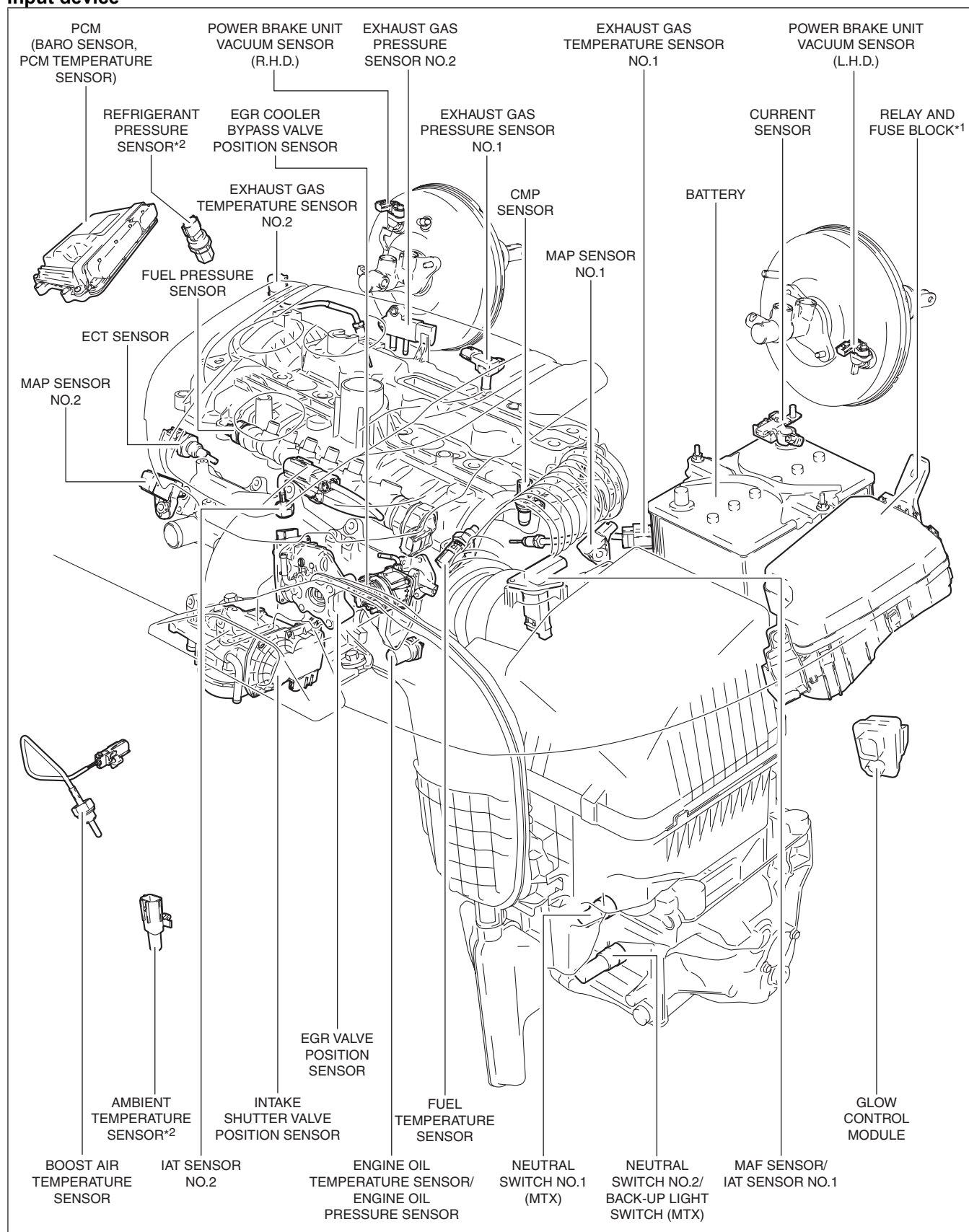


Outline

- Two-step boost control has been adopted, realizing low emission, low fuel consumption, high torque, and high response.
 - Compressor bypass solenoid valve adopted
 - Regulating solenoid valve adopted
 - Wastegate solenoid valve adopted
- Intake stroke EGR using double exhaust valve actuation system (IDEVA) control has been adopted, realizing combustion stability at cold temperatures.
 - OCV adopted
- Glow control has been adopted to improve engine startability and diesel particulate filter regeneration performance.
 - Glow control module adopted
- Engine hydraulic pressure switching control has been adopted reducing engine load.
 - Engine oil solenoid valve adopted
- DC-DC converter control has been adopted for improved power supply stability.
 - DC-DC converter adopted
- Generator output control adopted, fuel economy/idling stability improved.
 - Current sensor adopted

Structural View Input device

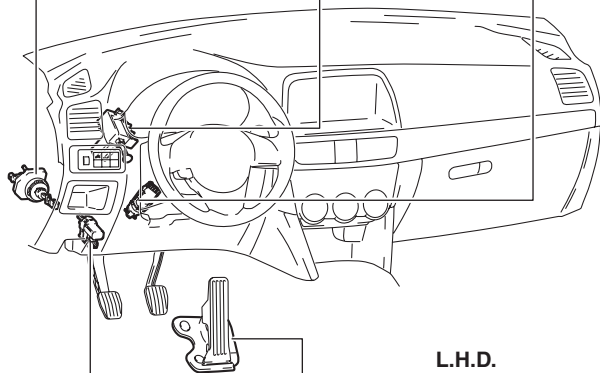


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*1 : Check connector, IG1 relay

