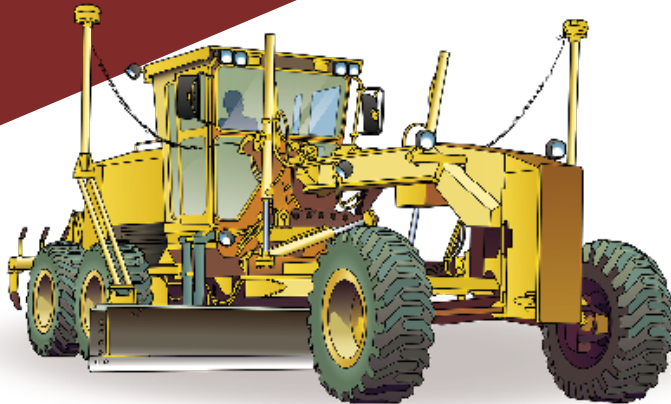


LEARNER GUIDE



Grader TICKET



Training support material for:

RIIMPO324E

Conduct civil construction grader operations

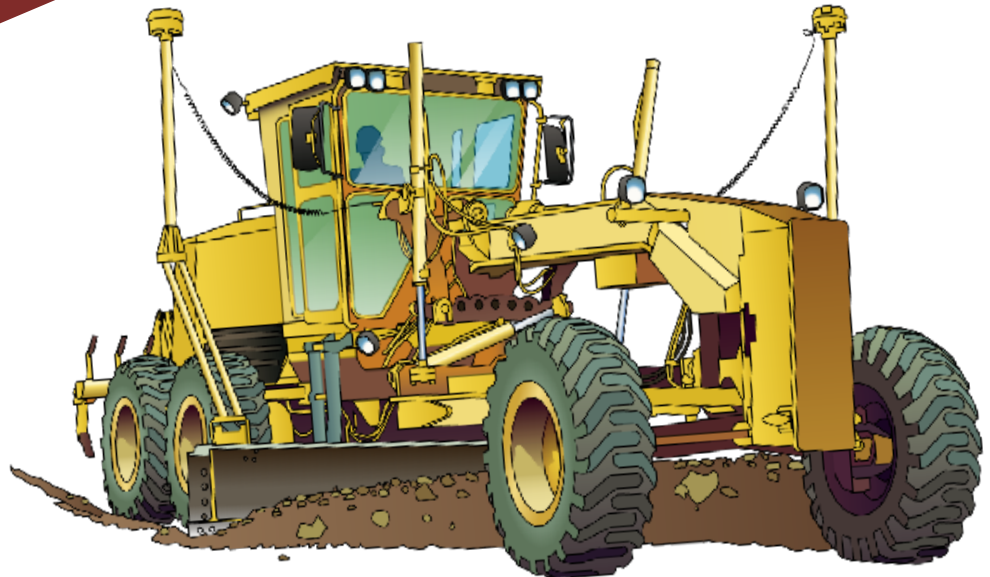
Produced by:



Contents

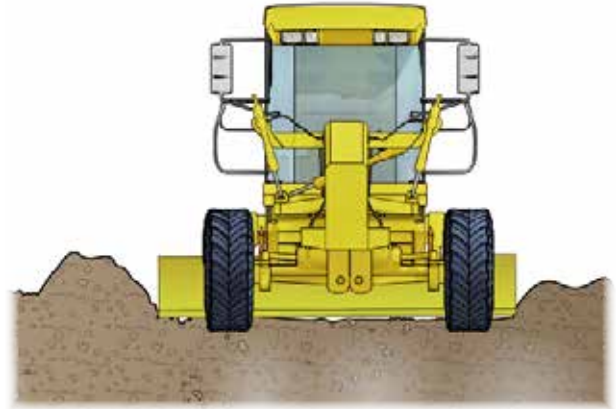
How to use this guide	4
Language – Literacy – Numeracy (LLN)	6
Acknowledgements	8
Introduction to grader	9
General information	13
Chapter 1 Plan and prepare for work	25
Chapter 2 Identify and control hazards	51
Chapter 3 Check and monitor equipment	93
Chapter 4 Operate/use equipment	121
Chapter 5 Shut down and store equipment	153
Chapter 6 Maintain equipment	161
Chapter 7 Housekeeping	181
Chapter 8 Record keeping	187
Chapter 9 Relocate equipment	189
Chapter 10 Attachments	197

