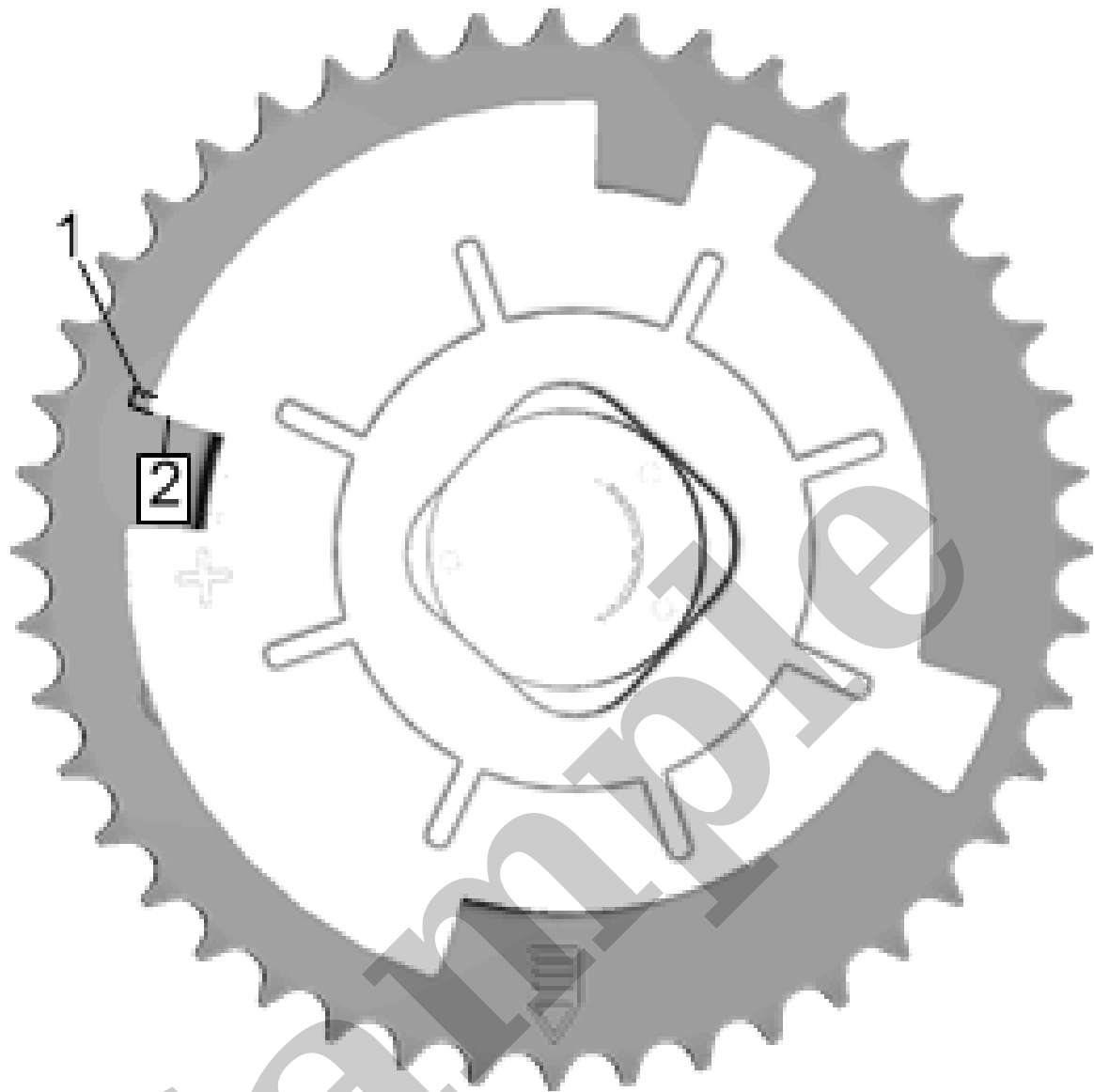


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2004 CHEVROLET Equinox OEM Service and Repair Workshop Manual

