

CRUISE CONTROL SYSTEM [SKYACTIV-D 2.2]

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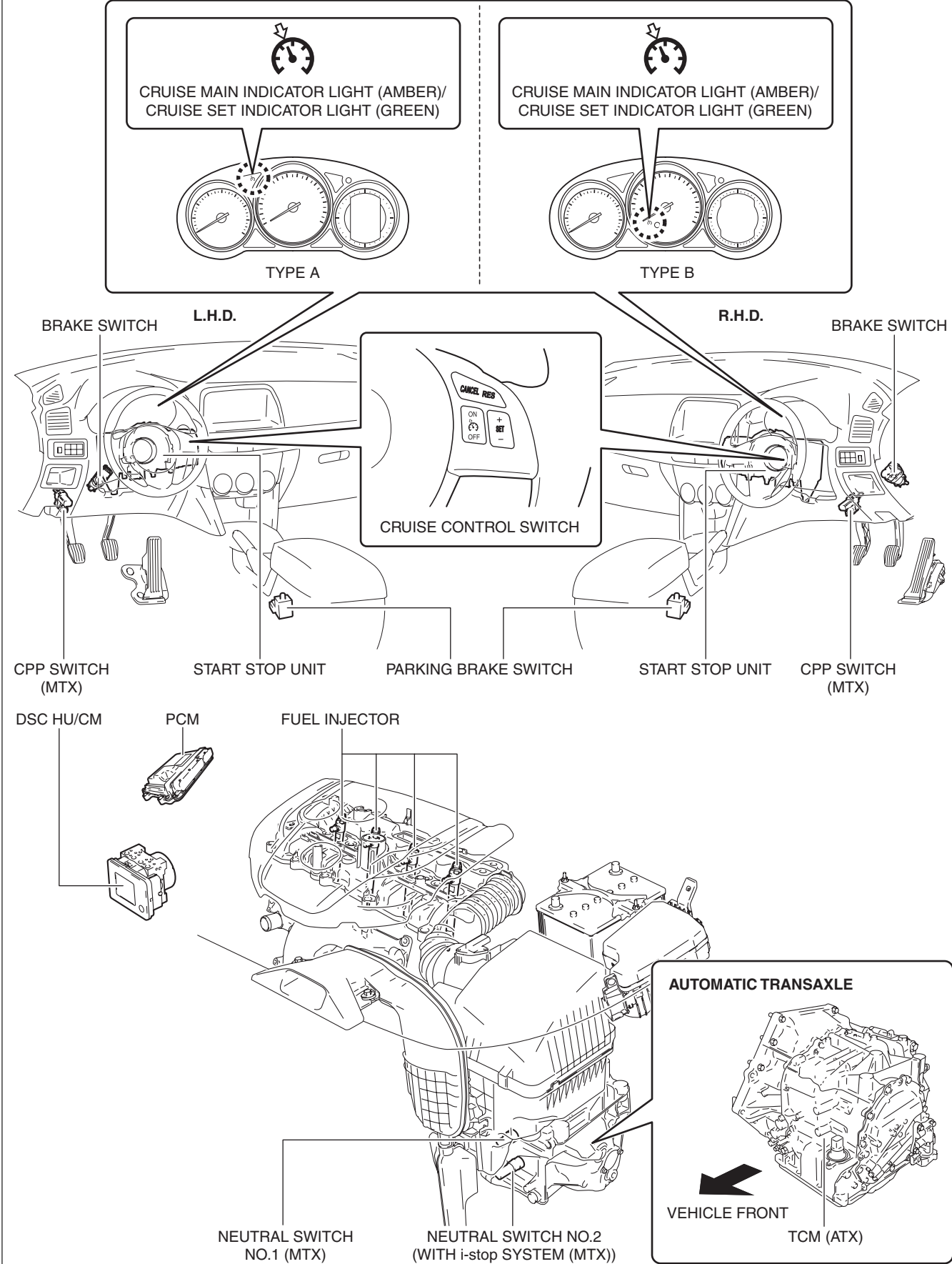
Outline

- The cruise control system enables driving at a constant speed by setting the vehicle speed with the cruise control switch instead of operating the accelerator pedal.
- The PCM controls the fuel injection amount to maintain the vehicle at a constant speed.

