

OPERATION	VARIATION	OPERATION NUMBER	REPAIR TIME	INCLUDES
<b>F00 DIAGNOSIS</b>				
EGI SYSTEM, DRIVE MODE		F0009XDX	0.5	
DTC READING BY DIAGNOSTIC TOOL		F9999XDX	0.2	
The labor operation for DIAGNOSTIC TOOLS usage (F9999*-*~*) can be applied only when the diagnosis requires the NGS/WDS/PDS/IDS tester to read the Diagnostic Trouble Code for fuel and emission control system components.				
<b>F01 INTAKE AIR SYSTEM</b>				
INTAKE MANIFOLD, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve]/[SKYACTIV-G 1.5,With Coolant Control Valve]	F0101ARX	0.9	◆ Intake manifold gasket (F0102), R&R ◆ Throttle body gasket (F0108), R&R
INTAKE MANIFOLD, R&R	SKYACTIV-D 1.5,Without i-ELOOP system	F0101BRX	2.4	◆ Intake manifold gasket (F0102), R&R
INTAKE MANIFOLD, R&R	SKYACTIV-D 1.5,With i-ELOOP system	F0101CRX	2.5	◆ Intake manifold gasket (F0102), R&R
INTAKE MANIFOLD GASKET, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve]/[SKYACTIV-G 1.5,With Coolant Control Valve]	F0102ARX	0.8	
INTAKE MANIFOLD GASKET, R&R	SKYACTIV-D 1.5,Without i-ELOOP system	F0102BRX	2.3	
INTAKE MANIFOLD GASKET, R&R	SKYACTIV-D 1.5,With i-ELOOP system	F0102CRX	2.4	
AIR CLEANER ASSEMBLY, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Without i-stop]/[SKYACTIV-D 1.5]	F0105ARX	0.3	

## ILLUSTRATION

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AIR CLEANER ASSEMBLY, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,With i-stop]	F0105BRX	0.4	
AIR CLEANER ELEMENT, R&R		F0106XRX	0.2	
THROTTLE BODY, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Without i-stop]	F0107ARX	0.5	◆Throttle body gasket (F0108), R&R
THROTTLE BODY, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,With i-stop]	F0107BRX	0.6	◆Throttle body gasket (F0108), R&R
THROTTLE BODY GASKET, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Without i-stop]	F0108ARX	0.5	
THROTTLE BODY GASKET, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,With i-stop]	F0108BRX	0.6	
CHARGE AIR COOLER, R&R	Without i-ELOOP system	F0110ARX	2.4	◆Intake manifold gasket (F0102), R&R
CHARGE AIR COOLER, R&R	With i-ELOOP system	F0110BRX	2.5	◆Intake manifold gasket (F0102), R&R
TURBOCHARGER ASSEMBLY AND/OR GASKET, R&R	Turbocharger,6MT,Without i-ELOOP system	F0111ARX	4.9	◆Front crossmember assembly, R&R
TURBOCHARGER ASSEMBLY AND/OR GASKET, R&R	Turbocharger,6MT,With i-ELOOP system	F0111BRX	5.0	◆Front crossmember assembly, R&R
TURBOCHARGER ASSEMBLY AND/OR GASKET, R&R	Turbocharger,6AT,Without i-ELOOP system	F0111CRX	5.0	◆Front crossmember assembly, R&R

