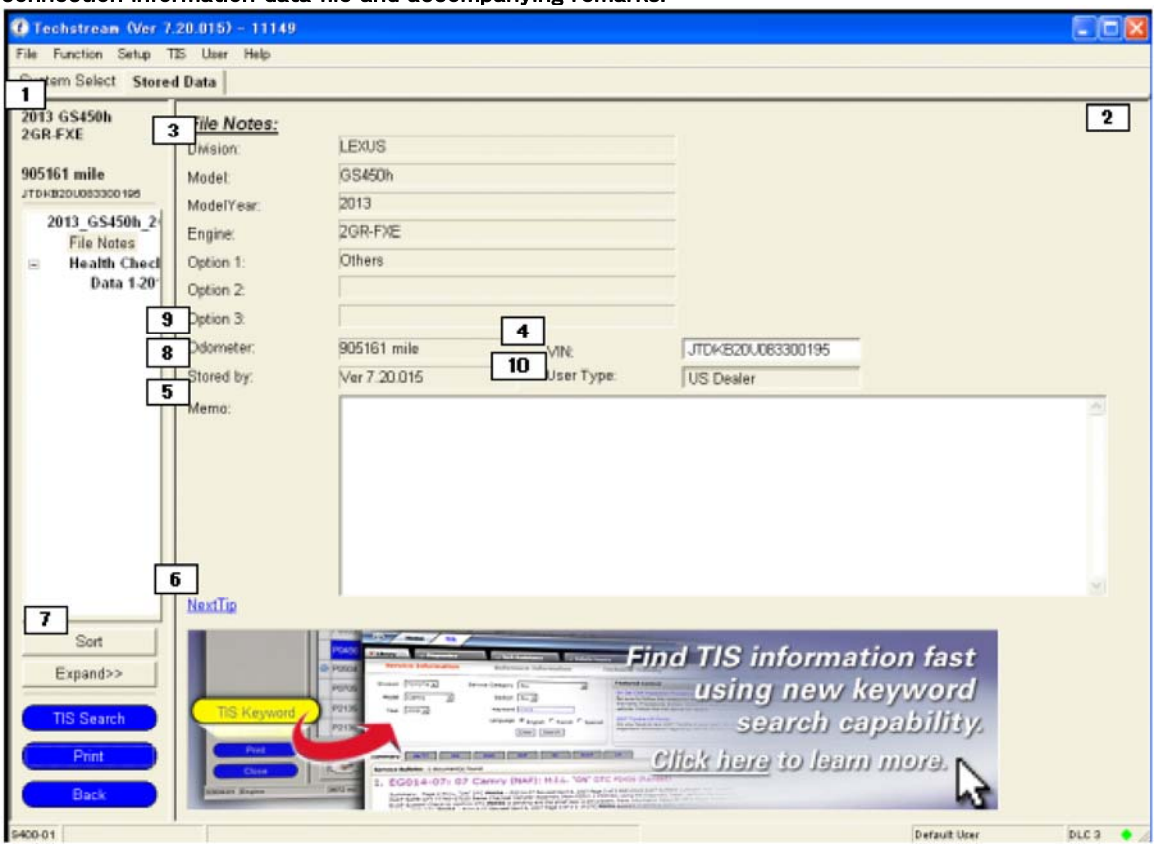
Stored Data Main Screen

The Stored Data Main Screen displays data selected from Event File Trees. The first screen displays the vehicle connection information data file and accompanying remarks.



Diagnosis Screen (Stored Data Tab)

1 **Model Information**
Displays vehicle information registered in the Service Event File.

Data Viewer
Displays data selected in the Event File Tree.

Vehicle Information
Displays vehicle Stored Data.
The displayed contents are as follows.
- Display for North America
  Division, Model, Model Year, Engine, Option 1, Option 2, Option 3
- Display for other regions
  Model, Model Code, Vehicle Spec, Option 1, Option 2, Option 3

VIN Input Area
Displays the VIN acquired from the vehicle.
The VIN display can be edited in cases where the VIN cannot be acquired from the vehicle.

Memo Text Area
Display and/or edit a Stored Data memo.

Tech Tip
Displays help information on usage.

7 **Sort Button**
Data sorting is switched as shown below every time the button is pressed.

Default →Date/Time (Ascending Order) → Date/Time (Descending Order) → Default …

Software Version
Displays the software version that was first used to obtain data from the vehicle.

Odometer
Displays the distance covered data from the stored data.

User Type
Displays the user type of the user who obtained data from the vehicle first.

Event File tree

Optional data from the Service Event File can be designated with an Event File Tree. The selected data is displayed on the right hand side of the screen. By selecting and right clicking on a piece of data, the name may be edited.
When a memo is entered for a flag, the icon is displayed in yellow. When there is no memo, the icon is displayed in white.
When the display for data set in a flag is minimized, an icon will be displayed to the side of the data.
When detailed data is included in the level below, "+" and "−" icons will be displayed. When there is no details included, neither the "+" or "−" icon will be displayed.
An icon as shown below is displayed to indicate the sort status.
Blank: Default

:Date/Time (Ascending Order)

:Date/Time (Descending Order)

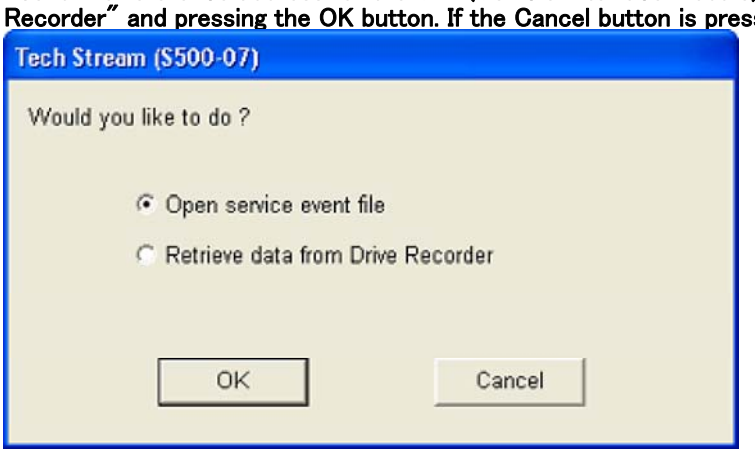
All of the operations below can be performed by right clicking on an individual piece of data.
- Delete (Info box, flag, file)
- Add info box to file
- Edit Notes

Event File Tree

File Management

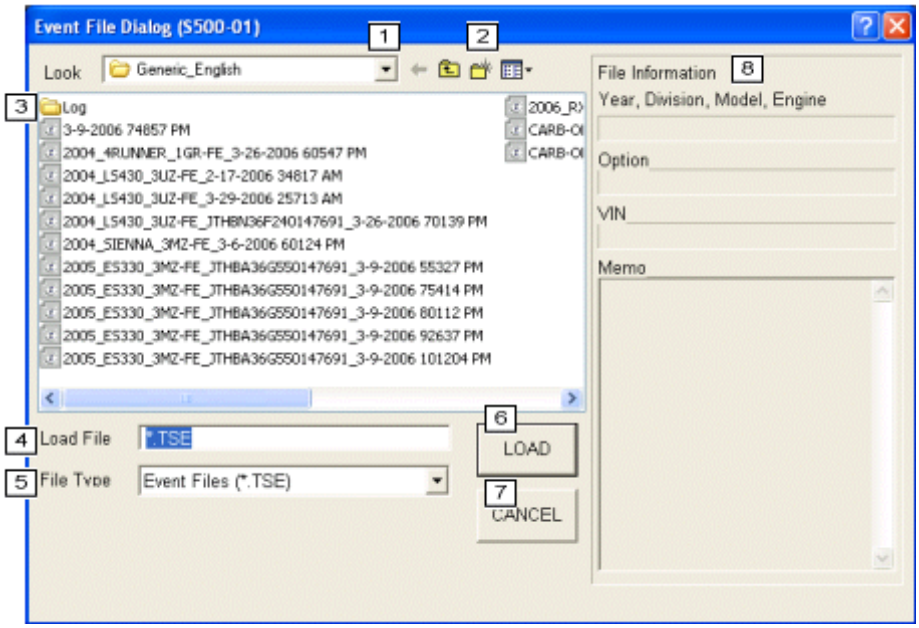
Open File Dialog

Press the Open Scan Data File button on the Main Menu Screen, OR select Open Scan Data File from the File menu.
This screen is displayed in order to designate the file acquisition path when opening files. Designate the Event File reference address for your PC by selecting "Open service Event File" and pressing the OK button. Designate the Event File reference address for the VIM (Vehicle Interface Module) by selecting "Retrieve data from Drive Recorder" and pressing the OK button. If the Cancel button is pressed, the file open operation is cancelled.



Open File Dialog

The file to be opened can be designated from this screen. The default directory prepared by the user is displayed as the standard directory. The VIM file catalogue will not be displayed in the pull down menu.



Event File Dialog

Directory pull down list
Designate the target directory from the File List. The default directory for the logged-in user is used as the initial value.

Common Control
File selection controls common in all Windows OS'.

File List
Displays files inside the directory that were selected from the Directory Pull Down List. Only a single file from those displayed can be selected for opening. The displayed files are only those with the extension designated in the File Type Pull Down List.

File Name Input box
Input the name of the file to be opened. When a file is designated from the File List, the file name will be displayed.

File Type pull down list
Select the type of file to be displayed in the File List.

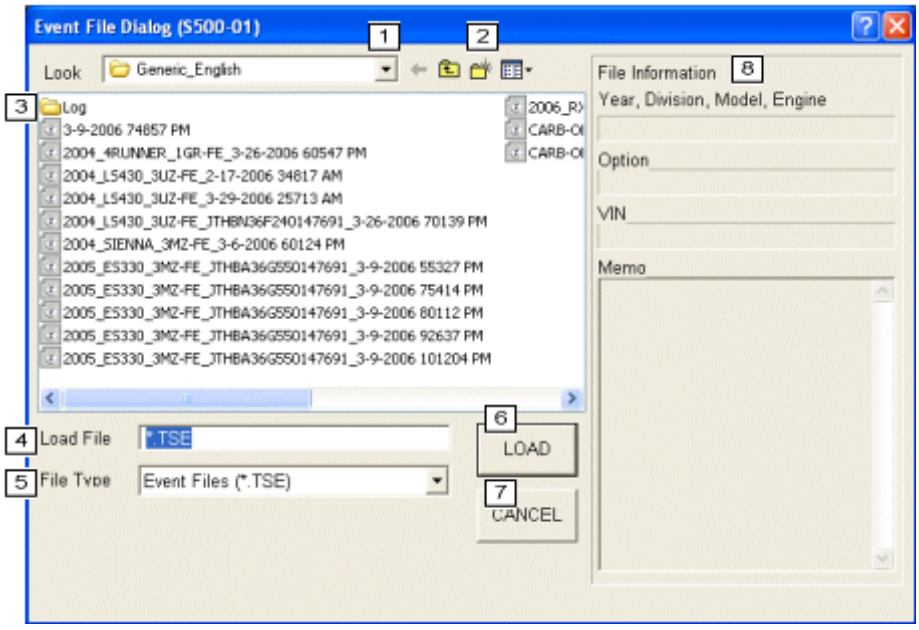
Open button
Opens the file designated in the File Name Input Area.

