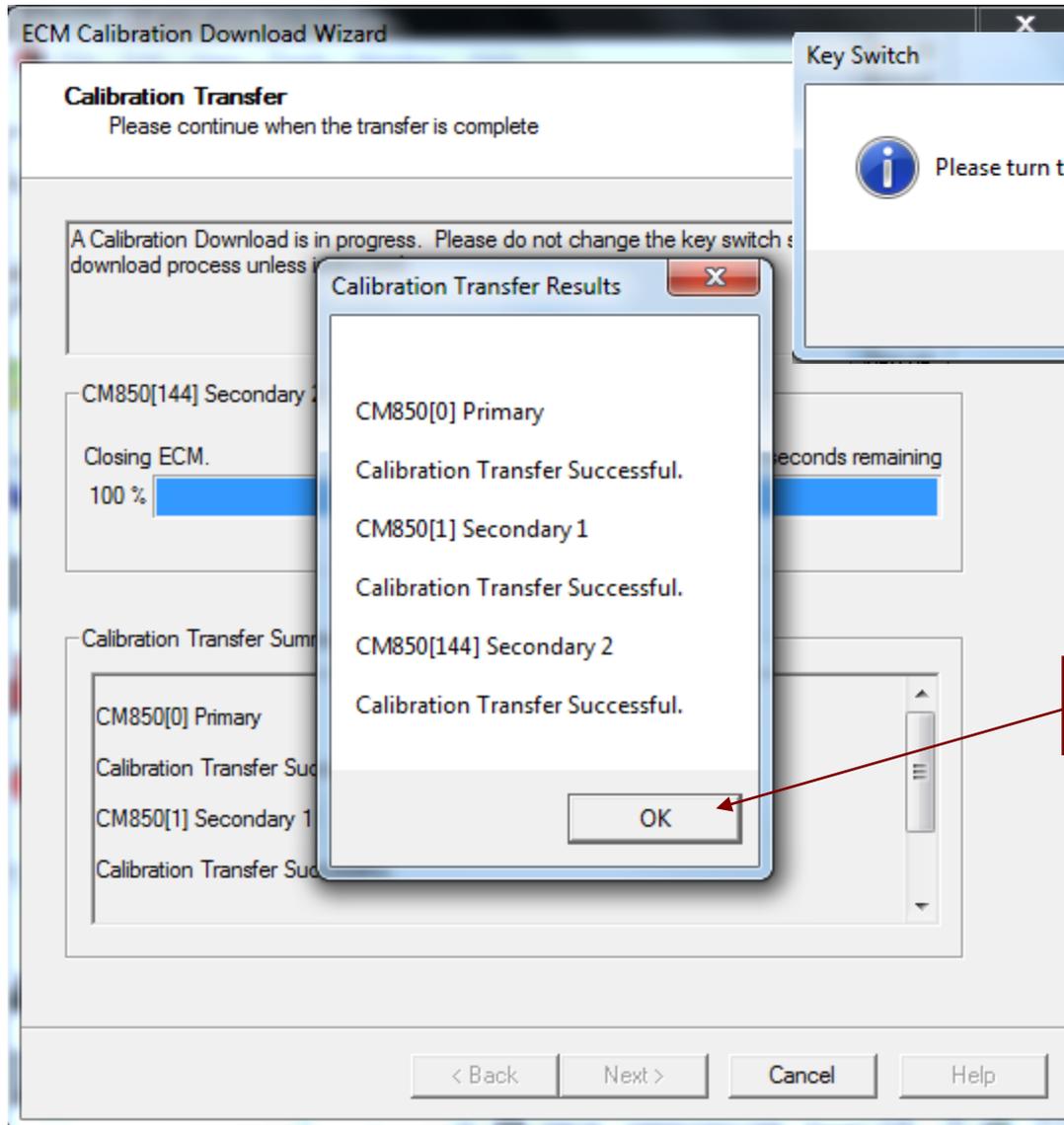
**Select the Fleet Calibration Count if required and click Next**





**Calibration Transfer Summary shows the calibration download status**



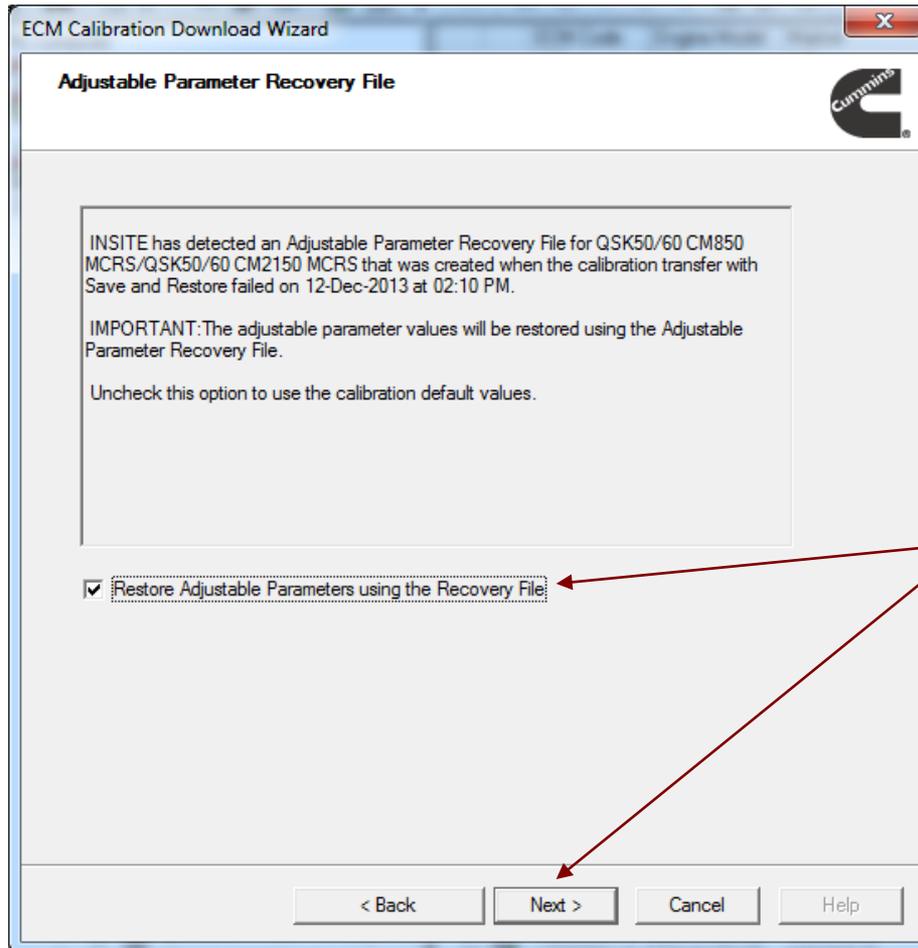


# Adjustable Parameters Recovery File

- If a calibration download fails when Save/Restore Adjustable Parameters is selected, INSITE™ will save these parameters to an Adjustable Parameter Recovery File
- The file can be used by INSITE™ to restore the Dataplate and adjustable parameters on this ECM if it is in a ROM Booted or Foot Printed state on the next successful download



# Adjustable Parameters Recovery File



**Check the box to restore adjustable parameters and click Next to continue the calibration download**



# Calibration Selection

## Calibration Supersession

- Supersession refers to the process of providing replacement calibrations for obsolete calibrations
- Superseded Calibrations are not active and not installed on the INCAL DVD
- Calibration Reduction has generated a large number of Superseded Calibrations

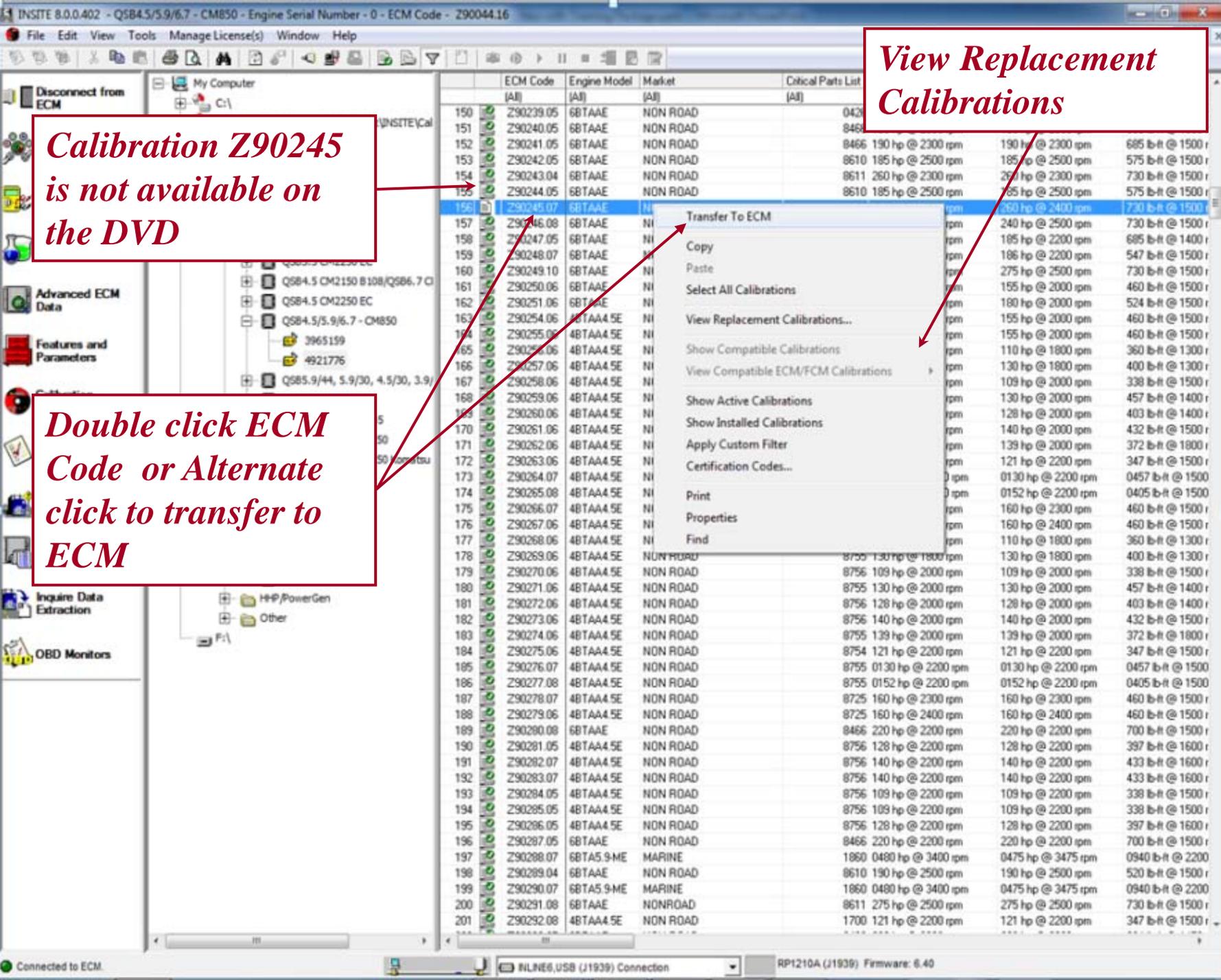


# Calibration Selection

## Calibration Supersession

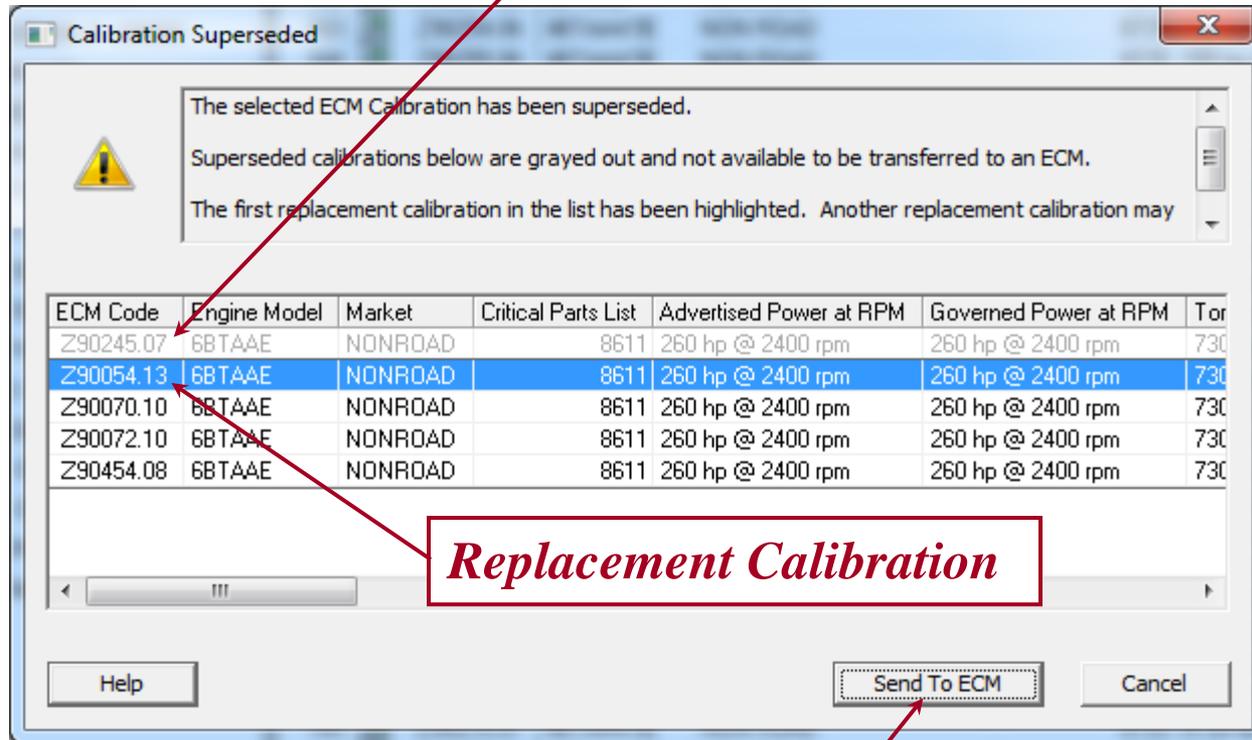
- If INSITE has “Show Installed Calibrations” or “Show Active Calibrations” selected
  - Calibration Selection will not display the Superseded calibration
  - Auto detect will not find the Superseded calibration
- Uncheck “Installed Calibrations” and uncheck “Active Calibrations” on Tools menu
  - Tools > Calibration Selection or Alternate Click
- When downloading the replacement calibration, first select the Superseded calibration. A pop-up window will appear displaying the replacement calibration.
- View Replacement Calibrations
  - Tools > Calibration Selection > View Replacement Calibrations





# Calibration Selection

*Selected Calibration that was not available*



*Replacement Calibration*

*Click OK To ECM to continue calibration transfer with replacement ECM Code*

# PowerMatch calibrations are now able to be sent using INSITE

- The PowerMatch calibration will be based on an ECM Serial number and will only download to the specific ECM for which it was created
- Calibration download attempts to different ECMs will produce a warning message and will end the calibration download process



# Calibration Selection Wrap Up

- Calibration Download is used to update the ECM
- Calibration Selection
  - Contact local distributor for Calibration and/or Calibration Authorization password
  - To view Superseded Calibrations, uncheck “Installed Calibrations” and uncheck “Active Calibrations”
- Use Calibration filtering to reduce number of Calibrations listed
- Calibration Authorization Password is required for updating or ROM Booted ECMs



You have concluded this section of the training.  
Please click to the next slide and continue or [Click Here](#) to return to  
the Table of Content.





# **INSITE™ Connections**

**Electronic Service Tools**

# Connections

Additional Connections/Simulators can be added.

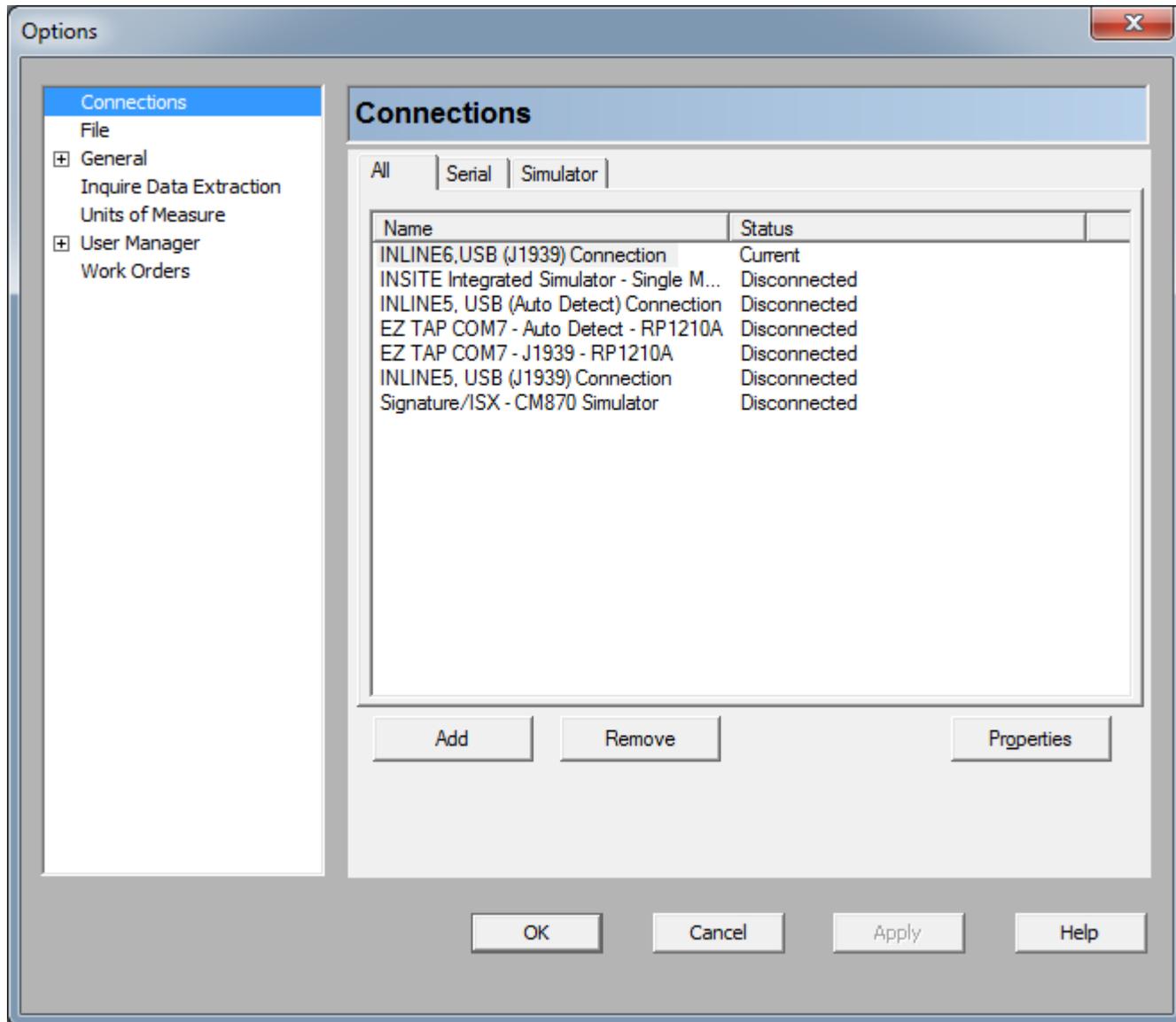
- Add new...
- Tools → Options → Connections
- File → Connections → Add New Connection...



- New
- Open... Ctrl-O
- Close
- Save Ctrl+S
- Save As...
- Convert
- Export
- Import
- Connections
- Page Setup...
- Print Preview...
- Print... Ctrl-P
- Send To
- Properties Alt+Enter
- Exit

Add New Connection...

- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors



# Auto Configure

- The Auto Configure feature is updated and improved to identify not only Cummins adapters but also other third party RP1210A compliant datalink adapters



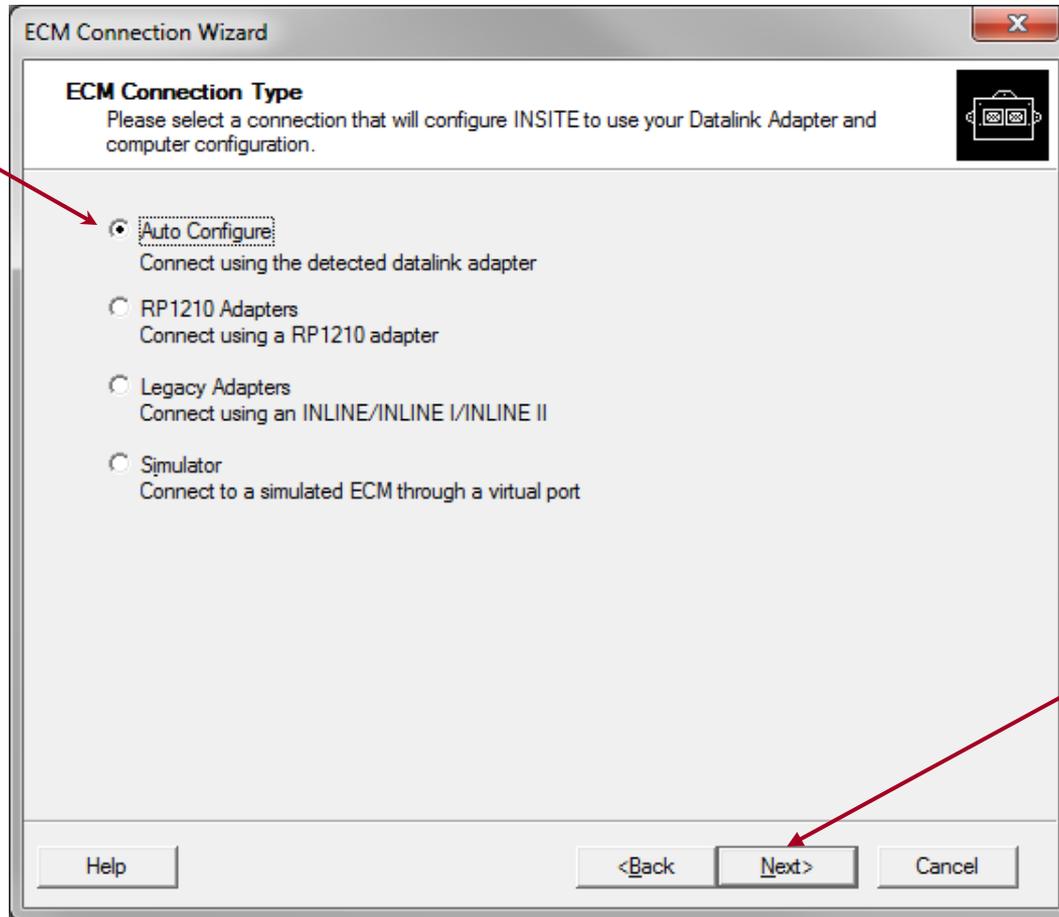
# ECM Connection Wizard – Auto Configure



*Click Next to continue*

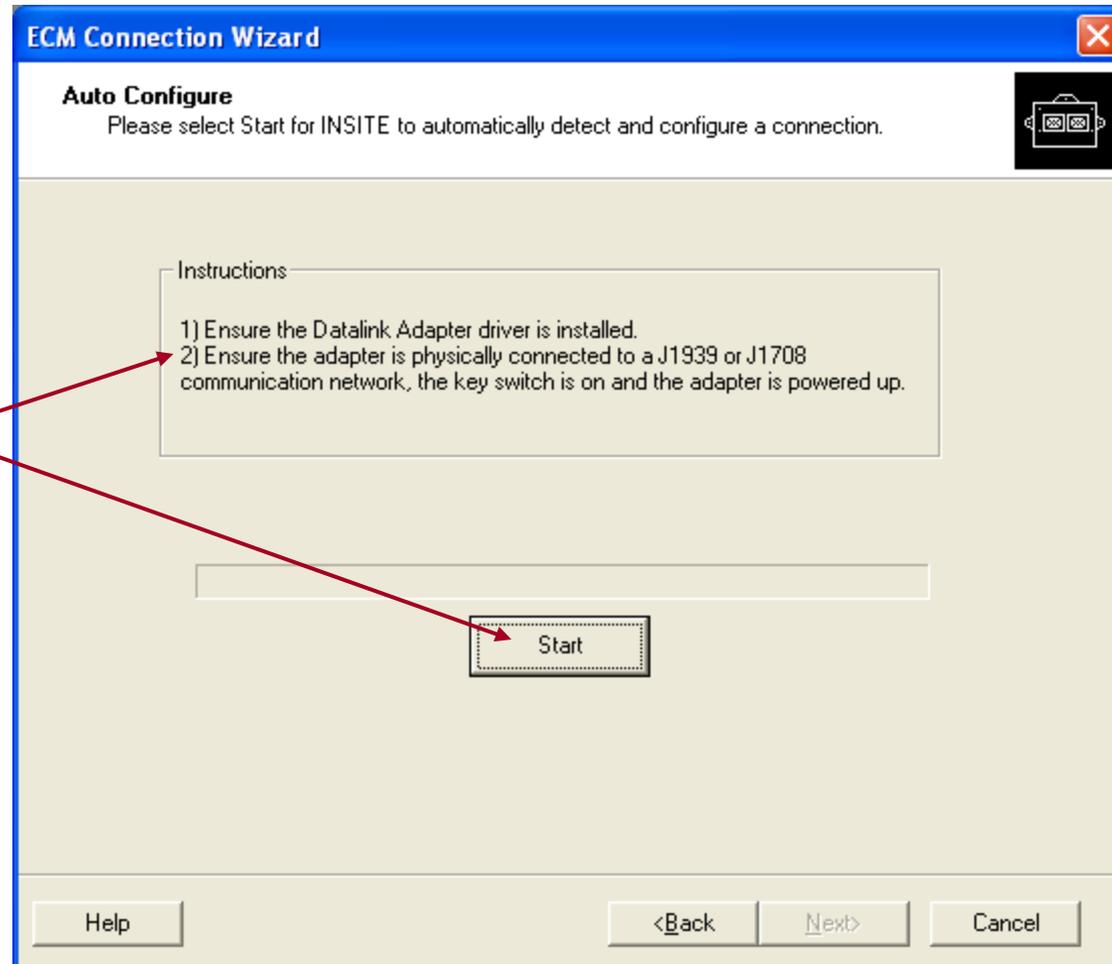
# ECM Connection Wizard – Auto Configure

*Select Auto Configure*



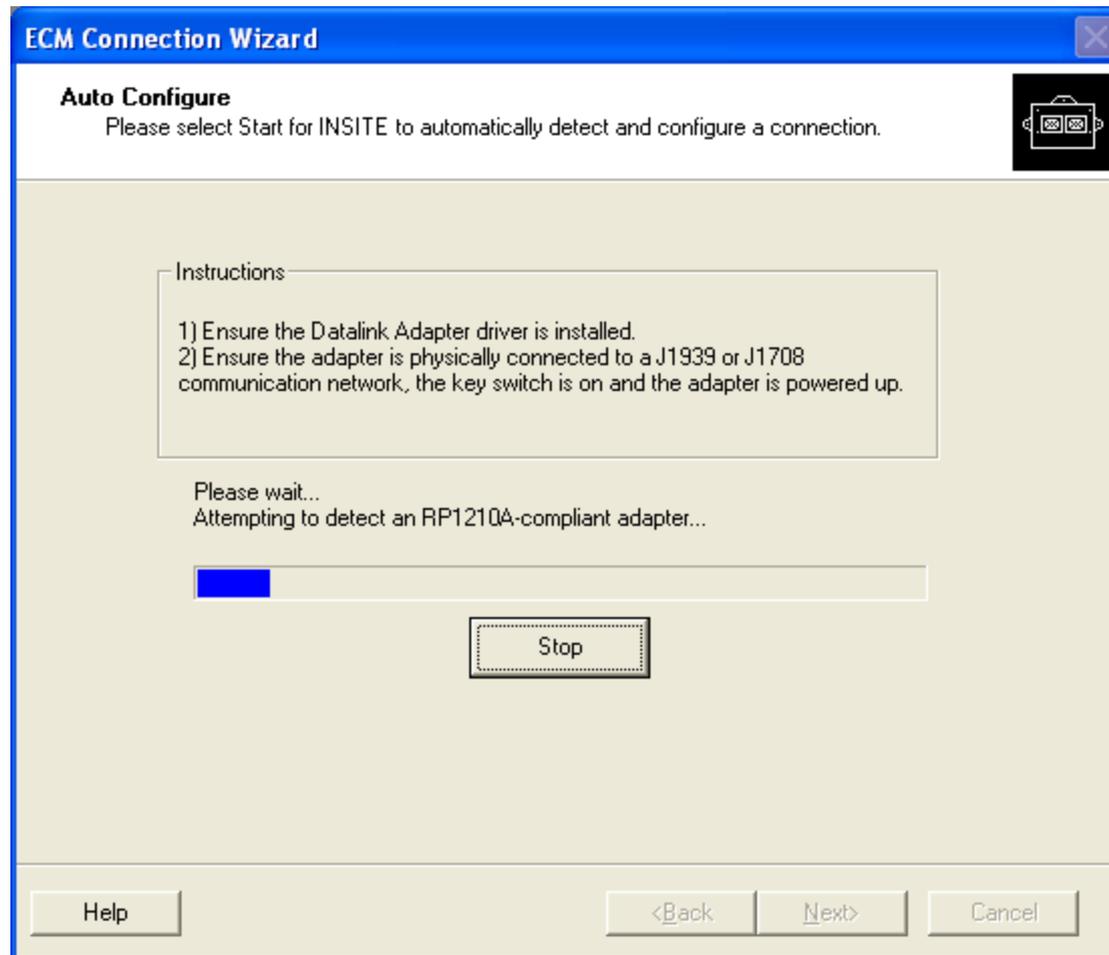
*Click Next to continue*

# ECM Connection Wizard – Auto Configure

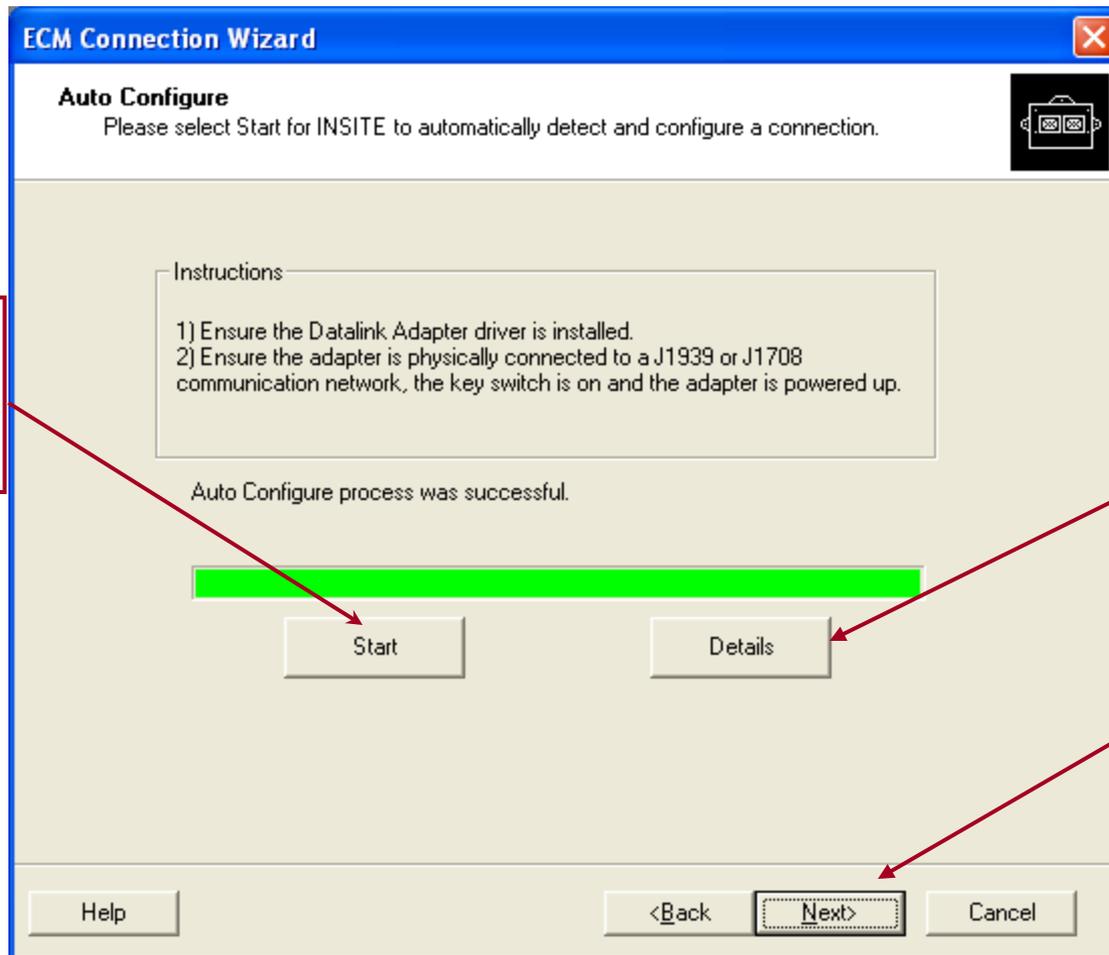


*Follow the  
Instructions,  
then Click Start*

# Connection Auto Configure



# Connection Auto Configure



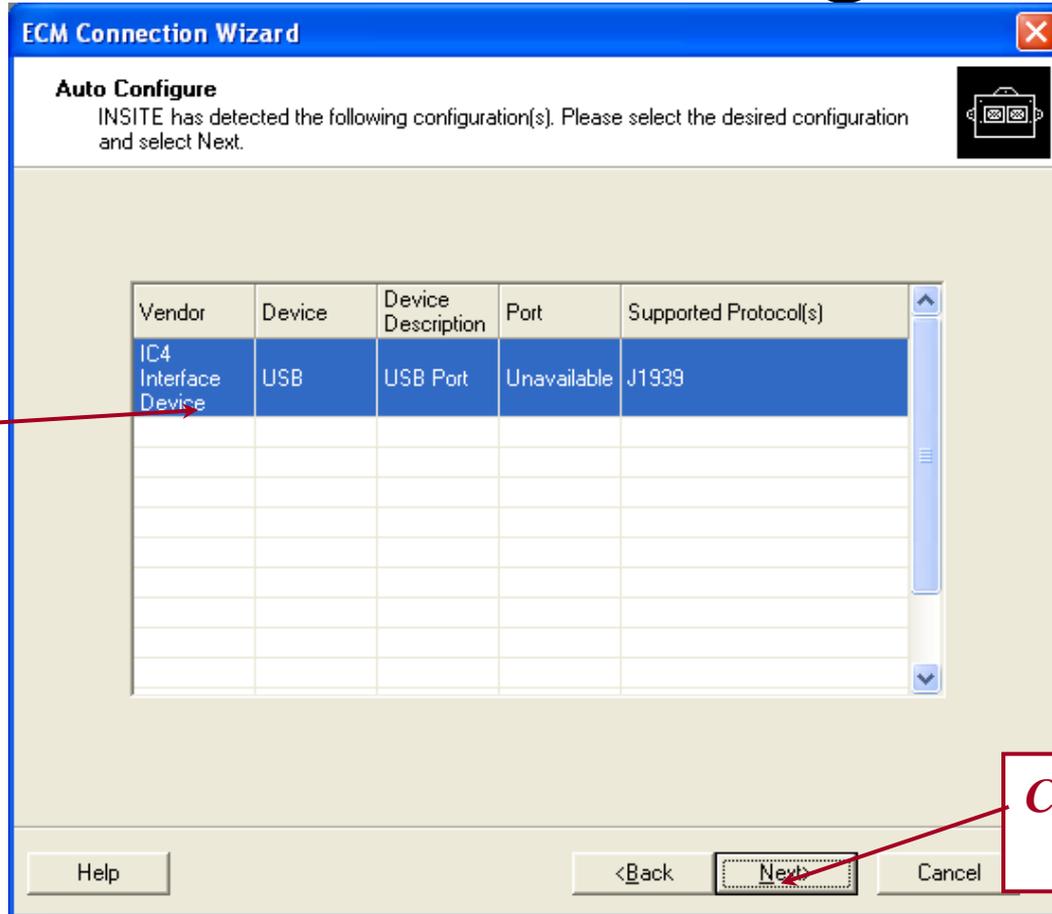
*Click Start to restart the Auto Configure*

*Click Details for more information*

*Click Next to continue*



# Connection Auto Configure



*Select the connection*

*Click Next to continue*



# Connection Auto Configure

**ECM Connection Wizard**

**Connection Name:**  
Specify connection name

The information describing your connection is grouped together as an ECM Connection and labeled with a name you provide.

Please enter a name for the new connection.