*2 : With air conditioner

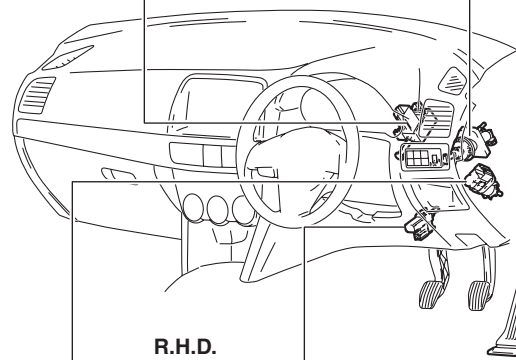
CLUTCH STROKE SENSOR (MTX) STARTER INTERLOCK SWITCH (MTX) BRAKE SWITCH



L.H.D.

CPP SWITCH (MTX) APP SENSOR

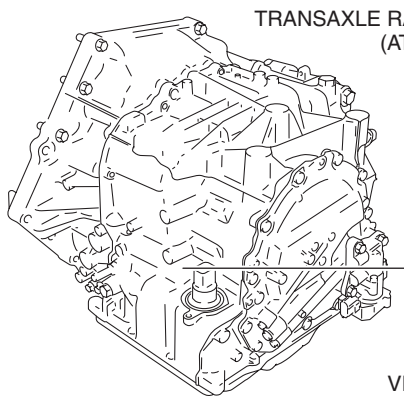
STARTER INTERLOCK SWITCH (MTX) CLUTCH STROKE SENSOR (MTX)



R.H.D.

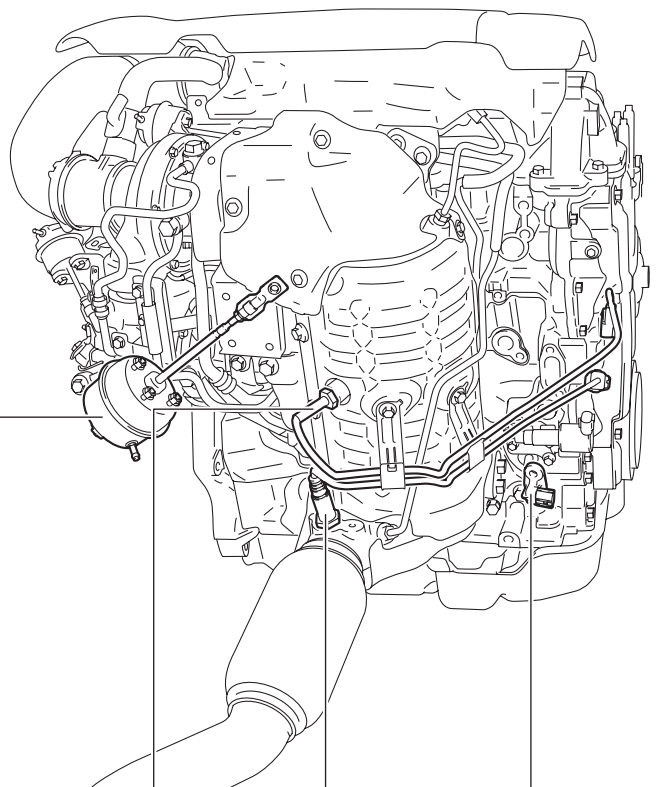
BRAKE SWITCH CPP SWITCH (MTX) APP SENSOR