Cancel button
Cancels file selection and closes the file selection dialog box.

File Information View Area
Displays vehicle information included in the file selected from the File List. The following appear as display items
For North America: Year, Division, Model, Engine, Option, VIN, and File Notes.
For non-North America: Model, Model Code, Vehicle Spec, Option, VIN, and File Notes.

Select Merge Data Dialog

The Select Merge Data Dialog performs the Merge Event Files function. It is located in File on the Menu Bar. Data Merge can only be performed if there is a Stored Data Tab.
From this dialog box, designate the service Event File that includes the target merge data.



Event File Dialog

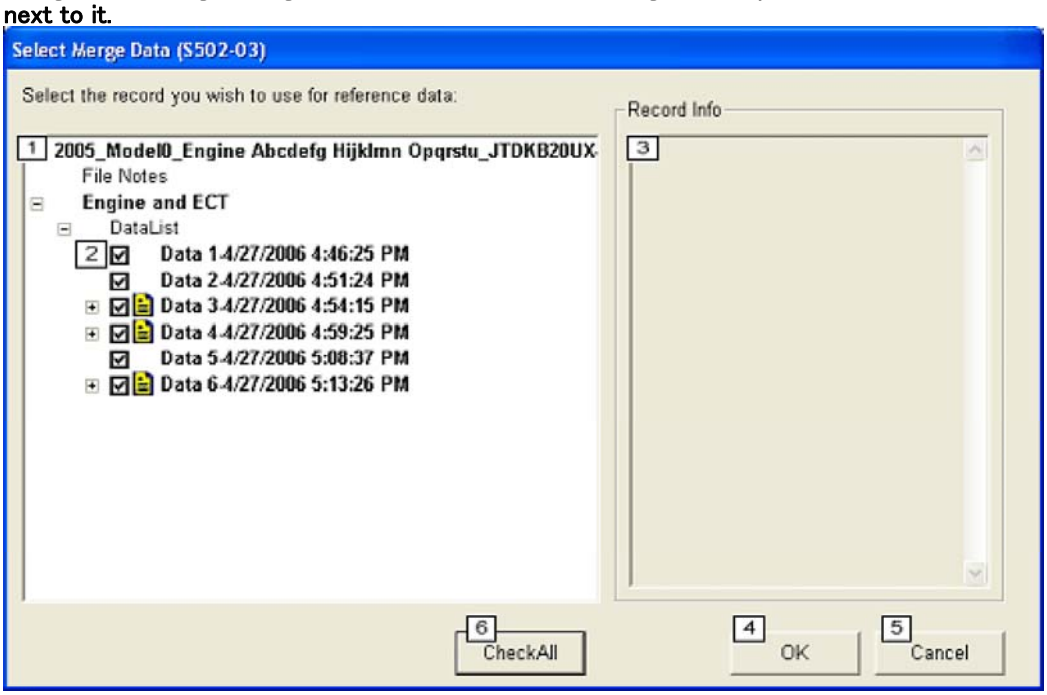
Directory pull down list
Designate the target directory from the File List. The default directory for the logged in user is used as the initial value.

Common Control

Prepares the file selection dialog shared control, common in all Windows OS'.

- File List
  Displays files inside the directory that were selected from the Directory Pull Down List. One file from those displayed can be selected for opening. The displayed files are only those with the extension designated in the File Type Pull Down List.
- File Name Input box
  Input the name of the file to be opened. When a file is designated from the File List, the file name will be displayed.
- File Type pull down list
  Select the type of file to be displayed in the File List.
- Open button
  Opens the file designated in the File Name Input Area.
- Cancel button
  Cancels file selection and closes the file selection dialog box.
- File Information View Area
  Displays vehicle information included in the file selected from the File List. The following appear as display items
  For North America: Year, Division, Model, Engine, Option, VIN, and File Notes.
  For non-North America: Model, Model Code, Vehicle Spec, Option, VIN, and File Notes.

Designate the target merge data on this screen. Data Merge will be performed for data with a checkmark appearing next to it.



Merge File Dialog

1 Event File Tree
Displays the Service Event File data tree that was designated in the file selection dialog box.

2 Data Check Box
Designate the target merge file by checking the appropriate box.

3 Record Info
Displays data record information for the selected file.

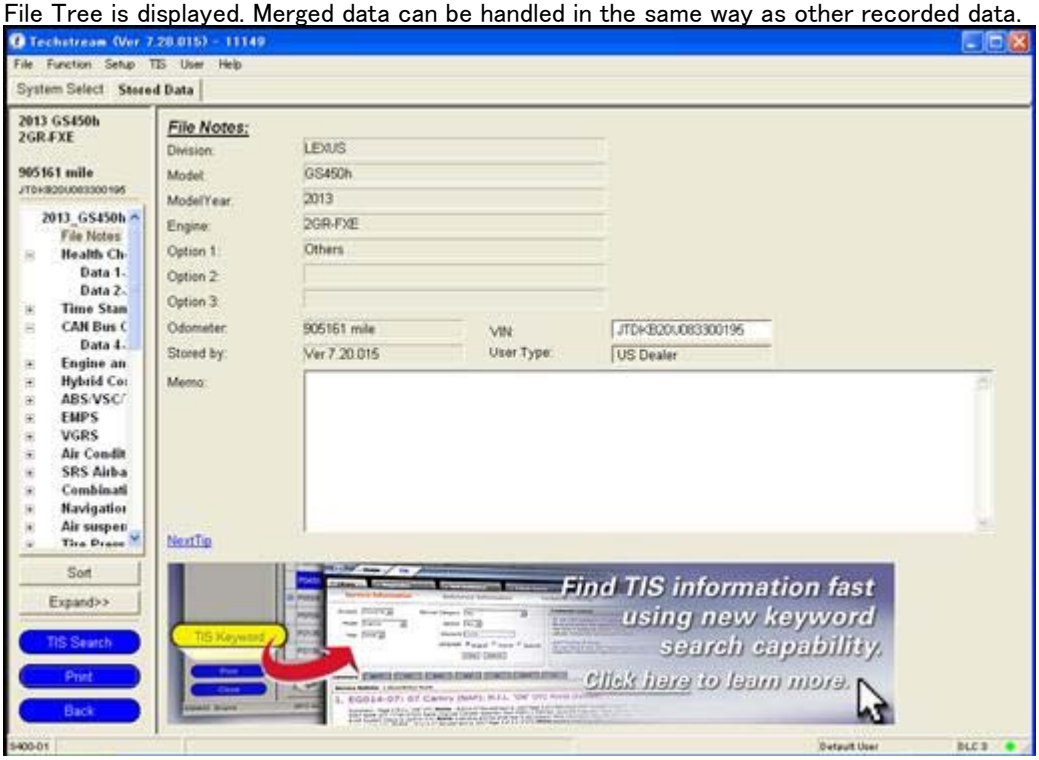
4 OK button
Performs data merge on checked files.

5 Cancel button

Cancels data merge operations.

6 Check All
Pressing this button inserts or removes checks from all checkboxes.

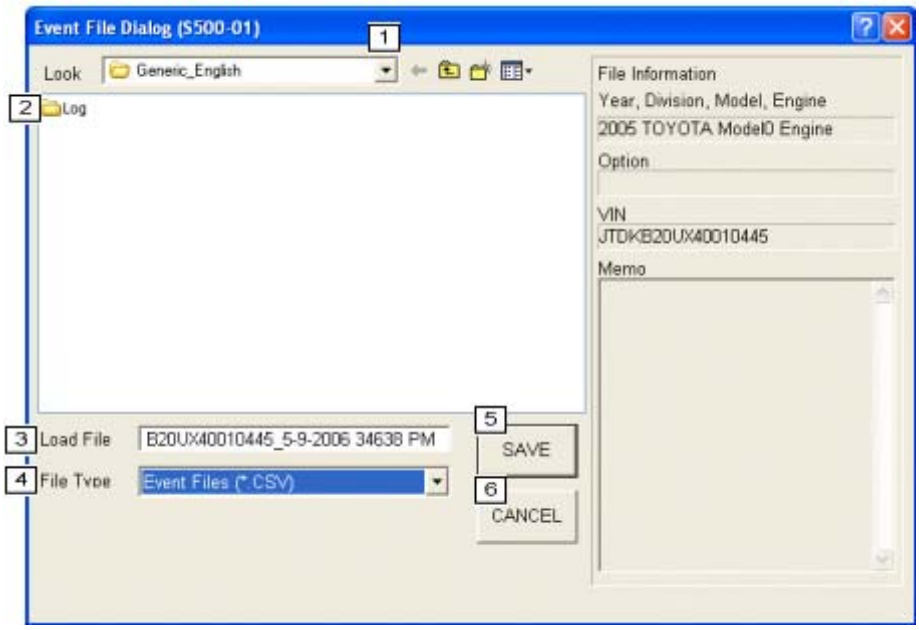
This is an example of the screen displayed upon completion of data merge. The merged data added to the Event File Tree is displayed. Merged data can be handled in the same way as other recorded data.



Diagnosis Screen (Stored Data Tab)

Export Data Select Dialog

Run export processing from File – Export Data on the Menu bar. Export processing is available only when Stored Data Tab exists.
The Export Data Select Dialog box is used to designate export data and the export data file name. The Model Year, Model, Engine and VIN are combined and displayed as the default file name.



Event File Dialog

Directory Name
Select the directory in which to save the export file. The default directory for each user is displayed

File List Box
Display the file inside the folder designated as the Directory Name. When a file is selected, the file name is displayed in the File Name Input Area.

File Name Input Area
Input a file name for export data. The Model Year, Model, Engine and VIN are combined and displayed as the default file name.

