×: Applicable

					lr.	ntake air s	svstem		_	-: Not ap	plicable
		Intake ai		£	". Air cleane		Intake s		Compr essor (small)	Compr essor (large)	Compr essor bypas s soleno id valve
	Troubleshooting item	Air suction / Leakag e/ Perfora tion	Cloggi ng	Deform ation	Air cleaner elemen t restrict ed	Non- genuin e part installa tion	Does not fully close (Does not confor m to target value)	Cloggi ng, stickin g	Impro per operat ion	Impro per operat ion	Impro per operat ion
_1	Blown fuses	_		_	_	_	_	_	_	_	_
2	Check engine light illuminates	×	×	_	×	_	×	×	×	×	×
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
9	Will not crank	_		_					_		
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	_	_	_	_	_	_	_
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_	_
12	Cranks normally but will not start	_	_	_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_	_
14	Fast idle/runs on	_		_	_	_	<u> </u>	<u> </u>	_		

					Ir	ntake air s	system				
		Intake ai	r system ırt	A	Air cleane		Intake s		Compr essor (small)	Compr essor (large)	Compr essor bypas s soleno id valve
	Troubleshooting item	Air suction / Leakag e/ Perfora tion	Cloggi ng	Deform ation	Air cleaner elemen t restrict ed	Non- genuin e part installa tion	Does not fully close (Does not confor m to target value)	Cloggi ng, stickin g	Impro per operat ion	Impro per operat ion	Impro per operat ion
15	Low idle/stalls during deceleration	_	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/ jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	_	_	_	_	×	_	_	_	_	_
18	Knocking/pinging-acceleration/cruise	_	_	_	_		-		_	_	_
19	Poor fuel economy	_	_	_	_	×	_	_	_	_	_
20	Emission compliance	_		_	_	×	_	_	_	_	_
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_	_	_
22	Cooling system concerns- overheating	_	_	_	_	_	_	_	_	_	_
23	Cooling system concerns- runs cold	_	_	_	_	_	_	_	_	_	_
24	Excessive black smoke	_	_	_	_		_	_	_	_	
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_	_
26	Engine noise	×		×	_	×			_	_	
27	Vibration concerns (engine)	_	_	_	_	_	_	_	_	_	_
28	A/C does not work sufficiently		_	_			_	_	_	_	
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_
I-S	top related troubleshooting item	(See SY	MPTOM D	IAGNOST	TIC INDEX	([SKYAC	ΓIV-D 2.2]	.)			

		Intake air s	ystem			Exhau	ıst syste	m		
			Interfer ence with		n exhaust tem part	Small- type turboc harger	Large- type turboc harger	Regula ting solenoi d valve	Waste gate solenoi d valve	EGR cooler bypass valve
	Troubleshooting item	Improper installation of turbocharg er	housin g of turbo rotatio nal mecha nism	Leakag e	Clogging (mostly in oxidation catalytic converter for diesel, diesel particulate filter)	Improp er operati on	Improp er operati on	Improp er operati on	Improp er operati on	Improp er operati on
1	Blown fuses		_	_		_	_	_	_	_
2	Check engine light illuminates	_	_	×	×	×	×	×	×	×
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_
9	Will not crank	_	_	<u> </u>	<u> </u>	_	_	_	_	_
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	<u> </u>	_	_	_	_	_
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_
12	Cranks normally but will not start	_	_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	<u> </u>	_	_	_	_	_
14		_	_	_	_	_	_	_	_	]
15	Low idle/stalls during deceleration	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_

		Intake air s	ystem			Exhau	ıst systei	n		
			Interfer ence with		exhaust tem part	Small- type turboc harger	Large- type turboc harger	Regula ting solenoi d valve	Waste gate solenoi d valve	EGR cooler bypass valve
	Troubleshooting item	Improper installation of turbocharg er	housin g of turbo rotatio nal mecha nism	Leakag e	Clogging (mostly in oxidation catalytic converter for diesel, diesel particulate filter)	Improp er operati on	Improp er operati on	Improp er operati on	Improp er operati on	Improp er operati on
17	Lack/loss of power- acceleration/cruise	_	_	_	_	_	_	_	_	_
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_	_	_	_	_
19	Poor fuel economy	_	_	_	_	<u> </u>	_	_	_	_
20	Emission compliance	_	_		_	_	_	_	_	
21	High oil consumption/ leakage	×	_	_	_	_	_	_	_	_
22	Cooling system concerns-overheating	_	_	_	_	_	_	_	_	_
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_
24	Excessive black smoke	_	_	_	_	_	_	_		_
25	Fuel odor (in engine compartment)	_	_	_		_	_	_	_	_
26	Engine noise	_	×	×		_				
27	Vibration concerns (engine)	_	_	_	_	_	_		_	_
28	A/C does not work sufficiently	_	_	_		_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_		_	
i-st	op related troubleshooting item	(See SYMPT	OM DIAG	NOSTIC I	NDEX [SKYA	CTIV-D 2.	2].)			

			Ex	haust syst	em			Fuel s	ystem	арриосью
	Troubleshooting item	EGR valve	EGR (	cooler	EGR pipe	Diesel particul ate filter	Fuel	line	Fuel filter	
	Troubleshooting item	Imprope r operatio n	Leakage (gas)	Cloggin g	Cloggin g	Loss	Leakage	Cloggin g	Leakage	Cloggin g
1	Blown fuses	_	_	_	_	_	_	_	_	_
2	Check engine light illuminates	×	×	×	_	_	×	×	×	×
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_

			ExI	haust syst	em			Fuel s	ystem	
	Troubleshooting item	EGR valve	EGR (	cooler	EGR pipe	Diesel particul ate filter	Fuel	line	Fuel	filter
	Troubleshooting item	Imprope r operatio n	Leakage (gas)	Cloggin g	Cloggin g	Loss	Leakage	Cloggin g	Leakage	Cloggin g
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_		_	_	_	_	_	_	_
9	Will not crank	_	_	_	_	_	_	_	_	_
10	Hard to start/long crank/ erratic start/erratic crank	_	1	_	_	_	_	_	_	_
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_
12	Cranks normally but will not start	_	_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_
14	Fast idle/runs on	_	_	_	_	_	_	_	_	_
15	Low idle/stalls during deceleration	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	_	_	_	_	_	_	_	_	_
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_	_	_	_	_
19		_			_	_	_	_	_	_
20	Emission compliance	_	_	×	×	_	_	_	_	_
21	High oil consumption/ leakage		_	_	_	_	_	_	_	_
22	Cooling system concerns-overheating	_	_	_	_	_	_	_	_	_
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_
24		_	_	_	_	×	_	_	_	_
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_
26	Engine noise	_	_	_	·—	_		_	_	_

			Ext	naust syst	em			Fuel s	l system	
	Troubleshooting item	EGR valve	EGR (	cooler	EGR pipe	Diesel particul ate filter	Fuel	line	Fuel filter	
	Troubleshooting item	Imprope r operatio n	Leakage (gas)	Cloggin g	Cloggin g	Loss	Leakage	Cloggin g	Leakage	Cloggin g
27	Vibration concerns (engine)	_	_	_	_	_	_	_	_	_
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_
i-st	op related troubleshooting item	(See SYM	IPTOM DIA	AGNOSTIC	INDEX [S	KYACTIV-	D 2.2].)			

