

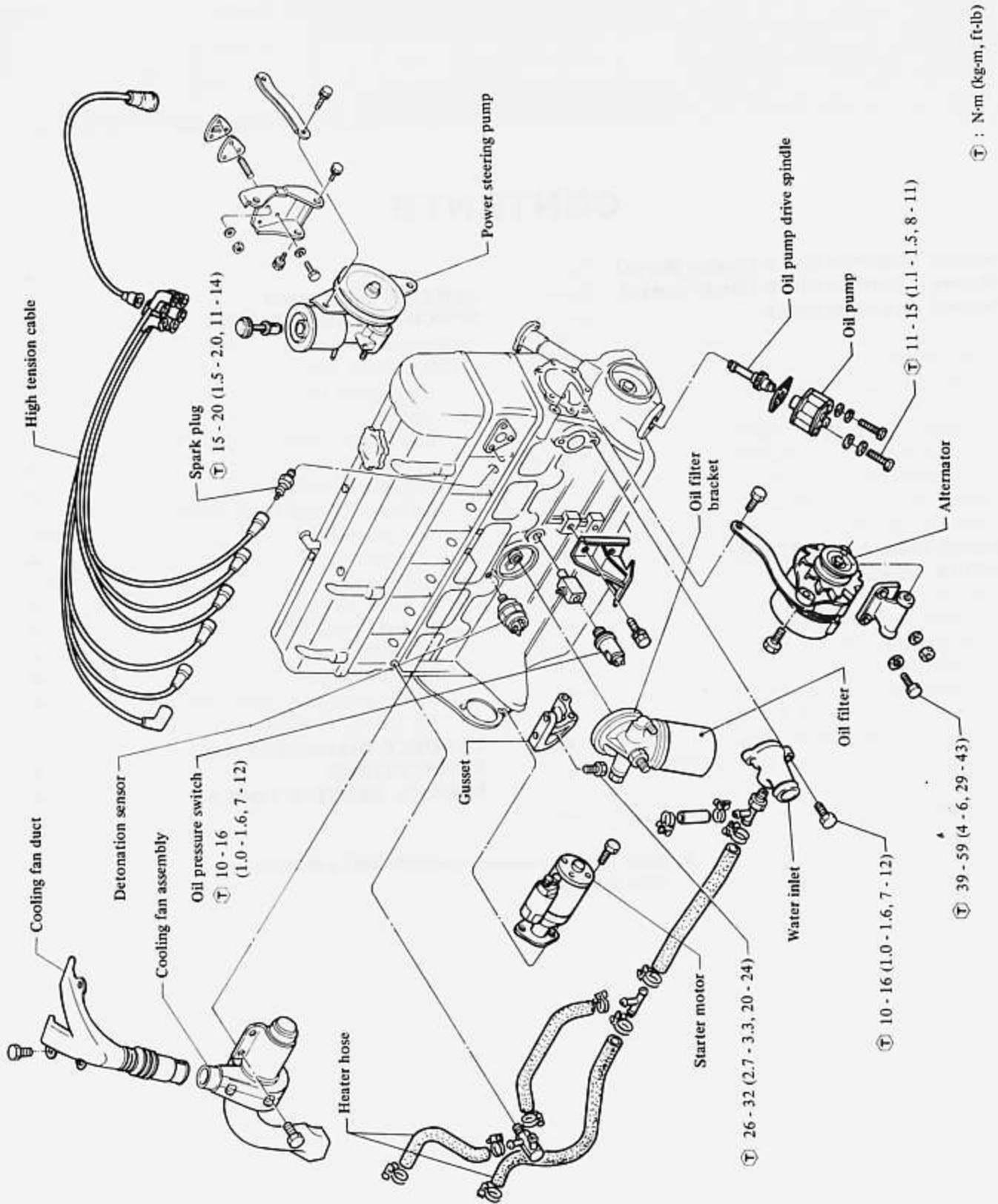
SECTION EM

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