Automotive Qualifications (4101)

Practical assessment guide
Certificate in Vehicle Maintenance and Repair (VRQ, NVQ, SVQ) Level 2
Light vehicles
Heavy vehicles
Motorcycles
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City & Guilds
1 Giltspur Street
London EC1A 9DD
T +44 (0)20 7294 2800     www.cityandguilds.com
F +44 (0)20 7294 2400    enquiry@cityandguilds.com
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1 About this document

This assignment guide has been designed to cover the most popular automotive maintenance and repair units for the City & Guilds Level 2 Certificate in Vehicle Maintenance and Repair (4101). It can be used for light vehicle (LV), heavy vehicle (HV) and motorcycle (MC) practical assessments and applies to the following qualification routes:

### Vocationally Related Qualification (VRQ) routes

<table>
<thead>
<tr>
<th>VRQ complexes</th>
<th>VRQ unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4101-46</td>
<td>Level 2 Certificate in Vehicle Maintenance and Repair (Light Vehicles)</td>
</tr>
<tr>
<td>4101-47</td>
<td>Level 2 Certificate in Vehicle Maintenance and Repair (Heavy Vehicles)</td>
</tr>
<tr>
<td>4101-48</td>
<td>Level 2 Certificate in Vehicle Maintenance and Repair (Motorcycles)</td>
</tr>
</tbody>
</table>

### National Vocational Qualification (NVQ) routes

<table>
<thead>
<tr>
<th>NVQ complexes</th>
<th>NVQ unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4101-01</td>
<td>Level 2 Certificate in Vehicle Maintenance and Repair (Light Vehicles)</td>
</tr>
<tr>
<td>4101-02</td>
<td>Level 2 Certificate in Vehicle Maintenance and Repair (Heavy Vehicles)</td>
</tr>
<tr>
<td>4101-03</td>
<td>Level 2 Certificate in Vehicle Maintenance and Repair (Motorcycles)</td>
</tr>
</tbody>
</table>

### Scottish Vocational Qualification (SVQ) routes

<table>
<thead>
<tr>
<th>SVQ complexes</th>
<th>SVQ unit title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4101-23</td>
<td>Level 2 Certificate in Vehicle Maintenance and Repair (Light Vehicles)</td>
</tr>
<tr>
<td>4101-24</td>
<td>Level 2 Certificate in Vehicle Maintenance and Repair (Heavy Vehicles)</td>
</tr>
<tr>
<td>4101-25</td>
<td>Level 2 Certificate in Vehicle Maintenance and Repair (Motorcycles)</td>
</tr>
</tbody>
</table>
2 Guidance for assessors

Introduction
The assessments have been designed to cover all the scope, observation and knowledge requirements for the practical content of this qualification.

Underpinning knowledge for each practical assessment should be covered during the assessment and documented on the worksheets provided within this guide. Candidates are required to complete a number of practical tasks to show their attainment of practical skills and underpinning knowledge.

One practical task may cover elements from more than one unit. The practical tasks have been designed to avoid repetition, but allow complete coverage of the required knowledge for the qualification.

The practical assessments cover the most popular optional units. If a candidate wishes to cover units not contained within the tasks provided, the centre delivering the qualification will need to devise the appropriate practical task. For further information on centre devised assignments please refer to the 4101/4121 qualification handbook – section 5.12 Producing centre devised assignments, available from the City & Guilds Automotive website (www.cityandguilds.com/uk/automotive).

Online testing (GOLA) is used to assess the theory component of the maintenance and repair units. In addition to obtaining centre approval, centres are required to set up a GOLA profile in order to offer online examinations to candidates. Setting up a GOLA profile is a simple process that need only be completed once for the centre.

Details of how to set up the profile are available on the City and Guilds website (www.cityandguilds.com/gola). The website also has details of the GOLA helpline for technical queries and downloads for centres and candidates about GOLA examinations.

Note: It is important that candidates who are new to the industry complete a practical training programme which covers a wider range of equipment and resource material before attempting these final assessment tasks. This is to ensure that they gain the sufficient confidence and knowledge to successfully complete the qualification. For complimentary practical practice tasks please refer to the Practical practice task guide available for download from the City and Guilds Automotive website (www.cityandguilds.com/uk/automotive). For further information about the available documentation and resources, please refer to section 1.2 Other documents and sources of further information in the qualification handbook.
Relation to Key Skills, Wider Key Skills and Core Skills

The City & Guilds Level 2 Certificate in Vehicle Maintenance and Repair may provide opportunities to gather evidence if working towards any of the following Key Skills, Wider Key Skills or Core Skills: Communication; Number; ICT; Problem Solving; Improving Own Learning and Working with Others.

Examples of Key Skill, Core Skill and Wider Key Skill work are provided in the following table.

<table>
<thead>
<tr>
<th>Key Skill/Wider Key Skill</th>
<th>Example of Key Skill work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Data collection, assessment, reports (oral and written), feedback.</td>
</tr>
<tr>
<td>Number</td>
<td>Measurements, percentages, test readings, pressures.</td>
</tr>
<tr>
<td>ICT</td>
<td>Computer diagnostics, data collection.</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>Most assessments involve diagnosing vehicle problems and faults, although these are not in-depth at Level 2.</td>
</tr>
<tr>
<td>Working with Others</td>
<td>Working with another or as teams to lift and support vehicle components is part of a vehicle technician’s normal role, as well as in the final assessments.</td>
</tr>
<tr>
<td>Improving Own Learning</td>
<td>Unit by unit achievements evidence the learning progress made by candidates during the assessment period.</td>
</tr>
</tbody>
</table>

A detailed guide to signposting the Key Skills, Wider Skills and Core Skills covered within this Level 2 qualification is outlined in the individual Vehicle Maintenance and Repair unit specifications available from the City & Guilds Automotive website (www.cityandguilds.com/uk/automotive).

Candidates seeking to achieve any of the Key Skills, Wider Key Skills and/or Core Skills would need to be separately registered for them. Any evidence presented for a Key/Core Skills and/or Wider Key Skills portfolio must be separately assessed using the relevant Key/Core and Wider Key Skills specifications and guidance. For further guidance and information about these qualifications, please refer to the City & Guilds website (www.cityandguilds.com).

