

IN-VEHICLE SERVICE

2. Install the woodruff key.
3. Install the crankshaft timing belt pulley flange.

NOTE:

Ensure that the flanges are installed only in the correct direction.

4. Perform the timing belt tensioner installation and the following operations described in the section under "Installation of Timing Belt & Water Pump." As for the contents of these operations, see the section under "Timing Belt & Water Pump."

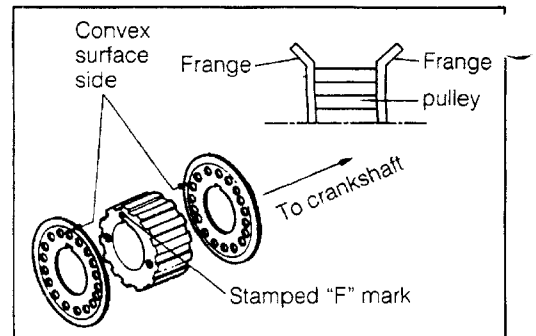


Fig. 4-20

WM-04026

CAMSHAFT (CB-23 & CB-61 Engines)

REMOVAL

1. After the operations up to the timing belt removal in the section under "Removal of Timing Belt & Water Pump" have been completed, proceed to this operation of "Camshaft Removal."
2. Remove the surge tank. (CB-61 engine only)
3. Remove the intake pipe. (CB-61 engine only)
4. Remove the air cleaner assembly. (CB-23 engine only)
5. Remove the resistive cords.
6. Remove the cylinder head cover.
7. Remove the distributor and distributor housing.
8. Remove the camshaft timing belt pulley.

NOTE:

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

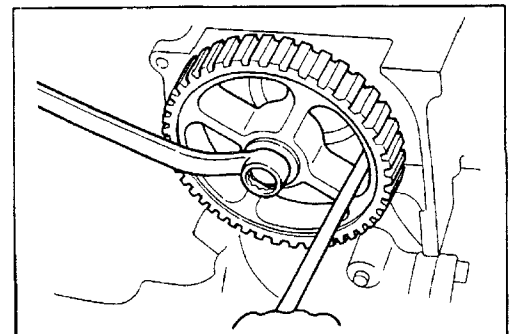


Fig. 4-21

WM-04027

9. Slacken the attaching screws of the valve rocker arm.
10. Remove the camshaft.

INSTALLATION

Reverse the removal procedure to install the camshaft.

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CAMSHAFT (CB-80 Engine)

REMOVAL

1. After the operations up to the timing belt removal in the section under "Removal of Timing Belt & Water Pump" have been completed, proceed to this operation of "Camshaft Removal."

2. Remove the camshaft timing belt pulley.

NOTE:

The rotation of the camshaft can be prevented by securing the hexagon section on the cylinder No.1.

Do not remove the camshaft timing belt pulley by utilizing the tension of the timing belt.

3. Remove the distributor.
4. Remove the camshaft bearing caps.
5. Remove oil seal from camshaft.
6. Remove the camshafts.

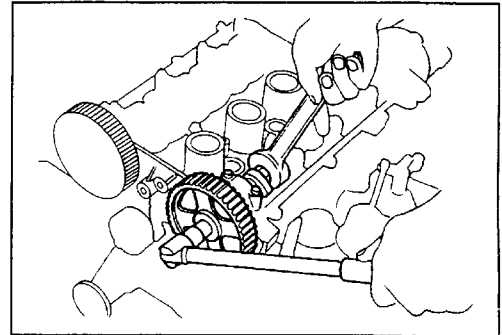


Fig. 4-22

WM-04029

INSTALLATION

1. Install the camshafts.
2. Installation of camshaft bearing caps
Install each camshaft bearing cap as indicated in the right figure, according to the embossed number and arrow at the back side of the camshaft bearing cap.