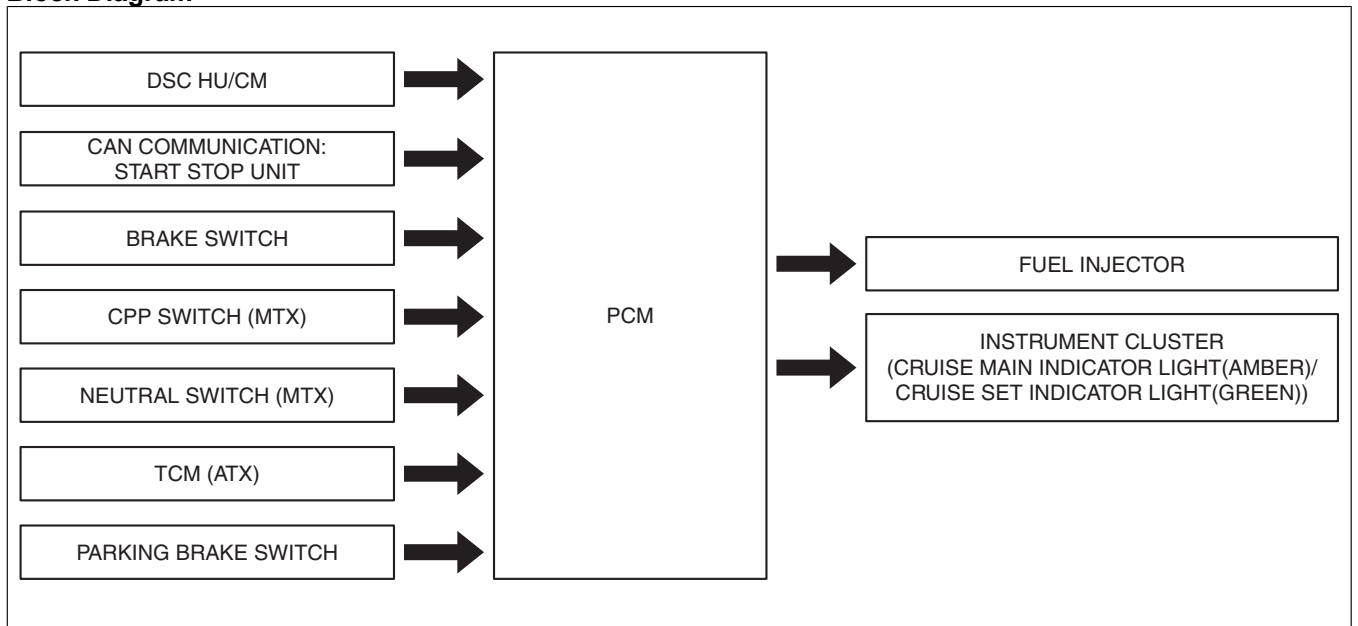
Component and function

Component		Function
DSC HU/CM (CAN communication: Vehicle speed signal)		The vehicle speed signal is sent to the PCM from the DSC HU/CM.
Cruise control switch	ON	The cruise control system main switch. The cruise control system goes on standby with the operation of the switch.
	OFF	The cruise control system main switch. The cruise control system is turned off with the operation of the switch.
	SET (+)	<ul style="list-style-type: none"> • If the switch is pressed when the vehicle speed exceeds 25 km/h {16 mph} with the system in standby, the vehicle speed at the point when the switch is pressed is stored in the PCM and the system initiates the cruise control. • The PCM controls acceleration by the pressing of the switch or when the switch is continuously pressed during cruise control.
	SET (-)	<ul style="list-style-type: none"> • If the switch is pressed when the vehicle speed exceeds 25 km/h {16 mph} with the system in standby, the vehicle speed at the point when the switch is pressed is stored in the PCM and the system initiates the cruise control. • The PCM controls deceleration by the pressing of the switch or when the switch is continuously pressed during cruise control.
	RESUME	If the switch is pressed when the vehicle speed exceeds 25 km/h {16 mph} with the system in standby and the previous pre-set vehicle speed is stored in the PCM, the system initiates the cruise control so that the vehicle speed is the pre-set vehicle speed stored in the PCM.
	CANCEL	If the switch is pressed during cruise control, the cruise control system goes on standby (pre-set vehicle speed is stored).
Brake switch		Depressing the brake pedal during cruise control switches the cruise control system to standby mode (pre-set vehicle speed is stored).
CPP switch (MTX)		Depressing the clutch pedal during cruise control switches the cruise control system to standby mode (pre-set vehicle speed is stored).
Neutral switch (MTX)		Shifting to neutral during cruise control switches the cruise control system to standby mode (pre-set vehicle speed is stored).
TCM (ATX) (CAN communication: gear signal)		If the following operation is performed during cruise control, the cruise control system goes on standby mode (pre-set vehicle speed is stored). <ul style="list-style-type: none"> • The selector lever is shifted from D position to N position.
DSC HU/CM (CAN communication: Brake pressure)		If the brake pressure exceeds 0.3 MPa {3 kgf/cm², 44 psi} , the cruise control system goes on standby mode (pre-set vehicle speed is stored).
Parking brake switch		If the parking brake is applied, the cruise control system goes on standby mode (pre-set vehicle speed is stored).
TCM (ATX) (CAN communication: diagnostic signal)		If there is a malfunction with the ATX, the cruise control system goes on standby mode (pre-set vehicle speed is stored).
PCM		The cruise control system is executed or stopped according to the cruise control switch signals.
Fuel injector		The input signal sent from the PCM adjusts the fuel injection amount.
Cruise main indicator light (Amber)		(See CRUISE MAIN INDICATOR LIGHT (AMBER) [SKYACTIV-D 2.2].)
Cruise set indicator light (Green)		(See CRUISE SET INDICATOR LIGHT (GREEN) [SKYACTIV-D 2.2].)

Structural View



Block Diagram



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