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TURBOCHARGER ASSEMBLY AND/OR GASKET, R&R	Turbocharger,6AT,With i-ELOOP system	F0111GRX	5.1	◆Front crossmember assembly, R&R
TURBOCHARGER ASSEMBLY AND/OR GASKET, R&R	Turbocharger gasket,6MT,Without i-ELOOP system	F0111DRX	4.6	◆Front crossmember assembly, R&R
TURBOCHARGER ASSEMBLY AND/OR GASKET, R&R	Turbocharger gasket,6MT,With i-ELOOP system	F0111HRX	4.7	◆Front crossmember assembly, R&R
TURBOCHARGER ASSEMBLY AND/OR GASKET, R&R	Turbocharger gasket,6AT,Without i-ELOOP system	F0111ERX	4.8	◆Front crossmember assembly, R&R
TURBOCHARGER ASSEMBLY AND/OR GASKET, R&R	Turbocharger gasket,6AT,With i-ELOOP system	F0111FRX	4.9	◆Front crossmember assembly, R&R
INTAKE AIR DUCT, R&R		F0117XRX	0.2	
INTAKE AIR PIPE, R&R	Air inlet pipe	F0126ARX	0.2	
INTAKE AIR PIPE, R&R	Turbocharger air outlet pipe	F0126BRX	0.5	
FRESH AIR DUCT, R&R		F0131XRX	0.3	
RESONANCE CHAMBER AND/OR AIR HOSE, R&R	Without i-stop	F0132ARX	0.2	
RESONANCE CHAMBER AND/OR AIR HOSE, R&R	With i-stop	F0132BRX	0.3	
INTAKE AIR SHUTTER VALVE, R&R	Without i-ELOOP system	F0136XRX	1.0	
INTAKE AIR SHUTTER VALVE, R&R	With i-ELOOP system	F0136ARX	1.1	
<b>F02 EXHAUST SYSTEM</b>				
EXHAUST MANIFOLD GASKET, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5 (with 4-1 exhaust system),Without Coolant Control Valve,With i-stop]/[SKYACTIV-G 1.5 (with 4-1 exhaust system),With Coolant Control Valve,With i-stop]	F0202ARX	1.1	
EXHAUST MANIFOLD GASKET, R&R	[SKYACTIV-G 1.5 (with 4-1 exhaust system),Without Coolant Control Valve,Without i-stop]/[SKYACTIV-G 1.5 (with 4-1 exhaust system),With Coolant Control Valve,Without i-stop]	F0202BRX	1.0	

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OPERATION	VARIATION	OPERATION NUMBER	REPAIR TIME	INCLUDES
EXHAUST MANIFOLD GASKET, R&R	[SKYACTIV-G 1.5 (with 4-2-1 exhaust system),Without Coolant Control Valve]/[SKYACTIV-G 1.5 (with 4-2-1 exhaust system),With Coolant Control Valve]	F0202CRX	1.4	
FRONT EXHAUST PIPE GASKET [ALL], R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,With i-stop]	F0203ARX	0.6	
FRONT EXHAUST PIPE GASKET [ALL], R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Without i-stop]	F0203BRX	0.5	
FRONT EXHAUST PIPE GASKET [ALL], R&R	SKYACTIV-D 1.5	F0203CRX	0.6	
GASKET [TURBOCHARGER TO JOINT EXHAUST PIPE], R&R	6MT,Without i-ELOOP system	F0204CRX	4.1	◆Front crossmember assembly, R&R
GASKET [TURBOCHARGER TO JOINT EXHAUST PIPE], R&R	6MT,With i-ELOOP system	F0204DRX	4.1	◆Front crossmember assembly, R&R
GASKET [TURBOCHARGER TO JOINT EXHAUST PIPE], R&R	6AT,Without i-ELOOP system	F0204ARX	4.2	◆Front crossmember assembly, R&R
GASKET [TURBOCHARGER TO JOINT EXHAUST PIPE], R&R	6AT,With i-ELOOP system	F0204BRX	4.3	◆Front crossmember assembly, R&R
MIDDLE PIPE, R&R		F0207XRX	0.7	
MAIN SILENCER, R&R		F0210XRX	0.4	
EXHAUST MANIFOLD HEAT INSULATOR, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5 (with 4-1 exhaust system),Without Coolant Control Valve]/[SKYACTIV-G 1.5 (with 4-1 exhaust system),With Coolant Control Valve]	F0213ARX	0.4	
EXHAUST MANIFOLD HEAT INSULATOR, R&R	SKYACTIV-G 1.5 (with 4-2-1 exhaust system),Without Coolant Control Valve,Without i-stop	F0213BRX	0.6	

