# Unit L1AM05: Engine Cooling System Components and Maintenance

|  |
| --- |
| Vehicle Details |
| Reg No: |  | Approx. Year: |  |
| Make: |  | Model: |  |
| Eng/VIN no: |  |

## Practical Support Material: Engine Cooling System Maintenance

|  |  |
| --- | --- |
| Customer request: | [Tick tasks carried out ✓] |
| 1. Remove and refit a radiator, thermostat and refill the cooling system
 |  |
| 1. Check the condition of a coolant pump drive belt
 |  |
| 1. Use the correct procedure to pressure test the cooling system and check for leaks
 |  |
| 1. State to your assessor:
2. 2 reasons why anti-freeze is added to water to make engine coolant

Ans1. the purpose of coolant in the engine’s cooling system

Ans1. the purpose of the cooling system radiator

Ans |  |
| Brief description of work carried out and recommendations for repair: |
|  |
| PPE work and special precautions taken: | Technical data used to complete task: | [Tick ✓] |
|  |  |  |
|  |  |
|  |  |
| Special tools used including any calibration required:  | Further faults found: |
|  |  |

## Practical Support Material Assessor Record: Engine Cooling System Maintenance

|  |  |  |
| --- | --- | --- |
|  | Tick [✓] | Written feedback (with reference to the Assessment Criteria) must be given when a learner is referred: |
| **PASS**I confirm that the learner’s work was to an acceptable standard and met the Assessment Criteria of the unit |  |  |
| **REFER**The work carried out did not achieve the standards specified by the Assessment Criteria *(*written feedback to learner) |  |  |
| Assessor’s Name [Print]: | Assessor’s PIN: | Date: |
|  |  |  |
| The section below is only to be completed once the assessor’s decision has been made and feedback given to the learner: |
| The section below is to be completed by the learner: |
| I confirm that the work carried out was my own, and that I received feedback from the assessor | Learner’s Name: | Learner’s Signature: | Date: |
|  |  |  |

|  |  |
| --- | --- |
| Learning Outcome/Assessment Criteria | Passed [Tick ✓] |
| 1. **Know about engine cooling systems**
	1. Identify the main components used in engine liquid cooling and air-cooling systems
	2. State the purpose of the main components used in engine liquid cooling and air-cooling systems
 |  |
| 1. **Know how engine cooling systems operate**
	1. State the operating principles of engine liquid cooling and air cooling systems
 |  |
| 1. **Know how to carry out routine maintenance to engine cooling systems**
	1. State how to remove, inspect and replace engine cooling system components
 |  |
| 1. **Be able to carry out routine maintenance on engine liquid cooling systems**
	1. Work safely during cooling system maintenance
	2. Select and use the correct technical data, tools and equipment for routine maintenance of liquid cooling systems
	3. Demonstrate the correct procedures when:
2. removing and refitting a radiator and thermostat and refilling the cooling system
3. checking the condition of coolant pump drive belts
4. pressure testing the cooling system and checking for leaks
 |  |