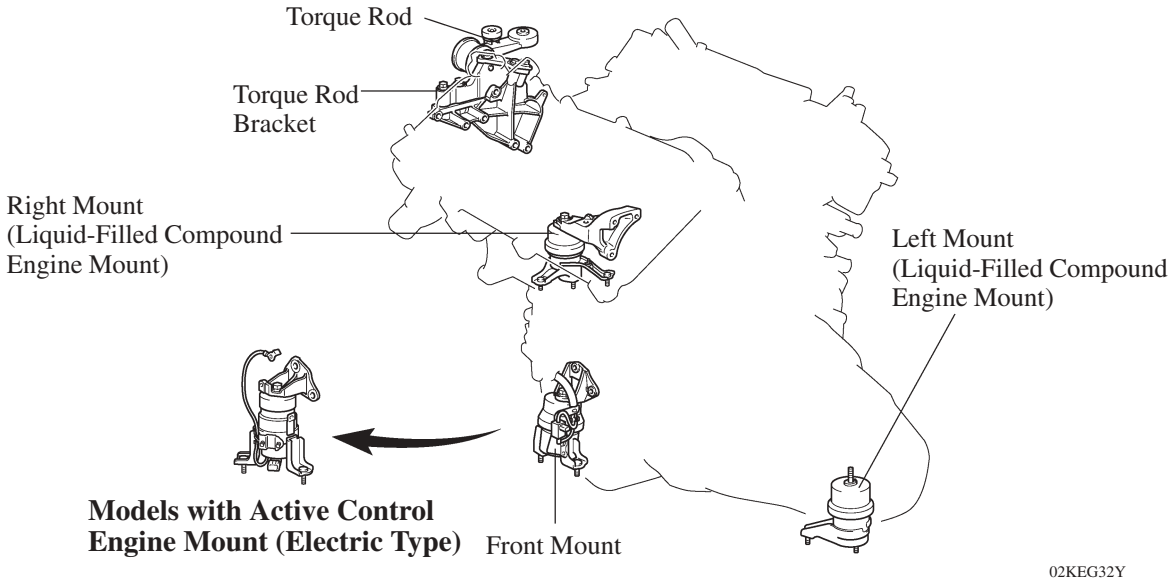
■ENGINE MOUNT

1. General

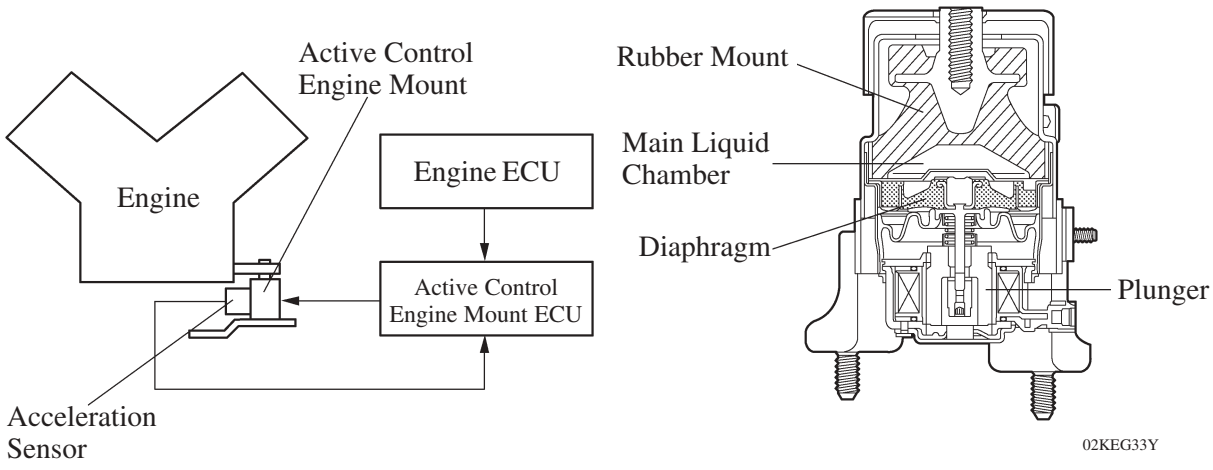
- A 3-point support on the front sub-frame is used.
- An active control engine mount is used on the front engine mount and a liquid-filled compound engine mount is used on the right and left engine mounts to realize low noise and vibration and to achieve high levels of both riding comfort and drivability.
- The new Camry uses 2 types of active control engine mounts depending on the power tilt and power telescopic steering column specifications, as follows: Electric type (for models with power tilt and power telescopic steering column) and Vacuum type (for models without power tilt and power telescopic steering column).



Models with Active Control Engine Mount (Vacuum Type)

2. Active Control Engine Mount (Electric Type)

- The active control engine mount (electric type) is used to reduce engine vibration and noise during idling. It is controlled by the active control engine mount ECU through signals which vary in accordance with the engine operating conditions, allowing the engine vibration and noise to be minimized effectively.
- Engine idling vibration is canceled out by vibration of the active control engine mount. The engine mount vibration is produced control signals from the active control engine mount ECU which are applied to the actuator's solenoid, these trigger the plunger inside the engine mount to vibrate the diaphragm. The vibration is conducted to the rubber mount through the main liquid chamber.
- The active control engine mount has an acceleration sensor that detects the engine mount vibration. The sensor continuously monitors the engine mount operating condition.



3. Active Control Engine Mount (Vacuum Type)

- The active control engine mount (vacuum type) is used to reduce engine vibration and noise during idling.
- Signals that are synchronized to the engine speed are sent by the engine ECU to the VSV and the engine vacuum is utilized to vary the pressure of the intake air chamber in the active control engine mount. As a result, the diaphragm vibrates, and using the liquid as a medium, the rubber mount vibrates. This vibration of the engine mount acts to cancel out the engine vibration during idle, thus reducing the vibration and noise at idle. The engine mount's damping force to generate vibrations is adjusted through the effects of the orifice and the side branch.

