

| OPERATION | VARIATION | OPERATION NUMBER | REPAIR TIME | INCLUDES |
|---|---|---------------------|-------------|--|
| F00 DIAGNOSIS | | | | |
| 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. | | | | |
| F01 INTAKE AIR SYSTEM | | | | |
| INTAKE MANIFOLD, R&R | SKYACTIV-G 2.5 | F0101ARX | 0.9 | ◆Intake manifold gasket (F0102), R&R ◆Throttle body gasket (F0108), R&R |
| INTAKE MANIFOLD, R&R | SKYACTIV-D 2.2 | F0101XRX | 2.3 | ◆Intake manifold gasket (F0102), R&R |
| INTAKE MANIFOLD GASKET, R&R | SKYACTIV-G 2.5 | F0102ARX | 0.8 | |
| INTAKE MANIFOLD GASKET, R&R | SKYACTIV-D 2.2 | F0102XRX | 2.2 | |
| AIR CLEANER ASSEMBLY, R&R | SKYACTIV-G 2.5 | F0105ARX | 0.4 | |
| AIR CLEANER ASSEMBLY, R&R | SKYACTIV-D 2.2 | F0105XRX | 0.3 | |
| AIR CLEANER ELEMENT, R&R | | F0106XRX | 0.2 | |
| THROTTLE BODY, R&R | | F0107XRX | 0.6 | ◆Throttle body gasket (F0108), R&R |
| THROTTLE BODY GASKET, R&R | | F0108XRX | 0.6 | |
| CHARGE AIR COOLER, R&R | Without 360°view monitor system | F0110ARX | 0.9 | ◆Front bumper assembly, R&R |
| CHARGE AIR COOLER, R&R | With 360°view monitor system,360°view monitor system screen display verification only | F0110BRX | 1.1 | ◆Front bumper assembly, R&R |
| CHARGE AIR COOLER, R&R | With 360°view monitor system,360°view monitor system screen display verification and 360°view monitor system aiming | F0110CRX | 1.1 | ◆Front bumper assembly, R&R |
| TURBOCHARGER ASSEMBLY AND/OR GASKET, R&R | Turbocharger,2WD | F0111ARX | 4.4 | ◆Front crossmember assembly, R&R |
| TURBOCHARGER ASSEMBLY AND/OR GASKET, R&R | Turbocharger,4WD | F0111BRX | 6.0 | ◆Front crossmember assembly, R&R |
| TURBOCHARGER ASSEMBLY AND/OR GASKET, R&R | Turbocharger gasket,2WD | F0111CRX | 4.1 | ◆Front crossmember assembly, R&R |

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| TURBOCHARGER ASSEMBLY AND/OR GASKET, R&R | Turbocharger gasket,4WD | F0111DRX | 5.7 | ◆Front crossmember assembly, R&R |
| TURBOCHARGER BRACKET, R&R | | F0113XRX | 2.9 | ◆Front crossmember assembly, R&R |
| INTAKE AIR DUCT, R&R | | F0117XRX | 0.2 | |
| CHARGE AIR COOLER BRACKET, R&R | Without 360°view monitor system | F0125ARX | 1.0 | ◆Front bumper assembly, R&R |
| CHARGE AIR COOLER BRACKET, R&R | With 360°view monitor system,360°view monitor system screen display verification only | F0125BRX | 1.1 | ◆Front bumper assembly, R&R |
| CHARGE AIR COOLER BRACKET, R&R | With 360°view monitor system,360°view monitor system screen display verification and 360°view monitor system aiming | F0125CRX | 1.2 | ◆Front bumper assembly, R&R |
| INTAKE AIR PIPE, R&R | Air inlet pipe | F0126ARX | 0.4 | |
| INTAKE AIR PIPE, R&R | Turbocharger air inlet pipe | F0126BRX | 0.4 | |
| INTAKE AIR PIPE, R&R | Turbocharger air outlet pipe component | F0126CRX | 0.5 | |
| INTAKE AIR PIPE, R&R | Charge air cooler air inlet pipe | F0126DRX | 0.7 | |
