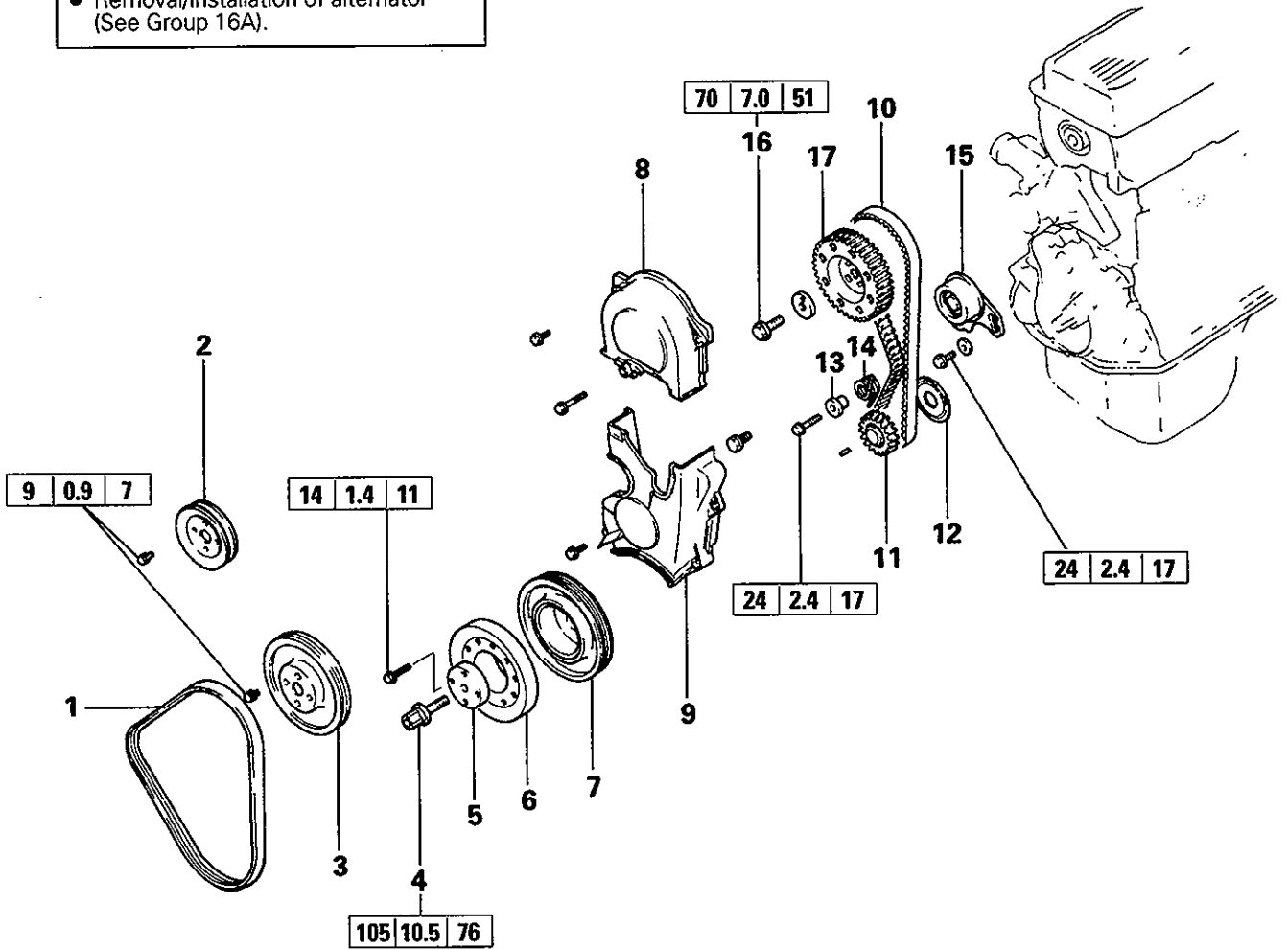


3. DRIVE BELT AND TIMING BELT REMOVAL AND INSTALLATION

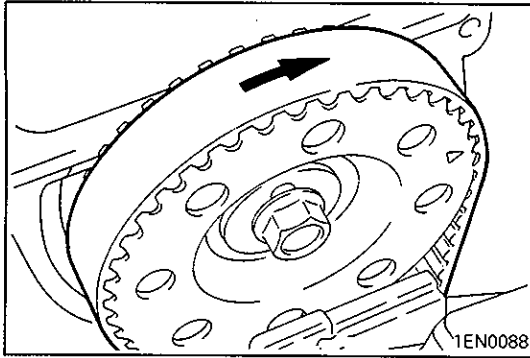
Pre-removal/post-installation operations

