TECH TIPS

Subaru Service and Technical Support Line Newsletter

April 2016 — SUBARU

SPECIAL EDITION

ARTICLES CONTAINED IN THIS ISSUE

01 SAVING AND PRINTING FREEZE FRAME DATA

We would like to take a few moments to address a concern which has been discussed in every Service department, and with every Technician over the past approximately 2 years. FSEs have most likely had the conversations with you about this, as well as Techline reps and the Tech Trainers have been providing reinforcement of it as part of their instructor led training classes.

What we're referring to is the electronic saving of data collected using the SDS Notebook. Some say, "We never had to do this before". As a technician performing a repair, we have ALWAYS had to keep, and be able to provide on request, all notes and data required as part of making a repair, especially those covered by Warranty. Refer to section 13.2 of the Claims Policy and Procedures Manual on Subarunet. "It is the responsibility of the retailer to maintain documentation supporting all claims submitted by the retailer to SOA for reimbursement. All documents should be retained and readily available for review and verification by an SOA representative. SOA requires that documentation be retained for the time period required by Federal, State and Local statutes or for a minimum of 2 years."

Using the SDS Notebook to save this data is faster and more efficient than the old way of printing, walking to the printer, and stapling it to the RO. With printed data, if the data was requested (or worse the car returned), someone had to go to the customer file, retrieve the document, remove the staple, copy the document, fax the document, then reattach all the paperwork and return it to the file. It's easy to see why saving the data electronically is a better use of everyone's valuable time.

When printing Freeze Frame data as an example, the printed copy cuts off at least one, sometimes more than one column of data and prevents access to the actual event data which FHI engineers absolutely need to have. In fact, this information is so important, FHI will no longer accept a printed copy of any collected data from SOA. So now, not only is printing environmentally wasteful and time consuming, from a practical standpoint it's a complete waste of everyone's time.

If you print out your Freeze Frame data and your print out shows a file location such as shown below, you can still navigate to it by searching that file location. This way, the electronic version can still be retrieved and shared with anyone who requests it.

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ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.

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QUALITY DRIVEN® SERVICE

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With all of this in mind, make sure you immediately start saving EVERYTHING ELECTRONICALLY!!

> **Freeze Frame Data Display**
> Date   **Wednesday, December 09, 2015**
> Time   **15:12 C:\Users\Subaru\Documents\JF2SJGPCXEH523163 P0171.ffd**
> System   **Engine Control System**

DTC and Freeze Frame Data should be saved EVERY time the SDS Notebook is connected to the vehicle for diagnostic purposes.

Start by creating a new folder in "My Documents" on the notebook. (Folder name example—G3233396 <Trouble symptom or DTC>-RO 12345-<Retailer code>)

Then, collect Current & History codes module by module not just with an all system check. Each time data is collected, it must be identified as to what they are. (File name example—G3233396-ECM Freeze Frame <DTC>-<Retailer code>) saving those files to the folder you just created.

It is always recommended Technicians print the diagnostic trouble tree, fill in the results to each step as they go through the diagnostic process, then attach their results to the RO, or if possible, scan and save it in the same folder.

None of us had to do this before. However, technology has evolved, and whether we like it or not, we must evolve in how we approach diagnosing and repairing utilizing this new technology. It only appears difficult because we're not used to doing it. Initially, it may take just a little longer because it's new and unfamiliar but, it will become second nature and quick after doing it a few times.

Remember, by supporting the process, you will limit any claim concerns that may come up later as a result of incomplete documentation. Perhaps even more importantly, whenever a vehicle comes in, you and the other Technicians in your retailer will have access to all the vehicle's past data including prior codes, FFD, and known good driving files for reference which could be valuable time savers.

Don't forget to regularly back up the data you save in My Documents following your company's data retention policies and procedures. Remember, the SDS Notebooks are leased and will go away after a time, plus any device can crash unexpectedly and data may be lost as a result. So, regular backups are STRONGLY recommended. See your retailer internal IT liaison for details.

An excerpt from the February 2015 Tech Tips:

IMPORTANT REMINDER: It is imperative all collected Freeze Frame Data (FFD) be saved electronically. Faxing or e-mailing scanned print-outs or screen captures of FFD is no benefit to anyone requesting the data. A recent TSB, 01-172-14, was released on this and other Select Monitor III-related usage topics during August, 2014 which included screen shots with step-by-step instructions outlining the necessary procedures to follow for saving and e-mailing FFD and SSMIII data files. For those unfamiliar with TSB 01-172-14, please locate it on STIS at your earliest opportunity and become familiar with this very important, time-saving information."

