

Operation Manual

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ECU Field Rewriting



ECU Field Rewriting Operation Manual

FORWARD

This operation manual is published for the information and guidance for ECU's field rewriting.

We earnestly look forward to seeing that this manual is made full use of in order to perform correct ECU's field rewriting.

OCTOBER 2007

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1. APPLICABLE ECU AND SERVICE WORKS

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APPLICABLE ECU AND SERVICE WORKS

Some pieces of information such as vehicle ID and equipment specifications are stored in an onboard ECU after being converted into encrypted coding data. In the earlier models, those sets of coding data have been loaded into the spare ECUs. In the later models, you should load those sets of coding data into ECUs in the field. Loading the coding data is referred to as “ECU Field Rewriting”.

The applicable ECUs for which data should be rewritten and each service work for that operation are shown below:

1. Applicable ECUs and Service Works

ECUs that require “ECU Field Rewriting” and their coding are summarized in the following tables for each country.

- For U.S.A.

Models marked with a circle indicate applicable ECUs.

ECU	Engine ECU (engine control)	MVCU (vehicle combined control unit)
Vehicle model		
EPA07 CANTER	○	○
EPA07 FK/FM	○	○

Works marked with a circle indicate that the applicable data rewriting is required during the works.

ECU	Engine ECU						MVCU
Coding data	VIN code	Injector correction data	Injection quantity correction data	Air flow sensor characteristics data	PTO idle rpm data	Ash accumulation volume data	SLD limited speed data
Work item							
Replacement of ECU	○	○	○	○	○	○	
Replacement of injector		○					
Change of PTO idle rpm					○		
Replacement of MVCU							○
Change of SLD setting							○

APPLICABLE ECU AND SERVICE WORKS

● For Singapore

Model	ECU	Field rewriting Required: ○ Not required: ×	Coding data		Remarks
			When ECU replacement	When Injector replacement	
FP.FV.FS (Euro4)	6M7	○	(1), (2)	—	(1) Air flow sensor code (2) Air M/V control code (3) SLD code (4) Powertard control code (5) Injector correction code (6) Q-Adjustment (7) Cruise control code
	MVCU	○	(3), (4)	—	
CANTER (Euro4)	4M4	×	—	—	
FK.FM (Euro4)	6M6	○	(1), (5), (6)	(5)	
	MVCU	○	(3)	—	

● For Hong Kong

Model	ECU	Field rewriting Required: ○ Not required: ×	Coding data		Remarks
			When ECU replacement	When Injector replacement	
FP.FV.FS (JP05)	6M7	○	(1), (2)	—	(1) Air flow sensor code (2) Air M/V control code (3) SLD code (4) Powertard control code (5) Injector correction code (6) Q-Adjustment (7) Cruise control code
	MVCU	○	(4), (7)	—	
CANTER (Euro4)	4M5	×	*1	—	
ROSA (JP05)	4M5	×	—	—	
FK.FM (JP05)	6M6	○	(1), (5), (6)	(5)	
	MVCU	○	(7)	—	

Remarks (*1) :

As for CANTER EURO-4 for Hong Kong, "VIN writing" only is required when Engine ECU is replaced with new one.
Therefore, downloading/uploading is not required.

Please see the Shop Manual for the details.

● For Australia / New Zealand

Model	ECU	Field rewriting Required: ○ Not required: ×	Coding data		Remarks
			When ECU replacement	When Injector replacement	
FP.FV.FS (EPA04)	6M7	×	—	—	(1) Air flow sensor code (2) Air M/V control code (3) SLD code (4) Powertard control code (5) Injector correction code (6) Q-Adjustment (7) Cruise control code
	MVCU	○	(3), (4), (7)	—	
CANTER (EPA04)	4M5	×	—	—	
ROSA (EPA04)	4M5	×	—	—	
FK.FM.FN (EPA04)	6M6	×	—	—	
	MVCU	○	(3), (7)	—	

For details of the rewriting procedure, see Section 5 "MUT-III OPERATION".

2. GENERAL DESCRIPTION OF WORK

◆	General Description of Work	2-1
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GENERAL DESCRIPTION OF WORK

General Description of Work

This section describes the procedure for ECU field rewriting. First you need to obtain the required ECU data, password, and reference number from the Data Server. This operation is referred to as downloading. The downloaded data should be stored on a removal disk such as USB memory and then loaded into ECU via MUT-III. This operation is referred to as ECU field rewriting. Finally, you should load the data in ECU onto the Data Server. This operation is referred to as uploading. ECU field rewriting ends with uploading. Note that you may not perform the next ECU field rewriting if you fail to perform uploading the data.

At Office (See Section 4 “DATA SERVER OPERATION”.)

●Downloading

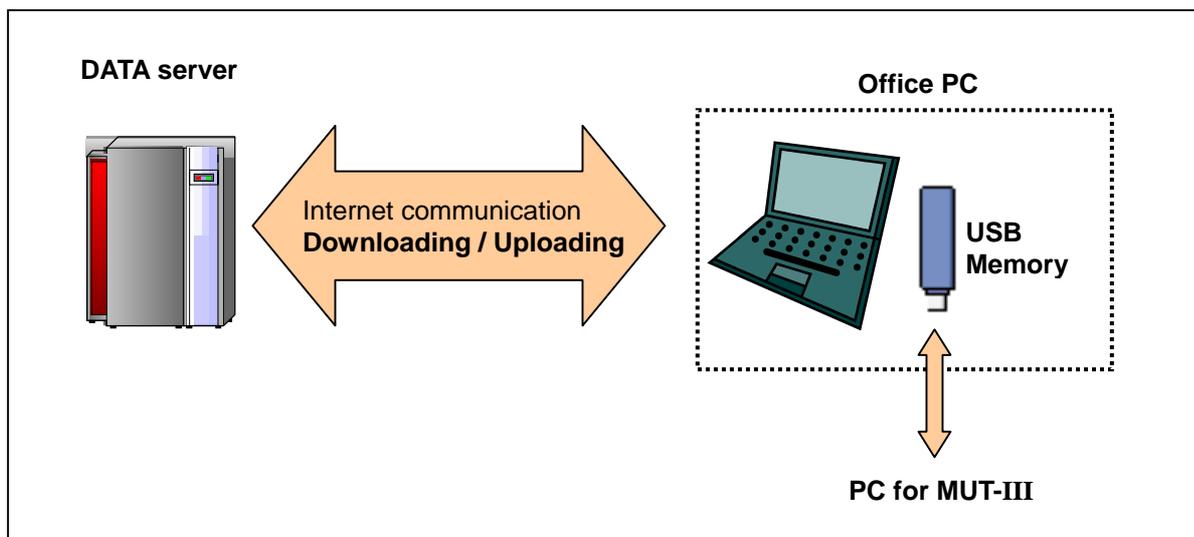
Internet-connected PC

- (1) Insert a USB memory stick into a slot of the PC.
- (2) Run Internet Explorer and access the Data Server login window.
- (3) Log into the Data Server.
- (4) Select the chassis number, ECU type, and item for ECU to be rewritten.
- (5) Download ECU data and store it in the USB memory.
- (6) Make the note of “Reference number” and “Password” or print the window as it is for the ECU rewriting.
- (7) Remove the USB memory from the slot of PC.

●Uploading

Internet-connected PC

- (1) Insert a USB memory stick into a slot of the PC.
- (2) Run Internet Explorer and access the Data Server login window.
- (3) Log into the Data Server.
- (4) Select “History upload” option and then select the required file in the USB memory.
- (5) Wait a few seconds until the transmission to the Data Server ends.
- (6) The data uploaded to the Data Server is shown on the PC screen. Check the data and select the OK button to complete “History upload”.
- (7) Log out the Data Server.
- (8) Remove the USB memory from the PC slot.



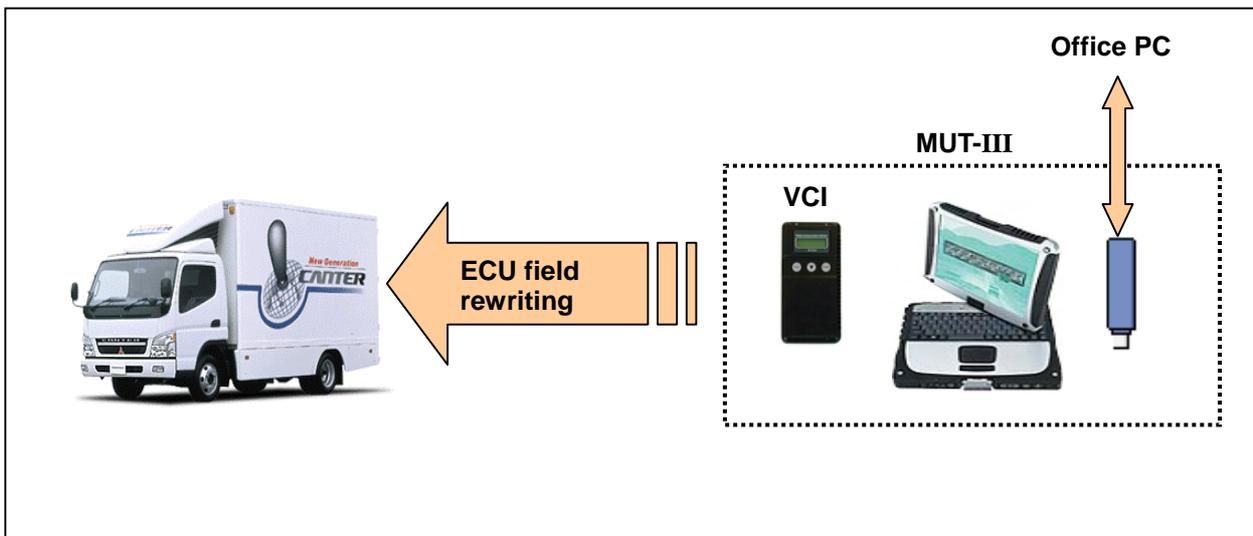
GENERAL DESCRIPTION OF WORK

At Workshop (See Section 5 “MUT-III OPERATION”.)

●ECU rewriting

Use the MUT-III.

- (1) Insert a USB memory stick into a slot of the PC for MUT-III and boot up the PC.
- (2) Copy data in the USB memory to the PC.
- (3) Select “Coding Menu” for rewriting.
- (4) Enter the “Password” and “Reference number” transferred from the Data Server window.
- (5) Select the rewrite mode (Manual or Automatic).
- (6) Enter a work note in the “Memo” field as required.
- (7) Check the rewrite data and start rewriting if it is acknowledged, and wait until the rewriting is complete.
- (8) Check the “Writing Result” and select the OK button if it is acceptable to end the rewriting.
- (9) Shut down the PC for the MUT-III and remove the USB memory from the slot.



3. PREPARATION

- ◆ **Devices** 3-1
- ◆ **License** 3-1

PREPARATION

To perform ECU rewriting, you need to prepare devices and obtain the right to access the Data Server.

1. Devices

No.	Item	Explanation
1	MUT-III hardware	The following hardware devices are required. These hardware devices are the same as those required for the MUT-III diagnostic tester. <ul style="list-style-type: none">• PC for MUT-III• VCI (MH062927)• USB cable (MH063668)• Harness E (MH063661)
2	MUT-III software	The software version FMS-E07-1 or above is required.
3	Removable disc (USB memory etc)	It's required for transmitting the ECU data between PC for MUT-III and PC accessible to the Internet. The folder "CodingData_EOL" should be created in USB memory before loading data.
4	PC accessible to the Internet	It's required for download and upload to Data server. The Internet Explorer, version 5.5 or above, is required. The Antivirus software is recommended.

2. License

To "prevent unauthorized modification" and "secure correct operation", users need to be registered and obtain user IDs and initial passwords in advance to access the Data Server.

(1) Registering a user ID

Each user needs to notify the following information to MFTBC via the distributor. In a few days, the user will be registered and the user ID and initial password will be informed to the user via the distributor.

- 1) User name
- 2) Email address
- 3) Company name
- 4) VCI serial number used

(2) Password management

a) At initial logon

At initial logon, the user needs to change the password. The user cannot access the Data Server until he/she changes the initial password.

b) Changing the password

The following rules should be observed to change the password:

- Use alphanumeric characters (case sensitive) and/or symbols.
- Use at least six characters.
- Use at least one uppercase letter, at least one lowercase letter, and at least one digit.

PREPARATION

c) Password expiration date

A password is expired 30 days after the change of the password. You should change the current password after the expiration date of 30 days.

d) If you forget your password

You have to notify MFTBC via the distributor to reset your password.

(3) Management of user ID

Please notify unnecessary user ID (which is no longer used) to MFTBC via the distributor without delay.

4. DATA SERVER OPERATION

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DATA SERVER OPERATION

Access to Data Server

(1) Run the Web browser.

MITSUBISHI FUSO TRUCK & BUS CORPORATION - Microsoft Internet Explorer の提供元: FEC InternetExplorer 6 カスタムパッケージ 0409

ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)

戻る 検索 お気に入り 移動

アドレス http://www.mitsubishi-fuso.com/en/index.html

FUSO MITSUBISHI FUSO TRUCK & BUS CORPORATION

Top page Site Map Japanese Site
Products International Sales & Service Technology

Corporate Information

- Outline
- Executives
- Organization Chart
- Roadmap
- Development
- Production
- Quality & technology
- R&D and production facilities
- FUSO History
- Environmental Activities
- CSR Activities

Products

Products TOP

International Sales & Service

Worldwide Distributors
Special Report

Technology

Q&A
Technical Info
Save Energy

Policy for Personal Information Protection

NEWS

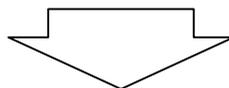
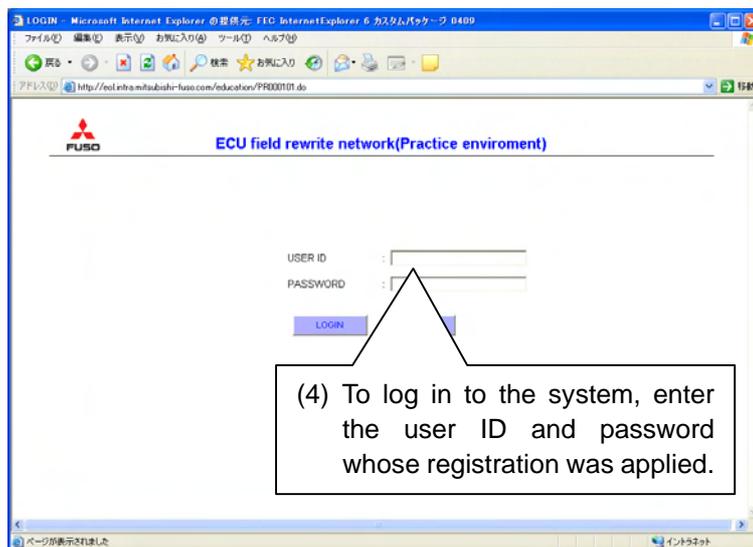
- 2007.01.17 DaimlerChrysler Truck Group again posts record sales in 2006
- 2006.12.05 Mitsubishi Fuso Announces Results of 28th Annual Sketch Contest
- 2006.11.15 Mitsubishi Fuso Announces New Light-Duty Vehicle Initiative in Mexico
- 2006.10.31 DaimlerChrysler and Mitsubishi Fuso Conduct Student Educational Programs Under Takenoko Fund Cultural Exchange Initiative
- 2006.09.14 Mitsubishi Fuso Launches Next Generation Canter Truck in Turkey
- 2006.07.28 Mitsubishi Fuso Announces 2006 Summer Sketch Contest
- 2006.07.21 Mitsubishi Fuso Exhibits Advanced Vehicle Technology at Indonesia International Motor Show
- 2006.07.14 Mitsubishi Fuso Launches New Generation Canter in South Africa

<Full Coverage>

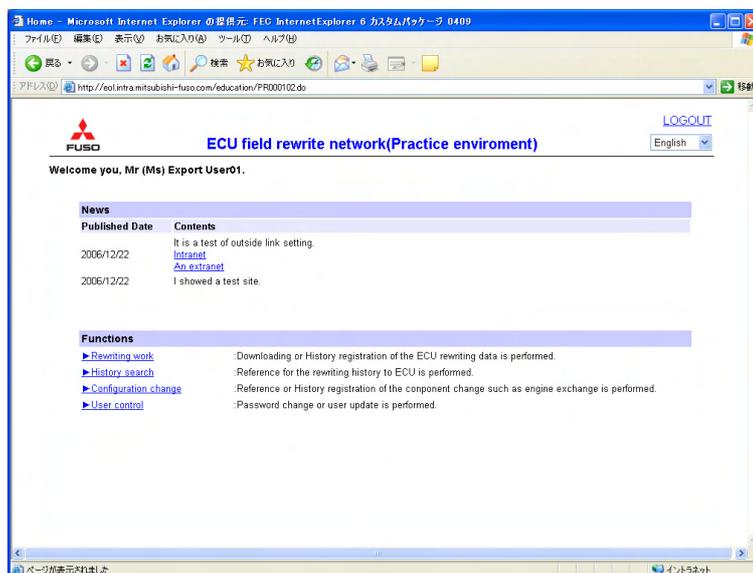
ページが表示されました インターネット

DATA SERVER OPERATION

(3) The login page to the system is displayed.

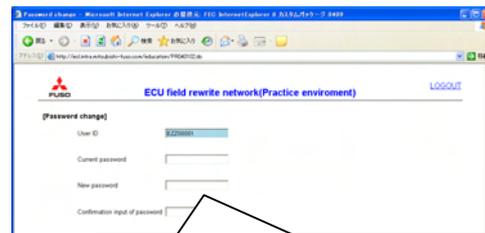
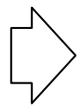
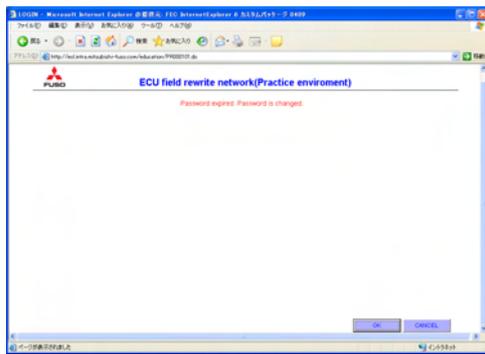


(5) The system top page is displayed, the preparation for the work completed.

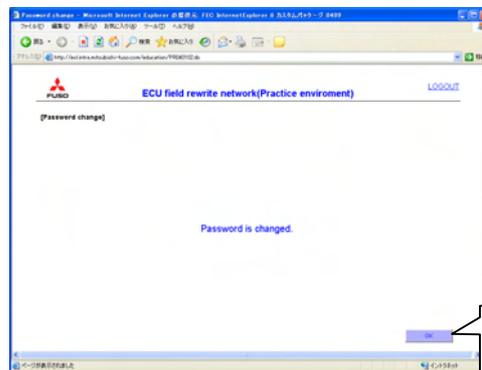
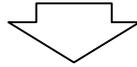


DATA SERVER OPERATION

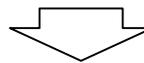
- At the time of the first login or when 30 or more days have passed after password change



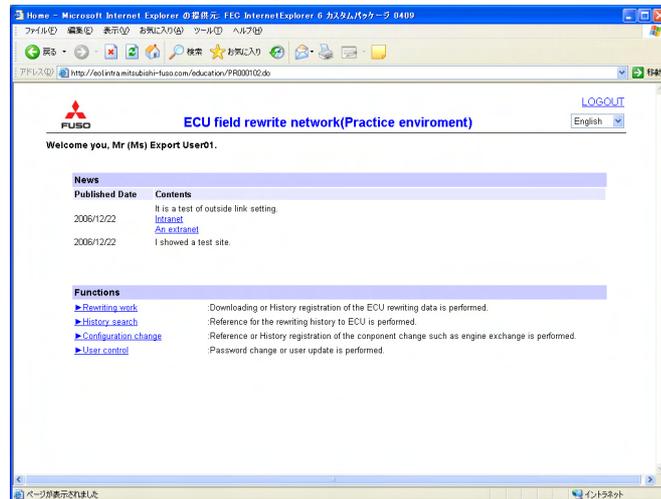
(1) Enter the following three.
- Current password
- New password
- New password (for confirmation)



(2) Select OK.



(3) The system top page is displayed.



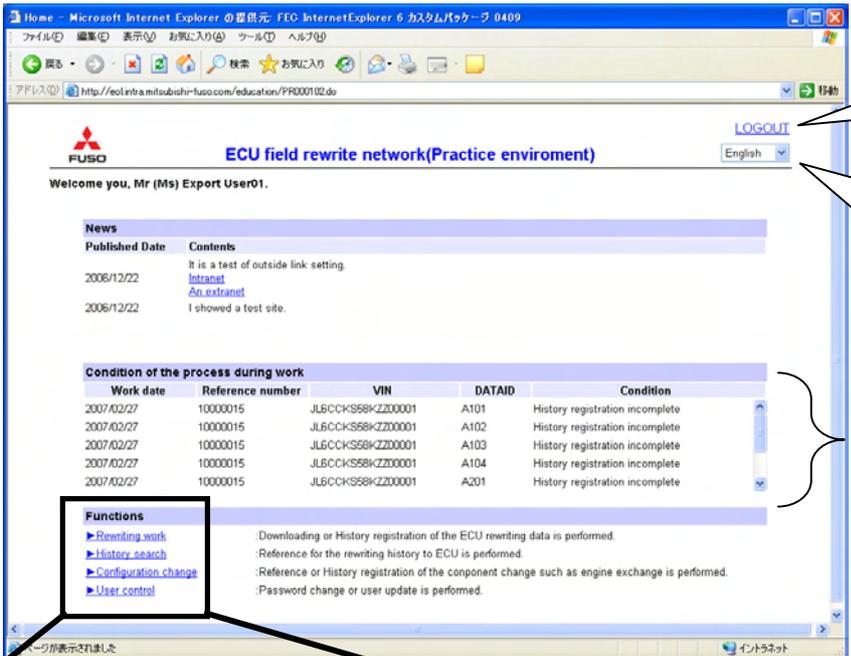
Important: Notes on password change

When a password is to be changed, set it following the following rules.

- Half-size alphanumeric characters (case-sensitive) can be used.
- Set at least six characters.
- Use one or more upper-case alphabets, one or more lower-case alphabets, and one or more numbers.
- Change to the same password as the current one is invalid.

DATA SERVER OPERATION

Window: Top page



Delete login information and display login page.

Japanese-language and English-language window displays can be selected. (The functions are the same.)

List of works in progress is displayed. (Items whose history registration is completed are no longer displayed.)

Functions
[▶ Rewriting work](#)
[▶ History search](#)
[▶ Configuration change](#)
[▶ User control](#)

Functions	
▶ Rewriting work	Makes it possible to download and history-register written data.
▶ History search	Makes it possible to view the history of vehicle rewriting.
▶ Configuration change	Makes it possible to change engines during engine modification and to register link engine data.
▶ User control	Makes it possible to change passwords.

Rewriting Data Request (Download)

Window: Top page

The screenshot shows a Microsoft Internet Explorer browser window displaying the 'ECU field rewrite network(Practice environment)' website. The browser's address bar shows the URL: <http://eol.intra.mitsubishi-fuso.com/education/PR000102.do>. The page features the FUSO logo and a 'LOGOUT' link. A welcome message reads: 'Welcome you, Mr (Ms) Export User01.' Below this is a 'News' section with two entries:

Published Date	Contents
2006/12/22	It is a test of outside link setting. Intranet An extranet
2006/12/22	I showed a test site.