					F	uel syster	n			
			nentor itch	Fuel warmer	Jet pump (4WD)	Supply pump	l	control lve		ressure valve
	Troubleshooting item	Always on	Always off	Imprope r operatio n	Imprope r operatio n	Poor dischar ge amount	Low adjuste d pressur e value	High adjuste d pressur e value	Low adjuste d pressur e value	High adjuste d pressur e value
1	Blown fuses	_	_	_	_		_	_	_	_
2	Check engine light illuminates	_	_	×	_	×	×	×	×	×
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	l	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_		_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	×	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_		_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_
9	Will not crank	_	_	_	_	_	_	_	_	_

						uel syster	n			
		Sedim swi	nentor itch	Fuel warmer	Jet pump (4WD)	Supply pump	Suction va	control lve		essure valve
	Troubleshooting item	Always on	Always off	Imprope r operatio n	Imprope r operatio n	Poor dischar ge amount	Low adjuste d pressur e value	High adjuste d pressur e value	Low adjuste d pressur e value	High adjuste d pressur e value
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	×	_	_	_	_	_
11	Engine stalls-after start/at idle	_	_	_	×	_	_	_	_	_
12	Cranks normally but will not start	_	_	_	×	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	×	_	_	_	_	_
14	Fast idle/runs on	_	_	_	_	_			_	_
15	Low idle/stalls during deceleration	_	_	_	×	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	×	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	_	_	_	×	_	_	_	_	_
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_	_	_	_	_
19	Poor fuel economy	_	_		_	_		—	_	_
20	Emission compliance		_	_	_	_		_	_	
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_	-
22	Cooling system concerns-overheating	_			_		_	_	_	_
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_
24	Excessive black smoke	<u> </u>		_		_			_	
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_
26	Engine noise		_	_	_		_	_	_	
27	Vibration concerns (engine)	_	_	_	×	_	_	_	_	_
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_
ı-st	op related troubleshooting item	(See SYM	IPTOM DIA	AGNOSTIC	INDEX [S	KYACTIV-	D 2.2].)			

Fuel system  Fuel Fuel Fuel check feed system Fuel injector  valve valve /Fuel											
		check	feed	system /Fuel			Fı	uel inject	or		
	Troubleshooting item	Improp er operati on	Improp er operati on	injectio n system malfun ction (such as leakag e)	Open circuit in drive circuit	Short circuit in drive circuit	Leakag e	Restric ted	Always open	Always close	QR code mismat ch
2	Blown fuses Check engine light illuminates	×	×	_	x	x	×	x	×	×	x
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_		_	_	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
9	Will not crank	_	_	_	_	_	_	_	_	_	_
10	Hard to start/long crank/ erratic start/erratic crank	×	×	×	_	_	_	_	_	_	_
11	Engine stalls-after start/at idle	×	×	×		_	_	_	_	_	_
12	Cranks normally but will not start	×	×	×	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	×	×	×	_	_	_	_	_	_	_
14		×	×	×		_			_		_
15	Low idle/stalls during deceleration	×	×	×	_	_	_		_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	×	×	×	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	×	×	×	_	_	_		_	_	_

						Fuels	vstem				
		Fuel check valve	Fuel feed valve	Fuel system /Fuel			-	uel inject	or		
	Troubleshooting item	Improp er operati on	Improp er operati on	injectio n system malfun ction (such as leakag e)	Open circuit in drive circuit	Short circuit in drive circuit	Leakag e	Restric ted	Always open	Always close	QR code mismat ch
18	Knocking/pinging- acceleration/cruise	×	×	×	_	_	_	_	_	_	_
19	Poor fuel economy	_		_	_	_	_	_	_	_	_
20	Emission compliance	×	×	×	_	_	_	_	_	_	_
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_	_	_
22	Cooling system concerns-overheating	_	_	_	_	_	_	_	_	_	_
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_	_
24	Excessive black smoke	_		_	_	_	_	_	_	_	_
25	Fuel odor (in engine compartment)	_	_	×	_	_	_	_	_	_	_
26	Engine noise	_		_	_	_	_	_	_	_	_
27	Vibration concerns (engine)	×	×	×	_	_	_	_	_	_	
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_	
29	A/C is always on or A/C compressor runs continuously	_								_	
i-st	op related troubleshooting item	(See SYI	МРТОМ [	DIAGNOS	TIC INDE	X [SKYA	CTIV-D 2.	2].)			

			Fue	l system				Contr	ol system		
			Fuel injector	Fı	uel			PCM		Main	relay
	,	Troubleshooting item	Injection amount correction miss-match	Low cetane value	Inferior constit uent	No initiati on	No config uration	No learnin g	Open circuit in back-up power supply circuit of PCM	Always off	Always on
Ī	1	Blown fuses	_	_	_	_	_		_	_	_
	2	Check engine light illuminates	_	_	_	_	×	_	×	_	_
	3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	×	_	_	_	_	_	_

			l system				Contr	ol system		
		Fuel injector	Fu	ıel			PCM		Main	relay
	Troubleshooting item	Injection amount correction miss-match	Low cetane value	Inferior constit uent	No initiati on	No config uration	No learnin g	Open circuit in back-up power supply circuit of PCM	Always off	Always on
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	×	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	l	_	_
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_
9	Will not crank	_	_	_	×	_	_	_	×	_
10	Hard to start/long crank/ erratic start/erratic crank	_	×	×	_	_	×	1	_	_
11	Engine stalls-after start/at idle	_	×	×	_	_	×	_	_	_
12	Cranks normally but will not start	_	×	×	_	_	×	_	_	_
13	Engine runs rough/rolling idle	×	×	×	_	_	×	_	_	_
14	Fast idle/runs on	_	_	_	_	_	_	_	_	_
15	Low idle/stalls during deceleration		×	×	_		×	<u> </u>		
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	×	×	_	_	×	_	_	_
17	Lack/loss of power- acceleration/cruise	_	×	×	_	_	×	_	_	_
18	Knocking/pinging- acceleration/cruise	×	_	×	_	_	_	_	_	_
19	, , , , , , , , , , , , , , , , , , , ,	_	×	×	_	_	×		-	_
20	High oil consumption/	×	×	×		_	×	<del>-</del>		_
22	Cooling system	_	_		_	_	_	_	_	_
	concerns-overheating Cooling system									
23	concerns-runs cold	_	_	_	_	_	_	_	_	_
24		_	_	_	_	_	_	<del>_</del>	-	_
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_

		Fue	l system				Contr	ol system		
		Fuel injector	Fı	ıel			PCM		Main	relay
	Troubleshooting item	Injection amount correction miss-match	Low cetane value	Inferior constit uent	No initiati on	No config uration	No learnin g	Open circuit in back-up power supply circuit of PCM	Always off	Always on
26	Engine noise	_	_	<u> </u>	_	_	×	_	_	
27	Vibration concerns (engine)	×	×	×	_	_	×	_	_	_
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_
i-st	op related troubleshooting item	(See SYMPT	OM DIAG	NOSTIC I	NDEX [S	KYACTIV	-D 2.2].)			

							/stem (l	PCM inp	ut sign	al)			
		M	AF sens	or	shutte pos	ake r valve ition isor	APP s	sensor	CI	KP sens	or	CMP s	sensor
	Troubleshooting item	High input	Low	Open or short circui t in signa I circui t	Errati c signa I input	Open or short circui t in signa I circui t	Errati c signa l input	Open or short circui t in signa I circui t	False signa I outpu t (no noise , pulse )	Open or short circui t in signa I circui t	Engin e spee d signa	False signa I outpu t (no noise , pulse )	Open or short circui t in signa I circui t
1	Blown fuses	_	_	_	_	_		_	_		_	_	_
2	Check engine light illuminates	×	×	×	×	×	×	×	×	×	_	×	×
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_		_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_		_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_	_		_	_	_	_	_

