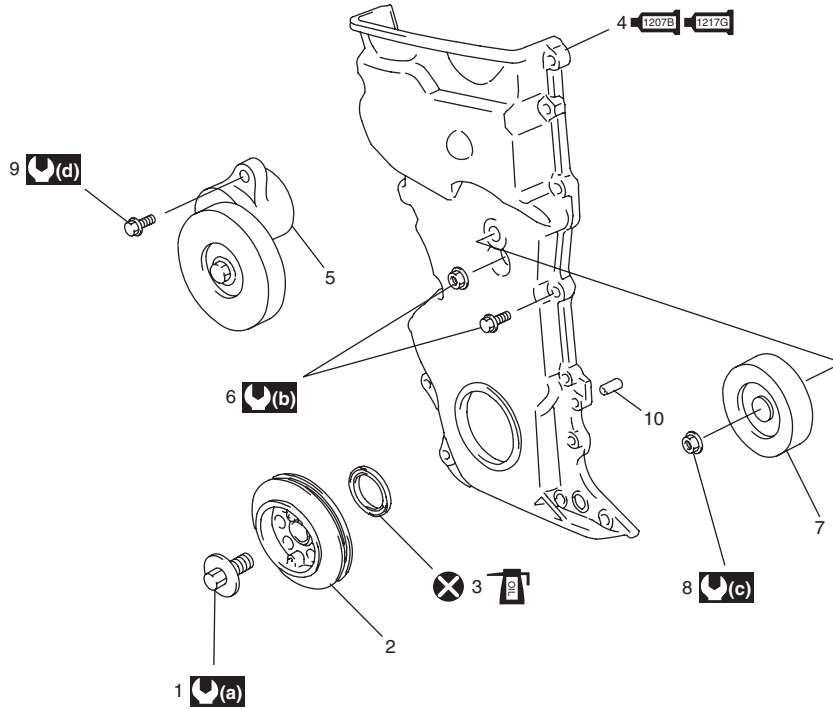


Timing Chain Cover Components

S6RW0C1406015



I7RW01140039-01

1. Crankshaft pulley bolt	6. Timing chain cover bolt and nut	(a) : 150 N·m (15.0 kgf-m, 108.5 lb-ft)
2. Crankshaft pulley	7. Idler pulley	(b) : 11 N·m (1.1 kgf-m, 8.0 lb-ft)
3. Oil seal : Apply engine oil to oil seal lip.	8. Idler pulley nut	(c) : 42 N·m (4.2 kgf-m, 30.5 lb-ft)
4. Timing chain cover : See "A" : See "B"	9. Generator belt tensioner bolt	(d) : 25 N·m (2.5 kgf-m, 18.0 lb-ft)
5. Generator belt tensioner	10. Pin	X : Do not reuse.
"A": Apply sealant 99000-31140 to the mating surface of cylinder and cylinder head.		
"B": Apply sealant 99000-31260 to the mating surface of timing chain cover referring to the figure of Step 3) of "Installation" under "Timing Chain Cover Removal and Installation".		

Timing Chain Cover Removal and Installation

S6RW0C1406016

Removal

- 1) Remove engine assembly from vehicle referring to "Engine Assembly Removal and Installation".
- 2) Remove oil pan referring to "Oil Pan and Oil Pump Strainer Removal and Installation in Section 1E".
- 3) Remove cylinder head cover referring to "Cylinder Head Cover Removal and Installation".
- 4) Remove crankshaft pulley bolt.
To lock crankshaft pulley (1), use special tool (camshaft pulley holder) as shown in figure.

Special tool

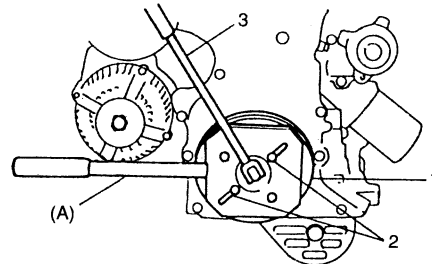
(A): 09917-68221

NOTE

Be sure to use the following bolts instead of pins in order to fix crankshaft pulley by special tool.

Bolt size: M8, P1.25 L = 25 mm (0.98 in.)

Strength: 7T



I2RH01140051-01

2. Bolt	3. Wrench
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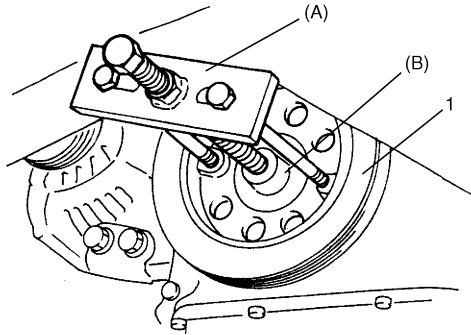
5) Remove crankshaft pulley (1).

To remove crankshaft pulley, use special tools (Steering wheel remover, Bearing puller attachment) with it as shown in figure.