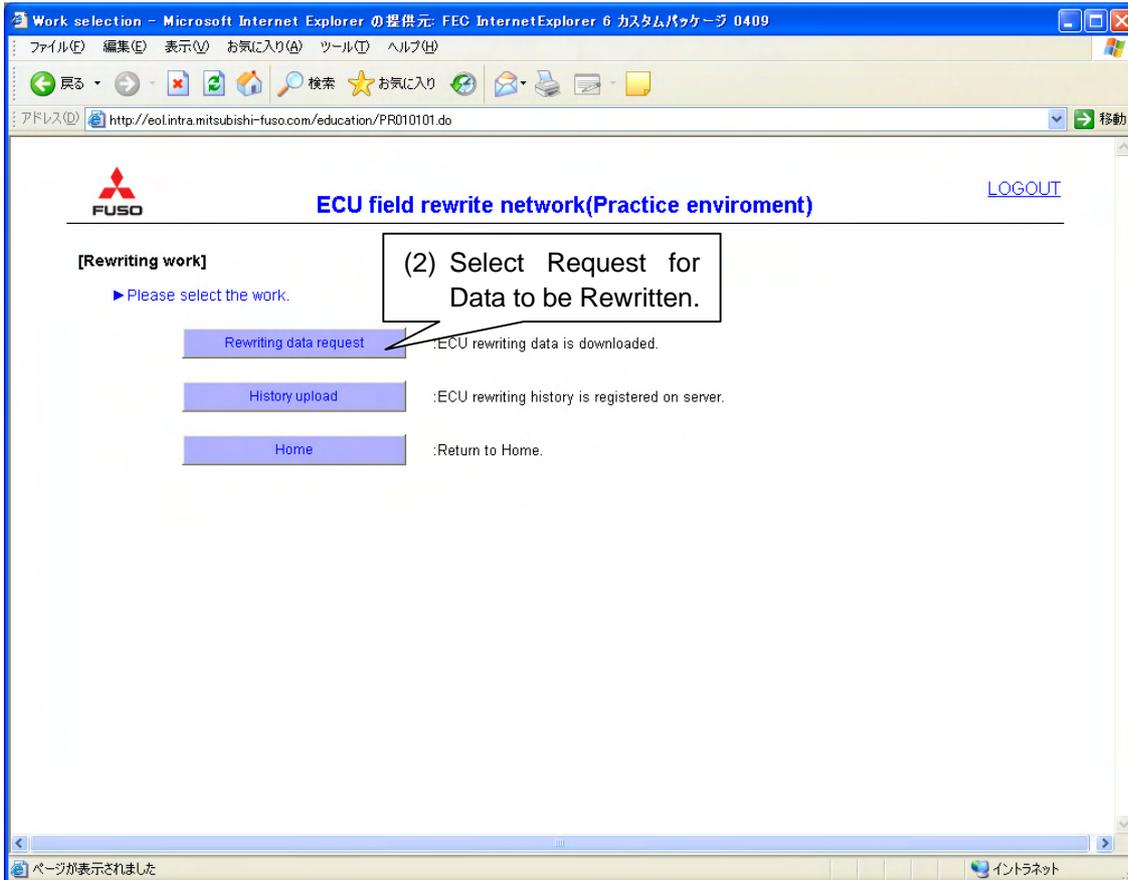
The 'Functions' menu is highlighted, showing the following options:

- ▶ [Rewriting work](#)
- ▶ [History search](#)
- ▶ [Configuration change](#)
- ▶ [User control](#)

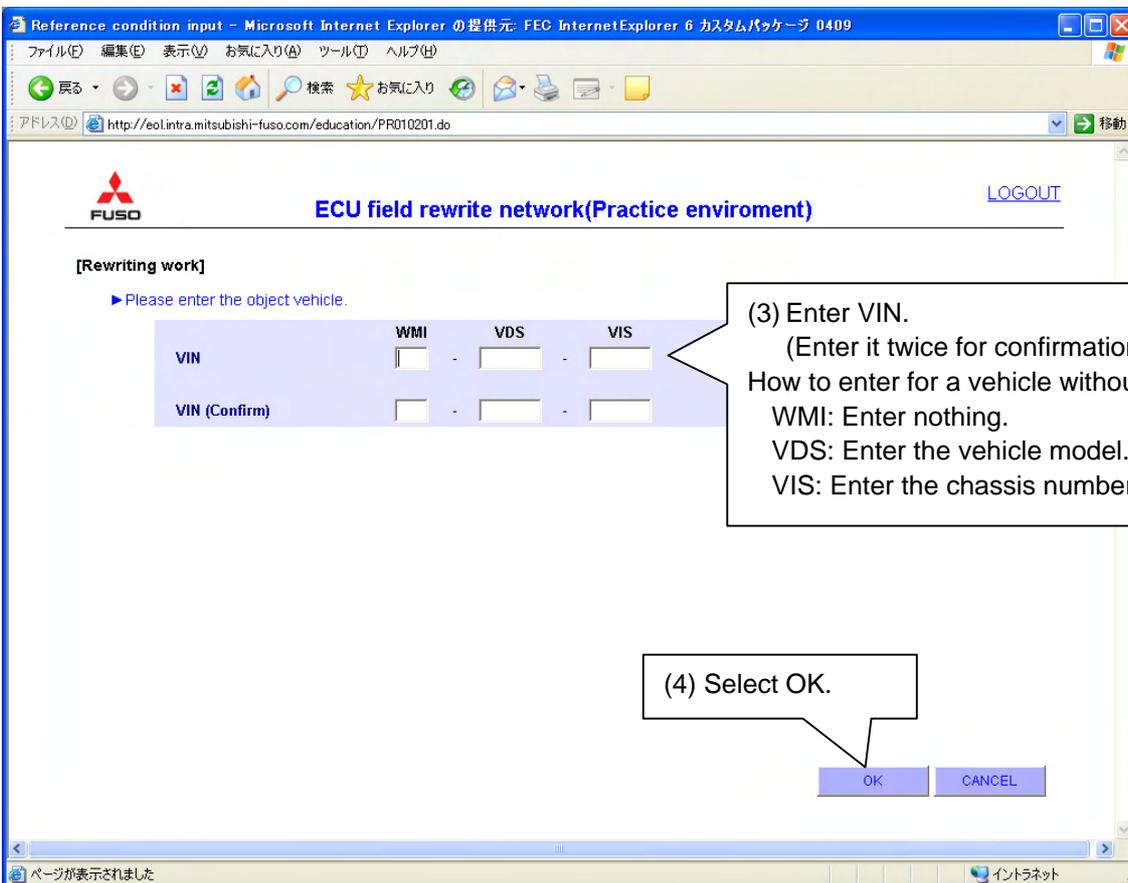
A callout box points to the 'Rewriting work' option with the text: '(1) Select Rewriting Work.'

DATA SERVER OPERATION

Window: Selecting rewriting work



Window: Vehicle selection



DATA SERVER OPERATION

Window: ECU selection

The screenshot shows a web browser window titled "EUC selection - Microsoft Internet Explorer の提供元: FEC: Internet Explorer 6 カスタムパッケージ 0409". The address bar shows "http://eol.intra.mitsubishi-fuso.com/fss/PR010201.do". The page content includes the FUSO logo and the title "ECU field rewrite network". A "LOGOUT" link is visible in the top right.

Under the heading "[Rewriting work]", there is a section "Object Vehicle" with a table of vehicle details:

VIN	Chassis #	Vehicle Type	Engine Model	Engine #
FK00AB X000002	X000002	FK00ABCDEF	6M606A1F4217	YYY002

Below this, a prompt says "Please select an ECU." followed by a table of ECUs:

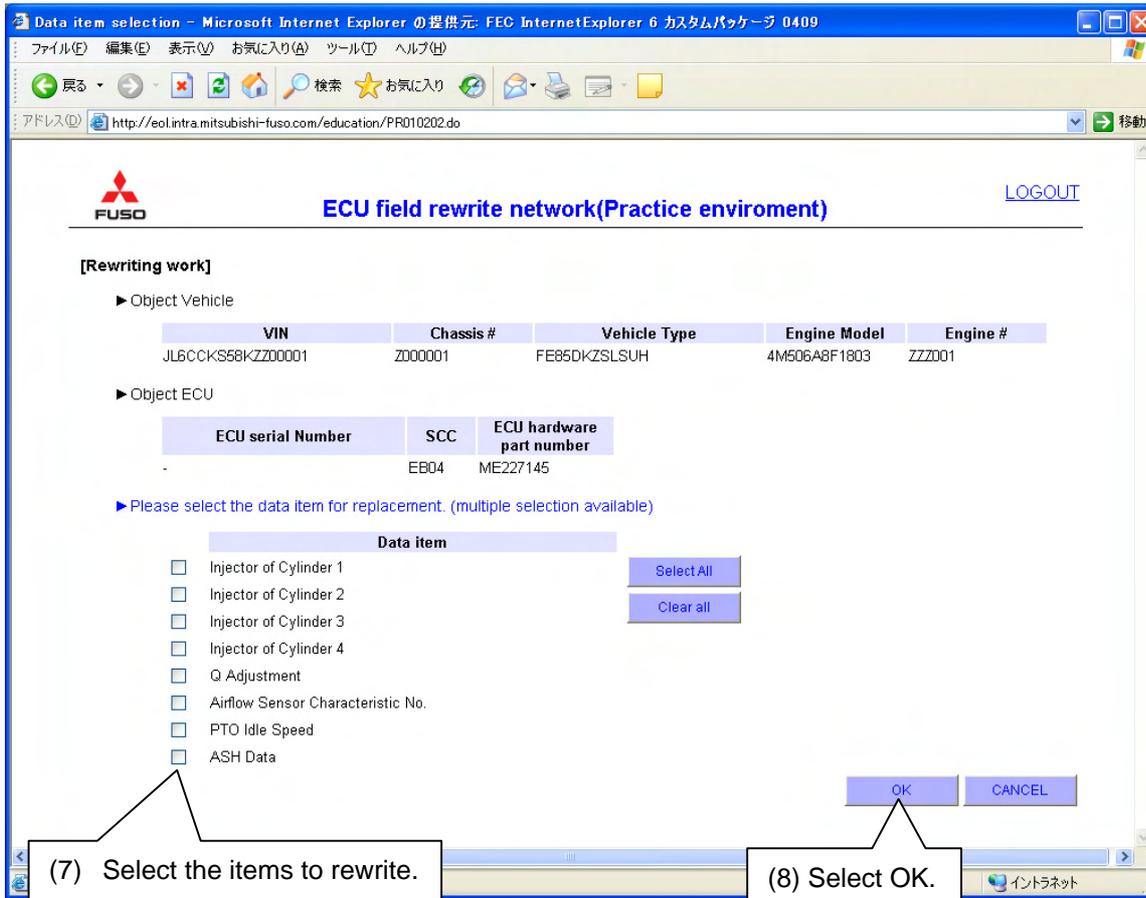
SCC	ECU type	ECU serial number	ECU hardware part number
<input checked="" type="radio"/> EB02	DOM-Common-rail(GM6)	-	ME304523
<input type="radio"/> EB08	MVCU	EB08Y002	Mk543138

Callout box (5) points to the radio buttons in the ECU table. Callout box (6) points to the "OK" button at the bottom right of the interface.

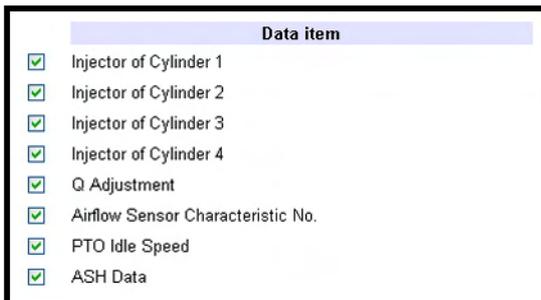
Page status: ページが表示されました. Bottom right: イン트라ネット

DATA SERVER OPERATION

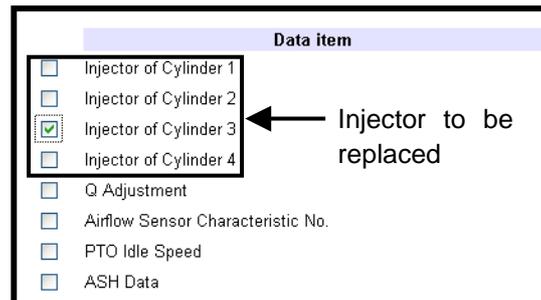
Window: Selecting items to be rewritten



When ECU is replaced (Select all items.)



When injector is replaced (Select the injector to be replaced.)



DATA SERVER OPERATION

Window: Download

(9) Select Download. After Save as ... window appears, select the specified folder (CodingData_EOL) in the USB memory to save the file.

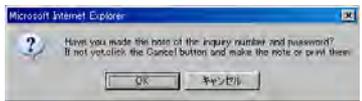
Inquiry number	Data valid duration	Data item name	DATA ID	Writing value	Download	Password
10000026	2007/4/5 - 2007/7/5					
Injector of Cylinder 1	A101	9F0000000000000000000000000000009F			Download	651222
Injector of Cylinder 2	A102	9F0000000000000000000000000000009F			Download	
Injector of Cylinder 3	A103	9F0000000000000000000000000000009F			Download	
Injector of Cylinder 4	A104	9F0000000000000000000000000000009F			Download	
Injector of Cylinder 5	A105	9F0000000000000000000000000000009F			Download	
Injector of Cylinder 6	A106	9F0000000000000000000000000000009F			Download	
Q Adjustment	A201	01FF			Download	
Airflow Sensor Characteristic No.	A301	0000			Download	

Download	Password
ad	

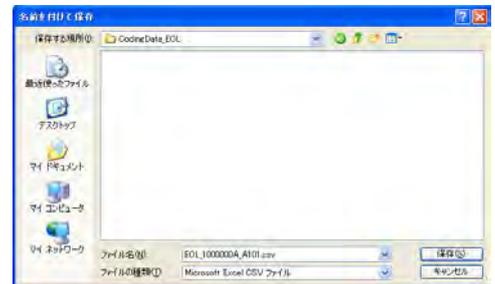
Download	Password
ad	406294

(10) After confirming all passwords displayed, press the EXIT button. A message window appears to ask you for confirming that you have printed or noted down them.

* Be sure to note down the reference number (Inquiry number) and password or output the screen in hardcopy before pressing the EXIT button.



Save as window (specify CodingData_EOL) displayed when "Download" is selected in step (9).

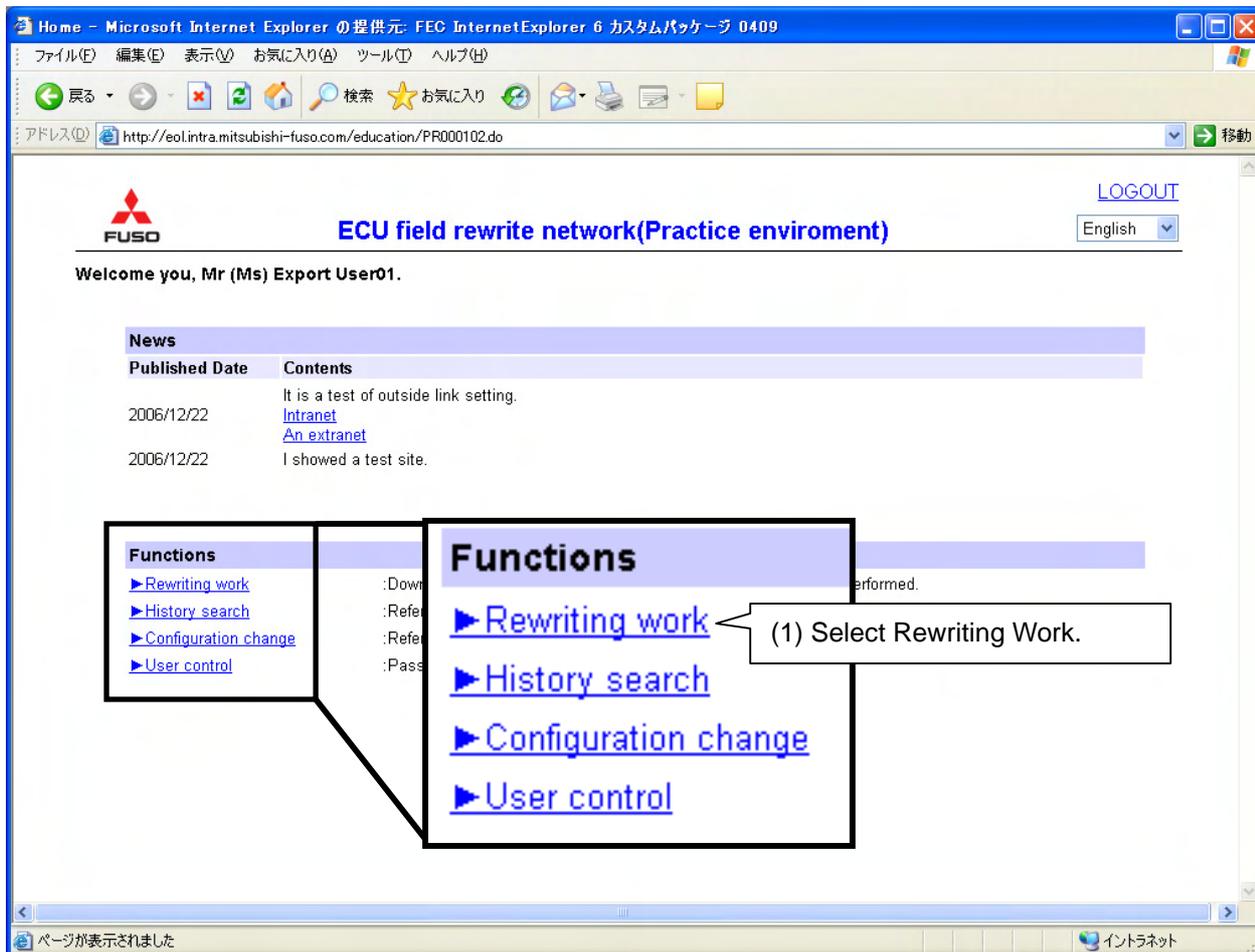


Important: Notes on downloading

- The Save as ... window appears with the default file name specified. Save the file without changing the file name. (MUT cannot recognize any other file name.)
- When downloading files, confirm that a password is displayed next to the "Download" selected.
- After downloading is complete, be sure to make the note of the reference number (Inquiry number) and password or select the menu option "File" and then "Print" to print the screen.

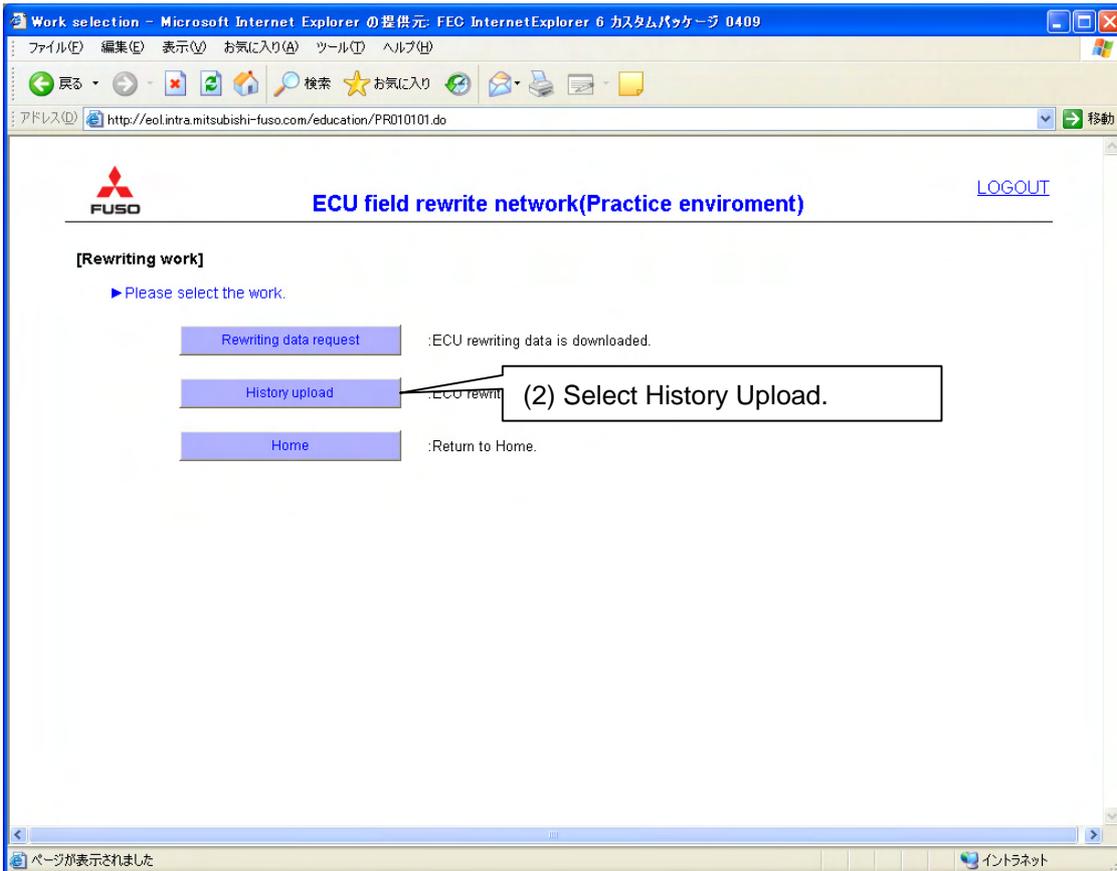
Registering ECU Data (Upload)

Window: Top page

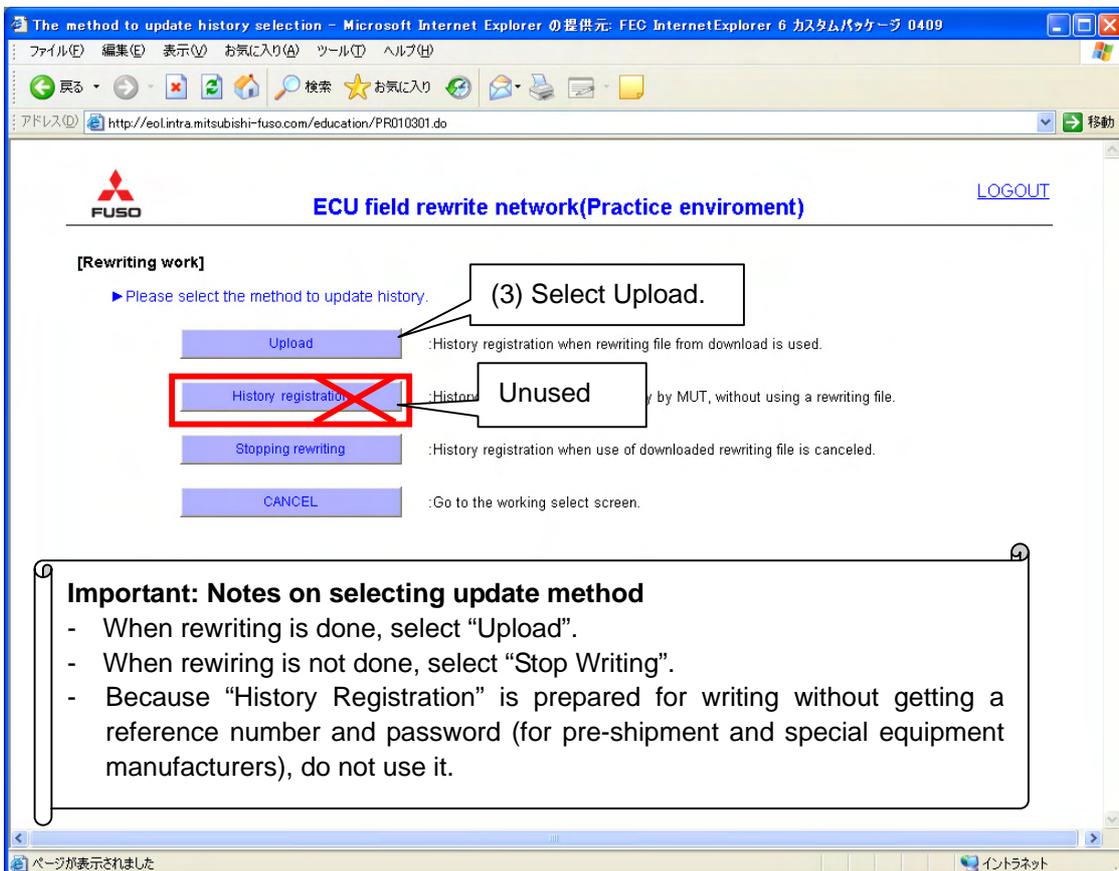


DATA SERVER OPERATION

Window: Selecting rewriting work



Window: Selecting history registration method



DATA SERVER OPERATION

Window: Selecting history file

History file registration - Microsoft Internet Explorer の提供元: FEC Internet Explorer 6 カスタムパッケージ 0409

アドレス http://eol.intra.mitsubishi-fuso.com/education/PR010302.do

FUSO ECU field rewrite network(Practice enviroment) [LOGOUT](#)

[Rewriting work]

▶ Please input the history file to upload.

History file 1	<input type="text"/>	参照...
History file 2	<input type="text"/>	参照...
History file 3	<input type="text"/>	参照...
History file 4	<input type="text"/>	参照...
History file 5	<input type="text"/>	参照...
History file 6	<input type="text"/>	参照...
History file 7	<input type="text"/>	参照...
History file 8	<input type="text"/>	参照...
History file 9	<input type="text"/>	参照...
History file 10	<input type="text"/>	参照...

(4) Press the Brouse...button and select a file whose history is to be registered from the CodingData_MUT folder.

(5) When all files are selected, select OK.

OK CANCEL

ファイルの参照 CodingData_MUT
MUT_1000027_A301.csv
MUT_1000027_A301.csv

ページが表示されました

Important: Notes on upload

- Data with the same reference numbers can be collectively uploaded.
- If files with different reference numbers are registered at the same time, or an attempt is made to register data that has already been registered, an error occurs. Select another history file or cancel the registration and then re-select OK.

DATA SERVER OPERATION

Window: Checking registered data

The screenshot shows a Microsoft Internet Explorer window titled "Confirmation of history file registration". The address bar contains "http://ds-188:9080/fss/PR010307.do". The page header includes the FUSO logo and the text "ECU field rewrite network" with a "LOGOUT" link. The main content area is titled "[Rewriting work]" and contains the text "The information on target file is the following. Do you upload it?". Below this text is a table with the following data:

	Reference number	Chassis number	DATAID
History file 1	1000026B	FP50JD 0593427	A301

Below the table are two buttons: "OK" and "CANCEL". A callout box points to the "OK" button with the text: "(6) Check the data, and if there is no problem, select OK."

Window: Registration end

The screenshot shows a Microsoft Internet Explorer window titled "The completion of registration". The address bar contains "http://ds-188:9080/fss/PR010305.do". The page header includes the FUSO logo and the text "ECU field rewrite network" with a "LOGOUT" link. The main content area is titled "[Rewriting work]" and contains the text "Following history registration is complete.". Below this text is a table with the following data:

	Reference number	DATAID
History 1	1000026B	A301

Below the table is an "OK" button. A callout box points to the "OK" button with the text: "(7) Select OK to complete the history registration."

Quitting Rewriting

Window: Top page

The screenshot shows a Microsoft Internet Explorer browser window displaying the 'ECU field rewrite network(Practice environment)' website. The browser's address bar shows the URL: <http://eol.intra.mitsubishi-fuso.com/education/PR000102.do>. The page header includes the FUSO logo, the site title 'ECU field rewrite network(Practice environment)', a 'LOGOUT' link, and a language dropdown menu set to 'English'. A welcome message reads: 'Welcome you, Mr (Ms) Export User01.' Below this is a 'News' section with two entries:

Published Date	Contents
2006/12/22	It is a test of outside link setting. Intranet An extranet
2006/12/22	I showed a test site.