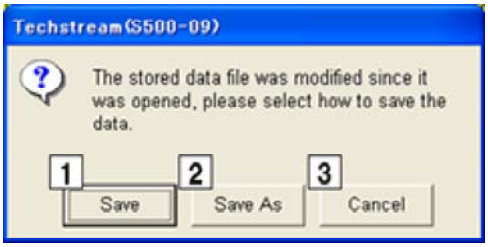
File Type Pull Down List
Displays file formats available for the export file. The format for the file to be saved is CSV.

Save button
Performs data export.

Cancel button
Cancels data export operations.

Save Event File dialog (for selecting where to store changed event file)

When there are changes in the open event file and you have selected to save the file with these changes, this screen lets you select whether to save the file with its old name (and overwrite the file from before the changes) or save as a different file name.



Save Event File dialog (for selecting where to store changed event file)

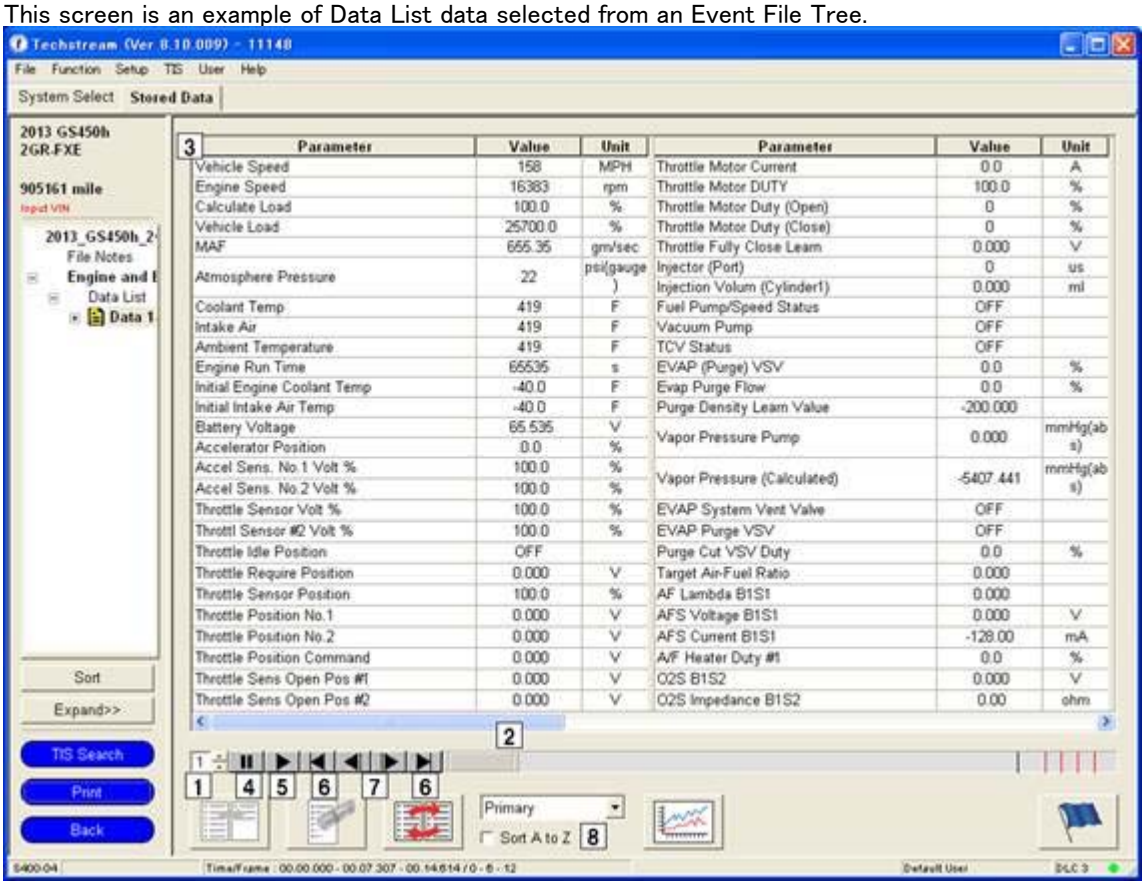
Save button
Overwrites the event file currently open.

Save As button
Displays a dialog for saving with a different name.

Cancel button
Closes Save Event File dialog.

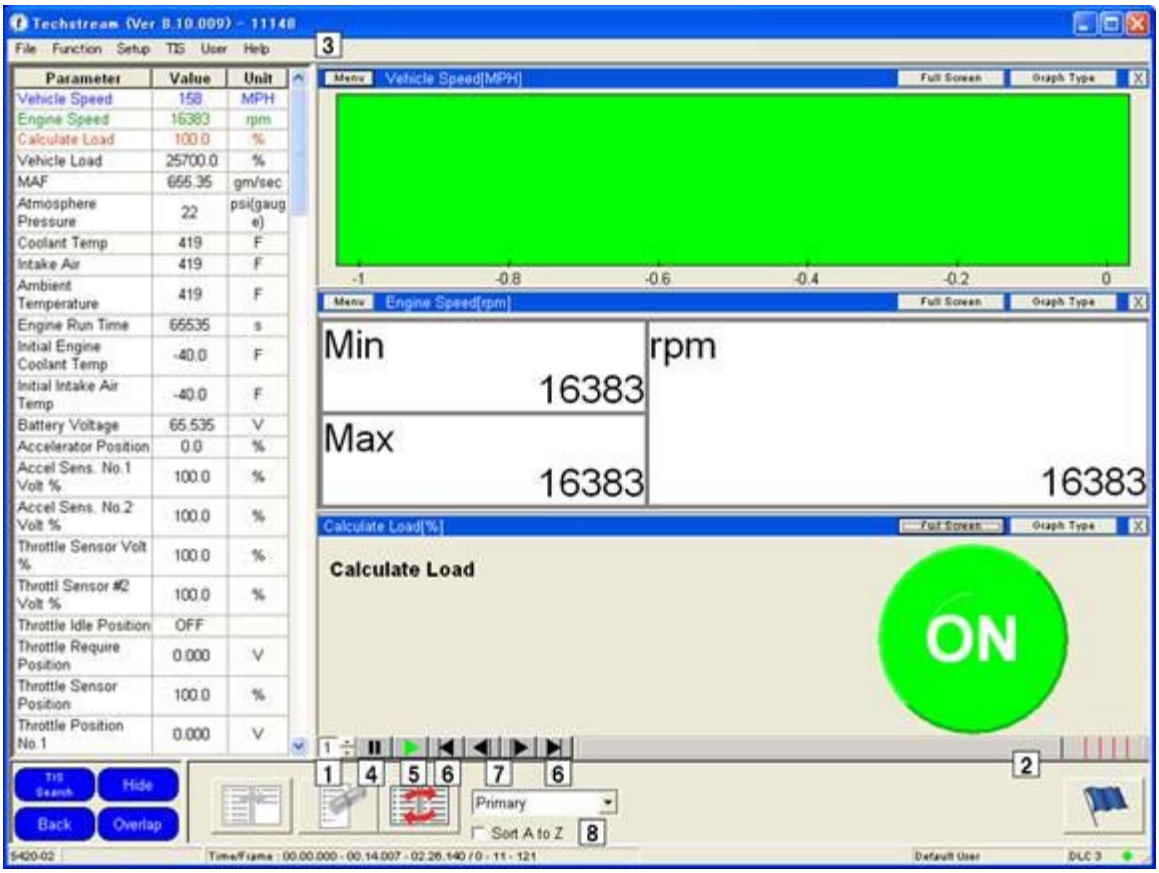
Playback Data List / Active Test

This screen is an example of Data List data selected from an Event File Tree.



Parameter	Value	Unit	Parameter	Value	Unit
Vehicle Speed	158	MPH	Throttle Motor Current	0.0	A
Engine Speed	16383	rpm	Throttle Motor DUTY	100.0	%
Calculate Load	100.0	%	Throttle Motor Duty (Open)	0	%
Vehicle Load	25700.0	%	Throttle Motor Duty (Close)	0	%
MAF	655.35	gm/sec	Throttle Fully Close Learn	0.000	V
Atmosphere Pressure	22	psi(gauge)	Injector (Port)	0	us
			Injection Volum (Cylinder1)	0.000	ml
Coolant Temp	419	F	Fuel Pump/Speed Status	OFF	
Intake Air	419	F	Vacuum Pump	OFF	
Ambient Temperature	419	F	TCV Status	OFF	
Engine Run Time	65535	s	EVAP (Purge) VSV	0.0	%
Initial Engine Coolant Temp	-40.0	F	Evap Purge Flow	0.0	%
Initial Intake Air Temp	-40.0	F	Purge Density Learn Value	-200.000	
Battery Voltage	65.535	V	Vapor Pressure Pump	0.000	mmHg(abs)
Accelerator Position	0.0	%			
Accel Sens. No.1 Volt %	100.0	%	Vapor Pressure (Calculated)	-5407.441	mmHg(abs)
Accel Sens. No.2 Volt %	100.0	%			
Throttle Sensor Volt %	100.0	%	EVAP System Vent Valve	OFF	
Throttl Sensor #2 Volt %	100.0	%	EVAP Purge VSV	OFF	
Throttle Idle Position	OFF		Purge Cut VSV Duty	0.0	%
Throttle Require Position	0.000	V	Target Air-Fuel Ratio	0.000	
Throttle Sensor Position	100.0	%	AF Lambda B1S1	0.000	
Throttle Position No.1	0.000	V	AFS Voltage B1S1	0.000	V
Throttle Position No.2	0.000	V	AFS Current B1S1	-128.00	mA
Throttle Position Command	0.000	V	A/F Heater Duty #1	0.0	%
Throttle Sens Open Pos #1	0.000	V	O2S B1S2	0.000	V
Throttle Sens Open Pos #2	0.000	V	O2S Impedance B1S2	0.00	ohm

Diagnosis Screen (Playback Data)



Diagnosis Screen (Playback Data)

Playback speed
Displays the playback speed for recorded data. The playback speed can be changed using this button.

Playback time bar
Displays the current frame position. During playback, the time bar moves to match the data. The time bar can be moved to change the displayed frame.

Playback information
Displays playback information for recorded data.

Pause button
Pauses the playback of recorded data.

Play button
Plays recorded data.

Advance/Previous button
Moves the frame position from the current position forward (or backward) to the next (or previous) flag position.

7 Advance/Previous Frame button
Moves the frame position from the current position, forward (or backward) to the next (or previous) frame.

8 Sort A to Z Check Box
Sort the currently displayed Custom List items in alphabetical order.

New List button
Displays only those parameters selected from the Parameter List.