Connection Name:  
USB (J1939) Connection

Help <Back Next> Cancel

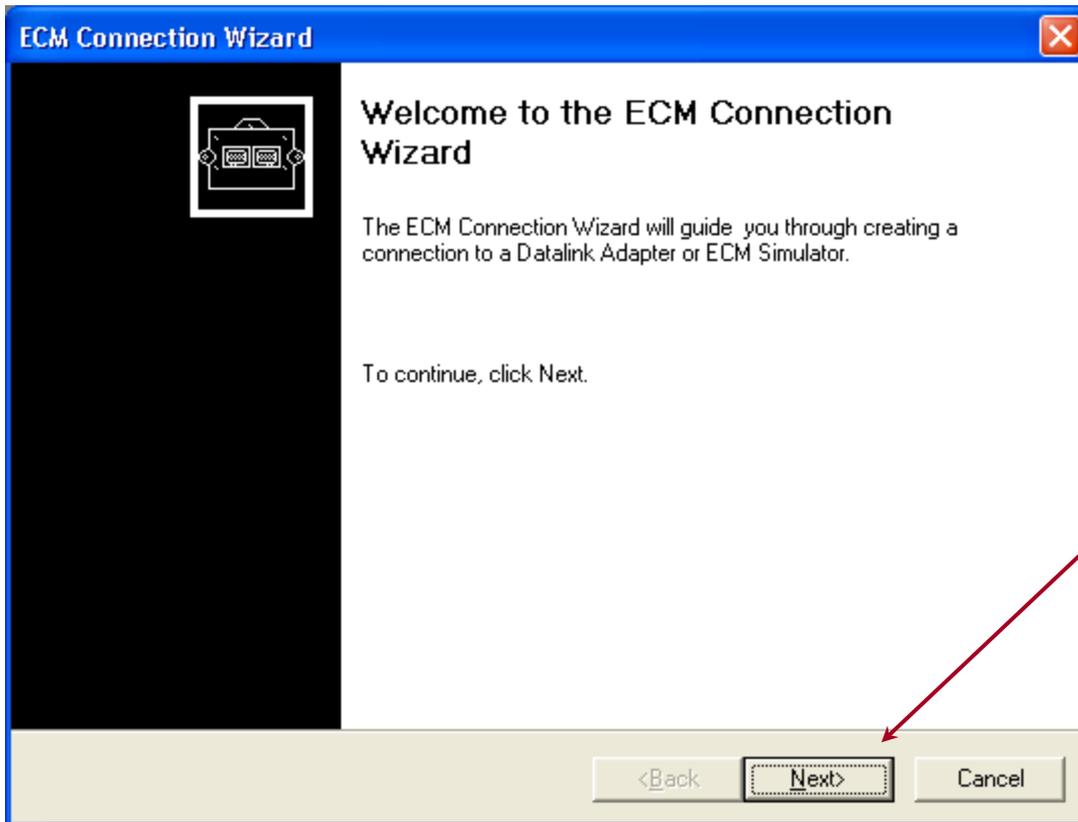
*Click Next to continue*

# Connection Wizard

- The connection wizard is updated and simplified for the easy selection of RP1210A compliant datalink adapters and connection tests within the connection wizard

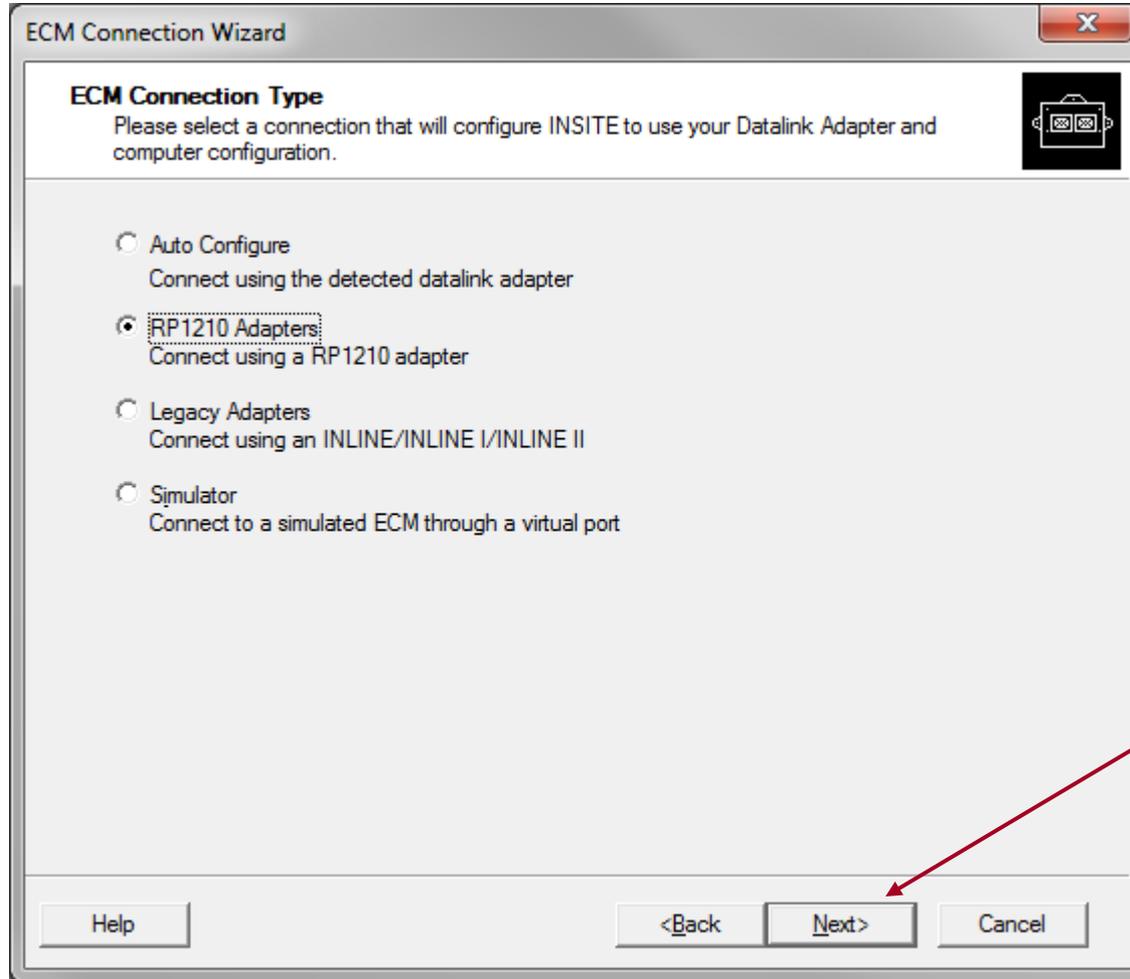


# ECM Connection Wizard



*Select Next to continue the wizard*

# Updated ECM Connection Wizard



*Click Next to  
continue*

# Updated ECM Connection Wizard

**RP1210A Datalink Adapter Vendor list will be displayed if the corresponding adapter drivers are installed. Select the Datalink Adapter Vendor**

ECM Connection Wizard

**Connection Settings**  
Please select the specific Connection Settings based on the system configuration.

Vendor

<Please Select a Vendor>

<Please Select a Vendor>

Adapter Cummins Inc. INLINE6  
Cummins, Inc.

Protocol

Datalink Adapter Connection Test

Help <Back Next> Cancel

# Updated ECM Connection Wizard

**ECM Connection Wizard**

**Connection Settings**  
You can choose the specific Connection settings based on the configuration of your computer.

Datalink Adapter Vendor  
Cummins Inc.

Datalink Adapter  
<Select an Adapter>  
<Select an Adapter>  
INLINE  
INLINE 4/5  
INLINE 5

Computer Port  
INLINE 4/5

Datalink Protocol

Datalink Adapter Connection Test

Help <Back Next> Cancel

*Select the  
Datalink Adapter*

# Updated ECM Connection Wizard

**ECM Connection Wizard**

**Connection Settings**  
You can choose the specific Connection settings based on the configuration of your computer.

Datalink Adapter Vendor  
Cummins Inc.

Datalink Adapter  
INLINE 5

Computer Port  
USB

Datalink Protocol  
Auto Detect

Datalink Adapter Connection Test

Help <Back Next> Cancel

*Select the computer port*



# Connection Name

**ECM Connection Wizard**

**Connection Name:**  
Specify connection name

The information describing your connection is grouped together as an ECM Connection and labeled with a name you provide.

Please enter a name for the new connection.

Connection Name:  
Test Connection

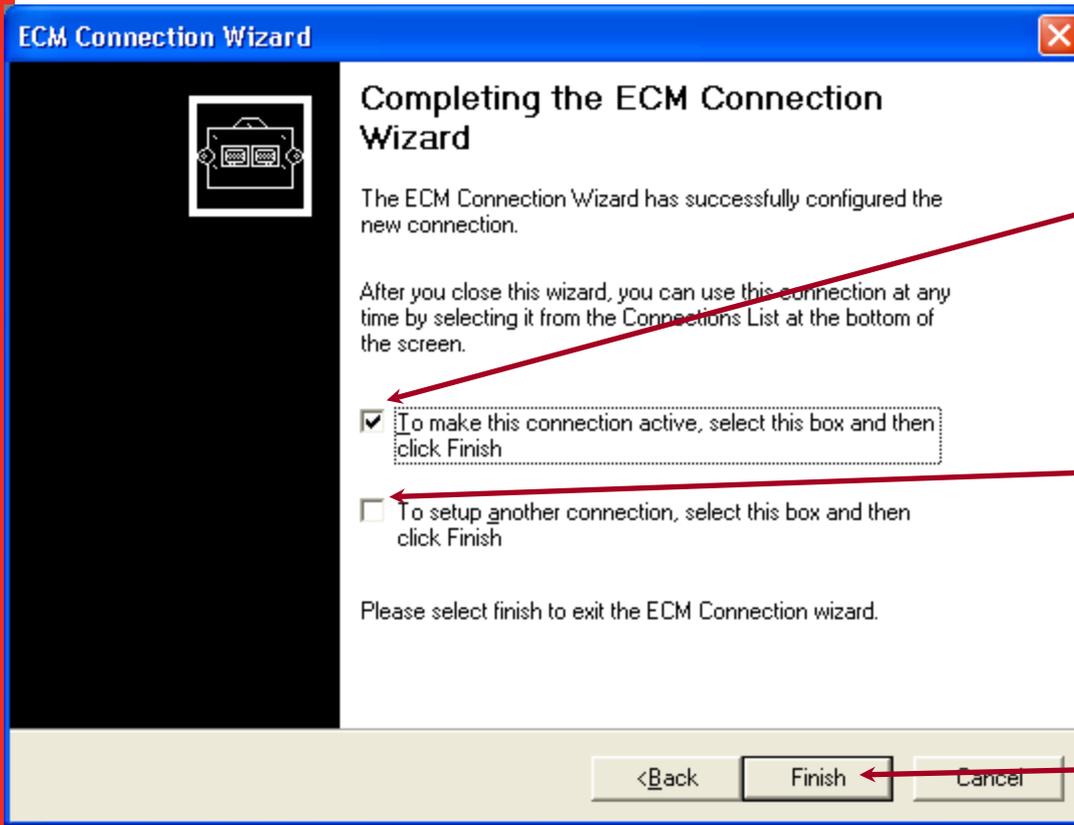
<Back   Next >   Cancel

*Type name for connection*

*Select Next to continue the wizard*



# Completing the ECM Connection Wizard



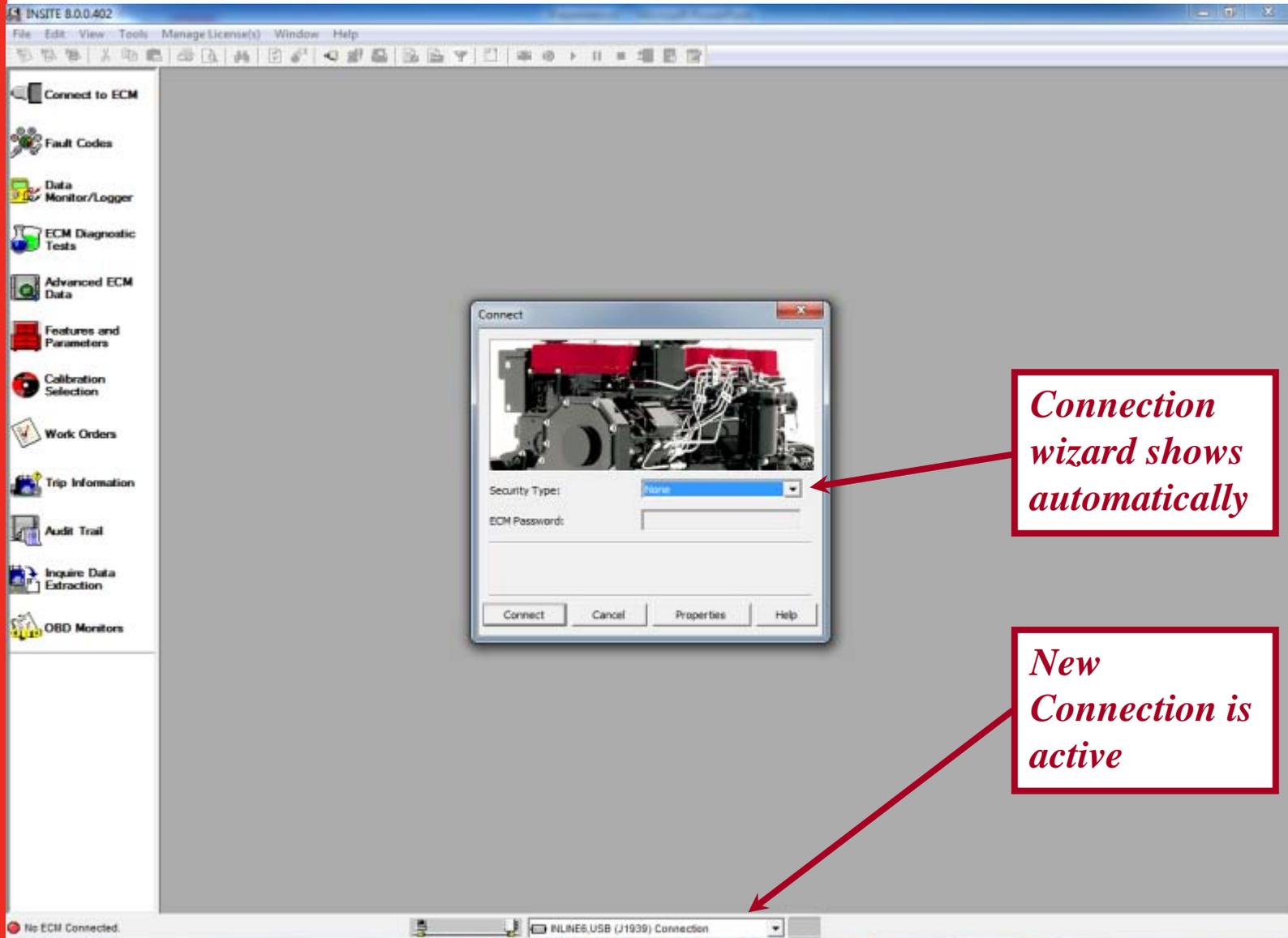
*Select to make the new connection active*

*Select to create another connection*

*Select Finish to conclude wizard*



# Connection Wizard



*Connection wizard shows automatically*

*New Connection is active*

# Datalink Adapter Connection Test

**ECM Connection Wizard**

**Connection Settings**  
Please select the specific Connection Settings based on the system configuration.

Datalink Adapter Vendor  
Cummins Inc.

Datalink Adapter  
INLINE 5

Computer Port  
USB

Datalink Protocol  
Auto Detect

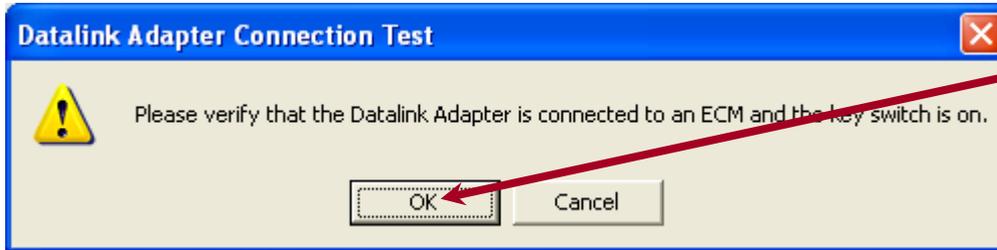
**Datalink Adapter Connection Test**

Help <Back Next> Cancel

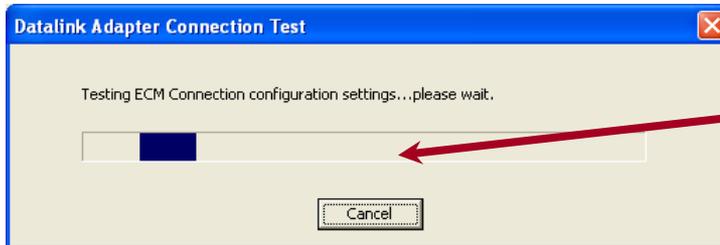
*Click on Datalink Adapter Connection Test*



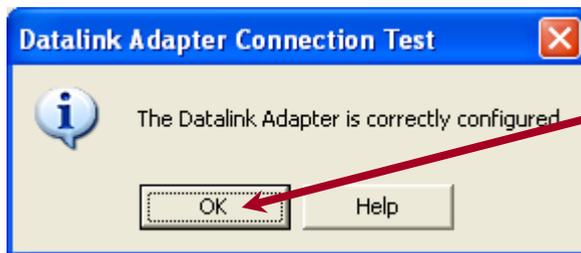
# Datalink Adapter Connection Test



*Click OK*



*Status bar showing the connection status*



*Click OK*

# Connections

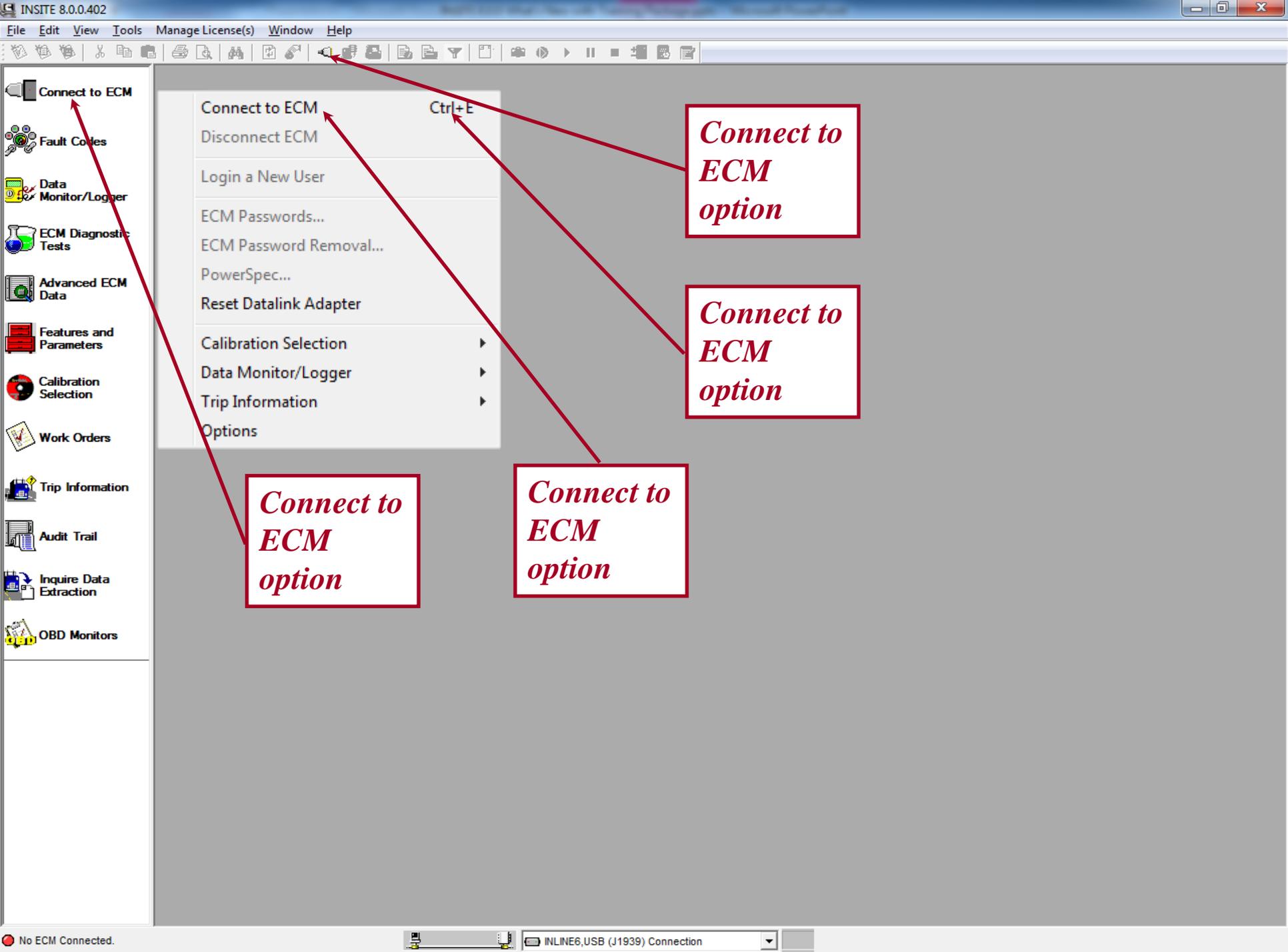
Select the desired Connection Type

- INLINE 5/6, RP1210A or Simulator
- Will open a Connect Window

If previous connection type selected

- Tools → Connect to ECM
- Ctrl+E
- Connect to ECM icon on the View Bar
- Connect to ECM icon on the Tool Bar





*Connect to ECM option*

*Connect to ECM option*

*Connect to ECM option*

*Connect to ECM option*

# Connections



# Engine Simulators

- INSITE can Simulate connections to all supported engines
  - Celect Plus, ISX, ISB...
  - Almost Full Simulated tool Functionality
  - Can be used for training or exploring Engine Features
  - Data is simulated and may not represent actual engine data
- Simulator can be used to learn INSITE and Engine features without being connected to an Engine



# Connections Wrap Up

- Make sure the desired connection is selected
- To connect to ECM
  - Use Ctrl+E as a shortcut to get connected
  - Use the View Bar icon
  - Tool Bar icon to connect
  - Click on Tools → Connect to ECM



You have concluded this section of the training.  
Please click to the next slide and continue or [Click Here](#) to return to  
the Table of Content.





# **INSITE™ Data Monitor/Logging and OBD Monitors**

**Electronic Service Tools**

# Data Monitor / Logger

Method to view or log live engine data at a user defined sample rate.

- Monitor data:
  - View selected parameters to display
- Log data:
  - Continuous logged data for each parameter selected and saved to a file for analysis
- Snapshot:
  - Single data point logged for each parameter selected and saved to a file for analysis



Parameter	Value	Units	Minimum Measured	Maximum Measured
Accelerator Pedal Position Sensor Signal Voltage	0.00	V	0.00	0.00
Adjusted Tire Size	501	revs/mi	501	501
Air Conditioning Pressure Switch	On			
Amber Warning Lamp Status	On			
Anti-theft Status	Unlocked			
Barometric Pressure	24.3	InHg	24.3	24.3
Barometric Pressure Sensor Signal Voltage	0.00	V	0.00	0.00
Battery Voltage	13.81	V	13.81	13.88
Brake Pedal Position Switch	Depressed			
Calibration Software Phase	06060001			
Camshaft Position Sensor	0	RPM	0	0
Camshaft Position Sensor State	Low			
Clutch Pedal Position Switch	Depressed			
Cruise Control ON/OFF Switch	Off			
Cruise Control Set/Resume Switch	Neutral			
...	...	...	...	...
...	0 mi		0	0
...	Off			
...	None			
...	14:54:44	HH:MM:SS		
...	Not Available	Percent		
...	...	...	...	...
...	-2.0	InHg	-2.0	-2.0
...	...	...	...	...
...	0.00	V	0.00	0.00

*Parameter Groups available for some products to allow common monitors to be selected quickly.*

*Click once to open Data Monitor/Logger*

*The Upper and Lower limit columns have been modified to display the Minimum Measured and Maximum Measured values read by INSITE while the parameters are being monitored.*



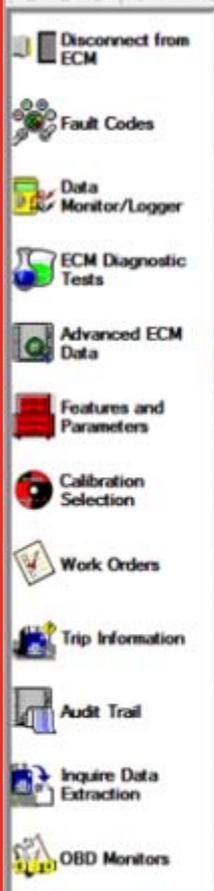
- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

- Parameter Groups
- Predefined
    - All Parameters
    - ECM Information
    - EGR and Turbocharger Performance
    - Engine Braking
    - Engine Protection
    - Hard Start
    - Lamps
    - Low Power and Fuel Economy

- Parameters
- Signature/ISX - CM870
    - CM870
      - Accelerator Pedal Position Sensor Signal Voltage
      - Adjusted Tire Size
      - Air Conditioning Pressure Switch
      - Amber Warning Lamp Status
      - Anti-theft Status
      - Barometric Pressure
      - Barometric Pressure Sensor Signal Voltage
      - Battery Voltage
      - Brake Pedal Position Switch
      - Calibration Software Phase
      - Camshaft Position Sensor
      - Camshaft Position Sensor State
      - Clutch Pedal Position Switch
      - Cruise Control ON/OFF Switch
      - Cruise Control Set / Resume Switch
      - Current Miles On Tires
      - Diagnostic Test Mode Switch
      - Driver Reward State

Parameter	Value	Units	Minimum Measured	Maximum Measured
Accelerator Pedal Position Sensor Signal Voltage	0.00	V	0.00	0.00
Adjusted Tire Size	501	revs/mi	501	501
Air Conditioning Pressure Switch	On			
Amber Warning Lamp Status	On			
Anti-theft Status	Unlocked			
Barometric Pressure			24.3	24.3
Barometric Pressure Sensor Signal Voltage	0.00		0.00	0.00
Battery Voltage			13.75	13.94
Brake Pedal Position Switch				
Calibration Software Phase				
Camshaft Position Sensor	0	RPM	0	0
Camshaft Position Sensor State	Low			
Clutch Pedal Position Switch	Depressed			
Cruise Control ON/OFF Switch	Off			
Cruise Control Set / Resume Switch	Neutral			
Current Miles On Tires	0	mi	0	0
Diagnostic Test Mode Switch	Off			
Driver Reward State	None			
ECM Time	14:58:09	HH:MM:SS		
EGR Cooler Efficiency	Not Available	Percent		
EGR Differential Pressure	-2.0	InHg	-2.0	-2.0
EGR Differential Pressure Sensor Signal Voltage	0.00	V	0.00	0.00
EGR Flow Derate	Active			
EGR Temperature	32	°F	32	32
EGR Temperature Sensor Signal Voltage	5.17	V	5.16	5.17
EGR Valve Position (Percent Open)	0	Percent	0	0
EGR Valve Position Commanded	0	Percent	0	0
EGR Valve Position Sensor Signal Voltage	0.00	V	0.00	0.00
Engine Brake Output Circuit 2	Inactive			
Engine Brake Output Circuit 3	Inactive			
Engine Brake Switch Level	0	Percent	0	0
Engine Coolant Level	Error			

*Click on the arrow to Show/Hide the left column*



Parameter Groups
Engine Braking
Engine Protection
Hard Start
Lamps
Low Power and Fuel Economy
Sensors
Switches
White Smoke and Engine Stumble
<b>Custom</b>

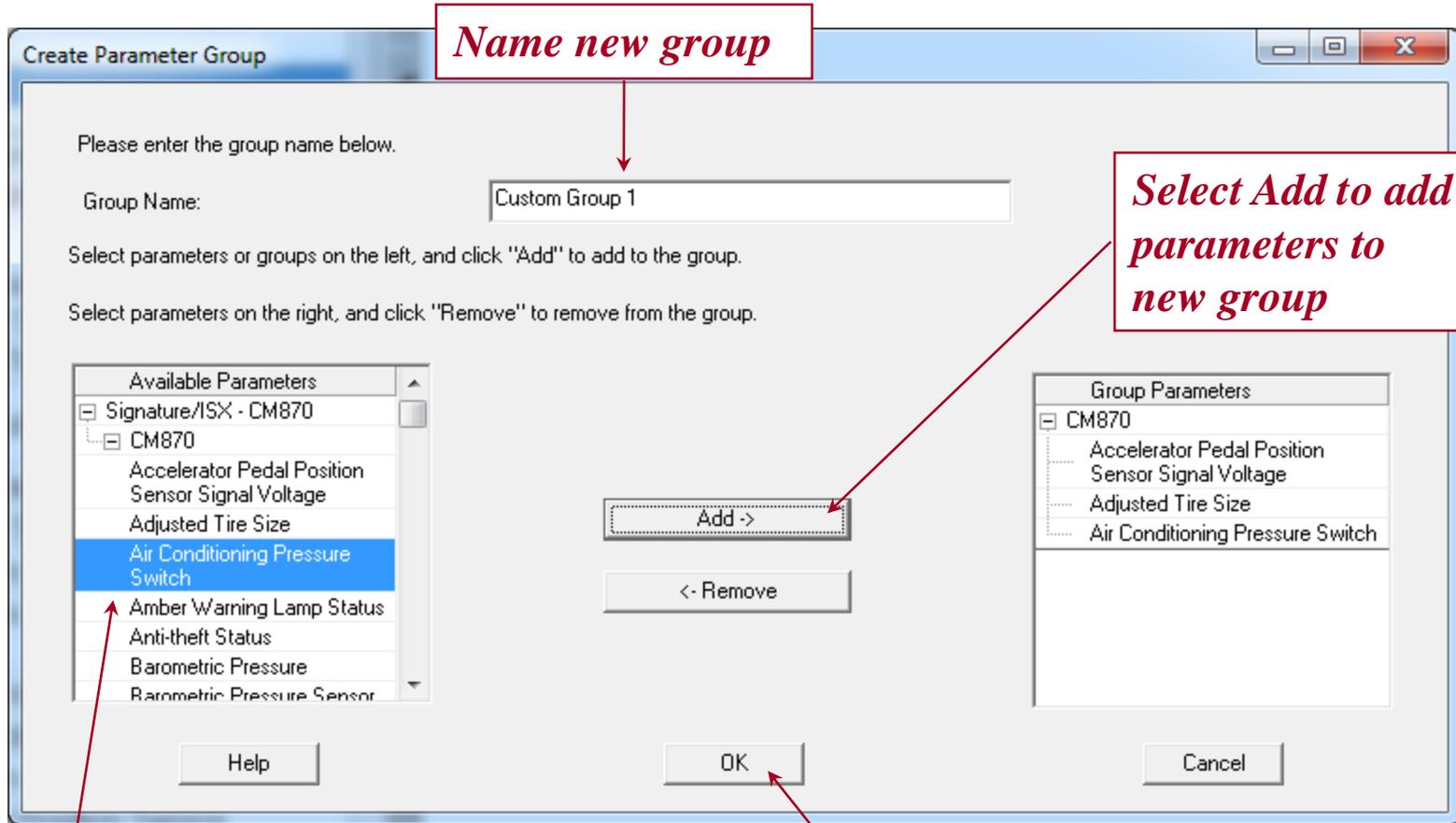
Parameters
Signature/ISX - CM870
CM870
Accelerator Pedal Position Sensor Signal Voltage
Adjusted Tire Size
Air Conditioning Pressure Sw
Amber Warning Lamp Status
Anti-theft Status
Barometric Pressure
Barometric Pressure Sensor Sig
Voltage
Battery Voltage
Brake Pedal Position Switch
Calibration Software Phase
Camshaft Position Sensor
Camshaft Position Sensor State
Clutch Pedal Position Switch
Cruise Control ON/OFF Switch
Cruise Control Set / Resume Switch
Current Miles On Tires
Diagnostic Test Mode Switch
Driver Reward State
ECM Time
FGR Cntrlr Efficiency

Parameter	Value	Units	Minimum Measured	Maximum Measured
Accelerator Pedal Position Sensor Signal Voltage		V		
Air Conditioning Pressure Switch				

- Add to Monitor/Logger
- Remove from Monitor/Logger
- Create New Group...**
- Edit Group...
- Delete Group...
- Rename Group...
- Export to File...
- Import from File...
- Expand
- Collapse
- Set Sampling Rate...
- Event Marker Setup...
- Start Graphical Monitoring

*Alternate Click and select Create New Group*

# Create Custom Group



*Select desired parameters for new group*

*Select OK to continue*



- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

- Parameter Groups
  - Engine Protection
  - Hard Start
  - Lamps
  - Low Power and Fuel Economy
  - Sensors
  - Switches
  - White Smoke and Engine Stumble
  - Custom
    - Custom Group 1**

- Parameters
  - Adjusted Tire Size**
  - Air Conditioning Pressure Switch**
  - Amber Warning Lamp Status
  - Anti-theft Status
  - Barometric Pressure
  - Barometric Pressure Sensor Signal Voltage
  - Battery Voltage
  - Brake Pedal Position Switch
  - Calibration Software Phase
  - Camshaft Position Sensor
  - Camshaft Position Sensor State
  - Clutch Pedal Position Switch
  - Cruise Control ON/OFF Switch
  - Cruise Control Set / Resume Switch
  - Current Miles On Tires
  - Diagnostic Test Mode Switch
  - Driver Reward State
  - ECM Time
  - EGR Cooler Efficiency
  - EGR Differential Pressure
  - EGR Differential Pressure Sensor Signal Voltage
  - EGR Flow Derate
  - EGR Temperature

Parameter	Value	Units	Minimum Measured	Maximum Measured
Accelerator Pedal Position Sensor Signal Voltage	0.00	V	0.00	0.00
<b>Air Conditioning Pressure Switch</b>	<b>On</b>			
Adjusted Tire Size	501	revs/mi	501	501

*New custom group*

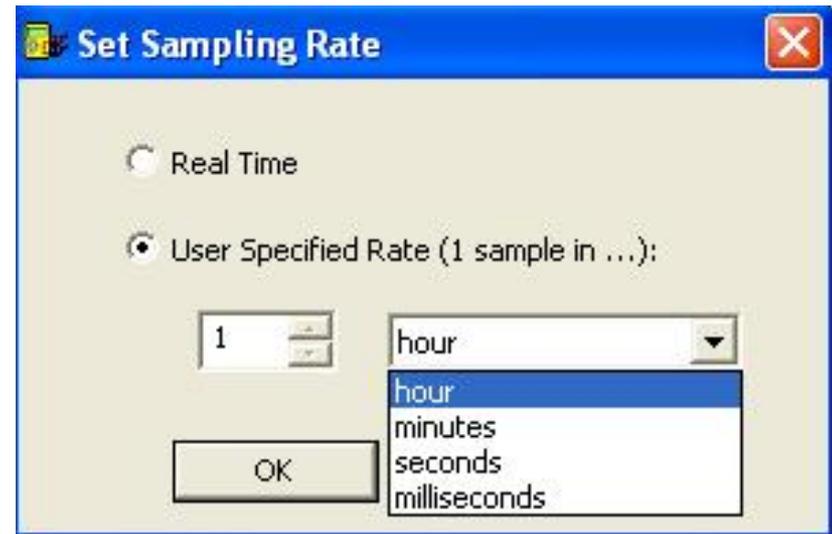
*Desired parameters for Custom Group*

# Data Monitor / Logger

Setting the Data Monitor / Logger sample rate.

- Select Tools → Data → Monitor/Logger → Set Sampling Rate

*OR: Alternate  
Click in Data Monitor/Logger  
While not  
Monitoring or  
Logging*





- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

- Parameter Groups
  - Engine Protection
  - Hard Start
  - Lamps
  - Low Power and Fuel Economy
  - Sensors
  - Switches
  - White Smoke and Engine Stumble
  - Custom
    - Custom Group 1
- Parameters
  - Adjusted Tire Size
  - Air Conditioning Pressure Switch
  - Amber Warning Lamp Status
  - Anti-theft Status
  - Barometric Pressure
  - Barometric Pressure Sensor Signal Voltage
  - Battery Voltage
  - Brake Pedal Position S
  - Calibration Software P
  - Camshaft Position Sensor
  - Camshaft Position Sensor State
  - Clutch Pedal Position Switch
  - Cruise Control ON/OFF Switch
  - Cruise Control Set / Resume Switch
  - Current Miles On Tires
  - Diagnostic Test Mode Switch
  - Driver Reward State
  - ECM Time
  - EGR Cooler Efficiency
  - EGR Differential Pressure
  - EGR Differential Pressure Sensor Signal Voltage
  - EGR Flow Derate
  - ECR Temperature

Parameter	Value	Units	Minimum Measured	Maximum Measured
Accelerator Pedal Position Sensor Signal Voltage	0.00	V	0.00	0.00
Air Conditioning Pressure Switch	On			
Adjusted Tire Size	501	revs/mi	501	501

*Snapshot*

*Log*

*Start/Resume*

*Pause*

*Stop*

*Alternate Click Menu for Monitor Options*

- Snapshot
- Log Data
- Start/Resume
- Pause
- Stop
- Print
- Save As Group...
- Add to Group...
- Remove Parameter(s)
- Remove All Parameters
- Set Sampling Rate...
- Event Marker Setup...
- Start Graphical Monitoring

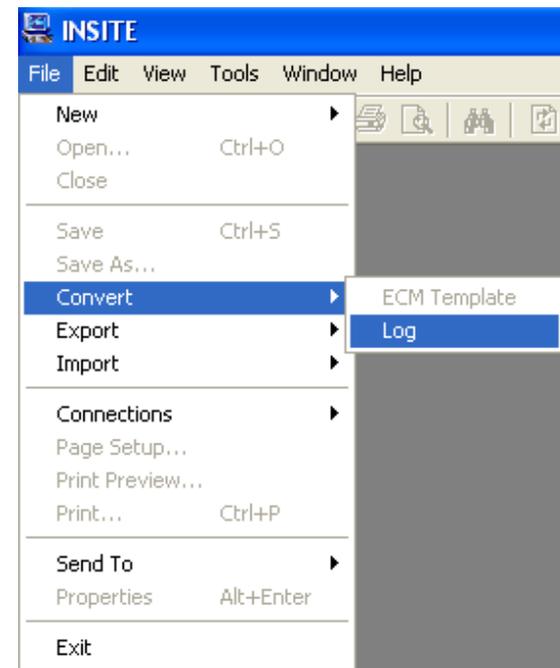
# Data Monitor / Logger

Converting a Log file for external use:

- Generate a Log File
- Save the Log File



- INSITE prompts to save once **Stop** has been selected in Data Monitor/Logger
- The log files or the snapshot files are saved as Comma Separated Value (CSV) files
- This file is saved to the hard drive in the **C:\Intellect\Insite\Logs** Directory or to the drive INSITE is installed
- User Comments can be added to the Log File



# Data Monitor / Logger

## —Log file contains:

INSITE Professional 8.0.0.402  
Cummins Inc.

