

4-WHEEL ANTI-LOCK BRAKE SYSTEM

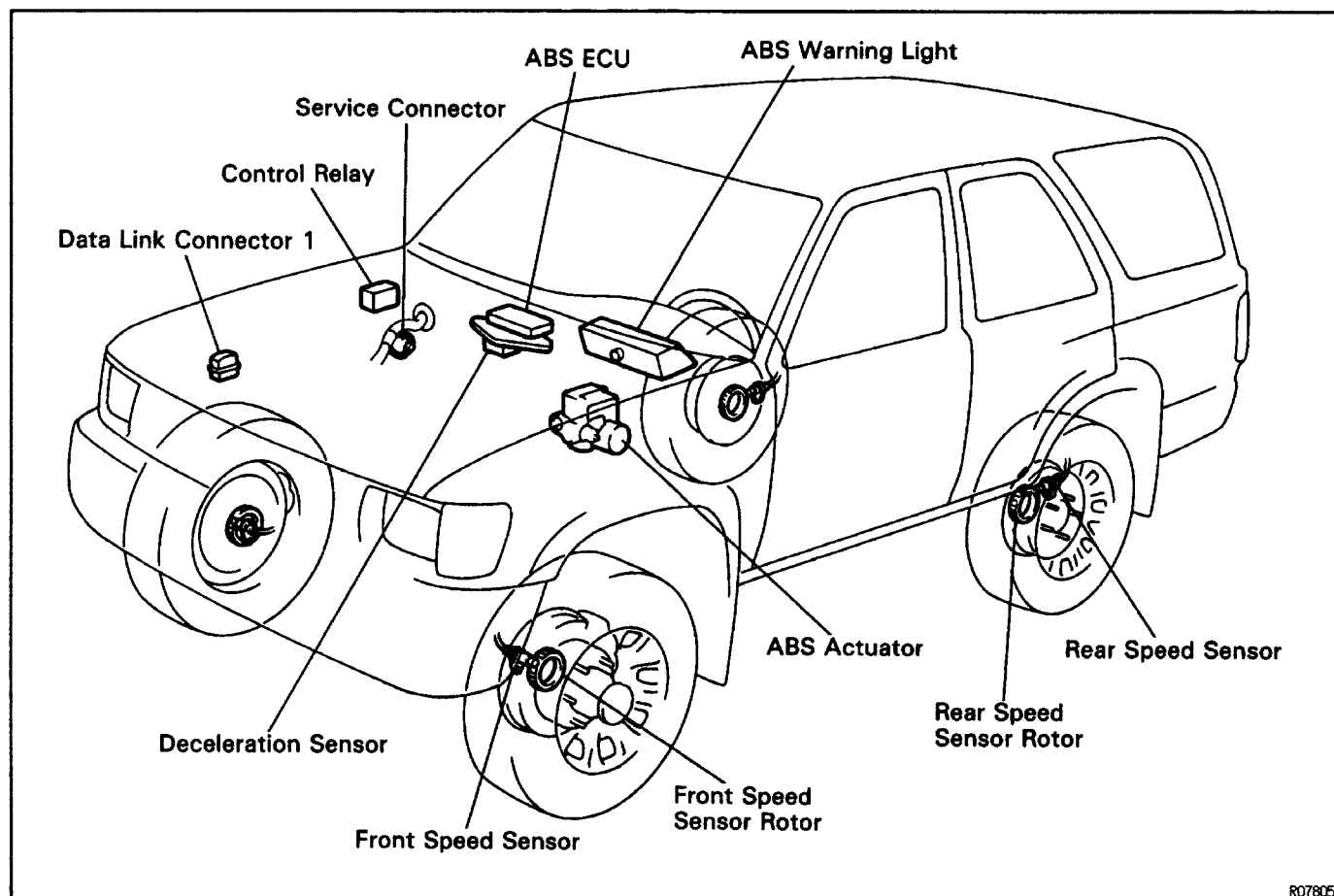
DESCRIPTION

- ABS is a brake system which controls the brake cylinder hydraulic pressure of all 4 wheels during sudden braking and braking on slippery road surfaces, preventing the wheels from locking. ABS provides the following benefits:
 - (1) Steering round an obstacle with a greater degree of certainty even when panic braking.
 - (2) Stopping in a panic brake while keeping the effect upon stability and steerability to a minimum, even on curves.
- The ABS has a longitudinal deceleration sensor to match braking characteristics to the 4 wheel drive.
- In case a malfunction occurs, a diagnosis function and fail-safe system have been adopted for the ABS.

