Print Exit

6AR-FSE ENGINE MECHANICAL ENGINE UNIT DETAILS CAMSHAFT

CONSTRUCTION

a. The camshafts are made of cast iron alloy.

b. An oil passage is provided in the intake camshaft (camshaft) and exhaust camshaft (No. 2 camshaft) in order to supply engine oil to the VVT-iW and VVT-i systems.

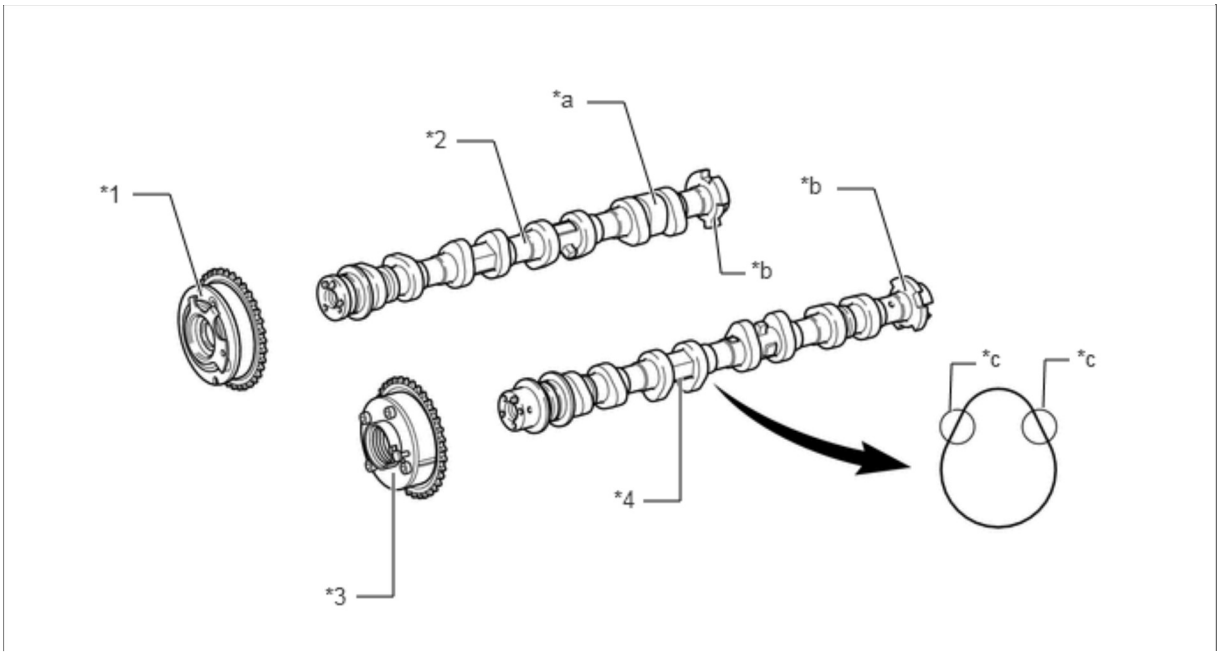
c. A VVT-i controller (camshaft timing gear assembly or camshaft timing exhaust gear assembly) is installed on the front of the intake camshaft (camshaft) and exhaust camshaft (No. 2 camshaft) to vary the timing of the intake and exhaust valves.

d. Together with the use of the No. 1 valve rocker arm sub-assemblies, the cam profile is modified. This results in increased valve lift when the valve begins to open and as it finishes closing, helping to achieve enhanced output performance.

e. A timing rotor for the camshaft position sensor is provided on the back of the intake camshaft (camshaft) and exhaust camshaft (No. 2 camshaft). Additionally, a cam for powering the fuel pump is installed on the intake camshaft, thus reducing the size of the engine.

f. The cam that drives the fuel pump assembly (for high pressure) is positioned directly above the No. 4 cylinder of the intake camshaft (camshaft) to achieve size reduction. Also, a pump cam with 4 peaks is used in the cam that drives the fuel pump assembly (for high pressure) and by synchronizing fuel pressure-feeding and fuel injection, the difference in fuel pressure between cylinders is reduced.

g. The vacuum pump assembly is driven by the end of the exhaust camshaft (No. 2 camshaft).



*1	Camshaft Timing Gear Assembly	*2	Intake Camshaft (Camshaft)
*3	Camshaft Timing Exhaust Gear Assembly	*4	Exhaust Camshaft (No. 2 Camshaft)
*a	Cam (for Powering the Fuel Pump)	*b	Timing Rotor
*c	Modified Portion of Cam Profile	-	-