SB-10055968-8941

No: C1006710
Issued: 4/1/2014
Revised: 4/21/14
Re: Engine Protection System
Group: 13 **Models:** FE/FG
Expires: 4/1/2015

SUBJECT:
Product Improvement Campaign C1006710 – Engine Protection System

MODELS:
FEC52, FEC72, FEC92, FGB72

VEHICLES INVOLVED:
Certain 2012 through 2015 model year FEC52, FEC72, FEC92 and FGB72 trucks produced from February 3, 2011 through February 24, 2014.

OWNER NOTIFICATION:
Owners of affected vehicles will be notified by mail.

MODIFICATION:
The EEC will be reprogrammed to include an Engine Protection System (EPS) that will prevent engine damage resulting from low oil pressure. When the EPS detects low oil pressure, a buzzer will sound and the engine will shut down 40 seconds after the buzzer has sounded. The engine EEC will be reprogrammed on all affected vehicles. Note: If any EEC-related DTC's are present, the vehicle must be diagnosed prior to EEC reprogramming, and any components found to be defective must be replaced.

CAMPAIGN CLAIM SUBMITTAL:
Claim labor for EPS programming via Fusonet using the Recall Claim Entry screen. Enter all requested information, including the Campaign Number. The system will apply the labor allowance shown.

| Campaign Reimbursement					
Campaign Number	**Models**	**Allowances**		**Labor Description**	**Part Number**
C1006710	FEC52 FEC72 FEC92 FGB72	Labor Time	0.4 hour	Reprogram the EEC to include EPS	N/A
		Parts Pricing	N/A		

REPAIR PROCEDURE:
1. Park the vehicle on a flat, level surface, turn off the engine, apply the parking brake and chock the wheels.
   CAUTION! Do not remove the wheel chocks until all modification work has been completed.
2. Perform the Campaign using the attached modification procedure.
3. Upon completion, affix an EPS label to the EEC cover as shown below:

Modification Procedure

1 - Connect Fuso Diagnostics (FD) to the vehicle. Check the version of the XENTRY diagnostic program to ensure that version ***FDS-R13-1.3*** is installed. Click the gear icon (1). Click **System and data version of Xentry diagnostics** (2). Check for version **FDS-R13-1.3**.
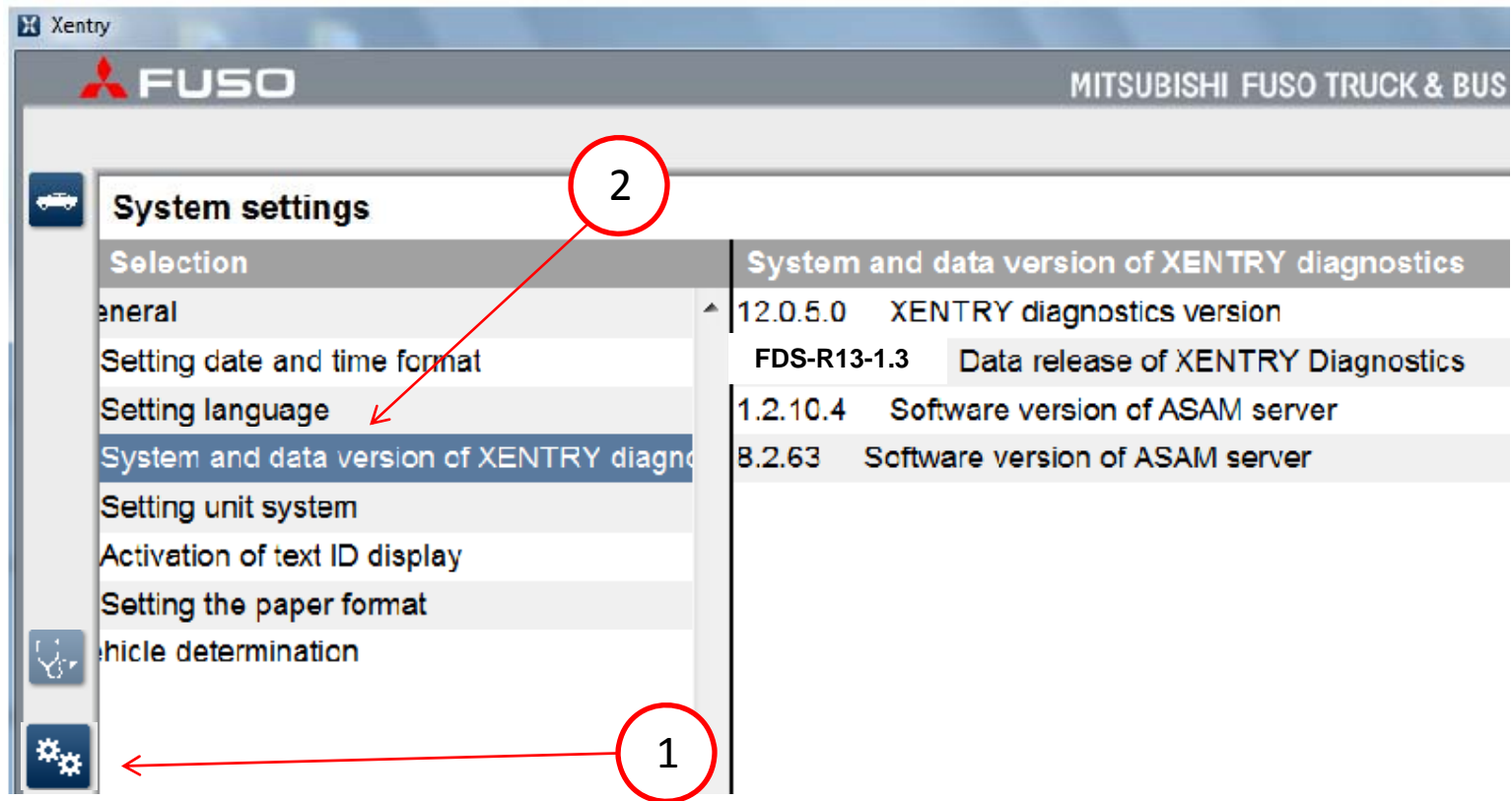
2. Start Fuso Diagnostics and navigate to the home screen which shows all the vehicle's controller units. Perform a **"quick test"** on the vehicle's Electronic Control Units (ECU). It is not advisable to reprogram any ECU with Diagnostic Trouble Codes (DTC) present in the system.
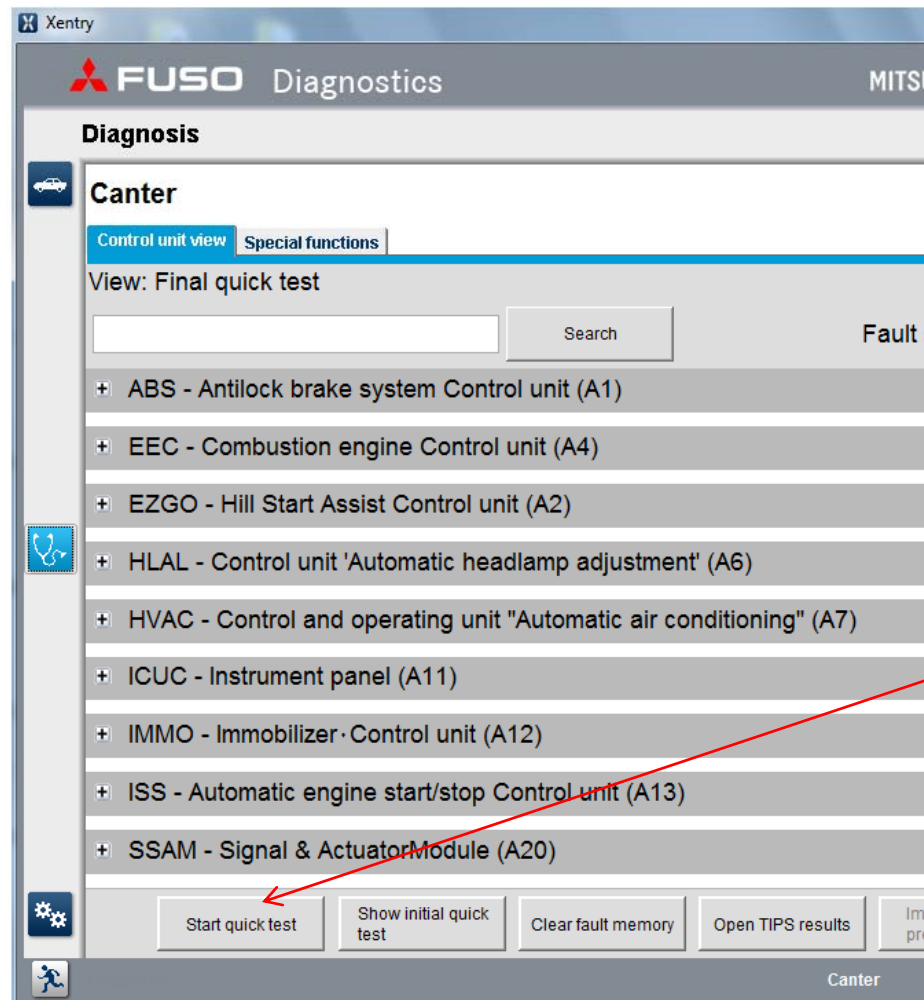
3. Download an inquiry number and password from MFTBC's EOL website for the EEC (See SIB 14-005). Load the file to a USB storage device (flash drive).

