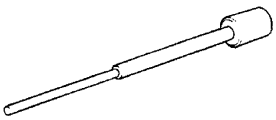
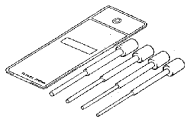
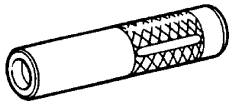
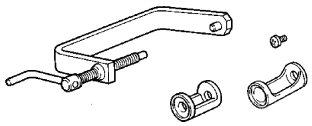
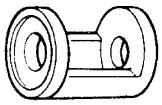
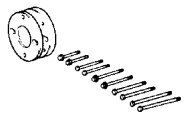
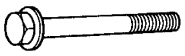
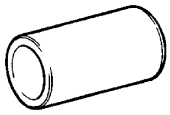
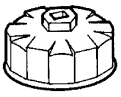
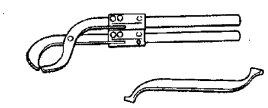
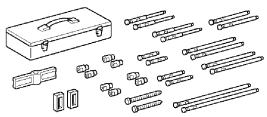
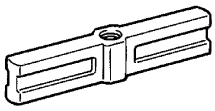
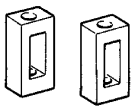
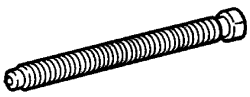
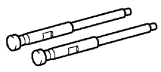
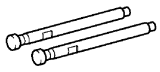
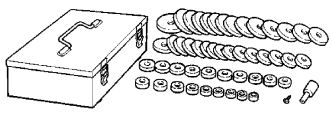
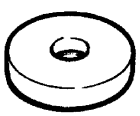
ENGINE MECHANICAL

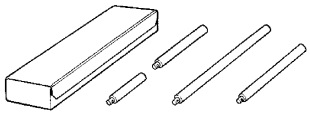
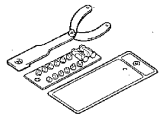
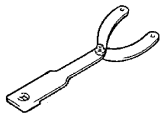
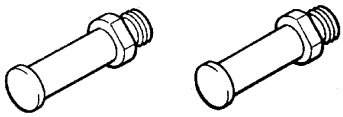
PREPARATION

023QL–01

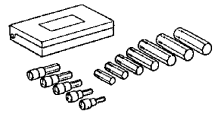
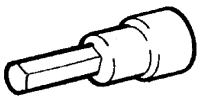
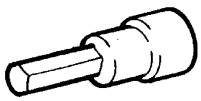
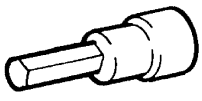
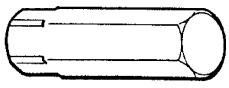
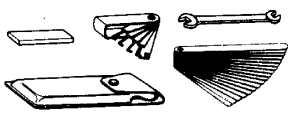
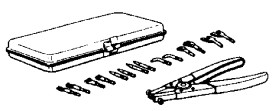
SST

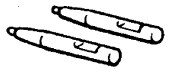
	09032–00100	Oil Pan Seal Cutter	PARTIAL ENGINE ASSY(3MZ–FE)
	09201–01055	Valve Guide Bushing Remover & Replacer 5.5	CYLINDER HEAD ASSY(3MZ–FE)
	09201–10000	Valve Guide Bushing Remover & Replacer Set	CYLINDER HEAD ASSY(3MZ–FE)
	09201–41020	Valve Stem Oil Seal Replacer	CYLINDER HEAD ASSY(3MZ–FE)
	09202–70020	Valve Spring Compressor	CYLINDER HEAD ASSY(3MZ–FE)
	(09202–00010)	Attachment	CYLINDER HEAD ASSY(3MZ–FE)
	09213–54015	Crankshaft Pulley Holding Tool	PARTIAL ENGINE ASSY(3MZ–FE)
	(91651–60855)	Bolt	PARTIAL ENGINE ASSY(3MZ–FE)
	09222–30010	Connecting Rod Bushing Remover & Replacer	CYLINDER BLOCK ASSY(3MZ–FE)
	09223–00010	Cover & Seal Replacer	PARTIAL ENGINE ASSY(3MZ–FE)
	09223–15030	Oil Seal & Bearing Replacer	PARTIAL ENGINE ASSY(3MZ–FE)
	09228–07501	Oil Filter Wrench	PARTIAL ENGINE ASSY(3MZ–FE)