Special tool

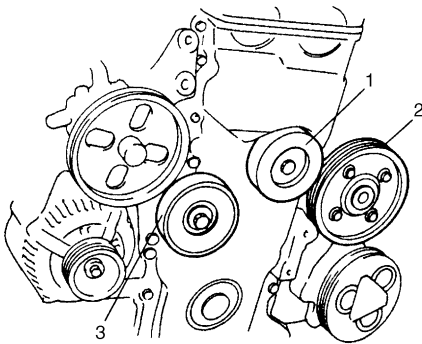
(A): 09944-36011

(B): 09926-58010



I2RH01140052-01

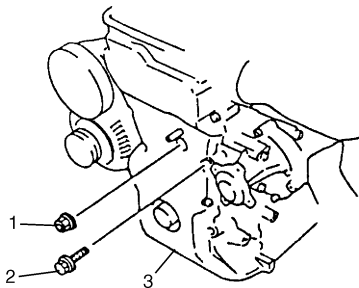
6) Remove idler pulley (1), water pump pulley (2) and belt tensioner (3).



I2RH01140054-01

7) Remove timing chain cover bolts (2) and nut (1).

8) Remove timing chain cover (3).



I7RW01140041-01

Installation

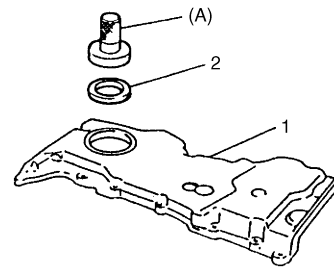
- 1) Clean sealing surfaces on timing chain cover, cylinder block and cylinder head.
Remove oil, old sealant and dust from sealing surface.
- 2) Install new oil seal (2) to timing chain cover using special tool, if removed.

NOTE

When installing new oil seal (2), drive it until its surface is flush with edge of timing chain cover (1).

Special tool

(A): 09913-75510



I2RH01140061-01

1D-21 Engine Mechanical:

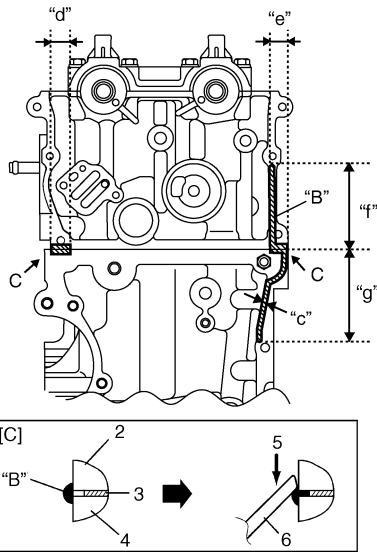
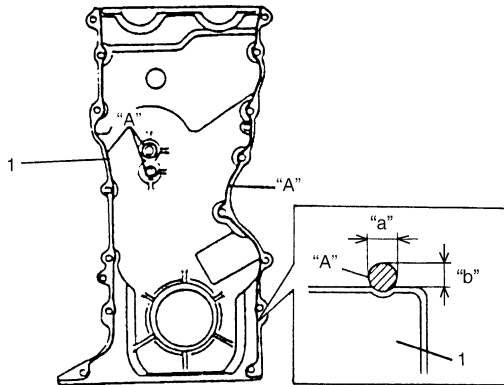
3) Apply sealant "A" and "B" to specific area as shown in figure.

"A": Sealant 99000-31260 (SUZUKI Bond No.1217G)

"B": Water tight sealant 99000-31140 (SUZUKI Bond No.1207B)

Sealant amount for timing chain cover

- "a": 3 mm (0.12 in.)
- "b": 2 mm (0.08 in.)
- "c": 4 mm (0.16 in.)
- "d": 16 mm (0.63 in.)
- "e": 14 mm (0.55 in.)
- "f": 65 mm (2.56 in.)
- "g": 73 mm (2.87 in.)



I7RW01140045-01

1. Timing chain cover	5. Rub into
2. Cylinder head	6. Jig
3. Cylinder head gasket	[C]: View C
4. Cylinder block	

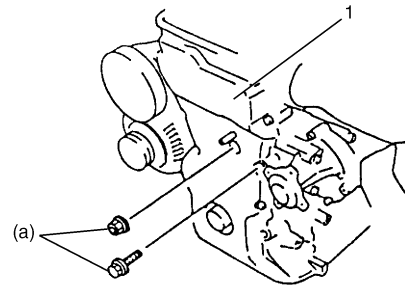
4) Apply engine oil to oil seal lip, then install timing chain cover (1). Tighten bolts and nut to specified torque.

NOTE

Before installing timing chain cover, check that pin is securely fitted.

Tightening torque

Timing chain cover bolt and nut (a): 11 N·m (1.1 kgf-m, 8.0 lb-ft)



I2RH01140057-01

5) Install belt idler pulley (1). Tighten nut to specified torque.

Tightening torque

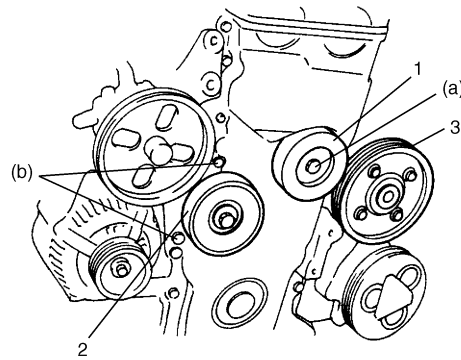
Idler pulley nut (a): 42 N·m (4.2 kgf-m, 30.5 lb-ft)

6) Install belt tensioner (2). Tighten bolts to specified torque.