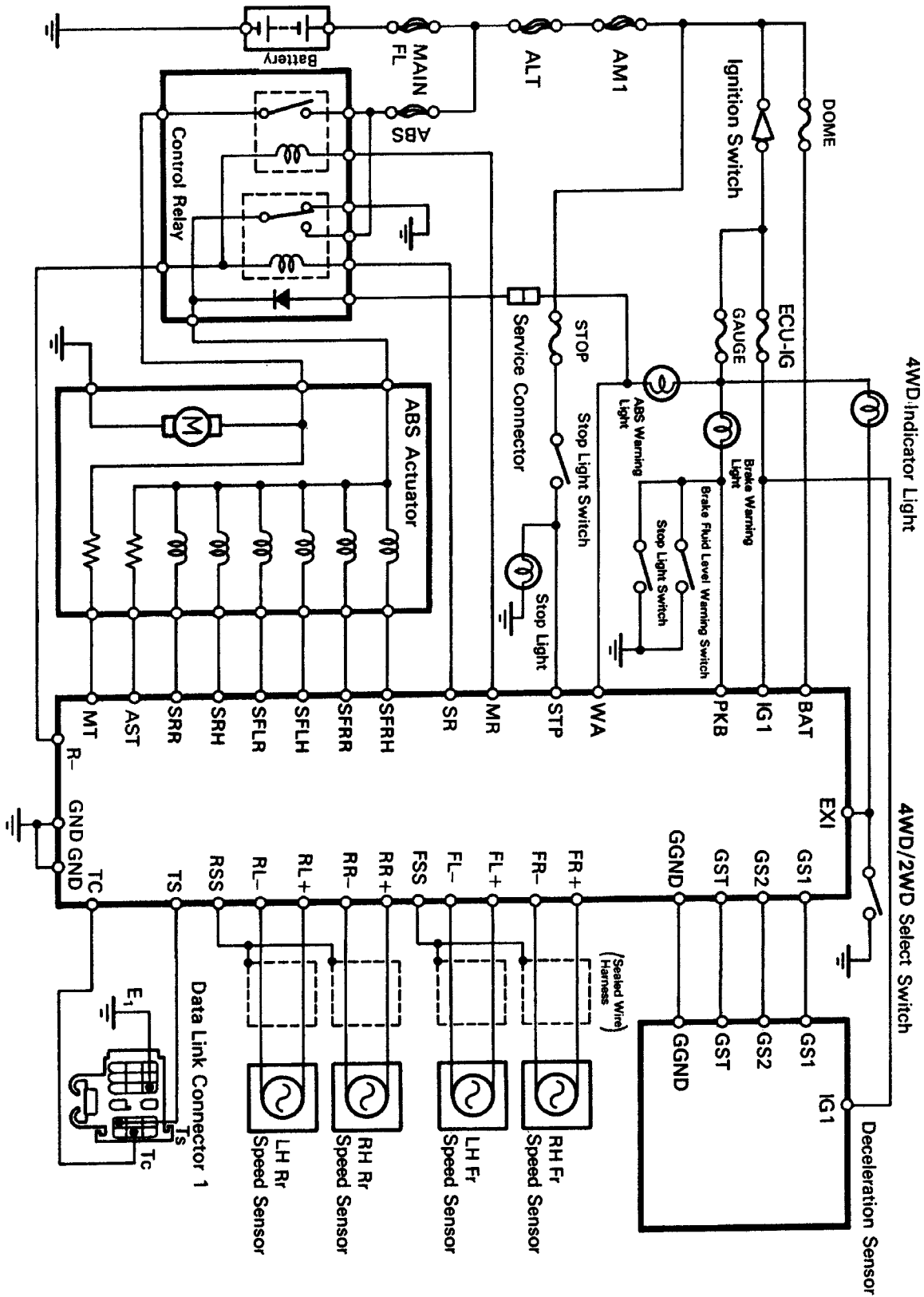
COMPONENTS FUNCTION

Component	Function
Front Speed Sensor	Detect the wheel speed of each of the left and right front wheels.
Rear Speed Sensor	Detect the wheel speed of each of the left and right rear wheels.
ABS Warning Light	Lights up to alert the driver when trouble has occurred in the Anti-Lock Brake System.
Actuator	Controls the brake fluid pressure to each brake cylinder through signals from the ECU.
ABS ECU	From the wheel speed signals from each speed sensor and vehicle deceleration signals from the deceleration sensor, it calculates acceleration, deceleration and slip values and sends signals to the actuator to control brake fluid pressure.