Tightening Torque: 1.15 - 1.45 kg-m (8.3 - 10.5 ft-lb)

3. Install the new camshaft oil seal, using SST.
SST: 09618-87301-000

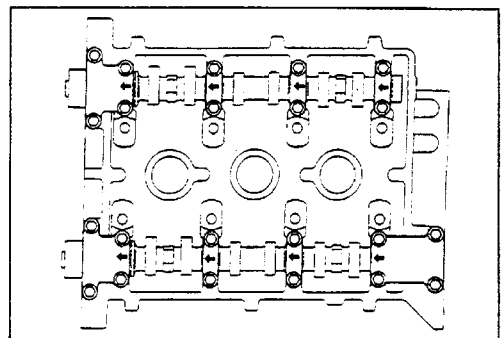


Fig. 4-23

WM-04030

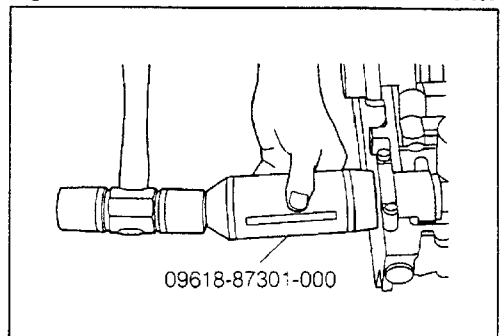


Fig. 4-24

WM-04030A

4. Installation of distributor
 - (1) Remove the distributor cap. Tilt the rotor, as indicated in the right figure.
 - (2) While turning the rotor, push and install the distributor into the groove provided in the camshaft to drive the distributor.

NOTE:

Since the distributor is eccentric with the groove provided in the camshaft, the installation can be performed in one direction. Therefore, never install the distributor forcibly.

Failure to observe this note will lead to distributor damage.

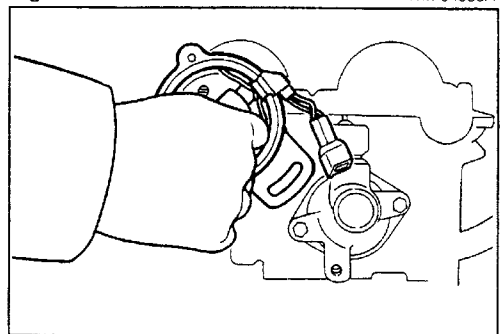


Fig. 4-25

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IN-VEHICLE SERVICE

5. Install the camshaft timing belt pulley.

NOTE:

The rotation of the camshaft can be prevented by securing the hexagon section on the cylinder No.1.

Tightening Torque: 3.0 - 4.5 kg-m (22 - 33 ft-lb)

6. Perform the timing belt installation and the following operations described in the section under "Installation of Timing Belt & Water Pump." As for the contents of these operations, see the section under "Timing Belt & Water Pump."

CAMSHAFT OIL SEAL (CB-23 & CB-61 Engines)

REMOVAL

1. After the operations up to the cylinder head cover removal in the section under "Removal of timing belt & water pump" have been completed, proceed to this operation of "Camshaft Oil Seal Removal."
2. Remove the camshaft timing belt pulley.

NOTE:

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

3. Removal of camshaft oil seal
 - (1) Make a hole on the oil seal, using the following SST.

SST: 09223-87702-000

- (2) Screw in the SST into the hole.

SST: 09223-87702-000

- (3) Pry off the oil seal with a screwdriver or the like.

NOTE:

Be careful not to damage the camshaft and cylinder head.

