

21: Valve clearance, B6294S

S80 (-06), 2000, B6294S, M65, L.H.D, YV1TS94K2Y1079445, 079445

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**PRINT****21: Valve clearance, B6294S****Checking valve clearance**

Note! As the illustrations in this service information are used for different model years and / or models, some variation may occur. However, the essential information in the illustrations is always correct.

Preparation (B6294S)

Remove

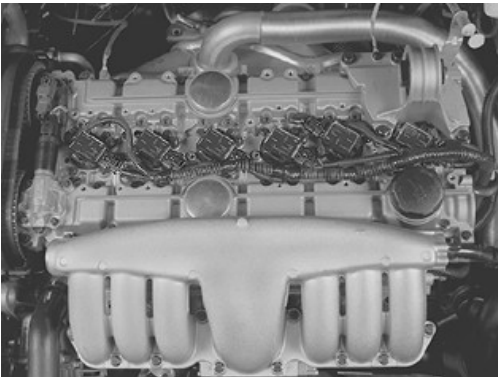
- the covers over the suspension turrets
- the engine stabiliser brace between the suspension turrets
- the upper timing cover
- the cover over the ignition coils
- the camshaft position (CMP) sensor housing. Place to one side
- the trigger wheel
- the clamps that hold the wiring to the rear of the cylinder head.

Preparation (B6284T)

Remove

- the covers over the suspension turrets
- the engine stabiliser brace between the suspension turrets
- plastic charge air / intake pipe over the engine
- the upper timing cover
- the cover over the ignition coils
- the cover at the rear edge of the intake camshaft
- the clamps that hold the wiring to the rear of the cylinder head.

Preparation (common)



Remove

- ground strip from the engine stabiliser brace
- the screw from the upper mounting for the gearbox dipstick pipe
- engine stabiliser brace
- ignition coils, **without** disconnecting connectors.

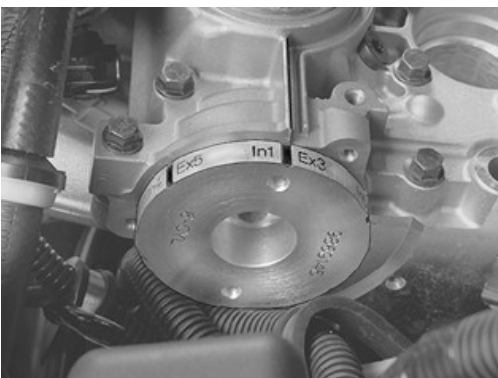
Note! Mark up before removal.

- both ground terminals
- the connector for the variable valve timing solenoid
- the connector for the engine coolant temperature (ECT) sensor.

Put the wiring and ignition coils to one side.

- the right front wheel
- the plastic nuts on the cover on the wing liner.

Setting up the engine in test mode



Install tool 999 5755 at the rear edge of the intake camshaft. Turn the crankshaft in the direction of engine rotation (clockwise) until the marking on the tool ("In1/Ex3") is opposite the thin flange running straight over the entire top of the cylinder head. Remove all plugs from the test holes.

Note! If the crankshaft is turned to far, it is essential that it is turned back at least a quarter of a turn so that it can then be turned clockwise to the correct position.

Checking valve clearance

Check the valve clearance with feeler



gauge 999 5752 at the intake valves for cylinder 1 and the exhaust valves for cylinder 3.

Insert the feeler gauge through the inspection holes. Bend the feeler gauge with light finger pressure so that it follows the top of the tappet. The correct measurement will not be obtained until the feeler gauge has gone in approximately **15 mm**.

