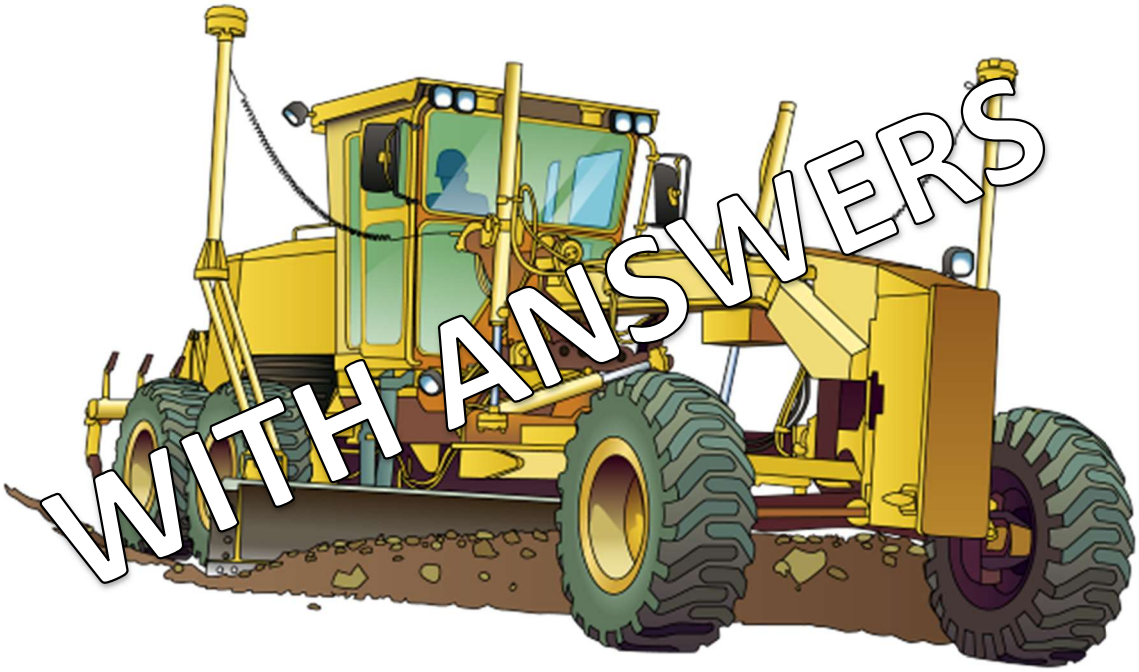
GRADER

Learner Workbook

(Formative assessment)

TRAINER'S MARKING GUIDE

RIIMPO324F –
Conduct civil construction grader operations



Learner Name: _____

Student Number: _____ **Date:** _____

This resource was developed by:

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Candidate's details
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Trainer/Assessor's / Supervisor details
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Company/registered training organisation:
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Student Signature: **Date:**	This submission is all my own work and has not been copied nor does it violate the material that is listed under the Statement on Plagiarism and Academic Integrity rules, except for any collaboration that has been authorized by my tutor as group work.

Contents

Training support materials

Training package: Resources and Infrastructure Industry Training Package

Unit of competency: RIIMPO324F - Conduct civil construction grader operations

Application / Context of Assessment

This unit describes the skills and knowledge required to conduct Grader operations.

This unit applies to those working in site based roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors, and must be sourced from state jurisdictions prior to applying this unit.

This unit alone does not provide sufficient skill to independently load and unload equipment. To perform this activity safely, personnel must either complete or be assisting someone who has completed RIIHAN308F Load and unload plant or equivalent.

Notes to Candidate:

Practical components of this assessment may be filmed on grader operations that safely, effectively and efficiently follows workplace procedures to carry out work activity on at least two occasions, along with handling at least two different material types.

Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

Include access to:

- grader
- materials to be shifted
- personal protective equipment
- equipment attachments

- be conducted in a safe environment; and,
- be assessed in context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment* provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

Summary of Practical tasks to be performed.

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

Operate a grader,
By cutting, leveling, filling, trimming,

- spreading materials,
- Compacting and

Safely, effectively and efficiently following workplace procedures to carry out work activity on at least **two occasions**.

The assessor is to submit 2 work orders to candidate, to follow, which outlines work to be performed for at least **2 different material types** such as the following:

- mixing materials
- stripping/spreading materials
- cutting/digging
- back filling
- compacting

and working with the following material types, top soil, dirt, clay, rock or crushed rock, in situ material (lime), gravel and sand.

Including:

- ❑ assisting with loading and unloading grader from float/trailer

Along with selecting, fitting, testing, using and removing at least two attachments, the attachment must be certified and approved in line with workplace procedures, such as the following;

- ❑ Front-mounted scarifier (mixer)
- ❑ Rear-mounted ripper
- ❑ Curved cutting edge blade
- ❑ Serrated edge blade
- ❑ Flat edge blade
- ❑ Roller

An example of a work order / job (requirements) might be the following;

Example 1 / Work Order 1. Assist with the moving of grader vehicle off and on float / trailer.

Dig up an area for a new road to be laid and use the rear mounted ripper to cut up soil. Use the curved cutting edge or flat edge blade to remove some of the top soil. Next to the dug up soil, use the curved cutting edge blade to make a small trench for a dozer to dig a bigger hole for later use to lay pipes.

Example 2 / Work Order 2. Use a roller to flatten the Natural Ground level compacted subgrad of an area where a new road is to be laid.

Use the curved cutting edge or flat edge blade to lay in situ material (lime) / sand over new section of road to be laid and then compact it using a roller, to create a subbase course layer.

Use the curved cutting edge or flat edge blade to lay crushed rock over a subbase course layer and use a roller to compact the area for a paver to lay the Wearing course layer. Finally, assist with the moving of grader vehicle off and on float / trailer.

Note: Performing the actual practical task may be filmed and noted of where the video file is stored.

Note See appendix for guidelines on what to look out for when candidate is performing practical tasks. Use the Appendix topic steps as basic benchmark guides.

Equipment description

Any reference to a machine or machines in this document means a 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.

Resources Required / Resources required for Sample Work Order 1 & 2:

- ❑ A **site** for traveling with material
- ❑ A **site** with top soil with Grass.

Equipment

- ❑ Grader
- ❑ Float / trailer

Attachments

- ❑ Front Mounted scarifier or rear-mounted ripper.
- ❑ Curved cutting edge blade.
- ❑ Roller
- ❑ Flat edge blade

Materials

- ❑ In situ material (lime) / sand
- ❑ crushed rock
- ❑ top soil / dirt

Assessor's qualifications and assessment conditions

To conduct valid assessments for this qualification the assessor must meet the assessor requirements outlined in the assessment conditions.

The assessment conditions and assessor requirements for this unit of competency can be viewed at www.training.gov.au/Home/Tga and are also outlined in the mapping document prepared by Easy Guides.

Assessors should access the assessment conditions prior to undertaking assessments. The assessment conditions and the assessor requirements form part of the assessment tool.

Please note: Units of Competency and Assessment Requirements change frequently; it is the Assessor's responsibility to ensure they meet the criteria for the assessment to be valid.

Assessment Guidelines

This assessment is designed to be used with the learning materials developed by Easy Guides Australia. The assessor must be satisfied the applicant has successfully demonstrated each aspect of the Unit of Competency. The answers provided are model answers only. The written assessment determines the candidate's underpinning knowledge.

This assessment can be customised to suit your requirements. When customising this assessment, you must ensure all performance criteria and knowledge evidence are addressed to maintain the integrity of the assessment.

Reasonable adjustments to assessments should be made to accommodate candidates with special needs.

Where ever a practical task is demonstrated it may be filmed and documented in the assessment sheet, along with the file name, location of file store and to whom the assessment video is associated to.

Determining competency

Evidence from the knowledge assessment together with evidence from the practical assessment should be used by the assessor to determine the candidate's competency.

Practical Assessment Check list.

Assessor is to observer candidate performing task and once task criteria has been observed for / on two occasions e.g., Job 1, Job 2, then can the assessor mark yes / no to indicate candidate has satisfactory meet that performance criteria. Further details of what needs to be performed is outlined in each sub category for the performance criteria, which is in the far left hand corner.

Please tick each sub category once task has been performed, and mark off on what job occurrence it has been performed i.e. Job 1, Job 2.

Sample On how to fill out Practical assessment Check List.

Observation performed when performing Practical Task 1 from work order provided (Job 1, Job 2) Candidate:	**Yes**	**No**	**N/A**	**Job 1**	**Job 2**
Located and apply relevant documentation, policies and procedures.	❑	❑	❑		
❑ Locates operator's manual for backhoe/loader and finds requirements for pre-start and start-up checks.				❑	❑
☑ Locates site policies and procedures for personal protective equipment requirements when operating backhoe/loader.				❑	❑
Selected and wear personal protective equipment.	❑	❑	❑		
☑ PPE selected must be as per site policies and relevant to the task. As a minimum MUST include appropriate footwear, Hi-visibility workwear and hard hat.				☑	❑
❑ PPE must be checked for serviceability and correctly fitted.				❑	❑
Conducted pre-start inspection of backhoe/loader.	☑	❑	❑		
☑ Pre-start check is carried out as per operators manual and workplace policies and procedures. Where possible a completed pre-start checklist should be provided as supporting evidence.				☑	☑
☑ During inspection the candidate must identify and/or verbalise any common faults they are looking for.				☑	☑

Right of appeal

On completion of the assessment:

- the candidate is to be advised of assessment result
- the candidate might disagree with the result of the assessment
- the candidate has the right to challenge the assessment result
- an unsuccessful candidate may apply to the R.T.O. for re-assessment.

(Please note: applications for reassessments are subject to the RTO's policies and procedures)

Duration of Assessment: Single session or over a period of time.

Assessment Date: _____

Knowledge Assessment - Introduction

The assessor must be satisfied the candidate has successfully demonstrated each element and performance criteria contained in the Unit of Competency.

Knowledge Assessment Instructions

1. This assessment should be completed in writing (pen not pencil). However, where necessary it may be undertaken verbally. If verbal assessment is undertaken the candidates' responses must be clearly recorded by the assessor. The assessor must clearly note on the assessment that it was undertaken verbally.

2. Candidates should be allowed 10 minutes reading time before commencing the assessment and a further 180 minutes to complete the assessment.

3. The assessment should be completed in a quiet area free from distraction.

4. The assessment is to be completed without the assistance of learning resources. Students may ask the assessor for assistance to clarify questions they do not understand.

5. A pass mark of 90% (47/52) must be achieved for a satisfactory result. The assessor must provide feedback to the candidate to clarify any answers deemed to be incorrect.

6. Reasonable adjustment to the assessment is to be made by the assessor where deemed necessary.

Knowledge Assessment

Question 1-A	(PC1.1)

Give three (3) examples of compliance documentation you should read before using a grader. Compliance documentation tells you the rules and regulations you need to follow.