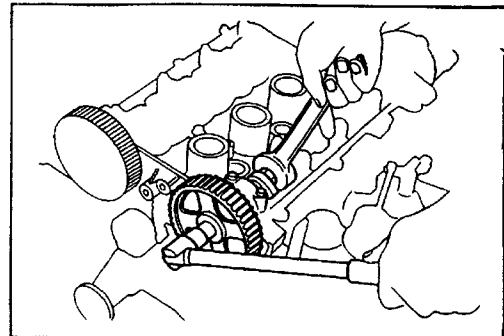


Fig. 4-26

WM-04032

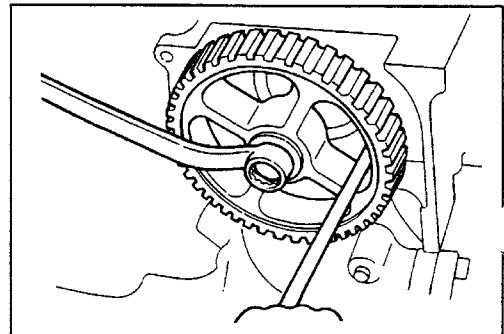


Fig. 4-27

WM-04033

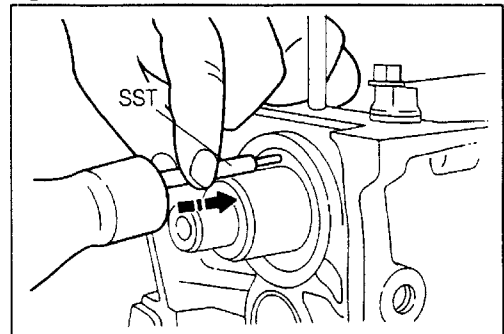


Fig. 4-28

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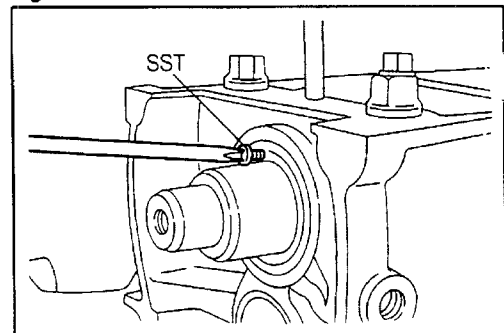


Fig. 4-29

WM-04035

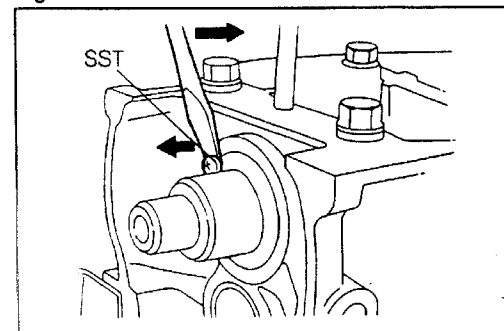


Fig. 4-30

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INSTALLATION

1. Installation of camshaft oil seal
With the SST placed against the oil seal, drive the oil seal into position.

SST: 09608-12010-000

NOTE:

Be sure to use a new oil seal.

2. Install the camshaft timing pulley.
Tightening Torque: 3.0 - 4.5 kg-m (22 - 33 ft-lb)

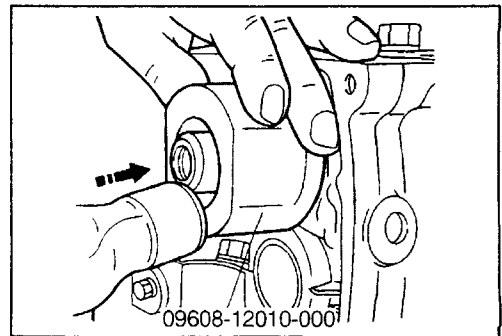


Fig. 4-31

WM-04037

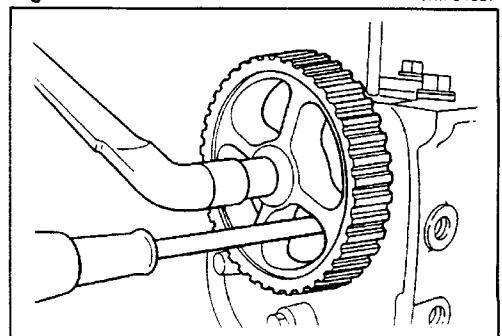


Fig. 4-32

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3. Perform the timing belt tensioner installation and the following operations described in the section under "Installation of Timing Belt & Water Pump." As for the contents of these operations, see the section under "Timing Belt & Water Pump."