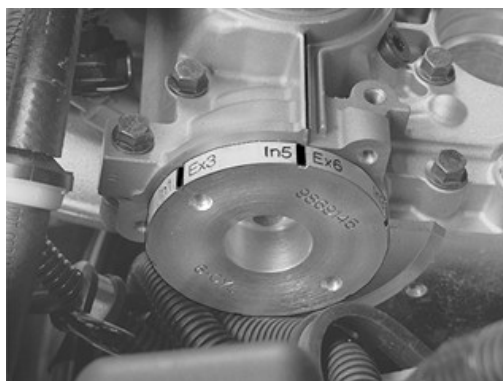
Valve clearance intake
valve.....0.15-0.45 mm

Valve clearance exhaust
valve.....0.35-0.60 mm

Caution! This is only the check value.

Note! Carry out this check with the engine at room temperature.

Make a note of the valve clearance in the inspection form.



Next test measurement

Turn the crankshaft in the direction of engine rotation until the next marking "In5/Ex6" is opposite the flange on top of the cylinder head. Perform the test measurement as described above.

Continue by measuring the remaining valve clearances according to the markings on tool 999 5755.

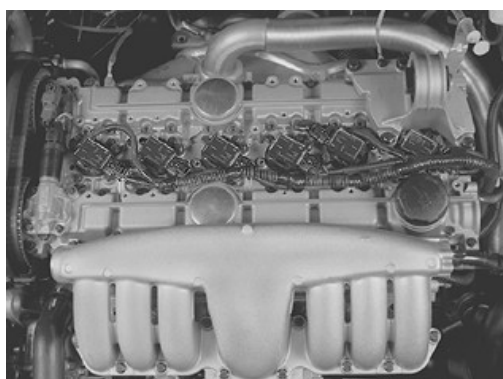
Finishing work (common)

Install

- plugs in inspection holes.
Tighten to **20 Nm**.

Note! Take care when tightening the plugs for the inspection holes. Do not exceed the torque listed or the threads in the cam cover may strip.

- the ignition coils according to the earlier markings
- both ground terminals
- the connector for the variable valve timing solenoid
- the connector for the engine



coolant temperature (ECT)
sensor

- engine stabiliser brace. Tighten to **50 Nm**
- ground strip to the engine stabiliser brace
- the screw for the upper mounting for the gearbox dipstick pipe.

Remove tool 999 5755.

Finishing work (B6294S)

Install

- the trigger wheel. Tighten to **17 Nm.**

Note! Ensure that the trigger wheel is correctly positioned against the camshaft.

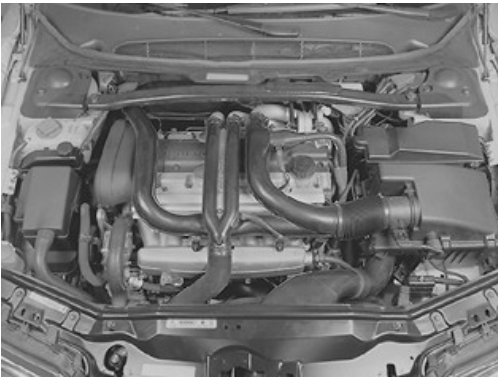
- the camshaft position (CMP) sensor housing
- the clamps that hold the wiring to the rear of the cylinder head
- the cover over the ignition coils
- the upper timing cover
- the engine stabiliser brace. Tighten the screws at the suspension turret. Tighten to **50 Nm.** Tighten the screw on the engine stabiliser brace. Tighten to **80 Nm**
- the covers over the suspension turrets
- the plastic nuts for the cover in wing liner
- the right front wheel Installing wheels .

Finishing work (B6284T)

Install

- new cover at the rear edge of the intake camshaft
- the clamps that hold the wiring to the rear of the cylinder head
- the cover over the ignition coils
- the upper timing cover
- plastic charge air / intake pipe over the engine. Tighten the





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- clamps
- the engine stabiliser brace.
Tighten the screws on the suspension turret. Tighten to **50 Nm**. Tighten the screws on the engine stabiliser brace. Tighten to **80 Nm**
- the covers over the suspension turrets
- plastic nuts on the cover in the wing liner
- the right front wheel Installing wheels .

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