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EXHAUST MANIFOLD HEAT INSULATOR, R&R	[SKYACTIV-G 1.5 (with 4-2-1 exhaust system),Without Coolant Control Valve,With i-stop]/[SKYACTIV-G 1.5 (with 4-2-1 exhaust system),With Coolant Control Valve]	F0213CRX	0.7	
HANGER, R&R	One	F0214ARX	0.2	
HANGER, R&R	All	F0214BRX	0.4	
INSULATOR [UPPER SIDE], R&R	All,Without i-stop	F0218ARX	0.6	
INSULATOR [UPPER SIDE], R&R	All,With i-stop	F0218BRX	0.7	
MAIN SILENCER GASKET OR TAIL PIPE GASKET, R&R		F0220XRX	0.4	
MAIN SILENCER INSULATOR OR TAIL PIPE INSULATOR, R&R		F0224XRX	0.4	
EXHAUST SHUTTER VALVE, R&R		F0225XRX	0.5	
<b>F03 FUEL SYSTEM</b>				
FUEL PUMP AND/OR GAUGE GASKET, R&R	Fuel pump (Fuel tank side),Without i-stop	F0301ARX	0.8	
FUEL PUMP AND/OR GAUGE GASKET, R&R	Fuel pump (Fuel tank side),With i-stop	F0301BRX	0.9	
FUEL PUMP AND/OR GAUGE GASKET, R&R	High pressure fuel pump,Without i-stop	F0301CRX	0.8	
FUEL PUMP AND/OR GAUGE GASKET, R&R	High pressure fuel pump,With i-stop	F0301DRX	0.9	
FUEL FILTER, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,With i-stop]	F0302ARX	0.9	
FUEL FILTER, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Without i-stop]	F0302BRX	0.8	
FUEL FILTER, R&R	SKYACTIV-D 1.5	F0302CRX	0.6	

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FUEL DISTRIBUTOR [ALL], R&R	Without i-stop	F0303ARX	1.4	◆ Intake manifold gasket (F0102), R&R
FUEL DISTRIBUTOR [ALL], R&R	With i-stop	F0303BRX	1.5	◆ Intake manifold gasket (F0102), R&R
FUEL INJECTOR, INSULATOR, GROMMET AND/OR "O" RING [ALL], R&R	Without i-stop	F0304ARX	1.4	◆ Intake manifold gasket (F0102), R&R
FUEL INJECTOR, INSULATOR, GROMMET AND/OR "O" RING [ALL], R&R	With i-stop	F0304BRX	1.5	◆ Intake manifold gasket (F0102), R&R
PRESSURE REGULATOR, "O" RING AND/OR GASKET, R&R	Without i-stop	F0306ARX	0.8	
PRESSURE REGULATOR, "O" RING AND/OR GASKET, R&R	With i-stop	F0306BRX	0.9	
NOZZLE HOLDER ASSEMBLY/FUEL INJECTOR AND/OR GASKET, R&R	SKYACTIV-D 1.5,One	F0308ARX	1.6	◆ Fuel injection pipe (F0318), R&R
NOZZLE HOLDER ASSEMBLY/FUEL INJECTOR AND/OR GASKET, R&R	SKYACTIV-D 1.5,All	F0308BRX	1.8	◆ Fuel injection pipe (F0318), R&R
FUEL MAIN HOSE, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,With i-stop]	F0312ARX	0.5	
FUEL MAIN HOSE, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Without i-stop]	F0312BRX	0.4	
FUEL MAIN HOSE, R&R	SKYACTIV-D 1.5,Without i-ELOOP system	F0312CRX	0.5	
FUEL MAIN HOSE, R&R	SKYACTIV-D 1.5,With i-ELOOP system	F0312DRX	0.6	
FUEL RETURN HOSE, R&R	Without i-ELOOP system	F0313ARX	0.5	
FUEL RETURN HOSE, R&R	With i-ELOOP system	F0313BRX	0.6	
FUEL PUMP CONTROL UNIT, R&R	5HB	F0314XRX	0.5	
FUEL PUMP CONTROL UNIT, R&R	4SD	F0314ARX	0.4	