4. Connect the USB storage device to the FD computer. Follow steps below. (1) Click **Adaptations**. (2) Click **Data transfer**. (3) Click **Copying from USB storage device**. (4) Enter the **Inquiry number**. (5) Click **Continue**.
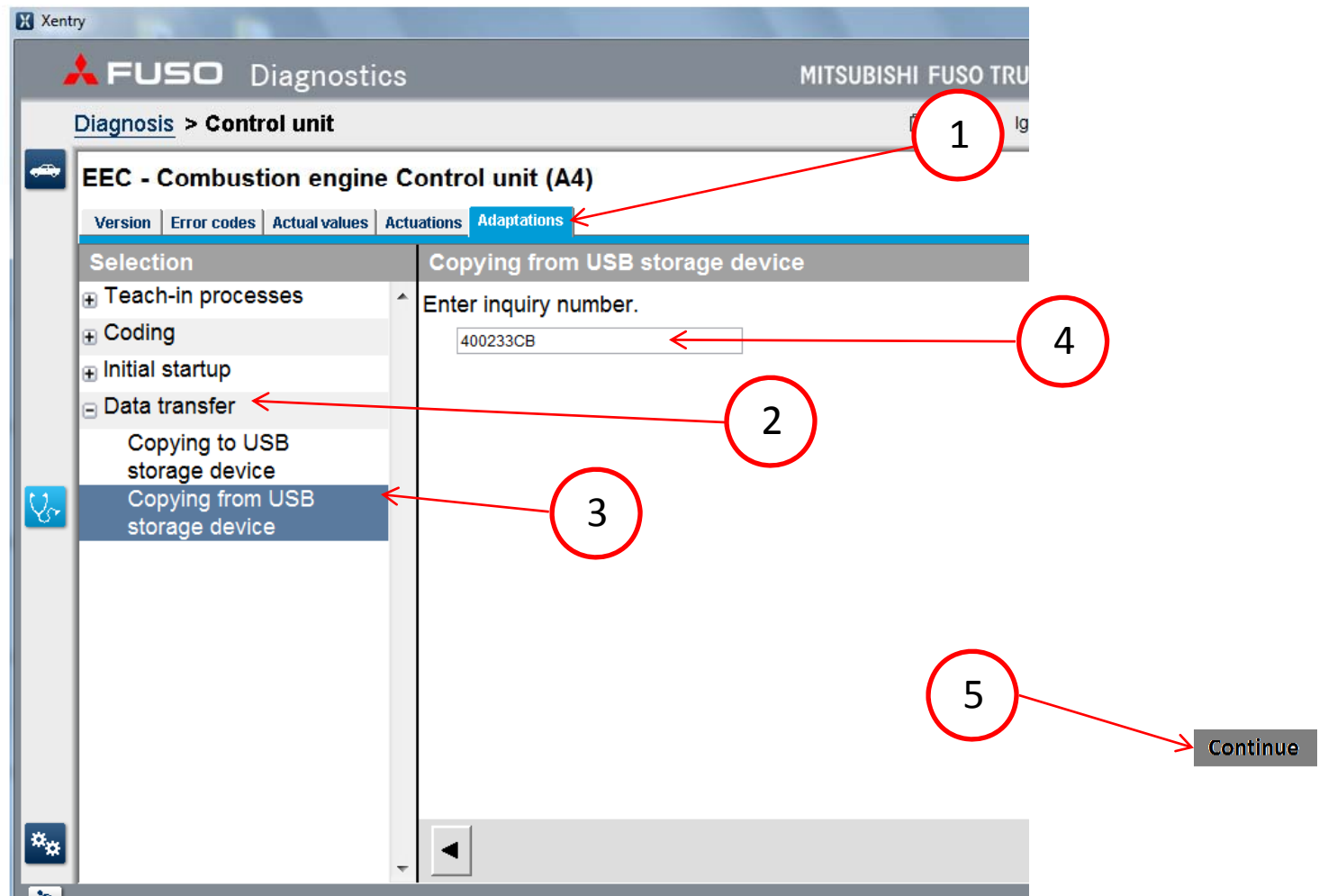
5. When the file has successfully transferred, (1) Open the "+" symbol next to Initial startup. (2) Click Reprogramming. The screen will display that **"A new software version is available and can be installed."**(3) Click **Yes**, when prompted - Enter the Inquiry number and password.

