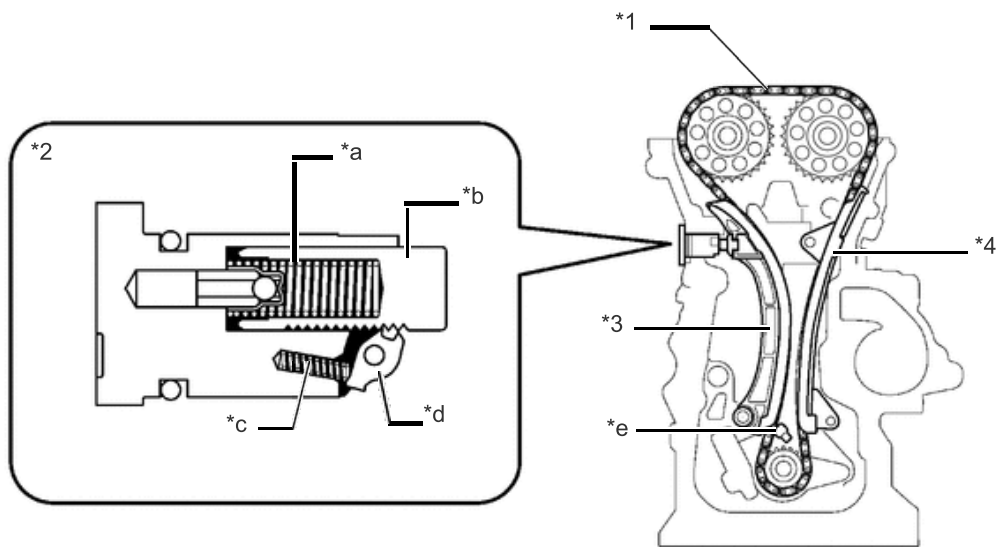


1ZZ-FE ENGINE MECHANICAL ENGINE UNIT DETAILS TIMING CHAIN AND CHAIN TENSIONER

CONSTRUCTION

- a. A chain sub-assembly with an 8 mm (0.315 in.) pitch is used to make the engine more compact.
- b. A material which has excellent wear resistance has been selected for the timing chain to ensure reliability.
- c. The timing chain is lubricated by an oil jet.
- d. The No. 1 chain tensioner assembly uses a spring and oil pressure to maintain proper chain tension at all times.
- e. The No. 1 chain tensioner assembly suppresses noise generated by the chain sub-assembly.
- f. The No. 1 chain tensioner assembly is a ratchet type tensioner with a non-return mechanism.
- g. To achieve excellent serviceability, the No. 1 chain tensioner assembly is constructed so that it can be removed and installed from the outside of the timing chain cover sub-assembly.



*1	Chain Sub-assembly	*2	No. 1 Chain Tensioner Assembly
*3	Chain Tensioner Slipper	*4	No. 1 Chain Vibration Damper
*a	Spring	*b	Plunger
*c	Cam Spring	*d	Cam
*e	Oil Jet	-	-