



**City & Guilds Level 3  
Technical Occupational  
Entry in Electrical  
Installations (Diploma)  
(2366-03)**

Version 1.2 (April 2026)

**Practical assignment (Sample):  
2366-353**

Version and date	Change detail	Section
V1.0 February 2025	Initial version	All
V1.1 May 2025	Change to 2366-353 Part A Task 1 duration to align with other electrotechnical qualifications	Part A Task 1
V1.2 April 2026	Minor grammatical amendments in line with BS 7671 18 <sup>th</sup> Edition Amendment 4 2026	2, 3, 4, 5

SAMPLE

## Contents

<b>1. Assessment overview</b>	<b>4</b>
<b>2. Assignment guidance for Part A, Task 1 – Inspection and testing</b>	<b>5</b>
<b>3. Part A, Task 1 – Inspection and testing</b>	<b>9</b>
<b>4. Grading for Task 1 – Inspection and testing</b>	<b>11</b>
<b>5. Assignment guidance for Part B, Task 2 – Fault diagnosis and rectification</b>	<b>16</b>
<b>6. Part B, Task 2 – Fault diagnosis and rectification</b>	<b>30</b>
<b>7. Grading for Task 2 – Fault diagnosis and rectification</b>	<b>31</b>
<b>8. Centre guidance</b>	<b>33</b>
<b>Appendix 1 – Assessor observation record form for Part A, Task 1</b>	<b>38</b>
<b>Appendix 2 – Assessment Checklist for Part B, Task 2</b>	<b>43</b>
<b>Appendix 3 – Candidate Report Sheet</b>	<b>46</b>
<b>Appendix 4 – Sources of General Information</b>	<b>47</b>

## 1. Assessment overview

This guidance contains assessment documentation for the Level 3 Technical Occupational Entry in Electrical Installations (Diploma) (2366-03).

The practical assignment consists of two parts:

- Part A, Task 1 – Inspection and testing
- Part B, Task 2 – Fault diagnosis and rectification.

For Part A, Task 1, candidates are required to safely undertake an initial verification on a section of the assessment rig as advised by assessors.

For Part B, Task 2, candidates are required to safely diagnose and suggest a suitable method of rectification for a range of faults by interpreting the given symptoms.

Parts A and B of the assessment may be taken either on the same or two separate consecutive days. Assessment evidence must be handed in at the end of each session.

### Accessing the practical assignment material

The practical assignment is provided to candidates using a separate candidate pack.

The candidate pack must be downloaded from the City & Guilds website prior to the assessment taking place. The password can be found on the Walled Garden. The practical assignment must be provided to the candidate only at the commencement of the assessment period.

### Supervised assessment conditions

This is a controlled assessment taken under supervised conditions. When working under supervised conditions for longer sessions, breaks can be facilitated outside of the controlled conditions, ensuring the room is locked and all candidates have vacated once the break begins. All materials must be kept securely during the break.

### Access arrangements and reasonable adjustments

Access arrangements are adjustments that allow candidates with disabilities, special educational needs and temporary injuries to access the assessment and demonstrate their skills and knowledge without changing the demands of the assessment. These arrangements must be made before assessment takes place.

The Equality Act 2010 requires City & Guilds to make reasonable adjustments where a disabled person would be at a substantial disadvantage in undertaking an assessment.

It is the responsibility of the centre to ensure at the start of a programme of learning that candidates will be able to access the requirements of the qualification.

Please refer to the *JCQ access arrangements and reasonable adjustments and Access arrangements – when and how applications need to be made to City & Guilds* for more information. Both are available on the City & Guilds website:

<http://www.cityandguilds.com/delivering-our-qualifications/centre-development/centre-document-library/policies-and-procedures/access-arrangements-reasonable-adjustments>

## 2. Assignment guidance for Part A, Task 1 – Inspection and testing

### General task guidance

Please read **all** information carefully before releasing the assessment.

### Overarching conditions

Part A, Task 1 of the practical assignment will require the use of a specified assessment rig that must be set up for the assessment. The rig must not have been used for any practice or formative activities.

The rig must not contain any faults during this assessment.

The tasks are on-demand and can be released to the candidate at the centre's discretion. However, centres are only expected to release tasks when there is confidence that candidates have undertaken learning of all the required content, and in their ability to undertake the assessment.

### Time

Candidates are allowed **three hours** for this task. All the testing must be completed within this time, however, if a candidate is still completing documentation at the end of the 2-hour period, they may be given additional time (a maximum of up to 30 minutes) to complete.

The timing for Task 1 includes time for candidates to work on and produce the required evidence, as well as time for thinking, reflection and application of prior knowledge from the specification content.

### Resources

Candidates must have access to a suitable range of resources to carry out the tasks and, where appropriate, have the opportunity to choose components, tools and equipment that demonstrate their ability to select from a range of appropriate materials.

The candidate should have access to the following to select and carry out each task:

- suitable test equipment
- suitable isolation kit, including sign
- tools
- guidance documentation, GN3, OSG and BS 7671
- appropriate PPE to ensure candidate safety
- copy of Electrical Installation Certificate, Schedule of Inspections (incorporated within the EIC), Schedule of Circuits and Schedule of Test Results, as contained within Appendix 6 of BS 7671.

### Task 1 – Specific guidance

The purpose of Task 1 is for candidates to safely undertake an initial verification on a section of the assessment rig.

Candidates must be provided with a card that covers three circuits for a section of the assessment rig.

Each candidate should be given a different card. These cards must be allocated by rotation.

The candidate must obtain permission from the assessor before proceeding with any tests involving switching on the supply.

