



LITERACY PROFILE:

Electrical Appliance Service Trainee

- Reading**
- Speaking and listening**
- Critical thinking**
- Writing**
- Numeracy**
- Technology**

Reading tasks

“Read” implies that the person reads and understands.

Read Signs and Short Texts

(some may be read from computer screen)

- Workshop signs
- Serial numbers, part numbers from appliance, new parts order system, job information
- Job abbreviations
- Dates and other codes
- Color codes
- Van WOF, registration, mileage
- Text messages

Read forms and short passages of text

(some may be read from computer screen)

- Job card or job sheet
- Consignment docket
- Previous repairs
- Appliance brand & model
- Fax: re installation instructions

Read charts and tables

- List of parts
- Exploded parts diagram
- Road maps

Read instructions and more detailed job information

- Diagnostic readout, diagnostic fault sheet
- Part installation instructions
- Appliance installation instructions
- Manufacturer’s manuals / information

Read new product handouts / information

Refer to electrical legislation, regulations and ANZS 3000 (complex texts using legal terminology)

Read training material

- Off-job training material – course workbooks, text books
- First aid / health & safety
- EWRB refresher courses
- Workplace logbook
- Quarterly training plans (Modern Apprentices only)
- ETITO Progress Reports
- NZQA Record of Learning
- Assessments

Read employment documents

- Leave forms
- Job descriptions, employment contracts
- Code of conduct, performance reviews
- Training agreements

Reading skills

Read and understand information from graphical material e.g. tables, price lists, parts lists, maps.

Check that numbers on parts match numbers on order forms, and are the correct part for the appliance.

Follow written instructions.

Find out the meaning of unfamiliar words or phrases.

Recognise serial number formats.

Read key.

Read map.

Read technical vocabulary.

Use reference sources (manufacturers manuals, regulations, text books, training course material).

- Predict what will be in text
- Skim text for gist
- Scan text for specific sections
- Read text thoroughly

Note: this is done more frequently in training than in day-to-day work.

Summarise material read in own words (training).

Underpinning knowledge / understanding

How specific texts are laid out, and what to expect from them e.g. ETITO workplace logbook, regulations, AS/NZS standards.

Skimming / scanning / reading for detail are essential skills and required for different purposes.

How data is presented in tables and graphs.

Common symbols and abbreviations.



Writing tasks

Complete simple forms

- Time sheets
- Leave forms

Complete job sheet, job records

- Start and finish times
- Model serial number, appliance information
- Part replaced
- Description
- Work completed or progress to date
- Mileage

Write out invoice forms for customers

- Job details
- Cost

Request parts

- Including part number, how many required, customer details (if relevant)
- Request written on white board, paper based form, order book or computer

- Send text messages to arrange or confirm details (e.g. appointment times, completed work)
- Leave notes for customer

For on job training

Complete work diary for learning / experience records

- Including description, parts used, diagnosis (if not recorded on job sheet)
- Complete work details sections of workplace logbook reporting sheets

For off job training

- Write answers to assessment questions.
- Write assignments



Writing skills

Complete forms using numbers, single words, short sentences.

- Handwriting must be legible
- Abbreviations can be used
- Spelling must be understandable, but correct spelling is not important
- Grammar and punctuation must be understandable but do not need to be 100% correct

Take notes from material read (training).

Write short answers to assessment questions.

- Handwriting must be legible
- Abbreviations can be used
- Spelling must be correct
- Grammar and punctuation must be understandable but do not need to be 100% correct

Write assignments.

- Plan assignment writing (beginning, middle and end)
- Write sentences and paragraphs
- Use diagrams and sketches to help make a point

Underpinning knowledge / understanding

When the customer will see the form, handwriting and spelling must be clear and legible.

Purpose of forms to be completed.

Purpose of other sorts of writing.

Planning, drafting and editing assist writing.

Presentation styles for assignments, short answer questions.