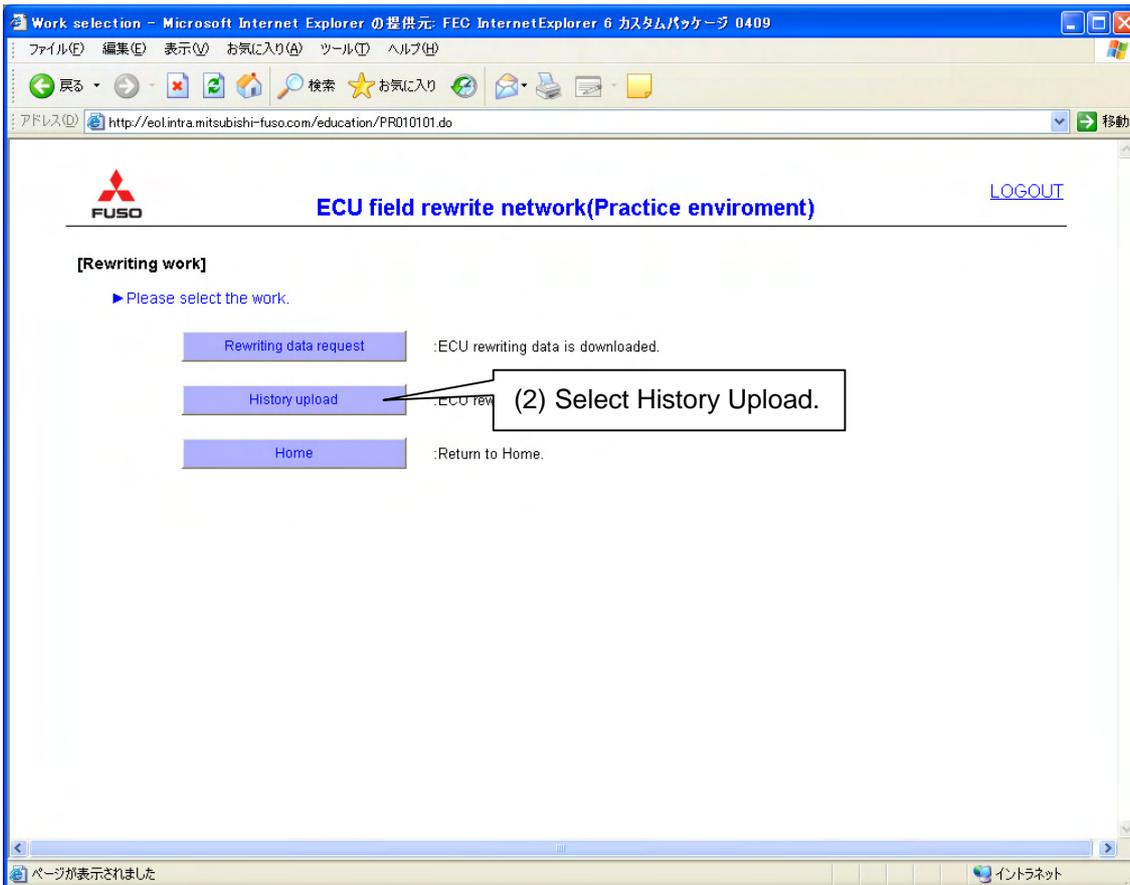
The 'Functions' menu is visible, with the following items:

- [▶ Rewriting work](#)
- [▶ History search](#)
- [▶ Configuration change](#)
- [▶ User control](#)

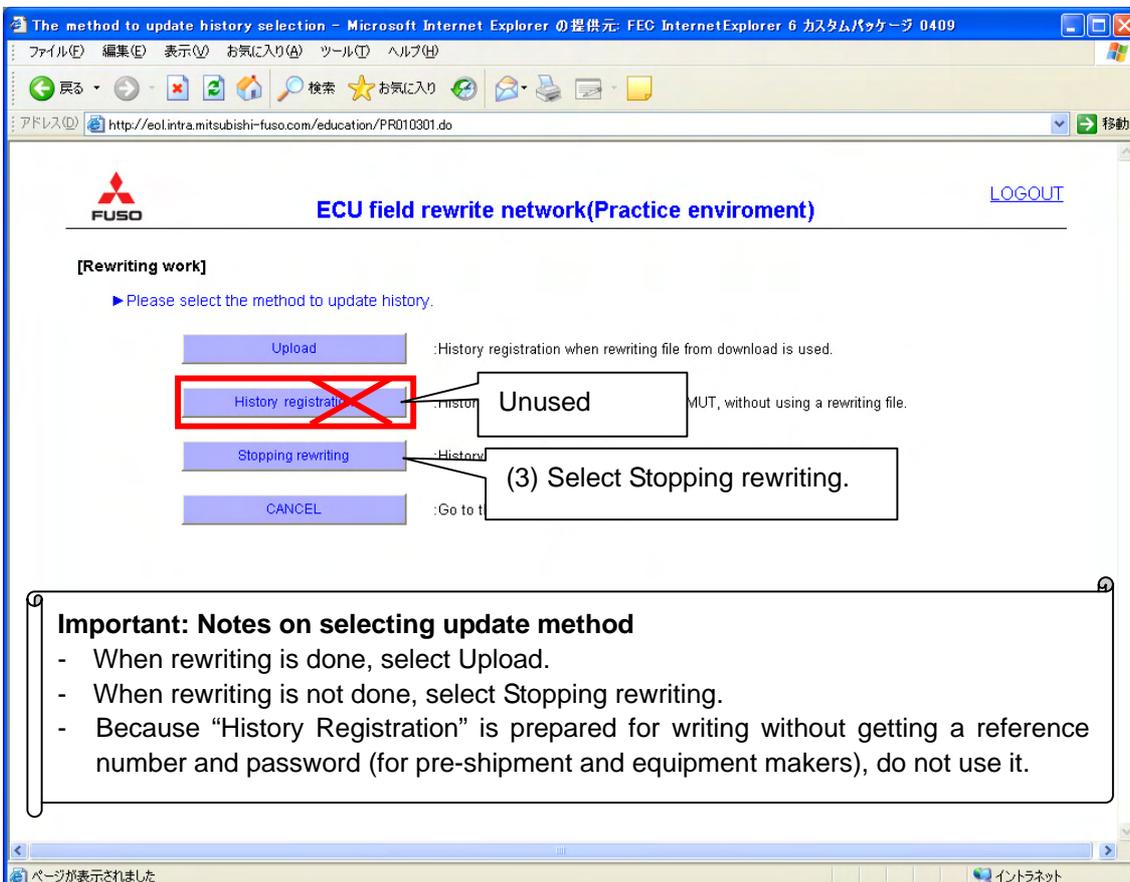
A callout box with a black border points to the 'Rewriting work' link, containing the text: '(1) Select Rewriting Work.'

DATA SERVER OPERATION

Window: Selecting rewriting work



Window: Selecting history registration method



DATA SERVER OPERATION

Window: Entering reason for quit

[Rewriting work]

▶ Please input the information

Reference number: 1000026C DATAID: A301

Reason for canceling:

- Downloading was done by mistake.
- The rewriting work period (for three days) was over.
- Rewriting was unnecessary.

Postsript / Other reasons:

Notes on registering rewriting cancel
- If you forgot the reference number and DATA ID, check the list of processing in progress on the top page.

(4) Enter a reference number.

(5) Enter a DATA ID.

(6) Select the reason for cancelling.

(7) Enter any other reasons and additional items.

(8) Select OK.

OK CANCEL

Window: Checking registered data

[Rewriting work]

▶ The work is stopped with following contents. Click on the 'OK' button if it is fine.

Reference number: 1000026C DATAID: A301

Reason for cancel:
Rewriting was unnecessary.

OK CANCEL

(9) Check the data, and if there is no problem, select OK.

DATA SERVER OPERATION

Window: Registration completion

The screenshot shows a Microsoft Internet Explorer window titled "The completion of registration - Microsoft Internet Explorer". The address bar displays "http://ds-188:9080/fss/PRO10305.do". The page content includes the FUSO logo on the left and the text "ECU field rewrite network" in the center, with a "LOGOUT" link on the right. Below this, a section titled "[Rewriting work]" contains the message "Following the stop registration is complete." and a table with the following data:

Reference number	DATAID
1000026C	A301

A callout box with the text "(10) Select OK to complete the registration cancelling." points to an "OK" button located at the bottom right of the page content.

Rewriting History Search

Window: Top page

The screenshot shows a Microsoft Internet Explorer browser window displaying the 'ECU field rewrite network(Practice environment)' website. The browser title is 'Home - Microsoft Internet Explorer の提供元: FEC InternetExplorer 6 カスタムパッケージ 0409'. The address bar shows the URL 'http://eol.intra.mitsubishi-fuso.com/education/PR000102.do'. The page content includes a FUSO logo, a 'LOGOUT' link, and a language dropdown set to 'English'. A welcome message reads 'Welcome you, Mr (Ms) Export User01.' Below this is a 'News' section with two entries. A 'Functions' menu is visible, with 'History search' highlighted. A callout box points to 'History search' with the text '(1) Select History Search.'

Published Date	Contents
2006/12/22	It is a test of outside link setting. Intranet An extranet
2006/12/22	I showed a test site.

Functions

- ▶ [Rewriting work](#)
- ▶ [History search](#)
- ▶ [Configuration change](#)
- ▶ [User control](#)

(1) Select History Search.

DATA SERVER OPERATION

Window: Entering reference conditions

The screenshot shows a web browser window titled 'History search - Microsoft Internet Explorer の提供元: FEC Internet Explorer 6 カスタムパッケージ 0409'. The address bar shows 'http://eol.intra.mitsubishi-fuso.com/fss/PRO20001.do'. The page header includes the FUSO logo and the text 'ECU field rewrite network' with a 'LOGOUT' link. Below the header, there is a section '[History search]' with a prompt 'Please input the reference condition.' and a list of search criteria:

- VIN: WMI, VDS, VIS
- Chassis number: Model, Number
- ENGINE: Engine model (4M5), Engine number
- ECU NUMBER: ECU type (DOM-Common-rail(4M)), Serial number
- FINGER PRINT: Supplier name (Bosch), Serial number of the writing device, Writing day (YYYYMMDD)

At the bottom of the form, there are three buttons: 'Search', 'CLEAR', and 'CANCEL'. A '移動' button is also visible in the browser's address bar area.

(2) Select the conditions to specify.

(3) Enter the conditions.

(4) Select Search.

When searching a vehicle without VIN, enter the conditions in Chassis number.

DATA SERVER OPERATION

Window: Displaying search results

History search result

Vehicle production history					Detail
VIN (Chassis number)	FP50JD-0593427				
Type classification	FP50JDR4C7				
Model	FP50JD				
Notification type					
Chassis number	593427				
Engine	6M70-999938				

Complete examination date	Shipping date	Sales date

Engine exchange history

	Engine model	Model	Engine number	Registration date	Detail
Production history	6M70	6M70	999938	20070115	
Latest	6M70	6M70	999938	20070115	

ECU exchange history

	ECU hardware part number	ECU Serial number	Registration date	EOLDetail	Detail
Common-rail	MK526658	44169265	20070115		

When two or more vehicles meet the conditions

Plural applicable data were searched. Please select one data.

History search result

VIN (Chassis Number)	Engine
<input checked="" type="radio"/> FP54JD-0593431	6M70-999942
<input type="radio"/> FP54JD-0593446	6M70-999967
<input type="radio"/> FP54JD-0593506	6M70-A00018

Notes on each data display

- Only the display of rewritten histories is supported.
- Detailed display is to be supported by obtaining complete vehicle, engine and transmission data or by link.

DATA SERVER OPERATION

Window: Displaying ECU details

EOL Detail display - Microsoft Internet Explorer

Address: http://ds-188:9080/fss/PR020003.do

FUSO **ECU field rewrite network** [LOGOUT](#)

[EOL Detail display]

EOL Detail display

ECU type	ECU serial number (At time of production)	ECU serial number (latest)
DOM-Common-rail(6M7)	44169265	44169265

Vehicle information

VIN	Engine	TRANSMISSION
FP50JD-0593427	6M70-999938	

Complete examination date Shipping date Sales date

Writing content

Data item	Writing value	FINGER PRINT
Airflow Sensor Characteristic No./SCR Characteristic No.	0000	0003 35453525 20060806021334
	0000	0003 35453525 20070116213238

[History](#)

File output Data print CANCEL

Done

Displays all rewriting history from the production to the current.

Displays written values from the production and latest histories.

Makes it possible to download displayed items into a CSV file.

Makes it possible to print the window.

The rewriting history from the production to the current is displayed.

Detailed display - Microsoft Internet Explorer

Reference number	Writing value	FINGER PRINT	Reason for cancel
1000026B	0000	0003 35453525 20070116213238	
10000257	0000	0003 35453525 20070115204816	□□□□□□□□
10000255	0000	0003 35453525 20070115201741	
00000000	0000	0003 35453525 20060806021334	

CANCEL

DATA SERVER OPERATION

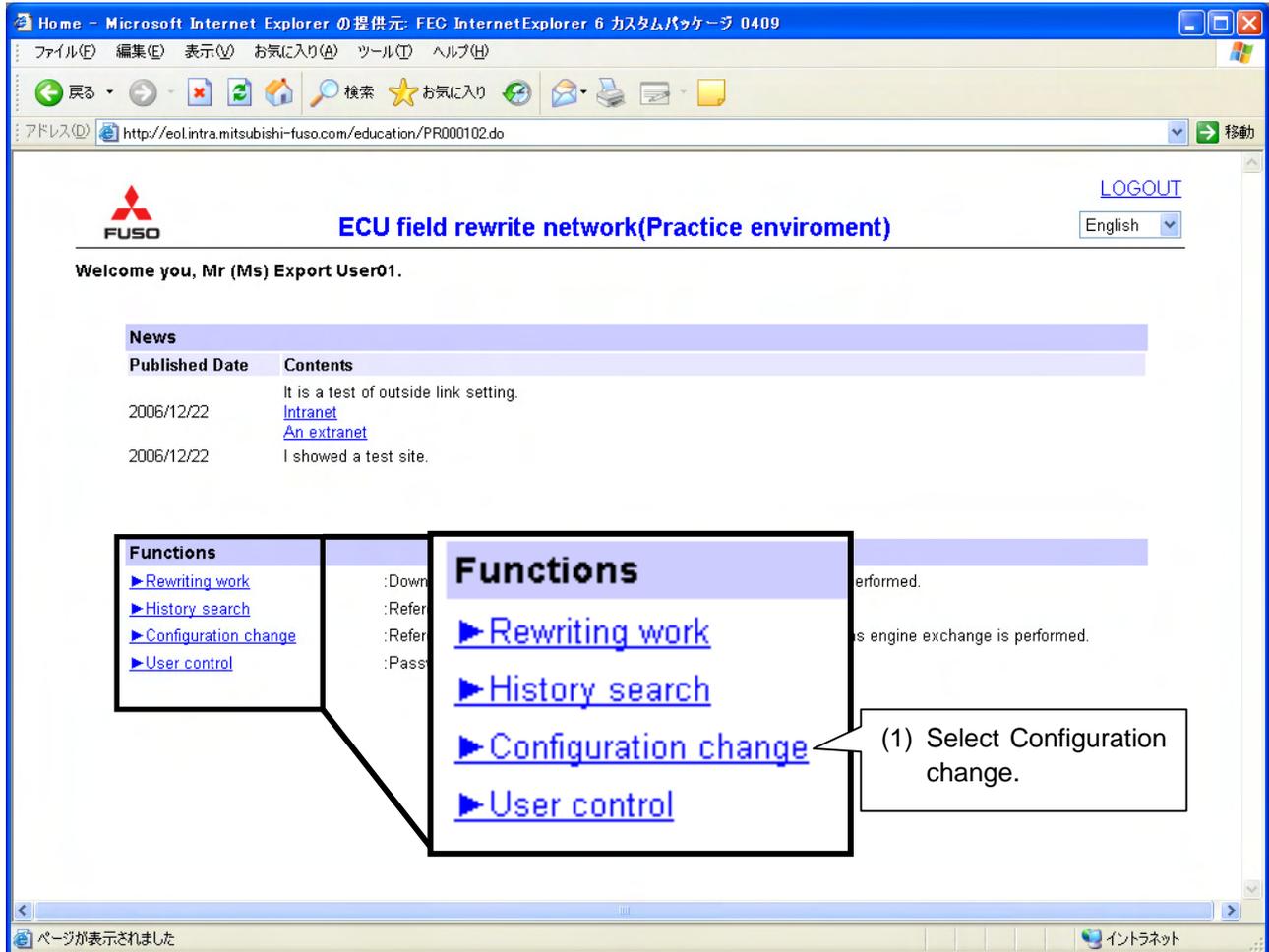
Preparatory Works for Engine Replacement

When replacing an engine in a given vehicle, you need to load new data particular to each engine such as injector type into the engine. After one of the following operations has been performed, do the works as indicated in the following pages before downloading the ECU data.

Major operations:

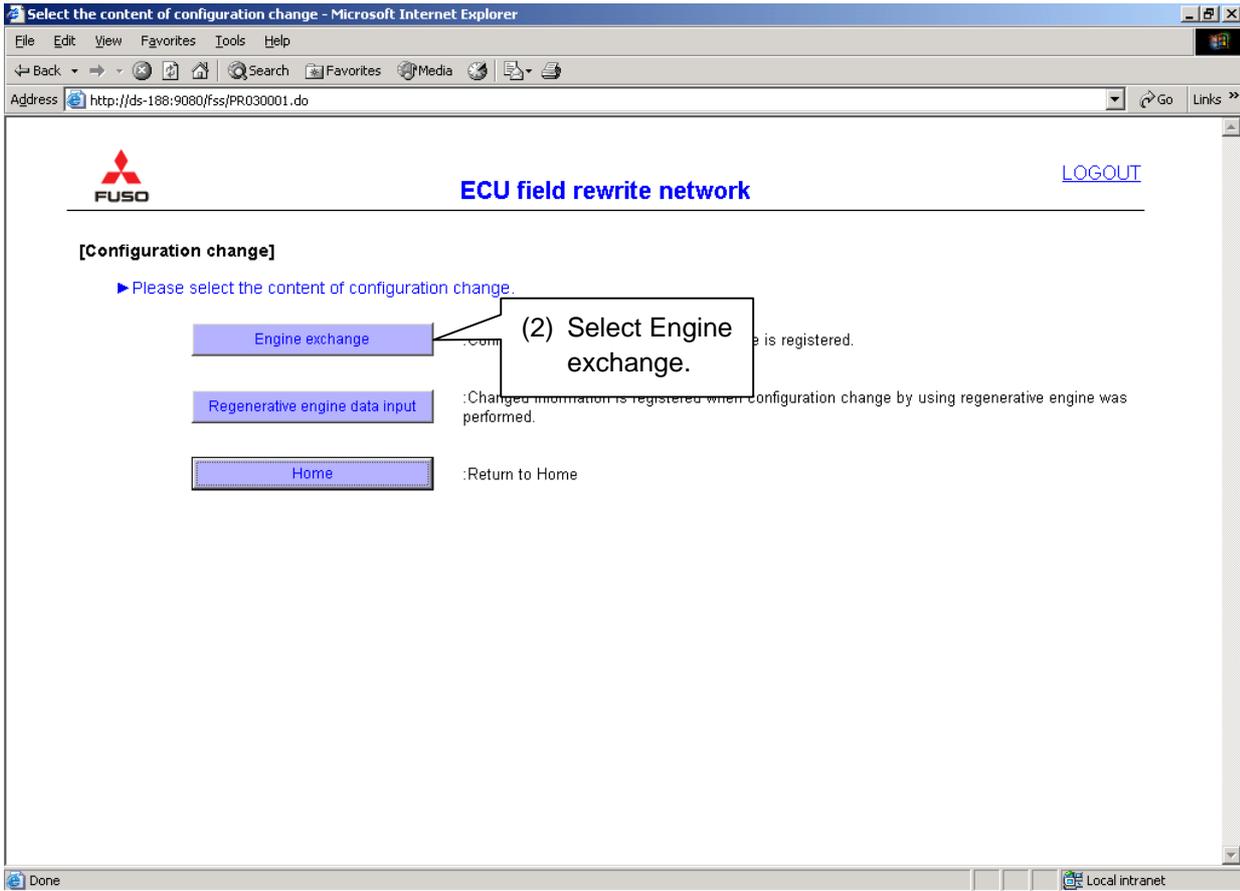
- Replacing an engine with new
- Transferring an engine from another vehicle

Window: Top page

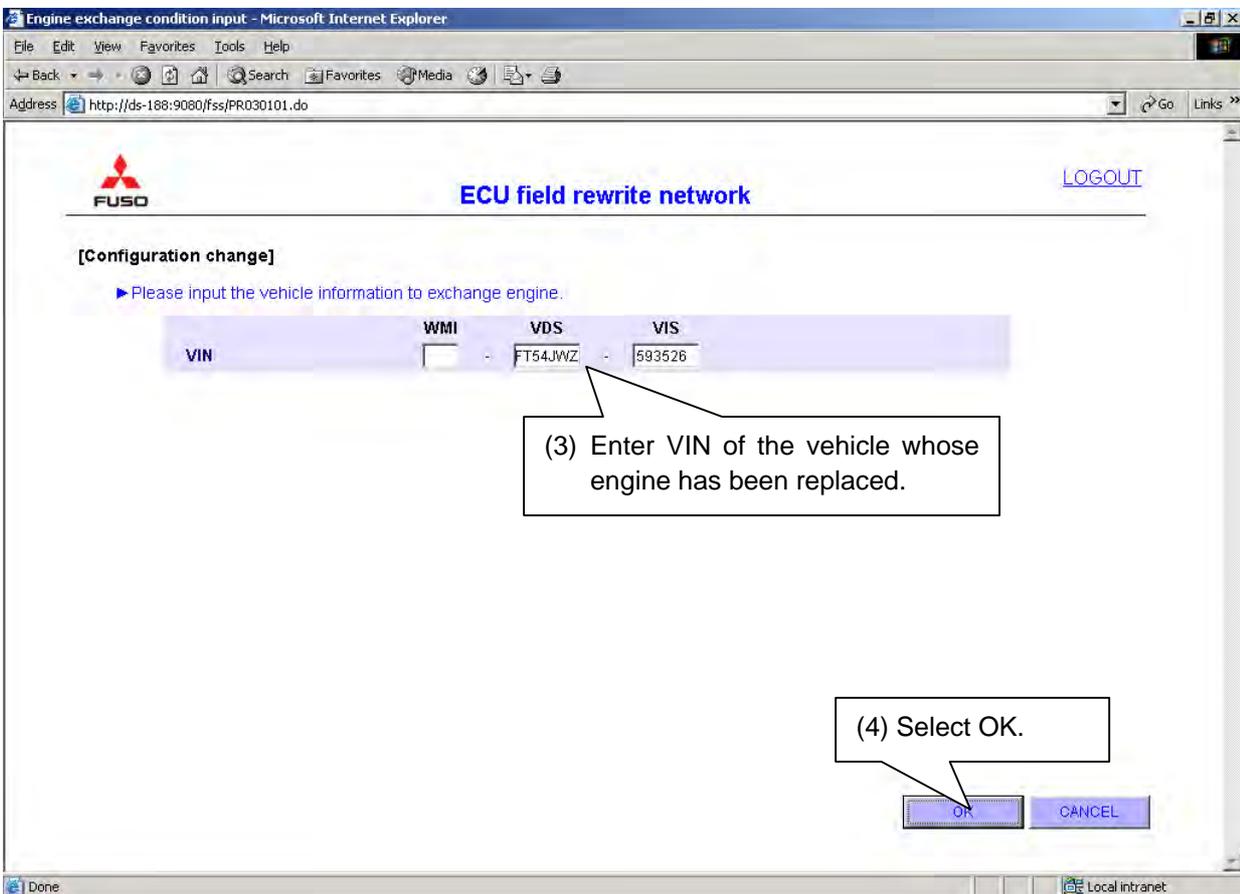


DATA SERVER OPERATION

Window: ECU detail display



Window: Entering vehicle information



DATA SERVER OPERATION

Window: Entering engine information

Engine exchange condition input - Microsoft Internet Explorer

Address: <http://ds-188:9080/fss/PR030101.do>

FUSO ECU field rewrite network [LOGOUT](#)

[Configuration change]

▶ Vehicle information to exchange engine

VIN	WMI	VDS	VIS
	-	FT54JWZ	- 593526

▶ Please input the new engine information.

ENGINE	Engine model	Engine number
	6M7 0	A00038

(5) Change the engine model, if required.

(6) Enter the engine number.

(7) Select OK.

When the Configuration change window appears, the later engine model and number are displayed.

OK CANCEL

Window: Entering engine information

Engine exchange confirmation - Microsoft Internet Explorer

Address: <http://ds-188:9080/fss/PR030101.do>

FUSO ECU field rewrite network [LOGOUT](#)

[Configuration change]

▶ Configuration is changed with the following content. Click on 'OK' button, if it is fine.

▶ Vehicle information to exchange engine

VIN	WMI	VDS	VIS
	-	FT54JWZ	- 593526

▶ New engine

ENGINE	Engine model	Engine number
	6M7 0	A00038

(8) Confirm that the chassis number and engine number are correct.

(9) Select OK.

Confirm that correct VIN and engine number are displayed. If an incorrect number is found, select CANCEL and enter your correct number.

OK CANCEL

DATA SERVER OPERATION

Window: Completion of registration

FUSO [LOGOUT](#)

ECU field rewrite network

[Configuration change]

The registration of configuration change is complete.

▶ Vehicle information to exchange engine

WMI	VDS	VIS
FT54JWZ	-	593526

▶ New engine

ENGINE	Engine model	Engine number
6M7 0		A00038

This completes the preparation for getting new data for the replacement engine.
Now, you can get data to be loaded to replacement engines by using the normal procedure for getting write data.

(10) Select OK to end the operation.

OK

5. MUT-III OPERATION

- ◆ **Notes** 5-1
- ◆ **List of Service Works** 5-2
- ◆ **File Transfer (MUT-III↔Removable Disk)** 5-4
- ◆ **All Data Writing** 5-8
- ◆ **Injector Data Writing** 5-14
- ◆ **PTO Idle speed Writing** 5-21
- ◆ **SLD Limited Speed Writing** 5-27
- ◆ **Ash Data Writing** 5-33

Remarks:

This document is quoted from the MUT-III Instruction Manual which comes with the MUT-III Software. Refer to the MUT-III Instruction Manual if you have any questions.

MUT-III OPERATION

Notes

1. Common check items

The following conditions are not prerequisite for rewriting ECU data. But it is recommended to meet the following requirements when ECU data rewriting is performed for the sake of safety:

- Engine stopped
- Vehicle stopped
- Gear placed in the neutral position and parking brake applied
- Normal battery voltage (24 V-vehicle: terminal voltage 20 V or higher desirable)
(12 V-vehicle: terminal voltage 10 V or higher desirable)

2. Requirements for ECU data rewriting

The following requirements must be satisfied to perform ECU data rewriting.

ECU	Requirements for rewriting (all must be satisfied)	Error code (*1)
Bosch 4M5 ECU 6M7 ECU	(1) Key switch ON (2) Engine speed = 0 rpm (3) Vehicle speed = 0 km/h (4) Gear position: neutral or parking	Communication error (22)
DENSO 6M6 ECU	(1) Key switch ON (2) Engine speed = 0 rpm (3) Vehicle speed ≤ 1 km/h (4) Data writing not in progress	Communication error (22)
MVCU	(1) On the MUT-III, select the write target system and press the write execution key. (2) Ignition switch: ON (main power supply: higher than 4 V) (3) Auto cruise inoperative (4) SLD inoperative (5) Vehicle speed: Less than 3 km/h (6) Engine speed: Less than 400 rpm (7) ECU power supply: Higher than 8 V (both battery power and main power)	Communication error (22) Diagnostic code P1007 (ECU error) P1009 (writing not complete)

(*1): Error code that is displayed on the MUT-III if an error occurs in the ECU during data rewriting.
As communication error is automatically displayed, the ordinary MUT-III diagnostic procedure is necessary for the diagnostic codes.

