



### Valve timing procedures

- Removal/refitting requires:
- Engine removal.
- Cylinder head removal.

**NOTE: Refer to Technical Data module for tightening torques.**

- Sump removal.
- Engine at TDC on No.1 cylinder [1]11744.
- Ensure crankshaft sprocket keyway at 12 o'clock position [2]11744.
- Align copper coloured chain link with crankshaft sprocket timing mark [3]11744.
- Align silver coloured chain links with timing mark on each camshaft sprocket [4]11744.
- Ensure correct number of link rollers between timing marks [5]11744.
- Reset timing chain tensioner:
- Depress ratchet [6]to release tensioner plunger.
- Push plunger into tensioner housing and lock with retaining clip [7].
- Install tensioner [8]11744.
- Plunger will automatically release during installation.

**NOTE: Ensure arrow on tensioner pointing to the front of the engine.**

- Camshaft sprocket tightening torque:
- Inlet without variable timing control - 137-157 Nm.
- Inlet with variable timing control - 127-137 Nm.