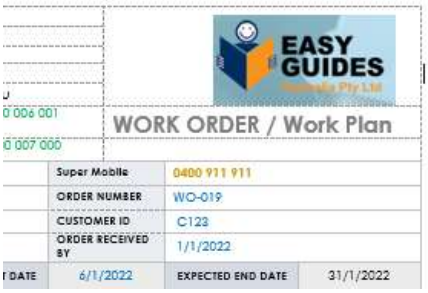
Answer may include:

- Codes of practice
- Occupational Health and Safety Acts (OHS)
- Regulations
- Operator's manual
- Site procedures

Question 1-B	(PC1.2)

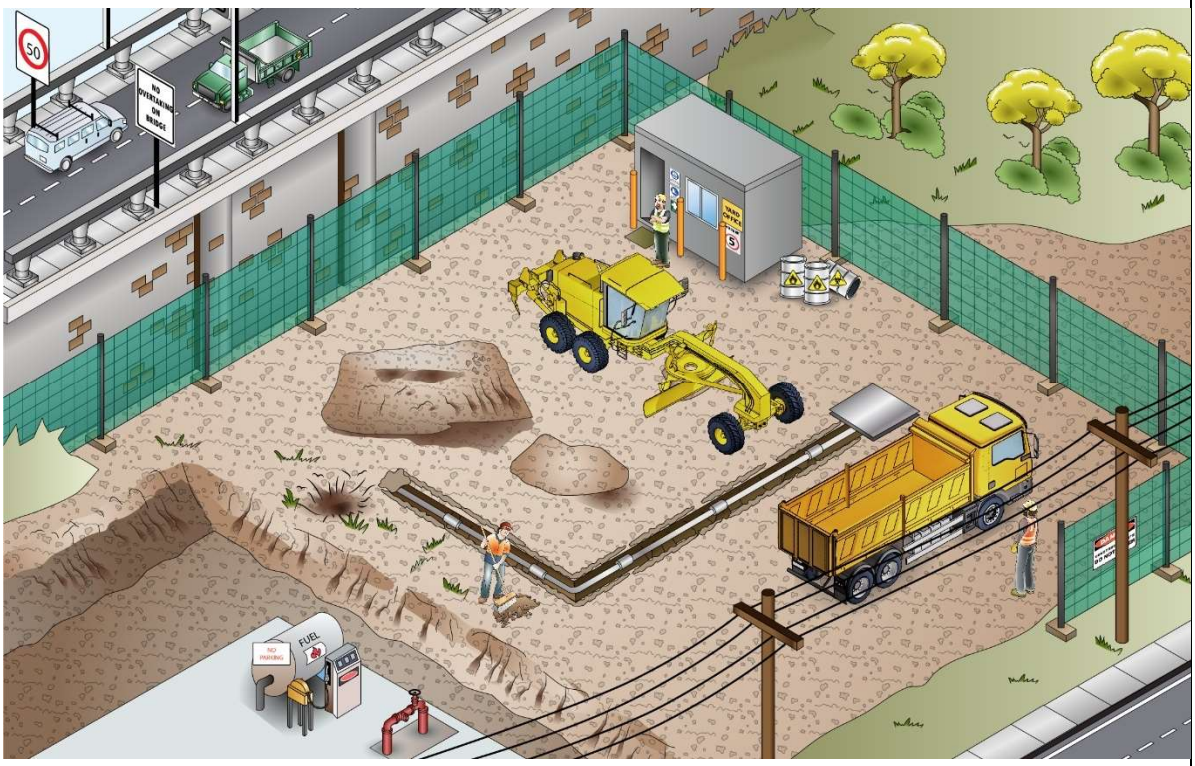
What are work instructions and what do they explain?

Answer may include:
Work instructions tell you about the job. They include: what the job is, where you will do the job, how to do the job, how long the job will take, equipment and tools you need and what you should do if an unexpected situation arises.



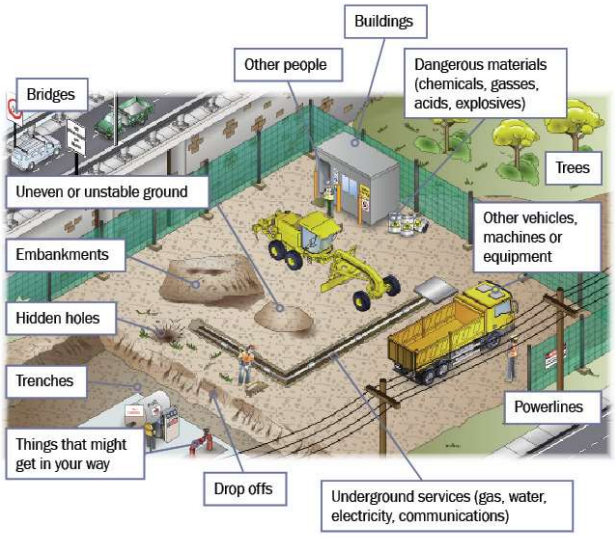
Question 1-C	**(PC1.3)**

List three (3) common hazards you might need to plan for before starting work?



Answer may include:

- uneven or unstable ground, other people in the work area, other vehicles, machines or equipment in the work area, powerlines, trees, overhead lines, bridges, buildings, things that might get in your way, dangerous materials (chemicals, gasses, acids, explosives), underground services (gas, water, electricity, communications), trenches



Question 1-D	**(PC1.3)**

What does the environmental management plan explain? Give at least four (4) examples.

Answer may include:

The environmental management plan tells you how to:

- manage waste and recycling
- lower air pollution
- lower erosion and damage to soil
- stop damage to underground services
- control fire
- work more safely in confined spaces
- lower damage to nature (trees, plants, etc)

Question 1-E	**(PC1.4)**

List three (3) examples of personal protective equipment (PPE) you may need to wear while operating your machine.

Answer may include:

- helmet
- safety boots
- gloves
- safety glasses
- dust mask
- hearing protection

Question 1-F	**(PC1.4)**

What footwear must you wear when doing earthmoving work?

Answer may include:

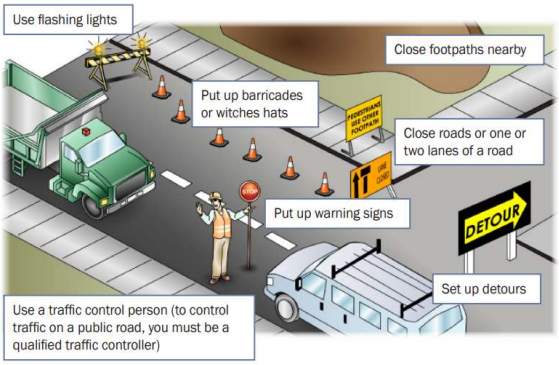
Non-slip shoes that cover your whole foot. Some sites require steel-capped boots.

Question 1-G	**(PC1.5)**

You must be a qualified traffic controller to control traffic. How do you control traffic on a worksite or public road? Give three (3) examples.

Answer may include:

- close roads or lanes
- ask someone to direct traffic
- use detours
- use witches hats and barricades
- close footpaths
- use warning signs
- use lights

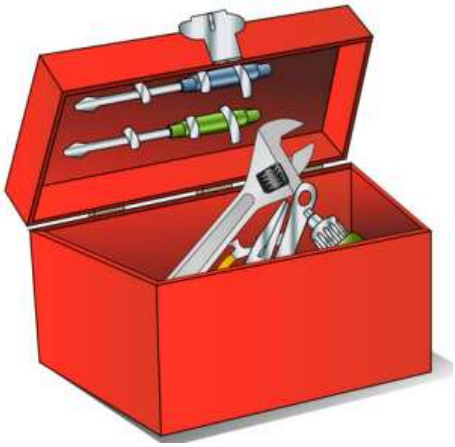


Question 1-H	**(PC1.6)**

What tools and equipment can you use to help you with earthmoving work? Give five (5) examples.

Answer may include:

- grease gun
- shovels
- wheel chocks
- ratchets
- sockets
- wrenches
- spanners
- hammers
- screwdrivers
- wire brush
- portable lights



Question 1-I	**(PC1.6)**

If you find ANY fault with the machine including attachments, what do you do?

Answer may include:

1. **Tag out** the equipment and DO NOT USE IT.
2. **Remove** the key.
3. **Record** the problem in the logbook.
4. **Report** the problem to a supervisor.

Question 1-J	**(PC1.7)**

What is the purpose of the site safety plan?

Answer may include:

The site safety plan tells you what to do if there is a fire, emergency or accident on the site.

Question 1-K	**(PC1.7)**

Where could you find the location of the first aid station or emergency evacuation assembly area?

Answer may include:

Look at the site safety plan.

Question 2-A	**(PC2.1)**

List at least five (5) pre-operational checks you should do on a grader.

Answer may include:

- fuel gauge
- transmission oil
- oil, fluid and water leaks
- engine oil
- coolant level
- battery electrolyte levels
- air tank
- air filter indicator
- drive tyre pressures
- blade condition
- blade circle conditions
- warning devices

Question 2-B	**(PC2.1)**

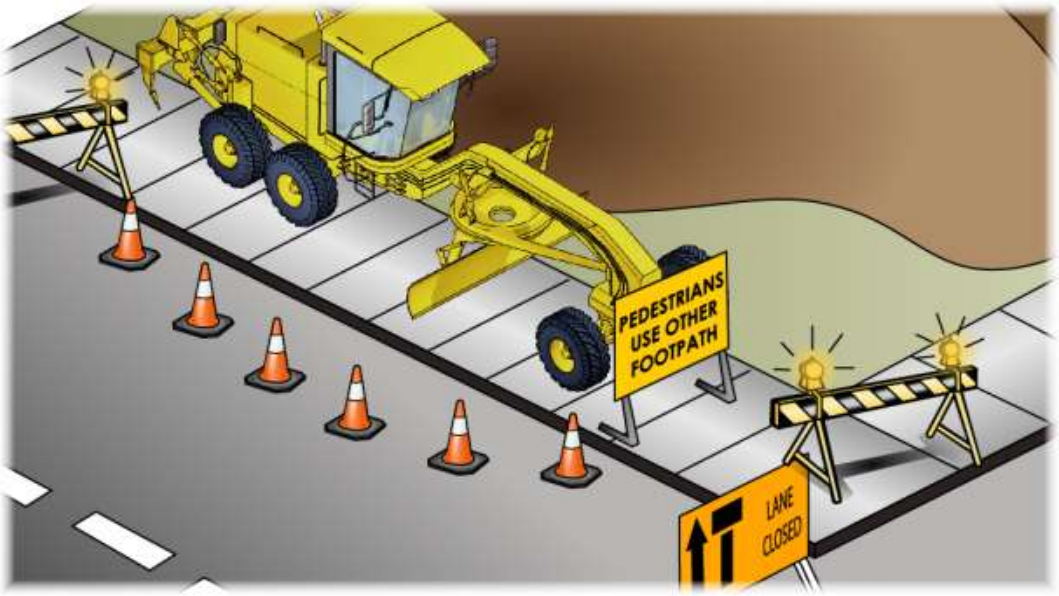
How do you test the grader to make sure it's safe to use? Give two (2) examples.

Answer may include:

- test the brakes
- test all controls
- test the steering
- test the attachment and its movements
- check decelerator pedal
- go for a short drive and make sure everything works

Question 2-C	**(PC2.8)**

How do you park and shut down a grader? Explain the steps.



[Assessors note: Answer may vary with the machine being used.]

1. Park safely away from hazards and entrances.
2. Activate the park brake.
3. Put the transmission in neutral or park.
4. Idle engine to stabilize temperature before turning off.
5. Switch off the engine.
6. Remove the key.
7. Refuel if necessary.

Question 2-D	**(PC2.3)**

How can you find out where underground services are located on site? List two (2) ways

Answer may include:

- Ask your site supervisor
- Ask the local supply authority (for example, the electricity, gas or water company)
- Check the council maps for the site
- Call “Dial before you dig” on 1100.

Question 2-E	**(PC1.2)**

Who should you check work instructions with before starting work? Give two (2) examples.

Answer may include:

- your site supervisor
- other people you will be working with
- safety officer
- site foreman.

Question 2-F	**(PC 1.8)**

How do you communicate with workmates and other people? Give at least three (3) examples.

Answer may include:

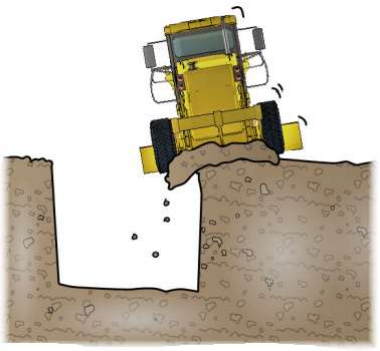
- use warning signs
- use information signs
- speak to each other
- use radios
- have meetings
- give instructions
- use hand signals.

Question 2-G	**(PC2.3, 2.6, 5.2)**

While operating your machine, what hazards should you keep checking for? Give at least four (4) examples.

Answer may include:

- people
- vehicles, equipment and other machines
- buildings and other structures
- low bridges, obstructions
- trenches and excavations, trees
- overhead powerlines
- hazardous materials such as chemicals, gasses, explosives and acids
- underground services such as gas, water or electricity lines
- ground conditions such as soft or uneven ground.



Question 2-H	**(PC2.6)**

You are driving the grader close to a trench. The trench is more than 1.5 metres deep and a workmate is in the trench. What do you do first?

Answer may include:

- Set up shoring, benching or battering depending on the type of trench.
- Do not operate or grade material too near to the trench.

Question 2-I	**(PC2.6)**

How can you stop a trench from caving in? Give at least two (2) examples.

Answer may include:

- benching
- battering
- shoring or trench shields
- offset the blade to the maximum to move the machine mass (weight) away from the trench

Question 2-J	**(PC2.3, 2.6)**

What is the danger of trying to push dead trees over with a grader?

Answer may include:

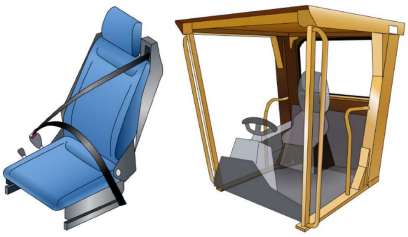
Branches could break off and fall on you.

Question 2-K	**(PC2.3, 2.6)**

If the grader tips over, which safety devices protect you from being crushed?

Answer may include:

The rollover protective structure (ROPS) and the seat belt.



Question 2-L	**(PC2.4, 2.6)**

You are working on soft, muddy ground and the wheels are slipping. How can you improve the grip?

Answer may include:

Drive with part of the grader on a previously graded area which reduces how much the grader is pushing or raise the blade until traction is regained.

Question 2-M	**(PC2.5)**

How would you work your grader when the light is bad or at night? List two (2) ways.

Answer may include:

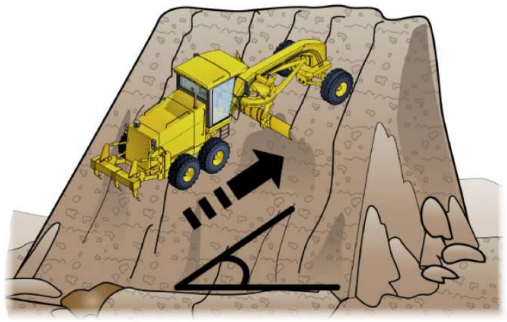
- turn on the work lights
- travel slower and allow extra stopping distances.

Question 2-N	**(PC2.5)**

How do you drive safely up or down a steep hill?

Answer may include:

Go straight up or down, not at an angle.



Question 2-O	**(PC2.5, 2.6)**

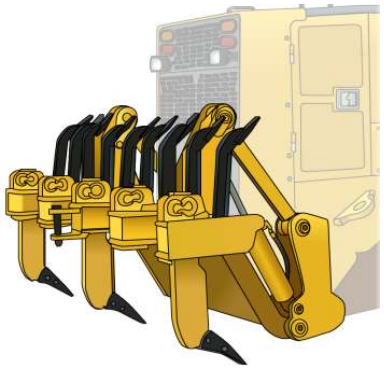
What must you do when approaching underground services while operating the rippers?

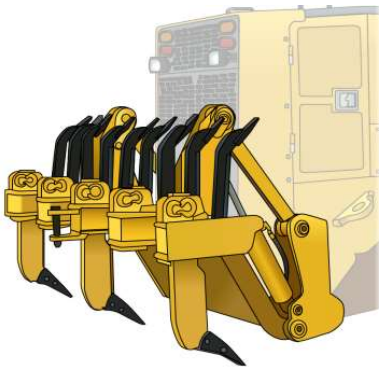
Answer may include:

- Raise the rippers clear of the ground until you have safely passed the underground services

Why?

- To prevent the rippers from damaging or collapsing the service cavities.



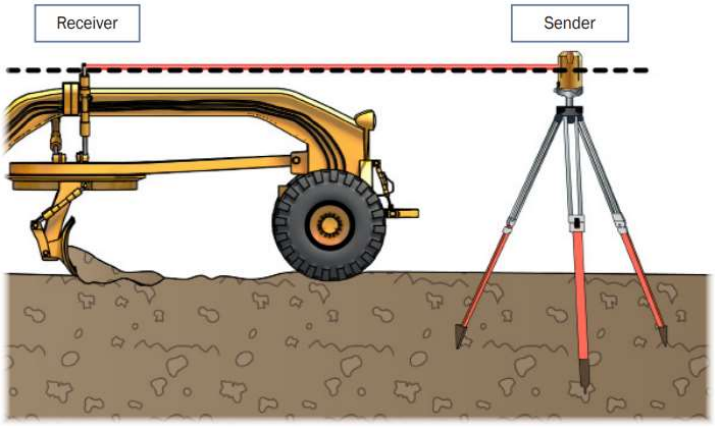
Question 2-P	**(PC2.3)**
The work plan calls for an area with a lot of rock to be ripped. Would you use a grader with a ripper attachment for this work?	
Answer may include: No the ripper attachment is designed to loosen up packed soil, not rock. 	

Question 2-Q	**(PC2.3, 2.4)**
The work plan calls for an area to be ripped prior to grading to allow water to quickly get below the surface. What would limit how deep you could rip with the grader?	
Answer may include: The grader traction. Ripper depth would need to be adjusted to maintain traction and limit wheel spin 	

Question 2-R	**(PC2.7)**
What you do when an alarm or buzzer sounds or a warning light comes on?	
Answer may include: • stop the machine • try to locate the fault • report to supervisor. 	

Question 2-S	**(PC2.4, 2.5)**

What is a laser grade control system?



Answer may include:
A laser grade control system can be used to guide the cutting depth and angle of the blade without the operator having to take any action.

Question 2-T	**(PC2.4, 2.5, 2.8)**

What is a GPS used for on an excavator?

Answer may include:

The GPS can be used to control the steering system of the grader so it travels along a pre-set path.

Question 3-A	**(PC3.1)**

List at least two (2) attachments you can use on a grader.

Answer must include answers in bold text:

- rippers
- scarifier
- dozer blade
- guidance system
- laser controlled leveling system
- rear mounted roller
- rear mounted broom

Question 3-B **(PC3.1, 3.4)**

Which grader or attachment is best for breaking up asphalt ready for pushing off work area?

Answer may include:

Rear mounted rippers

Question 3-C	**(PC3.2)**

How would you find out the correct way to remove or fit an attachment?

Answer may include:

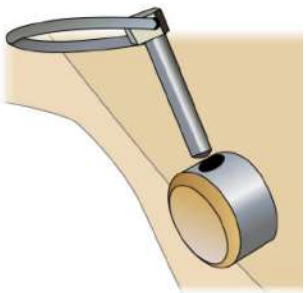
Read the attachment's and machine operators manuals

Question 3-D	**(PC 3.2, 3.3)**

How do you check the attachment is fitted correctly?

Answer may include:

Check all bolts, pins and fasteners are fitted correctly and tight, check all hoses are correctly clamped or tied off to prevent damage.

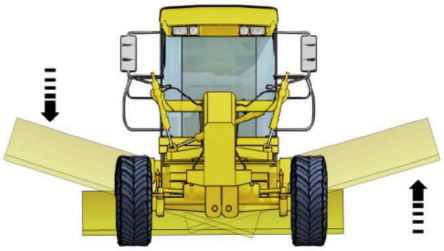


Question 3-E	**(PC3.3)**

Why do you need to test the attachment before using it?

Answer may include:

To make sure it's safe to use and is working properly.

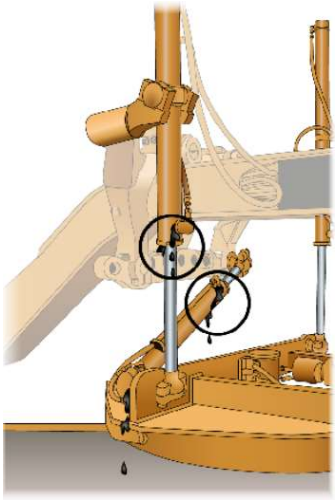


Question 3-F	**(PC3.3)**

What faults do you look for in the attachment hydraulic system? List two (2).

Answer may include:

- Damaged or bent rams
- Cracked/split hoses
- Loose pins
- Leaks
- Loose connections



Question 3-G	**(PC 3.1, 3.4)**

What attachment would you use if you were grading and compacting road shoulders in one pass?

Answer may include:

Use the rear mounted roller to compact the loose material while grading the shoulder to fill holes and level uneven surfaces.

Question 3-H	**(PC3.4)**

Give at least two (2) examples of safety limits you should remember when using an attachment.

Answer may include:

- Attachment is suitable for the machine
- Attachment is designed for the task
- Safe working load (SWL) of attachment and grader

Question 3-I	**(PC3.5)**

Why should you clean soil from an attachment after you have finished using it?

Answer may include:

To prevent rust and corrosion.

Question 3-J	**(PC3.5)**

How do you protect the attachment from damage when you've finished using it?

Answer may include:

- clean the attachment including joints and pivot points
- seal the hydraulic lines with plugs to prevent contamination and moisture entering
- store metal parts of the attachments clear of contact with the ground to prevent corrosion

Question 4-A	**(PC4.1, 1.5)**

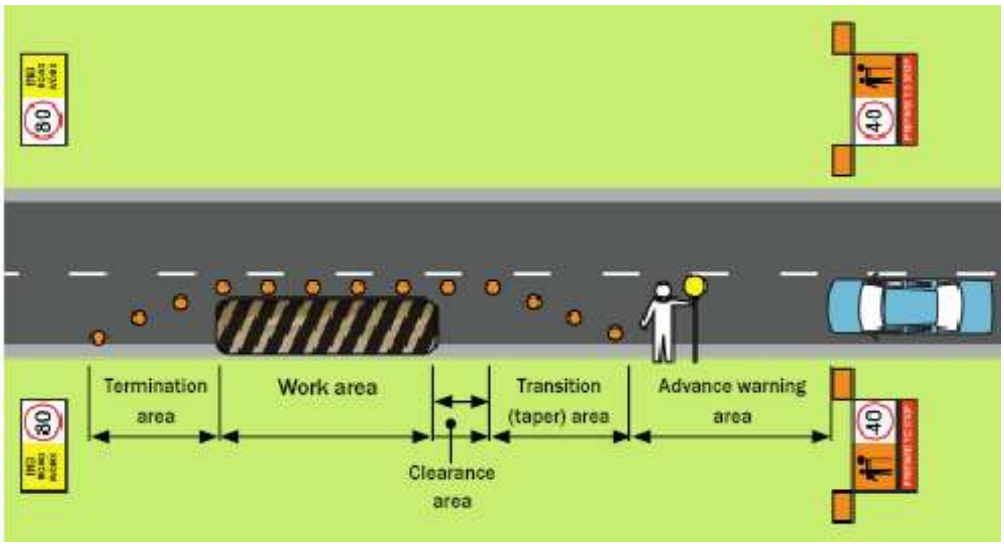
Signs and warning lights need to be used while loading a grader onto a transport vehicle on a public road? Is the grader operator allowed to put up traffic control signs?

