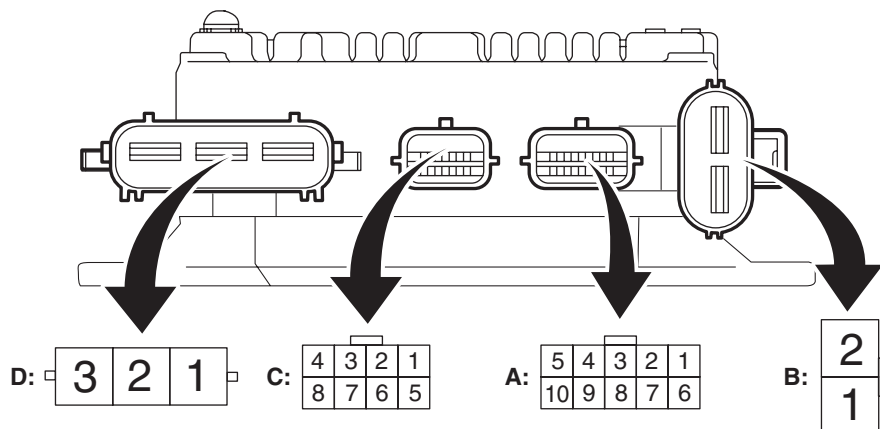


Control Module I/O Signal

POWER ASSISTED SYSTEM (POWER STEERING) (DIAGNOSTICS)

5. Control Module I/O Signal

A: ELECTRICAL SPECIFICATION



PS-01741

NOTE:

The terminal numbers of the power steering control module connectors are as indicated in the figure.

Contents	Terminal No.	Input/output signal
		Measured value and measuring conditions
Power supply (IG SW)	A1	Battery voltage is detected with the ignition switch ON when measuring between A1 — B1.
Shield GND	A3	0 V is constantly detected.
Main torque sensor	A4	The voltage changes when the steering is operated to the right or left with the ignition switch ON.
Sub torque sensor	A5	The voltage changes when the steering is operated to the right or left with the ignition switch ON.
CAN communication	A6	Digital signal; can not be measured
CAN communication	A7	Digital signal; can not be measured
Torque sensor ground	A9	0 V is constantly detected.
Torque sensor power supply	A10	Approximately 5 V is detected with ignition switch ON.
Ground	B1	Battery voltage is constantly detected when measuring between B1 — B2.
Power supply	B2	
Resolver S1	C1	Varies depending on the operational status of the motor.
Resolver S3	C2	
Resolver S2	C3	
Resolver S4	C4	
Resolver R1	C5	
Resolver R2	C6	
Motor W phase	D1	Varies depending on the motor output.
Motor V phase	D2	
Motor U phase	D3	

POWER ASSISTED SYSTEM (POWER STEERING) (DIAGNOSTICS)

The diagram illustrates a vehicle's electrical system with the following components and connections:

- (1)**: A battery symbol with a negative (-) terminal on the left and a positive (+) terminal on the right.
- (2)**: A switch, shown as a circle with a diagonal line through it, connected to the positive terminal of the battery.
- (3)**: A semi-circular horn symbol with a bell icon inside.
- (4)**: A trapezoidal shape representing a fuse or relay.
- (5)** and **(11)**: Two rectangular boxes representing relays or solenoids, connected in series.
- (6)**: A large rectangular box representing the main control unit or fuse block, connected to ground.
- (7)**: A motor symbol labeled 'M'.
- (8)**: A set of three coils representing a starter motor assembly.
- (9)**: A rectangular box representing an alternator or generator.
- (10)**: A set of three coils representing a distributor or ignition system.
- (12)**: A dashed-line enclosure containing the motor (7), the starter coils (8), and the alternator (9).

The circuit connections are as follows:

- The positive terminal of the battery (1) is connected to the switch (2).
- The switch (2) is connected to the main control unit (6).
- The main control unit (6) is connected to ground.
- The main control unit (6) is also connected to the relay assembly (5 and 11).
- The relay assembly (5 and 11) is connected to the horn (3).
- The main control unit (6) is connected to the motor (7) and the starter coils (8).
- The main control unit (6) is connected to the alternator (9).
- The alternator (9) is connected to the distributor (10).
- The distributor (10) is connected to the motor (7).

- PS(diag)-10**