

Cylinder Head Thickness Measurement on Caterpillar C15, C-15, C16, C-16, C18, C-18, C27 & C32 Engines

The AERA Technical Committee offers the following information regarding the proper method to measure cylinder head thickness on Caterpillar C15, C-15, C16, C-16, C18, C-18, C27 & C32 engines.

Concern has been expressed on where to measure the cylinder head thickness on the above mentioned cylinder heads. These SOHC (single overhead cam) heads do not offer a conventional method of measuring the total head thickness as shown in Figure 1 below.

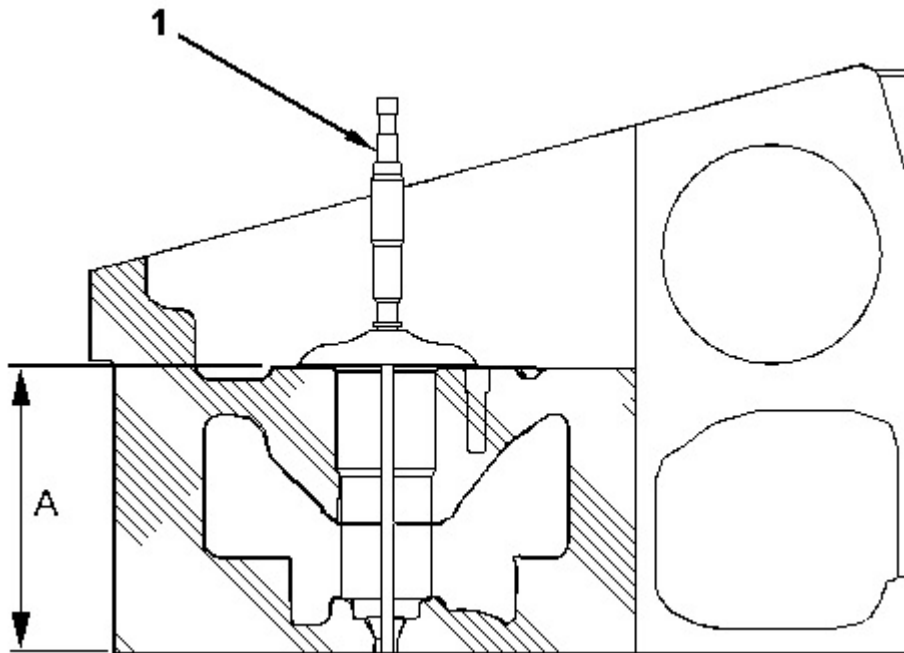


Figure 1. 6V-2012 Depth Micrometer(1) A = Measurement Location

The machining limits for the head are listed below and the valve recession should be checked after any deck machining operations.

Manufactured Thickness	Minimum Thickness	Valve Recession
4.7180-4.7303" (119.850-120.150 MM))	4.7050" (119.500 MM)	
Valve Recession		
Intake	.087-.110" (2.200-2.800 MM)	
Exhaust	.047-.071" (1.200-1.800 MM)	