Answer may include:

Only if the grader operator is a qualified traffic controller.

Question 4-B	**(PC4.1, 1.5)**

A grader is being loaded onto a transport vehicle on a public road? A traffic control plan needs to be used. What is the purpose of the traffic control plan?



Answer may include but is not limited to:
The aim of the traffic control plan is to maintain a safe flow of traffic around the area where the grader is being loaded onto the transport vehicle.

Question 4-C	**(PC4.1)**
How do you prepare a grader for relocating to another work site?	

Answer may include:

- clean all vegetation from the grader, grader attachments and tyres
- wash down the machine to remove all soil and contaminants

Question 4-D	**(PC4.1)**
Why should you wash down a machine before moving it to another worksite?	

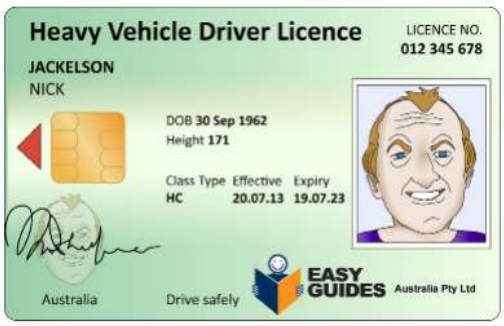
Answer may include:

To prevent contaminants, chemical residue, weeds and seeds being transferred between sites.

Question 4-E	**(PC4.2)**
What licence would the grader driver need if they were driving the grader between sites on a public road?	

Answer may include:

A licence class suitable for the weight of the grader as required by law in that state.



Question 4-F	**(PC4.2)**

You are asked to drive a grader on a public road. What checks must you make before using the road? List two (2) examples.

Answer may include:

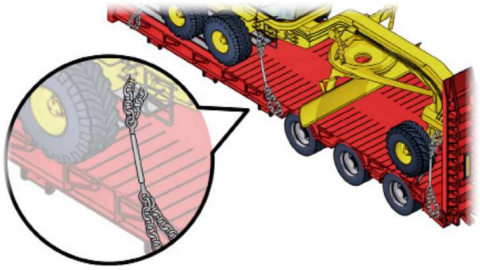
- check any speed restrictions
- check any road and bridge load limits
- check local laws that may limit the use of the road

Question 4-G	**(PC4.3)**

How do you secure a grader on a transport vehicle?

Answer may include:

Use chains or load binders to secure the grader to the vehicle as required by law.



Question 5-A	**(PC5.1, 5.2)**

Why is it dangerous to leave debris such as rocks on public roads and footpaths?

Answer may include:

- someone might trip over a rock and be injured
- rocks on the road can be picked up by passing vehicle tyres and thrown into the air and damage other vehicles

Question 5-B	**(PC5.1, 5.2, 5.3)**

What should you do after you have finished the job? List two (2) actions.

Answer may include:

- tell people who live in the area that the work is finished
- clean the job site
- remove any rubbish and recycle what you can

Question 5-C	**(PC5.1)**

What should you do with tools and equipment after you have finished using them? List two (2).

Answer may include:

- clean tools and equipment
- check tools and equipment for damage
- report any equipment or tools that need to be repaired
- dispose of tools that cannot be repaired
- put tools and equipment back in their proper place

Question 5-D	**(PC 5.3)**

You may need to fill out records after you have finished work.

Give two (2) examples of records that may need to be kept.

(A) Answer may include:

- shift handover form
- job plan form
- daily inspection booklet
- logbook

Score for knowledge assessment

Knowledge Assessment		
Correct answers:	_____ / **52**	
Percentage:		
Result (circle):	Satisfactory	Not satisfactory

Assessor feedback:

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If you have any questions about your results, speak to your trainer/supervisor.

Practical Assessment

The assessor must be satisfied the candidate has successfully demonstrated each element and performance criteria contained in the Unit of Competency.

It is the assessor's responsibility to decide if the candidate has competently demonstrated a skill. The assessor may question a candidate further if their demonstration needs clarification.

Practical assessment instructions

Practical assessment should be performed in a normal working environment where possible. However, under some circumstances may occur in a simulated work environment (refer to assessment conditions for further information).

The Assessor must:

- Clearly explain to the candidate what is expected of them
- Check that the candidate has been provided with the necessary tools and equipment
- Complete checklists as the candidate goes through the tasks
- Only question a candidate during a practical task if it is safe to do so
- Stop the assessment immediately if the candidate is doing something dangerous
- Stop the assessment immediately if the machine or objects are likely to be damaged
- Inform the candidate of the result of the assessment
- Provide the candidate with a **work order or job plan** that outline the task to demonstrate, if one is not provided then use the sample contained within this document or one of your own.

If an assessor needs to stop the assessment because of danger or possible damage, the candidate must be marked as not yet competent. If the assessment is stopped, further training would need to take place before a re-assessment can be undertaken.

Tasks in the assessment do not have to be assessed in isolation, they may be done as one continual task, a simple example of this might be to:

Ask the candidate to perform the **pre-start** requirements, when complete they should **drive** the grader to an area where they can **operate** it to **cut, level, fill, spread and compact** to pre-determined **specifications** and **use a number of attachments on different material types**. Now the candidate will be required to complete any **housekeeping** requirements then **prepare the grader for relocation** and **assist in loading the grader** onto a float or trailer. If the scenario above was completed twice it should meet the requirements as long as two different material types are used.

Note: Performing the actual practical task may be filmed and noted of where the video file is stored.

Note: See appendix for guidelines on what to look out for when candidate is performing practical tasks. Use the Appendix topic steps as basic benchmark guides.

Summary of practical assessment task.

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

Operate a grader;
By cutting, leveling, filling, trimming,

- spreading materials,
- Compacting and

Safely, effectively and efficiently following workplace procedures to carry out work activity on at least **two occasions**.

The assessor is to submit 2 work orders to candidate, to follow, which outlines work to be performed for at least **2 different material types** such as the following:

- mixing materials,
- stripping/spreading materials,
- cutting/digging,
- back filling,
- compacting,

and working with the following material types top soil, dirt, clay, rock or crushed rock, in situ material (lime) / sand, gravel, sand.

Including:

- ❑ assisting with loading and unloading Grader from float/trailer

Along with selecting, fitting, testing, using and removing at least two attachments, the attachment must be certified and approved in line with workplace procedures, such as the following;

- ❑ Front-mounted scarifier (mixer)
- ❑ Rear-mounted ripper
- ❑ Curved cutting edge blade
- ❑ Serrated edge blade
- ❑ Flat edge blade
- ❑ Roller

An example of a work order / job (requirements) might be the following;

Example 1 / Work Order 1. Assist with the moving of grader vehicle off and on float / trailer.
Dig up an area for a new road to be laid and use the rear mounted ripper to cut up soil. Use the curved cutting edge or flat edge blade to remove some of the top soil.
Next to the dug up soil, use the curved cutting edge blade to make a small trench for a dozer to dig a bigger hole for later use to lay pipes.

Example 2 / Work Order 2. Use a roller to flatten the Natural Ground level compacted subgrad of an area where a new road is to be laid.
Use the curved cutting edge or flat edge blade to lay in situ material (lime) / sand over new section of road to be laid and then compact it using a roller, to create a subbase course layer.
Use the curved cutting edge or flat edge blade to lay crushed rock over a subbase course layer and use a roller to compact the area for a paver to lay the Wearing course layer. Finally, assist with the moving of grader vehicle off and on float / trailer.

Note: Performing the actual practical task may be filmed and noted of where the video file is stored.

Resources Required:

Equipment

- ❑ Grader
- ❑ Float / trailer

Attachments

- ❑ Front Mounted scarifier or rear-mounted ripper.
- ❑ Curved cutting edge blade.
- ❑ Roller
- ❑ Flat edge blade

Materials

- ❑ In situ material (lime) / sand
- ❑ Crushed rock
- ❑ Top soil
- ❑ Rock

Description of work order / Job (requirements).

Description of work order 1 / Job 1:

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Description of work order 2 / Job 2:

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Practical Assessment – Check List

The skills and knowledge required to operate a grader to load, distribute and place materials, work must be performed on at least two occasions and carrying out the actual practical task may be filmed and noted of where the video file is stored.

Note See appendix for guidelines on what to look out for when candidate is performing practical tasks. Use the Appendix topic steps as basic benchmark guides.

Practical Assessment 1 – Pre-Start

Note: the job task / work order will be given to you by your trainer or assessor or you can do the sample job / work order contained within this document.

Task to be performed for job task / work order;

- ❑ Acquire all compliance documentation as needed according to job task / work order. (PC 1.1)
- ❑ Do a site inspection before performing job task / work order (PC 1.3, 1.2)
  - ❑ **Identify and report all potential hazards, risks and environmental issues** during site inspection and prepare a (Jsea), Emp document - Environmental management plan (EMP) (PC 1.3)
- ❑ Select appropriate PPE Equipment to operate Grader and make a note in job plan. (PC 1.4)
- ❑ Refuel vehicle and wear appropriate PPE equipment. (See appendix for Hazard control check list for the worksite/area when refuelling vehicle.) – (PC 1.4)

- ❑ Check that the Vehicle is safe to use and do a **pre start check** on Grader vehicle and attachments. (pc 2.1, 2.2)
- ❑ Review Emergency procedures for site, operating grader and discuss with supervisor (1.7)
- ❑ Crate a job plan outlining, what needs to be performed e.g. equipment needed, site report, traffic management required e.g. barriers, environment assessment, get PPE Equipment ready, confirm with management in writing or oral recording of conversation with supervisor about work instructions (PC 1.2, 1.8, 1.6, 1.4, 1.5) Also source the vehicles operators manual.
  - ❑ Note you must discuss your work area with your supervisor and other workers and identify the hazards and decide on the most effective control which should be used.

Submit the following documents;

- ❑ Job Plan – with notes of work that needs to be done and other support documents (ie traffic management plan along with all relevant documentation), also source a copy of the vehicles operators manual.
- ❑ Emp document - Environmental management plan (EMP)
- ❑ Jsea document - Job safety and environment analysis (JSEA) or Safe work method statement (SWMS)
- ❑ Video recording may be used for site inspection and conversation with supervisor of the work that needs to be carried out.
- ❑ 2 x Copies of Work Order 1 for each job performed / task.