						ontrol s	ystem (I	PCM inp	out sign	al)			
		M	AF sens	or	shutte pos	ake r valve ition isor	APP s	ensor	CI	KP sens	or	CMP s	sensor
	Troubleshooting item	High input	Low input	Open or short circui t in signa I	Errati c signa I input	Open or short circui t in signa I	Errati c signa I input	Open or short circui t in signa I	False signa l outpu t (no noise , pulse	Open or short circui t in signa I	Engin e spee d signa	False signa I outpu t (no noise , pulse	Open or short circui t in signa I
				t		t		t	)	t		)	t
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
9	Will not crank Hard to start/long crank/					_			_			_	_
10	erratic start/erratic crank Engine stalls-after start/at	_	_	_	_	_	_	_	_	_		_	_
11	idle Cranks normally but will	_	_	_	_	_	_	_	_	_	_	_	_
12	not start	_	_	_	_	_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_	_	_	_
14	Fast idle/runs on Low idle/stalls during		_	_	_	<u> </u>	_	_	_	_	×	_	_
15	deceleration Engine stalls/quits,	_	_	_	_	_	_	_	_	_	_	_	_
16	engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	_	_	_	×	×	_	_	_	_	_	_	_
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_	_	_	_	_	_	_	_
19	Poor fuel economy	_	_	_	_	_	_	_	_	_	_	_	_
20	High oil consumption/	_	_	_	_	_	_		_	_	_	_	_
22	leakage Cooling system	_	_	_	_	_	_	_	_	_	_	_	_
23	concerns-overheating Cooling system	_	_	_	_	_	_	_	_	_	_	_	_
24	concerns-runs cold Excessive black smoke	_	_	_	_	_	_	_	_	_	_	_	_
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_	_	_	_
26	Engine noise	_	_	_	_	_	_	_	_	_	_	_	_
27	Vibration concerns (engine)	_	_	_	_	_	_	_	_	_	_	_	_
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_	_	_

				Co	ontrol sy	ystem (l	PCM inp	out sign	al)			
	M	AF sens	sor	shutte pos	ake r valve ition isor	APP s	ensor	CI	(P sens	or	CMP s	sensor
Troubleshooting item	High input	Low	Open or short circui t in signa I circui t	Errati c signa I input	Open or short circui t in signa I circui t	Errati c signa I input	Open or short circui t in signa I circui t	False signa I outpu t (no noise , pulse )	Open or short circui t in signa I circui t	Engin e spee d signa I	False signa I outpu t (no noise , pulse )	Open or short circui t in signa I circui t
i-stop related troubleshooting item	(See S	e SYMPTOM DIAGNOSTIC INDEX [SKYACTIV-D 2.2].)										

					С	ontrol	system (l						ррпоавто
		E	CT ser	nsor	IAT	senso	r No.1		Boost erature	air sensor	IAT	senso	r No.2
	Troubleshooting item	High input	Low input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit
1	Blown fuses	—	_	_	_	_		_	_	_	_	_	_
2	Check engine light illuminates	_	_	×	_	_	×	_	_	×	_	_	×
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
9	Will not crank	-	_	_	_	_	_	_	_	_	_	_	_

					С	ontrol	system (						
		E	CT sen	sor	IAT	senso	r No.1	1	Boost a	air sensor	IAT	senso	r No.2
	Troubleshooting item	High input	Low input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit	High input	Low	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit
10	Hard to start/long crank/ erratic start/erratic crank	×	×	_	_		_	_	_	_	_	_	_
11	Engine stalls-after start/at idle	×	×	_	_		_	_	_	_	_	_	_
12	Cranks normally but will not start	×	×	_	_	1	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	×	×		_	_		_	_		_	_	
14	Fast idle/runs on	_	_	_	_		_		_		_	_	_
15	Low idle/stalls during deceleration	×	×	_	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	×	×	_	_			_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	_	_	_	×	×	-	_	_	_	_	_	_
18	Knocking/pinging- acceleration/cruise	_	_	_	_	1	_	_	_	_	_	_	_
19	Poor fuel economy			_	_			_		_		<u> </u>	_
20	•	_	_			_	_		_		_	_	
21	High oil consumption/ leakage	_	_	_	_	1	_	_	_	_	_	_	_
22	Cooling system concerns-overheating	_	×	_	_	1	_	_	_	_	_	_	_
23	Cooling system concerns-runs cold	×	_	_	_	1	_	_	_	_	_	_	_
24		_	_	_	_	_	_	_	_	_	_	_	_
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_	_	_	_
26	Engine noise	_	_				_		_		_		
27	Vibration concerns (engine)	×	×						_			_	
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_	_	_
ı-st	op related troubleshooting item	(See S	SYMPT	OM DIAG	NOSTI	C INDE	X [SKYA	CTIV-D	2.2].)				

					С	ontrol	system (	PCM in	put sig	nal)			
		MAF	senso	or No.1		senso			tempe senso	rature	Fu	el pres	
	Troubleshooting item	High input	Low	Open or short circuit in signal circuit	High input		Open or short circuit in signal circuit	High input	Low	Open or short circuit in signal circuit	High input	Low	Open or short circuit in signal circuit
1	Blown fuses	_	_	_	_	_		_	_	_	_	_	
2	Check engine light illuminates	_	_	×	_	_	×	_	_	×	×	_	×
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	-	_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	-	_	_	_	_	_	-
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
9	Will not crank	_	_		_	_	_	_	_		_	_	_
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	_		_	_		_	_	_	_
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_	_	_	_
12	Cranks normally but will not start	_	_	_	_	_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_	_	×	_
14	Fast idle/runs on	_	_	_	<u> </u>	_	_	<del> </del>	_	_	_	_	_
15	Low idle/stalls during deceleration	_	_	_	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	_	_		×	_		_	_	_	_	_	
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_	_	_	_	_	_	_	_
19	Poor fuel economy		_	_			_		_				_

					С	ontrol	system (	PCM in	put sig	ınal)			
		MAF	senso	or No.1		senso			l tempe senso	rature	Fu	el pres senso	
	Troubleshooting item	High input	Low input	Open or short circuit in signal circuit	High input		Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit	High input		Open or short circuit in signal circuit
20	Emission compliance	_	_	_	_	-	_	_	_	_	_	_	_
21	High oil consumption/ leakage		_	_	_		_	_	_	_	_	_	_
22	Cooling system concerns-overheating	_	_	_	_	_	_	_	_	_	_	_	_
23	Cooling system concerns-runs cold		_	_	_			_	_	_	_	_	_
24	Excessive black smoke	_	_	_	_	_	_	_	_	_	_	_	_
25	Fuel odor (in engine compartment)	ı	_	1	_	ı		_	_		_	_	_
26	Engine noise	_	_			_	_	_					
27	Vibration concerns (engine)	1	_	-	_	1		_	_	_	_	×	_
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_	_	_
i-st	op related troubleshooting item	(See S	SYMPT	OM DIAG	NOSTI	C INDE	X [SKYA	CTIV-D	2.2].)				

					С	ontrol	system (l	PCM in	put sig	ınal)			
			xhaust erature No.1	sensor	1	xhaust ure ser 1	gas nsor No.		Engine erature	oil sensor	Engir	ne oil p sensc	ressure or
	Troubleshooting item	High input	Low	Open or short circuit in signal circuit	High input		Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit
1	Blown fuses	_	_	_	_	_	_	_	_	_	_	_	
2	Check engine light illuminates	_	_	×	_	_	×	_	_	×	_	×	×
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_

					С	ontrol	system (l	PCM in	put sig	nal)			
			xhaust erature No.1	sensor		xhaust ure ser 1	gas nsor No.		Engine erature	oil sensor	Engir	ne oil p sensc	ressure
	Troubleshooting item	High input	Low input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_		_	_	_	×	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
9	Will not crank	_	_	_	_	_		_	_		_	_	
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	_	_	_	_	_	_	_	_	_
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_	_	_	-
12	Cranks normally but will not start	_	_	_	_	_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	×	_	_	_	_	_	_	_
14	Fast idle/runs on	_	_	_	_	_	_	_	_	_	_	_	_
15	Low idle/stalls during deceleration	_	_	_	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	×	_	_	×	×	_	_	_	_	_	_	_
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_		_	_		_	_	
19	Poor fuel economy		_	_	_		_	_	_	_		_	
20	•		_	_	_			_	_		_	_	
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_	_	_	_	
22	Cooling system concerns-overheating		_					_			_		_
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_	_	_	_
24		_	_	_	_	_	_	_	_	_	_	_	_
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_	_	_	_
26		_	_	_	_	_	_	_	_	_	_	_	
27	Vibration concerns	_	_	_	_	×	_	_	_	_	_	_	_
27	Vibration concerns (engine)			_	_	×	_	_	_		_	_	

					С	ontrol	system (	PCM in	put sig	nal)			
			xhaust erature No.1	sensor		xhaust ure sei 1	gas nsor No.	I	Engine erature	oil sensor	Engir	ne oil p senso	ressure or
	A/C is always on or A/C	High input	Low input	Open or short circuit in signal circuit	High input		Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit
28		_	_	_	_	_	_	_	_		_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_	_	_
i-st	op related troubleshooting item	(See S	SYMPT	OM DIAG	NOSTI	C INDE	X [SKYA	CTIV-D	2.2].)				

