

RIIMPO308F

Conduct Tracked Dozer Operations

Learner Guide Instructions

Who is this document for?

The learner.

What is in this document?

- Course information that matches the PowerPoint presentation.
- Review questions.
- Practical assessment instructions for learners.

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.
3. Set the reading and test time limits that are highlighted in pink at the end of the document.

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

LEARNER GUIDE

RIIMPO308F Conduct Tracked Dozer Operations

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

This Book Contains:

- Course Information.
- Review Questions.
- Practical Assessment overview and instructions.

Evaluation Copy Only

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1.1 Introduction

This course is based on the unit of competency **RIIMPO308F Conduct Tracked Dozer Operations**.

The information in this unit is relevant to the mining and extractive industries.



You will learn about:

- ◆ Planning and preparing for operations.
- ◆ Conducting routine checks.
- ◆ Operating the machine.
- ◆ Carrying out post-operational procedures.

1.1.1 What is a Tracked Dozer?

A tracked dozer is one of the most common dozers found. It differs from a wheeled dozer as it has tracks or conveyor-styled wheel coverings.

These tracks spread the weight of the machine over a greater area, making the dozer more stable to operate in difficult or dangerous environments.

The tracks allow the dozer to turn tightly, giving more manoeuvrability, particularly in narrow spaces. The tracks also enable the dozer to push heavier and larger loads.



On a mine site a dozer may be used for:

- Towing and pushing other plant and equipment.
- Pushing and preparing overburden.
- Bench and pad preparation.
- Trimming and cutting.
- Building and maintaining stockpiles.
- Shifting materials.
- Supporting other vehicles.

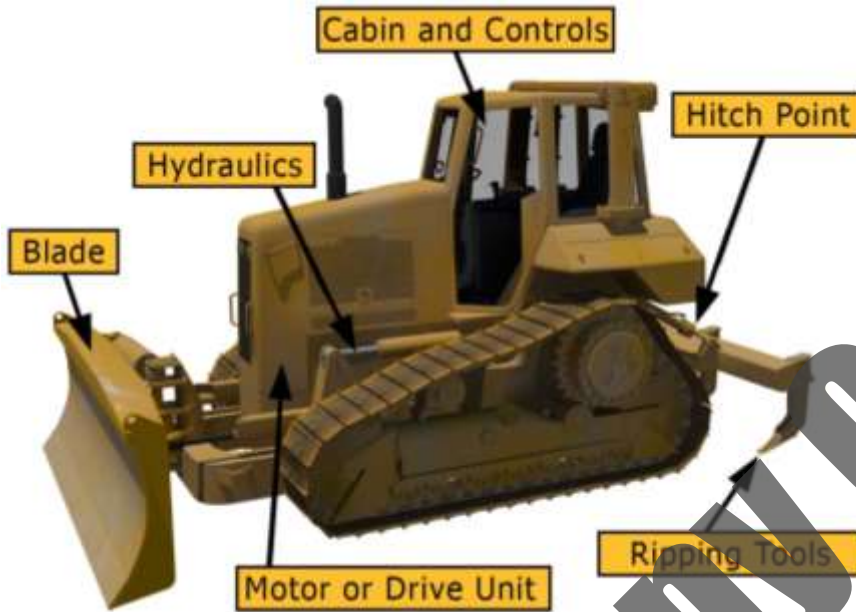


The dozer can also be used for dumping operations, including:

- ◆ Creating windrows.
- ◆ Dump establishment.

1.1.2 Common Tracked Dozer Components

The following diagram outlines the basic components of a tracked dozer:



Part or Component	Explanation
Blade	The pushing implement on the machine.
Hydraulics	Generic name given to all hydro-static drive units including hoses and rams.
Motor or Drive Unit	Engine of the machine.
Cabin and Controls	Part where operator sits and operates the machine. Controls including joystick or control levers, transmission controls, brakes, emergency stop controls.
Hitch Point	Point where linkage between different parts occurs.
Ripping Tools	Points, tips, boots, or blades designed to tear or break hard materials. These may need replacing regularly.

For exact details on the components of the machine you are working with, check your operator's manual as parts can vary with different makes and models.

1.2 Site Policies and Procedures

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. They will tell you what you need to do and how to do it in a safe way.

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.

Your worksite will also have instructions for working safely including:

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



Review Questions

1.	List 3 things that may be included in 'operations documentation'.	<input type="checkbox"/>
1.		
2.		
3.		

1.3 Work Instructions

You need to be clear about what work you will be doing. Make sure you have everything about the job written down before you start. This includes what you will be doing, how you will be doing it and what equipment you will be using.

Make sure you have all of the details about where you will be working. For example:



- ◆ **The Site** – Is there clear access for all equipment? Are there obstacles in the way? What are the ground conditions like? Is the site ready for your work to begin? Are there any 'out of bounds' areas you need to avoid?
- ◆ **The Weather** – Is there wind, rain or other bad weather? Is it too dark?
- ◆ **Traffic** – Are there people, vehicles or other equipment in the area that you need to think about? Do you need to get them moved out of the area? Do you need to set up barriers or signs?
- ◆ **Hazards** – Are there dangerous materials to work around or think about? Will you be working close to other people or vehicles?

You also need to make sure you have all of the details about the kind of work you will be doing:

- ◆ **The Task** – What kind of material is being work with? How much is there to work with? How long do you have to complete the work? Where will the work be done? Does the job need a special type of attachment?
- ◆ **Plant** – What type of plant will be used? How big is it? How much room does it need?
- ◆ **Attachments** – What equipment will you need to move the materials safely? Is the equipment available?
- ◆ **Communications** – How are you going to communicate with other workers?
- ◆ **Procedures and Rules** – Do you need any special permits or licences? Are there site rules that affect the way you will do the work, e.g., contamination control requirements?



1.3.1 Reading and Checking Your Work Instructions

All work needs to follow worksite, environment and company safety procedures.



Procedures help to make sure that all work is done in a safe way, without damaging equipment or putting people in unsafe situations. They also help to make sure that work is done in the correct order and doesn't interrupt or get in the way of other work that is happening on the site.

Your work instructions will tell you the safest way to do the job, and the equipment that you will need to use. It is a good idea to check your work instructions with your boss or supervisor to make sure you know exactly what you need to do.

If you don't know where to get your instructions or you can't understand them, you can ask your boss or supervisor. They will tell you where to find your work instructions and explain what they mean.

1.3.2 Work Method Statements

Many worksites require a work method statement before any high risk construction work can start. A work method statement is a list of steps that outlines how a job will be done and includes details for any hazards that occur at each step, and what you need to do about them.

These statements can also be known as Safe Work Method Statement (SWMS), Job Safety Analysis (JSA) or Safe Operating Procedure (SOP).

Make sure you understand all of the information in the work method statement before you start the work. It will help you to complete the work as safely as possible.



1.3.3 Plans and Specifications



Some of your work instructions might be given to you in plans, maps, reports and specifications. You will need to get the information out of these documents and use it to do your job.

Specifications will tell you the types, quantities, grades and classifications of materials you will be working with.

You need to check the floor clean up procedures to make sure you are able to achieve the specified levels and grades. These will be outlined in the project specifications and your instructions.



Plans are usually "scale drawings" that represent a large area on a small sheet of paper and show proportion at the same time.

Project plans and maps give you an overview of the site, for example:

- ◆ The location of your work area in relation to the whole mine site.
- ◆ The position of stockpiles, work zones, roads and access areas.
- ◆ The location of environmentally sensitive or 'no go' areas.
- ◆ Contours, or the lay of the land, e.g. slopes, banks, depressions.

1.3.4 Geological and Survey Data

Geological and survey data is used to guide you through a job.

It tells you what the area is like, what things you will need to think about and what work you need to complete.



1.3.4.1 Geological Data

Geological data gives you information about:

- ◆ Rock or material types and characteristics.
- ◆ Wet and dry areas.
- ◆ Water tables or other sources of water.
- ◆ Broken ground, faults or joints.
- ◆ Compaction levels.

All of this information will help you to decide on what equipment you need to use, where and how you should travel with equipment and areas to avoid.



1.3.4.2 Survey Data



Survey data covers information about job outcomes including:

- ◆ Bench heights and widths.
- ◆ Floor heights.
- ◆ Floor, ramp and bench grades.
- ◆ Underground working and voids.



Survey data can also be used to mark out:

- ◆ Work circuits.
- ◆ Pick up areas.
- ◆ Dump areas.
- ◆ Spill zones.
- ◆ Routes or traffic ways.

Review Questions

2.	What details about the work area can you get from your work instructions?	<input type="checkbox"/>

3.

Why is it a good idea to check your work instructions with your boss or supervisor?

4.

What details about materials can you get from job specification?

5.

What will geological data help you to decide?

1.4 Emergency Procedures



Emergency procedures will vary depending upon the worksite. These procedures could include:

- ◆ Emergency shutdown.
- ◆ Evacuation.
- ◆ First aid.
- ◆ Fire fighting.

1.4.1 Emergency Shutdown of Equipment

If there is a fire, emergency or accident you might need to use the emergency stop on the equipment you are using. This will turn the equipment off immediately. You can also use the emergency stop if the equipment stops working properly or you lose control of the equipment.



1.4.2 Evacuation



Things to remember are:

1. Keep calm.
2. Move away from the danger to a designated evacuation point, sometimes called an emergency assembly area.
3. Do not let other people into the area.
4. Call emergency services in accordance with workplace procedures and policies.

1.4.3 First Aid

First Aid is the quick care given to an injured or ill person. Every site will have a First Aid Officer. If somebody needs first aid you must tell your supervisor or First Aid Officer. Do not try to give first aid if you have not been trained.

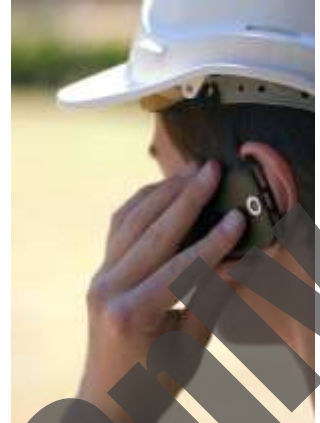


1.4.4 Fire Fighting Equipment

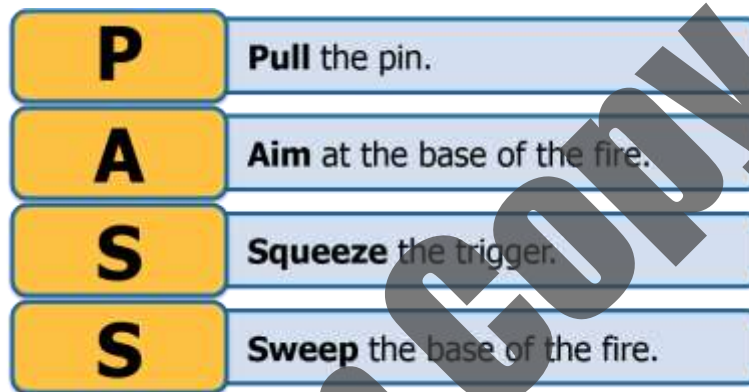
Fire fighting equipment on site could be anything from small fire extinguishers through to large water cannons. Different fire fighting equipment should be used for different types of fire. Always check the equipment for information on what type of fire it can be used on.

Steps for using a fire extinguisher:

1. Evacuate the area.
2. Isolate the area.
3. Call emergency services or other designated on site procedure.
4. If it is safe to do so, use an extinguisher to attempt to control the fire using the **PASS** system.



The **PASS** system:



Contact your site emergency management team as soon as possible and call the fire brigade on 000.

Review Questions

6.	What emergency situations are generally outlined in site emergency procedures?	<input type="checkbox"/>

1.5 Inspect and Prepare the Work Area

Before you start any work you need to look around the site. The inspection and preparation of the worksite includes:

- ◆ Working out the path of movement for plant, vehicles and materials.
- ◆ Identifying hazards, and taking suitable actions to deal with them.
- ◆ Making sure all equipment, resources and workers are available for the task.

It is important to coordinate with other workers when you are inspecting and preparing the site to make sure everyone knows what is going on, what you are planning to do and what they need to do.



All workers on site must understand their own role and the roles of others before starting work. It helps to make sure work is done safely and efficiently.

Workers you may need to coordinate with includes:

- ◆ Other mobile plant operators.
- ◆ Processing plant operators.
- ◆ Maintenance workers.
- ◆ Water truck/cart operators.
- ◆ Service vehicle operators.
- ◆ Crane and float operators.
- ◆ Contractors.
- ◆ Inspectors, both internal and external, including WHS, environmental and quality assurance officers.
- ◆ Supervisors.
- ◆ Site visitors.

1.5.1 Identify Hazards

Part of your job is to look around to see if you can find any hazards before you start any work.

A **hazard** is the thing or situation that causes injury, harm or damage.

When you start checking for hazards, make sure you look everywhere. A good way to do this is to check:

- ◆ **Up high** above your head.
- ◆ All around you **at eye level**.
- ◆ **Down low** on the ground (and also think about what is under the ground).



Some hazards you should check for in the work area:

- ◆ Installed services.
- ◆ Damaged or defective pressurised hoses and fastenings.
- ◆ Abandoned equipment.
- ◆ Adjoining pit walls or structures.
- ◆ Adverse weather conditions (electrical storms, floods, fires).
- ◆ Chemicals.
- ◆ Contaminants.
- ◆ Ancillary equipment.
- ◆ Fences.
- ◆ Holes and pot holes.
- ◆ Over-hanging rocks.
- ◆ Personnel.
- ◆ Unsafe ground.
- ◆ Unstable faces.
- ◆ Vehicles.
- ◆ Power lines.
- ◆ Dust and noise.
- ◆ Conveyors and other fixed plant.
- ◆ Overhead structures and services.
- ◆ Stored energy which may include:
 - ◇ Engine components.
 - ◇ Radiators and cooling systems.
 - ◇ Hydraulic tanks and reservoirs.
 - ◇ Air tanks and reservoirs.
 - ◇ Hydraulic hoses.
 - ◇ Air hoses.
 - ◇ Air conditioning components.
 - ◇ Electrical components.
 - ◇ Braking systems.
 - ◇ Centrifugal forces.

