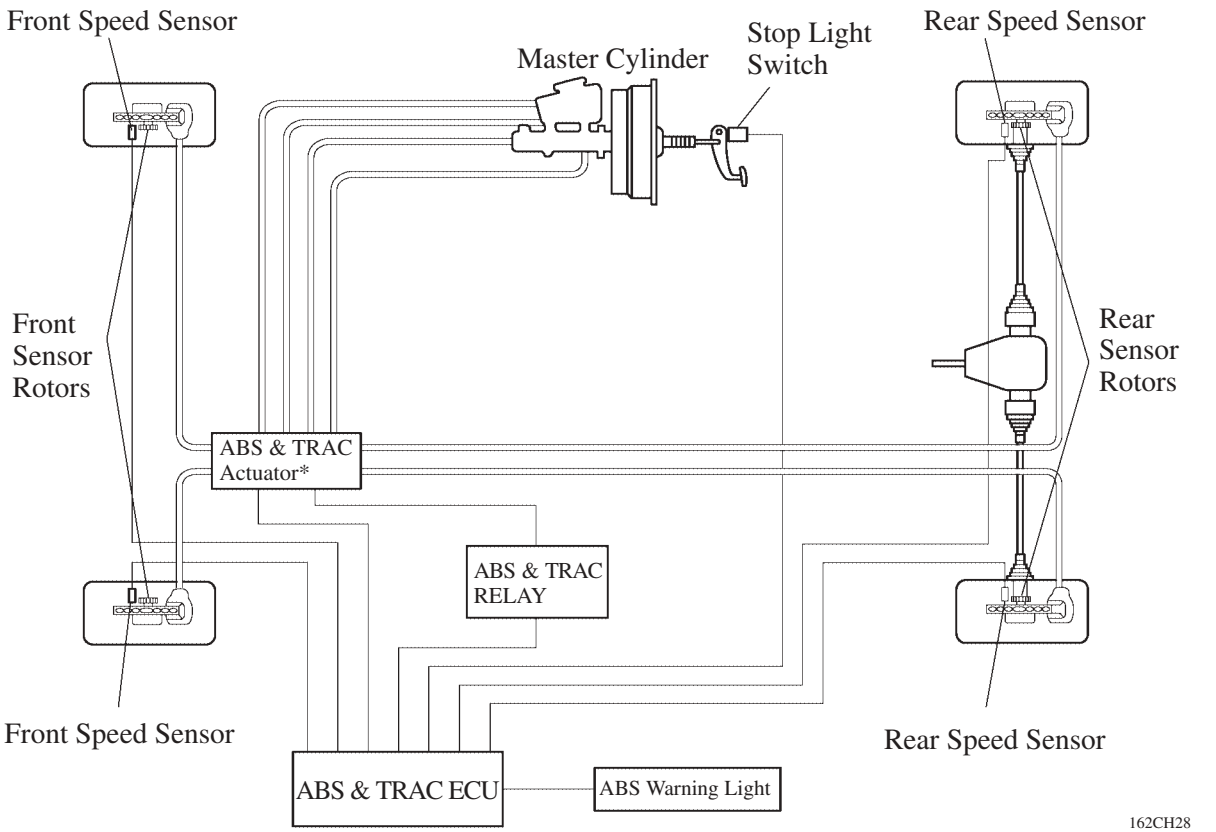
■ ABS (Anti-Lock Brake System)

1. General

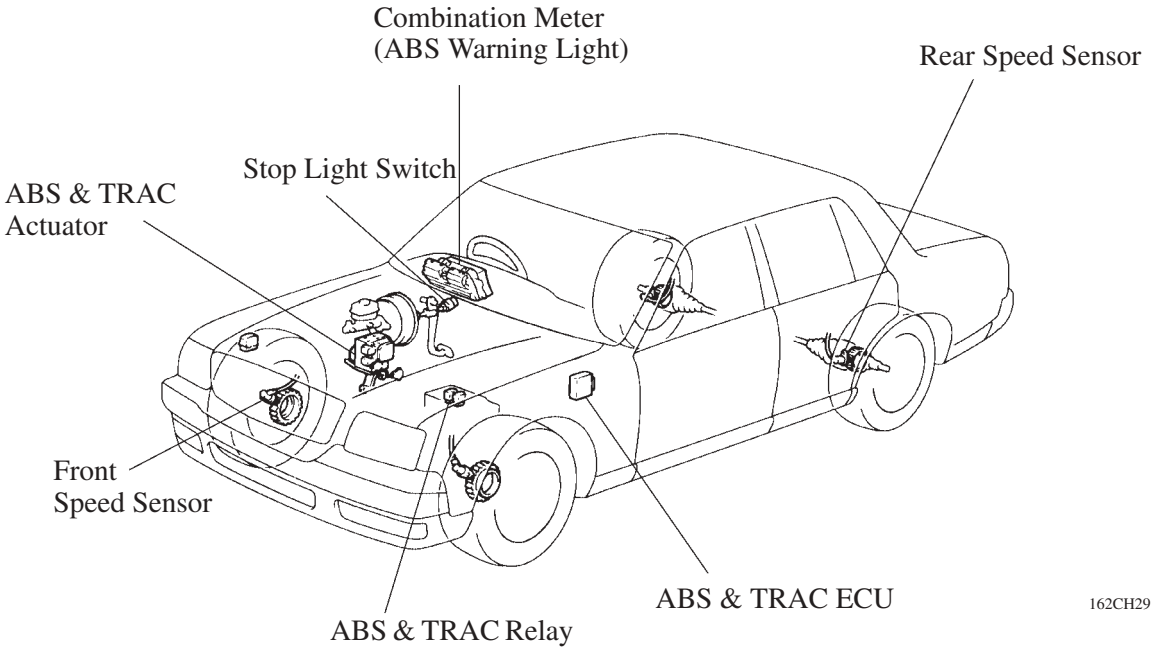
The ABS (Anti-Lock Brake System) controls the brake fluid pressure acting on the disc brake cylinders when the brakes are aplied in a panic stop so that the wheels do not lock. This helps to maintain good directional stability and steerability during panic braking.

