■SYSTEM RESETTING

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 Actuator Preload
- Initialization of Multi-mode Manual Transmission ECU
- Learning of Multi-mode Manual Transmission System
- Synchronization Position Calibration

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

Engine	Clutch	Transaxle
● Fly Wheel ● End Plate ● Crankshaft	● Clutch Disc ● Clutch Cover ● Clutch Release Bearing ● Clutch Release Fork ● Clutch Release Fork Lever	● 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

Clutch Position Adjustment

- 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.
- Other general service procedures (“clutch actuator preload” and “learning of multi-mode manual transmission 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 the 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 performed the brake pedal and shift lever operation.

For details on the clutch position adjustment, see the Yaris Repair Manual (Pub. No. RM00S1E).

Adjustment and Initialization

- Perform the 4 general service procedures (“clutch actuator preload”, “initialization of multi-mode manual transmission ECU”, “learning of multi-mode manual transmission 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 Yaris Repair Manual (Pub. No. RM00S1E).

General Service Procedure	Outline
Clutch Actuator Preload	After touching the clutch actuator pull rod to the clutch release fork with the actuator in the standard position, install the bolts for fixation. In the condition that clutch actuator pull rod touches with the clutch release fork without preload, fasten three bolts to make sure that the clutch actuator should be adjusted to the clutch clamp position.
Initialization of Multi-mode Manual Transmission ECU	M-MT ECU stores the calibrated/learned value for actuators positions, clutch synchronization position etc., the data and DTC. These information in 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 Multi-mode Manual Transmission System	Adjusts clutch clamp position accurately including all related parts on vehicle. Each part and LCC system have tolerance and are designed to have certain range of stroke in the clutch 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 the initial position is shifted with designed one, M-MT 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) Select the power source mode from OFF to IG-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 characteristics of the parts themselves would make the change of the clutch clamp position or clutch synchronization position under actual driving. M-MT ECU learns the actual standard position as standard value for smooth shifting.
	Driving with M-mode, shifts up from 1st to 5th, and shifts down from 5th to 1st in the specified vehicle speed for each shifting condition.