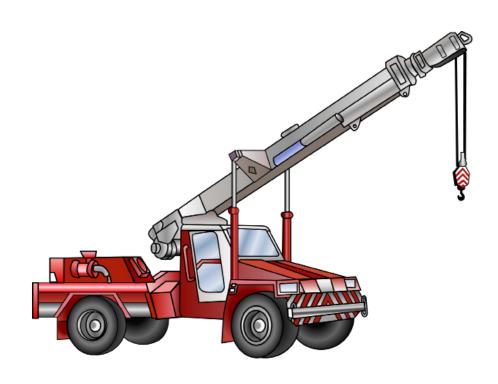
NON-SLEWING MOBILE CRANE LEARNER WORKBOOK

TLILIC0018
Licence to operate a non-slewing mobile crane (greater than 3 tonnes capacity)





www.easyguides.com.au

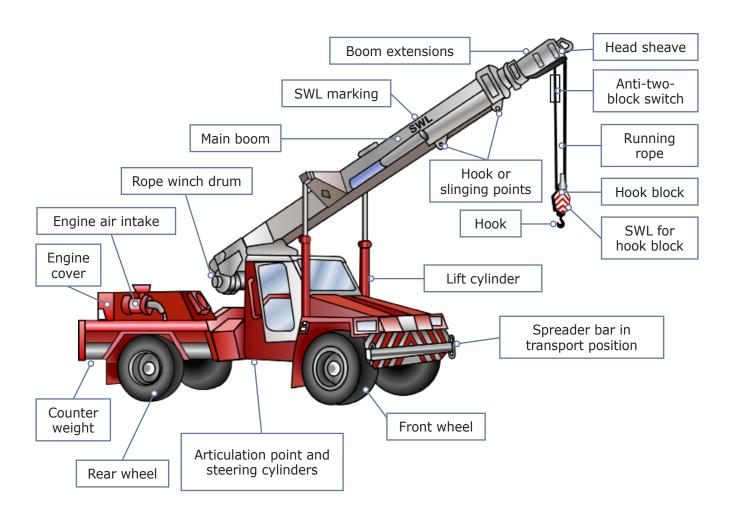
National Licence RTO-VET Learning Materials

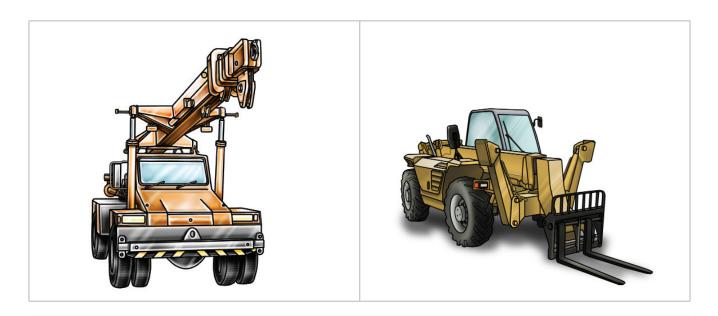
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What is a non-slewing mobile crane?

A non-slewing mobile 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

Part 1

Prepare for Hazards

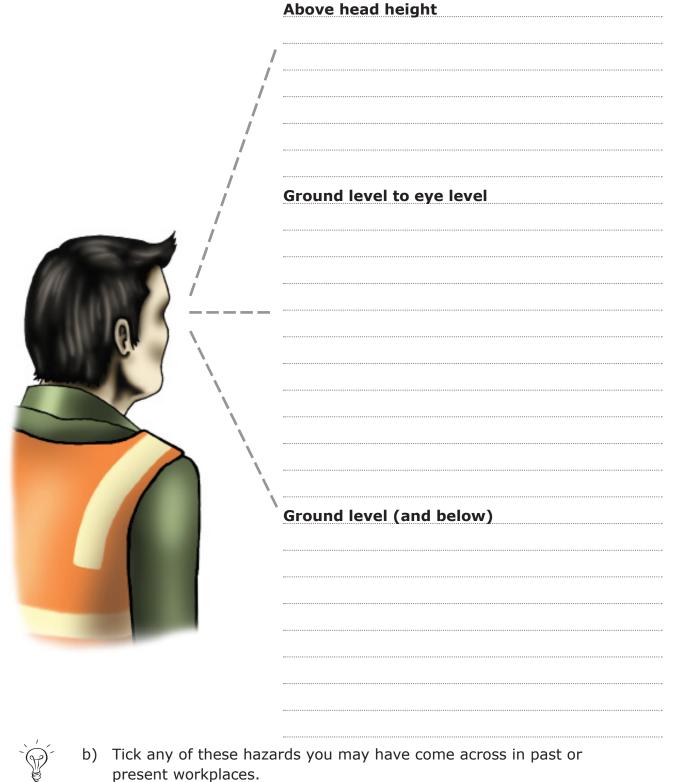




Performance Criteria: 1.5, 2.2

Identify (know) workplace hazards. A hazard is anything that can harm you or others while you work. You need to identify (know) workplace hazards before you start work. Look for hazards. Look above you, look around you and check the ground below you.

a) Give examples of hazards you should look for before you begin work



Freedom Werkplaces

Communicate Clearly



Performance Criteria: 1.7

Communicate clearly

Choose the communication equipment you will use for the job. After you have made your choice, test the equipment to make sure it's working. Make sure you understand the dogger's hand signals if you use hand signals.





Theory Training Task 9

Performance Criteria: 1.7

You can communicate many different ways. What are some of the ways you can communicate with other workers while moving a load?				





Performance Criteria: 1.7, 3.7

How should you and the dogger communicate when you can see each other? Circle the correct answer.







Hand signals

Whistle

Two-way radio



Theory Training Task 11

Performance Criteria: 1.7

a) Name the communication equipment you should test before you start work to see if it functions.



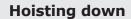
b) What should you do if the equipment doesn't work?

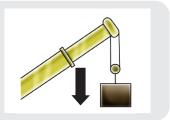




Performance Criteria: 3.7

Match the crane boom motion on the left with the correct hand or whistle signals on the right.

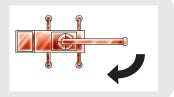




Stop



Slewing right



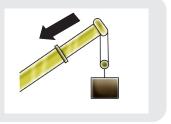
Travel and transverse

Indicate the direction you want the crane to go

Luffing boom up



Telescoping boom retract. Jib-trolley in.

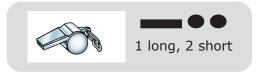














Part 4

Plan the Lift





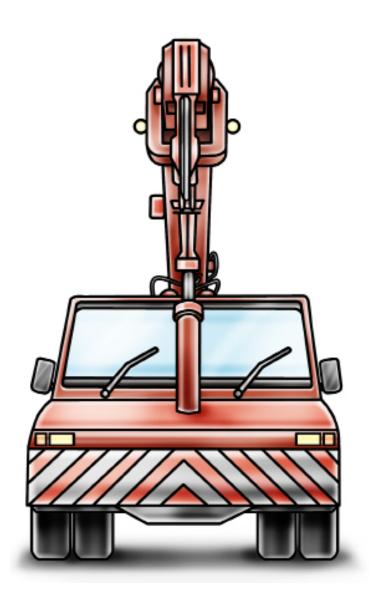
Performance Criteria: 1.3

- a) You will lift a steel universal beam. The dimensions are:
 - Weight of structural steel = 7840 kg per cubic metre
 1 mm = 0.001 m
 - Flanges (top and bottom)
 - Length = 12 m
 - Width = 250 mm
 - Thickness = 15 mm
 - Flange = $L \times W \times D \times 2 \times weight$ of structural steel
 - Web
 - Length = 12 m
 - Width = 275 mm
 - Thickness = 40 mm
 - Web= L × W × D × weight of structural steel

What is the total weight of the steel universal beam in kilograms?



Set Up the Crane



Follow safety procedures

Follow all of the safety procedures when you drive the crane to the work area.





Theory Training Task 36

Performance Criteria: 1.6, 2.2, 4.1

Circle the **correct** answer for the following statements.

a) When driving a crane you do not have to obey road signs.

True False

b) When driving a crane you must check for clearances below tunnels and powerlines.

True False

c) When driving a crane outriggers/stabilisers do not have to be retracted.

True False

d) Pedestrians need to get out of your way when you are driving a non-slewing mobile crane.

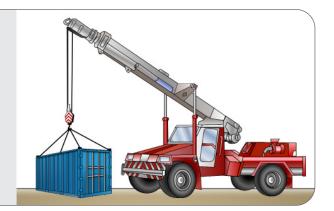
True False



Performance Criteria: 1.2

Position the crane

Position the crane in a spot which is good for balance and the lift.





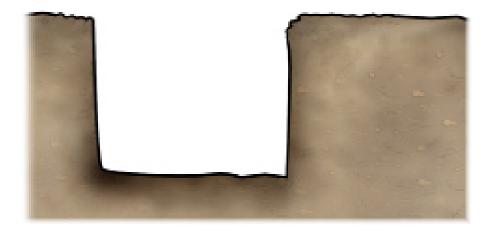
Theory Training Task 37

Performance Criteria: 1.2

- a) How far away should you set up your crane from a four-metre deep trench or excavation?
- b) Circle the correct answer for the following statement.

Never lift the rear truck wheels off the ground.

True False



Part 6

Do The Lift



Performance Criteria: 2.3

Access the crane safely

Climb in and out of the crane's cabin safely.



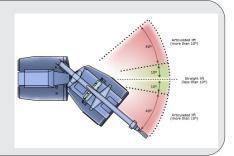
Theory Training Task 47

Performance Criteria: 2.3

ss (get in and out of) the cra	

Check the crane's capacity

Check the crane's load capacity, and always stay within the safe working limit (SWL) of the crane and boom.

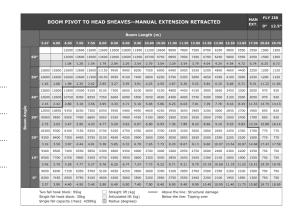




Theory Training Task 48

Performance Criteria: 1.3, 2.5, 3.1

What is the load chart and what does it tell you?





Performance Criteria: 2.5, 3.1

What do you need to plan for when moving a load within the crane's

working radius?





Theory Training Task 50

Performance Criteria: 1.3, 2.5, 3.1

Can you go over the safe working load (SWL) at a given radius of the crane?

Performance Criteria: 3.2

Position the boom/jib

Position the boom/jib and hoist block over the load's centre of gravity.



Theory Training Task 51

Performance Criteria: 3.2

Who guides you when you're positioning/ placing the boom/jib and hoist block over the load?

