Overview of the role

Repairing, replacing and re-calibrating windscreens on vehicles.

Standard in development

L3: Automotive glazing technician

Title of occupation

Automotive glazing technician

UOS reference number

ST0031

Core and options

No

Level of occupation

Level 3

Route

Engineering and manufacturing

Typical duration of apprenticeship

18 months

Target date for approval

01/09/2023

Resubmission

No

Would your proposed apprenticeship standard replace an existing framework?

No

Does professional recognition exist for the occupation?

No
Occupation summary

This occupation is found in a range of different organisations that replace, repair and recalibrate automotive windscreens including national windscreen companies, independent windscreen companies, body repair shops and main franchise dealerships.

The broad purpose of the occupation is to repair, replace and recalibrate vehicle windscreens. The automotive glazing technician will have knowledge of the properties of glazing components and will use advanced techniques to ensure all work is completed safely. The types of vehicles can include a broad range from cars and car derived vans, through to light and heavy commercial vehicles. Due to advances in vehicle safety through Advanced Driver Assist Systems (ADAS) being integrated into the vehicle windscreen and the growth of electric cars, technicians will need to have a high level of technical knowledge on vehicle mechanical, electrical and trim systems. This includes the relationship they have with the windscreen in the control of the vehicle. Automotive glazing technicians need to have a full understanding of business operations within the industry and their own role within the business to support excellent customer service. They will have a good understanding of conducting safety checks and performance monitoring for associated equipment, documenting all stages of work activities, including operational procedures documentation controls, and contributing to audits. The automotive glazing technician will be able to obtain, interpret and work accurately to complex technical repair specifications and instructions. They will also have the ability to work in a focused, analytical and methodical fashion, completing repairs on time, with a right-first-time, customer focused culture under-pinning all their activities.

In their daily work, an employee in this occupation interacts with a range of internal and external stakeholders including colleagues, supervisors, customers and suppliers. They could be operating from a fully equipped workshop or a fully equipped service vehicle completing the repair replacement at the customer’s premises.

An employee in this occupation will be responsible for the repair and replacement of automotive glazing windscreens which could be in a variety of situations. They will need to ensure work is completed in line with stringent safety and quality requirements. A fully trained mobile technician will need to have a current driving licence and can expect to work on a roster including some weekends.

Typical job titles

Automotive glazing technician Glazing technician

Are there any statutory/regulatory or other typical entry requirements?

Yes
**Entry requirements**

Individual employers will set the selection criteria for applicants to the industry. Typically, an apprentice would be expected to be well organised and have good attention to detail. They should be able to work in a team and to communicate well both orally and in writing. They should care about delivering excellent service both internally and externally to colleagues and customers. Typical qualifications may include GCSEs or equivalent.