### Example cards

Section	Circuits	Notes
Outhouse DB	<ul style="list-style-type: none"><li>• outhouse lighting</li><li>• outhouse ring final circuit</li><li>• distribution circuit to outhouse DB</li><li>• main protective bonding within the house.</li></ul>	Requires x2 Schedules of Circuit Details and x2 Schedules of Test Results.

Section	Circuits	Notes
Garage DB	<ul style="list-style-type: none"><li>• garage lighting</li><li>• garage ring final circuit</li><li>• garage door motor circuit</li><li>• main protective bonding within the house.</li></ul>	Requires x1 Schedule of Circuit Details and x1 Schedule of Test Results.

Section	Circuits	Notes
House DB	<ul style="list-style-type: none"><li>• house lighting</li><li>• house ring final circuit</li><li>• house electric shower</li><li>• main protective bonding within the house.</li></ul>	Requires x1 Schedule of Circuit Details and x1 Schedule of Test Results.

Section	Circuits	Notes
House DB	<ul style="list-style-type: none"> <li>• outside lighting circuit</li> <li>• ring final circuit</li> <li>• supply to Outhouse DB</li> <li>• main protective bonding within the house.</li> </ul>	Requires x1 Schedule of Circuit Details and x1 Schedule of Test Results.

Section	Circuits	Notes
House DB	<ul style="list-style-type: none"> <li>• house lighting</li> <li>• ring final circuit</li> <li>• supply to Garage DB</li> <li>• main protective bonding within the house</li> </ul>	Requires x1 Schedule of Circuit Details and x1 Schedule of Test Results.

The candidate will carry out a full range of tests on the circuits identified. These include:

- Full safe isolation procedure of the whole installation.

With the installation safely isolated

- Continuity of main protective bonding conductor.
- Continuity of CPC using test method 1 as in Guidance Note 3.
- Continuity of ring final circuit.
- Insulation resistance.
- Polarity (circuits).

With the supply to the main DB energised but the rest of the installation isolated

- Supply polarity
- External earth fault loop impedance ( $Z_e$ ).
- Earth fault loop impedance of ( $Z_{db}$ ) (if required, by calculation).
- Prospective fault current ( $I_{pf}$ ) (both PEFC and PSCC).

With the installation energised

- Total earth fault loop impedance of circuits tested ( $Z_s$ ) by calculation.
- Additional protection/RCD (by instrumentation at a safe point within the installation).
- Functional tests.

Candidates must also complete an Electrical Installation Certificate, Schedule of Inspections (incorporated within the EIC), Schedule of Circuits and Schedule of Test Results, as contained within Appendix 6 of BS 7671.

Centres should provide detail relating to:

- The client and their address.
- Installers and designer's details.
- Supply characteristics (which are not apparent).

The information above may be supplied to the candidate in a pre-populated document.

The assessor may question the candidate to elicit further clarification, but this must be recorded on the assessment paperwork.

### **Health and safety**

If a candidate is working unsafely, the assessment may either be stopped, or the candidate may be given a warning. This is dependent on the severity of the incident and is issued at the discretion of the assessor. If a candidate is issued a warning and continues to work unsafely, risking the safety of themselves or others, their assessment must be ended, and the candidate fails the task.

Any warnings issued to a candidate must be considered as part of the grading process and recorded on the assessor observation record form. Any actions that have led to that warning must be detailed on the assessor observation record form.

### **Resit opportunities**

A candidate who fails to meet the criteria must undertake the entire assessment again at a later date, following a period of retraining. They must not have two consecutive attempts on the same section of the rig.

Candidates are allowed two resit attempts.

### 3. Part A, Task 1 – Inspection and testing

The purpose of Task 1 is for you to safely undertake an initial verification on a section of the assessment rig as advised by the assessor.

You need to carry out the process below for three circuits. The assessor will provide a card for each circuit.

You must work safely throughout this assessment. Any unsafe actions may result in the termination of this assessment.

You must:

- Carry out an inspection on the relevant section of an installation, completing the section on the Electrical Installation Certificate for inspections prior to testing.
- Carry out a range of tests relating to the circuits given by the assessor. You must obtain permission from the assessor before proceeding with any tests involving switching on the supply.
- Use instruments safely and in accordance with manufacturer's information and HSE GS38 as appropriate.
- Complete the remainder of the Electrical Installation Certificate, Schedule of Circuit Details and Schedule of Test Results, as contained within Appendix 6 of BS 7671.

#### Conditions of assessment

- The time allocated for this task is **three hours**.
- You must carry out the task on your own.
- You will be observed by the assessor, under controlled conditions, whilst carrying out the task.
- You must not share or discuss your work with other candidates after the assessment has been completed.

#### Controlled conditions

- You must only work on the tasks in the allocated times.
- You must use the required materials listed below.
- You are only permitted to use the resources listed below.

#### Required materials

- Guidance documentation, GN3, OSG and BS 7671.
- Copy of Electrical Installation Certificate, Schedule of Inspections (incorporated within the EIC), Schedule of Circuit Details and Schedule of Test Results, as contained within Appendix 6 of BS 7671.

### **Permitted resources**

- Suitable test equipment.
- Suitable isolation kit, including sign.
- Appropriate tools.
- Appropriate PPE.

### **What must be produced for grading**

- The completed Electrical Installation Certificate, Schedule of Inspections (incorporated within the EIC), Schedule of Circuit Details and Schedule of Test Results.

SAMPLE

## 4. Grading for Task 1 – Inspection and testing

### Guidance on grading

Candidates must correctly inspect and test and complete relevant documentation, relating to the three circuits, within three hours.

If candidates are still completing documentation at the point three hours is reached, they may be permitted an additional 30 minutes to finalise the documentation. No further inspection or testing activity is permitted after three hours of assessment time has elapsed.

Candidates must achieve a pass against each criterion to pass overall.

