2. Possible Causes

DTC	Inspection Strategy	Setting Condition (Control Strategy)	Faulty Area
P1790		• After ignition, the software detects invalid driver expected torque signal for 0.1 s or more and judges as malfunction by DTC	
P1735		• After ignition, the software detects that CAN signal frame of EPS is missing for 0.1 s or more and judges as malfunction by DTC	
U2091		• After ignition, the software detects that CAN signal frame of EPS is missing for 0.1 s or more and judges as malfunction by DTC	
P1795		• After ignition, the software detects implausible engine torque signal for 0.1 s or more and judges as malfunction by DTC	
P1796		• After ignition, the software detects implausible friction torque signal for 0.1 s or more and judges as malfunction by DTC	
P1798	Hardware Circuit Inspection	• After ignition, the software detects implausible friction torque signal for 0.1 s or more and judges as malfunction by DTC	• ABS/ESP • Wiring harness and connector (CAN communication system)
P1799		• After ignition, the software detects invalid engine speed signal for 0.1 s or more and judges as malfunction by DTC	
P1801		• After ignition, the software detects invalid engine target idling signal for 0.1 s or more and judges as malfunction by DTC	
P1803		• After ignition, the software detects invalid accelerator pedal position signal for 0.1 s or more and judges as malfunction by DTC	
P1805		• After ignition, the software detects invalid engine coolant temperature signal for 0.1 s or more and judges as malfunction by DTC	
P1807		• After ignition, the software detects invalid ESP vehicle speed signal for 0.1 s or more and judges as malfunction by DTC	

DTC	Inspection Strategy	Setting Condition (Control Strategy)	Faulty Area
P1808	Hardware Circuit Inspection	• After ignition, the software detects implausible ESP vehicle speed signal for 0.1 s or more and judges as malfunction by DTC	• ABS/ESP • Wiring harness and connector (CAN communication system)
P1810		• After ignition, the software detects invalid ESP left rear wheel speed signal for 0.1 s or more and judges as malfunction by DTC	
P1811		• After ignition, the software detects implausible ESP left rear wheel speed signal for 0.1 s or more and judges as malfunction by DTC	
P1813		• After ignition, the software detects invalid ESP right rear wheel speed signal for 0.1 s or more and judges as malfunction by DTC	
P1814		• After ignition, the software detects implausible ESP right rear wheel speed signal for 0.1 s or more and judges as malfunction by DTC	
P1816		• After ignition, the software detects invalid ESP left front wheel speed signal for 0.1 s or more and judges as malfunction by DTC	
P1817		• After ignition, the software detects implausible ESP left front wheel speed signal for 0.1 s or more and judges as malfunction by DTC	
P1819		• After ignition, the software detects invalid ESP right front wheel speed signal for 0.1 s or more and judges as malfunction by DTC	
P1820		• After ignition, the software detects implausible ESP right front wheel speed signal for 0.1 s or more and judges as malfunction by DTC	
P1824		• After ignition, the software detects CAN bus off for 0.1 s or more and judges as malfunction by DTC	

3. Diagnosis Procedure

Test Conditions	Details/Results/Actions
1. General inspection	
	A. Inspect each relative wiring harness connector for reliability, falling off, damage, poor contact, aging and looseness, etc. Is it normal? **Yes** Go to step 2. **No** Repair the faulty area.
2. Clear DTC	
	A. Connect the diagnostic tool. B. Clear DTC with diagnostic tool. C. Shake, pull and press diagnostic connector, EPS/ABS control module, automatic transmission control module and engine control module wiring harness connector. D. Perform DTC diagnosis again using diagnostic tool. Are there DTC P1790, P1735, U2091, P1795, P1798, P1799, P1801, P1803, P1805, P1807, P1808, P1810, P1811, P1813, P1814, P1816, P1817, P1819, P1820, P1824? **Yes** Go to step 3. **No** Clear the DTC.
3. Inspect and repair CAN bus circuit	
	A. Inspect and repair CAN bus circuit. **Refer to: CAN Bus Integrity Inspection (4.3.14 On-board Network System, Description and Operation)**