Chapter 24 Engine Cleaning and Crack Detection

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1. What precautions need to be followed when cleaning aluminum parts using mechanical methods?

2. How do magnetic crack inspection, dye-penetrant testing, and fluorescent-penetrant testing methods work and where each can be used?

3. What is the purpose of stop drilling?

4. How can the engine block and cylinder heads be repaired if cracked?

5. What are five methods that could be used to clean engines or engine parts?

Answer Key
Testname: ENGINES 10 SHORT24

1. When cleaning aluminum parts use only a plastic scraper or rotary disc that is white and designed for aluminum parts.
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2. Magnetic crack inspection uses a strong electromagnet to force iron powder around cracks. Dye penetrant is used on aluminum parts to check for cracks by using chemicals that penetrate into the surface flow. Fluorescent penetrant can be used on all material and requires a black light to observe cracks.
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3. A hole can be drilled at each end of the crack to keep it from extending further, a step sometimes called stop drilling. Cracks that do not cross oil passages, bolt holes, or seal surfaces can sometimes be left alone if stopped.
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4. Engine blocks and cylinder heads can be repaired if cracked by welding or plugging.
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5. Five methods that could be used to clean an engine or engine component part include chemical, mechanical, pyrolytic ovens, hot soak tank, ultrasonic, vibratory, and sprayers.
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