Variable Valve Actuator

Part Number - 247-3814
S/N - RKS1-UP

Part Number - 247-3814
S/N - NXS1-UP

Part Number - 247-3814
S/N - MXS1-UP

Refer to Specifications, "CAT Compression Brake" for information that is related to the adjustment of the CAT Compression Brake.

NOTICE

Do not disassemble the Variable Valve Actuator. There are no components of the Variable Valve Actuator that are serviceable. If the Variable Valve Actuator is disassembled, the warranty will be void.
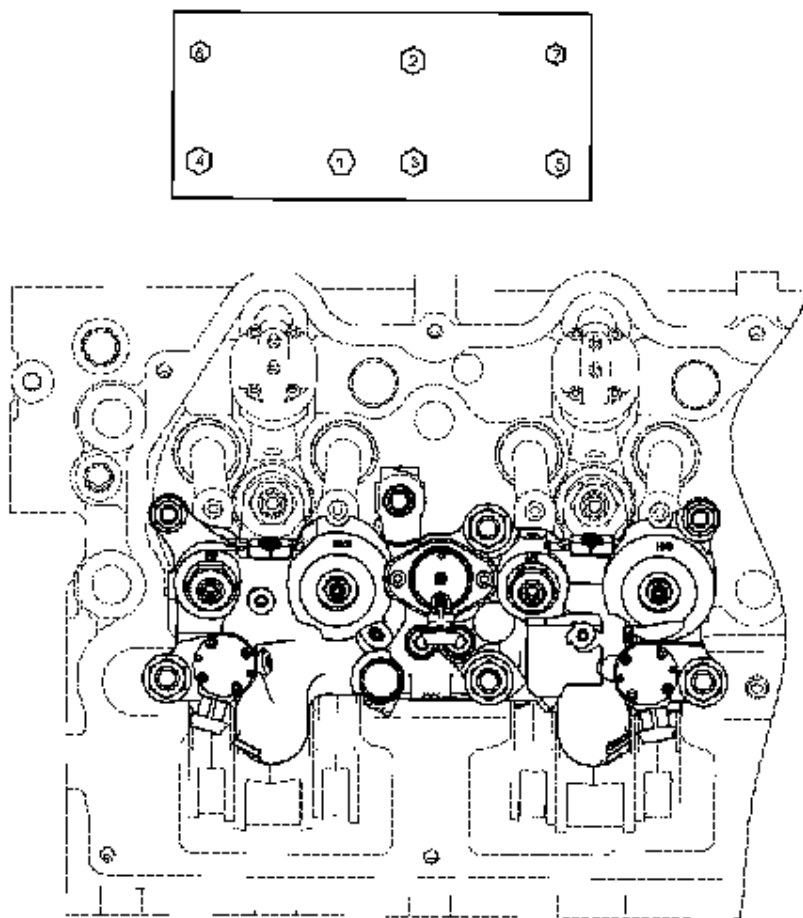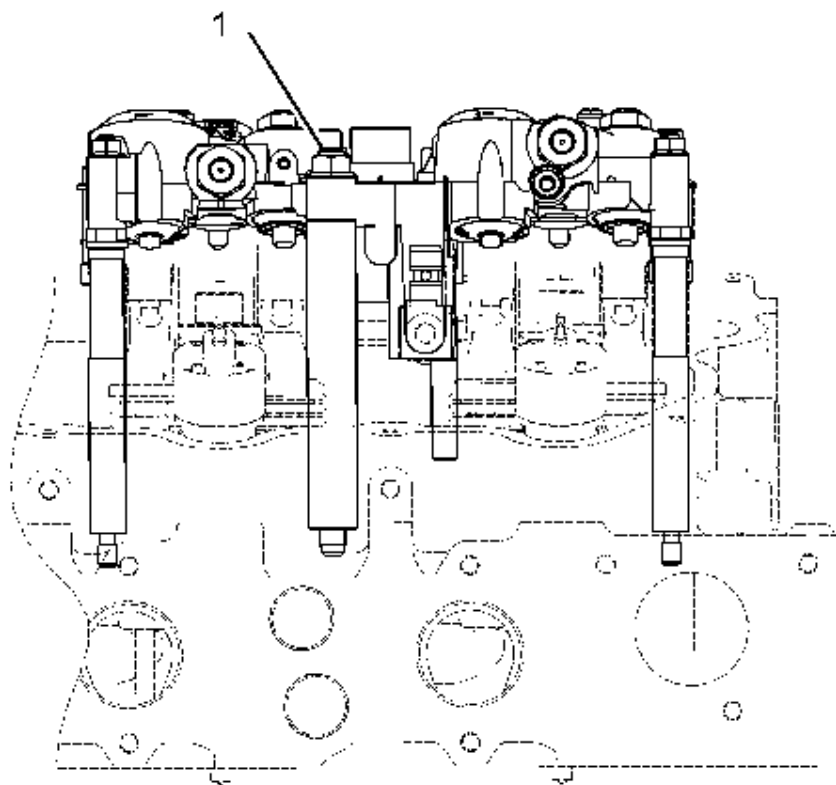