3. Work to be done after rewriting

After engine ECU data is rewritten, the diagnostic codes stored in the ECU and MVCU should be cleared. Failure to clear the diagnostic codes will cause an ECU communication error.

MUT-III OPERATION

List of Service Works

The MUT-III operation is described separately for individual service works. Each number in parentheses indicates the applicable document in the following pages.

● For U.S.A.

Works	EPA07 CANTER		EPA07 FK/FM		Reference Manual
	4M5 ECU	MVCU	6M6 ECU	MVCU	
Common works	(1)	(1)	(1)	(1)	(1) File Transfer (MUT- III to/from Removable Disk) (2) All Data Writing (3) Injector Data Writing (4) PTO Idle speed Writing (5) SLD Limited Speed Writing (6) Ash Data Writing
Replacement of ECU (*1)	(2), (6)	(2)	(2)	(2)	
Replacement of Injector	(3)	—	(3)	—	
Change of PTO idle rpm	(4)	—	(4)	—	
Change of SLD Limited speed	—	(5)	—	(5)	

● For Singapore

Works	FP.FV.FS (EURO-4)		FK.FM (EURO-4)		Reference Manual
	6M7 ECU	MVCU	6M6 ECU	MVCU	
Common works	(1)	(1)	(1)	(1)	(1) File Transfer (MUT-III to/from Removable Disk) (2) All Data Writing (3) Injector Data Writing
Replacement of ECU	(2)	(2)	(2)	(2)	
Replacement of Injector	—	—	(3)	—	

● For Hong Kong

Works	FP.FV.FS (JP05)		FK.FM (JP05)		Reference Manual
	6M7 ECU	MVCU	6M6 ECU	MVCU	
Common works	(1)	(1)	(1)	(1)	(1) File Transfer (MUT-III to/from Removable Disk) (2) All Data Writing (3) Injector Data Writing
Replacement of ECU	(2)	(2)	(2)	(2)	
Replacement of Injector	—	—	(3)	—	

● For Australia / New Zealand

Works	FP.FV.FS (EPA04)		FK.FM.FN (EPA04)		Reference Manual
	6M7 ECU	MVCU	6M6 ECU	MVCU	
Common works	—	(1)	—	(1)	(1) File Transfer (MUT-III to/from Removable Disk) (2) All Data Writing
Replacement of ECU	—	(2)	—	(2)	
Replacement of Injector	—	—	—	—	

MUT-III OPERATION

Remarks (*1):

As the following two cases are assumed when EPA07 CANTER ECU for U.S.A. is replaced, determine the case considering the work characteristic.

<Case 1>

- (1) Select manual input of coding function Ash of MUT.
- (2) Read Ash data from the old ECU (before replacement).
- (3) Replace ECU.
- (4) Write Ash data to a new ECU (after replacement).
- (5) Select automatic input of coding function All of MUT.
- (6) Remove check of Ash in coding Item and write data.

Demerits

- If you fail to un-check in Ash, you need to read Ash from old ECU.
- You must replace ECU during rewriting work.

<Case 2>

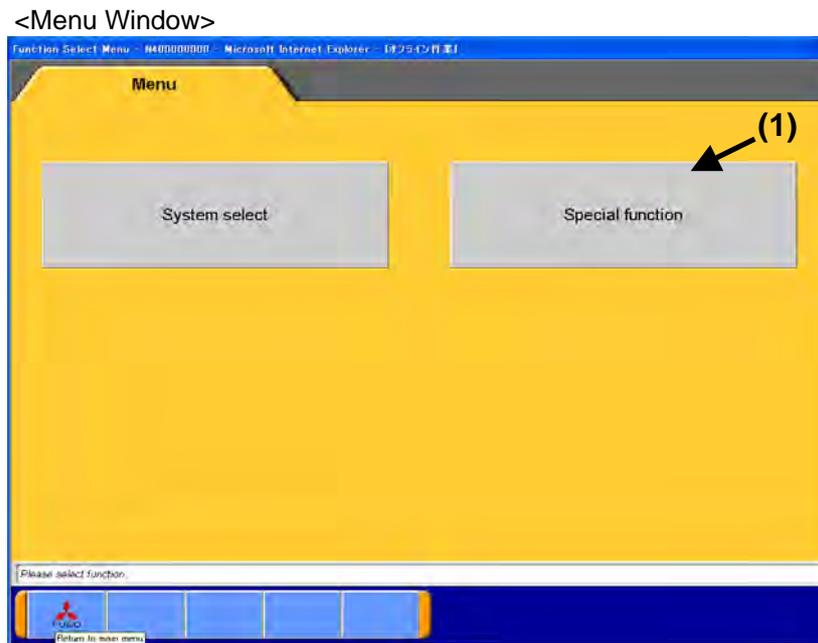
- (1) Select information of coding function Ash of MUT and memo Ash data (6 digits).
- (2) Replace ECU.
- (3) Select automatic input of coding function All of MUT and write all data.
- (4) Select manual input of coding function Ash of MUT and write the memo Ash.

Demerits

- It takes time to write a memo.
- Manual input is required.

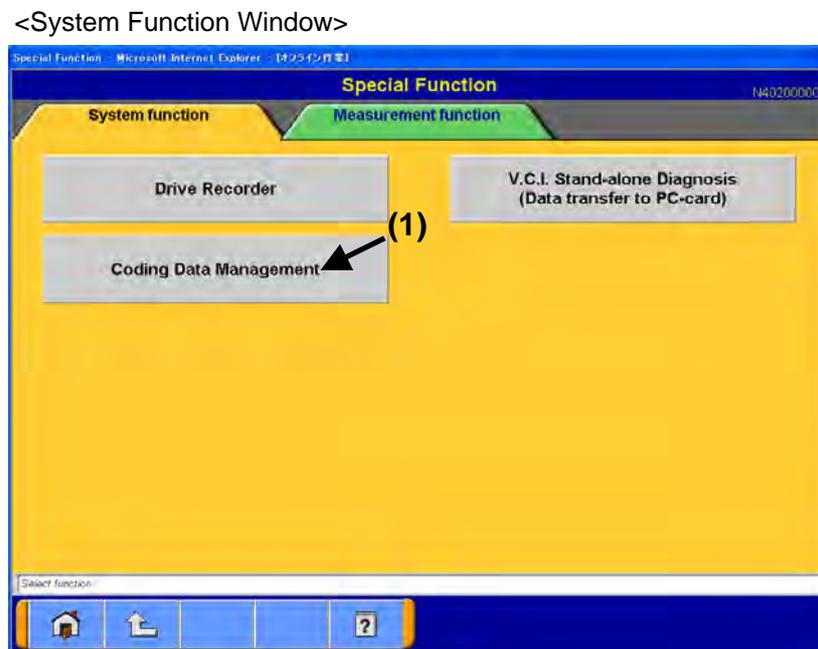
MUT-III OPERATION

(1) File Transfer (MUT-III↔Removable Disk)



Window 1

- Press “Special Function” button (Window 1: (1)) to proceed to the System Function Window (Window 2).

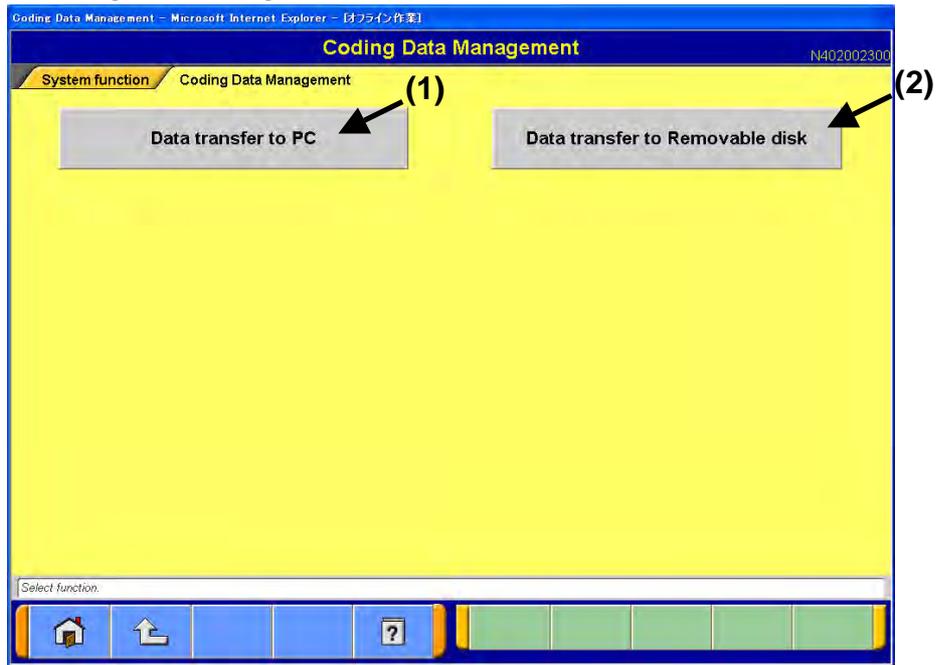


Window 2

- Press “Coding Data Management” button (Window 2: (1)) to proceed to the Coding Data Management Window (Window 3).

MUT-III OPERATION

<Coding Data Management Window>



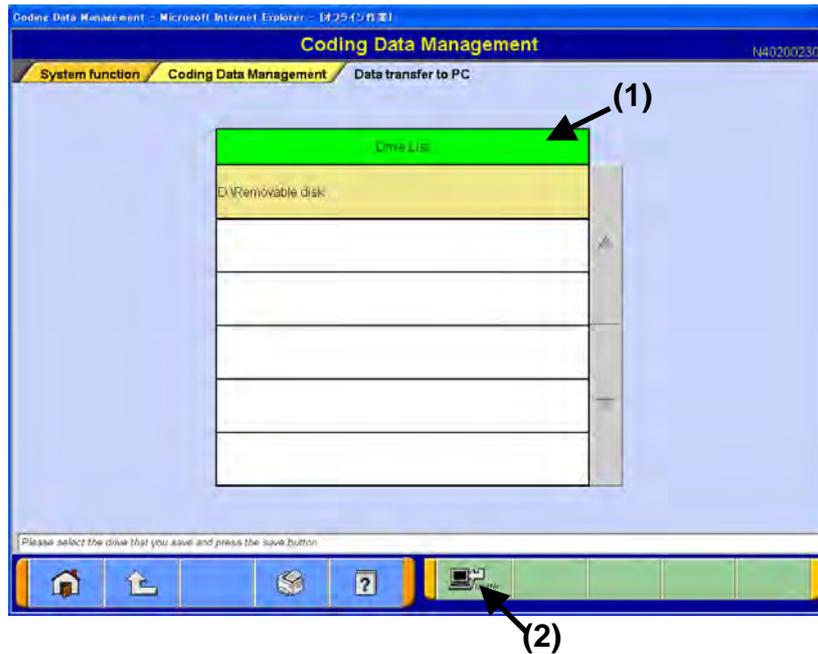
Window 3

- Press Function button to proceed to the following windows.

Function button name	Next window	Remarks
Data transfer to PC (Window 3: (1))	Drive Select Window (Window 4)	Transfer data from removable disk (USB memory, etc.) to MUT PC.
Data transfer to removable disk (Window 3: (2))	Stored File List Window (Window 6)	Transfer data from MUT PC to removable disk (USB memory, etc.).

MUT-III OPERATION

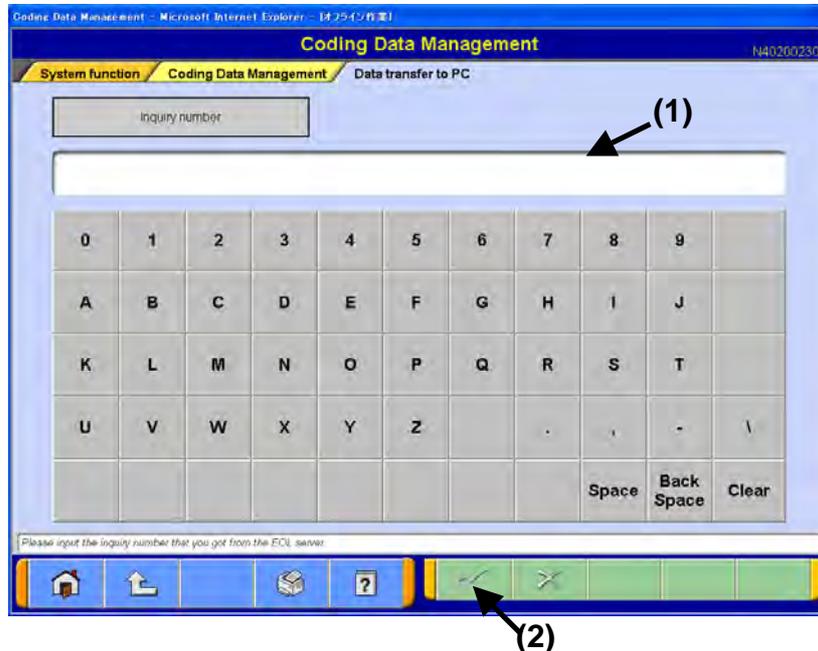
<Drive Select Window>



Window 4

- Select removable disk (Window 4: (1)) which contains data from Drive List.
- Press "Transfer" button (Window 4: (2)) to proceed to the Inquiry Number Input Window (Window 5).

<Inquiry Number Input Window>



Window 5

- Enter inquiry number of transferred data in Inquiry Number Input Field (Window 5: (1)) from the keyboard of MUT Screen or PC main unit.
- Press OK button (Window 5: (2)) to transfer all files that match the entered inquiry number to MUT PC.

MUT-III OPERATION

<Stored File List Window>



Window 6

- All files stored in MUT PC are displayed.

File name	Display contents
EOL_~~~.csv	Writing file to download from EOL server.
MUT_~~~.csv	History management file to upload to EOL server. (Automatically created when writing is performed in MUT)

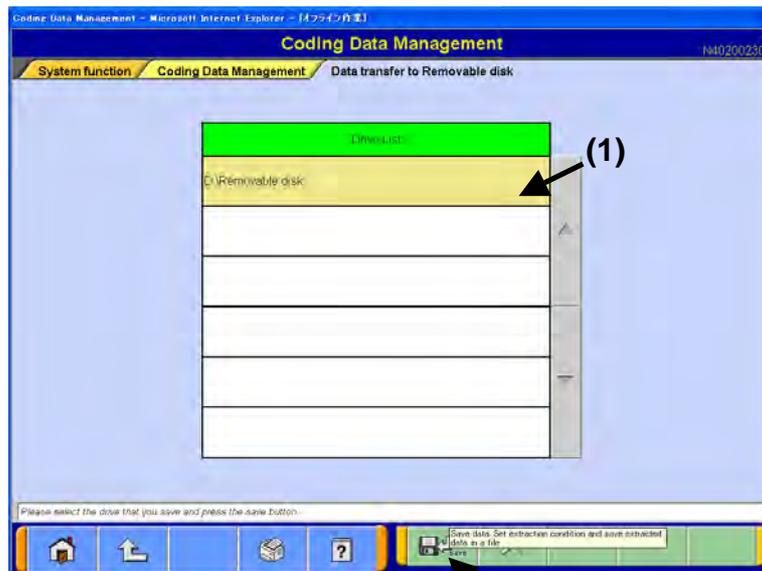
<To transfer a file to removable disk>

- Select a file to transfer. (Check the checkbox on the left.)
- Press OK button (Window 6: (1)) to proceed to the Drive Select Window (Window 7).

<To delete a file>

- Select a file to delete. (Check the checkbox on the left.)
- Press "Delete" button (Window 6: (2)) to delete a file after Confirmation Window is displayed.

<Drive Select Window>

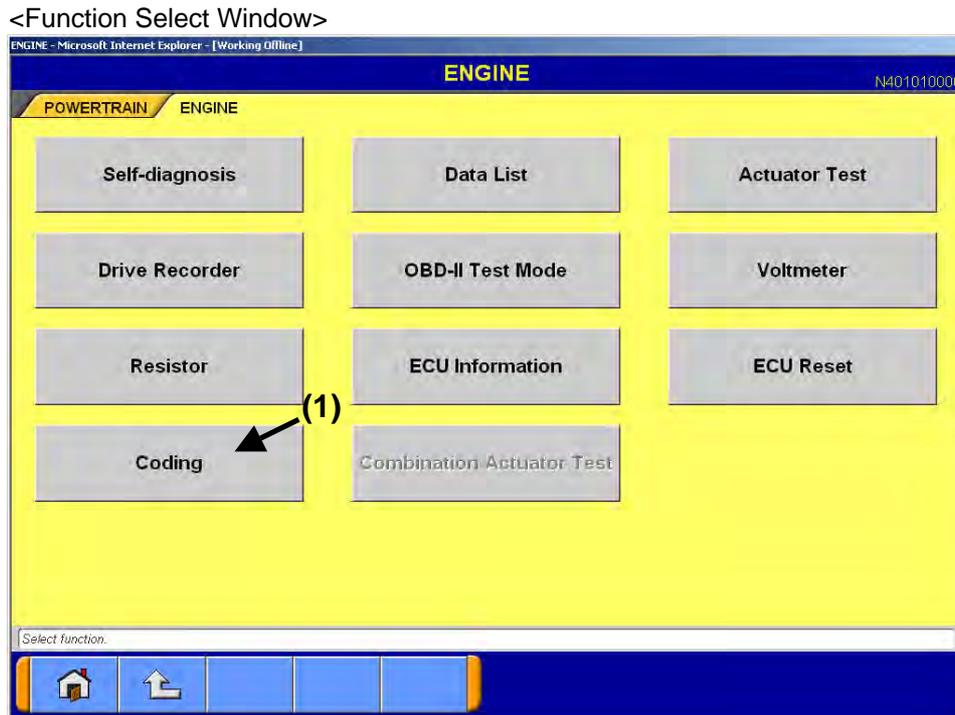


Window 7

- Select a removable disk (Window 7: (1)) to save data from Drive List.
- Press "Save" button (Window 7: (1)) to copy the selected file.

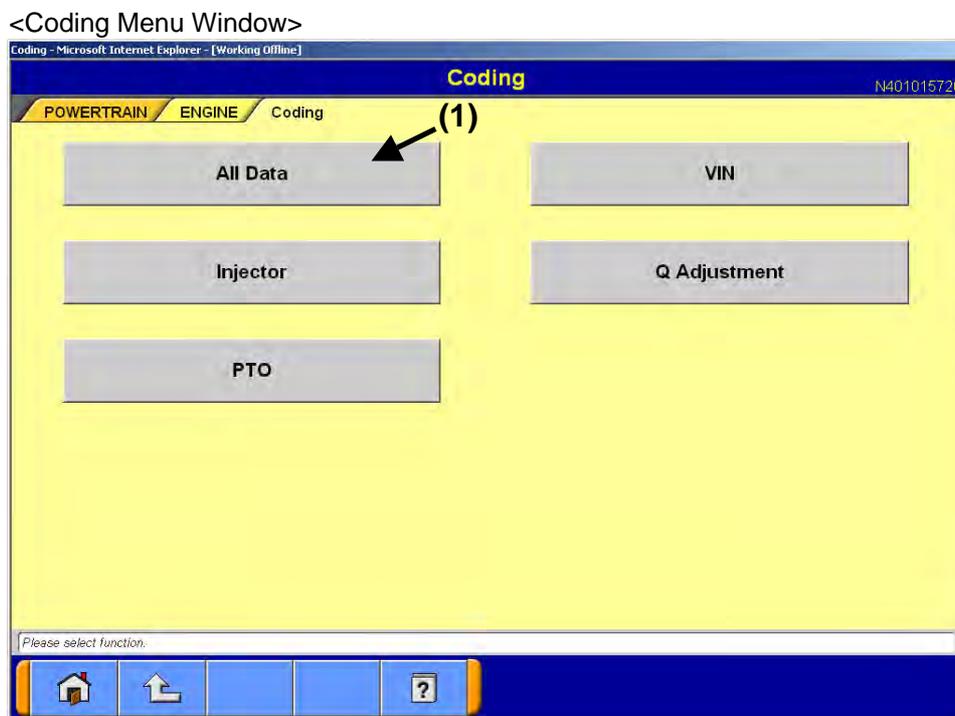
MUT-III OPERATION

(2) All Data Writing



Window 1

- Press “Coding” button (Window 1: (1)) to proceed to the Coding Menu Window (Window 2).

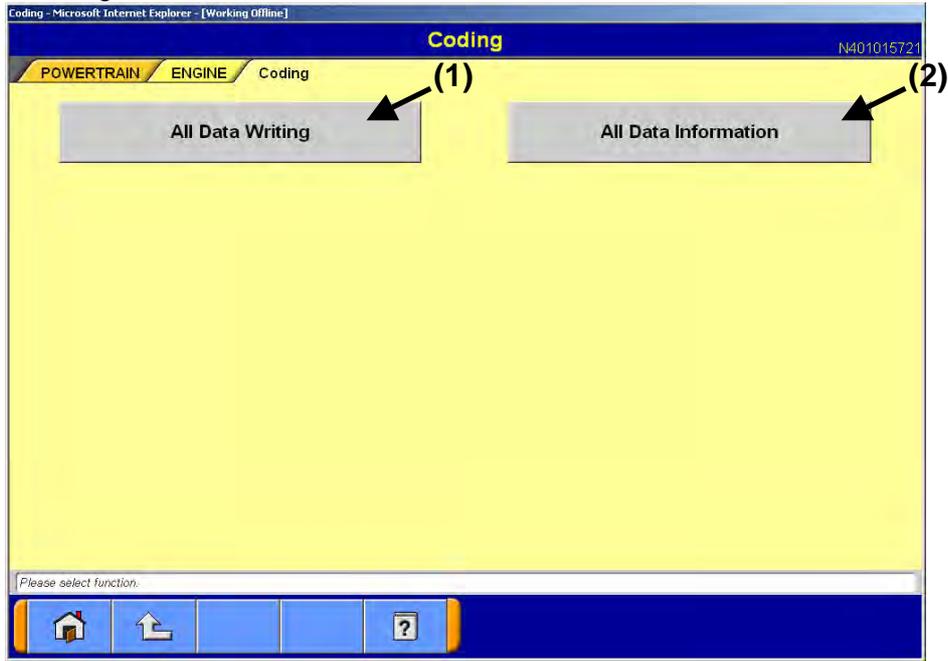


Window 2

- Press “All Data” button (Window 2: (1)) to proceed to the Coding Submenu Window (Window 3).

MUT-III OPERATION

<Coding Submenu Window>

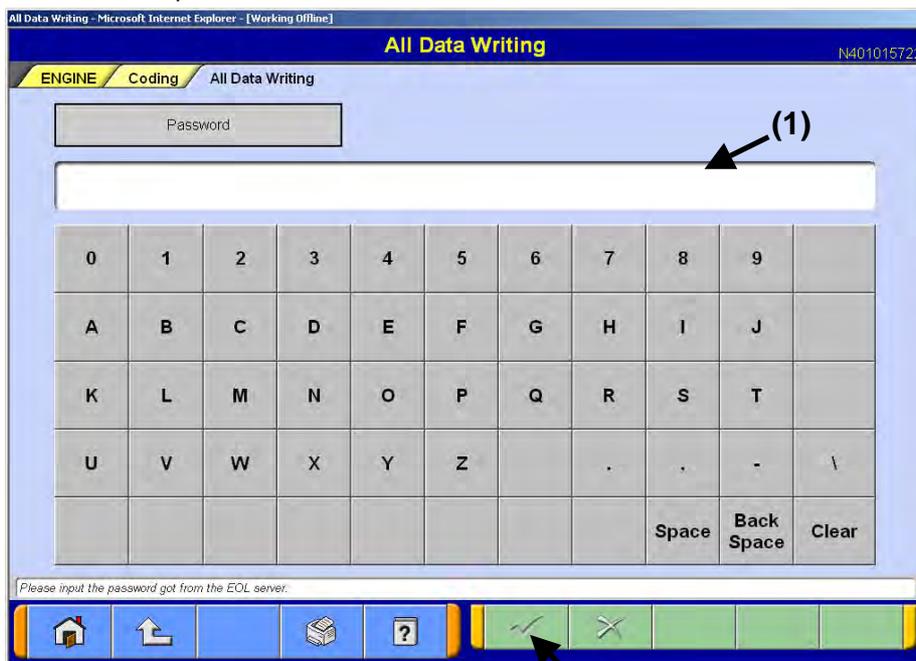


Window 3

- Press each Function button to proceed to the following windows.

Function button name	Next window	Remarks
All Data Writing (Window 3: (1))	Password Input Window (Window 4)	Write all coding data to ECU.
All Data Information (Window 3: (2))	All Data Display Window (Window 11)	Confirm coding related data which is written in ECU.

<Password Input Window>

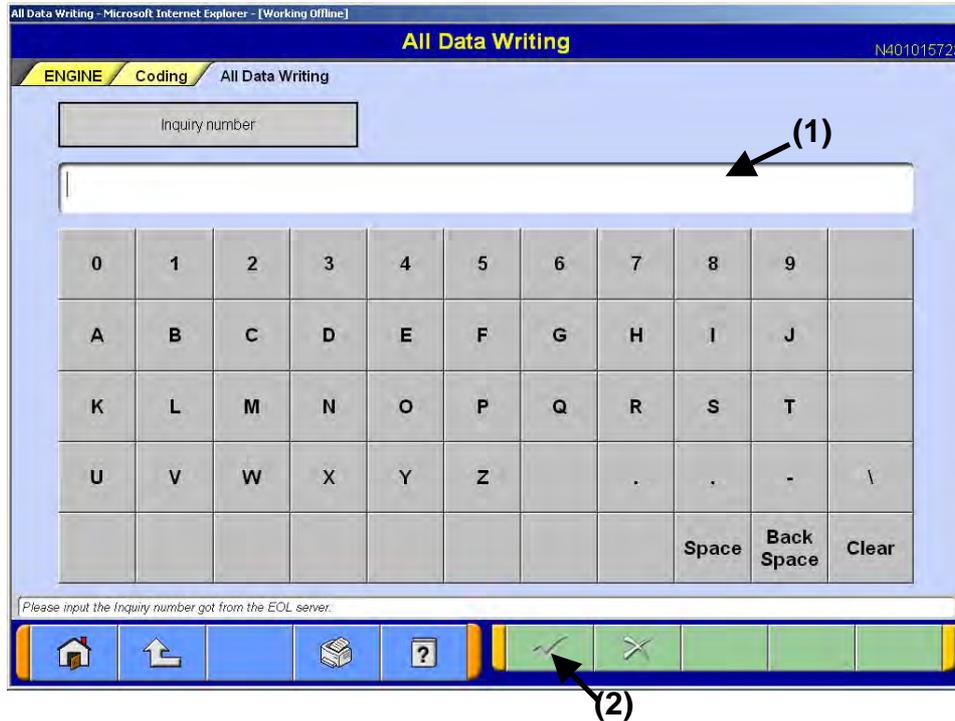


Window 4

- Enter password obtained from EOL server into Password Input field (Window 4: (1)) from the keyboard of MUT Screen or PC main unit.
- Press OK button (Window 4: (2)) to proceed to the Inquiry Number Input Window (Window 5).