Introduction to Grader



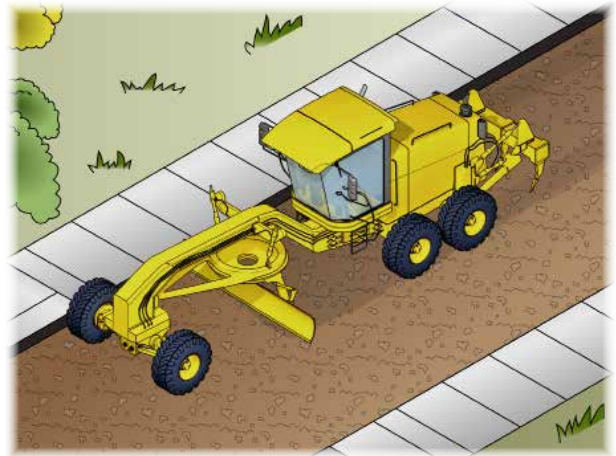
Introduction to grader

- A grader is a self-propelled articulating or rigid framed wheeled machine, designed to cut, move and place construction materials using a centrally mounted blade and may include forward and/or rear mounted rippers/scarifiers.
- The blade and attachment controls are normally hydraulic; however, they may be mechanical.

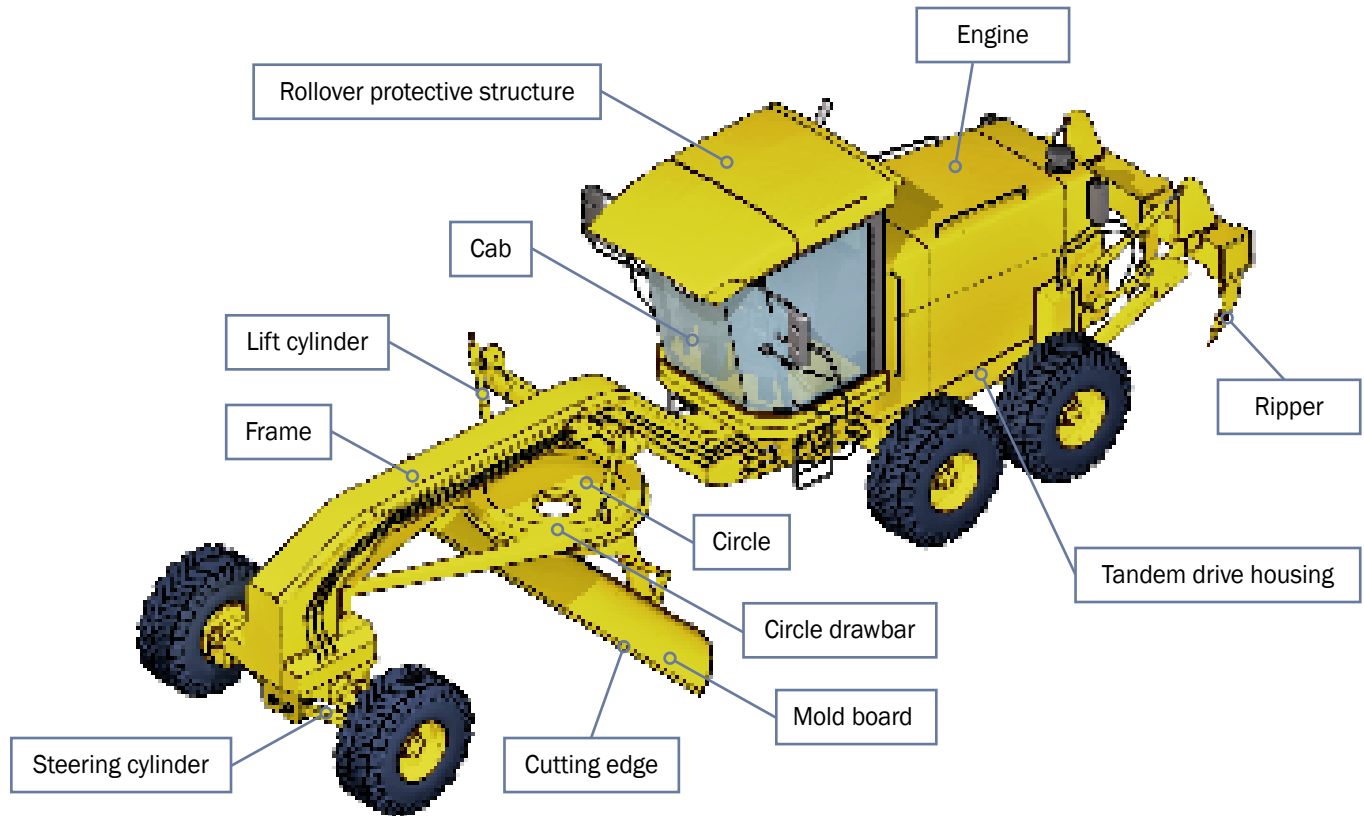


What industries do you use a grader in?