AUTOMATIC TRANSAXLE



VEHICLE FRONT

VEHICLE FRONT



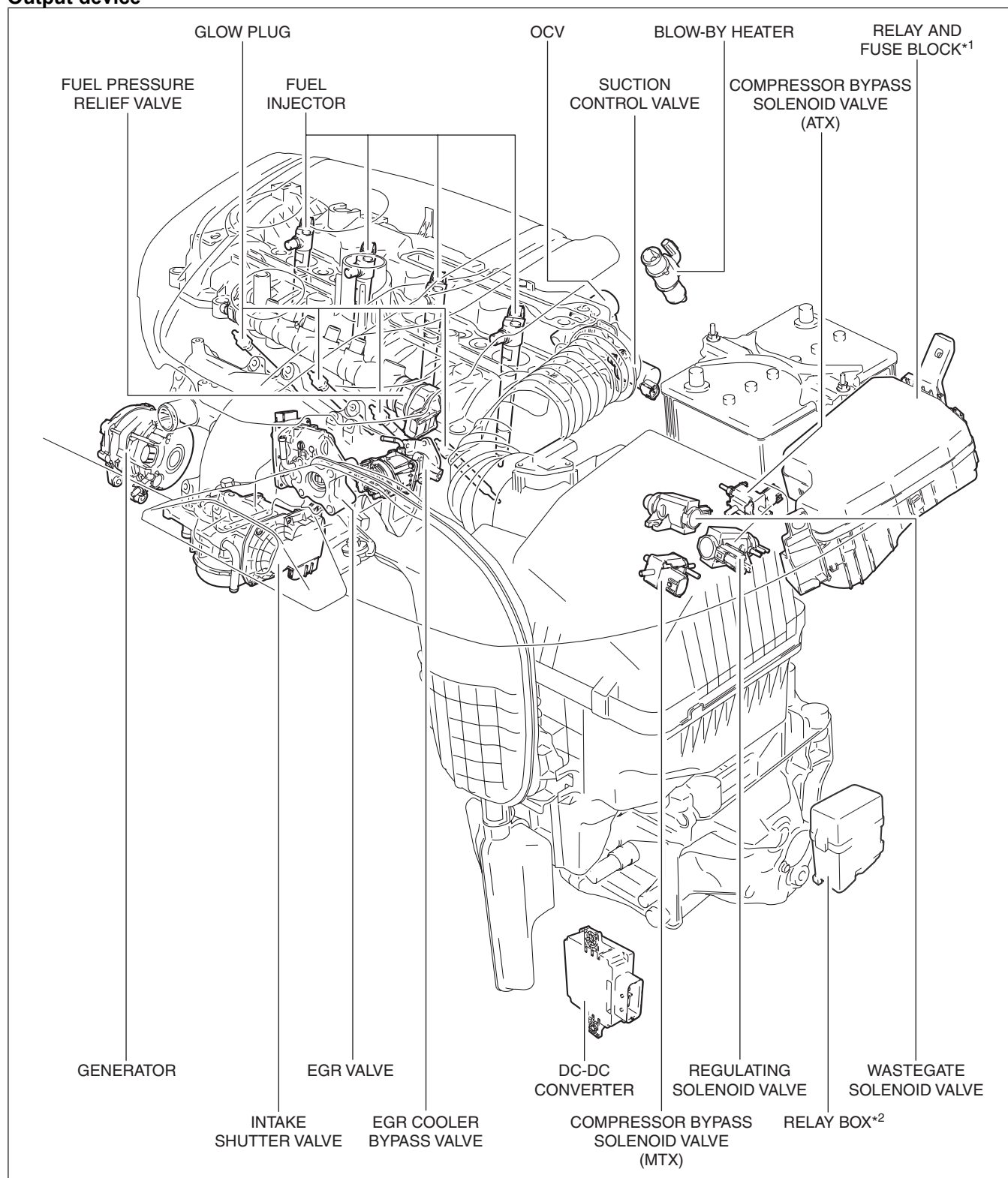
REGULATING VALVE POSITION SENSOR

EXHAUST GAS TEMPERATURE SENSOR NO.3

A/F SENSOR

CKP SENSOR

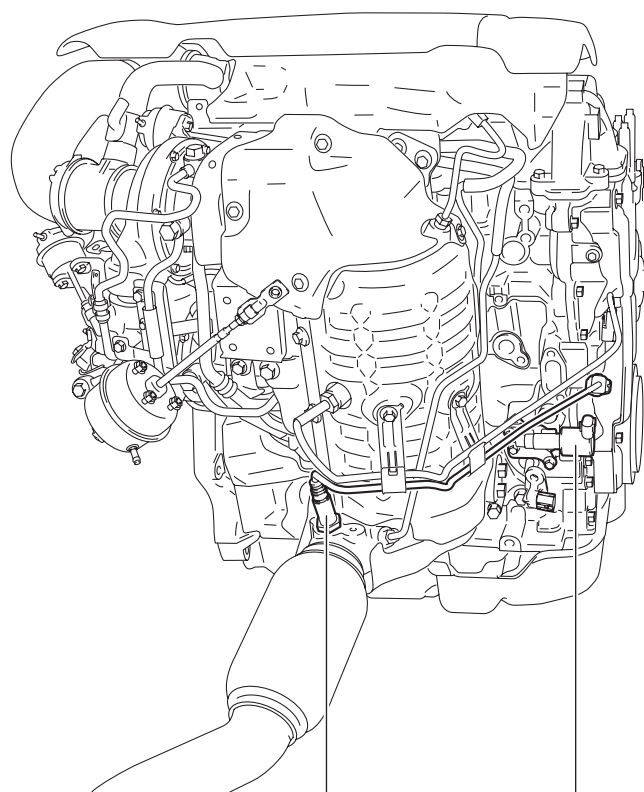
Output device



ac5wzn00001671

*1 : Main relay, blow-by heater relay, starter relay, A/C relay

*2 : Cooling fan relay No.1, cooling fan relay No.2



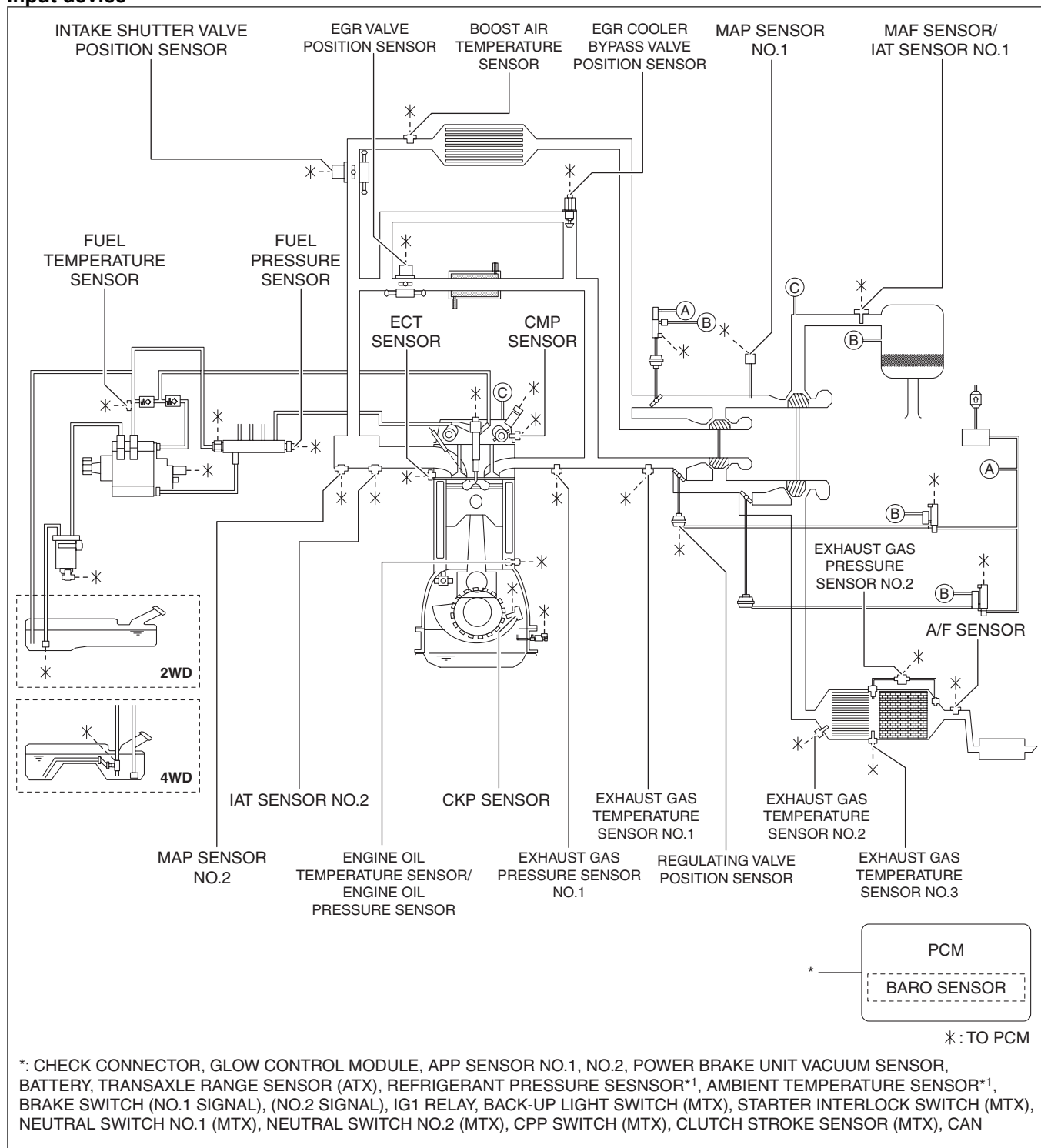
A/F SENSOR HEATER

ENGINE OIL
SOLENOID VALVE

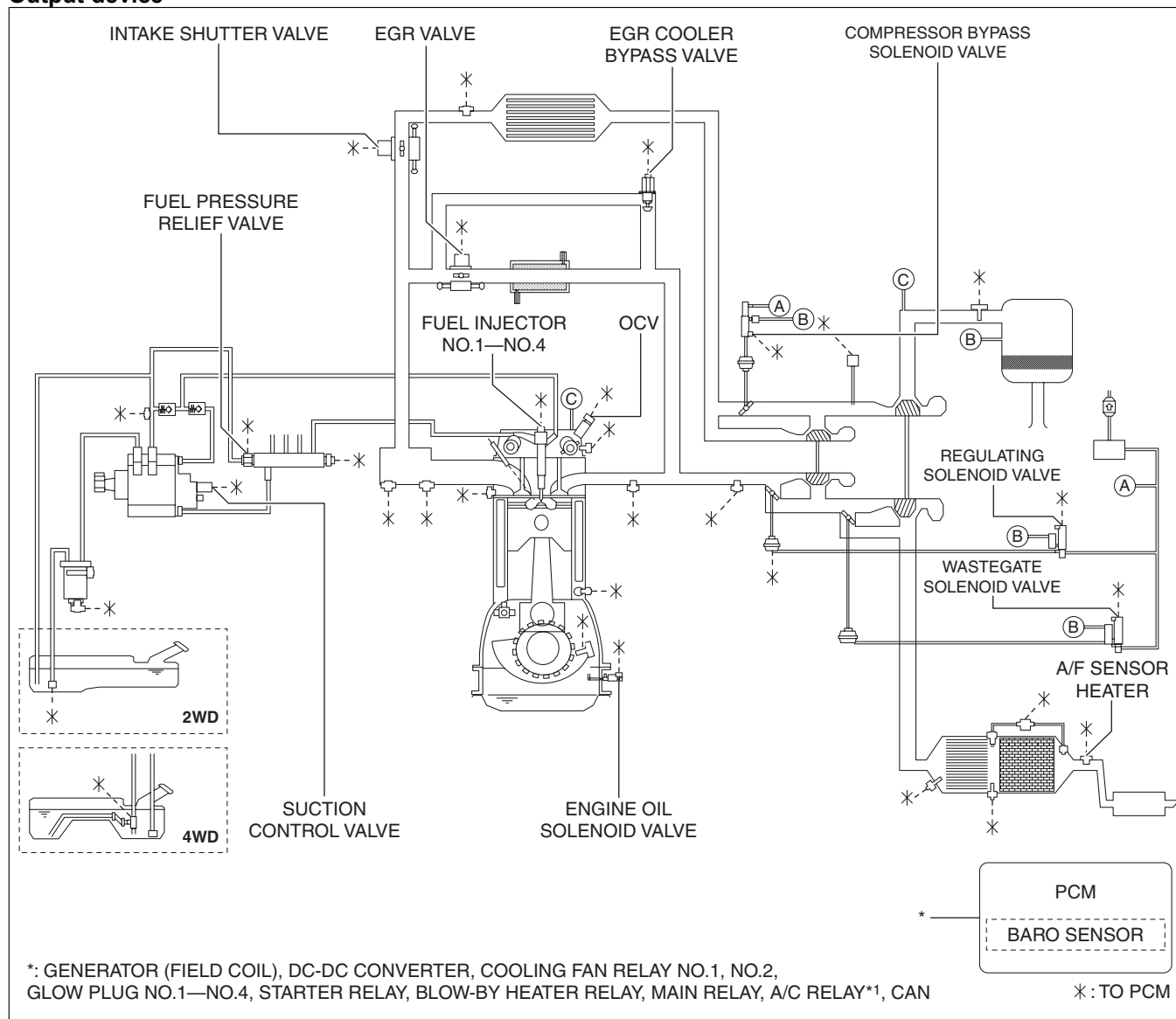
VEHICLE FRONT