Introducing practical tasks to candidates

It will be beneficial to take the candidate through what is required for each practical task and the way each task will be assessed.

Timings for practical tasks

A submission schedule should be worked out by the centre, governed by the overall assessment plan for the course, to be negotiated between tutor/assessor and candidate.

The relationship between course delivery, the handing out and completion of practical tasks are matters for agreement between the tutors and candidates locally.

Feedback

Assessors must provide feedback on every occasion that a skills observation takes place. Recording forms are provided and can be downloaded from the City & Guilds Automotive website (www.cityandguilds.com/uk/automotive).
Candidate's records of coursework
Candidates should be encouraged to keep their work carefully in a portfolio. This may be an unfamiliar form of recording keeping for many of them, but it is a good discipline which will benefit them when they progress in learning and training.

Overall grading of practical tasks
Practical tasks are graded Pass (P) or Fail (F).

Codes of practice
The importance of safe working practices, the demands of any regional and/or national legislation relating to health and safety and any regional and/or national codes of practice associated with the industry must always be adhered to.

Health and safety
The requirement to follow safe working practices is an integral part of City & Guilds qualifications and assessments, and it is the responsibility of centres to ensure that all relevant health and safety requirements are in place before the candidates start practical assessments.

Should a candidate fail to follow health and safety practice and procedures during an assessment, the assessment must be stopped and the candidate advised of the reasons why. The candidate should be informed that they have not reached the standard of assessment required. Candidates may retake the assessment at a later date, at the discretion of the centre.

If the centre is in any doubt about a violation of health and safety, guidance should be sought from the external verifier.

Guidance on risk management of pre-16 candidates
Centres offering the City & Guilds Automotive qualifications at Level 2 to candidates under the age of 16 must assume responsibility for the safe delivery of the qualification. This will include those units that require using and working with power tools and machinery and using and working under lifts and hoists.

Verification of practical tasks
By using checklists, verifiers can check that evidence for an assignment is complete and can ensure that the assessment decision has been fair and beyond dispute.

Assessors must ensure that candidates understand why a particular grade has been given for the task. It is for this reason that City & Guilds requires the signature of both the assessor and the candidate on the assignment record.

If a candidate's work is selected for verification, samples of work must be made available to the appointed external verifier. The external verifier will ensure that:
- the internal verifier is undertaking his/her responsibilities
- the internal verifier is given prompt, accurate and constructive feedback on centre operations
- a report is written on centre activities for City & Guilds.

Internal quality assurance
Approved centres must have effective quality assurance systems to ensure optimum delivery and assessment of qualifications.

Quality assurance includes initial centre approval, qualification approval and the centre's own internal procedures for monitoring quality. Centres are responsible for internal quality assurance, and City & Guilds is responsible for external quality assurance.
Full details and guidance on the internal and external quality assurance requirements and procedures, are provided in Providing City & Guilds qualifications – A guide to centre and qualification approval (available from www.cityandguilds.com, by selecting ‘becoming a centre’). This document also explains the tasks, activities and responsibilities of quality assurance staff.

In order to fully support candidates, centres are required to retain copies of candidates’ assessment records for three years after certification.

Centres are also free to design their own practical tasks, if they feel their suggestions better reflect candidate and/or regional/national needs, or if the chosen route is not covered by the tasks provided by City & Guilds. Nationally/regionally-devised tasks must fulfill the assessment requirements of each unit.

**Entry for assessment and certification**
Candidates should be registered via the Walled Garden or using Form S at least 28 days before any assessment. Entries for the online multiple choice test should be made via the Walled Garden or by using Form S as per the instructions outlined in Providing City & Guilds qualifications – A guide to centre and qualification approval.

Results of assignments should be submitted in the form of grades via the Walled Garden or by using Form S. Only those units which have been achieved should be included. Each unit number is entered, followed by P (Pass) to indicate the grade the candidate has achieved.
3 Resource requirements

The resource list below identifies the typical workshop tools and equipment required by candidates to complete the practical assessments for the City & Guilds Level 2 Certificate in Vehicle Maintenance and Repair (4101).

- Steel ruler.
- Micrometer (25 millimetre, 50 millimetre, 75 millimetre and 100 millimetre).
- Oil drain.
- Vernier calliper.
- Trolley jack, wheel chocks and stands.
- Car lifting ramp.
- Tyre changer and wheel balance machine.
- Dial test indicator.
- Cooling pressure tester.
- Antifreeze tester.
- Hand and pillar drill.
- Solder iron.
- Oil pressure test gauge.
- Torque wrench.
- Air wrench.
- Taps and dies.
- Multimeter (volts, amps and ohm).
- Wheel alignment gauge.
- Engine diagnostic machine with gas analyser.
- Straight edge.
- Vee blocks and surface plate.
- Brake pipe flaring tools and formers.
- Brake fluid test machine.
- Selection of hand tools suitable for a garage workshop.
- Selection of garage consumables (rags, nuts, bolts, washers, electrical terminals).
4 Guidance for candidates

The practical tasks given to you by your tutor have been designed to help you to complete the Level 2 Certificate in Vehicle Maintenance and Repair (4101).

The following will help you to understand the requirements of the practical assessment and ensure that you complete all of the necessary recording forms.

1 Before starting the assessment it is important that you have had sufficient training.
2 Read the task criteria carefully and complete all parts of the assessment task.
3 Complete all the documentation as neatly and as legibly as possible.
4 Try to keep to the estimated times allowed.
5 Ensure that you and your assessor sign and date the relevant worksheets accurately, and that you get feedback from your assessor.
5 Candidate information sheet

<table>
<thead>
<tr>
<th>Candidate name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Birth:</td>
<td></td>
</tr>
<tr>
<td>Date enrolled with centre:</td>
<td></td>
</tr>
<tr>
<td>Date enrolled with City &amp; Guilds:</td>
<td></td>
</tr>
<tr>
<td>City &amp; Guilds enrolment number:</td>
<td></td>
</tr>
<tr>
<td>Course tutor:</td>
<td></td>
</tr>
</tbody>
</table>
6  Assessment pro formas
6.1  Note for assessors

Before the G1-V1, G2-V2 and G3-V3 units are awarded, sufficient evidence needs to be achieved. For the purpose of this assessment booklet, these units are embedded within the following main units: MR01-V14; MR02-V15; MR03-V16; MR04-V17/MR04HV-V18 and MR12-V27 or MR09-V19. All the criteria for the performance, knowledge and scope have also been embedded within the unit tasks. It is important that the task documentation is completed fully and correctly.

