

1D

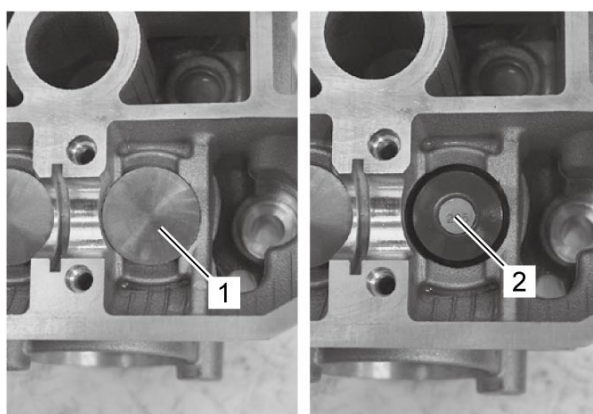


Valve / Valve Spring Removal and Installation

Refer to [Cam Chain Tension Adjuster / Cam Chain Tensioner / Cylinder Head Assembly / Cam Chain Guide / Cylinder Removal](#) and [Cam Chain Tension Adjuster / Cam Chain Tensioner / Cylinder Head Assembly / Cam Chain Guide / Cylinder Installation](#).

Removal

- 1) Remove the tappet (1) and shim (2) by fingers or magnetic hand.



- 2) Install the sleeve protector between the valve spring and cylinder head.

NOTICE:

To prevent damage of the tappet sliding surface with the valve lifter attachment, use the special tool.

- 3) Using the special tools, compress the valve spring and remove the two cotter halves (1) from the valve stem.

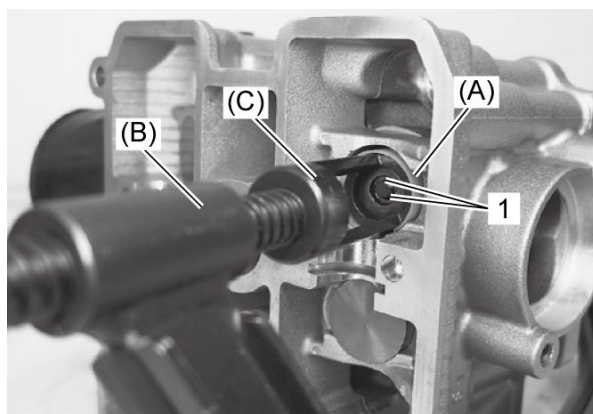
Special Tool

(A): [09919-28620](#)

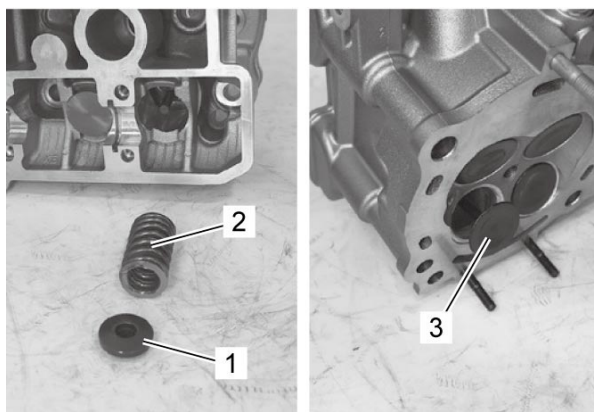
(B): [09916-14510](#)

(C): [09916-14522](#)

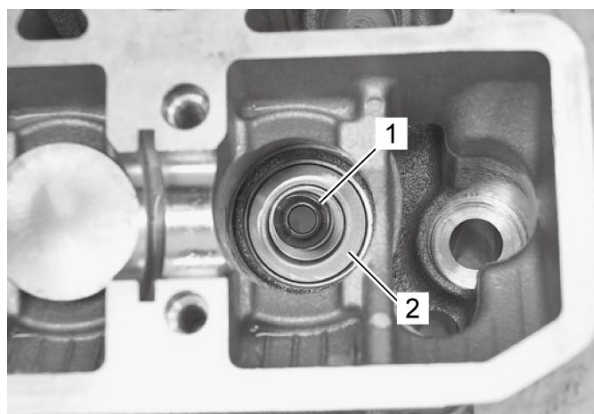
[09916-84511](#)



- 4) Remove the valve spring retainer (1) and valve spring (2).
- 5) Pull out the valve (3) from the combustion chamber side.