2. System Diagram



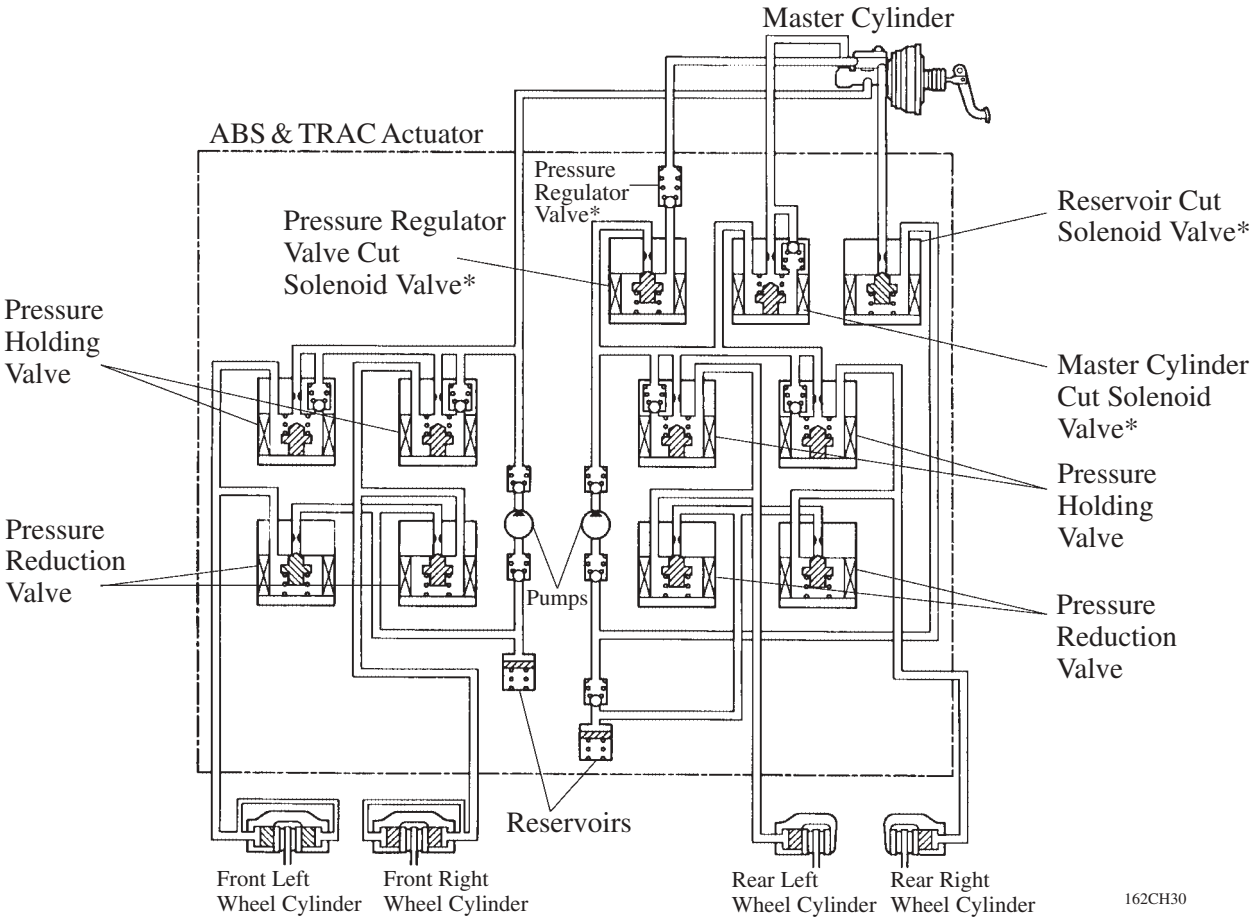
*: The TRAC (Traction Control) system is not activated.

3. Layout of Components



RHD Model

4. Hydraulic Circuit



*: Because an actuator that is common to the ABS and TRAC systems is used, these valves that are relative to the TRAC system do not operate.