					С	ontrol	system (	PCM in	put sig	nal)			
		E	xhaust	gas		xhaust		E	xhaust	gas			
		temp	erature	sensor	temp	erature	sensor	press	ure sei	nsor No.	-	A/F sen	sor
			No.2			No.3			2				
				Open			Open			Open			Open
	Troubleshooting item			or			or			or			or
		High	Low	short	High	Low	short	High	Low	short	High	Low	short
		input		circuit		input	circuit		input	circuit		input	circuit
		mpat	pat	in	mpac	put	in	mpat	put	in	mpat	put	in
				signal			signal			signal			signal
				circuit			circuit			circuit			circuit
1	Blown fuses	_	_	_	_	_	_	_	_	_	_		_
2	Check engine light	×	×	×	l <u> </u>	×	×	×	×	×	×	×	×
	illuminates												
	Diesel particulate filter												
	indicator light illuminates												
	frequently/message							l					
3	"Soot Accumulation in	_	_	_	_	_	_	×	_	_	_	-	_
	DPF too high" is												
	frequently indicated in TFT LCD												
	Diesel particulate filter												
	indicator light flashes/												
4	message "DPF	_	_	_	_	_	_	×	_	_	_	_	_
'	Inspection Required" is												
	indicated in TFT LCD												
	Wrench indicator light												
	illuminates/message												
5	"Drain Water from Fuel	_	—	_	—	_	_	—	_	_	l —	—	_
	Filter" is indicated in TFT												
	LCD												
6	Master warning light	_	_	_	l		_				l		_
	illuminates												
	Charging system warning												
	light illuminates/message												
7	"Charging System	—	—	_	—	-	_	—	—	_	—	-	_
	Inspection Required" is												
	indicated in TFT LCD												

		F	xhaust	uae		ontrol xhaust	system (		put sig xhaust				
				sensor			sensor			nsor No.	4	A/F sen	sor
	Troubleshooting item	High input	Low input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_		_	_	_	_	_	_	_	_	_
9	Will not crank		_	_	_		_	_	_			_	
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	_	_	_	_	_	_	_	_	_
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_	_	_	_
12	Cranks normally but will not start	_	_	_	_	_		_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_	×	×	×
14	Fast idle/runs on	_	_	_	_	_	_	_	_			_	
15	Low idle/stalls during deceleration	_	_	_	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	_	_	_	_	_	_	_	_	_	×	×	×
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_		_	_	_	_	_	_
19	Poor fuel economy	_	_	_	_	_	_	_	_	_	<b>—</b>	_	_
20	Emission compliance	_	_	_	_	_	_	_	_	_	_	_	_
21	High oil consumption/ leakage	_	_	l	_	_	_	_	_		_	_	_
22	Cooling system concerns-overheating	_	_	_	_	_	_	_	_	_	_	_	_
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_	_	_	_
24	Excessive black smoke	_		_	_		_	<u> </u>			_		
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_	_	_	_
26	Engine noise		_								<u> </u>	_	
27	Vibration concerns (engine)	_	_	_	_	_	_	_	_	_	×	×	×
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_	_	_	_
29	continuously	_	_	<u> </u>	_	_	_	_	_	_	_	_	_
ı-st	op related troubleshooting item	(See S	SYMPT	OM DIAG	NOSTI	C INDE	X [SKYA	CTIV-D	2.2].)				

					С	ontrol s	ystem (l	PCM inp	ut signa	al)			
			.RO se It-into		valve p	lating osition isor	bypas: pos	cooler s valve ition sor	pos	valve ition isor		erator o	
	Troubleshooting item	High input	Low input	Open or short circuit in signal circuit	Errati c signal input	Open or short circuit in signal circuit	Errati c signal input	Open or short circuit in signal circuit	Errati c signal input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit
1	Blown fuses	_	_	_		_			_	_	_	_	_
2	Check engine light illuminates	_	_	×	×	×	×	×	×	×	_	_	_
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_		_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	-	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_		_	_	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_		_	_	_	×	_	×
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_		_	_	_	_	_	_
9	Will not crank	_	_	_	_	_	_	_	_	_	_	_	_
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	_	_	_	_	_	_	_	_	_
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_	_	_	_
12	Cranks normally but will not start	_	_	_	_	_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	×	×	_	_	_	_	_	_	_	_	_	_
14	Fast idle/runs on Low idle/stalls during	_	_	_	_	_		_	_	_	_	_	_
15	deceleration	_							_		_	_	_
16	hesitation/stumble, surges	_	_	_	_	_	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	×	×	_	×	×	_	_	×	×	_	_	_

					С	ontrol s	ystem (l	PCM inp	ut signa	al)			
			.RO sei lt-into		valve p	lating osition isor	bypas: pos	cooler s valve ition isor	pos	valve ition sor		erator o	
	Troubleshooting item	High input	Low input	Open or short circuit in signal circuit	Errati c signal input	Open or short circuit in signal circuit	Errati c signal input	Open or short circuit in signal circuit	Errati c signal input	Open or short circuit in signal circuit	High input	Low input	Open or short circuit in signal circuit
18	Knocking/pinging- acceleration/cruise	_	_		_		_		_	_	_	_	_
19	Poor fuel economy		_	_		_		_	_	_		_	_
20	Emission compliance						_						
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_	_	_	_	_
22	Cooling system concerns-overheating	_	_	_	_	_	_	_	_	_	_	_	_
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_	_		_
24	Excessive black smoke		_	_	_	_	_	_	_	_		_	_
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_	_	_	_
26	Engine noise	<u> </u>		_	_	_	_	_	_	_			_
27	Vibration concerns (engine)	×	×	_	_	_	_	_	_	_	_	_	_
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_	_	_
i-st	op related troubleshooting item	(See S	SYMPT	OM DIA	GNOSTI	C INDEX	([SKYA	CTIV-D 2	2.2].)		•		

					Co	ntrol s	ystem (l	PCM inp	out sign	al)			
		Refrig	jerant p sensc	oressure or	Chec k conn ector		switch TX)	inte	rter lock (MTX)		switch signal)		switch signal)
	Troubleshooting item	High input	Low input	Open or short circuit in signal circuit	Open circui t	Alwa ys on	Alwa ys off	Alwa ys on	Alwa ys off	Alwa ys on	Alwa ys off	Alwa ys on	Alwa ys off
1	Blown fuses	_	_	_	_	_	_	_		_	_	_	_
2	Check engine light illuminates	_	_	_	_	×	×	_	_	×	×	×	×
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_

