

Assessment Pack

**Entry Level 3 Certificate, Diploma in Body and Paint Maintenance and Entry
Level 3 Diploma in General Vehicle Maintenance**

Assessment Recording
Qualification 3902 – 02/03 Entry Level 3

**SCQF Level 3 Certificate, Diploma in Introduction to Vehicle Body and Paint
Maintenance and SCQF Level 3 Diploma in Introduction to General Vehicle
Maintenance**

Assessment Recording
Qualification 3902 – 72/73 Level 3

3902 Entry Level 3 & SCQF Level 3

Candidate unit tracking assessment and verification page



Qualification: _____ Name of Assessor: _____

Candidate name: _____ Planned completion date: ____/____/____

City & Guilds registration number: _____ Name of IV: _____

City & Guilds registration date: ____/____/____ Date qualification completed: ____/____/____

Centre enrolment date: ____/____/____ Date qualification claimed: ____/____/____

| Unit number and title | Date unit completed | Unit number and title | Date unit completed |
|--|---------------------|--|---------------------|
| (Unit 013/SCQF Unit 313): Basics of vehicle body fitting | | (Unit 018/SCQF Unit 318): Introduction to vehicle panel preparation techniques | |
| (Unit 014/SCQF Unit 314): Basics of Vehicle Mechanical, Electrical and Trim Fittings (MET) | | (Unit 020/SCQF Unit 320): Application of paint materials to vehicles using spray gun techniques | |
| (Unit 015/SCQF Unit 315): Fundamental vehicle body repair techniques. | | (Unit 021/SCQF Unit 321): Mix foundation coat materials for spray gun application | |
| (Unit 016/SCQF Unit 316) Introduction to vehicle MAG welding techniques | | (Unit 022/SCQF Unit 322): Manufacture single tolerance vehicle body components | |
| (Unit 017/SCQF Unit 317): Introduction to vehicle resistance spot welding techniques | | (Unit 023/SCQF Unit 323): Prepare vehicle body panels for foundation coat materials using masking materials and techniques | |

Declaration of competence:

I confirm that the candidate completed the work for this qualification to the required standard.

Signed (assessor): _____ Date ____/____/____

Quality assurance sampling

| | | | |
|------------------------|---------------|---------------------|------------------------------------|
| Internal verifier name | Units sampled | IV report reference | IV Signature and date (if sampled) |
| External verifier name | Units sampled | EV report reference | EV Signature and date (if sampled) |

About this qualification:

The 3902 Entry Level 3/SCQF Level 3 qualification consists of ten competence based units which can be completed as stand alone units or as a complete qualification made up of a combination of units.

The aim of the qualification is to introduce learners to the skills required to complete preliminary body panel repairs and to prepare body panels for foundation coats.

Rules of combination

3902 -02

Entry Level 3 Certificate in Vehicle Body & Paint Maintenance – Accreditation Number (QAN): 501/1105/X

Full Rules of Combination – (906) Certification Module – Minimum 24 credits from (010, 012-023)

Entry Level 3 Diploma in Body & Paint Maintenance – Accreditation Number (QAN): 501/0831/1

Full Rules of Combination – (907) Certification Module – Minimum of 40 credits from (010, 012-023)

3902-03

Entry Level 3 Diploma in General Vehicle Maintenance – Accreditation Number (QAN): 501/1356/2

Full Rules of Combination – Overall minimum of 45 credits from (001-023, 101-109, 112) at least minimum 24 credits from (001-023)

SCQF

3902 -72

SCQF Level 3 Certificate in Vehicle Body and Paint Maintenance

Full Rules of Combination – (914) Certification Module – Minimum 24 credits from (310, 312-318 and 320-323)

SCQF Level 3 Diploma in Body and Paint Maintenance

Full Rules of Combination – (915) Certification Module – Minimum of 40 credits from (310, 312-318 and 320-323)

3902-73

SCQF Level 3 Diploma in Introduction to General Vehicle Maintenance

Full Rules of Combination – Overall minimum of 45 credits from (301-318, 320-323) and (401-409, 412) at least a minimum of 24 credits from (301-323)

The vehicle types

The units are flexible and are designed in a way to support all types of vehicles; evidence can come from one type or a mixture of different vehicle types, examples include:

Light vehicle

Heavy vehicles

Motorcycles and scooters

Quad and land-based

Tractors

Assessment

The vehicles used for assessment should be constructed using methods and materials that reflect current technology. Part vehicles, components and realistic vehicle rigs may also be used for training and assessment.

