# **INITIAL LEARNING [GW6A-EL, GW6AX-EL]**

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#### Introduction

- If the control valve body and oil pressure switch are replaced, always perform the initial learning. If the initial learning is not completed, engine rev-up may occur or shift shock may increase. DTC P06B8:00 is displayed while the initial learning has not been implemented.
- The procedure for the initial learning has a procedure which uses the M-MDS and one which does not. The initial learning can be activated easily using the M-MDS.

#### Warning

The initial learning forcibly changes gears within the driving shift range while the engine is running.
Before implementing the initial learning, securely apply the parking brake and set the wheel blocks
for both the front and rear wheels. Otherwise, the vehicle will move which could cause injury or
property damage.

# **Using M-MDS**

# Preparation before servicing

1. Verify initial learning implementation necessity for replacement parts.

Replacement part	Initial learning necessity
Control valve body replacement	Necessary
Oil pressure switch replacement	Necessary
Automatic transaxle replacement	Necessary
ON/OFF solenoid replacement	Unnecessary
Coupler component replacement	Unnecessary

- 2. Apply the parking brake firmly, and set the wheel blocks for both the front and rear wheels.
- 3. Inspect the ATF level. (See AUTOMATIC TRANSAXLE FLUID (ATF) INSPECTION [GW6A-EL, GW6AX-EL].)
- 4. Bring the M-MDS inside the vehicle and connect it to the DLC-2.
- 5. Perform vehicle identification using the M-MDS.
- 6. Start the engine.
- 7. After the vehicle is identified, select the following items from initialization of the M-MDS.
  - (1) Select "Data logger".
  - (2) Select "Module".
  - (3) Select "TCM".
- 8. While checking the PID TFT (ATF temperature), warm-up the engine and allow the ATF temperature to reach 60—110 °C {108—198 °F}.

# Starting procedure for initial learning

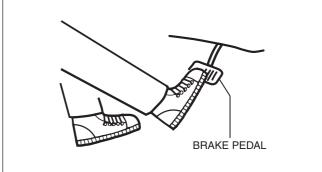
- 1. After the vehicle is identified, select the following items from initialization of the M-MDS.
  - (1) Select "Self-test"
  - (2) Select "Module"
  - (3) Select "TCM"
  - (4) Select "Retrieve CMDTCs"

#### Note

- DTC P06B8:00 is displayed while the initial learning has not been implemented.
- 2. Start the engine and wait for **30 s or more**.
- 3. Perform the following steps (1) to (4) with the brake pedal depressed.

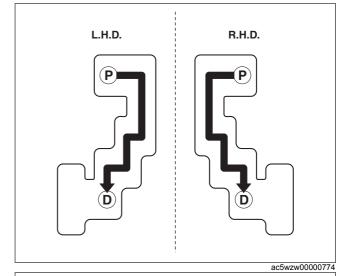
#### Caution

- When the brake fluid pressure sensor value is the specification or less, shut down the initial learning to assure safety.
   Accordingly, be careful of the following when performing the initial learning:
  - Strongly depress the brake pedal while performing the initial learning.
  - Do not depress the brake pedal again.
     Otherwise, the brake booster pressure
     will decrease and the brake force will weaken.



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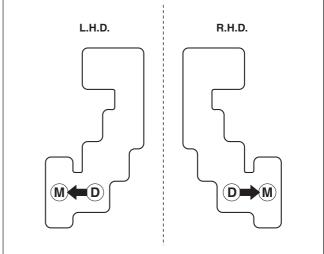
 Shift the selector lever from the P position to the D position and click the DTC clear button for the M-MDS.

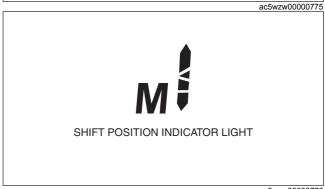


(2) When the M-MDS screen returns to the DTC display screen, shift the selector lever from the D position to the M position within **10 s** and verify that the engine speed increases from idling.

