

-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

**Hanover House
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NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number- 0074756 **-Session-1987-88**
-Superclass- XE

-Title- REPAIR OF NON-METALLIC COMPONENTS (x 1/2)

-DESCRIPTION-

Type and Purpose A general module which develops the knowledge and skill necessary to repair non-metallic components.

Preferred Entry Level No formal entry requirements.

Learning Outcomes The student should:

1. know the uses and reparability of non-metallic materials;
2. carry out tests to identify non-metallic materials to be repaired;
3. repair a range of non-metallic materials.

Content/Context Safety regulations and safe working practices and procedures should be observed at all times.

Corresponding to Learning Outcomes 1-3:

1. The range of non-metallic materials available.
The uses of common non-metallic materials.
Reparability of non-metallic components.
2. Standard tests which enable identification of the types and properties of plastics.
3. Safe removal, handling and replacement of non-metallic components.

Methods of repair of non-metallic materials.

Suggested
Learning and
Teaching
Approaches

This module should be taught in a workshop situation with access to non-metallic components.

After initial lectures/demonstrations this module should consist mainly of practical assignments requiring the students to repair a range of components.

Assessment
Procedures

Acceptable performance in the module will be satisfactory achievement of the performance criteria for each learning outcome.

The following abbreviations are used below:

LO Learning Outcome

IA Instrument of Assessment

PC Performance Criteria

LO1 IA Short answer written test consisting of 16 questions.

Breakdown of questions

- (a) definitions - 2 questions;
- (b) uses of plastics - 6 questions;
- (c) safety aspects - 4 questions;
- (d) methods and safeguards involved in repair - 4 questions.

PC The student:

- (a) correctly defines thermoplastics;
- (b) correctly defines thermosetting plastics;
- (c) correctly describes the uses of four different types of plastics;
- (d) explains the safety aspects of removing and handling plastics;;
- (e) correctly explains the methods and safeguards involved when repairing plastics.

LO2 IA Practical and written identification exercise involving the testing of plastic samples and recording results.

PC The student:

- (a) carries out standard tests on six different samples of plastics;
- (b) prepares a report of the results of the tests;
- (c) correctly identifies the type and properties of the plastic in 4 of these samples;
- (d) uses appropriate equipment;
- (e) observes all relevant safety regulations;
- (f) wears all necessary safety clothing and equipment.

LO3 IA Practical exercise used in conjunction with an observation checklist involving the repair of three samples of non-metallic materials.

The following three methods of repair to be used:

- (a) chemical fusion;
- (b) heat fusion;
- (c) adhesion.

PC The student:

- (a) repairs the component to workshop standard so that it is suitable for use in the repair of a vehicle;
- (b) wears all safety clothing and equipment;
- (c) uses the appropriate tools and equipment;
- (d) observes all safety regulations.