Tools and equipment

Centres must have the tools, equipment, vehicle and units required for the qualification. They should be in a safe and suitable condition to support learning and assessment.

Evidence submitted for assessment and verification

All units have a one page assessment document that states the skills and knowledge requirements. Assessment should be completed by a competent assessor. Knowledge can be assessed using the prepared questions (centre devised questions may also be used to suit local circumstances) either orally or in written form. A record of the candidate's response to the knowledge questions must be kept and made available for verification.

Evidence may also be recorded using photographic or digital methods provided it is readily available and easily audited.

Candidate name: _____ Assessor name _____ Date assessment completed ___/___/___

Candidates need to be observed by their assessor removing and replacing **two** of the following detachable body components. They are also required to correctly answer questions related to these tasks, a record of which must be kept. Indicate (✓) below which of the components have been assessed.

Bonnet

Door

Tailgate

Bolt on wing

Vehicle details and relevant information:

Vehicle make

Vehicle model

Type of body

Number of doors

Assessment record:

Assessor to indicate (✓) when correct use demonstrated and or knowledge confirmed

Be able to follow approved safety procedures when removing and refitting detachable vehicle body panels.

| | | | | | |
|---------------------------------------|--------------------------|---|--------------------------|--|--------------------------|
| Correctly use required PPE | <input type="checkbox"/> | Follow approved workplace procedures | <input type="checkbox"/> | Identify potential H&S hazards and risks | <input type="checkbox"/> |
| Identify relevant information sources | <input type="checkbox"/> | State the importance of keeping records | <input type="checkbox"/> | Recycling and disposal | <input type="checkbox"/> |

Be able to carry out the removal and replacement of detachable vehicle body components.

| | | | | | |
|--|--------------------------|---------------------------------------|--------------------------|--|--------------------------|
| Identify the correct hand tools and check they are fit for purpose | <input type="checkbox"/> | Correctly use hand tools | <input type="checkbox"/> | Identify vehicle body panels using correct terminology | <input type="checkbox"/> |
| Correctly align detachable vehicle body components | <input type="checkbox"/> | Identify different types of fasteners | <input type="checkbox"/> | Securely fix detachable vehicle body components | <input type="checkbox"/> |
| Follow prescribed quality checks to ensure correct alignment and secure fixing | <input type="checkbox"/> | | | | |

Assessors to select suitable 'component' based on assessment circumstances. Answers to questions should be available for verification.

1. Why is it important to protect the surrounding bodywork when removing a 'component'?
2. State three checks you should complete before you remove a 'component'?
3. What should you do if you identify additional damage to the body when you have removed a 'component'?
4. How should a metal 'component' be disposed of?
5. Why is it important to use plain and spring washers?

Assessor feedback :

Candidate name: _____

Assessor name _____

Date assessment completed ___/___/___

Candidates need to be observed by their assessor removing and replacing **two** of the following MET components. They are also required to correctly answer questions related to these tasks, a record of which must be kept. Indicate (✓) below which of the components have been assessed.

Bumper front or rear

Rear lamps

Front grille/trim

Road wheel

Vehicle details and relevant information:

Vehicle make

Vehicle model

Type of body

Number of doors

Assessment record:

Assessor to indicate (✓) when correct use demonstrated and or knowledge confirmed

Be able to follow approved safety procedures when removing and refitting MET components.

Correctly use required PPE
 Identify relevant information sources

Follow approved workplace procedures
 State the importance of keeping records

Identify potential H&S hazards and risks
 Recycling and disposal

Be able to remove and replace MET components.