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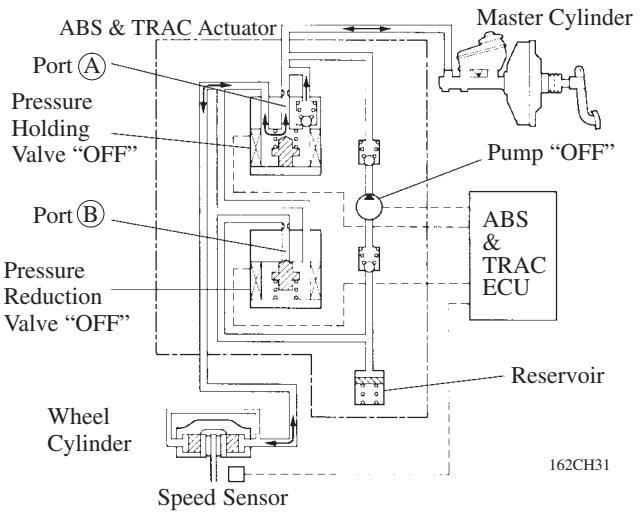
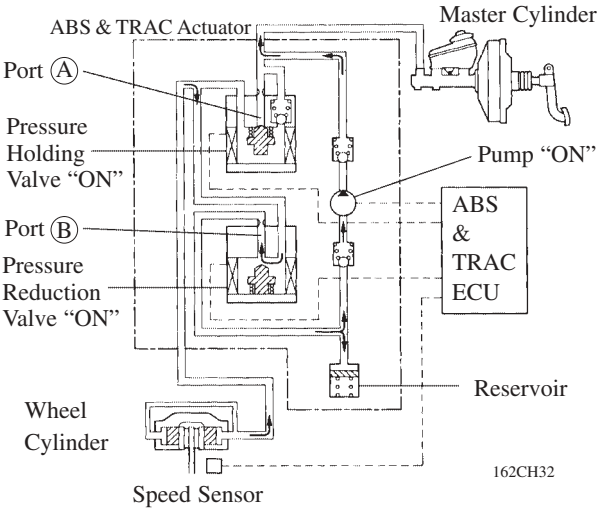
5. Operation

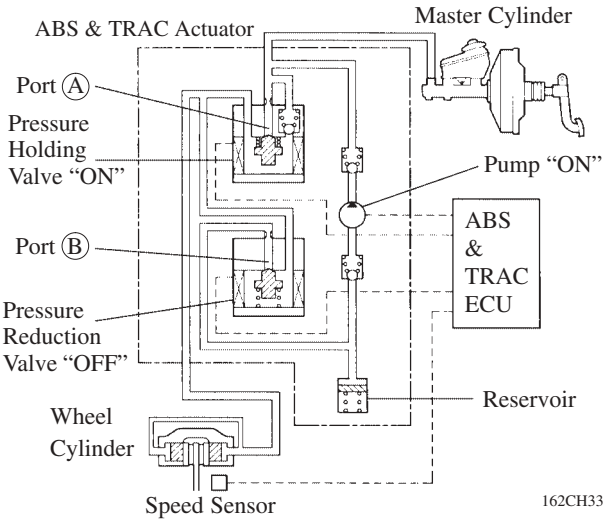
The brake control of each wheel during ABS activation is implemented by the following 3 modes: pressure reduction, pressure holding and pressure increase modes.
The ECU controls the fluid pressure of each of the front left and right wheel independently, while the fluid pressure of the rear left and right wheels is controlled simultaneously for vehicle stability. Although the hydraulic circuit described below is a front circuit, it is applicable to other circuits as well.



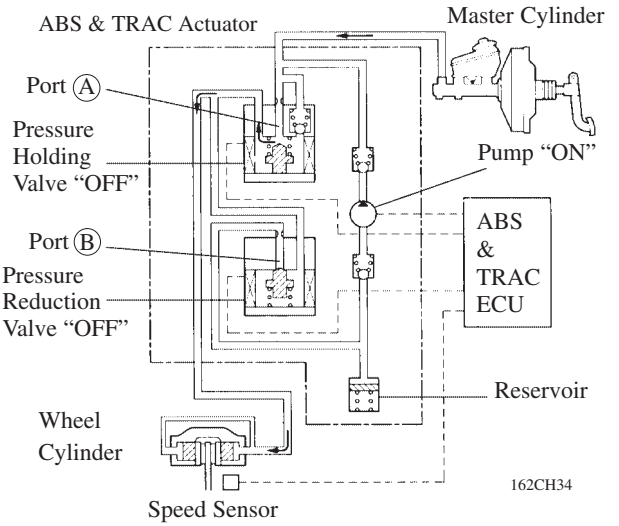
Normal Braking



Pressure Reduction Mode



Pressure Holding Mode



Pressure Increase Mode

▶ Condition of Each valve ◀

Mode / Valve	Normal Braking	ABS Activated		
		Pressure Reduction	Pressure Holding	Pressure Increase
Pressure Holding Valve (Port (A))	OFF (Open)	ON (Closed)	ON (Closed)	OFF (Open)
Pressure Reduction Valve (Port (B))	OFF (Closed)	ON (Open)	OFF (Closed)	OFF (Closed)