PREPARATION

ENGINE MECHANICAL PP–1
EMISSION CONTROL PP–4
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COOLING PP–11
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IGNITION PP–16
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REFER TO FOLLOWING REPAIR MANUALS:

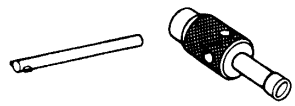
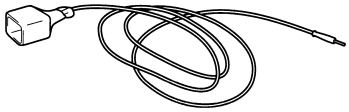
Manual Name	Pub. No.
3S–FE Engine Repair Manual	RM395E
3S–FE Engine Repair Manual Supplement	RM495E

NOTE: The above pages contain only the points which differ from the above listed manuals.

ENGINE MECHANICAL

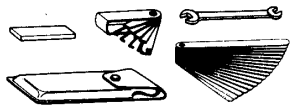
PP13M–01

SST (Special Service Tools)

	09243–00020	Idle Adjusting Screw Wrench	
	09843–18030	Tacho–pulse Pickup Wire No.2	
	09843–18040	Diagnosis Check Wire No.2	

PP13N–01

RECOMMENDED TOOLS

	09200–00010 Engine Adjust Kit .	

PP13O–01

EQUIPMENT

CO/HC meter	
Hand–held tester	
Micrometer	
Tachometer	
Timing light	
Vernier calipers	

EMISSION CONTROL

PP13P–01

SST (Special Service Tools)

	09843–18040 Diagnosis Check Wire No.2	

PP13Q–01

EQUIPMENT

Torque wrench	
Vacuum gauge	

PP13R–01

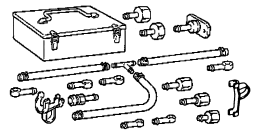
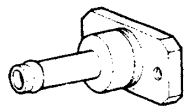
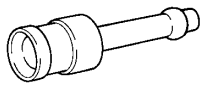
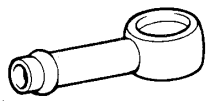
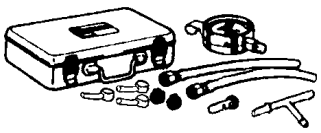
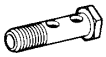
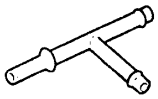
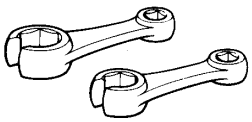
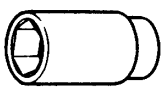
SSM (Special Service Materials)

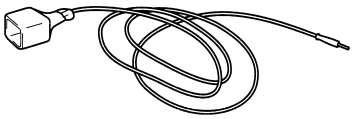
08833–00070	Adhesive 1324, THREE BOND 1324 or equivalent	BVSV for EVAP

ELECTRONIC FUEL INJECTION

PP13S–01

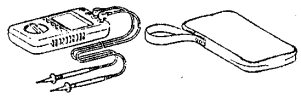
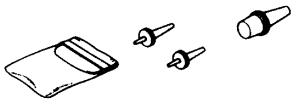
SST (Special Service Tools)

	09268–41047	Injection Measuring Tool Set	
	(09268–41091)	NO.7 Union	Except Europe
	(09268–41110)	Adaptor	
	(09268–41300)	Clamp	
	(90405–09015)	No.1 Union	Except Europe for LHD
	09268–45014	EFI Fuel Pressure Gauge	
	(09268–41190)	Adapter	Except Europe for LHD
	(09268–41250)	T Joint	Europe for LHD
	(90405–06167)	I Union	Except Europe for LHD
	09631–22020	Power Steering Hose Nut 14 x 17 mm Wrench Set	Fuel line flare nut
	09816–30010	Oil Pressure Switch Socket	Knock sensor
	09842–30070	Wiring ”F” EFI Inspection	

	09843–18030	Tacho–pulse Pickup Wire No.2	
	09843–18040	Diagnosis Check Wire No.2	

PP13T–01

RECOMMENDED TOOLS

	09082–00040	TOYOTA Electrical Tester.	
	09258–00030	Hose Plug Set .	Plug for vacuum hose, fuel hose etc.

PP13U–01

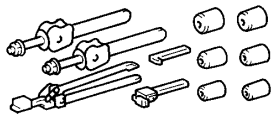
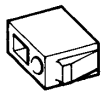
EQUIPMENT

Carburetor cleaner	Throttle body
Graduated cylinder	Injector
Hand–held tester	
Soft brush	Throttle body
Sound scope	Injector
Tachometer	
Torque wrench	
Vacuum gauge	

COOLING

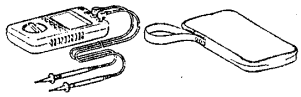
PP13V–01

SST (Special Service Tools)

	09230–01010	Radiator Service Tool Set	
	09231–14010	Punch	

PP13W–01

RECOMMENDED TOOLS

	09082–00040 TOYOTA Electrical Tester.	

PP13X–01

EQUIPMENT

Heater	
Radiator cap tester	
Thermometer	
Torque wrench	
Vernier calipers	

PP13Y–01

COOLANT

Item		Capacity	Classification
Engine coolant			Ethylene–glycol base
w/ Heater	M/T	7.5 liters (7.9 US qts, 6.6 Imp. qts)	
	A/T	7.6 liters (8.0 US qts, 6.7 Imp. qts)	
w/o Heater	M/T	6.7 liters (7.1 US qts, 5.9 Imp. qts)	
	A/T	6.8 liters (7.2 US qts, 6.0 Imp. qts)	

LUBRICATION

LUBRICANT

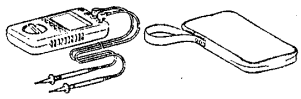
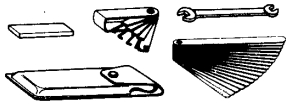
PP13Z–01

Item	Capacity	Classification
Engine oil		API grade SH, Energy–Conserving II or SJ, Energy–Conserving or ILSAC multigrade engine oil
Dry fill	4.4 liters (4.7 US qts, 3.9 Imp. qts)	
Drain and refill		
w/ Oil filter change	3.9 liters (4.1 US qts, 3.4 Imp. qts)	
w/o Oil filter change	3.7 liters (3.9 US qts, 3.2 Imp. qts)	

IGNITION

RECOMMENDED TOOLS

PP140–01

	09082–00040	TOYOTA Electrical Tester.	
	09200–00010	Engine Adjust Kit .	

PP141–01

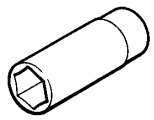
EQUIPMENT

Megger (Insulation resistance meter)	Spark plug
Spark plug cleaner	
Torque wrench	

STARTING

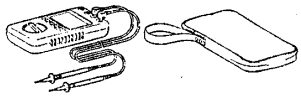
PP142–01

SST (Special Service Tools)

	09810–38140	Starter Magnet Switch Nut Wrench 14	

PP143–01

RECOMMENDED TOOLS

	09082–00040 TOYOTA Electrical Tester.	

PP144–01

EQUIPMENT

Press	
Torque wrench	
Vernier calipers	