

AHCMOM217

Operate Quad Bikes

Learner Guide Instructions

Who is this document for?

The learner.

What is in this document?

- Course training content (this matches the PowerPoint Presentation).
- Review questions.

What do you need to do before you use it for the first time?

1. Rebrand the document.
2. Review the document as part of your validation process.

See the 'Read Me First' document for a complete set of instructions on how to use these resources.



LEARNER GUIDE

AHCMOM217 Operate Quad Bikes

Learner Name:	
Learner ID:	
Learner Contact Number:	
Learner Email Address:	
Date Training Commenced:	

This Book Contains:

- Course Information.
- Review Questions.

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Evaluation Copy Only

1.1 Introduction

This course is based on the unit of competency **AHCMOM217 Operate Quad Bikes**.

You will learn about:

- ◆ Preparing a quad bike for operations.
- ◆ Operating a quad bike.
- ◆ Completing quad bike operations.
- ◆ Cleaning and maintaining a quad bike.



1.1.1 Common Terms and Definitions

The following terms or acronyms relate to quad bike operations:

Acronym/Term	Definition
Active Riding	Active riding describes good riding technique using hand-eye coordination and the appropriate transfer of body weight to maintain the stability of the quad bike.
Biosecurity	Procedures or measures designed to protect the public from harmful biological or biochemical substances.
Corrugation	The formation of ripples across the surface of gravel or dirt roads.
Environment	The surroundings or conditions in which a person, animal, or plant lives or operates.
PPE	Personal Protective Equipment.
Rollover	The overturning of a vehicle.
Terrain	A stretch of land.
Quad Bike	A four-wheeled motorbike that is often used for work on farms.

1.2 What is a Quad Bike?

A quad bike is a four-wheeled motorised vehicle which rides on low-pressure tyres, with a seat that is straddled by the rider, steered using handlebars and controlled using a small thumb-operated throttle.



1.2.1 Using a Quad Bike



A quad bike (or four-wheeled motorbike) is a popular and useful machine commonly used for work on farms. However, they do have serious safety risks.

Operators need to understand that a quad bike **is not**:

- ◆ An all-terrain vehicle.
- ◆ Suitable for carrying passengers.
- ◆ Suitable for all conditions.
- ◆ Suitable for highway use.

Quad bikes can be a cheaper and more agile alternative to a car and are typically used for tasks such as:

- ◆ Droving/mustering.
- ◆ Checking fences.
- ◆ Checking stock and crops.
- ◆ Checking wildlife and natural habitats.
- ◆ Checking water tanks and troughs.
- ◆ Weed control.
- ◆ Towing.
- ◆ Spraying.
- ◆ Transporting the operator.
- ◆ Transporting materials, including:
 - ◆ Fencing supplies.
 - ◆ Tools.
 - ◆ Machine parts.
 - ◆ Drenching products.
 - ◆ Fruit and vegetables.
 - ◆ Small animals.



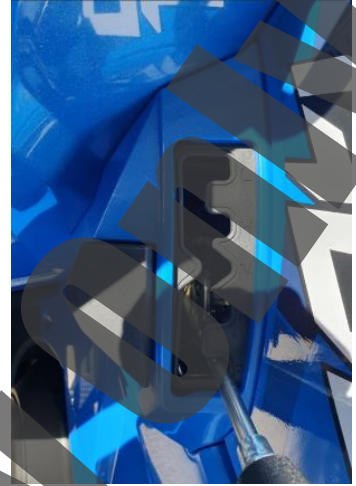
1.2.2 Basic Operations

There are various quad bike makes and models, each with different controls. Quad bikes can be two-wheel drive or four-wheel drive and may be manual or automatic transmission.

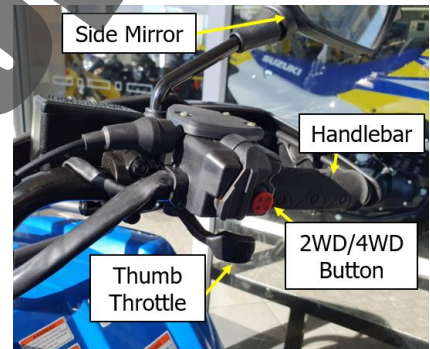
To change gears on a quad bike with manual transmission you will need to use the clutch, throttle, and shift lever, all at the same time. If you are on a hill, you may also need to use a brake at the same time.

Automatic transmissions change gears for you. These types of quad bikes can be simpler to operate as there are not as many controls to use. Some automatic transmission quad bikes may also have a lever for either hi or lo gearing:

- ◆ **High/Hi gear:** The quad can travel at a faster speed; however, it will not have as much power at lower speeds.
- ◆ **Low/Lo gear:** The amount of power at the lower speed is significantly increased, allowing you to tow or haul more. However the max speed is significantly reduced.



The following diagrams are a basic guide to the controls and features of a quad bike. The operator's manual for your quad bike will have detailed diagrams relevant to your vehicle.



Review Questions

1.	What are four (4) examples of tasks a quad bike may be used to complete?	<input type="checkbox"/>
1.		
2.		
3.		
4.		

2.

What are three (3) controls or features you might find on a quad bike?



1.

2.

3.

1.3 Working Safely

You must follow all safety rules and instructions when performing any work. If you are not sure about what you should do, ask your boss or supervisor, or check the operator's manual for your quad bike.



1.3.1 Regulations and Legislation

Every workplace must follow laws and rules to keep everyone safe. There are four (4) main types:

Law	Description
Acts	Laws to protect the health, safety and welfare of people at work.
Regulations	Gives more details or information on particular parts of the Act.
Codes of Practice	Are practical instructions on how to meet the terms of the Law.
Australian Standards	Give you the minimum levels of performance or quality for a hazard, work process or product.

Work Health and Safety (WHS), called Occupational Health and Safety (OH&S) in some states, outlines a series of requirements to keep everyone in the workplace safe. If you have questions about safety rules, you should talk to your manager or supervisor.

The **Consumer Goods (Quad Bikes) Safety Standard 2019** outlines the safety standards required for new quad bikes and imported second-hand quad bikes. According to this standard, from 11th October 2021, all general-use quad bikes need to have operator protection devices (OPD) fitted on or incorporated into the quad bike design. This is to reduce the risk of rollover.



1.3.2 Operations Documentation

Before starting your work you need to make sure you have access to all operations documentation for the job. This will help you to do your work in the safest way and make sure all work is compliant.

Operations documentation includes:

- Site Details**
 The information and safety requirements of the workplace environment (where you will be working).
- Hazard Details**
 Any hazards in the work area or related to the work. This could also include instructions on how to handle dangerous or hazardous materials.
- Task Details**
 Instructions of what the work is or what you will be doing (this can include diagrams or plans). Also instructions on how to safely do the job.
- Faulty Equipment Procedures**
 Isolation procedures to follow or forms to fill out.
- Signage**
 Site signage tells you what equipment you need to have, or areas that are not safe to be in.
- Emergency Procedures**
 Instructions on what to do in emergency situations, for example if there is a fire, accident or emergency where evacuation or first aid is needed.
- Equipment and Work Instructions**
 Details of how to operate plant and equipment and the sequence of work to be done.

1.3.3 Work Instructions

Your work instructions will tell you the safest way to do the job and the equipment you will need to use.

You will need to check your work instructions with your boss or supervisor to make sure you know exactly what you need to do. Your supervisor will be able to tell you about potential hazards and how you can manage them as well as the appropriate safe working procedures to follow.

Sometimes, there may not be work instructions or a supervisor to refer to for help. In those circumstances, it is helpful to take some time to plan what you intend to do with the quad bike and identify what hazards might be involved before you start.



Quad bike work is often conducted alone, but it is essential that you tell your supervisor, or another suitable person where you are going, what you are doing and when you will be back.

If you have an accident, you will likely be unable to call for help. Having someone raise the alarm and come and find you can be the difference between life and death.

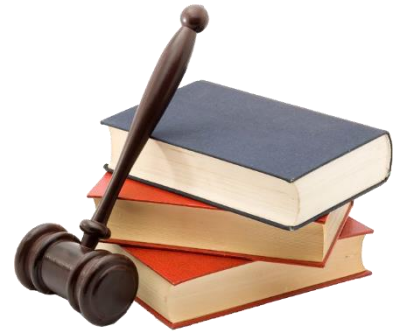
Keep communication as consistent as possible. If your plans change, inform someone before riding to an area where you are not expected to be.

1.3.4 How to Keep Everyone Safe

WHS law says that all companies and workers must keep themselves and others safe while working. This is called a **duty of care**.

To keep yourself and other workers safe, you need to:

- ◆ Follow instructions.
- ◆ Follow workplace rules.
- ◆ Make sure equipment is safe to use.
- ◆ Carry out work safely.
- ◆ Report problems.



If you think something is dangerous, tell your boss or supervisor as soon as possible.



Your worksite will also have instructions for working safely, including:

- ◆ Emergency procedures, including fire-fighting equipment, first aid and evacuation.
- ◆ Handling hazardous materials.
- ◆ Safe operating procedures.
- ◆ Personal protective clothing and equipment.
- ◆ Safe use of tools and equipment.

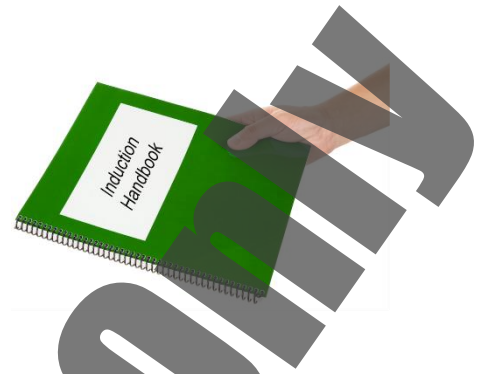
Instructions should be found in an induction manual, work instructions, workplace signage or other relevant documents.

1.3.5 No-Go Areas

A 'no-go' area is an established area where a quad bike should not be operated, usually because it is dangerous or there may be environmental considerations relating to the area.

The no-go areas will be explained to you during the workplace induction. Ensure the person conducting the induction explains the hazards associated with the no-go areas. This will mean that if you accidentally drive the quad bike into these areas, you will be familiar with the hazards and more ready to manage them.

Ensure you enforce the no-go areas to reduce risk to workers and the environment.



Review Questions

3.

What information can you find in Australian Standards?

4.

What is the purpose of work instructions?

5.

What is duty of care?

6.

What is a no-go area?



1.4 Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) is clothing and equipment designed to lower the chance of injury on the job. It is required to enter most work sites.



1.4.1 Selecting PPE

Before using the quad bike you need to select the appropriate PPE. The PPE you choose should follow any instructions or procedures relevant to the usage of the quad bike and be appropriate for the conditions on site.

It is recommended that you always wear an appropriate and properly fitting helmet. For quad bikes, manufacturers recommend the use of a helmet as required PPE, and some state/territory authorities enforce this.

Other recommended PPE includes:

- ◆ Foot protection – non-slip work boots.
- ◆ Hand protection – gloves.
- ◆ Eye protection – goggles or visors.
- ◆ Ear protection – plugs.
- ◆ Hi-visibility clothing makes you stand out and lets others know where you are.
- ◆ Weather and environment protection – clothing that protects you from the sun, the cold and abrasions.
- ◆ UV protection – sunscreen.



1.4.2 Quad Bike Helmet






While operating a quad bike, you must wear a helmet that complies with **AS1698:2006 Protective helmets for vehicle users**. You should have your own personal helmet that fits snugly and provides good, all-round visibility.

Your workplace will have policies in place detailing which helmets are suitable to use for each job. Your work instructions should also include which helmet to use for your job.

There are three types of helmets often used on quad bikes:

- ◆ **Full-face helmet** – protects the head, neck and face. Often used in dense environments where the operator is at risk of facial injuries, e.g. riding through scrub.
- ◆ **Open-face helmet** – protects the head and sometimes the neck.
- ◆ **'Shorty' style helmet** – protects the head. Offers peripheral vision, hearing and airflow often limited by other helmets. Useful for mustering on farms. A shade brim can be attached.



				
Full-face helmet	Full-face helmet with shade brim	Open-face helmet	Open-face helmet with shade brim	'Shorty' style helmet



Before starting your quad bike, make sure that your helmet has been checked for any faults. If your helmet is safe to use, make sure it is securely fastened according to workplace safety requirements.

If you travel on a public road, your helmet must comply with the standard AS/NZS 1698:2006 (or United Nations Economic Commission for Europe Regulation 22.05 (UNECE22-05)). This will ensure your helmet meets the requirements for on-road and off-road use.

1.4.3 Maintain PPE

Make sure any PPE you wear, including your helmet, is in good condition, fits well and is suitable for the job.

If you find any PPE that is not in good condition, tag it, remove it from service and tell your supervisor about the problem. Your supervisor or yourself will be responsible for organising repairs or replacement of faulty PPE.

Before putting on your helmet, you need to check the following:

- ◆ The straps are in good condition, e.g. no fraying or wear.
- ◆ There are no cracks or breaches on the outside of the helmet.
- ◆ All face-covering accessories and visors are cleaned, adequately fixed and do not obstruct the operator's sight.



Review Questions

7.

What are four (4) recommended pieces of PPE for operating a quad bike?



1.

2.

3.

4.

8.

What are three (3) types of helmets used on quad bikes?



1.

2.

3.

1.5 Environmental Protection

Environmental protection requirements are part of every worksite. Ensure you check with your supervisor about what environmental impacts must be managed while riding a quad bike.



1.5.1 Environmental Hazards

Environmental hazards include any activities which may create pollution or waste or cause erosion that could harm people or the environment. All environmental protection requirements should be listed in an 'Environmental Management Plan' for the site. This is a document produced before work begins which identifies environmental hazards and how they should be managed on site.

It can include details for:

- ◆ Waste management.
- ◆ Emissions control.
- ◆ Noise control.
- ◆ Dust management.
- ◆ Erosion control.

The plan will outline the steps and processes needed to prevent or minimise damage to the environment through the use of the quad bike.



1.5.2 Managing Environmental Impacts

Quad bike operations have the potential to heavily impact the environment. Care must be taken to reduce the negative impact as much as possible.

Examples of negative impacts include:

- ◆ Breakage and dislodgment of rock and other formations.
- ◆ Compaction of soil and other deposits.
- ◆ Development of quad bike facilities and signs.
- ◆ Introduction of new flora (plants) and fauna (animals).
- ◆ Vegetation trampling and breakage.
- ◆ Disturbance of fauna.
- ◆ Chemical alteration of environments.
- ◆ Noise.



These impacts can be reduced or avoided by:



- ◆ Keeping to roads, tracks and trails (not 'bush-bashing').
- ◆ Complying with land management principles and policies.
- ◆ Planning and conducting activities in a manner that minimises environmental impact.
- ◆ Avoiding fragile or sensitive environments and threatened species.
- ◆ Being aware of upcoming terrain and scouting ahead on foot when the terrain becomes challenging.
- ◆ Limiting the size of the party travelling (number of vehicles).
- ◆ Considering seasonal restrictions in some areas.
- ◆ Enforcing company policy and code of ethics and conduct.

You need to report any environmental issues that you come across. Give all of the details to your supervisor, who will be able to pass them on or direct you to the right person to report to.