Practical Assessment 1 – Pre-Start – Check list

Observation performed when performing Practical Task 1 from work order provided (Job 1, Job 2) Candidate:	**Yes**	**No**	**N/A**	**Job 1**	**Job 2**
Located and apply relevant documentation, policies and procedures. (PC 1.1, PC 1.2, 1.7)	❑	❑	❑		
❑ Locates operator's manual for Grader and finds requirements for pre-start and start-up checks. (PC 1.1)				❑	❑
❑ Locates site policies and procedures for personal protective equipment requirements when operating Grader.				❑	❑
❑ Candidate displays preparedness for emergency situations by outlining the steps to be taken in the case of a fire or accident.				❑	❑
❑ Interrupt work order or requirements before performing work task. (PC 1.2)				❑	❑
Review Emergency procedures and discuss with supervisor (pc 1.7)	❑	❑	❑	❑	❑
Selected and wear personal protective equipment. (PC 1.4)	❑	❑	❑		
❑ PPE selected must be as per site policies and relevant to the task. As a minimum MUST include appropriate footwear, Hi-visibility workwear and hard hat.				❑	❑
❑ PPE must be checked for serviceability and correctly fitted.				❑	❑
Conducted pre-start inspection of Grader.	❑	❑	❑		
❑ Pre-start check is carried out as per operators manual and workplace policies and procedures. Where possible a completed pre-start checklist should be provided as supporting evidence. (PC 2.1)				❑	❑
❑ During inspection the candidate must identify and/or verbalise any common faults they are looking for. (PC 2.1)				❑	❑
❑ Faults and/or damage found during inspection must be managed as per workplace policies and procedures. This should include, tagging out faulty equipment, isolating faulty equipment, reporting to the appropriate person and recording in a logbook. If no faults or damage are found the candidate must verbalise the procedure for the worksite to the assessor. (pc 2.2)				❑	❑
Carried out vehicle refuelling requirements and procedures where applicable. (PC 1.3, 1.4, 1.5)	❑	❑	❑		
❑ Candidate must refuel the Grader when necessary. The candidate must refer to workplace policies and procedures for refuelling. (PC 1.5)				❑	❑
❑ The correct PPE for refuelling must be selected and worn during the refuelling process. (PC 1.4, 1.5)				❑	❑
Crate a job plan outlining, what needs to be performed e.g. equipment needed, site report, traffic management required, environment assessment, Review traffic management plan, review work order and source appropriate tools or attachments for the job, confirm with management in writing or oral recording of conversation with supervisor about work instructions (PC 1.2, 1.8, 1.6, 1.4, 1.5)	❑	❑	❑	❑	❑

Submit the following documents;

- ❑ Job Plan – with notes of work that needs to be done and other support documents (ie traffic management plan along with all relevant documentation)
- ❑ Emp document - Environmental management plan (EMP)

- ❑ Jsea document - Job safety and environment analysis (JSEA) or Safe work method statement (SWMS)
- ❑ Video recording may be used for site inspection and conversation with supervisor of the work that needs to be carried out.
- ❑ 2 x Copies of Work Order 1 for each job performed / task.

The applicants' performance in Practical Assessment 1 – Pre-Start activity was deemed to be:	
☐ Satisfactory	**☐ Not yet satisfactory**
Applicant signature:	**Date:**
Trainer/assessor signature:	**Date:**

Practical Assessment 2 – Drive and operate a Grader

Task to be performed….

- ❑ Identify and report all potential hazards, risks and environmental issues. (PC 1.3)
- ❑ Start the Grader (2.3)
- ❑ Drive and operate the equipment to complete the work order tasks, along with Monitor hazards and risks during operations, and ensure safety of self, other personnel, plant and equipment (2.3, 2.4, 2.5, 2.6)
- ❑ Monitor and manage equipment performance using indicators and alarms (PC 2.7)
- ❑ and follow job task / work order, (PC 2.3, 2.4, 2.5)
- ❑ Finally, park and secure the Grader (PC 2.8)

Files to submit:

- ❑ 2 x Copies of work order.
- ❑ Job safety and environment analysis, (JSEA)
- ❑ Environmental management plan (EMP)
- ❑ Safe work method statement (SWMS)
- ❑ 1 x Video file of candidate operating vehicle & its machinery may be used. For job / work order 1

Video File Name: _____

- ❑ 1 x Video file of candidate operating vehicle & its machinery may be used. For job / work order 2

Video File Name: _____

Practical Assessment 2 – Drive and operate Grader – Check List

Observation performed when performing Practical Task 2 from work order provided (Job 1, Job 2) Candidate:	**Yes**	**No**	**N/A**	**Job 1**	**Job 2**
Identifying and reporting all potential hazards, risks and environmental issues	❑	❑	❑		
❑ The applicant must inspect the work area and identify any potential hazards and risks that exist including environmental hazards and risks. Where possible a completed **site inspection checklist** should be provided as supporting evidence. (pc 1.3)				❑	❑
❑ **Hazard control** methods consistent with the Hierarchy of hazard control and any existing environmental management plan must be used to manage the hazards. Site policies and procedures must also be followed. (pc 1.3) ❑ Submit jsea, EMP Environmental management plan (EMP) ❑ Submit a Safe work method statement (SWMS)				❑	❑
❑ The applicant must **inspect** the **work area** and **identify any potential hazards** and risks that exist including environmental hazards and risks. Where possible a completed site inspection checklist should be provided as supporting evidence. (pc 1.3)				❑	❑
Starting the Grader	❑	❑	❑		
❑ Candidate must ensure any footsteps and handgrips are clear of mud, debris and slippery substances. The candidate must face the Grader when mounting and dismounting and maintain three (3) points of contact at all times. Must not jump.				❑	❑
❑ Grader is started as per manufacturer's instructions and workplace policies and procedures. Post-start checks and tests must be carried out and any abnormalities rectified (where possible), reported and recorded.				❑	❑
Driving and operating the equipment	❑	❑	❑		
❑ Candidate applies safe work practices when driving and operating the Grader, including but not limited to using all warning devices and motion alarms, always checking travel direction is clear, continually monitoring ground and site conditions, monitoring the movement of the ❑ Front-mounted scarifier (mixer) ❑ Rear-mounted ripper ❑ Curved cutting edge blade ❑ Serrated edge blade ❑ Flat edge blade ❑ Roller and travelling at a safe speed.				❑	❑
Monitored and managed equipment performance using indicators and alarms	❑	❑	❑		
❑ Candidate identifies and monitors all indicators and alarms relevant to managing the performance of the Grader.				❑	❑
❑ The candidate must react appropriately to any indicators or alarms and apply problem solving and troubleshooting techniques to rectify any problems when operating the Grader.				❑	❑
❑ The candidate adjusts operating techniques to suit site conditions and/or as a direct response to any indicators or alarms.				❑	❑
Parked and secured Grader	❑	❑	❑		
❑ Candidate parks Grader in an appropriate and safe location.				❑	❑
❑ Grader is shutdown as per operators manual and workplace policies and procedures. Key must be removed.				❑	❑

❑ Post-operational inspection of Grader is performed and any damage or defects are managed as per policies and procedures (ie: isolate, tag and report).				❑	❑
❑ Grader is locked and secured as per workplace policies and procedures.				❑	❑

Files to submit:

- ❑ 2 x Copies of work order.
- ❑ Job safety and environment analysis, (JSEA)
- ❑ Environmental management plan (EMP)
- ❑ Safe work method statement (SWMS)
- ❑ 1 x Video file of candidate operating vehicle & its machinery may be used. For job / work order 1

Video File Name: _____

- ❑ 1 x Video file of candidate operating vehicle & its machinery may be used. For job / work order 2

Video File Name: _____

The applicants' performance in Practical Assessment 2 – Drive and operate Grader activity was deemed to be:

☐ **Satisfactory**	☐ **Not yet satisfactory**
Applicant signature:	**Date:**
Trainer/assessor signature:	**Date:**

Practical Assessment 3 – Complete operations to specification

Task to be performed….

Use correct tool / attachment for a grader to perform a number of operations, such as;

- Mix,
- strip,
- cut / dig,
- back fill,
- move
- distribute / spread,
- and compact,

to different types of materials according to job task / work order for at two different occasions.

Material types that may be used:

- ❑ In situ material (lime) / sand
- ❑ Crushed rock
- ❑ Rock
- ❑ top soil
- ❑ Base Clay
- ❑ Other types:

_____

Practical Assessment 3 – Complete operations to specification - Check List

Note: The candidate must **complete operations** to specifications / (work order) using at least two different material types and two different occasions. The operational task activities can be selected from those listed in the table highlighted in bold. Mark Yes / No once two operations have been completed by candidate.

Material types that may be used:

- ❑ In situ material (lime) / sand
- ❑ Crushed rock
- ❑ Broken up / compacted top soil
- ❑ Other material types: _____

Observation performed when performing Practical Task 3 from work order provided (Job 1, Job 2) Candidate:	**Yes**	**No**	**N/A**	**Job 1**	**Job 2**
Cut / Dig	❑	❑	❑		
Candidate adheres to safe work practices when completing operations.				❑	❑
Operations are completed as per workplace policies and procedures.				❑	❑
Candidate organises work activity to meet task (work) requirements and co-ordinates with others at the site.				❑	❑
Operating techniques suitable to the job and site conditions are used.				❑	❑
Candidate uses problem solving and troubleshooting techniques when applicable.				❑	❑
Suitable levelling techniques are applied if and when required.				❑	❑
The weight of any load lifted and/or carried is established to ensure it is within SWL of Grader, associated lifting equipment and vehicle being loaded.				❑	❑
Changes to the loads centre of gravity are managed during lifting and transporting operations.				❑	❑
Various communication techniques and a range of equipment are used to ensure the operation is completed safely.				❑	❑
Move	❑	❑	❑		
Candidate adheres to safe work practices when completing operations.				❑	❑
Operations are completed as per workplace policies and procedures.				❑	❑
Candidate organises work activity to meet task (work) requirements and co-ordinates with others at the site.				❑	❑

Operating techniques suitable to the job and site conditions are used.				❑	❑
Candidate uses problem solving and troubleshooting techniques when applicable.				❑	❑
Suitable levelling techniques are applied if and when required.				❑	❑
The weight of any load lifted and/or carried is established to ensure it is within SWL of Grader, associated lifting equipment and vehicle being loaded.				❑	❑
Changes to the loads centre of gravity are managed during lifting and transporting operations.				❑	❑
Various communication techniques and a range of equipment are used to ensure the operation is completed safely.				❑	❑
distribute /spread	❑	❑	❑		
Candidate adheres to safe work practices when completing operations.				❑	❑
Operations are completed as per workplace policies and procedures.				❑	❑
Candidate organises work activity to meet task (work) requirements and co-ordinates with others at the site.				❑	❑
Operating techniques suitable to the job and site conditions are used.				❑	❑
Candidate uses problem solving and troubleshooting techniques when applicable.				❑	❑
Suitable levelling techniques are applied if and when required.				❑	❑
The weight of any load lifted and/or carried is established to ensure it is within SWL of Grader, associated lifting equipment and vehicle being loaded.				❑	❑
Changes to the loads centre of gravity are managed during lifting and transporting operations.				❑	❑
Various communication techniques and a range of equipment are used to ensure the operation is completed safely.				❑	❑
compact	❑	❑	❑		
Candidate adheres to safe work practices when completing operations.				❑	❑
Operations are completed as per workplace policies and procedures.				❑	❑
Candidate organises work activity to meet task (work) requirements and co-ordinates with others at the site.				❑	❑
Operating techniques suitable to the job and site conditions are used.				❑	❑
Candidate uses problem solving and troubleshooting techniques when applicable.				❑	❑
Suitable levelling techniques are applied if and when required.				❑	❑

