

Name _____

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

1) What are five methods that could be used to clean engines or engine parts?

2) Explain magnetic crack inspection, dye-penetrant testing, and fluorescent-penetrant testing methods and where each can be used.

3) How can the engine block and cylinder heads be repaired if cracked?

4) What is the purpose of stop drilling?

5) What precautions need to be followed when cleaning aluminum parts using mechanical methods?

Answer Key

Testname: ENGINES9_SHORT 25

- 1) Five methods that could be used to clean an engine or engine component part include chemical, mechanical, pyrolytic ovens, hot soak tank, and sprayers.
Page Ref: 342-346
- 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 that requires a black light to observe cracks.
Page Ref: 346-347
- 3) Engine blocks and cylinder heads can be repaired if cracked by welding or plugging.
Page Ref: 347-350
- 4) 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.
Page Ref: 348
- 5) When cleaning aluminum cylinder heads, blocks, or other engine components, make sure that the chemicals used are "aluminum—safe." Many chemicals that are not aluminum—safe may turn the aluminum metal black.
Page Ref: 342