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CYLINDER HEAD GASKET (CB-23 & CB-61 Engines)

REMOVAL

1. After the operations up to the cylinder head cover removal in the section under "Camshaft Removal" have been completed, proceed to this operation of "Cylinder Head Gasket Removal."
2. Drain engine oil

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3. Disconnect the exhaust pipe.
4. Remove the EGR pipe. (Specific area only)
5. Disconnect the hoses.
6. Remove the cylinder head assembly.
7. Remove the cylinder head gasket.

INSTALLATION

Reverse the removal procedure to install the cylinder head gasket.

NOTE:

Be sure to use a new gasket oil seal.

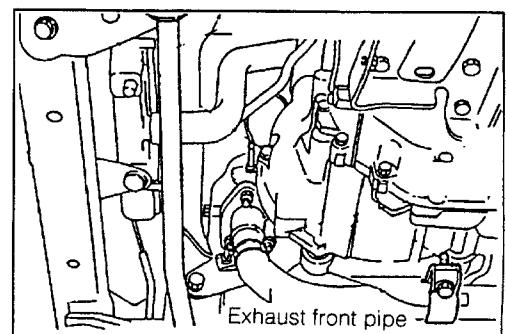


Fig. 4-33

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IN-VEHICLE SERVICE

CYLINDER HEAD GASKET (CB-80 Engine)

REMOVAL

1. After the operations up to the distributor removal in the section under "Camshaft Removal" have been completed, proceed to this operation of "Cylinder Head Gasket Removal."
2. Remove the surge tank cover.
3. Remove the hoses.
4. Remove the connectors.
5. Remove the surge tank stay.
6. Disconnect the exhaust pipe.
7. Remove the intake pipe.
8. Remove the cylinder head assembly.
9. Remove the cylinder head gasket.

INSTALLATION

Reverse the removal procedure to install the cylinder head gasket.

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INJECTOR (CB-80 Engine)

REMOVAL

1. Remove the surge tank cover.
2. Remove the bracket (surge tank ⊗ cylinder head cover).
3. Remove the intake pipe.
4. Remove the hoses.

Union (for cold start injector)

The fuel line system is retained under a highly-pressurized state. When the union is removed, place a cloth underneath. Be sure to slowly remove the union so as to prevent the fuel from splashing.

5. Remove the connectors
6. Remove the surge tank.
7. Remove the delivery pipe.
8. Remove the insulator.
9. Remove the injector.

INSTALLATION

Reverse the removal procedure to install the injector.

NOTE:

Be sure to use new gaskets.

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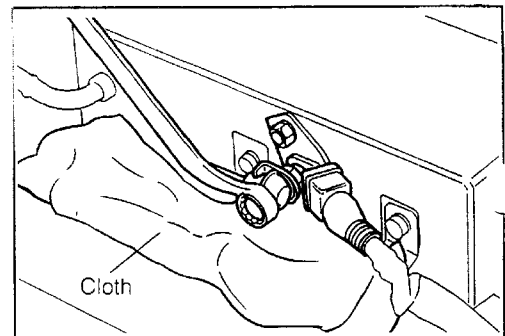


Fig. 4-34

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OIL PUMP

REMOVAL

1. Remove the exhaust pipe.
2. Remove the bracket (transmission ⊗ exhaust pipe).
3. Remove the engine mounting rear bracket No.2.
4. Remove the engine mounting rear bracket No.1.
5. Remove the engine lower mounting member.
6. Remove the stiffener plate.
7. Remove the oil pan.
8. Remove the oil pan gasket.
9. Remove the oil pump drive shaft sprocket.
10. Remove the oil jet. (CB-80 engine only)
11. Remove the oil pump.

INSTALLATION

1. Install the oil pump.

NOTE:

Be sure to use new "O" ring

2. Install the oil jet. (CB-80 engine only)
3. Install the oil pump drive shaft sprocket.

NOTE:

Be sure to install the oil pump drive shaft sprocket with the side having the "CB OUTSIDE" stamp facing to the outside.