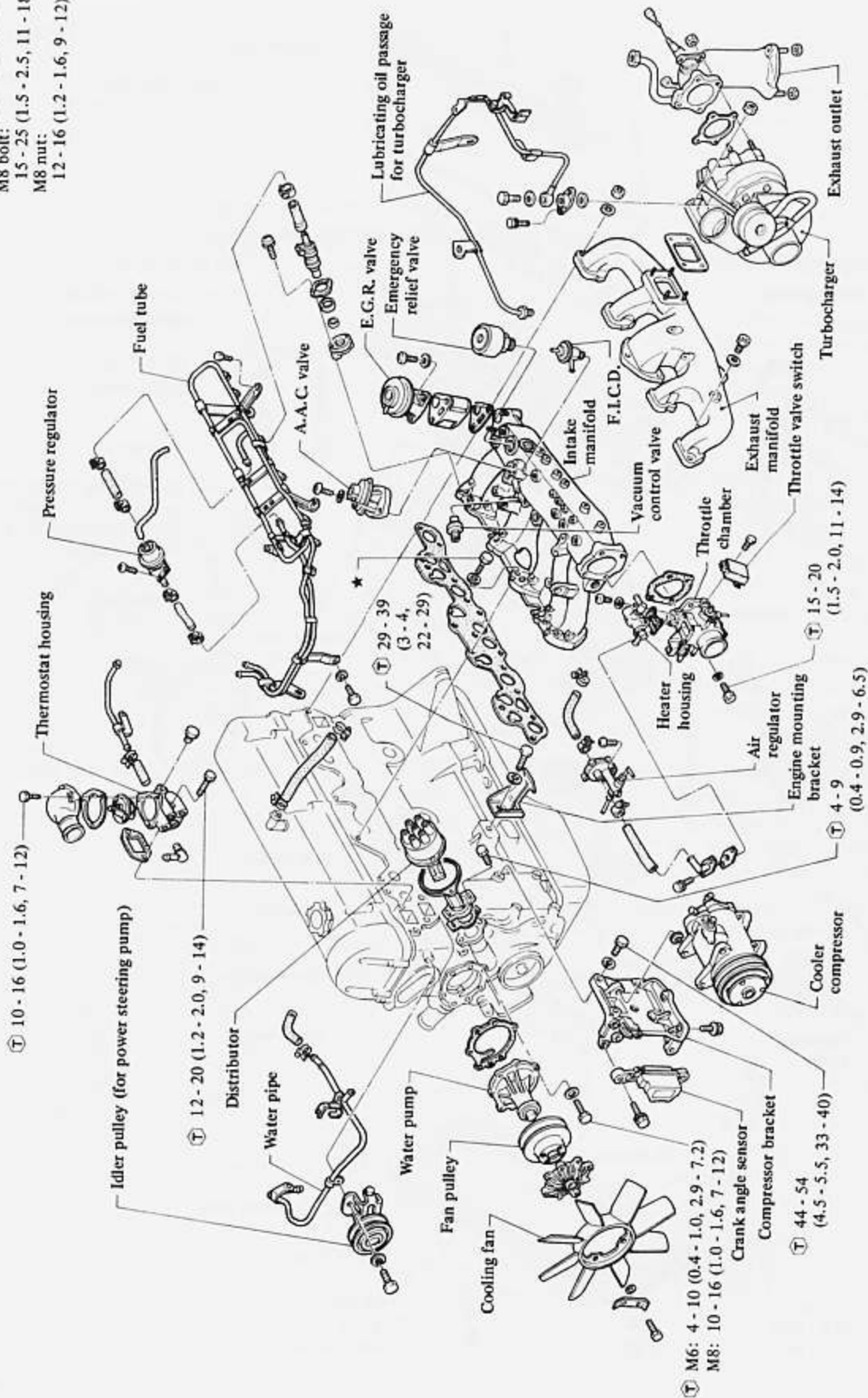
★: Refer to Service Manual "DATSUN 280ZX MODEL S130 SERIES".

ENGINE COMPONENTS (Outer parts)