The weight of any load lifted and/or carried is established to ensure it is within SWL of Grader, associated lifting equipment and vehicle being loaded.				❑	❑
Changes to the loads centre of gravity are managed during lifting and transporting operations.				❑	❑
Various communication techniques and a range of equipment are used to ensure the operation is completed safely.				❑	❑
Loading dump trucks, wagons, hoppers, chutes, and cutting/boxing – n/a	❑	❑	❑		
❑ Candidate adheres to safe work practices when completing operations.				❑	❑
❑ Operations are completed as per workplace policies and procedures.				❑	❑
❑ Candidate organises work activity to meet task (work) requirements and co-ordinates with others at the site.				❑	❑
❑ Operating techniques suitable to the job and site conditions are used.				❑	❑
❑ Candidate uses problem solving and troubleshooting techniques when applicable.				❑	❑
❑ Suitable levelling techniques are applied if and when required.				❑	❑
❑ The weight of any load lifted and/or carried is established to ensure it is within SWL of Grader, associated lifting equipment and vehicle being loaded.				❑	❑
❑ Changes to the loads centre of gravity are managed during lifting and transporting operations.				❑	❑
❑ Various communication techniques and a range of equipment are used to ensure the operation is completed safely.				❑	❑
Stripping	❑	❑	❑		
❑ Candidate adheres to safe work practices when completing operations.				❑	❑
❑ Operations are completed as per workplace policies and procedures.				❑	❑
❑ Candidate organises work activity to meet task (work) requirements and co-ordinates with others at the site.				❑	❑
❑ Operating techniques suitable to the job and site conditions are used.				❑	❑
❑ Candidate uses problem solving and troubleshooting techniques when applicable.				❑	❑
❑ Suitable levelling techniques are applied if and when required.				❑	❑
❑ The weight of any load lifted and/or carried is established to ensure it is within SWL of Grader and associated lifting equipment.				❑	❑
❑ Changes to the loads centre of gravity are managed during lifting and transporting operations.				❑	❑
❑ Various communication techniques and a range of equipment are used to ensure the operation is completed safely.				❑	❑
❑ Operation is completed to specification and in line with work requirements.				❑	❑
Lifting and carrying materials – n/a	❑	❑	❑		
❑ Candidate adheres to safe work practices when completing operations.				❑	❑

❑ Operations are completed as per workplace policies and procedures.					
❑ Candidate organises work activity to meet task (work) requirements and co-ordinates with others at the site.				❑	❑
❑ Operating techniques suitable to the job and site conditions are used.				❑	❑
❑ Candidate uses problem solving and troubleshooting techniques when applicable.				❑	❑
❑ Suitable levelling techniques are applied if and when required.				❑	❑
❑ The weight of any load lifted and/or carried is established to ensure it is within SWL of Grader and associated lifting equipment.				❑	❑
❑ Changes to the loads centre of gravity are managed during lifting and transporting operations.				❑	❑
❑ Various communication techniques and a range of equipment are used to ensure the operation is completed safely.				❑	❑
❑ Operation is completed to specification and in line with work requirements.				❑	❑
Mixing materials	❑	❑	❑		
❑ Candidate adheres to safe work practices when completing operations.				❑	❑
❑ Operations are completed as per workplace policies and procedures.				❑	❑
❑ Candidate organises work activity to meet task (work) requirements and co-ordinates with others at the site.				❑	❑
❑ Operating techniques suitable to the job and site conditions are used.				❑	❑
❑ Candidate uses problem solving and troubleshooting techniques when applicable.				❑	❑
❑ Suitable levelling techniques are applied if and when required.				❑	❑
❑ The weight of any load lifted and/or carried is established to ensure it is within SWL of Grader and associated lifting equipment.				❑	❑
❑ Changes to the loads centre of gravity are managed during lifting and transporting operations.				❑	❑
❑ Various communication techniques and a range of equipment are used to ensure the operation is completed safely.				❑	❑
❑ Operation is completed to specification and in line with work requirements.				❑	❑
Backfilling	❑	❑	❑		
❑ Candidate adheres to safe work practices when completing operations.				❑	❑
❑ Operations are completed as per workplace policies and procedures.				❑	❑
❑ Candidate organises work activity to meet task (work) requirements and co-ordinates with others at the site.				❑	❑
❑ Operating techniques suitable to the job and site conditions are used.				❑	❑
❑ Candidate uses problem solving and troubleshooting techniques when applicable.				❑	❑
❑ Suitable levelling techniques are applied if and when required.				❑	❑
❑ The weight of any load lifted and/or carried is established to ensure it is within SWL of Grader and associated lifting equipment.				❑	❑
❑ Changes to the loads centre of gravity are managed during lifting and transporting operations.				❑	❑

❑ Various communication techniques and a range of equipment are used to ensure the operation is completed safely.				❑	❑
❑ Operation is completed to specification and in line with work requirements.				❑	❑

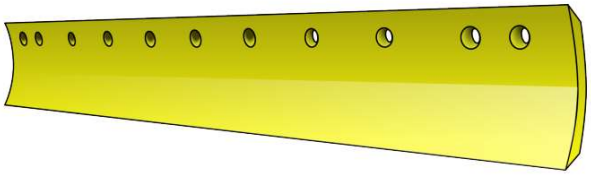
The applicants' performance in Practical Assessment 3 – Complete operations to specification activity was deemed to be:

☐ Satisfactory	☐ Not yet satisfactory
Applicant signature:	**Date:**
Trainer/assessor signature:	**Date:**

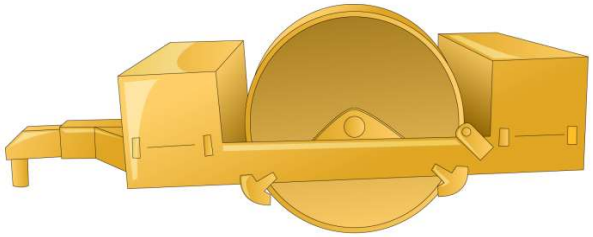
Practical Assessment 4 – Complete operations to specification - Attachments

You are to select, fit, test, use and remove at least two attachments when performing a number of operations according to job / work order.

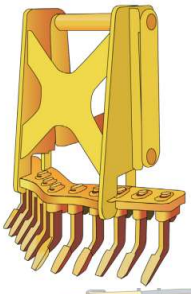
Cutting Edge Blade



Roller

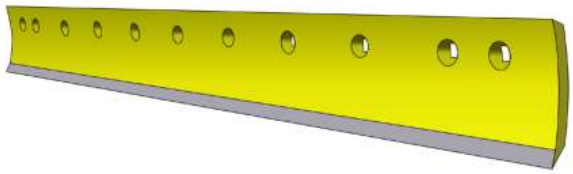


Front-mounted scarifier



Rear mounted ripper

Flat Edge Blade



Serrated edge blade

Practical Assessment 4 – Complete operations to specification – Attachments – Check List

Note: if necessary, the candidate must **select, fit, test, use and remove at least two attachments** selected from but not limited to those listed below highlighted in bold. The attachment must be certified and approved in line with workplace procedures.

Observation performed when performing Practical Task 4 from work order provided (Job 1, Job 2) Candidate used / and:	**Yes**	**No**	**N/A**	**Job 1**	**Job 2**
Front-mounted scarifier (mixer)	❑	❑	❑		
❑ Attachment selected is correct for the job to be performed.				❑	❑
❑ Required tools and equipment for fitting/removing the attachment are selected and used.				❑	❑
❑ Attachment is fitted as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is tested to ensure correct and secure fitting and correct operation.				❑	❑
❑ Candidate uses attachment in accordance with workplace procedures and as it is designed to be used.				❑	❑
❑ Attachment is removed as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is cleaned and stored as per workplace policies and procedures.				❑	❑
Rear-mounted ripper	❑	❑	❑		
❑ Attachment selected is correct for the job to be performed.				❑	❑
❑ Required tools and equipment for fitting/removing the attachment are selected and used.				❑	❑
❑ Attachment is fitted as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is tested to ensure correct and secure fitting and correct operation.				❑	❑
❑ Candidate uses attachment in accordance with workplace procedures and as it is designed to be used.				❑	❑
❑ Attachment is removed as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is cleaned and stored as per workplace policies and procedures.				❑	❑
Curved cutting edge blade	❑	❑	❑		
❑ Attachment selected is correct for the job to be performed.				❑	❑
❑ Required tools and equipment for fitting/removing the attachment are selected and used.				❑	❑
❑ Attachment is fitted as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is tested to ensure correct and secure fitting and correct operation.				❑	❑
❑ Candidate uses attachment in accordance with workplace procedures and as it is designed to be used.				❑	❑
❑ Attachment is removed as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is cleaned and stored as per workplace policies and procedures.				❑	❑

Observation performed when performing Practical Task 4 from work order provided (Job 1, Job 2) Candidate used / and:	**Yes**	**No**	**N/A**	**Job 1**	**Job 2**
Serrated edge blade	❑	❑	❑		
❑ Attachment selected is correct for the job to be performed.				❑	❑
❑ Required tools and equipment for fitting/removing the attachment are selected and used.				❑	❑
❑ Attachment is fitted as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is tested to ensure correct and secure fitting and correct operation.				❑	❑
❑ Candidate uses attachment in accordance with workplace procedures and as it is designed to be used.				❑	❑
❑ Attachment is removed as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is cleaned and stored as per workplace policies and procedures.				❑	❑
Flat edge blade	❑	❑	❑		
❑ Attachment selected is correct for the job to be performed.				❑	❑
❑ Required tools and equipment for fitting/removing the attachment are selected and used.				❑	❑
❑ Attachment is fitted as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is tested to ensure correct and secure fitting and correct operation.				❑	❑
❑ Candidate uses attachment in accordance with workplace procedures and as it is designed to be used.				❑	❑
❑ Attachment is removed as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is cleaned and stored as per workplace policies and procedures.				❑	❑
Roller	❑	❑	❑		
❑ Attachment selected is correct for the job to be performed.				❑	❑
❑ Required tools and equipment for fitting/removing the attachment are selected and used.				❑	❑
❑ Attachment is fitted as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is tested to ensure correct and secure fitting and correct operation.				❑	❑
❑ Candidate uses attachment in accordance with workplace procedures and as it is designed to be used.				❑	❑
❑ Attachment is removed as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is cleaned and stored as per workplace policies and procedures.				❑	❑

Observation performed when performing Practical Task 4 from work order provided (Job 1, Job 2) **Candidate used / and:**	**Yes**	**No**	**N/A**	**Job 1**	**Job 2**
Other: _____	❑	❑	❑		
❑ Attachment selected is correct for the job to be performed.				❑	❑
❑ Required tools and equipment for fitting/removing the attachment are selected and used.				❑	❑
❑ Attachment is fitted as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is tested to ensure correct and secure fitting and correct operation.				❑	❑
❑ Candidate uses attachment in accordance with workplace procedures and as it is designed to be used.				❑	❑
❑ Attachment is removed as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is cleaned and stored as per workplace policies and procedures.				❑	❑
Other: _____	❑	❑	❑		
❑ Attachment selected is correct for the job to be performed.				❑	❑
❑ Required tools and equipment for fitting/removing the attachment are selected and used.				❑	❑
❑ Attachment is fitted as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is tested to ensure correct and secure fitting and correct operation.				❑	❑
❑ Candidate uses attachment in accordance with workplace procedures and as it is designed to be used.				❑	❑
❑ Attachment is removed as per manufacturer's instructions and workplace policies and procedures.				❑	❑
❑ Attachment is cleaned and stored as per workplace policies and procedures.				❑	❑

The applicants' performance in Practical Assessment 4 – Complete operations to specification activity was deemed to be:

☐ **Satisfactory** ☐ **Not yet satisfactory**

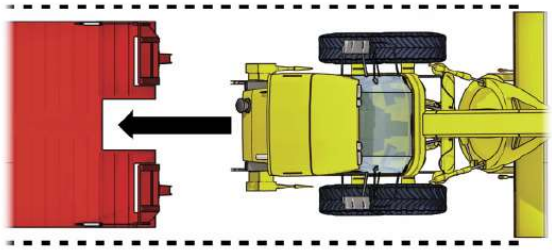
Applicant signature: **Date:**

Practical Assessment 5 – Load, unload and relocate Grader.

