# 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 selected from the apprenticeship provider and assessment register (APAR).

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, wit and must complete the required amount of off-the-job training in line with the apprenticeship funding rules.

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. The apprentice must have achieved English and mathematics qualifications in line with the apprenticeship funding rules.

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 25 minutes (knowledge test = 90 minutes, professional discussion = 45 minutes and practical skills test = 11 hours and 10 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.

An approved end-point assessment organisation (EPAO) must conduct the EPA for this apprenticeship. Employers must select an approved EPAO from the apprenticeship provider and assessment register (APAR).

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

On-programme (typically 36 months)	End-Point Assessment Gateway	End-Point Assessment (to be completed within 3 months of passing through the Gateway)
Training to develop the occupation standard's	achieved English and mathematics	Knowledge test
knowledge, skills and behaviours	qualifications in line with the apprenticeship	Professional discussion (supported by
Updating mandatory portfolio of evidence	funding rules	portfolio of evidence)
complete training towards English and	Submission of completed portfolio of evidence	Practical skills test
mathematics qualifications in line with the apprenticeship funding rules	Achieved certificate in Refrigerant Handling (EC 842-2006) or latest	Graded fail, pass or distinction
Working towards achievement of certification in Refrigerant Handling	revision Employer confirms apprentice is consistently	
(EC 842-2006) or latest revision	working at or above the level of the standard Vehicle damage mechanical, electrical and trim	

Diagram 2. End-Point Assessment overview

EPA overview	EPA overview (See Annex A and B for detail)				
Assessment Method	Area Assessed	Assessed by	Grading	Time Allowance	Rules
Knowledge test	Knowledge and understanding	EPAO	Fail, Pass or Distinction	90 minutes	Shall achieve a pass prior to Professional discussion
Professional discussion (supported by portfolio of evidence)	Knowledge, understanding and behaviours	EPAO	Fail, Pass or Distinction	45 minutes + 10% extra if required	Shall achieve a pass prior to Practical skills test
Practical skills test	Knowledge, understanding, Skills and behaviours	EPAO	Fail, Pass or Distinction	11 hours and 10 minutes over 2 consecutive days (individual tasks allowed time specified)	

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:

- the apprentice must have achieved English and mathematics qualifications in line with the apprenticeship funding rules. 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 and 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 the required amount of off-the-job training in line with the apprenticeship funding rules
- 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 such as a quiet room free from distraction and influence, with the necessary equipment for each assessment method (for example 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 for

example 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 and or 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 and or invigilator
- the maximum administrator and or 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 so 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
- 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 or re-takes
- independent assessors must award a grade using the following grading boundaries.

Grading boundaries	Fail	Pass	Distinction
Marks	0-47	48-55	56-60

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 their 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 they have 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 workplace.

#### 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 of 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 10 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 they have 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
- ror 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. An approved end-point assessment organisation (EPAO) must conduct the EPA for this apprenticeship. Employers must select an approved EPAO from the apprenticeship provider and assessment register (APAR). The practical tasks may be supported by a workshop maintenance technician from the employer and must be approved by the EPAO. The workshop maintenance technican 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 and 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
- attend initial assessor training for this standard held by the EPAO
- attend standardisation events every year as a minimum

## **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**

Fail	Pass	Distinction
0 - 47	48 – 55	56 - 60

#### Professional Discussion supported by a portfolio of evidence

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

#### **Pass**

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:

- Demonstrate an understanding of the principles of customer service, e.g. speed, responsiveness, accuracy, accessibility, friendliness and efficiency and how they apply them. (K7)
- Identify the main Health & Safety and compliance requirements of a collision repair business for example COSHH, HASAWA, EPA. (K8, B1)
- Describe the main impact in terms of how their direct commercial productivity and efficiency has an impact within the whole repair process, for example impact in the repair cycle and key to key times within the business. (K9)
- Discuss the importance of the quality control process and the implications of poor quality repairs. for example exceeded expectations in terms of quality of repair, by reducing wastage and resource and a re-work activity undertaken. (K10)
- Demonstrate when they have operated as an effective team member and taken responsibility, for example 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, for example 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)

