05I6S–01

FAIL–SAFE CHART

1. FAIL–SAFE FUNCTION

(a) The fail–safe function starts if any bus (communication line) fails due to a short or other type of circuit failure. The fail–safe function differs in each system and ensures the minimum required function for each system.

(b) Effects on each system when communication is impossible. (For further details, see the pages for each system.)

Function	Hybrid Vehicle Control ECU	ECM	Battery ECU	Skid Control ECU	Steering Sensor	Yaw Rate Sensor	Power Steering ECU	Gateway ECU	Action when unable to communicate	DTC detection (Driver detectable)
TOYOTA hybrid system control (Optimum mix of the electric motor and gas engine)	●	○	○						Restricted driving	Detectable (Lamp comes on)
Regenerative braking (Drives the motor as a generator using the electricity produced by the wheel's rotation. The electricity is stored in the HV battery)	○			●					Prohibits regeneration	Detectable (Lamp comes on)
VSC+ control (Controls braking force when enhanced VSC is in operation)	○			●	○	○			Stops VSC+	Detectable (Lamp comes on)
Electric power steering (Calculates assist current according to the torque sensor value and vehicle speed, then sends the data to the motor)	○			○			●		Maintains control through power assist, as during regular driving at 70 km/h.	Detectable (Lamp comes on)
Display (Operating condition, shift position, DTC)	○	○		○			○	● Meter	Lamp does not come on or remains on	Detectable by illumination malfunction
A/C control	○	○						● A/C	Control of A/C to level set not possible	Detectable (Lamp does not come on)

HINT:

- ●: Control master
- ○: System related