

# LEARNER GUIDE

## Front End Loader- Wheeled

TICKET

Training support material for:

**RIIMP0321F**

**Conduct civil construction wheeled  
front end loader operations**

Produced by:



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# Introduction to Wheeled Front End Loader

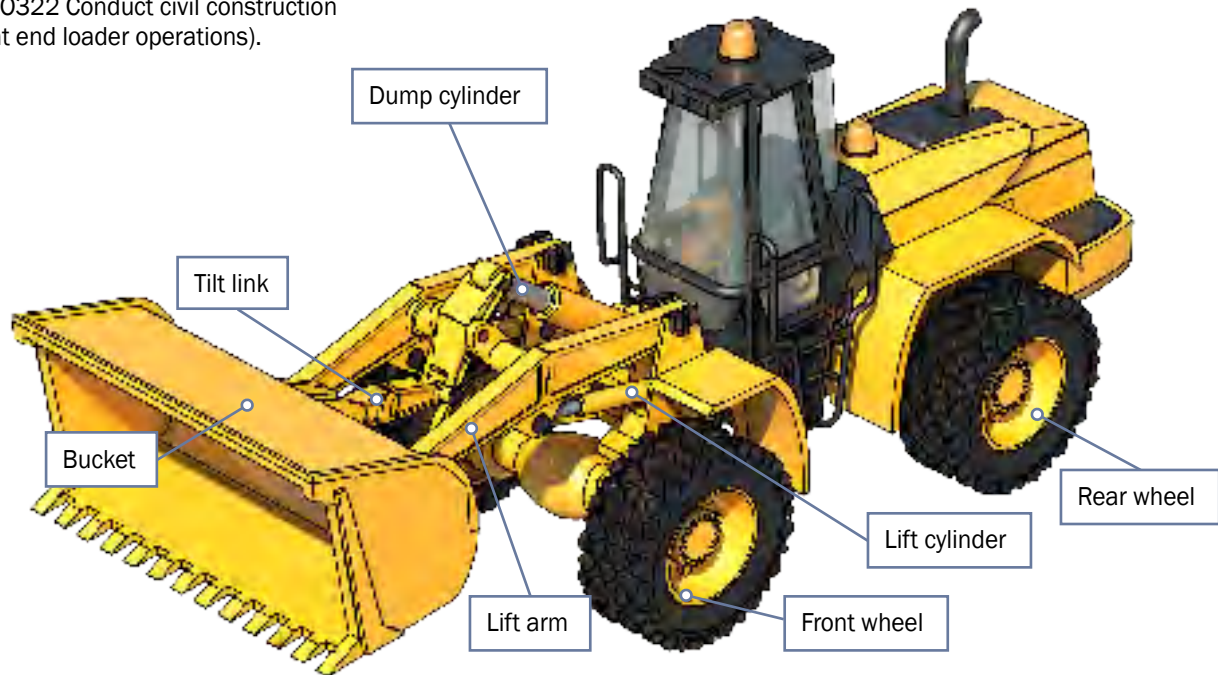


## An example of a wheeled front end loader

A wheeled front end loader is a type of machine, that has a front-mounted square wide bucket connected to the end of two booms (arms) to scoop up loose material such as dirt, sand or gravel and move it from one place to another without pushing the material across the ground.

A wheeled front end loader is commonly used to move material from ground level and deposit it into an awaiting dump truck, stockpile or into an open trench excavation.

Front end loaders can also come in tracked models (refer RIIMPO322 Conduct civil construction tracked front end loader operations).



# Plan and prepare for work

## Chapter 1



**QUESTION 15**

How can you find out the maximum safe working load (SWL) of the front end loader?

Check the load chart



Check the data plate



Read the markings on the loader itself



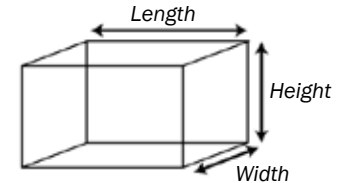
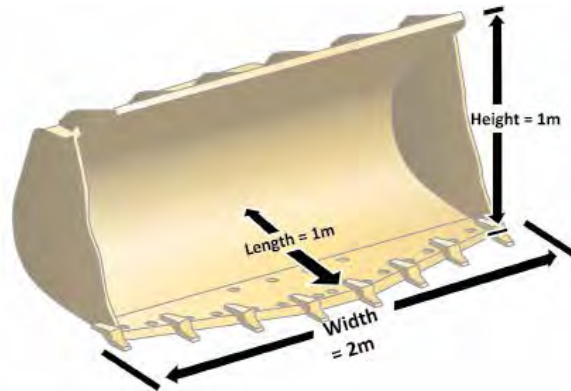
Read the operator's manual.



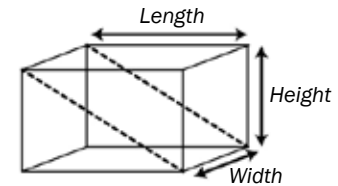
**QUESTION 16**

How do you find out the cubic capacity of the bucket?

$$\text{Capacity} = \frac{L \times W \times H}{2}$$



Cubic capacity of cube =  $L \times W \times H$



Cubic capacity of bucket =  $L \times W \times H \div 2$   
 Cubic capacity is  $\div 2$  because of the shape of the bucket  
 (a triangular prism, or half of a rectangle)

**QUESTION 32**

Where do you put up warning signs?

Near underground services



Near dangerous places



In places you need to control traffic



On the site fencing.





# Operate/use equipment

## Chapter 4



**QUESTION 72**

How do you safely fill out a stockpile?

1. Start by filling the area closest to the back of the stockpile area.



2. Try not to fill too close to the edge. The edge of the stockpile could give way.



3. Keep filling out the stockpile one row at a time.



**QUESTION 73**

When dumping materials near an excavation, how far away from the excavation must you dump the load?

As a general rule of thumb, you should dump the load the same distance away as the depth of the hole.

For example:

