

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? _____