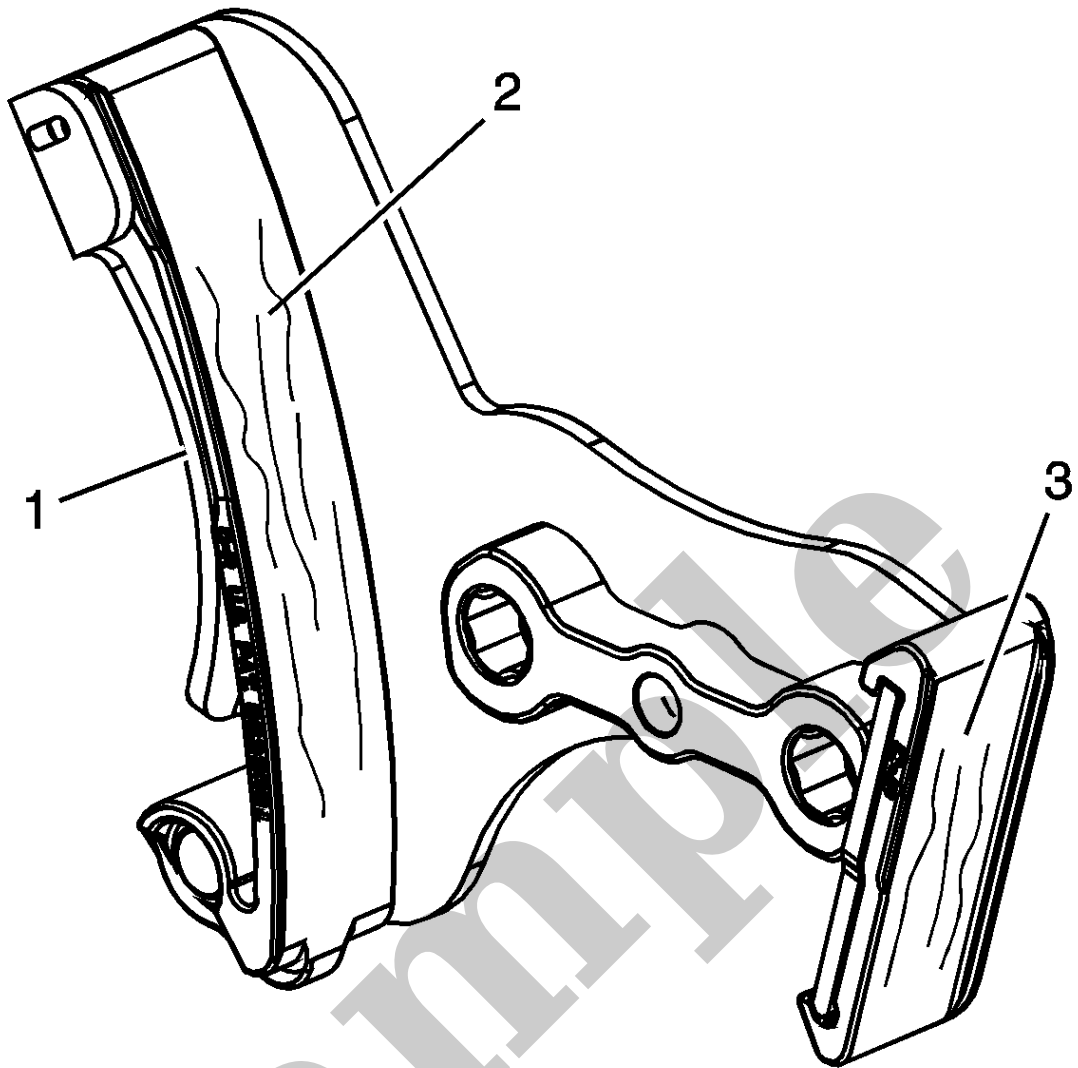
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5.