Identify the correct hand tools and check they are fit for purpose
 Identify vehicle MET using correct terminology
 Securely fix detachable MET components

Correctly use hand tools
 Correctly align MET components
 Follow prescribed quality checks to ensure correct alignment and secure fixing

Identify different types of vehicle
 Identify different types of fasteners

Answers to questions should be available for verification.

1. After raising the car with a trolley jack, what piece of equipment should be placed under the car to support it when you are removing the road wheel?
2. What should be checked before you remove a rear lamp cluster?
3. What type of tool should be used to check that the wheel nuts are tightened correctly?
4. How should a plastic bumper be disposed of?
5. What is a nyloc nut used for?

Assessor feedback:

Candidate name: _____

Assessor name _____

Date assessment completed ___/___/___

Candidates need to be observed by their assessor **roughing out a small dent** and **one** other task. They are also required to correctly answer questions related to these tasks, a record of which must be kept. Indicate (✓) below which of the components have been assessed.

Roughing out small dent

Repair small dent in metal panel using body filler

Repair small dent in plastic panel using body filler

Vehicle details and relevant information:

Vehicle make

Vehicle model

Type of body

Number of doors

Assessment record:

Assessor to indicate (✓) when correct use demonstrated and or knowledge confirmed

Be able to follow approved safety procedures when carrying out preliminary vehicle body repairs

Correctly use required PPE
Identify relevant information sources

Follow approved workplace procedures
State the importance of keeping records

Identify potential H&S hazards and risks
Recycling and disposal

Be able to carry out body repair techniques

Identify the correct hand tools and check they are fit for purpose
rough out small dents using a variety of hand tools
Follow prescribed quality checks to ensure acceptable profile of repair

Correctly use hand and power tools
Mix and apply plastic body filler in an economical manner

Identify panel and panel/substrate material
Rub down body filler to the correct profile

Answers to questions should be available for verification.

- | | |
|---|--|
| <p>1. What piece of PPE should you use to protect your lungs when rubbing down body filler?</p> <p>3. What condition should a metal body panel be in before applying body filler?</p> <p>5. Name two hand tools used when roughing out a steel panel prior to applying body filler?</p> | <p>2. What grade of production paper should you use to remove the paint from a damaged steel body panel?</p> <p>4. Why is body filler applied to a higher profile than the surrounding bodywork?</p> |
|---|--|

Assessor feedback:

Candidate name: _____ Assessor name _____ Date assessment completed ___/___/___

Candidates need to be observed by their assessor completing a **lap** and **plug** weld in 1 mm mild steel. They are also required to correctly answer questions related to these tasks, a record of which must be kept.

Lap weld **AND** Plug weld

Welding plant details and relevant information:

Wire speed _____ Wire gauge _____ Type of gas _____ Gas pressure _____

Standard of weld required:

For a minimum of half its length (lap weld) and two of the three plug welds. The welds should be linear, have a consistent form, and have adequate penetration.

Assessment record: Assessor to indicate (✓) when correct use demonstrated and or knowledge confirmed

Be able to follow approved safety procedures when using MAG welding equipment

| | | | | | |
|--|--------------------------|---|--------------------------|---|--------------------------|
| State the H&S requirements relevant to electric welding principles | <input type="checkbox"/> | Correctly use the required PPE | <input type="checkbox"/> | Follow approved workplace procedures | <input type="checkbox"/> |
| Identify potential H&S hazards and risks | <input type="checkbox"/> | Identify the relevant information sources | <input type="checkbox"/> | State the importance of keeping records | <input type="checkbox"/> |
| Recycling and disposal | <input type="checkbox"/> | | | | |

Be able to produce MAG plug and lap welds

| | | | | | |
|---|--------------------------|------------------------------|--------------------------|-------------------------------|--------------------------|
| Complete effective tacking of materials prior to lap and plug welding | <input type="checkbox"/> | Complete effective lap welds | <input type="checkbox"/> | Complete effective plug welds | <input type="checkbox"/> |
|---|--------------------------|------------------------------|--------------------------|-------------------------------|--------------------------|

Answers to questions should be available for verification.