<table>
<thead>
<tr>
<th>Unit Number</th>
<th>Unit Title</th>
<th>Scope (please tick)</th>
<th>Observation (please tick)</th>
<th>Knowledge (please tick)</th>
<th>Unit description And portfolio/page number (PRN)</th>
<th>Assessor signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1-V1</td>
<td>Contribute to good house keeping</td>
<td></td>
<td></td>
<td></td>
<td>Units G1-V1, G2-V2 and G3-V3 are generic units and can be completed as stand alone units. However, for the purpose of this assessment package, they are integrated within the main core units listed below. Once the main core units are completed they can be automatically signed off.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2-V2</td>
<td>Ensure your own actions reduce risks to health &amp; safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G3-V3</td>
<td>Maintain positive working relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR01-V14</td>
<td>Carry out routine vehicle maintenance</td>
<td></td>
<td></td>
<td></td>
<td>PRN 1  major service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR02-V15</td>
<td>Remove and replace engine units and components</td>
<td></td>
<td></td>
<td></td>
<td>PRN 2  mechanical / fluid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR03-V16</td>
<td>Remove and replace auxiliary electrical units and components</td>
<td></td>
<td></td>
<td></td>
<td>PRN 3  electrical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR04-V17/</td>
<td>Remove and replace chassis units and components/</td>
<td></td>
<td></td>
<td></td>
<td>PRN 4  lighting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR04HV-</td>
<td>MR04HV-V18</td>
<td></td>
<td></td>
<td></td>
<td>PRN 5  brake switch &amp; solder</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remove and replace heavy vehicle chassis units and components</td>
<td></td>
<td></td>
<td></td>
<td>PRN 6  coolant sender/instruments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR12-V27*</td>
<td>Remove and replace vehicle transmission and driveline units and components</td>
<td></td>
<td></td>
<td></td>
<td>PRN 7  suspension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MR09-V19*</td>
<td>Conduct pre and post work vehicle inspections</td>
<td></td>
<td></td>
<td></td>
<td>PRN 8  steering</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PRN 9  brakes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PRN 10 wheel bearing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PRN 11 clutch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PRN 12 drive/prop shaft</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Units marked with *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Either unit can be chosen. It is recommended to choose MR12-V27 for Vehicle Technicians</td>
<td></td>
<td></td>
<td></td>
<td>Verifier sampling</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Name: ............................................ Signature: ...............................................</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Assessment pro formas

#### 6.2 Portfolio reference number (PRN) tracking table

The table below identifies the PRN assessment pro formas that need to be completed to meet the required performance evidence for the relevant vehicle maintenance and repair units within the City & Guilds Level 2 Certificate in Vehicle Maintenance and Repair (4101). The assessment pro formas follow this page. For a detailed qualification structure please refer to the Qualification handbook – section 4.3 Route tables.

<table>
<thead>
<tr>
<th>G1-V1</th>
<th>Contribute to workplace good housekeeping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
<td>Hand tools</td>
</tr>
<tr>
<td>PRN</td>
<td>1,2,3,4,5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G2-V2</th>
<th>Ensure your own risks reduce risks to health and safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
<td>Machinery Equipment</td>
</tr>
<tr>
<td>PRN</td>
<td>1,2,3,4,5,6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G3-V3</th>
<th>Maintain positive working relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
<td>Work as a team</td>
</tr>
<tr>
<td>PRN</td>
<td>1,2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MR01-V14</th>
<th>Carry out routine vehicle maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
<td>PPE</td>
</tr>
<tr>
<td>PRN</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MR02-V15</th>
<th>Remove and replace engine units and components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
<td>Engine Mechanical</td>
</tr>
<tr>
<td>PRN</td>
<td>2</td>
</tr>
</tbody>
</table>

14 Automotive Qualifications (4101)
### 6 Assessment pro formas

#### 6.2 Portfolio reference number (PRN) tracking table (continued)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>MR03-V16 Remove and replace auxiliary electrical units and components</th>
<th>MR04-V17/MR04HV-V18 Remove and replace chassis units and components</th>
<th>MR05-V19 Conduct pre and post work vehicle inspections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting systems</td>
<td>Wiper system</td>
<td>Security</td>
<td>Monitoring instruments</td>
</tr>
<tr>
<td>PRN</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 6 Assessment pro formas

#### 6.3 Portfolio reference number (PRN) unit table

The table below identifies the units covered and the corresponding portfolio reference number (PRN) for each assessment pro forma contained within this guide.