Tightening torque

Generator belt tensioner bolt (b): 25 N·m (2.5 kgf-m, 18.5 lb-ft)

7) Install water pump pulley (3).



I2RH01140058-01

- 8) Install cylinder head cover referring to "Cylinder Head Cover Removal and Installation".
- 9) Install oil pan. Refer to "Oil Pan and Oil Pump Strainer Removal and Installation in Section 1E" for installation.
- 10) Install crankshaft pulley. To lock crankshaft pulley (1), use special tool (camshaft pulley holder) as shown in figure.

Special tool
(A): 09917-68221

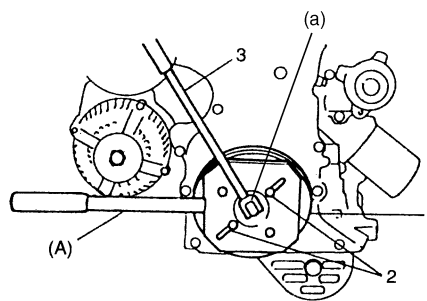
NOTE

Be sure to use the following bolts instead of pins in order to fix crank pulley by special tool.

Bolt size: M8, P1.25 L = 25 mm (0.98 in.)
Strength: 7T

Tightening torque

Crankshaft pulley bolt (a): 150 N·m (15.0 kgf·m, 108.5 lb-ft)



I2RH01140060-01

2. Bolt	3. Wrench
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- 11) Install engine assembly to vehicle referring to "Engine Assembly Removal and Installation".

Timing Chain Cover Cleaning and Inspection

S6RW0C1406017

Clean

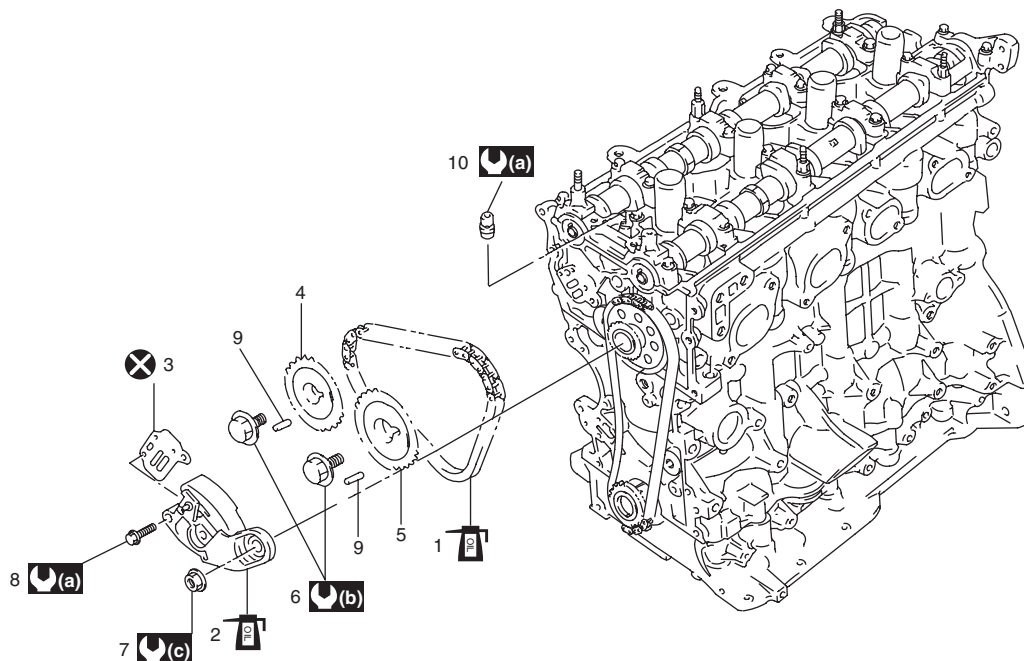
Clean sealing surface on timing chain cover, crank case, cylinder block and cylinder head.
 Remove oil, old sealant, and dust from sealing surface.

Inspection

Check oil seal lip for fault or other damage. Replace as necessary.

2nd Timing Chain and Chain Tensioner Components

S6RW0C1406018



I7RW01140049-01

1. 2nd timing chain : Apply engine oil	6. Camshaft timing sprocket bolt	: 11 N·m (1.1 kgf·m, 8.0 lb-ft)
2. Timing chain tensioner adjuster No.2 : Apply engine oil to sliding surface.	7. Timing chain tensioner adjuster No.2 nut	: 80 N·m (8.0 kgf·m, 58.0 lb-ft)
3. Tensioner adjuster No.2 gasket	8. Timing chain tensioner adjuster No.2 bolt	: 45 N·m (4.5 kgf·m, 32.5 lb-ft)
4. Intake camshaft timing sprocket	9. Knock pin	: Do not reuse.
5. Exhaust camshaft timing sprocket	10. Oil relief valve	