

## SWITCHABLE HYDRAULIC LASH ADJUSTER (SWITCHABLE HLA), ROCKER ARM [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)]

id0110s7220000

### Purpose, Function

#### Switchable HLA

- The switchable HLA maintains the valve clearance at a constant **0 mm {0 in}** to achieve a maintenance-free valve clearance.

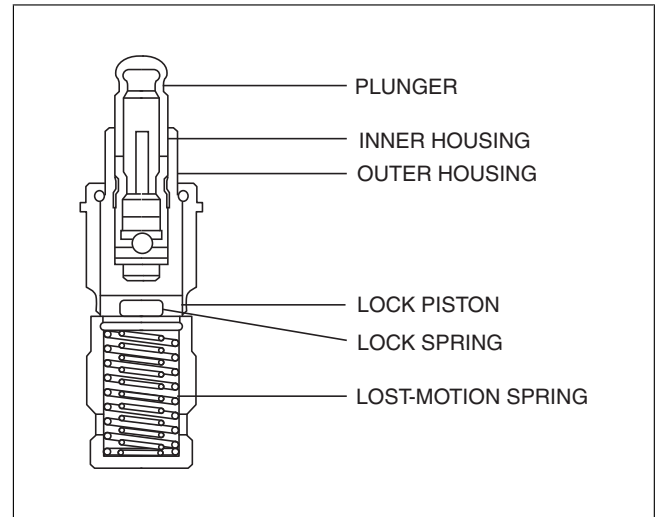
#### Rocker arm

- With the adoption of the rocker arm and built in needle roller bearing, the contact to the cam employs rolling contact to reduce sliding resistance.

### Construction

#### Switchable HLA

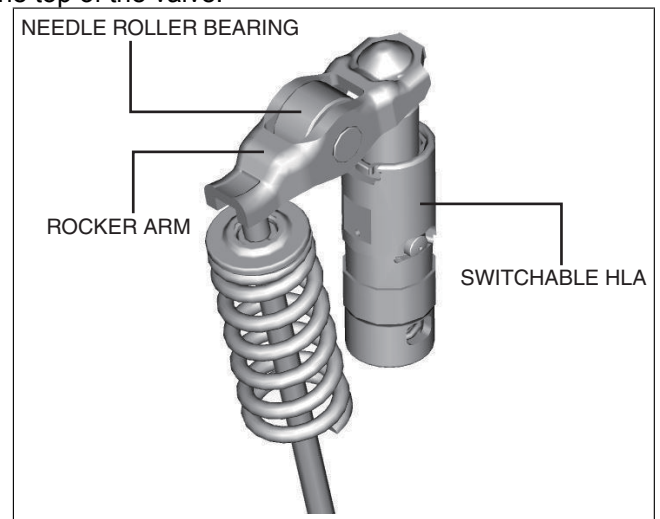
- The switchable HLA is installed to the cylinder head.



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#### Rocker arm

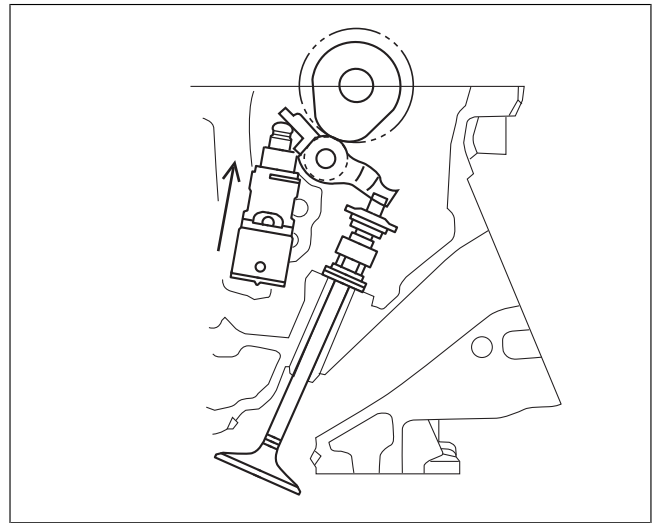
- The rocker arm is installed to the switchable HLA and the top of the valve.
- The needle roller bearing is built into the rocker arm.