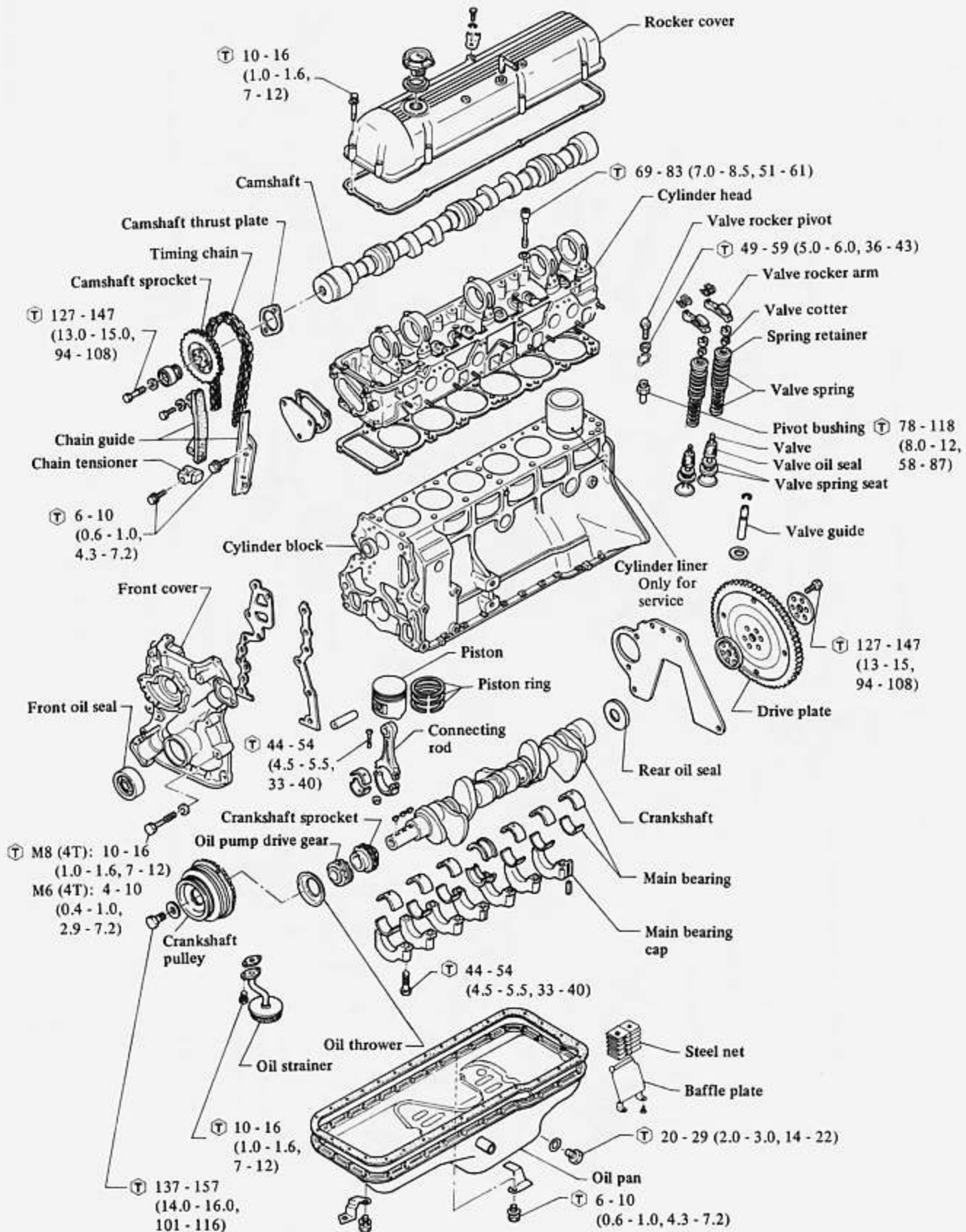
T : N·m (kg·m, ft·lb)

- ★ ① M10:
- 34 - 44 (3.5 - 4.5, 25 - 33)
- M8 bolt:
- 15 - 25 (1.5 - 2.5, 11 - 18)
- M8 nut:
- 12 - 16 (1.2 - 1.6, 9 - 12)



① : N·m (kg·m, ft·lb)

ENGINE COMPONENTS (Body parts)



Ⓣ : N·m (kg·m, ft·lb)

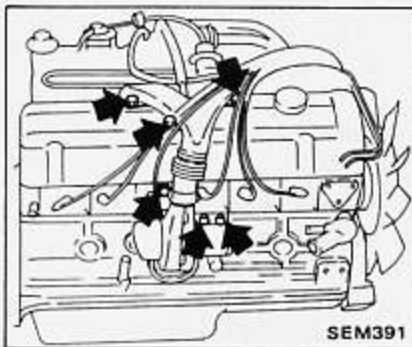
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ENGINE DISASSEMBLY

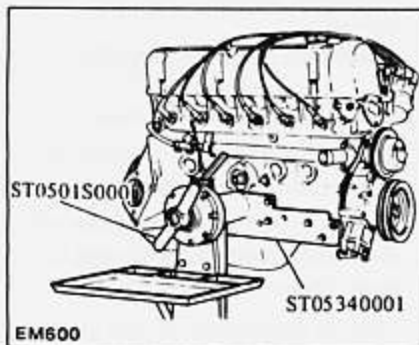
DISASSEMBLY

MOUNTING ENGINE ON ENGINE STAND

1. Remove rear and right side parts.
 - Starter motor
 - Gussets
 - Transmission with torque converter
 - Alternator, alternator drive belt and alternator bracket
 - Engine mounting bracket (R.H.)
 - Oil filter with oil filter bracket
 - Oil pressure switch
 - Injector auxiliary cooling fan and air duct.



