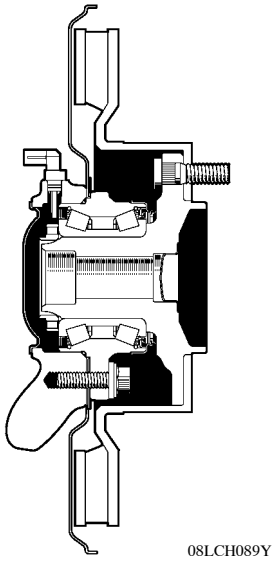
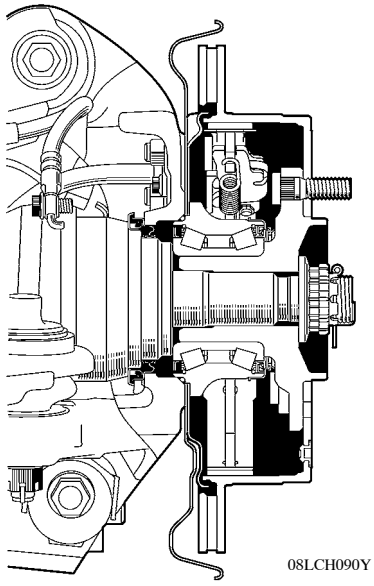
■AXLE

1. General

- The unit-type double-row tapered roller bearing is used for the front and rear axles.
- The speed sensor rotors have been integrated in the inner races of the front and rear wheel bearings due to the use of active type speed sensors.



Front Axle

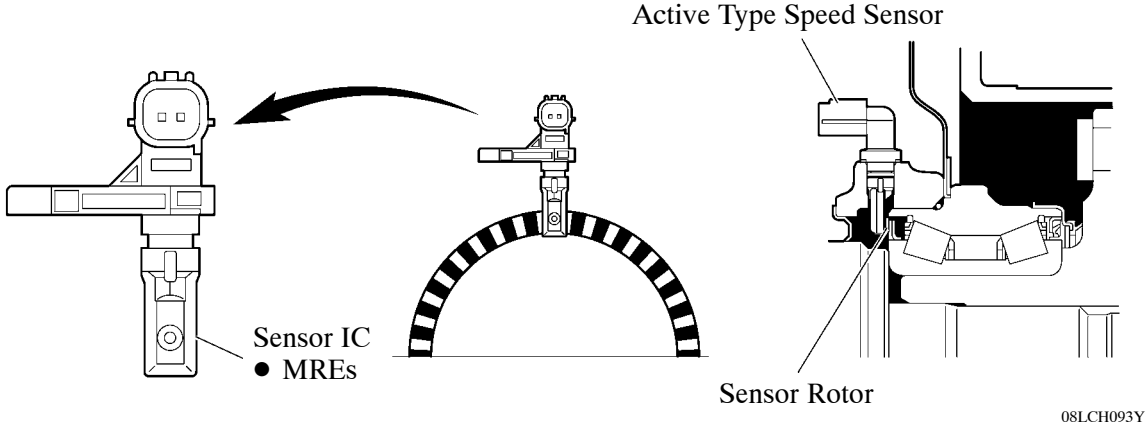


Rear Axle

2. Speed Sensor

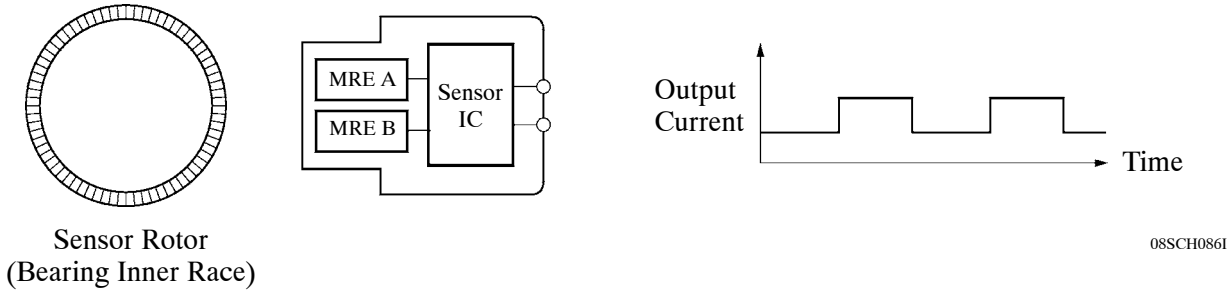
General

- The active type speed sensor can detect the wheel rotation. This sensor contains a sensor IC, which consists of the Magnetic Resistance Elements (MREs).
- The sensor rotor, which consists of N and S poles that are arranged in a circle, is integrated with the inner race of the hub bearing.



Detection Method

- An active type speed sensor uses a sensor IC to detect magnetic field changes caused when the sensor rotor rotates, and the sensor outputs the detected information to the skid control ECU as digital pulses (vehicle speed signal).



- To detect the vehicle speed, the frequency of the output pulses is used. Because the active type sensor outputs digital pulses, it can detect vehicle speeds even when the vehicle is nearly stationary.

