

REMOVAL

1. Remove the V-belt.
2. Remove the water pump pulley.
3. Remove the crankshaft pulley.
When slackening the attaching bolt of the crankshaft pulley, use the following SST to prevent the ring gear from turning.

SST: 09210-87701-000

4. Remove the timing belt upper cover.
5. Remove the timing belt lower cover.
6. Remove the crankshaft timing belt pulley flange.
7. Remove the timing belt tensioner subassembly.
When removing the timing belt tensioner subassembly, set the piston No.1 to the top dead center under the compression stroke.

(Before removing the timing belt tensioner, align the punch marks of the crankshaft and camshaft timing belt pulleys with the indicators, respectively.)

NOTE:

After the timing belt tensioner has been removed, under no circumstances should the camshaft or the crankshaft be rotated. If they should be rotated, the piston will interfere with the valves, resulting in damage to these parts.

8. Remove the timing belt.
Prior to the timing belt removal, put a mark which shows the normal rotating direction at the back surface of the timing belt, using chalk or the like.

NOTE:

While removing the timing belt, make sure not to bend the belt sharply to form a small radius.
When removing the timing belt, never use a screwdriver or the like.

9. Remove the crankshaft timing belt pulley, as follows:
Screw in M8 bolts. Remove the crankshaft timing belt pulley together with the bolts.

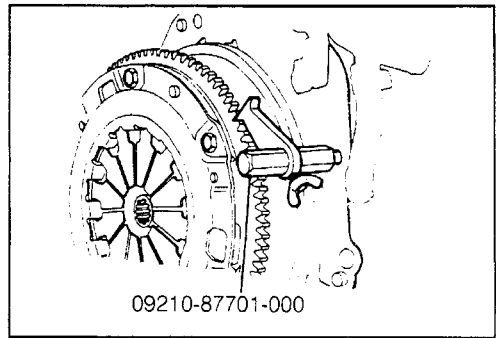


Fig. 5-85

WM-05096

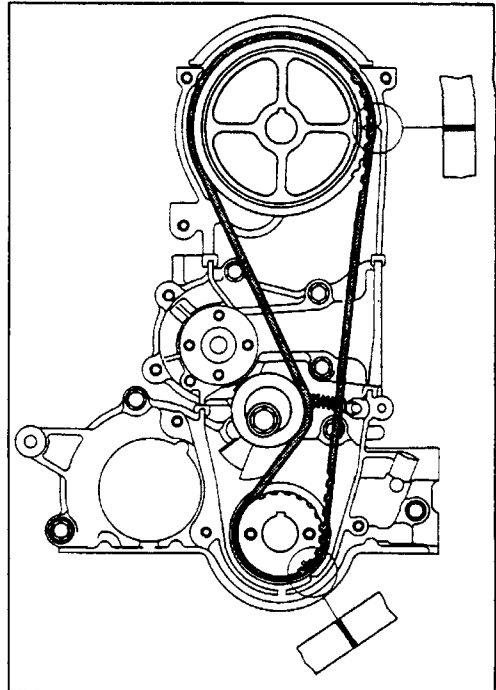


Fig. 5-86

WM-05097

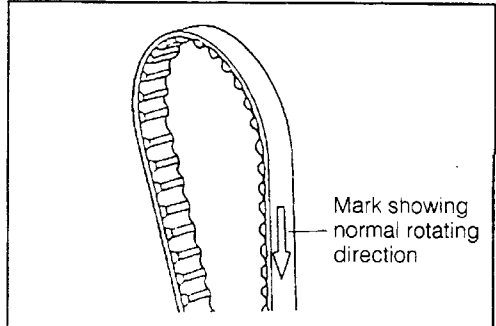


Fig. 5-87

WM-05098

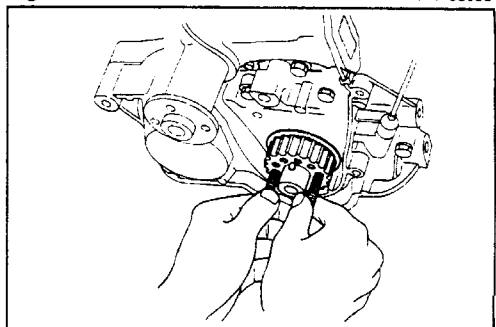


Fig. 5-88

WM-05099

ENGINE MECHANICALS

10. Remove the camshaft timing belt pulley.
 During the timing belt pulley removal, the rotation of the camshaft can be prevented by inserting a screwdriver through the opening of the pulley.