- | | |
|--|---|
| 1. State three hazards when MAG welding? | 2. Why should plates be tacked before welding? |
| 3. What is likely to happen if you weld too fast (speed of torch travel too high)? | 4. What is the approximate torch angle when MAG welding (down hand lap)? |
| 5. What condition should the parent metal be in before MAG welding)? | 6. State why it is important to use the correct MAG welding technique? |
| 7. State the purpose of the shielding gas? | 8. Identify two different types distortion caused by the application of heat. |

Assessor feedback:

Candidate name: _____

Assessor name _____

Date assessment completed ___/___/___

Candidates need to be observed by their assessor setting up a resistance spot welder, confirm correct set up by completing destructive test and complete three evenly spaced spot welds in 0.75 - 1 mm mild steel. They are also required to correctly answer questions related to these tasks, a record of which must be kept.

Set up resistance spot welder Complete destructive test Weld three correctly positioned spot welds

Welding plant details and relevant information:

| Squeeze time | Weld time | Hold time | Current |
|--------------|-----------|-----------|---------|
|--------------|-----------|-----------|---------|

Assessment record: Assessor to indicate (✓) when correct use demonstrated and or knowledge confirmed

Be able to follow approved safety procedures when setting up and using resistance spot welding equipment

| | | | | | |
|--|--------------------------|---|--------------------------|---|--------------------------|
| State the H&S requirements relevant to electric welding principles | <input type="checkbox"/> | Correctly use required PPE | <input type="checkbox"/> | Follow approved workplace procedures | <input type="checkbox"/> |
| Identify potential H&S hazards and risks | <input type="checkbox"/> | Identify the relevant information sources | <input type="checkbox"/> | State the importance of keeping records | <input type="checkbox"/> |
| Recycling and disposal | <input type="checkbox"/> | | | | <input type="checkbox"/> |

Be able to carry out resistance spot welds

| | | | | | |
|----------------------------------|--------------------------|--|--------------------------|------------------------------------|--------------------------|
| Set up spot welding equipment | <input type="checkbox"/> | Adjust resistance spot welding equipment | <input type="checkbox"/> | Prepare materials for spot welding | <input type="checkbox"/> |
| Complete resistance spot welding | <input type="checkbox"/> | | | | |

Answers to questions should be available for verification.

- | | |
|--|---|
| 1. State three hazards when resistance spot welding? | 2. What is the purpose of a peel test? |
| 3. Why is it important to dress the electrodes before welding? | 4. How should the parent metal be prepared before welding? |
| 5. What is likely to happen if you position the spot weld too close to the edge of the parent metal? | 6. State two factors which affect the quality of a resistance spot weld |
| 7. State two methods used to test the effectiveness of resistance spot welds | 8. Identify distortion caused by the application of heat when spot welding. |

Assessor feedback:

Candidate name: _____

Assessor name _____

Date assessment completed ___/___/___

Candidates need to be observed by their assessor preparing a panel for paint coats by using hand flattening or by using power tools, and to complete a feather edge repair. They are also required to correctly answer questions related to these tasks, a record of which must be kept.

Hand flat body panel

Flat body panel using power tools

Feather edge repaired body panel

Vehicle details and relevant information:

Vehicle make

Vehicle model

Type of body

Panel prepared

Assessment record: Assessor to indicate (✓)when correct use demonstrated and or knowledge confirmed

Be able to follow approved and safe procedures when preparing vehicle body panels

Correctly use required PPE

Follow approved workplace procedures

Identify potential H&S hazards and risks

Identify the relevant information sources

State the importance of keeping records

Recycling and disposal

Be able to prepare vehicle body panels

Identify the correct hand, power tools and equipment and check they are fit for purpose

Correctly use hand and power tools

Hand flat vehicle body panels

Flat vehicle body panels using power tools

Feather edge a repaired body panel

Clean tools and equipment and obtain confirmation that they are left in a clean and serviceable condition

Answers to questions should be available for verification.

