

**Listing of
Units of Competence
and
Index to Record and Report Sheets**

AUR 322 99 (Mechanical) Common Compulsory

Compulsory Common Core						
Work Evidence Report No.	Unit Number	Competency Unit Title	Work Evidence Required	Record Page No	Report Page No	Date Presented to RTO
N/A	AUR70125A	Follow Workplace Occupational Health and Safety procedures	No	N/A	N/A	N/A
N/A	AUR70278A	Use of and maintenance of workplace tools and equipment	No	N/A	N/A	N/A
N/A	AUR70314A	Contribute to workplace communication	No	N/A	N/A	N/A
N/A	AUR70421A	Establish relations with customers	No	N/A	N/A	N/A
Compulsory Stream						
7292BW	AUR00108A	Carry out maintenance and/or component servicing operations	Yes	7	18	
7292DW	AUR01170A	Service engines and associated engine components	Yes	9	19	
7292FW	AUR18708A	Carry out minor repairs to electrical circuits/systems	Yes	10	20	
7292HW	AUR18676A	Test, service and replace battery	Yes	11	21	

Listing of Units
Off the Job Modules,
Change of Employment Details

Marine Stream Common Compulsory

Unit No	Unit Title	Module No	Module Name	Result	Attend Actual Possible
AUR70125A	Follow workplace Occupational Health and Safety Procedures	3223B	Coping with injury in the Workshop		
		7292AA	Automotive Mechanical and Electrical OH&S		
AUR70278A	Use of and maintaining workplace tools and equipment	7292AB	Automotive Mechanical and Electrical Tools		
AUR70314A	Contribute to workshop communications	7292K	Automotive workshop communication		
AUR70421A	Establish relations with customers	7292L	Automotive customer relations		
	Underpinning knowledge & skills	7292C	Automotive Mechanical, Hydraulic & Pneumatic		
		7292E	Automotive Electrical Principles		
		7292F	Automotive Electrical Systems		
		7292M	Automotive Training and the Industry		
AUR00108A	Carry out maintenance/servicing components	7292BA	Automotive maintenance and service		
AUR01170A	Service engines & associated engine components	7292DA	Automotive engine operation and service		
AUR18676A	Test, service & replace batteries	7292H	Automotive batteries		
AUR18708A	Carry out minor repairs to electrical circuits/systems	7292FA	Electrical systems minor repairs		

Change of Employer Details

SECOND EMPLOYER

Commencement of Employment: _____

Transfer or Termination of Employment: _____

Company or Business Name: _____

Trading Name (if different from above): _____

Address: _____

Contact Details: Phone: _____ **Mobile:** _____

FAX: _____ **E-mail:** _____

Change of Employer Details

THIRD EMPLOYER

Commencement of Employment: _____

Transfer or Termination of Employment: _____

Company or Business Name: _____

Trading Name (if different from above): _____

Address: _____

Contact Details: Phone: _____ **Mobile:** _____

FAX: _____ **E-mail:** _____

Change of Employer Details

FOURTH EMPLOYER

Commencement of Employment: _____

Transfer or Termination of Employment: _____

Company or Business Name: _____

Trading Name (if different from above): _____

Address: _____

Contact Details: Phone: _____ **Mobile:** _____

FAX: _____ **E-mail:** _____

OFF THE JOB MODULE DESCRIPTORS

Coping with Injury in the Workplace 3223B Nominal Duration: 8 hours.
MODULE PURPOSE: The purpose of this module is to provide very basic knowledge of First Aid practices. It is intended that the module will be used in a range of courses requiring study of 8 hours of First Aid only..
On successful completion of this module the learner should be able to: <ul style="list-style-type: none">• Outline the basic concepts underlying the practice of First Aid:• Demonstrate effective single and two person cardio-pulmonary-resuscitation.• Describe the First Aid management for a bleeding casualty.• Describe the First Aid management of burns.
PREREQUISITES: There are no prerequisites for this course.

Automotive Mechanical & Electrical OH&S 7292AA Duration: 12 hours.

MODULE PURPOSE: This module provides automotive mechanical and electrical trainees and apprentices with the knowledge that will enable them to conform to the laws that govern occupational health and safety in an automotive mechanical or electrical service and repair workplace.

The module will also enable the learner to identify typical automotive workplace hazards and follow procedures that will control the risks associated with those hazards to prevent injury, illness and death. The module also enables learners to respond in a correct and safe manner to emergencies that may arise in an automotive service and repair workplace and to follow established security procedures.

On successful completion of this module this learner should be able to:

- List the main features of the law relating to occupational health and safety issues in an automotive workshop.
- Describe effective procedures aimed at preventing illness, injury and death at the workplace.
- Identify hazardous automotive workshop equipment and conditions.
- Describe the safe procedures for manual handling.
- Explain the effective use of automotive workshop fire fighting equipment.
- Outline safe and effective automotive workshop emergency and security procedures.

Occupational Health and safety is a critical issue in all automotive service and repair workplaces and training establishments and should be addressed as early as possible in the training of all trainees or apprentices.

This module should precede all other modules in any course it is included in.

PREREQUISITES: NIL

Automotive Mechanical & Electrical Tools 7292AB Duration: 42 hours.

MODULE PURPOSE: This module provides automotive mechanical and electrical trainees and apprentices with the knowledge and skill to select, safely use and maintain tools and equipment used in an automotive mechanical/electrical service and repair workplace.

In this module the trainee or apprentice will learn to use workshop equipment and tools to remove and fit vehicle road wheels and other components. The module will also enable the learner to select and fit or apply fasteners and sealing devices and materials typical to automotive mechanical/electrical service and repair activities.

On successful completion of this module the learner should be able to:

- Select and safely use automotive hand and power tools and workshop equipment.
- Use workshop equipment and tools to remove and fit vehicle road wheels and other components.
- Select and correctly use or fit fasteners typical to automotive mechanical/electrical service and repair activities.
- Identify automotive gaskets, seals, sealants and adhesives and state their application.
- Use an oxy/acetylene welding plant to apply heat to aid in the disassembly and assembly of automotive mechanical components.

PREREQUISITES: 7292AA Automotive Mechanical and Electrical OH&S

Automotive Maintenance and Service 7292BA Duration: 32 hours.

MODULE PURPOSE: : This module provides automotive mechanical and electrical trainees and apprentices with the knowledge and skills to perform routine maintenance and service operations as specified by vehicle, plant or equipment manufactures.

On successful completion of this module this learner should be able to:

- Select the correct lubricant or fluid for given automotive maintenance or service operations on specific vehicles, plant or equipment.
- Interpret and follow vehicle and equipment servicing schedules.
- Perform routine service or maintenance procedures as specified in vehicle, plant or equipment service or maintenance schedules.
- Explain the procedures involved in presenting a customer's vehicle, plant or equipment in a clean condition.

PREREQUISITES: 7292AA Automotive Mechanical and Electrical OH&S

Automotive Mechanical, Hydraulic and Pneumatic 7292C Duration: 40 hours.

MODULE PURPOSE: This module provides automotive mechanical and electrical trainees and apprentices with an understanding of the mechanical, hydraulic, pneumatic, power transmission and heat transfer principles that underpin the operation of a wide range of vehicle systems, assemblies and components. This will aid the learner in explaining the operation of automotive systems, assemblies and components and in performing tests and identifying faults in those systems, assemblies and components.

The module also provides the learner with an understanding of the basic properties of materials that automotive mechanical and electrical components are made from to enable them to employ appropriate procedures when carrying out service and repair operations.

This understanding is essential for the learner to be able to attempt the modules of Brake System, Suspension and Steering Systems, Manual and Automatic Transmission, Final Drives and Drive Lines and Air Conditioning..

On successful completion of this module the learner should be able to:

- Explain mechanical principles and identify their automotive applications
- Explain hydraulic principles and identify their automotive applications
- Explain pneumatic principles and identify their automotive applications.
- Explain the principles of power transmission and identify typical applications.
- Explain the principles of heat and heat transfer and identify their automotive applications.
- Explain the properties of materials used in the construction of automotive components, identify typical applications of each and the precautions to be taken during service and repair operations.

PREREQUISITES: 7292AA Automotive Mechanical and Electrical OH&S

Automotive Engine Operation and Service 7292DA **Duration: 44 hours.**

MODULE PURPOSE: This module provides automotive mechanical and electrical trainees and apprentices with the knowledge to explain the operation of reciprocating piston internal combustion engines and state the purpose of associate engine systems and their components. This knowledge is essential for the learner to undertake further modules on the repair and overhaul of engines and associated systems.

The module will also provide apprentices and trainees with the knowledge and skills to perform the more complex service procedures of replacing engine timing belts and adjusting engine valve tappet clearances.

On successful completion of this module this learner should be able to:

- Explain the operation of 2 and 4 stroke engines.
- Replace engine timing belts and adjust engine valve tappet clearances.
- Explain the purpose of engine cooling systems and their major components.
- Explain the purpose of engine lubrication systems and their major components.
- Explain the purpose of petrol and diesel fuel system and their major components
- Explain the purpose of engine induction and exhaust systems and their major components.

PREREQUISITES: 7292AA Automotive Mechanical and Electrical OH&S.

Automotive Electrical Principles 7292E**Nominal Duration: 42 hours.**

MODULE PURPOSE: This module provides automotive mechanical and electrical apprentices and trainees with the knowledge and skills to use electrical test meters and describe the electrical principles that relate to the operation of automotive electrical components and systems.

This knowledge is essential for the learner to be able to attempt the modules on : Electrical Systems, Ignition Systems, Emission Controls, Engine Management Systems, Brake Systems, Suspension and Steering Systems, Fuel Systems and Air Conditioning Systems

On successful completion of this module the learner should be able to:

- make electrical measurements to confirm the relationship between current, voltage and resistance.
- describe the effects of an electric current and their automotive application.
- describe the operating principles of the automotive components used to produce electrical energy.
- determine the effect on current, voltage and resistance when loads are connected in series and parallel.
- interpret automotive circuit diagrams.

PREREQUISITES 7292AA Automotive Mechanical and Electrical OH&S.

Automotive Electrical System: 7292F**Nominal Duration: 26 hours.**

MODULE PURPOSE: The purpose of this module is to provide automotive mechanical and electrical trainees and apprentices with the knowledge and skills to outline the purpose and operation of automotive electrical systems. This knowledge is essential for learners to undertake further modules on the repair of starting systems, charging systems and ignition systems and engine management systems.

The module also provides trainees and apprentice with underpinning knowledge for subsequent modules on electronically controlled automotive systems.

On successful completion of this module this learner should be able to:

- outline the operation of automotive charging, starting, ignition, lighting and traffic warning systems.
- measure voltages in automotive charging, starting, ignition, lighting and traffic warning systems to determine their operational status.
- outline the fundamentals of electronically controlled automotive systems..

**PREREQUISITES: 7292AA Automotive Mechanical and Electrical OH&S,
7292E Automotive Electrical Principles.**

Electrical System Minor Repairs 7292FA Nominal Duration: 8 hours.

MODULE PURPOSE: This module provides automotive mechanical and electrical trainees and apprentices with the knowledge and skills to carry out minor repairs to automotive electrical systems and circuits.

On successful completion of this module the learner should be able to:

- test electrical circuits and systems to locate and identify faults.
- Carry out minor repairs on automotive electrical circuits and systems.

PREREQUISITES: 7292AA Automotive Mechanical & Electrical OH&S, 7292E Automotive Electrical Principles, 7292F Automotive Electrical Systems.

Automotive Batteries: 7292H Nominal Duration: 8 hours.

MODULE PURPOSE: This module provides automotive mechanical and electrical trainees and apprentices with the knowledge and skills to service, test and replace automotive batteries.

This module is for individuals employed or being trained in a wide range of callings in the automotive mechanical and electrical service and repair industries.

The battery is an essential part of almost all automotive vehicles or plant and those involved in their service or repair and often confronted with vehicles with batteries that have low state of charge or are faulty. This module is designed to enable such personnel to perform tests on batteries and carry out service or replacement activities.

The learning outcomes of this module should enable the learner to test batteries to determine their state of charge and serviceability, service and charge batteries, replace batteries and state vehicles with the aid of an auxiliary battery.

On successful completion of this module this learner should be able to:

- Service, Test, and replace automotive batteries, in a safe manner.
- Apply all Occupational Health and Safety and Institute policies and regulations.

PREREQUISITES: 7292AA Automotive Mechanical and Electrical OH&S.

Automotive Workshop Communication 7292K	Duration: 16 hours.
MODULE PURPOSE: This module provide automotive service and repair trainees and apprentices with the knowledge and skills to effectively obtain, convey, retrieve and maintain automotive service and repair workshop information.	
On successful completion of this module the learner should be able to:	
<ul style="list-style-type: none"> • Use communication skills to receive and convey information and ideas in an automotive service and repair workplace. • Retrieve documented information from sources typically found in the automotive service and repair workplace. • Maintain automotive service and repair workplace records. 	
PREREQUISITES: NIL.	

Automotive Customer Relations 7292L	Duration: 8 hours.
MODULE PURPOSE: This module provide automotive service and repair trainees and apprentices with a knowledge of the social and technical communication skills required to effectively establish, develop and maintain good relationships with automotive service and repair industry customers.	
On successful completion of this module the learner should be able to:	
<ul style="list-style-type: none"> • Use communication and social skills to establish effective customer relations. • Use effective communication skills to identify customer needs. 	
PREREQUISITES: 7292K Automotive Workshop Communications..	