Remove button

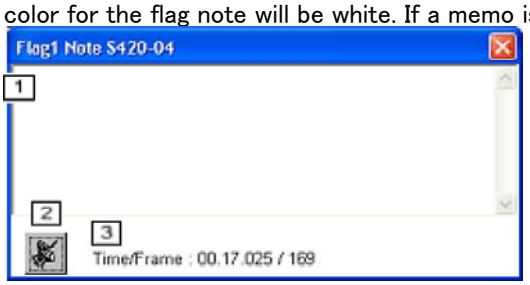
Deletes parameters selected from the Parameter List.

Data Manager Button
Displays the Data List Manager.

Graph button
Switches the Data List display to a graph format.

Flag button
Highlights the display when a flag exists for the frame position.
If a flag does not exist for the frame position, clicking the Flag Button will add a flag for the current frame position.

When the flag frame is reached during Stored Data playback, a flag note will be displayed in a pop-up dialog box on the Parameter Data List, and the Flag button will be highlighted. If there is no memo for the flag, the background color for the flag note will be white. If a memo is included, the background color of the flag note will be yellow.



Flag Note Dialog

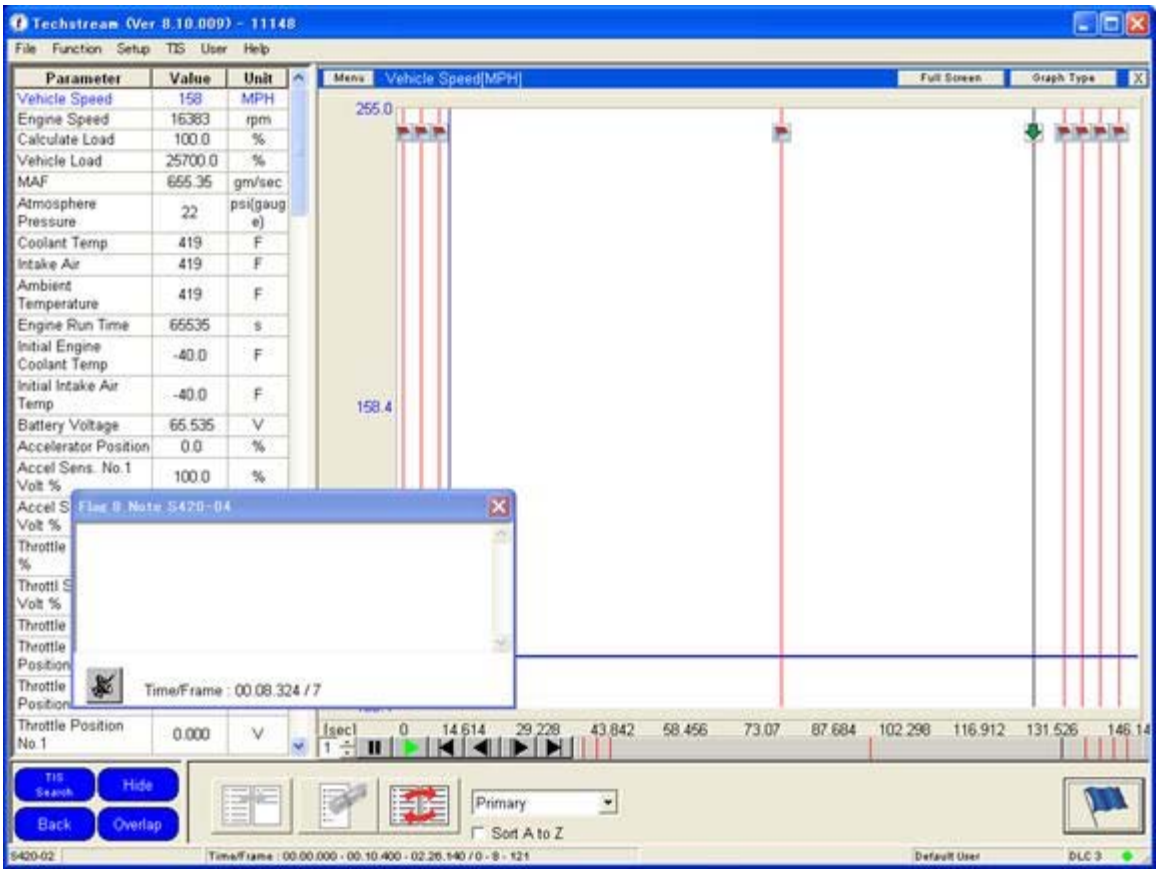
1 Flag Notes
Input a memo for a flag.
When playing snapshot flag data recorded automatically during an active test, displays the Active Test name and the value (editable).

2 Note Visibility button
Hide or display the flag note. If the note is set to display, each time the flag position is reached during playback, the note will appear on the screen. If the note is set to be hidden, the note will not appear on the screen each time the flag position is reached during playback. To remove the "hide" setting, click the Flag button at the appropriate flag position.

3 Flag position time (frame)
Displays the set flag position in relation to the corresponding memo (as time and frame number).

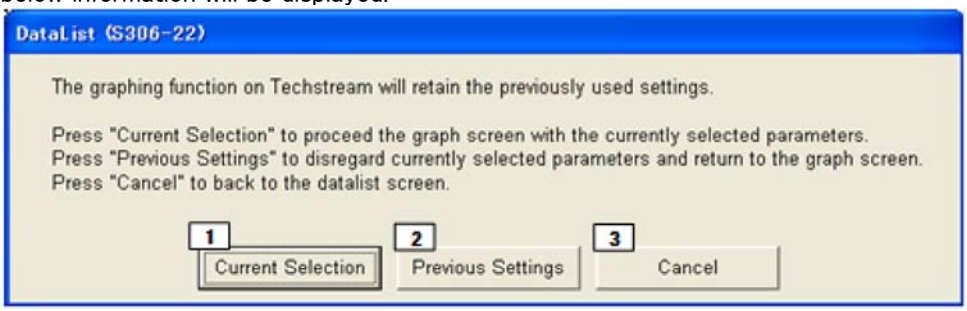
Graph Function

Using the Graph Function, Data List/Active Test playback data can be viewed as a Graph. The Flag and trigger positions are displayed as an icon on the graph.



Diagnosis Screen (Data List)

If the graph button is clicked when monitor data from the saved data is displayed and there are graph settings, the below information will be displayed.



Graphing Confirmation Dialog

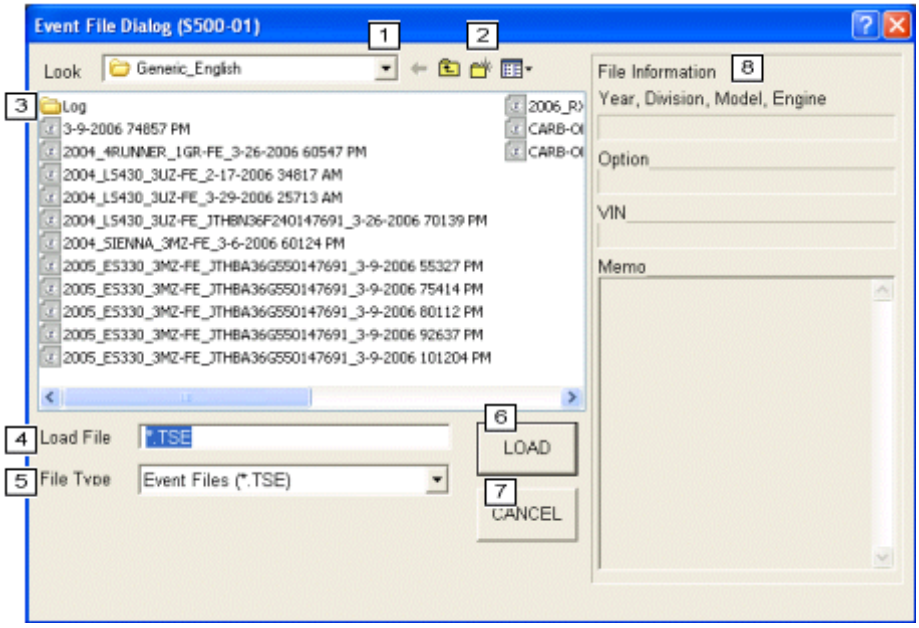
1 Current Selection
Proceed to the graph screen with the currently selected parameters.

2 Previous Settings
Disregard currently selected parameters and return to the graph screen.

3 Cancel
Go back to the data list screen.

File Compare

Executing File Compare in the Menu bar (File – File Compare). Data comparison can only be executed if there is a record data tab.
In this dialog box, an event file that includes data to be compared can be specified.



Event File Dialog

Directory pull down list
Used to designate the target directory from the File List. The default directory for the logged-in user is used as the initial value.

Common Control
Prepares the file selection dialog shared control, common in all Windows OS's.

File List
Displays files inside the directory that were selected from the Directory Pull Down List. One of the displayed files can be selected for opening. Only files with the extension designated in the File Type Pull Down List are displayed.

File Name Input box
Used to input the name of the file to be opened. When a file is designated from the File List, the file name is displayed.

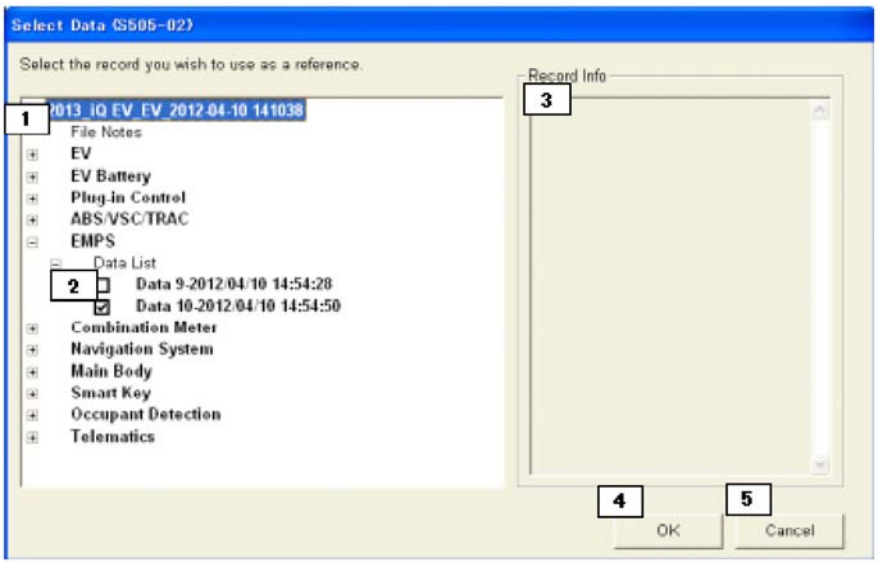
File Type pull down list
Used to select the type of file to be displayed in the File List.