<table>
<thead>
<tr>
<th>PRN</th>
<th>Name</th>
<th>Units covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Carry out a major service</td>
<td>G1-V1, G2-V2, G3-V3, MR01-V14</td>
</tr>
<tr>
<td>2</td>
<td>Remove and replace cylinder head</td>
<td>G1-V1, G2-V2, G3-V3, MR02-V15</td>
</tr>
<tr>
<td>3</td>
<td>Remove, replace and test alternator</td>
<td>G1-V1, G2-V2, G3-V3, MR01-V14</td>
</tr>
<tr>
<td>4</td>
<td>Remove, replace and test headlamp</td>
<td>G1-V1, G2-V2, G3-V3, MR03-V16</td>
</tr>
<tr>
<td>5</td>
<td>Remove, test and refit brake light switch</td>
<td>G1-V1, G2-V2, G3-V3, MR03-V16</td>
</tr>
<tr>
<td>6</td>
<td>Remove, replace and test coolant sensor for driver instrumentation</td>
<td>G1-V1, G2-V2, G3-V3, MR01-V14</td>
</tr>
<tr>
<td>7</td>
<td>Remove, test and refit suspension unit</td>
<td>G1-V1, G2-V2, G3-V3, MR04-V17, MR04HV-V18</td>
</tr>
<tr>
<td>8</td>
<td>Remove and refit steering track rod</td>
<td>G1-V1, G2-V2, G3-V3, MR04-V17</td>
</tr>
<tr>
<td>9</td>
<td>Remove break pads, brake calliper and check condition of brake disc</td>
<td>G1-V1, G2-V2, G3-V3, MR04-V17, MR04HV-V18</td>
</tr>
<tr>
<td>10</td>
<td>Wheel bearing/hub assembly</td>
<td>G1-V1, G2-V2, G3-V3, MR04-V17, MR04HV-V18</td>
</tr>
<tr>
<td>11</td>
<td>Remove gearbox and clutch assembly</td>
<td>G1-V1, G2-V2, G3-V3, MR04-V17, MR04HV-V18</td>
</tr>
<tr>
<td>12</td>
<td>Remove drive line assembly</td>
<td>G1-V1, G2-V2, G3-V3, MR04-V17, MR04HV-V18</td>
</tr>
<tr>
<td>13</td>
<td>Pre-work</td>
<td>G1-V1, G2-V2, G3-V3, MR05-V19</td>
</tr>
<tr>
<td>14</td>
<td>Post-work</td>
<td>G1-V1, G2-V2, G3-V3, MR05-V19</td>
</tr>
</tbody>
</table>
## 6.4 PRN 1 Carry out a major service

**Vehicle details**
- **Vehicle type (please circle):** LV, HGV, MC, PSV
- **Make/Model:**
- **Registration number:**
- **Chassis/VIN number:**

**Indicate unit(s) covered on this evidence record:** G1-V1, G2-V2, G3-V3, MR01-V14

**Date work carried out** ……/……/……

**Carry out a major service (estimated time 2.5 hours)**

<table>
<thead>
<tr>
<th>Details of work activity:</th>
<th>Fuel filter</th>
<th>Air filter</th>
<th>Ignition checks</th>
<th>Suspension and steering checks</th>
<th>Under bonnet levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjust to suit vehicle types</td>
<td></td>
<td></td>
<td>battery voltage</td>
<td>checks</td>
<td></td>
</tr>
<tr>
<td>Brakes check front/rear</td>
<td></td>
<td>Tyre check</td>
<td>Interior systems check</td>
<td>Lighting systems</td>
<td>Vehicle fault codes</td>
</tr>
<tr>
<td>Tyre check</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior systems check</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle fault codes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change oil and filter</td>
<td>Under body damage</td>
<td>Exhaust gas test</td>
<td>Ancillary electrical checks</td>
<td>Transmission oils</td>
<td>Exterior body damage</td>
</tr>
<tr>
<td>Technical information:</td>
<td>Tyre pressures</td>
<td>Engine oil capacity</td>
<td>Wheel nut torque</td>
<td>CO / HC if applicable</td>
<td>Minimum brake pad limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination and testing methods used (include readings as appropriate):</td>
<td>Diagnostic code read</td>
<td>Brake pad wear</td>
<td>CO / HC reading if applicable</td>
<td>Antifreeze frost protection</td>
<td>Battery voltage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Special tools/equipment used:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydraulic lifting equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand tools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tyre pressure tester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antifreeze tester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostic reader/volt meter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Torque &amp; air wrench</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas analyser</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Specific evidence of health and safety, good housekeeping and working with others:</strong></td>
<td>Work with others to check lighting</td>
<td>Sweep up</td>
<td>Wear and use correct PPE.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Work with others to check lighting</td>
<td>4</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Dispose of all waste correctly and safely</td>
<td>5</td>
<td>Clear up spillages from oil changes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Tools tidy, cleaned, checked and put away</td>
<td>6</td>
<td>Identify workshop policies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Wear and use correct PPE.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Examination and testing methods used (include readings as appropriate):**
- Diagnostic code read
- Brake pad wear
- CO / HC reading if applicable
- Antifreeze frost protection
- Battery voltage

**Technical information:**
- Tyre pressures
- Engine oil capacity
- Wheel nut torque
- CO / HC if applicable
- Minimum brake pad limit
- Spark plug gap if applicable

**Assessor feedback on evidence provided:**

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary scope, performance and knowledge for this task have been met.

**Assessor knowledge check:**

<table>
<thead>
<tr>
<th>Assessor name:</th>
<th>Signature:</th>
<th>Date: ………/……/……</th>
<th>Candidate signature:</th>
<th>Date: ………/……/……</th>
</tr>
</thead>
</table>
### 6.5 PRN 2 Remove and replace cylinder head

<table>
<thead>
<tr>
<th>Date work carried out</th>
<th>Indicate unit(s) covered on this evidence record:</th>
<th>Remove and replace cylinder head (estimated time 6 hours, flexible to suit vehicle type)</th>
</tr>
</thead>
<tbody>
<tr>
<td>…/…/……….</td>
<td>G1-V1  G2-V2  G3-V3  MR02-V15</td>
<td>Location:</td>
</tr>
</tbody>
</table>

#### Vehicle details
- **Vehicle type (please circle):** LV, HGV, MC, PSV
- **Make/Model:** ...
- **Registration number:** ...
- **Chassis/VIN number:** ...

#### Details of work activity:
- Adjust to suit vehicle types
  - Disconnect all cooling system, fuel pipes and ignition system connections as necessary. Disconnect exhaust connections.
  - Set and lock engine if necessary to ignition pos, remove timing belt if applicable. Undo all cylinder head bolts and remove cylinder head.
  - Clean all surfaces and inspect for damage/wear. Refit with gaskets and correct sealant devices. Tighten in correct sequence and reassemble.
  - Repair any electrical terminals, coolant hoses.
  - Make suitable adjustments and correct all levels to manufacturer’s limits.

