

INSTALLATION SERVICE POINTS

►A◄ AUTO TENSIONER INSTALLATION

- (1) Use a press or vise to compress the push rod of the auto tensioner as slowly as possible. Then align pin hole A of the push rod with pin hole B of the tensioner cylinder.

Caution

1. Place the auto tensioner at a right angle to the pressing surface of the press or vise.
2. Push in the rod slowly to prevent the push rod from being damaged.

- (2) Insert setting pin or wire with a diameter of 1.4 mm (.06 in.) into the aligned pin holes.

NOTE

The wire should be as stiff as possible (such as piano wire, etc.), and should be bent into the shape of an "L".

- (3) Install the auto tensioner to engine.

Caution

Leave the setting pin or wire installed in the auto tensioner.

►B◄ TIMING BELT INSTALLATION

- (1) Align the timing marks of each sprocket.

NOTE

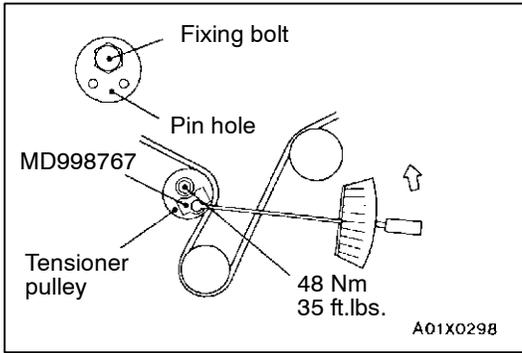
At this time, No. 1 cylinder should be at the top dead center on compression stroke.

- (2) Use bulldog clips to fix the timing belt in the following procedure to prevent the belt from slacking.
 1. Crankshaft sprocket → 2. Idler pulley → 3. Front bank side camshaft sprocket → 4. Water pump pulley → 5. Rear bank side camshaft sprocket → 6. Tensioner pulley

Caution

Since the camshaft is turned by the reaction of valve spring, be careful not to get your fingers caught between the sprocket and timing belt.

- (3) Apply force counterclockwise to the camshaft sprocket on the rear side. When the tight side of the belt is fault, check that the timing marks are all aligned.
- (4) Gently raise the tensioner pulley as shown by the arrow, so that the belt does not sag, and temporarily tighten the center bolt.



►C◄ TIMING BELT TENSION ADJUSTMENT

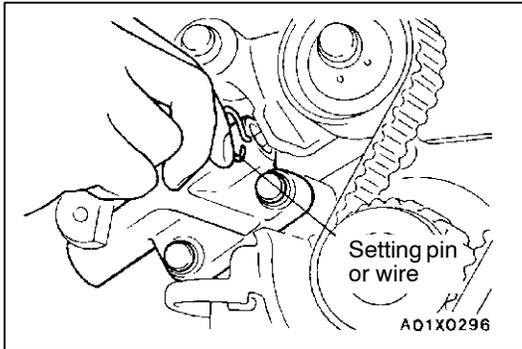
- (1) Turn the crankshaft a 1/4 turn counterclockwise, and then turn it clockwise to the position where the timing marks are aligned.
- (2) Loosen the center bolt of the tensioner pulley. Use the special tool and a torque wrench to apply tension to the timing belt as shown in the illustration. Then tighten center bolt to the specified torque.

Caution

When tightening the bolt, make sure that the tensioner pulley shaft doesn't rotate with the bolt.

Specified torque: 4.4 Nm (3.3 ft.lbs.) [tensional torque]

- (3) Pull out the auto tensioner setting pin or wire. At this time, check that the setting pin or wire can be pulled out easily. Turn the crankshaft clockwise 2 turns and hold it for 5 minutes or more. Then check again that the auto tensioner setting pin or wire can be pulled or inserted easily.



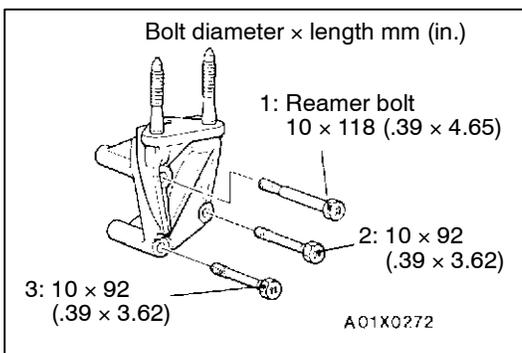
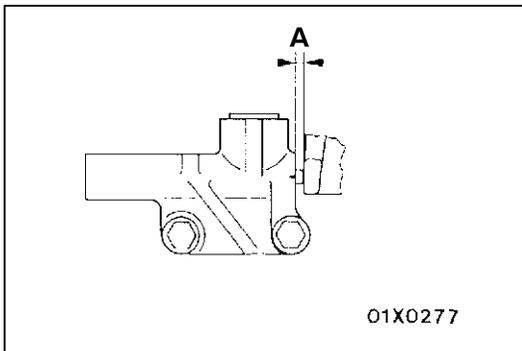
NOTE

Even if the setting pin or wire cannot be easily inserted, then it is satisfactory if the auto tensioner rod projection is within the standard value.

Standard value (A): 3.8 - 4.5 mm (.149 - .177 in.)

If it is not within the standard value, repeat the operations in steps 1. to 3.

- (4) Check again that each of the sprocket timing marks is aligned.

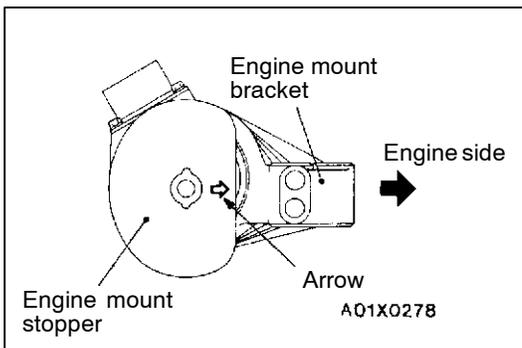


►D◄ ENGINE SUPPORT BRACKET INSTALLATION

Since the engine support bracket mounting bolts differ in size depending on their locations, install them in the numbered sequence shown in the figure.

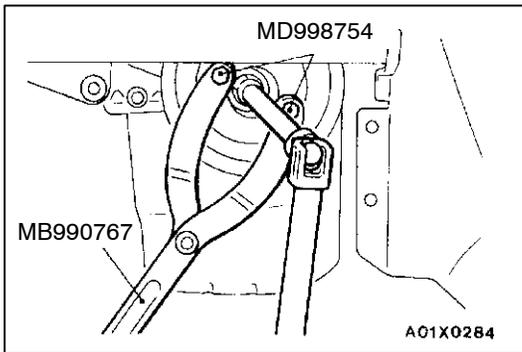
Caution

When installing the reamer bolt, tighten it slowly while spraying lubricant on the reamer area.



►E◄ ENGINE MOUNT BRACKET INSTALLATION

Attach the engine mount bracket so that the arrow mark on the engine mount stopper is in the direction as shown in the illustration.

**►F◄ CRANKSHAFT PULLEY INSTALLATION****Caution**

Use only the specified special tools, or the pulley damper could be damaged.

INSPECTION**AUTO TENSIONER**

- Check the auto tensioner for leaks.
- Check the push rod for cracks.