Open button
Opens the file designated in the File Name Input Area.

Cancel button
Cancels file selection and closes the file selection dialog box.

File Information View Area
Displays vehicle information included in the file selected from the File List. The following appear as display items
For North America: Year, Division, Model, Engine, Option, VIN, and File Notes.
For non-North America: Model, Model Code, Vehicle Spec, Option, VIN, and File Notes.

In this screen, the target data to be compared can be designated. Data with a check mark in the check box is used for comparison.



Compare File Dialog

1 Event File Tree
Displays the service Event File data tree that was designated in the file selection dialog box.

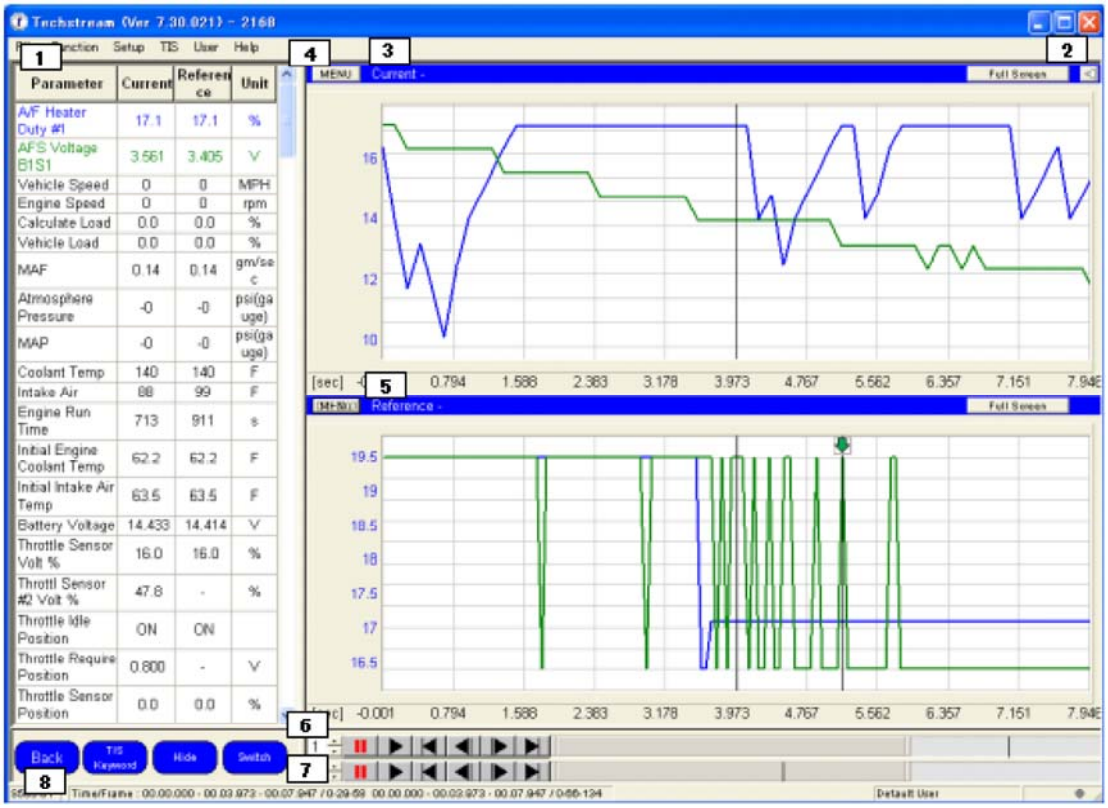
2 Data Check Box
Used to designate the target file to be compared by checking the appropriate box.

3 Record Info
Displays data record information for the selected file.

4 OK button
Merges data for the checked files.

5 Cancel button
Cancels data merge operations.

In this screen, the target data to be compared is displayed.



Diagnosis Screen (File Compare)

1 Parameter List
Display the current data in “Current” column and the reference data in “Reference” column.
If one data is longer than the other, pad shorter data with blank data and make its duration the same as the longer one. When blank part is being played, display ″–″ as Parameter List values and hide the Frame reading of ″Time/Frame″.

2 Remove
Removes the graph of the parameter selected in the Parameter List. If no graph parameter is selected, this button is grayed out.

3 Current Graph
Displays the current data graph in overlapped style.
″Current – selected parameter's name″ is displayed in the title bar. If no graph parameter is selected, no parameter name is displayed.
Displays scales for the selected parameter next to the vertical axis. If no graph parameter is selected, displays scales for the last selected graphed parameter.
Displays graph line for the selected parameter thicker. If no graph parameter is selected, no lines are displayed thicker.
If the graph is Zoomed In/Out, so is the other graph.
The graph line can be moved around by right clicking (hold) on the graphing area and dragging.
Up to 8 parameters can be graphed.

4 Menu
Displays the Menu for a Line Graph.
– Enter Graph Setup
Displays the Modify Graph Setup dialog box.
– MEASURE TIME, MEASURE AMPLITUDE, MIN/MAX INDICATOR, MIN/MAX BEEP
Affects the selected parameter in the graph.

5 Reference Graph
Displays the reference data graph in overlapped style.
Displays ″Reference –selected parameter's name″ in the title bar. Other functionalities are the same as for Current Graph.


Playback Controller for Current
This is a Playback Controller for the current data. If the Time scroll bar is reduced or expanded by the user, the width of the Playback Controller for Reference changes the same way.

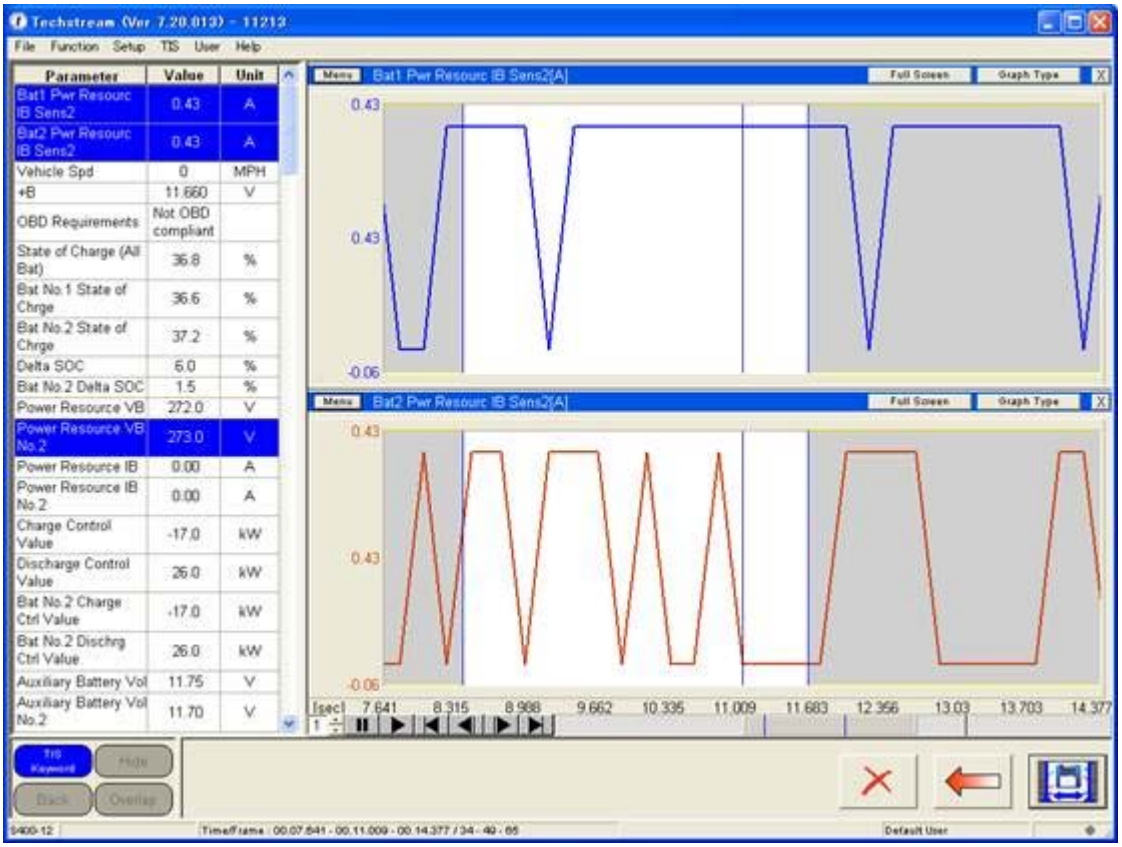
7 Playback Controller for Reference
This is a Playback Controller for the reference data. If the Time scroll bar is reduced or expanded by the user, the width of the Playback Controller for Current changes the same way.


Time/Frame
Shows the Time/Frame for Current on the left and Time/Frame for Reference on the right.


Graph Mode Switch
Changes the graphing mode between Graph per Data and Graph per Parameter.
Graph per Data : Overlaps and displays selected signals, separated by each data.
Graph per parameter : Overlaps and displays selected signals for each data, separated by signal.

Snapshot Edit

Executing Snapshot Edit in the Menu bar (Function – Snapshot).
Snapshot editing can only be executed if the recorded snapshot data is displayed.
The selected portion of the snapshot data can be cut out and saved with a name.



Diagnosis Screen (Snapshot Edit)

 Exit Button
Exits the Snapshot Edit function.

 Back Button
Returns to the previous screen. Grayed out if the starting point for data cut out is not set.

 Marker/Edit Button
By pressing the button, the starting point and the ending point for cut out can be selected.
The button changes as follows every time it is pressed.
Marker Button 1 Marker Button 2 Edit Button

 :The starting point for data cutout can be selected.