### Data Log Information

Start Date and Time: 17-Dec-2013,11:05:54.441  
Total Log Time: 00:07.7  
Source Log Filename: C:\Users\AME\AppData\Local\Temp\DML-20131217-110553.log  
Destination Path C:\Intelect\INSITE\Logs  
SamplingRate: 1 seconds per sample  
Comments:

### Customer and Vehicle Information

Customer Name: Bart Starr  
Vehicle Unit Number: 123456

### Engine Information

Model: STA15  
Serial Number: 0  
ECM Part Number: 3684009

Date	Time	Accelerator Pedal Position Sensor Signal Voltage (V)	Adjusted Tire Size (revs/mi)	Air Conditioning Pressure Switch	Amber Warning Lamp Status
17-Dec-13	05:54.5	0	501 On	On	
17-Dec-13	05:55.5	0	501 On	On	
17-Dec-13	05:56.9	0	501 On	On	
17-Dec-13	05:57.9	0	501 On	On	
17-Dec-13	05:58.9	0	501 On	On	
17-Dec-13	06:00.2	0	501 On	On	
17-Dec-13	06:01.2	0	501 On	On	
17-Dec-13	06:02.2	0	501 On	On	



# Data Monitor / Logger

## Data Monitor / Logger Limits

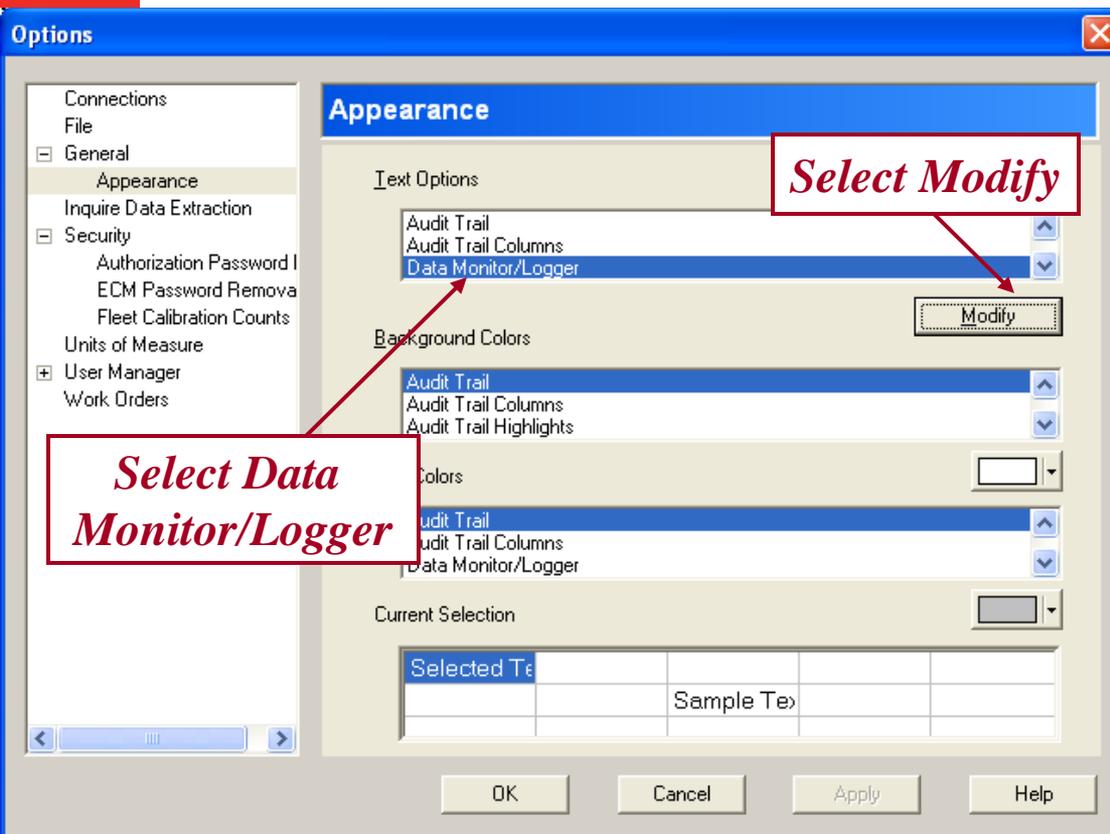
- The Lower Limit and Upper Limit column titles have been replaced with "Min Measured" and "Max Measured"
- The Min Measured column now contains the minimum value observed for each parameter during an open Data Monitor/Logger session.
- The Max Measured column now contains the maximum value observed for each parameter during an open Data Monitor/Logger session.
- The Out of Range Parameter window will no longer be used and has been removed.



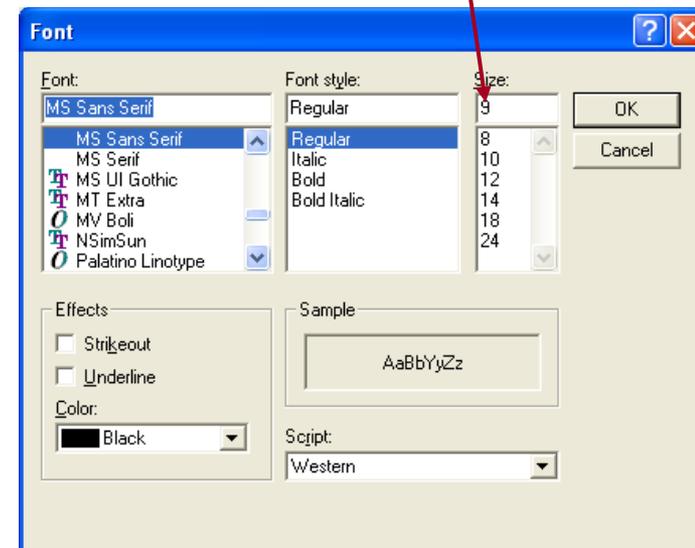
# Data Monitor / Logger

Increasing the font size in Data Monitor/Logger:

- Select Tools → Options and select Appearance under the General settings



*Select desired  
Font size*



# Data Monitor/Logging

- An event can be marked while logging in the main Data Monitor / Logger screen, or when in Graphical Monitoring, by pressing the spacebar
- This provides the option to enable or disable the Event Marker as well as providing the option to create comments for event markers
- The Log file contains the Event Marker Description. For more information on Data Monitor/Logger, refer to Data Monitor logger module on slide 20.



- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

- Parameter Groups
  - Predefined
    - All Parameters
    - ECM Information
    - EGR and Turbocharger Performance
    - Engine Braking
    - Engine Protection
    - Hard Start
    - Lamps
    - Low Power and Fuel Economy
  - Parameters
    - Fan Control Command
    - Fan Control Switch
    - Fuel Shutoff Valve
    - Gear-Down Protection
    - Governor Type
    - Idle Validation Switch
    - Intake Manifold Air Temperature
    - Intake Manifold Air Temperature Sensor
    - Intake Manifold Pressure
    - Intake Manifold Pressure Sensor Signal Voltage
    - J1939 Broadcast
    - J1939 Engine Control Source
    - J1939 Engine Control Status
    - J1939 Engine Source Address
    - J1939 Retarder Control Source
    - J1939 Retarder Control Status
    - J1939 Stop Broadcast Source Address One

Parameter	Value	Units	Minimum Measured	Maximum Measured
Accelerator Pedal Position Sensor Signal Voltage	0.00	V	0.00	0.00
Adjusted Tire Size	501	revs/mi	501	501
Air Conditioning Pressure Switch	On			
Amber Warning Lamp Status	On			
Anti-theft Status	Unlocked			
Barometric Pressure	24.3	InHg	24.3	24.3
Barometric Pressure Sensor Signal Voltage	0.00	V	0.00	0.01
Battery Voltage	13.88	V	13.75	13.94
Brake Pedal Position Switch	Depressed			
Calibration Software Phase	06060001			
Camshaft Position Sensor	0	RPM	0	0
EGR Cooler Efficiency	Not Available	Percent		
EGR Differential Pressure	-2.0	InHg	-2.0	-2.0
EGR Differential Pressure Sensor Signal Voltage	0.00	V	0.00	0.01
EGR Flow Derate	Active			
EGR Temperature	32		32	32
EGR Temperature Sensor Voltage	7		5.17	5.17
EGR Valve Position (Percent)	0		0	0
EGR Valve Position Control Signal Voltage	0		0	0
EGR Valve Position Sensor Signal Voltage	0.00	V	0.00	0.00
Engine Brake Output Circuit 2	Inactive			
Engine Brake Output Circuit 3	Inactive			
Engine Brake Switch Level	0	Percent	0	0
Engine Coolant Level	Error			

Data Monitor/Logger : Enter Event Description

Please enter your description below for: Event 1

Event 1

OK

**Event Marker with numeric and user entered description**

# Data Monitor/Logger Graphical Monitoring

- Graphical Monitoring is a way to display, log, print, and save data for up to six parameters in a graph
- Graphical Monitoring visually monitors and plots multiple parameters into a graphical display



INSITE 8.0.0.402 - Signature/ISX - CM870 - Engine Serial Number - 0 - ECM Code - AB10400.23

File Edit View Tools Manage License(s) Window Help

Disconnect from ECM

Fault Codes

Data Monitor/Logger

ECM Diagnostic Tests

Advanced ECM Data

Features and Parameters

Calibration Selection

Work Orders

Trip Information

Audit Trail

Inquire Data Extraction

OBD Monitors

Parameter Groups

- Predefined
  - All Parameters
  - ECM Information
  - EGR and Turbocharger Performance
  - Engine Braking
  - Engine Protection
  - Hard Start
  - Lamps
  - Low Power and Fuel Economy
- Parameters
  - Fan Control Command
  - Fan Control Switch
  - Fuel Shutoff Valve
  - Gear-Down Protection State
  - Governor Type
  - Idle Validation Switch
  - Intake Manifold Air Temperature
  - Intake Manifold Air Temperature Sensor Signal Voltage
  - Intake Manifold Pressure
  - J1939 Engine Source Address
  - J1939 Retarder Control Source
  - J1939 Retarder Control Status
  - J1939 Stop Broadcast Source Address One

Parameter	Value	Units	Minimum Measured	Maximum Measured
Accelerator Pedal Position Sensor Signal Voltage	0.00	V	0.00	0.00
Adjusted Tire Size	501	revs/mi	501	501
Air Conditioning Pressure Switch	On			
Amber Warning Lamp Status	On			
Anti-theft Status	Unlocked			
Barometric Pressure	24.3	InHg		24.3
Barometric Pressure Sensor Signal Voltage	0.00	V		
Battery Voltage	13.81	V		13.94
Brake Pedal Position Switch	Depressed			
Calibration Software Phase	06060001			
Camshaft Position Sensor	0	RPM		
Camshaft Position Sensor State	Low			
Clutch Pedal Position Switch	Depressed			
Cruise Control ON/OFF Switch	Off			
Cruise Control Set / Resume Switch	Neutral			
Current Miles On Tires	0	mi		
Diagnostic Test Mode Switch	Off			
Driver Reward State	None			
ECM Time	15:21:12	HH:MM:SS		
EGR Cooler Efficiency	Not Available	Percent		
EGR Differential Pressure	-2.0	InHg	-2.0	-2.0
EGR Differential Pressure Sensor Signal Voltage	0.00	V	0.00	0.01
Flow Derate	Active			
Temperature	32	°F	32	32
Temperature Sensor Signal Voltage	5.17	V	5.17	5.17
ECM Valve Position (Percent Open)	0	Percent	0	0
EGR Valve Position Commanded	0	Percent	0	0
EGR Valve Position Sensor Signal Voltage	0.00	V	0.00	0.00
Engine Brake Output Circuit 2	Inactive			
Engine Brake Output Circuit 3	Inactive			
Engine Brake Switch Level	0	Percent	0	0
Engine Coolant Level	Error			

Snapshot

Log Data

Start/Resume

Pause

Stop

Print

Save As Group...

Add to Group...

Remove Parameter(s)

Remove All Parameters

Set Sampling Rate...

Event Marker Setup...

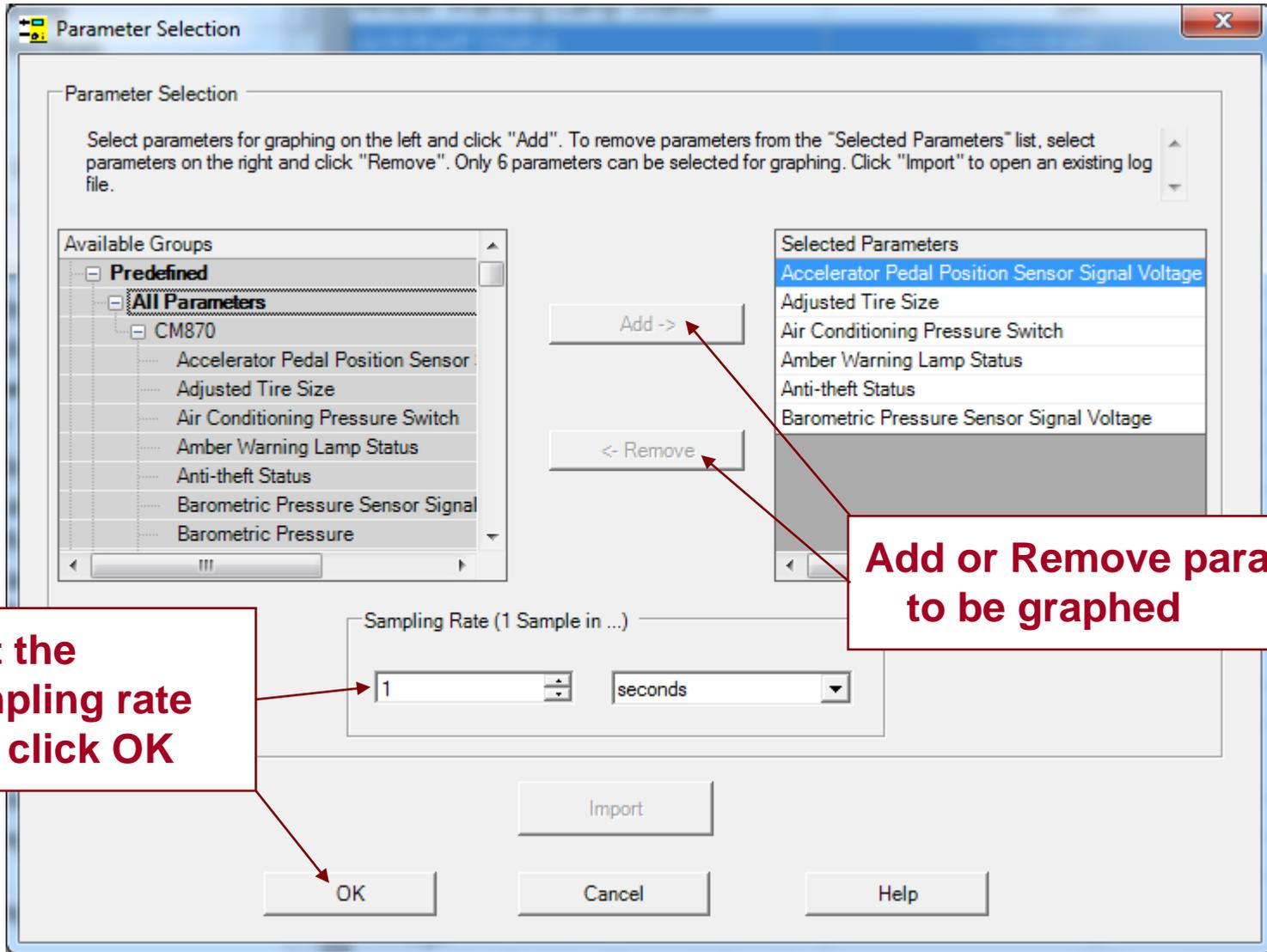
Start Graphical Monitoring

**Click on the icon or right-click to start the graphing**

Connected to ECM.

INLINE6,USB (J1939) Connection

RP1210A (J1939) Firmware: 6.40



Select the sampling rate and click OK

Add or Remove parameters to be graphed



- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

Parameter	Value	Units	Minimum Measured	Maximum Measured
Accelerator Pedal Position Sensor Signal Voltage			0.00	0.00
Adjusted Tire Size			501	501
Air Conditioning Pressure Switch				
Amber Warning Lamp Status				
...				
...	24.3		24.3	
...	0.00		0.01	
...	3.75		13.94	
...	0		0	
...	0		0	
...	-2.0		-2.0	
...	0.00		0.01	
...	32		32	
...	5.17		5.17	
J1939 Engine Source Address	EGR Valve Position (Percent Open)	0 Percent	0	0
J1939 Retarder Control Source	EGR Valve Position Commanded	0 Percent	0	0
J1939 Retarder Control Status	EGR Valve Position Sensor Signal Voltage	0.00 V	0.00	0.00
J1939 Stop Broadcast Source Address One	Engine Brake Output Circuit 2	Inactive		
	Engine Brake Output Circuit 3	Inactive		
	Engine Brake Switch Level	0 Percent	0	0
	Engine Coolant Level	Error		

*The graph can be imported or saved*

INSITE - Data Monitor Logger - Graphical Display

Signature/ISX - CM870

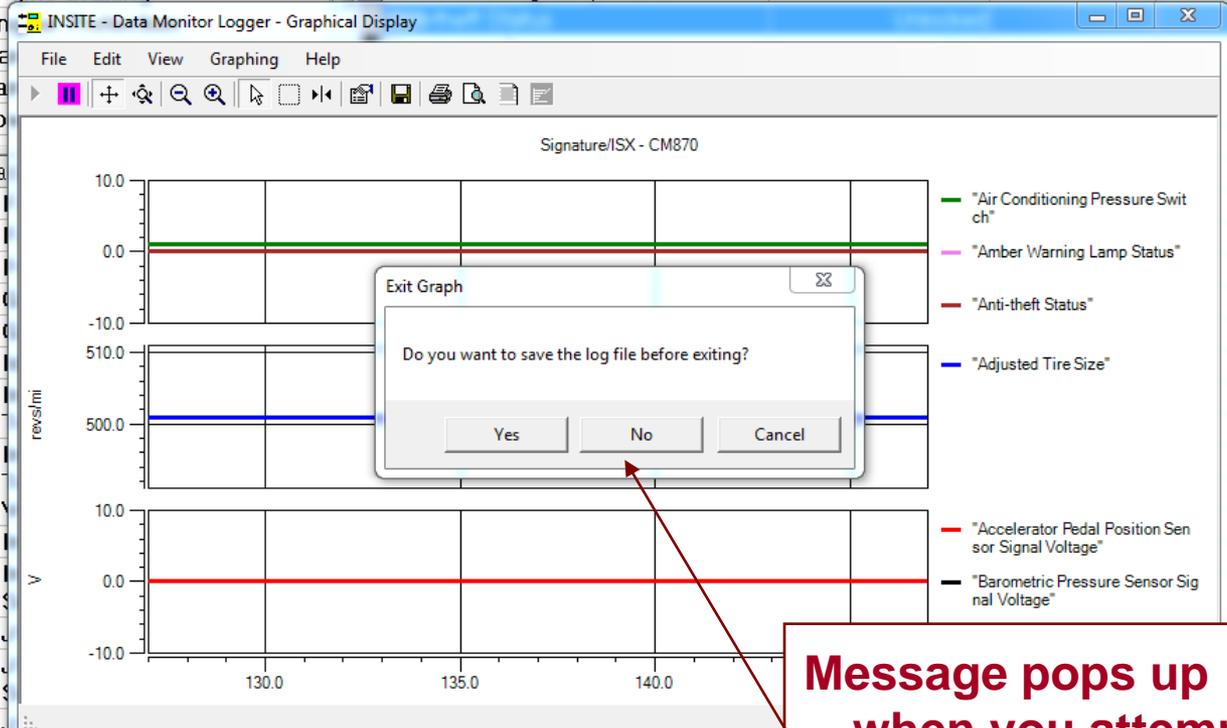
File Edit View Graphing Help

- Import Log File
- Save As Picture
- Save/Export File
- Print Preview
- Print
- Exit

- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

- Parameter Groups
- Predefined
  - All Parameters
  - ECM Information
  - EGR and Turbocharger Performance
  - Engine Braking

Parameter	Value	Units	Minimum Measured	Maximum Measured
Accelerator Pedal Position Sensor Signal Voltage	0.00	V	0.00	0.00
Adjusted Tire Size	501	revs/mi	501	501
Air Conditioning Pressure Switch	On			
Amber Warning Lamp Status	On			



**Message pops up when you attempt to close the graph without saving**

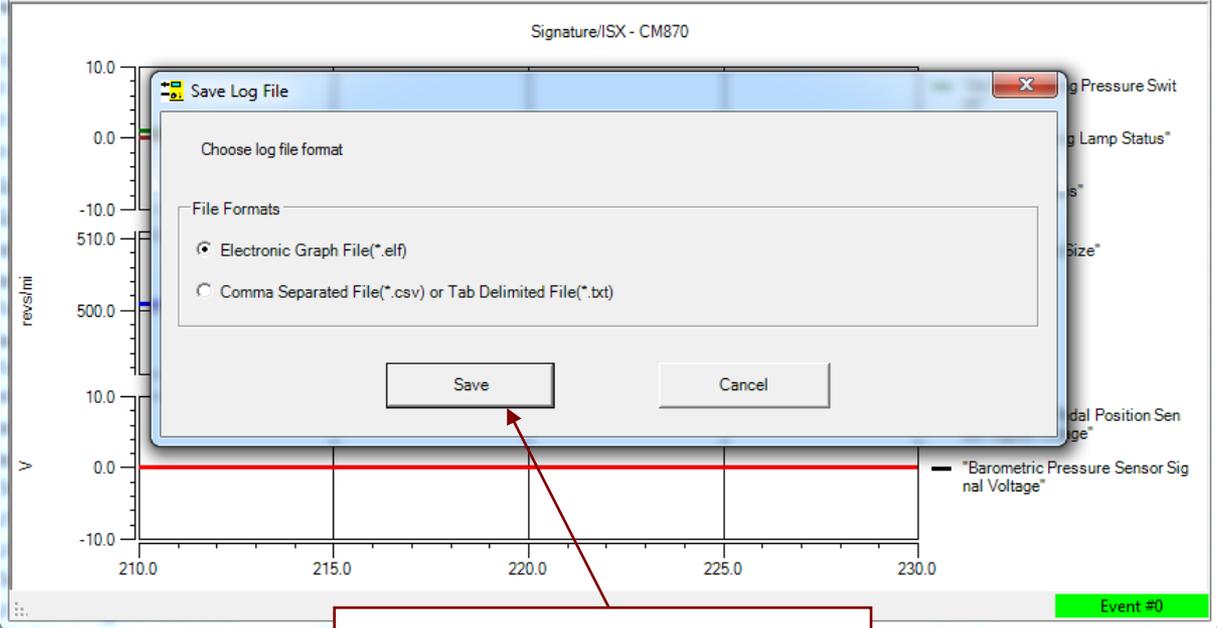
Status	Parameter	Value	Units	Minimum Measured	Maximum Measured
	EGR Valve Position (Percent Open)				
	EGR Valve Position Commanded				
	EGR Valve Position Sensor Signal Voltage				
	Engine Brake Output Circuit 2	Inactive			
	Engine Brake Output Circuit 3	Inactive			
	Engine Brake Switch Level	0	Percent	0	0
	Engine Coolant Level	Error			

- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
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- Inquire Data Extraction
- OBD Monitors

- Parameter Groups
- Predefined
  - All Parameters
  - ECM Information
  - EGR and Turbocharger Performance
  - Engine Braking

Parameter	Value	Units	Minimum Measured	Maximum Measured
Accelerator Pedal Position Sensor Signal Voltage	0.00	V	0.00	0.00
Adjusted Tire Size	501	revs/mi	501	501
Air Conditioning Pressure Switch	On			
Amber Warning Lamp Status	On			

INSITE - Data Monitor Logger - Graphical Display



Select the format and click Save

- Status
- J1939 Engine Source Address
- J1939 Retarder Control Source
- J1939 Retarder Control Status
- J1939 Stop Broadcast Source Address One

Engine Brake Output Circuit 2	Inactive			
Engine Brake Output Circuit 3	Inactive			
Engine Brake Switch Level	0 Percent		0	0
Engine Coolant Level	Error			



- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

- Parameter Groups
- Predefined
    - All Parameters
    - ECM Information
    - EGR and Turbocharger Performance
    - Engine Braking

Parameter	Value	Units	Minimum Measured	Maximum Measured
Accelerator Pedal Position Sensor Signal Voltage	0.00	V	0.00	0.00
Adjusted Tire Size	501	revs/mi	501	501
Air Conditioning Pressure Switch	On			
Amber Warning Lamp Status	On			

**Export Log File**

File Edit

INSITE - Data Monitor/Logger - Graphical Display

File Edit

« Intelect » INSITE » Logs

Search Logs

Organize New folder

Desktop Downloads Recent Places

Libraries Documents Music Pictures Videos

Computer Local Disk (C:) Lenovo\_Recovery DVD RW Drive (E:)

File name: G-DML-20131217-113618.elf

Save as type: Electronic Graph File(\*.elf)

Hide Folders

Save Cancel



- Status
- J1939 Engine Source Address
  - J1939 Retarder Control Source
  - J1939 Retarder Control Status
  - J1939 Stop Broadcast Source Address One

Event #0	5.17		5.17	
EGR Valve Position (Percent Open)	0	Percent	0	0
EGR Valve Position Commanded	0	Percent	0	0
EGR Valve Position Sensor Signal Voltage	0.00	V	0.00	0.00
Engine Brake Output Circuit 2	Inactive			
Engine Brake Output Circuit 3	Inactive			
Engine Brake Switch Level	0	Percent	0	0
Engine Coolant Level	Error			

# Data Monitor / Logger Wrap Up

- Data Monitor/Logger provides a means to View, Log or Snapshot live engine data
- Log and Snapshot files can be saved as a CSV or Tab delimited (.txt) files for analysis in Excel
- The Data Monitor/Logger appearance can be modified through Tools → Options to display data in a larger font
- Graphical Monitoring is a way to display, log, print, and save data for up to six parameters in a graph



# OBD Monitors

- The OBD system monitors components that can affect the emission performance of the vehicle
- Displays a map of all available fault codes with associated monitor type and its readiness status.
- OBD Monitors are never cleared from this view
- User can refresh the view



- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBID Monitors

MIL ON Distance (All Faults)				
MIL ON Time (All Faults)				
Fault Code	Description	Monitor Type	Readiness Code	
0145	Engine Coolant Temperature 1 Sensor Circuit - Voltage below normal, or shorted to low source	Ambient Air Temperature Sensor Rationality Check Trip Status	Not Complete	
0122	Intake Manifold 1 Pressure Sensor Circuit - Voltage above normal, or shorted to high source	Catalyst Outlet Temperature Sensor Rationality Check Trip Status	Complete	
0432	Accelerator Pedal or Lever Idle Validation Switch Circuit - Out of Calibration	Engine Coolant Temperature In Range Monitor Trip Status	Complete	

**Refresh View**

**Monitor Type Definition**

**Distance the vehicle has driven with the MIL ON**

**Completed = The vehicle has completed two trips in which the specified fault has not reoccurred.**

**Not Completed = The vehicle has not yet completed two trips in which the specified fault has not reoccurred**

You have concluded this section of the training.  
Please click to the next slide and continue or [Click Here](#) to return to  
the Table of Content.





# **INSITE™ ECM Diagnostic Tests and Advanced ECM Data**

**Electronic Service Tools**

# ECM Diagnostic Tests

- ECM Diagnostic Tests window displays tests available for the connected engine

- Each Engine supports different ECM Diagnostic Tests



INSITE 8.0.0.402 - Signature/ISX - CM870 - Engine Serial Number - 0 - ECM Code - AB10400.23

File Edit View Tools Manage License(s) Window Help

Disconnect from ECM

Fault Codes

Data Monitor/Logger

ECM Diagnostic Tests

Advanced ECM Data

Features and Parameters

Calibration Selection

Work Orders

Trip Information

Audit Trail

Inquire Data Extraction

OBD Monitors

Help

### Welcome to the ECM Diagnostic Tests Wizard.

This wizard helps you through the steps needed to run an ECM Diagnostic Test.

To continue, select a test from the list below and press the Next button.

- Signature/ISX - CM870
  - CM870
    - Centrefuel Operational Test**
    - Cylinder Cutout Test
    - Cylinder Performance Test
    - EGR Valve / Turbocharger Operational Test
    - EGR Valve Test
    - Engine State Monitor
    - Fan Override Test
    - Injector Check Valve Diagnostics Test
    - SAE J1939 Datalink Control Test
    - Setup for Dynamometer
    - Switch and Sensor Intermittent Connection Test
    - Turbocharger Actuator Test

Back Next

*Double Click the test or  
Select the ECM Diagnostic Test  
and then click Next*

- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

### Cylinder Cutout Test

This test is used to cutout cylinders for troubleshooting cylinder misfires.

#### Instructions:

- It is recommended that the following steps be performed before running the Cylinder Cutout Test:
1. Turn off Air Conditioning.
  2. Lock Engine Fan in the "ON" position.

Cutout Cylinders

- 1
- 2
- 3
- 4
- 5
- 6

Cutout Banks

- Front
- Rear

Restore All

Engine Statistics:

Parameter	Value	Units

Status:

*Follow the instructions in each ECM Diagnostic Test*

Help

Back Start

INSITE 8.0.0.402 - Signature/ISX - CM870 - Engine Serial Number - 0 - ECM Code - AB10400.23

File Edit View Tools Manage License(s) Window Help

Disconnect from ECM

Fault Codes

Data Monitor/Logger

ECM Diagnostic Tests

Advanced ECM Data

Features and Parameters

Calibration Selection

Work Orders

Trip Information

Audit Trail

Inquire Data Extraction

OBD Monitors

### Cylinder Cutout Test

This test is used to cutout cylinders for troubleshooting cylinder misfires.

Instructions:

It is recommended that the following steps be performed before running the Cylinder Cutout Test:

1. Turn off Air Conditioning.
2. Lock Engine Fan in the "ON" position.

If the engine stalls, or communication with the ECM is lost during test operation, the keyswitch must be cycled to restore cylinders to their active state.

Cutout Cylinders

1
2
3
4
5
6

Help

Back Start

Connected to ECM. NLN6.USB (J1939) Connection RP1210A (J1939) Firmware: 6.40

#### Cylinder Cutout Test

It is recommended that the following steps be performed before running the Cylinder Cutout Test:

1. Turn off Air Conditioning.
2. Lock Engine Fan in the "ON" position.

If the engine stalls, or communication with the ECM is lost during test operation, the keyswitch must be cycled to restore cylinders to their active state.

OK

Click on Show to open the instructions in a new window

# ECM Diagnostic Tests Wrap Up

- Each Engine supports different ECM Diagnostic Tests
- Follow the directions of each test carefully



# Advanced ECM Data

- Advanced ECM Data window displays the special features available for the connected engine
- Each Engine supports different special features



INSITE 8.0.0.402 - Signature/ISX - CM870 - Engine Serial Number - 0 - ECM Code - AB10400.23

File Edit View Tools Manage License(s) Window Help

Disconnect from ECM

Fault Codes

Data Monitor/Logger

ECM Diagnostic Tests

Advanced ECM Data

Features and Parameters

Calibration Selection

Work Orders

Trip Information

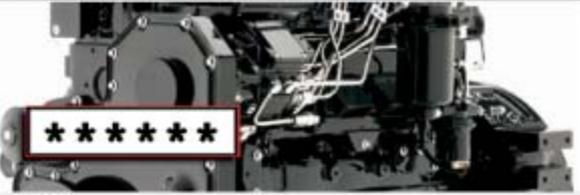
Audit Trail

Inquire Data Extraction

OBD Monitors

**Signature/ISX - CM870**

- Anti-Theft Protection
- Duty Cycle Monitor
- Engine Abuse History
- Engine Protection
- Engine Torque History
- Maintenance Monitor
- Real Time Clock
- SAE J1939 Multiplexed Fault Data
- SAE J1939 Powertrain Control



Instructions  
This feature is intended for use with the RoadRelay system. In order to start an engine that is secured with an anti-theft password the operator must first enter a matching password using the RoadRelay system. Passwords must consist of six numeric characters.

Passwords	Status
Password 1	Disabled
Password 2	Disabled
Password 3	Disabled
Password 4	Disabled
Password 5	Disabled
Password 6	Disabled

Enter Password:

Anti-theft Status:  
Unlocked

Vehicle Anti-theft

Vehicle Anti-theft Automatic Mode

*Follow the instructions*

*Select the special feature supported for the engine*

# Advanced ECM Data Wrap Up

- Each Engine supports different special features
- Follow the directions of each feature carefully



You have concluded this section of the training.  
Please click to the next slide and continue or [Click Here](#) to return to  
the Table of Content.