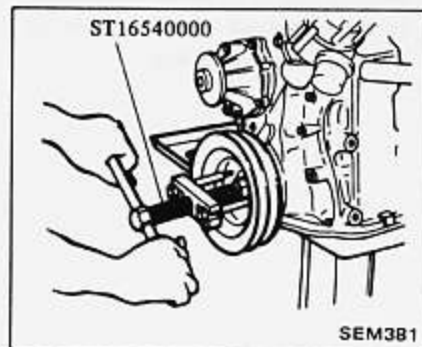
- Lubricating oil passage for turbo-charger
2. Install engine attachment to cylinder block. Then, mount the engine on the engine stand.



3. Drain engine oil and coolant.

REMOVING OUTER PARTS

1. Remove engine front side parts:
 - Fan, fan coupling and fan pulley
 - Alternator adjusting bar
 - Crank pulley using Tool



- Pulley bracket with idler pulley for power steering
2. Remove engine left side parts:
 - Distributor cap and high tension cable
 - Distributor assembly
 - Hoses connected to engine
 - Intake manifold

Remove intake manifold as an assembly of fuel pipe, injector, air regulator, etc. as follows:

- a. Disconnect hose connecting rocker cover to throttle chamber at rocker cover.
 - b. Disconnect water pipe connecting heater housing to water inlet at water inlet.
- Remove bolt which secures water pipe and fuel pipe to cylinder head.
- c. Remove tube connecting heater housing to thermostat housing.
 - d. Remove bolt which secures intake manifold to cylinder head and remove intake manifold as an assembly.

- e. Remove P.C.V. valve hose, sub heat shield plate and E.G.R. tube.

- Turbocharger assembly with exhaust outlet
- Exhaust manifold
- Thermostat housing
- Pulley bracket with idler pulley for air conditioner
- Air conditioner compressor bracket with crank angle sensor
- Engine mounting bracket (L.H.)

3. Remove engine right side parts:

- Spark plugs
- Oil level gauge
- Water inlet
- Water hoses and pipes
- Power steering pump bracket

4. Remove engine bottom side parts:
 - Oil pump and oil pump drive spindle

ENGINE ASSEMBLY

ASSEMBLING PISTON AND CONNECTING ROD

1. Assemble pistons, piston pins and connecting rods of the designated cylinders.

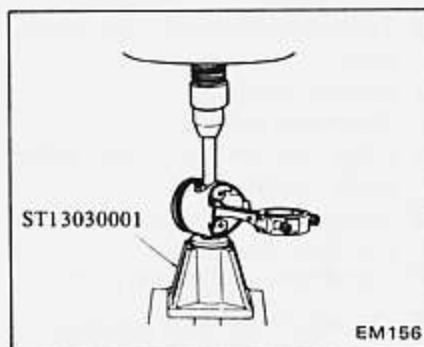
- a. Piston pin is pressed into connecting rod, and fitting force should be within the specified limit.

Piston pin fitting force:

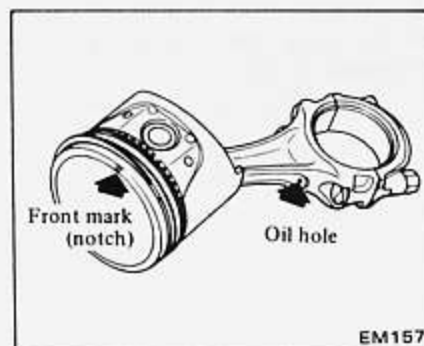
4.9 - 14.7 kN

(0.5 - 1.5 t, 0.6 - 1.7 US ton,
0.5 - 1.5 Imp ton)

When pressing piston pin in connecting rod, apply engine oil to pin and small end of connecting rod.



