| AR05.10-P-7620-04MM | Place engine on cylinder 1 at 40 degrees after <br> top dead center |  |  |
| :--- | :--- | :--- | :--- |

## Shown on engine 276

10 Belt pulley/vibration damper
10a Reference edge (coolant pump)

P05.10-2424-11
Engine 152.9, 157, 278, shown on engine 278
10 Belt pulley/vibration damper
10a Reference edge (poly-V belt tensioning device)


P05.10-2423-11


P05.10-2442-08

## Shown on engine 276



P05.10-2443-08

## Shown on engine 276

2 Camshaft adjuster

1 Rotate engine at the center bolt of the crankshaft in direction of engine rotation until marking for a $40^{\circ}$ CKA on the belt pulley/ vibration damper (10) coincides with reference edge (10a).
i The reference edge (10a) is located for engine 276 on the coolant pump and for engines 152.9, 157, 278 on the poly- $V$ belt tensioning device.
i The engine must not be turned against the direction of rotation of engine otherwise the timing chain can get jammed.

Position of cylinder 1 at $40^{\circ}$ after overlap TDC (the laser markings (arrows) are at the bottom)

2 Check position of camshafts based on the laser marks (arrows). i If the laser marks on the camshaft adjusters (2) are located at the top (see picture 3) and the mark $40^{\circ}$ is at the reference edge (10a), then cylinder 1 is at $40^{\circ}$ after ignition TDC.
i If the laser marks on the camshaft adjusters (2) are located at the bottom (see picture 4) and the mark $40^{\circ}$ is at the reference edge (10a), then cylinder 1 is at $40^{\circ}$ after overlap TDC.
i A complete crankshaft revolution $\left(360^{\circ}\right)$ lies between $40^{\circ}$ after ignition TDC and $40^{\circ}$ after overlap TDC on cylinder 1.