### Grading grids

Topic	Criteria	Pass	Fail
Safety	Sought permission at each stage of isolation/removal of isolation	Where isolation is to be removed for live testing, the candidate sought permission first in accordance with the candidate's guide.	Did not seek permission in-line with the candidate's guide.
	Safe isolation procedure	Carried out the full safe isolation process including posting notices and securing lock by using key or unique code. Kept key secure. Had correct probe awareness.	Demonstrated a lack of understanding of the safe isolation procedure, for example, did not lock-off the system, did not keep the key secure and/or did not post notices.
	Worked safely	Throughout the assessment the candidate has worked in a safe manner.	The candidate did not work safely during the assessment, in line with the assessment guidance

Topic	Criteria	Pass	Fail
Inspection	Inspection of relevant items	Carried out an inspection in accordance with BS 7671 for the circuits, accessories and systems identified.	Did not undertake inspection of the circuits, accessories and systems identified, in accordance with BS 7671.
	Completion of inspection schedule in accordance with BS 7671	Completed relevant sections within the schedule correctly and accurately.	Did not complete all of the documentation correctly and accurately.
Instruments	Selected suitable instrument/setting/scale	Correct instrument, scales and settings selected throughout the range of tests. Used suitable GS38 probes, leads and guards where applicable.	Did not choose the correct instrument, scale and/or setting throughout the range of tests.  Did not use suitable GS38 test probes, leads, and guards where applicable.
	Checked instrument for function and safety	At each stage of the testing, the candidate has correctly checked the instrument and lead suitability for the test undertaken.	Did not verify the instrument and/or leads at each stage of the testing and/or the instrument was incorrectly set up during any of these tests.
	Zero or nulled leads where appropriate	At each stage of the testing, the candidate has correctly checked the instrument and the lead resistance was	Did not verify the instrument and lead resistance were zeroed or nulled at each stage of the testing.

Topic	Criteria	Pass	Fail
		zeroed or nulled.	
Testing	Continuity of main protective bonding conductors	Test carried out in accordance with guidelines given in OSG or GN3.	The candidate did not carry out testing or undertook the test process but failed to take account of the full requirements/ guidelines given in OSG or GN3.
	Continuity of CPC	Test carried out in accordance with guidelines given in OSG or GN3.	The candidate did not carry out testing or undertook the test process but failed to take account of the full requirements/ guidelines given in OSG or GN3.
	Continuity of ring-final circuits (steps 1, 2 and 3)	Test carried out in accordance with guidelines given in OSG or GN3.	The candidate did not carry out testing or undertook the test process but failed to take account of the full requirements/ guidelines given in OSG or GN3.
	Insulation resistance	Test carried out in accordance with guidelines given in OSG or GN3.	The candidate did not carry out testing or undertook the test process but failed to take account of the full requirements/ guidelines given in OSG or GN3.
	Polarity (circuit)	Test carried out in accordance	The candidate did not carry out

Topic	Criteria	Pass	Fail
		with guidelines given in OSG or GN3.	testing or undertook the test process but failed to take account of the full requirements/ guidelines given in OSG or GN3.
	Polarity (supply)	Test carried out in accordance with guidelines given in OSG or GN3.	The candidate did not carry out testing or undertook the test process but failed to take account of the full requirements/ guidelines given in OSG or GN3.
	External earth fault loop impedance ( $Z_e$ )	Test carried out in accordance with guidelines given in OSG or GN3.	The candidate did not carry out testing or undertook the test process but failed to take account of the full requirements/ guidelines given in OSG or GN3.
	Total earth fault loop impedance ( $Z_{db}$ where applicable and $Z_s$ )	Test or calculation carried out in accordance with guidelines given in OSG or GN3.	The candidate did not carry out testing or calculation or undertook the test or calculation process but failed to take account of the full requirements/ guidelines given in OSG or GN3.
	Prospective fault current	Test carried out in accordance with guidelines given in OSG or	The candidate did not carry out testing or undertook the test process but failed

Topic	Criteria	Pass	Fail
		GN3. (I <sub>PEFC</sub> and I <sub>PSCC</sub> )	to take account of the full requirements/ guidelines given in OSG or GN3.
	RCD testing (instrument)	Test carried out in accordance with guidelines given in OSG or GN3.	The candidate did not carry out testing or undertook the test process but failed to take account of the full requirements/ guidelines given in OSG or GN3.
	Functional testing	Carried out appropriate functional testing of all fitted equipment.	Did not carry out appropriate functional testing of all fitted equipment.
Recording and verification	Completed Schedule of Circuit Details and Schedule of Test Results	Completed documentation correctly and accurately.	Did not complete the documentation correctly.
	Verified results in accordance with BS 7671	Correctly verified results in accordance with BS 7671 values.	Was not able to reference the correct materials or verify the results obtained.
	Completed Electrical Installation Certificate	Certificate has been completed correctly in all areas required.	Did not complete the documentation correctly in all required areas.

## 5. Assignment guidance for Part B, Task 2 – Fault diagnosis and rectification

### Task guidance for Part B Fault finding

Please read **all** information carefully before the assessment.

### Overarching conditions

Part B, Task 2 of the practical assignment will require the use of a specified assessment rig that must be set up for the assessment. The rig must not have been used for any practice or formative activities.

The tasks are on-demand and can be released to the candidate at the centre's discretion. However, centres are only expected to release tasks when there is confidence that candidates have undertaken learning of all the required content, and in their ability to undertake the assessment.

### Time

Candidates are allowed **three hours** for this task.

All allocated task timings include time for candidates to work on and produce the required evidence, as well time for thinking, reflection and application of prior knowledge from the specification content.

### Resources

Candidates must have access to a suitable range of resources to carry out the tasks and, where appropriate, to have the opportunity to choose components, tools and equipment that demonstrate their ability to select from a range of appropriate materials.