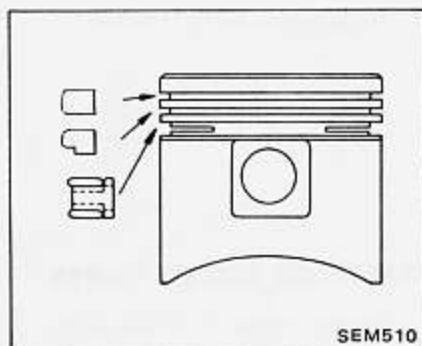
- b. Arrange so that oil hole on big end of connecting rod points toward the right side of cylinder block.



- c. Connecting rods are marked at side of big end for identifying the designated cylinders.

2. Install piston rings.

Install so that stamped mark on ring faces upward.



- a. Second ring is an under-cut design.
b. In the combined oil ring, upper rail is the same as lower one.

ASSEMBLING ENGINE OVERALL

INSTALLING SIDE PARTS AND OIL PAN

1. Install engine right side parts.

- Spark plugs
- Oil filter
- Oil pressure switch
- Lubricating oil passage for turbo-charger
- Engine mounting brackets

⊕ : Bracket bolt
29 - 39 N·m
(3.0 - 4.0 kg·m,
22 - 29 ft·lb)

- Oil level dipstick
- Oil pump and oil pump drive spindle

⊕ : Oil pump attaching bolt
11 - 15 N·m
(1.1 - 1.5 kg·m,
8 - 11 ft·lb)

2. Install left side engine parts.
- Intake and exhaust manifold.

Always install a new gasket.

	N·m	kg·m	ft·lb
M10 Bolt	34 - 44	3.5 - 4.5	25 - 33
M8 Bolt	15 - 25	1.5 - 2.5	11 - 18
M8 Nut	12 - 16	1.2 - 1.6	9 - 12

- Turbocharger assembly with exhaust outlet
- Thermostat housing

Always install a new gasket.

⊕ : 12 - 20 N·m
(1.2 - 2.0 kg·m,
9 - 14 ft·lb)

3. Install oil strainer and oil pan with new gasket.

⊕ : Oil strainer bolts
10 - 16 N·m
(1.0 - 1.6 kg·m,
7 - 12 ft·lb)

Oil pan bolts
6 - 10 N·m
(0.6 - 1.0 kg·m,
4.3 - 7.2 ft·lb)

- a. Apply sealant to the designated portions. Refer to Precautions.
b. Oil pan should be tightened in a criss-cross pattern. Do not over-tighten.
c. Always use new oil pan gasket.

4. Install distributor assembly.

- a. Make sure that No. 1 Piston is at T.D.C. on its compression stroke.
b. Align oil pump drive spindle with distributor assembly shaft and rotor head. Refer to Section EL.

5. Install distributor cap and connect high tension cable.

6. Install air conditioner compressor bracket with crank angle sensor. Refer to Section EF for adjustment.

7. Dismount engine from work stand and remove engine attachment.

8. Install the following parts.

- Alternator bracket
- Alternator assembly

Ⓣ : Alternator bracket

39 - 59 N-m

(4 - 6 kg-m,

29 - 43 ft-lb)

Alternator to adjusting bar bolt

20 - 29 N-m

(2.0 - 3.0 kg-m,

14 - 22 ft-lb)

- Water inlet and water hose
- Fan belt
- Power steering pump bracket
- Injector auxiliary cooling fan and duct
- Torque converter and transmission

For details concerning torque converter and transmission, refer to Section AT.

SERVICE DATA AND SPECIFICATIONS (S.D.S.)

GENERAL SPECIFICATIONS

Cylinder arrangement		6, in-line
Displacement cm ³ (cu in)		2,753 (167.99)
Bore and Stroke mm (in)		86.0 x 79.0 (3.386 x 3.110)
Valve arrangement		O.H.C.
Firing order		1-5-3-6-2-4
Number of piston rings	Compression	2
	Oil	1
Number of main bearings		7
Compression ratio		7.4

INSPECTION AND ADJUSTMENT

PISTON, PISTON RING AND PISTON PIN

Piston ring

Ungt: mm (in)

		Standard	Limit
Side clearance	Top	0.040 - 0.073 (0.0016 - 0.0029)	0.1 (0.004)
	2nd	0.030 - 0.063 (0.0012 - 0.0025)	
	Oil	0.023 - 0.070 (0.0009 - 0.0028)	—
Ring gap	Top	0.19 - 0.33 (0.0075 - 0.0130)	1.0 (0.039)
	2nd	0.15 - 0.30 (0.0059 - 0.0118)	
	Oil (rail ring)	0.3 - 0.9 (0.012 - 0.035)	