Combustion Chamber Volume Test

Meets NATEF Task: Not specified by NATEF

Name _____ **Date** _____ **Time on Task** _____

Make/Model/Year _____ **VIN** _____ **Evaluation: 4 3 2 1**

This procedure should be performed before machining the cylinder head(s) to check compression ratio.

_____ **1.** Install the specified spark plug in the plug hole.

_____ **2.** Install the valves.

_____ **3.** Apply a thin layer of grease to the edge around the combustion chamber to create a seal between the plastic plate and the head.

_____ **4.** Place the plastic plate over the combustion chamber and place the hole in the plate near the edge.

_____ **5.** Fill the burette with mineral spirits.

HINT: Automotive transmission fluid (ATF) could also be used.

_____ **6.** Adjust the fluid level to zero (use the lower portion or meniscus of the fluid as the measuring point).

_____ **7.** Place the burette over the hole and slowly add liquid until all the air has escaped and the combustion chamber is filled with fluid. Read the volumes of each cylinder and record.

Cylinder #1 _____	Cylinder #5 _____
Cylinder #2 _____	Cylinder #6 _____
Cylinder #3 _____	Cylinder #7 _____
Cylinder #4 _____	Cylinder #8 _____

_____ **8.** Remove material around the spark plug to achieve equal volume.