The candidate should have access to the following to select and carry out each task:

- appropriate hand tools
- appropriate PPE
- test equipment
- report sheets
- job card.

### **Task specific guidance**

The purpose of this task is for candidates to demonstrate the process of diagnosing faults. Candidates are required to safely diagnose and suggest a suitable method of rectification for a range of faults by interpreting the given symptoms.

The assessor will provide the candidate with one pack of job cards. Each pack contains seven cards providing the candidate with symptoms for each fault. The candidate needs to select and diagnose six faults out of the seven (the seventh card may be used if the candidate is unable to diagnose one of the faults). The packs will be provided to candidates by rotation.

There are 10 packs of job cards in total. Details of which job cards to be included in each pack can be found on the next page.

Only one fault should be introduced to the rig at any one time. The only exception is for the asterisked faults, which need to be introduced before candidates enter the assessment room. Candidates must not be shown the details of the job cards prior to being given a pack of job cards.

After a candidate correctly identifies each fault, they need to complete an individual report sheet. The report sheet should include the details of the fault and give recommendations on how the fault should be rectified. The candidate also needs to include suggested materials to fix the fault and the actions to ensure the fault and the circuit is safe to reenergise.

Report sheets can be found in the candidate's pack and should be photocopied as required.

### **Health and safety**

If a candidate is working unsafely, the assessment may either be stopped, or the candidate may be given a warning. This is dependent on the severity of the incident and is issued at the discretion of the assessor. If a candidate is issued a warning and continues to work unsafely, risking the safety of themselves or others, their assessment must be ended, and the candidate fails the task.

Any warnings issued to a candidate must be considered as part of the grading process and recorded on the assessor observation record form. Any actions that have led to that warning must be detailed on the assessor observation record form.

### **Resit opportunities**

A candidate who fails to meet the criteria must undertake the entire assessment again at a later date, following a period of retraining. They must not attempt the same job card pack again.

Candidates are allowed two resit attempts.

## Example job card packs

Pack 1	Pack 2	Pack 3	Pack 4	Pack 5	Pack 6	Pack 7	Pack 8	Pack 9	Pack 10
OH2	OH2	OH3	OH3	OH2	OH5	OH3	OH1	OH1	OH1
OH3	OH5	OH6	OH5	OH5	OH6	OH6	OH6	OH4	OH4
HO1	HO2	HO3	HO4	HO1	HO2	HO3	HO4	HO1	HO2
HO6	HO7	HO5	HO5	HO5	HO5	HO7	HO8	HO9	HO6
HO10	HO11	HO8	HO6	HO8	HO11	HO10	HO11	HO10	HO9
GA1	GA2	GA3	GA1	GA2	GA3	GA1	GA2	GA4	GA4
GA5	GA6	GA7	GA8	GA9	GA5	GA7	GA7	GA8	GA7

## Example job cards

Fault reference number: OH 1

### Symptoms of fault:

Over-sink water heater is reported to not be heating water to the required temperature.

Fault reference number: OH 2

### Symptoms of fault:

A service engineer reports that the polarity could not be confirmed at the fused connection unit supplying the over-sink water heater.

Fault reference number: OH 3

### Symptoms of fault:

A customer felt an electric shock when touching the pipework supplying the over-sink water heater in the outhouse.

Fault reference number: OH 4

**Symptoms of fault:**

Light not working in the outhouse.

Fault reference number: OH 5

**Symptoms of fault:**

Light not working in the outhouse.

Fault reference number: OH 6

**Symptoms of fault:**

RCBO/RCD for ring final circuit has operated and will not reset.

Centre use only: Reference number: HO 1

**Symptoms of fault:**

Kitchen lights not working.

Centre use only: Reference number: HO 2

**Symptoms of fault:**

Bedroom lights not working.

Centre use only: Reference number: HO 3

**Symptoms of fault:**

Hallway lights work occasionally depending on the switch used.

Centre use only: Reference number: HO 4

**Symptoms of fault:**

One light in the lounge not working.

Centre use only: Reference number: HO 5

**Description of fault:**

Customer reports getting a mild electric shock when they touch the radiator and the sink tap at the same time.

Centre use only: Reference number: HO 6

**Description of fault:**

Kitchen sockets not working, and circuit breaker has operated.

Centre use only: Reference number: HO 7

**Description of fault:**

RCD/RCBO trips every time an appliance is plugged into a specific socket.

Centre use only: Reference number: HO 8

**Description of fault:**

Shower does not get hot.

Centre use only: Reference number: HO 9

**Description of fault:**

Following a periodic inspection and test, an issue was reported with earth fault loop impedance at the garage DB.

Centre use only: Reference number: HO 10

**Description of fault:**

Following a periodic inspection and test, an issue was reported with earth fault loop impedance at the outhouse DB.

Centre use only: Reference number: HO 11

**Description of fault:**

Electric shower does not work.

Centre use only: Reference number: GA 1

**Description of fault:**

Air compressor stops working after several seconds, each time it is turned on.

Centre use only: Reference number: GA 2

**Description of fault:**

Air compressor does not work.

Centre use only: Reference number: GA 3

**Description of fault:**

Air compressor does not work.

Centre use only: Reference number: GA 4

**Description of fault:**

The air compressor stops after releasing the start button.

Centre use only: Reference number: GA 5

**Description of fault:**

RCD/RCBO operates every time the garage light is turned on.

Centre use only: Reference number: GA 6

**Description of fault:**

Light has stopped working in the garage.

Centre use only: Reference number: GA 7

**Description of fault:**

Circuit breaker on ring final circuit will not stay on.

Centre use only: Reference number: GA 8

**Description of fault:**

Ring final circuit RCBO/RCD will not reset.

