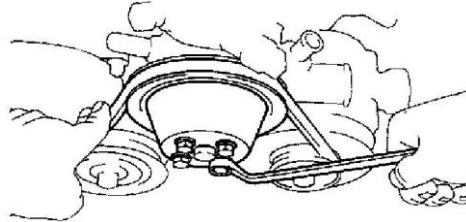




Toyota Starlet L4-4KC 1982

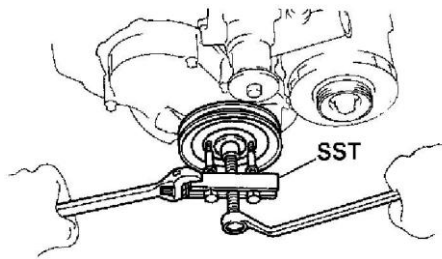
Timing Chain: Service and Repair

REMOVAL



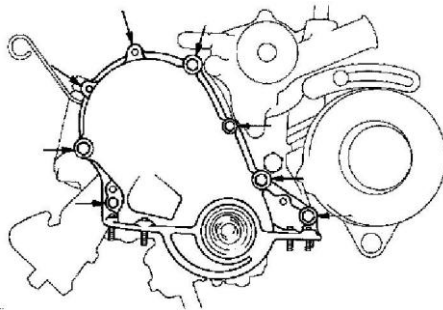
Drive Belt And Water Pump Pulley Removal

1. Loosen the water pump pulley set bolts.
2. Remove the drive belt adjusting bolt, and remove the drive belt.
3. Remove the water pump pulley from the water pump.



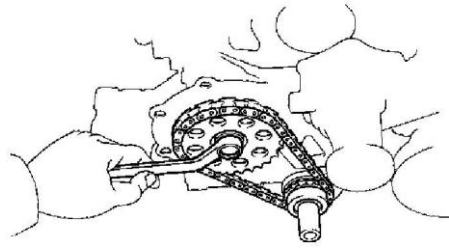
Crankshaft Pulley Removal

4. Remove the crankshaft pulley set bolt.
5. Using SST (09213-31021), remove the crankshaft pulley.



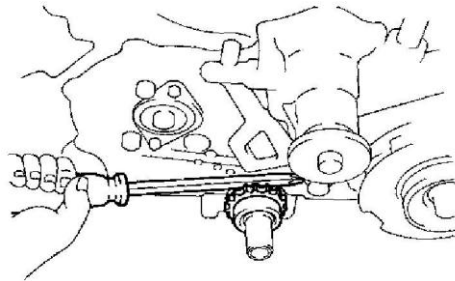
Timing Chain Cover Removal

6. Remove the timing chain cover bolts and nuts as shown in the figure.
7. Using a plastic faced hammer, loosen the timing chain cover and remove it.
8. Remove timing chain tensioner and vibration damper.
9. Remove the camshaft sprocket set bolt.



Removing Timing Chain And Camshaft Sprocket

10. Remove the timing chain and camshaft sprocket together.

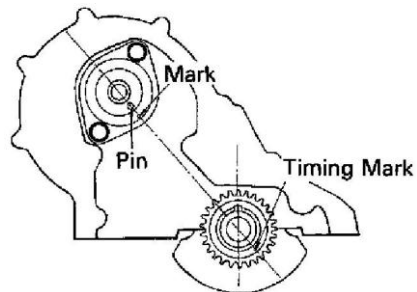


Crankshaft Sprocket Removal

11. Remove the crankshaft sprocket using a screwdriver. If the crankshaft sprocket can not be removed with a screwdriver, use SST (09213-36020).

INSTALLATION

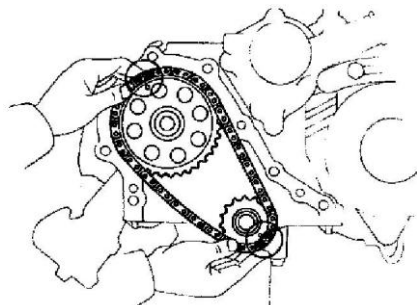
1. Install crankshaft sprocket.