					Co	ontrol sy	/stem (l	PCM inp	out sign	al)			
		Refrig	jerant p sensc	oressure or	Chec k conn ector		switch TX)	inte	rter rlock (MTX)		switch signal)	I	switch signal)
	Troubleshooting item	High input	Low input	Open or short circuit in signal circuit	Open circui t	Alwa ys on	Alwa ys off	Alwa ys on	Alwa ys off	Alwa ys on	Alwa ys off	Alwa ys on	Alwa ys off
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_	_
9	Will not crank	_	_	_	_	_	_	_	_	_	_	_	_
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	_	_	_	_	_	_	_	_	_
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_	_	_	_
12	Cranks normally but will not start	_	_	_	_	_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_	_	_	_
14	Fast idle/runs on	_	_	_	_	_	_	_	_	_	_	_	_
15	Low idle/stalls during deceleration	_	_	_	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough,	_	_	_	_	_	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	_	×	_	_	_	_	_	_	_	_	_	_
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_	_	_	_	_	_	_	_
19		_	_	_	_	_	_	_	_	_	_	_	_
20	Emission compliance	_	_					_	_	_	_		
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_	_	_	_	_
22	Cooling system concerns-overheating	_	_	_	_	_	_	_	_	_	_	_	_
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_	_	_	_
24		_	_	_	_	_	_	_	_	_	_	_	_

					Co	ntrol sy	/stem (l	PCM inp	out sign	al)			
		Refrig	erant p	oressure or	Chec k conn ector	_	switch TX)	inte	rter rlock (MTX)		switch signal)		switch signal)
	Fuel odor (in engine compartment)	High input	Low input	Open or short circuit in signal circuit	Open circui t	Alwa ys on	Alwa ys off	Alwa ys on	Alwa ys off	Alwa ys on	Alwa ys off	Alwa ys on	Alwa ys off
25	, ,	_	_	_	_	_	_	_	_	_	_	_	_
26	Engine noise	_	_	_	_	_	_	_	_	_	_	_	_
27	Vibration concerns (engine)	_	_	_	_	_	_	_	_	_	_	_	_
28	A/C does not work sufficiently	×	×	×	_	_	_	_	_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_	_	_
i-st	op related troubleshooting item	(See S	SYMPT	OM DIAG	NOSTIC	INDEX	[SKYA	CTIV-D	2.2].)				

			sig	m (PCM nal)	input		Contr	ol syste	m (PCM	output s	ignal)	
		1	switch		ip light (MTX)	Fan c		odule co cuit	ontrol	A/C	relay cir	cuit
	Troubleshooting item	Alway s on	Alway s off	Alway s on	Alway s off	Open circuit in power supply circuit	Contr ol signal circuit alway s on	Contr ol signal circuit alway s off	Open circuit in groun d circuit	Open circuit in circuit on coil side	Circuit on switch side consta ntly on	Circuit on switch side consta ntly off
1	Blown fuses	—	_	_	_	_	_	_	_	_	_	_
2	Check engine light illuminates	×	×	_	_	_	_	_	_	_	_	
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_	_	_

			ol syste sig	nal)	input		Contr	ol syste	m (PCM	output s	ignal)	
			switch		ip light (MTX)	Fan c	ontrol m	odule co	ontrol	A/C	relay cir	cuit
	Troubleshooting item	Alway s on	Alway s off	Alway s on	Alway s off	Open circuit in power supply circuit	Contr ol signal circuit alway s on	Contr ol signal circuit alway s off	Open circuit in groun d circuit	Open circuit in circuit on coil side	Circuit on switch side consta ntly on	Circuit on switch side consta ntly off
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
10	Will not crank Hard to start/long crank/ erratic start/erratic crank	_	_		_	_					<u> </u>	
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_	_	_
12	Cranks normally but will not start	_	_	_	_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_	_	_
14	Fast idle/runs on	_	_	_	_	_	_	_	_	_	_	_
15	Low idle/stalls during deceleration	_	_	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	_	_	_	_	_	_	_	_	_	×	_
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_	_	_	_	_	_	_
19	Poor fuel economy	_	_	_	_	_	×	_	_	_	×	_
20		_	<u> </u>	_	_	_	_	_	_	_	_	
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_	_	_	_
22	Cooling system concerns-overheating	_		_	_	×	_	×	×	_	×	_
23	Cooling system concerns-runs cold	_	_	_	_	_	×	_	_	_	_	_
24	Excessive black smoke	_	_	_	_		_	_	_	_		
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_	_	
26	Engine noise	_	_		_	_				_	_	
27	Vibration concerns (engine)	_					_	_		_	_	
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	×	_	×
29	A/C is always on or A/C compressor runs continuously	_	_	_		_	_	_	_	_	×	_
i-st	op related troubleshooting item	(See S	YMPTON	/I DIAGN	IOSTIC I	NDEX [S	KYACTI	V-D 2.2].	)			

					Contr	ol syste	m (PCM	output s	ignal)		. Not ap	plicable
		Gener ator contro I signal	Starte	er relay (	circuit	Blow-l	by heate circuit	r relay	Glow	control r sig	nodule d	control
	Troubleshooting item	Open or short circuit	Open circuit in circuit on coil side	Circui t on switch side const antly on	Circui t on switch side const antly off	Open circuit in circuit on coil side	Circui t on switch side const antly on	Circui t on switch side const antly off	Open circuit in power suppl y circuit	Contr ol signal circuit const antly energi zes (FET malfu nction )	Contr ol signal circuit alway s off	Open circuit in groun d circuit
1	Blown fuses Check engine light	_	_			_	_	_		_	_	_
2	illuminates	_	<u> </u>	_	_	_	_	_	×	×	×	×
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	
6	Master warning light illuminates	_	_	_	_	×	×	×	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	×	_	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
9	Will not crank	_	×	_	×	_	_	_	_	_	_	_
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	_	_	_	_	_	_	_	_
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_	_	_
12	Cranks normally but will not start	_	_	_	_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_	_	_
14	Fast idle/runs on	_		_	_	_			_			

					Contr	ol syste	m (PCM	output s	ignal)			
		Gener ator contro I signal	Starte	er relay o			by heate	-		control r sig	nodule o	control
	Troubleshooting item	Open or short circuit	Open circuit in circuit on coil side	Circui t on switch side const antly on	Circui t on switch side const antly off	Open circuit in circuit on coil side	Circui t on switch side const antly on	Circui t on switch side const antly off	Open circuit in power suppl y circuit	Contr ol signal circuit const antly energi zes (FET malfu nction	Contr ol signal circuit alway s off	Open circuit in groun d circuit
15	Low idle/stalls during deceleration	_	_	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	_	_	_	_	_	_	_	_	_	_	_
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_	_	_	_	_	_	_
19	Poor fuel economy	_	_	_	_	_	_	_	_	_	_	_
20	Emission compliance	_	_	_	_		_		_	_	_	_
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_	_	_	_
22	Cooling system concerns-overheating	_			_	_	_	_	_	_	_	
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_	_	_
24		_				_	_	_			_	
25	Fuel odor (in engine compartment)		_		_	_	_	_	_	_	_	_
26		_	_	_	_	_	_	_	_	_	_	_
27	Vibration concerns (engine)		_		_	_	_	_	_	_	_	_
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_	_
i-st	op related troubleshooting item	(See SY	/MPTON	DIAGNO	OSTIC IN	NDEX [SI	(YACTI\	/-D 2.2].)				

		systen output A/F s	ntrol n (PCM signal) ensor					lechanic	al ernal par	•		
		hea	ater				Lacii eii	giiie iiite	illai pai			,
	Troubleshooting item	Alway s on	Alway s off	Large mecha nical resist ance	Deviat ion in valve timing	High compr ession press ure	No compr ession in specifi c cylind er	No compr ession in all cylind ers	Bad compr ession in specifi c cylind er	Bad compr ession in all cylind ers	Oil worki ng up or down	Piston ring malfu nction
1	Blown fuses	_	_	_	_	_	_	_	_	_		_
2	Check engine light illuminates	×	×	_							_	_
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_		_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
9	Will not crank	_	_	_	_	_	_	_	_	_		
10	Hard to start/long crank/ erratic start/erratic crank	_	_	×	×	×	×	_	×	×	×	_
11	Engine stalls-after start/at idle	_	_	×	×	×	×	_	×	×	×	
12	Cranks normally but will not start	_	_	×	×	×	×	×	×	×	×	
13	Engine runs rough/rolling idle	_	_	×	×	×	×	_	×	×	×	
14			_	_	_		_				×	
15	Low idle/stalls during deceleration	_	_	×	×	×	×	_	×	×	×	
16	hesitation/stumble, surges	_	_	×	×	×	×	_	×	×	×	_
17	Lack/loss of power- acceleration/cruise	_	_	×	×	×	×	_	×	×	×	