Centre use only: Reference number: GA 9
<b>Description of fault:</b> Light in garage not working.

SAMPLE

SAMPLE

## Fault criteria: Perform fault diagnosis

Fault reference number	Outhouse faults		Fault switch number
OH 1	Over-sink water heater reported not heating water to the required temperature.	Very high resistance between L and N, therefore high voltage drop.	21
OH 2	A service engineer reports that the polarity could not be confirmed at the fused connection unit supplying the over-sink water heater.	Broken CPC	20
OH 3	A customer felt an electric shock when touching the pipework supplying the over-sink water heater in the outhouse.	Broken supplementary bonding conductor.	22
OH 4*	Light not working in outhouse.	Broken switch	Introduced
OH 5	Light not working in outhouse.	Broken L or N	18 or 19
OH 6	RCBO/RCD for ring final circuit has operated and will not reset.	L-CPC fault	23

\*These faults need to be introduced before the assessment begins.

<b>Fault reference number</b>	<b>House faults</b>		<b>Fault switch number</b>
HO 1	Kitchen lights not working.	Broken line conductor	1
HO 2	Bedroom lights not working.	Broken neutral conductor	3
HO 3	Hallway lights work occasionally depending on the switch used.	Strapper and common wrongly connected	2
HO 4*	One light in the lounge not working.	Broken component relating to the light fitting or lamp. Centre to choose.	Introduced
HO 5	Customer reports getting a mild electric shock when they touch the radiator and the sink tap at the same time.	Broken bonding conductor	6
HO 6	Kitchen sockets not working, and circuit breaker has operated.	Low resistance L to E	7
HO 7*	RCD/RCBO trips every time an appliance is plugged into a specific socket.	N and E reversal to the socket.	8
HO 8	Shower does not get hot.	Broken element	5
HO 9	Following a periodic inspection and test, an issue was reported with earth fault loop impedance	Open distribution CPC	4

	at the garage DB.		
HO 10	Following a periodic inspection and test, an issue was reported with earth fault loop impedance at the outhouse DB.	Open distribution CPC	16
HO 11	Electric shower does not work.	Broken line conductor	17

\*These faults need to be introduced before the assessment begins.

Fault reference number	Garage faults		Fault switch number
GA 1*	Air compressor stops working after several seconds, each time it is turned on.	Set overload to low	Introduced
GA 2	Air compressor does not work.	Open circuit L conductor	13
GA 3	Air compressor does not work.	Open circuit N conductor	14
GA 4	The air compressor stops after releasing the start button.	Fault in hold-on circuit	15
GA 5	RCD/RCBO operates every time the garage light is turned on.	Insulation resistance failure between L and E	9
GA 6*	Light has stopped working in the garage.	Broken component relating to the light fitting or lamp. Centre to choose.	Introduced
GA 7	Circuit breaker on ring final circuit will not stay on.	L to N short circuit	11
GA 8	Ring final circuit RCBO/RCD will not reset.	L-E fault	12
GA 9	Light in garage not working.	Open switch line	10

\*These faults need to be introduced before the assessment begins.

SAMPLE

## 6. Part B, Task 2 – Fault diagnosis and rectification

This practical task is intended to assess your knowledge, skills and understanding of the fault diagnosis and rectification process within electrical installations.

You will be provided with one pack of job cards. Each pack contains seven cards which outline the symptoms of each fault.

Using the job cards provided, you need to investigate and diagnose a total of six faults on the assessment rig, provided by the assessor. The additional card may be used if you are unable to diagnose one of the faults.

All work must be carried out to conform to current standards and in accordance with all health and safety requirements. Any unsafe actions will result in the termination of this assessment.

After the you correctly identifies each fault, you will need to complete a report sheet.

The report sheet should include the following:

- A description of work undertaken, and tests carried out to locate the fault.
- The nature of the fault.
- A brief description of what is required in order to rectify the fault, including materials required.
- The actions required to ensure the rectification is suitable.

After these actions are undertaken, you will need to inform the assessor, who will activate the next fault. Only one fault will be introduced on to the rig at any one time. You need to repeat this process for each fault for a total of six faults.

### Timing of assessment

- The time allocated for this task is **three hours**.
- You will be observed by the assessor, under controlled conditions, whilst carrying out the task.

### Controlled conditions

- You must only work on the tasks in the allocated times.
- You are not permitted to bring any materials into the assessment session.
- You must carry out the task on their own, under controlled conditions whilst being observed.

### What must be produced for grading

A completed report sheet for each of the six faults.

## 7. Grading for Task 2 – Fault diagnosis and rectification

### Guidance on grading

Candidates must correctly identify six faults within three hours, including stating suitable rectifications and completing the report sheet for each of the six faults.

The assessor may question the candidate to elicit further clarification, but these must be recorded on the report sheet.

The grading grid below must be used for each of the six faults. For each fault, candidates must achieve a pass against each criterion to pass overall.

### Grading grids

Fault card reference	Topic	Pass	Fail
	Identified correct test instrument and appropriate range (if applicable).	Selected the correct test instrument and appropriate range to identify the fault.	Did not select the correct test instrument and/or appropriate range to identify the fault.
	Carried out suitable checks to test instrument and associated equipment (if applicable).	Correctly checked the instrument, leads and probes appropriate to the test undertaken at each stage of the assessment.	Did not correctly check the instrument, leads and/or probes appropriate to the test undertaken at all relevant stages of the assessment.
	The fault was correctly diagnosed.	The fault was correctly diagnosed.	The fault was not correctly diagnosed.
	<b>Report sheet correctly completed identifying the following</b>		
	A description of work and test(s) carried out, as appropriate.	Accurate description of the work and test(s) carried out, as appropriate.	Inaccurate description of work and/or test(s) carried out.
	Recorded the nature of the fault.	Accurately recorded the nature of the fault as diagnosed.	Did not accurately record the nature of

Fault card reference	Topic	Pass	Fail
			the fault as diagnosed.
	A brief description of what is required, in order to rectify the fault, including materials needed.	Clearly recorded a description of what was required, including materials needed.	Did not clearly record a description of what was required and/or the materials needed.
	The actions required to ensure proposed rectification of fault is appropriate and safe.	Clearly recorded the actions required to ensure proposed rectification of fault is appropriate and safe.	Did not clearly record the actions required to ensure proposed rectification of fault is appropriate and safe.

