

► TASK Inspect and replace camshaft and drive belt/chain (includes checking drive gear wear and backlash, endplay, sprocket and chain wear, overhead cam drive sprocket[s], drive belt[s], belt tension, tensioners, camshaft reluctor ring/tone-wheel, and variable valve timing components); verify correct camshaft timing.

MAST
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CDX Tasksheet Number: C676

Time off _____

Time on _____

Total time _____

1. Research the procedure and specifications for inspecting and replacing the camshaft and timing components in the appropriate service information.

- a. Type of cam drive system used: _____
- b. Is this engine equipped with variable valve timing? Yes: _____
No: _____
- c. Camshaft endplay: _____ in/mm
- d. Camshaft drive gear backlash, if equipped: _____ in/mm
- e. List or print off and attach to this sheet any precautions when performing this task:

- f. List or print off and attach to this sheet any measurement and torque specifications for this task:

2. Following the specified procedure, remove any timing belt/chain covers. Visually inspect the installed timing components, including belt/chain tensioner. List your observations:

3. Following the specified procedure, disassemble the cam drive system. Clean all gasket surfaces.

4. Inspect the condition of the following components, if equipped, and list your observations:

- a. Timing belt/chain: _____
- b. Sprockets: _____
- c. Belt/chain tensioners: _____

- d. Camshaft endplay: _____ in/mm
- e. Camshaft drive-gear backlash: _____ in/mm
- f. Camshaft reluctor ring/tone-wheel: _____
- g. Crank and cam oil seals: _____
- h. Water pump: _____
- i. Variable valve timing components: _____

5. Determine any necessary action(s): _____

- 6. Have your instructor verify removal of the timing components and your observations: _____
- 7. Following the specified procedure, reinstall the timing components, making sure the timing marks are properly aligned and the belt or chain is properly tensioned. Do not install the timing cover yet.
- 8. Have your instructor verify installation of the timing components and camshaft timing: _____
- 9. Reassemble any removed components and belts, being careful to properly tighten all fasteners and accessory drive belts.
- 10. When everything is back together, carefully turn the engine by hand (ignition key off) at least two complete turns to verify there isn't a piston-to-valve interference.
- 11. If the engine turns over properly, start the engine, verify it is running properly, and make any timing or other adjustments.
- 12. Have your supervisor/instructor verify satisfactory completion of this procedure, any observations found, and any necessary action(s) recommended.

Performance Rating

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Supervisor/instructor signature _____ Date _____