		Con systen output A/F so hea	n (PCM signal) ensor				M Each en	lechanic		t		
	Troubleshooting item	Alway s on	Alway s off	Large mecha nical resist ance	Deviat ion in valve timing	High compr ession press ure	No compr ession in specifi c cylind er	No compr ession in all cylind ers	Bad compr ession in specifi c cylind er	Bad compr ession in all cylind ers	Oil worki ng up or down	Piston ring malfu nction
18	Knocking/pinging- acceleration/cruise	_	_	×	×	×	×	_	×	×	×	_
19	Poor fuel economy	_	_	×	×	×	×	_	×	×	×	_
20	Emission compliance	_	_	×	×	×	×	_	×	×	×	_
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_	_	_	×
22	Cooling system concerns-overheating	_	_	_	_	_	_	_	_	_	_	_
23	Cooling system concerns-runs cold	_		_	_	_	_	_	_	_	_	_
24	Excessive black smoke	_	_	_	_	_	_	_	_	_	_	_
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_	_	_
26	Engine noise	_	_	_	×	×	×	_	×	×	_	_
27	Vibration concerns (engine)	_	_	×	×	×	×	_	×	×	×	_
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_	_
i-st	op related troubleshooting item	(See S	/MPTON	/I DIAGN	OSTIC IN	NDEX [SI	KYACTI\	/-D 2.2].)				

						Mecha	nical				Lubrica tion system
	Troubleshooting item	oleshooting item OCV		1	w-by ater	En	gine oil sc	olenoid va	llve	Belts for engine access ories	Engine oil
		Alway s on	Alway s off	Alway s on	Alway s off	Open circuit in drive circuit	Short circuit in drive circuit	Valve stuck open	Valve stuck close		Inferior constit uent
1	Blown fuses	_	_	_	_	_	_	_	_	_	_
2	Check engine light illuminates	_	_	_	_	×	×	_	_	_	_
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_	×

						Mecha	nical				Lubrica tion system
	Troubleshooting item	00	ev		w-by ater		gine oil sc	olenoid va	ilve	Belts for engine access ories	Engine oil
		Alway s on	Alway s off	Alway s on	Alway s off	Open circuit in drive circuit	Short circuit in drive circuit	Valve stuck open	Valve stuck close	Slippag e	Inferior constit uent
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	×
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_		_	_	_	
6	Master warning light illuminates	_	_	×	×	_	_	×	×	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_		_	_	_	
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
9	Will not crank	_	_	_	_	_	_	_	_	_	_
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	_	_	_	_	_	_	
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_	_
12	Cranks normally but will not start		_	_		_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_	
14	Fast idle/runs on			_	_		_	<u> </u>	_	_	
15	Low idle/stalls during deceleration	_	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	×	_	_	_	_	_	_	_	_	_
18	Knocking/pinging-acceleration/cruise	×	_			_	_	_	_	_	_
19	Poor fuel economy	_	_	_	_	_	_	_	_	_	_
20	Emission compliance High oil consumption/		<u>×</u>			<u> </u>	_ _	<u> </u>	<u> </u>	_ _	
22	leakage Cooling system	_	_	_	_	_	_		_	_	
23	concerns-overheating Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_	_
24	Excessive black smoke	_	_	_	_	_	_	_	_	<del>  _</del>	_

						Mecha	nical				Lubrica tion system	
	Troubleshooting item	00	CV	I	w-by ater	En	gine oil sc	olenoid va	lve	Belts for engine access ories	Engine oil	
		Alway s on	Alway s off	Alway s on	Alway s off	Open circuit in drive circuit	Short circuit in drive circuit	Valve stuck open	Valve stuck close	Slippag e	Inferior constit uent	
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_	_	
26	Engine noise	_	_	_		_	_		_	×	_	
27	Vibration concerns (engine)	_	_	_	_	_	_		_	_	_	
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_	_	
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_	
i-st	op related troubleshooting item	(See S	(See SYMPTOM DIAGNOSTIC INDEX [SKYACTIV-D 2.2].)									

		Lubri	cation sy	/stem	Cooling system Chargin system		ging				
		E	Engine oi	il	_	coolant sage	Thern	nostat	Coolin g fan motor	Ba Does not	tery
	Troubleshooting item	Leakag e	Cloggi ng	Improp er level	Restric ted	Leakag e	Always open	Always close	Improp er operati on		No discha rge (deteri oration )
1	Blown fuses	_	_	_	_	_				_	_
2	Check engine light illuminates	_	_	_	_	_	_	_	_	_	_
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD		_	_	_	_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_	_

		Lubri	cation sy	/stem		Cod	oling sys	tem			ging tem
		E	Engine oi	il	_	coolant sage	Thern	nostat	Coolin g fan motor	Bat	tery
	Troubleshooting item	Leakag e	Cloggi ng	Improp er level	Restric ted	Leakag e	Always open	Always close	Improp er operati on	Does not charge	No discha rge (deteri oration )
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	×	×
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	×	×	×	_	_	_	_	_	_	_
9	Will not crank Hard to start/long crank/ erratic start/erratic crank	_		_	<u> </u>	_			_	<u>×</u>	<u>×</u>
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_	_
12	Cranks normally but will not start	_	_	_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_	_
14	Fast idle/runs on	_	_	_	_	_	_	_	_	_	_
15	Low idle/stalls during deceleration	_	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_	_
17	Lack/loss of power- acceleration/cruise	_	_	_	_	_	_	_	_	_	_
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_	_	_	_	_	_
	Poor fuel economy	_		_	_	_	_	_	_	_	_
20	Emission compliance	_				_	×		_	_	
21	High oil consumption/ leakage	_		_	_	_	_	_	_	_	_
22	Cooling system concerns-overheating	_	_	_	×	×	_	×	×	_	_
23	Cooling system concerns-runs cold	_	_	_	_	_	×	_	_	_	_
24	Excessive black smoke	_			_			_	_		_
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_	_
26	Engine noise	_		_		_		_	_	_	_
27	Vibration concerns (engine)	_	_	_	_	_	_	_	_	_	_
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_	_
	A/C is always on or A/C compressor runs continuously	_	_	_	_		_	_	_	_	_
i-st	op related troubleshooting item	(See SYI	МРТОМ [	DIAGNOS	TIC INDE	X [SKYA	CTIV-D 2.	2].)			

				Char	ging syst	em			Emission system		pplicable rx
	Troubleshooting item	(	Generato	r	Sta	rter	Glow	plug	Catalytic converte r (diesel particulat e filter)	A.	ΓF
		Low power genera tion voltage	No power genera tion	High power genera tion	Open/ short circuit in drive circuit	Interna I malfun ction	Alway s off	Alway s on	Deteriora tion or loss	Oil cooler restrict ion	Lack of ATF
1	Blown fuses	_	_	_	_	_	_	_	_	_	_
2	Check engine light illuminates	_	_	_	_	_	×	×	_	×	_
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	×	×	×	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
9	Will not crank	_	_	_	×	×	_	_	_	_	_
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	_	_	_	_	_	_	_
11	Engine stalls-after start/at idle	_	_	_	_				_		_
12	Cranks normally but will not start	_		_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_	_
14	Fast idle/runs on	_		_		_	_	_	_	_	_
15	Low idle/stalls during deceleration	_		_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_	_

				Char	ging syst	em			Emission system	A	гх
	Troubleshooting item		Generato	r		rter	Glow	plug	Catalytic converte r (diesel particulat e filter)	A <sup>-</sup>	ΤF
		Low power genera tion voltage	No power genera tion	High power genera tion	Open/ short circuit in drive circuit	Interna I malfun ction	Alway s off	Alway s on	Deteriora tion or loss	Oil cooler restrict ion	Lack of ATF
17	Lack/loss of power- acceleration/cruise	_	_	_	_	_	_	_	_	_	_
18	Knocking/pinging- acceleration/cruise	_	_	1	_	1		_	_	_	_
	Poor fuel economy		_		_			_	_	_	
20	Emission compliance	_			_		_	_	×	_	_
21	High oil consumption/ leakage	_	_	_	_	-	_	_	_	_	_
22	Cooling system concerns-overheating	_	_	_	_	_		_	_	_	_
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_	_
24	Excessive black smoke	_	_	_	_		_	_	_	_	_
25	Fuel odor (in engine compartment)	_		_		_	_	_		_	
26	Engine noise	_			_		_	_	_	_	_
27	Vibration concerns (engine)	_	_	_	_	_	_	_	_	_	_
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_
i-st	op related troubleshooting item	(See SYI	ИРТОМ [	DIAGNOS	TIC INDE	X [SKYA	CTIV-D 2	2.2].)			