Speaking and listening tasks

- Communicate with office staff and supervisor (work co-ordination)
 - Tasks for day
 - Progress on jobs
 - Parts ordered
 - Find out cost of parts
 - Ask office to contact or communicate with customers
 - Checking job or customer details
 - Discuss work with other technicians
 - Work in progress
 - Offer assistance on other jobs
 - Listen to and comprehend job instructions from supervisor (work instruction)
 - Listen to and comprehend verbal explanations and training instructions from supervisor or trainer and off job training provider
 - Participate in meetings
- Communicate with supplier or retailer e.g. arranging pick up, ordering parts
 - Communicate with customer on site
 - Contact customer to check access to premises
 - Ask questions to identify the problem
 - Explain problem to customer using non-technical jargon
 - Explain actions needed for the repair e.g. workshop, time, parts, return visit
 - Give verbal price estimates or quotes
 - Gain agreement to proceed
 - train customer to use appliance correctly
 - Request and receive payments
 - Recommend sales if appliance is not worth repairing
 - Explain product guarantee
 - Communicate in a way that encourages repeat business
- Communicate with customers on the phone
 - Contact customers when job completed
 - Greet
 - Explain what has been done
 - Give cost information
 - Arrange pick up or delivery
 - Communicate in a way that encourages repeat business
 - Formal training
 - Communicate with ETITO Training Managers, Modern Apprenticeship Co-ordinators (listen to instructions, discuss training progress)
 - Ask questions about training material
 - Listen to explanations / lectures in class situation
 - Answer verbal assessment questions

Speaking and listening skills

Speak clearly.

Ask for help if necessary.

Give information in a sensible order.

Use suitable body language.

Use questioning techniques including using open / closed questions to gain information, check understanding and encourage further discussion.

Use active listening skills.

- Repeat message back to sender
- Summarise instructions in own words
- Following techniques e.g. saying "aha" or "okay" as you follow what someone is saying

Use language appropriate to situation and person.

Discuss topics which are appropriate in work context.

Use negotiation skills.

- Identify issue
- Suggest possible solutions
- Agree on best outcome

Underpinning knowledge / understanding

Communication is a two-way process.

There is a range of spoken language styles which change with purpose, topic and audience.

There are ways of making positive and negative statements.

Ways of initiating and concluding conversations.

Summarising can be used for checking and clarification.

Pronunciation and tone can affect the communication process.

Messages are conveyed by body language and facial expressions.

There are barriers to communication, especially cross-cultural communication.

Numeracy tasks

- Estimate cost for customer
 - Time (6-minute units)
 - Parts (mark up – different % rates depending on job)
 - Mileage rates
 - Overheads
 - Minimum call out cost
 - GST
 - Cell phone charges
 - Safety test fee
- Produce invoice for customer (includes same types of items as above)

- Receive payments from customer by cheque or cash
- Read odometer
- Use map key
- Recognise correct forms of and interpret serial numbers of appliances and parts
 - Age
 - Warranty status
 - Model numbers

- Measure and record time in 6-minute units
- Use multimeter to measure and record electrical units
- Check temperatures (fridge, washing machine, oven, hot plates etc.)
- Recognise appliance size
 - Volume (litres)
 - Dimensions
- Calculate electrical load, voltage and overload

Numeracy skills

Add, subtract, multiply and divide whole numbers and decimal numbers.

Calculate percentages.

Use a calculator.

Use 12 or 24hr clock to measure and record time.

Use 6-minute units (6 x table).

Use Celsius temperature scale (appliance temperature, includes negative scale).

Work with dimension measurements (metric, mm, cm, m).

- Height
- Width
- Depth
- Clearance (space around appliance)

Interpret numerical information contained in graphs and tables.