System Diagram Input device



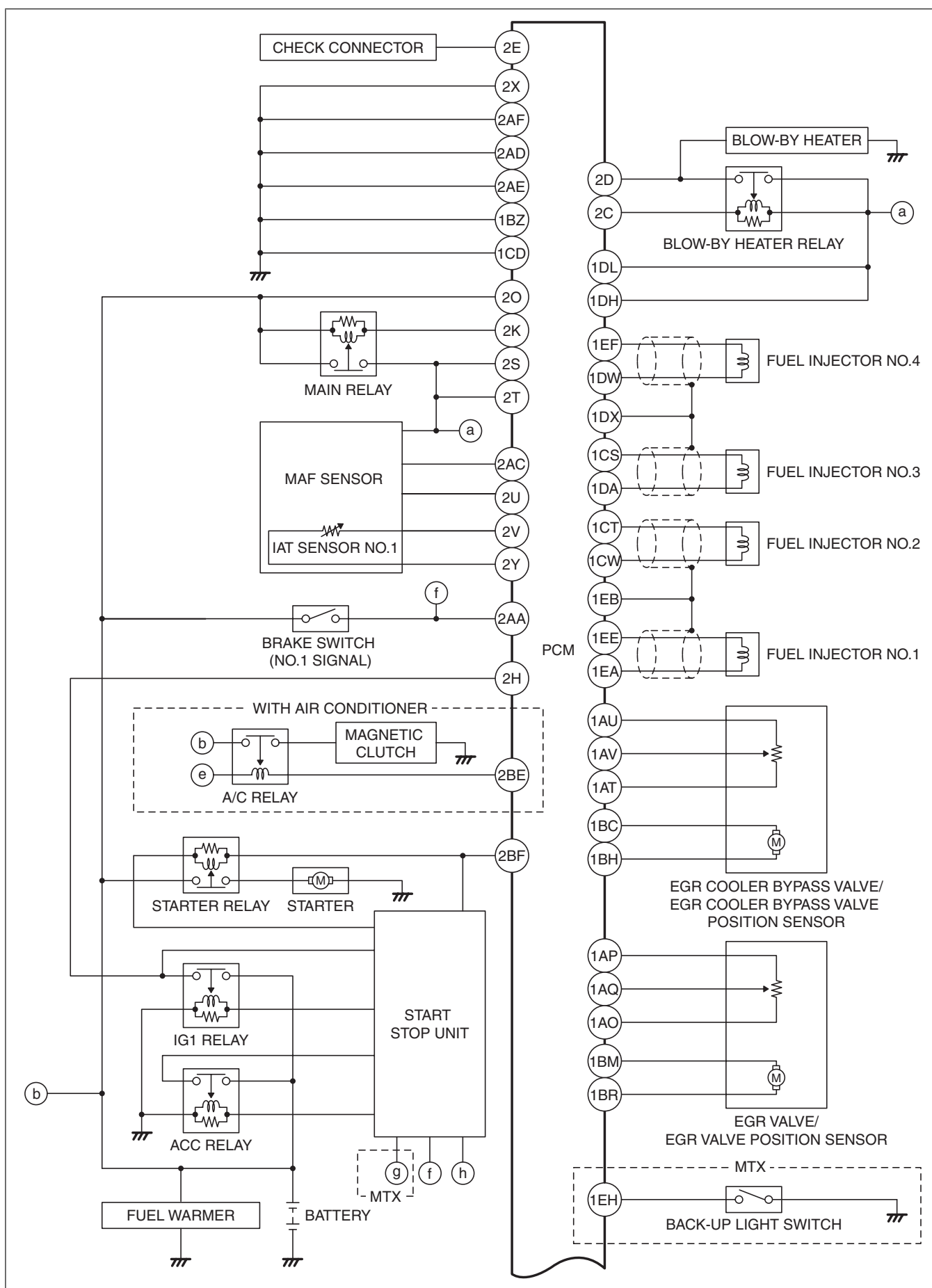
Output device

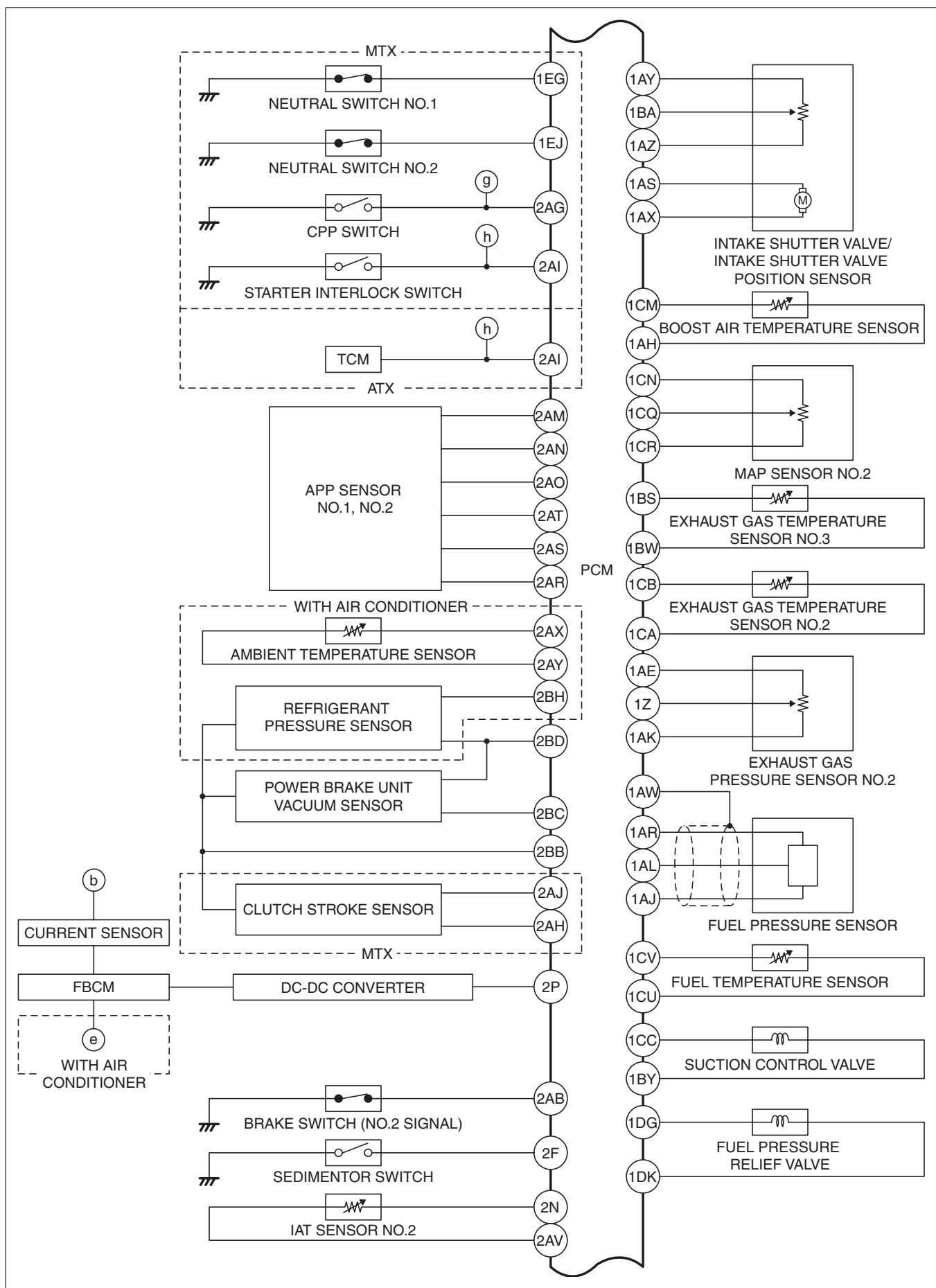


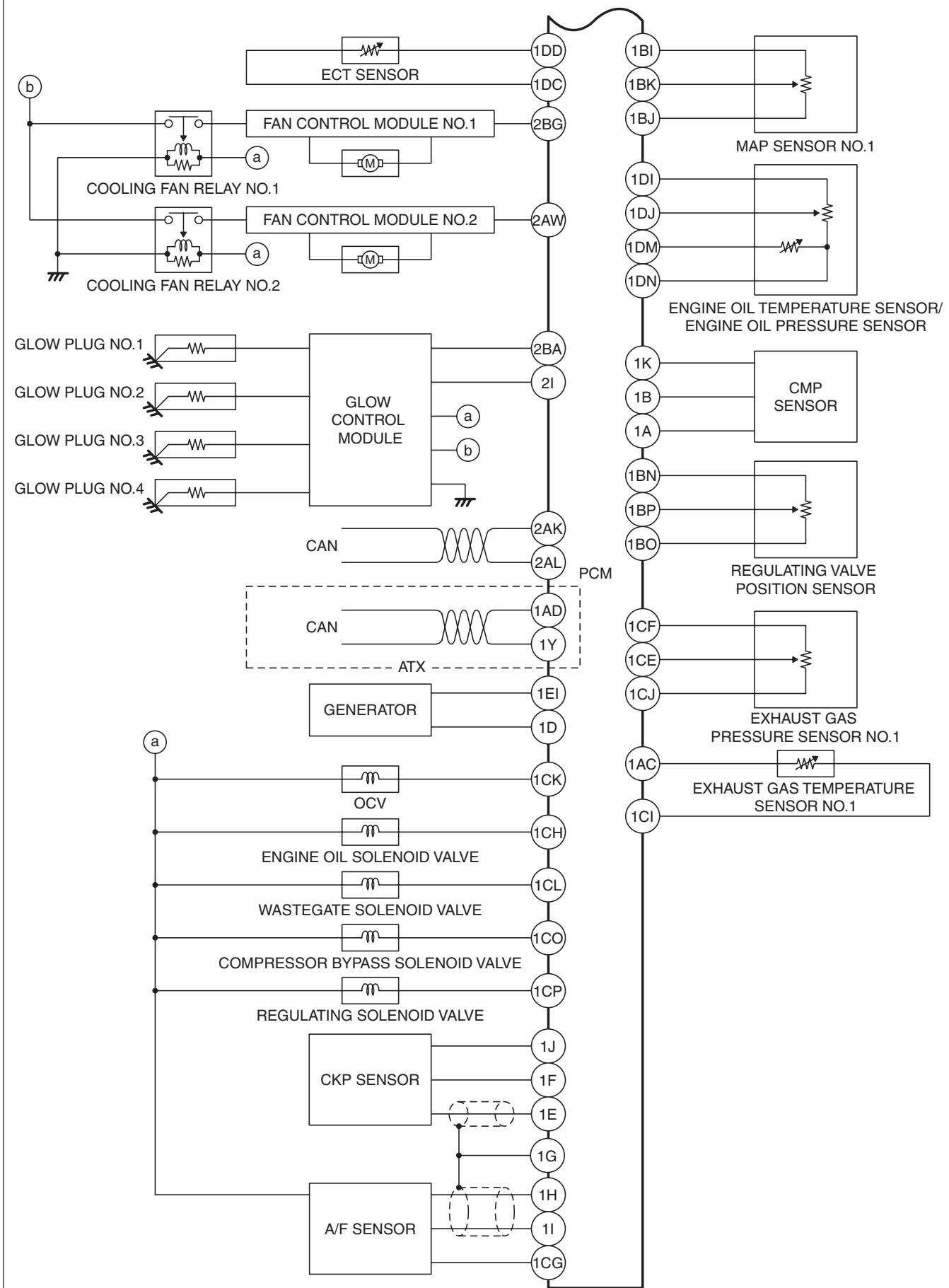
*1 : With air conditioner

System Wiring Diagram

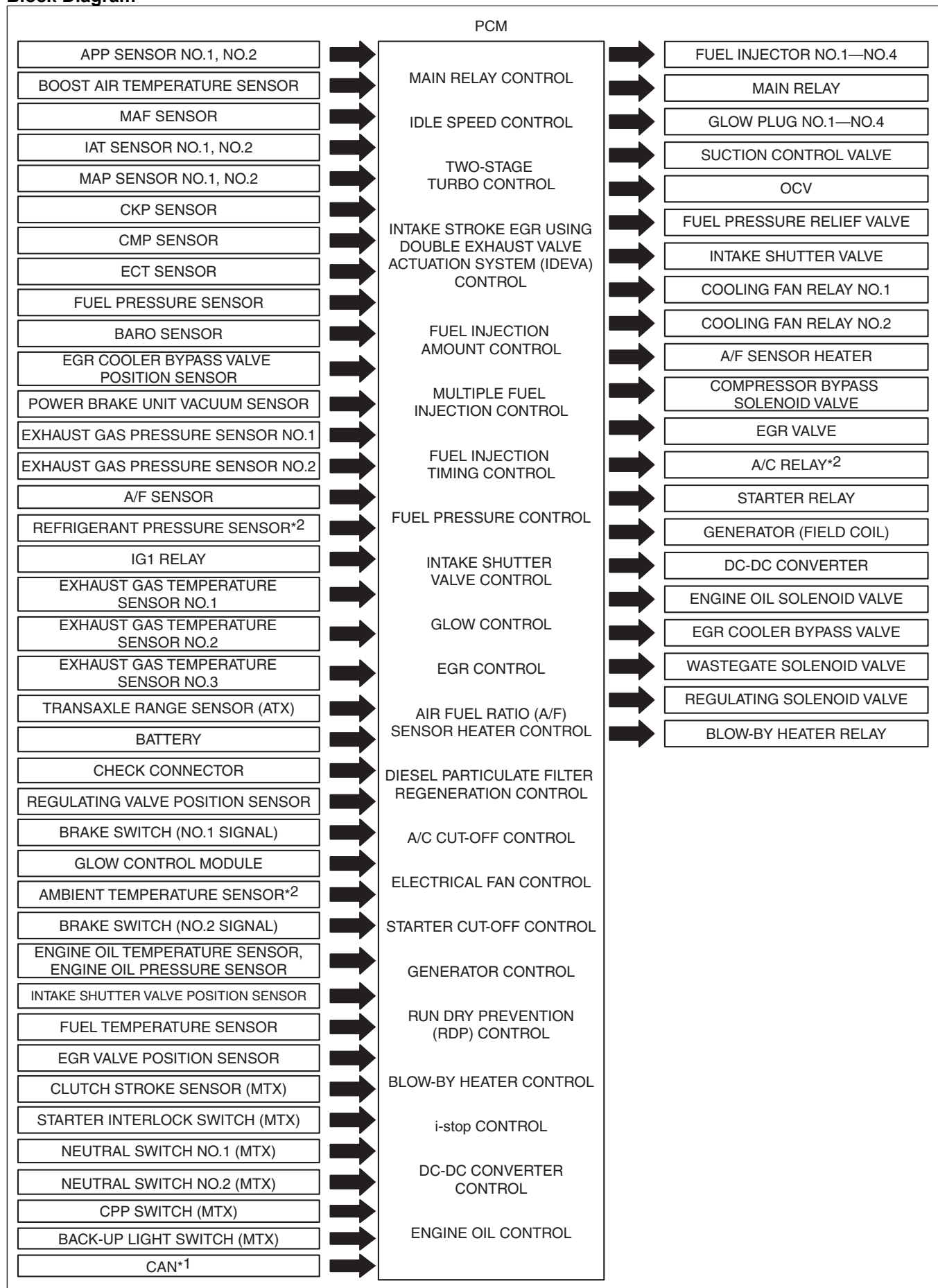
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Block Diagram



*2: With air conditioner

x: Applicable

[illegible]

Item	MAIN RELAY CONTROL	IDLE SPEED CONTROL	TWO-STAGE TURBO CONTROL	IDEVA*1 CONTROL	FUEL INJECTION AMOUNT CONTROL	MULTIPLE FUEL INJECTION CONTROL	FUEL INJECTION TIMING