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FUEL PUMP RELAY, R&R		F0315XRX	0.2	
FUEL INJECTION PIPE [ALL], R&R		F0318XRX	1.1	
FUEL LEAK OFF PIPE AND/OR HOSE, R&R		F0321XRX	0.4	
COMMON RAIL, R&R		F0326XRX	1.6	
LOWER CASE, R&R		F0330XRX	0.7	
<b>F04 CARBURETOR &amp; INJECTION PUMP/SUPPLY PUMP</b>				
INJECTION PUMP/SUPPLY PUMP, R&R	Without i-ELOOP system	F0402ARX	1.2	
INJECTION PUMP/SUPPLY PUMP, R&R	With i-ELOOP system	F0402BRX	1.3	
SUCTION CONTROL VALVE, R&R		F0432XRX	0.4	
<b>F05 FUEL TANK &amp; PIPINGS</b>				
FUEL TANK, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5, Without Coolant Control Valve]/[SKYACTIV-G 1.5, With Coolant Control Valve]	F0501ARX	1.9	◆Fuel pump assembly, R&R
FUEL TANK, R&R	SKYACTIV-D 1.5	F0501BRX	1.9	
FILLER CAP, R&R		F0502XRX	0.2	
FILLER PIPE ASSEMBLY, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5, Without Coolant Control Valve]/[SKYACTIV-G 1.5, With Coolant Control Valve]	F0503ARX	1.3	
FILLER PIPE ASSEMBLY, R&R	SKYACTIV-D 1.5	F0503BRX	1.4	
FILLER PIPE DUST COVER, R&R		F0504XRX	0.3	
JOINT HOSE [FILLER PIPE TO JOINT PIPE OR FUEL TANK], R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5, Without Coolant Control Valve]/[SKYACTIV-G 1.5, With Coolant Control Valve]	F0505ARX	1.1	
JOINT HOSE [FILLER PIPE TO JOINT PIPE OR FUEL TANK], R&R	SKYACTIV-D 1.5	F0505BRX	1.2	
FUEL FILLER LID, R&R		F0508XRX	0.2	
FUEL FILLER LID OPENER, R&R	5HB	F0509ARX	0.8	
FUEL FILLER LID OPENER, R&R	4SD	F0509BRX	0.2	

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FUEL FILLER LID OPENER CABLE, R&R	5HB, Without i-stop	F0511ARX	0.8	
FUEL FILLER LID OPENER CABLE, R&R	5HB, With i-stop	F0511BRX	0.9	
FUEL FILLER LID OPENER CABLE, R&R	4SD	F0511CRX	0.8	
<b>F06 EMISSION 1/2</b>				
CHARCOAL CANISTER, R&R		F0601XRX	0.3	
SOLENOID VALVE ASSEMBLY, R&R	Turbocharger solenoid valve, Without i-ELOOP system	F0607ARX	0.6	
SOLENOID VALVE ASSEMBLY, R&R	Turbocharger solenoid valve, With i-ELOOP system	F0607BRX	0.6	
POSITIVE CRANKCASE VENTILATION [PCV] VALVE, R&R	[SKYACTIV-G 1.5, Without Coolant Control Valve, Without i-stop]/[SKYACTIV-G 1.5, With Coolant Control Valve, Without i-stop]	F0609ARX	0.8	◆ Intake manifold gasket (F0102), R&R
POSITIVE CRANKCASE VENTILATION [PCV] VALVE, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5, Without Coolant Control Valve, With i-stop]/[SKYACTIV-G 1.5, With Coolant Control Valve, With i-stop]	F0609BRX	0.9	◆ Intake manifold gasket (F0102), R&R
VACUUM CHECK VALVE, R&R		F0611XRX	0.2	
EGR VALVE AND/OR GASKET, R&R	HP-EGR control valve	F0619ARX	0.8	
EGR VALVE AND/OR GASKET, R&R	LP-EGR control valve	F0619BRX	1.1	
PURGE SOLENOID VALVE, R&R	[SKYACTIV-G 1.5, Without Coolant Control Valve, Without i-stop]/[SKYACTIV-G 1.5, With Coolant Control Valve, Without i-stop]	F0621ARX	0.4	
PURGE SOLENOID VALVE, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5, Without Coolant Control Valve, With i-stop]/[SKYACTIV-G 1.5, With Coolant Control Valve, With i-stop]	F0621BRX	0.5	