- Civil construction

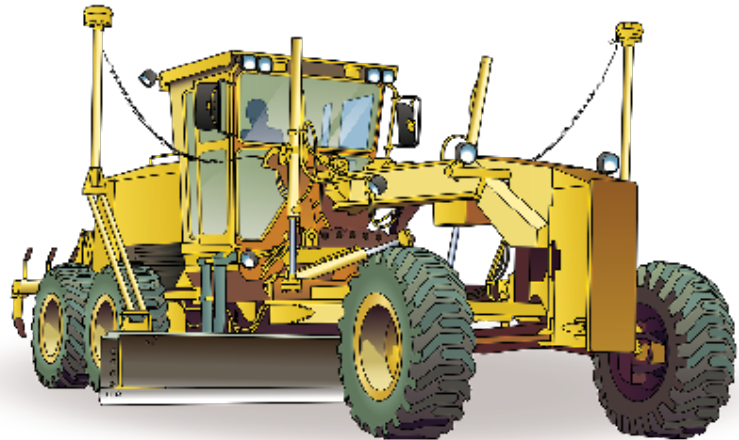


An example of a grader



Identify and control hazards

Chapter 2



Earthmoving site hazards

Checking for underground services

You should always check where services are before you start work. You may phone '**Dial before you dig on 1100**'. You may look at the site plan or talk to your supervisor. You may need to look at the location of pits and meters to get an idea of where the services run. You may need to check with the local council or service company. You may even need to get underground detection equipment.

If you hit a service line, contact the provider immediately. You may need to organise to get the service disconnected while a qualified person fixes the problem.

You can sometimes tell there are services below by the types of ground. Some services are surrounded by a different type of soil, rock or sand. You may notice that the soil is looser, or does not match the soil around where you are digging. There may be a line of tape alerting you to the services.

If you suspect there are services underground, stop working. Check the ground. You may need to excavate the area by hand, or dig in another area.



