



Camshaft Sprocket/Pulleys

REMOVAL & INSTALLATION

Z24i and KA24E Engines

1. Remove the timing chain with the camshaft sprocket.

NOTE: The engines are designed so that the camshaft sprocket MUST be removed at the same time that the timing chain is removed.

2. To install, use new gaskets and reverse the removal procedures.

VG30i and VG30E Engines

1. Remove the timing belt.
2. Using an adjustable spanner wrench (to hold the camshaft pulley) and a socket wrench, remove the camshaft pulley bolt and washer.
3. Remove the camshaft pulley(s) from the camshaft(s). Be careful not to lose the Woodruff keys.

NOTE: The right and left camshaft pulleys are different parts. Install them in their correct positions. The right pulley has an R3 identification mark and the left pulley has an L3.

To install:

4. To install the camshaft pulleys, perform the following:
 - A. Remove the cylinder head covers.
 - B. Loosen the rocker arm shaft assembly bolts.
 - C. Remove the spark plugs.
 - D. Make sure the Woodruff keys are in position, then install the camshaft pulleys.
5. Install and adjust the timing belt.
6. Install the timing belt covers.

Fig. 1: Tightening the camshaft sprocket bolt with a spanner-type wrench — 4-cylinder engines

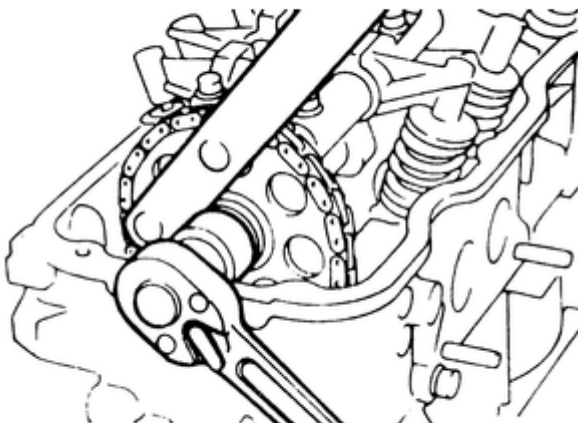


Fig. 2: Loosen the camshaft pulley retaining bolt



Fig. 3: Remove the camshaft pulley retaining bolt



Fig. 4: View of the camshaft pulley — note the timing mark on top of the pulley

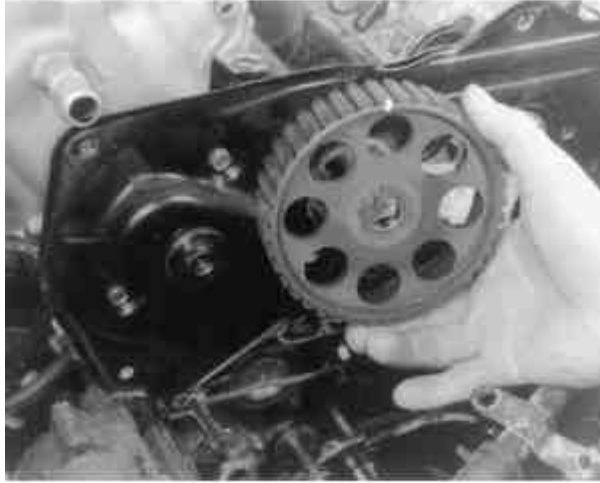


Fig. 5: Tighten the camshaft pulley retaining bolt — note the tool to hold the pulley in place