Inspect the CMP actuator for the following conditions:

- Improper positioning of the CMP reluctor wheel. The actuator return spring should reposition the reluctor wheel to the PARK position. Inspect for proper alignment of the mark on the face of the sprocket (1) with the flat edge of the reluctor wheel (2). If the reluctor wheel is not properly positioned, the internal components of the actuator are sticking or the return spring is broken and the actuator should be replaced as an assembly.
- Nicked or damaged edges (3) on the CMP reluctor wheel
- Damaged timing sprocket teeth (4)



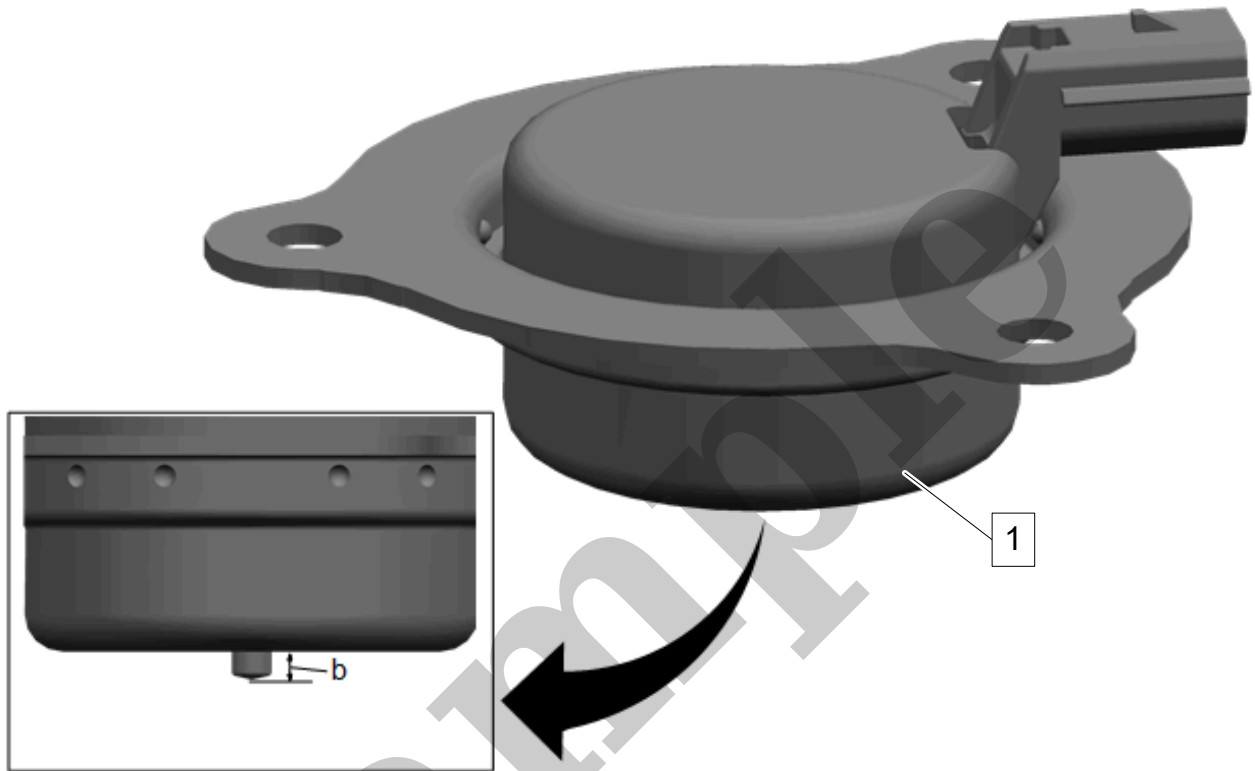
7.

Inspect the timing chain tensioner for the following conditions:

- Damaged or broken tension spring (1)
- Excessive wear or scoring on the chain guide surfaces (2, 3)

- An accumulation of dirt or debris in the recessed area around the pintle
- A build-up of burnt engine oil on the shaft of the pintle which may cause the pintle to stick and not move freely within the proper range of travel

2. Holding the CMP magnet with the pintle facing upward, measure the pintle retracted position (a). Record the dimension.