#### Special tools/equipment used:
- Hand tools...
- Coolant pressure tester...
- Torque/angle wrench...
- Straight edge/feeler gauge...

#### Technical information:
- Engine oil capacity...
- Coolant capacity...
- Torque for cylinder head...

#### Examination and testing methods used (include readings as appropriate):
- Coolant pressure test...
- Oil leaks...
- Engine runs on all cylinders...
- Idle speed within tolerance...

#### Specific evidence of health and safety, good housekeeping and working with others:
1. Work with others when lifting cylinder head
2. Dispose of all waste correctly and safely
3. Tools tidy, cleaned, checked and put away
4. Sweep up
5. Clear up spillages
6. Identify workshop policies
7. Wear and use correct PPE.

#### Work found that requires further attention and any action taken:

#### Assessor knowledge check – outline of question(s) used and response:

#### Assessor feedback on evidence provided:

---

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary scope, performance and knowledge for this task have been met.

**Assessor name:** ………………… **Signature:** ………………… **Date:** …/…/…….. **Candidate signature:** ………………… **Date:** …/…/……..
### Assessment pro formas

**6.6 PRN 3   Remove, replace and test alternator**

<table>
<thead>
<tr>
<th>Date work carried out</th>
<th>Indicate unit(s) covered on this evidence record:</th>
<th>G1-V1</th>
<th>G2-V2</th>
<th>G3-V3</th>
<th>MR01-V14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Remove, replace and test alternator (estimated time 1.5 hours)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Vehicle details:**
- **Vehicle type (please circle):** LV, HGV, MC, PSV
- **Make/Model:** ………………………………………..
- **Registration number:** ………………………………….. Chassis/VIN number …………………………………..

**Details of work activity:**
- Adjust to suit vehicle types
- Disconnect battery.
- Remove alternator and check condition of drive belt, replace if necessary.
- Check condition of alternator pulley and mountings.
- Fit alternator, belt and run engine.
- Check regulated voltage at recommended alternator speed.

**Special tools/equipment used:**
- Hand tools ……………………………..
- Voltmeter ………………………………
- Torque wrench ……………………...…
- Special tools, as necessary………..

**Technical information:**
- **Battery voltage** ………………………………..
- **Recommended maximum regulated voltage** ………………………………………..

**Examination and testing methods used (include readings as appropriate):**
- **Battery voltage engine not running** …………………………………………………..
- **Maximum regulated voltage** ……………………………………………………………..
- **Type of drive belt fitted** ……………………………………………………………..
- **Condition of drive belt and pulleys** …………………………………………………..

**Specific evidence of health and safety, good housekeeping and working with others:**
1. Work with others when taking voltage readings
2. Dispose of all waste correctly and safely
3. Tools tidy, cleaned, checked and put away
4. Sweep up
5. Care with battery
6. Identify workshop policies
7. Wear and use correct PPE.

**Work found that requires further attention and any action taken:**

**Assessor knowledge check - outline of question(s) used and response:**

**Assessor feedback on evidence provided:**

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary scope, performance and knowledge for this task have been met.

**Assessor name:** ………………………
**Signature:** ………………………
**Date:** …../…..../……
**Candidate signature:** ………………………
**Date:** …../…..../……
## Assessment pro formas

### 6.7 PRN 4 Remove, replace and test headlamp

<table>
<thead>
<tr>
<th>Date work carried out</th>
<th>Indicate unit(s) covered on this evidence record:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G1-V1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vehicle details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle type (please circle)</td>
</tr>
<tr>
<td>Make/Model</td>
</tr>
<tr>
<td>Registration number</td>
</tr>
<tr>
<td>Chassis/VIN number</td>
</tr>
</tbody>
</table>

**Remove, replace and test headlamp (estimated time 1.5 hours)**

### Details of work activity:
- Adjust to suit vehicle types
  - Remove headlamp.
  - Check condition of wiring and bulbs.
  - Fit headlamp and align as necessary to suit vehicle type.
  - Check voltage to headlamp bulbs.

### Special tools/equipment used:
- Hand tools
- Voltmeter
- Torque wrench
- Headlamp alignment equipment

### Technical information:
- Battery voltage
- Alignment data

### Examination and testing methods used (include readings as appropriate):
- Headlamp bulb terminal voltage
- Condition of headlamp glass
- Headlamp beam pattern (draw on reverse side)

### Specific evidence of health and safety, good housekeeping and working with others:
1. Work with others when taking voltage readings
2. Dispose of all waste correctly and safely
3. Tools tidy, cleaned, checked and put away
4. Sweep up
5. Care with battery
6. Identify workshop policies
7. Wear and use correct PPE.

### Work found that requires further attention and any action taken:

### Assessor knowledge check – outline of question(s) used and response:

### Assessor feedback on evidence provided:

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary scope, performance and knowledge for this task have been met.

### Candidate signature:

### Assessor name:

### Date:

### Signature:

### Date:

### Candidate signature:

### Date:
6 Assessment pro formas

6.8 PRN 5 Remove, test and refit brake light switch

Date work carried out: ……/……/……

Indicate unit(s) covered on this evidence record:

<table>
<thead>
<tr>
<th>G1-V1</th>
<th>G2-V2</th>
<th>G3-V3</th>
<th>MR03-V16</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Vehicle details:
Vehicle type (please circle): LV, HGV, MC, PSV
Make/Model: 
Registration number: 
Chassis/VIN number: 

Details of work activity:
Adjust to suit vehicle types
• Remove brake light switch.
• Check with ohmmeter/multimeter for continuity and operation.
• Fit to vehicle.
• Adjust and check brake light operation.
• Show you have the ability and knowledge to solder terminals to wire, this can be on a separate piece of wire.

Special tools/equipment used:
Hand tools: 
Multimeter/ohm: 
Torque wrench: 
Soldering iron: 

Technical information:
Battery voltage: 
Brake light bulb wattage: 

Examination and testing methods used (include readings as appropriate):
Resistance readings of switch when operated: 
Condition of brake light lens: 
Solder connection resistance: 

Specific evidence of health and safety, good housekeeping and working with others:
1. Work with others when taking electrical test readings
2. Dispose of all waste correctly and safely
3. Tools tidy, cleaned, checked and put away
4. Sweep up
5. Care with battery
6. Identify workshop policies
7. Wear and use correct PPE.

