Crack Detection and Cylinder Head Warpage

Meets ASE Task: A1 – B-3 – P-1

Name:_____ Date:_____ Time on Task:_____

Make/Model/Year:_____ VIN:_____

Evaluation (Enter number from 4, 3, 2, 1) :_____

☐ 1. Clean the cylinder head(s) and visually inspect for damage.

☐ 2. Check the cylinder head(s) for cracks. Which method(s) was used?

_____ magnetic (Magnafluxing®)

_____ dye penetrant (red dye and white powder)

_____ fluorescent penetrant (Zyglo®)

_____ pressure testing

☐ 3. If cracks were detected, what was the solution?

_____ replace the head/block

_____ stop drilling

_____ welding

_____ crack plugging

_____ other (describe) _____

☐ 4. Use a precision straight edge and a feeler (thickness) gauge to check for warpage, distortion, bend, and twist by checking in five places.

☐ 5. Maximum thickness of feeler gauge that could be placed between the straight edge and the head is _____ inches. **OK _____** **NOT OK _____**

☐ 6. What is the necessary action? _____

_____