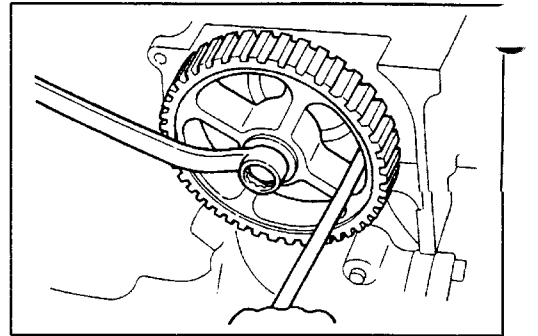


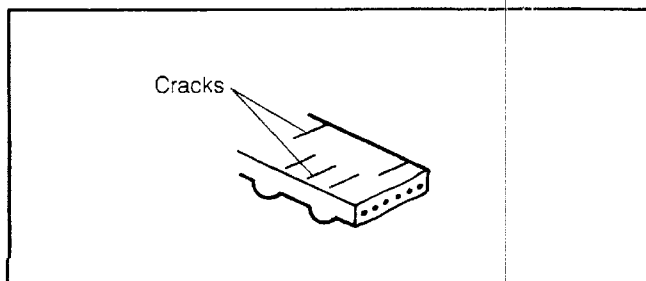
Fig. 5-89

WM-05100

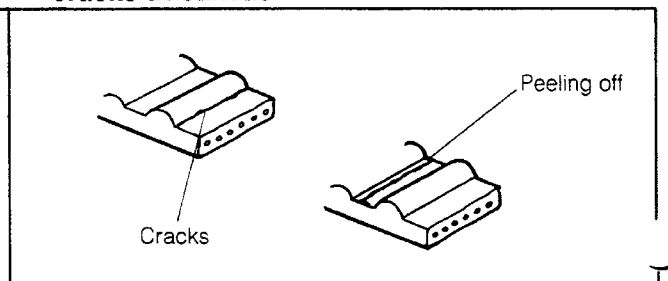
INSPECTION

1. Checking of timing belt
 Check each section of the timing belt. Replace the belt which exhibits the following damage.

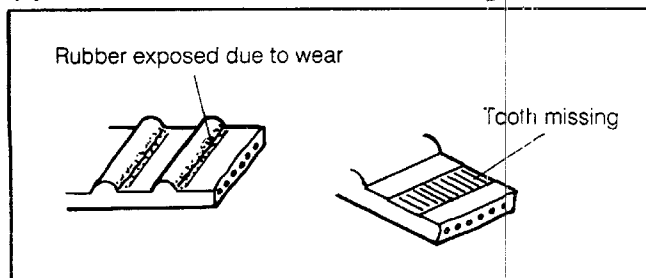
(1) Cracks at rubber portion of back surface



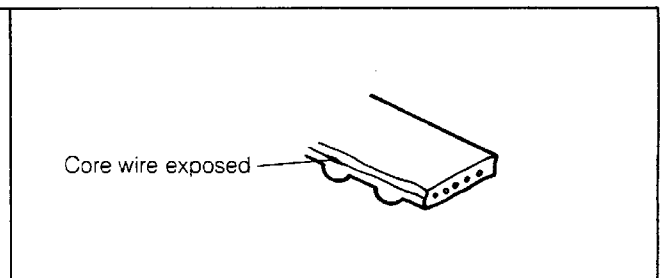
(2) Cracks at tooth bottom and peeling off and cracks at canvas



(3) Wear at canvas and tooth missing



(4) Abnormal wear at side surface of belt



Replace the belt in the following cases, even if no external damage is observed.

- (1) Case where the timing belt has been continuously exposed to water owing to water leakage of the water pump, etc.
- (2) Case where the rubber may have swollen because of a large amount of oil stuck on the timing belt.
- (3) Case where most likely excessive force has been applied to the timing belt due to a camshaft seizure.

2. Checking of timing belt tensioner
Turn the tensioner. Check the bearing for a lock condition and abnormal noise. Also check the belt contact surface for damage.

