

VVT Inspect and Replace Timing Chain(s) and Gears

Meets ASE Task: A1 – B-6 – P-1

Name: _____ Date: _____ Time on Task: _____

Make/Model/Year: _____ VIN: _____

Evaluation (Enter number from 4, 3, 2, 1) : _____

- 1. Check service information to determine the specified procedure and special tools needed to inspect and replace the timing chain(s), gears, actuators, guides, and tensioners. List the special tools needed:

- 2. Remove the engine front cover following the manufacturer's procedures.
- 3. Using the original crankshaft bolt, rotate the engine until the crankshaft gear is in the desired location.
- 4. Verify the timing marks on the variable cam actuators are in the correct location.
- 5. Inspect the chain(s), gears, actuators, guides, and tensioners for wear.
- 6. Based on the inspection, what components need to be replaced?
- 7. Install the replacement timing chain(s), gears, actuators, guides, and tensioners. Check that the timing marks align.
- 8. Reassemble the front of the engine and torque all fasteners to factory specifications.

