

INSPECTION

1. INSPECT TIMING CHAINS AND SPROCKETS

- (a) Measure the length of the 16 links with the chain fully stretched.

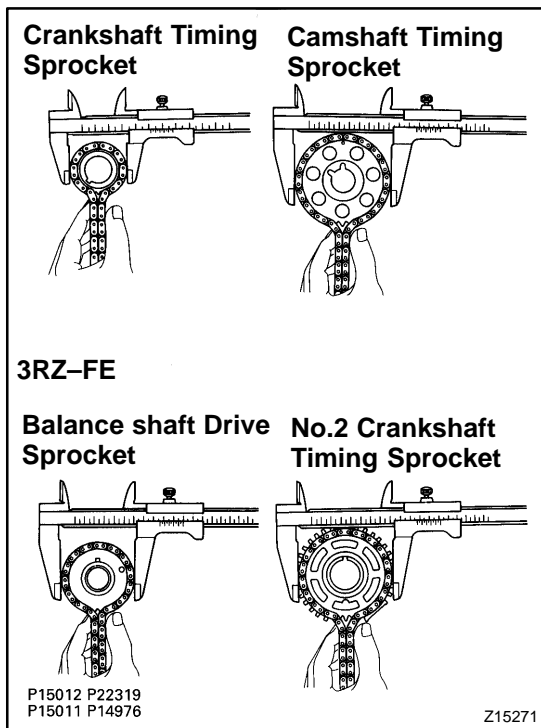
Maximum chain elongation:

No.1 timing chain	147.5 mm (5.807 in.)
No.2 timing chain (3RZ-FE)	123.6 mm (4.866 in.)

If the elongation is greater than maximum, replace the chain.

HINT:

Make the same measurements pulling at 3 or more places selected at random.



- (b) Wrap the chain around the timing sprocket.
 (c) Using vernier calipers, measure the sprocket diameter with the chain.

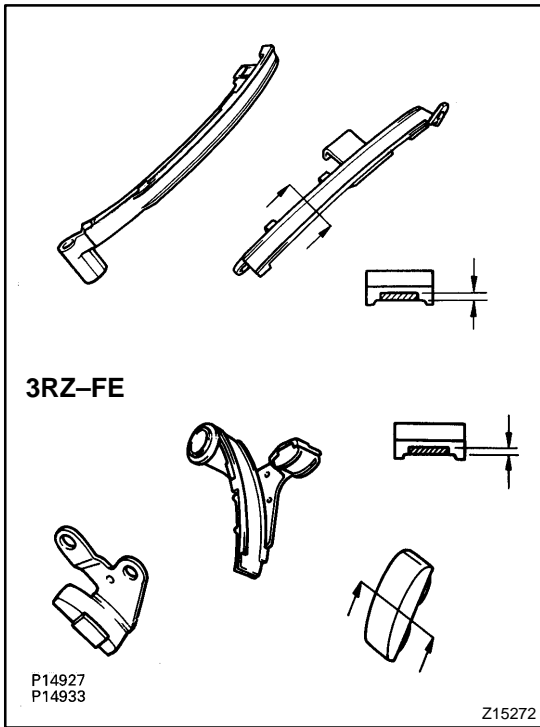
NOTICE:

Vernier calipers must contact the chain rollers for measuring.

Minimum sprocket diameter with chain:

Camshaft	113.8 mm (4.480 in.)
Crankshaft	59.4 mm (2.339 in.)
No.2 crankshaft (3RZ-FE)	96.7 mm (3.807 in.)
Balance shaft (3RZ-FE)	75.9 mm (2.988 in.)

If the diameter is less than minimum, replace the chain with the sprocket.

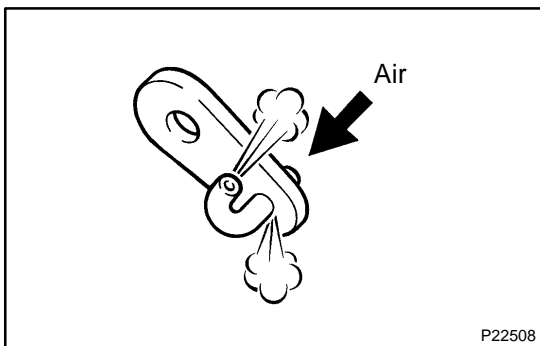


2. INSPECT CHAIN TENSIONER SLIPPER AND VIBRATION DAMPERS

Measure the chain tensioner slipper and vibration damper wears.

Maximum wear: 1.0 mm (0.039 in.)

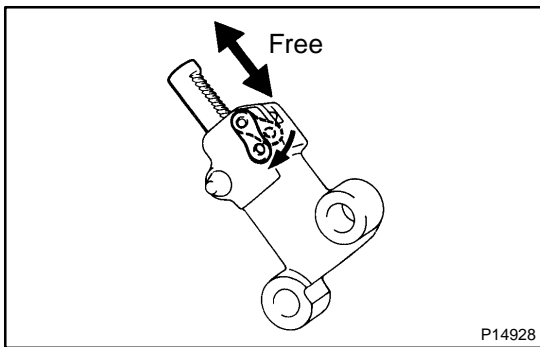
If the wear is greater than maximum, replace the slipper and/or dampers.



3. 2RZ-FE: INSPECT OIL JET

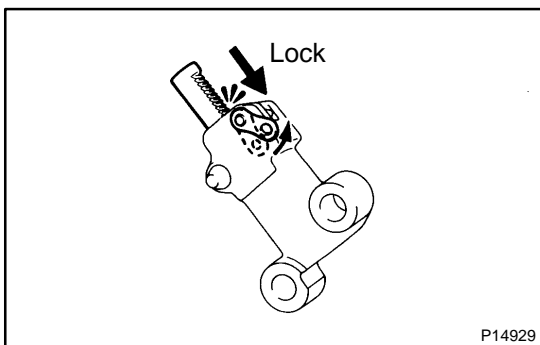
Check the oil for damage or clogging. If necessary, replace the oil jet.

4. INSPECT NO.1 CHAIN TENSIONER (See page EM-34)

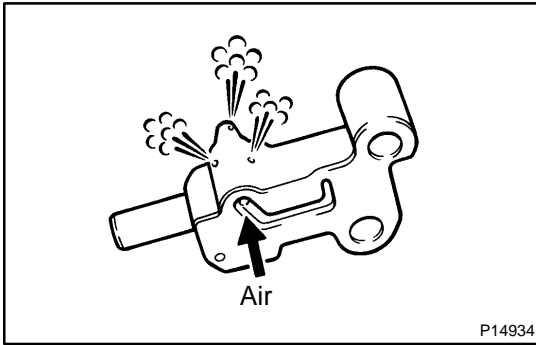


5. 3RZ-FE: INSPECT NO.2 CHAIN TENSIONER

- (a) Inspect the chain tensioner.
 - (1) Check that the plunger moves smoothly when the ratchet pawl is raised with your finger.



- (2) Release the ratchet pawl and check that the plunger is locked in place by the ratchet pawl and does not move when pushed with your finger.



- (b) Inspect the oil jet (No.2 chain tensioner).
Check the oil jet for damage or clogging.
If necessary, replace the oil jet (No.2 chain tensioner).