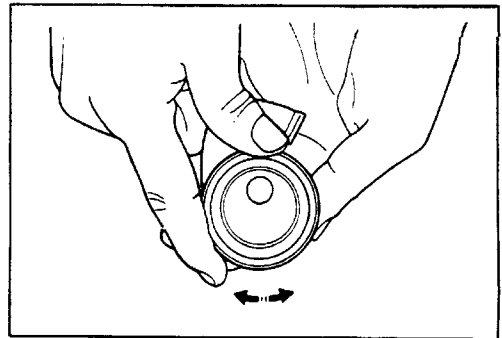


Fig. 5-90

WM-05102

3. Checking of timing belt pulley

Wear limit of timing belt pulley mm (inches)

Crankshaft timing belt pulley	59.2 (2.331)
Camshaft timing belt pulley	119.8 (4.717)

the wear exceeds the wear limit, replace the timing belt pulley.

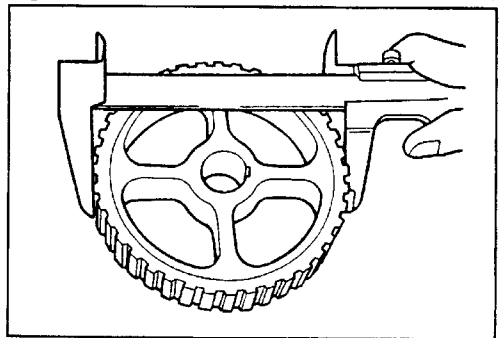


Fig. 5-91

WM-05103

4. Checking of crankshaft timing belt pulley flange
Check the crankshaft timing belt pulley flange for deformation or damage.

WM-05104

ENGINE MECHANICALS

INSTALLATION

1. Install the camshaft timing belt pulley.
To prevent the rotation of the camshaft, apply a metal rod to the rib section of the cylinder head.
(Be sure not to turn the camshaft while the timing belt pulley is being installed.)

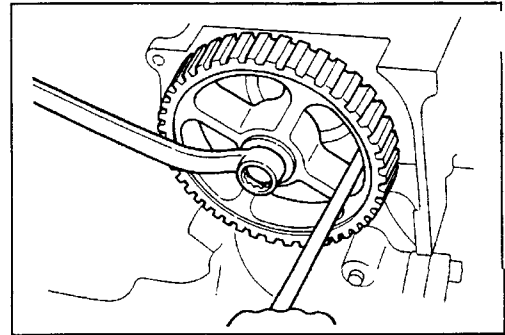


Fig. 5-92

WM-05105

2. Install the crankshaft timing belt pulley.
3. Install the timing belt tensioner subassembly.
Temporarily attach the timing belt tensioner.
The setting bolt of the timing belt tensioner should be backed off about half a turn from the completely tightened position.
Install the tension spring bracket and tension spring.

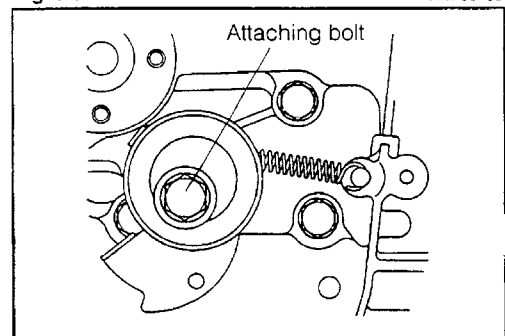


Fig. 5-93

WM-05106

4. Install the timing belt.

NOTE:

- ① Make sure not to bend the belt sharply to form a small radius. Such practice will cut the belt cord.
- ② Never permit oils, greases or water to get to the belt.
- ③ When installing the belt, never try to pry the timing belt with a screwdriver or the like.
- ④ When turning the engine with the belt installed, the rotation should be made at the crankshaft side.
- ⑤ If the belt is reused, install the belt in such a way that the belt is turned in the same direction as indicated by the arrow mark which was put at the belt's back surface during the belt removal.

WM-05107

- (1) Ensure that the punch marks of the crankshaft and camshaft timing belt pulleys are aligned with the indicator marks, respectively.
- (2) Ensure that two mating marks at the back surface of the belt are aligned with the punch marks of the camshaft and crankshaft timing belt pulleys, respectively. Also, be certain that the belt is not slackened.