# Note

- The initial learning implements after idle speed starts increasing. If idle speed does not start increasing, repeat the procedure from Step 2.
- If the initial learning is shut down for any reason while performing the learning, the shift position indicator light does not flash. If the shift position indicator light does not flash, repeat the procedure from Step 2.
- (3) Verify that the engine speed returns to idle and the shift position indicator light flashes **two times**.



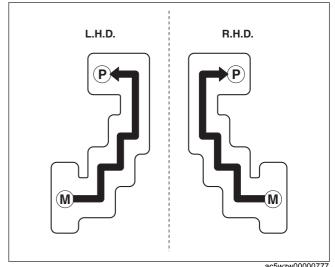


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(4) After the shift position indicator light flashes twice, shift the selector lever from the M position to the P position and stop the engine.

# Note

- · Be careful not to miss looking at the shift position indicator light because the light flashes only one time.
- 4. Release the brake pedal.
- 5. Switch the ignition ON (engine on) and verify the DTC.
  - If DTC P06B8:00 is displayed, repeat the procedure from Step 2. If any other DTCs are displayed, perform the applicable DTC troubleshooting. (See ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [GW6A-EL, GW6AX-EL1.)



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# **Not Using of M-MDS**

# Preparation before servicing

1. Verify initial learning implementation necessity for replacement parts.

Replacement part	Initial learning necessity
Control valve body replacement	Necessary
Oil pressure switch replacement	Necessary
Automatic transaxle replacement	Necessary
ON/OFF solenoid replacement	Unnecessary
Coupler component replacement	Unnecessary

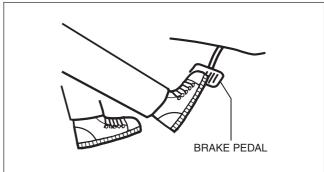
- 2. Apply the parking brake firmly, and set the wheel blocks for both the front and rear wheels.
- 3. Inspect the ATF level. (See AUTOMATIC TRANSAXLE FLUID (ATF) INSPECTION [GW6A-EL, GW6AX-EL].)
- 4. Start the engine.
- 5. Warm-up the engine and allow the ATF temperature to reach 60—110 °C {108—198 °F}.

# Starting procedure for initial learning

- 1. Start the engine and wait for **30 s or more**.
- 2. Perform the following steps (1) to (7) with the brake pedal depressed.

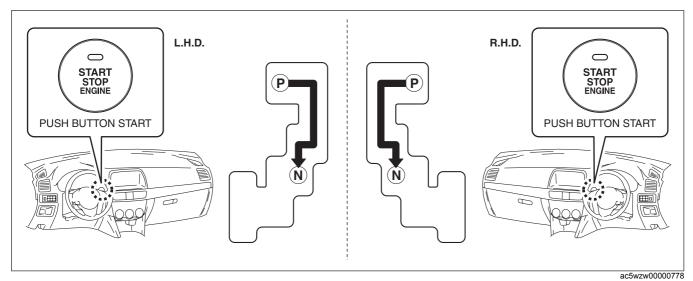
## Caution

- When the brake fluid pressure sensor value is the specification or less, shut down the initial learning to assure safety. Accordingly, be careful of the following when performing the initial learning:
  - Strongly depress the brake pedal while performing the initial learning.
  - Do not depress the brake pedal again. Otherwise, the brake booster pressure will decrease and the brake force will weaken.