## 8. Centre guidance

Guidance provided in this document supports the administration of this assessment.

This assessment is designed to require the candidate to make use of the knowledge, understanding and practical skills they have built up over the course of their learning to tackle tasks/problems/challenges.

During the learning programme, it is expected that tutors will have taken the opportunity to set shorter, formative tasks that allow candidates to be supported to independently use the learning they have so far covered, drawing this together in a similar way, so they are familiar with the format, conditions and expectations of the assessment.

Candidates should be made aware, during learning, what the assessment will be measuring, and how the assessment will be graded. Learners should understand the level of performance that will be required as a minimum to demonstrate competence.

### **Compliance with timings**

Due to the nature of this assessment, the time allowances provided for each task must be adhered to. They refer directly to assessment time, not any additional setting up times the centre needs to create an appropriate assessment environment.

It is the centre's responsibility to plan sufficient assessment sessions as stated in each of the tasks, under the appropriate conditions, to allow candidates reasonable time to complete the assessment tasks.

Where candidates are required to plan their work, they should have their plans confirmed for appropriateness in relation to the time allocated for each task, to ensure their planning has not left them with too short a time to complete the tasks safely. Any planning that is not appropriate must be recorded on the assessor observation record form as part of the marking process.

Any guidance or feedback relating to timings/planning should follow the guidance provided in the section Guidance and feedback below.

### **Assessor student ratios**

The number of candidates an assessor will be able to observe at one time will vary depending on local conditions relating to:

- monitoring and maintaining safety during assessment
  - any specific hazards related to the task that pose a risk of harm in relation to the competence of the learners
  - availability of supervisory staff to support the assessor.

## Observation evidence

Observation notes form part of the candidate's evidence and must capture evidence of student performance during the practical tasks describing how well the activity has been carried out, rather than stating the steps/actions the candidate has taken. The notes must be very descriptive and focus on the quality of the performance that are notable in relation to the quality indicators in the grading grid. They must provide sufficient, appropriate evidence that can be used by the assessor (and external verifier) to assess the performance using the grading grid.

Identifying what it is about the performances that is different between candidates, can clarify the qualities that are important to record. Each candidate is likely to carry out the same steps, so a checklist of this information would not help differentiate between them. However, qualitative comments on how well they do it, and quantitative records of accuracy and tolerances would.

The assessor should refer to the grading grid to ensure appropriate aspects of the performances are recorded. These notes will be used for grading and verification purposes and so must be detailed, accurate and differentiating.

Assessors should ensure that any required additional supporting evidence, including photographs or video, can be easily matched to the correct candidate, is clear, well-lit and shows the areas of particular interest in sufficient detail and clarity for assessment (ie taken at appropriate points in production, showing accuracy of measurements where appropriate).

Assessor grading and justification is completed on a separate form (assessor observation record form in Appendix 1).

As far as possible, candidates must not be distracted, or their performance affected by the process of observation and evidence collection.

## Video and photograph evidence

The assessment materials for each assignment identify the minimum candidate and assessor evidence requirements to support grading and verification. Where ephemeral evidence (eg areas of candidate performance that may be hard to capture with photographs and assessor notes alone) plays a significant part of the practical assignment. If this is the case, City & Guilds will prescribe the type/capture where the use of video is necessary for practical assignment component (eg specifying exactly which elements of the practical must be videotaped, or photographed), and any technical specifications for these forms of evidence eg length of videos, maximum file sizes etc. will also be supplied. Photographic and video evidence will be submitted along with the written candidate evidence and assessor evidence as described in the additional evidence section of the task.

If this is the case, then the video evidence must meet these minimum requirements, in order to be considered by external verifiers:

- the qualitative written evidence provided by assessors must
  - clearly identify the parts of the video that are being referred to, when used as supporting evidence – using a timecode for this is recommended
  - include their judgement on the performance being demonstrated
- Section 6.5 of the *Centre Manual* also contains general information about the requirements for video evidence submission.

Please note that centres must ensure that video evidence is clear and meets the minimum requirements. The ability of the moderators to take this evidence into account may be impaired and delay the external verification process if the requirements are not met.

### **Minimum evidence requirements for grading**

The section in the assignment:

- ***What must be produced for grading***

lists the minimum requirements of evidence to be submitted for grading and the external verification sample.

Evidence produced during assessment above and beyond this may be submitted, as long as it provides useful information for grading and has been produced under appropriate conditions.

Whilst technological methods which support the capturing or creating of evidence can be helpful, eg pin board style websites for creating mood boards, the final evidence must be converted to a suitable format for grading which cannot be lost/deleted or amended after the end of the assessment period (eg screen prints, pdf files). Considerations around tracking authenticity and potential loss of material hosted on such platforms during assessment is the centre's responsibility.

### **Preparation of candidates**

Candidates should be aware of which aspects of their performance will give them a pass in assessment. This is best carried out through routinely pointing out good or poor performance during the learning period, and through formative assessment. Although candidates will not have access to the grading grids during the assessment. Candidates should be made aware of what they need to do to achieve a pass by referring and formatively being assessed against grade descriptors as part of their formal learning programme.