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 sewerage piping

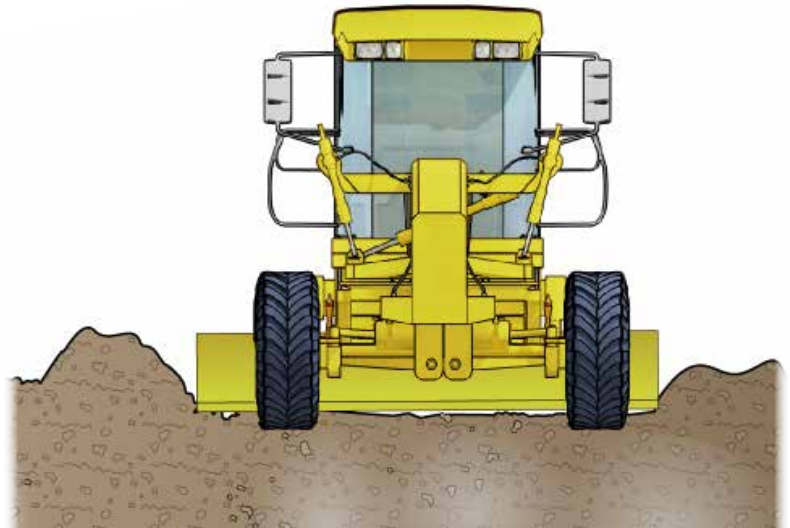


Rollovers



Operate/use equipment

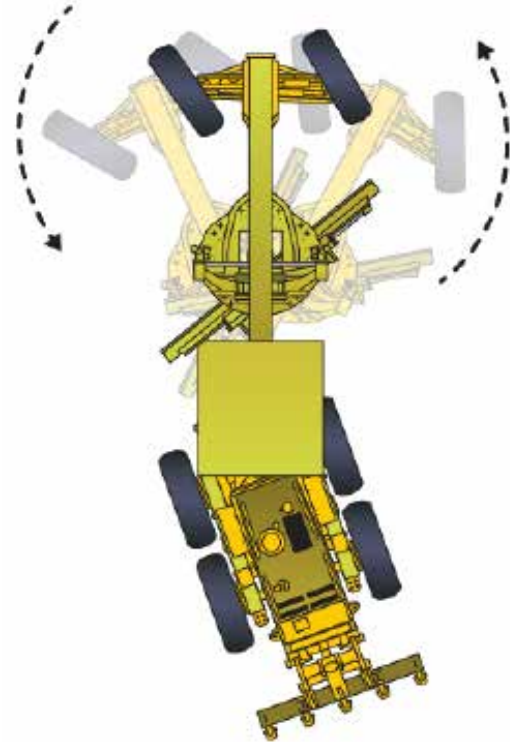
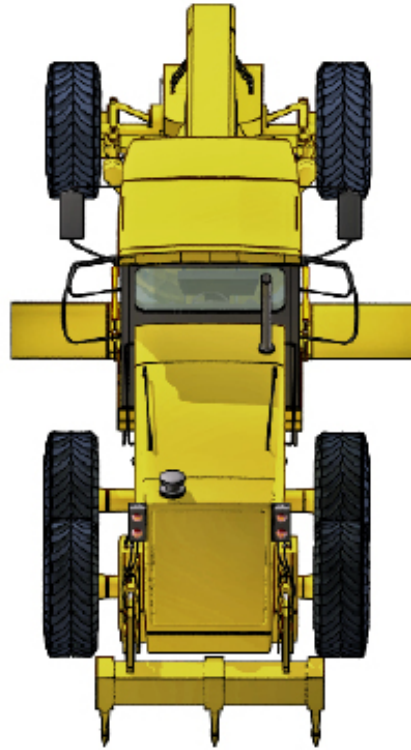
Chapter 4



QUESTION 48

What kinds of graders are there?

Graders can be all-wheel-drive or tandem drive. Some graders can articulate or crab steer which makes them useful in small spaces and increases side slope capability. Other graders have a rigid frame that can't articulate.



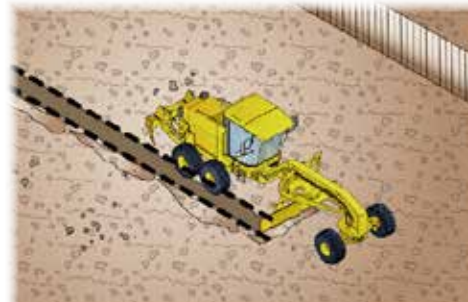
QUESTION 49

What are some of the operations a grader can be used for?

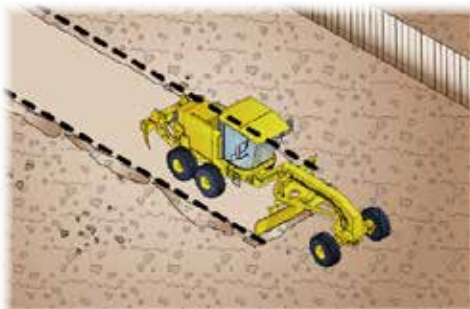
Battering



Ditching cut



Marking cut



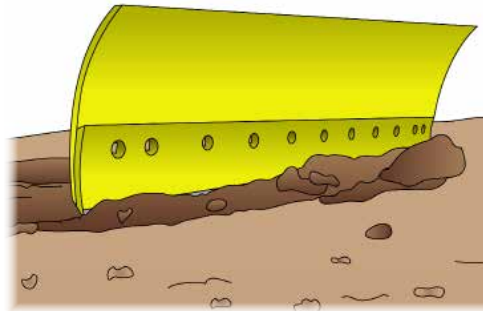
Move and spread windrow



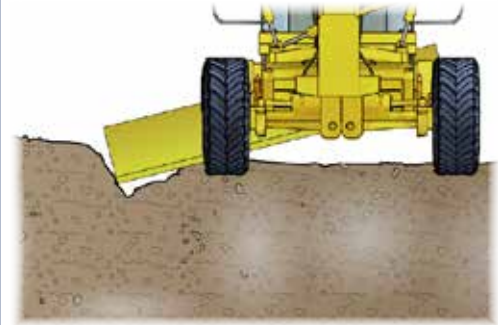
QUESTION 50

What kinds of jobs do you use a grader for?

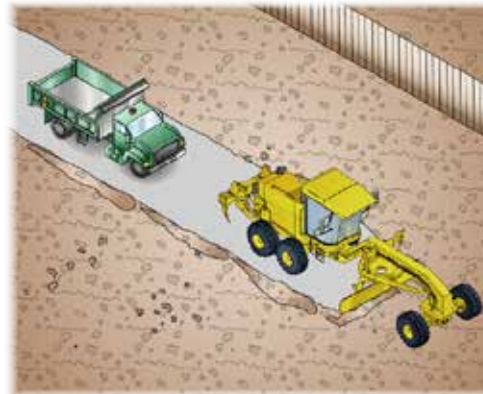
Spreading soil



Cutting ditches and drains



Making roads



Levelling surfaces



...CONTINUES ON NEXT PAGE