MUT-III OPERATION

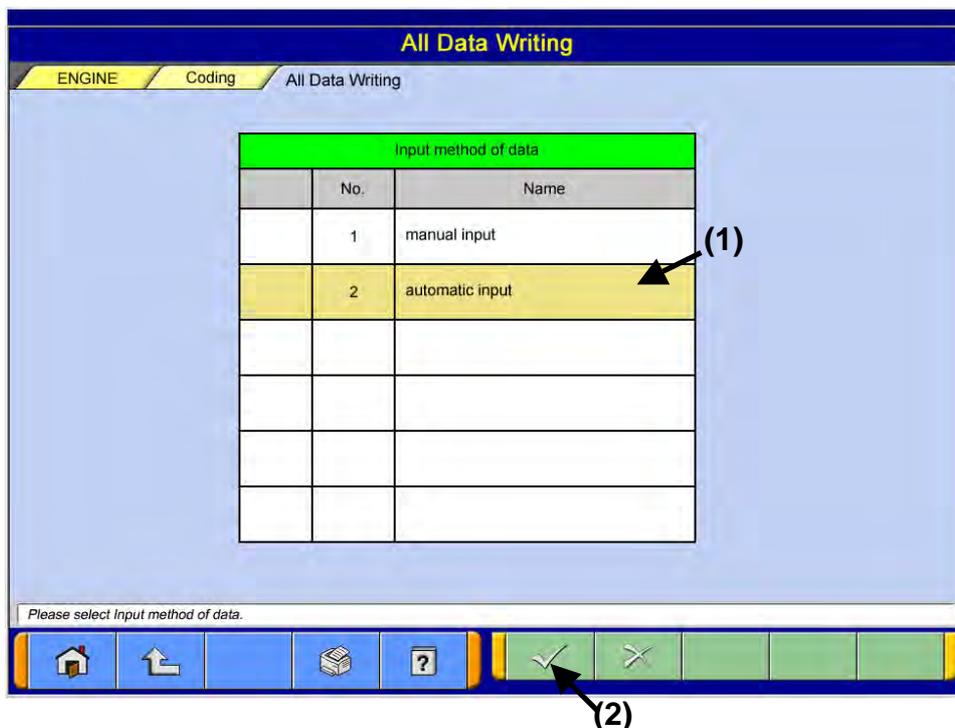
<Inquiry Number Input Window>



Window 5

- Enter inquiry number obtained from EOL server into Inquiry Number Input field (Window 5: (1)) from the keyboard of MUT Screen or PC main unit.
- Press OK button (Window 5: (2)) to proceed to the Data Input Method Select Window (Window 6).

<Data Input Method Select Window>

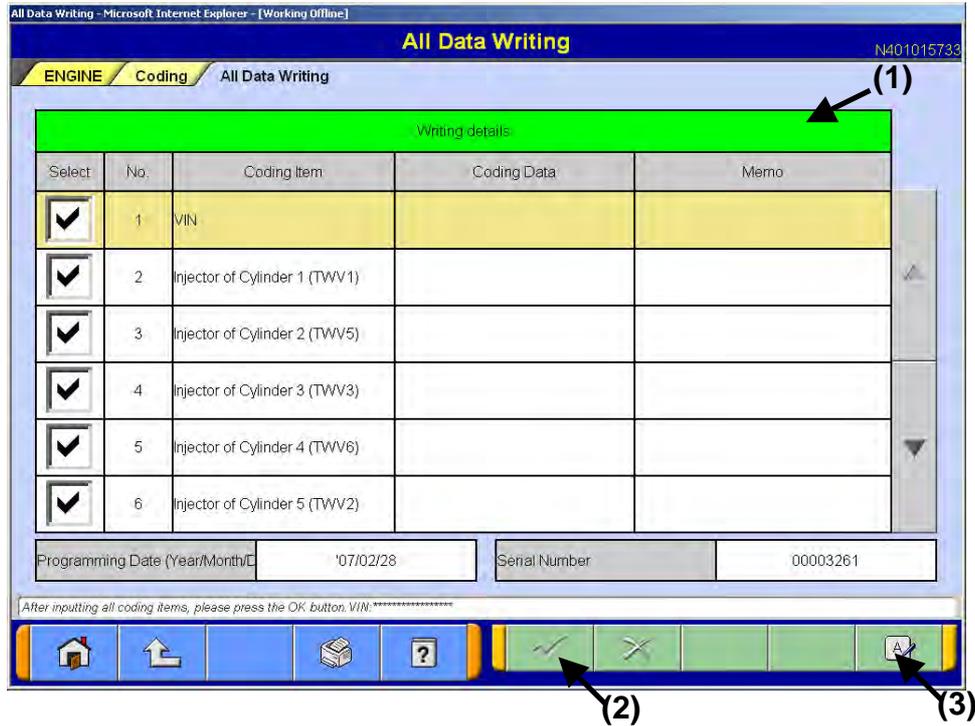


Window 6

- Select "Automatic Input" (Window 6: (1)) and press OK button (Window 6: (2)) to proceed to the Coding Contents Confirmation Window (Window 7).

MUT-III OPERATION

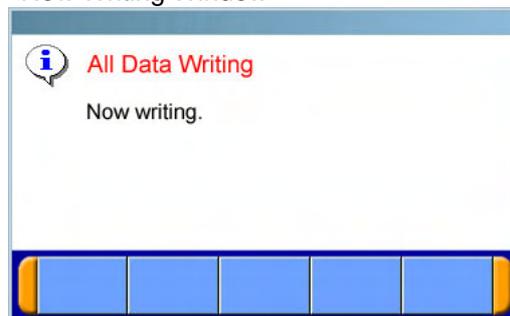
<Coding Contents Confirmation Window>



Window 7

- The writing target item related to diagnosis is displayed.
(The coding data is automatically read from a file and displayed.)
- Uncheck coding Items which are not written.
(All coding Items are checked by default.)
- Press Input Window Call button (Window 7: (3)) to enter "Memo".
(The input of work memo is optional and it needs not be entered.)
- Confirm the writing contents (Window 7: (1)) and press OK button (Window 7: (2)) to display Now Writing Window (Window 8) after Writing Confirmation Window is displayed.

<Now Writing Window>

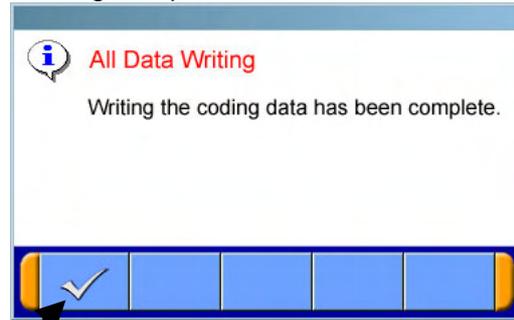


Window 8

- When writing is completed, Writing Complete Window (Window 9) is displayed.

MUT-III OPERATION

<Writing Complete Window>



(1)

Window 9

- Press OK button (Window 9: (1)) to proceed to Result Display Window (Window 10).

<Result Display Window>

Coding Item	Coding Data	Programming Date (Year)	Writing tool Information	
			Tool ID	Serial Number
Injector of Cylinder 1 (TWW1)	9F 00 00 CA 00 E2 00 00 09 ED 00 00 00 00 53	'07/02/28	0085	00003261
Injector of Cylinder 2 (TWW5)	9F 2F 00 00 00 00 14 00 09 00 00 00 00 00 AD	'07/02/28	0085	00003261
Injector of Cylinder 3 (TWW3)	9F 00 00 00 00 00 17 00 1E 00 00 00 00 00 96	'07/02/28	0085	00003261

Part Number:ME303459/ROM-ID:*****/Communication Type:OBD on CAN/SCC:EB03/VIN:*****

(2)

Window 10

- The writing result of coding Items for which the writing result (Window 10: (1)) is checked is displayed. (See below).
 - (1) Value written in ECU
 - (2) Date when rewriting is performed
 - (3) ID of tool with which rewriting was performed (In case of MUT-III, "0085")
 - (4) Serial number of tool with which rewriting was performed (In case of MUT-III, serial number of V.C.I.)
- Press OK button (Window 10: (2)) to return to Coding Submenu Window (Window 3).

MUT-III OPERATION

<All Data Display Window>

The screenshot shows a web browser window titled 'All Data Information' with a status bar indicating 'N401015735'. The main content area has a blue header with 'ENGINE Coding All Data Information'. Below this is a green bar labeled 'Vehicle Information'. The main data is presented in a table with columns for 'Coding Item', 'Coding Data', 'Programming Date (Year)', and 'Writing tool Information' (subdivided into 'Tool ID' and 'Serial Number'). The table lists six injectors for cylinders 1 through 6. A red arrow labeled '(1)' points to the 'Coding Data' column.

Coding Item	Coding Data	Programming Date (Year)	Writing tool Information	
			Tool ID	Serial Number
Injector of Cylinder 1 (TWW1)	9F 00 00 CA 00 E2 00 00 09 ED 00 00 00 00 53	'06/10/20	0085	00008338
Injector of Cylinder 2 (TWW5)	9F 2F 00 00 00 00 14 00 09 00 00 00 00 00 AD	'06/10/20	0085	00008338
Injector of Cylinder 3 (TWW3)	9F 00 00 00 00 00 17 00 1E 00 00 00 00 00 96	'06/10/20	0085	00008338
Injector of Cylinder 4 (TWW6)	9F 00 00 00 00 00 10 00 17 00 13 00 00 00 8B	'06/10/20	0085	00008338
Injector of Cylinder 5 (TWW2)	9F 00 00 00 00 D8 00 00 00 E5 E3 00 00 00 41	'06/10/20	0085	00008338
Injector of Cylinder 6 (TWW4)	9F 2F 28 00 00 D6 18 00 15 00 00 00 00 00 43	'06/10/20	0085	00008338

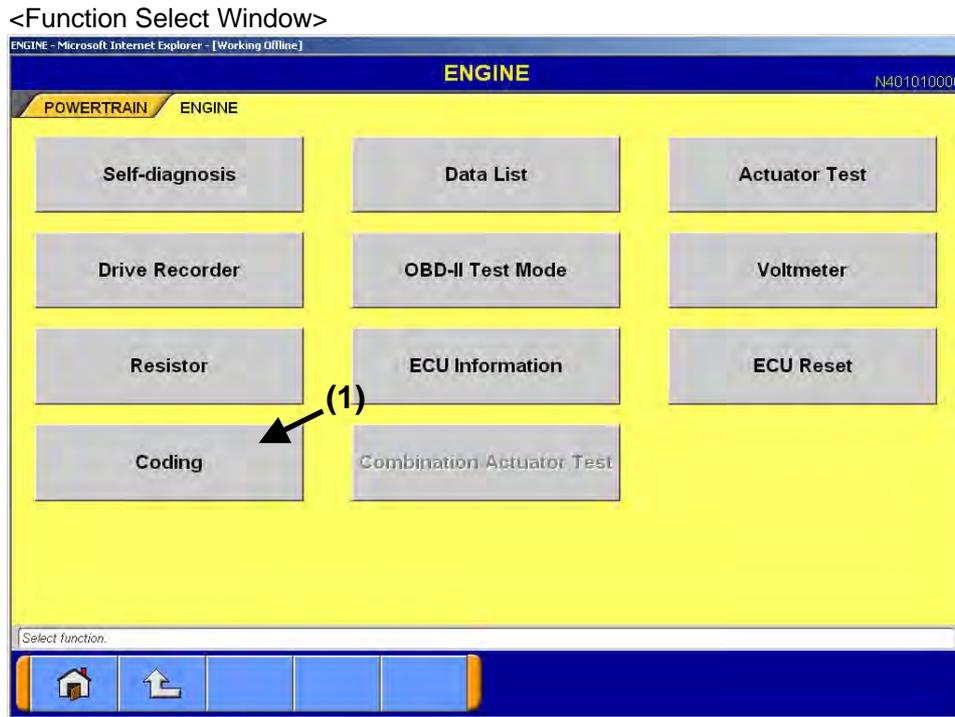
Part Number:ME303459/ROM-ID:*****/Communication Type:OBD on CAN/SCC:EB03

Window 11

- The following data which is written in ECU is displayed.
 - (1) Value which is written in ECU
 - (2) Date when rewriting was performed
 - (3) ID of tool with which rewriting was performed (In case of MUT-III, "0085")
 - (4) Serial number of tool with which rewriting was performed (In case of MUT-III, serial number of V.C.I.)

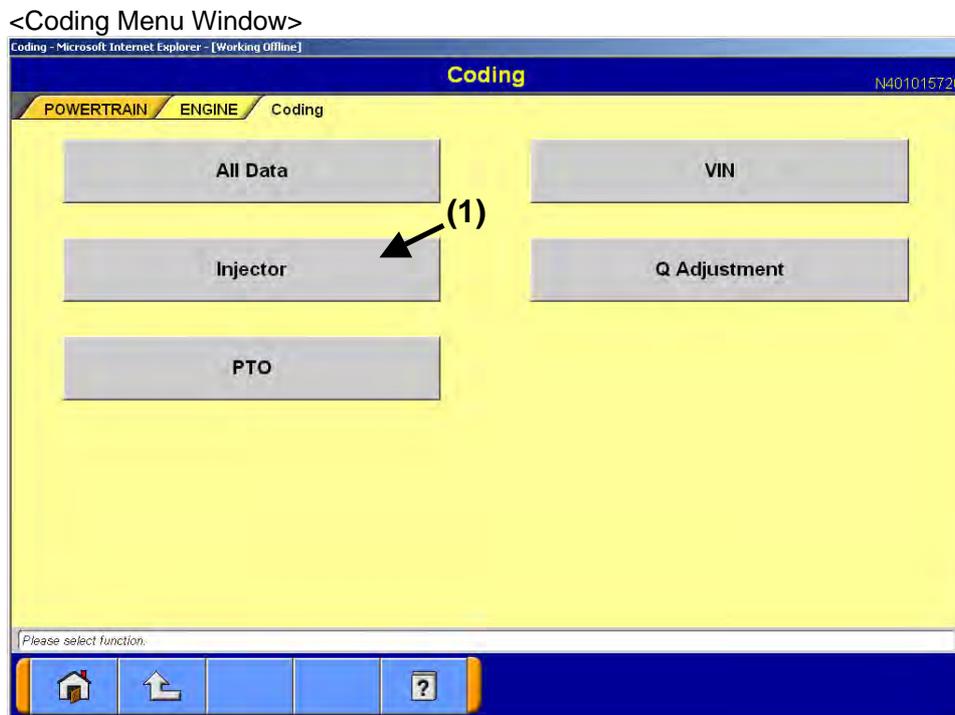
MUT-III OPERATION

(3) Injector Data Writing



Window 1

- Press “Coding” button (Window 1: (1)) to proceed to the Coding Menu Window (Window 2).

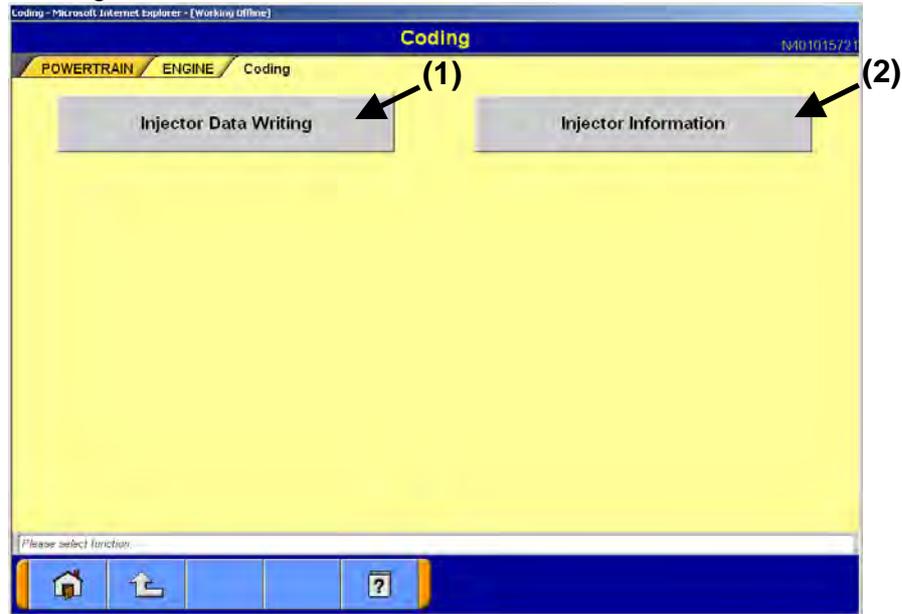


Window 2

- Press “Injector” button (Window 2: (1)) to proceed to the Coding Submenu Window (Window 3).

MUT-III OPERATION

<Coding Submenu Window>

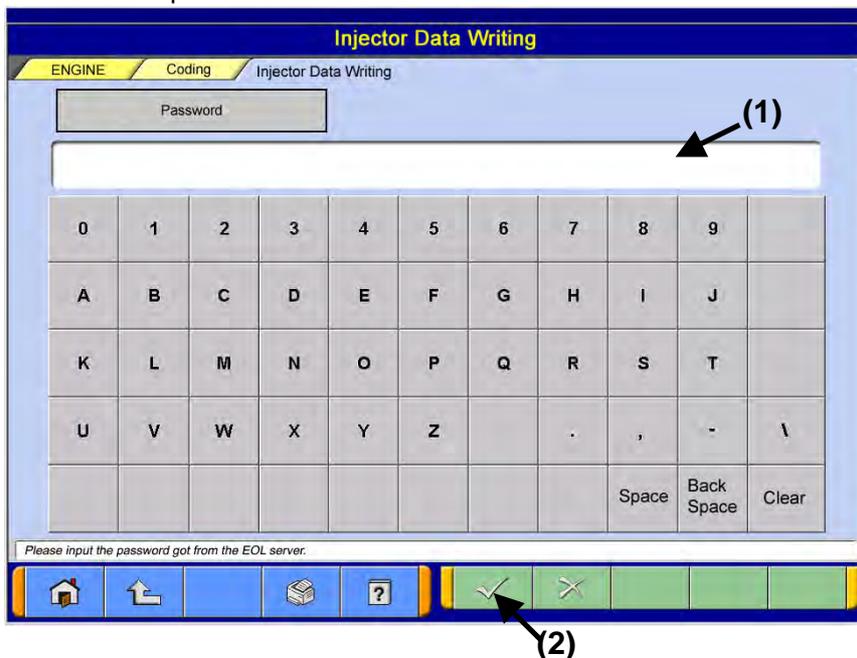


Window 3

- Press each Function button to proceed to the following windows.

Function button name	Next window	Remarks
Injector Data Writing (Window 3: (1))	Password Input Window (Window 4)	Write "correction data" of each injector.
Injector Information (Window 3: (2))	Injector Information Display Window (Window 14)	Confirm the injector information which is written in ECU (correction data, etc.).

<Password Input Window>

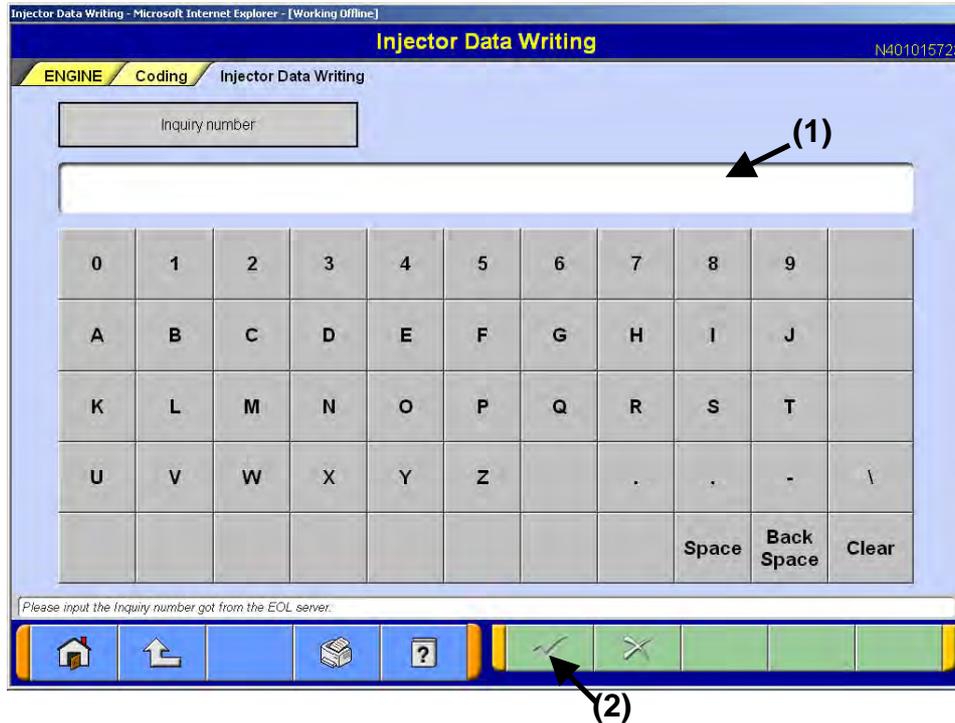


Window 4

- Enter password obtained from EOL server in Password Input field (Window 4: (1)) from the keyboard of MUT Screen or PC main unit.
- Press OK button (Window 4: (2)) to proceed to the Inquiry Number Input Window (Window 5).

MUT-III OPERATION

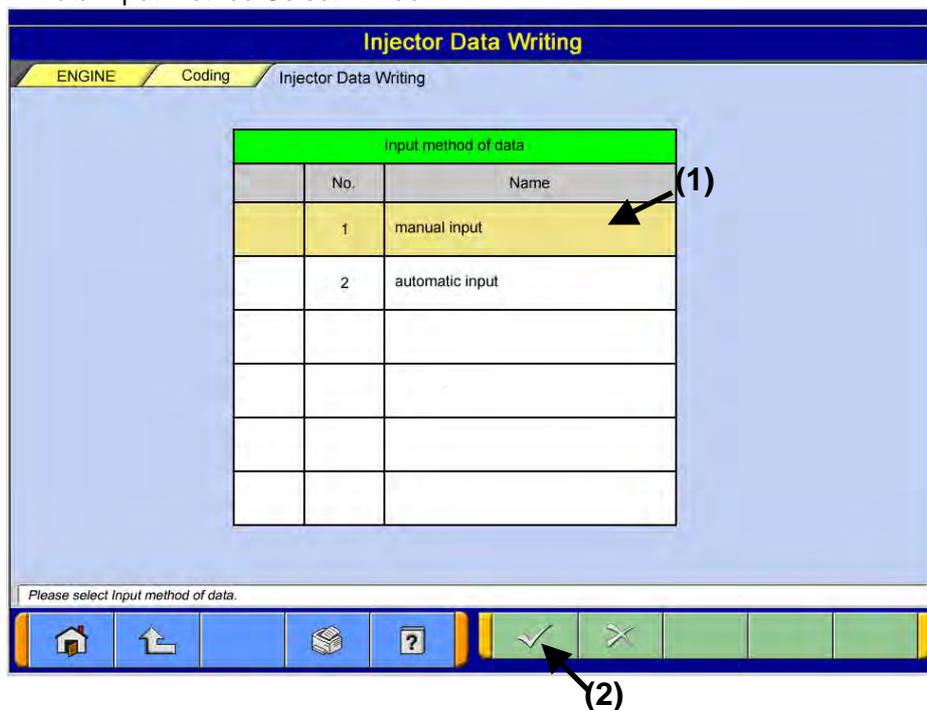
<Inquiry Number Input Window>



Window 5

- Enter inquiry number obtained from EOL server into Inquiry Number Input field (Window 5: (1)) from the keyboard of MUT Screen or PC main unit.
- Press OK button (Window 5: (2)) to proceed to the Data Input Method Select Window (Window 6).

<Data Input Method Select Window>

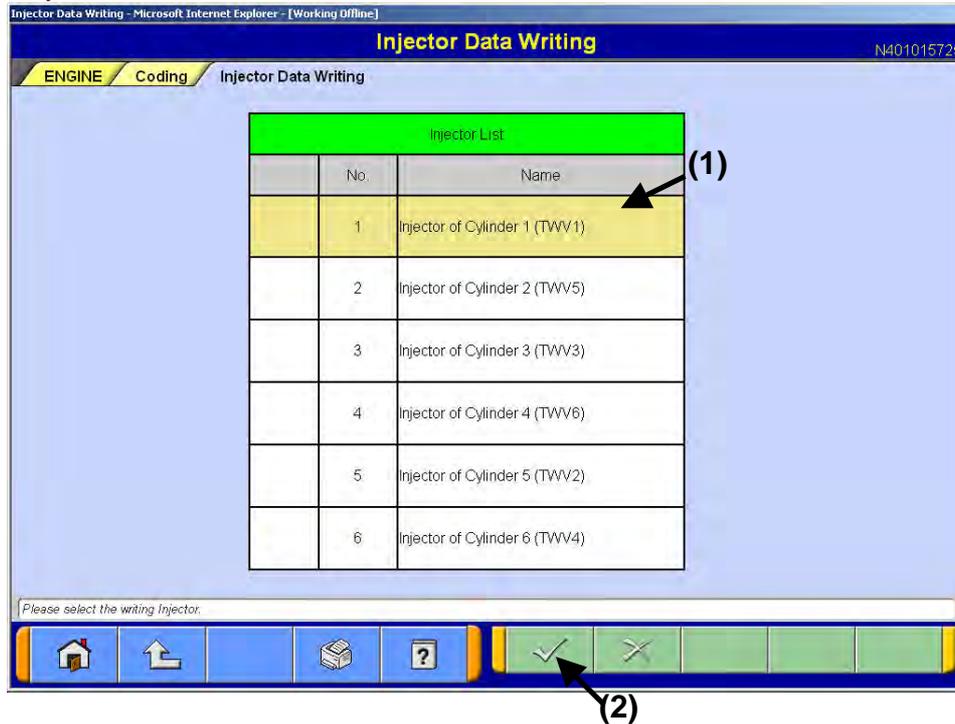


Window 6

- Select "Manual Input" (Window 6: (1)) and press OK button (Window 6: (2)) to proceed to the Injector Select Window (Window 7).