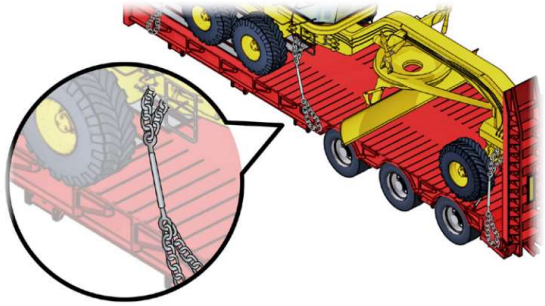
You are to demonstrate the ability to;

Prepare grader for relocation

Move grader safely within and between work areas, observing relevant codes and traffic management requirements



Assist with loading and unloading machine from float/trailer as required by workplace procedures.



Practical Assessment 5 – Load, unload and relocate Grader checklist

Candidate must demonstrate the ability to;

Prepare grader for relocation,

Move grader safely within and between work areas, observing relevant codes and traffic management requirements,

Assist with loading and unloading machine from float/trailer as required by workplace procedures.

Observation performed when performing Practical Task 5 from work order provided (Job 1, Job 2) **Candidate:**	**Yes**	**No**	**N/A**	**Job 1**	**Job 2**
Prepared Grader for loading, unloading or relocation	❑	❑	❑		
❑ Attachment selected is correct for the job to be performed.				❑	❑
❑ Required tools and equipment for fitting/removing the attachment are selected and used.				❑	❑
Moved Grader safely within and/or between work areas, observing relevant codes and traffic management requirements	❑	❑	❑		
❑ Appropriate traffic management including adequate and correct signage and the assistance of a traffic control person is in place when and where necessary.				❑	❑
❑ If travelling on a public road the candidate confirms the Grader meets local requirements for registration and roadworthiness.				❑	❑
❑ Candidate is appropriately qualified (ie: licenced) to operate Grader on public road				❑	❑
❑ Candidate follows all road laws and requirements when travelling on a public road and/or all site requirements and safe work procedures when moving between work areas on the job site.				❑	❑
Assisted loading and unloading machine from float/trailer in accordance with safe work practices	❑	❑	❑		
❑ Candidate assists qualified person to load and unload the Grader from a float or trailer.				❑	❑
❑ Loading and unloading of the float or trailer is performed in line with safe work practices and the chain of responsibility.				❑	❑

The applicants' performance in Practical Assessment 5 – Load, unload and relocate Grader activity was deemed to be:

☐ **Satisfactory**	☐ **Not yet satisfactory**
Applicant signature:	**Date:**
Trainer/assessor signature:	**Date:**

Practical Assessment 6 – Housekeeping

You are to demonstrate the ability to;

Clear a work area and dispose of or recycle any material according to workplace procedures

Manage and/or report hazards to maintain a safe working environment

Complete and file or distribute documentation in a manner that complies with workplace practices

Practical Assessment 6 – Housekeeping checklist

Candidate must demonstrate the ability to;

Clear a work area and dispose of or recycle any material according to workplace procedures

Manage and/or report hazards to maintain a safe working environment

Complete and file or distribute documentation in a manner that complies with workplace practices.

Observation performed when performing Practical Task 6 from work order provided (Job 1, Job 2) **Candidate:**	**Yes**	**No**	**N/A**	**Job 1**	**Job 2**
Cleared work area and disposed of or recycle materials according to workplace procedures	❑	❑	❑		
❑ Candidate must ensure the work area is clear of any rubbish and debris. This should occur before during and after operation.				❑	❑
❑ Materials must be disposed of as per policies and procedures and/or environmental management requirements. This should include recycling of materials where possible and the correct disposal of environmentally sensitive materials and substances.				❑	❑
Managed and/or reported hazards to maintain a safe working environment	❑	❑	❑		
❑ Housekeeping hazards must be managed in line with workplace policies and procedures and the hierarchy of hazard control.					
❑ Housekeeping hazards must be reported and documented in line with workplace policies and procedures.					
Complete and file or distribute documentation in a manner that complies with workplace practices	❑	❑	❑		
❑ All required documentation is completed and filed or distributed to the appropriate people in line with workplace policies and procedures. This Answer may include but is not limited to:				❑	❑
❑ Checklists				❑	❑
❑ Reports				❑	❑
❑ Site specific forms				❑	❑
❑ SWMS/JSEA.				❑	❑

The applicants' performance in Practical Assessment 6 – Housekeeping activity was deemed to be:

☐ Satisfactory	**☐ Not yet satisfactory**
Applicant signature:	**Date:**
Trainer/assessor signature:	**Date:**

Knowledge and Practical Assessment Summary – Competency Sign Off

Files to be submitted.

Knowledge Assessment
❑ 1 x Knowledge assessment

Practical Work
❑ 2 x activities performed in work place or simulated environment (Additional evidence: Video footage of candidate performing work order)
Name of work order and/or Video File 1: _____
Name of work order and/or Video File 2: _____

Documents that need to be submitted.
❑ 2 x Copies of work order
❑ 2 x Job safety and environment analysis, (JSEA) – 1 each for work order
❑ 2 x Environmental management plan (EMP) – 1 each for work order
❑ 2 x Safe work method statement (SWMS) – 1 each for work order
❑ 2 x Job plans with notes and attachments of required documentation – 1 each for work order
❑ 1 x Trainer's Assessment Work book filled in of candidate's assessment. Assessment Checklists

Knowledge and Practical Assessment Summary	**Satisfactory**	**Not Satisfactory**
0. Knowledge Assessment - Written Quiz	❑	❑
1. Pre-Start	❑	❑
2. Drive and operate Grader	❑	❑
3. Complete operations to specification	❑	❑
4. Attachments	❑	❑
5. Load, unload and relocate Grader	❑	❑
6. Housekeeping	❑	❑

Competency:	Not Yet Competent ❑ Date_____	Competent ❑ Date_____
Feedback to be given to candidate or to Workplace Supervisor		
Trainer / Assessor signature: **Date:**	The learner has been assessed as ❑ **Not Yet competent /** ❑ **competent** in the elements and performance criteria, critical aspects for assessment, required skills and knowledge for this unit and the evidence presented is: ❑ **Authentic** ❑**Valid** ❑ **Reliable** ❑ **Current** ❑ **Sufficient**	

Appendix.

Unit Performance evidence.

The candidate must demonstrate the ability to complete the tasks outlined in the elements and performance criteria of this unit.

The candidate must demonstrate completion of grader operations that safely, effectively and efficiently follows workplace procedures to meet carry out work activity on at least two occasions, and include:

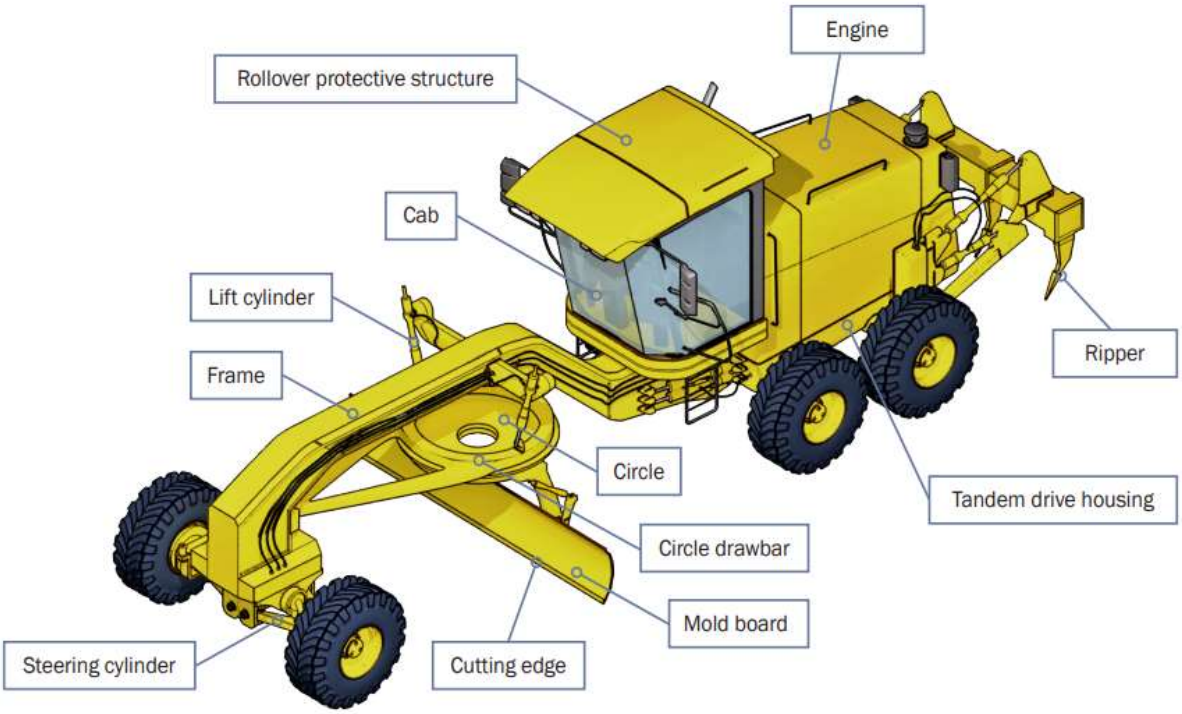
- conducting prestart checks prior to commencing operations and shutdown procedures on completion of operations
- driving and operating the equipment to site conditions
- completion of operations to specification using at least two different material types including:
  - cutting and maintaining drains
  - forming/upgrading/maintaining roads
  - mixing/ spreading materials
  - scarifying and ripping
  - cutting and trimming of batters
  - trimming of road sub-grades and pavements
  - site clean-up
  - form and carry a windrow
- selecting, fitting, testing, using and removing at least two attachments, the attachment must be certified and approved in line with workplace procedures
- assisting with loading and unloading unit plant type from float/trailer
- parking and securing of equipment.

In the course of the above the candidate must also:

- locate and apply relevant documentation, policies and procedures
- select and wear personal protective equipment required for work activities
- carry out vehicle refuelling requirements and procedures where applicable
- apply safe work practices, identifying and reporting all potential hazards, risks and environmental issues
- apply problem solving and troubleshooting techniques when operating equipment
- monitor and manage equipment performance using indicators and alarms
- identify common equipment faults
- establish weight of load
- apply levelling techniques
- apply cut and fill techniques
- conduct towing of equipment/plant where required
- select and use the required tools and equipment
- apply methods of changing machine attachments
- use a range of communication techniques and equipment essential to the safe completion of work activity, including hand, audible and other signals
- meet written and verbal reporting requirements and procedures associated with equipment operations
- organise work activities to meet all task requirements.

Basic Pre-Inspection Check list.

Identify Components for Grader.



Check that each item of Grader is operational. (Use Pre-Inspection Check list.)

