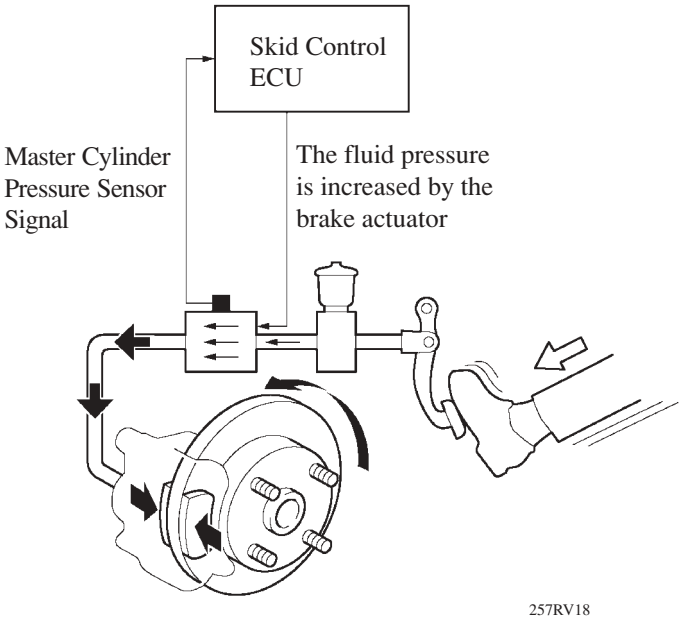
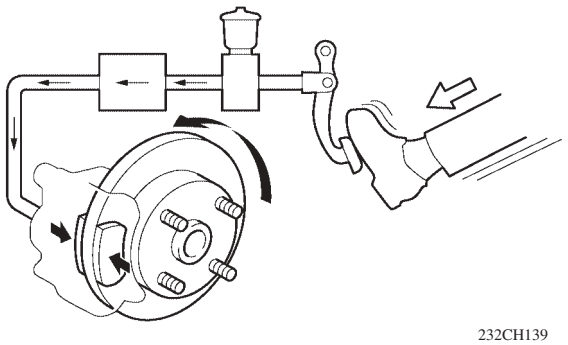
3. Outline of Brake Assist System

- The Brake Assist System interprets a quick push of the brake pedal as emergency braking and supplements the braking power applied if the driver has not stepped hard enough on the brake pedal. In emergencies, drivers, especially inexperienced ones, often panic and do not apply sufficient pressure on the brake pedal. Based on the signals from the master cylinder pressure sensor, the skid control ECU calculates the speed and the amount of the brake pedal application and then determines the intention of the driver to make an emergency braking. If the skid control ECU determines that the driver intends emergency braking, the system activates the brake actuator to increase the brake fluid pressure, which applies the sufficient pressure on the brake pedal.
  The Brake Assist System in combination with ABS helps improve the vehicle's brake performance.
  A key feature of Brake Assist system is that the timing and the degree of braking assistance are designed to ensure that the driver does not discern anything unusual about the braking operation. When the driver intentionally eases up on the brake pedal, the system reduces the amount of assistance it provides.

▶ In case that the driver's depressing force is small when applying emergency braking ◀



With Brake Assist System



Without Brake Assist System*

*: This is no difference of the maximum brake performance between the vehicles with and without brake assist system.