Illustration 1   g01518455

Variable valve actuator and tightening sequence

In order to install the housing for the variable valve actuator to the cylinder head, position the housing over the studs that have been installed into the cylinder head. Torque the nuts in the numerical sequence that is shown in Illustration 1.
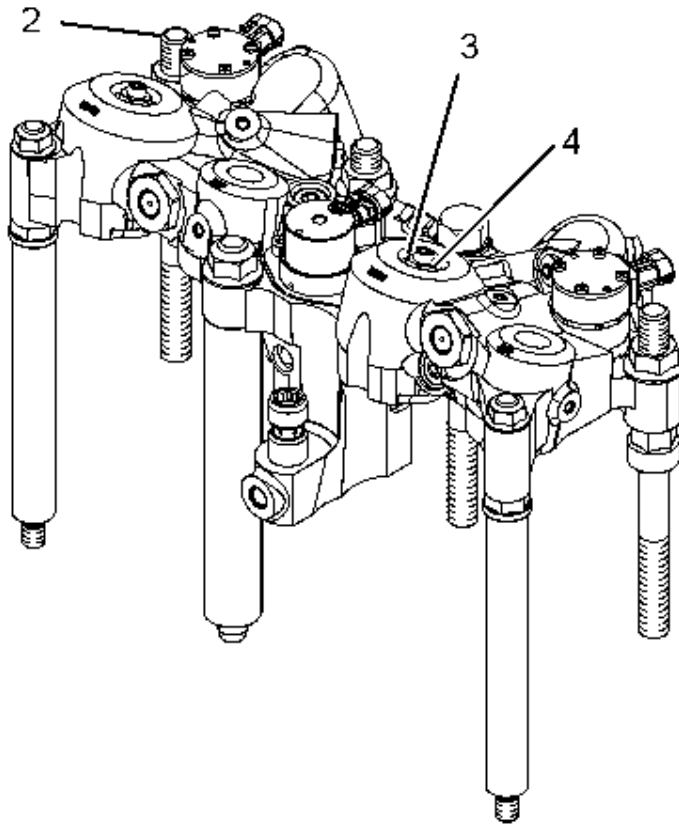
Illustration 2   g01526852

Right side view

(1) Torque for three taperlock studs ... 65 ± 10 N·m (48 ± 7 lb ft)

Illustration 3   g01518527

Note: Refer to Testing and Adjusting, "Variable Valve Actuators - Inspect/Adjust" for procedural information that is related to the adjustment of the variable valve actuators.

Note: The inlet rocker arm must be in contact with the valve bridge when you set the lash for the variable valve actuators.

(2) Use the following procedure for tightening nine studs of the valve actuator group:
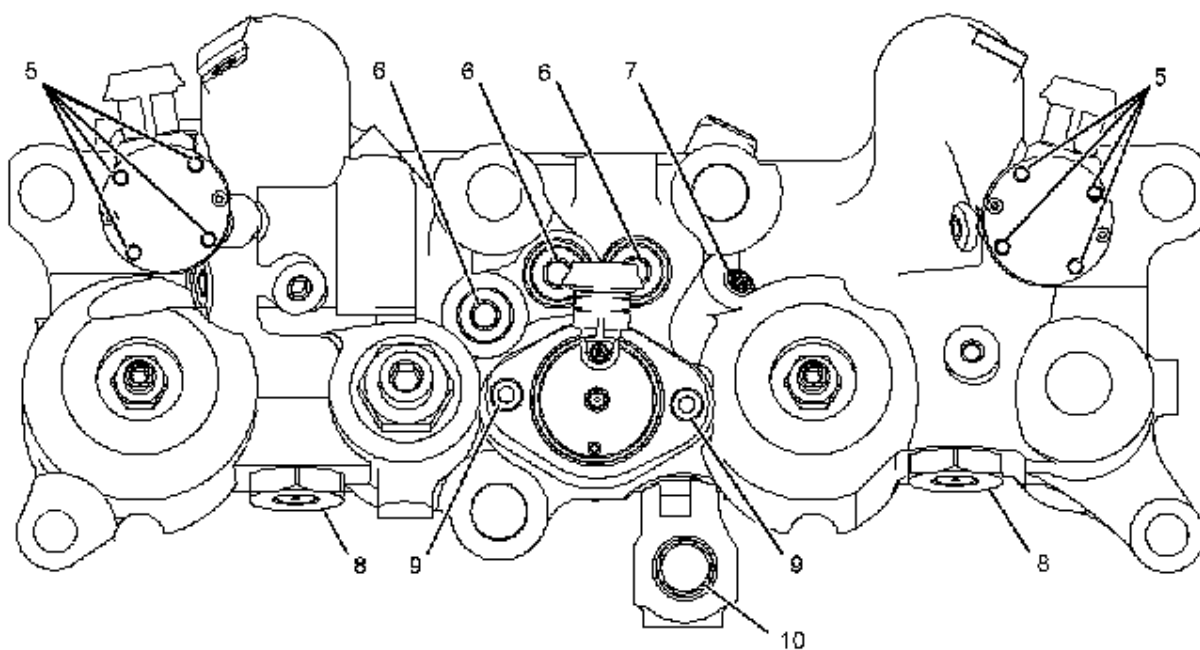
1. Tighten the studs to 50 ± 5 N·m (37 ± 4 lb ft).

2. Turn the studs by an additional 45 ± 5 degrees.

(3) Variable valve actuators

   Lash setting for the variable valve actuators ... 0.50 ± 0.08 mm (0.020 ± 0.003 inch)
   Torque for the locknut (4) ... 50 ± 10 N·m (37 ± 7 lb ft)

Illustration 4

(5) Torque for eight screws ... 2.3 ± 0.2 N·m (20 ± 2 lb in)

(6) Torque for four check valve groups ... 25 ± 6 N·m (18 ± 4 lb ft)

(7) Torque for two orifice plugs ... 15 ± 3 N·m (11 ± 2 lb ft)

(8) Torque for two accumulator assemblies ... 45 ± 5 N·m (33 ± 4 lb ft)

(9) Torque for two bolts ... 6 ± 1 N·m (55 ± 9 lb in)

(10) Torque for the quill ... 40 ± 5 N·m (30 ± 4 lb ft)