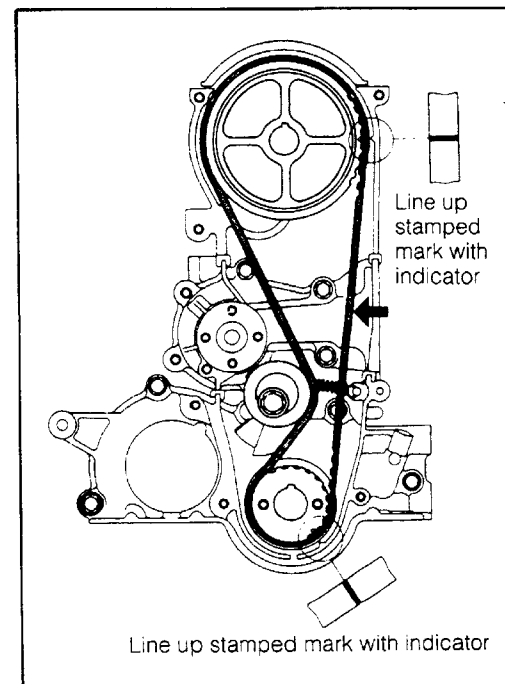


Fig. 5-94

WM-05108

- (3) Turn the crankshaft two turns in the normal rotating direction (clockwise), until the piston No.1 comes between the point 30° before the top dead center and the top dead center.

NOTE:

Never make a reverse rotation when turning the crankshaft.

- (4) Tighten the attaching bolt of the timing belt tensioner.

NOTE:

Do not push the tensioner by your finger, etc. during this operation.

Tightening Torque: 2.0 - 3.0 kg-m (14 - 22 ft-lb)

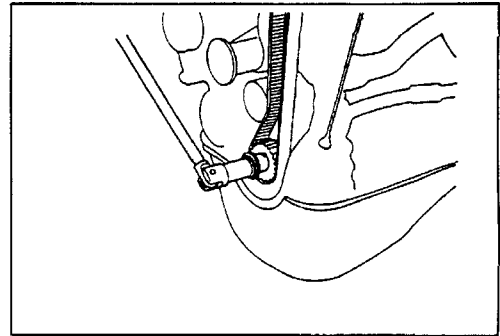


Fig. 5-95

WM-05109

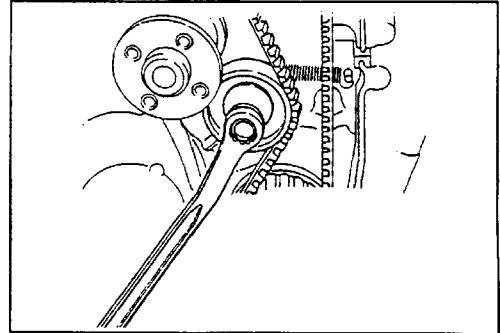


Fig. 5-96

WM-05110

- (5) Turn the crankshaft, until the piston No.1 comes at the top dead center under the compression stroke.
- (6) Ensure that the punch marks of the crankshaft and camshaft timing belt pulley are aligned with the indicators, respectively.
At this time, however, the two mating marks at the back surface of the timing belt are not aligned with the punch marks, respectively.

WM-05111

- 5. Install the crankshaft timing belt pulley flange.
— The crankshaft timing belt pulley flange should be installed only in the correct direction.

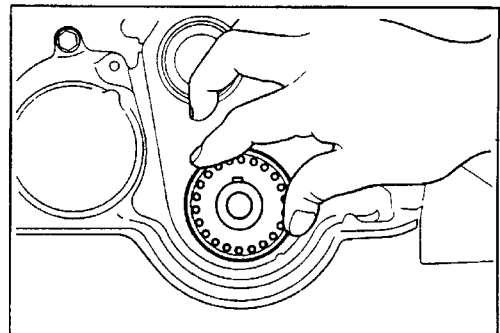


Fig. 5-97

WM-05112

- 6. Install the timing belt lower cover.
- 7. Install the timing belt upper cover.
- 8. Install the crankshaft pulley.
- 9. Install the water pump pulley.
- 10. Install the V-belt.