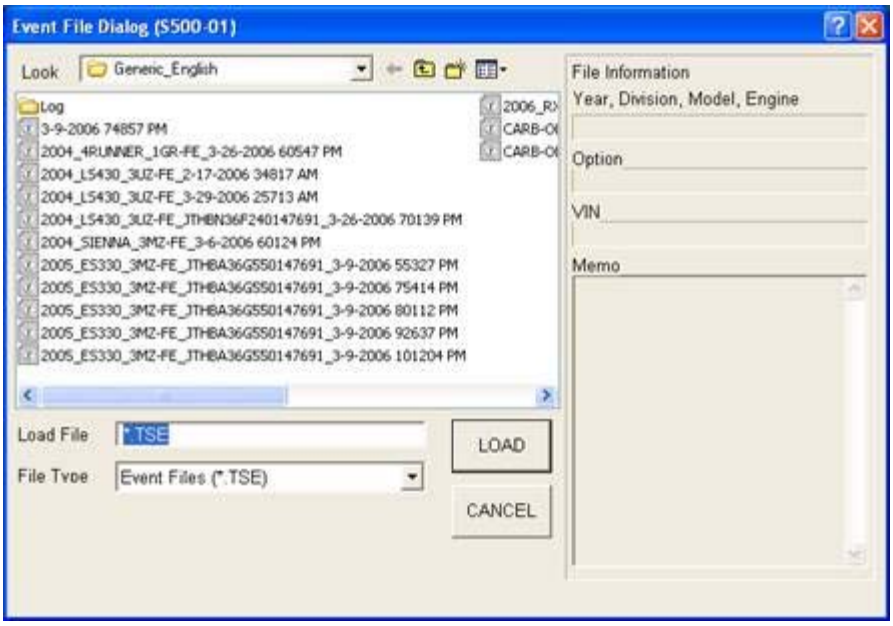
 :The ending point for data cutout can be selected. When the playing position is before the position selected by Marker Button 1, the button is grayed out.

 :The selected portion of the data is cut out. The new cutout data is saved in the same destination as the original data with all the parameters included in the original data.

Add Data

Using Add Data, data can be added to an existing service Event File by following the two steps below.
- When recording the service Event File, connect to the car with the service Event File opened.
- While still connected to the vehicle, open the equivalent service Event File recorded for that vehicle.

This screen displays when selecting files for addition.

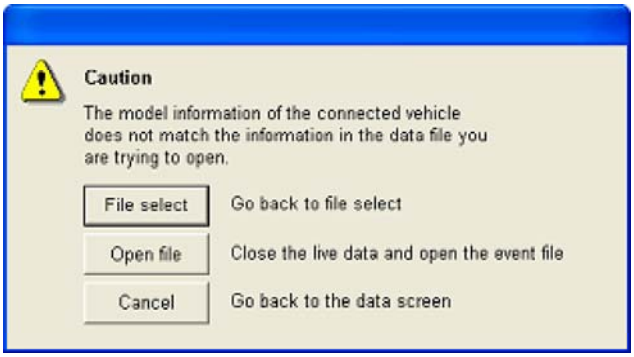


Event File Dialog

If when connecting to a vehicle while a data file is opened, the information from the connected vehicle does not match the data file, the following screen is displayed.
If the View live Data button is pressed, the currently opened file is closed and a connection is made to the vehicle.
If the Cancel button is pressed, the connection to the vehicle is terminated and the opened file continues to be available for reference.

Caution Dialog

If when opening a data file while connected to a vehicle, the contents of the data file being opened do not match the information of the connected vehicle, the following screen displays. If the File Select button is pressed, the screen returns to the file select dialog box. If the Open File button is pressed, the connection to the vehicle is terminated and the designated data file is opened.
When this button is pressed, all tabs displaying vehicle information are closed. If the Cancel button is pressed, the data file is not opened and the vehicle remains connected.



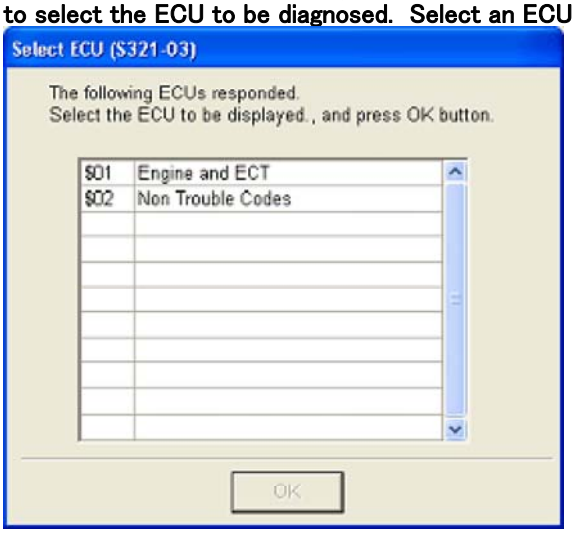
Caution Dialog

Generic OBD II

Generic OBD II performs vehicle troubleshooting (malfunction diagnosis).
Press the Generic OBD II button on the Main Menu Screen, OR select Function – Connect OBD2 from the Menu bar.

Select ECU

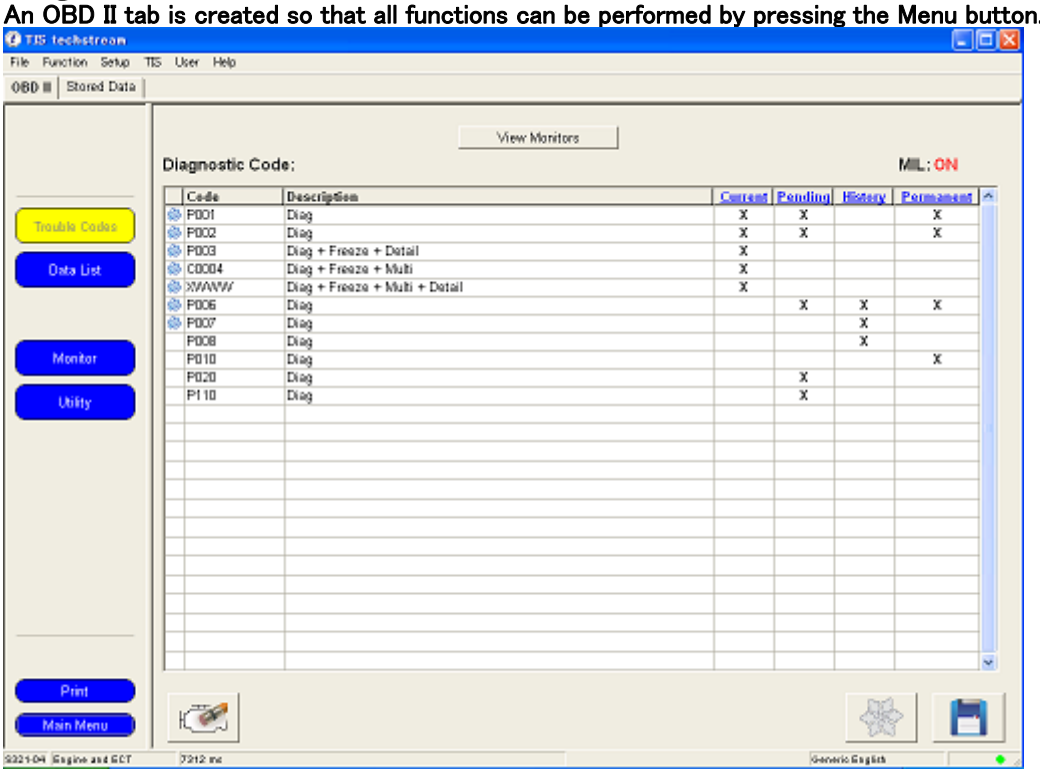
When Generic OBD II is initially started and more than two ECU's respond, the following dialog box allows the user to select the ECU to be diagnosed. Select an ECU for communication and press the OK button.



Select ECU Dialog

Diagnosis Screen

An OBD II tab is created so that all functions can be performed by pressing the Menu button.



Diagnosis Screen (OBD II : Trouble Codes)

Trouble Codes	Switches the screen to Manages Trouble Codes display.
Data List	Switches the screen to the Data List display.
Monitor	Switches the screen to the Monitor display.
Utility	Switches the screen to the Utility display.
Print	Switches the screen to the Print display.
Main Menu	Returns the screen to the Main Menu.

Note

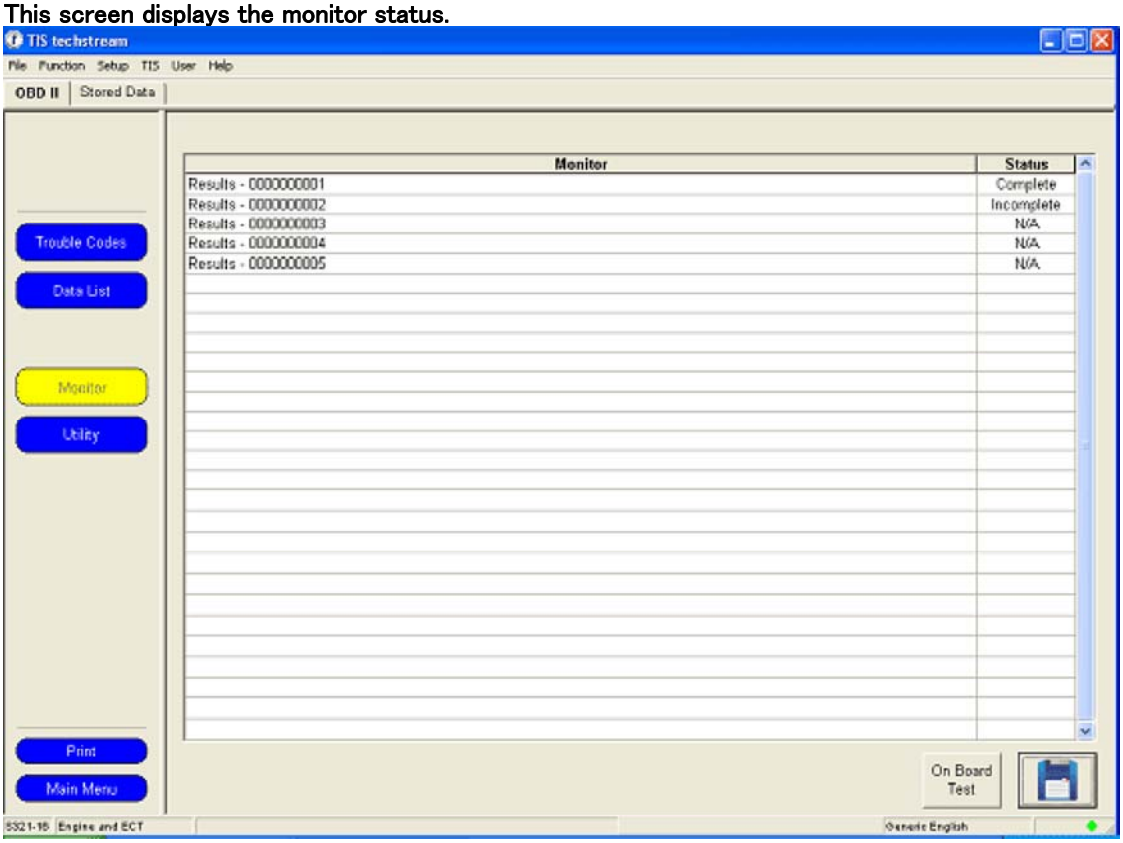
SAE J2012 defines the standardized Diagnostic Trouble Codes (DTC).
Example

P0123

P – Power Train
B – Body
C – Chassis
U – Network

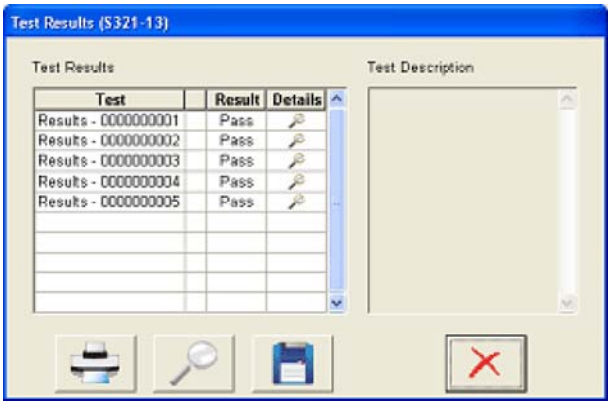
Monitor

Press the Monitor button on the Menu Button Area OR the View Monitors button at the top.
This screen displays the monitor status.



