Vehicle Damage Mechanical, Electrical and Trim Technician level 3 End-Point Assessment Plan

Summary of assessment

Introduction & Overview

This document is based on the apprenticeship standard for the Vehicle Damage Mechanical, Electrical and Trim (MET) Technician. Contained within this document are the requirements for the End-Point Assessment (EPA) designed to prove occupational competence of apprentices following comprehensive training, development and occupational mentoring. Training shall have been carried out by a training provider approved by the Education and Skills Funding Agency (ESFA) and selected from the Register of Apprentice Training Providers (RoATP).

This document sets out the requirements for end-point assessment (EPA) for the Vehicle Damage Mechanical, Electrical and Trim Technician apprenticeship standard. It is written for end-point assessment organisations who need to know how EPA for this apprenticeship must operate. It will also be of interest to Vehicle Damage Mechanical, Electrical and Trim Technician apprentices, their employers and training providers.

Full time apprentices will typically spend 36 months on-programme working towards the apprenticeship standard, with a minimum of 20% off-the-job training. The EPA should only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the standard, the pre-requisite gateway requirements for EPA have been met and that they can be evidenced to an EPA organisation.

As a gateway requirement, apprentices must complete the Certification in Refrigerant Handling (EC 842-2006) or latest revision. Apprentices without level 2 English and maths will need to achieve this level prior to taking the end-point assessment. For those with an education, health and care plan or a legacy statement the apprenticeships English and maths minimum requirement is Entry Level 3 and British Sign Language qualifications are an alternative to English qualifications for whom this is their primary language.

They are also required to complete a mandatory portfolio of evidence that will be used as a basis for the “professional discussion” method of assessment which is described later on in this plan.

The EPA must be completed over a maximum total assessment time of 13 hours and 45 minutes (knowledge test = 90 minutes, professional discussion = 45 minutes and practical skills test = 11 hours and 30 minutes) within a three-month period, after the apprentice has met the EPA gateway requirements. The practical skills task is to be completed over a two day period.

EPA must be conducted by an organisation approved to offer services against this standard, as selected by the employer, from the Education & Skills Funding Agency’s Register of End-Point Assessment Organisations.

The EPA consists of three distinct assessment methods:

- Knowledge Test
- Professional Discussion (supported by a portfolio of evidence)
- Practical Skills Test
Performance in the EPA will determine the apprenticeship grade of fail, pass or distinction.

The EPA shall only commence once the employer is confident that the apprentice has developed all the knowledge, skills and behaviours defined in the apprenticeship standard. It is advisable that the employers involved make this decision in consultation with the training provider and the apprentice.

The behavioural, knowledge and skills assessments outlined are designed to cover the breadth of the standard and reflect the current job functions of a Vehicle Damage Mechanical, Electrical and Trim (MET) Technician working in the collision repair sector.

### Diagram 1. Typical Vehicle Damage Mechanical, Electrical and Trim (MET) Technician Apprenticeship Summary

<table>
<thead>
<tr>
<th>On-programme (typically 36 months)</th>
<th>End-Point Assessment Gateway</th>
<th>End-Point Assessment (to be completed within 3 months of passing through the Gateway)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training to develop the occupation standard’s knowledge, skills and behaviours</td>
<td>English/maths Level 2 or prescribed alternative as set out in the apprenticeships standard</td>
<td>Knowledge Test</td>
</tr>
<tr>
<td>Updating mandatory portfolio of evidence</td>
<td>Submission of completed portfolio of evidence</td>
<td>Professional Discussion (supported by portfolio of evidence)</td>
</tr>
<tr>
<td>Working towards English/maths Level 2 or prescribed alternative as set out in the apprenticeship standard (if required)</td>
<td>Achieved certificate in Refrigerant Handling (EC 842-2006) or latest revision</td>
<td>Practical Skills Test</td>
</tr>
<tr>
<td>Working towards achievement of certification in Refrigerant Handling (EC 842-2006) or latest revision</td>
<td>Employer confirms apprentice is consistently working at or above the level of the standard Vehicle Damage Mechanical, Electrical and Trim (MET) Technician</td>
<td>Graded fail, pass or distinction</td>
</tr>
</tbody>
</table>

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### Diagram 2. End-Point Assessment overview

<table>
<thead>
<tr>
<th>EPA overview (See Annex A and B for detail)</th>
<th>Area Assessed</th>
<th>Assessed by</th>
<th>Grading</th>
<th>Time Allowance</th>
<th>Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Test</td>
<td>Knowledge &amp; Understanding</td>
<td>EPAO</td>
<td>Fail / Pass / Distinction</td>
<td>90 minutes</td>
<td>Shall achieve a pass prior to Professional Discussion</td>
</tr>
<tr>
<td>Professional Discussion (supported by portfolio of evidence)</td>
<td>Knowledge &amp; Understanding and Behaviours</td>
<td>EPAO</td>
<td>Fail / Pass / Distinction</td>
<td>45 minutes + 10% extra if required</td>
<td>Shall achieve a pass prior to Practical Skills Test</td>
</tr>
<tr>
<td>Practical Skills Test</td>
<td>Knowledge &amp; Understanding Skills and Behaviours</td>
<td>EPAO</td>
<td>Fail / Pass / Distinction</td>
<td>11 hours and 30 minutes over 2 consecutive days (individual tasks allowed time specified)</td>
<td></td>
</tr>
</tbody>
</table>

Assessments should be completed within 3 months of passing through the Gateway. Where significant additional learning needs have been identified a new agreement that the apprentice can proceed to EPA should be agreed with the employer following the additional learning provision.

### Assessment gateway

**End-Point Assessment Gateway**

The EPA should only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the standard, the pre-requisite gateway requirements for EPA have been met and that they can be evidenced to an EPA organisation. Employers may wish to take advice from their apprentice’s training provider(s).

