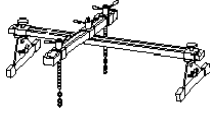

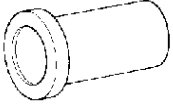
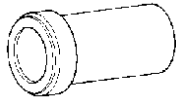
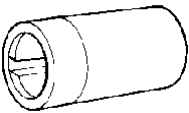
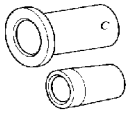
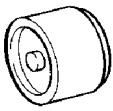
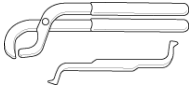
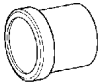
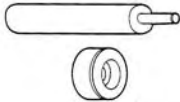

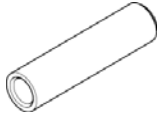
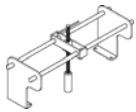
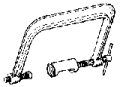
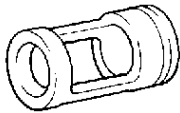
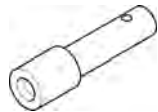
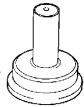

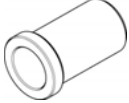
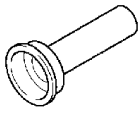



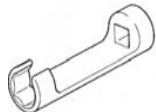
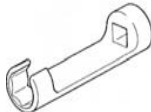
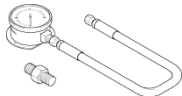
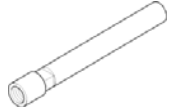
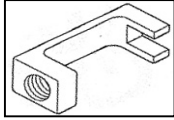
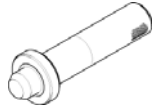
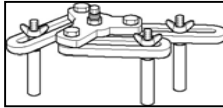




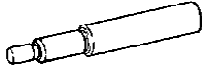



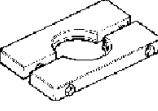

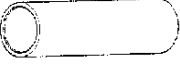
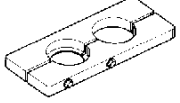
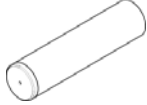
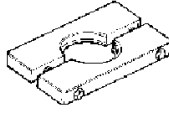

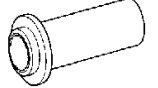
05' SPORTAGE


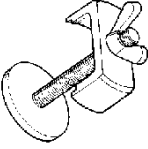

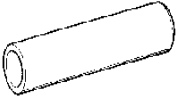
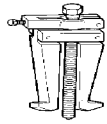


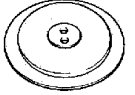
05' SPORTAGE					EM	AT	EMA	EMB	FLA	CH	MT	AT	BD	ST	RT	HA	DS	BR	SS	USE	
No	Tool No.	Tool Name	Illustration	GRADE	2.0 D4EA		2.0 G4G C	2.7 G6BA			M5G F1	F4A 42									
1	09200-38001	ENGINE SUPPORT FIXTURE		D								o									Removal and installation of transaxle
2	09212-27100	CAMSHAFT OIL SEAL INSTALLER		A	o																Installation of the camshaft oil seal
3	09214-21000	CRANKSHAFT FRONT OIL SEAL GUIDE		A			o														Installation of the camshaft oil seal
4	09214-32000	CRANKSHAFT FRONT OIL SEAL INS.		A			o														Installation of the front oil seal
5	09214-32100	CRANKSHAFT FRONT OIL SEAL GUIDE		A			o														Installation of the front oil seal
6	09214-33000	CRANKSHAFT FRONT OIL SEAL INSTALLER		A			o														Installation of the front oil seal
7	09216-21000	MOUNT BUSHING R & I ARBOR		C																o	Removal & installation of lower arm bushing(G)
8	09220-2D000	VALVE CLEARANCE ADAPTER TOOL SET		B			o														Removal and installation of the tappet shim

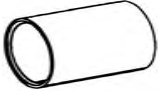
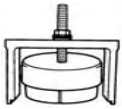
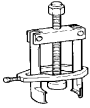



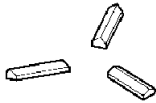
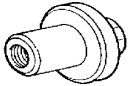

