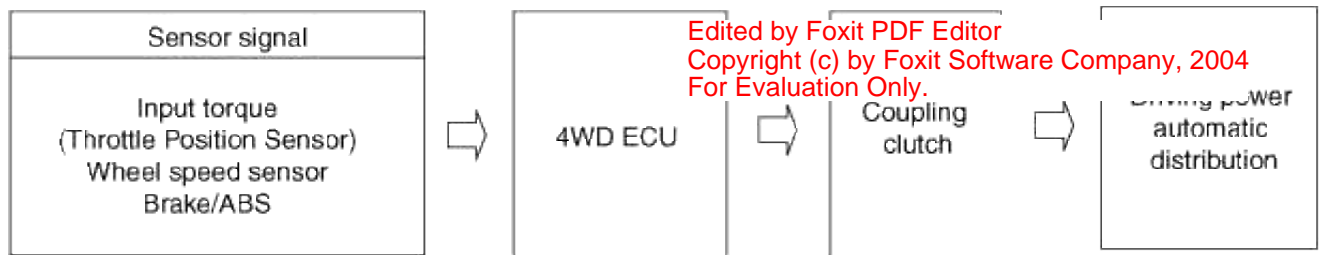


1. 4WD ECU

4 Wheel Drive (4WD) System

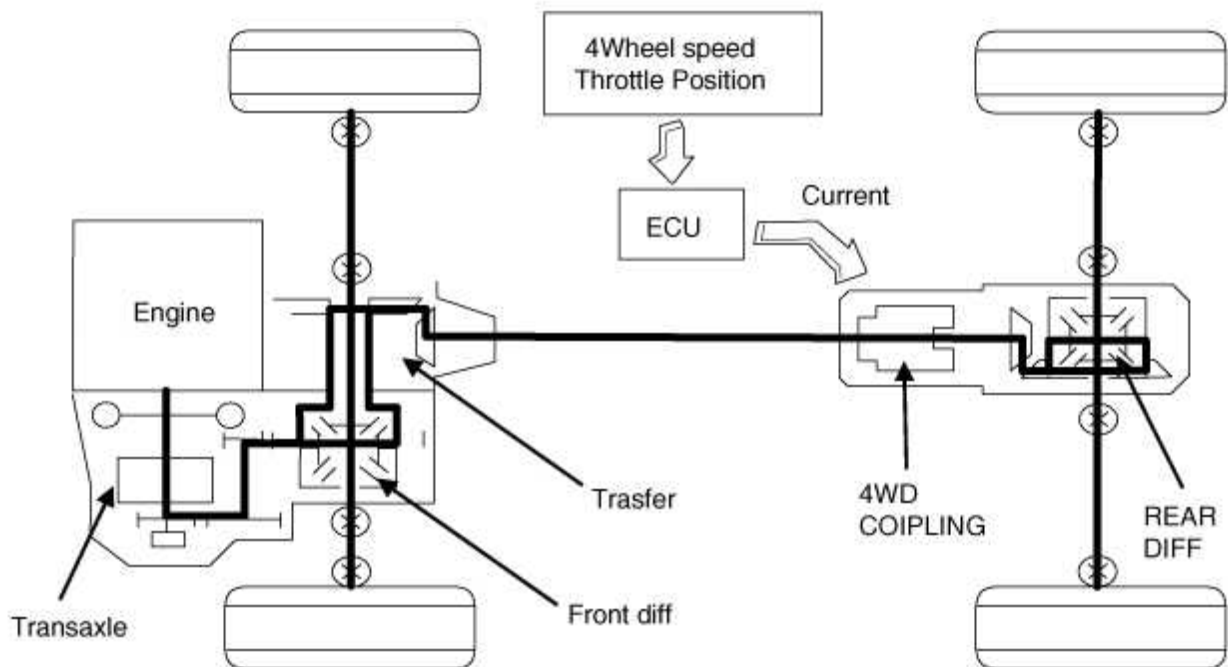
Description

4WD ECU processes signals from various sensors and determines the current road and driving conditions. The ECU utilizes this information to implement precision control over the 4WD coupling's multi-plate clutch and variably adjust amount of torque delivered to the rear wheels.