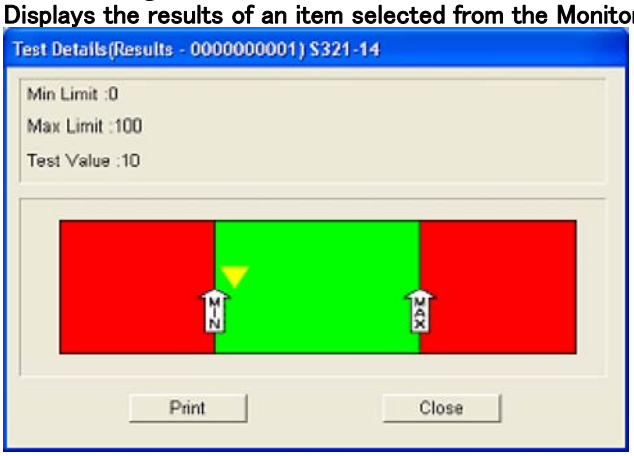
Diagnosis Screen (OBD II : Monitor)

Press the On Board Test button.
This dialog box displays Monitor Details and gives a description of each.



Monitor Details Dialog

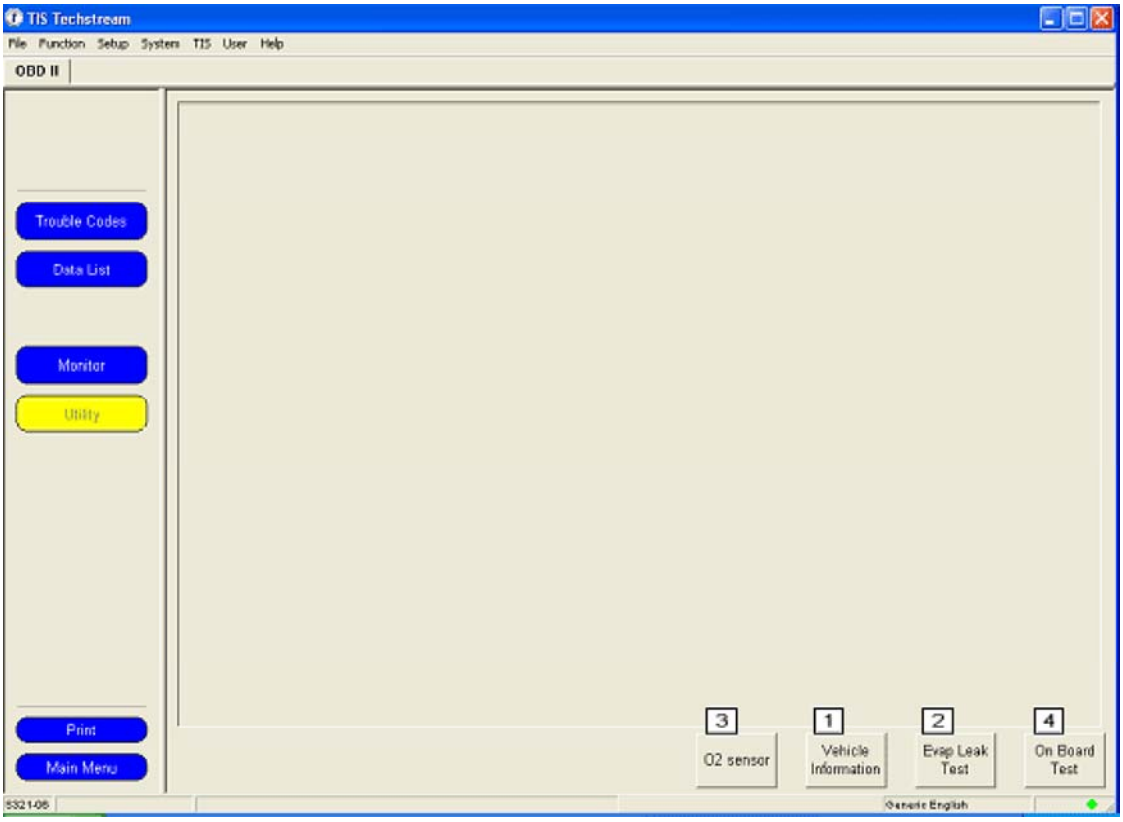
Click the Magnifier button.
Displays the results of an item selected from the Monitor Details screen in graphic form.



Test Details Dialog

Utility

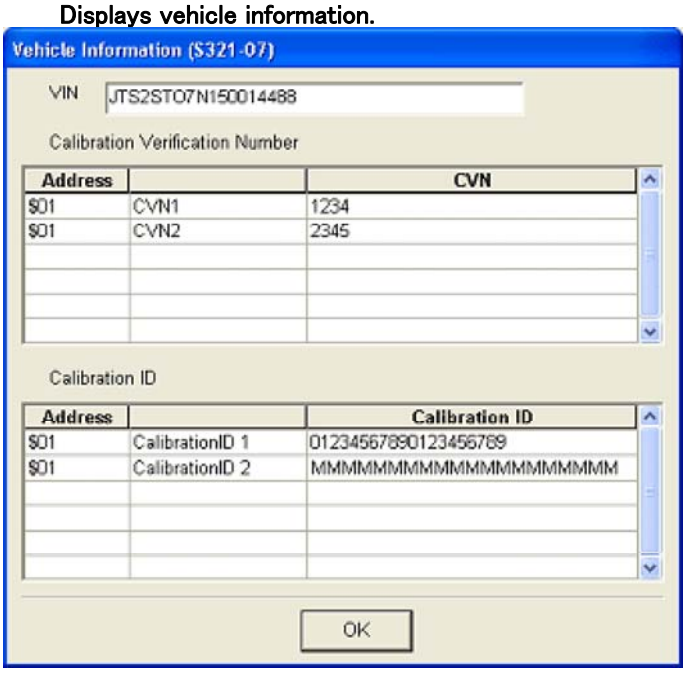
The following four functions can be selected from the Utility screen.



Diagnosis Screen (OBD II : Utility)

1 Vehicle Information

Displays vehicle information.

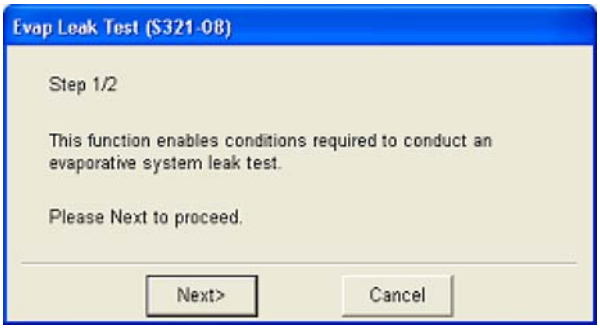


Vehicle Information Dialog

2 Evap Leak test

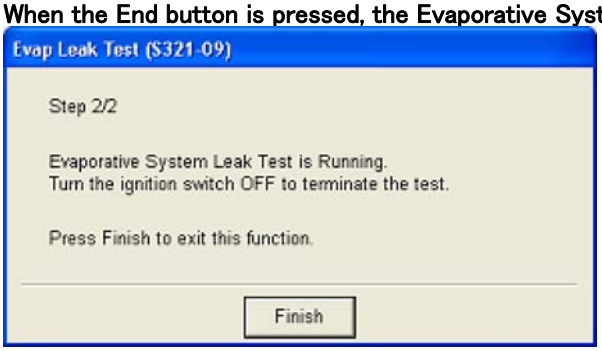
Performs the Evaporative System Leak Test.

When the Next button is pressed, the Evaporative System Leak Test is performed.
When the Cancel button is pressed, the Evaporative System Leak Test is stopped.



Evap Leak Test 1/2 Dialog

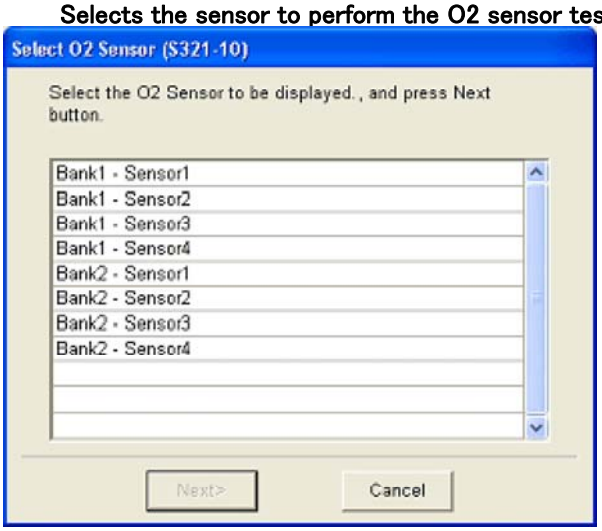
When the End button is pressed, the Evaporative System Leak Test is exited.



