

Checking valve clearance

Remove the seat ([Removing the seat](#)).

Remove the rear body panels ([Removing the side body panels and the tail guard](#)).

Remove the front half-fairings ([Removing the front half-fairing](#)).

Remove the fuel tank ([Removing the fuel tank](#)).

Remove the airbox ([Removing the airbox and throttle body](#)).

Loosen the timing belt covers ([Removing the timing belt external covers](#)).

Loosen the water radiator retaining screws by leaving the radiator connected to the cooling system ([Removing the water radiator](#)).

Disconnect the coil caps.

Disconnect the secondary air units of the head covers ([Removing the secondary air system](#)).

Remove the cylinder head cover ([Removing the camshafts](#)).



Note

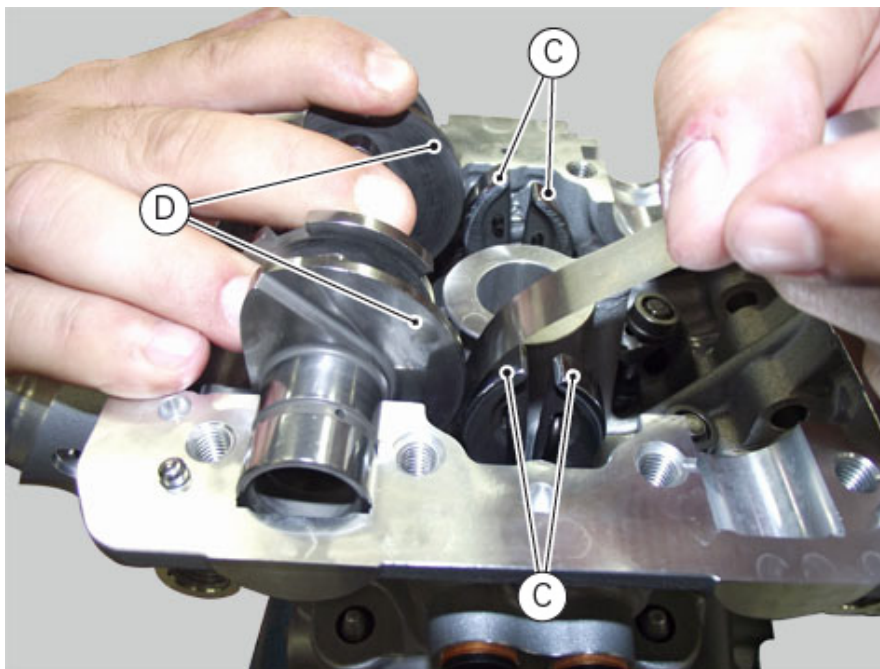
For better clarity, some of the following figures show the engine removed from the frame.

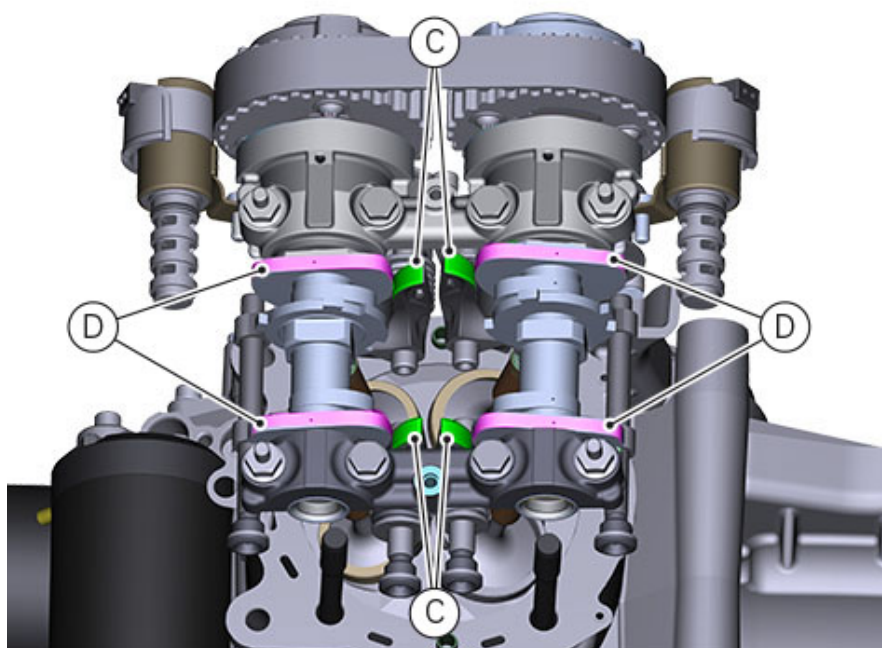
Bring the horizontal cylinder to the TDC and proceed as described in chapter "Timing"

Then, all valves are closed and the camshafts are in rest position, i.e. free to rotate.

Checking the closing clearance

Using a feeler gauge, check the clearance between the closing rocker arm (C) sliding shoe and the highest point of the camshaft lobe (D).

