

Engine Block Crack Detection and Warpage

Meets ASE Task: A1 – C-4 – P-2

Name: _____ Date: _____ Time on Task: _____

Make/Model/Year: _____ VIN: _____

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

- 1. Clean the engine block and visually inspect for damage.

- 2. Check the engine block 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 the block deck 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? _____