# **INSITE™ Fault Codes**

**Electronic Service Tools**

# Fault Codes

- Fault Codes window displays an engine's fault data
- Fault Codes include both engine faults and engine protection faults
- Each fault is represented by a Cummins fault code
  - Indicates a specific malfunction or abnormal condition within the controller, subsystem, or engine
- Ability to link to Fault Information System for Troubleshooting Information



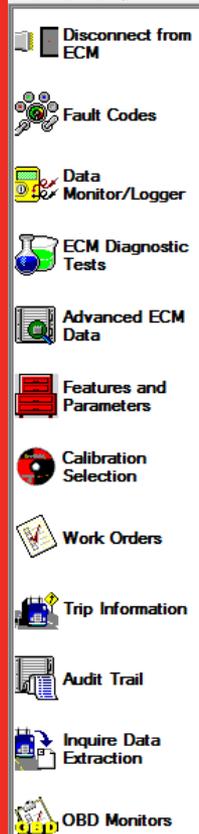
**Select Fault Codes**

**Alternate Click Menu – Use to Clear Inactive Faults**

Fault Code	Status	Count	Lamp	Description	PID	SID	J1587 FMI	J1939 FMI	SPN
CM870		ECM Time	16:21:10	HH:MM:SS					
		Engine Hours	0:00:00	HH:MM:SS					
		Keyoffs	29						
2349	Active	6	Amber	EGR Valve Control Circuit - Current below		146	5	5	2791
0195	Active	1		Temperature Sensor Circuit - Voltage above	111		3	3	111
0263	Active	1		Temperature Sensor Circuit - Voltage above normal, or shorted to high	174		3	3	174
0123	Active	1		Pressure Sensor Circuit - Voltage above normal, or shorted to low	102		4	4	102
0141	Active	1		Temperature Sensor Circuit - Voltage below normal, or shorted to low source	100		4	4	100
0144	Active	1		Temperature Sensor Circuit - Voltage above normal, or shorted to high	110		3	3	110
0153	Active	1	Amber	Intake Manifold Air Temperature Sensor Circuit - Voltage above normal, or shorted to high source	105		3	3	105
			Amber	Oil Temperature Sensor Circuit - Voltage above normal, or shorted to high source	175		3	3	175
			Amber	Barometric Pressure Sensor Circuit - Voltage below normal, or shorted to low source	108		4	4	108
0691	Active	1	Amber	Turbocharger #1 Compressor Inlet Temperature Sensor Circuit - Voltage above			3	3	1172

**Links to Fault Information System**

- Expand
- Collapse
- Reset Inactive Faults
- Reset All Faults
- Refresh All
- Sort
- Print
- Fault Trees Overview
- Fault Trees Troubleshooting Steps
- Fault Trees Index
- SAE J1939 Multiplexed Fault Data



**Click and hold on the top bar to resize Fault Code Window**

Fault Code	Status	Count	Lamp	Description	PID	SID	J1587 FMI	J1939 FMI	SPN
	Fault Parameters	First	Last	Units					
CM870	ECM Time	16:24:48		HH:MM:SS					
	Engine Hours	0:00:00		HH:MM:SS					
	Keyoffs	29							
2349	Active	6	Amber	EGR Valve Control Circuit - Current below normal or open circuit	146	5	5		2791
	ECM Time	14:32:41	14:51:53	HH:MM:SS					
	Accelerator Interlock State	Unlocked	Unlocked						
	Air Conditioning Pressure Switch	On	On						
	Barometric Pressure	24.3	24.3	InHg					
	Battery Voltage	13.81	13.88	V					
	Brake Pedal Position Switch	Depressed	Depressed						
	Clutch Pedal Position Switch	Depressed	Depressed						
	Cruise Control ON/OFF Switch	Off	Off						
	Diagnostic Test Mode Switch	Off	Off						
	EGR Differential Pressure	-2.0	-2.0	InHg					
	EGR Temperature	57	57	°F					
	EGR Valve Position (Percent Open)	0	0	Percent					

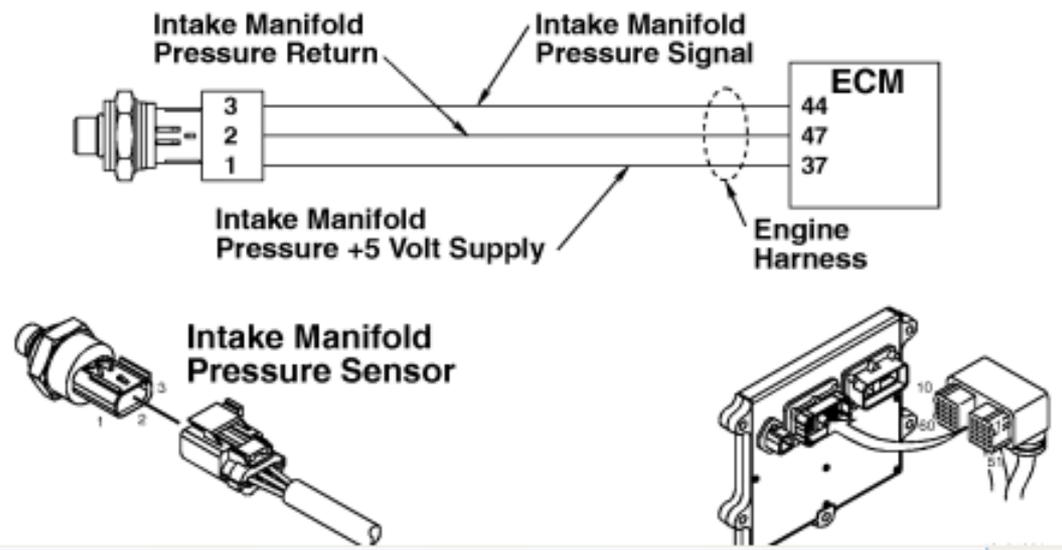
**Click on + sign to see Fault Snapshot data**

- [-] Troubleshooting
  - (70-fc111) E
  - (70-fc122) Ir**
  - (70-fc123) Ir
  - (70-fc131) A
  - (70-fc132) A
  - (70-fc133) R
  - (70-fc134) R
  - (70-fc135) E
  - (70-fc141) E
  - (70-fc143) E
  - (70-fc144) C
  - (70-fc145) C
  - (70-fc151) E
  - (70-fc153) Ir
  - (70-fc154) Ir
  - (70-fc155) Ir
  - (70-fc187) S
  - (70-fc195) E
  - (70-fc195-2)
  - (70-fc195-3)
  - (70-fc196) E
  - (70-fc196-2)
  - (70-fc196-3)
  - (70-fc197) E
  - (70-fc212) C
  - (70-fc213) C
  - (70-fc214) E
  - (70-fc219) C

### Overview

CODE	REASON	EFFECT
Fault Code: 122 PID: P102 SPN: 102 FMI: 3/3 LAMP: Amber SRT:	Intake Manifold Pressure Sensor Circuit - shorted high. High signal voltage detected at the intake manifold pressure circuit.	Engine power derate

### Intake Manifold Pressure Sensor Circuit



# Fault Codes Sorting

- Fault Codes can be sorted by either the column, or by right click for multiple column sorting
- The Fault Code data can be sorted by clicking on the column header for a single column sort
- The data will be sorted based on the selected column in ascending order. Click on the column header again to resort the data in descending order

**Note:** *Sorting can only be used on the Fault Code, Status, Count, or Lamp columns*

INSITE 8.0.0.402 - Signature/ISX - CM870 - Engine Serial Number - 0 - ECM Code - AB10400.23

File Edit View Tools Manage License(s) Window Help

Disconnect from ECM

Fault Codes

Data Monitor/Logger

ECM Diagnostic Tests

Advanced ECM Data

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Trip Information

Audit Trail

Inquire Data Extraction

OBD Monitors

Fault Code	Status	Count	Lamp	Description
	Fault Parameters	First	Last	Units
CM870	ECM Time	16:21:10		HH:MM:SS
	Engine Hours	0:00:00		HH:MM:SS
	Keyoffs	29		
2349	Active	6	Amber	EGR Valve Control Circuit - C...
0195	Active	1		Sensor Circuit - Voltage above normal, or shorted to high source
0263	Active	1		Temperature Sensor Circuit - Voltage above normal, or shorted to high source
0123	Active	1		Pressure Sensor Circuit - Voltage above normal, or shorted to high source
0141	Active	1		or Circuit - Voltage above normal, or shorted to high source
0144	Active	1		Temperature Sensor Circuit - Voltage above normal, or shorted to high source
0153	Active	1	Amber	Intake Manifold Air Temperature Sensor Circuit - Voltage above normal, or shorted to high source
				Temperature Sensor Circuit - Voltage above normal, or shorted to high source
				etric Pressure Sensor Circuit - Voltage above normal, or shorted to low source
				Temperature Sensor Circuit - Voltage above normal, or shorted to high source
0691	Active	1	Amber	Temperature Sensor Circuit - Voltage above normal, or shorted to high source

Expand  
Collapse  
Reset Inactive Faults  
Reset All Faults  
Refresh All  
Sort  
Print  
Fault Trees Overview  
Fault Trees Troubleshooting Steps  
Fault Trees Index  
SAE J1939 Multiplexed Fault Data

Sort

Sort by  
Status  Ascending  Descending

Then by  
Fault Code  Ascending  Descending

Then by  
(none)  Ascending  Descending

OK Cancel

Right- click to select Sort and sort by options

Connected to ECM. INLINE6,USB (J1939) Connection RP1210A (J1939) Firmware: 6.40

# Fault Codes Wrap Up

- Fault Codes window shows active and inactive Fault Codes
- Alternate click
  - Link to Fault Information System for Troubleshooting information
  - Clear Inactive Faults
- Links to Troubleshooting available in the Fault Information System



You have concluded this section of the training.  
Please click to the next slide and continue or [Click Here](#) to return to  
the Table of Content.





# **INSITE™ Features and Parameters**

## **Electronic Service Tools**

# Features and Parameters

- Allows licensed user to make changes to ECM settings
- Each Engine family may have a unique set of Available Features and Parameters
- Parameters are a subset of Features
- INSITE™ lists Features and Parameters in one view - allowing multiple adjustments at once



INSITE 8.0.0.402 - Signature/ISX - CM870 - Engine Serial Number - 0 - ECM Code - AB10400.23

File Edit View Tools Manage License(s) Window Help

Disconnect from ECM

Fault Codes

Data Monitor/Logger

ECM Diagnostic Tests

Advanced ECM Data

Features and Parameters

Calibration Selection

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Trip Information

Audit Trail

Inquire Data Extraction

OBD Monitors

Features and Parameters	ECM Value	Units	Original Value
Signature/ISX - CM870			
CM870			
System ID and Dataplate			
Accelerator Interlock	Disable		
Adaptive Cruise	Disable		
Adjustable High Idle Governor Speed			
Adjustable Low Idle Speed			
Battery Voltage Monitor	Disable		
Centinel Oil System	Disable		
Cruise Control	Enable		
Cruise Control Switch Setup			
Driver Reward	Disable		
Engine Brake Control	Disable		
Engine Coolant Level Sensor	Installed		
Engine Protection			
<b>Fan Control</b>	Enable		
Gear-Down Protection			
Governor Type			
Idle Shutdown			
J1939 Controls			
Load Based Speed Control			
Maintenance Monitor			
Powertrain Protection			
PTO/Remote PTO			
Remote Accelerator	Disable		
Road Speed Governor			
SAE J1939 Multiplexing	Disable		
Starter Lockout	Disable		
Switched Maximum Engine Operating Speed	Disable		
Tire Wear Adjustment	Disable		
Transmission Setup			
Trip Information	Enable		
Vehicle Electrical System Voltage			
Vehicle Speed Sensor Anti-Tampering	Enable		

*Alternate Click Menu*

- Find...
- Send To
- Expand
- Collapse
- Restore Original Value
- Restore All Original Values
- Refresh
- Limits

Connected to ECM.

INLINE6,USB (J1939) Connection

RP1210A (J1939) Firmware: 6.40



INSITE 8.0.0.402 - Signature/ISX - CM870 - Engine Serial Number - 0 - ECM Code - AB10400.23

File Edit View Tools Manage License(s) Window Help

Disconnect from ECM

Fault Codes

Data Monitor/Logger

ECM Diagnostic Tests

Advanced ECM Data

Features and Parameters

Calibration Selection

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Inquire Data Extraction

OBD Monitors

Features and Parameters

	ECM Value	Units	Original Value
<b>Signature/ISX - CM870</b>			
<b>CM870</b>			
System ID and Dataplate			
Accelerator Interlock			
Adaptive Cruise			
Adjustable High Idle Governor Speed			
Adjustable Low Idle Speed			
Battery Voltage Monitor			
Centinel Oil System			
Cruise Control	Enable		
Cruise Control Switch Setup			
Driver Reward	Disable		
Engine Brake Control	Enable		Disable
<b>Engine Coolant Level Sensor</b>	<b>Installed</b>		
Engine Protection			
Fan Control			
Gear-Down Protection			
Governor Type			
Idle Shutdown	Disable		
J1939 Controls			
Load Based Speed Control			
Maintenance Monitor	Disable		
Powertrain Protection	Disable		
PTO/Remote PTO			
Remote Accelerator	Disable		
Road Speed Governor			
SAE J1939 Multiplexing	Disable		
Starter Lockout	Disable		
Switched Maximum Engine Operating Speed	Disable		
Tire Wear Adjustment	Disable		
Transmission Setup			
Trip Information	Enable		
Vehicle Electrical System Voltage			
Vehicle Speed Sensor Anti-Tampering	Enable		

Find...

Send To

Expand

Collapse

Restore Original Value

Restore All Original Values

Refresh

Limits

ECM

Printer

Connected to ECM.

INLINE6,USB (J1939) Connection

RP1210A (J1939) Firmware: 6.40

*To Send Changes to ECM:  
Tool Bar icon OR Alternate Click  
Select Send To → ECM*

# Check Limits

The screenshot shows the INSITE software interface for a Signature/ISX - CM870 engine. The 'Features and Parameters' table is displayed with columns for 'ECM Value', 'Units', and 'Original Value'. The 'Low Idle Speed' parameter is highlighted in blue, and a context menu is open over it with 'Limits' selected. A red arrow points from a text box to the 'Limits' option.

Features and Parameters	ECM Value	Units	Original Value
Signature/ISX - CM870			
CM870			
System ID and Dataplate			
Accelerator Interlock	Disable		
Adaptive Cruise	Disable		
Adjustable High Idle Governor Speed			
Adjustable Low Idle Speed			
Low Idle Speed	600	RPM	
Low Idle Speed Adjustment Switch	Enable		
Battery Voltage Monitor	Disable		
Centinel Oil System	Disable		
Cruise Control	Enable		
Cruise Control Switch Setup			
Driver Reward	Disable		
Engine Brake Control	Disable		
Engine Coolant Level Sensor	Installed		
Engine Protection	Enable		
Fan Control	Disable		
Gear-Down Protection	Disable		
Governor Type			
Idle Shutdown	Disable		
J1939 Controls			
Load Based Speed Control			
Maintenance Monitor			
Powertrain Protection	Disable		
PTO/Remote PTO			
Remote Accelerator	Disable		
Road Speed Governor			
SAE J1939 Multiplexing	Disable		
Starter Lockout	Disable		
Switched Maximum Engine Operating Speed	Disable		
Tire Wear Adjustment	Disable		
Transmission Setup			
Trip Information	Enable		

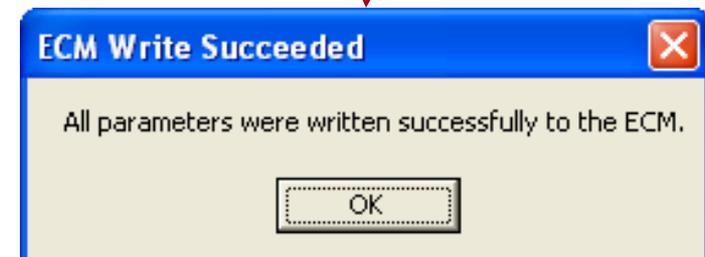
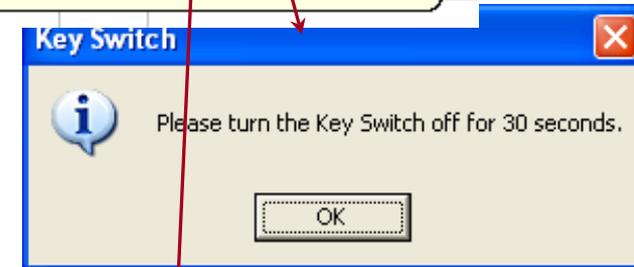
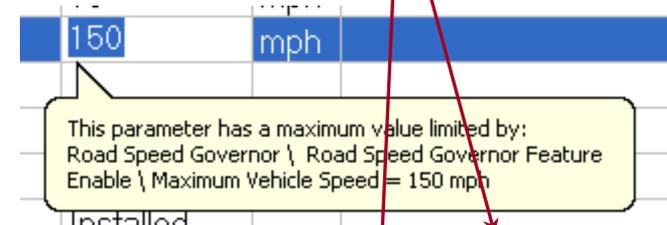
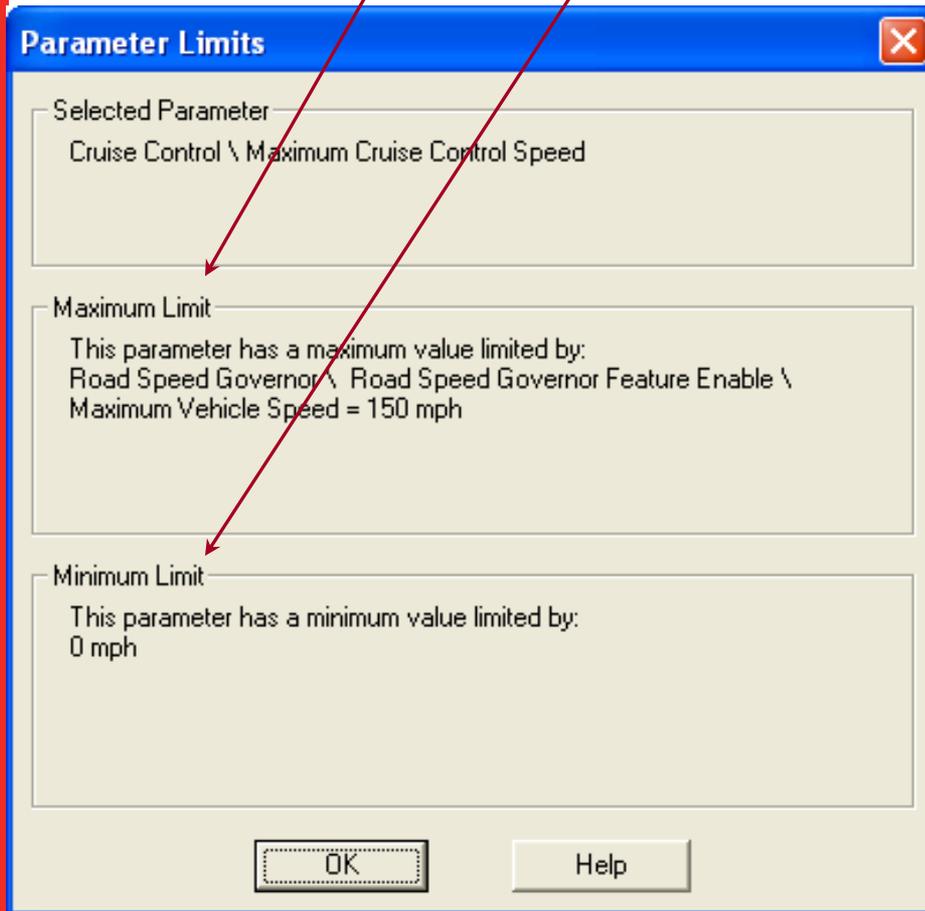
Alternately click and select Limits



# Features and Parameters

*Limits*

*Send to ECM prompts*



# Features and Parameters Wrap Up

- Multiple adjustments can be made at once
- Tool Tips help in adjusting parameters
- Alternate Click
  - Ability to search using Alternate Click Menu
  - Send changes to ECM
  - View Limits of a parameter
  - Expand all parameters when alternate click on title bar of Features and Parameters



You have concluded this section of the training.  
Please click to the next slide and continue or [Click Here](#) to return to  
the Table of Content.





# **INSITE™ Inquire Data Extraction**

**Electronic Service Tools**

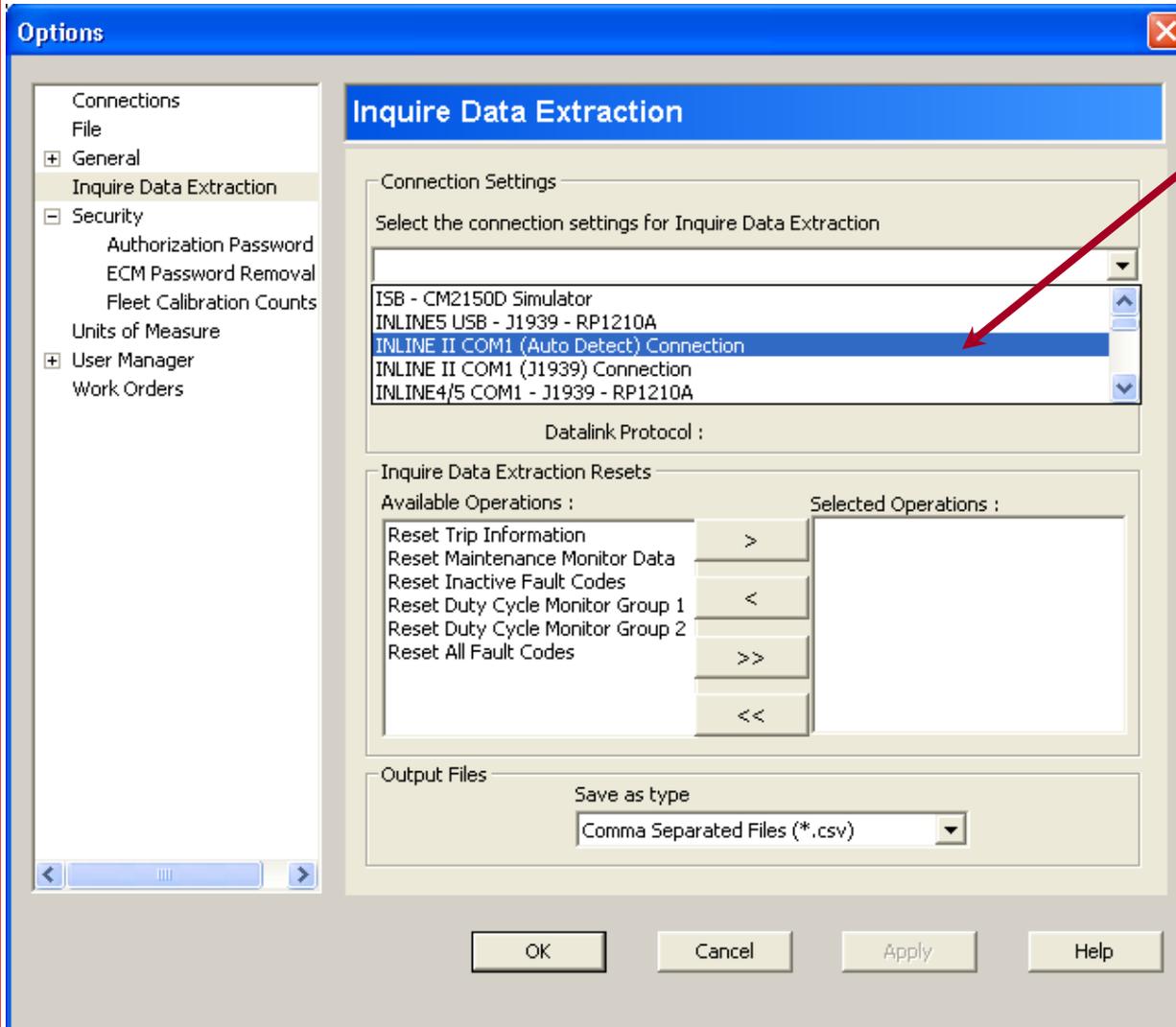
# Inquire Data Extraction

- Used to quickly extract and store ECM data
- Reset selected parameters in a connected engine
  - When no active faults or other issues are present
- Inquire Data Extraction is typically performed while fueling the vehicle
- Extracted data is saved to a ‘CSV’ (Comma Separated Value) file for future use



# Inquire Data Extraction

Tools → Options

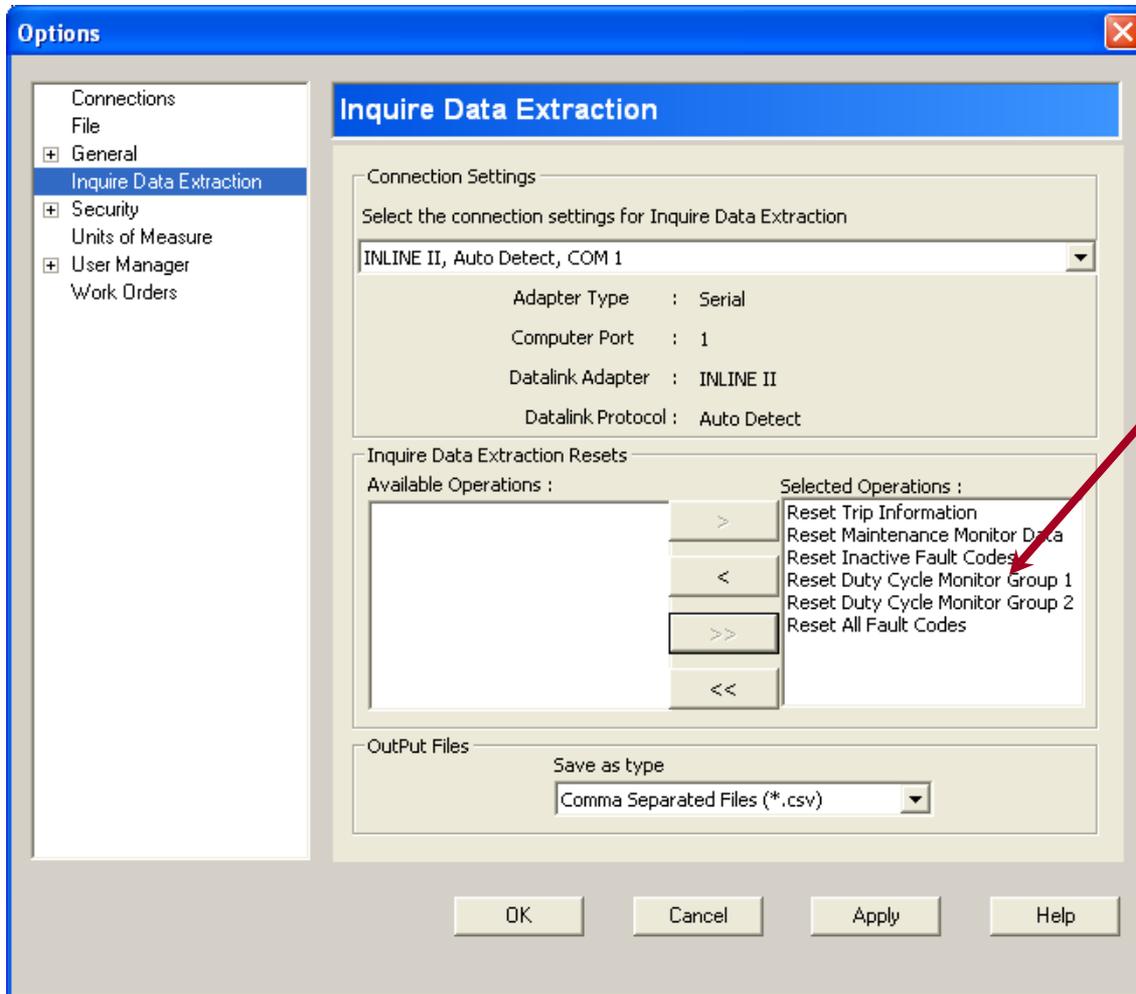


Select the connection



an Depend On

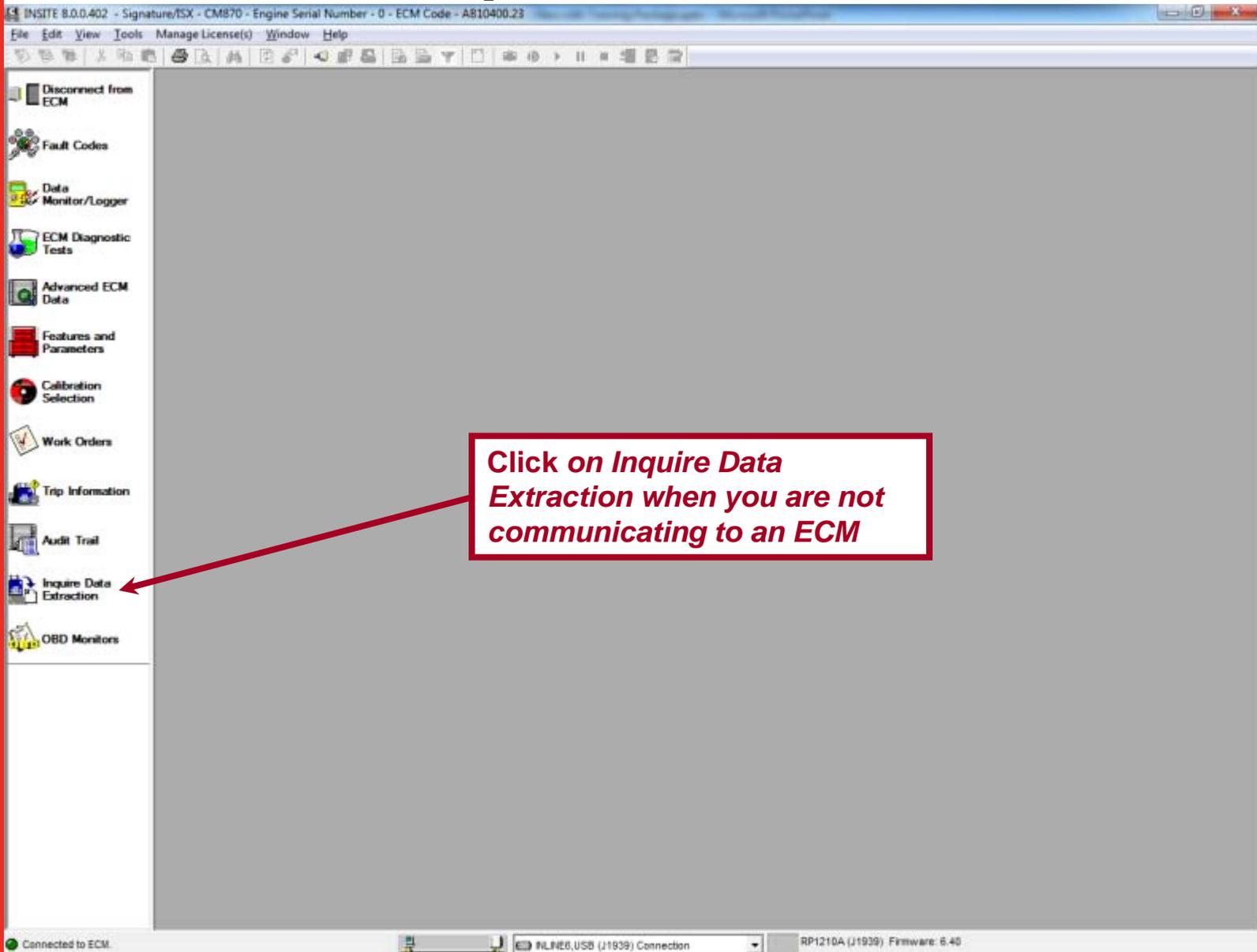
# Inquire Data Extraction



Select Operations



# Location of Inquire Data Extraction



**Click on *Inquire Data Extraction* when you are not communicating to an ECM**

# Inquire Data Extraction

## 1<sup>st</sup> Time Engine Extract

- Vehicle information Listed
- Can be customized for easier identification

**New Engine Information**

Edit the New Engine Information

Name	Value
Engine Serial Number	E5012345
Unit Number	623
Customer Name	Customer
Group Name	New Group

Continue Cancel



Inquire Data Extraction Status

Current Connection Configuration :

.....

Connection Name : Signature/ISX - CM870 Simulator  
 Computer Port : 1  
 Datalink Adapter : N/A  
 Datalink Protocol : N/A  
 (To change the settings click on 'Options' button)

.....

Please connect to a vehicle

0 %

Vehicle Properties :

Group Name	Engine Serial Number	Unit Number	Customer Name
[-] New Group			
[-] Vehicle	<b>E5012345</b>	<b>623</b>	<b>Customer</b>
IE5012345_0_20040720105757.csv			
IE5012345_0_20040720110242.csv			
IE5012345_0_20040720110310.csv			
IE5012345_0_20040720110447.csv			
[-] Vehicle	<b>15012345</b>	<b>UNIT001</b>	<b>Customer</b>
I15012345_0_20040720110415.csv			
I15012345_0_20040720110529.csv			
[-] Vehicle	<b>307662884</b>	<b>QSKG</b>	<b>Customer</b>
I307662884_0_20040720110654.csv			
I307662884_1_20040720110656.csv			
I307662884_2_20040720110659.csv			

# Inquire Data Extraction

# Inquire Data Extraction Wrap Up

- Excellent application for fleets that need to quickly gather vehicle data
- Simple connection to vehicles
- Provides resets as needed
- Data is automatically formatted for importing to a spread sheet or data base



You have concluded this section of the training.  
Please click to the next slide and continue or [Click Here](#) to return to  
the Table of Content.





# **INSITE™ Installation and Tool – ECM – User Security**

**Electronic Service Tools**

# Agenda

- Installation/Auto Run
- Tool Security
- Start Up
- Tools Options
- ECM Security
- User Manager
- Roll Back Option



# Auto Run Menu

## INSITE™ installation DVD uses an Auto Run Menu

- To Install, Select *Install INSITE™ 7.6.0*
- INSITE™ will upgrade from previous versions
- It is not necessary to uninstall previous versions of INSITE before installing the new version



# Auto Run Menu



[Back to Agenda](#)



# Auto Run Wrap Up

Refer to either the Quick Start Guide or the Installation Instructions

INSITE™ will upgrade from previous versions

- It is not necessary to uninstall previous versions of INSITE™ before installing the new version.



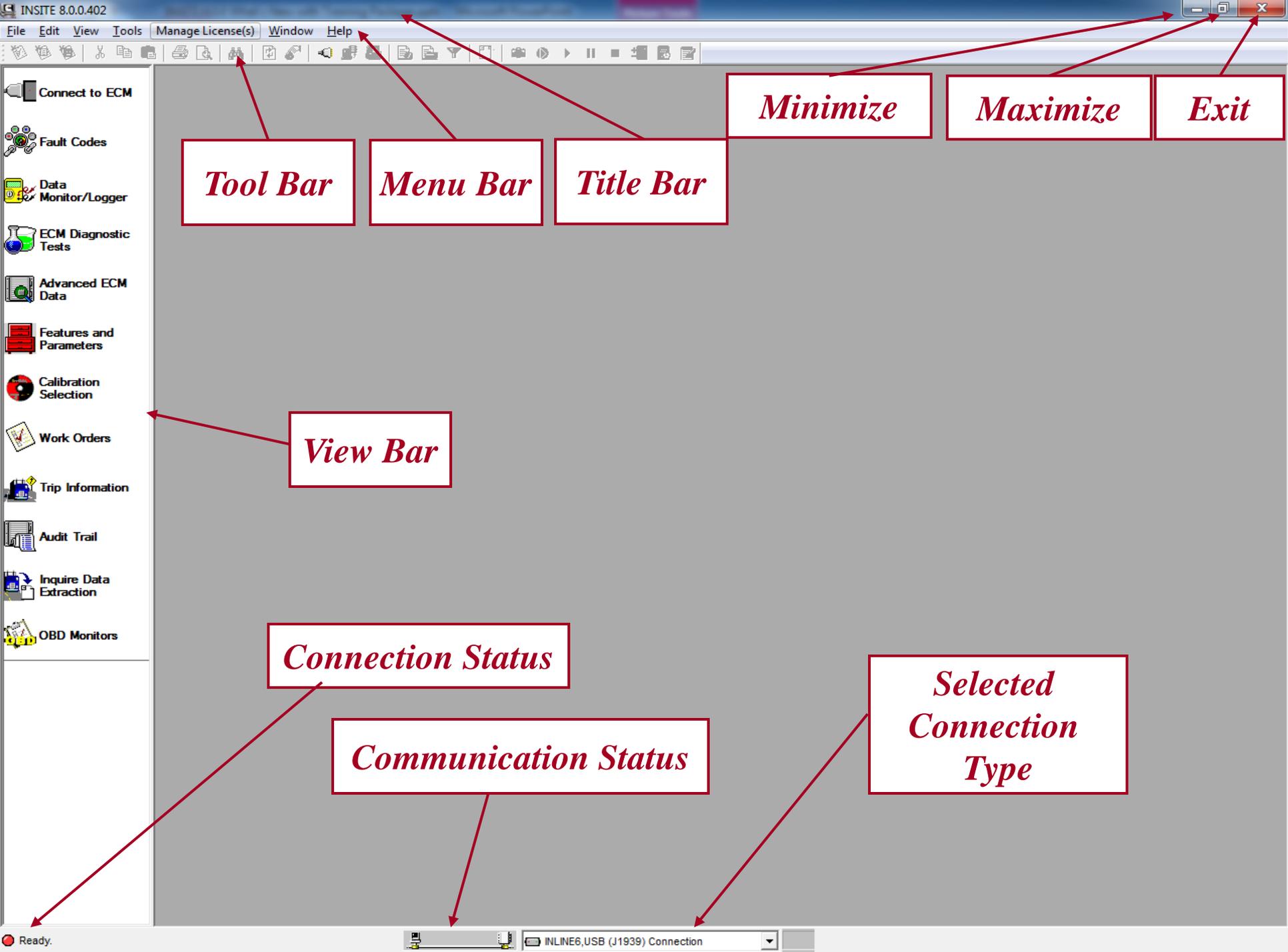
# INSITE Start Up

The collage features the following elements:

- Top Left:** A technician in a dark uniform working on a laptop.
- Top Middle:** A close-up of a multi-pin connector with six ports.
- Top Right:** A screenshot of the INSITE software interface showing various engine parameters.
- Bottom Left:** A laptop displaying the INSITE software interface.
- Bottom Middle:** An INLINE 6 Data Link Adapter device with the Cummins logo and text: "INLINE 6 Data Link Adapter" and "Compliant With TNC's SP1200 Standard".
- Bottom Right:** A red engine component with a white label featuring the Cummins logo.

**INSITE™** 

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*Tool Bar*

*Menu Bar*

*Title Bar*

*Minimize*

*Maximize*

*Exit*

*View Bar*

*Connection Status*

*Communication Status*

*Selected  
Connection  
Type*

# Manage Licenses

*Click on  
"Manage License(s)"*

The screenshot shows the INSITE 8.0.0.402 software interface. The main application window has a menu bar with 'File', 'Edit', 'View', 'Tools', 'Manage License(s)', 'Window', and 'Help'. The 'Manage License(s)' menu item is highlighted with a red arrow pointing to the 'Manage License(s)' button in the Cummins License Configuration Tool window.