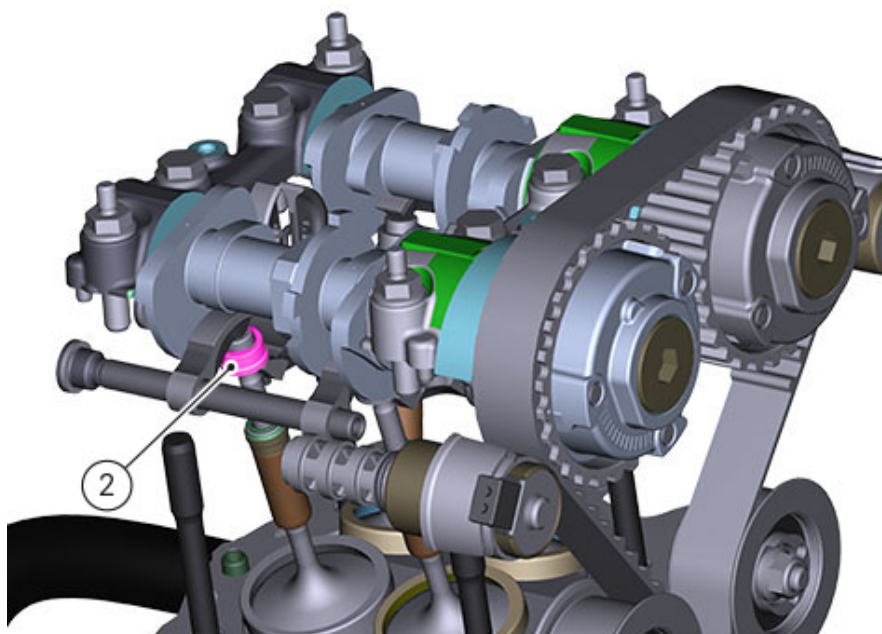




The value must be within the prescribed ones.

VALVES	CLOSING CLEARANCE (mm)
INTAKE	0.05 ÷ 0.10
EXHAUST	0.05 ÷ 0.10

If not, remove the closing shim (2), as described in paragraph "[Removing the valves](#)", and replace it with one of suitable height to obtain the prescribed clearance.

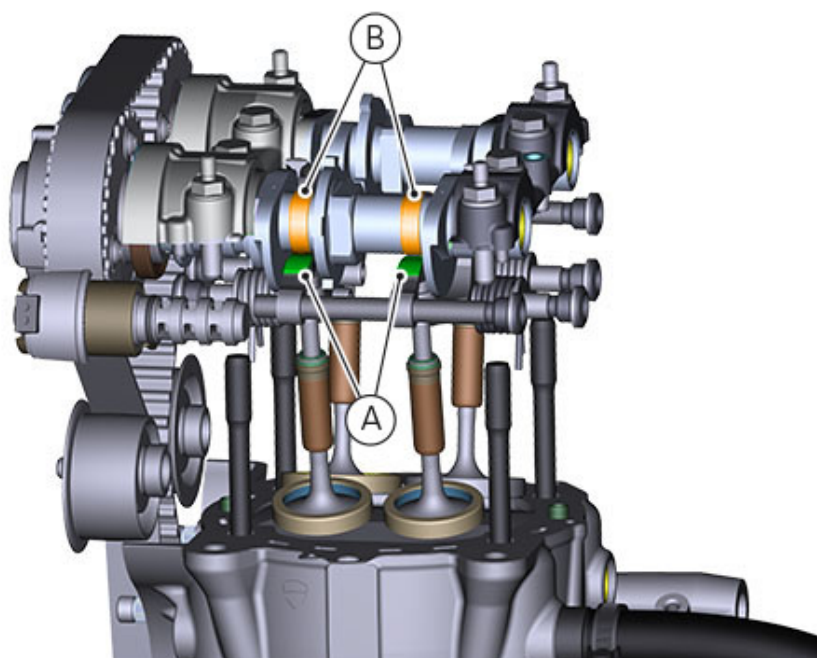
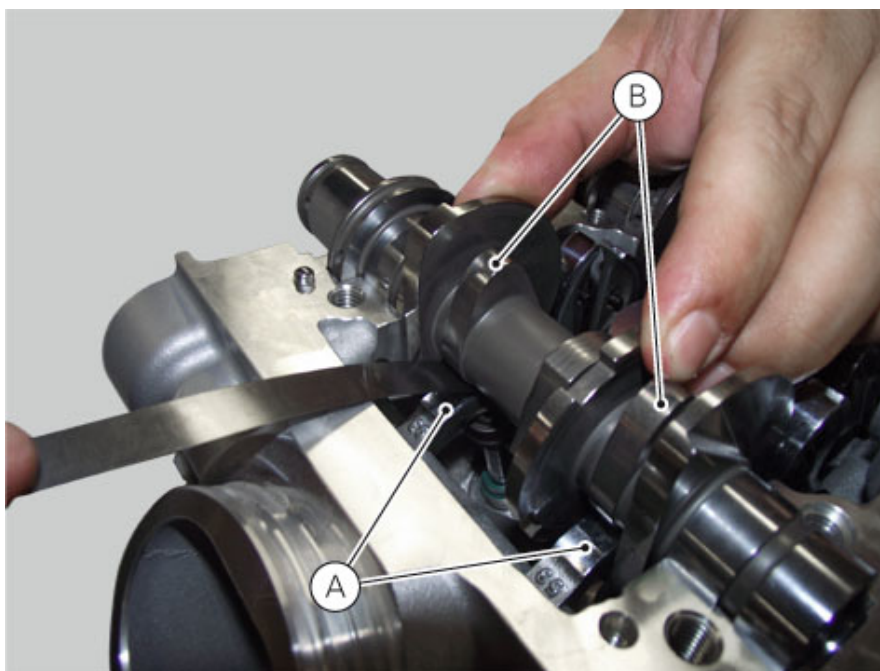