05' SPORTAGE				EM	AT	EMA	EMB	FLA	CH	MT	AT	BD	ST	RT	HA	DS	BR	SS	USE	
9	09221-21000	CAM SHAFT OIL SEAL INS.		A			o													Installation of the camshaft oil seal
10	09221-3F100	VALVE GUIDE REMOVER & INSTALLER		C			o													Removal and installation of the valve guide
11	09222-22001	VALVE STEM OIL SEAL INS.		A			o													Installation of the valve stem oil seal
12	09222-27200	VALVE STEM OIL SEAL INS.		A	o															Installation of valve stem oil seals
13	09222-27300	VALVE SPRING COMPRESSOR		A	o															Removal and installation of intake and exhaust valves
14	09222-28000	VALVE SPRING COMPRESSOR(구매)		C			o													Removal and installation of the intake or exhaust valve
15	09222-28100	VALVE SPRING COMP. HOLDER		C			o													Removal and installation of the intake or exhaust valve
16	09222-32100	VALVE STEM SEAL INSTALLER		A									o							Installing the pinion gear bearing
17	09231-21000	CRANK SHAFT REAR OIL SEAL INS.		A			o													Installation of the crankshaft rear oil seal

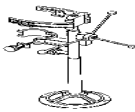

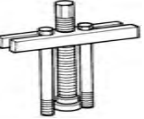
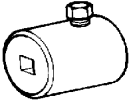
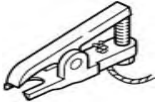
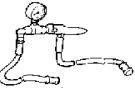
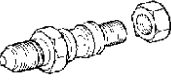
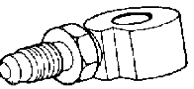

05' SPORTAGE				EM	AT	EMA	EMB	FLA	CH	MT	AT	BD	ST	RT	HA	DS	BR	SS	USE	
18	09231-27000	CRANK SHAFT REAR OIL SEAL INS.		A	○															Installation of the crankshaft rear oil seal
19	09231-27100	CRANK SHAFT FRONT OIL SEAL INS.		A	○															Installation of the front case oil seal
20	09231-33000	CRANK SHAFT REAR OIL SEAL INS.		A			○													1. Installation of the engine rear oil seal 2. Installation of the crankshaft rear oil seal
21	09263-27000	OIL FILTER WRENCH (CRDI-D:EXCEPT EUROPE LHD)		A	○															Removal and installation of oil filter
22	09263-27100	OIL FILTER WRENCH (CRDI-D:EUROPE LHD ONLY)		A	○															Removal and installation of oil filter
23	09263-2E000	OIL FILTER WRENCH		A	○															Removal and installation of oil filter for Europe LHD
24	09314-27110	Torque wrench socket		B	○															Installing the high pressure pipe(14MM)
25	09314-27120	Torque wrench socket		B	○															Installing the high pressure pipe(17MM)
26	09351-27000	COMPRESSION GAUGE		A	○															Checking engine compression pressure


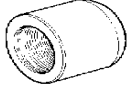

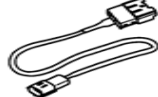
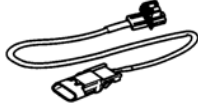
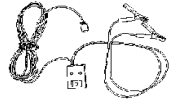

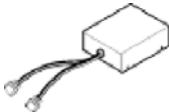

05' SPORTAGE				EM	AT	EMA	EMB	FLA	CH	MT	AT	BD	ST	RT	HA	DS	BR	SS	USE	
27	09351-27100	COMPRESSION GAUGE ADAPTER		A	o															Checking engine compression pressure
28	09351-27210	Injector Remover Adapter		B			o													Removing the injector
29	09351-27401	INJECTOR OIL SEAL INSTALLER		A	o															Installation of the injector oil seal
30	09351-4A200	Removing the Injector		B	o															Removing the injector
31	09351-4A300	INJECTOR REMOVER																		Removal of Injector
32	09353-24000	FUEL PRESSURE GAUGE ADAPTER		A				o												Connection between the Fuel Pressure Gauge(09353-24100) and Adapter(09353-38000)
33	09353-24100	FUEL PRESSURE GAUGE		A				o												Measuring the fuel line pressure
34	09353-38000	FUEL PRESSURE GAUGE ADAPTER		A				o												Connection between the delivery pipe and fuel feed line
35	09411-11000	CLUTCH DISC GUIDE		B					o											Installation of the clutch disc


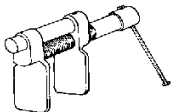

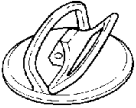

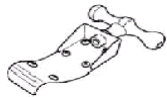

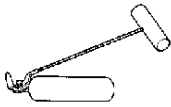

05' SPORTAGE				EM	AT	EMA	EMB	FLA	CH	MT	AT	BD	ST	RT	HA	DS	BR	SS	USE
36	09431-39000	OIL SEAL INSTALLER									o								Installation of differential oil seal (use with 09500-11000)
37	09432-21300	BEARING REMOVING PLATE									o								REMOVAL OF INPUT/OUTPUT SHAFT ROLLER BEARING
38	09432-21601	BEARING INSTALLER											o						Installing the pinion gear bearing
39	09432-22000	BEARING INSTALLER									o								INSTALLATION OF INPUT SHAT GEAR AND SLEEVE
40	09432-33200	REMOVE PLATE										o							Removal of 4WD coupling flange oil seal
41	09432-H1000	BEARING INSTALLER										o							Removal of input/out put shaft bearing
42	09433-21000	REMOVING PLATE											o						1. Removal of transfer driven gear taper bearing(use with 09432-33800) 2. Removal of differential ball bearing
43	09434-14200	COUNTER SHAFT BEARING INS.												o					Installing the gear box oil seal
44	09452-21200	OIL PUMP OIL SEAL INSTALLER										o							Installation of the oil pump oil seal

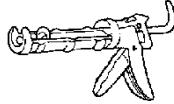
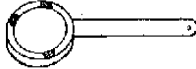

05' SPORTAGE				EM	AT	EMA	EMB	FLA	CH	MT	AT	BD	ST	RT	HA	DS	BR	SS	USE	
45	09452-33100	OIL PUMP REMOVER									O									Removal of the oil pump
46	09453-21000	SNAP RING/ SPRING COMPRESSOR									O									1. Removal of installation of low and reverse brake snap ring 2. Removal and installation of overdrive clutch snap ring(use with 09456-39000)
47	09453-21100	SPRING COMPRESSOR									O									Removal and installation of the low and reverse brake snap ring(use with 09453-21000)
48	09455-21100	BEARING INSTALLER								O										Installation of differential ball bearing
49	09455-32200 (OK011 190 008)	OIL SEAL PULLER								O										Removal of differential bearing spacer
50	09455-33200	BEARING INSTALLER									O									Installation of differential ball bearing and out put shaft taper roller bearing
51	09456-39000	SPRING COMPRESSOR									O									Removal and installation of low and reverse brake overdrive clutch snap ring
52	09456-39100	A/B CLEARANCE DUMMY PLATE									O									Measurement of the low and recerse brake and second brake end plays

05' SPORTAGE				EM	AT	EMA	EMB	FLA	CH	MT	AT	BD	ST	RT	HA	DS	BR	SS	USE
53	09478-26000	OIL SEAL INSTALLER		A							o								Installation of 4WD coupling flange oil seal
54	09478-26100	BACK PLATE REMOVER		A							o								Removal of 4WD coupling Back plate
55	09495-33000	BEARING & GEAR PULLER		B												o			Removal of wheel bearing inner race from a hub
56	09495-33100	BEARING INSTALLER		B						o									Installation of input shaft bearing
57	09500-11000	BAR		A						o									Installation of differential bearing outer race(use with 09532-11500)
58	09517-43401	WORKING BASE		C												o			Support for the differential carrier
59	09517-43500	WORKING BASE ADAPTER		C												o			Support for the differential carrier
60	09529-21000	WHEEL ALIGNMENT GAUGE ATTACHMENT (Trailing Arm Bushing Remover & Installer)		C														o	Removal & installation of trailing arm bushing
61	09532-11500	BEARING INSTALLER		C							o								Installation of differential bearing outer race(use with 09500-11000)