Deceleration Sensor	Detect the deceleration speed of the vehicle and sends a signal accordingly to the ABS ECU.

SYSTEM PARTS LOCATION

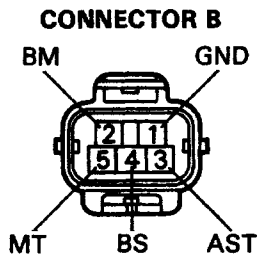
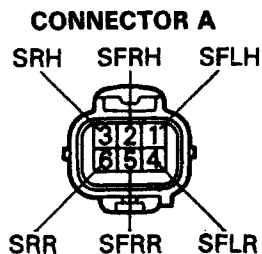


WIRING DIAGRAM

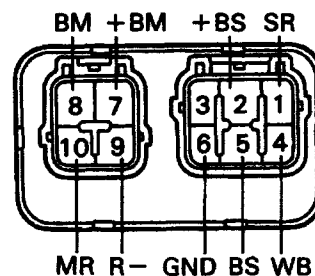


CONNECTORS

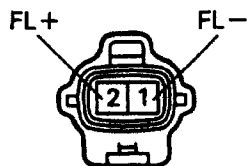
ABS Actuator



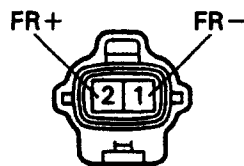
Control Relay



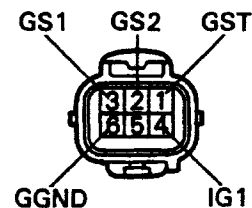
Front Speed Sensor (LH)



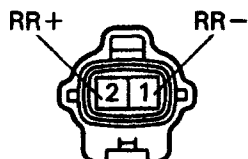
Front Speed Sensor (RH)



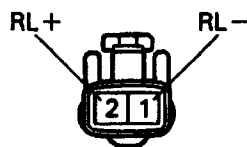
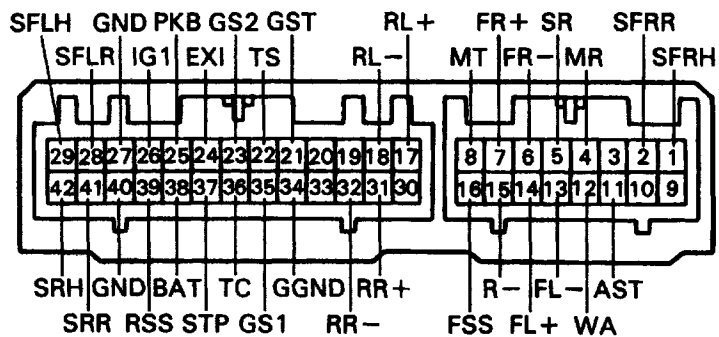
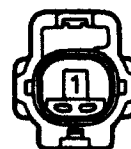
Deceleration Sensor



Rear Speed Sensor (RH)



Rear Speed Sensor (LH)

Service Connector
(Solenoid Relay Side)

Data Link Connector 1