			ATX					Other			
		Autor	matic tran	ısaxle	Engine mount	Instru ment cluster	Brake	Tire	Vehicle	electric	devices
-	Troubleshooting item	TCC non- operati on	Consta nt lockup	Abnor mal shift point	Loose ness	Improp er operati on	Drag	Low air pressu re	Remot e transm itter left in vehicle cabin	Large amoun t of parasit ic draw	Large power consu mption
1	Blown fuses	_	_	_	_	_	_	_	_	_	_
2	Check engine light illuminates	_	_		_	×	_	_		_	_

			ATX					Other			
		Autor	natic tran	saxle	Engine mount	Instru ment cluster	Brake	Tire	Vehicle	electric	devices
Т	roubleshooting item	TCC non- operati on	Consta nt lockup	Abnor mal shift point	Loose ness	Improp er operati on	Drag	Low air pressu re	Remot e transm itter left in vehicle cabin	Large amoun t of parasit ic draw	Large power consu mption
3	Diesel particulate filter indicator light illuminates frequently/ message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_		_	_			_		_	
4	Diesel particulate filter indicator light flashes/message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/ message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_		_	_
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_	_
7	Charging system warning light illuminates/ message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/ message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	×	_	_	_	_	_
9	Will not crank	_	_	_	_	_		_	_	_	
10	Hard to start/long crank/erratic start/erratic crank	_		_	_	_	_	_	_	_	
11	Engine stalls-after start/at idle	×	×	_	_	_	_	_	_	_	_
12	Cranks normally but will not start	_	_		_	_		_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_	_
14	Fast idle/runs on						_			_	_

			ATX					Other			
		Autor	natic tran	ısaxle	Engine mount	Instru ment cluster	Brake	Tire	Vehicle	electric	devices
Т	roubleshooting item	TCC non- operati on	Consta nt lockup	Abnor mal shift point	Loose ness	Improp er operati on	Drag	Low air pressu re	Remot e transm itter left in vehicle cabin	Large amoun t of parasit ic draw	Large power consu mption
15	Low idle/stalls during deceleration	_	×	_	_	_	_	_	_	_	_
16	Engine stalls/ quits, engine runs rough, misses, buck/jerk, hesitation/ stumble, surges	_	×	_	_	_	_	_	_	_	_
17	Lack/loss of power-acceleration/cruise	×	_	×	_	_	×	_	_	_	_
18	Knocking/pinging- acceleration/ cruise	_	_	_	_	_	_	_	_	_	_
19	Poor fuel economy	×	_	×	_	_	×	×	_	_	_
20	Emission compliance	_	_	_	_	_	_	_	_	_	_
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_	_	_
22	Cooling system concerns-overheating	_	_	_	_	_	_	_	_	_	_
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_	_
24	Excessive black smoke	_	_	_	_	_	_	_	_	_	_
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_	_
26	Engine noise	_	_	_	_	_	_	_	_	_	_
27	Vibration concerns (engine)	×	×	×	×	_	_	_	_	_	_
28	A/C does not work sufficiently	_	_	_	_	×	_	_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_
tro	i-stop related oubleshooting item	(See SY	MPTOM D	DIAGNOS	TIC INDE	X [SKYA0	CTIV-D 2.	2].)			

				Ot	her					i-stop		
	Troubleshooting item	A/C compr essor	Immo sys	bilizer	Advan ced keyles s entry syste m	Climat e contro I unit	Magn etic clutch	i-stop OFF signal		et latch itch	swite liftgate	latch ch or e latch itch
		Large mech anical resist ance	Impro per operat ion	gram med remot e trans mitter	Impro per operat ion	Impro per operat ion	Impro per operat ion	malfu nction	Stuck open	Stuck close	Stuck open	Stuck close
1	Blown fuses	_	_	_	_	_	_	_		_	_	_
2	Check engine light illuminates	_	_	_	_	_	_	_	_	_	_	_
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_	_	_
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_	_	_
9	Will not crank	×	×	×	×	_	_	_		_	_	_
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	_	_	_	_	_	_	_	_
11	Engine stalls-after start/at idle	×	_	_	_	_	_	_	_	_	_	_
12	Cranks normally but will not start	_	_	_	_	_	_	_	_	_	_	_
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_	_	_
14		_	_	_	_	_	_	_	_	_	_	_
15	Low idle/stalls during deceleration	×	_	_	_	_	_	_	_	_	_	_
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	×	_	_	_	_	_	_	_	_	_	_

			Other						i-stop					
	Troubleshooting item		Immo sys	bilizer tem	Advan ced keyles s entry syste m	Climat e contro I unit	Magn etic clutch	i-stop OFF		et latch itch	swite	latch ch or e latch itch		
			Impro per operat ion	Unpro gram med remot e trans mitter	Impro per operat ion	Impro per operat ion	Impro per operat ion	signal - malfu nction	Stuck open	Stuck close	Stuck open	Stuck close		
17	Lack/loss of power- acceleration/cruise	_	_	_	_	_	_	_	_	_	_	_		
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_	_	_	_	_	_	_		
19	Poor fuel economy	_	_	_	_	_	_	_	_	_	_	_		
20	Emission compliance	_	_	_	_	_	_	_	_	_	_	_		
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_	_		_		
22	Cooling system concerns-overheating	_	_	_	_	_	_	_	_	_	_	_		
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_	_	_		
24	Excessive black smoke	_	_	_	_	_	_	_	_	_	_	_		
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_	_	_		
26	Engine noise	_	_	_	_	_	_	_	_	_	_	_		
27	Vibration concerns (engine)	_	_	_	_	_	_	_	_	_	_	_		
28	A/C does not work sufficiently	_	_	_	_	×	×	_	_			_		
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_	_	_	_		
i-st	op related troubleshooting item	(See SY	MPTOM	DIAGN	OSTIC IN	IDEX [SI	KYACTIV	'-D 2.2].)						