1. State two hazards when hand flattening?
2. State two hazards when flattening using power tools?
3. What is meant by the term feather edging?
4. Identify the types and grades of abrasive materials used for vehicle body panels.
5. Identify the types of foundation coat materials used on vehicle body panels.

Assessor feedback:

Candidate name: _____

Assessor name _____

Date assessment completed ___/___/___

Candidates need to be observed by their assessor applying foundation coats using spray gun techniques. They are also required to correctly answer questions related to these tasks, a record of which must be kept.

Apply etch primer

AND

Apply primer coat

Foundation coat details and relevant information:

Type of spray gun used

Position of panel on vehicle

Shape of panel painted

Panel material painted

**Assessment record: Assessor to indicate (✓) when correct use demonstrated and or knowledge confirmed
Be able to follow approved and safe procedures when applying foundation coat materials.**

Correctly use required PPE
Recycling and disposal

Follow approved workplace procedures
Identify the relevant information sources

Identify potential H&S hazards and risks
State the importance of keeping records
State the need for fume extraction when applying foundation coat materials

Be able to apply foundation coat materials.

Use a pre-prepared spray gun to apply foundation coat materials

Identify the correct spray gun pattern

Clean tools and equipment and obtain confirmation that they are left in a clean and serviceable condition.

Answers to questions should be available for verification.

1. State two hazards when applying foundation coats?
2. State two items of PPE that should be worn when applying foundation coats?
3. Why is it necessary to keep the spray gun a regular distance from the panel?
4. Why is the correct spray pattern important?
5. Why is it important to clean the spray gun thoroughly after use?

Assessor feedback:

Candidate name: _____

Assessor name _____

Date assessment completed ___/___/___

Candidates need to be observed by their assessor preparing a panel for paint coats by using hand flattening or by using power tools, and to complete a feather edge repair. They are also required to correctly answer questions related to these tasks, a record of which must be kept.

Mix etch primer

AND

Mix primer

Foundation coat details and relevant information:

Viscosity required

Mixing ratio used

Type of foundation coat material

Type of mixing scheme/system used

**Assessment record: Assessor to indicate (✓) when correct use demonstrated and or knowledge confirmed
Be able to follow approved and safe procedures when mixing foundation coat materials.**

Correctly use required PPE

Follow approved workplace procedures

Identify potential H&S hazards and risks

Recycling and disposal

Identify the relevant information sources

State the importance of keeping records

State the importance of controlling paint shop substances which may be hazardous to health

Be able to mix foundation coat materials.

Use pre-selected technical information to support the mixing of foundation coat materials

Use hand tools for mixing foundation coat materials

Use measuring equipment for mixing foundation coat materials

Mix foundation coat materials

Clean tools and equipment and obtain confirmation that they are left in a clean and serviceable condition.

Answers to questions should be available for verification.

1. State two hazards when mixing foundation coats?
2. State two items of PPE that should be worn when mixing foundation coats?
3. Why is it necessary to mix foundation coat materials?
4. What is the purpose of an activator?
5. Why is it important to clean mixing equipment after use?

Assessor feedback:

Candidate name: _____

Assessor name _____

Date assessment completed ___/___/___

Candidates need to be observed by their assessor making two components that require at least four different and techniques each. They are also required to correctly answer questions related to these tasks, a record of which must be kept.

Indicate (✓) techniques demonstrated:

Measuring Marking out Cutting Fabrication Forming Drilling Thread cutting Filing

Standard required:

Each piece that is made must have at least one critical or key dimension. Typical tolerances being $\pm 1\text{mm}$ in sheet metal and $\pm 0.5\text{mm}$ in preformed sections. Examples of typical tools that can be manufactured as an alternative to body components are on the drawings provided.