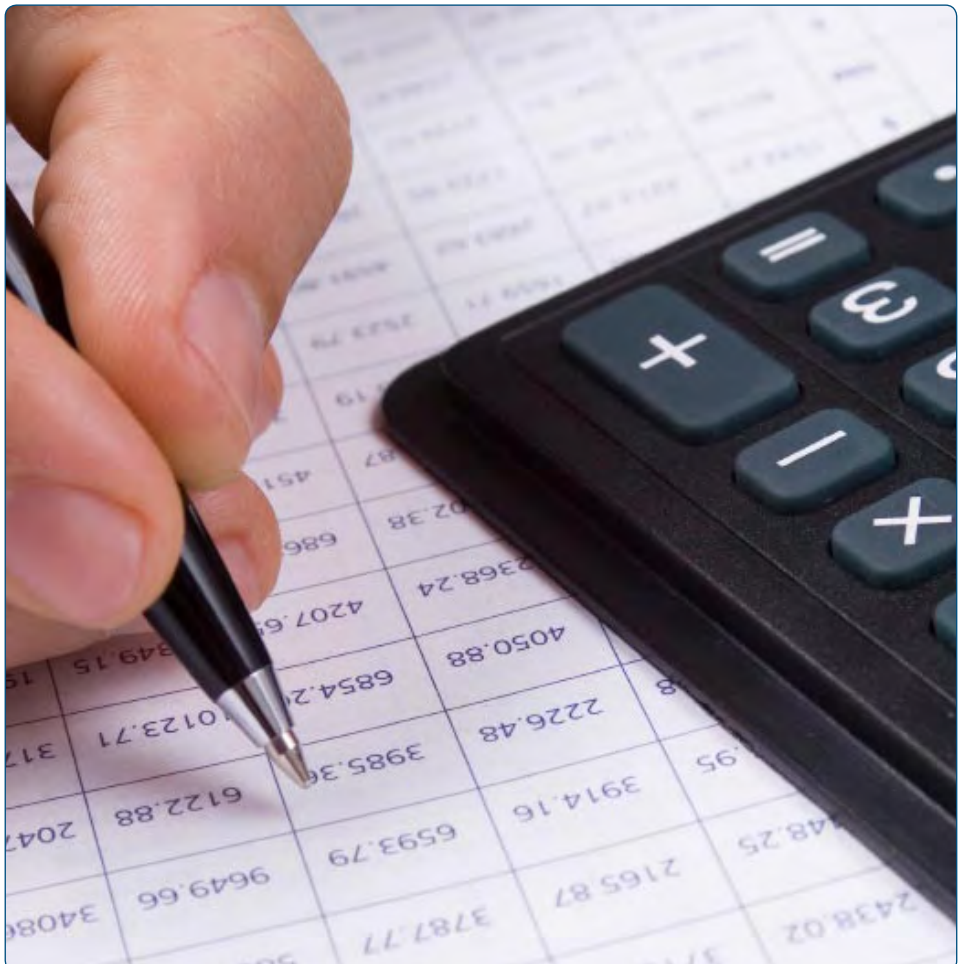
Be aware of difference between imperial and metric measurements.

Calculate values using electrical formulae.

- Ohm's law
- Kirchhoff's law

Underpinning knowledge / understanding

ETITO has set out the underpinning maths knowledge and skill requirements in unit standard 15847 – Demonstrate knowledge of mathematics and mechanics for electrical trades.



Critical thinking tasks

- Anticipate likely fault and part needed (using job sheet information)
- Diagnose faults
- Decide if temporary repair is viable
- Evaluate repair versus replacement
- Judge if you can do the job (skills, knowledge and experience) and ask for assistance if necessary
- Deal with contingencies e.g. missing receipt book, customer doesn't want anti-tilt fixed to wall, customer changes mind after repair is completed
- Determine best route to job
- Work out order to complete jobs
- Negotiate with client e.g. payment immediately following repair
- Anticipate potential issue with client e.g. client not home and determine action

- Apply knowledge
 - Company service model e.g. decide how long to spend on a job, whether appliance should go back to the workshop
 - Warranty conditions e.g. remember that warranty jobs are fixed rate, and may need to be done in short time-frames

- Customer payment history e.g. to make decision about whether to proceed with service or to get payment
- Plan travel routes



Critical thinking skills

Identify if they have enough knowledge and skill to take action on own.

Identify when they do not have enough knowledge and skill and need assistance from others.

Apply fault-finding methodologies.

Deal with contingencies.

- Incorrect part or part not available
- Injuries
- OSH hazard identification

Apply knowledge of safety requirements / principles to work practice.

Use problem solving methodology.

- Identify issue
- Identify possible solutions
- Determine best outcome
- Decide on plan of action
- Carry out plan

Technology related tasks

- Use cell phone
- Use RT
- Use computer
 - Read information
 - Enter data e.g. job complete
 - Track or order parts on internet
 - E-mail
- Use diagnostic (smart) tools
- Read electronic appliance error message codes
- Use Navman or other GPS based navigation system to find directions

Technology skills

Log on to computer.

Read information off computer.

Enter information into computer using mouse and keyboard.

Understand links between computer displays and job tracking systems.



Notes:

This profile relates to electrical appliance service trainees and is based on roles from a number of companies.

The profile represents a combined skill set. Individuals will have strengths and weaknesses across the areas of workplace literacy described in the profile. Electrical appliance service trainees will also use different combinations of the skills identified depending on where they are at in their training.

Different companies may require staff to use slightly different subsets of skills from the profile. In some instances companies may have additional tasks and skills required of their staff. The differences will depend on the company systems and management structure.