During the learning programme, direct tutor instruction in how to approach tasks through modelling, support, guidance and feedback is critical. However, gradual removal of this support is necessary in preparation for summative assessment. This supported approach is not valid for summative assessment.

The purpose of summative assessment is to confirm the standard the candidate has reached as a result of participating in the learning process. Candidates should be encouraged to do the best they can and be made aware of the difference between these summative assessments and any formative assessments they have been subject to. Candidates will not have access to the grading grids.

### **Guidance on assessment conditions**

The assessment conditions that are in place for this assignment are to:

- ensure the rigour of the assessment process
- provide fairness for candidates
- give confidence in the outcome.

They can be thought of as the rules that ensure that all candidates who take an assessment are being treated fairly, equally and in a manner that ensures their result reflects their true ability.

The conditions outlined below relate to the tasks within this assignment. These do not affect any formative assessment work that takes place, although it is advised that candidates are prepared for the conditions they will need to work under during summative assessment.

The evidence for the tasks that make up this assignment must be completed under the specified conditions. This is to ensure authenticity and prevent malpractice as well as to assess and record candidate performance for assessment in the practical tasks. It is the centre's responsibility to ensure that local administration and oversight gives the assessor sufficient confidence to be able to confirm the authenticity of the candidate's work.

### **Security and authentication of candidate work**

Candidate evidence must be kept secure to prevent unsupervised access by the candidate or others. Where evidence is produced over a number of sessions, the assessor must ensure learners and others cannot access the evidence without supervision. This might include storing written work or artefacts in locked cupboards and collecting memory sticks of evidence produced electronically at the end of each session.

Candidates are required to sign declarations of authenticity, as is the assessor. The relevant form is included in this assignment pack and must be signed after the production of all evidence.

### **Accessibility and fairness**

Where a candidate has special requirements, assessors should refer to the *Access arrangements and reasonable adjustments* section of the City & Guilds website.

Assessors can support access where necessary by providing clarification to any candidate on the requirements or timings of any aspect of this assignment. Assessors should not provide more guidance than the candidate needs as this may impact on the candidate's grade, see the guidance and feedback section below.

All candidates must be provided with an environment, time frame and resources that allows them reasonable access to the full range of marks available.

Where candidates have worked in groups to complete one or more tasks for this assessment, the assessor must ensure that no candidate is disadvantaged as a result of the performance of any other team member. If a team member is distracting or preventing another team member from fully demonstrating their skills or knowledge, the assessor must intervene.

### **Guidance and feedback**

To support centre file management, assessors may specify a suitable file format and referencing format for evidence (unless otherwise specified eg if file naming is an assessment point for the assignment). Guidance must only support access to the assignment brief and must not provide feedback for improvement. The level and frequency of clarification and guidance must be:

- recorded fully on the assessor observation record form
- taken into account along with the candidate's final evidence during grading
- made available for external verification.

Assessors must not provide feedback on the quality of the performance or how the quality of evidence can be improved. This would be classed as malpractice. However, this does not

apply if the assessor asks questions as part of the assessment process. Such requirements will be specifically stated within task centre guidance.

Assessors should however provide general reminders to candidates throughout the assessment period to check their work thoroughly before submitting it, and to be sure that they are happy with their final evidence as it may not be worked on further after submission.

Candidates can rework any evidence that has been produced for each task during the time allowed.

The information on the guidance given and captured on the assessor observation record form is part of the evidence that must be considered along with the other evidence for the task when grading. It is up to the assessor to decide if the guidance the candidate has required suggests they are lacking in any performance outcome and consider the severity of the issue when applying the grading criteria. The assessor must record where and how guidance has had an impact on the marks given, so this is available should queries arise at external verification or appeal.

### **What is, and is not, an appropriate level of guidance**

- An assessor should intervene with caution if a candidate has taken a course of action that will result in them not being able to submit the full range of evidence for assessment. However, this should only take place once the assessor has prompted the candidate to check that they have covered all the requirements. Where the assessor has to be explicit as to what the issue is, this is likely to demonstrate a lack of understanding on the part of the candidate rather than a simple error, and full details should be recorded on the assessor observation record form.
- The assessor should not provide guidance if the candidate is thought to be able to correct the issue without it, and a prompt would suffice. In other words, minimum support should be given to the candidate, since the more assessor guidance provided, the less of the candidate's own performance is being demonstrated and therefore the larger the impact on the marks awarded.
- The assessor must not provide guidance that the candidate's work is not at the required standard or how to improve their work. In this way, candidates are given the chance to identify and correct any errors on their own, providing valid evidence of knowledge and skills that will be credited during grading.
- The assessor must not produce any templates, pro-formas, work logs etc. unless directly stated in the task specific guidance. If templates are provided by City & Guilds as part of the assignment, these should not be adapted but can be provided to candidates either electronically or paper based.

All specific prompts and details of the nature of any further guidance must be recorded on the relevant form and made available for external quality assurance activities.