- Removal/installation of alternator (See Group 16A).



Removal steps

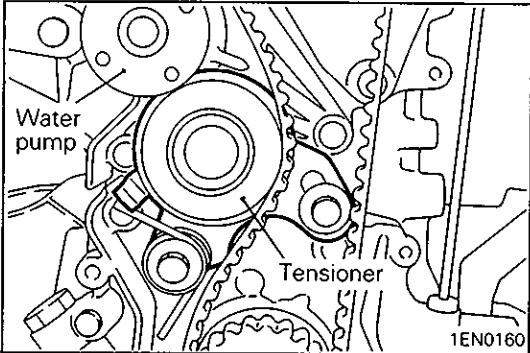
- ▶E▶ 1. Drive belt
- 2. Pulley (for power steering pump drive)
- 3. Water pump pulley
- 4. Crankshaft pulley bolt
- 5. Special washer
- 6. Crankshaft pulley
- 7. Damper pulley
- 8. Timing belt upper cover
- 9. Timing belt lower cover
- ◇A▶▶D▶▶10. Timing belt
- ▶C▶▶11. Crankshaft sprocket
- ▶C▶▶12. Flange
- ▶▶▶13. Tensioner spacer
- ▶▶▶14. Tensioner spring
- ▶▶▶15. Timing belt tensioner
- ◇B▶▶▶A▶▶▶16. Camshaft sprocket bolt
- ▶▶▶▶▶▶▶17. Camshaft sprocket



SERVICE POINTS OF DISASSEMBLY

◁A▷ REMOVAL OF TIMING BELT

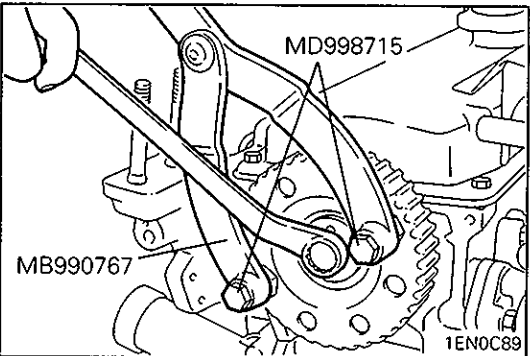
- (1) Using chalk, etc., mark an arrow on the back of the timing belt to indicate the direction of rotation. This is to ensure correct installation of the belt in case it is reused.



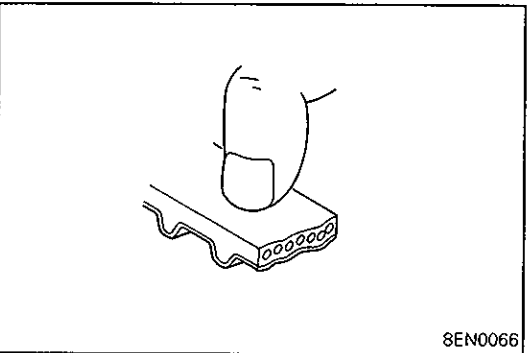
- (2) Slide the tensioner toward the pump as illustrated and tighten the bolt.
- (3) Remove the timing belt.

NOTE

- (1) Water or oil on the belt shortens its life drastically, so the removed timing belt, sprocket, and tensioner must be free from oil and water. Do not immerse parts in cleaning solvent.
- (2) If there is oil or water on any part, check front case oil seal, camshaft oil seal and water pump for leaks.