The Cummins License Configuration Tool window has a title bar 'Cummins License Configuration Tool' and a menu bar with 'Language', 'English (English)', 'Help', and 'Exit'. The 'INSITE Tool Instance' is 'CD84DDE5'. The tool displays two tables:

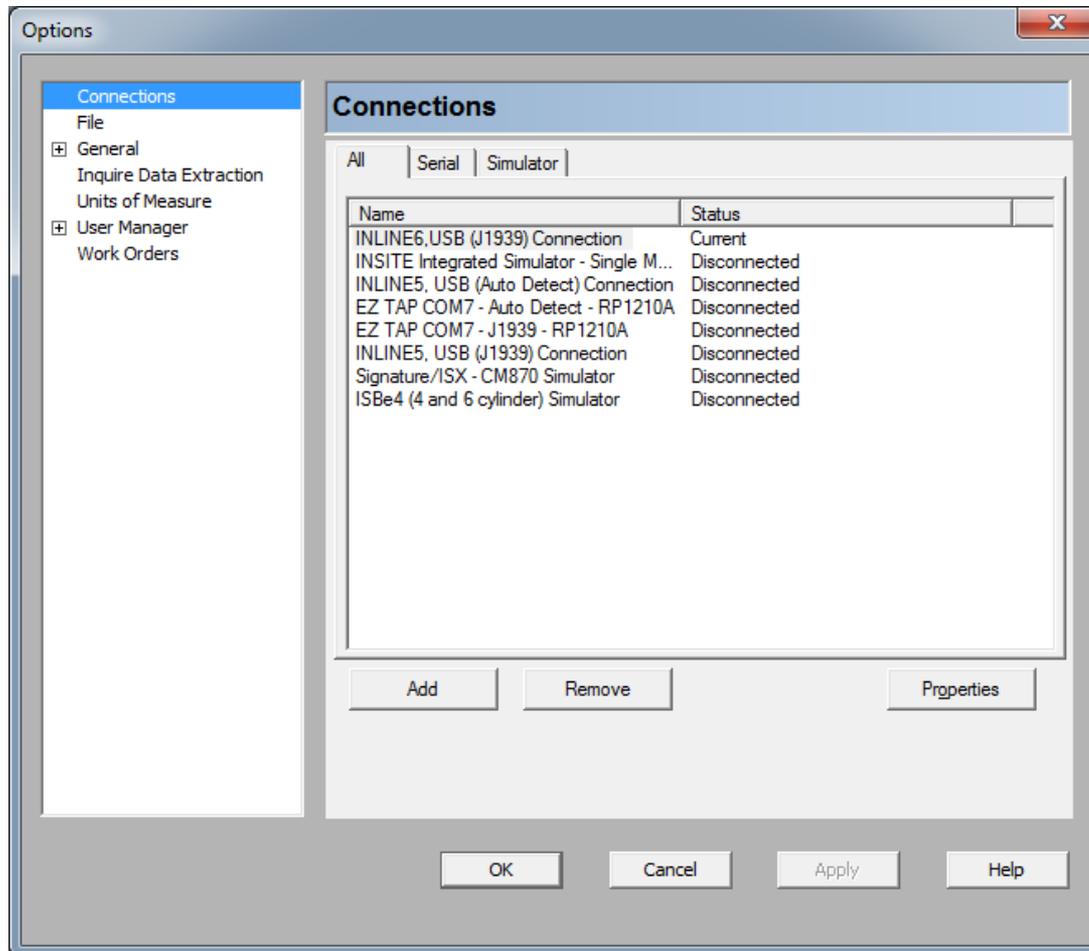
Active Licenses				
	License Type	Expiration Date	Revalidate By	Status
View Active Licenses/ Counts	Service Plus Pro	09/30/14	03/17/14	Active
Transfer Licenses	Service Plus Basic	09/29/18	12/16/18	Active

Active Counts			
	Count Type	Counts Available	Revalidate By
	Fleet Count	49	03/17/14

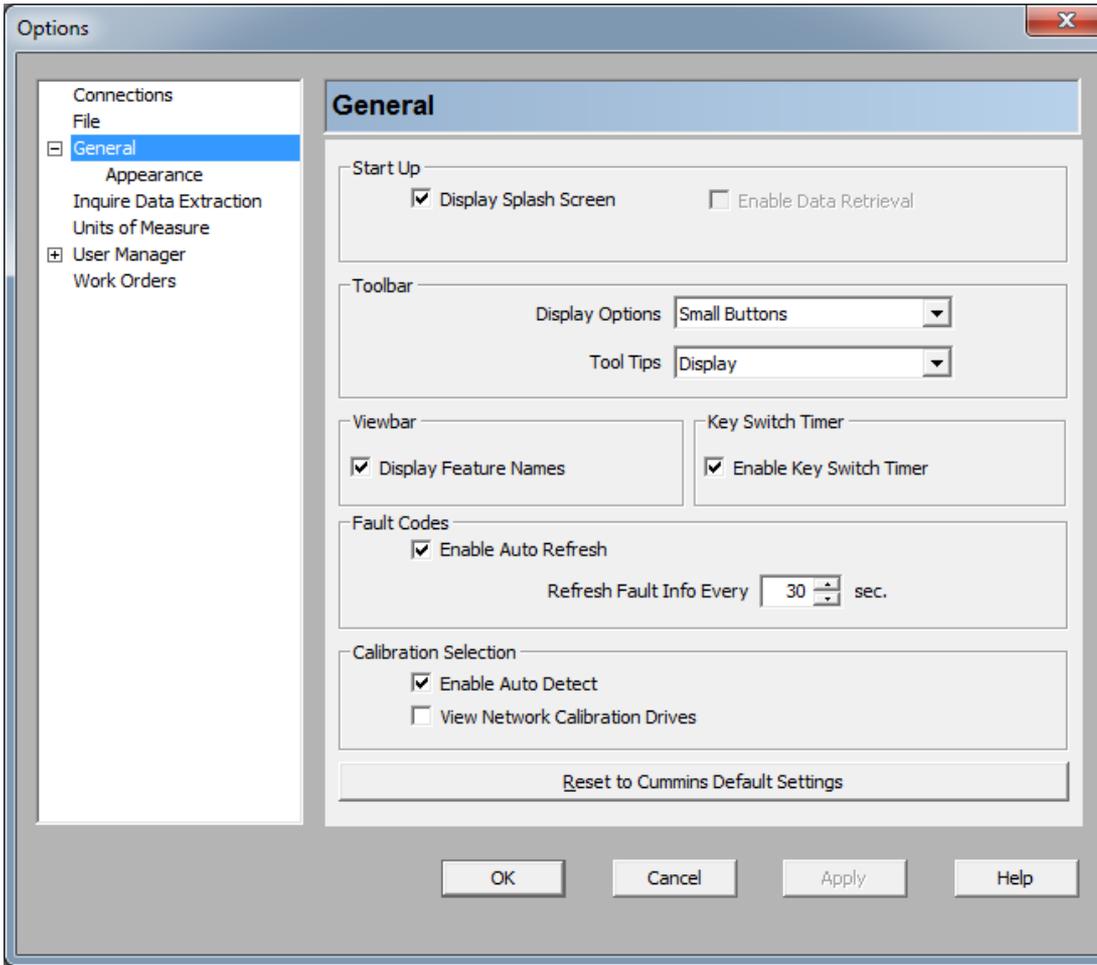
At the bottom of the tool window is an 'Update Licenses' button.

# Tools → Options → Connections



Add and  
Remove  
Connections

# Tools → Options → General

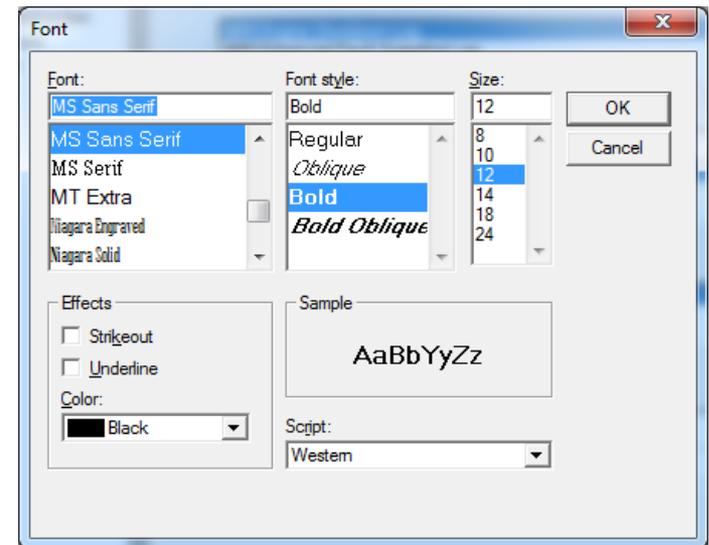
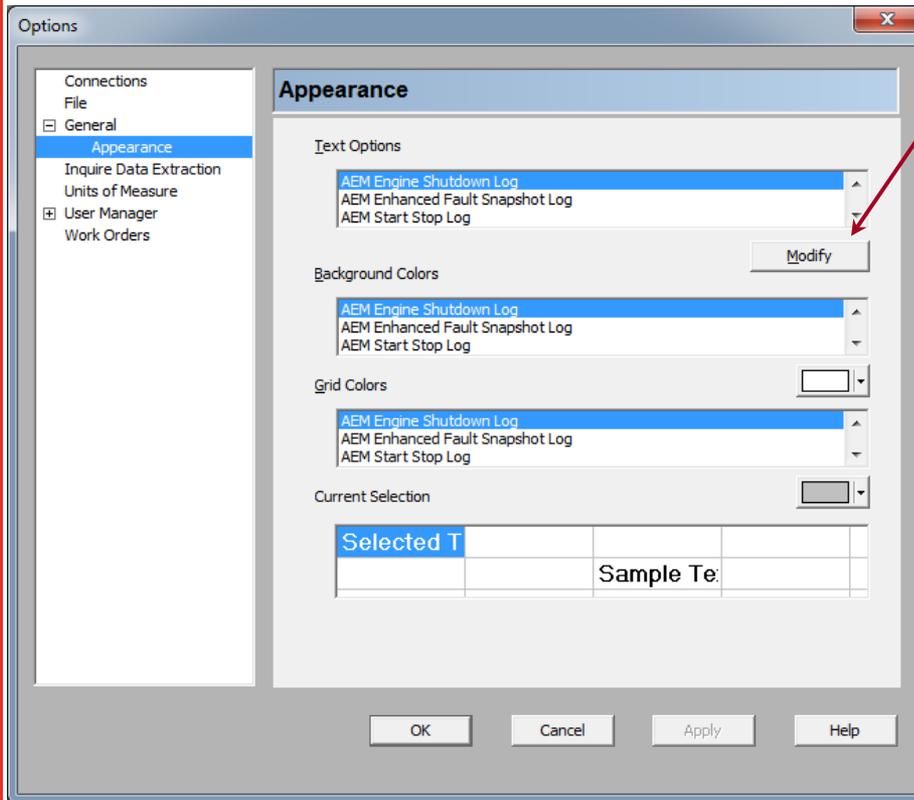


**Personal Preferences**

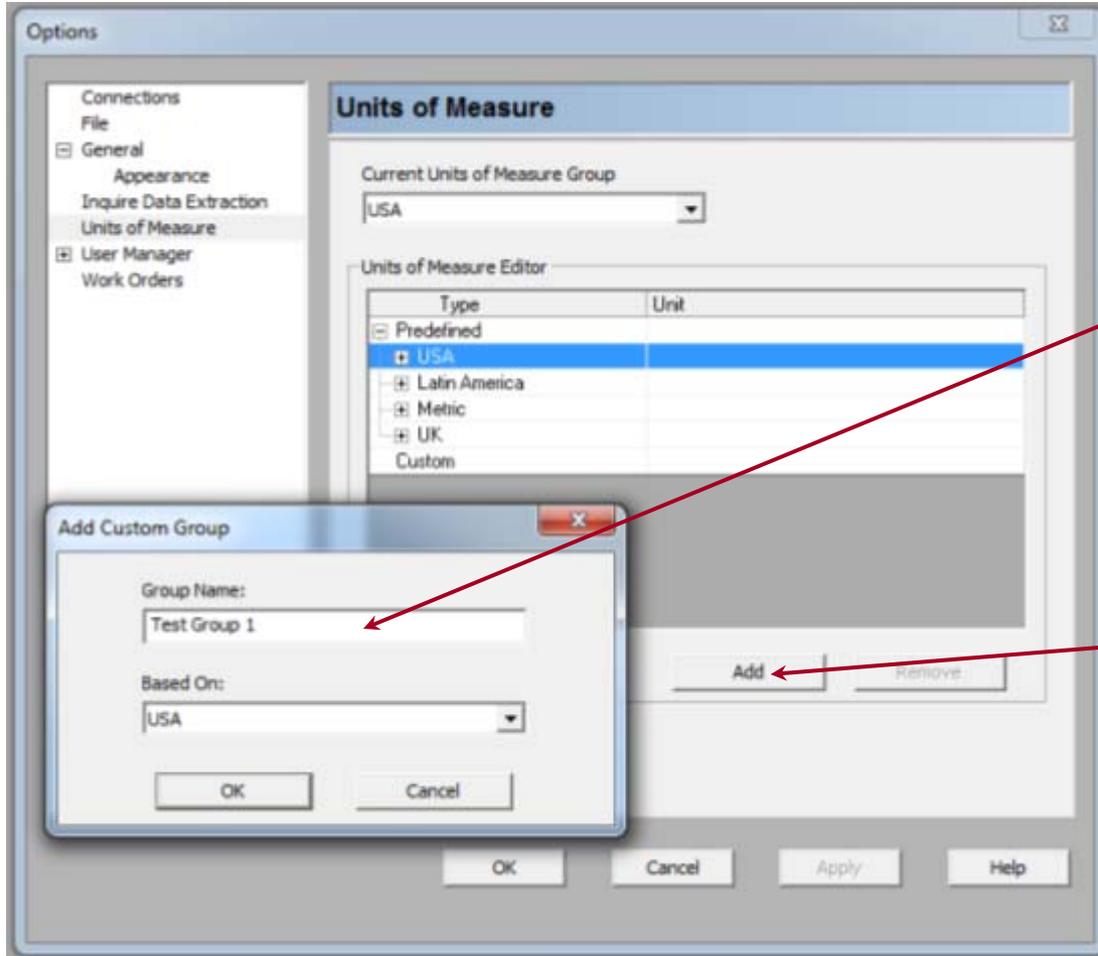
# Tools → Options → General → Appearance

*Select  
Modify*

- Font size can be changed for ease of viewing



# Tools → Options → Units of Measure

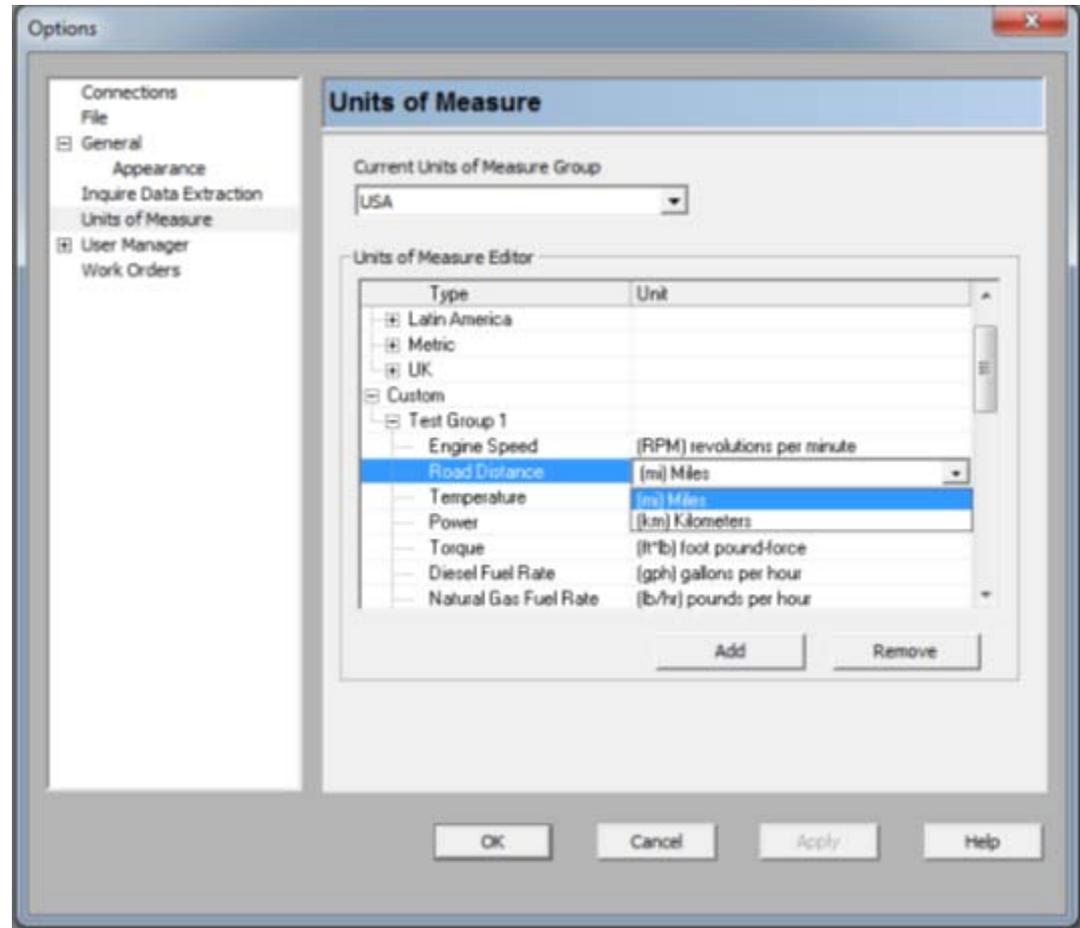


*Insert  
Group  
Name*

*Select Add*

# Tools → Options → Units of Measure

- ❑ Predefined Groups
- ❑ Custom Groups may be set up
- ❑ Adjust Custom Groups to match User Preferences



# Tools → Options Wrap Up

One place to Set up and customize INSITE™

Contains:

- Connections
- File Locations
- General
  - Location to Adjust Font Sizes
- Tool Level Security
  - ECM Password Removal Passwords
  - Fleet Calibration Count Passwords
- Units of Measure
- User Manager
- Work Orders

[\*Back to Agenda\*](#)



# ECM Security

Most of the Cummins ECMs have five levels of password capabilities:

- Master
- Adjustment
- Reset
- OEM
- OEM 2



# ECM Security

## Master ECM Password

- No Changes to ECM Allowed
- Includes all Writes and Resets

## Adjustment Password

- Master Password must also be Set
- Only allows changing ECM Adjustments
  - Features and Parameters

## Reset Password

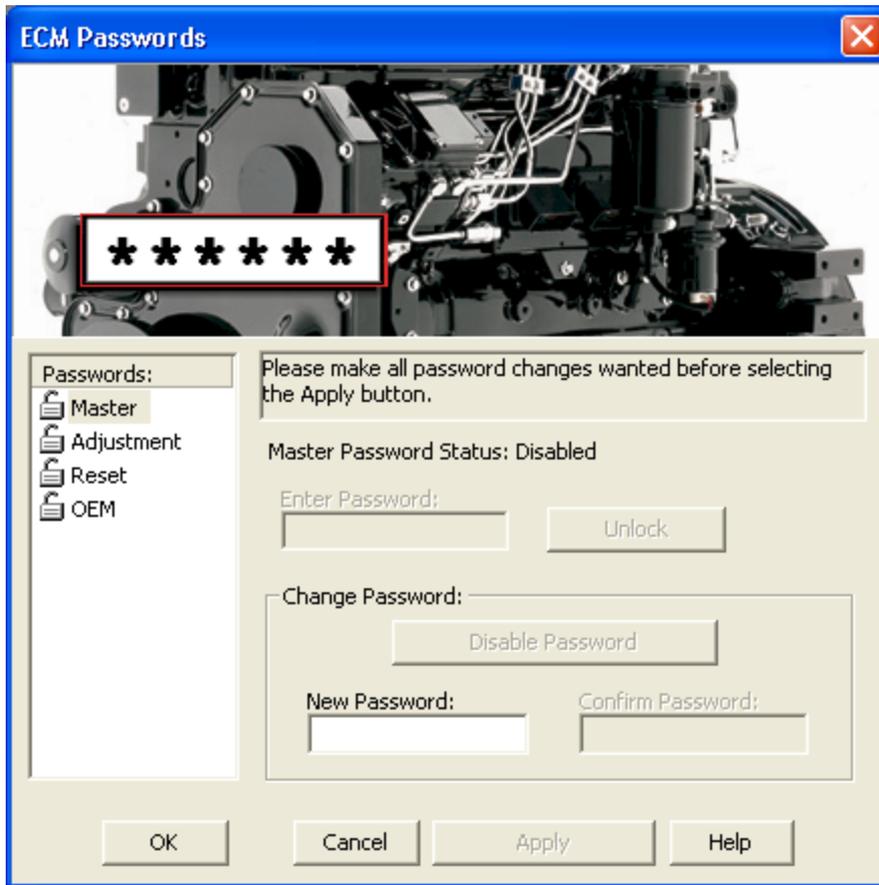
- Master Password must also be Set
- Only allows ECM Resets
  - Fault Codes, Trip Information

## OEM/OEM 2 Password

- Master Password does not need to be set
- Protects OEM Specific Parameters from Adjustment

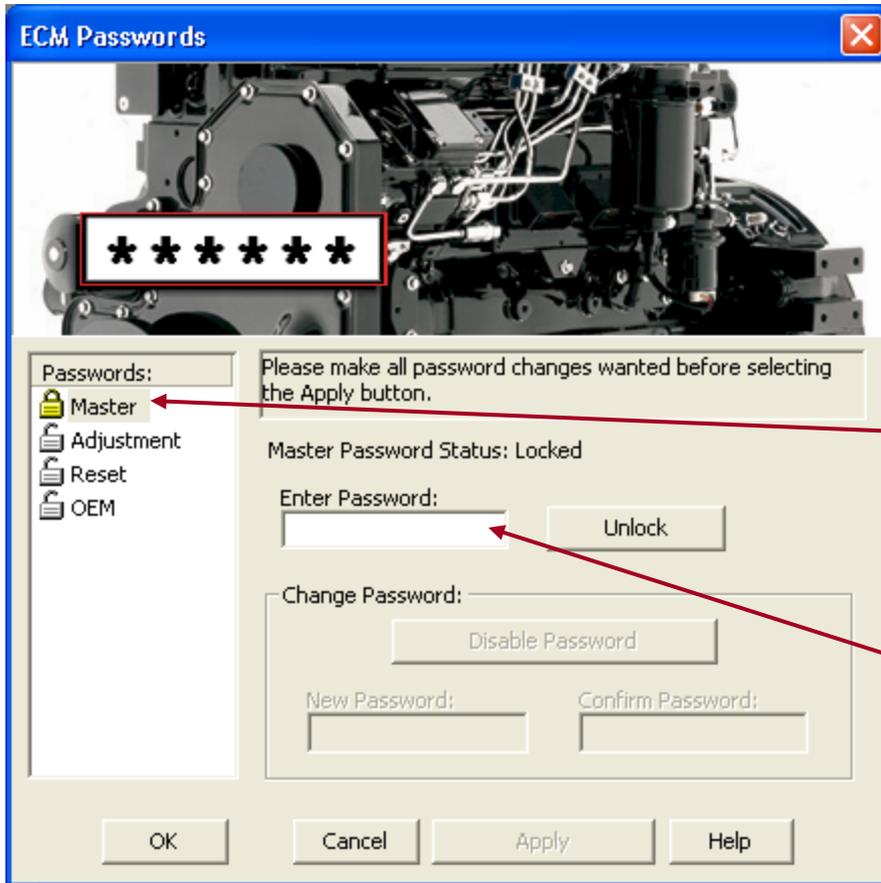


# ECM Security



Tools → ECM Passwords...

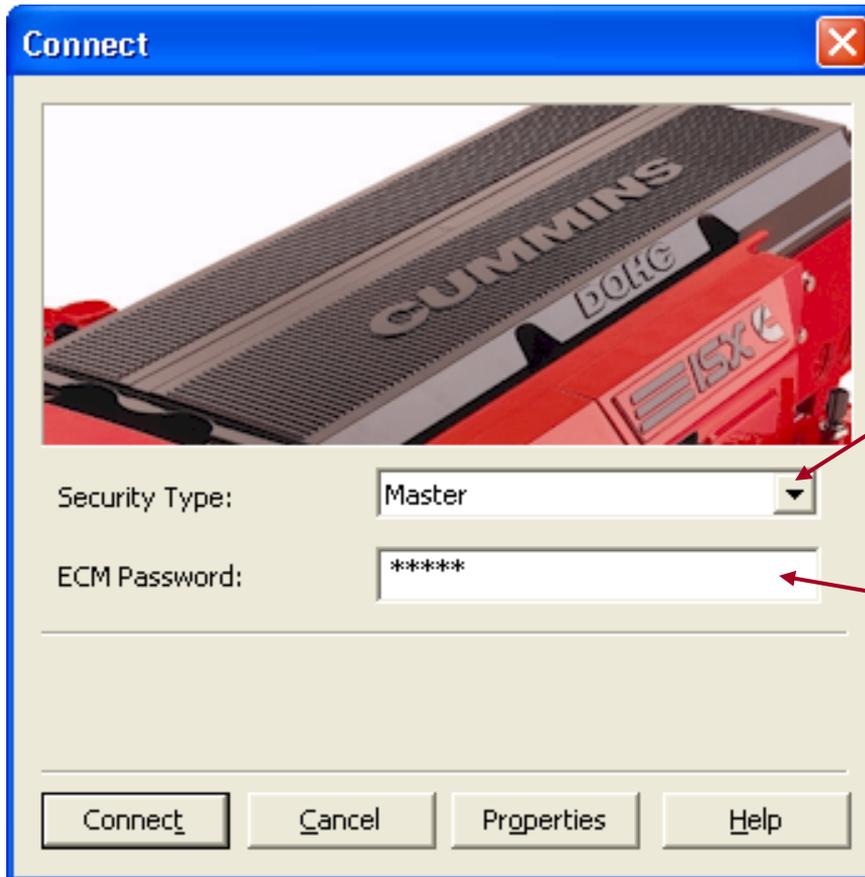
# ECM Security



*Master Password  
is Set/Locked*

*Enter Password  
to Unlock*

# ECM Security



Connect

Security Type: Master

ECM Password: \*\*\*\*\*

Connect Cancel Properties Help

*Select Password Level from the dropdown list*

*Enter Password*

# ECM Security

## Wrap Up

- Used to protect the ECM from users making unauthorized adjustments
- Different levels can be set to allow for:
  - Resets only (Reset Password)
  - Feature Adjustments (Adjustment Password)
  - Full functionality (Master Password)
- Master Password must be Set when using ECM Security

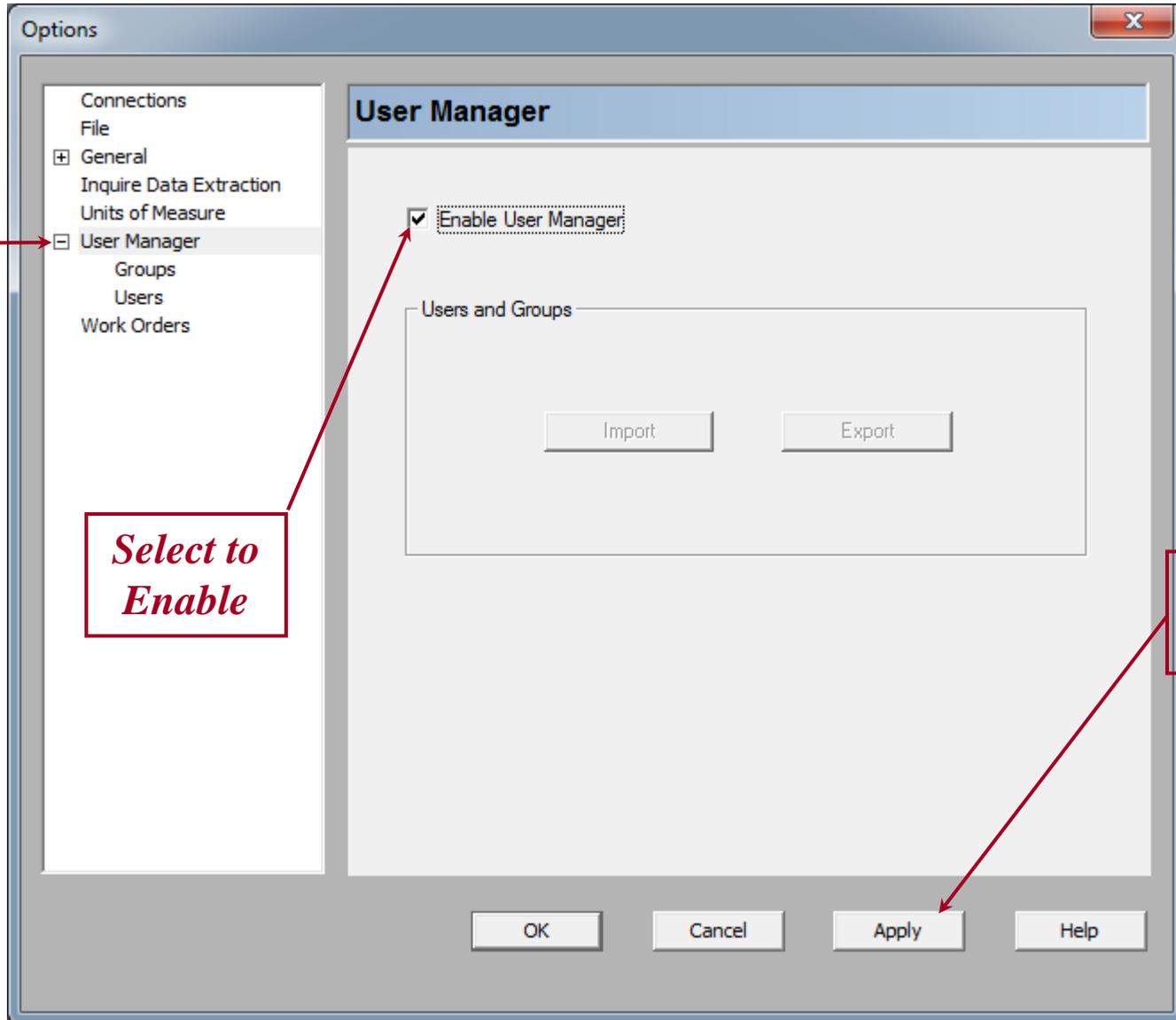


# User Manager

- Enables a system administrator to assign specific access rights to individual users and groups
- When enabled, a login is required to open INSITE™
- Multiple users and groups can be created



# Tools → Options → User Manager



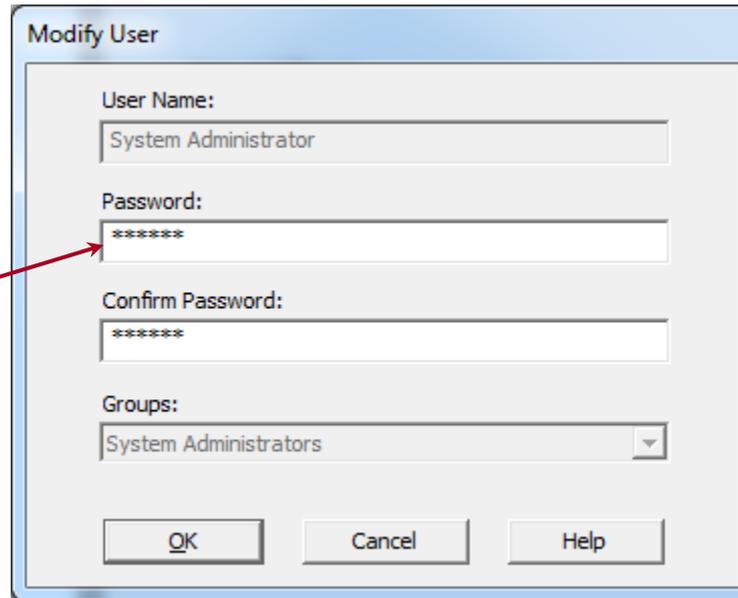
*Click on  
User  
Manager*

*Select to  
Enable*

*Select  
Apply*

# System Administrator

*Enter the  
password for  
the System  
Administrator*



Modify User

User Name:  
System Administrator

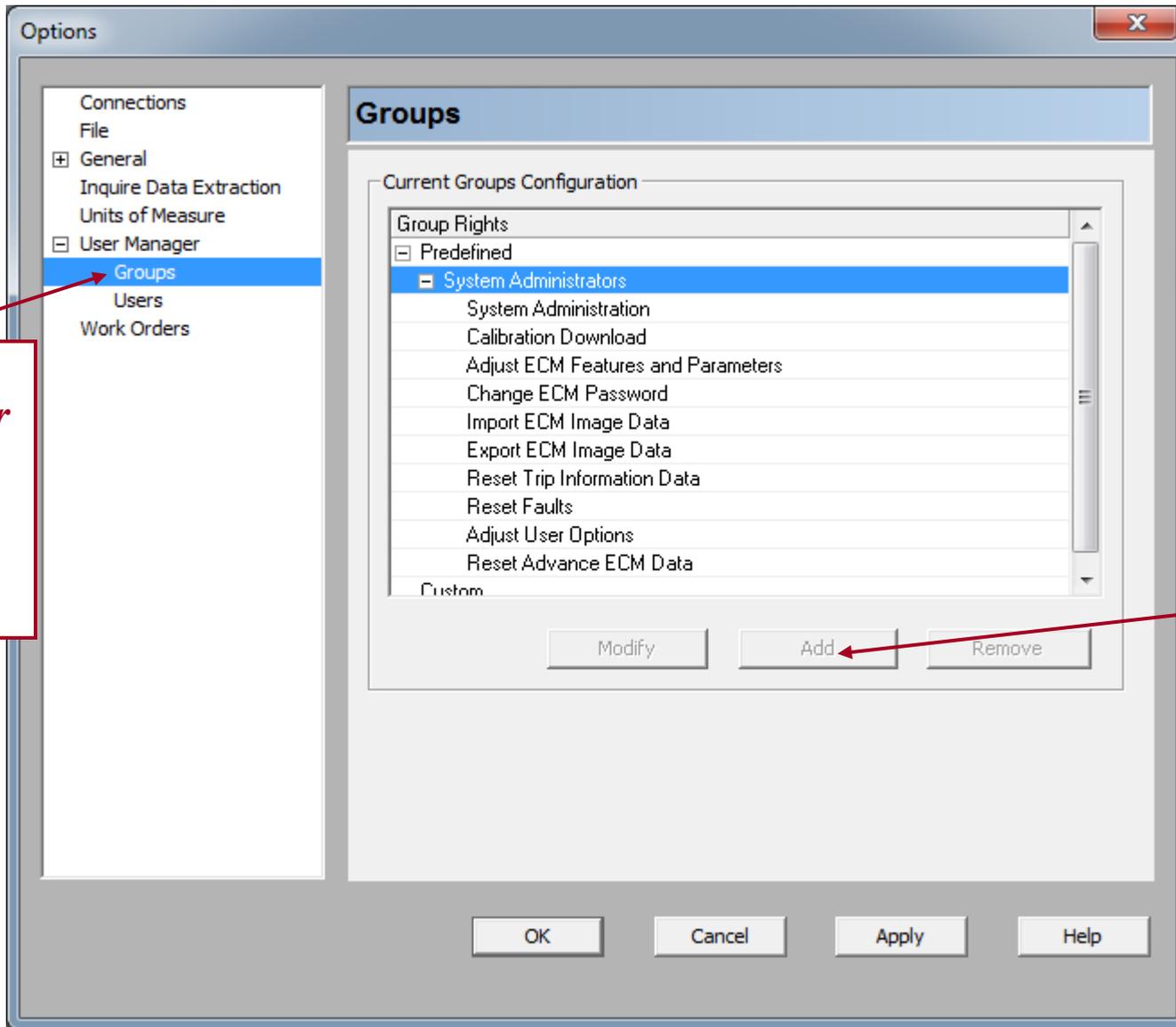
Password:  
\*\*\*\*\*

Confirm Password:  
\*\*\*\*\*

Groups:  
System Administrators

OK Cancel Help

# Setting Up Groups



*Expand User Manager and click on Groups*

*Click on Add to add a Group*



# Setting Up Groups

**Enter  
Name of  
Group**

**Select the  
Rights that  
the group  
should have  
the ability  
to do**

New Group

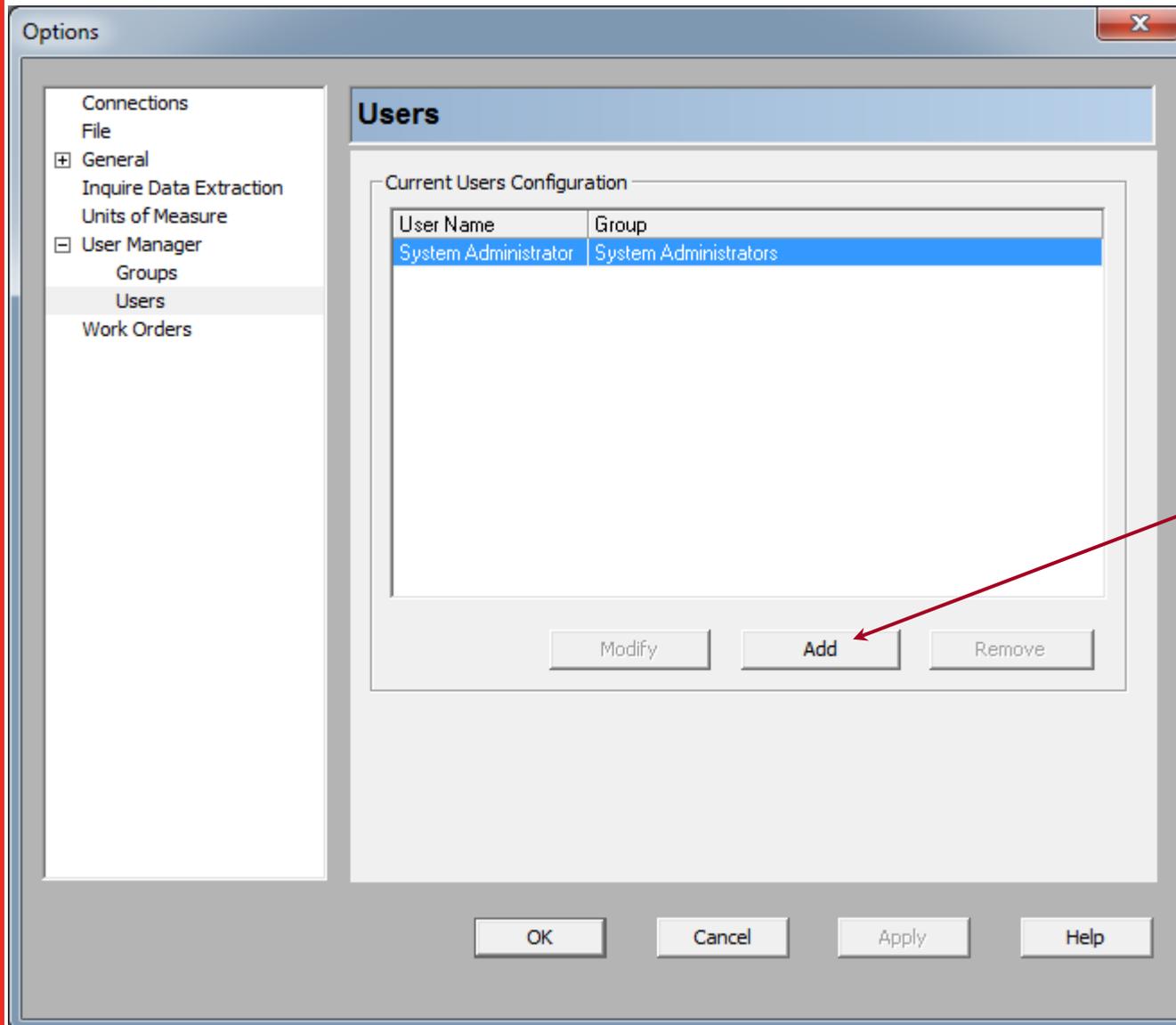
Group Name:  
Technician

Group Rights

- System Administration
- Calibration Download
- Adjust ECM Features and Parameters
- Change ECM Password
- Import ECM Image Data
- Export ECM Image Data
- Reset Trip Information Data
- Reset Faults
- Adjust User Options
- Reset Advance ECM Data