## Appendix 1 – Assessor observation record form for Part A, Task 1

Section	Criteria	Assessor Check	Feedback on areas where improvement is required (optional)
Safety	Sought permission at each stage of isolation/removal of isolation	<input type="checkbox"/>	
	Safe isolation procedure	<input type="checkbox"/>	
	Worked safely	<input type="checkbox"/>	
Inspection	Inspection of relevant items	<input type="checkbox"/>	
	Completion of inspection schedule in accordance with BS 7671	<input type="checkbox"/>	
Instruments	Selected suitable instrument/setting/scale	<input type="checkbox"/>	
	Checked instrument for function and safety	<input type="checkbox"/>	
	Zero or nulled leads where appropriate	<input type="checkbox"/>	

Section	Criteria	Assessor Check	Feedback on areas where improvement is required (optional)
Testing	Continuity of main protective bonding conductors	<input type="checkbox"/>	
	Continuity of CPC	<input type="checkbox"/>	
	Continuity of ring-final circuits (all 3 steps)	<input type="checkbox"/>	
	Insulation resistance	<input type="checkbox"/>	
	Polarity (circuit)	<input type="checkbox"/>	
	Polarity (supply)	<input type="checkbox"/>	
	External earth fault loop impedance	<input type="checkbox"/>	
	Total earth fault loop impedance	<input type="checkbox"/>	
	Prospective fault currents	<input type="checkbox"/>	
	RCD testing (instrument)	<input type="checkbox"/>	

Section	Criteria	Assessor Check	Feedback on areas where improvement is required (optional)
	Functional testing	<input type="checkbox"/>	
	Completed Schedule of Circuit Details and Schedule of Test Results	<input type="checkbox"/>	
Recording and verification	Verified results in accordance with BS 7671	<input type="checkbox"/>	
	Completed Electrical Installation Certificate	<input type="checkbox"/>	
General	Worked in an efficient manner	<input type="checkbox"/>	
<b>Any additional questions asked, or prompts provided by the assessor</b>			

The task has been successfully completed to the standards identified			
Person	Print name	Signature	Date
Candidate			
Assessor			
Internal quality assurance (if required)			

**Additional assessor/tutor feedback to candidate on outcome of assessment (if applicable)**

SAMPLE

SAMPLE

## Appendix 2 – Assessment Checklist for Part B, Task 2

		Job card reference						
1	<b>Identified correct range of equipment (if applicable)</b>							
2	<b>Carried out suitable checks to equipment (if applicable)</b>							
3	<b>Fault correctly located using a logical process</b>							
	<b>Report sheet correctly completed identifying the following:</b>							
	Description of work done to find fault							
	Tests carried out to locate fault (if any)							
	The nature of the fault							
	Brief description including materials required to fix the fault							
	Actions required to ensure rectification is suitable							
<b>Any additional questions asked/prompts provided by the assessor</b>								

The task has been successfully completed to the standards identified			
Person	Print name	Signature	Date
Candidate			
Assessor			
Internal quality assurance (if required)			

**Additional assessor/tutor feedback to candidate on outcome of assessment**

SAMPLE

SAMPLE

## Appendix 3 – Candidate Report Sheet

<b>Report sheet</b>	
<b>Job card reference number:</b>	
<b>Candidate name:</b>	<b>Date of assessment:</b>
<b>Description of work undertaken, and tests carried out (as appropriate)</b>	
<b>The nature of the fault</b>	
<b>Brief description of what is required in order to rectify the fault, including materials (if needed)</b>	
<b>The actions required to ensure proposed rectification of fault is appropriate and safe</b>	

## Appendix 4 – Sources of General Information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with the handbook. To download the documents and to find other useful documents, go to the Centre document library on [www.cityandguilds.com](http://www.cityandguilds.com) or click on the links below:

### Centre Handbook: Quality Assurance Standards

This document is for all approved centres and provides guidance to support their delivery of our qualifications. It includes information on:

- centre quality assurance criteria and monitoring activities
- administration and assessment systems
- centre-facing support teams at City & Guilds/ILM
- centre quality assurance roles and responsibilities.

The Centre Handbook should be used to ensure compliance with the terms and conditions of the centre contract.

### Centre Handbook: Quality Assurance Standards

This document sets out the minimum common quality assurance requirements for our regulated and non-regulated qualifications that feature centre-assessed components. Specific guidance will also be included in relevant qualification handbooks and/or assessment documentation.

It incorporates our expectations for centre internal quality assurance and the external quality assurance methods we use to ensure that assessment standards are met and upheld. It also details the range of sanctions that may be put in place when centres do not comply with our requirements or actions that will be taken to align centre marking/assessment to required standards. Additionally, it provides detailed guidance on the secure and valid administration of centre assessments.

Access arrangements: When and how applications need to be made to City & Guilds provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The Centre document library also contains useful information on such things as:

- conducting examinations
- registering learners
- appeals and malpractice.

## Useful contacts

Please visit the Contact us section of the City & Guilds website, [Contact us](#)

## City & Guilds

For almost 150 years, we have worked with people, organisations and economies to help them identify and develop the skills they need to thrive. We understand the life-changing link between skills development, social mobility, prosperity and success. Everything we do is focused on developing and delivering high-quality training, qualifications, assessments and credentials that lead to jobs and meet the changing needs of industry.

We partner with our customers to deliver work-based learning programmes that build competency to support better prospects for people, organisations and wider society. We create flexible learning pathways that support lifelong employability because we believe that people deserve the opportunity to (re)train and (re)learn again and again – gaining new skills at every stage of life, regardless of where they start.

The City & Guilds community of brands includes Gen2, ILM, Intertrain, Trade Skills 4U, Kineo and The Oxford Group.

## Copyright

The content of this document is, unless otherwise indicated, © City & Guilds Limited and may not be copied, reproduced or distributed without prior written consent. However, approved City & Guilds centres and learners studying for City & Guilds qualifications may photocopy this document free of charge and/or include a PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching learners working towards a City & Guilds qualification, or for internal administration purposes
- learners may copy the material only for their own use when working towards a City & Guilds qualification.

The Standard Copying Conditions (see the City & Guilds website) also apply.

Contains public section information licensed under the Open Government Licence v3.0. Published by City & Guilds, a company registered in England and Wales (company number 16513878).

City & Guilds of London Institute  
Giltspur House  
5–6 Giltspur Street  
London  
EC1A 9DE

[cityandguildsgroup.com](http://cityandguildsgroup.com)