◁B▷ LOOSENING OF CAMSHAFT SPROCKET BOLT

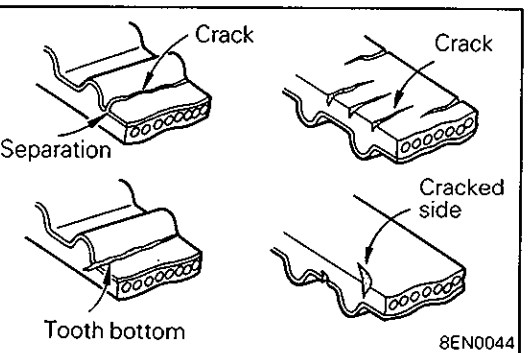


INSPECTION

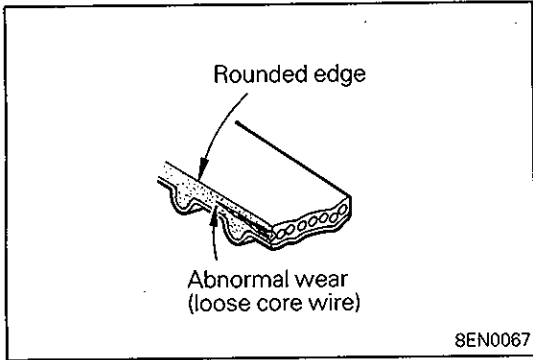
TIMING BELT

The timing belts must be checked closely. Should the following defects be evident, replace the belt with a new one.

- (1) Hardened back surface rubber
Glossy, non-elastic and so hard that no mark is produced even when scratched by fingernails.



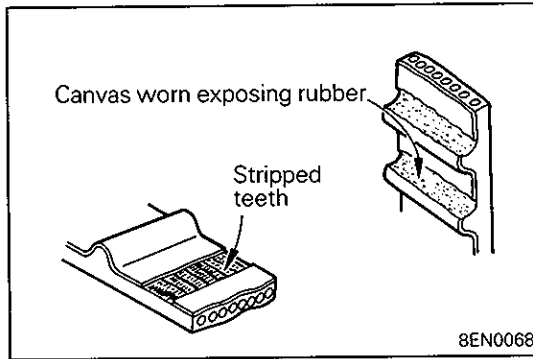
- (2) Cracked back surface rubber
- (3) Cracked or separated canvas
- (4) Cracked tooth bottom
- (5) Cracked side



(6) Abnormal wear on side

NOTE

Normal belt should have clear-cut sides as if cut by a sharp knife.



(7) Abnormal wear in teeth

Initial stage:

Canvas on load side tooth flank worn (Fluffy canvas fibers, rubber gone and color changed to white, and unclear canvas texture)

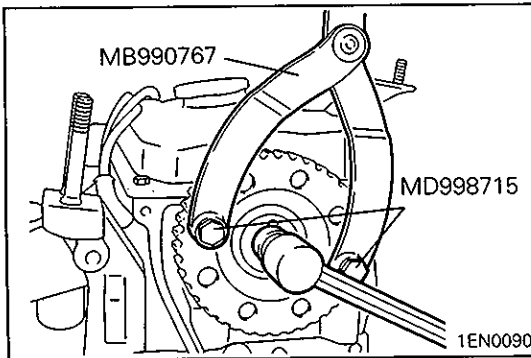
Final stage:

Canvas on load side tooth flank worn down and rubber exposed (tooth width reduced)