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<b>EGR COOLER, R&amp;R</b>	6MT,Without i-ELOOP system	F0631CRX	3.9	◆Front crossmember assembly, R&R
<b>EGR COOLER, R&amp;R</b>	6MT,With i-ELOOP system	F0631DRX	4.0	◆Front crossmember assembly, R&R
<b>EGR COOLER, R&amp;R</b>	6AT,Without i-ELOOP system	F0631ARX	4.0	◆Front crossmember assembly, R&R
<b>EGR COOLER, R&amp;R</b>	6AT,With i-ELOOP system	F0631BRX	4.1	◆Front crossmember assembly, R&R
<b>F07 EMISSION 2/2</b>				
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	SKYACTIV-G 1.3,Warm up three way catalytic converter	F0702ARX	1.5	
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	SKYACTIV-G 1.5 (with 4-1 exhaust system),Without Coolant Control Valve,Warm up three way catalytic converter,Without i-stop	F0702BRX	1.4	
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	SKYACTIV-G 1.5 (with 4-1 exhaust system),Without Coolant Control Valve,Warm up three way catalytic converter,With i-stop	F0702CRX	1.5	
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	SKYACTIV-G 1.5 (with 4-1 exhaust system),With Coolant Control Valve,Warm up three way catalytic converter,Without i-stop	F0702PRX	1.4	
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	SKYACTIV-G 1.5 (with 4-1 exhaust system),With Coolant Control Valve,Warm up three way catalytic converter,With i-stop	F0702LRX	1.5	
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	SKYACTIV-G 1.5 (with 4-2-1 exhaust system),Without Coolant Control Valve,Warm up three way catalytic converter	F0702DRX	2.7	◆Front crossmember assembly, R&R

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OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	SKYACTIV-G 1.5 (with 4-2-1 exhaust system),With Coolant Control Valve,Warm up three way catalytic converter,Without i-ELOOP system	F0702MRX	2.7	◆Front crossmember assembly, R&R
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	SKYACTIV-G 1.5 (with 4-2-1 exhaust system),With Coolant Control Valve,Warm up three way catalytic converter,With i-ELOOP system	F0702NRX	2.8	◆Front crossmember assembly, R&R
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	[SKYACTIV-G 1.3,Three way catalytic converter]/[SKYACTIV-G 1.5,Without Coolant Control Valve,Three way catalytic converter,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Three way catalytic converter,With i-stop]	F0702ERX	0.6	
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Three way catalytic converter,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Three way catalytic converter,Without i-stop]	F0702FRX	0.5	
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	SKYACTIV-D 1.5,Diesel particulate filter,Without i-ELOOP system	F0702GRX	4.2	◆Front crossmember assembly, R&R
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	SKYACTIV-D 1.5,Diesel particulate filter,With i-ELOOP system	F0702HRX	4.3	◆Front crossmember assembly, R&R
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	SKYACTIV-D 1.5,Oxidation catalytic converter,Without i-ELOOP system	F0702JRX	4.4	◆Front crossmember assembly, R&R
OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R	SKYACTIV-D 1.5,Oxidation catalytic converter,With i-ELOOP system	F0702KRX	4.5	◆Front crossmember assembly, R&R