Assessment record: Assessor to indicate (✓) when correct use demonstrated and or knowledge confirmed

Be able to follow approved and safe procedures when manufacturing vehicle body components.

| | | | |
|---|--|---|--|
| Use appropriate PPE and methods | | Follow approved workplace procedures | |
| Identify potential H&S hazards and risks | | Identify the relevant information sources | |
| State how to safely handle and dispose of used and waste materials, components and fluids | | State the importance of keeping records | |


Be able to use tools and equipment to manufacture vehicle body components

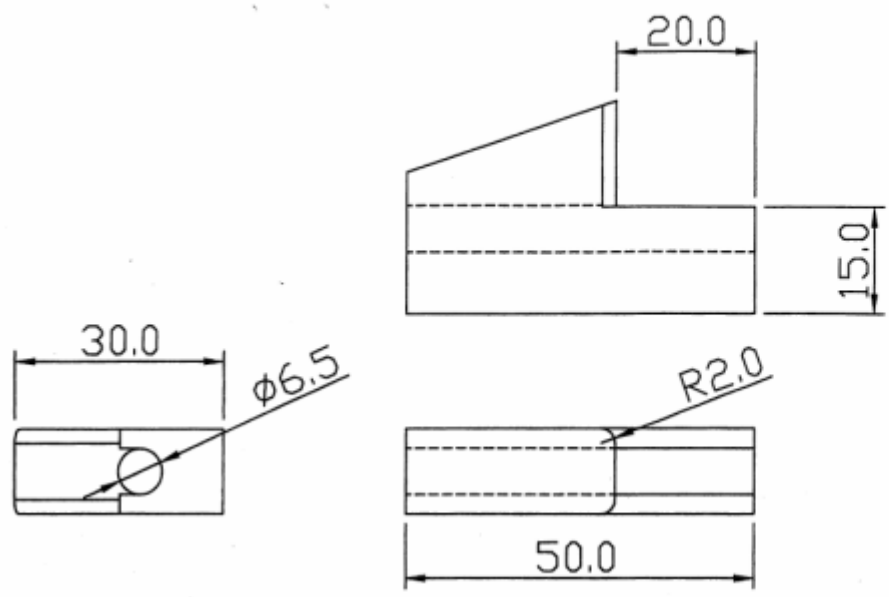
| | | | |
|--|--|--|--|
| Identify the workshop hand tools used for the manufacture of vehicle body components | | Demonstrate how to check the condition and operation of the tools and equipment required for manufacturing vehicle body components | |
| Demonstrate a range of techniques | | Demonstrate how to prepare the tools and equipment required for manufacturing vehicle body components | |
| Demonstrate how to check manufactured vehicle body components for compliance | | Produce working drawings or sketches that illustrate the main features of manufactured vehicle body components | |

Understand the methods and techniques when manufacturing vehicle body components. Answers to questions should be available for verification.

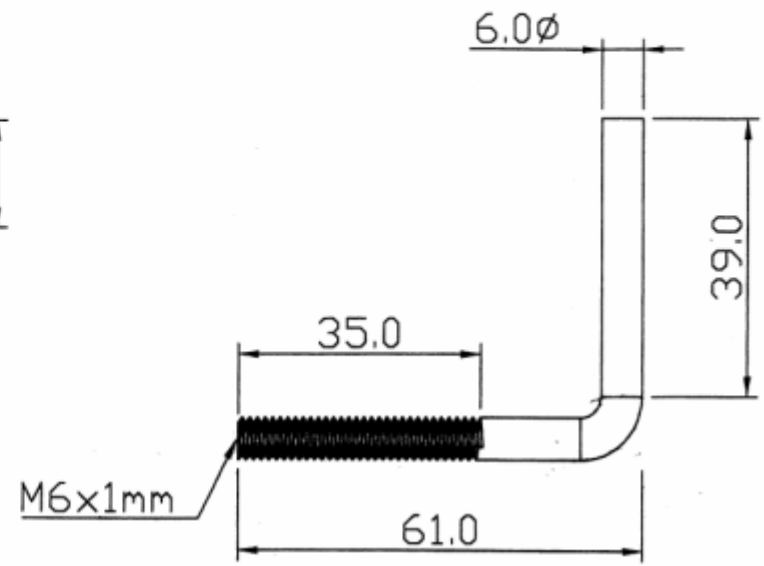
1. Why is it important to work from a datum when marking out?
2. Identify the different materials used to manufacture vehicle body components including carbon steels and aluminium alloys
3. State typical vehicle body component applications for the materials used
4. State how materials are modified to provide strength by forming, alloying and heat treatment
5. State the importance of hardness, toughness, rigidity and tensile strength as material properties