OK Cancel Help

# Setting Up Users



*Add New User*

# Setting Up Users

**Enter New  
User Name**

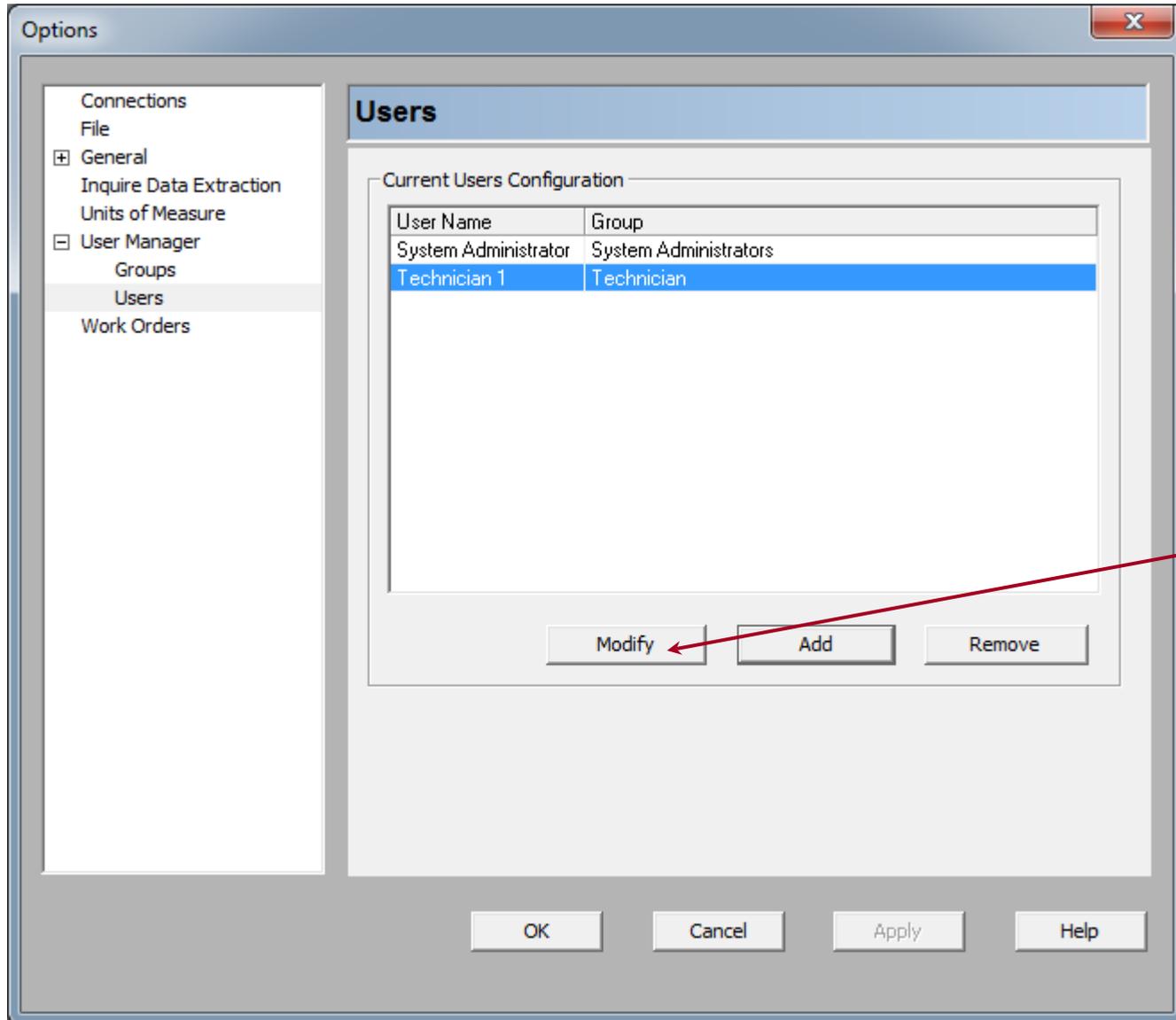
**Enter  
Password**

**Select an  
existing  
Group**

The screenshot shows a 'New User' dialog box with the following fields and controls:

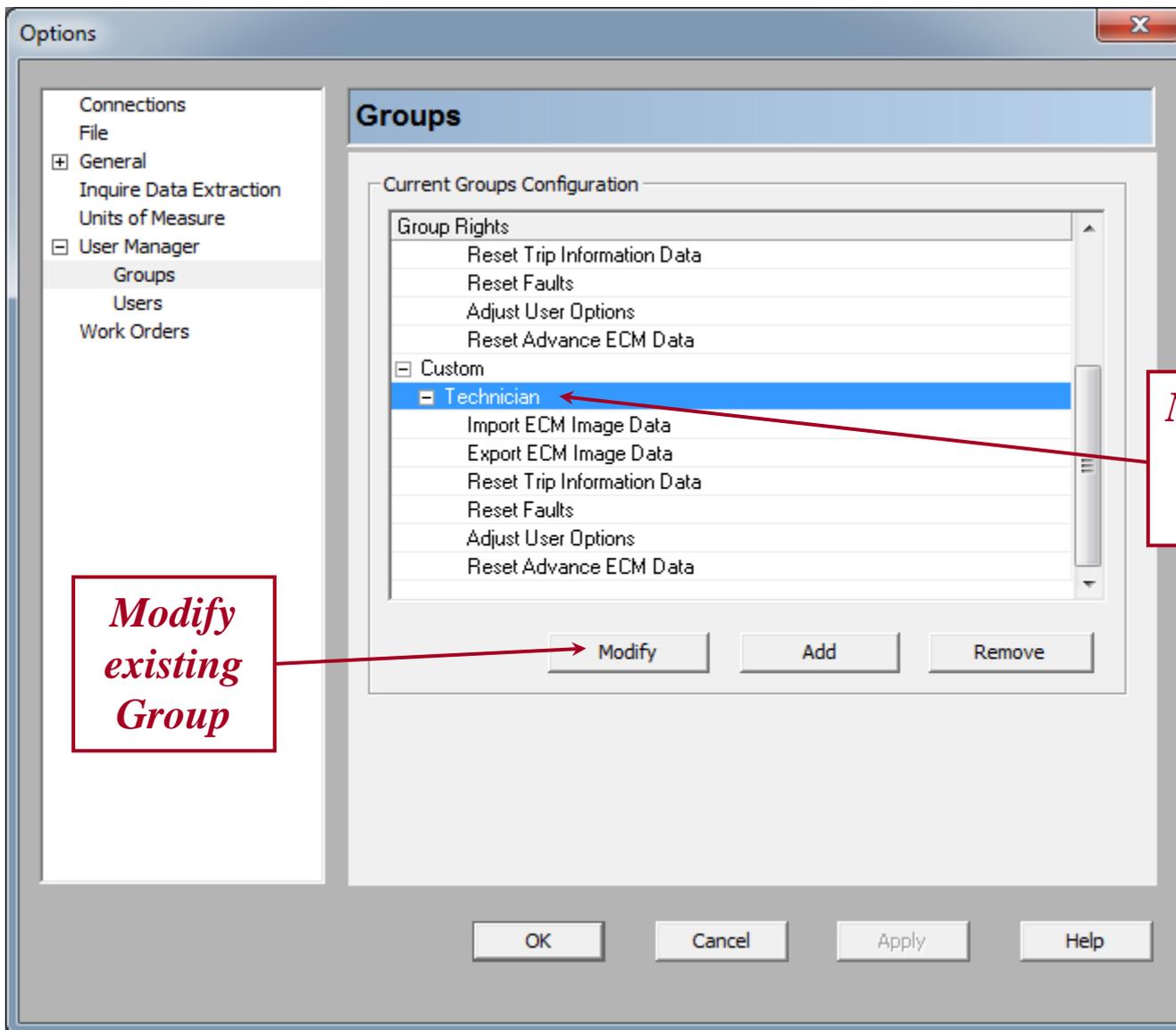
- User Name:** A text input field containing 'Technician 1'. A red arrow points from the 'Enter New User Name' callout to this field.
- Password:** A text input field containing six asterisks (\*\*\*\*\*). A red arrow points from the 'Enter Password' callout to this field.
- Confirm Password:** A text input field containing six asterisks (\*\*\*\*\*).
- Groups:** A dropdown menu with 'Technician' selected. A red arrow points from the 'Select an existing Group' callout to this dropdown.
- Buttons:** 'OK', 'Cancel', and 'Help' buttons are located at the bottom of the dialog.

# Modifying Users



*Modify  
existing  
Users*

# Modifying Groups



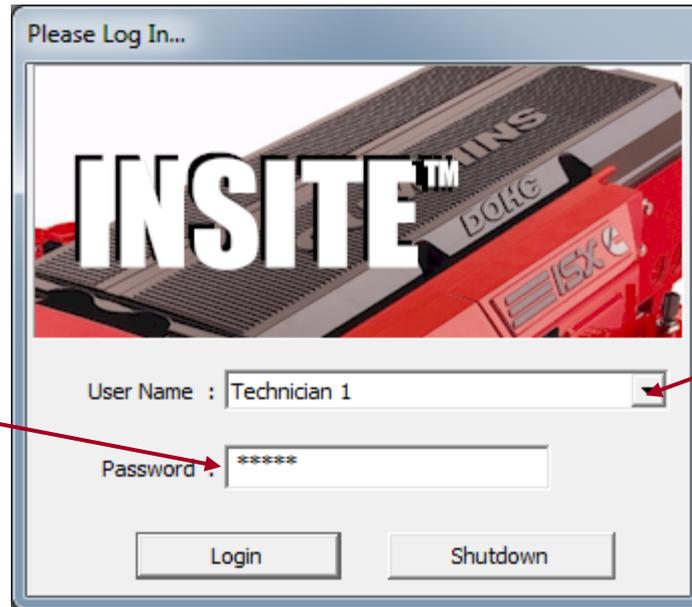
*Modify existing Group*

*New Group will show under Custom*



# After Re-starting INSITE

*Enter  
Password*



Please Log In...

**INSITE™**

User Name :

Password :

*Required  
To select  
User Name*



# User Manager Wrap Up

- User Manager allows INSITE™ to be used by multiple users with restricted access to the Tool Functionality



# Roll Back Option

- INSITE™ provides the capability to roll back to the previous base version
- For example, INSITE™ 7.5.1 can be rolled back to INSITE™ 7.5 by using uninstall update in the Control Panel

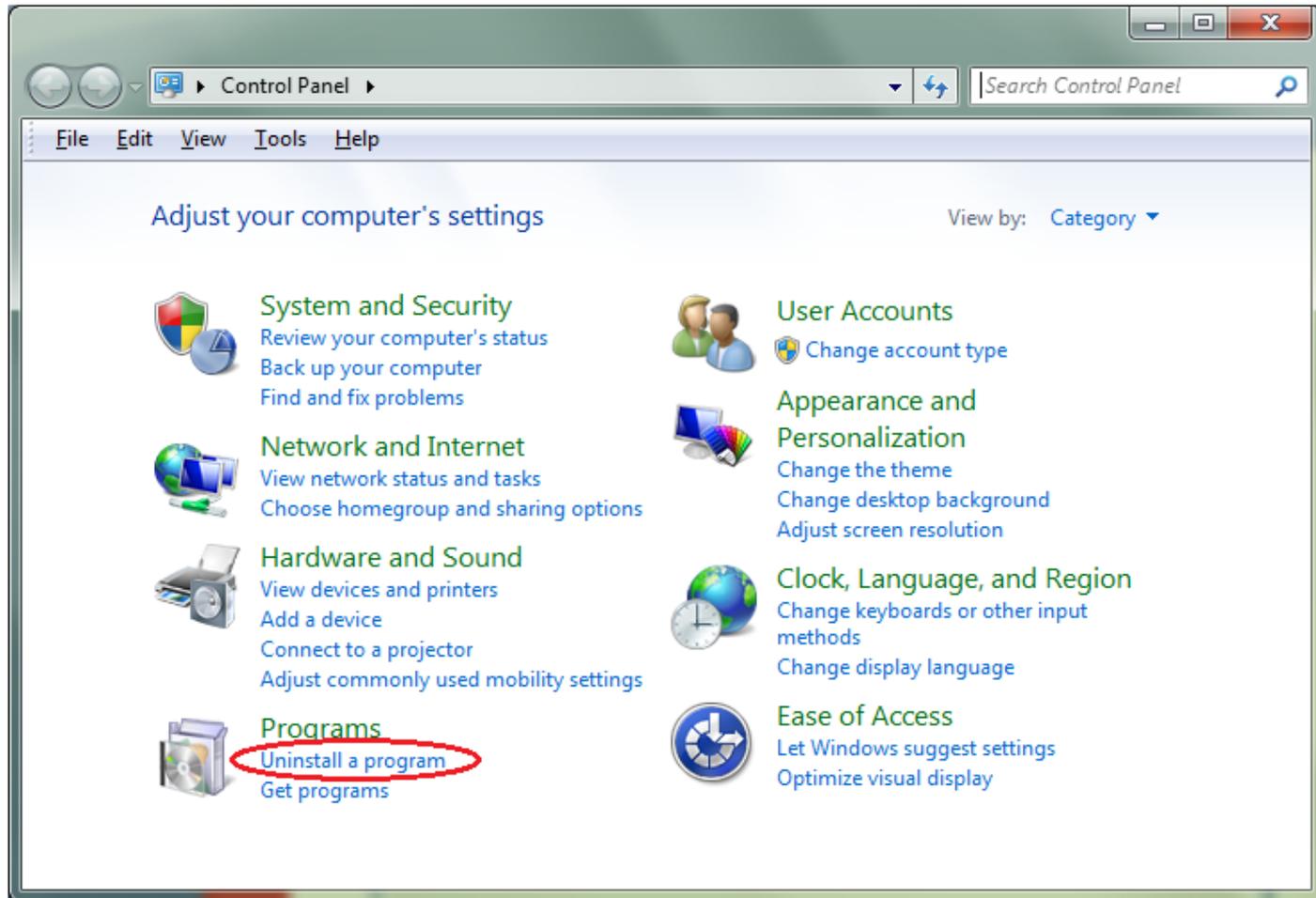


# Roll Back Option

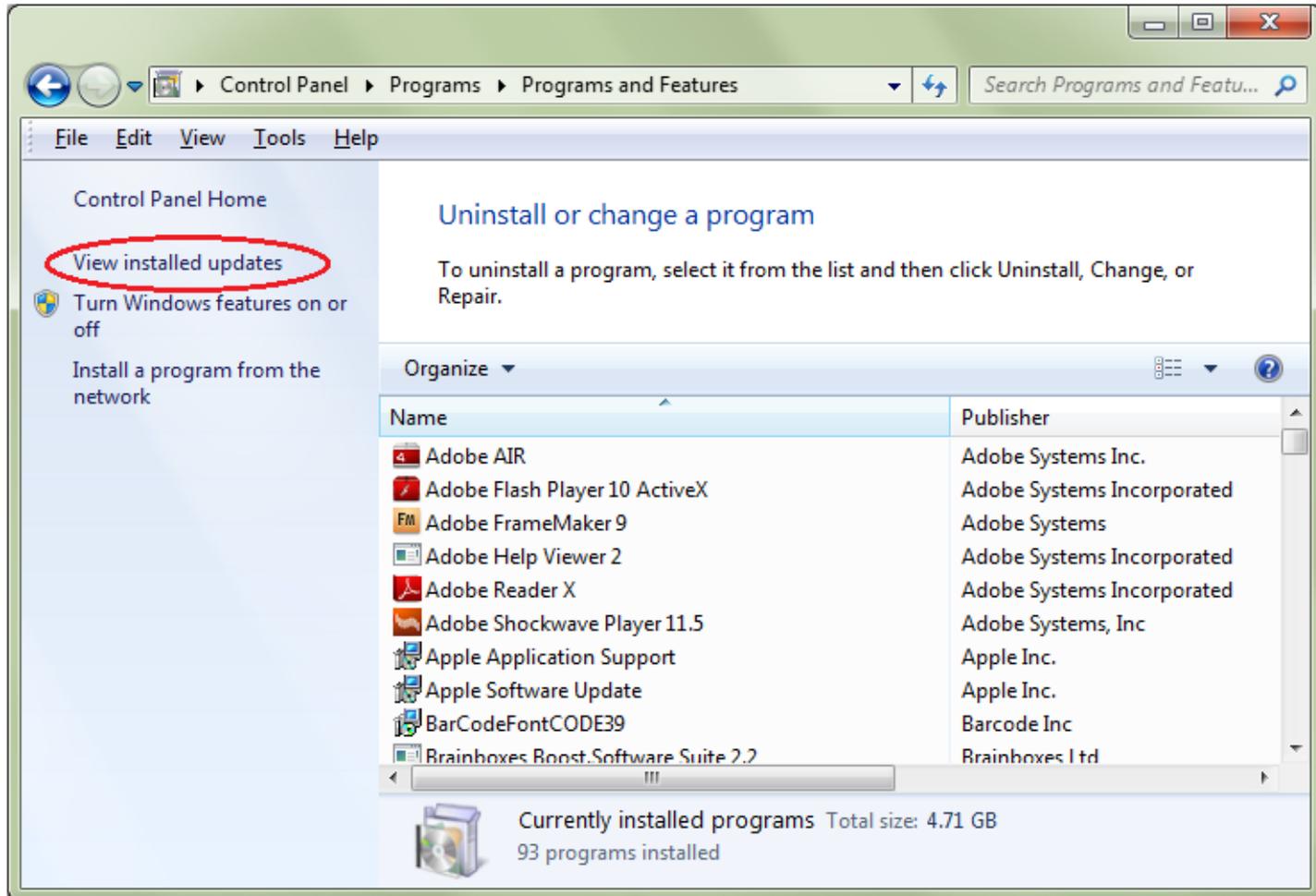
- On a Windows 7 or Windows Vista PC
  - Go to Start > Control Panel > Programs > Uninstall a Program. On the upper left hand side, click on **View installed updates**. Select INSITE™ 7.5.1 from the list and click **Uninstall**. Follow the prompts to uninstall INSITE™ 7.5.1
- On a Windows XP PC
  - Go to Start > Control Panel > Add/Remove Programs. On the top, check the box **Show updates**. Select INSITE™ 7.5.1 from the list and click **Uninstall**. Follow the prompts to uninstall INSITE™ 7.5.1
- Note: The PC may need to be restarted after uninstalling INSITE™ 7.5.1



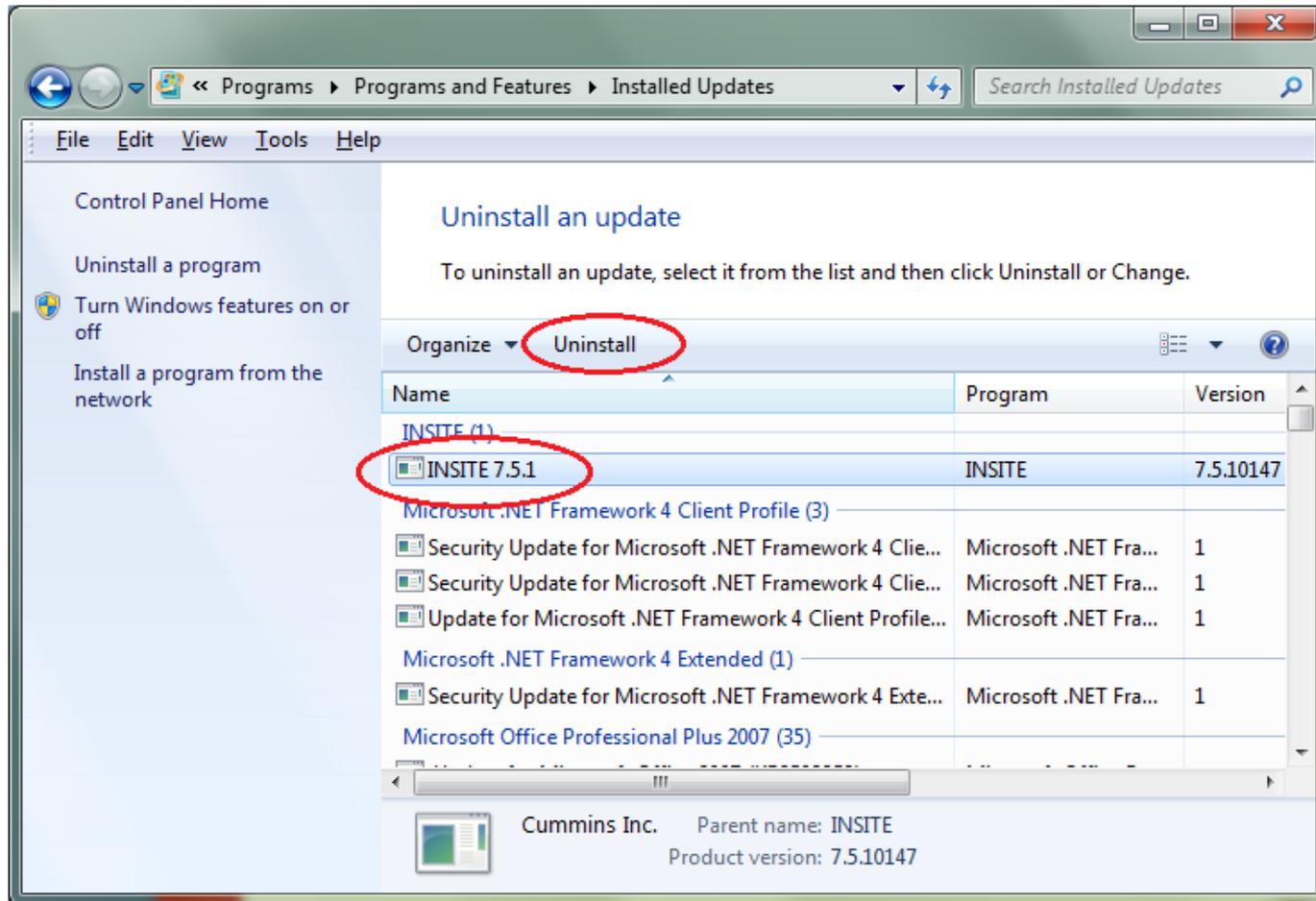
# Roll Back Option – Windows 7/Vista



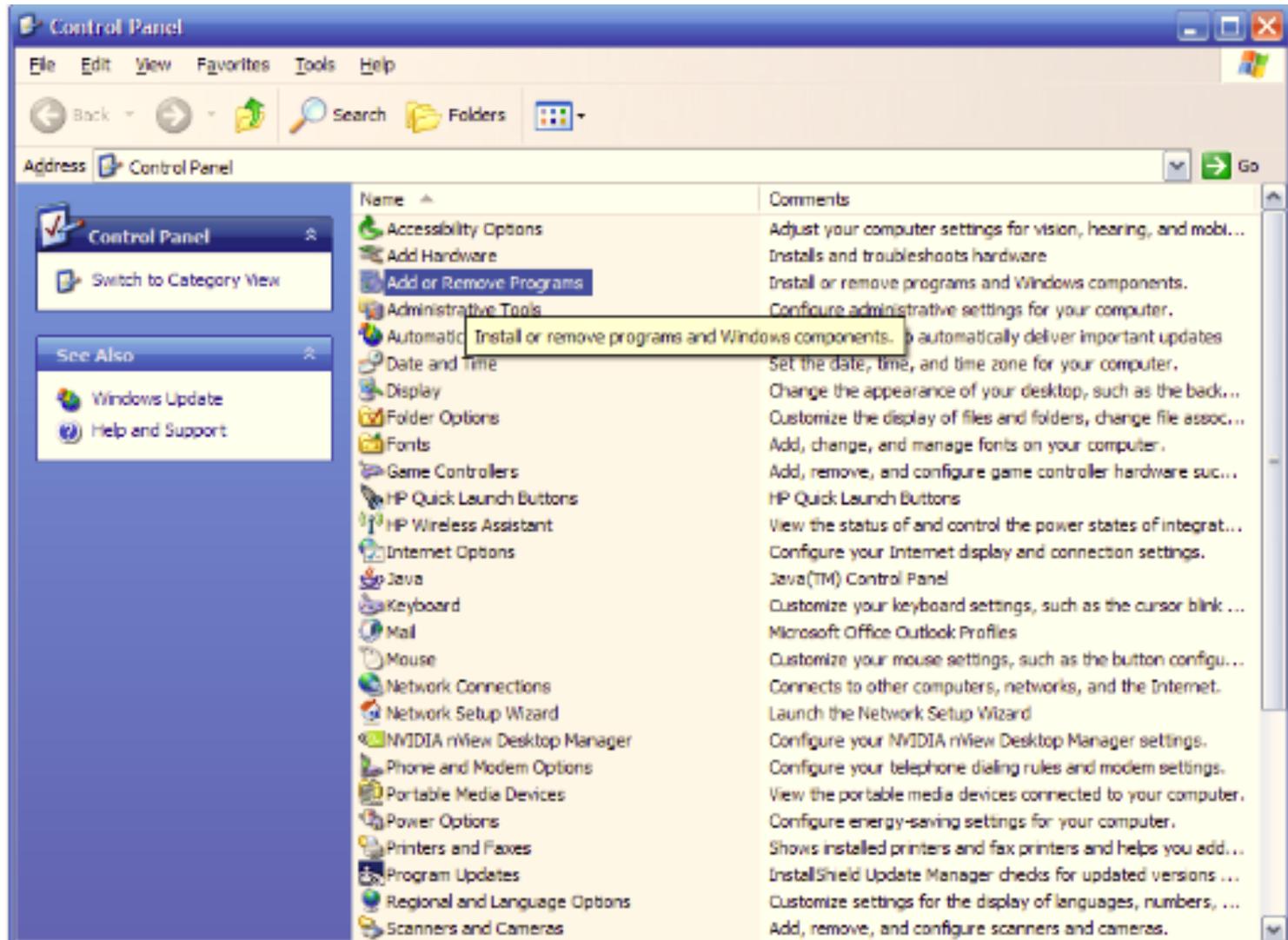
# Roll Back Option – Windows 7/Vista



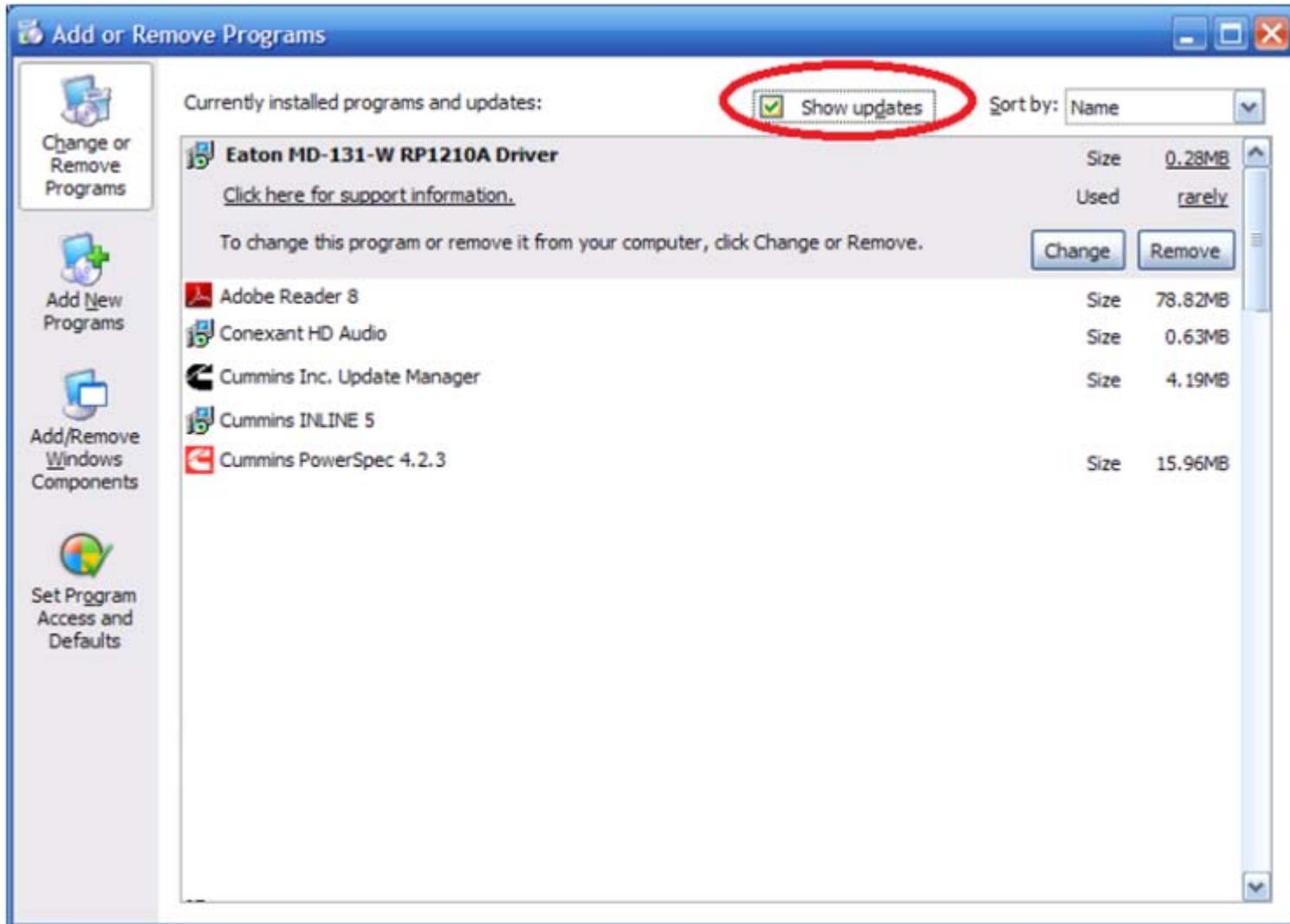
# Roll Back Option – Windows 7/Vista



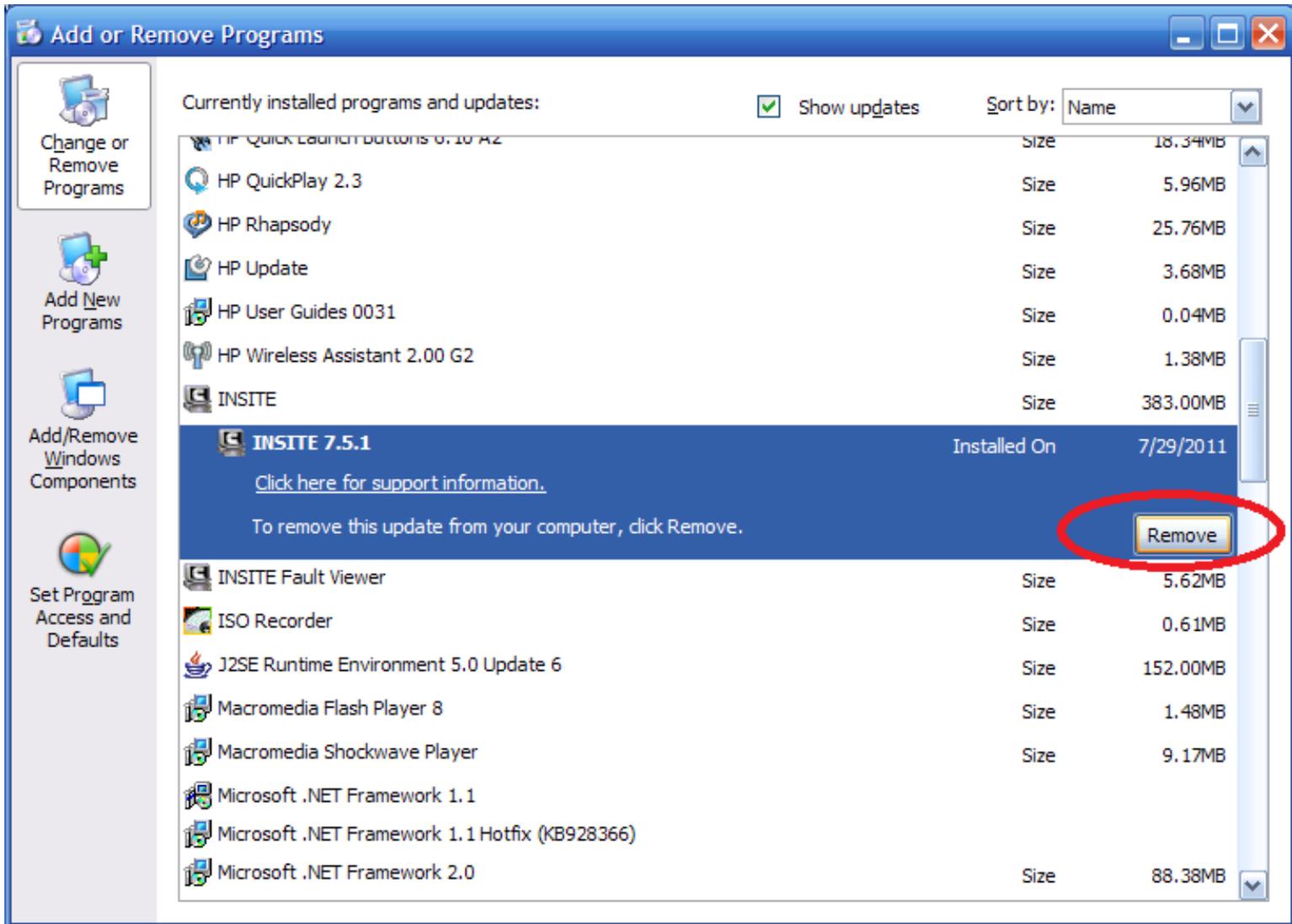
# Roll Back Option – Windows XP



# Roll Back Option – Windows XP



# Roll Back Option – Windows XP



# Roll Back Option Wrap Up

- INSITE™ provides the capability to roll back to the previous version



You have concluded this section of the training.  
Please click to the next slide and continue or [Click Here](#) to return to  
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# **INSITE™ Trip Information**

**Electronic Service Tools**

# Trip Information

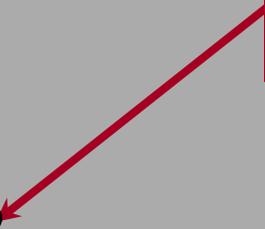
- Trip Information continuously monitors and records engine operating data that tracks engine and driver performance
- Stored data can be viewed using INSITE™
  - Live module
  - Exported ECM Image
- Parameters are grouped differently, according to the ECM
- Not all ECMs list the same parameters





- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information**
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

*Click on Trip Information*



- Disconnect from ECM
- Fault Codes
- Data Monitor/Logger
- ECM Diagnostic Tests
- Advanced ECM Data
- Features and Parameters
- Calibration Selection
- Work Orders
- Trip Information
- Audit Trail
- Inquire Data Extraction
- OBD Monitors

Name	ECM Value	Units	
Signature/ISX - CM870			
CM870			
All Trips (Cumulative)			
Trip Since Last Reset			

*If "All Trips (Cumulative)" is expanded, ECM Values will be shown for the life of the ECM*

*If "Trip Since Last Reset" is expanded, parameter values for that ECM are shown since the last time the ECM was reset*

INSITE 8.0.0.402 - Signature/ISX - CM870 - Engine Serial Number - 0 - ECM Code - AB10400.23

File Edit View Tools Manage License(s) Window Help

Name	ECM Value	Units
Signature/ISX - CM870		
CM870		
All Trips (Cumulative)		
Trip Since Last Reset		

- Find
- Expand
- Collapse
- Trip Fuel Report
- Reset
- Refresh

Disconnect from ECM

Fault Codes

Data Monitor/Logger

ECM Diagnostic Tests

Advanced ECM Data

Features and Parameters

Calibration Selection

Work Orders

Trip Information

Audit Trail

Inquire Data Extraction

OBD Monitors

Refresh ECM Values

Alternate click on the Title Bar of Trip Information and choose Expand All or Collapse All

Clicking on the + or - sign next to the parameter name will expand or collapse

Connected to ECM.