CONTROL	FUEL PRESSURE CONTROL	INTAKE SHUTTER VALVE CONTROL	GLOW CONTROL	EGR CONTROL	AIR FUEL RATIO (A/F) SENSOR HEATER CONTROL	DIESEL PARTICULATE FILTER REGENERATION CONTROL	A/C CUT-OFF CONTROL	ELECTRICAL FAN CONTROL	STARTER CUT-OFF CONTROL	GENERATOR CONTROL	RUN DRY PREVENTION (RDP) CONTROL	BLOW-BY HEATER CONTROL	i-stop CONTROL	DC-DC CONVERTER CONTROL	ENGINE OIL CONTROL
Power brake unit vacuum sensor			x																	x		
CKP sensor	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x		x	x		x
CMP sensor					x	x	x	x	x		x						x			x		
Transaxle range sensor (ATX)		x			x	x	x		x				x			x				x		
Back-up light switch (MTX)		x			x	x	x		x				x			x				x		
Neutral switch No.1 (MTX)		x			x	x	x		x				x	x		x	x			x		
CPP switch (MTX)		x			x	x	x		x				x			x	x			x		
Starter interlock switch (MTX)																				x		
Neutral switch No.2 (MTX)																				x		
Clutch stroke sensor (MTX)																				x		
CAN*2		x	x		x	x	x		x	x	x		x	x	x	x	x	x		x	x	
Output device																						
Intake shutter valve									x				x							x		
EGR cooler bypass valve											x		x							x		
EGR valve											x		x							x		
Fuel pressure relief valve								x												x		
Main relay	x																					
Regulating solenoid valve			x										x							x		
Wastegate solenoid valve			x										x							x		
Compressor bypass solenoid valve			x										x							x		
A/F sensor heater												x								x		
Starter relay																x				x		
Generator (Field coil)		x															x			x		
A/C relay*3														x								
Cooling fan relay No.1															x							
Cooling fan relay No.2															x							
Engine oil solenoid valve				x									x									x
Suction control valve									x											x		
Fuel injector No.1—No.4		x			x	x	x						x					x		x		
Blow-by heater relay																			x			
OCV				x									x									
DC-DC converter																	x				x	
Glow plug No.1—No.4									x				x									

*1 : Intake stroke EGR using double exhaust valve actuation system

*2 : TCM (ATX), DSC HU/CM, front body control module (FBCM), rear body control module (RBCM), instrument cluster, start stop unit, EPS control module

*3 : With air conditioner