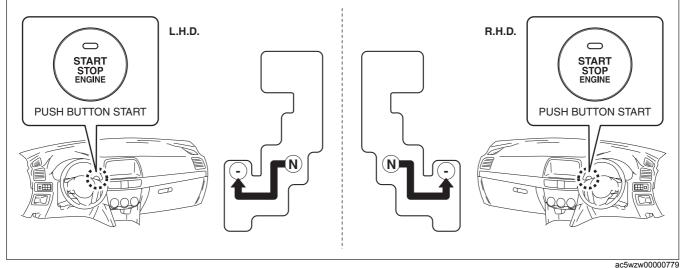


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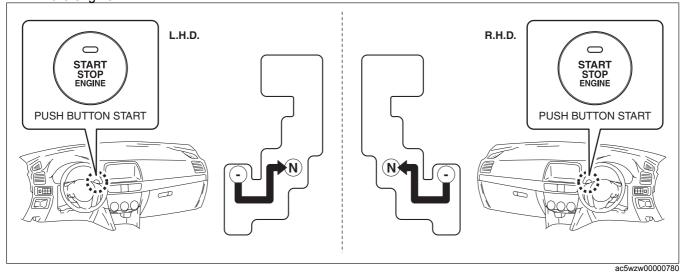
(1) Shift the selector lever from the P position to the N position, press the push button start **one time**, and stop the engine.



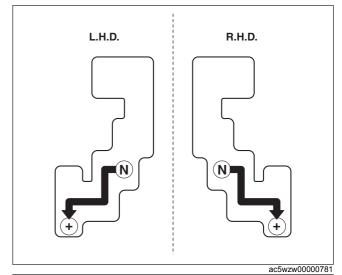
(2) Shift the selector lever from the N position to the M- position, press the push button start **one time** while holding the lever in the M- position, and wait for **5 s or more** (ignition switch ON (engine on)).



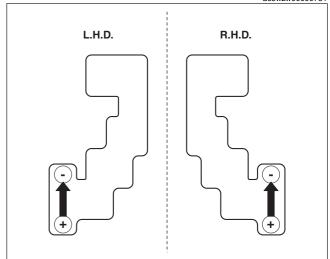
(3) Shift the selector lever from the M- position to the N position, press the push button start **one time**, and start the engine.



(4) Shift the selector lever from the N position to the M+ position and wait for **5 s or more** while holding the lever in the M+ position.

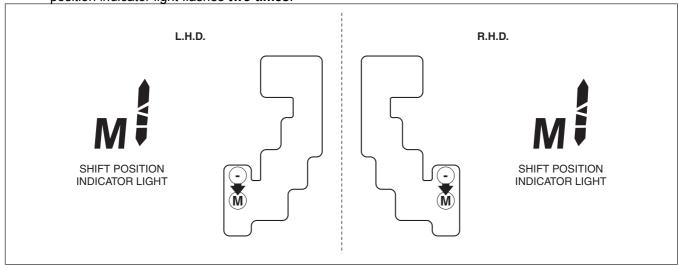


(5) Select the selector lever from the M+ position to the M- position and wait for **5 s or more** while holding the lever in the M- position.



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(6) When starting idle up, shift the selector lever from the M- position to the M position and verify that the shift position indicator light flashes **two times**.



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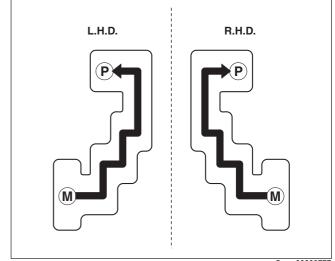
#### Note

• The initial learning implements after idle speed starts increasing. If idle speed does not start increasing, repeat the procedure from Step 1, "Start the engine and wait for **30 s or more**."

(7) After the shift position indicator light flashes twice, shift the selector lever from the M position to the P position and stop the engine.

# **Note**

- Be careful not to miss looking at the shift position indicator light because the light flashes only one time.
- 3. Release the brake pedal.
- Clear the DTC using the M-MDS and switch the ignition off. (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [GW6A-EL, GW6AX-EL].)
- Switch the ignition ON (engine off or on) and verify that DTC P06B8:00 is not recorded using the M-MDS. (See ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [GW6A-EL, GW6AX-EL].)
  - If the DTC P06B8:00 is displayed, repeat the procedure from Step 1.



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