INLINE,USB (J1939) Connection

RP1210A (J1939) Firmware: 6.40

# Trip Information: Trip Fuel Report

- A Trip Fuel Report is a condensed list of fueling parameters
- Available on any engine that supports Trip Information
- Can only be Printed from this view

Name	ECM Value	Units
Signature/ISX - CM870		
CM870		
Trip Since Last Reset		
Distance		
Trip Distance	1525000.0	mi
Fuel Used		
PTO Fuel Used	2000.0	gal
Trip Average Fuel Economy	12.700	mpg
Trip Drive Average Fuel Economy	12.700	mpg
Trip Fuel Used	500000.0	gal
Trip Idle Fuel Used	500000.0	gal
Other		
Number of Sudden Decelerations	128	
Service Brake Actuations	25000	
Trip Average Vehicle Speed	75	mph
Trip Maximum Engine Speed	4000	RPM
Trip Maximum Vehicle Speed	127	mph
Time		
Percent Time at Idle	20.5	Percent
Percent Time in Cruise Control	62.4	Percent
Percent Time in PTO	83.8	Percent
Percent Time in Top Gear	77.8	Percent
PTO Time	5000.0	hrs
Trip Idle Time	5885.2	hrs
Trip Time	5885.2	hrs



INSITE 8.0.0.402 - Signature/ISX - CM870 - Engine Serial Number - 10101010 - ECM Code - AB10040.00

File Edit View Tools Manage License(s) Window Help

Disconnect from ECM

Fault Codes

Data Monitor/Logger

ECM Diagnostic Tests

Advanced ECM Data

Features and Parameters

Calibration Selection

Work Orders

Trip Information

Audit Trail

Inquire Data Extraction

OBD Monitors

Name	ECM Value	Units
Signature/ISX - CM870		
CM870		
All Trips (Cumulative)		
Distance		
Total ECM Distance	220014.6	mi
Total Engine Brake Distance	2.0	mi
Total Engine Distance	220120.4	mi
Total Service Brake Distance	1525000.0	mi
Fuel Used		
Total Cruise Control Fuel Used	0.1	gal
Total Fuel Used	500000.0	gal
Total Gear Down Fuel Used	500000.0	gal
Total Idle Fuel Used	500000.0	gal
Total Loaded PTO Drive Fuel Used	10000.0	gal
Total Maximum Accelerator Vehicle Speed Fuel Used	0.1	gal
Total PTO Drive Fuel Used	10000.0	gal
Total PTO Fuel Used	5000.0	gal
Total Top Gear Fuel Used	500000.0	gal
Multiple PTO		
PTO Device 1	Device 1	
PTO Device 2	Device 2	
PTO Device 3	Device 3	
PTO Device 4	Device 4	
PTO Device 5	Device 5	
PTO Device 6	Device 6	
PTO Device 7	Device 7	
PTO Device 8	Device 8	
Fuel		
PTO Device 1 Total Fuel Used	21	gal
PTO Device 2 Total Fuel Used	22	gal
PTO Device 3 Total Fuel Used	23	gal
PTO Device 4 Total Fuel Used	24	gal
PTO Device 5 Total Fuel Used	25	gal
PTO Device 6 Total Fuel Used	26	gal
PTO Device 7 Total Fuel Used	27	gal
PTO Device 8 Total Fuel Used	28	gal
Time		
PTO Device 1 Total Time	21	hrs

Find

Expand

Collapse

Trip Fuel Report

Reset

Refresh

Connected to ECM.

Signature/ISX - CM870 Simulator

*Trip Fuel Report*

*Or Alternate Click and select Trip Fuel Report*

INSITE 8.0.0.402 - Signature/ISX - CM870 - Engine Serial Number - 10101010 - ECM Code - AB10040.00

File Edit View Tools Manage License(s) Window Help

Disconnect from ECM

Fault Codes

Data Monitor/Logger

ECM Diagnostic Tests

Advanced ECM Data

Features and Parameters

Calibration Selection

Work Orders

Trip Information

Audit Trail

Inquire Data Extraction

OBD Monitors

Name	ECM Value	Units
Signature/ISX - CM870		
CM870		
Trip Since Last Reset		
Distance		
Trip Distance	152	mi
Fuel Used		
PTO Fuel Used	200	gal
Trip Average Fuel Economy	12.700	mpg
Trip Drive Average Fuel Economy	12.700	mpg
Trip Fuel Used	500000.0	gal
Trip Idle Fuel Used	500000.0	gal
Other		
Number of Sudden Decelerations	128	
Service Brake Actuations	25000	
Trip Average Vehicle Speed	75	mph
Trip Maximum Engine Speed	4000	RPM
Trip Maximum Vehicle Speed	127	mph
Time		
Percent Time at Idle	20.5	Percent
Percent Time in Cruise Control	62.4	Percent
Percent Time in PTO	83.8	Percent
Percent Time in Top Gear	77.8	Percent
PTO Time	5000.0	hrs
Trip Idle Time	5965.2	hrs
Trip Time	5965.2	hrs

Find

Expand

Collapse

Trip Fuel Report

Reset

Refresh

Connected to ECM.

Signature/ISX - CM870 Simulator

*Click on the "Print" button to print a copy of parameters listed on the screen*

*Alternate Click now lists the Trip Fuel Report as Selected*

# Trip Information

Trip Information may be printed when connected to the ECM or Image

- Tool Bar Printer Icon
- File → Print

Engine Serial Number :1010010  
Customer Unit Number :623  
Work Order Base :SA

INSITE 8.0.0.402  
Company Name :Cummins Inc.  
ECM Image Base :SA

Name	ECM Value	Units	
<b>Standard/ESK - CME70</b>			
<b>CME70</b>			
All Trips (Cumulative)			
Distance			
Total ECM Distance	220014.6	mi	
Total Engine Brake Distance	2.0	mi	
Total Engine Distance	220120.4	mi	
Total Service Brake Distance	1525000.0	mi	
Fuel Used			
Total Cruise Control Fuel Used	0.1	gal	
Total Fuel Used	500000.0	gal	
Total Gear Down Fuel Used	500000.0	gal	
Total Idle Fuel Used	500000.0	gal	
Total Loaded PTO Drive Fuel Used	10000.0	gal	
Total Maximum Accelerator Vehicle Speed Fuel Used	0.1	gal	
Total PTO Drive Fuel Used	10000.0	gal	
Total PTO Fuel Used	5000.0	gal	
Total Top Gear Fuel Used	500000.0	gal	
Multiple PTO			
PTO Device 1	Device 1		
PTO Device 2	Device 2		
PTO Device 3	Device 3		
PTO Device 4	Device 4		
PTO Device 5	Device 5		
PTO Device 6	Device 6		
PTO Device 7	Device 7		
PTO Device 8	Device 8		
Fuel			
PTO Device 1 Total Fuel Used	21	gal	
PTO Device 2 Total Fuel Used	22	gal	

01:51:47 PM Page 1 of 7 17-Dec-2013



# Trip Information Wrap Up

- Allows the user to view ECM Values for multiple time periods:
  - Lifetime of the ECM
  - Since the Trip Information was last reset
- Trip Fuel Report will display all fuel related parameters for the above time periods
- INSITE™ allows the user to print these screens



You have concluded this section of the training.  
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the Table of Content.





# **INSITE™ Work Orders**

**Electronic Service Tools**

# Work Orders

- A Work Order is the top level identifier that contains the ECM image(s). Work Orders can be used for tracking vehicle and equipment repair history.
- An Image is a copy of the ECM data
- Work Orders may contain multiple Images
  - By default, an “Initial” image is created when connecting to an ECM with the Work Order Mode enabled
  - By default, a “Final” image is created when disconnecting from an ECM with the Work Order Mode enabled
  - Additional “User” images may be created under each Work Order while connected to the ECM
- Work Orders can be created automatically by INSITE™ or manually by the user



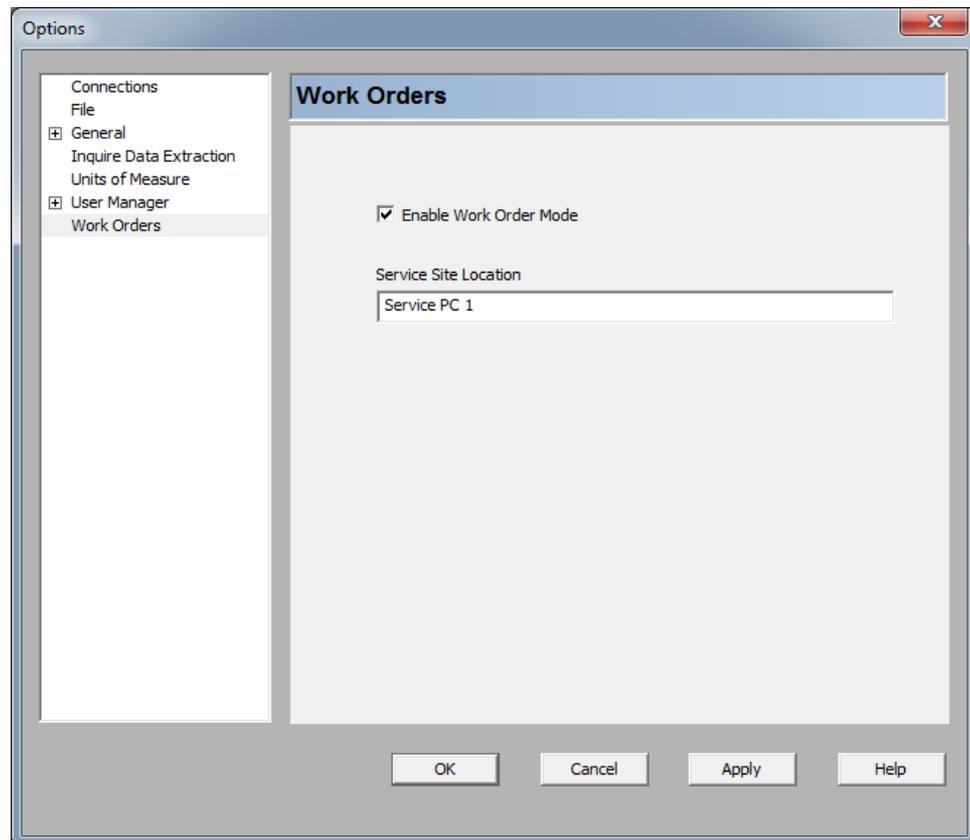
# Work Orders

To have INSITE™ automatically create Work Orders when connecting and disconnecting:

Select Tools →  
Options → Work  
Orders

- Select “Enable Work Order Mode”

By default this feature is Enabled when INSITE™ is installed.



# Work Orders

- When connected to an ECM, only Work Orders compatible with that ECM serial number will be displayed
- Disconnect from an ECM to view all Work Orders
- Work Order and Image names are defaulted to a Date – Time format (i.e. WO-20041027-145950 = 10/27/2004-2:59:50). These names can be changed at the time of creation or under the Work Order properties to help identify the specific customer, vehicle or equipment



# Work Orders

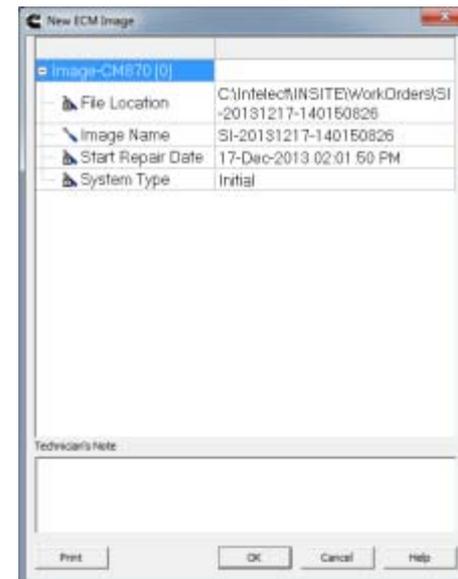
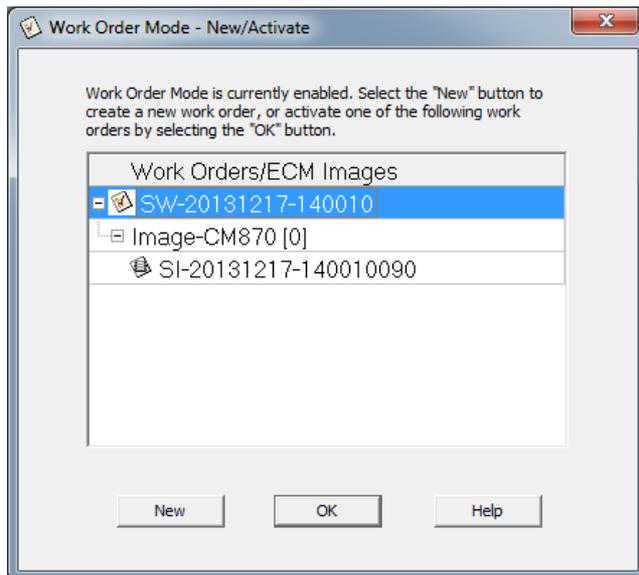
- With Work Order Mode enabled and no compatible Work Orders exist, a New Work Order dialog will be displayed after connection to the ECM

- Enter the Work Order Number, Image Name and Select OK
- If you do not wish to create a new Work Order, select Cancel

Work Order	
Engine Information	
ECM Serial Number	0110031812
Make	CMMNS
Model	Signature/ISX - CM870
Serial Number	10101010
Image-CM870 [0]	
File Location	C:\Intelect\INSITE\WorkOrders\SI-20131217-140010090
Image Name	SI-20131217-140010090
Start Repair Date	17-Dec-2013 02:00:10 PM
System Type	Initial
Summary Information	
Customer Contact	Columbus, IN
Customer Name	Customer
Last Modified	

# Work Orders

- With Work Order Mode enabled and compatible Work Orders exist, the New/Activate Work Order dialog will be displayed after connection to the ECM
  - Select New to create a new Work Order
  - OR: Select one of the compatible Work Orders in which to create a new Image and select OK
    - Enter the Image Name and confirm the creation by selecting OK
    - OR: Select Cancel if you do not wish to create an Image



# Work Orders

## Manually creating New Work Orders

- Select File → New → Work Order...

The screenshot shows the INSITE 8.0.0.402 software interface. The main window displays a table with the following data:

Work Orders/ECM Images	System Type	Customer Name	Vehicle Unit Number	Engine Serial Number	Start Repair Date	Last
SW-20131217-140010	Signature/ISX - CM870	Customer	628	10101010	17-Dec-2013 02:00:10 PM	17-D
Image-CM870 [0]						
SI-20131217-140150826	Initial					17-D
SI-20131217-140010090	Initial					17-D

Two red boxes with arrows pointing to the 'New Work Order' option in the context menu contain the following text:

- OR: Select New Work Order*
- OR: Alternate click and select New Work Order*

The context menu also includes the following options: Delete Work Order(s), Make Active, New ECM Image, Import Image(s), Expand, Collapse, Print Work Order(s), and Properties...



# Work Orders

## Manually creating New ECM Image

- Select File → New → ECM Image...
- The new Image will be created in the Active Work Order

The screenshot shows the INSITE software interface with a table of Work Orders/ECM Images. The table has the following data:

Work Orders/ECM Images	System Type	Customer Name	Vehicle Unit Number	Engine Serial Number	Start Repair Date	Last
SW-20131217-140010	Signature/ISX - CM870	Customer	623	10101010	17-Dec-2013 02:00:10 PM	17-D
Image-CM870 [0]						
SI-20131217-140150826	Initial					17-D
SI-20131217-140010090	Initial					17-D

Two red callout boxes provide alternative instructions:

- OR: Click on New Image Icon** (pointing to the image icon in the first row of the table)
- OR: Alternate click and select New ECM Image** (pointing to the 'New ECM Image' option in the context menu)

# Work Orders

- Each image can be exported for use in two ways:
  - Exported as an INSITE compatible file, .eif (exported image file) to be imported by another user with INSITE
  - To an external file, “Image Name.csv” (Comma Separated Value)
    - This format can be opened with Excel, Word, Notepad, etc.
- All Work Order images can be exported using the right-click menu and selecting the ‘Export All Images’ option. Highlight the Work Order image and right-click to export all images



# Work Orders

The screenshot shows the INSITE 8.0.0.402 software interface. The main window displays a table with the following data:

Work Orders/ECM Images	System Type	Customer Name	Vehicle Unit Number	Engine Serial Number	Start Repair Date	Last
SW-20131217-140010	Signature/ISX - CM870	Customer	623	10101010	17-Dec-2013 02:00:10 PM	17-D
Image-CM870 [0]						
SI-20131217-140150826	Initial					17-D
SI-20131217-140010090	Initial					17-D

A right-click context menu is open over the selected row (SI-20131217-140150826), showing the following options:

- Connect to Image
- Convert to Template(s)
- Export Image(s)
- Export All Images
- Export Image(s) to External File
- Print ECM Image(s)...
- Delete Image(s)...
- Properties...

A red-bordered box contains the text: **Right-Click and select Export All Images**. An arrow points from this box to the 'Export All Images' option in the context menu.

# Work Orders

- Importing an Image
  - Alternate Click in the Work Order area and select Import Image
  - Select the Image to be imported
  
- Opening an Image
  - INSITE's exported ECM images (.eif) can be opened by double clicking .eif file
  - INSITE™ will open, import the image, and automatically connect to it
    - If INSITE™ is already open, the ECM image will be imported but not automatically connected
  
- Convert to a Template
  - Alternate Click on the Image and select Convert to Template
  - Templates provide a means of configuring multiple ECM's with the same base parameter settings



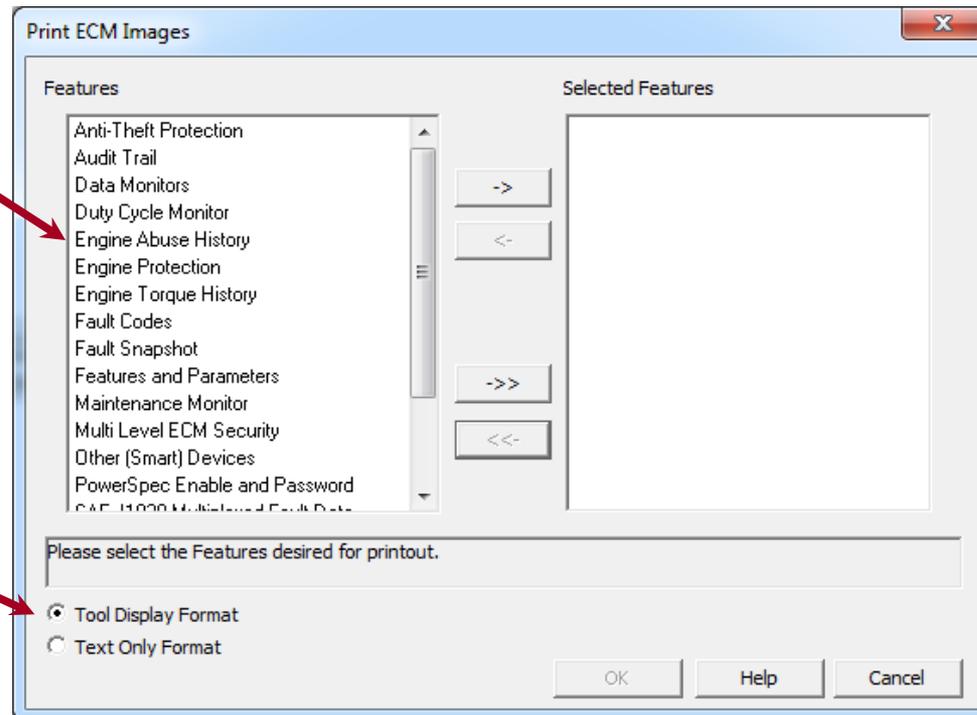
# Work Orders

## Printing ECM Images

- Select the ECM Image
  - Select File → Print
  - OR: Alternate right click – Print ECM Image(s)

**Select single features with (- >) or all with (- >>)**

**Select Tool Display for Graphical print or Text Only Format**



# Templates

Templates can be created from an ECM Image to allow transferring the same Feature and Parameter setup from that Image to multiple ECMs

- Select Image then select File → Convert → ECM Template

The screenshot displays the INSITE 8.0.0.402 software interface. The main window shows a table of Work Orders/ECM Images. The table has columns for Work Orders/ECM Images, System Type, Customer Name, Vehicle Unit Number, Engine Serial Number, Start Repair Date, and Last. The data rows are:

Work Orders/ECM Images	System Type	Customer Name	Vehicle Unit Number	Engine Serial Number	Start Repair Date	Last
SW-20181217-140010	Signature/ISX - CM870	Customer	623	10101010	17-Dec-2018 02:00:10 PM	17-D
Image-CM870 [0]						
SI-20181217-140150826	Initial					17-D
SI-20181217-140010090	Initial					17-D

The 'File' menu is open, showing the following options:

- Connect to Image
- Convert to Template(s)
- Export Image(s)
- Export All Images
- Export Image(s) to External File
- Print ECM Image(s)...
- Delete Image(s)...
- Properties...

Two red boxes with arrows pointing to the 'Convert to Template(s)' option provide alternative instructions:

- OR: Select Convert Image to Template**
- OR: Alternate click and select Convert to Template(s)**

The bottom of the interface shows a table with columns: ECM Template, System Type, Module Type, System Comment, Date And Time, and Origin.

# Templates

To send a template to an ECM, select the Template:

- Select File → Send To → ECM...

The screenshot displays the INSITE 8.0.0.402 software interface. The main window shows a table of Work Orders/ECM Images. A red arrow points from a text box to the 'Send to ECM' menu option in the context menu.

Work Orders/ECM Images	System Type	Customer Name	Vehicle Unit Number	Engine Serial Number	Start Repair Date	Last
SW-20131217-140010	Signature/ISX - CM870	Customer	623	10101010	17-Dec-2013 02:00:10 PM	17-D
Image-CM870 [0]						
SI-20131217-140150826	Initial					17-D
SI-20131217-140010090	Initial					17-D

**OR: Select Send to ECM**

ECM Template	System Type	Module Type	System Comment	Date And Time	Origin
ST-20131217-141612	Signature/ISX - CM870	CM870 [0]		17-Dec-2013 02:16:12 PM	SI-20131217-140010090

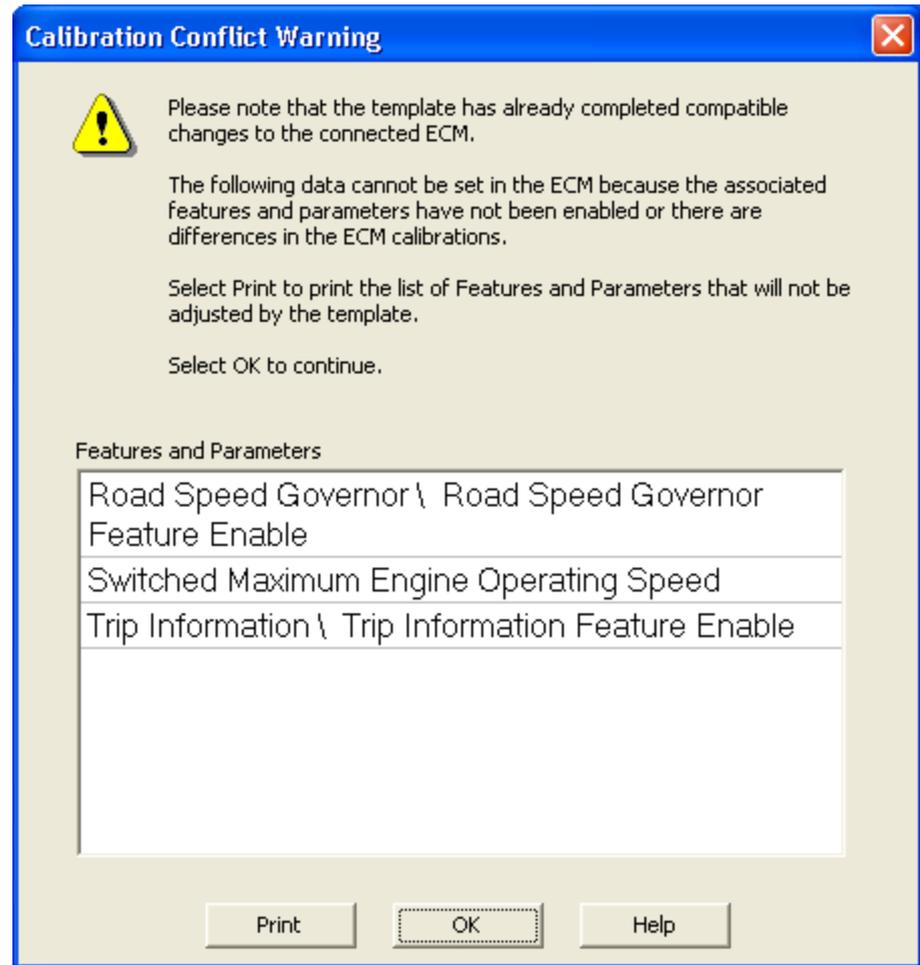
**OR: Alternate click and Send to ECM**



# Templates

## Template Report

- Ability to report which parameters were not able to be written to ECM
- User can use this to setup the vehicle accordingly



# Work Order Wrap Up

- A Work Order is the top level identifier and can contain multiple ECM Images
- Only compatible Work Orders are displayed when connected to an ECM. All Work Orders will display when not connected
- Work Order Mode is defaulted ON and can be used to create Initial and Final Images upon Connect and Disconnect respectively
- Images can be converted to Templates to allow the Features and Parameters from that Image to be transferred to other ECMs



You have concluded this section of the training.  
Please click to the next slide and continue or [Click Here](#) to return to  
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# Cummins® Inc. Update Manager

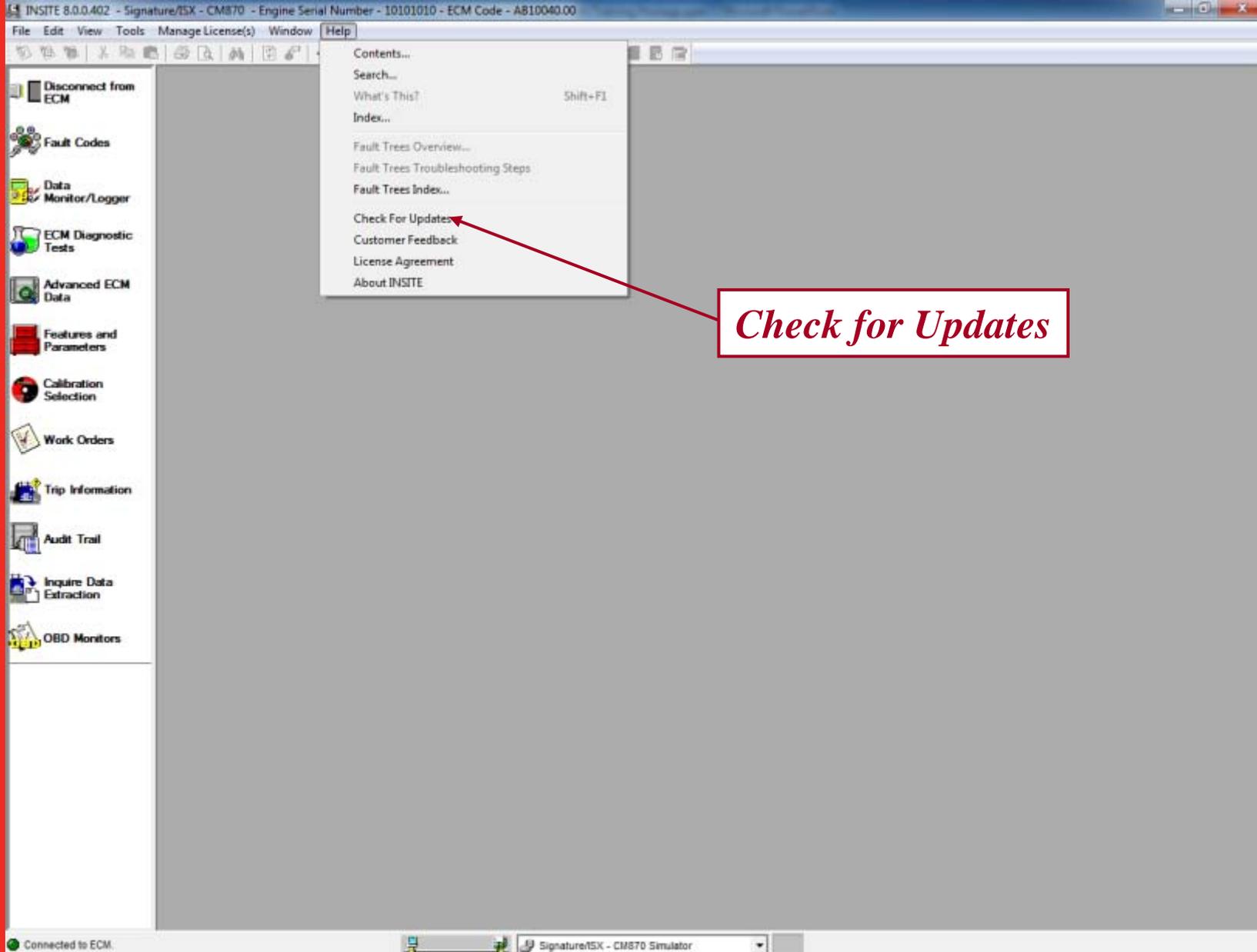
**Electronic Service Tools**

# Cummins® Inc.

## Update Manager Overview

- Provides up-to-date information for INSITE™
  - Fault Information System (FIS) files
  - Help and Manual files
  - Feature Packs
  - Service Packs
- Provides an Automatic Update Notification Alert when updates are available through the internet





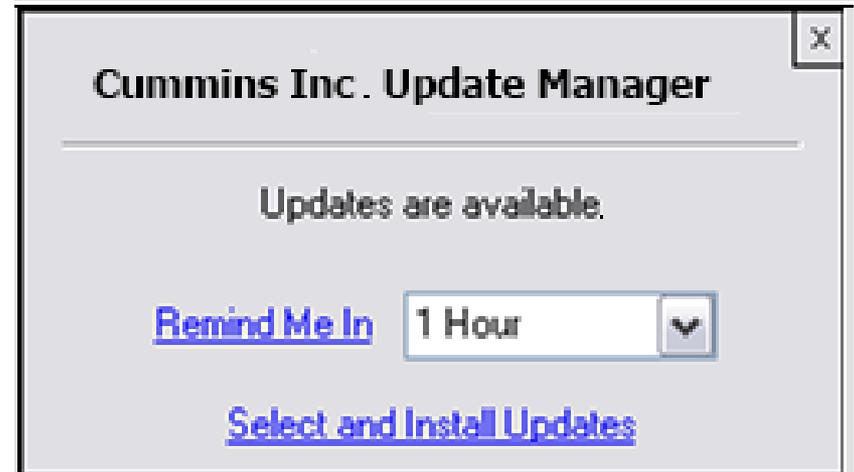
*Check for Updates*



# Automatic Update Notification Alert

The Automatic Update Notification Alert will display at a specified day and time if updates are available

Choose “Remind Me In” or “Select and Install Updates”

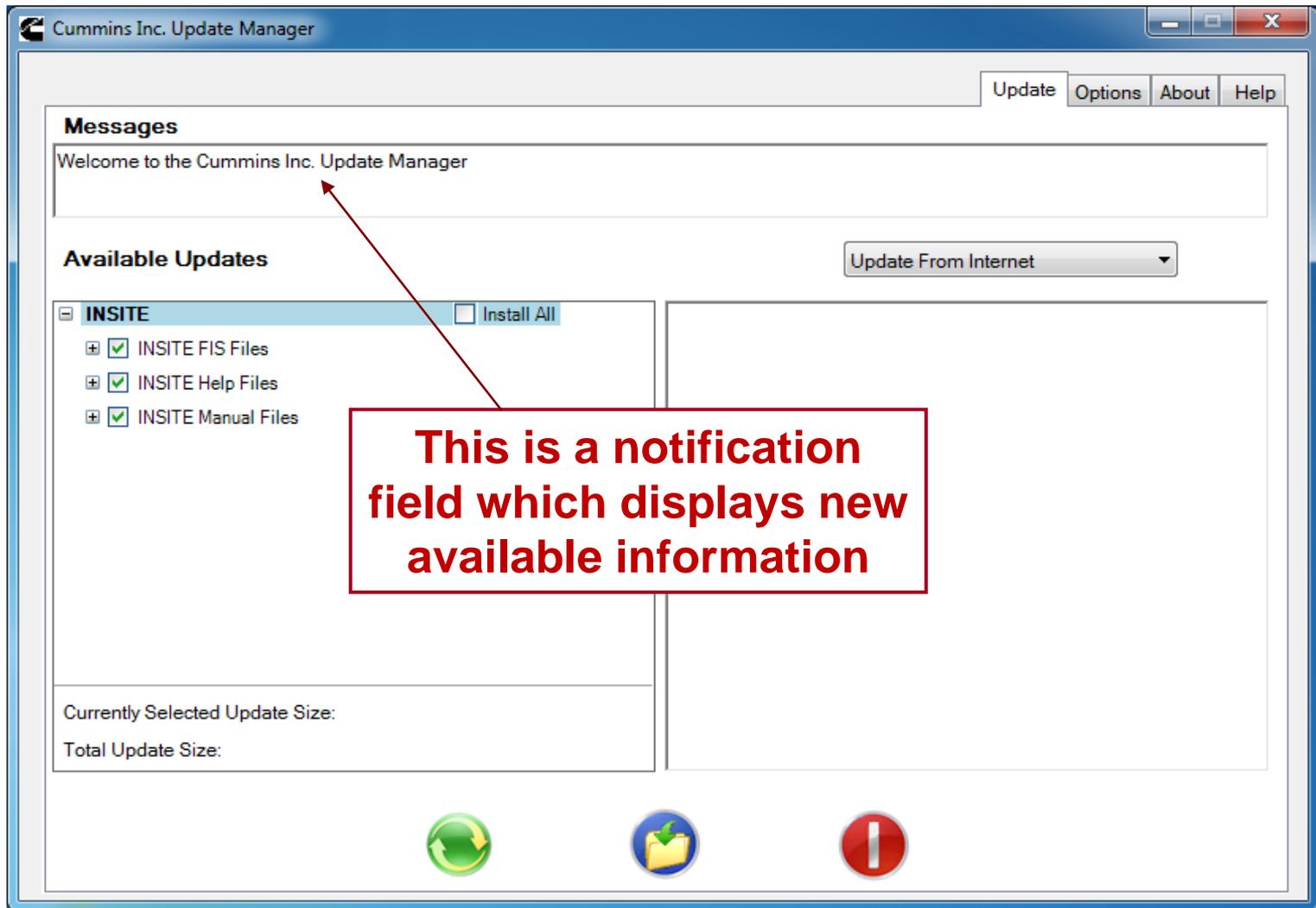


# Check for Updates Manually

- Updates can be manually checked through the following:
  - INSITE > Help > Check for Updates
  - Open the Cummins Inc Update Manager and click on “Get Updates” button in the lower left part of the window.