Work found that requires further attention and any action taken:

Assessor knowledge check - outline of question(s) used and response:

Assessor feedback on evidence provided:

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary scope, performance and knowledge for this task have been met.

Assessor name: 
Signature: 
Date: ……/……/……

Candidate signature: 
Date: ……/……/……
6.9 PRN 6  Remove, replace and test coolant sensor for driver instrumentation

Date work carried out: ..............................................................

Indicate unit(s) covered on this evidence record: G1-V1 G2-V2 G3-V3 MR01-V14

Vehicle details
Vehicle type (please circle) LV HGV MC PSV
Make/Model .................................................................
Registration number .....................................................
Chassis/VIN number ........................................................

Remove, replace and test coolant sensor for driver instrumentation
(estimated time 1.5 hours)

Details of work activity:
Adjust to suit vehicle types
• Take care as coolant and engine may be hot.
• Remove coolant sensor connections.
• Remove sensor and connect ohm meter.
• Check the resistance at the specified temperatures.
• Refit sensor, check coolant and adjust as necessary.
• Check driver instrumentation for coolant gauge operation.

Special tools/equipment used:
Hand tools .................................................................
Multi-meter .................................................................
Special tools as necessary ..............................................

Technical information:
Battery voltage .............................................................
Resistance cold 10 °C .....................................................
Resistance cold 100 °C ...................................................
Resistance hot 90 °C .......................................................
(Use vehicle data spec as near as possible)

Examination and testing methods used (include readings as appropriate):
Resistance cold 10 °C .....................................................
Resistance hot 90 °C .......................................................
Does the engine temperature coolant gauge work correctly?

Specific evidence of health and safety, good housekeeping and working with others:
1 Work with others when taking voltage readings 4 Sweep up 7 Wear and use correct PPE.
2 Dispose of all waste correctly and safely 5 Care with antifreeze
3 Tools tidy, cleaned, checked and put away 6 Identify workshop policies

Work found that requires further attention and any action taken:

Assessor knowledge check – outline of question(s) used and response:

Assessor feedback on evidence provided:

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary scope, performance knowledge for this task have been met.

Assessor name: .................................................. Signature: ................................ Date: ........../.........../...... Candidate signature: ................. Date: ........../.........../......
## 6 Assessment pro formas

### 6.10 PRN 7  Remove, test and refit suspension unit

<table>
<thead>
<tr>
<th>Date work carried out</th>
<th>Indicate unit(s) covered on this evidence record:</th>
<th>G1-V1</th>
<th>G2-V2</th>
<th>G3-V3</th>
<th>MR04-V17/MR04HV-V18</th>
<th>Choose either MR04-V17 or MR04HV-V18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Remove and refit suspension unit (strut, coil, leaf, torsion, gas/air)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 Test operation of damper (estimated time 2 hours)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Vehicle details**

- **Vehicle type (please circle):** LV, HGV, MC, PSV
- **Make/Model:** ……………………………………...
- **Registration number:** ……………………………………...
- **Chassis/VIN number:** ……………………………………...

**Details of work activity:**

- Adjust to suit vehicle types
- • Remove the spring and check the condition and suitability for use.
- • Check the condition and operation of the damper unit.
- • Measure the trim height of the vehicle.

**Special tools/equipment used:**

- Hand tools ……………………………...
- Spring compressor ………………………
- Torque wrench ……………………………
- Rule ………………………………………

**Technical information:**

- Trim height ……………………………
- Type of spring ………………………
- Wheel nut torque ………………………

**Examination and testing methods used - include readings as appropriate:**

- Condition of spring ………………………
- Condition of damper ………………………
- Trim height ………………………

**Specific evidence of health and safety, good housekeeping and working with others:**

1. Work with others when lifting vehicle components
2. Dispose of all waste correctly and safely
3. Tools tidy, cleaned, checked and put away

4. Sweep up
5. Care when lifting
6. Identify workshop policies
7. Wear and use correct PPE.

**Work found that requires further attention and any action taken:**

**Assessor knowledge check - outline of question(s) used and response:**

**Assessor feedback on evidence provided:**

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary **scope**, **performance** and **knowledge** for this task have been met.

**Assessor name:** ………………………

**Signature:** ………………………

**Date:** …./…./…….

**Candidate signature:** ………………………

**Date:** …./…./…….
### 6 Assessment pro formas

#### 6.11 PRN 8 Remove and refit steering track rod

<table>
<thead>
<tr>
<th>Date work carried out</th>
<th>Indicate unit(s) covered on this evidence record:</th>
<th>Vehicle details:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G1-V1  G2-V2  G3-V3  MR04-V17</td>
<td>Vehicle type (please circle) LV HGV MC PSV</td>
</tr>
</tbody>
</table>

**Remove and refit steering track rod or similar component**  
(estimated time 1.5 hours)

#### Vehicle details:
- **Make/Model**:  
- **Registration number**:  
- **Chassis/VIN number**:  

<table>
<thead>
<tr>
<th>Details of work activity:</th>
<th>Special tools/equipment used:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adjust to suit vehicle types</strong></td>
<td></td>
</tr>
</tbody>
</table>
| - Remove a track rod end, steering arm or similar component to suit the vehicle worked upon.  
| - Remove the component check condition and suitability for use.  
| - Refit and make adjustments to steering alignment to meet manufactures specification.  |
| **Hand tools** |  
| **Alignment gauge** |  
| **Torque wrench** |  

<table>
<thead>
<tr>
<th>Technical information:</th>
<th>Examination and testing methods used (include readings as appropriate):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steering alignment</td>
<td>Condition of track rod/steering component</td>
</tr>
<tr>
<td>Wheel nut torque</td>
<td>Alignment reading</td>
</tr>
</tbody>
</table>

#### Specific evidence of health and safety, good housekeeping and working with others:
- 1 Work with others when lifting vehicle components  
- 2 Dispose of all waste correctly and safely  
- 3 Tools tidy, cleaned, checked and put away  
- 4 Sweep up  
- 5 Care when lifting  
- 6 Identify workshop policies  
- 7 Wear and use correct PPE

#### Work found that requires further attention and any action taken:

#### Assessor knowledge check - outline of question(s) used and response:

#### Assessor feedback on evidence provided:

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary scope, performance and knowledge for this task have been met.