**Occupation duties**

<table>
<thead>
<tr>
<th>DUTY</th>
<th>KSBS</th>
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<tbody>
<tr>
<td><strong>Duty 1</strong> Receive, read and interpret engineering and technical documentation such as specific manufacturer guidance.</td>
<td>K2 K8 K11 K16 K19 K25</td>
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<tr>
<td></td>
<td>S7 S16 S21</td>
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<td>B1 B2 B3</td>
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<tr>
<td><strong>Duty 2</strong> Accept the task or job, ensuring all relevant information and details are obtained.</td>
<td>K2 K4 K5 K6 K8 K9 K11 K22 K25</td>
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<td>S1 S12 S15 S16 S21</td>
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<td>B1 B2 B3 B4</td>
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<tr>
<td><strong>Duty 3</strong> Conduct safety checks of all associated equipment and the surrounding work area.</td>
<td>K3 K5 K7 K9 K15 K20 K25 K27</td>
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<td>S2 S10 S16 S18 S21 S22</td>
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<td>B1 B2 B3 B4</td>
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<tr>
<td><strong>Duty 4</strong> Check and inspect parts to ensure that they conform to quality standards. Identify and report any issues or faults.</td>
<td>K3 K25 K27</td>
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<td>S21</td>
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<td>B1 B2 B3 B4</td>
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<tr>
<td><strong>Duty 5</strong> Handle, store and process information in line with regulations and organisational requirements.</td>
<td>K2 K3 K19 K25 K27</td>
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<td>S16 S21</td>
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<td>B2 B4</td>
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<tr>
<td><strong>Duty 6</strong> Set up, operate, adjust or edit equipment settings and re-calibration programmes appropriate to the work required.</td>
<td>K2 K3 K14</td>
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<td>S10 S13 S16 S21 S22</td>
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<td>B1 B2 B3</td>
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<tr>
<td><strong>Duty 7</strong> Organise and coordinate work to meet stakeholders’ requirements.</td>
<td>K3 K4 K15 K17 K18 K21 K22</td>
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<td>S1 S12 S14 S15 S21</td>
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<td>B1 B2 B3 B4 B7</td>
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<tr>
<td>DUTY</td>
<td>KSBS</td>
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<tr>
<td><strong>Duty 8</strong> Plan repair and installation work in accordance with standard operating procedures.</td>
<td>K3 K4 K5 K6 K7 K9 K10 K11 K12 K15 K16 K17 K20 K21 K22 S1 S2 S3 S5 S6 S7 S10 S11 S12 S14 S15 S20 S21 S22 B1 B2 B3 B4 B7</td>
</tr>
<tr>
<td><strong>Duty 9</strong> Communicate with customers in a polite, respectful and professional manner at all times.</td>
<td>K13 K18 K22 K23 K24 K25 K26 K28 S14 S15 S19 B2 B3 B4 B5</td>
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<tr>
<td><strong>Duty 10</strong> Complete documentation at the required stages of the work activity. For example standard operational procedures, risk assessments, equipment service records, customer documentation, ongoing training records and test results and control documentation.</td>
<td>K2 K13 K19 K20 K23 K25 S16 S21 S22 B1 B2 B4 B7</td>
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<td><strong>Duty 11</strong> Maintain and restore the work area. Perform housekeeping and waste management as appropriate and in line with environmental requirements. Ensure tools, unused materials and equipment are returned to a safe, clean and approved condition on completion of work.</td>
<td>K10 K13 K15 K20 K21 K27 S4 S7 S17 S18 S20 S21 B1 B2 B3 B4 B7</td>
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<tr>
<td><strong>Duty 12</strong> Handover completed work and provide technical and regulatory advice to stakeholders for equipment and services.</td>
<td>K2 K19 K22 K23 K24 K25 S8 S9 S15 S16 S21 B1 B2 B3 B4</td>
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<tr>
<td><strong>Duty 13</strong> Perform repairs and replace and re-calibrate vehicle glass in accordance with</td>
<td>K1 K2 K3 K4 K5 K7 K9 K10 K11 K12 K14 K15 K16 K20 K21 K27 K29 S1 S2 S3 S4 S5 S6 S7 S10 S11 S13 S18 S21 S22 B1 B2 B3 B4 B7</td>
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**Duty 14** Keep stakeholders such as customers, colleagues and line managers informed about work status.

Duty 15 Contribute to continuous improvement in the operational area.

**KSBs**

**Knowledge**

**K1:** Methods of automotive glazing construction: laminated and toughened glass, polyvinyl Butyral (PVB) interlayers, solar control glass. How they behave on impact and how the different types of glass can be processed for repair after manufacture.

**K2:** Terminology used in automotive glazing systems: glass identification markings, direct glazing, heated screens (front and rear), integral antennas, hydrophobic coating, properties, repair procedure and precautions.

**K3:** The types of problems that can occur in the replacement of fixed and opening automotive glass and how these problems can be overcome.

**K4:** Evolving technologies. Vehicle Advanced Driver Assistance Systems (ADAS), mechanical, electrical and trim systems including diagnostic and calibration techniques.

**K5:** Airbags: how to identify their presence and what precautions need to be taken when working near them.

**K6:** Vehicle power and transmission systems: hybrid, electric and internal combustion vehicle technology.

**K7:** Codes of practice relating to the replacement of automotive glazing systems.

**K8:** How to access and interpret technical data sheets.

**K9:** How to identify the damaged zone and how this affects the feasibility of repair and the types of action that can be taken to rectify windscreen damage.

**K10:** Methods by which glass can be fitted to a vehicle.

**K11:** How to check suitability of the automotive glass against vehicle and job specification.

**K12:** Specific technology used in glazing on vehicle doors: types of membranes used on the inside of doors, glazing regulator and retaining mechanisms, and identification and reset procedures for door glazing systems.

**K13:** Post repair requirements. The minimum amount of time required after direct glazing installation before different vehicles can be driven in relation to their safe drive away times (SDAT)

**K14:** How to connect to the On-Board Diagnostics (OBD) port in vehicles to access the Controller Area Network (CAN) bus system. Diagnostic and calibration processes and the range of equipment used to diagnose and calibrate vehicles in static and dynamic situations.