Evap Leak Test 2/2 Dialog

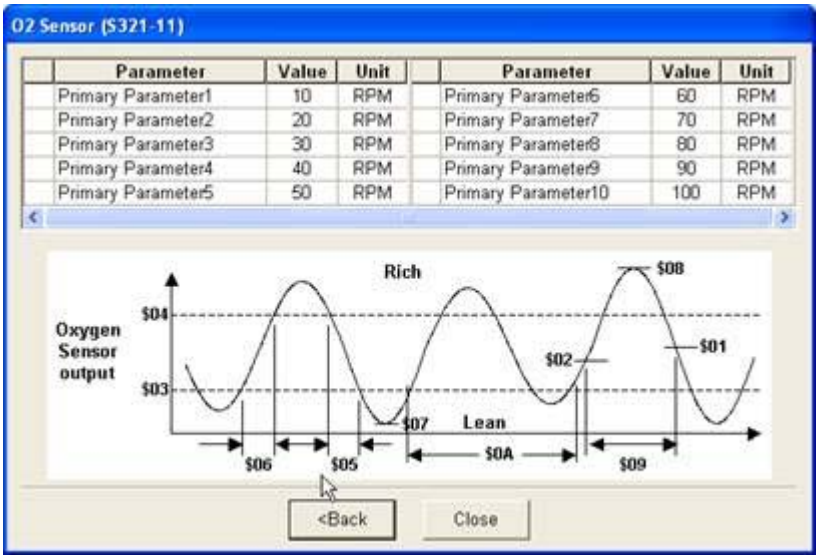
3 O2 sensor

Selects the sensor to perform the O2 sensor test.



O2 Sensor Select Dialog

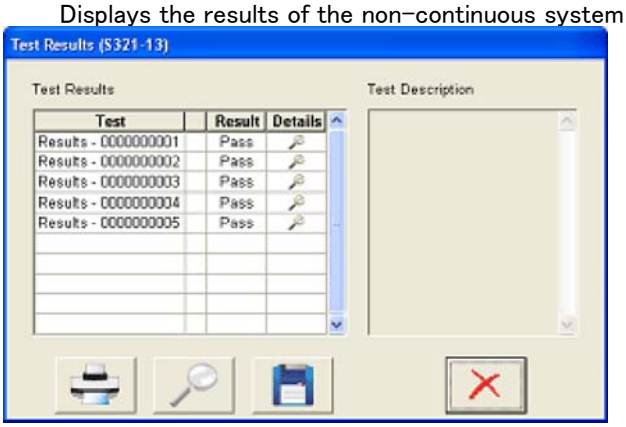
Displays the results of the O2 sensor test.



O2 Sensor Test Result Dialog

4 Non Continuous Test Results

Displays the results of the non-continuous system test.



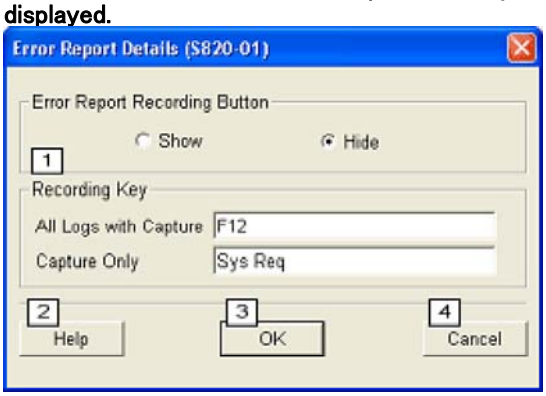
Non Continuous Test Results (Test Results)

Error Report

Error Report records a screen shot as well as an operations log in order to simplify the analysis of errors that occur during Techstream use.

Recording Function

When the user selects "Error Report Hot Key" from "Setup" on the Menu Bar, an error report dialog box is displayed.



Error Report Details Dialog

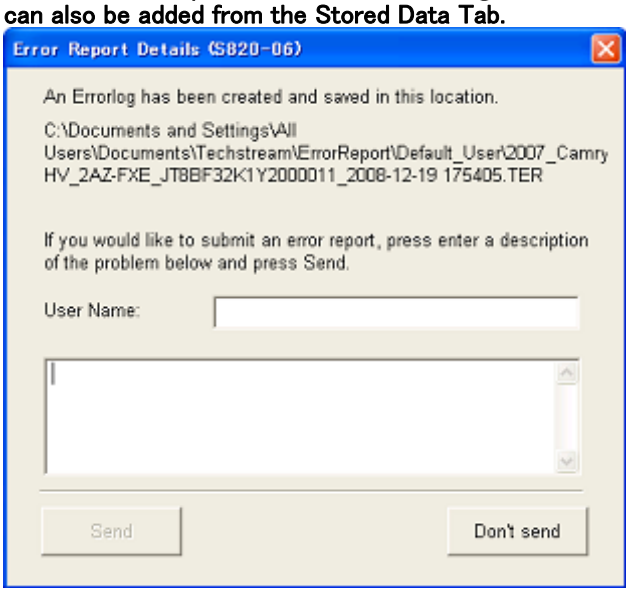
1 Setup Recording Key
Set the Recording Key. The recording key is set by placing the cursor on the Recording Key editing box and pressing the key.

2 Help Button
Displays help content.

3 OK Button
Reflects the settings and closes the dialog box.

4 Cancel Button
Cancels the settings and closes the dialog box.

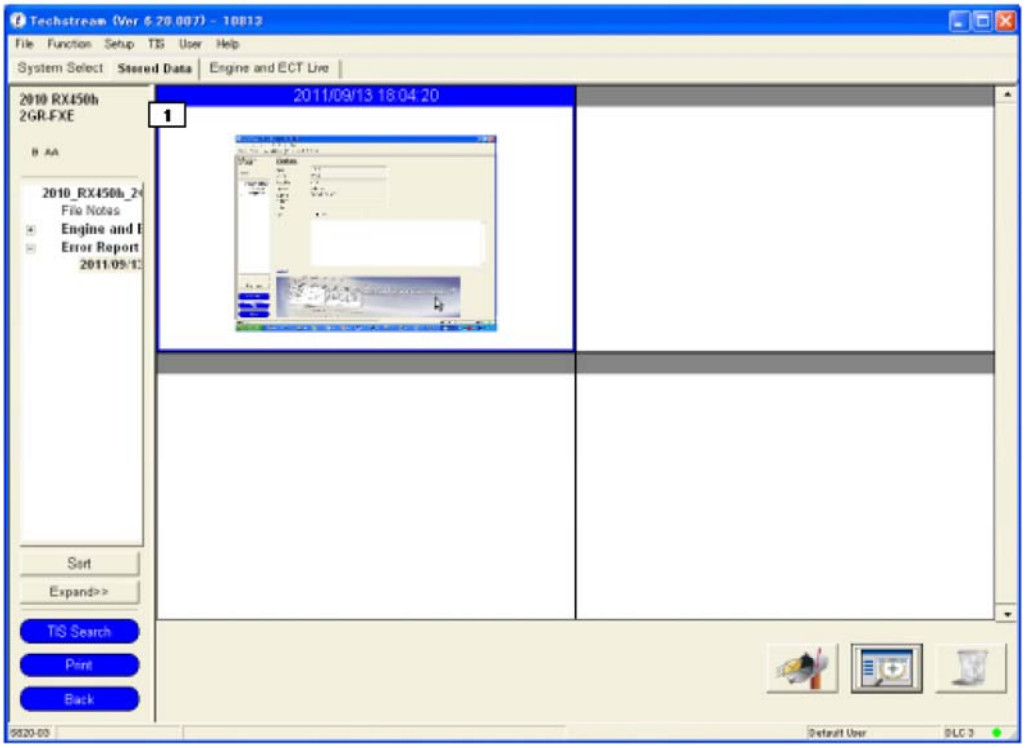
When an error report is recorded, the dialog box below opens where a note can be added and sent to TIS. A note can also be added from the Stored Data Tab.



Error Report Details Dialog

View and Report Function

From this screen, an Error Report can be selected and viewed from the Stored Data Tab Event File Tree.



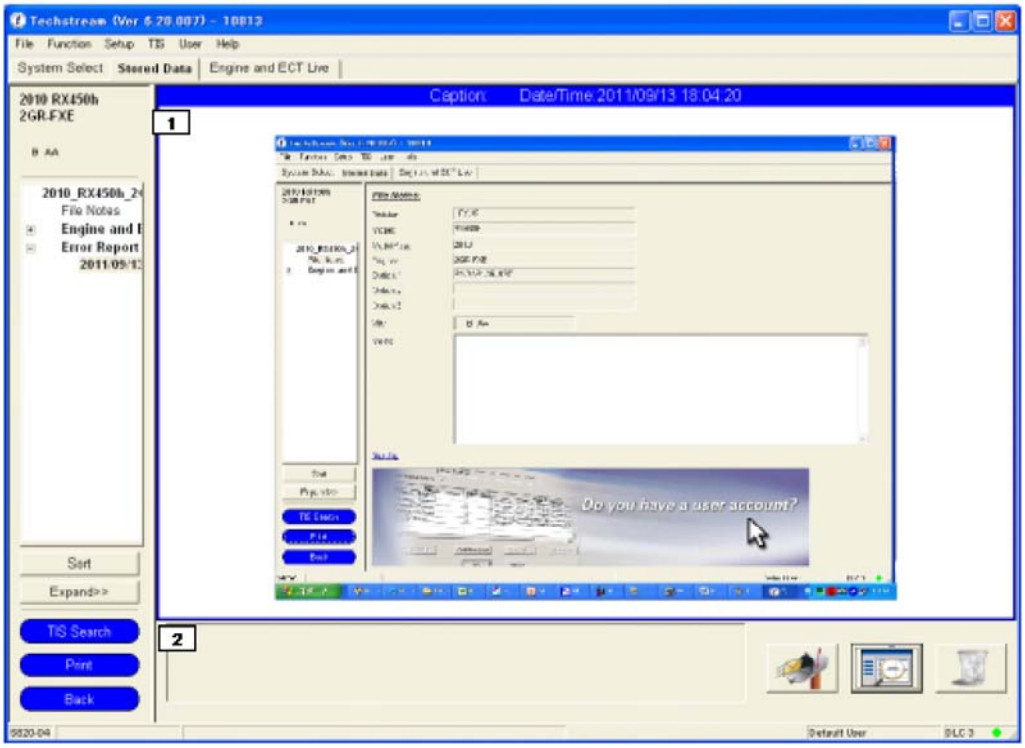
Diagnosis Screen (Stored Data Tab)

1 List View Area
Displays a list of recorded error reports.
Right click and select "Remove" to delete an error report.

 Send to TIS Button
Forwards error reports selected from the List View Area to TIS.

 List View Button / Detail view Button
Switches between List View and Detail View.

The Detail View screen is displayed after an Error Report Detail dialog box is closed or, if Report is selected from List View and then the Detail View button is pressed.



Diagnosis Screen (Stored Data Tab)

1 List View Area
Displays a list of recorded error reports.
Right click and select "Remove" to delete an error report.

Report's Note Display Area
Displays notes related to an error report.

Send to TIS Button
Forwards error reports selected from the List View Area to TIS.

List View Button / Detail view Button
Switches between List View and Detail View.