#### Distinction

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. for example 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, for example 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)
- 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

- 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, for example 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 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)

by including at least 2 different styles of communication to resolve a concern or complaint. for example Face-to-face, telephone, letter and email. (B7)

#### **Practical Skills Test**

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

PassDistinction

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:

- Carry out tasks in a safe and efficient manner, comply with all business operating procedures and policies. (S2, B1, K8)
- Complete all tasks within the time provided and to the standards required. (S3)
- Work in a logical sequence using the right and correct tools for the job. (S6)
- Undertake appropriate job preparation to carry out all tasks in a safe and efficient manner. (S1, K4, K5)
- Identify supplementary parts where required. (S5)
- Anticipate problems and put steps in place to avoid them, where problems do occur explore and address the cause. (S4, B6)
- Demonstrate best practices for pre and post diagnostic associated with ADAS calibration and complete the task prior to returning the vehicle. (S1)
- Demonstrate best practices for post repair and reinstate safety critical systems correctly. (S7)

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 mus meet all of the following criteria:

- 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)
- 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)
- 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)
- Describe how they verified the correct rectifications for complex tasks and explain the use of checking schedules. (S3, S4)
- Distinguish between the complexity of varying procedures, evaluate best practice and outline the value of detailed record keeping. Categorise procedures by their importance. (B1)

#### **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 or re-take an assessment method – see re-sit or 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.

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

#### **Assessment Resits and Retakes**

Apprentices who fail one or more EPA method will be offered the opportunity to take a re-sit or retake. Re-sits or 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.

Apprentices will only have to re-sit or re-take the failed tasks from the practical skills test and not the whole assessment method

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

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

EPAOs must ensure that apprentices complete a different knowledge test when taking a resit or re-take.

Resits and retakes are a matter for the employer to decide. The timescales for a resit or retake is agreed between the employer and EPAO.

## End-point - summary of roles and responsibilities

## **End-point Assessment Organisations**

An approved end-point assessment organisation (EPAO) must conduct the EPA for this apprenticeship. Employers must select an approved EPAO from the apprenticeship provider and assessment register (APAR).

#### 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

Role	Requirement
Employer  Training Provider  Independent End-Point Assessment Organisation	<ul> <li>decides on the timing of and makes arrangements for the EPA in conjunction with the EPAO</li> <li>considers whether the apprentice is fully competent in the workplace and check that Gateway requirements have been met</li> <li>reviews the portfolio of evidence to ensure it contains the information outlined in this plan</li> <li>may work with the training provider to agree any remedial action required by the apprentice before re-sitting or retaking any part of the assessment</li> <li>has no input or influence on the results or grade of the assessments</li> <li>may bring a view of the apprentice from supporting them through the apprenticeship</li> <li>may support the employer in deciding readiness, time and arrangements of the end-point assessment</li> <li>may support the employer in agreeing remedial action required by the apprentice before re-sitting or re-taking any part of the assessment</li> <li>plays no part in the delivery of the EPA</li> </ul>
Invigilator	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
Workshop Maintenance Technician	<ul> <li>supports the setting up of practical tasks and equipment prio to the practical tasks commencing</li> <li>re-sets practical tasks ready for other candidates to undertake same task in same conditions</li> <li>be on hand if equipment fails or faults identified when assessments are being undertaken</li> </ul>

•	plays no part in administering the practical tasks or making
	judgements on grading
•	must be approved by the EPAO

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# **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 (for example 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

- Affordability:
  - EPAO should define the most cost effective venue available
  - remote assessment is permissible, reducing travel costs
  - 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
  - in order to ensure costs have been kept to a minimum we have designed this endpoint 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
- Consistency:
  - any and all EPAO's delivering assessments associated to this plan shall maintain compliance with the requirements of Ofqual, the Institute for Apprenticeships and Technical Education. The EPAO shall undertake Immediate and appropriate action where any quality, compliance or safety concerns are identified
- Volumes:
  - it is anticipated that there will be 550 per year on this apprenticeship and 700 per year once established.

### Feasibility:

- 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
- 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
- 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
- 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 re-sit the practical tasks due to equipment failure
- 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.

Title	Task Overview	Justification	Time
(All sub tasks	Mandatory Shall be completed to pass the s		in any order)
Advanced Driver Assistance Systems.	<ul> <li>The candidate is required to:-</li> <li>Identify a fault within the ADAS functionality and correct this fault</li> <li>Calibrate a Camera or Radar used for AEB and ADAS features</li> <li>The calibration process is required to be done in accordance with the vehicle manufacturer's specifications.</li> <li>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</li> </ul>	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	calibration process on a vehicle.  The candidate is required to:-		
Electrical Faults, use of diagnostic equipment for pre/post activities, place a HV vehicle into a safe mode.	<ul> <li>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</li> <li>Place a Hybrid or Electric vehicle in a safe mode,</li> </ul>	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 3 hours 40 minutes

t a f a	<ul> <li>Full diagnostic scan inclusive of battery disconnection, re-scan, resets and configuring all ADAS functions using the vehicles own setup menu</li> <li>The candidate shall refit all the components, carry out any relevant diagnostics, fluids and fixings in accordance with the vehicle</li> </ul>	appropriate working practice to facilitate accident damage repairs.	
t a f a	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		
t a f a	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		
t a f a	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		
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t a f a	vehicles own setup menu The candidate shall refit all the components, carry out any relevant diagnostics, fluids and fixings in		
t a f a	the components, carry out any relevant diagnostics, fluids and fixings in		
t a f a	the components, carry out any relevant diagnostics, fluids and fixings in		
a f a	any relevant diagnostics, fluids and fixings in		
1			
r	accordance with the vehicle		
	manufacturer's		
	specifications.		
-	The candidate is required to		
	remove and refit the		
f	following: –	The practical task is	
		designed to assess the	
	A. Front or rear brake	candidate on purposeful	
Removing and	calliper inclusive of evacuating and bleeding	elements of mechanical	
refitting safety related	the brake fluid	and electrical disciplines, which are mapped to the	
Maalaasiaal	B. Front suspension strut	apprenticeship standard	
Electrical and	inclusive of removal and	and mirror the common job	Task shall
Trim	refitting of the coil spring	functions associated with	not exceed
components – Suspension,	C. Drivers air bag or Seat	this type of collision.	3 hours.
Steering,	containing a pretensioner	This assessment is to	
Brakes and	and side air bag	demonstrate competence,	
SRS _	The candidate shall refit all	best practice and use of	
COHIDOHEHIS	the components, carry out	methods for safe and appropriate working	
á	any relevant diagnostics,	practice to facilitate	
	fluids and fixings in	accident damage repairs.	
	accordance with the vehicle manufacturer's		
	specifications.		

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 10 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;

Exhaust extraction equipment, First Aid Kit,	Fire extinguishers
Diagnostic equipment	Diagnostic tools commensurate with the tasks to be undertaken
PPE equipment	(PPE equipment relevant to undertaking the practical tasks, in line with HASAWA and appropriate repair methods)
Comprehensive set(s) of hand tools	Hand tools commensurate with the tasks to be undertaken
A range of internal and external measuring equipment	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
Lifting & jacking equipment	Trolley and bottle jacks, Axle stands, engine /wheel crane, lifting slings and chains and 4 poster ramps commensurate with the tasks to be undertaken
Fluid draining equipment	Measuring jugs, funnels, fluid containers commensurate with the tasks to be undertaken
Sundry workshop tools	Workshop equipment and special tooling to facilitate the tasks being undertaken
Access to reference data relevant to the tasks	Technical reference documentation and repair methods
Cleaning materials	Cleaning cloths, tissues, broom, shovel, spillage materials, waste bin and degreasing agents
Screening to separate workshop areas	Separate work stations with work bench and access to a writing area
Workshop sundries	Commensurate with the tasks to be undertaken

#### 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

REF	Knowledge and Understanding			l of nent
1121	Tanomougo una Ondorotanamg	KT	PD	PST
(K1)	Engine, gearbox, suspension, mechanical and electrical systems including safety related autonomous items.	<b>√</b>		
(K2)	Body Mechanical Repair tools, equipment and devices used in the process, e.g. vehicle diagnostics equipment, wheel alignment, advanced driver assistance calibration tooling etc.	<b>✓</b>		
(K3)	Vehicle diagnostics and interpretation of technical data	<b>✓</b>		
(K4)	The safe handling and management of Safety Restraint Systems Pyrotechnics and other areas of significant risk.	<b>✓</b>		<b>√</b>
(K5)	Repair and safe handling of all vehicle fuel types including combustion, hybrid and other high voltage, compressed natural gas. Including High Voltage components.	<b>√</b>		<b>√</b>
(K6)	Vehicle hardware and software and digital communication e.g. telematics capability, recall legislation compliance etc.	<b>√</b>		
(K7)	The principles of customer service.		<b>√</b>	
(K8)	Health & Safety and compliance requirements of a collision repair business.	<b>√</b>	<b>√</b>	<b>√</b>
(K9)	Their direct commercial productivity and efficiency impact of their role within the whole repair process.		✓	
(K10)	Quality control process and the implications of poor quality repairs.		✓	
	Skills			
(S1)	Ability to undertake appropriate job preparation prior to commencing repair, e.g. disarming airbags, undertaking electrical safety precautions and conducting pre-repair diagnostics sweeps.			<b>√</b>
(S2)	Ability to interpret relevant technical data, specification and methods will enable appropriate pre-preparation prior to work being carried out.			<b>√</b>
(S3)	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 & LIDAR semi-autonomous components.			✓
(S4)	Ability to diagnose and fix faults within a vehicle management system (on board computer) & associated electrical system.			<b>√</b>

Ability to identify and communicate supplementary parts where required.  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 re calibrated, utilising torque wrenches to tighten nuts/bolts to the manufacturer recommendations.  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.  Behaviours				
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 re calibrated, utilising torque wrenches to tighten nuts/bolts to the manufacturer recommendations.  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.  Behaviours	✓			(S5)
(S7) systems including Safety Restraint Systems, airbags, seat belts and pretensions, Advanced Driver Assistance Systems, cameras, RADAR's and LIDAR's including collision avoidance technology.  Behaviours	<b>√</b>		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 re calibrated, utilising torque wrenches to tighten nuts/bolts to the	(S6)
	<b>√</b>		7) systems including Safety Restraint Systems, airbags, seat belts and pretensions, Advanced Driver Assistance Systems, cameras,	(S7)
			Behaviours	
Use all the knowledge and skills developed to carry out tasks in a  (B1) safe and efficient manner, complying with all business operating procedures and policies.	<b>√</b>	<b>V</b>		(B1)
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.		<b>✓</b>	2) honest and accountable when things go wrong, tracking their own	(B2)
(B3) Commitment to understanding their role in the wider sector by making opportunities to understand how other roles contribute to their work output.		<b>✓</b>	making opportunities to understand how other roles contribute to their work output.	(B3)
(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.		<b>√</b>	4) flexible with their time and willingness to take on tasks outside of	(B4)
(B5) Take responsibility for personal and professional development, keeping knowledge and skills up to date with emerging technology to perform the role effectively.		<b>✓</b>	keeping knowledge and skills up to date with emerging technology	(B5)
(B6) Anticipate problems and put steps in place to avoid them, where problems do occur explore and address the cause.	<b>√</b>			(B6)
(B7) Effectively communicate with customers and colleagues.		<b>✓</b>		(B7)