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VENTILATION HOSE [TO CHARCOAL CANISTER], R&R		F0707XRX	0.3	
VENTILATION HOSE [PCV], R&R		F0708XRX	0.8	◆ Intake manifold gasket (F0102), R&R
EGR PIPE AND/OR GASKET, R&R	HP-EGR control valve side,EGR pipe No.1	F0710ARX	0.3	
EGR PIPE AND/OR GASKET, R&R	HP-EGR control valve side,EGR pipe No.2	F0710BRX	0.8	◆ EGR valve (F0619), R&R [HP-EGR control valve]
EGR PIPE AND/OR GASKET, R&R	LP-EGR control valve side,Without i-ELOOP system	F0710DRX	0.4	
EGR PIPE AND/OR GASKET, R&R	LP-EGR control valve side,With i-ELOOP system	F0710CRX	0.5	
<b>F08 EMISSION CONTROLS</b>				
VOLUME/MASS AIR FLOW SENSOR, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Without i-stop]	F0801ARX	0.4	◆ Idle speed, Check (A0106)
VOLUME/MASS AIR FLOW SENSOR, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,With i-stop]	F0801BRX	0.5	◆ Idle speed, Check (A0106)
VOLUME/MASS AIR FLOW SENSOR, R&R	SKYACTIV-D 1.5	F0801CRX	0.7	
INTAKE AIR TEMPERATURE SENSOR, R&R	Intake air temperature sensor No.2 (Intake manifold side)	F0803XRX	0.4	
BOOST SENSOR, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Without i-stop]	F0805ARX	0.2	

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BOOST SENSOR, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,With i-stop]	F0805BRX	0.3	
BOOST SENSOR, R&R	SKYACTIV-D 1.5,Manifold absolute pressure sensor	F0805CRX	0.3	
CRANKSHAFT POSITION SENSOR, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Without i-stop]	F0807ARX	0.5	◆ Ignition timing, Check (A0108)
CRANKSHAFT POSITION SENSOR, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,With i-stop]	F0807BRX	0.6	◆ Ignition timing, Check (A0108)
CRANKSHAFT POSITION SENSOR, R&R	SKYACTIV-D 1.5	F0807CRX	0.8	
MAIN RELAY, R&R		F0809XRX	0.2	
ENGINE COOLANT TEMPERATURE SENSOR, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve]	F0810ARX	0.7	
ENGINE COOLANT TEMPERATURE SENSOR, R&R	SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.1,Without i-stop	F0810LRX	0.7	
ENGINE COOLANT TEMPERATURE SENSOR, R&R	SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.1,With i-stop	F0810CRX	0.8	
ENGINE COOLANT TEMPERATURE SENSOR, R&R	SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.2,5MT,PCM cover with standard bolts	F0810DRX	1.2	

## ILLUSTRATION

OPERATION	VARIATION	OPERATION NUMBER	REPAIR TIME	INCLUDES
ENGINE COOLANT TEMPERATURE SENSOR, R&R	SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.2,5MT,PCM cover with shear-off bolts	F0810ERX	1.3	
ENGINE COOLANT TEMPERATURE SENSOR, R&R	[SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.2,6MT,PCM cover with standard bolts]/[SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.2,6MT,PCM cover with shear-off bolts,Without i-stop]	F0810FRX	1.2	
ENGINE COOLANT TEMPERATURE SENSOR, R&R	SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.2,6MT,PCM cover with shear-off bolts,With i-stop,Without i-ELOOP system	F0810GRX	1.3	
ENGINE COOLANT TEMPERATURE SENSOR, R&R	SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.2,6MT,PCM cover with shear-off bolts,With i-stop,With i-ELOOP system	F0810HRX	1.4	
ENGINE COOLANT TEMPERATURE SENSOR, R&R	[SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.2,6AT,PCM cover with standard bolts,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.2,6AT,PCM cover with shear-off bolts,Without i-stop]	F0810JRX	1.3	