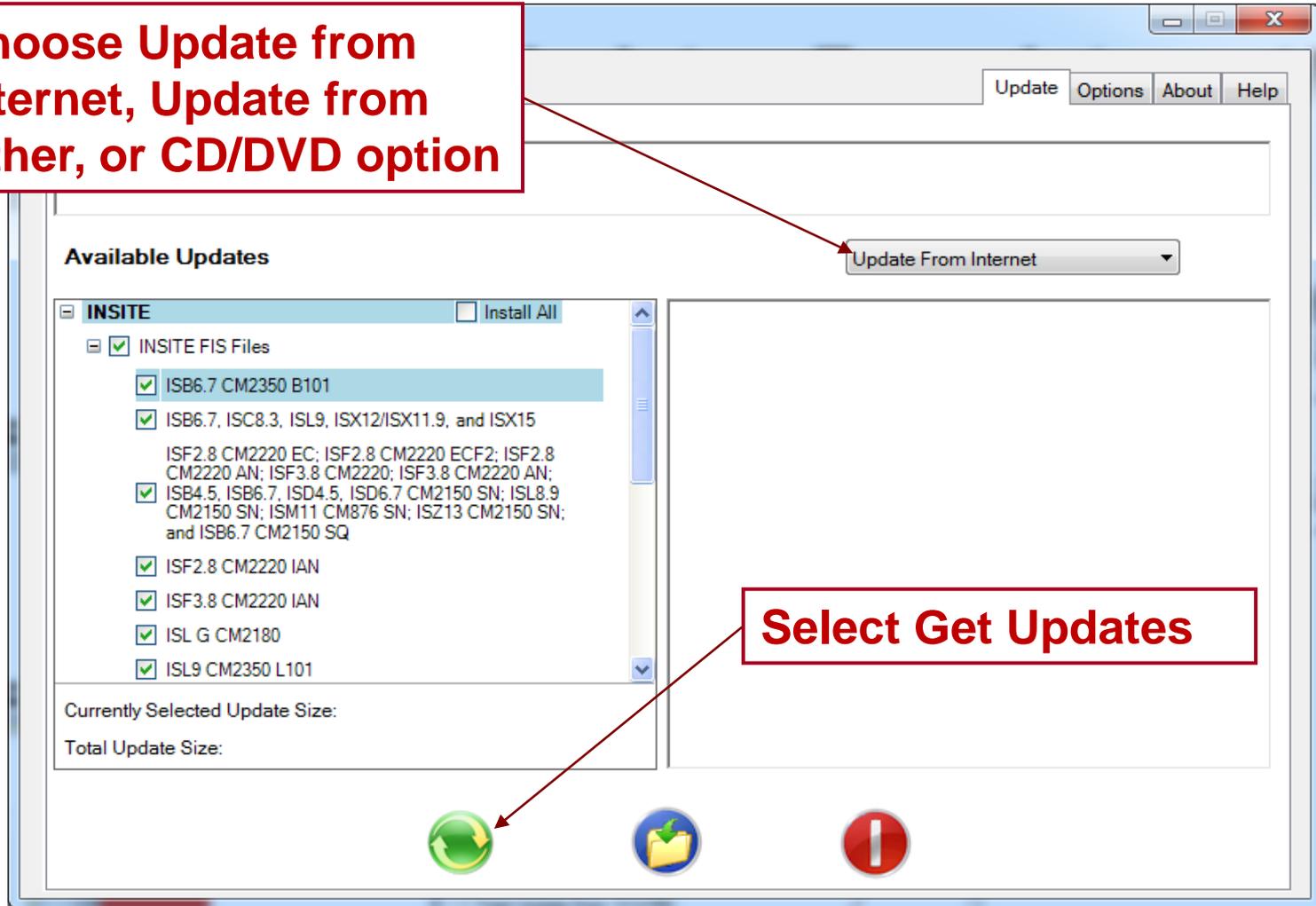


# Message Box



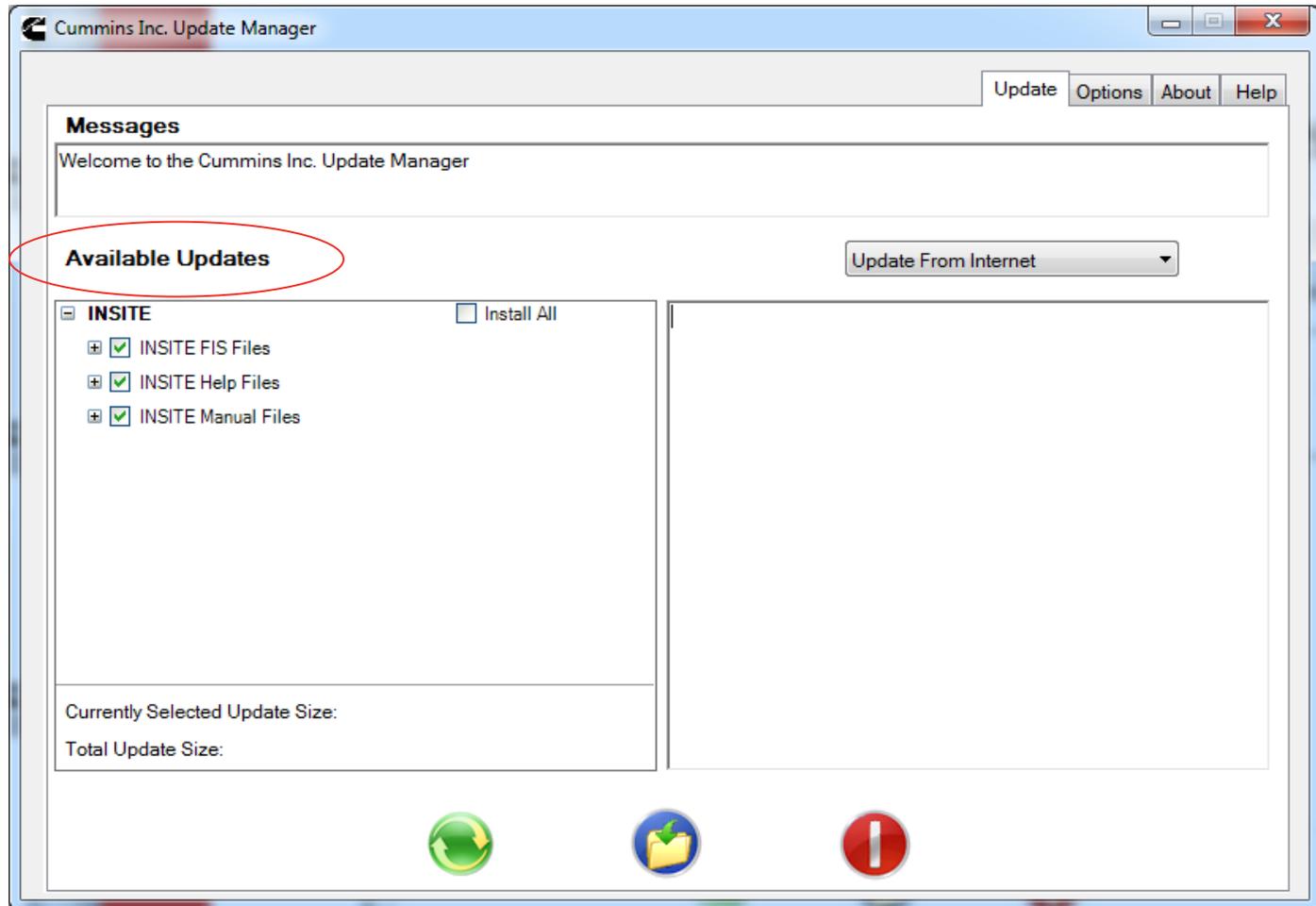
# Get Updates From Internet/CD

Choose Update from Internet, Update from Other, or CD/DVD option

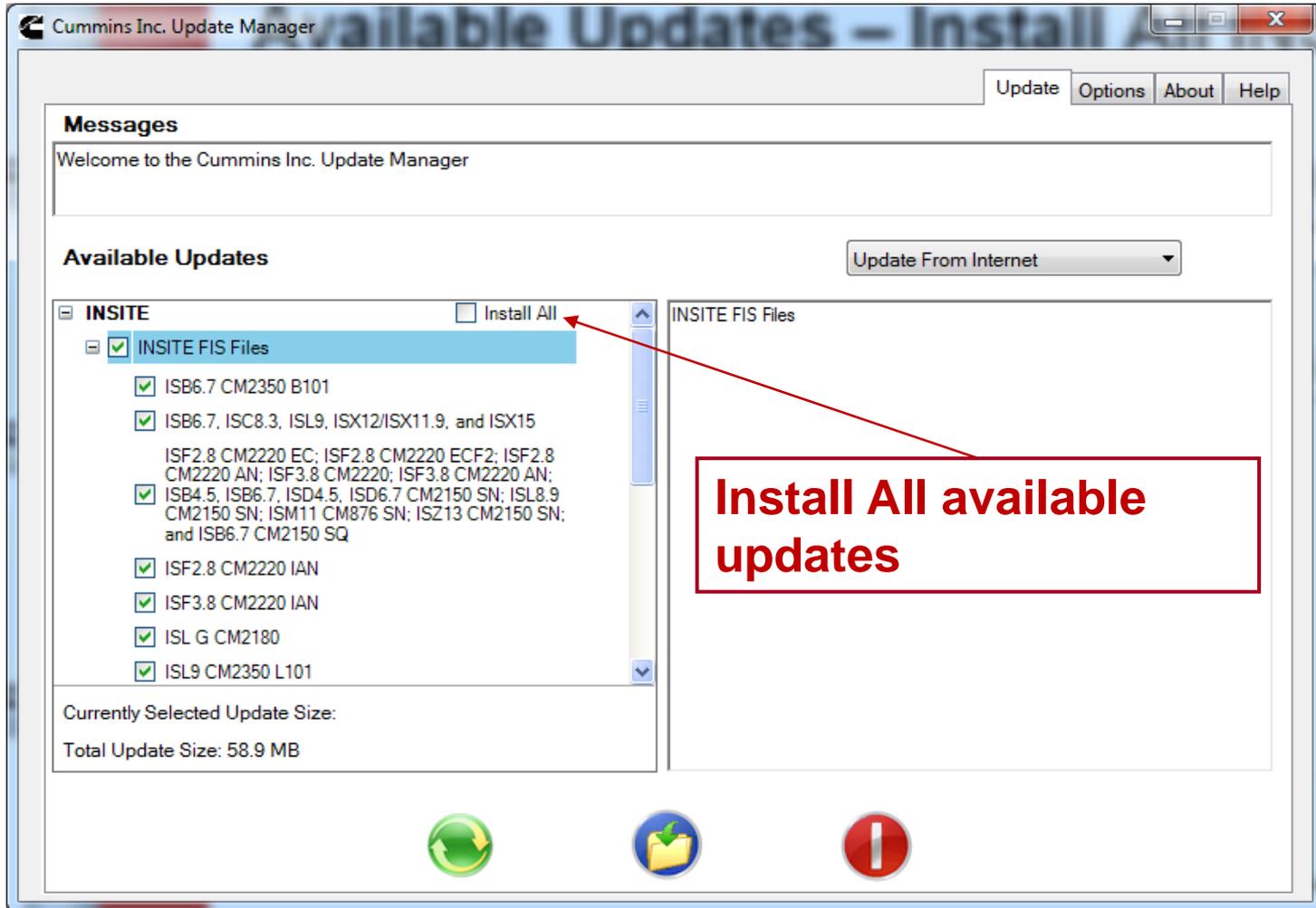


Select Get Updates

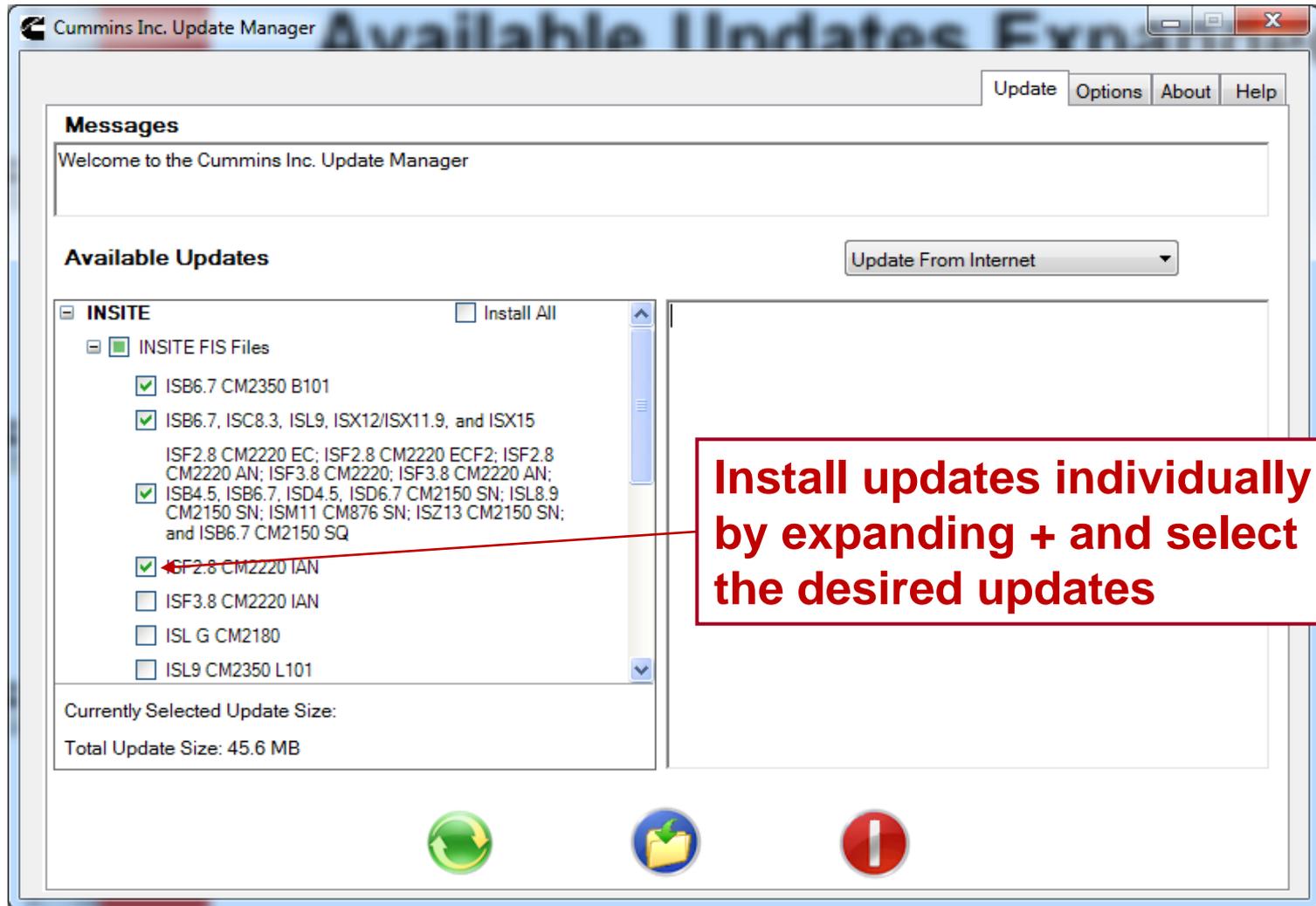
# Checking for Updates - Internet



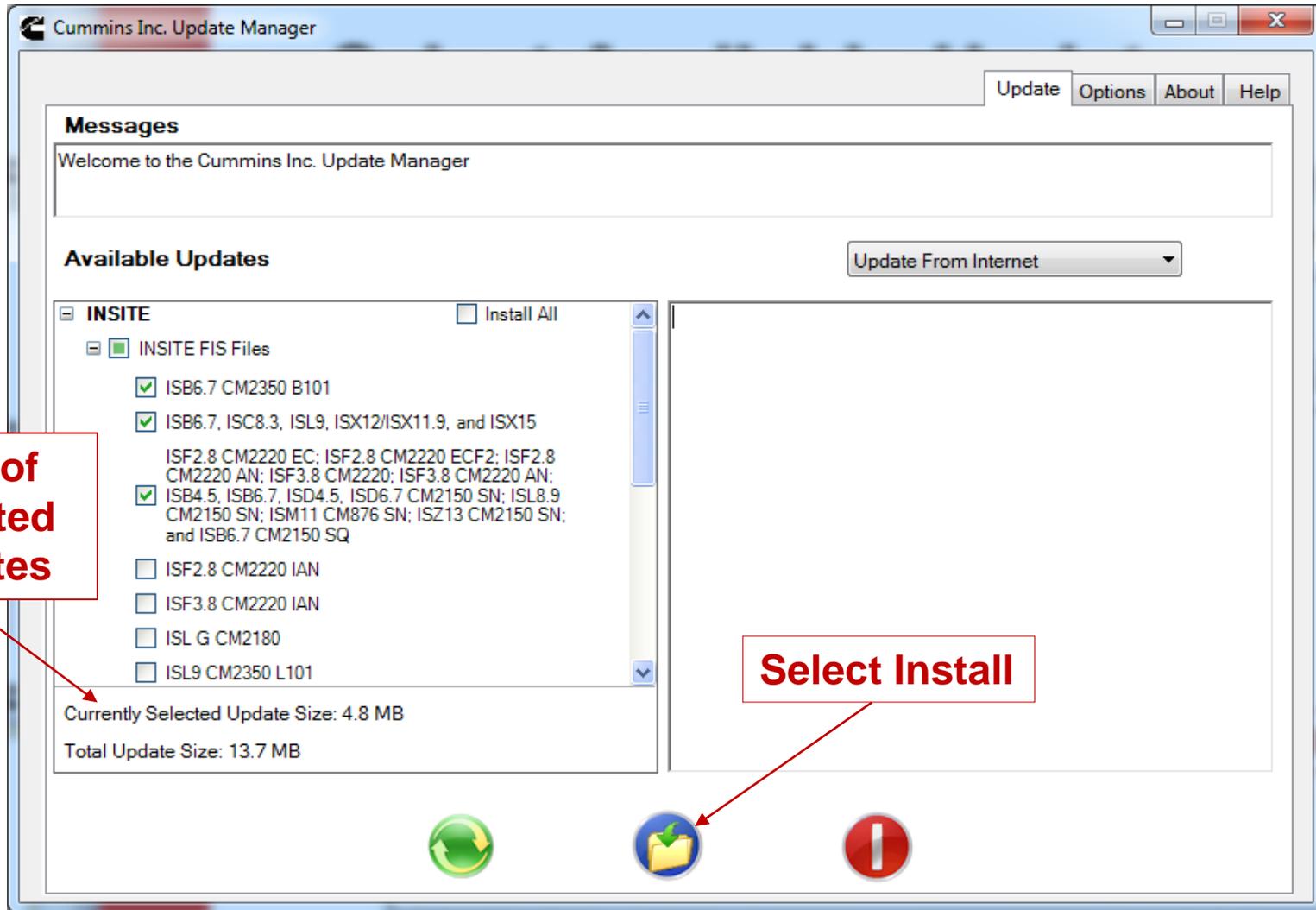
# Available Updates – Install All INSITE Updates



# Available Updates Expanded



# Select Available Updates



# Download Status Information

The screenshot shows the 'Update Status' window from the Cummins Inc. Update Manager. The window title is 'Update Status' and it has standard Windows window controls (minimize, maximize, close). The main content area is divided into two sections: 'Download Status' and 'Install Status'.  
**Download Status:** The top message says 'Updates are being installed, please wait...' followed by '18 MB out of 29 MB complete....'. Below this, the 'Download Status' section shows a 'Download Rate: 2.29 MB/s' and a list of updates: 'ISB6.7, ISC8.3, ISL9, ISX12/ISX11.9, and ISX15', 'ISF2.8 CM2220 EC; ISF2.8 CM2220 ECF2; ISF2.8 CM2220 AN...', 'ISL G CM2180', 'ISL9 CM2350 L101', and 'ISX CM871 and ISM CM876'. To the right of this list are three progress bars. The top two bars are green and nearly full, while the bottom bar is grey and labeled 'Queued for Download'. A 'Pause All Downloads' link is visible in the top right of this section.  
**Install Status:** The 'Install Status' section lists three updates: 'ISF2.8 CM2220 IAN', 'ISB6.7 CM2350 B101', and 'ISF3.8 CM2220 IAN'. To the right of each update name, the status is 'Installation Successful' in green text.  
At the bottom of the window, the text 'Cummins Inc. Update Manager' is displayed on the left, and a red circular icon with a white 'X' is centered at the bottom.



# Installation Status Information

Once the installation is complete, the installation status will be displayed.

If the installation is successful, “Installation Successful” will be displayed.

If the installation is not successful, “Installation Failed: Error XX” will be displayed along with an error code.

The screenshot shows the 'Update Status' window with the following content:

**One or more of the selected updates could not be installed.**

**Download Status**

Update Name	Status
ISB6.7, ISC8.3, ISL9, ISX11.9, and ISX15	Queued for Download
ISC, QSC8.3, and ISL	Queued for Download
ISF2.8 CM2220 E, ISF2.8 CM2220 AN, ISF3.8 CM2220, ISF3.8...	Queued for Download
ISF2.8 CM2220 E, ISF2.8 CM2220 AN, ISF3.8 CM2220, ISF3.8...	Queued for Download
ISF2.8 CM2220 E; ISF2.8 CM2220 AN; ISF3.8 CM2220; ISF3.8...	Queued for Download
ISL G CM2180	Queued for Download
ISM and QSM11	Queued for Download
ISM CM875	Queued for Download
ISM with CM870 and CM570	Queued for Download
ISX CM871 and ISM CM876	Queued for Download
KTA19GC CM558	Queued for Download

**Install Status**

Update Name	Status
Gas Plus	Installation Successful
GTA8.3 CM558	Installation Successful
ISB, ISBe2, ISBe3, ISBe4, QSB4.5, QSB5.9, QSB6.7, ISC,...	Installation Successful
ISB, ISC, ISL, ISDe, and QSB3.3	Installation Successful
ISB5.9 G CM2180	Installation Successful
	Installation Failed: Error 1002
	Installation Failed: Error 1002
	Installation Failed: Error 1002
	Installation Failed: Error 99
	Installation Failed: Error 99

Cummins Inc. Update Manager

OK

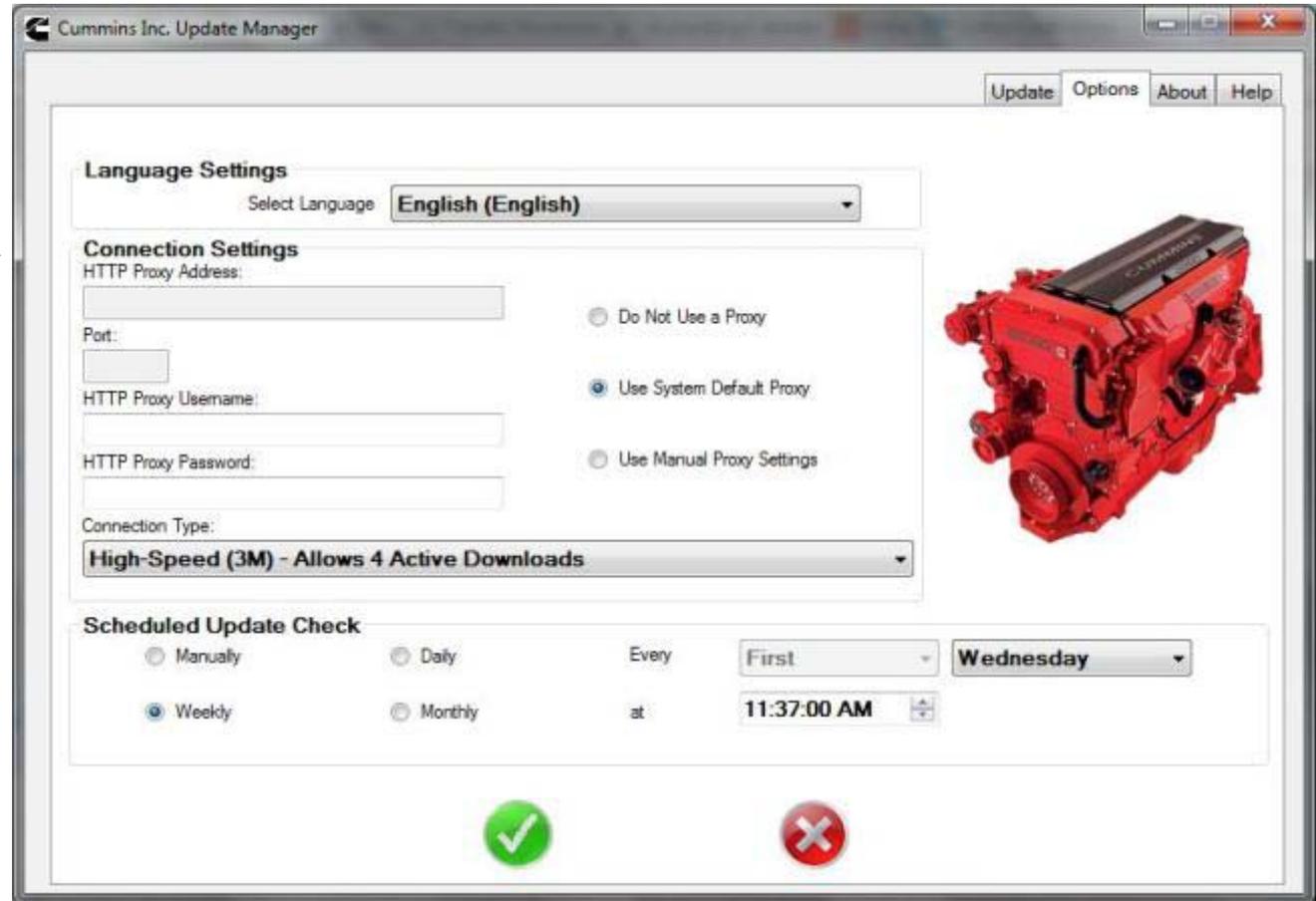


# Options Tab – Proxy Settings

Most users will not have to change the proxy settings.

For other users, the Proxy Settings will have to be entered.

Contact local IT support for help with Proxy settings.



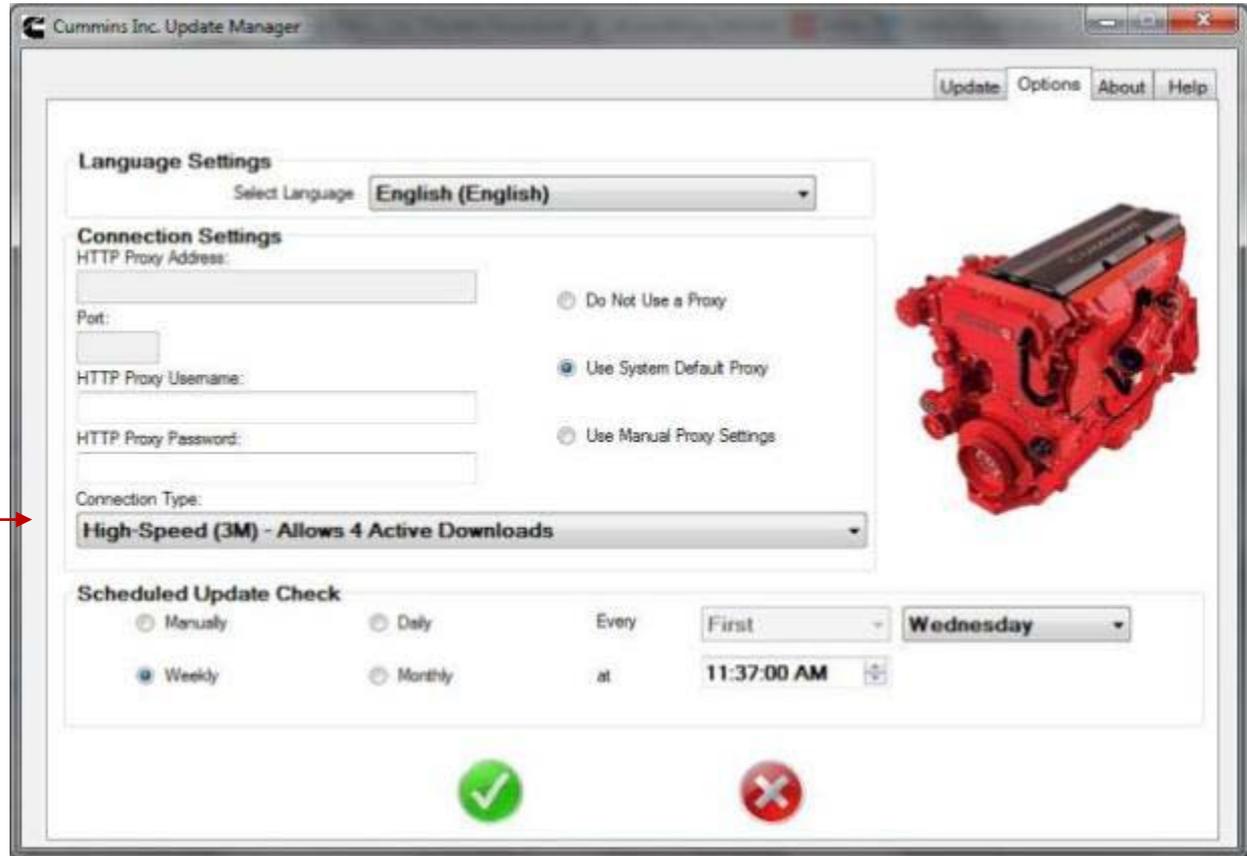
The screenshot shows the 'Options' tab of the 'Cummins Inc. Update Manager' application. The window title is 'Cummins Inc. Update Manager' and it has menu options for 'Update', 'Options', 'About', and 'Help'. The main content area is divided into three sections:

- Language Settings:** A dropdown menu labeled 'Select Language' is set to 'English (English)'.
- Connection Settings:** This section includes input fields for 'HTTP Proxy Address', 'Port', 'HTTP Proxy Username', and 'HTTP Proxy Password'. To the right of these fields are three radio button options: 'Do Not Use a Proxy', 'Use System Default Proxy' (which is selected), and 'Use Manual Proxy Settings'. Below these is a 'Connection Type' dropdown menu set to 'High-Speed (3M) - Allows 4 Active Downloads'. To the right of this section is a large image of a red Cummins engine.
- Scheduled Update Check:** This section has radio buttons for 'Manually', 'Weekly' (selected), 'Daily', and 'Monthly'. It also includes a frequency dropdown set to 'Every First' and a day dropdown set to 'Wednesday'. Below these is a time field set to '11:37:00 AM' with a small icon to its right.

At the bottom of the window, there are two circular icons: a green checkmark on the left and a red 'X' on the right.

# Options Tab – Connection Types

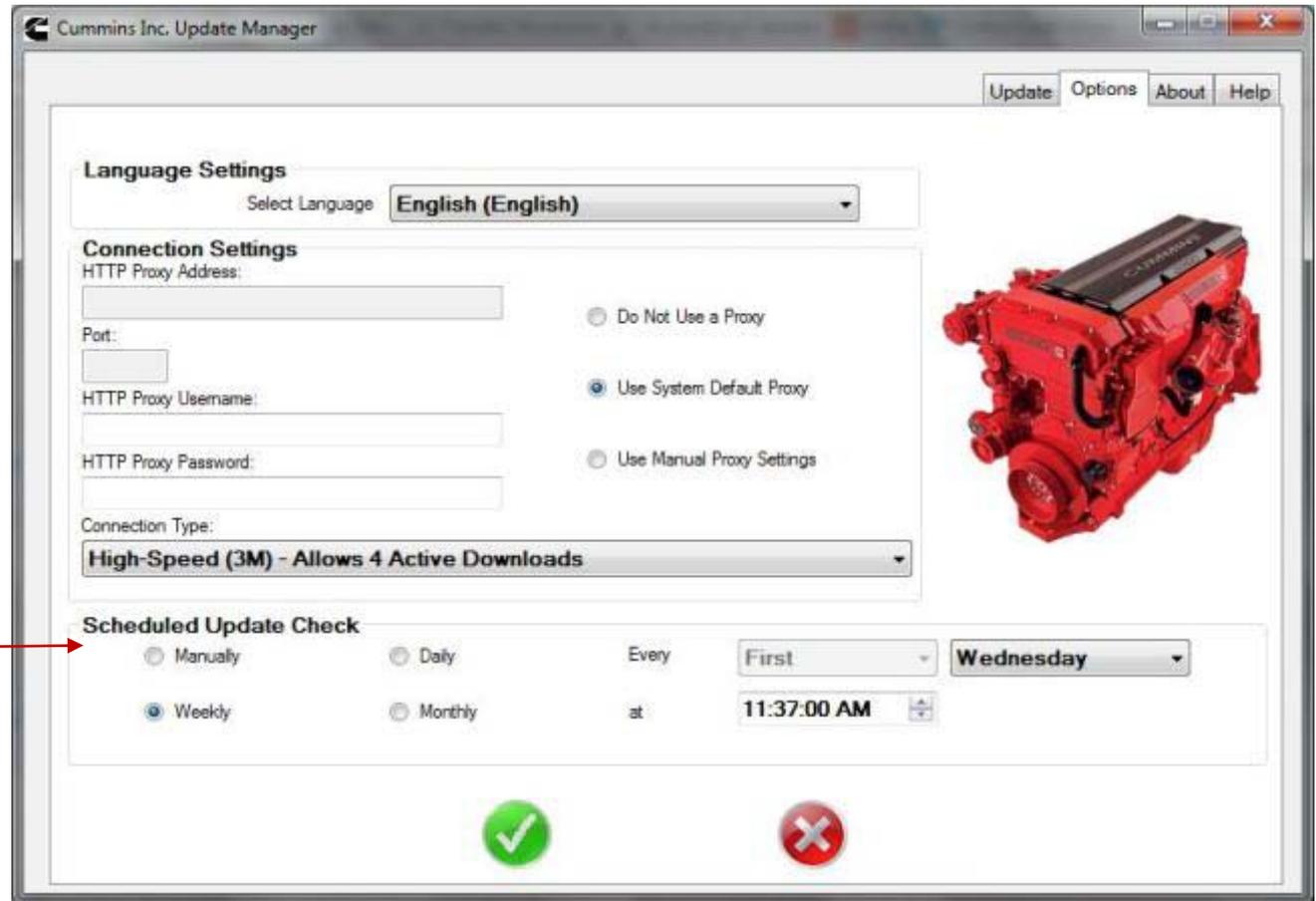
Connection Type for users who want to vary their connection option.



# Options Tab – Scheduled Update Check

The default Scheduled Update Check is once a month.

This can be changed to Daily, Weekly, Monthly or Manually.



Update Options **About** Help



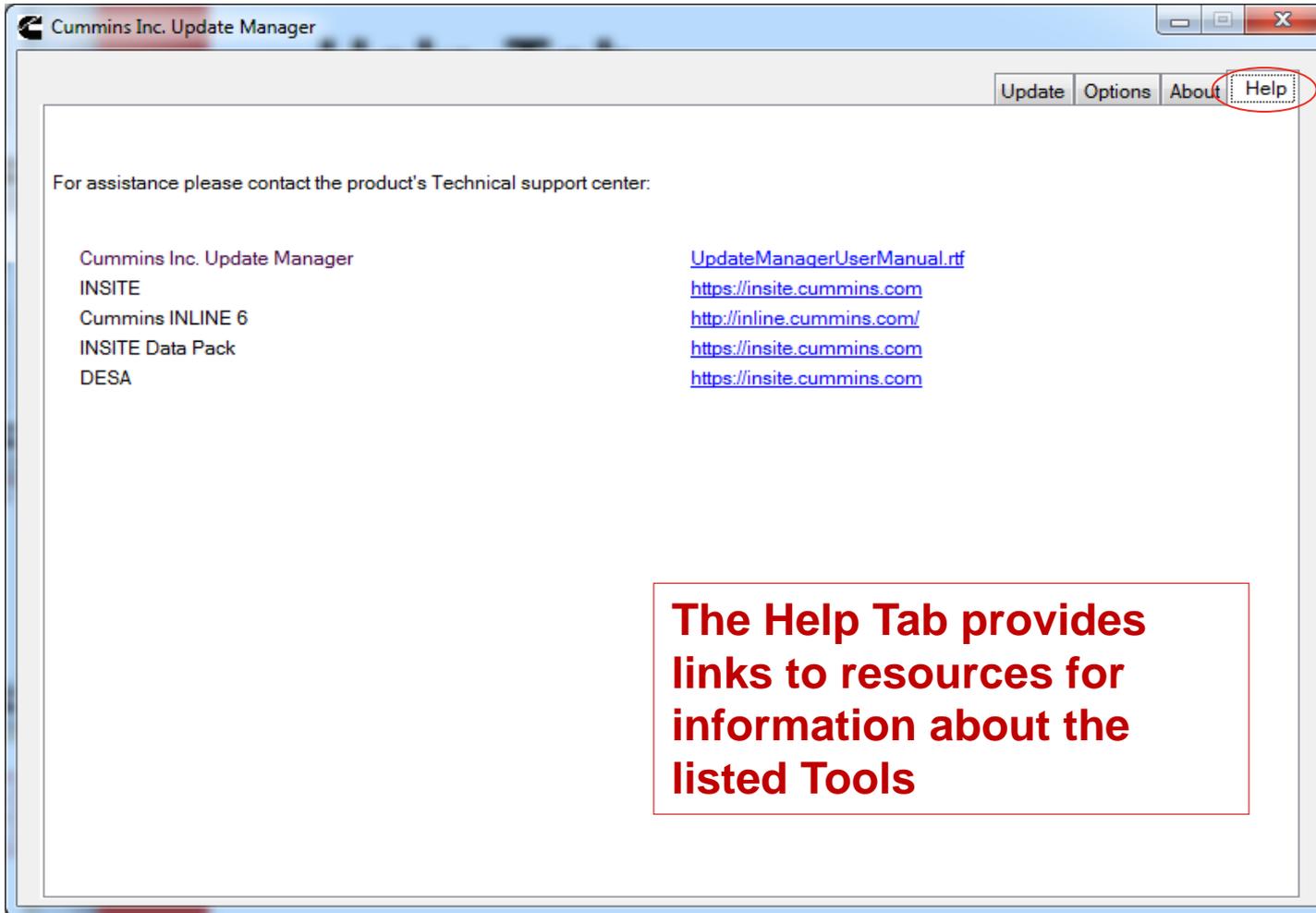
**Version: 4.0.0.10**

**Copyright 2013, Cummins Inc.**

<http://www.cummins.com>



# Help Tab



# Help Tab

## Cummins® Inc. Update Manager

### About

The Cummins® Inc. Update Manager provides a means of delivering software, Fault Information System (FIS), Help File, and User Manual updates. Updates can be downloaded over the internet, from a Cummins® DVD or another location such as a network drive or removable media device. Using Cummins Inc. Update Manager is an easy way to keep the electronic service tool and its supporting data as current as possible.

Cummins Inc. Update Manager can be opened manually at any time or it can be configured to issue a reminder at regular intervals.

*Note: Files cannot be updated while the application is running. Ensure the application is closed before installing updates.*

Perform the following steps to obtain updates:

1. Open Cummins® Inc. Update Manager by performing one of the following steps:
  - Within the application, select **Help > Check for Updates**
  - From the Windows Start menu, select **All Programs > Cummins® Inc. Update Manager**
  - When the Cummins Inc. Update Manager reminder window opens, click on the **Select and Install Updates** link.
2. Select **Update From Internet, Update From DVD** or **Other** from the drop-down menu at the top of the screen.
3. Select the **Get Updates** button.
4. Cummins Inc. Update Manager will check for updates. This process may take several minutes. A rotating globe will appear in the upper right-hand corner of the screen.
  - If updating from the internet, Cummins Inc. Update Manager will connect to a Cummins® web server and compare the applications version and files on the PC to the files on the server.
  - If updating from a DVD, Cummins Inc. Update Manager will compare the applications version and files on the PC to the files on the DVD.
  - If updating from a network drive, when **Other** is selected, a window will open to enter or Browse to another location for the update files. Cummins Inc. Update Manager will compare the applications version and files on the PC to the files on this location.
5. If updates are available, they will be listed in the window pane under **Available Updates**.
6. Select the desired updates by either highlighting the item or clicking on its checkbox. When an item is selected, its description is displayed on the right-hand side of the screen. The **Total Update Size** of all selected items is displayed in the lower left-side of the screen below **Currently Selected Update Size**. Click on an item again to deselect it.  
Selecting the top level box will also select all updates listed below it. Clicking on the  will expand the listing.
7. Once the desired updates have been selected, click on **Install**.
8. Cummins Inc. Update Manager will start downloading the selected updates. Depending on the total update size and the speed of the internet connection, this may take several minutes. Cummins Inc. Update Manager will display a progress bar.
9. Once the updates have been downloaded, Cummins Inc. Update Manager will install the updates.



# Cummins® Inc. Update Manager Wrap Up

- Provides up-to-date Fault Information System (FIS) files, Help files, Feature Packs and Service Packs
- Automatic Update Notification
- Scheduled update checks



You have concluded this training package.  
[Click Here](#) to return to the Table of Content.