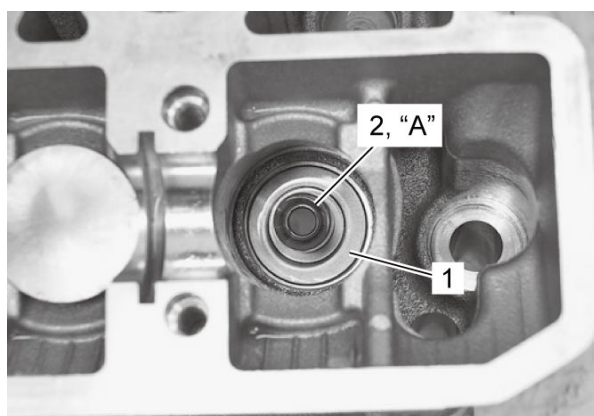
6) Remove the oil seal (1) and spring seat (2).



Installation

- 1)** Install the valve spring seat (1).
- 2)** Apply molybdenum oil solution to the new oil seal (2), and press-fit it into position.

"A": Assembly lubrication (Molybdenum oil solution)

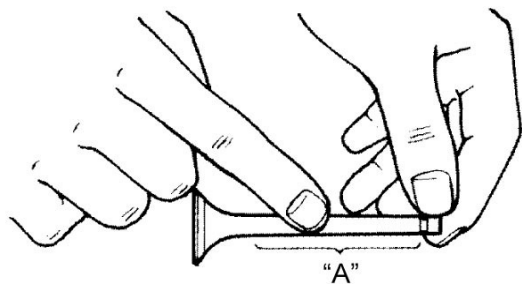


3) Insert the valve, with its stem coated with molybdenum oil solution all around and along the full

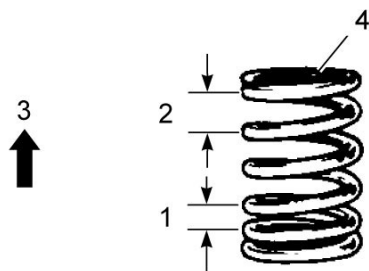
stem length without any break.

NOTICE:
When inserting the valve, take care not to damage the lip of the oil seal.

"A": Assembly lubrication (Molybdenum oil solution)



4) Install the valve spring with the small-pitch portion (1) facing cylinder head.



2.	Large-pitch portion	4.	Paint
3.	UPWARD		

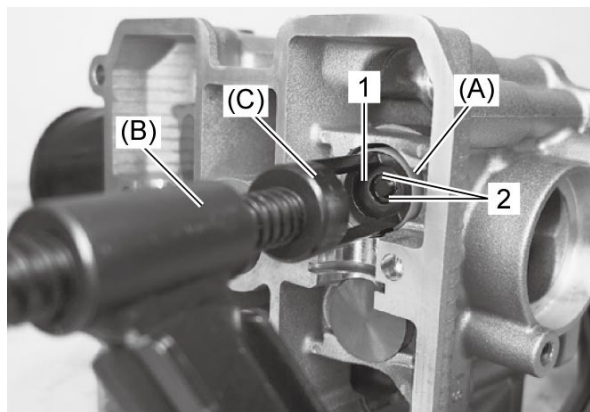
5) Put on the valve spring retainer (1), and using the special tools, press down the spring, fit the cotter halves (2) to the stem end, and release the lifter to allow the cotter halves to wedge in between retainer and stem.

NOTICE:

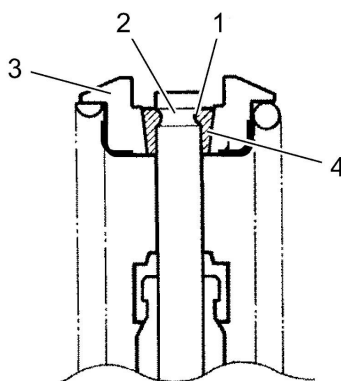
- Be sure to restore each spring and valve to their original positions.
- Be careful not to damage the valve and valve stem when handling it.

Special Tool

- (A): [09919-28620](#)
- (B): [09916-14510](#)
- (C): [09916-14522](#)
- [09916-84511](#)



- 6)** Be sure that the rounded lip (1) of the cotter fits snugly into the groove (2) in the stem end.



3.	Valve spring retainer	4.	Cotter
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- 7)** Apply engine oil to the stem ends and tappet shims (1).
8) Apply molybdenum oil solution to the tappets (2).
"A": Assembly lubrication (Molybdenum oil solution)
9) Install the tappet shims (1) and the tappets (2) to their original positions.

NOTE:

When seating the tappet shim, be sure the figure printed surface faces the tappet.