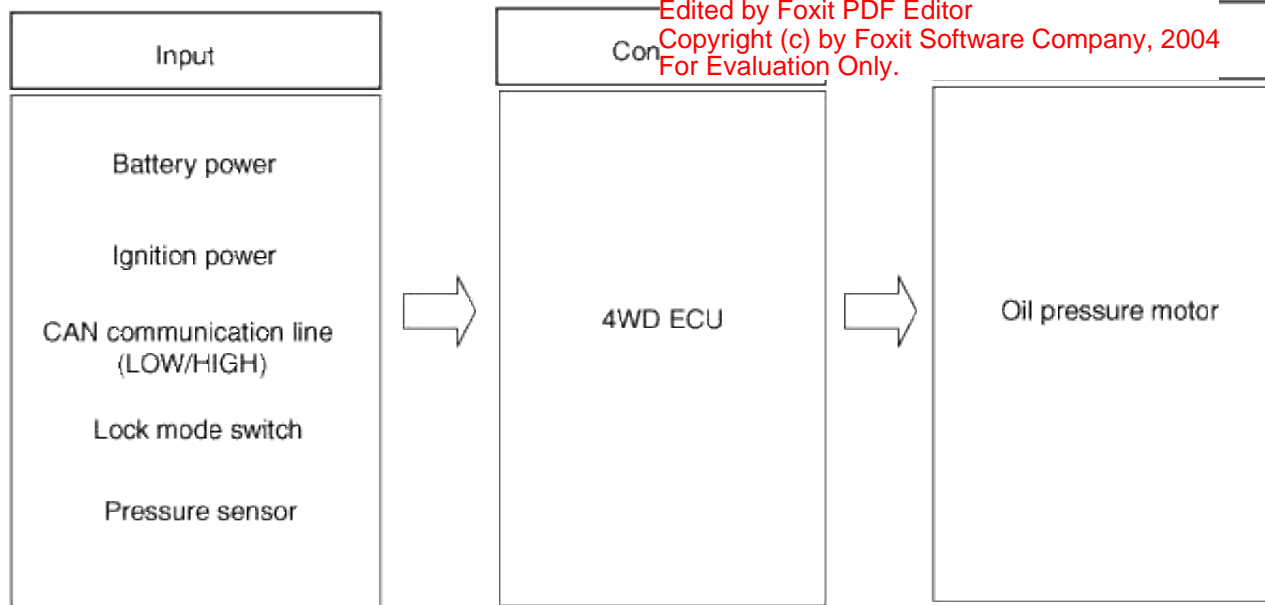


4 Wheel Drive (4WD) System

Power Flow Diagram



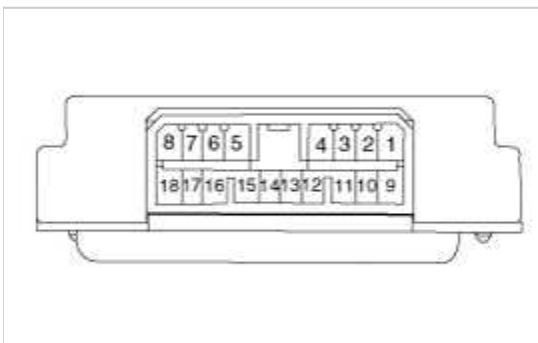
4WD ECU Input&Output Diagram



4 Wheel Drive (4WD) System

Circuit Diagram

4WD ECU Connector

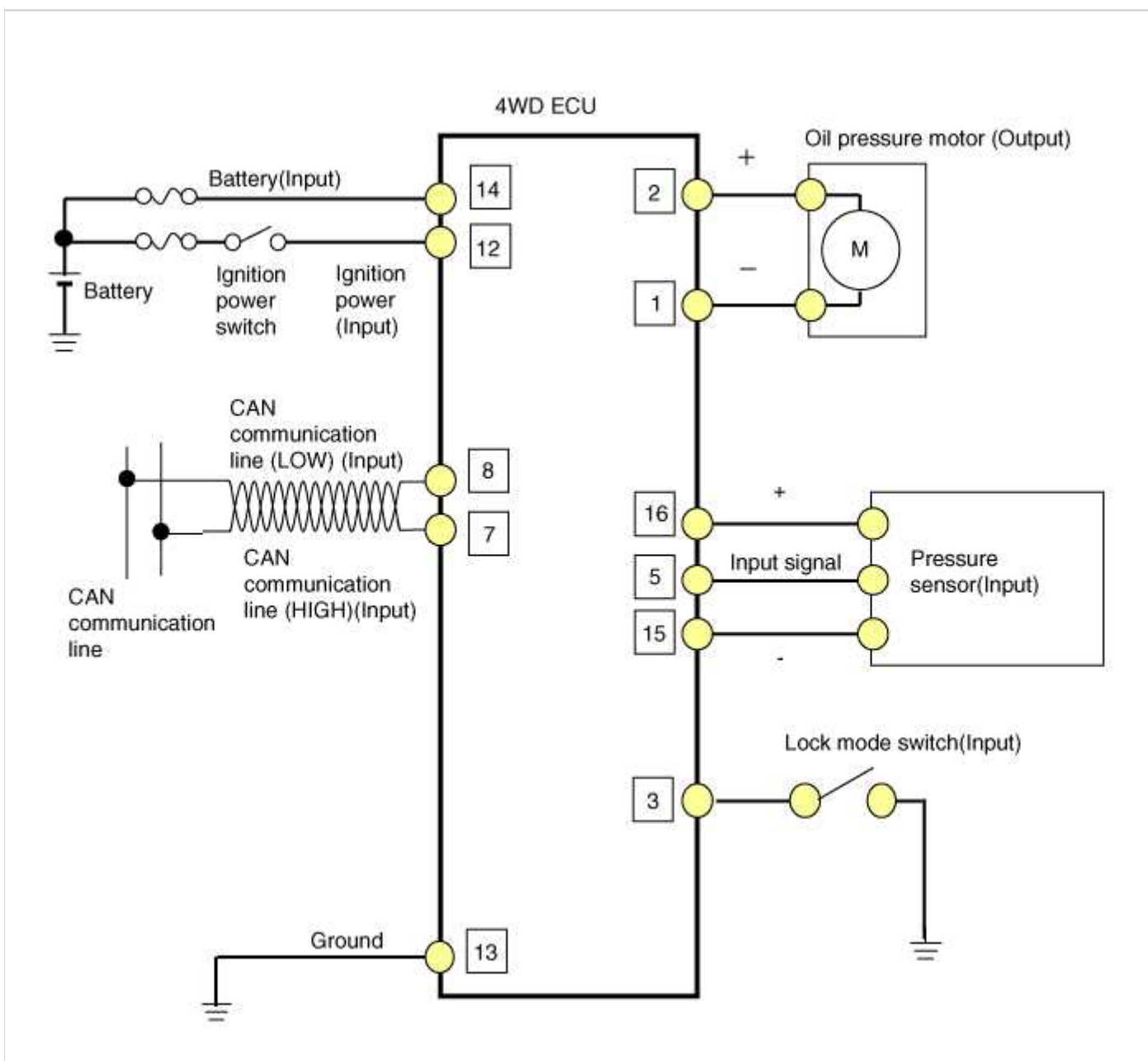


Pin	Function
1	MOTOR A
2	MOTOR B
3	LOCK MODE SWITCH (Input)
4	-
5	PRESSURE SENSOR SIGNAL (Input)
6	-
7	CAN communication line (Low)
8	CAN communication line (High)
9	-
10	-
11	-
12	IG. POWER (Input)

13	GROUND
14	BATTERY (Input)
15	PRESSURE SENSOR GROUND (-)
16	PRESSURE SENSOR SUPPLY (+)
17	-
18	-

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4WD ECU Circuit Diagram



4 Wheel Drive (4WD) System

Removal

1. Prior to replacing the 4WD ECU, check the 4WD ECU's clutch learning with the GDS tool.
(Refer to 4WD Control System - "Repair procedures")
2. Disconnect the battery negative cable from the battery

3. Disconnect the 4WD ECU connector (A).



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4. Loosen the nuts (A) and then remove the 4WD ECU.

Tightening torque:

56.9 ~ 64.7 N.m (5.8 ~ 6.6 kgf.m, 42 ~ 47.7 lb-ft)

**Installation**

1. Install in the reverse order of removal.
2. Prior to installing a new ECU, upload the original ECU's clutch learning to the replacement ECU using the GDS to (Refer to 4WD Control System - "Repair procedures")

4 Wheel Drive (4WD) System

Component Location