

CONTROL SYSTEM DEVICE AND CONTROL RELATIONSHIP CHART [SKYACTIV-D 2.2]

id0103g1800200

×: Applicable

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
Input device																						
Check connector												×	×									
IG1 relay	×		×						×	×							×			×	×	
Brake switch (No.1 signal)			×																×			
Brake switch (No.2 signal)																			×			
Glow control module										×												
MAP sensor No.2		×	×		×	×	×		×		×		×									
IAT sensor No.1					×	×	×		×		×		×									
MAP sensor No.1			×										×									
ECT sensor		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×			×		×
Fuel temperature sensor					×			×														
IAT sensor No.2		×	×		×	×	×		×	×	×	×	×				×			×		
Boost air temperature sensor			×										×									
APP sensor No.1, No.2		×	×		×	×	×	×	×		×	×	×	×			×			×		
MAF sensor			×		×	×	×		×		×	×	×									
Fuel pressure sensor					×			×					×									
Intake shutter valve position sensor			×						×		×	×	×							×		
EGR cooler bypass valve position sensor			×						×		×	×	×							×		
EGR valve position sensor			×						×		×	×	×							×		
Exhaust gas pressure sensor No.2		×								×			×									
BARO sensor		×	×		×	×	×	×	×	×	×	×	×							×		
Battery			×							×		×			×		×			×		
Refrigerant pressure sensor ^{*3}		×												×	×							
Exhaust gas pressure sensor No.1		×	×						×		×		×									
Exhaust gas temperature sensor No.1			×						×		×		×									
Exhaust gas temperature sensor No.2					×	×	×						×									
Exhaust gas temperature sensor No.3												×	×									
Engine oil temperature sensor		×		×									×									×
Engine oil pressure sensor		×		×									×									
Regulating valve position sensor			×										×							×		
Ambient temperature sensor ^{*3}																			×			
A/F sensor					×	×	×		×		×											
Power brake unit vacuum sensor			×																	×		
CKP sensor	×	×	×	×	×	×	×	×	×	×	×	×	×	×		×	×		×	×		×
CMP sensor					×	×	×	×	×		×						×			×		

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
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