<table>
<thead>
<tr>
<th>Assessor name:</th>
<th>Signature:</th>
<th>Date:</th>
<th>Candidate signature:</th>
<th>Date:</th>
</tr>
</thead>
</table>

---

Automotive Qualifications
### 6 Assessment pro formas

#### 6.12 PRN 9  Remove brake pads, brake calliper and check condition of brake disc

<table>
<thead>
<tr>
<th>Date work carried out</th>
<th>Indicate unit(s) covered on this evidence record: G1-V1</th>
<th>G2-V2</th>
<th>G3-V3</th>
<th>MR04-V17</th>
<th>MR04HV-V18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Remove brake pads, brake calliper and check condition of brake disc (estimated time 1.5 hours)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Vehicle details**

Vehicle type (please circle)  
LV  
HGV  
MC  
PSV  

Make/Model  

Registration number  

Chassis/VIN number  

**Details of work activity:**  
• Remove brake calliper and brake pads, measure pad thickness and check suitability for use.  
• Check run out of brake disc.  
• Fit brake pads and calliper, bleed air from system.

**Special tools/equipment used:**  
Hand tools  
DTI  
Bleed kit  
Torque wrench  

**Technical information:**  
Minimum pad thickness  
Type of brake fluid  
Maximum allowed disc run out  
Wheel nut torque  

**Examination and testing methods used (include readings as appropriate):**  
Condition of brake pads  
Condition of brake disc  
Feel of brake pedal/hand lever  

**Specific evidence of health and safety, good housekeeping and working with others:**  
1  Work with others when bleeding air from brakes  
2  Dispose of all waste correctly and safely  
3  Tools tidy, cleaned, checked and put away  
4  Sweep up  
5  Care with brake dust  
6  Identify workshop policies  
7  Wear and use correct PPE.

**Work found that requires further attention and any action taken:**

**Assessor knowledge check - outline of question(s) used and response:**

**Assessor feedback on evidence provided:**

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary scope, performance and knowledge for this task have been met.

**Assessor name:**  
**Signature:**  
**Date:**  
**Candidate signature:**  
**Date:**

---

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### 6 Assessment pro formas

#### 6.13 PRN 10 Wheel bearing/hub assembly

<table>
<thead>
<tr>
<th>Date work carried out</th>
<th>Indicate unit(s) covered on this evidence record:</th>
<th>G1-V1</th>
<th>G2-V2</th>
<th>G3-V3</th>
<th>MR04-V17</th>
<th>MR04HV-V18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel bearing/hub assembly (estimated time 2 hours)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Vehicle details**
- Vehicle type (please circle)  
  - LV  
  - HGV  
  - MC  
  - PSV
- Make/Model
- Registration number
- Chassis/VIN number

**Details of work activity:**
- Adjust to suit vehicle types
- Remove a hub assembly, remove a bearing, and check for wear and suitability.
- Refit the components in accordance with manufacturer settings and tolerances.
- Check lubrication and sealing devices.

**Special tools/equipment used:**
- Hand tools
- Torque wrench

**Technical information:**
- Data system used
- Oil/grease type
- Adjustment data

**Examination and testing methods used (include readings as appropriate):**
- Condition bearing
- Turn wheel bearing after fitting and report

**Specific evidence of health and safety, good housekeeping and working with others:**
- Work with others when lifting vehicle components
- Dispose of all waste correctly and safely
- Tools tidy, cleaned, checked and put away
- Sweeping
- Wear and use correct PPE
- Care when lifting
- Identify workshop policies

**Work found that requires further attention and any action taken:**

**Assessor knowledge check – outline of question(s) used and response:**

**Assessor feedback on evidence provided:**

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary **scope**, **performance** and **knowledge** for this task have been met.

**Assessor name:**  
**Signature:**  
**Date:**  
**Candidate signature:**  
**Date:**
## 6 Assessment pro formas

### 6.14 PRN 11 Remove gearbox and clutch assembly

<table>
<thead>
<tr>
<th>Date work carried out</th>
<th>Indicate unit(s) covered on this evidence record: G1-V1</th>
<th>G2-V2</th>
<th>G3-V3</th>
<th>MR04-V17</th>
<th>MR04HV-V18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vehicle details</strong></td>
<td><strong>Remove gearbox and clutch assembly</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle type (please circle)</td>
<td>LV HGV MC PSV</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make/Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration number</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chassis/VIN number</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

### Details of work activity:
- Adjust to suit vehicle types
- Remove the gearbox, or transmission covers depending on vehicle type.
- Remove the clutch assembly.
- Check components for wear and damage.
- Refit all components and test gear selection.
- Depending on vehicle type, the hydraulic, mechanical or pneumatic system needs to be checked and reported

### Special tools/equipment used:
- Hand tools
- Clutch tools
- Torque wrench
- DTI/Micrometer

### Technical information:
- Clutch plate minimum thickness
- Run out information
- Number of clutch plates

### Examination and testing methods used (include readings as appropriate):
- Condition of diaphragm/coil springs
- Condition of clutch driven plates
- Clutch operation device: Hydraulic/Mechanical/pneumatic

### Specific evidence of health and safety, good housekeeping and working with others:
1. Work with others when lifting vehicle components
2. Dispose of all waste correctly and safely
3. Tools tidy, cleaned, checked and put away
4. Sweep up
5. Care with clutch dust
6. Identify workshop policies
7. Wear and use correct PPE.

### Work found that requires further attention and any action taken:

### Assessor knowledge check - outline of question(s) used and response:

### Assessor feedback on evidence provided:
I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary scope, performance and knowledge for this task have been met.

