

■ SYSTEM RESETTNG

1. General

When removing or installing any part related to the multi-mode manual transmission system as shown in the following table, perform the 5 general service procedures indicated below to reset the system:

- Clutch Position Adjustment (Clutch Clamp Position)
- Clutch Actuator Preload
- Initialization of M-MT ECU
- Learning of M-MT System
- Synchronization Position Calibration

► The Parts that Relate to the M-MT System ◀

| Engine | Clutch | Transaxle |
|---|---|--|
| <ul style="list-style-type: none"> ● Flywheel ● End Plate ● Crankshaft | <ul style="list-style-type: none"> ● Clutch Disc ● Clutch Cover ● Clutch Release Bearing ● Clutch Release Fork ● Clutch Release Fork Lever | <ul style="list-style-type: none"> ● Clutch Actuator ● Clutch Stroke Sensor ● Shift & Select Actuator ● Shift Stroke Sensor ● Select Stroke Sensor ● M-MT ECU ● Transaxle Assembly ● Transaxle Parts (inside gear box) |

2. General Service Procedures

Target Clutch Clamp Position Control

- The clutch actuator can be adjusted to the clutch clamp position by effecting the clutch position adjustment. This operation must be performed before removing the clutch actuator.
- Furthermore, when installing a new clutch actuator (service supplied parts), make sure to adjust it to the clutch clamp position by effecting the clutch position adjustment.
- Other general service procedures (“clutch actuator preload” and “learning of M-MT system”) are to be performed with the clutch actuator in the clutch clamp position. Therefore, before performing an operation that involves a general service procedure, make sure to effect the “clutch position adjustment”. If the “clutch position adjustment” is not effected, it will not be possible to correctly perform other general service procedures, which could result in a system malfunction.
- Effect “clutch position adjustment” through one of the two ways described below:
 - Use an intelligent tester II and connect it to the DLC3.
 - Use the SST 09843-18040 and connect it to the Tc and CG terminals of the DLC3, and perform the brake pedal and shift lever operation that is provided.

For details on the target clutch clamp position control, see the Aygo Repair Manual.

Adjustment and Initialization

- Perform the 4 general service procedures (“clutch actuator preload”, “initialization of M-MT ECU”, “learning of M-MT system” and “synchronization position calibration”) upon the completion of the removal and reinstallation of any part related to the multi-mode manual transmission system.
- For details on the general service procedures, see the Aygo Repair Manual.

| General Service Procedure | Outline |
|--------------------------------------|--|
| Clutch Actuator Preload | After touch the push rod of the clutch actuator to the clutch release lever with the actuator in the clutch clamp position, install the bolts for fixation. In the condition that clutch actuator push rod touches with the release fork without preload, to fasten three bolts to make sure that the clutch actuator should be adjusted to the complete engagement position. |
| Initialization of M-MT ECU | M-MT ECU stores the calibrated/learned value for actuators position, clutch synchronization position etc., the data and DTC. These information in ECU can be cleared and changed to initial condition. The initialization of the M-MT ECU can be performed through one of the two ways described below: a) Use an intelligent tester II and connect it to the DLC3. b) Use the SST (09843-18040) and connect it to the Tc and CG terminals of the DLC3, and operate the brake pedal and shift lever. |
| Learning of M-MT System | Adjusts clutch clamp position accurately including all related parts on vehicle. Each parts and LCC system have tolerance and are designed to have certain range of stroke in clamp position, and this operation calibrates the actual clamp position. |
| | Checks shift & select actuator's accurate position for shifting by operating the actuators for shift and select. If initial position is shifted with designed one, ECU learns actual standard position for shift and select side. |
| | Before the learning of the M-MT system, the initialization of the M-MT ECU must be performed first. The learning of the M-MT system can be performed through one of the two ways described below: a) Use an intelligent tester II and connect it to the DLC3. (This will be used if the initialization of the M-MT ECU is performed with method “a”.) b) Turn the ignition switch from OFF to ON, stand by for 40 seconds, start the engine, and stand by for 10 seconds. (This will be used if the initialization of the M-MT ECU is performed with method “b”.) |
| Synchronization Position Calibration | After initialization and learning, the combination of the parts or characteristic of the parts itself would make the change of clamp position or clutch synchronization position under actual driving. ECU learns the actual standard position as standard value for smooth shifting. |
| | Drive with M-mode and shift up 1st to 5th, shifts down 5th to 1st in the specified vehicle speed for each shifting condition. |

Precautions when using shift lock release button**1) When the vehicle is parked with the shift lever in a position other than N:**

- If the shift lock is released by the shift lock release button, the engine cannot be started even if the shift lever is moved to another position as the gear is not in neutral.
- The engine can be started after matching the gear position and shift lever position by moving the shift lever back to the position the vehicle was parked in, and then moving it to the N position.

2) When the vehicle is parked with the shift lever in the N position:

- If the shift lock is released by the shift lock release button, the engine can be started even if the shift lever is moved to the positions except N as the gear position is in neutral.
- The M-MT system will not operate, as the gear position and shift lever position do not match.

Other precautions

- When racing engine, make sure that the gear is in neutral.
- If the M-MT system stops with the transmission set in any gear, the vehicle can be moved by disconnecting the shift & select actuator plug and setting the gear to neutral.