With the release of the April 2016 SSM4 software, you may notice some changes to the application and the functions that it provides. In the following, you will find some of the key features added and how to utilize them to your advantage as a Subaru Technician.

1. Screen lock Icon

Locking the screen on the SSM4 is now available with the release of the April 2016 software. This feature will prevent inadvertently selecting an option on the screen which could interfere with the process you are following. Below in figure 1, you can see the lock button in place of the option button.
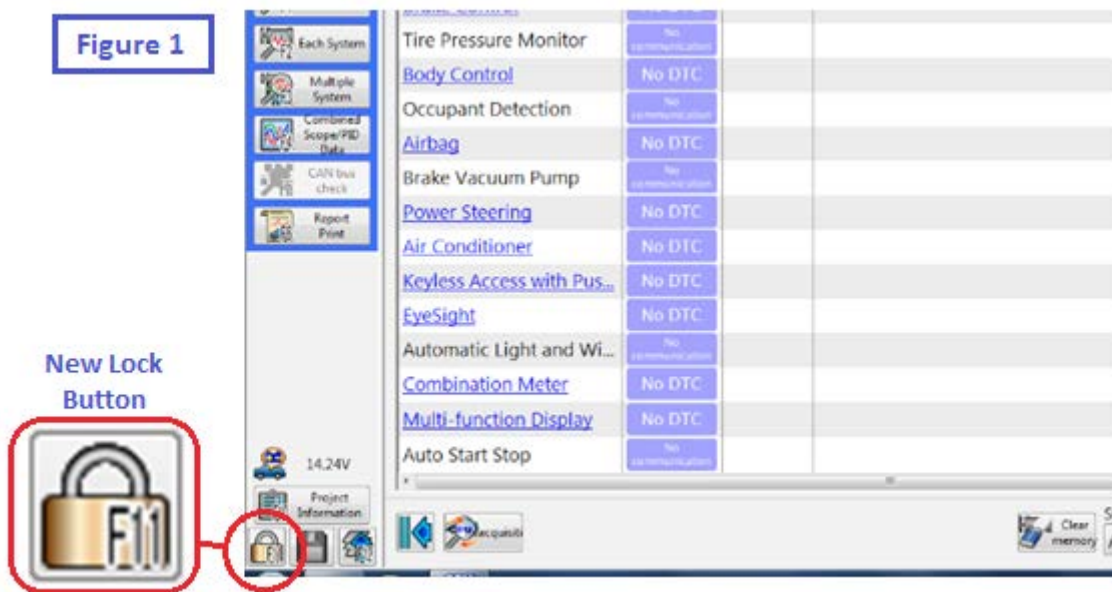
To enable the screen lock function, press and hold the option button. Once the option button switches to the lock symbol, the SSM4 screen is in the lock state. In order to unlock the screen, the same process will need to be followed. This process can be seen below in figure 2.

Figure 3 — April 2016 Version
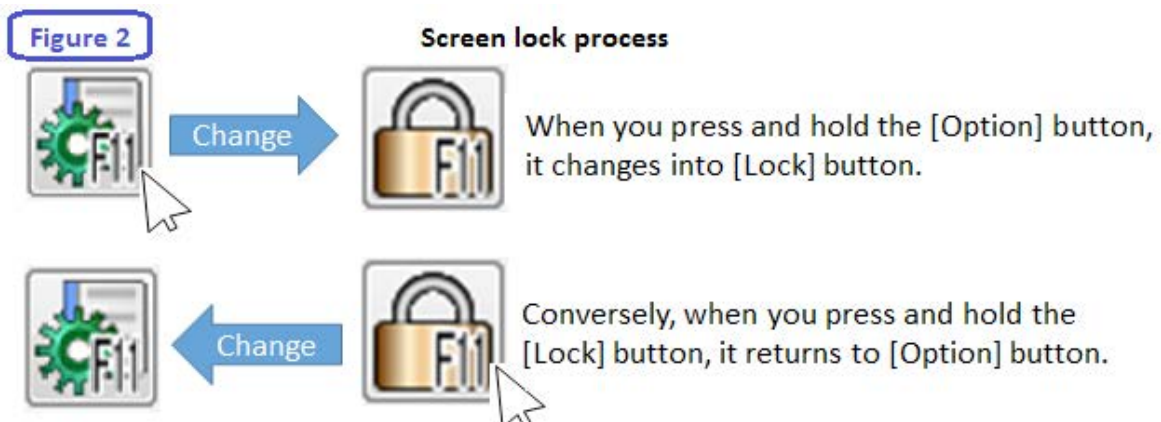
2. Freeze Frame Data

When viewing the All System Scan on the SSM4, you will now be able to view the freeze frame data on the same screen. Another feature will be that the freeze frame data is automatically saved in the project file along with the All Systems Scan. Figure 3 shows how the April 2016 SSM4 All Systems Scan will be viewed with this new feature. Note that now you can select to view the freeze frame data by clicking on the icons in the FFD column when viewing the All Systems Scan.
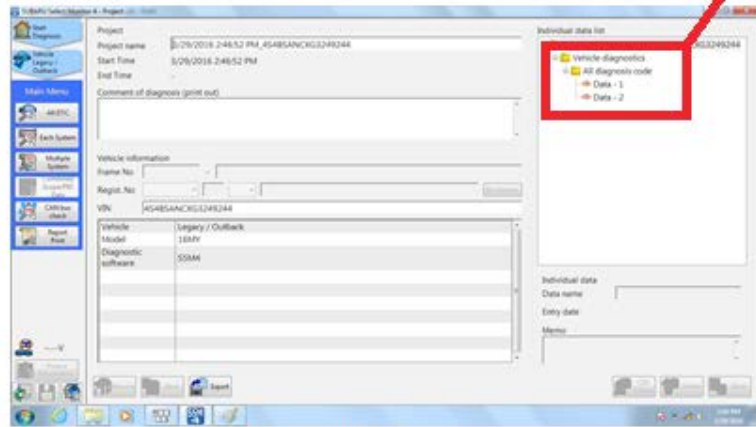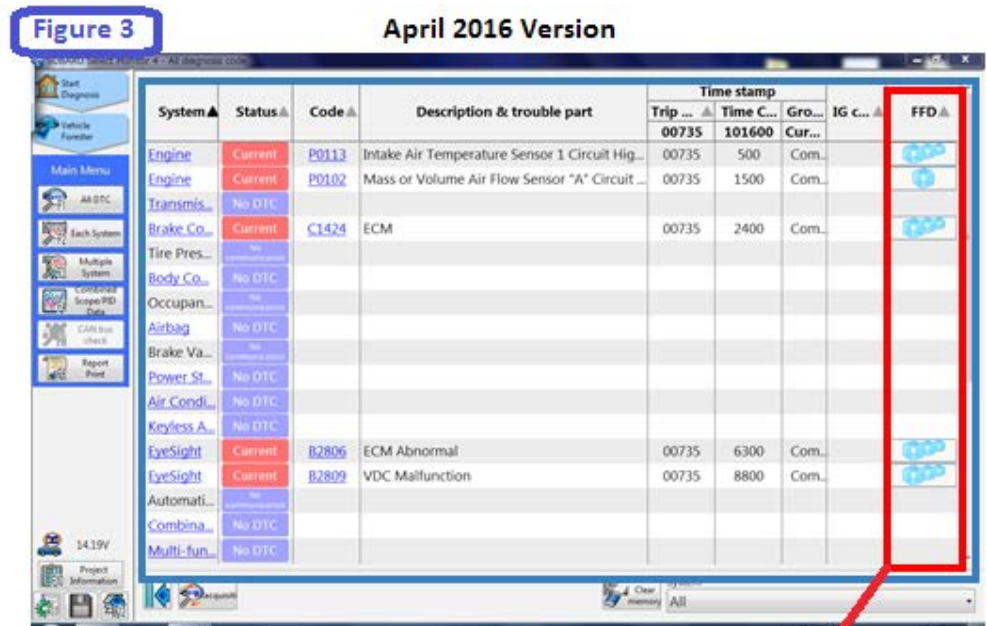
[Project] menu

3. Oscilloscope Changes

Oscilloscope data viewed in the current data display of the control module for which you are monitoring can now be viewed at an asynchronous interval. Prior to the release of the April 2016 SSM4 version, the oscilloscope data could only be viewed at the same interval (synchronous) of the control module current data. Another change you will see under the Select Signal menu is the name of the measurement category which has changed from "ANA" to "OSC". Figure 4 shows a screenshot of the analog settings menu in which you can now select a sampling interval of Synchronous, 2ms, 3ms, 6ms, and 15ms. Figure 5 shows a screen shot from the Select Signal menu with the new name of the measurement category.
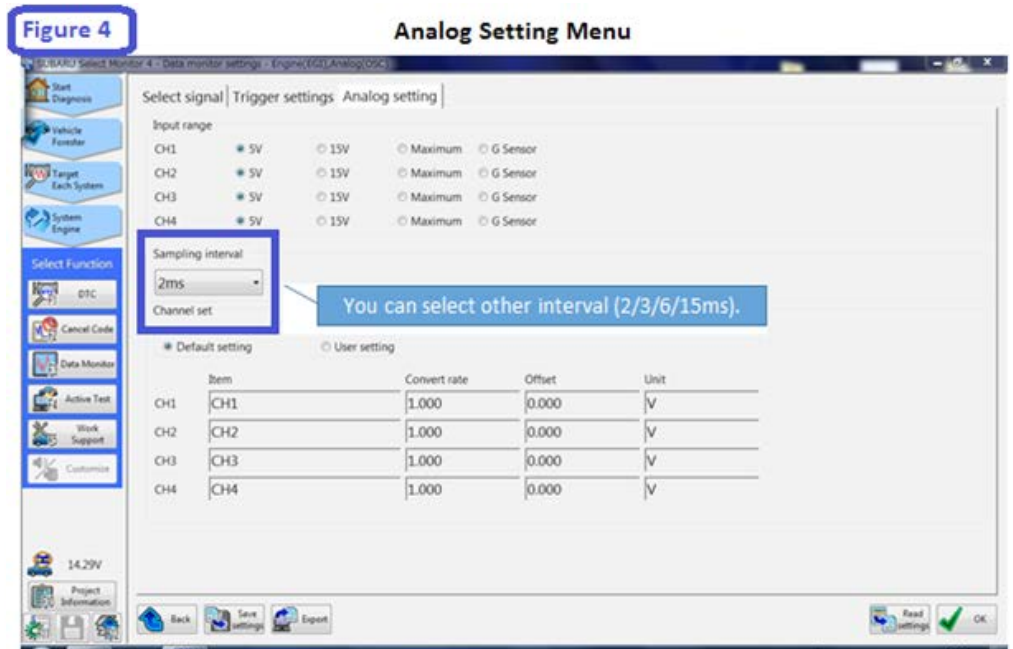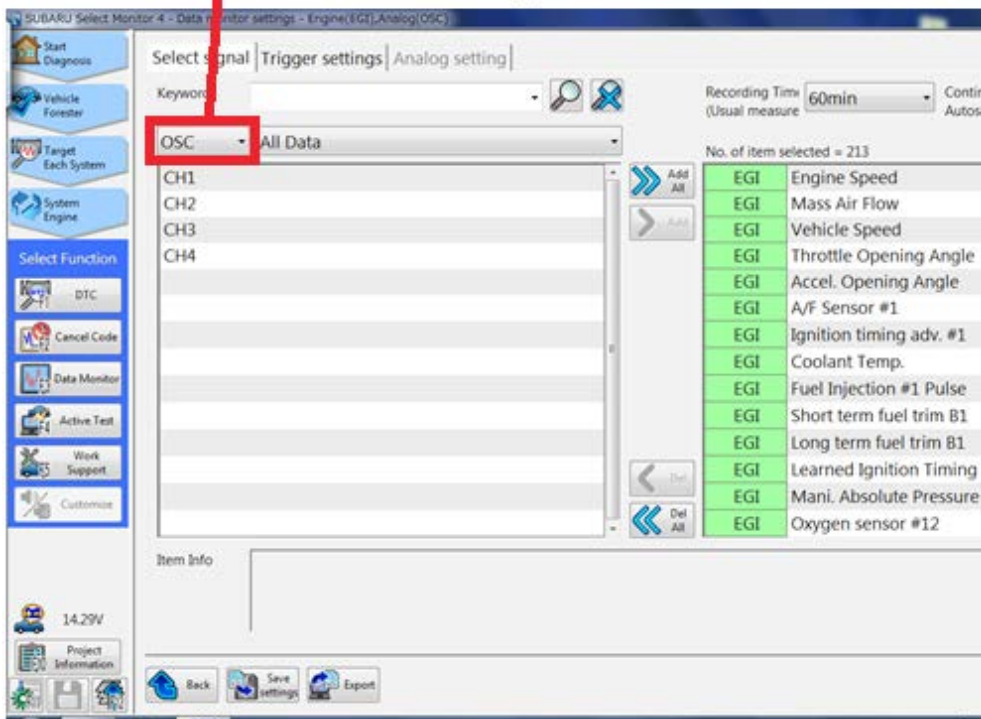
Figure 4

Analog Setting Menu


Figure 5

OSC

Select Signal Menu

4. Customized Setting Changes

You can now save the customized settings of the Body Integrated Unit as a setting file in the vehicle project information. Accessing this file will allow you to change the current settings of the Body Integrated Unit to match those in the setting file if, for example, the Body Integrated Unit has been replaced or the customer has purchased a new Subaru and would like the settings adjusted to their previous vehicle. Figure 6 shows the new function icons available with the new SSM4 software.

Figure 6

Customize Menu
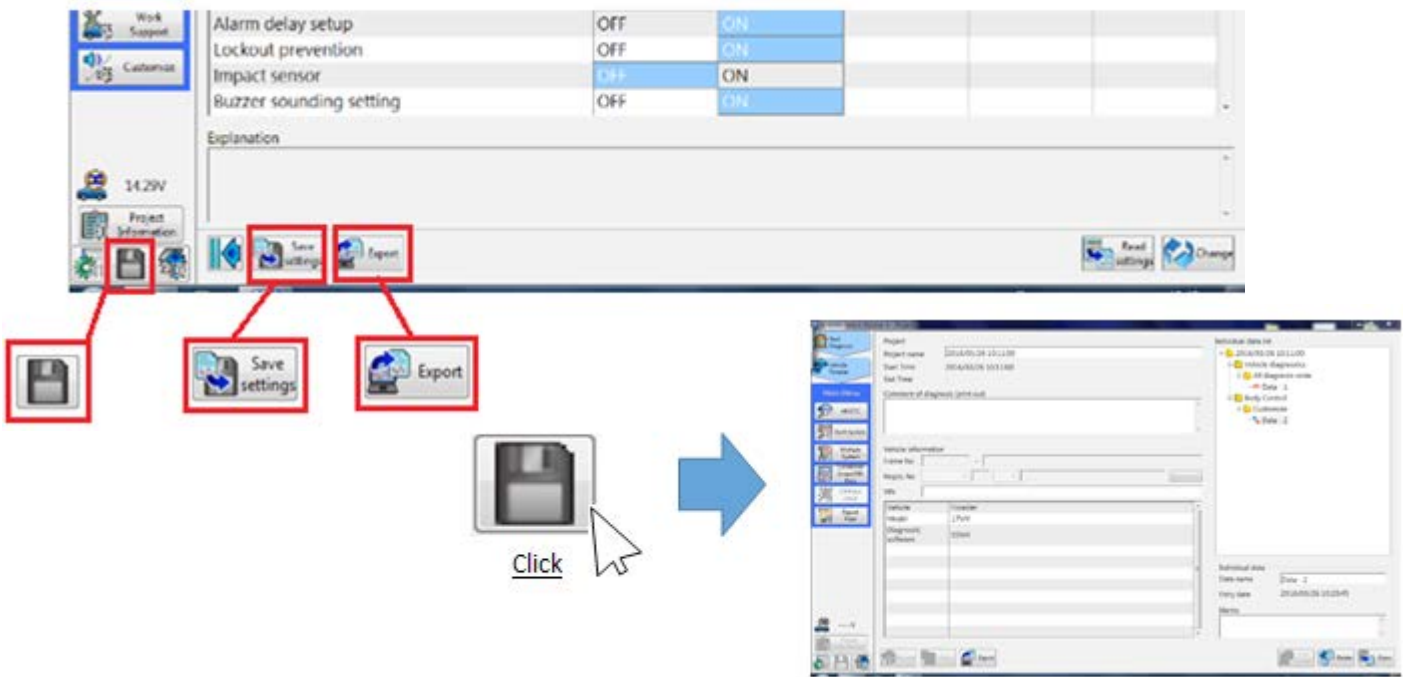
Click the save button to open the project information screen.
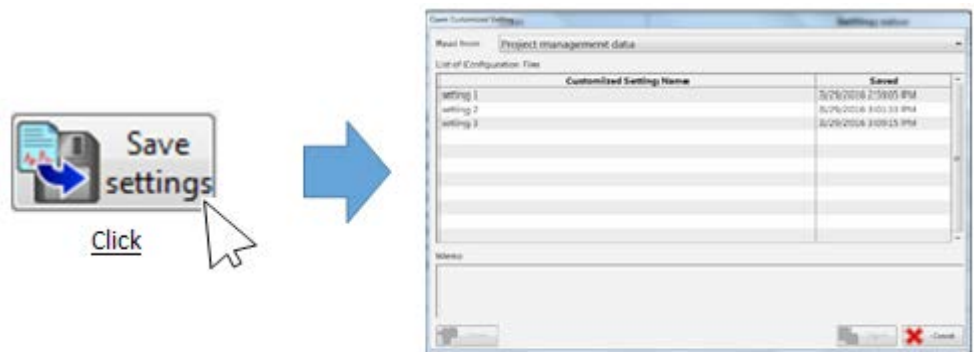
Click the Save Settings button to save the vehicle's customized settings.

The Export function will enable you to export the saved settings file.

2016033008490 8761.SECF

When viewing the customized settings function of the SSM4, you will now see three colors depicting the status of each setting. Figure 7 shows this new feature, and shows how the color corresponds to the status of each setting selection. The orange cell depicted below represents a selection from a saved setting file, which was explained in figure 5.

Figure 7

Body Control System Customized Settings

Changed value

If you select a new setting value which is different from the "Current Setting Value", the cell of this new value become highlighted in yellow.

Setting Reading Val.

"Setting Reading Val." is defined by a saved setting file which you open. If a "Setting Reading Val." value is different from the "Current Setting Value", the cell of this value is highlighted in orange.

5. Open Project Menu

You will now notice when viewing the Open Project menu, the "Brand" column will no longer be seen with the project management data. Figure 8 shows you the difference between the April 2016 SSM4 version versus the previous version.

Figure 8   January 2016 Version
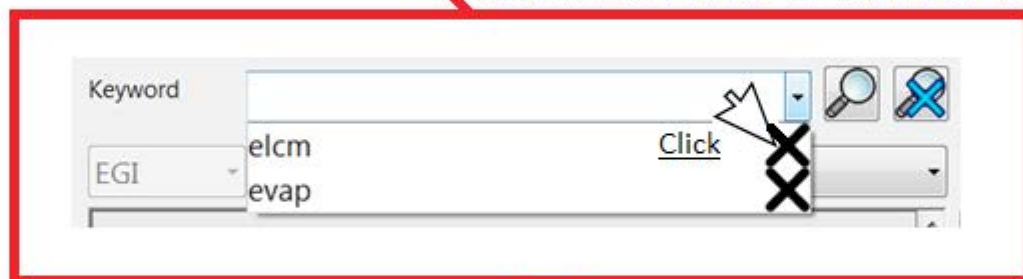
April 2016 Version

6. Search History

Previous search keywords in the Monitor Settings menu will now have the option to be deleted if they are no longer needed. Figure 9 highlights the process to delete keywords from the search history log.
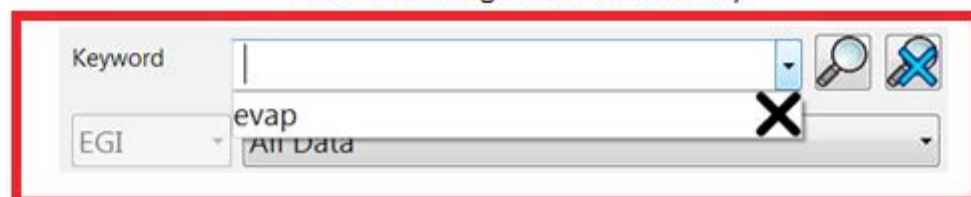

Figure 9 — Data Monitor Settings Menu

Place the cursor on the '"X" and click to delete

"elcm" is no longer in search history

7. Target models for SSM4

Additional models will now be supported by the SSM4 with the release of the April 2016 version. Targeting more vehicles with the SSM4, along with these new features, will help to enhance the diagnostic process necessary in the field. Below is a list of additional models and the model years applicable.

<u>Additional Models</u>

Legacy/Outback 15MY
WRX/STI 15MY
Impreza 12MY - 15MY
Crosstrek 13MY - 15MY
Forester 14MY - 15MY
BRZ 13MY - 15MY