MUT-III OPERATION

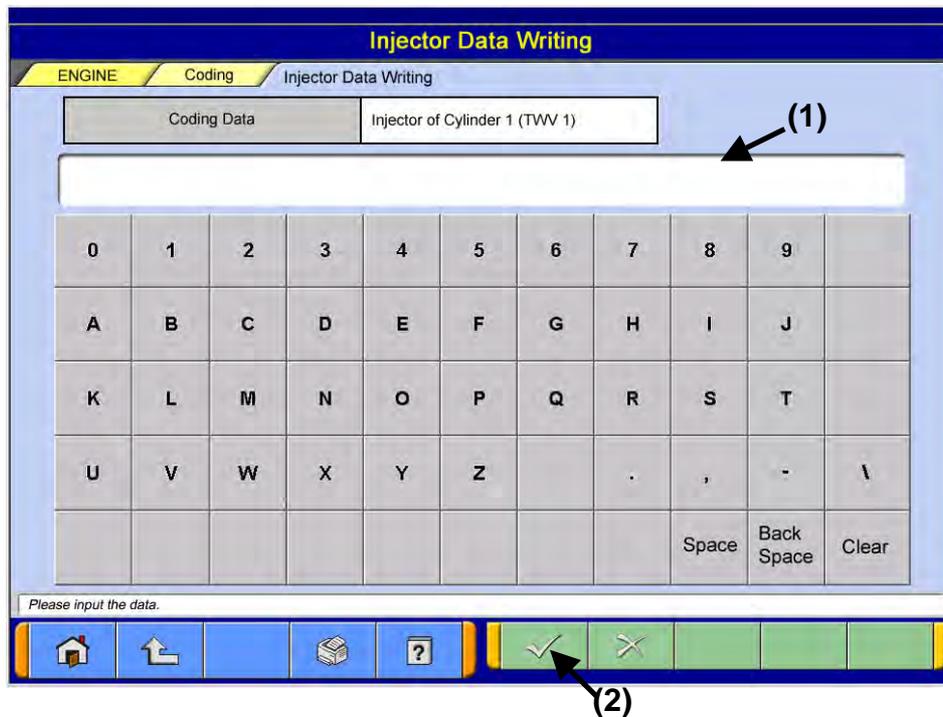
<Injector Select Window>



Window 7

- Select injector to which correction data is written from Injector List (Window 7: (1)).
- Press OK button (Window 7: (2)) to proceed to the Coding Data Input Window (Window 8).

<Coding Data Input Window>

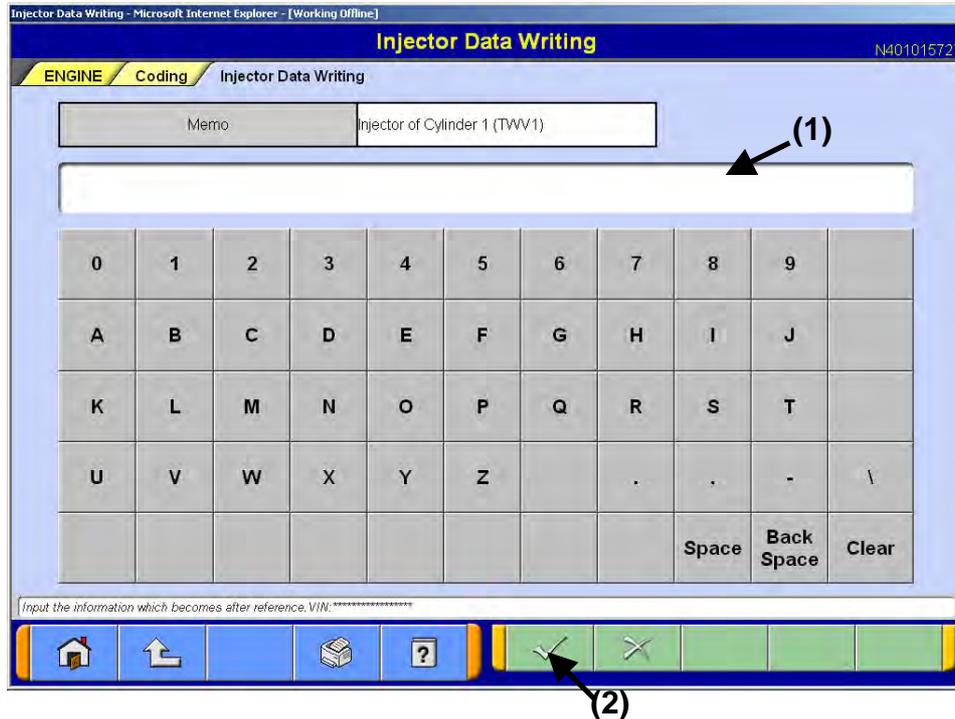


Window 8

- Enter "Correction data" which is described in Injector into Coding Data Input Field (Window 8: (1)) (4M: 6 digits, 6M: 30 digits) from the keyboard of MUT Screen or PC main unit.
- Press OK button (Window 8: (2)) to proceed to the Work Memo Input Window (Window 9).

MUT-III OPERATION

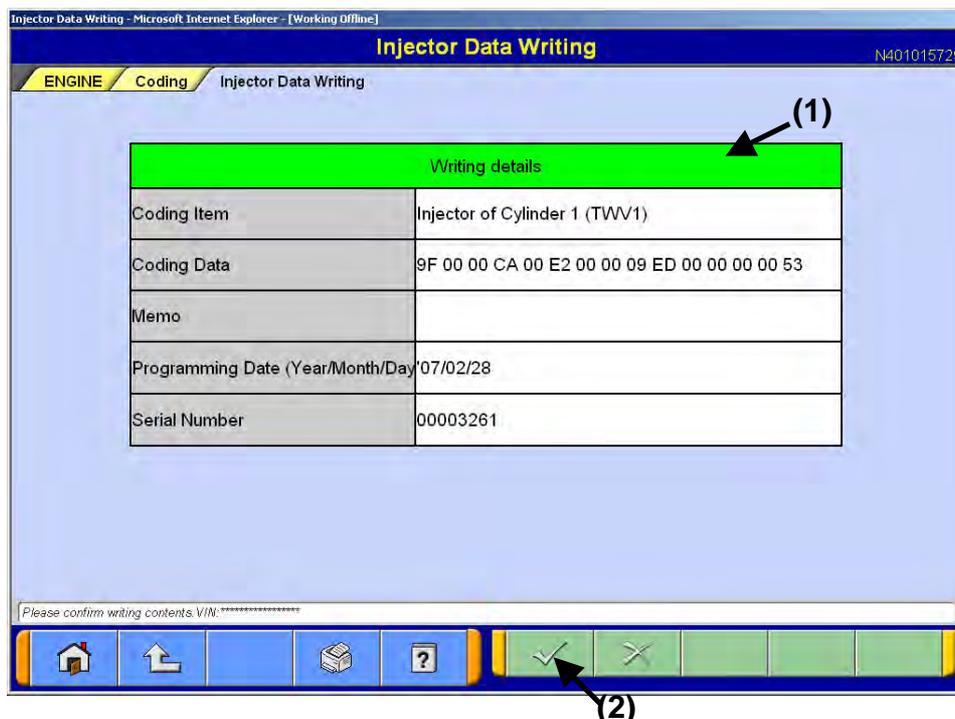
<Work Memo Input Window>



Window 9

- Enter memo for reference into Work Memo Input field (Window 9: (1)) from the keyboard of MUT Screen or PC main unit. (As the input is optional, it can be left blank.)
- Press OK button (Window 9: (2)) to proceed to the Coding Contents Confirmation Window (Window 10).

<Coding Contents Confirmation Window>

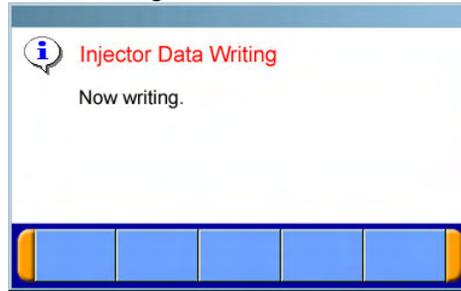


Window 10

- Confirm the writing contents (Window 10: (1)) and press OK button (Window 10: (2)) to proceed to the display Now Writing Window (Window 11) after Writing Confirmation Window is displayed.

MUT-III OPERATION

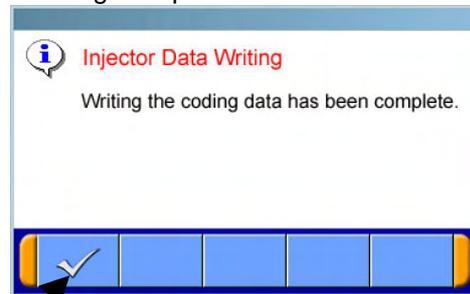
<Now Writing Window>



Window 11

- After writing is completed, Writing Complete Window (Window 12) is displayed.

<Writing Complete Window>

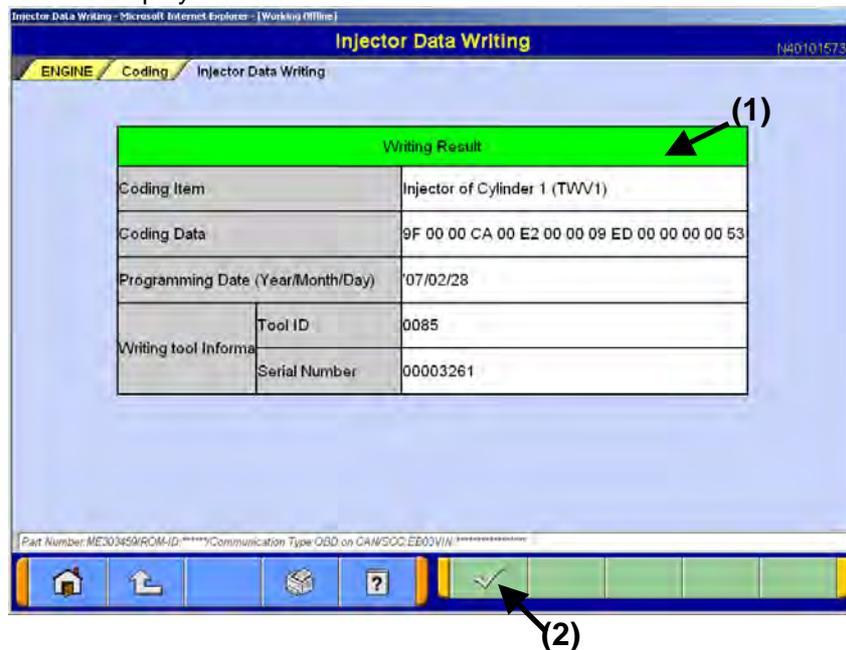


(1)

Window 12

- Press OK button (Window 12: (1)) to proceed to the Result Display Window (Window 13).

<Result Display Window>



Window 13

- The writing result is displayed in Writing Result Window (Window 13: (1)) (See below).
 - (1) "Correction data" of injector
 - (2) Date when rewriting was performed
 - (3) ID of tool with which rewriting was performed (In case of MUT-III, "0085")
 - (4) Serial number of tool with which rewriting was performed (In case of MUT-III, serial number of V.C.I.)
- Press OK button (Window 13: (2)) to proceed to the Coding Submenu Window (Window 3).

MUT-III OPERATION

<Injector Information Display Window>

Injector Data Information				
ENGINE		Coding		Injector Data Information
Vehicle Information				
Coding Item	Coding Data	Programming Date (Year)	Writing tool Information	
			Tool ID	Serial Number
Injector of Cylinder 1 (TWV1)	9F 00 00 CA 00 E2 00 00 09 ED 00 00 00 00 53	'06/10/20	0085	00008338
Injector of Cylinder 2 (TWV5)	9F 2F 00 00 00 00 14 00 09 00 00 00 00 00 AD	'06/10/20	0085	00008338
Injector of Cylinder 3 (TWV3)	9F 00 00 00 00 00 17 00 1E 00 00 00 00 00 96	'06/10/20	0085	00008338
Injector of Cylinder 4 (TWV6)	9F 00 00 00 00 00 10 00 17 00 13 00 00 00 8B	'06/10/20	0085	00008338
Injector of Cylinder 5 (TWV2)	9F 00 00 00 00 D8 00 00 00 E5 E3 00 00 00 41	'06/10/20	0085	00008338
Injector of Cylinder 6 (TWV4)	9F 2F 28 00 00 D6 18 00 15 00 00 00 00 00 43	'06/10/20	0085	00008338

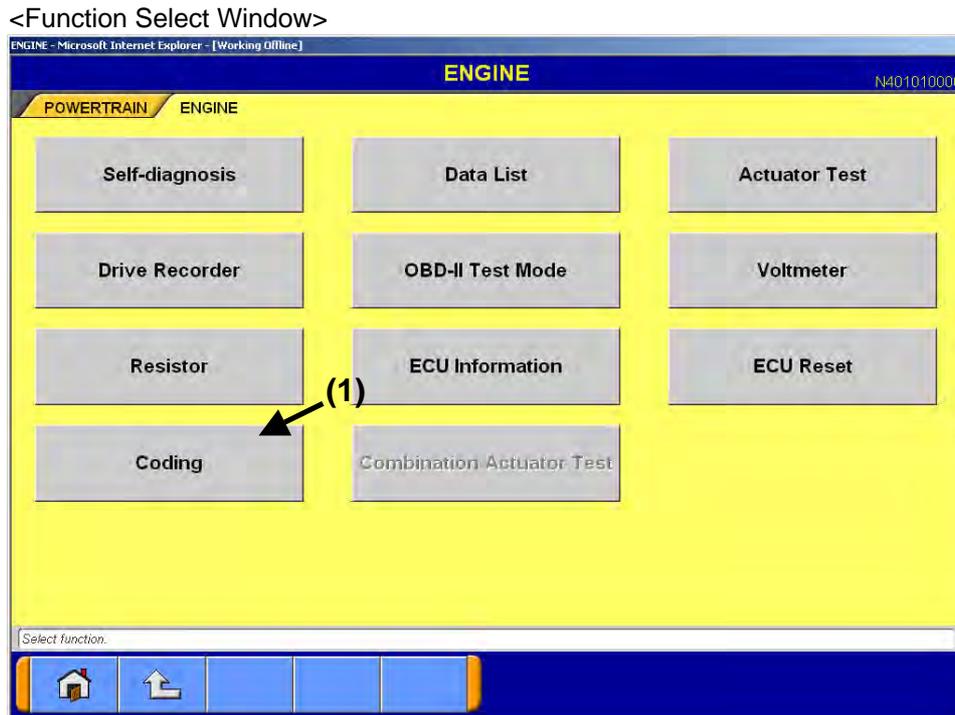
Part Number:ME303459/ROM-ID:*****/Communication Type:OBD on CAN/SCC:EB03

Window 14

- The following information which is written in ECU is displayed.
 - (1) "Correction data" of injector
 - (2) Date when rewriting was performed.
 - (3) ID of tool with which rewriting was performed (In case of MUT-III, "0085")
 - (4) Serial number of tool with which rewriting was performed (In case of MUT-III, serial number of V.C.I.)

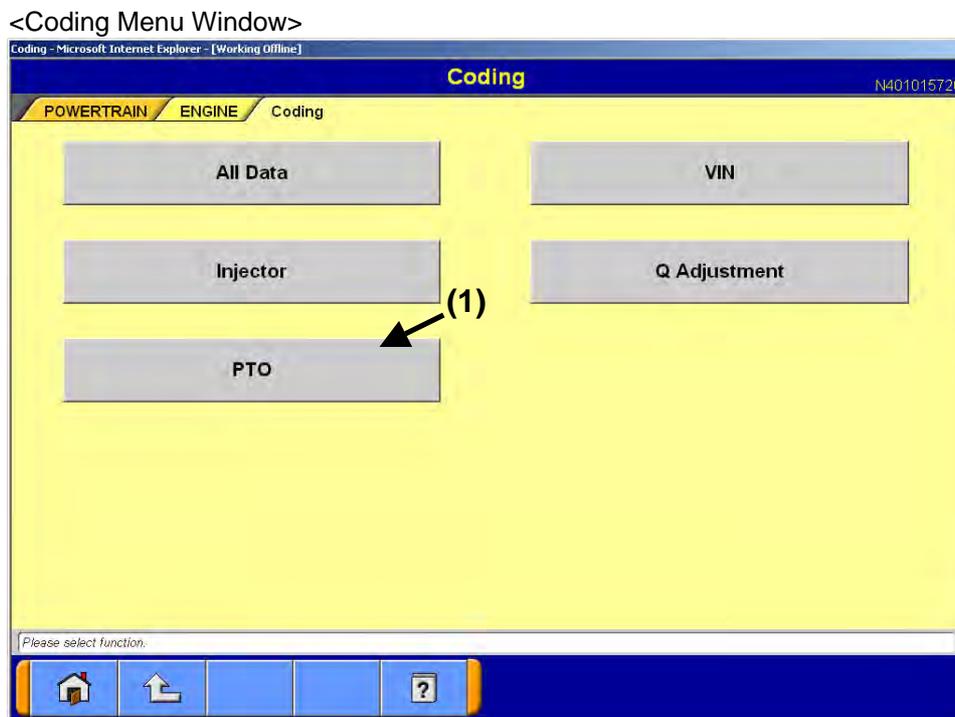
MUT-III OPERATION

(4) PTO Idle Speed Writing



Window 1

- Press “Coding” button (Window 1: (1)) in Function Select Window to proceed to the Coding Menu Window (Window 2).

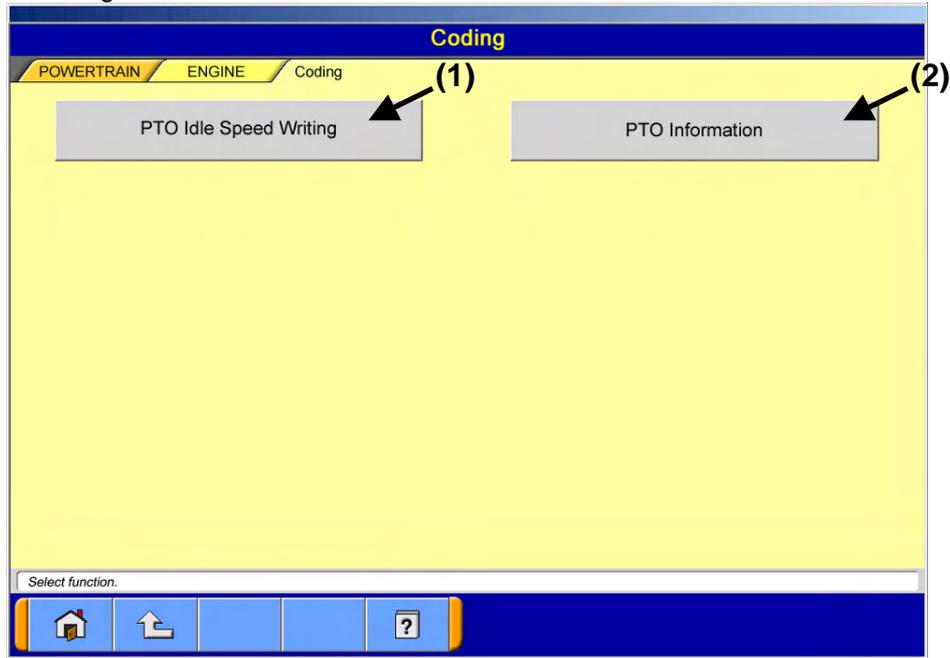


Window 2

- Press “PTO” button (Window 2: (1)) to proceed to the Coding Submenu Window (Window 3).

MUT-III OPERATION

<Coding Submenu Window>

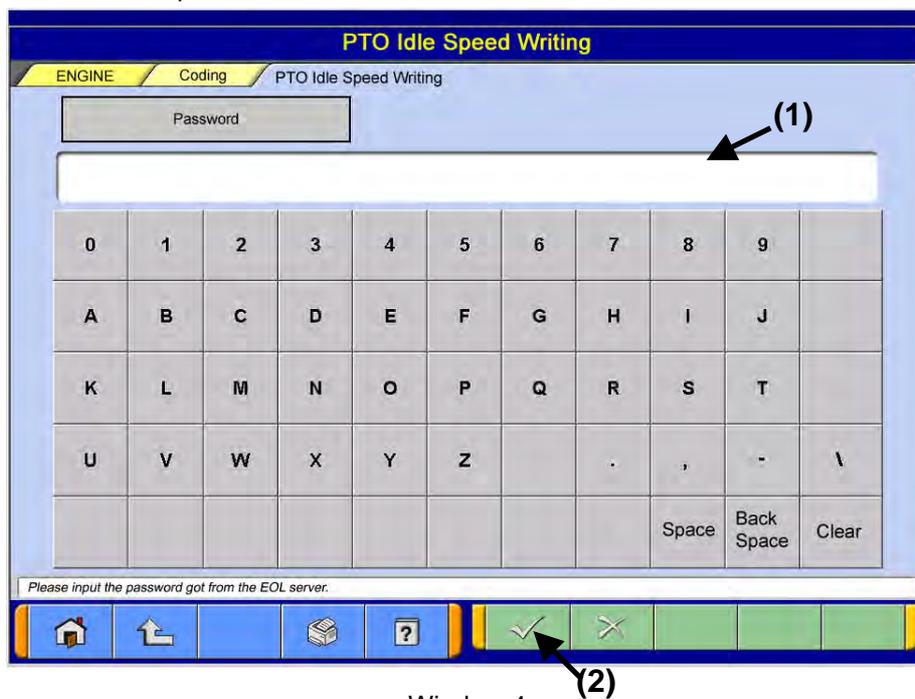


Window 3

- Press each Function button to proceed to the the following windows.

Function button name	NEXT window	Remarks
PTO Idle speed Writing (Window 3: (1))	Password Input Window (Window 4)	Write "PTO idle speed" manually/automatically.
PTO Information (Window 3: (2))	PTO Information Display Window (Window 13)	Confirm the PTO information written in ECU (PTO idle rotation number, etc.).

<Password Input Window>



Window 4

- Enter password in Password Input field (Window 4: (1)) from the keyboard of MUT Screen or PC main unit.
- Press OK button (Window 4: (2)) to proceed to the Inquiry Number Input Window (Window 5).

MUT-III OPERATION

<Inquiry Number Input Window>

PTO Idle Speed Writing

ENGINE Coding PTO Idle Speed Writing

Inquiry number

0 1 2 3 4 5 6 7 8 9

A B C D E F G H I J

K L M N O P Q R S T

U V W X Y Z . , - \

Space Back Space Clear

Please input the Inquiry number got from the EOL server.

(1)

(2)

Window 5

- Enter inquiry number in Inquiry Number Input field (Window 5: (1)) from the keyboard of MUT Screen or PC main unit.
- Press OK button (Window 5: (2)) to proceed to the Data Input Method Select Window (Window 6).

<Data Input Method Select Window>

PTO Idle Speed Writing

ENGINE Coding PTO Idle Speed Writing

Input method of data

No.	Name
1	manual input
2	automatic input

Please select Input method of data.

(1)

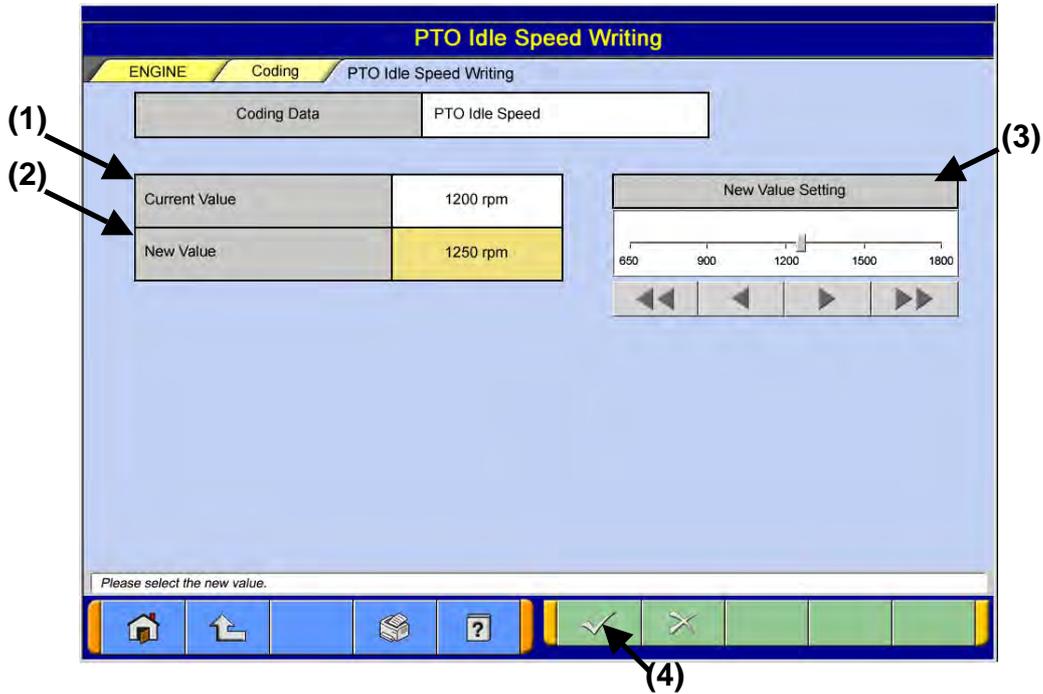
(2)

Window 6

- Select "Manual input" (Window 6: (1)) and press OK button (Window 6: (2)) to proceed to the Coding Data Input Window (Window 7).

MUT-III OPERATION

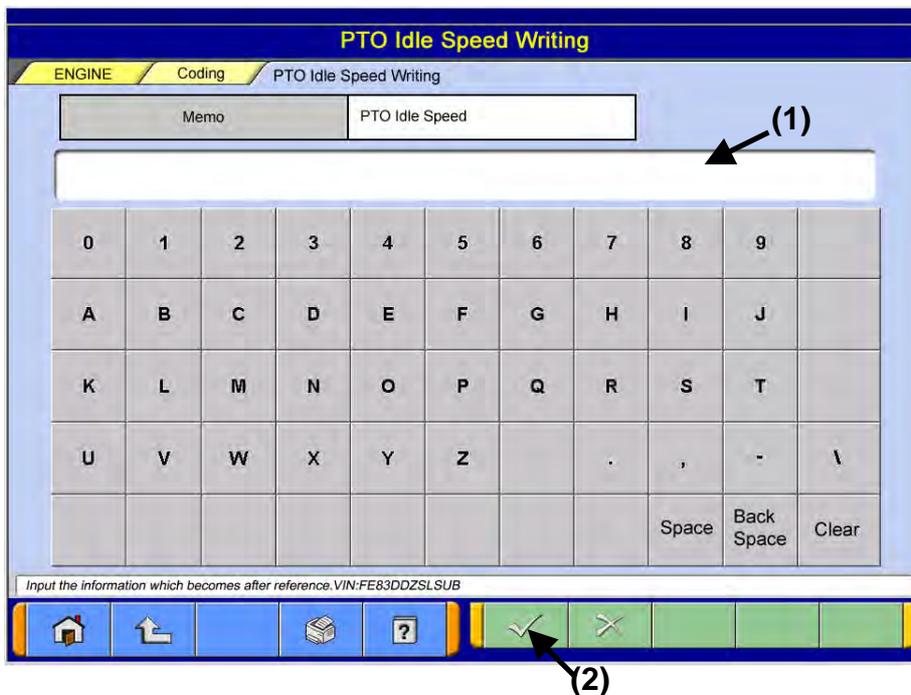
<Coding Data Input Window>



Window 7

- The current value written in “Current Value” (Window 7: (1)) in ECU is displayed.
- The value written in “New Value” (Window 7: (2)) in ECU is displayed.
- Select PTO idle rotation number using the slider in “New Value Setting” (Window 7: (3)) and up/down buttons.
- Press OK button (Window 7: (4)) to proceed to the Work Memo Input Window (Window 8).

<Work Memo Input Window>

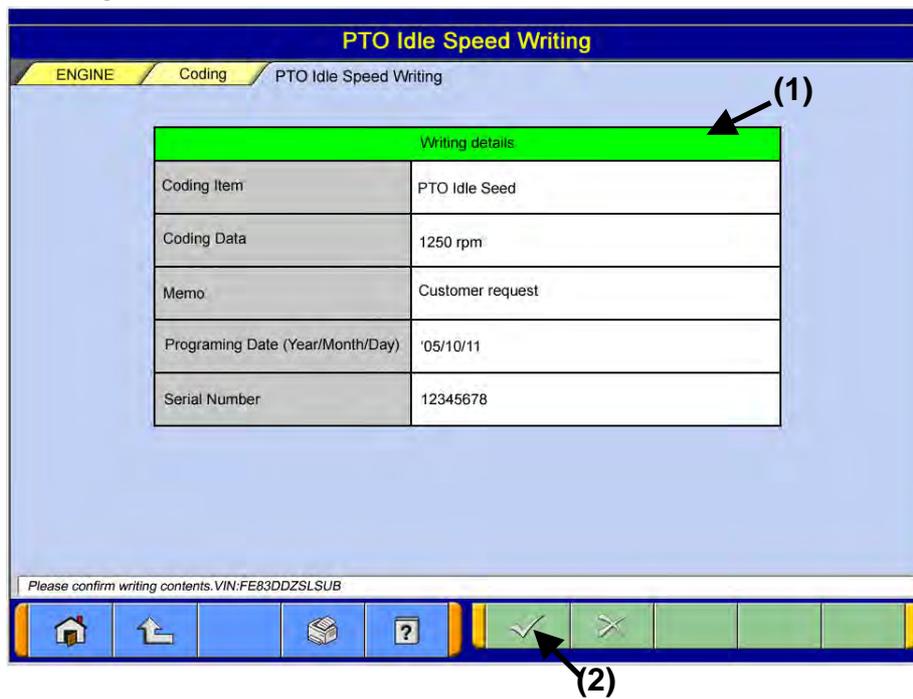


Window 8

- Enter memo in Work Memo Input field (Window 8: (1)) from the keyboard of MUT Screen or PC main unit, (It can be left blank)
- Press OK button (Window 8: (2)) to proceed to the Coding Contents Confirmation Window (Window 9).

MUT-III OPERATION

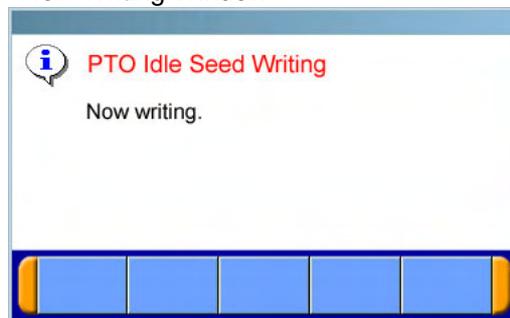
<Coding Contents Confirmation Window>



Window 9

- Confirm the writing contents (Window 9: (1)) and press OK button (Window 9: (2)) to display Now Writing Window (Window 10) after Writing Confirmation Window is displayed.

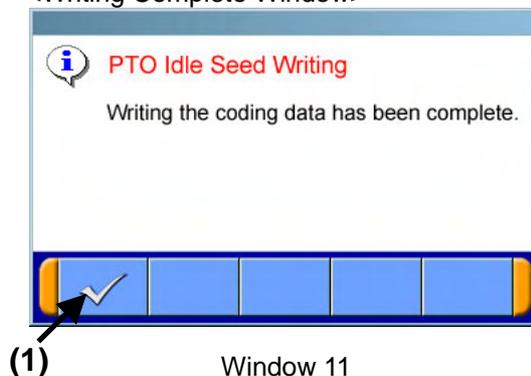
<Now Writing Window>



Window 10

- When writing is completed, Writing Complete Window (Window 11) is displayed.

<Writing Complete Window>



Window 11

- Press OK button (Window 11: (1)) to proceed to the Result Display Window (Window 12).

MUT-III OPERATION

<Result Display Window>

PTO Idle Speed Writing

ENGINE Coding PTO Idle Speed Writing

Writing Result		
Coding Item	PTO Idle Seed	
Coding Data	1250 rpm	
Programing Date (Year/Month/Day)	'05/10/11	
Writing tool Information	Tool ID	0085
	Serial Number	12345678

Part Number:ME304263/ROM-ID:*****/Communication Type:UDS on CAN/SCC:EB04/VIN:FE83DDZSLSUB

Window 12

- Writing result is displayed in Writing Result Window (Window 12: (1)).
- Press OK button (Window 12: (2)) to return to Coding Submenu Window (Window 3).

<PTO Information Display Window>

PTO Information

ENGINE Coding PTO Information

Vehicle Information		
Coding Item	PTO Idle Seed	
Coding Data	1250 rpm	
Programing Date (Year/Month/Day)	'05/10/11	
Writing tool Information	Tool ID	0085
	Serial Number	12345678

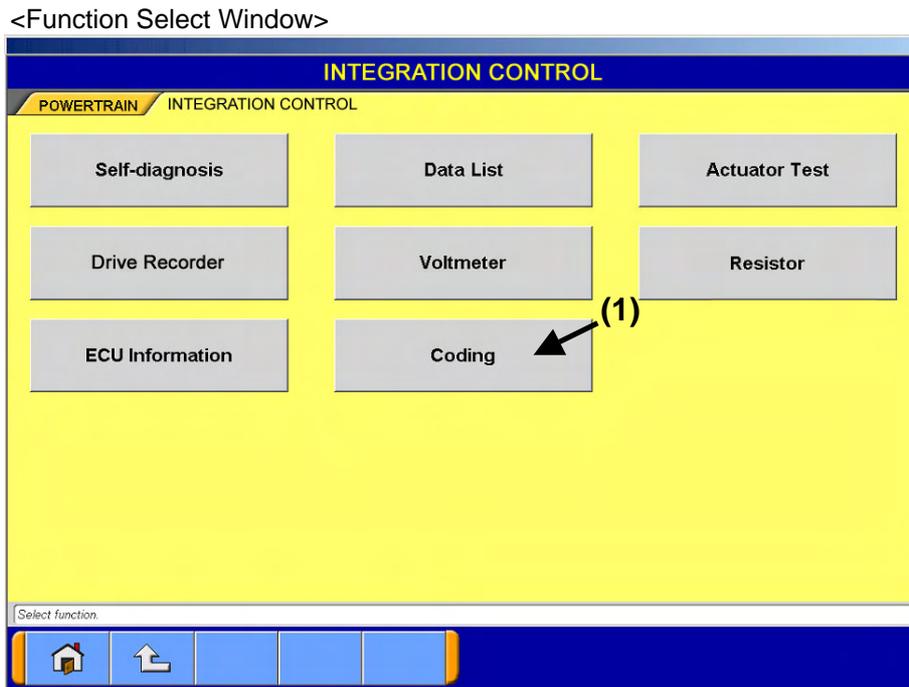
Part Number:ME304263/ROM-ID:*****/Communication Type:UDS on CAN/SCC:EB04

Window 13

- The “PTO idle rotation number” which is written in ECU is displayed.

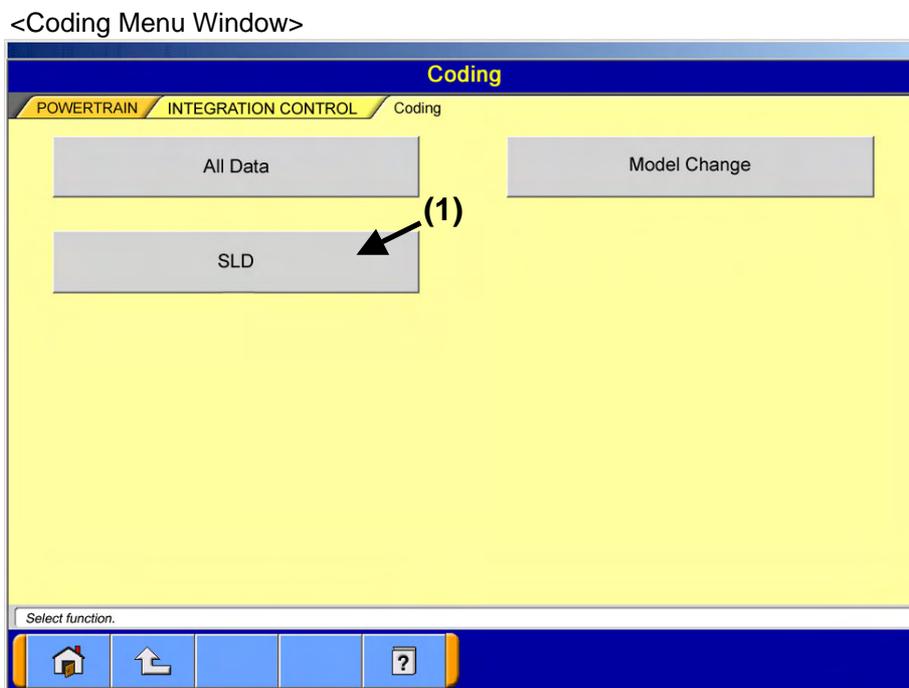
MUT-III OPERATION

(5) SLD Limited Speed Writing



Window 1

- Press “Coding” button (Window 1: (1)) in Function Select Window to proceed to the Coding Menu Window (Window 2).

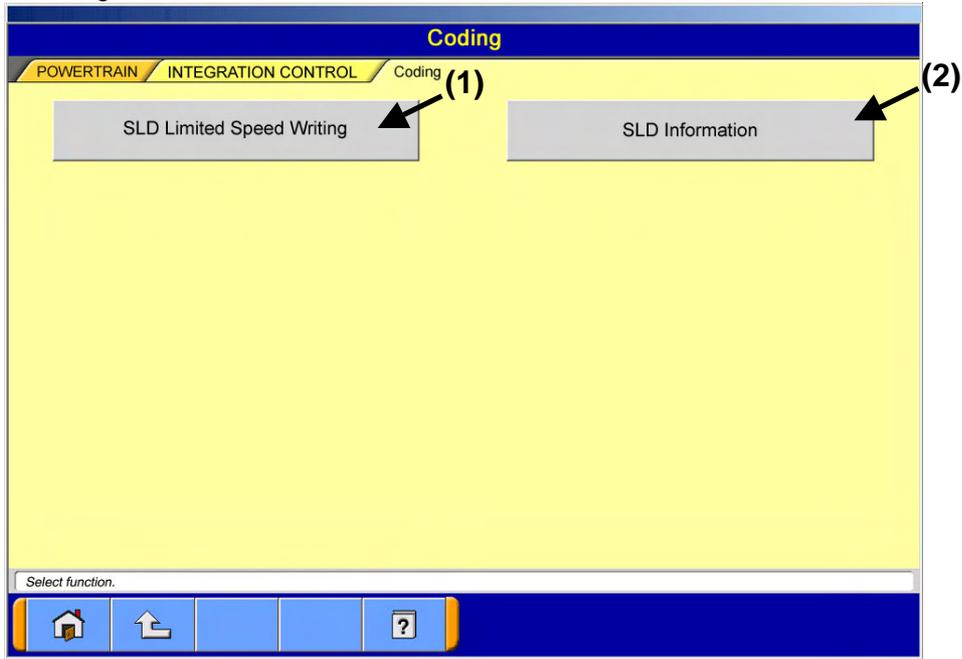


Window 2

- Press “SLD” button (Window 2: (1)) to proceed to the Coding Submenu Window (Window 3).

MUT-III OPERATION

<Coding Submenu Window>

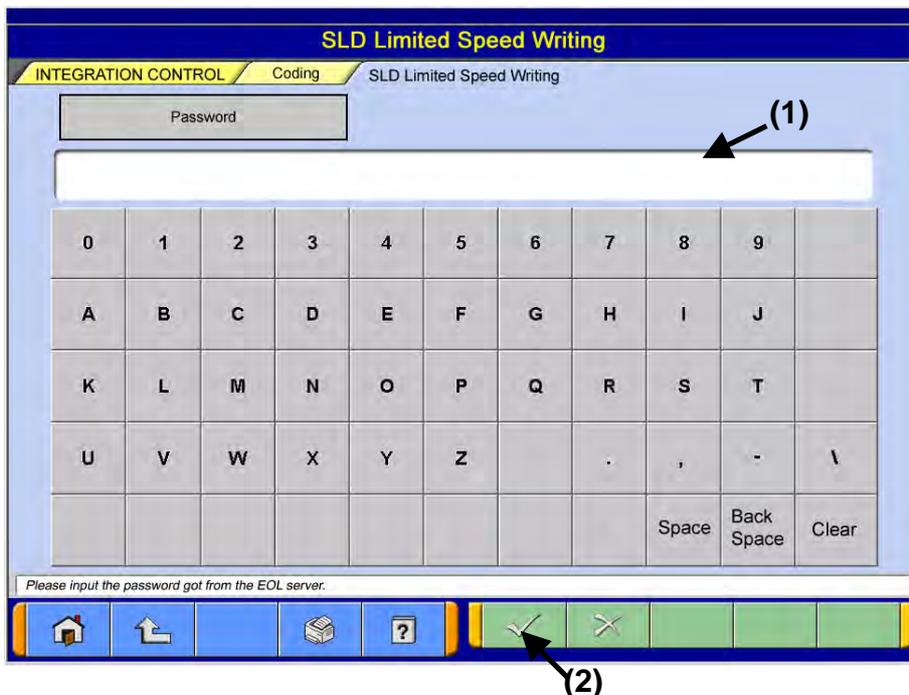


Window 3

- Press each Function button to proceed to the following windows.

Function button name	Next window	Remarks
SLD Limited Speed Writing (Window 3: (1))	Password Input Window (Window 4)	Write "SLD limit vehicle speed" manually/ automatically.
SLD Information (Window 3: (2))	SLD Information Display Window (Window 13)	Confirm the SLD information (SLD limit vehicle speed, etc.) which is written in ECU.

<Password Input Window>

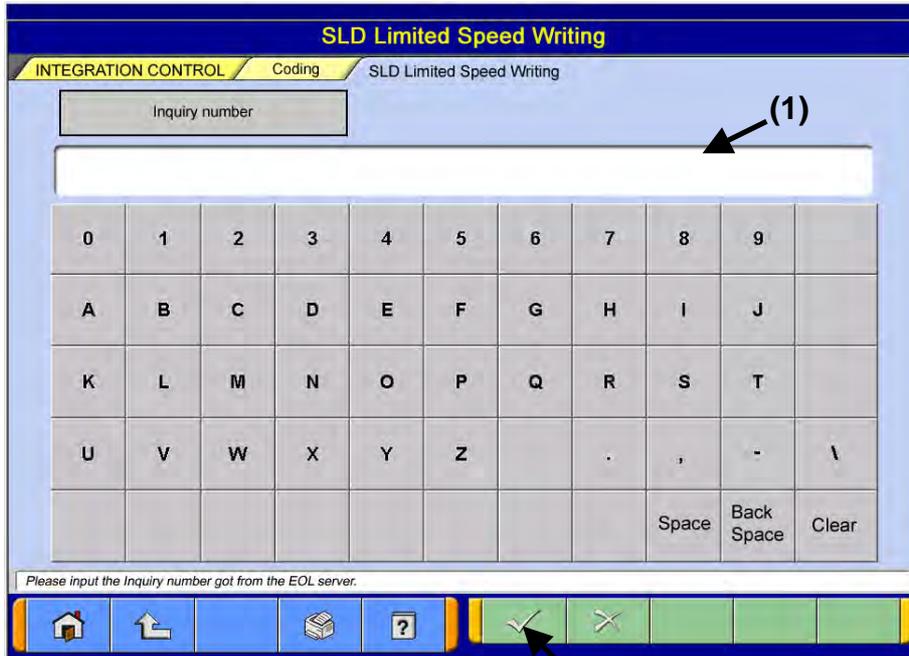


Window 4

- Enter password in Password Input field (Window 4: (1)) from the keyboard of MUT Screen or PC main unit.
- Press OK button (Window 4: (2)) to proceed to the Inquiry Number Input Window (Window 5).

MUT-III OPERATION

<Inquiry Number Input Window>



SLD Limited Speed Writing

INTEGRATION CONTROL Coding SLD Limited Speed Writing

Inquiry number

0 1 2 3 4 5 6 7 8 9

A B C D E F G H I J

K L M N O P Q R S T

U V W X Y Z . , - \

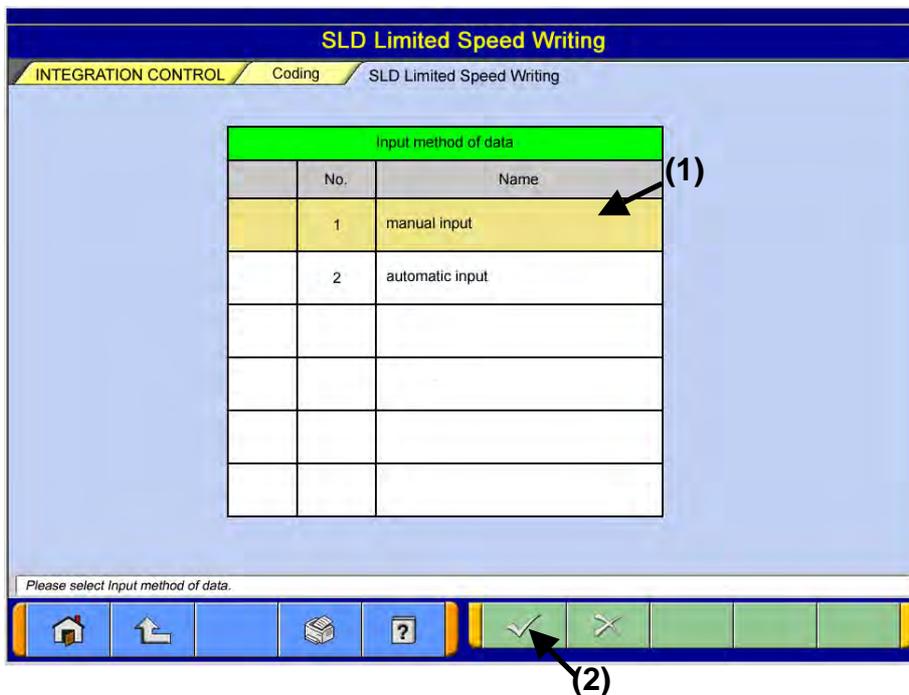
Space Back Space Clear

Please input the Inquiry number got from the EOL server.

Window 5

- Enter inquiry number in Inquiry Number Input field (Window 5: (1)) from the keyboard of MUT Screen or PC main unit.
- Press OK button (Window 5: (2)) to proceed to the Data Input Method Select Window (Window 6).

<Data Input Method Select Window>



SLD Limited Speed Writing

INTEGRATION CONTROL Coding SLD Limited Speed Writing

Input method of data

No.	Name
1	manual input
2	automatic input

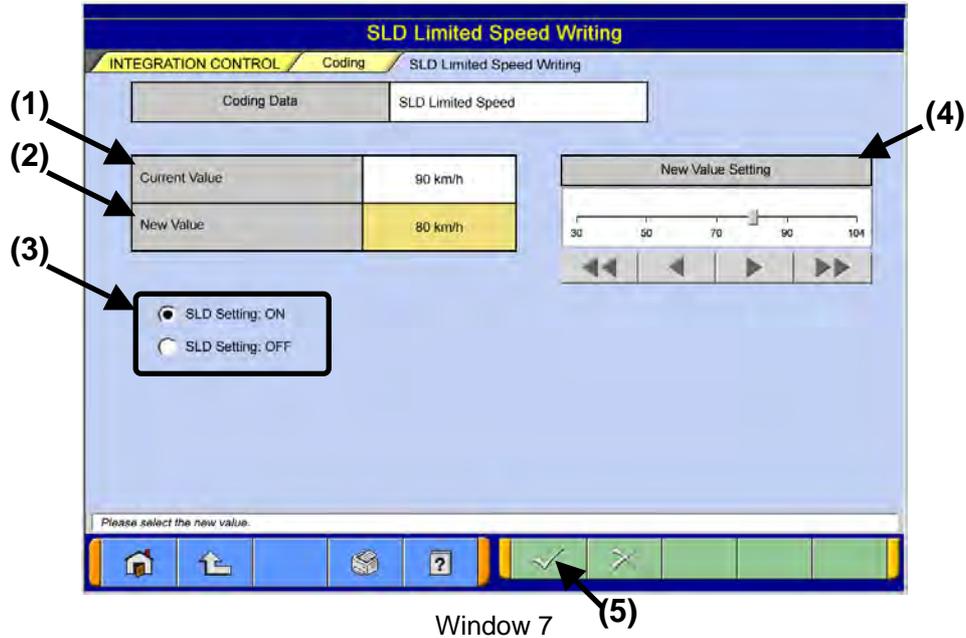
Please select Input method of data.

Window 6

- Select "Manual input" (Window 6: (1)) and press OK button (Window 6: (2)) to proceed to the Coding Data Input Window (Window 7).

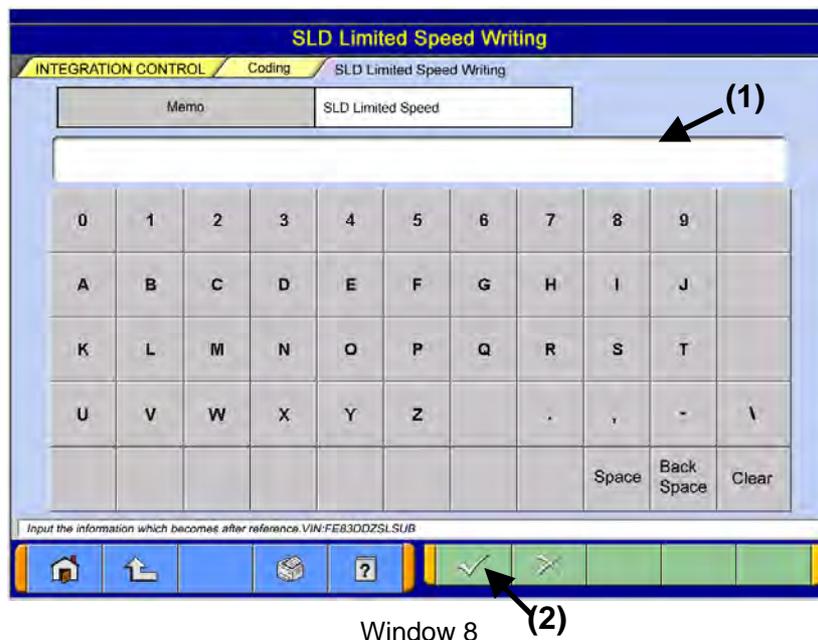
MUT-III OPERATION

<Coding Data Input Window>



- The current value written in “Current Value” (Window 7: (1)) in ECU is displayed.
- A value written in “New Value” (Window 7: (2)) in ECU is displayed.
- Select SLD ON/OFF in “SLD Setting” (Window 7: (3)).
ON: Select SLD vehicle speed (30 km/h to 104 km/h) using the slider.
OFF: No limit vehicle speed (255 km/h)
- Select SLD vehicle speed using slider in “New Value Setting” (Window 7: (4)) and increase/decrease button.
- Press OK button (Window 7: (5)) to proceed to the Work Memo Input Window (Window 8).

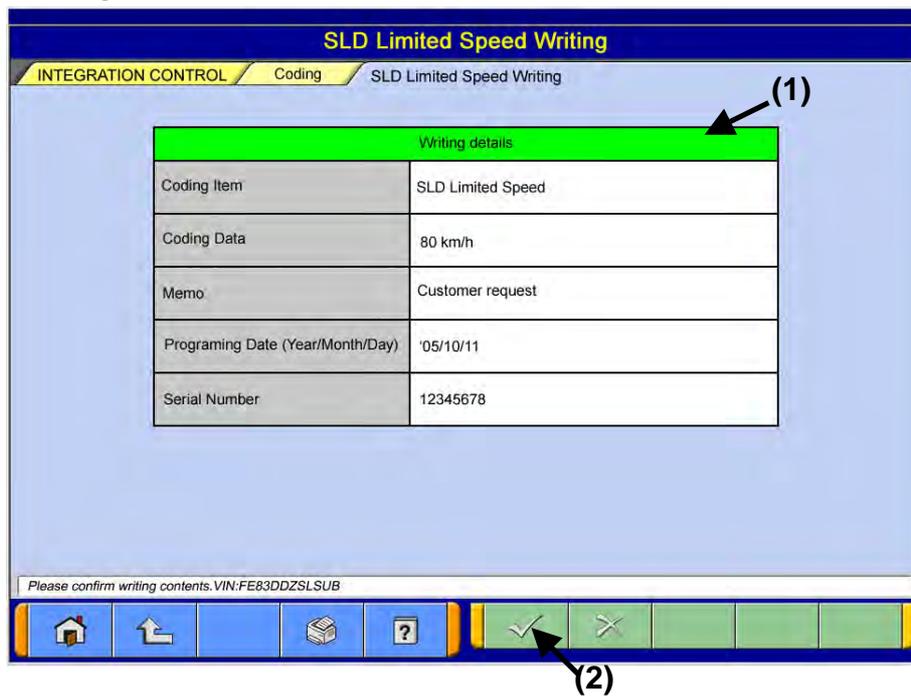
<Work Memo Input Window>



- Enter memo in Work Memo Input field (Window 8: (1)) from the keyboard of MUT Screen or PC main unit (It can be left blank).
- Press OK button (Window 8: (2)) to proceed to the Coding Contents Confirmation Window (Window 9).

MUT-III OPERATION

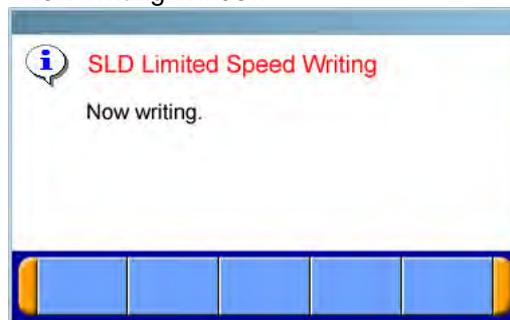
<Coding Contents Confirmation Window>



Window 9

- Confirm the writing contents (Window 9: (1)) and press OK button (Window 9: (2)) to display Now Writing Window (Window 10) after Writing Confirmation Window is displayed.

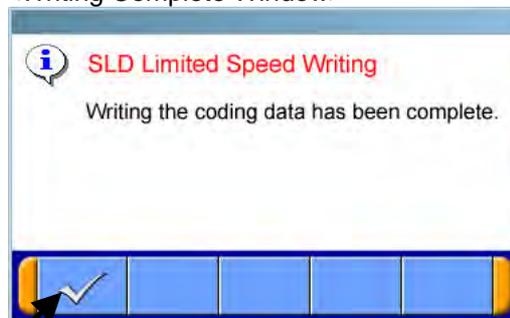
<Now Writing Window>



Window 10

- When writing is completed, Writing Complete Window (Window 11) is displayed.

<Writing Complete Window>



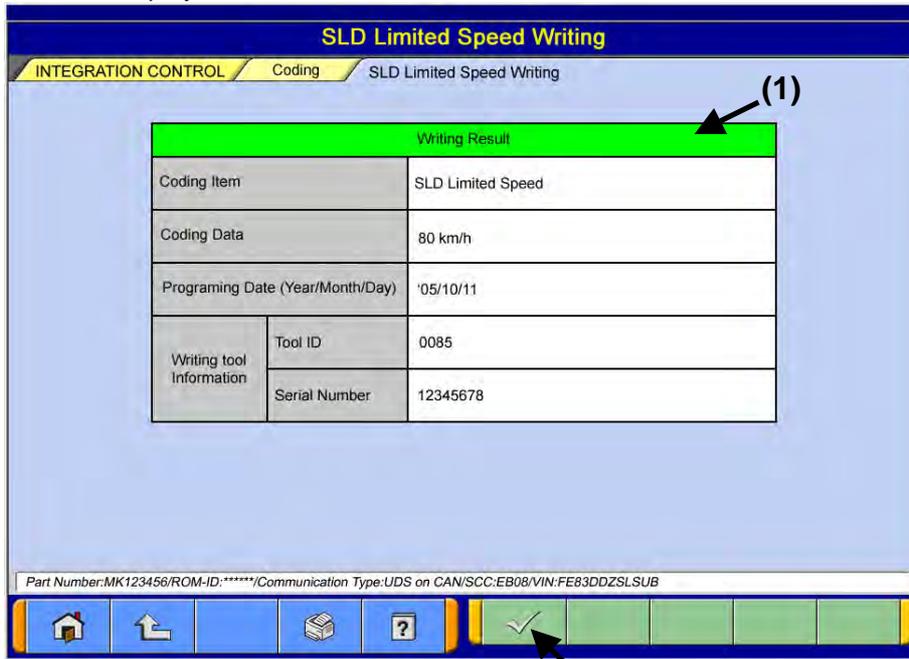
(1)

Window 11

- Press OK button (Window 11: (1)) to proceed to the Result Display Window (Window 12).

MUT-III OPERATION

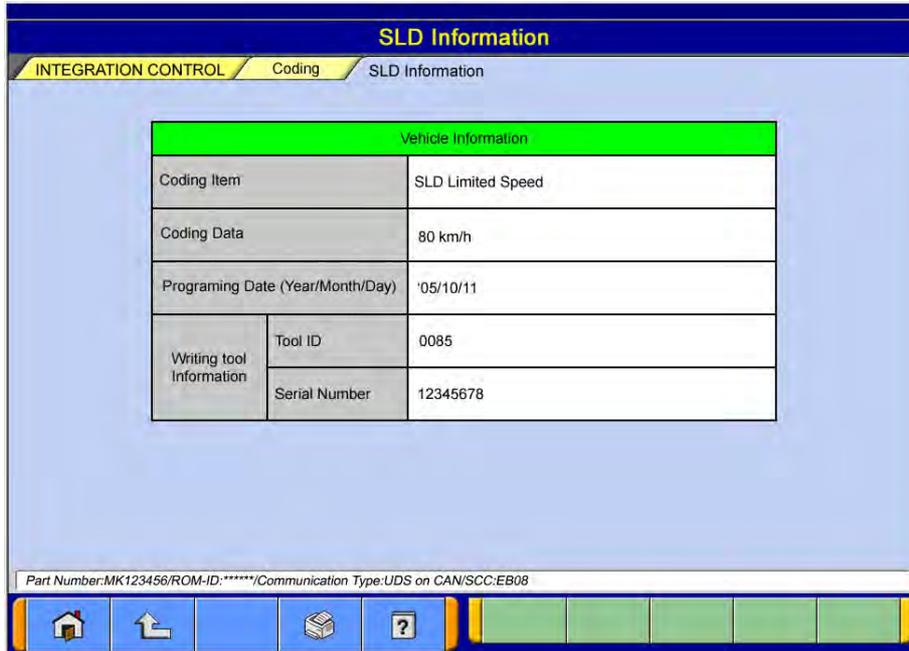
<Result Display Window>



Window 12

- Writing result written in Writing Result (Window 12: (1)) is displayed.
- Press OK button (Window 12: (2)) to return to Coding Submenu Window (Window 3).

<SLD Information Display Window>

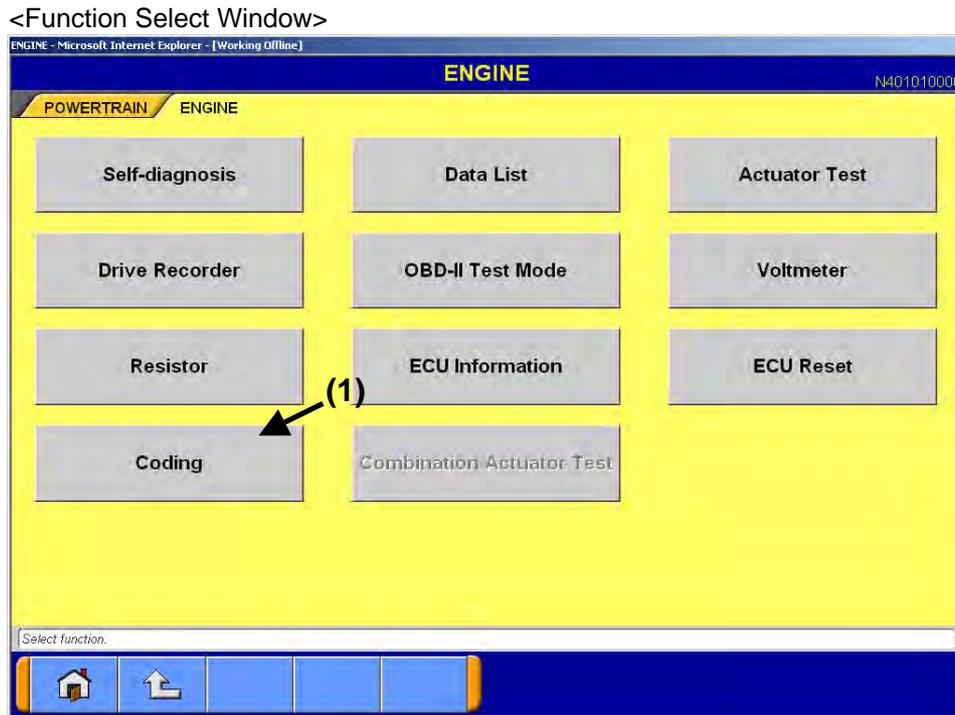


Window 13

- The value of "SLD limit vehicle speed" which is written in ECU is displayed.

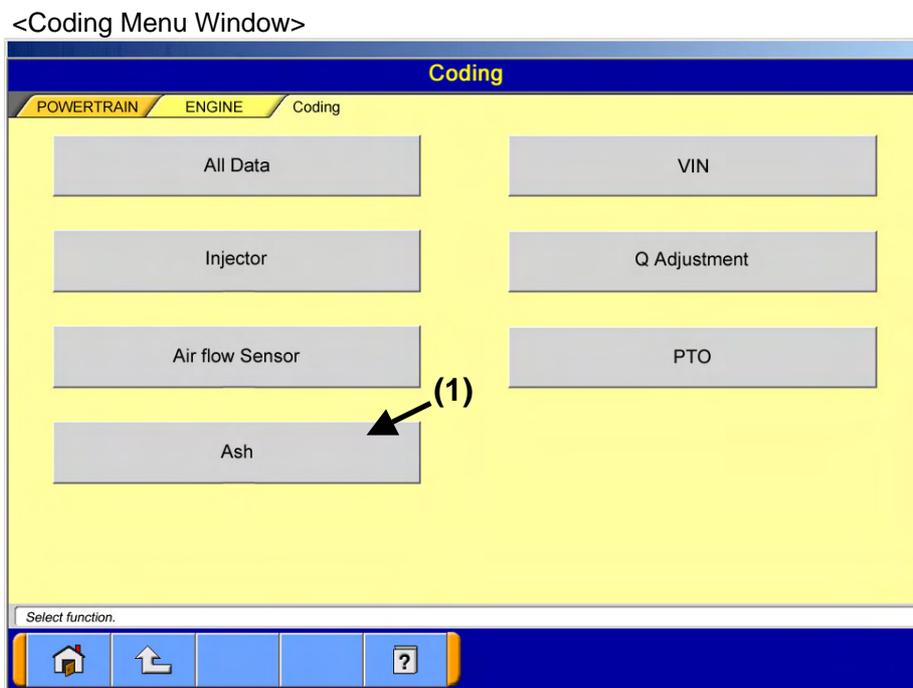
MUT-III OPERATION

(6) Ash Data Writing



Window 1

- Press “Coding” button (Window 1: (1)) in Function Select Window to proceed to the Coding Menu Window (Window 2).

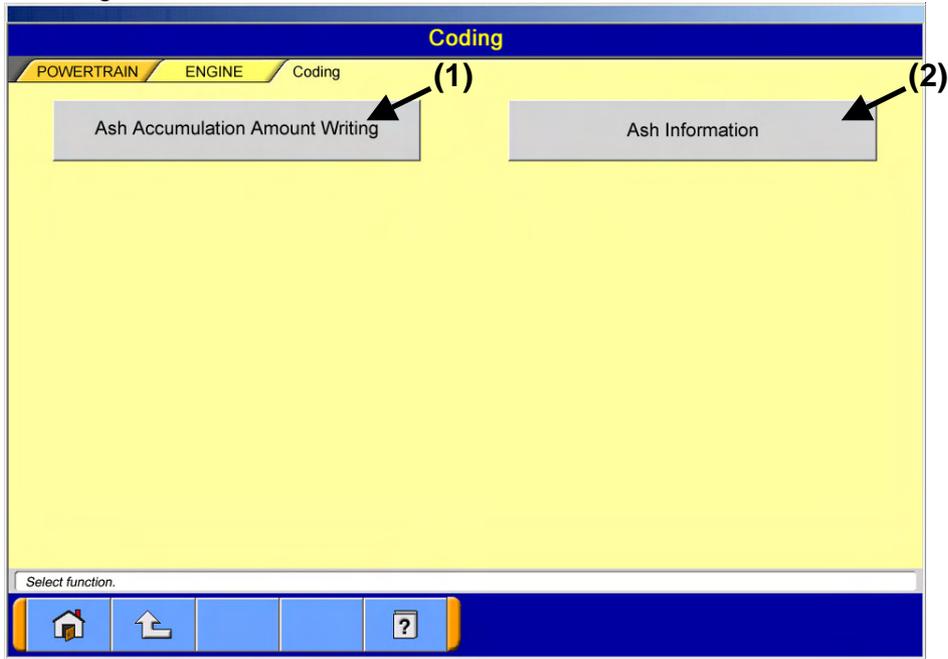


Window 2

- Press “Ash” button (Window 2: (1)) to proceed to the Coding Submenu Window (Window 3).

MUT-III OPERATION

<Coding Submenu Window>

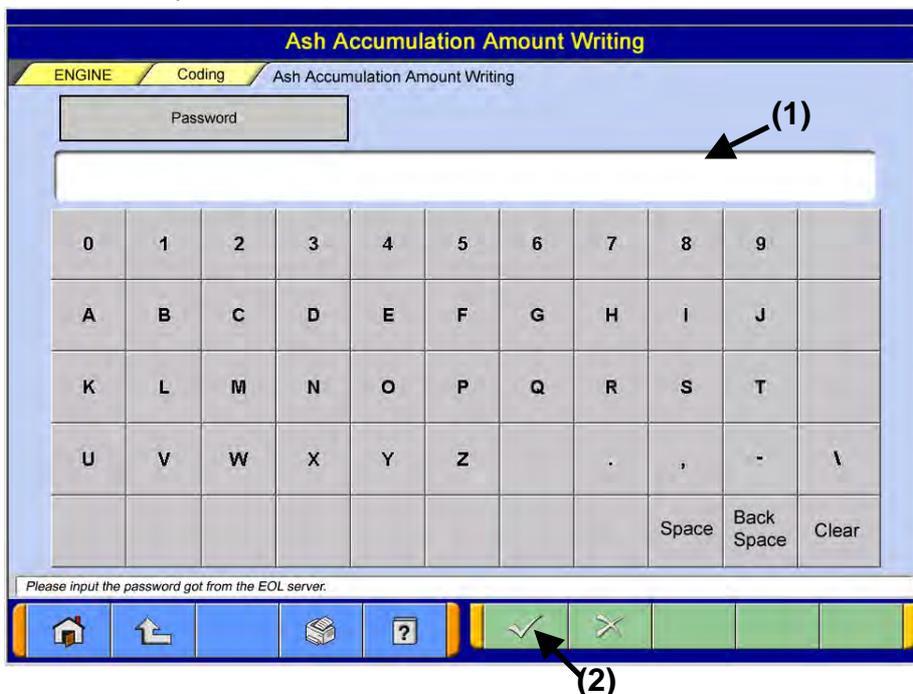


Window 3

- Press Function button to proceed to the following windows.

Function button name	Next window	Remarks
Ash Accumulation Amount Writing (Window 3: (1))	Password Input Window (Window 4)	Write "Ash data" manually/ automatically.
Ash Information (Window 3: (2))	Ash Information Display Window (Window 13)	Confirm the Ash information (Ash data) written in MUT.

<Password Input Window>



Window 4

- Enter password in Password Input field (Window 4: (1)) from the keyboard of MUT screen or PC main unit.
- Press OK button (Window 4: (2)) to proceed to the Inquiry Number Input Window (Window 5).

MUT-III OPERATION

<Inquiry Number Input Window>

Ash Accumulation Amount Writing

ENGINE Coding Ash Accumulation Amount Writing

Inquiry number

0	1	2	3	4	5	6	7	8	9	
A	B	C	D	E	F	G	H	I	J	
K	L	M	N	O	P	Q	R	S	T	
U	V	W	X	Y	Z		.	,	-	\
								Space	Back Space	Clear

Please input the Inquiry number got from the EOL server.

(1)

(2)

Window 5

- Enter Inquiry Number in Inquiry Number Input field (Window 5: (1)) from the keyboard of MUT Screen or PC main unit.
- Press OK button (Window 5: (2)) to proceed to the Data Input Method Select Window (Window 6).

<Data Input Method Select Window>

Ash Accumulation Amount Writing

ENGINE Coding Ash Accumulation Amount Writing

Input method of data	
No.	Name
1	manual input
2	automatic input

Please select Input method of data.

(1)

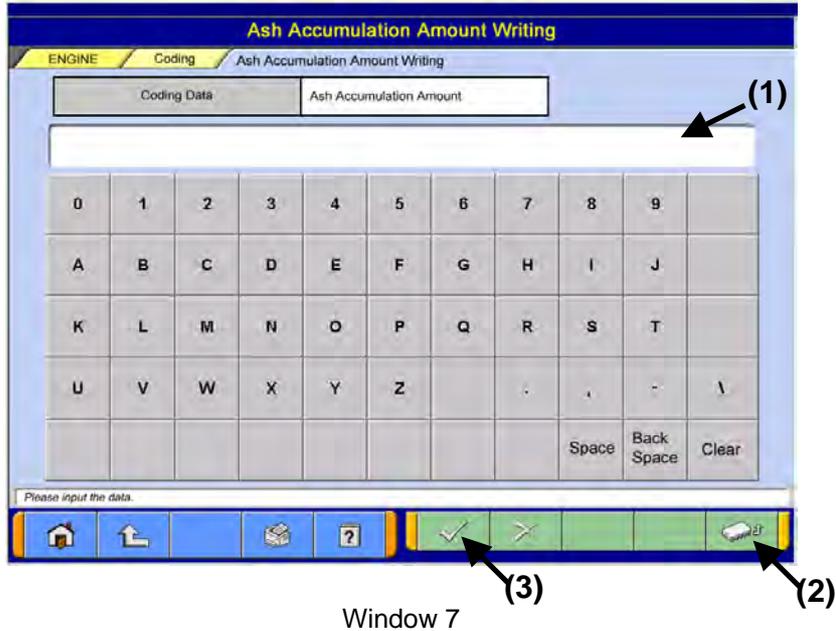
(2)

Window 6

- Select "Manual input" (Window 6: (1)) and press OK button (Window 6: (2)) to proceed to the Coding Data Input Window (Window 7).

MUT-III OPERATION

<Coding Data Input Window>



Window 7

<To write data which is read from ECU>

- Press “Read” button (Window 7: (2)) to read Ash data from ECU after the confirmation window ^{*1} is displayed and to display the data in the Coding Data Input field (Window 7: (1)).

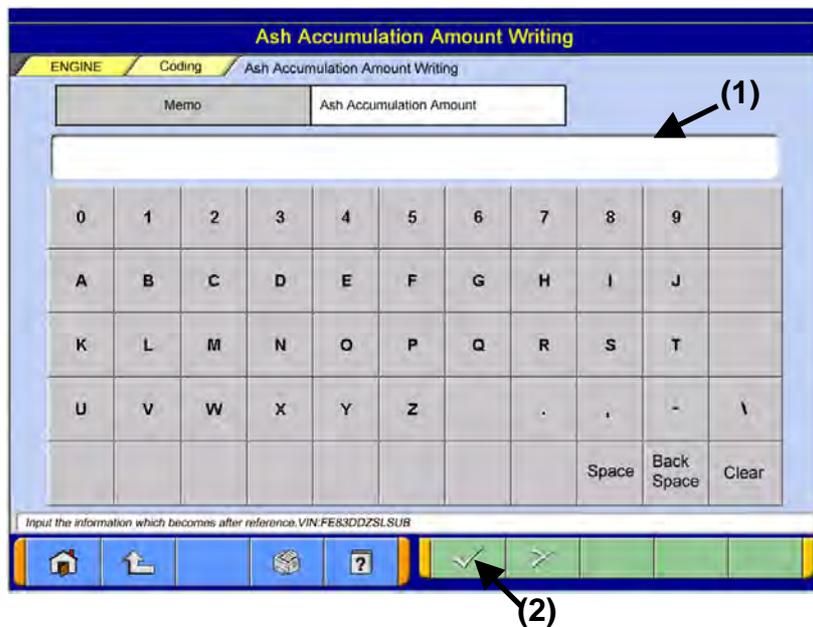
^{*1}: Check if the ECU before replacement is connected.

- Press OK button (Window 7: (3)) to proceed to the Work Memo Input Window (Window 8).

<To write Ash data by manually entering memo value>

- Enter the memo “Ash data” which is read from ECU before replacement in the Coding Data Input field (Window 7: (1)) from the keyboard of MUT Screen or PC main unit.
- Press OK button (Window 7: (3)) to proceed to the Work Memo Input Window (Window 8).

<Work Memo Input Window>

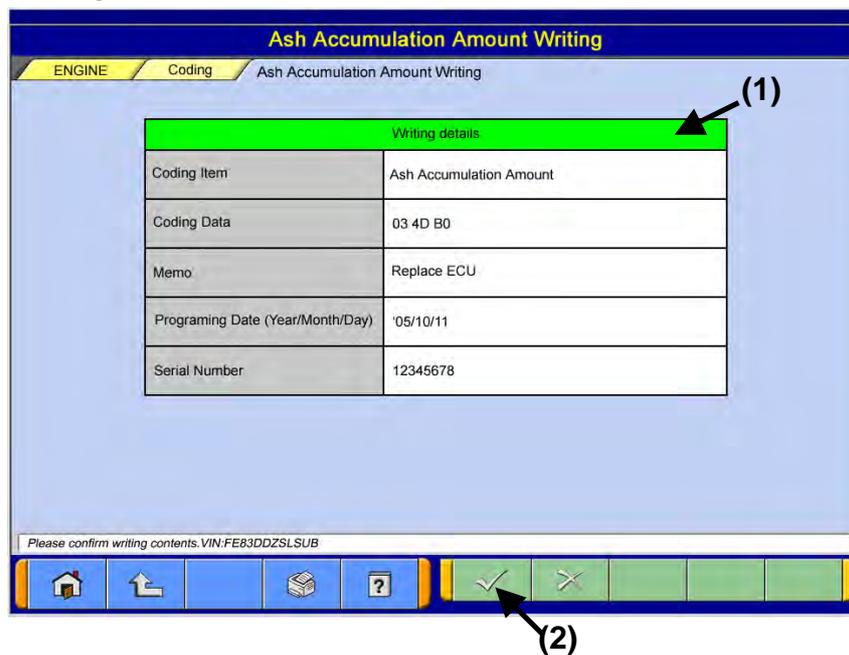


Window 8

- Enter memo in the Work Memo Input field (Window 8: (1)) from the keyboard of MUT Screen or PC main unit (It can be left blank).
- Press OK button (Window 8: (2)) to proceed to the Coding Contents Confirmation Window (Window 9).

MUT-III OPERATION

<Coding Contents Confirmation Window>

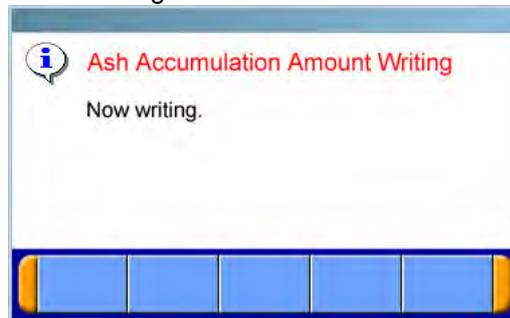


Window 9

- Confirm the writing contents (Window 9: (1)) and press OK button (Window 9: (2)) to display the Now Writing Window (Window 10) after the Writing Contents Writing Window^{*1} is displayed.

^{*1}: Confirm if it is replaced with a new ECU.

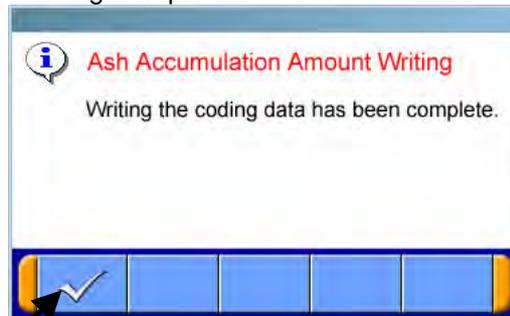
<Now Writing Window>



Window 10

- When writing is completed, Writing Complete Window (Window 11) is displayed.

<Writing Complete Window>



(1)

Window 11

- Press OK button (Window 11: (1)) to proceed to the Result Display Window (Window 12).

MUT-III OPERATION

<Result Display Window>

Writing Result		
Coding Item	Ash Accumulation Amount	
Coding Data	03 4D B0	
Programming Date (Year/Month/Day)	'05/10/11	
Writing tool Information	Tool ID	0085
	Serial Number	12345678

Part Number:ME304263/ROM-ID:*****/Communication Type:UDS on CAN/SCC:EB04/VIN:FE83DDZLSLUB

Window 12

- Writing result is displayed in Writing Result Window (Window 12: (1)).
- Press OK button (Window 12: (2)) to return to the Coding Submenu Window (Window 3).

<Ash Information Display Window>

Vehicle Information		
Coding Item	Ash Accumulation Amount	
Coding Data	03 4D B0	
Programming Date (Year/Month/Day)	'05/10/11	
Writing tool Information	Tool ID	0085
	Serial Number	12345678

Part Number:ME304263/ROM-ID:*****/Communication Type:UDS on CAN/SCC:EB04

Window 13

- The “Ash data” value which is written in ECU is displayed.

ECU Field Rewriting Operation Manual

mitsubishi FUSO TRUCK & BUS CORP.

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