3.

Holding the CMP magnet with the pintle facing downward, measure the pintle extended position (b). Record the dimension.

4. Subtract the retracted dimension (a) from the extended dimension (b) to determine pintle travel. A properly moving pintle will travel 3.0–5.5 mm (0.12–0.22 in).

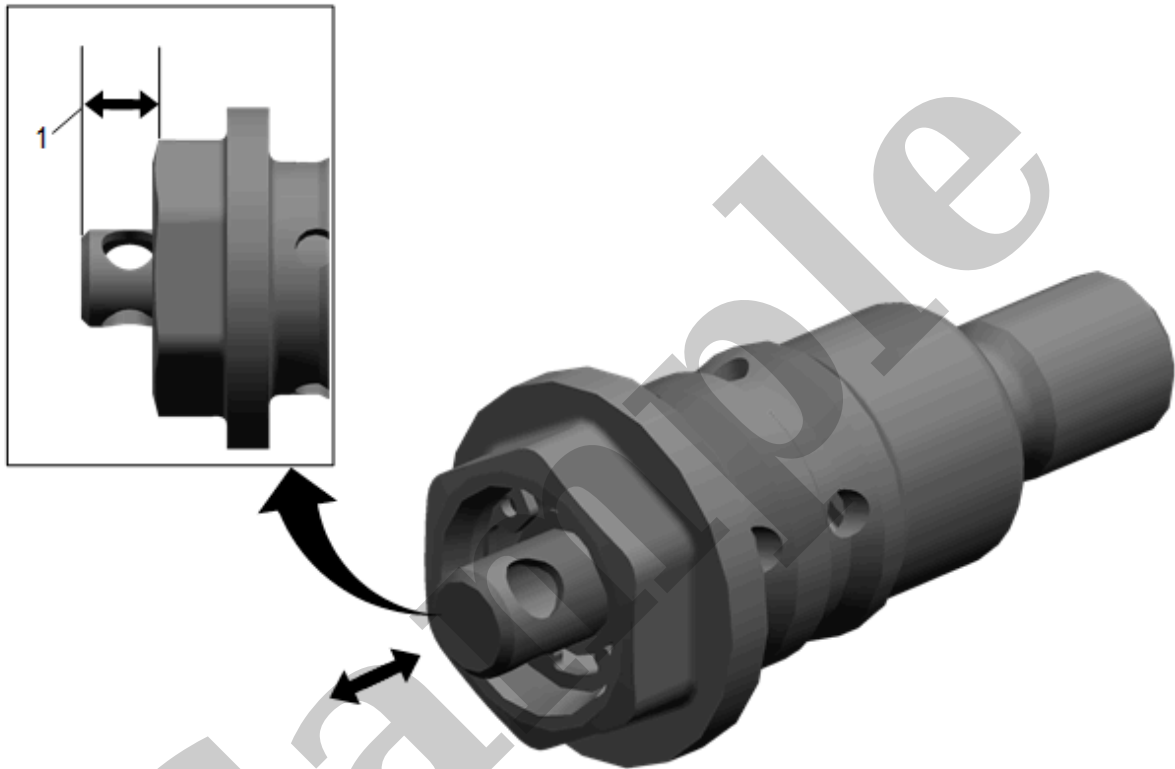
5. If the pintle of the CMP magnet is binding or does not move within the proper range of travel, replace the CMP magnet as an assembly.

- Damaged threads (2)

If the threads of the valve are damaged, also inspect the threads in the front of the camshaft for damage.

- Dirt, debris, or restrictions within the oil inlet (3)

If debris is detected, the engine assembly should be inspected to determine the source of contamination.



2.

Inspect for a sticking valve spool or broken valve spool spring.

3. Depress the valve spool into the housing. The valve should move freely with no binding or sticking and minimal resistance inward. When released, the valve spring should return the spool to the proper extended position (1) of 6.52–6.92 mm (0.257–0.272 in).