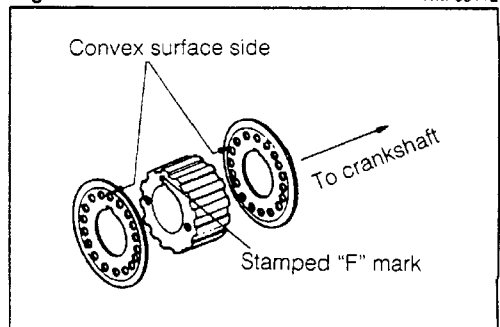


Fig. 5-98

WM-05113

ENGINE MECHANICALS

CB-80 ENGINE COMPONENTS OF TIMING BELT

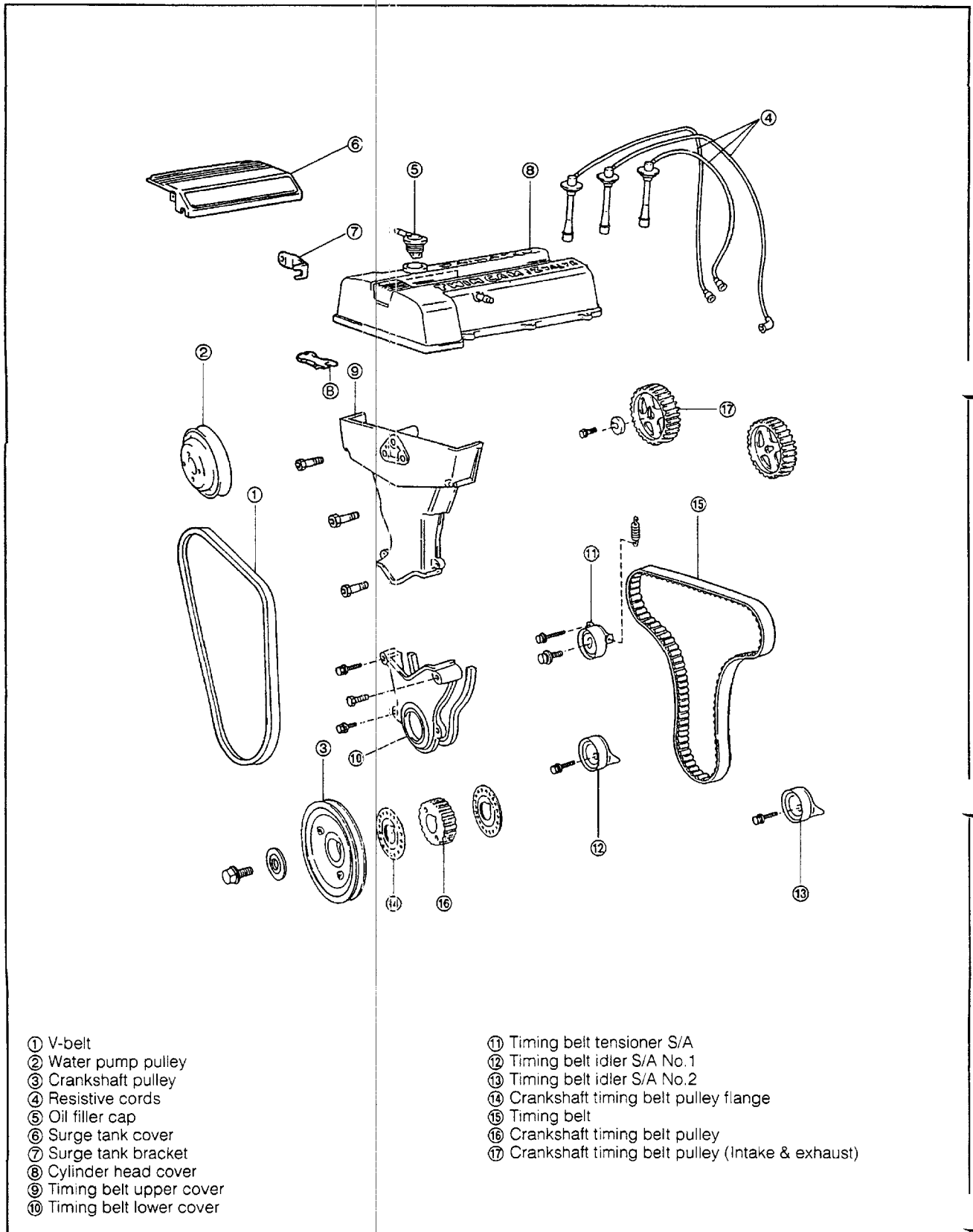


Fig. 5-99

WM-05114