(8) Missing tooth

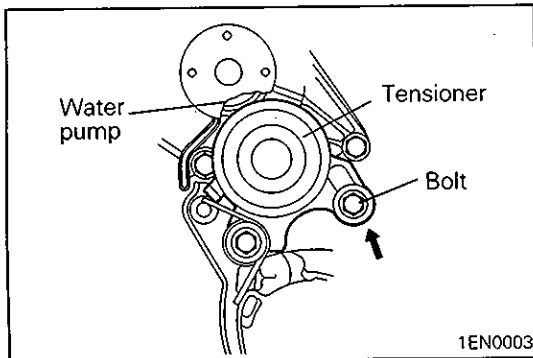
SERVICE POINTS OF REASSEMBLY

◆A◆ TIGHTENING OF CAMSHAFT SPROCKET BOLT



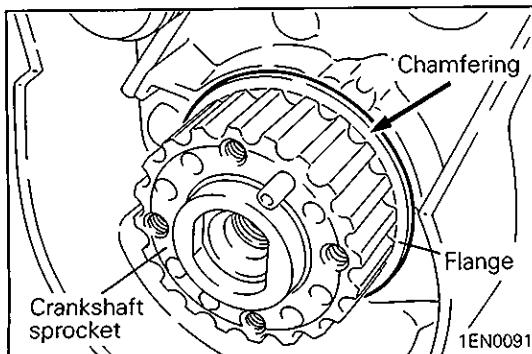
◆B◆ INSTALLATION OF TIMING BELT TENSIONER

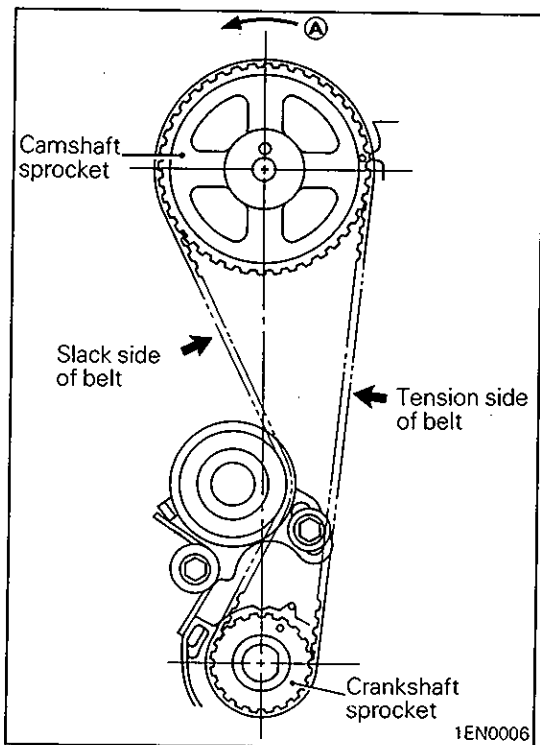
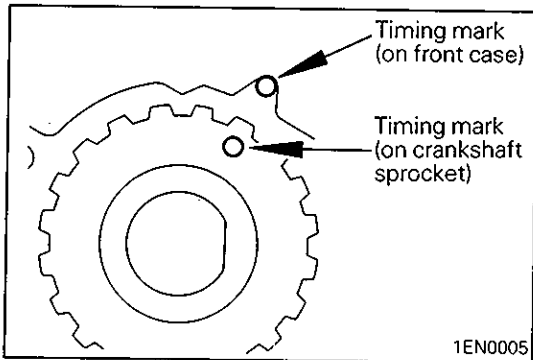
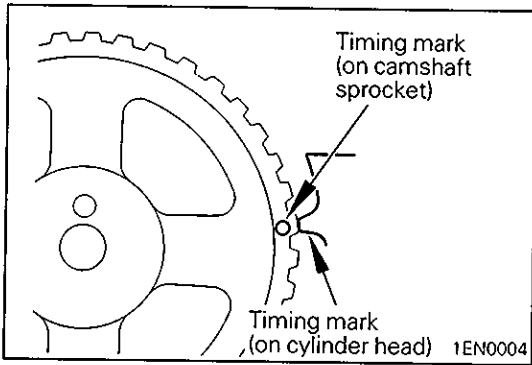
(1) Move tensioner pulley toward water pump and tighten tensioner mounting bolts.



◆C◆ INSTALLATION OF FLANGE

(1) Flange must be installed with its chamfered face toward the sprocket.





◆◆ INSTALLATION OF TIMING BELT

(1) Align timing marks on camshaft sprocket and crankshaft sprocket with their timing marks.

(2) Set the timing belt first on crankshaft sprocket and then keeping the tension side belt tight, set on the camshaft sprocket.

(3) Loosen the tensioner mounting bolts ① and ② to apply tension to the belt by tensioner spring force.

(4) Check that the belt completely meshes with the sprocket. Also check the alignment of the timing marks on the sprockets.