Assessor feedback:

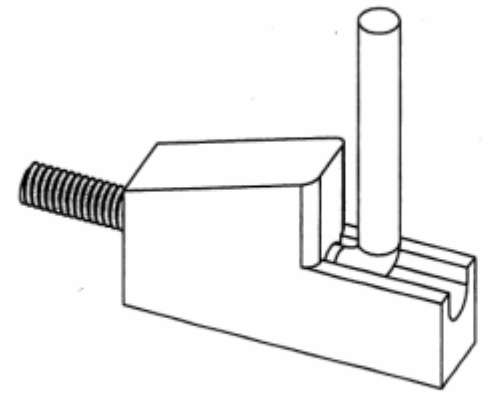
Do not Scale 



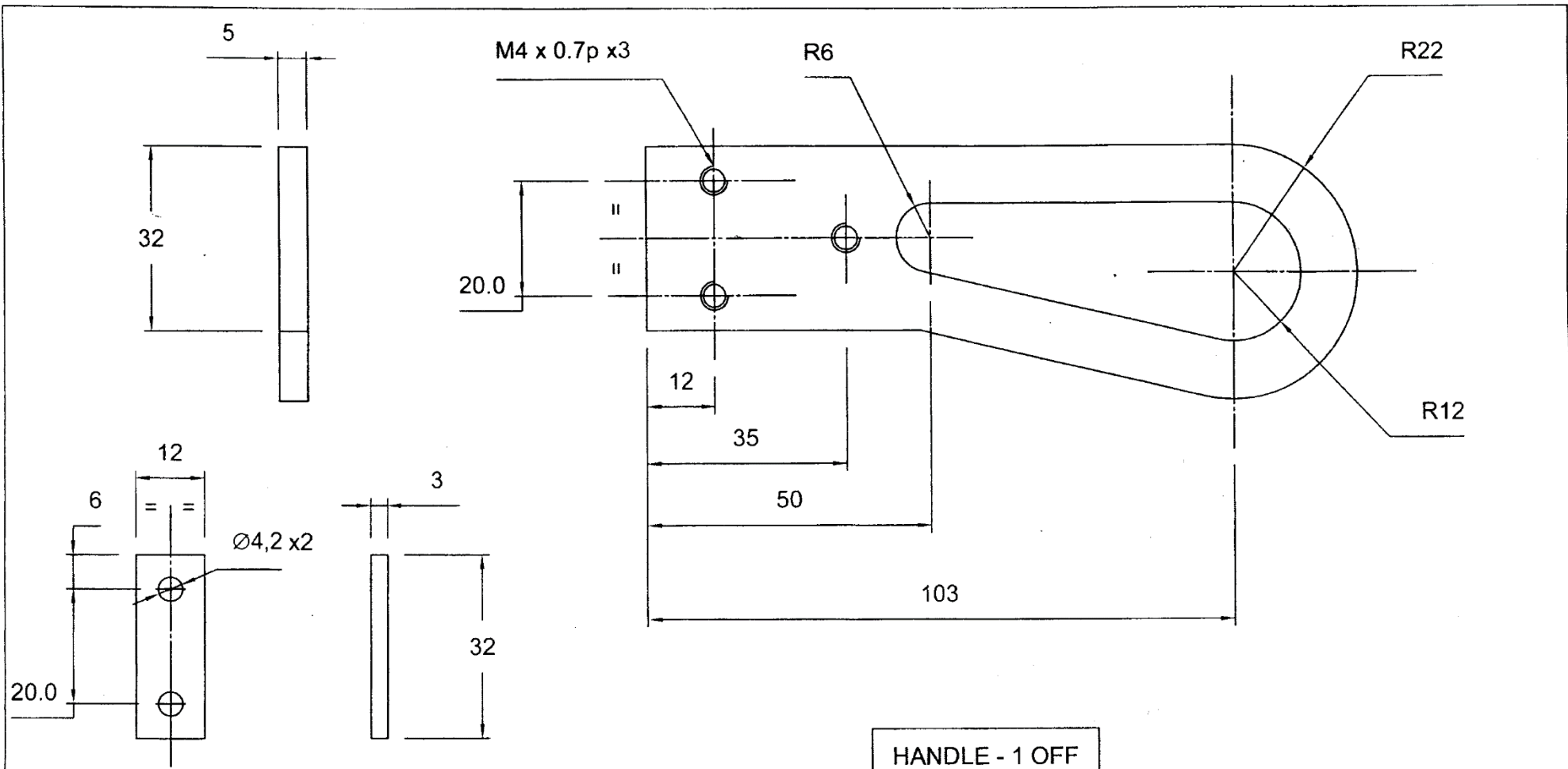
Detail 1 : Body



Detail 2 : Bar



| | | | | | | | | | |
|-------------|--|--|---|--|----------------|--|--------------------|--|--|
| | | | DIMENSIONS IN MM UNLESS OTHERWISE STATED | | Dwg. Size: NTS | | TITLE: Brake Clamp | | |
| | | | Untoleranced Dimensions | | DRAWN BY: | | DRAWING NUMBER: | | |
| A | | | Fabrication ± 0.5 mm | | DATE: | | REV: A | | |
| REV | | | Machining ± 0.5 mm | | CHECKED BY: | | | | |
| DATE | | | Angular ± 1.0 degree | | SCALE: | | | | |
| BY | | | | | | | | | |
| DESCRIPTION | | | | | | | | | |



BLADE RETAINER - 1 OFF

HANDLE - 1 OFF

| | | | | | | | |
|-------|--------------------|--------|---------|-------|---|------------------------|-----------------|
| ISSUE | DETAIL | SIGN. | TITLE | DRAWN | GEN. TOLERANCES +/- 0.5 DECIMAL DIMS 0.0 +/- 0.1 DECIMAL DIMS 0.00 +/- 0.025 UNLESS OTHERWISE STATED | SCALE 1:1 | DATE 22/10/2007 |
| 2 | REDRAWN 22/10/2007 | A.C.C. | | | | DIMENSIONS IN M/METRES | |
| | | | PAD SAW | | | DRAWING NUMBER | |
| | | | | | | SHEET | OF |

Candidate name: _____

Assessor name _____

Date assessment completed ___/___/___

Candidates need to be observed by their assessor preparing a panel for masking materials, applying and removing masking materials. They are also required to correctly answer questions related to these tasks, a record of which must be kept.

Use masking paper **OR** use plastic masking sheet/film **AND** Use masking tape