Please note: The Flashware number that is displayed may be different than shown.

6. As the program loads, a status bar will be displayed.
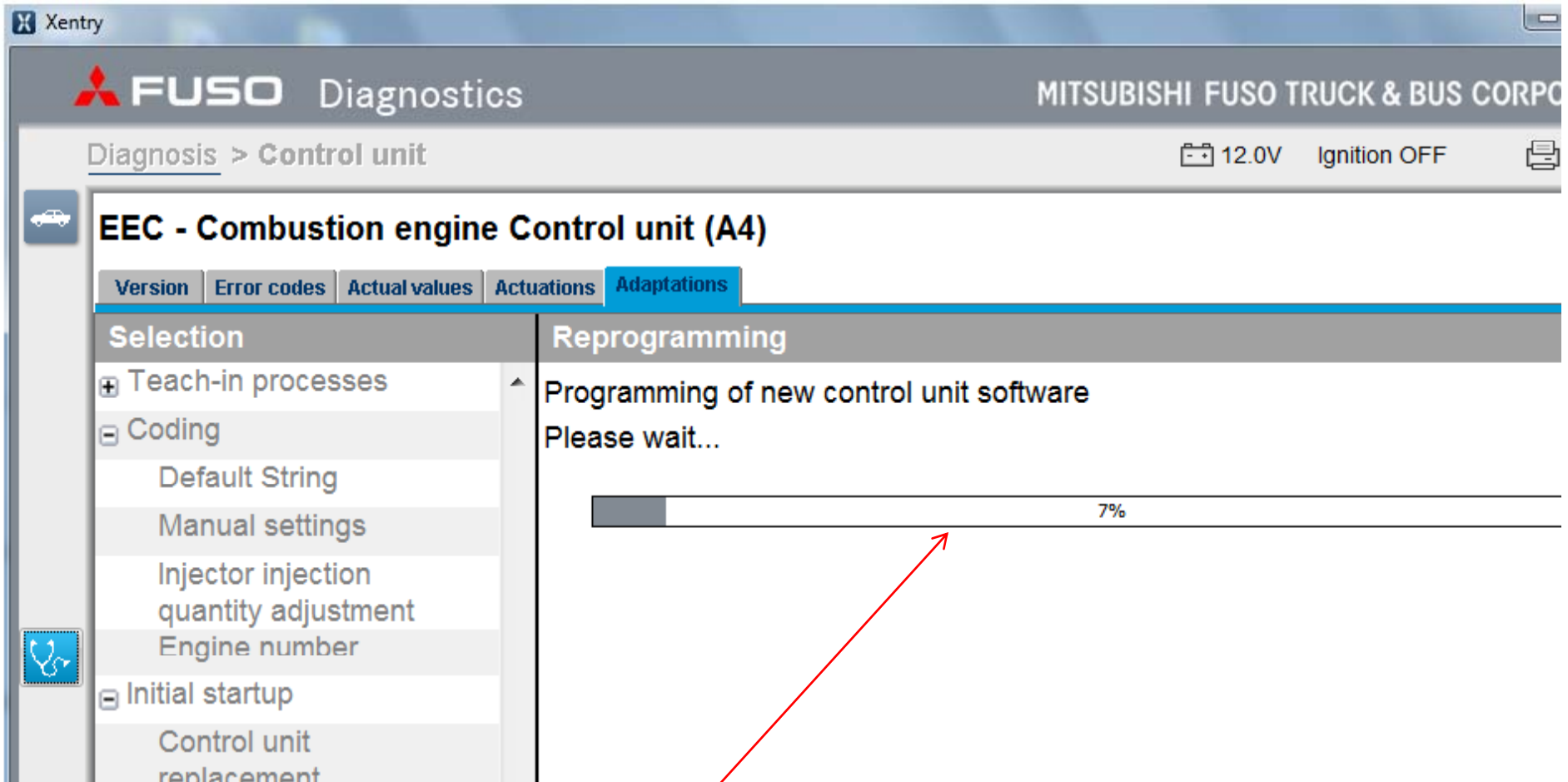
Wait for the program to load, the status will reach 100%