| INTAKE AIR PIPE, R&R | Charge air cooler air outlet pipe | F0126ERX | 0.5 | |
| FRESH AIR DUCT, R&R | | F0131XRX | 0.3 | |
| RESONANCE CHAMBER AND/OR AIR HOSE, R&R | | F0132XRX | 0.3 | |
| INTAKE AIR SHUTTER VALVE, R&R | | F0136XRX | 1.1 | |
| F02 EXHAUST SYSTEM | | | | |
| EXHAUST MANIFOLD, R&R | 2WD | F0201ARX | 4.4 | ◆Front crossmember assembly, R&R◆ Turbocharger assembly and/or gasket (F0111), R&R [Turbocharger gasket] |
| EXHAUST MANIFOLD, R&R | 4WD | F0201BRX | 6.0 | ◆Front crossmember assembly, R&R◆ Turbocharger assembly and/or gasket (F0111), R&R [Turbocharger gasket] |
| EXHAUST MANIFOLD GASKET, R&R | SKYACTIV-G 2.5,2WD | F0202CRX | 1.5 | |
| EXHAUST MANIFOLD GASKET, R&R | SKYACTIV-G 2.5,4WD | F0202DRX | 2.0 | |
| EXHAUST MANIFOLD GASKET, R&R | SKYACTIV-D 2.2,2WD | F0202ARX | 4.4 | ◆Front crossmember assembly, R&R◆ Turbocharger assembly and/or gasket (F0111), R&R [Turbocharger gasket] |

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| EXHAUST MANIFOLD GASKET, R&R | SKYACTIV-D 2.2,4WD | F0202BRX | 6.0 | ◆Front crossmember assembly, R&R◆ Turbocharger assembly and/or gasket (F0111), R&R [Turbocharger gasket] |
| FRONT EXHAUST PIPE GASKET [ALL], R&R | SKYACTIV-G 2.5,2WD | F0203CRX | 1.0 | |
| FRONT EXHAUST PIPE GASKET [ALL], R&R | SKYACTIV-G 2.5,4WD | F0203DRX | 0.7 | |
| FRONT EXHAUST PIPE GASKET [ALL], R&R | SKYACTIV-D 2.2,2WD | F0203ARX | 0.9 | |
| FRONT EXHAUST PIPE GASKET [ALL], R&R | SKYACTIV-D 2.2,4WD | F0203BRX | 0.4 | |
| GASKET [TURBOCHARGER TO JOINT EXHAUST PIPE], R&R | 2WD | F0204ARX | 2.9 | ◆Front crossmember assembly, R&R |
| GASKET [TURBOCHARGER TO JOINT EXHAUST PIPE], R&R | 4WD | F0204BRX | 2.9 | ◆Front crossmember assembly, R&R |
| MIDDLE PIPE, R&R | 2WD | F0207ARX | 0.9 | |
| MIDDLE PIPE, R&R | 4WD | F0207BRX | 0.4 | |
| MAIN SILENCER, R&R | | F0210XRX | 0.4 | |
| EXHAUST MANIFOLD HEAT INSULATOR, R&R | 2WD | F0213ARX | 0.8 | |
| EXHAUST MANIFOLD HEAT INSULATOR, R&R | 4WD | F0213BRX | 1.5 | |
| HANGER, R&R | One | F0214ARX | 0.2 | |
| HANGER, R&R | All | F0214BRX | 0.5 | |
| INSULATOR [UPPER SIDE], R&R | SKYACTIV-G 2.5,2WD | F0218CRX | 1.2 | |
| INSULATOR [UPPER SIDE], R&R | SKYACTIV-G 2.5,4WD | F0218DRX | 1.3 | ◆Propeller shaft assembly (L0101), R&R |
| INSULATOR [UPPER SIDE], R&R | SKYACTIV-D 2.2,2WD | F0218ARX | 1.1 | |
| INSULATOR [UPPER SIDE], R&R | SKYACTIV-D 2.2,4WD | F0218BRX | 1.5 | ◆Propeller shaft assembly (L0101), R&R |
| MAIN SILENCER GASKET OR TAIL PIPE GASKET, R&R | | F0220XRX | 0.4 | |
| MAIN SILENCER INSULATOR OR TAIL PIPE INSULATOR, R&R | | F0224XRX | 0.5 | |

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| F03 FUEL SYSTEM | | | | |
| FUEL PUMP AND/OR GAUGE GASKET, R&R | High pressure fuel pump | F0301ARX | 0.9 | |
| FUEL PUMP AND/OR GAUGE GASKET, R&R | Fuel pump (Fuel tank side) | F0301BRX | 1.1 | |
| FUEL FILTER, R&R | SKYACTIV-G 2.5,2WD,Captain type second-row seat | F0302ARX | 1.1 | |
| FUEL FILTER, R&R | SKYACTIV-G 2.5,2WD,Bench type second-row seat,RHD | F0302BRX | 1.1 | |
| FUEL FILTER, R&R | SKYACTIV-G 2.5,2WD,Bench type second-row seat,LHD | F0302CRX | 1.2 | |
| FUEL FILTER, R&R | SKYACTIV-G 2.5,4WD | F0302DRX | 1.2 | |
| FUEL FILTER, R&R | SKYACTIV-D 2.2 | F0302XRX | 1.0 | |
| FUEL DISTRIBUTOR [ALL], R&R | | F0303XRX | 1.5 | ◆Intake manifold gasket (F0102), R&R |
| FUEL INJECTOR, INSULATOR, GROMMET AND/OR "O" RING [ALL], R&R | | F0304XRX | 1.5 | ◆Intake manifold gasket (F0102), R&R |
| PRESSURE REGULATOR, "O" RING AND/OR GASKET, R&R | 2WD | F0306ARX | 1.1 | |
| PRESSURE REGULATOR, "O" RING AND/OR GASKET, R&R | 4WD,Captain type second-row seat | F0306BRX | 1.1 | |
| PRESSURE REGULATOR, "O" RING AND/OR GASKET, R&R | 4WD,Bench type second-row seat | F0306CRX | 1.2 | |
| NOZZLE HOLDER ASSEMBLY/FUEL INJECTOR AND/OR GASKET, R&R | One | F0308ARX | 1.1 | ◆Fuel injection pipe (F0318), R&R |
| NOZZLE HOLDER ASSEMBLY/FUEL INJECTOR AND/OR GASKET, R&R | All | F0308BRX | 1.3 | ◆Fuel injection pipe (F0318), R&R |
| FUEL MAIN HOSE, R&R | SKYACTIV-G 2.5 | F0312ARX | 0.4 | |
| FUEL MAIN HOSE, R&R | SKYACTIV-D 2.2 | F0312XRX | 0.5 | |
| FUEL RETURN HOSE, R&R | | F0313XRX | 0.4 | |
| FUEL PUMP CONTROL UNIT, R&R | | F0314XRX | 0.4 | |
| FUEL PUMP RELAY, R&R | | F0315XRX | 0.3 | |
| FUEL INJECTION PIPE [ALL], R&R | | F0318XRX | 1.0 | |
| INJECTION PIPE CLIP [ALL], R&R | | F0320XRX | 0.9 | |

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| FUEL LEAK OFF PIPE AND/OR HOSE, R&R | | F0321XRX | 0.3 | |
| COMMON RAIL, R&R | | F0326XRX | 1.4 | ◆Fuel injection pipe (F0318), R&R |
| LOWER CASE, R&R | | F0330XRX | 1.2 | |
| F04 CARBURETOR & INJECTION PUMP/SUPPLY PUMP | | | | |
| INJECTION PUMP/SUPPLY PUMP, R&R | | F0402XRX | 1.7 | |
| F05 FUEL TANK & PIPINGS | | | | |
| FUEL TANK, R&R | SKYACTIV-G 2.5,2WD | F0501CRX | 2.5 | ◆Fuel pump assembly, R&R |
| FUEL TANK, R&R | SKYACTIV-G 2.5,4WD | F0501DRX | 3.3 | ◆Fuel pump assembly, R&R◆Propeller shaft assembly (L0101), R&R |
| FUEL TANK, R&R | SKYACTIV-D 2.2,2WD | F0501ARX | 2.4 | |
| FUEL TANK, R&R | SKYACTIV-D 2.2,4WD | F0501BRX | 3.2 | ◆Propeller shaft assembly (L0101), R&R |
| FILLER CAP, R&R | | F0502XRX | 0.2 | |
| FILLER PIPE ASSEMBLY, R&R | SKYACTIV-G 2.5 | F0503CRX | 1.5 | |
| FILLER PIPE ASSEMBLY, R&R | SKYACTIV-D 2.2,2WD | F0503ARX | 1.8 | |
| FILLER PIPE ASSEMBLY, R&R | SKYACTIV-D 2.2,4WD | F0503BRX | 2.2 | |
| FILLER PIPE DUST COVER, R&R | | F0504XRX | 0.2 | |
| JOINT HOSE [FILLER PIPE TO JOINT PIPE OR FUEL TANK], R&R | SKYACTIV-G 2.5 | F0505CRX | 1.1 | |
| JOINT HOSE [FILLER PIPE TO JOINT PIPE OR FUEL TANK], R&R | SKYACTIV-D 2.2,2WD | F0505ARX | 1.3 | |
| JOINT HOSE [FILLER PIPE TO JOINT PIPE OR FUEL TANK], R&R | SKYACTIV-D 2.2,4WD | F0505BRX | 1.6 | |
| FUEL FILLER LID, R&R | | F0508XRX | 0.2 | |
| FUEL FILLER LID OPENER, R&R | | F0509XRX | 0.5 | |
| FUEL FILLER LID OPENER CABLE, R&R | RHD | F0511XRX | 1.2 | |
| FUEL FILLER LID OPENER CABLE, R&R | LHD | F0511ARX | 1.1 | |
| F06 EMISSION 1/2 | | | | |
| CHARCOAL CANISTER, R&R | | F0601XRX | 0.3 | |
| SOLENOID VALVE ASSEMBLY, R&R | Compressor bypass solenoid valve | F0607XRX | 0.3 | |

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| POSITIVE CRANKCASE VENTILATION [PCV] VALVE, R&R | | F0609XRX | 0.9 | ◆Intake manifold gasket (F0102), R&R |
| VACUUM CHECK VALVE, R&R | | F0611XRX | 0.2 | |
| EGR VALVE AND/OR GASKET, R&R | EGR valve | F0619ARX | 1.0 | |
| EGR VALVE AND/OR GASKET, R&R | EGR cooler bypass valve | F0619BRX | 1.5 | |
| PURGE SOLENOID VALVE, R&R | | F0621XRX | 0.5 | |
| CHECK VALVE [FUEL EVAPORATIVE LINE], R&R | | F0630XRX | 0.5 | |
| EGR COOLER, R&R | | F0631XRX | 1.3 | |
| F07 EMISSION 2/2 | | | | |
| OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R | SKYACTIV-G 2.5,Warm up three way catalytic converter,2WD | F0702CRX | 2.6 | ◆Front crossmember assembly, R&R |
| OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R | SKYACTIV-G 2.5,Warm up three way catalytic converter,4WD | F0702DRX | 2.7 | ◆Front crossmember assembly, R&R |
| OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R | SKYACTIV-G 2.5,Three way catalytic converter,2WD | F0702ERX | 1.1 | |
| OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R | SKYACTIV-G 2.5,Three way catalytic converter,4WD | F0702FRX | 0.7 | |
| OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R | SKYACTIV-D 2.2,2WD | F0702ARX | 3.3 | ◆Front crossmember assembly, R&R |
| OXIDATION/THREE WAY/WARM UP THREE WAY CATALYTIC CONVERTER, R&R | SKYACTIV-D 2.2,4WD | F0702BRX | 3.3 | ◆Front crossmember assembly, R&R |
| VENTILATION HOSE [TO CHARCOAL CANISTER], R&R | | F0707XRX | 0.4 | |
| VENTILATION HOSE [PCV], R&R | | F0708XRX | 0.8 | ◆Intake manifold gasket (F0102), R&R |
| EGR PIPE AND/OR GASKET, R&R | EGR valve side | F0710ARX | 0.3 | |
| EGR PIPE AND/OR GASKET, R&R | EGR cooler bypass valve side | F0710BRX | 1.5 | |
| EGR PIPE AND/OR GASKET, R&R | Intake manifold side | F0710CRX | 2.2 | ◆Intake manifold gasket (F0102), R&R |

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| F08 EMISSION CONTROLS | | | | |
| VOLUME/MASS AIR FLOW SENSOR, R&R | SKYACTIV-G 2.5 | F0801ARX | 0.5 | ◆ Idle speed, Check (A0106) |
| VOLUME/MASS AIR FLOW SENSOR, R&R | SKYACTIV-D 2.2 | F0801XRX | 0.7 | |
| INTAKE AIR TEMPERATURE SENSOR, R&R | Boost air temperature sensor (Charge air cooler side), Without 360°view monitor system | F0803ARX | 0.5 | |
| INTAKE AIR TEMPERATURE SENSOR, R&R | Boost air temperature sensor (Charge air cooler side), With 360°view monitor system, 360°view monitor system screen display verification only | F0803BRX | 0.6 | |
| INTAKE AIR TEMPERATURE SENSOR, R&R | Boost air temperature sensor (Charge air cooler side), With 360°view monitor system, 360°view monitor system screen display verification and 360°view monitor system aiming | F0803CRX | 0.7 | |
| INTAKE AIR TEMPERATURE SENSOR, R&R | Intake air temperature sensor No.2 (Intake manifold side) | F0803DRX | 0.3 | |
| BOOST SENSOR, R&R | SKYACTIV-G 2.5 | F0805CRX | 0.3 | |
| BOOST SENSOR, R&R | SKYACTIV-D 2.2, Manifold absolute pressure sensor No.1 (Turbocharger side) | F0805ARX | 0.6 | |
| BOOST SENSOR, R&R | SKYACTIV-D 2.2, Manifold absolute pressure sensor No.2 (Intake manifold side) | F0805BRX | 0.3 | |
| CRANKSHAFT POSITION SENSOR, R&R | | F0807XRX | 0.6 | |
| MAIN RELAY, R&R | | F0809XRX | 0.3 | |
| ENGINE COOLANT TEMPERATURE SENSOR, R&R | SKYACTIV-G 2.5, Engine coolant temperature (ECT) sensor No.1 | F0810ARX | 0.8 | |
| ENGINE COOLANT TEMPERATURE SENSOR, R&R | SKYACTIV-G 2.5, Engine coolant temperature (ECT) sensor No.2 | F0810BRX | 1.2 | |
| ENGINE COOLANT TEMPERATURE SENSOR, R&R | SKYACTIV-D 2.2 | F0810XRX | 1.1 | |

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| A/F SENSOR/OXYGEN SENSOR, R&R | SKYACTIV-G 2.5,A/F sensor | F0811CRX | 0.4 | |
| A/F SENSOR/OXYGEN SENSOR, R&R | SKYACTIV-G 2.5,Oxygen sensor,2WD | F0811DRX | 0.9 | |
| A/F SENSOR/OXYGEN SENSOR, R&R | SKYACTIV-G 2.5,Oxygen sensor,4WD | F0811ERX | 0.6 | |
| A/F SENSOR/OXYGEN SENSOR, R&R | SKYACTIV-G 2.5,All,2WD | F0811FRX | 0.9 | |
| A/F SENSOR/OXYGEN SENSOR, R&R | SKYACTIV-G 2.5,All,4WD | F0811GRX | 0.7 | |
| A/F SENSOR/OXYGEN SENSOR, R&R | SKYACTIV-D 2.2,A/F sensor,2WD | F0811ARX | 0.6 | |
| A/F SENSOR/OXYGEN SENSOR, R&R | SKYACTIV-D 2.2,A/F sensor,4WD | F0811BRX | 0.8 | |
| POWERTRAIN CONTROL MODULE [PCM], R&R | SKYACTIV-G 2.5 | F0812CRX | 0.4 | |
| POWERTRAIN CONTROL MODULE [PCM], R&R | SKYACTIV-D 2.2,Procedure for PCM replacement (pattern 1) | F0812ARX | 0.5 | |
| POWERTRAIN CONTROL MODULE [PCM], R&R | SKYACTIV-D 2.2,Procedure for PCM replacement (pattern 2) | F0812BRX | 1.1 | |
| KNOCK SENSOR, R&R | | F0815XRX | 0.9 | ◆Intake manifold gasket (F0102), R&R |
| CAMSHAFT POSITION SENSOR, R&R | SKYACTIV-G 2.5,Intake side | F0822ARX | 0.9 | ◆Intake manifold gasket (F0102), R&R |
| CAMSHAFT POSITION SENSOR, R&R | SKYACTIV-G 2.5,Exhaust side | F0822BRX | 0.3 | |
| CAMSHAFT POSITION SENSOR, R&R | SKYACTIV-G 2.5,All | F0822CRX | 0.9 | ◆Intake manifold gasket (F0102), R&R |
| CAMSHAFT POSITION SENSOR, R&R | SKYACTIV-D 2.2 | F0822XRX | 0.3 | |
| ACCELERATOR PEDAL OR PAD, R&R | | F0823XRX | 0.3 | |
| EXHAUST GAS TEMPERATURE SENSOR, R&R | Exhaust gas temperature sensor No.1 | F0838ARX | 0.5 | |
| EXHAUST GAS TEMPERATURE SENSOR, R&R | Exhaust gas temperature sensor No.2 | F0838BRX | 0.5 | |
| EXHAUST GAS TEMPERATURE SENSOR, R&R | Exhaust gas temperature sensor No.3 | F0838CRX | 0.4 | |
| 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 | 0.4 | |