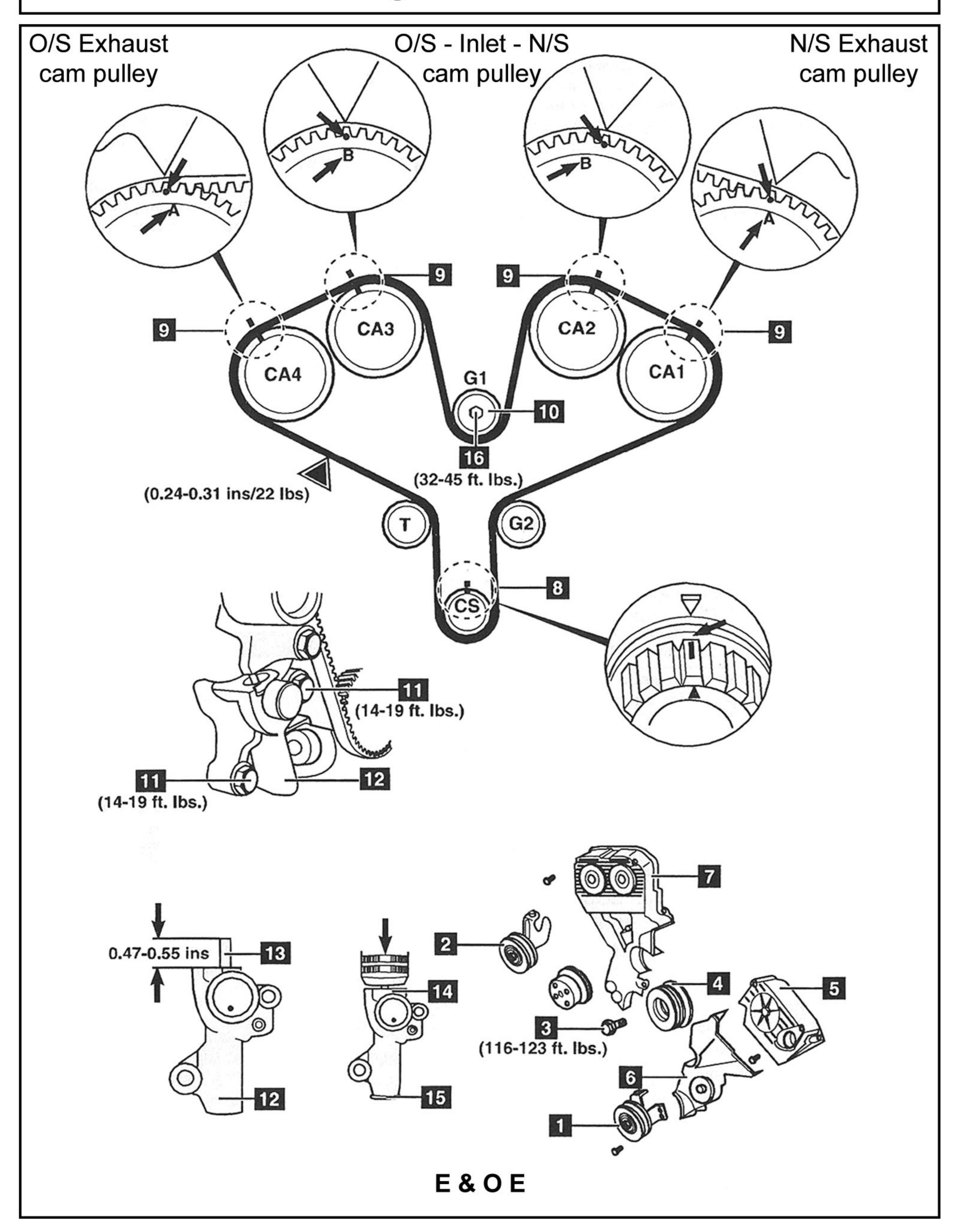


# MAZDA BONGO 2.5V6 PETROL Timing belt information



# Full workshop manual available

#### Replacement Interval Guide

Mazda recommends replacement every 60,000 miles. The previous use and service history of the vehicle must always be taken into account.

