

LEARNER GUIDE



Non-slewing Crane

RII COMPETENCY

Training support material for:

RIIAN212E

Conduct non-slewing crane
operations

CONTENTS

About this guide	2
Introduction to non-slewing crane	5
High risk licensing and the law	9
Element 1 Plan work / task	15
Element 2 Prepare for work / task	65
Element 3 Perform work / task	128
Element 4 Pack up	163

Introduction to Non-Slewing Crane

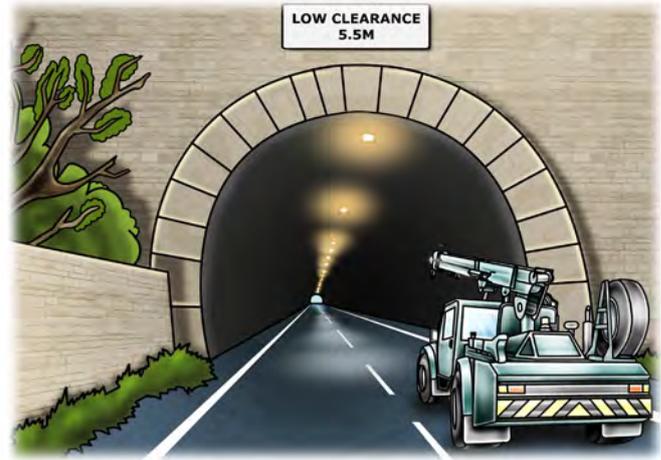


What is a non-slewing crane?

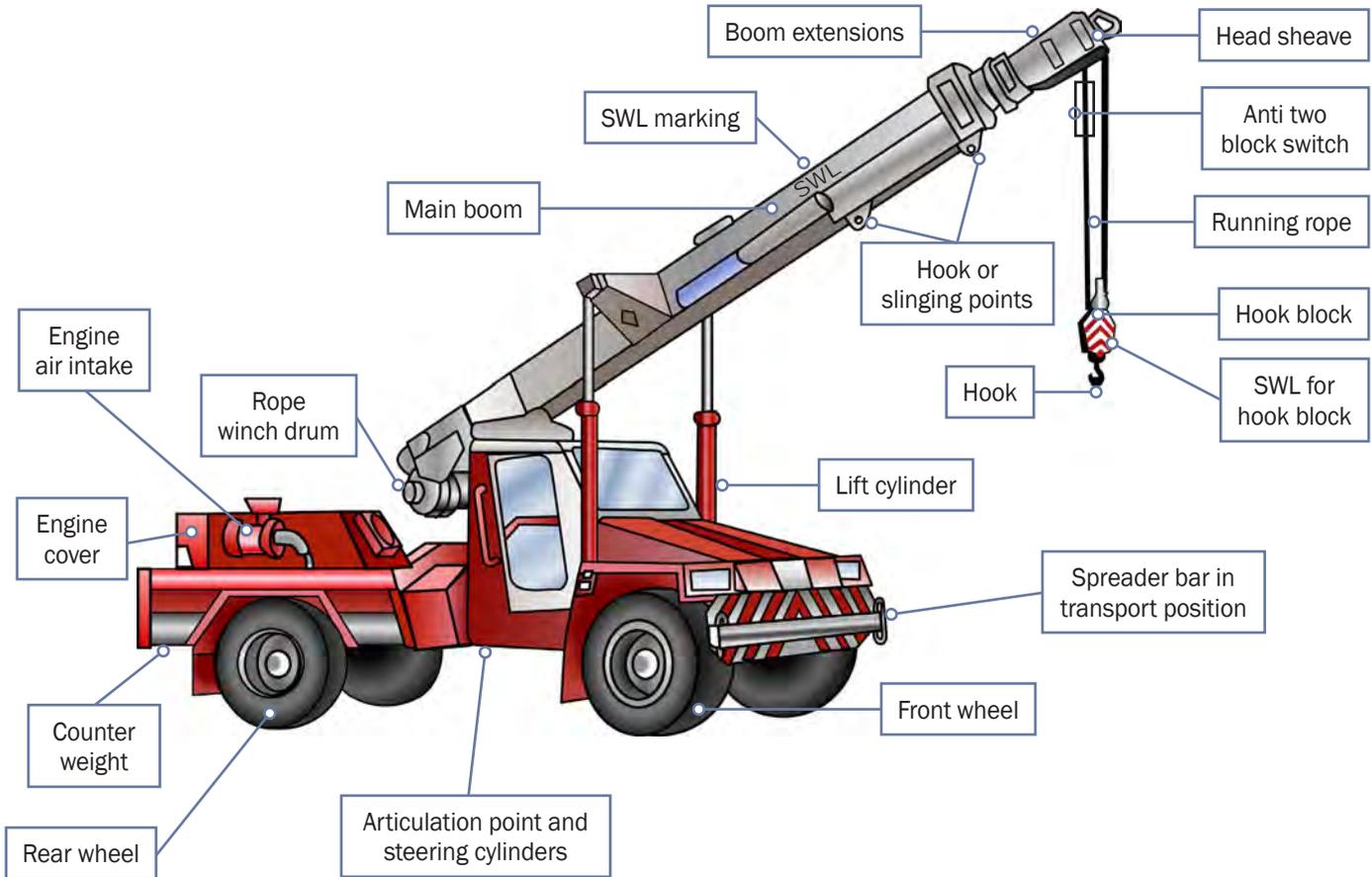
A non-slewing crane is a powered crane which features a boom or jib that does not slew.

The boom can only luff up and down and telescope in and out. The crane is mounted on a vehicle.

In some states a telescopic handler is classed as a non-slewing crane



Parts of a non-slewing crane



Prepare for non-slewing crane operations

Element 1



Communication

You can communicate many different ways. Sometimes the type of communication method depends on the non-slewing crane that you will be working with and the worksite. You must choose the best communication method for the job.

Make sure you **listen** to information and **ask questions** if you do not understand what you have been told.

You can communicate in many different ways. Examples of types of communication are:

Speaking, listening, asking questions

This is very important because it helps you understand how to do your job safely.



Toolbox meetings

Toolbox meetings are like small staff meetings that provide important information.



Two-way radios

These are common on worksites. If you are using them, always make sure they are working properly before you start the job.

Check the batteries have enough charge and check you have the right channel to communicate with your workmates.



Whistle

Whistles can be used when the operator and other workers are both in and out of sight.



Hazard versus risk

What is the difference?

Different hazards and risks emerge constantly—sometimes instantly.

Hazard

A hazard is any thing or any situation which could injure or harm you.

In other words, it is anything that can hurt you.



Risk

A risk is the chance of a hazard causing harm such as injury, illness or even death.

In other words, how likely it is that somebody or something may be harmed by the hazard.



QUESTION 11

You've already planned for site hazards.

What other things do you plan for before using the crane?

Some things to plan for are:

What the task requires you to do.



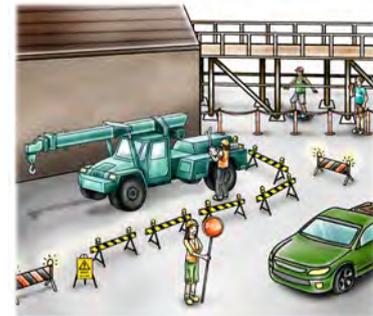
Safe and appropriate communication methods.



How will you get in and out of the site?



Where will you use the crane?



...CONTINUES ON NEXT PAGE

QUESTION 11

...CONTINUED FROM PREVIOUS PAGE

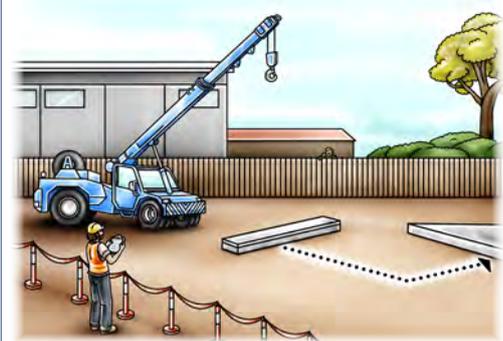
You've already planned for site hazards.

What other things do you plan for before using the crane?

The crane's movement sequence



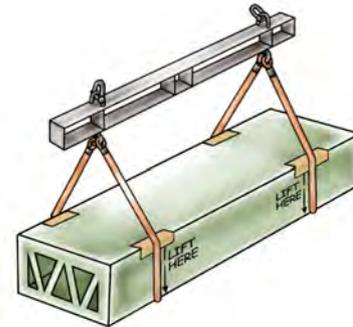
Travel requirements (distance, speed and direction)



Condition and configuration of the load.
Plan for weight and size of load.



Slinging method – balance and security of load.



QUESTION 13

You are working near powerlines. Working near powerlines is **very** dangerous and can kill you.

What are the minimum safe distance rules you **must** follow?

The minimum safe distance rules you must follow can be different for each state/territory. For example, only some use a spotter.

A spotter is someone who helps you work closer to powerlines.

Most states and territories use Australian Standard AS 2550.1

**QUESTION 14**

Who could you talk to if you need to find out the voltage of overhead powerlines?

Your local power supply company responsible for the electric lines.



QUESTION 15

What are some ways you can work closer to electric power lines than the minimum distances allowed?

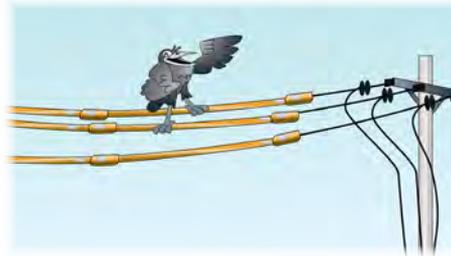
You might be able to get access permit from the electricity supply authority. They will provide help with working safely.



Where possible, the power company may be able to turn off (disconnect) the power supply.



If you can't get the power turned off, the electrical supply authority will need to cover the electric lines with insulation.



These powerlines have been insulated

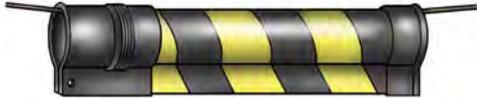
Use a spotter in the exclusion zone if you are allowed to in your state/territory.



Spotter

Tiger tails

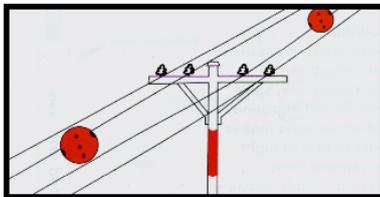
Tiger tails are **black and yellow pipes** that hang off powerlines. They are a **warning device** to make the powerlines easier to see. Be aware that tiger tails are very different to insulated powerlines.



Tiger tails:

- **DO NOT** insulate wires
- **DO NOT** protect you from the risk of electrocution or electric shock
- **DO NOT** allow you to work closer to powerlines

Power line marker



Markers

Markers of different colors such as white and orange.



Poles

Poles with the lower section painted up to 3m above ground.

Warning / danger signs

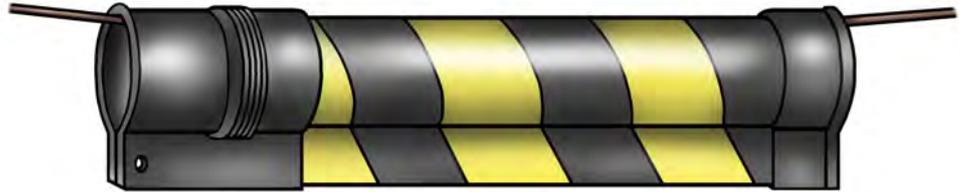


QUESTION 16

Tiger tails are black and yellow pipes that hang off powerlines.

What are they for?

Tiger tails are a warning device. They make powerlines easier to see.

**QUESTION 17**

A crane is moving a load on a windy day.

What hazards can the wind cause?

The crane could be damaged

The crane could become unstable



The load could swing

The crane could be damaged

The load could spin

QUESTION 18

What hazards (dangers) are there if you work near (the radius) of the outriggers or chassis of a non-slewing crane?

The crane or load could hit or crush you. You should stay outside the exclusion zone.