05' SPORTAGE				EM	AT	EMA	EMB	FLA	CH	MT	AT	BD	ST	RT	HA	DS	BR	SS	USE	
62	09546-26000	COIL COMPRESSOR		D															O	Compression of the coil spring
63	09555-21000	BAR		C									O							Removing & installing the oil seal
64	09561-11002	STEERING WHEEL PULLER		D									O							Removing the steering wheel
65	09565-11100	PRELOAD SOCKET		B									O							Measuring the mainshaft preload
66	09568-34000	BALL JOINT PULLER		B													O			Separation of lower arm and a tie rod end ball joint
67	09572-21000	P/S OIL PRESSURE GAUGE		A									O							Measuring the power steering oil pressure (use with 09572-21200,09572-22100)
68	09572-21200	P/S OIL PRESSURE GAUGE ADAPTER		A									O							Measuring the power steering oil pressure (use with 09572-21000,09572-22100)
69	09572-22100	OIL PRESSURE GAUGE ADAPTER		A									O							Measuring the power steering oil pressure (use with 09572-21000,09572-21200)
70	09573-21000	INSTALLER GUIDE		C									O							Installing the back-up washer and oil seal (use with 09573-21100,09573-21200,09517-11000,09555-21000)

05' SPORTAGE				EM	AT	EMA	EMB	FLA	CH	MT	AT	BD	ST	RT	HA	DS	BR	SS	USE	
71	09573-21100	OIL SEAL INSTALLER												o						Installing the back-up washer and oil seal (use with 09573-21000,09573-21200,09555-21000)
72	09573-21200	OIL SEAL GUIDE												o						Removing & installing the gear box oil seal and back washer (use with 09573-21000, 09555-21000, 09573-21000)
73	0957A-1C000	DUMMY ADAPTER(DAB,BPT,CAB)													o					Use with dummy (DAB,CAB,BPT)
74	0957A-2E200	DUMMY ADAPTER														o				Use with dummy (BUPT)
75	0957A-2E210	DEPLOYMENT ADAPTER														o				Use with deployment tool (BUPT)
76	0957A-34100A	AIR BAG DEPLOYMENT TOOL														o				Airbag deployment tool
77	0957A-38100	DEPLOYMENT ADAPTER															o			Use with deployment tool (PAB,SAB)
78	0957A-38200	DUMMY																		Simulator to check the resistance of each wiring harness
79	0957A-38300	DUMMY ADAPTER																		Use with dummy (PAB,SAB)

05' SPORTAGE				EM	AT	EMA	EMB	FLA	CH	MT	AT	BD	ST	RT	HA	DS	BR	SS	USE
80	0957A-38500	DEPLOYMENT ADAPTER		B										o					Use with deployment tool (DAB,CAB,BPT)
81	09581-11000	PISTON EXPENDER		D															Spreading the front disc brake piston
82	09861-31000	WINDSHILD GLASS HOLDING REMOVER		D									o				o		Removal of the windshield molding
83	09861-31400	GLASS HOLDER		D									o						Removal and installation of the windshield
84	09800-21000	ORNAMENT REMOVER		D									o						Trim removal
85	09840-1E100	CENTER FASCIA REMOVER																	Removal of Center Fascia
86	09853-31000	HEAD LINING CLIP REMOVER		D									o						Removal of the feadliner clip
87	09861-31100	SEALANT CUT-OUT TOOL		D									o						Cutting the sealant of the windshield (use with 09861-31200)
88	09861-31200	SEALANT CUTTING BLADE		D									o						Cutting the sealant of the windshield (use with 09861-31100)

05' SPORTAGE				EM	AT	EMA	EMB	FLA	CH	MT	AT	BD	ST	RT	HA	DS	BR	SS	USE	
89	09861-31300	SEALANT GUN		D									o							Application of the sealant to the windshield
90	09977-29000	PRESSURE PLATE BOLT REM.		C												o				Removal and installation of pressure plate
91	OK000 005 AA0	WIRE HARNESS REPAIR KIT II UPGRADE(STANDARD)																		Repair Wire Harness