**K15:** The different types of tools and equipment used in automotive glazing. What they are used for and when it is appropriate to use them.
K16: Automotive glazing materials: windscreen resins and urethanes. Their application and characteristics.
K18: Business operation considerations: efficiency, customer satisfaction, competitiveness, minimising risks to operation, and ethical issues.
K20: Awareness of health and safety regulations, relevant to the occupation and the technician's responsibilities: Control of Substances Hazardous to Health (COSHH), Display Screen Equipment (DSE), due diligence, electrical safety and compliance, emergency evacuation procedures, Health and Safety at Work Act – responsibilities, isolation and emergency stop procedures, Lifting Operations and Lifting Equipment Regulations (LOLER), lone working, management systems of occupational health and safety ISO 45001, manual handling, near miss reporting, Provision and use of Work Equipment Regulations (PUWER), Reporting of Injuries, Diseases, and Dangerous Occurrences Regulations (RIDDOR), risk assessments, safe systems of work, safety equipment: signage, fire extinguishers, situational awareness, slips, trips and falls, types of hazards, Personal Protective Equipment (PPE), working in confined spaces.
K24: Non-verbal communication techniques: gestures, facial expressions, tone of voice, eye contact, body language.
K25: Documentation: methods and requirements - electronic and paper.
K28: Team working principles.
K29: The substrate that the glazing product is to be bonded to. How to identify different types of bonding materials and their compatibility.

Skills

S1: Assess the existing glazing installation to identify and confirm the requirements of the repair or replacement in line with the job specification or technician's diagnosis.
S2: Prepare the vehicle and working area: remove or mitigate hazards, for example slip and trip hazards, ensure the vehicle is isolated and safe to work on and any lifting equipment is secured and safe to use.
S3: Prepare equipment and materials for repair or replacement including replacement glass.
S4: Remove and store existing glass and other components correctly including the safe disposal of waste materials such as glass, chemicals, sharps and general waste.
S5: Prepare the aperture to receive replacement glazing products: primer, cleaner, bonding products as per manufacturer guidance.
S6: Replace vehicle glazing.
S7: Repair vehicle glazing.
S8: Complete a final quality inspection.
S9: Complete vehicle handover activities including the use of the vehicle during the curing period and the visibility of repairs.
S10: Interpret data and diagnose faults in the vehicle Advanced Driver Assistance System (ADAS) and windscreens using diagnostic equipment connected through the On-Board Diagnostics (OBD) port to access vehicle Controller Area Network (CANBUS).
S11: Remove and replace components on vehicles to access glazing, such as on vehicles with different power and transmission systems. For example, hybrid, electric and combustion engines.
S12: Identify and order automotive glazing products and materials using company systems and processes.
S13: Set up, calibrate and test Advanced Driver Assistance Systems (ADAS).
S14: Prioritise own work to meet the needs of the business and the customer.
S15: Communicate with others verbally, for example colleagues and stakeholders.
S16: Use information and digital technology. Comply with GDPR and cyber security regulations and policies.
S17: Restore the work area on completion of the activity.
S18: Identify and document hazards and risks in the workplace. Apply control measures.
S19: Follow equality, diversity and inclusion policies.
S20: Apply environmental and sustainability procedures in compliance with regulations and standards for example, segregate resources for reuse, recycling and disposal.
S21: Record or enter information - paper based or electronic. For example, energy usage, job sheets, risk assessments, equipment service records, test results, handover documents and manufacturers’ documentation, asset management records, work sheets, checklists, waste environmental records and any legal reporting requirements.
S22: Apply health and safety procedures and safe systems of work in compliance with regulations and standards.
S23: Applies team working principles.

Behaviours
B1: Take personal responsibility for and promote health and safety.
B2: Act professionally.
B3: Respond and adapt to work demands and situations.
B4: Collaborate and promote teamwork across disciplines.
B5: Take account of diversity and inclusion requirements.
B6: Committed to continued professional development (CPD) to maintain and enhance competence in their own area of practice.
B7: Take personal responsibility for their own sustainable working practices.

Qualifications

English and Maths
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 apprenticeship’s English and maths minimum requirement is Entry Level 3. A British Sign Language (BSL) qualification is an alternative to the English qualification for those whose primary language is BSL.
Does the apprenticeship need to include any mandated qualifications in addition to the above-mentioned English and maths qualifications?

No

Consultation

Progression Routes

ST0406 Vehicle damage assessor L4

Supporting uploads

Mandatory qualification uploads
Mandated degree evidence uploads
Professional body confirmation uploads

Involved employers