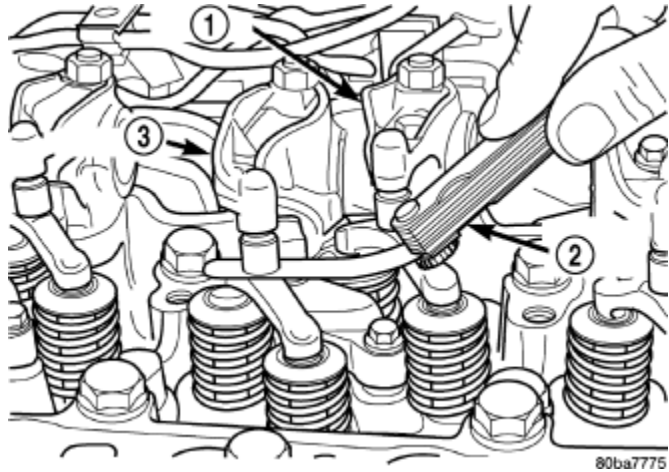


2003-2011 CUMMINS CR VALVE LASH ADJUSTMENT

NOTE: To obtain accurate readings, valve lash measurements AND adjustments should only be performed when the engine coolant temperature is less than 60° C (140° F).

The 24-valve overhead system is a “low-maintenance” design. Routine adjustments are no longer necessary, however, measurement should still take place when troubleshooting performance problems, or upon completion of a repair that includes removal and installation of the valve train components or injectors.



1. Disconnect battery negative cables.
2. Remove cylinder head cover.
3. Using the crankshaft barring tool #7471-B, rotate crankshaft to align damper TDC mark to 12:00 o'clock position.
 - a. If both number one cylinder rocker levers are loose, continue to next step.
 - b. If both number one cylinder rocker levers are not loose, rotate crankshaft 360 degrees.
4. With the engine in this position, valve lash can be measured at the following rocker arms: **INTAKE 1-2-4 / EXHAUST 1-3-5**. Measure the valve lash by inserting a feeler gauge between the rocker arm socket and crosshead. Refer to valve lash limit chart below for the correct specifications. If the measurement falls **within** the limits, adjustment/resetting **is not** necessary. If measurement finds the lash **outside** of the limits, adjustment/resetting **is** required.

VALVE LASH LIMIT CHART	
INTAKE	EXHAUST
0.152 mm (0.006 in.) MIN.	0.533 mm (0.021 in.) MIN.
0.381 mm (0.015 in.) MAX.	0.863 mm (0.034 in.) MAX.

NOTE: If measured valve lash falls within these specifications, no adjustment/reset is necessary. Engine operation within these ranges has no adverse affect on performance, emissions, fuel economy or level of engine noise.

5. If adjustment/resetting is required, loosen the lock nut on rocker arms and turn the adjusting screw until the desired lash is obtained:

- **INTAKE** 0.254 mm (0.010 in.)
- **EXHAUST** 0.660 mm (0.026 in.)

Tighten the lock nut to 24 N·m (18 ft. lbs.) and recheck the valve lash.

6. Using the crankshaft barring tool, rotate the **crankshaft** one revolution (360°) to align the damper TDC mark to the 12 o'clock position.

7. With the engine in this position, valve lash can be measured at the remaining rocker arms: **INTAKE 3-5-6 / EXHAUST 2-4-6**. Use the same method as above for determining whether adjustment is necessary, and adjust those that are found to be outside of the limits.

8. Install the cylinder head cover.

9. Connect the battery negative cables.