## ILLUSTRATION

OPERATION	VARIATION	OPERATION NUMBER	REPAIR TIME	INCLUDES
ENGINE COOLANT TEMPERATURE SENSOR, R&R	SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.2,6AT,PCM cover with standard bolts,Without i-stop	F0810MRX	1.2	
ENGINE COOLANT TEMPERATURE SENSOR, R&R	SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.2,6AT,PCM cover with shear-off bolts,With i-stop	F0810KRX	1.4	
ENGINE COOLANT TEMPERATURE SENSOR, R&R	SKYACTIV-G 1.5,With Coolant Control Valve,Engine coolant temperature (ECT) sensor No.2,6MT,PCM cover with shear-off bolts,With i-stop,With Mazda M Hybrid	F0810NRX	1.5	
ENGINE COOLANT TEMPERATURE SENSOR, R&R	SKYACTIV-D 1.5	F0810BRX	0.7	
A/F SENSOR/OXYGEN SENSOR, R&R	[SKYACTIV-G 1.3,A/F sensor]/[SKYACTIV-G 1.5,Without Coolant Control Valve,A/F sensor]/[SKYACTIV-G 1.5,With Coolant Control Valve,A/F sensor]	F0811ARX	0.3	
A/F SENSOR/OXYGEN SENSOR, R&R	[SKYACTIV-G 1.3,Oxygen sensor]/[SKYACTIV-G 1.5,Without Coolant Control Valve,Oxygen sensor]/[SKYACTIV-G 1.5,With Coolant Control Valve,Oxygen sensor]	F0811BRX	0.4	
A/F SENSOR/OXYGEN SENSOR, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,All,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,All,Without i-stop]	F0811CRX	0.4	

## ILLUSTRATION

OPERATION	VARIATION	OPERATION NUMBER	REPAIR TIME	INCLUDES
A/F SENSOR/OXYGEN SENSOR, R&R	[SKYACTIV-G 1.3,All]/[SKYACTIV-G 1.5,Without Coolant Control Valve,All,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,All,With i-stop]	F0811DRX	0.5	
A/F SENSOR/OXYGEN SENSOR, R&R	SKYACTIV-D 1.5,A/F sensor	F0811ERX	0.8	
POWERTRAIN CONTROL MODULE [PCM], R&R	SKYACTIV-G 1.3	F0812ARX	0.6	
POWERTRAIN CONTROL MODULE [PCM], R&R	SKYACTIV-G 1.5,Without Coolant Control Valve,PCM cover with standard bolts,Without i-stop	F0812BRX	0.5	
POWERTRAIN CONTROL MODULE [PCM], R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,PCM cover with standard bolts,With i-stop,Without i-ELOOP system]/[SKYACTIV-G 1.5,With Coolant Control Valve,PCM cover with standard bolts,With i-stop,Without i-ELOOP system]	F0812CRX	0.6	
POWERTRAIN CONTROL MODULE [PCM], R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,PCM cover with standard bolts,With i-stop,With i-ELOOP system]/[SKYACTIV-G 1.5,With Coolant Control Valve,PCM cover with standard bolts,With i-stop,With i-ELOOP system]	F0812MRX	0.7	
POWERTRAIN CONTROL MODULE [PCM], R&R	SKYACTIV-G 1.5,With Coolant Control Valve,PCM cover with standard bolts,Without i-stop	F0812NRX	0.5	
POWERTRAIN CONTROL MODULE [PCM], R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,PCM cover with shear-off bolts,Without i-stop,Without i-ELOOP system]/[SKYACTIV-G 1.5,With Coolant Control Valve,PCM cover with shear-off bolts,Without i-stop]	F0812DRX	0.6	

## ILLUSTRATION

OPERATION	VARIATION	OPERATION NUMBER	REPAIR TIME	INCLUDES
POWERTRAIN CONTROL MODULE [PCM], R&R	SKYACTIV-G 1.5,Without Coolant Control Valve,PCM cover with shear-off bolts,Without i-stop,With i-ELOOP system	F0812KRX	0.8	
POWERTRAIN CONTROL MODULE [PCM], R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,PCM cover with shear-off bolts,With i-stop,Without i-ELOOP system]/[SKYACTIV-G 1.5,With Coolant Control Valve,PCM cover with shear-off bolts,With i-stop,Without i-ELOOP system]	F0812ERX	0.7	
POWERTRAIN CONTROL MODULE [PCM], R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,PCM cover with shear-off bolts,With i-stop,With i-ELOOP system]/[SKYACTIV-G 1.5,With Coolant Control Valve,PCM cover with shear-off bolts,With i-stop,With i-ELOOP system]	F0812LRX	0.9	
POWERTRAIN CONTROL MODULE [PCM], R&R	SKYACTIV-G 1.5,With Coolant Control Valve,PCM cover with standard bolts,With i-stop,With Mazda M Hybrid	F0812PRX	0.6	
POWERTRAIN CONTROL MODULE [PCM], R&R	SKYACTIV-D 1.5,PCM cover with standard bolts,Procedure for PCM replacement (pattern 1)	F0812FRX	0.6	
POWERTRAIN CONTROL MODULE [PCM], R&R	SKYACTIV-D 1.5,PCM cover with standard bolts,Procedure for PCM replacement (pattern 2)	F0812GRX	1.2	
POWERTRAIN CONTROL MODULE [PCM], R&R	SKYACTIV-D 1.5,PCM cover with shear-off bolts,Procedure for PCM replacement (pattern 1)	F0812HRX	0.8	
POWERTRAIN CONTROL MODULE [PCM], R&R	SKYACTIV-D 1.5,PCM cover with shear-off bolts,Procedure for PCM replacement (pattern 2)	F0812JRX	1.4	