4. Install the oil pan gasket.

- ① Apply the sealer to the cylinder block, following the procedure indicated in the illustration at the right.

Sealer to be used: **Silicon Bond**

- ② Apply the sealer to the oil pan gasket a the oil pan side, following the procedure indicated in the illustration at the right. Place the oil pan gasket on the cylinder block.

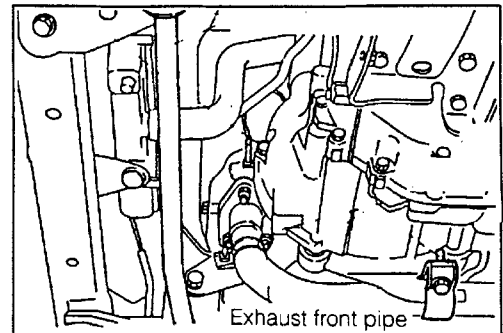


Fig. 4-35

WM-04050

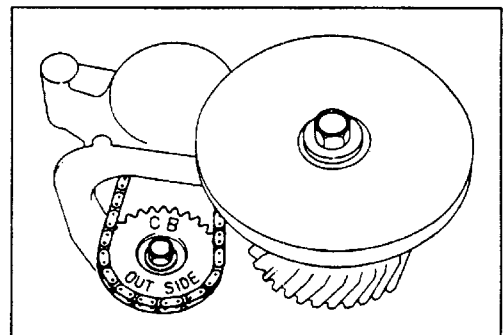
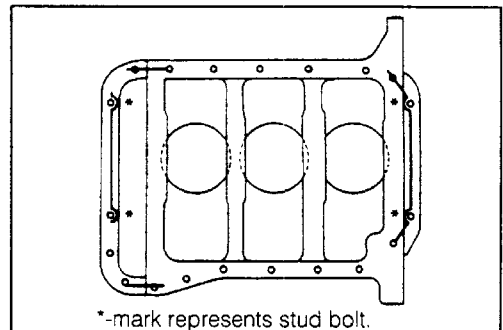


Fig. 4-36

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*-mark represents stud bolt.

Fig. 4-37

WM-04052

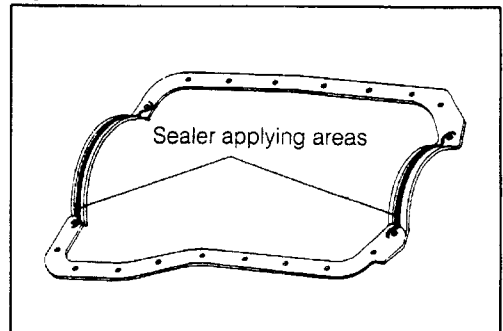


Fig. 4-38

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IN-VEHICLE SERVICE

5. Install the oil pan.
Tighten the stud bolt sections temporarily. Then, tighten the oil pan attaching bolts in the sequence as shown in the illustration at the right.

Tightening Torque: 0.4 - 0.7 Kg-m (2.9 - 5.1 ft-lb)

The numerals in () in the illustration at the right denote the temporal tightening sequence for the stud bolts.

6. Install the stiffener plate.
7. Install the engine lower mounting member.
8. Install the engine mounting rear bracket No.1.
9. Install the engine mounting rear bracket No.2.
10. Install the bracket (transmission ⊗ exhaust pipe).
11. Install the exhaust pipe.

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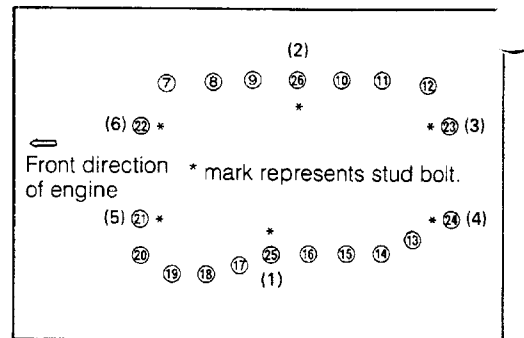


Fig. 4-39

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