SEG Awards Level 2

Motor Vehicle Studies

**Underpinning Knowledge Evidence Record**

L/601/6084 Knowledge of Inspection, Adjustment and Replacement of Light Vehicle Braking Systems and Components

|  |  |
| --- | --- |
| **Learners Name** |  |
| **SEG Awards Registration Number** |  |
| **Centre Name** |  |
| **Assessor 1 Name** |  |
| **Assessor 2 Name** |  |

**DECLARATION OF AUTHENTICITY**

This declaration must be completed and signed by the learner and countersigned by the tutor / assessor and covers all evidence submitted for moderation.

|  |  |  |  |
| --- | --- | --- | --- |
| Learner Name |  | | |
| Unique Learner Number (ULN) |  | SEG  Learner Reg. ID |  |
| Qualification Title |  | | |
| Centre Name |  | | |

# 

# Learner statement of authenticity

**Before signing please read the guidance below**.

I confirm, that the attached assignment / portfolio is all my own work[[1]](#footnote-1) and does not include any work completed by anyone other than myself. I have completed the assignment / portfolio in accordance with SEG Awards’ instructions and within the time limits set by my centre.

|  |  |  |  |
| --- | --- | --- | --- |
| Signature |  | Date |  |

# Centre confirmation of authenticity

On behalf of …………………………………….(insert centre name), I confirm that the above mentioned learner, to the best of my knowledge, is the sole author of the completed assignment / portfolio attached, and the assessments have been completed under the required conditions.

|  |  |  |  |
| --- | --- | --- | --- |
| Signed |  | Date |  |
| Name |  | | |
| Title |  | | |

**Guidance for Learners**

You have been asked to sign this Declaration of Authenticity and place it at the front of your portfolio or course work assessment. It confirms that the work you have submitted for assessment is your own and that you have not copied it from someone else or allowed another learner to copy it from you.

When preparing any course work it is good practice to undertake research using information from published sources. If you quote directly from these sources then this must be indicated in your work by using quotation marks and referencing the document from which the quotation was taken. You must then comment in your own words on any ideas expressed.

Assessors, internal verifiers and SEG Awards’ external moderators and verifiers are subject specialists who can spot the use of published materials that may be passed as your own words or ideas.

If you do copy words from a published source and do not indicate their reference you will be committing plagiarism. This is considered a form of cheating and may result in your assessment being declared void.

**Contents**

|  |  |  |
| --- | --- | --- |
| **Task No** | **Title** | **Assessment Criteria** |
| 1 | Tools and equipment | 1.1 |
| 2 | Brake layout and operation | 2.1 |
| 3 | Braking system inspection and repair | 2.2, 3.1, 3.2, 3.3, 3.4, 3.5 |
| 4 | Electronic braking systems | 2.3 |

|  |  |
| --- | --- |
| **Task 1 – Tools and equipment** | **Assessment Criteria 1.1** |

Describe the type and safe use of tools/equipment for the inspection, removal, adjustment and replacement of light vehicle braking systems

|  |  |  |
| --- | --- | --- |
| **Hand and Specialist Tools** | | |
| **Name of tools/equipment** | **Use of Tool/equipment** | **Explain how you would use the tool/equipment safely** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

|  |  |
| --- | --- |
| **Task 2 – Brake layout and operation** | **Assessment Criteria 2.1** |

|  |  |  |
| --- | --- | --- |
| **Draw a diagram of a typical light vehicle braking system layout** | **Label Diagram** | **Explain their operation** |
|  | **1** |  |
| **2** |  |
| **3** |  |
| **4** |  |
| **5** |  |
| **6** |  |
| **7** |  |

|  |  |  |
| --- | --- | --- |
| **Draw a diagram of a light vehicle disc brake assembly** | **Label Diagram** | **Explain their operation** |
|  | **1** |  |
| **2** |  |
| **3** |  |
| **4** |  |
| **5** |  |
| **6** |  |
| **7** |  |

|  |  |  |
| --- | --- | --- |
| **Draw a diagram of a light vehicle drum brake assembly (twin or single leading shoe)** | **Label Diagram** | **Explain their operation** |
|  | **1** |  |
| **2** |  |
| **3** |  |
| **4** |  |
| **5** |  |
| **6** |  |
| **7** |  |

|  |  |
| --- | --- |
| **Task 3 – Braking system inspection and repair** | **Assessment Criteria 2.2, 3.1, 3.2, 3.3, 3.4, 3.5** |

**Instructions to Learners**

List and explain how to carry out different types of component inspections on a braking system

|  |  |  |
| --- | --- | --- |
| **Component** | **Method of Inspection** | **Adjustment requirement** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Instructions to Learners**

Describe the common faults associated with light vehicle braking systems, their causes and how to identify and repair them

|  |  |  |  |
| --- | --- | --- | --- |
| **Component** | **Common fault and cause** | **How to identify fault** | **Repair/rectification** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

|  |
| --- |
| **Describe removal and replacement procedures associated with light vehicle braking systems and how you would adjust and test for correct operation (working tolerances)** |
|  |

|  |
| --- |
| **Describe how you would ensure light vehicle braking systems conform to legal requirements and manufacturers specifications (including sources of technical data)** |
|  |

|  |  |
| --- | --- |
| **Task 4 – Electronic braking systems** | **Assessment Criteria 2.3** |

|  |  |  |
| --- | --- | --- |
| **Draw a diagram of a typical light vehicle electronic braking system layout** | **Label Diagram** | **Explain their operation** |
|  | **1** |  |
| **2** |  |
| **3** |  |
| **4** |  |
| **5** |  |
| **6** |  |
| **7** |  |

1. Unless otherwise stated e.g. for some entry level qualifications, learners can work together but should identify sections which are their own work. [↑](#footnote-ref-1)