					i-stop					
Troubleshooting item		False detection of driver-side buckle switch		Instru ment	Number of times i- stop function operates	Ambie nt temper ature sensor	Cabin temper ature sensor	Solar radiati on sensor	Driver-side air mix	Driver-side air mix actuator position sensor
	Troubleshooting item	Stuck off	Stuck	cluster malfun ction	exceeds assured operation amount of componen ts	Erratic signal input	Erratic signal input	Erratic signal input	actuator malfunctio n	Erratic signal input
1	Blown fuses	_	_	_	_	_	_	_	_	_
2	Check engine light illuminates	_	_	_	_	_	_	_	_	_

		i-stop										
	Troubleshooting item		lse tion of r-side switch	Instru ment	Number of times i- stop function operates	Ambie nt temper ature sensor	Cabin temper ature sensor	Solar radiati on sensor	Driver-side air mix	Driver-side air mix actuator position sensor		
			Stuck on	cluster malfun ction	exceeds assured operation amount of componen ts	Erratic signal input	Erratic signal input	Erratic signal input	actuator malfunctio n	Erratic signal input		
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_	_		
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_		
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_		
6	Master warning light illuminates	_	_	_	_	_	_	_	_	_		
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_	_		
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	×	_	_	_	_	_	_		
9	Will not crank	_	_	_	_	_	_	_	_	_		
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	_	_	_	_	-	_		
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_	_		
12	Cranks normally but will not start	_	_	_	_	_	_	_	_	_		
13	Engine runs rough/rolling idle	_	_	_	_	_	_	_	_	_		
14		_	_	_	_	_	_	_	_	_		
15	Low idle/stalls during deceleration	_	_	_	_	_	_	_	_	_		
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_	_		
17	Lack/loss of power- acceleration/cruise	_	_	_	_	_	_	_	_			
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_	_	_	_	_		
19	, , , , , , , , , , , , , , , , , , , ,	_	_	_	_	_	_	_		_		
20	Emission compliance	_		_	_	_	<u> </u>	_	_	_		

			i-stop										
	Troubleshooting item		False detection of driver-side buckle switch		Number of times istop function operates	Ambie nt temper ature sensor	Cabin temper ature sensor	Solar radiati on sensor	Driver-side air mix	Driver-side air mix actuator position sensor			
			Stuck on	cluster malfun ction	exceeds assured operation amount of componen ts	Erratic signal input	Erratic signal input	Erratic signal input	actuator malfunctio n	Erratic signal input			
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_	_			
22	Cooling system concerns-overheating	_	_	_	_		_	_	_	_			
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_	_			
24	Excessive black smoke	_	_	_	_	_	_	_	_	_			
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_	_			
26	Engine noise	_	_	_	_	_	_	_	_	_			
27	Vibration concerns (engine)	_	_	_	_	_	_	_	_	_			
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_	_			
29	continuously		_	_	_	_	_	_	_	_			
i-st	op related troubleshooting item	(See S	(See SYMPTOM DIAGNOSTIC INDEX [SKYACTIV-D 2.2].)										

		i-stop											
	Troubleshooting item	Steering angle sensor Erratic signal	Defroster switch malfuncti on	Low power brake unit load	Power brake unit vacuum sensor Erratic signal	Heater core temperat ure sensor malfuncti on	Battery manage ment system malfuncti on	Brake fluid pressure sensor (built- into DSC HU/CM)	M position switch malfuncti on (ATX) Erratic signal				
1	Blown fuses	input —			input —		_	_	input —				
2	Check engine light illuminates	_	_	_	_	_	_	_	_				
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_	_	_				
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_				
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_	_	_				

			i-stop										
	Troubleshooting item	Steering angle sensor Erratic signal input	Defroster switch malfuncti on	Low power brake unit load	Power brake unit vacuum sensor Erratic signal input	Heater core temperat ure sensor malfuncti on	Battery manage ment system malfuncti on	Brake fluid pressure sensor (built- into DSC HU/CM)	M position switch malfuncti on (ATX) Erratic signal input				
6	Master warning light	_	_	_	_	_	_	_	_				
7	illuminates Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_				
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_	_	_				
9	Will not crank		_	_		_	_	_	_				
10	Hard to start/long crank/ erratic start/erratic crank	_	_	_	_	_	_	_	_				
11	Engine stalls-after start/at idle	_	_	_	_	_	_	_	_				
12	Cranks normally but will not start	1	_	_	_	_	_	_	_				
13	Engine runs rough/rolling idle	_	_	_	_	_		_	_				
14	Fast idle/runs on		_	_	_	_	_	_	_				
15	Low idle/stalls during deceleration	_	_	_	_	_		_	_				
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_	_	_				
17	Lack/loss of power- acceleration/cruise		_	_	_	_	_	_	_				
18	Knocking/pinging- acceleration/cruise		_	_	_	_	_	_	_				
	Poor fuel economy	_	_	_	_	_	×	_	_				
20	Emission compliance		_	_		<u> </u>	_	_	_				
21	High oil consumption/ leakage	_	_	_	_	_	_	_	_				
22	Cooling system concerns-overheating	_	_	_	_	_	_	_	_				
23	Cooling system concerns-runs cold	_	_	_	_	_	_	_	_				
24	Excessive black smoke		_	_	_	_	_	_	_				
25	Fuel odor (in engine compartment)	_	_	_	_	_	_	_	_				
26		_	_	_	_	_	_	_	_				
27	Vibration concerns (engine)	_	_	_	_	_	_	_	_				
28	A/C does not work sufficiently	_	_	_	_	_	_	_	_				
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_	_	_				
i-st	op related troubleshooting item	(See SYMI	PTOM DIAG	NOSTIC INI	DEX [SKYA	CTIV-D 2.2]	.)						

		i-stop											
	Troubleshooting item	Low-G (XY) sensor (built- into SAS control module) Erratic signal input	TFT sensor (ATX) Erratic signal input	Electric AT oil pump malfunction (ATX)	DSC HU/CM malfunction	Generator drive belt wear	Ignition switch input (PCM terminal 2H)						
1	Blown fuses	—	_	_	_	<u> </u>	_						
2	Check engine light												
	illuminates	_	_	_	_	_	_						
3	Diesel particulate filter indicator light illuminates frequently/message "Soot Accumulation in DPF too high" is frequently indicated in TFT LCD	_	_	_	_	_	_						
4	Diesel particulate filter indicator light flashes/ message "DPF Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_						
5	Wrench indicator light illuminates/message "Drain Water from Fuel Filter" is indicated in TFT LCD	_	_	_	_	_	_						
6	Master warning light illuminates	_	_	_	_	_	_						
7	Charging system warning light illuminates/message "Charging System Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_						
8	Engine oil warning light illuminates/message "Engine Oil Pressure Inspection Required" is indicated in TFT LCD	_	_	_	_	_	_						
9	Will not crank	_	_	_	_	<del></del>	_						
10	Hard to start/long crank/ erratic start/erratic crank	_	_	<u> </u>	_	_	_						
11	Engine stalls-after start/at idle	_	_	<u> </u>	_	_	_						
12	Cranks normally but will not start	_	_	<u>—</u>	_	_	_						
13	Engine runs rough/rolling idle	_	_	_	_	_	_						
14	Fast idle/runs on	_	_		_	_	_						
15	Low idle/stalls during deceleration	_	_	<u> </u>	_	_	_						
16	Engine stalls/quits, engine runs rough, misses, buck/jerk, hesitation/stumble, surges	_	_	_	_	_	_						
17	Lack/loss of power- acceleration/cruise	_	_	_	_	_	_						
18	Knocking/pinging- acceleration/cruise	_	_	_	_	_	_						

				i-s	top		
	Troubleshooting item	Low-G (XY) sensor (built- into SAS control module)  TFT sensor (ATX)		Electric AT oil pump malfunction (ATX)	DSC HU/CM malfunction	Generator drive belt wear	Ignition switch input (PCM terminal 2H)
		Erratic signal input	Erratic signal input	(* )			Stuck on
19	Poor fuel economy	_	_	_	_	_	_
20	Emission compliance	_	_	_			_
21	High oil consumption/ leakage	_	_	_	_	_	_
22	Cooling system concerns-overheating	_		_	_	_	_
23	Cooling system concerns-runs cold	_	_	_	_	_	_
24	Excessive black smoke	_	_	_	_	_	_
25	Fuel odor (in engine compartment)	_		_	_	_	_
26	Engine noise	_		_	_	_	_
27	Vibration concerns (engine)	_	_	_	_	_	_
28	A/C does not work sufficiently	_		_	_	_	_
29	A/C is always on or A/C compressor runs continuously	_	_	_	_	_	_
i-st	op related troubleshooting item	(See SYMPTO	M DIAGNOSTIC	INDEX [SKYA	CTIV-D 2.2].)		