#### Check For Engine Damage

CAUTION: This engine has been identified as an INTERFERENCE engine in which the possibility of valve-to-piston damage in the event of a timing belt failure is MOST LIKELY to occur.

A compression check of all cylinders should be performed before removing the cylinder head.

### Labour Times - 7 hrs (Incuding cam seals)

## **Special Tools - NONE**

☐ None required.

#### Special Precautions

- ☐ Disconnect battery ground cable.
- Do NOT turn crankshaft or camshaft with timing belt removed.
- Remove spark plugs to ease turning engine.
- ☐ Turn crankshaft in normal direction of rotation (unless otherwise stated).
- □ Do NOT turn crankshaft via camshaft or other sprockets.
- ☐ Observe all tightening torques.

#### Removal

# Generic description

#### 1. Drain coolant.

- 2. Remove:
  - Air intake ducting.
  - Accessory drive belt(s).
  - Cooling fan & pulley.
  - A/C compressor idler pulley & bracket 1.
  - PAS idler pulley & bracket 2.
  - Upper radiator hose.
  - o By-pass hose.
  - O Distributor.
  - o Crankshaft pulley bolt 13.
  - O Crankshaft pulley 2.
  - O Left hand upper timing belt cover **5**.
  - O Left hand lower timing belt cover 6.
  - o Right hand timing belt cover **7**.
- 3. Turn crankshaft clockwise until the crankshaft and camshaft sprocket timing marks ② & ② are aligned.

  NOTE: Align A marks on exhaust camshaft sprockets and B marks on intake camshaft sprockets.

#### 4. Remove:

- O Upper guide pulley (G1) 1.
- o Timing belt.
- O Auto tensioner retaining bolts III.
- O Auto tensioner 12.

NOTE: If re-using old belt, mark direction of rotation with chalk.

**IMPORTANT:** To maximise timing belt system performance.

It is recommended the timing belt tensioner & idler pulleys are all changed at the same time as the timing belt. The hydraulic tensioner must be carefully inspected as it is not classed as a lifetime component. Replacement of the hydraulic tensioner is recommended. It is also highly recommended that all cam shaft & main crank seals are replaced.

**WARRANTY:** We can only warranty timing belt components if all parts are changed, as failure can be caused by any of the above. Parts must be fitted by a professional mechanic and a company invoice detailing these works must be provided in the event of any claim.

#### Installation

- 1. Ensure crankshaft and camshaft sprocket timing marks 🛛 & 🖺 are aligned.
- 2. Ensure auto tensioner **12** is not leaking or damaged and that pushrod **12** extends 0.47-0.55 ins. If not, replace auto tensioner.
- 3. Using a suitable press, compress pushrod III into tensioner assembly III and retain pushrod with a suitable sized pin through hole III.

NOTE: Place a flat washer under auto tensioner to avoid damage to the end plug. Do not exceed 2200 lbs/in 2 pressure.

- 4. Install auto tensioner **12** to cylinder block.
- 5. Torque tensioner bolts III to 14-19 ft. lbs.
- 6. Install timing belt to sprockets and pulleys in the following order:
  - o Crankshaft sprocket.
  - Guide pulley G2.
  - Camshaft sprocket CA1.
  - Camshaft sprocket CA2.
- Tensioner pulley.
- Camshaft sprocket CA4.
- o Camshaft sprocket CA3.

NOTE: Align A marks on exhaust camshaft sprockets and B marks on intake camshaft sprockets. If re-using old belt, observe direction of rotation markings.

- 7. Apply hand tension to timing belt, then install guide pulley (G1) 10, torque bolt 10 to 32-45 ft. lbs.
- 8. Turn crankshaft slowly two turns clockwise until timing marks 2 & 2 are aligned.
- 9. Remove pin from hole in auto tensioner III to release pushrod.
- 10. Turn crankshaft two turns clockwise until timing marks 3 & 2 are aligned.
- 11. Apply a load of 22 lbs. at ▼, timing belt should deflect 0.24-0.31 ins. If not, repeat installation and tensioning procedure.
- 12. Install components in reverse order of removal.
- 13. Torque crankshaft pulley bolt 116-123 ft. lbs.
- 14. Refill cooling system.
- 15. Check and adjust ignition timing.

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