7. When this portion of the reprogramming finishes, you are prompted to turn the starter switch OFF and click **Continue**.

8. When prompted, turn the starter switch to ON, click **Continue**.

9. As the program loads, a progress bar is displayed.

Wait for the status bar to reach the end.

10. When the **Order log** screen is displayed, (1) Click **Continue**, and (2) click the **Version** tab.

11. On a Canters that comply with EPA 10 emissions ('12-'14 M/Y), navigate to the **Adaptations** screen of the EEC menu. Click **Teach-in processes** (1). Click **017 Status of exhaust after treatment** (2). Scroll down and click the green **S** (3). On OBD2013 vehicles ('14 ½ -'15 M/Y), skip this Step and proceed to **Step 15**.

12. Click the car icon in the upper left corner. Click **Yes**. Turn the starter switch to the OFF position. Remove the key from the switch for 1 minute.

13. Turn the starter switch to the ON position. Navigate to the **EEC** menu. (1) Click on **Adaptations** tab. (2) Click **Coding**. (3) Click **Manual settings**.(4) Enter the Inquiry number & password. (5) Click **Continue**.

14. Open the **Manual settings** list and scroll down. If an item in the list is found to be **red**, change the item to the first item that appears in the drop down box. **CHECK ALL ITEMS IN THE LIST, CHANGING ALL THOSE THAT APPEAR IN RED!!!**

Choose the 1ˢᵗ value in the list.

15. Change item # 015 EPS (Engine protection function) from INVALID to VALID.
NOTE: This will force the engine to shut down when oil pressure is low.