Timing Chain And Camshaft Sprocket Installation

2. Set the No. 1 position to TDC.
3. Align the camshaft dowel pin with the mark on the thrust plate.
4. Install the camshaft sprocket to the timing chain.

NOTE: Align the timing chain and camshaft sprocket timing marks.

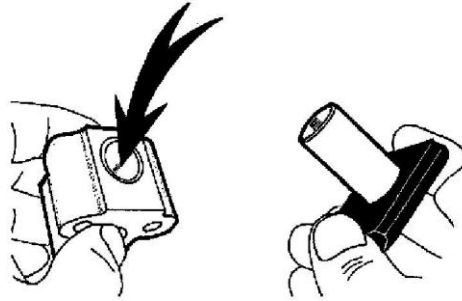


Timing Chain Installation

5. Install the timing chain to the crankshaft sprocket.
NOTE: Align the timing chain and crankshaft sprocket timing marks.

6. Install the camshaft sprocket with the timing chain.
Installing Camshaft Sprocket Set Bolt

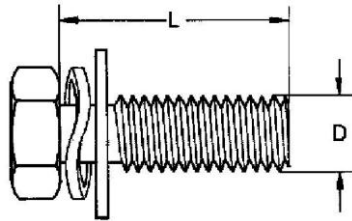
7. Install and torque the camshaft sprocket set bolt.
Torque: 54-63.5 Nm (40-47 ft.lb)



Chain Tensioner And Vibration Damper Installation

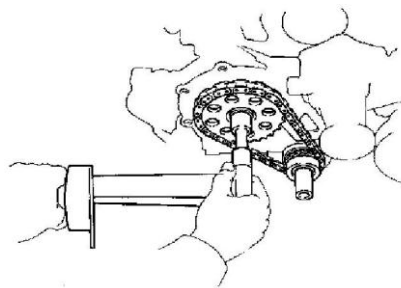
8. Install chain tensioner and vibration damper.
NOTE: Apply the tensioner with oil before installation.

9. Install timing chain cover

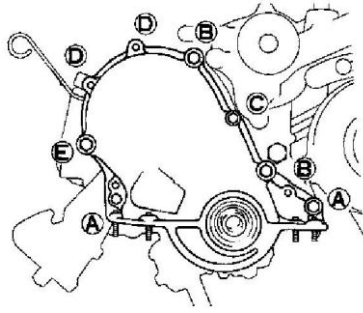


Bolt Identification

Location	Size mm (in.)	
	Length (L)	Diameter (D)
A	28 (1.10)	8 (0.31)
B	55 (2.17)	8 (0.31)
C	55 (2.17)	6 (0.24)
D	20 (0.79)	8 (0.31)
E	55 (2.17)	8 (0.31)

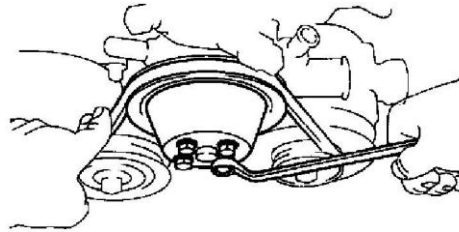


Bolt Identification / Usage Chart



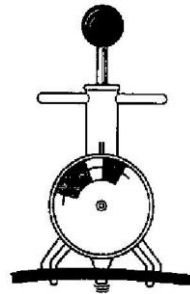
Timing Chain Cover Installation And Bolt Usage

10. Install the proper bolts in the correct locations. Refer to image.



Drive Belt And Water Pump Pulley Installation

11. Install water pump pulley and drive belt. Place the drive belt on the water pump pulley and install the water pump pulley with the four bolts. NOTE: If there are cracks, oiliness or wear, replace the belt.



Drive Belt Tension Adjustment

12. Adjust drive belt tension.

Drive Belt Tension: New Belt 125 ± 25 lb

 Used Belt 80 ± 25 lb

NOTE: Using Borroughs belt tension gauge No. BT-33-73 F)