**Gateway requirements:**

- Apprentices without level 2 English and mathematics will need to achieve this level prior to taking the end-point assessment. For those with an education, health and care plan or a legacy statement the apprenticeships English and maths minimum requirement is Entry Level 3 and British Sign Language qualifications are an alternative to English qualifications for whom this is their primary language.
- Apprentices will be required to achieve Certification in Refrigerant Handling (EC 842-2006) or latest revision
- The mandatory portfolio of evidence (which supports the Professional Discussion) must be submitted. See “Portfolio of evidence” section below.

**Portfolio of evidence**

On commencement of the apprenticeship the apprentice must begin to retain a portfolio of
Evidence which must be finalised before passing through the gateway.

A completed portfolio of evidence is a **compulsory** EPA gateway requirement, that underpins the EPA Professional Discussion component.

Employers/training providers are free to devise their own version of the portfolio of evidence but the portfolio of evidence must contain the following information:

- The name of the apprentice
- Details of the apprentice’s workplace
- Evidence to support the knowledge, skills and behaviours of the apprenticeship standard that are mapped to the Professional Discussion assessment method (see Annex B). Each of these knowledge, skills and behaviours statements should be evidenced twice. (Evidence can be provided through a range of sources, for example work reviews and customer feedback)
- Records of learning activities targeting their own performance (to support demonstration of Behaviour B5 – taking responsibility for personal development).
- Confirmation from the line manager that the tasks evidenced in the portfolio were completed to the required standard of the organisation
- Document the off-the-job training that has taken place during the on-programme phase, with at least 20% of their employed time off-the-job
- Copy of the Certification in Refrigerant Handling (EC 842-2006) or latest revision Copy of English and mathematics certificates

The apprentice’s employer must sign-off the portfolio of evidence, thereby confirming the demonstration of competence against the knowledge, skills and behaviours (KSBs) across the standard and that the apprentice is ready to take the EPA.

The apprentice must submit their portfolio of evidence to their EPAO when applying for the EPA. An independent assessor will check qualification outcomes and review the portfolio to glean personalised information that will assist the ‘Professional Discussion’ component of the EPA.

### End-point Assessment Methods, Timescale and Location

**What shall be assessed at each stage of the assessment**

The EPA shall be used to assess the knowledge, skills and behaviours included in the apprenticeship standard. See Annex B for a table showing how assessment methods align to the standard.

The EPA consists of three distinct assessment methods:

- Knowledge Test
- Professional Discussion (supported by a portfolio of evidence)
- Practical Skills Test

The EPA must be completed over a maximum period of 3 months, after the apprentice has met the EPA gateway requirements and the EPAO has confirmed that the gateway requirements have been met.

The assessment methods must be completed in the order outlined in diagram 2.
EPAOs must ensure that the knowledge test and professional discussion are conducted in a suitable controlled environment i.e. quiet room free from distraction and influence, with the necessary equipment for each assessment method (e.g. computer). It is anticipated that EPAOs will use the apprentice’s employer’s premises wherever possible to minimise costs. They may be conducted face-to-face or via an electronic platform e.g. electronic test or video-conferencing. EPAOs must ensure appropriate methods to prevent misrepresentation are in place should an electronic option be used. For example, screen share and 360-degree camera function with an administrator/invigilator when taking the knowledge test online.

The test venue shall have access to appropriate resources to conduct the assessment such as appropriately trained invigilation staff (provided by the End-Point Assessment organisation), robust IT equipment and infrastructure to enable effective use of any technology used.

Requirements for each assessment method are detailed below.

**How the assessment shall be administered**

**Method 1 – Knowledge test**

The knowledge assessment shall be a multiple choice test based on the knowledge required by the standard as outlined in Annex B. This may be a paper based or an electronic test.

**Key facts:**

- Apprentices must complete a knowledge test during the EPA period.
- The examination venue shall have been approved by the EPAO prior to the examination taking place.
- Apprentices must take the knowledge test in the presence of an EPAO administrator/invigilator.
- The maximum administrator/invigilator to apprentice ratio must be 1 to 10 if face-to-face; or 1 to 5 if remote.
- The knowledge test must represent an EPA weighting of one third of the overall apprenticeship assessment.
- The knowledge test must be closed book i.e. the apprentice can’t refer to reference books or materials.
- The knowledge test must consist of 60 randomly selected multiple-choice questions.
- Each question shall have four options. Three of these are distractors and one of the choices is correct.
- Each question answered correctly must be assigned 1 mark, any incorrect or missing answers must be assigned 0 marks.
- EPAOs must develop ‘test banks’ of sufficient size to prevent predictability and review them regularly (at least once a year) to ensure they, and the questions they contain, are fit for purpose.
- Apprentices must achieve the following marks in the following areas:
  - Vehicle diagnostics (K3), safety and risk (K4) and health and safety (K8) – There are 5 available marks each out of 60 questions, the candidate must achieve a minimum of 12 marks from across the 15 available in this area.
- Vehicle hardware (K6) – There are 8 available marks out of 60 questions, the candidate must achieve a minimum of 6 marks in this area.
- Body mechanical repair (K2) – There are 10 available marks out of 60 questions, the candidate must achieve a minimum of 8 marks in this area.
- Repair and handling of fuel systems (K5) – There are 12 available marks out of 60 questions, the candidate must achieve a minimum of 10 marks in this area.
- Engine, gearbox, suspension, mechanical & electrical systems (K1) – There are 15 available marks out of 60 questions, the candidate must achieve a minimum of 12 marks in this area.

The assessment shall be completed within the 90 minute allocated timescale.

Knowledge tests must be marked by EPAO independent assessors or markers following a marking guide produced by the EPAO; electronic marking is permissible.

EPAOs must develop and maintain a knowledge test question bank of sufficient size to prevent predictability and review them at least once per year.

EPAOs must ensure that apprentices have a different set of questions in the case of re-sits/re-takes.

Independent assessors must award a grade using the following grading boundaries.

<table>
<thead>
<tr>
<th>Grading boundaries</th>
<th>Fail</th>
<th>Pass</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marks</td>
<td>0-47</td>
<td>48-55</td>
<td>56-60</td>
</tr>
</tbody>
</table>

The EPAO must have in place clear arrangements for making Reasonable Adjustments for this standard. This should include how an apprentice qualifies for Reasonable Adjustment and what Reasonable Adjustments will be made. The adjustments must maintain the validity, reliability and integrity of the assessment methods. This may involve the apprentice having additional time for the knowledge test.

**Method 2 - Professional Discussion (supported by a portfolio of evidence)**

The purpose of the assessment is to determine the extent to which the apprentice understands the requirements of his/her role as defined by the standard and to explore them through discussion.

The professional discussion (supported by a portfolio of evidence) shall be a face-to-face session involving the apprentice and the end-point assessor. The portfolio will be used as a source of evidence by which apprentices can exemplify their responses to questions asked by the assessor. Modern communication software applications may be used but it is the responsibility of the EPAO to ensure the application and the infrastructures are fit for purpose so as not to disadvantage the apprentice whilst assuring quality and standardisation are not compromised.

The professional discussion will take place after successful completion of the knowledge test.

The apprentice will achieve a mark for this component of the end-assessment that will contribute a grade towards the overall apprenticeship grading award.

Behaviours and knowledge mapped in Annex B shall be assessed using this professional discussion (supported by a portfolio of evidence) and the outcome shall be graded as either Fail, Pass or Distinction.
The professional discussion will be supported by a mandatory portfolio of evidence, completed on programme. The portfolio itself will not be assessed, but will be used by the apprentice to exemplify their responses to the questions asked by the assessor during the professional discussion. (The content of the portfolio is outlined earlier in this plan).

**Key facts:**
- 1:1 discussion with end-point assessor.
- The professional discussion will assess the knowledge and behaviours as specified in Annex B.
- The professional discussion shall be supported by a portfolio of evidence.
- The portfolio of evidence shall be made available to the assessment organisation no less than 5 working days prior to the professional discussion to allow for preparation.
- The professional discussion shall last 45 minutes and the assessor will have the discretion to increase the time of the discussion by up to 10% to allow the apprentice to complete this method of the EPA.
- The professional discussion shall be carried out by an independent end-point assessor appointed by the EPAO.
- The discussion shall take place in an environment which is free from interruptions.
- Prior to the assessment the apprentice shall be given suitable notice, not less than 5 working days, to provide preparation time (for example, to make travel arrangements if necessary).
- Independent assessors must ask apprentices 6 questions, from a question bank prepared by the end-point assessment organisation, covering underpinning knowledge and behaviours as specified in Annex B. Supplementary questions are allowed to seek clarification.
- EPAOs must produce a bank of sample questions for end-point assessors. The question bank must be of sufficient size to prevent predictability and be reviewed regularly (at least once a year) to ensure the questions are fit-for-purpose.
- The professional discussion must represent an EPA weighting of one third of the overall apprenticeship assessment.

**The end-point assessor must:**
- Plan the professional discussion (supported by a portfolio of evidence) prior to it taking place and ensure that it is relevant to the standard.
- Ensure that the apprentice understands the process, the possible outcomes and how it is graded.
- Ensure they take steps to put the apprentice at ease.
- Ensure that he/she has the grading criteria and relevant documentation to hand before commencing the professional discussion (supported by portfolio of evidence).
- Complete the relevant documentation prepared by the end-point assessment organisation, taking notes of what is said.
- Ensure that the outcome of assessment is notified to the end-point assessment organisation within the timescale set by them.
- Ensure any special needs highlighted by the employer and training provider are taken into consideration in line with the Reasonable Adjustments policy.
Method 3 – Practical Skills Test

The practical skills test shall be a selection of tasks as outlined in Annex A, designed to synoptically test the knowledge, skills and behaviour within the apprenticeship standard as specified in Annex B and intended to replicate the undertaking of tasks expected of a competent technician in the work place.

Key facts:

- The tasks shall have individual ‘maximum allowed’ timescales attached to each one, that must be clearly stated in the instructions to the assessor and to the apprentice, however, the assessor may increase this by 10% to allow the apprentice to complete the task if necessary.
- Practical tasks shall be carried out on appropriate vehicles with factory fitted technology related to the tasks defined.
- The observation of the tasks shall be undertaken in a location and environment compliant with Annex A, and thereby provide a fair assessment.
- Observations must be conducted in a realistic work situation under normal conditions. It is anticipated that assessment organisations will use the apprentice’s normal work environment to carry out the observation where possible.
- All vehicles used for practical test purposes shall be screened off appropriately to prevent prior viewing of the tests although it may be that these vehicles have been used during the training.
- Repair methods (BS10125 – industry standard for safe vehicle repair) for the vehicle shall be available for the test vehicles and accessible on the day of the test, either in hard copy or electronically.
- To ensure that the apprentices are not disadvantaged, by equipment failure or the setting up of workstations, a workshop maintenance technician shall be available to reset tasks and resolve any technical issues which may arise during the test. This workshop maintenance technician shall be a different person to that carrying out the assessment and appointed by the end-point assessment organisation. The workshop maintenance technician may be from the apprentice’s employer and they will take no part in administering the end-point assessment.
- Apprentices must be provided with both written and verbal instructions on the tasks they must complete including timescales.
- Observations must be carried out over a maximum total assessment time period of 11 hours and 30 mins and the time relating to each task is set out in Annex A.
- End-point assessors may observe up to a maximum of 4 apprentices at any one time, to allow for cost effective use of resources while maintaining quality and rigour.
- For practical task “Road Test” the apprentice must describe to the assessor the circumstances in which a road test would be required and the requirements. The assessor must record this response. The assessor cannot ask any follow up questions.
- Observation specifications must be determined and standardised by EPAOs.
- The practical test must represent an EPA weighting of one third of the overall apprenticeship assessment.

The end-point assessor must:
- Ensure that the apprentice understands the process, the possible outcomes and how it is graded.
- Ensure they take steps to put the apprentice at ease.
- Ensure that he/she has the grading criteria and relevant documentation to hand before commencing the observation.
- Complete the relevant documentation prepared by the end-point assessment organisation, taking notes of what is observed.
- Ensure that the outcome of the practical skills test is notified to the end-point assessment organisation within the timescale specified by them.
- Ensure any special needs highlighted by the employer and training provider are taken into consideration in accordance with the Reasonable Adjustments policy.
- For practical task “Road Test” where the apprentice must describe to the assessor the circumstances in which a road test would be required and the requirements, the assessor must record this response.

**Who shall conduct the assessment:**

The EPA shall only be conducted by an independent end-point assessor appointed by the EPAO. The EPAO shall be Ofqual registered, be approved to deliver the end-point assessment for this apprenticeship and selected from the ESFA’s Register of End-Point Assessment Organisations (RoEPAO). The practical tasks may be supported by a workshop maintenance technician from the employer and must be approved by the EPAO. The workshop maintenance technician supports the Independent Assessor by setting up practical tasks, resetting them when required and providing technical support to ensure the smooth delivery of the practical tasks. They must not have conducted any training/mentoring or on-programme assessment with any apprentice involved in the practical tasks, nor can they make any assessment decisions.

**End-point – final judgement**

- The EPAO is responsible for the final judgement and grading of the EPA.

**Independence**

EPAOs for this Standard shall appoint vocationally competent end-point assessors.

The end-point assessors shall have had no personal or professional relationship with either the employer, the training provider or the apprentice.

A competent end-point assessor is required to meet the following criteria:

- Hold a Level 3 assessor qualification or accreditation.
- Hold current (within the last 3 years) technical/occupational competence in MET at or above the Apprenticeship Standard.
- Maintain a programme of ongoing CPD to provide 40 hours of work experience or technical development within a 12 month period.
End-point – grading

The overall grading for this apprenticeship shall be graded either Fail, Pass or Distinction. The grading for each of the 3 assessments shall be determined using the results as below:

### Knowledge Assessment

<table>
<thead>
<tr>
<th>Fail</th>
<th>Pass</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 47</td>
<td>48 – 55</td>
<td>56 - 60</td>
</tr>
</tbody>
</table>

### Professional Discussion supported by a portfolio of evidence

The apprentice will fail the assessment method if they do not meet the pass criteria.

<table>
<thead>
<tr>
<th>Pass</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apprentice demonstrates the knowledge and behaviours that meet the requirements of the role as set out in the standard. To achieve a pass, the candidate must meet all of the following criteria:</td>
<td></td>
</tr>
<tr>
<td>- Demonstrate an understanding of the principles of customer service, e.g. speed, responsiveness, accuracy, accessibility, friendliness and efficiency and how they apply them. (K7)</td>
<td></td>
</tr>
<tr>
<td>- Identify the main Health &amp; Safety and compliance requirements of a collision repair business eg. COSHH, HASAWA, EPA. (K8, B1)</td>
<td></td>
</tr>
<tr>
<td>- Describe the main impact in terms of how their direct commercial productivity and efficiency has an impact within the whole repair process, eg. impact in the repair cycle and key to key times within the business. (K9)</td>
<td></td>
</tr>
<tr>
<td>- Discuss the importance of the quality control process and the implications of poor quality repairs. eg. exceeded expectations in terms of quality of repair, by reducing wastage and resource and a re-work activity undertaken. (K10)</td>
<td></td>
</tr>
</tbody>
</table>

In addition to the pass criteria, the apprentice demonstrates knowledge and behaviours that exceed the requirements of the role as set out in the standard. To achieve a distinction, the candidate must meet all of the following criteria:

| - Demonstrate an understanding of why customer service is important to the business. eg, repeat business, builds trust, brand awareness, reduces problems, reputation winning new customers and their actions in proactively achieving that. (K7) |
| - Demonstrate an understanding of where to improve Health & Safety within their workplace, including action taken, eg. improved the audit of checks for COSHH related equipment with an example of an improvements they have made. (K8, B1) |
| - Promote a culture of safety and security by acting as a role model. Identify risks and non-compliances advising others how to make their practice safer and more secure. (K8, B1) |
- Demonstrate when they have operated as an effective team member and taken responsibility, eg. when they have contributed to solving a problem by listening and sharing their ideas in an effective manner, how they respected others views, how they ensured deadlines were met, how they identified roles, responsibilities and accountabilities in a task and the importance of fulfilling their part. (B2)

- Demonstrate the benefits of being honest and accountable when things go wrong, eg. when something went wrong, how they behaved, what was learnt from this experience and how they would deal with future issues as a result. (B2)

- Demonstrate how they have tracked their own progress and informing others if deadlines are at risk. (B2)

- Demonstrate how they have managed their time effectively, to include:
  - Setting goals.
  - Planning ahead
  - Checklists
  - Reporting delays effectively. (B2)

- Demonstrate the benefits of understanding their role in the wider sector and having commitment by making opportunities to understand how other roles contribute to their work output, eg. how they have given that extra effort to support colleagues within another area of the business and how this linked back into their own areas. (B3)

- Demonstrate how they have committed to customer service and how they meet deadlines by being flexible with their time and willingness to take on tasks outside of their job role to ensure goals are met. (B4)

- Demonstrate how they have taken responsibility for personal and

- Explain the implications of poor quality repairs, suggesting ways to enhance quality control processes, and how this is balanced against the need for efficiency. (K9 and 10)

- Explain risk and implications of balancing needs of an individual customer against needs of the business, colleagues and other customers, and how to best meet everyone’s requirements to an appropriate level (B4).

- Explain the likely impact of emerging technology on their role. (B5)

- Provide an example of having dealt with a situation that required resolving to a satisfactory outcome by including at least 2 different styles of communication to resolve a concern or complaint. eg. Face-to-face, telephone, letter and email. (B7)
professional development, keeping knowledge and skills up to date with emerging technology to perform the role effectively. (B5)

- Demonstrate how they have effectively communicated with customers and colleagues, providing an example of how they explained the repair requirements to a customer, using straightforward language. (B7)

**Practical Skills Test**

The apprentice will fail the assessment method if they do not meet the pass criteria.

<table>
<thead>
<tr>
<th><strong>Pass</strong></th>
<th><strong>Distinction</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apprentice demonstrates the knowledge, skills and behaviours that meet the requirements of the role as set out in the standard. To achieve a pass, the candidate must meet all of the following criteria:</td>
<td>In addition to the pass criteria, the apprentice demonstrates knowledge, skills and behaviours that exceed the requirements of the role as set out in the standard. To achieve a distinction, the candidate must meet all of the following criteria:</td>
</tr>
<tr>
<td>- Carry out tasks in a safe and efficient manner, comply with all business operating procedures and policies. (S2, B1, K8)</td>
<td>- Select tools and equipment that ensures the tasks are completed in the most efficient way, and where appropriate, check that they are correctly calibrated. (S1, S6, S7)</td>
</tr>
<tr>
<td>- Complete all tasks within the time provided and to the standards required. (S3)</td>
<td>- Carry out diagnostics in a systematic way, taking reference from diagrams and data and evaluates potential problems in advance. Carry out secondary tests to confirm results. (S4 and B6)</td>
</tr>
<tr>
<td>- Work in a logical sequence using the right and correct tools for the job. (S6)</td>
<td>- Carry out suitable test methods to ensure repair is effective. Consider and carry out tests to other systems that may be affected by the repair. (S7)</td>
</tr>
<tr>
<td>- Undertake appropriate job preparation to carry out all tasks in a safe and efficient manner. (S1, K4, K5)</td>
<td>- Describe how they verified the correct rectifications for complex</td>
</tr>
<tr>
<td>- Identify supplementary parts where required. (S5)</td>
<td></td>
</tr>
<tr>
<td>- Anticipate problems and put steps in place to avoid them, where problems do occur explore and address the cause. (S4, B6)</td>
<td></td>
</tr>
<tr>
<td>- Demonstrate best practices for pre and post diagnostic associated with ADAS</td>
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</tbody>
</table>
calibration and complete the task prior to returning the vehicle. (S1)
- Demonstrate best practices for post repair and reinstate safety critical systems correctly. (S7)

<table>
<thead>
<tr>
<th>Fail</th>
<th>Pass</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shall be granted where the apprentice has not achieved the required minimum in any one or more of the three assessment methods.</td>
<td>Shall be granted where the apprentice has achieved either a pass in all three assessment methods or achieved a mix of pass and distinction grades.</td>
<td>Shall only be granted if the apprentice achieves a distinction in all three categories.</td>
</tr>
</tbody>
</table>

**Overall Grading**

End-point assessors must individually grade each assessment method – fail, pass or distinction, according to the requirements set out in this plan. Restrictions on grading apply where apprentices re-sit/re-take an assessment method – see re-sit/re-take section below.

An end-point assessor must combine the grades of all three assessment methods to determine the overall EPA grade. Each is equally weighted.

Where more than one end-point assessor is involved, the assessor responsible for the assessment method completed last will be responsible for combining the grades.

End-point assessors’ decisions must be subject to moderation by the EPAO – see internal quality assurance section below. Decisions must not be confirmed until after moderation.

**Assessment Resits and Retakes**

Apprentices who fail one or more EPA method will be offered the opportunity to take a re-sit/re-take. Re-sits/re-takes must not be offered to apprentices wishing to move from pass to distinction. A re-sit does not require further learning, whereas a re-take does.

The apprentice’s employer will need to agree that a re-sit/re-take is an appropriate course of action.

The maximum grade awarded to a re-sit/re-take will be pass, unless the EPAO identifies exceptional circumstances accounting for the original fail (e.g. ill health which occurred on the day of the test).

EPAOs must ensure that apprentices complete a different knowledge test when taking a re-sit/re-take.
Resits and retakes are a matter for the employer to decide. The timescales for a resit/retake is agreed between the employer and EPAO.

### End-point – summary of roles and responsibilities

**End-point Assessment Organisations**

Employers must choose an independent EPAO approved to deliver the EPA for this apprenticeship from the Education & Skills Funding Agency’s (ESFAs) Register of End-Point Assessment Organisations (RoEPAO).

**Assessment tools and materials**

EPA organisations must produce assessment tools and supporting materials for the EPA that follow best assessment practice, as follows:

- Knowledge test question bank
- Sample questions for professional discussion
- Documentation for recording assessment evidence and decisions
- Guidance for end-point assessors on conducting the EPA
- Guidance for apprentices and their employers on the EPA

<table>
<thead>
<tr>
<th>Role</th>
<th>Requirement</th>
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</table>
| Employer                                  | • Decides on the timing of and makes arrangements for the EPA in conjunction with the EPAO.  
• Considers whether the apprentice is fully competent in the workplace and check that Gateway requirements have been met.  
• Reviews the portfolio of evidence to ensure it contains the information outlined in this plan.  
• May work with the Training Provider to agree any remedial action required by the apprentice before re-sitting/re-taking any part of the assessment.  
• Has no input or influence on the results / grade of the assessments. |
| Training Provider                         | • May bring a view of the apprentice from supporting them through the apprenticeship.  
• May support the employer in deciding readiness, time and arrangements of the end-point assessment.  
• May support the employer in agreeing remedial action required by the apprentice before re-sitting/re-taking any part of the assessment.  
• Plays no part in the delivery of the EPA. |
| Independent End-Point Assessment Organisation | • Approves and maintains a network of suitable EPA centres.  
• Sources and trains end-point assessors conducting the EPA ensuring fair assessments.  
• Conducts standardisation activities for assessor ensuring consistency of assessments. |

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| **Invigilator** | • Controls knowledge assessment by centrally setting, maintaining and marking multiple choice knowledge tests.  
• Makes the final decision on the grade to be awarded to the apprentice.  
• Appoints invigilators and markers to invigilate and mark the knowledge test (unless automated).  
• Appoints end-point assessors to grade the professional discussion and practical skills test.  
• Appoint workshop maintenance technicians to support the preparation of the practical task and to ensure equipment is in full working order during the assessments.  
• Provides quality assurance staff to undertake moderation of EPA. |
| **Workshop Maintenance Technician** | • The invigilator is to ensure that the knowledge test is conducted according to the EPAO instructions. Invigilators have a key role in upholding the integrity of the multiple choice test process.  
| | • Supports the setting up of practical tasks and equipment prior to the practical tasks commencing.  
• Re-sets practical tasks ready for other candidates to undertake same task in same conditions.  
• Be on hand if equipment fails or faults identified when assessments are being undertaken.  
• Plays no part in administering the practical tasks or making judgements on grading.  
• Must be approved by the EPAO. |

**Internal Quality Assurance**

Internal quality assurance refers to the requirements that EPAO must have in place to ensure consistent (reliable) and accurate (valid) assessment decisions. EPAOs for this EPA must undertake the following:

• Appoint end-point assessors that meet the requirements as detailed in this plan.
• Provide training for end-point assessors in terms of good assessment practice, operating the assessment tools and grading.
• Have quality assurance systems and procedures that support fair, reliable and consistent assessment across organisation and over time.
• Operate regular standardisation events that enable end-point assessors to attend a minimum of 1 event per year.
• Operate moderation of assessment activity and decisions, through examination of documentation and observation of activity, good practice, need and based on sufficient robust auditing activity. EPAOs are therefore expected to have in place clear robust relevant policies and to manage the moderation of their independent assessors dynamically (i.e. increase moderation rates above a minimum as necessary as a matter of course).

**External quality assurance (EQA)**

EQA for this apprenticeship standard shall be undertaken by Ofqual.
### Implementation

<table>
<thead>
<tr>
<th>Affordability:</th>
</tr>
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<tbody>
<tr>
<td>• EPAO should define the most cost effective venue available.</td>
</tr>
<tr>
<td>• Remote assessment is permissible, reducing travel costs.</td>
</tr>
<tr>
<td>• Where appropriate and possible an EPAO should be identified prior to learning starts so assessment protocols can be discussed and agreed in advance to avoid potential delays, conflicts of interest and unforeseen financial burdens.</td>
</tr>
<tr>
<td>• In order to ensure costs have been kept to a minimum we have designed this end-point assessment plan not to be technology adverse and remote assessment methods can be used where invigilation can be controlled. Also expensive parts of the assessment have been designed to fall after electronic tests and interviews to allow cancellations and delays due to failure to be accepted without cost as appropriate.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Consistency:</th>
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<tbody>
<tr>
<td>• Any and all EPAO's delivering assessments associated to this plan shall maintain compliance with the requirements of Ofqual, the Institute for Apprenticeships and the ESFA. The EPAO shall undertake immediate and appropriate action where any quality, compliance or safety concerns are identified.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Volumes:</th>
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<tbody>
<tr>
<td>• It is anticipated that there will be 550 per year on this apprenticeship and 700 per year once established.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feasibility:</th>
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</thead>
<tbody>
<tr>
<td>• In order to ensure this end-point assessment plan can be delivered within the time constraints and to the specified scale the knowledge test can be conducted electronically and can be invigilated. Up to four apprentices can be observed at any one time during the practical task and where possible this will be in the apprentice’s own workplace.</td>
</tr>
<tr>
<td>• To ensure that it is possible to observe more than one apprentice at once, the plan explains that each apprentice should be screened off from the view of others, but can be in the same place at the same time.</td>
</tr>
<tr>
<td>• When considering the requirements of end-point assessors, consideration was given to the likely pool of people that would meet the criteria to ensure this would not unduly restrict the assessor pool.</td>
</tr>
<tr>
<td>• The involvement of a workshop maintenance technician ensures that practical tasks are administered as smoothly as possible, mitigating the risks of the apprentice having to resit the practical tasks due to equipment failure.</td>
</tr>
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</table>

- ANNEX A – Rules and Guidelines for Practical Assessments
- ANNEX B – End-Point Assessment Breakdown
## Annex A

### Rules and Guidance for Practical Skills Test

The rules and guidance provided within the body of this end-point assessment plan shall be used in addition to the information within this annex to develop robust and consistently applied assessments nationally.

Before each task commenced, the assessor must brief the apprentice on what is expected of them and how the task will be marked.

For all tasks the assessor has the discretion to increase the time of the observation by up to 10% to allow the apprentice to complete this element of the EPA.

<table>
<thead>
<tr>
<th>Title</th>
<th>Task Overview</th>
<th>Justification</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mandatory Tasks</strong> (All sub tasks shall be completed to pass the section and can be completed in any order)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Advanced Driver Assistance Systems. | The candidate is required to:-  
- Identify a fault within the ADAS functionality and correct this fault  
- Calibrate a Camera or Radar used for AEB and ADAS features  

The calibration process is required to be done in accordance with the vehicle manufacturer’s specifications.  

The apprentice is required to carry out a static calibration or a dynamic calibration, however the candidate would be required to indicate that a final check and road test would be required in the event of any dynamic calibration process on a vehicle. | The practical task is designed to assess the candidate on purposeful elements of mechanical and electrical disciplines, which are mapped to the apprenticeship standard and mirror the common job functions associated with this type of collision.  

This assessment is to demonstrate competence, best practice and use of methods for safe and appropriate working practice to facilitate accident damage repairs. | Task shall not exceed Total hours 90 mns.  

| Diagnose and Rectify Electrical Faults, use of diagnostic equipment for pre/post activities, place a HV vehicle into a safe mode and removal | The candidate is required to:-  
- Diagnose and rectify a open circuit or high resistance in the circuit to either a ABS system, Headlamp, locking system, window or ICE, and measure the current draw in the circuit  
- Place a Hybrid or Electric vehicle in a safe mode, | The candidate shall refit all the components, carry out any relevant diagnostics, fluids and fixings in accordance with the vehicle manufacturer’s specifications.  

This assessment is to demonstrate competence, best practice and use of | Task shall not exceed Total hours 4 hours |
### and refit of a Key safety mechanical unit

- wake up and ensure fit for purpose
  - ABS Hydraulic Modulator removal and refit
  - Full diagnostic scan inclusive of battery disconnection, re-scan, resets and configuring all ADAS functions using the vehicles own setup menu

The candidate shall refit all the components, carry out any relevant diagnostics, fluids and fixings in accordance with the vehicle manufacturer's specifications.

### Methods for safe and appropriate working practice to facilitate accident damage repairs.

### Removing and refitting safety related Mechanical, Electrical and Trim components – Suspension, Steering, Brakes and SRS components

The candidate is required to remove and refit the following:

A. Front or rear brake calliper inclusive of evacuating and bleeding the brake fluid
B. Front suspension strut inclusive of removal and refitting of the coil spring
C. Drivers air bag or Seat containing a pretensioner and side air bag

The candidate shall refit all the components, carry out any relevant diagnostics, fluids and fixings in accordance with the vehicle manufacturer's specifications.

The practical task is designed to assess the candidate on purposeful elements of mechanical and electrical disciplines, which are mapped to the apprenticeship standard and mirror the common job functions associated with this type of collision.

This assessment is to demonstrate competence, best practice and use of methods for safe and appropriate working practice to facilitate accident damage repairs.

### Task shall not exceed 3 hours.
### Mandatory Task with choice of options
(2 tasks from the selection below must be completed)

| Removing and refitting - Exterior Hard Trims, Lighting and Air conditioning Systems | The candidate is required to remove and refit 2 out of the 3 of the following:
- Bumper front or rear – with sensors.
- Headlamp to include projection, Xenon, directional or adaptive with LED
- A/C compressor – either 12v, dual voltage (48v) or HV following best practice

The candidate shall refit all the components, carry out any relevant diagnostics, fluids and fixings in accordance with the vehicle manufacturer’s specifications.

|  | This assessment is to demonstrate competence, best practice and use of methods for safe and appropriate working practice to facilitate accident damage repairs.

The combination of tasks shall not exceed 3 hours

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**Note:** The vehicles used for this assessment shall be of sufficient specification to contain the technology required for all tasks to be completed in the most efficient and cost effective manner.

Total maximum task hours 11 hours and 30 minutes (the assessor has the discretion to increase the time of the observation by up to 10% to allow the apprentice to complete this element of the EPA).

**Test Conditions (Venue)**
Practical test assessment requirements
To carry out the practical test each area shall be equipped with screens to restrict candidate’s distractions but set up so that the assessor is able to observe all individuals at all times. Each assessment shall not exceed four individuals per assessor. All materials shall be provided for each individual as well as tools and consumables required to complete the tasks set. There shall be a clock in the area and the start and finish times clearly displayed so individuals can monitor the time they have. Notices should be placed around the immediate area to inform others that a test is being taken and request that noise is kept to a minimum. Where the technical information required for the tasks is provided electronically, such as displayed on tablets, these shall be provided by the test centre.

Each candidate shall be provided with a secure location to leave personal belongings in at the start of the day including any electronic mobile devices which are not to be permitted within the assessment area.

Each candidate shall adorn suitable protective clothing, such as work overalls, and be provided with appropriate PPE as required.
The Practical Task Assessment Facility shall be equipped with:

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Required Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhaust extraction equipment, First Aid Kit, Fire extinguishers</td>
<td></td>
</tr>
<tr>
<td>Diagnostic equipment</td>
<td>Diagnostic tools commensurate with the tasks to be undertaken</td>
</tr>
<tr>
<td>PPE equipment</td>
<td>(PPE equipment relevant to undertaking the practical tasks, in line with HASAWA and appropriate repair methods)</td>
</tr>
<tr>
<td>Comprehensive set(s) of hand tools</td>
<td>Hand tools commensurate with the tasks to be undertaken</td>
</tr>
<tr>
<td>A range of internal and external measuring equipment</td>
<td>Suitable equipment to measure gaps, flushes in trim components along with the appropriate electrical and pressure reading devices commensurate with the tasks to be undertaken</td>
</tr>
<tr>
<td>Lifting &amp; jacking equipment</td>
<td>Trolley and bottle jacks, Axle stands, engine /wheel crane, lifting slings and chains and 4 poster ramps commensurate with the tasks to be undertaken</td>
</tr>
<tr>
<td>Fluid draining equipment</td>
<td>Measuring jugs, funnels, fluid containers commensurate with the tasks to be undertaken</td>
</tr>
<tr>
<td>Sundry workshop tools</td>
<td>Workshop equipment and special tooling to facilitate the tasks being undertaken</td>
</tr>
<tr>
<td>Access to reference data relevant to the tasks</td>
<td>Technical reference documentation and repair methods</td>
</tr>
<tr>
<td>Cleaning materials</td>
<td>Cleaning cloths /tissues, broom, shovel, spillage materials, waste bin and degreasing agents</td>
</tr>
<tr>
<td>Screening to separate workshop areas</td>
<td>Separate work stations with work bench and access to a writing area</td>
</tr>
<tr>
<td>Workshop sundries</td>
<td>Commensurate with the tasks to be undertaken</td>
</tr>
</tbody>
</table>
**Annex B**

**End-Point Assessment Breakdown**

The EPA shall be used to broadly assess the knowledge, skills and behaviours included in the apprenticeship standard. The list below shows the type of method that shall be used to capture the evidence of this.