## ILLUSTRATION

OPERATION	VARIATION	OPERATION NUMBER	REPAIR TIME	INCLUDES
KNOCK SENSOR, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Without i-stop]	F0815ARX	0.8	◆Intake manifold gasket (F0102), R&R
KNOCK SENSOR, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,With i-stop]	F0815BRX	0.9	◆Intake manifold gasket (F0102), R&R
NEUTRAL SWITCH, R&R	One	F0816XRX	0.3	
NEUTRAL SWITCH, R&R	All	F0816ARX	0.4	
CAMSHAFT POSITION SENSOR, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Intake side,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Intake side,Without i-stop]	F0822ARX	0.8	◆Intake manifold gasket (F0102), R&R
CAMSHAFT POSITION SENSOR, R&R	[SKYACTIV-G 1.3]/[SKYACTIV-G 1.5,Without Coolant Control Valve,Intake side,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Intake side,With i-stop]	F0822BRX	0.9	◆Intake manifold gasket (F0102), R&R
CAMSHAFT POSITION SENSOR, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Exhaust side,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Exhaust side,Without i-stop]	F0822CRX	0.2	
CAMSHAFT POSITION SENSOR, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,Exhaust side,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,Exhaust side,With i-stop]	F0822DRX	0.3	

## ILLUSTRATION

OPERATION	VARIATION	OPERATION NUMBER	REPAIR TIME	INCLUDES
CAMSHAFT POSITION SENSOR, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,All,Without i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,All,Without i-stop]	F0822ERX	0.8	◆Intake manifold gasket (F0102), R&R
CAMSHAFT POSITION SENSOR, R&R	[SKYACTIV-G 1.5,Without Coolant Control Valve,All,With i-stop]/[SKYACTIV-G 1.5,With Coolant Control Valve,All,With i-stop]	F0822FRX	0.9	◆Intake manifold gasket (F0102), R&R
CAMSHAFT POSITION SENSOR, R&R	SKYACTIV-D 1.5	F0822GRX	0.3	
ACCELERATOR PEDAL OR PAD, R&R	Without i-stop	F0823ARX	0.2	
ACCELERATOR PEDAL OR PAD, R&R	With i-stop	F0823BRX	0.3	
EXHAUST GAS TEMPERATURE SENSOR, R&R	Exhaust gas temperature sensor No.1	F0838ARX	0.8	
EXHAUST GAS TEMPERATURE SENSOR, R&R	Exhaust gas temperature sensor No.2	F0838BRX	0.4	
EXHAUST GAS TEMPERATURE SENSOR, R&R	Exhaust gas temperature sensor No.3	F0838CRX	0.5	
EXHAUST GAS TEMPERATURE SENSOR, R&R	Exhaust gas temperature sensor No.4	F0838DRX	0.5	
EXHAUST GAS PRESSURE SENSOR, R&R	Exhaust gas pressure sensor No.1	F0839ARX	0.3	
EXHAUST GAS PRESSURE SENSOR, R&R	Exhaust gas pressure sensor No.2	F0839BRX	0.7	