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### Operation

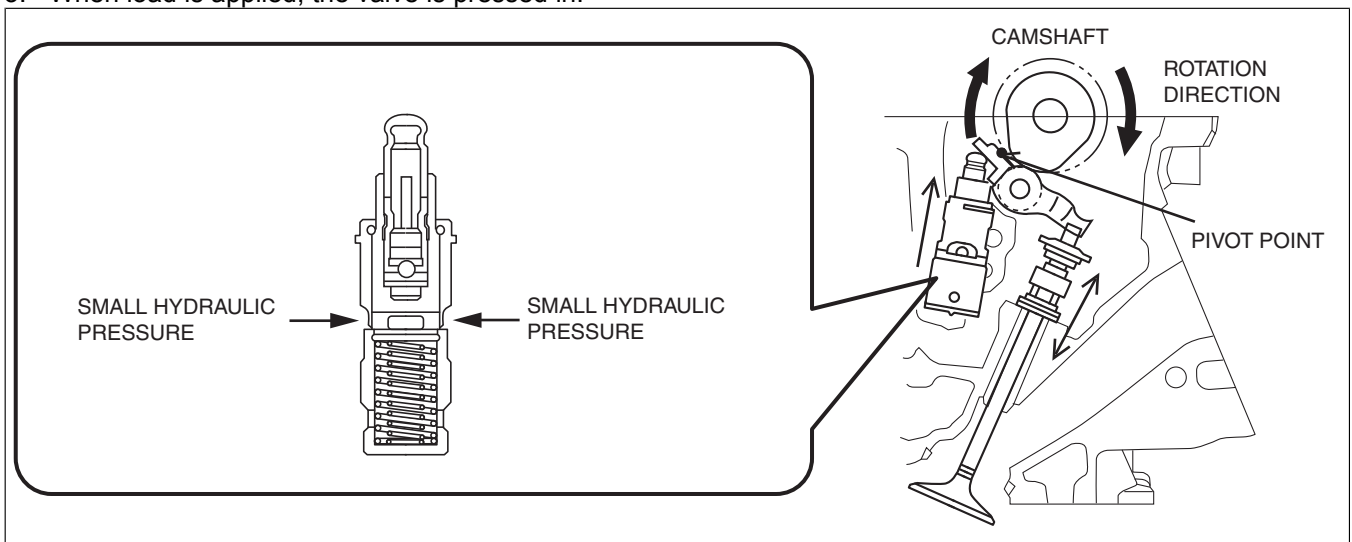
- The plunger presses up the rocker arm using the lost-motion spring to maintain the valve clearance at 0 mm {0 in}.



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### Cylinder deactivation is not performed

1. When the hydraulic pressure applied to the lock piston is small, the lock piston attaches to the outer housing.
2. The pivot point of the rocker arm switches from the valve to the switchable HLA in Step 1.
3. When load is applied, the valve is pressed in.



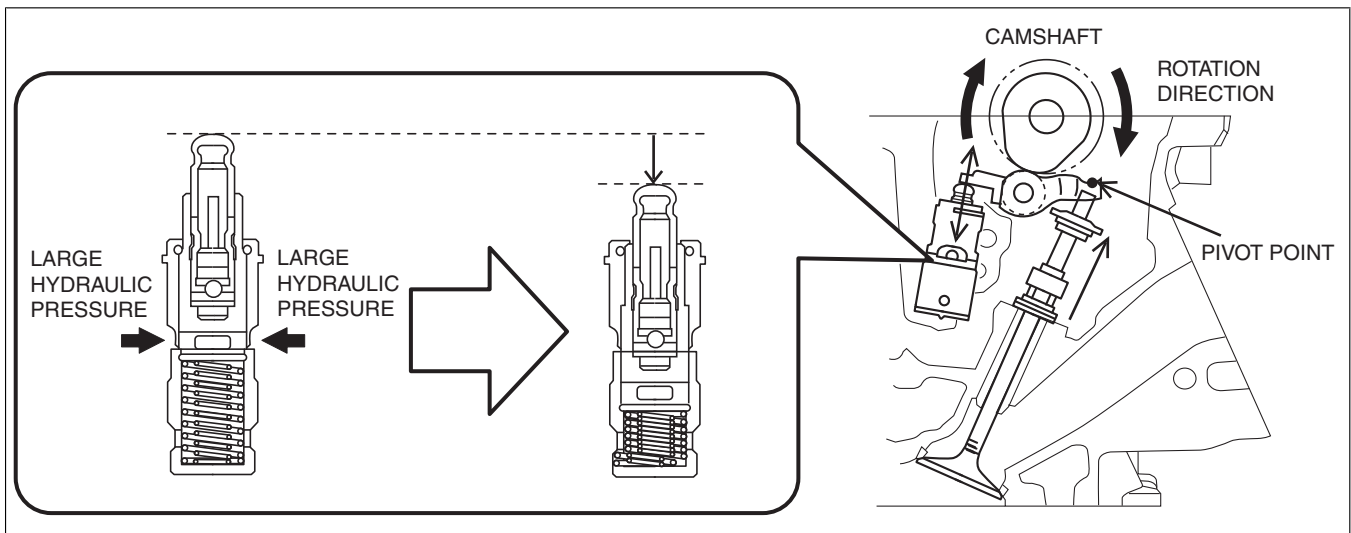
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### During cylinder deactivation

1. When the hydraulic pressure applied to the lock piston is large, the lock spring compresses and the lock piston is pressed into the inner housing.
2. The pivot point of the rocker arm switches from the switchable HLA to the valve in Step 1.
3. When load is applied, the plunger is pressed in.

### Note

- Because the load of the lost-motion spring is lower than the load of the valve spring, the inner housing and the plunger are pressed in. Due to this, the valve does not operate.



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