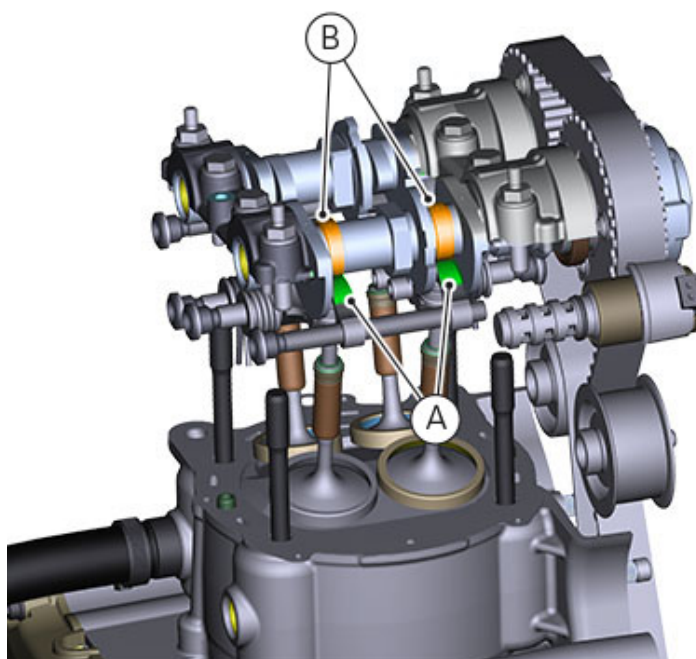
Note

Opening rocker arm shims measuring 1.80 to 3.45 are available as spare parts: the size is punched on the shim.

Checking the opening clearance

Using a feeler gauge, check the clearance between the opening rocker arm (A) and the lowest point of the camshaft lobe (B).

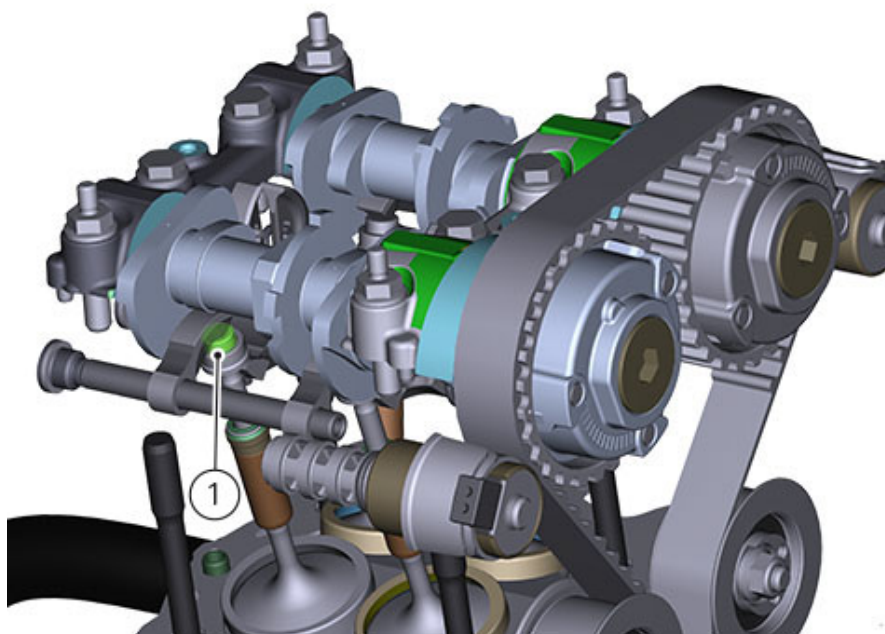




The value must be within the prescribed ones.

VALVES	CLOSING CLEARANCE (mm)
INTAKE	0.13 ÷ 0.18
EXHAUST	0.13 ÷ 0.18

If not, remove the opening shim (1), as described in paragraph "[Removing the valves](#)", and replace it with one of suitable height to obtain the prescribed clearance.



Note

Opening rocker arm shims measuring 1.80 to 3.45 are available as spare parts: the size is punched on the shim.

Bring the vertical cylinder to the TDC. Repeat the operations performed on the vertical head for the horizontal head.