- **KT** = Knowledge Test
- **PD** = Professional Discussion (supported by portfolio of evidence)
- **PST** = Practical Skills Test

<table>
<thead>
<tr>
<th>REF</th>
<th>Knowledge and Understanding</th>
<th>Method of assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>KT</td>
</tr>
<tr>
<td>(K1)</td>
<td>Engine, gearbox, suspension, mechanical and electrical systems including safety related autonomous items.</td>
<td>✓</td>
</tr>
<tr>
<td>(K2)</td>
<td>Body Mechanical Repair tools, equipment and devices used in the process, e.g. vehicle diagnostics equipment, wheel alignment, advanced driver assistance calibration tooling etc.</td>
<td>✓</td>
</tr>
<tr>
<td>(K3)</td>
<td>Vehicle diagnostics and interpretation of technical data</td>
<td>✓</td>
</tr>
<tr>
<td>(K4)</td>
<td>The safe handling and management of Safety Restraint Systems Pyrotechnics and other areas of significant risk.</td>
<td>✓</td>
</tr>
<tr>
<td>(K5)</td>
<td>Repair and safe handling of all vehicle fuel types including combustion, hybrid and other high voltage, compressed natural gas. Including High Voltage components.</td>
<td>✓</td>
</tr>
<tr>
<td>(K6)</td>
<td>Vehicle hardware and software and digital communication e.g. telematics capability, recall legislation compliance etc.</td>
<td>✓</td>
</tr>
<tr>
<td>(K7)</td>
<td>The principles of customer service.</td>
<td></td>
</tr>
<tr>
<td>(K8)</td>
<td>Health &amp; Safety and compliance requirements of a collision repair business.</td>
<td>✓</td>
</tr>
<tr>
<td>(K9)</td>
<td>Their direct commercial productivity and efficiency impact of their role within the whole repair process.</td>
<td></td>
</tr>
<tr>
<td>(K10)</td>
<td>Quality control process and the implications of poor quality repairs.</td>
<td></td>
</tr>
</tbody>
</table>

**Skills**

<table>
<thead>
<tr>
<th>REF</th>
<th>Knowledge and Understanding</th>
<th>Method of assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>KT</td>
</tr>
<tr>
<td>(S1)</td>
<td>Ability to undertake appropriate job preparation prior to commencing repair, e.g. disarming airbags, undertaking electrical safety precautions and conducting pre-repair diagnostics sweeps.</td>
<td>✓</td>
</tr>
<tr>
<td>(S2)</td>
<td>Ability to interpret relevant technical data, specification and methods will enable appropriate pre-preparation prior to work being carried out.</td>
<td>✓</td>
</tr>
<tr>
<td>(S3)</td>
<td>Ability to remove, repair and replace Engine, gearbox, suspension, mechanical and electrical systems, related autonomous items from the vehicle safely, e.g. ABS units, safety restraint systems, RADAR &amp; LIDAR semi-autonomous components.</td>
<td></td>
</tr>
<tr>
<td>(S4)</td>
<td>Ability to diagnose and fix faults within a vehicle management system (on board computer) &amp; associated electrical system.</td>
<td></td>
</tr>
<tr>
<td><strong>(S5)</strong></td>
<td>Ability to identify and communicate supplementary parts where required.</td>
<td>✓</td>
</tr>
<tr>
<td><strong>(S6)</strong></td>
<td>Ability to identify and operate the correct repair tools, equipment and devices used in the process such as Geometry wheel aligners for alignment of the wheels, diagnostic hardware to establish any faults with the vehicle and establish if parts are replaced or recalibrated, utilising torque wrenches to tighten nuts/bolts to the manufacturer recommendations.</td>
<td>✓</td>
</tr>
<tr>
<td><strong>(S7)</strong></td>
<td>Ability to rebuild vehicles post repair and reinstate safety critical systems including Safety Restraint Systems, airbags, seat belts and pretensions, Advanced Driver Assistance Systems, cameras, RADAR’s and LIDAR’s including collision avoidance technology.</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Behaviours

| **(B1)** | Use all the knowledge and skills developed to carry out tasks in a safe and efficient manner, complying with all business operating procedures and policies. | ✓ | ✓ |
| **(B2)** | Operate as an effective team member and take responsibility, be honest and accountable when things go wrong, tracking their own progress and informing others if deadlines are at risk. | ✓ |
| **(B3)** | Commitment to understanding their role in the wider sector by making opportunities to understand how other roles contribute to their work output. | ✓ |
| **(B4)** | Commitment to customer service and meeting deadlines by being flexible with their time and willingness to take on tasks outside of their job role to ensure goals are met. | ✓ |
| **(B5)** | Take responsibility for personal and professional development, keeping knowledge and skills up to date with emerging technology to perform the role effectively. | ✓ |
| **(B6)** | Anticipate problems and put steps in place to avoid them, where problems do occur explore and address the cause. | ✓ |
| **(B7)** | Effectively communicate with customers and colleagues. | ✓ |