**Assessor name**: 
**Signature**: 
**Date**: 
**Candidate signature**: 
**Date**: 

27 Automotive Qualifications (4101)
### 6 Assessment pro formas

#### 6.15 PRN 12  Remove drive line assembly

<table>
<thead>
<tr>
<th>Date work carried out</th>
<th>Indicate unit(s) covered on this evidence record:</th>
<th>Vehicle details</th>
<th>Vehicle type (please circle)</th>
<th>LV</th>
<th>HGV</th>
<th>MC</th>
<th>PSV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G1-V1</td>
<td>G2-V2</td>
<td>G3-V3</td>
<td>MR04-V17</td>
<td>MR04HV-V18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Remove drive line assembly (estimated time 4 hours)**

**Indicate unit(s) covered on this evidence record:**

- G1-V1
- G2-V2
- G3-V3
- MR04-V17
- MR04HV-V18

**Vehicle details**

- **Make/Model:** ………………………………
- **Registration number:** …………………………………
- **Chassis/VIN number:** ………………………………

**Details of work activity:**

- Adjust to suit vehicle types
  - Remove a drive shaft, prop shaft or in the case of a motorcycle, a drive chain and sprocket assembly.
  - Check the components for wear, run out and refit in accordance with manufacturer settings and tolerances.
  - Check lubrication and sealing devices.

**Special tools/equipment used:**

- Hand tools ………………………
- Torque wrench ………………………
- DTI/Micrometer ………………………

**Technical information:**

- Oil/grease type ………………………
- Run out information …………………
- Adjustment data ………………………
- Chain/sprocket (Motorcycle) ………

**Examination and testing methods used (include readings as appropriate):**

- Run out of drive/prop shaft
- Condition of CV and UJ couplings
- Chain/sprocket (Motorcycle)

**Specific evidence of health and safety, good housekeeping and working with others:**

1. Work with others when lifting vehicle components
2. Dispose of all waste correctly and safely
3. Tools tidy, cleaned, checked and put away
4. Sweep up
5. Care when lifting
6. Identify workshop policies
7. Wear and use correct PPE.

**Work found that requires further attention and any action taken:**

**Assessor knowledge check – outline of question(s) used and response:**

**Assessor feedback on evidence provided:**

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary scope, performance and knowledge for this task have been met.

**Assessor name:** ………………………

**Signature:** ………………………

**Date:** …./.......

**Candidate signature:** ………………………

**Date:** …./.......

---

**Automotive Qualifications (4101)**
### 6.16 PRN 13 Pre-work

#### Pre-work (estimated time 1.5 hours)

**Details of work activity:**
- Check the vehicle and vehicle systems prior to work commencing.
- Ensure that the vehicle systems operate and that interior and external damage has been recorded.

#### Vehicle details

<table>
<thead>
<tr>
<th>Vehicle type (please circle)</th>
<th>LV</th>
<th>HGV</th>
<th>MC</th>
<th>PSV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make/Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chassis/VIN number</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Exterior report

<p>| |</p>
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<thead>
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<tbody>
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</table>

#### Interior report

<p>| |</p>
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</thead>
<tbody>
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<td></td>
</tr>
</tbody>
</table>

#### Specific evidence of health and safety, good housekeeping and working with others:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Work with others to check lighting</td>
</tr>
<tr>
<td>2</td>
<td>Dispose of all waste correctly and safely</td>
</tr>
<tr>
<td>3</td>
<td>Tools tidy, cleaned, checked and put away</td>
</tr>
<tr>
<td>4</td>
<td>Conforms to specification</td>
</tr>
<tr>
<td>5</td>
<td>Vehicle protection</td>
</tr>
<tr>
<td>6</td>
<td>Identify workshop policies</td>
</tr>
<tr>
<td>7</td>
<td>Wear and use correct PPE</td>
</tr>
</tbody>
</table>

#### Work found that requires further attention and any action taken:

**Assessor knowledge check – outline of question(s) used and response:**

**Assessor feedback on evidence provided:**

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary **scope**, **performance** and **knowledge** for this task have been met.

**Assessor name:**

**Assessor signature:**

**Assessor date:**

**Candidate signature:**

**Candidate date:**
### 6 Assessment pro formas

#### 6.17 PRN 14  Post-work

<table>
<thead>
<tr>
<th>Date work carried out</th>
<th>Indicate unit(s) covered on this evidence record: G1-V1</th>
<th>G2-V2</th>
<th>G3-V3</th>
<th>MR05-V19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Post-work (estimated time 1.5 hours)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Vehicle details
- **Vehicle type (please circle):** LV, HGV, MC, PSV
- **Make/Model:** ...........................................
- **Registration number:** ...................................
- **Chassis/VIN number:** ....................................

#### Details of work activity:
- Adjust to suit vehicle types
- Check the vehicle and vehicle systems post work.
- Ensure that the vehicle systems operate and that interior and external damage has been recorded.

#### Exterior report

<table>
<thead>
<tr>
<th>Lights</th>
<th>Wipers</th>
<th>Horn</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Interior report

<table>
<thead>
<tr>
<th>Keys correct</th>
<th>Instruments</th>
<th>Seat belts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Specific evidence of health and safety, good housekeeping and working with others:

1. Work with others to check lighting
2. Dispose of all waste correctly and safely
3. Tools tidy, cleaned, checked and put away

<table>
<thead>
<tr>
<th>Conforms to specification</th>
<th>Vehicle protection</th>
<th>Wear and use correct PPE.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

#### Work found that requires further attention and any action taken:

<table>
<thead>
<tr>
<th>Identify workshop policies</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

#### Assessor knowledge check – outline of question(s) used and response:

<table>
<thead>
<tr>
<th>Identify workshop policies</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

#### Assessor feedback on evidence provided:

I confirm that the work carried out on this evidence record meets City & Guilds requirements for validity, authenticity, currency and sufficiency. All the necessary **scope**, **performance** and **knowledge** for this task have been met.

<table>
<thead>
<tr>
<th>Assessor name:</th>
<th>Signature:</th>
<th>Date:</th>
<th>Candidate signature:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
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