	09248–55040	Valve Clearance Adjust Tool Set	PARTIAL ENGINE ASSY(3MZ–FE)
	(09248–05410)	Valve Lifter Press	PARTIAL ENGINE ASSY(3MZ–FE)
	(09248–05420)	Valve Lifter Stopper	PARTIAL ENGINE ASSY(3MZ–FE)
	09249–63010	Torque Wrench Adaptor	PARTIAL ENGINE ASSY(3MZ–FE)
	09330–00021	Companion Flange Holding Tool	PARTIAL ENGINE ASSY(3MZ–FE)
	09950–50013	Puller C Set	PARTIAL ENGINE ASSY(3MZ–FE)
	(09951–05010)	Hanger 150	PARTIAL ENGINE ASSY(3MZ–FE)
	(09952–05010)	Slide Arm	PARTIAL ENGINE ASSY(3MZ–FE)
	(09953–05020)	Center Bolt 150	PARTIAL ENGINE ASSY(3MZ–FE)
	(09954–05011)	Claw No.1	PARTIAL ENGINE ASSY(3MZ–FE)
	(09954–05031)	Claw No.3	PARTIAL ENGINE ASSY(3MZ–FE)
	09950–60010	Replacer Set	PARTIAL ENGINE ASSY(3MZ–FE)
	(09951–00430)	Replacer 43	PARTIAL ENGINE ASSY(3MZ–FE)

	09950–70010	Handle Set	PARTIAL ENGINE ASSY(3MZ–FE) CYLINDER HEAD ASSY(3MZ–FE)
	(09951–07100)	Handle 100	PARTIAL ENGINE ASSY(3MZ–FE) CYLINDER HEAD ASSY(3MZ–FE)
	09960–10010	Variable Pin Wrench Set	PARTIAL ENGINE ASSY(3MZ–FE)
	(09962–01000)	Variable Pin Wrench Arm Assy	PARTIAL ENGINE ASSY(3MZ–FE)
	(09963–00500)	Pin 5	PARTIAL ENGINE ASSY(3MZ–FE)
	(09963–01000)	Pin 10	PARTIAL ENGINE ASSY(3MZ–FE)

Recomended Tools

	09040–00011	Hexagon Wrench Set	PARTIAL ENGINE ASSY(3MZ–FE) CYLINDER HEAD ASSY(3MZ–FE) CYLINDER BLOCK ASSY(3MZ–FE)
	(09043–20080)	Socket Hexagon Wrench 8	PARTIAL ENGINE ASSY(3MZ–FE)
	(09043–20100)	Socket Hexagon Wrench 10	PARTIAL ENGINE ASSY(3MZ–FE) CYLINDER BLOCK ASSY(3MZ–FE)
	(09043–20120)	Socket Hexagon Wrench 12	PARTIAL ENGINE ASSY(3MZ–FE)
	(09043–30140)	Straight Hexagon Wrench 14	CYLINDER HEAD ASSY(3MZ–FE)
	09200–00010	Engine Adjust Kit	PARTIAL ENGINE ASSY(3MZ–FE)
	09904–00010	Expander Set	PARTIAL ENGINE ASSY(3MZ–FE)

 (09904–00040)	No. 3 Claw	PARTIAL ENGINE ASSY(3MZ–FE)

SSM

08826–00080	Seal Packing Black or equivalent (FIPG)	PARTIAL ENGINE ASSY(3MZ–FE) CYLINDER HEAD ASSY(3MZ–FE)
08826–00100	"Seal Packing 1282B," THREE BOND 1282B or equivalent (FIPG)	PARTIAL ENGINE ASSY(3MZ–FE) CYLINDER BLOCK ASSY(3MZ–FE)
08833–00070	"Adhesive 1324," THREE BOND 1324 or equivalent	CYLINDER HEAD ASSY(3MZ–FE) CYLINDER BLOCK ASSY(3MZ–FE)

Equipment

Abrasive compound	Valve
Brush	Piston
Caliper gauge	
Carbide cutter (30°)	Valve seat
Carbide cutter (45°)	Valve seat
Carbide cutter (60°)	Valve seat
Connecting rod aligner	
Cylinder gauge	
Dial indicator	
Dye penetrant	
Groove cleaning tool	Piston ring groove
Heater	
Magnetic finger	
Micrometer	
Pin hole grinder	Connecting rod bush
Piston ring compressor	
Piston ring expander	
Plastigage	
Precision straight edge	
Press	
Razor brade	
Reamer (5.5 mm)	Valve guide bush
Ridge reamer	Cylinder
Soft brush	Cylinder head Cylinder block
Solvent	
Spring tester	Valve spring
Steel square	Valve spring
Thermometer	

Torque wrench	
Valve seat cutter	
Valve guide bushing brush	
V–block	
Vernier calipers	
Wire brush	Valve Cylinder head