Vehicle details and relevant information:

Vehicle make

Vehicle model

Type of body

Panel prepared

**Assessment record: Assessor to indicate (✓) when correct use demonstrated and or knowledge confirmed
Be able to follow approved and safe procedures when applying masking methods.**

| | | |
|--|--|---|
| Correctly use required PPE <input type="checkbox"/> | Follow approved workplace procedures <input type="checkbox"/> | Identify potential H&S hazards and risks <input type="checkbox"/> |
| Identify the relevant information sources <input type="checkbox"/> | State the importance of keeping records <input type="checkbox"/> | Recycling and disposal <input type="checkbox"/> |

Be able to use masking materials and techniques to prepare vehicle body panels for foundation coats

| | |
|---|--|
| Remove masking materials after foundation coat materials <input type="checkbox"/> | Mask vehicle parts and components <input type="checkbox"/> |
| Use suitable masking materials to mask up vehicle parts and components <input type="checkbox"/> | |

Understand the methods and techniques when masking up vehicle panels components Answers to questions should be available for verification.

1. List the materials used to mask vehicle parts and components
2. State the importance of accurate application of masking materials
3. State the importance of using the correct masking material for the application
4. How to remove masking materials without damaging the vehicle
5. State the importance of timely removal of masking materials

Assessor feedback: