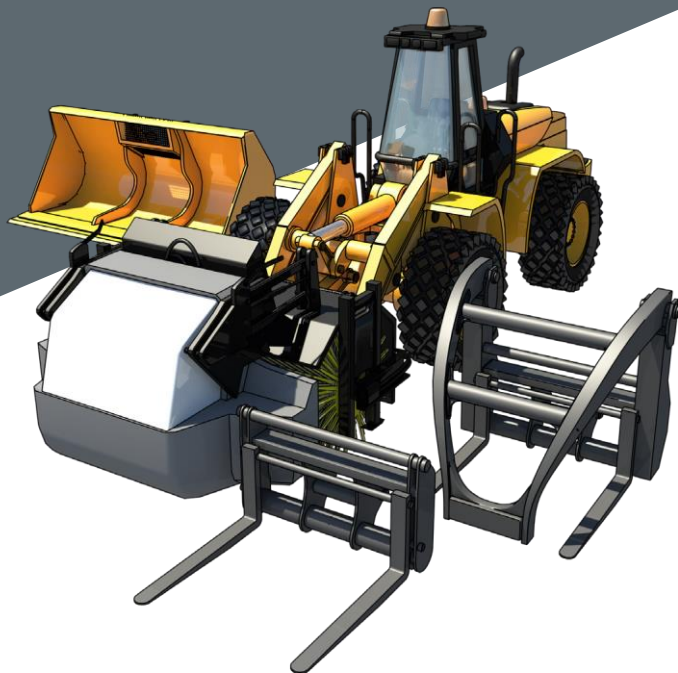


LEARNER GUIDE



Integrated Tool Carrier

RII COMPETENCY

Training support material for:

RIIHAN311F

Conduct operations with integrated tool carrier

Produced by:



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Introduction to Integrated tool carrier



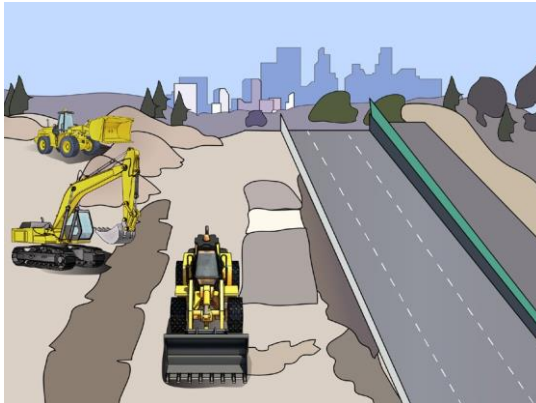
What do you use an integrated tool carrier for?

- Mining
- Construction
- Clean up
- Moving dirt/rocks etc
- Agriculture – farming
- Forestry
- Can use for lifting purposes



What industries do you use an integrated tool carrier in?

- Civil construction

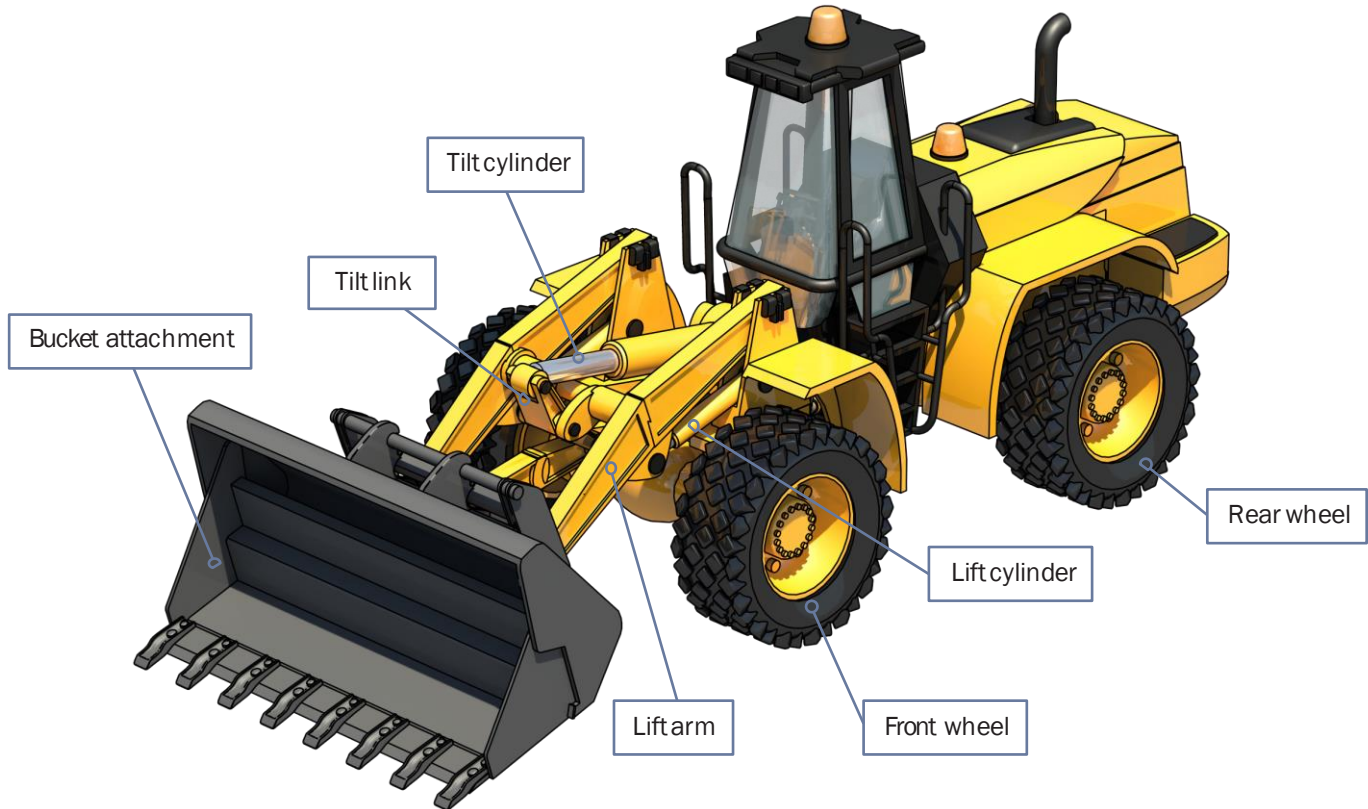


- Mining



Example of an integrated tool carrier (ITC)

An integrated tool carrier (ITC) is a machine similar to a front end loader which has a quick release mechanism on the lift arms which allows the fast changing of various attachments without the need for hand tools or special equipment.



Earthmoving hazards and risks

The most common hazards and risks with earthmoving work are:

Falls from plant or machinery



Traffic and other mobile plant



Overhead or underground power



Underground gas lines



Water and sewage piping



Rollovers



Earthmoving hazards and risks (continued)

Noise



Dust



Manual handling



Contaminated soil



Falling into trenches or excavations



UV rays (radiation) from working in the sun



Tools and equipment

Here are some typical tools and equipment you might need.

Personal protective equipment (PPE)

- Steel cap boots
- High visibility safety vest
- Hearing protection
- Hard hat
- Goggles/glasses
- Gloves
- Dust mask
- Sunscreen



Hand tools

- Shovel and levels
- Socket sets
- Screwdrivers or wrenches
- Wire brush
- Spanners



Plan and prepare for integrated tool carrier operations

Element 1



QUESTION 7

What kinds of information do you need before starting work?

- Plans – what you need to do
- Specifications – rules and details about the job
- Operational details – how you will do the job
- Quality requirements of the job – the standards you are expected to meet.



QUESTION 9

What do the job's work instructions explain?

Work instructions explain:

What to do in unexpected situations like bad weather

What the job is

Where the job is



How to do the job safely

How long the job will take

What tools and equipment you need

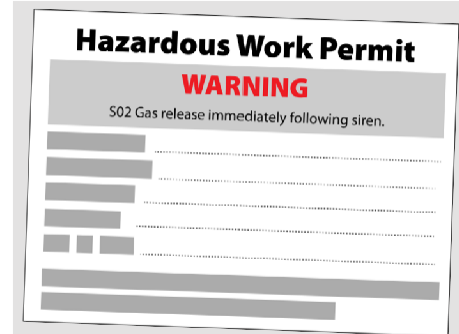
How to do the job from start to finish

QUESTION 10

You will be working in a hazardous area.

What type of permit might you need to get?

You may need to get a hazardous work permit.



QUESTION 11

What does the safety plan tell you?

The safety plan tells you how the worksite intends to meet all the safety rules. It tells you:

What personal protective equipment (PPE) to wear



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QUESTION 24

Where do you put up warning signs?

Near underground services



Near dangerous places



In places you need to control traffic



On the site fencing



QUESTION 29

Who can you ask about underground services on the worksite?

You can:

Ask your site supervisor



Call 'Dial Before You Dig' on 1100 as a guide to services location only. Ask a specialist consultant to check the site.



Ask the local supply authority (for example, the electricity, gas or water company).



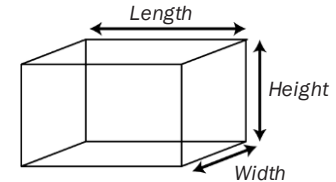
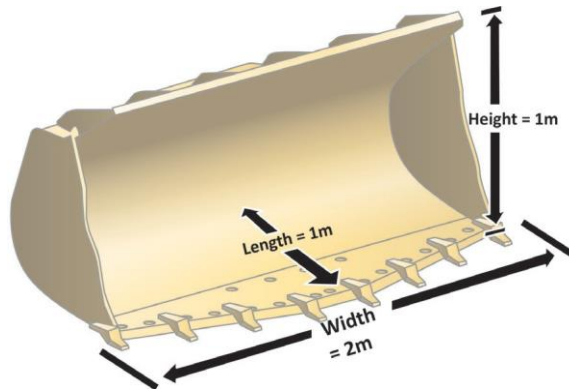
Check the council maps for the site



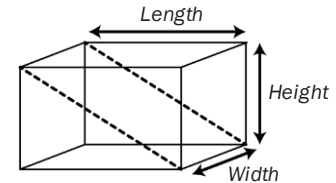
QUESTION 56

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

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



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



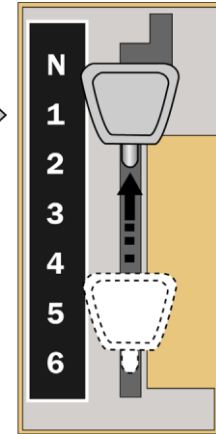
Cubic capacity of bucket = $L \times W \times H \div 2$
 Cubic capacity is $\div 2$ because of the shape of the bucket
 (a triangular prism, or half of a rectangle)

QUESTION 57

When travelling down a steep slope, which gear do you use?

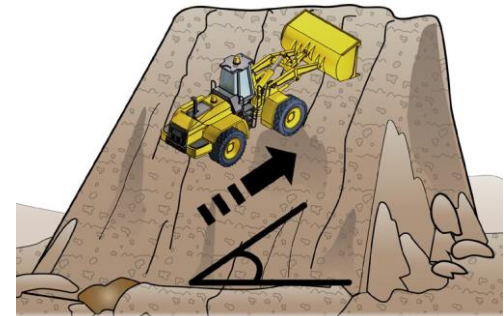
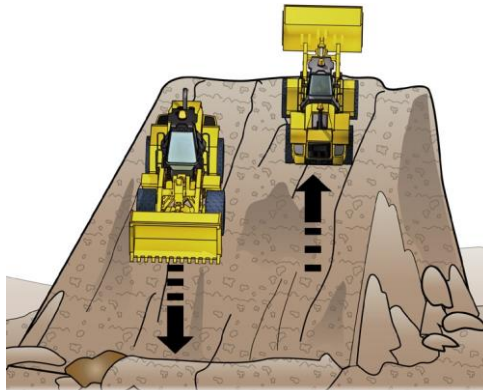
Use the lowest gear you can. Change into low gear before you drive on the slope.

For example: →

**QUESTION 58**

Which way should you travel when driving on sloping ground?

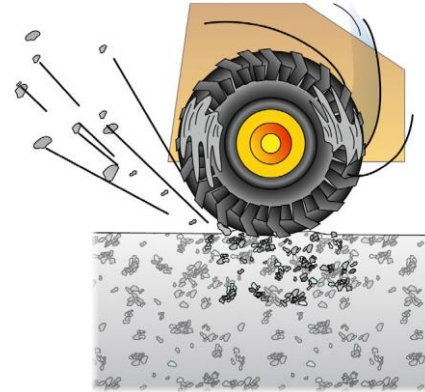
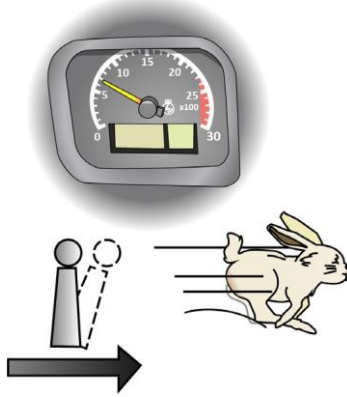
Go straight up or down the hill, not at an angle.



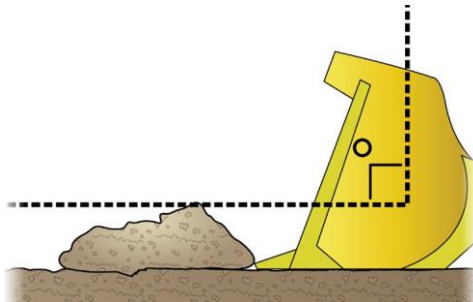
QUESTION 62

What steps do you take to safely pick up, move, and dump materials with a bucket?

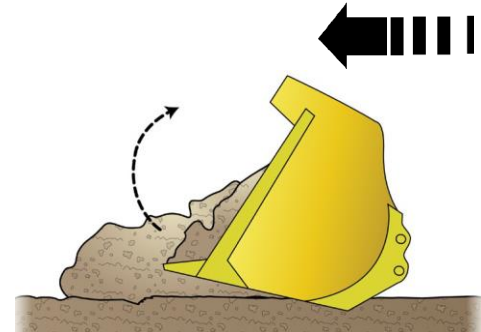
1. Build up engine RPM and correct speed. Try not to spin the wheels.



2. Make sure the bucket is at the right level and angle.



3. Crowd the bucket upwards while moving forward.



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