16. Click **Yes**.

17. Click **Continue**.
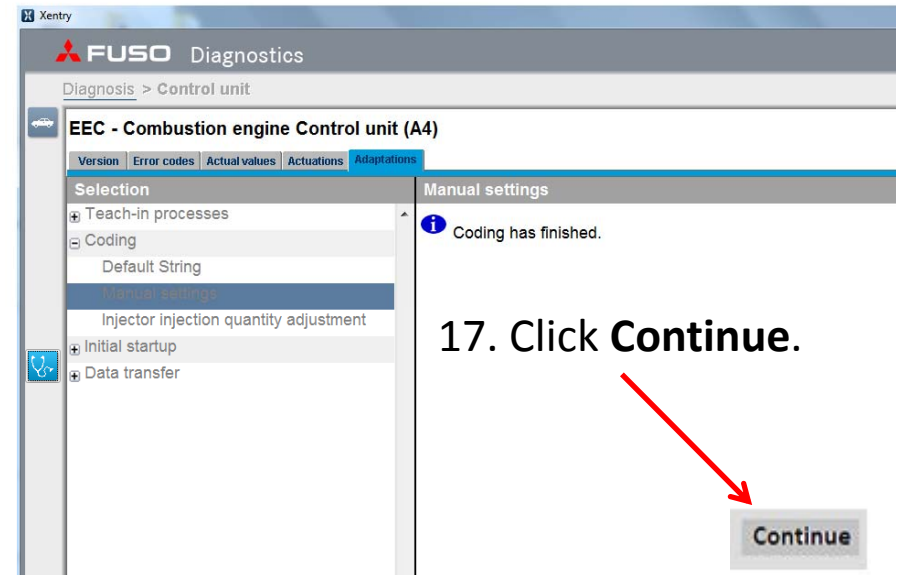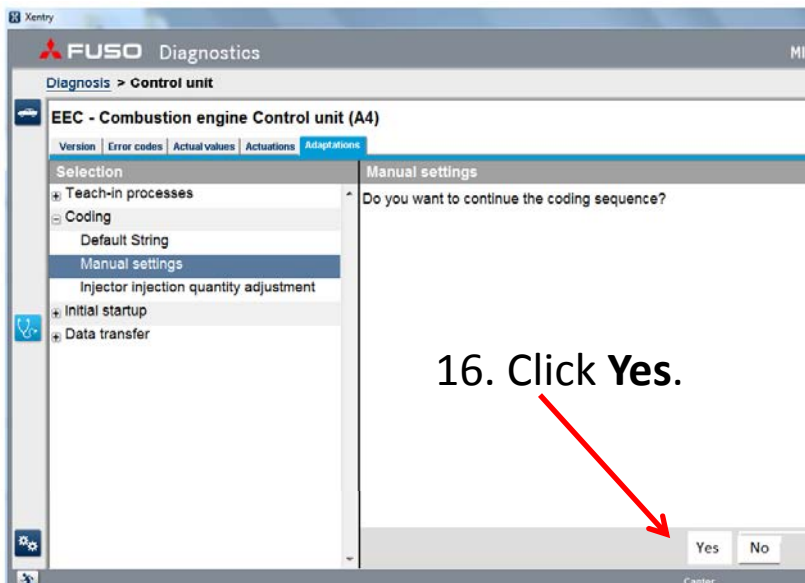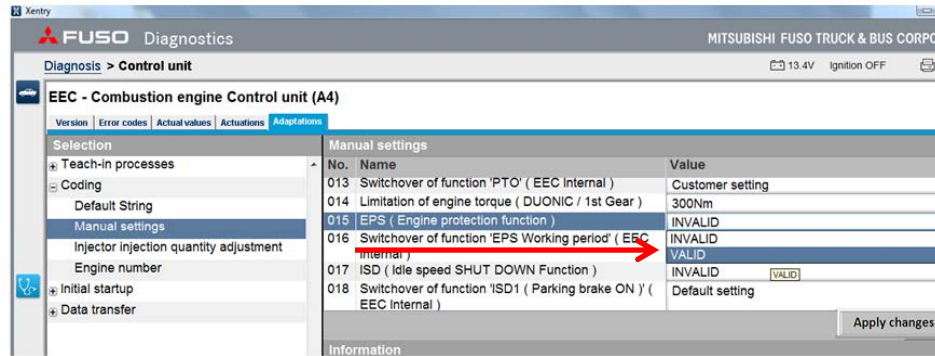
18. When the **Manual settings** list reloads, the program has completed. Click **Version**.

19. When the **Version** screen loads, click the car icon.

20. Click **Yes**. Turn the starter switch to the OFF position. Remove the key from the switch for 1 minute.

21. Turn the starter switch to the ON position. Navigate back to the EEC menu. Click on the **Actual values** tab (1). Click **Status** (2). Check items # **160** & **161** (3). If the learned value of the mass air flow sensor is zero, you must relearn the sensor.

22. If the values in items # **160** & **161** are zero, relearn the mass air flow sensor using the following method:

- Turn off the air conditioning switch.
- Run the engine until the engine coolant temperature is above 60°C (140°F). This will be more than 5 bars on the coolant temperature gauge on the meter cluster.
- Idle the engine for 2 minutes.
- Accelerate the engine to wide open throttle until the buzzer sounds. (About 15 seconds)
- Turn the starter switch to the OFF position for 60 seconds. Navigate back to items #160 & #161. Recheck the values. NOTE: The difference between the 2 values should be +/-5%.

23. Turn the starter to the ON position. Navigate to the EEC program. Click **Adaptations**. Click **Data transfer**. Click **Copying to USB storage device**. Click **Continue**.
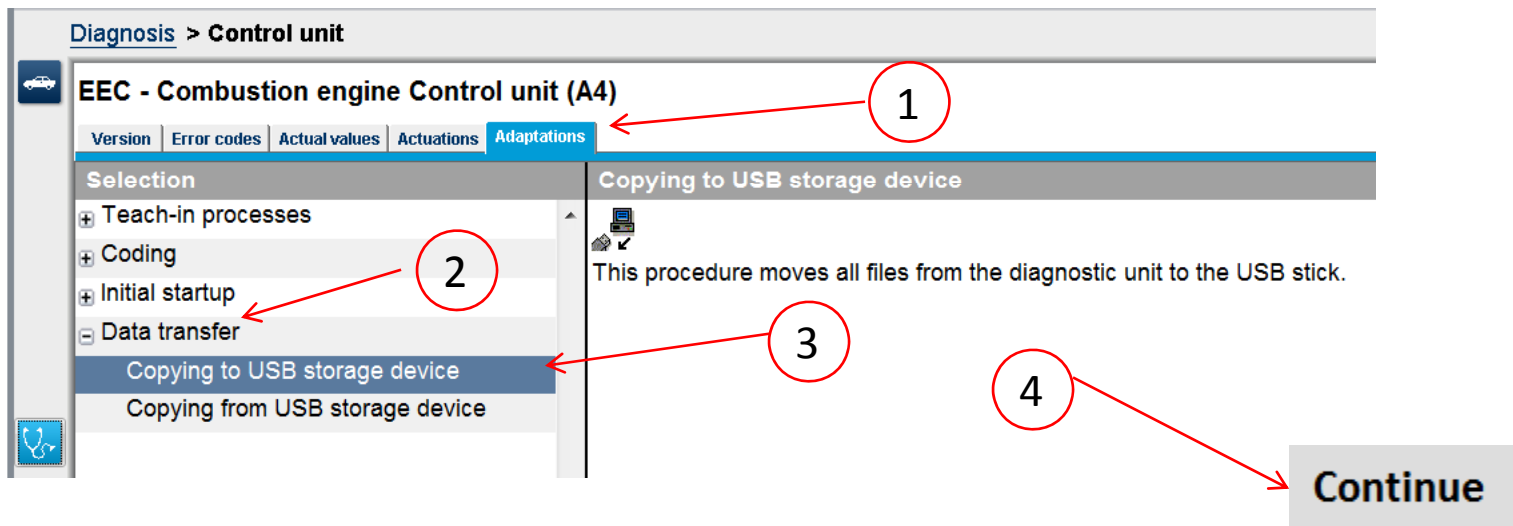
24. The drive where the USB storage device is shown. Click **Continue**.

Diagnosis > Control unit

EEC - Combustion engine Control unit (A4)

| Version | Error codes | Actual values | Actuations | Adaptations |

Selection | **Copying to USB storage device**

⊞ Teach-in processes
⊞ Coding
⊞ Initial startup
⊟ Data transfer
　Copying to USB storage device
　Copying from USB storage device

Removable storage device   E ▼

Continue

Diagnosis > Control unit

EEC - Combustion engine Control unit (A4)

| Version | Error codes | Actual values | Actuations | Adaptations |

Selection | **Copying to USB storage device**

⊞ Teach-in processes
⊞ Coding
⊞ Initial startup
⊟ Data transfer
　Copying to USB storage device
　Copying from USB storage device

The copying procedure was completed successfully.

25. The history file containing the coding changes to the EEC is now on the USB storage device. It can be uploaded to the EOL website (See SIB 14-005).