EARTHMOVING EQUIPMENT - Daily Inspection Checklist Week Starting ____/____/____

Company/Site _____ Machine Type _____

Machine Hour Meter _____/ / Machine Number _____

CHECK DAILY BEFORE EACH SHIFT: [✓] = OK [×] = Action needed [N/A] = Not applicable	Mon	Tue	Wed	Thur	Frid	Sat	Sun
WEAR OR DAMAGE: structure, guards, chains, hooks, pins...							
HYDRAULICS: rams, hoses, leaks, wear...							
WHEELS, TRACKS, TYRES: nuts, pressure, wear, tension...							
ATTACHMENTS: bucket, cutting edge, pins, teeth, pivots...							
FLUIDS: oil, hydraulic, coolant, fuel, battery, wiper water...							
CABIN: seat, seat belts, ROPS/FOPS, loose objects, visibility, fire extinguisher, windows, washer, wipers, mirrors, demister...							
LOAD CAPACITY PLATE: present, legible, clean, correct...							
BRAKES: park brake, service brake...							
CONTROLS: steering, indicators, lights, gauges, operation...							
WARNING DEVICES: horn, reversing beeper, alarms, lights...							
OTHER: warning signs, operator manual, decals, locks, radio...							
Operator doing check to clearly write/sign their name at the bottom of each column.							

FAULT REPORTED BY _____ Date: ____/____/____

DANGER DO NOT OPERATE

Description of fault _____

NOTE: Operator to TAG OUT machine if needed.

ACTION TAKEN TO RETURN TO SERVICE

Print Name _____

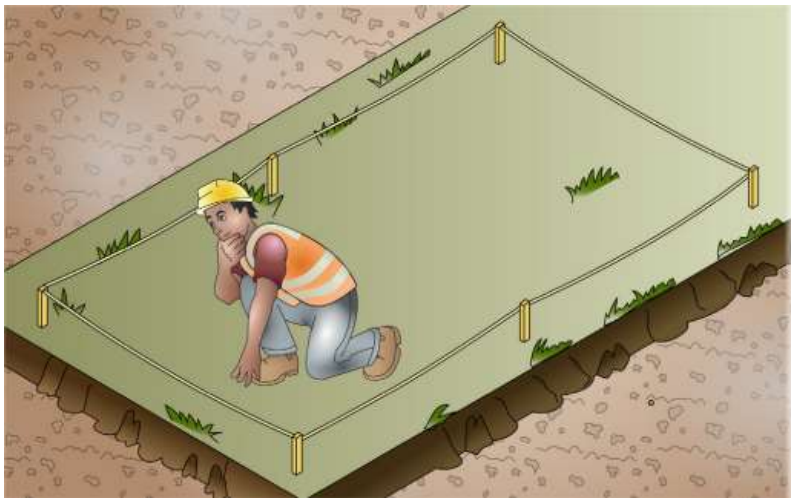
Date ____/____/____ Signature _____

Hazard control check list for the worksite/area when refuelling vehicle.

Hazard	Effects show		Personal Protection Needed
	immediate	delayed	
Example: Welding burns	√		Example: Gloves, long sleeves, long trousers,

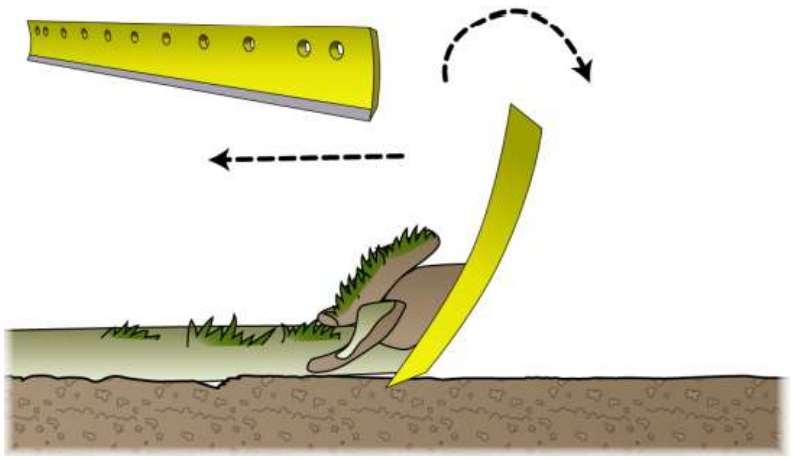
How do you strip top soil.

1. Mark the area using pegs.

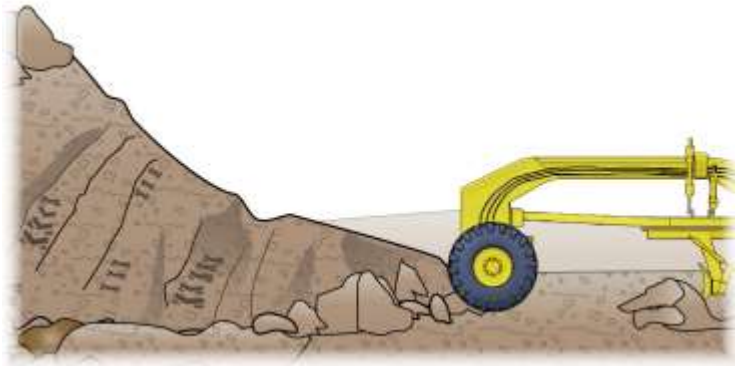


2. Drive forward with the blade at an angle and on the ground. This will fill in the dips and flatten out the bumps. Reverse in the same line with the blade up.

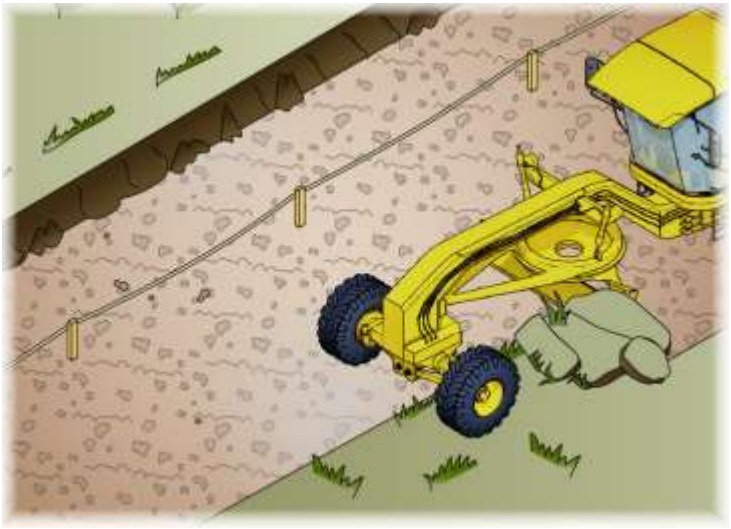
3. Tilt the blade backwards and lower the arms. Keep moving forwards to continue stripping the topsoil.



4. Keep pushing with full blade to end of strip run.



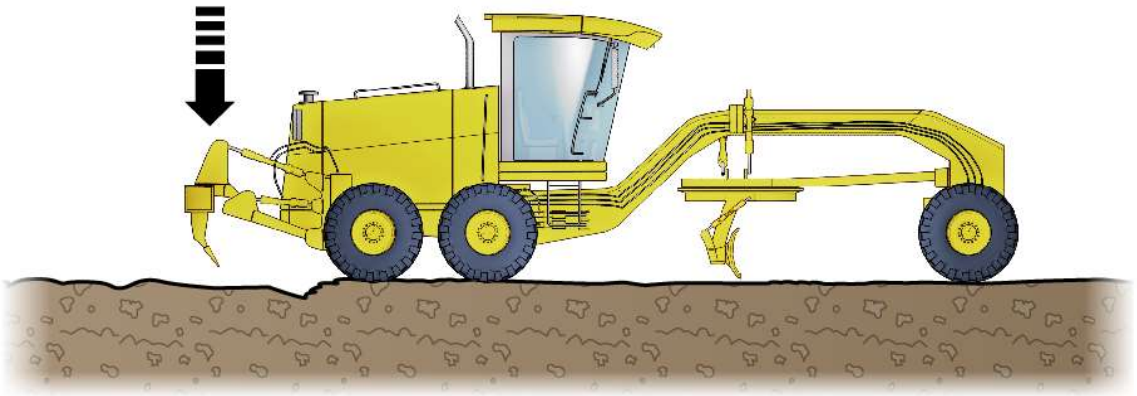
5. Move ½ blade width and make the next cut.



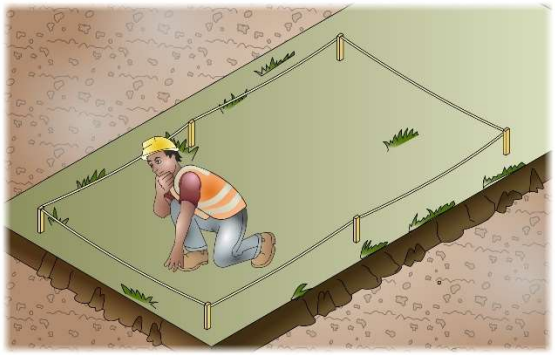
How to you use a ripper to break up dirt / top soil for grading.

1. Once Ripper is mounted and all attached hydraulic lines have been fitted,

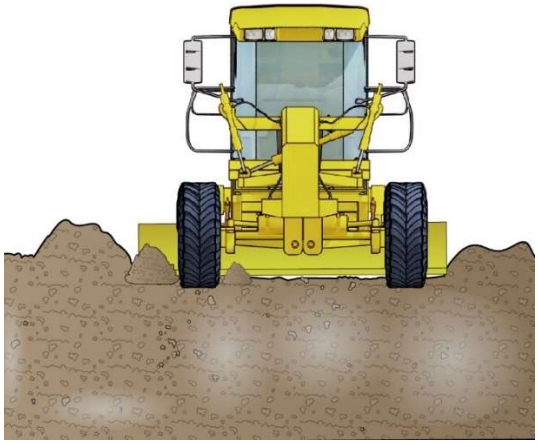
2. Test the device before using it i.e., move device up and down to see if it is securely attached.



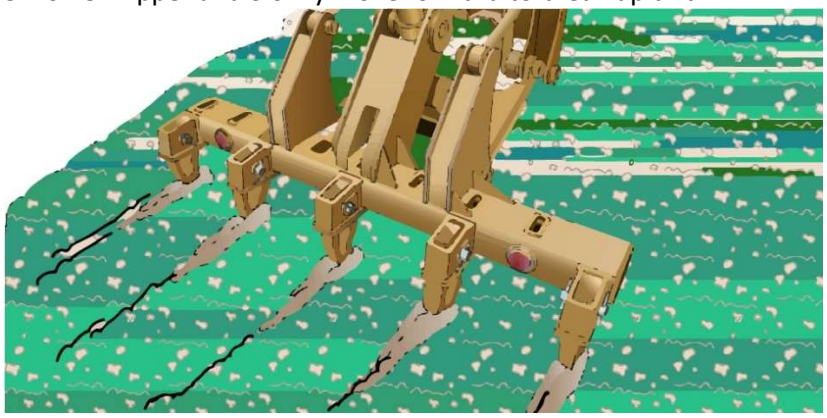
3. Plan your path.



4. Move Grader into position.

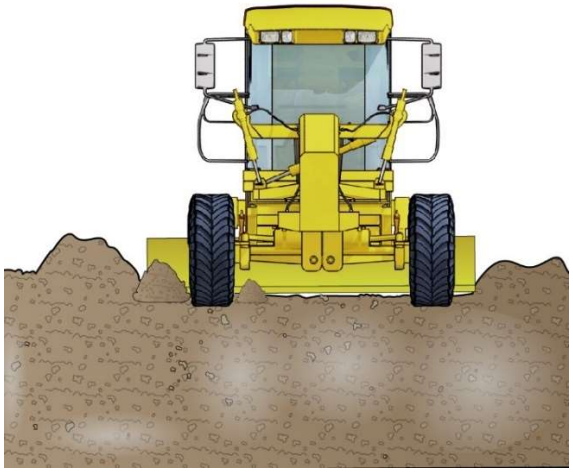


5. Lower Ripper and Slowly move forward to break up dirt.

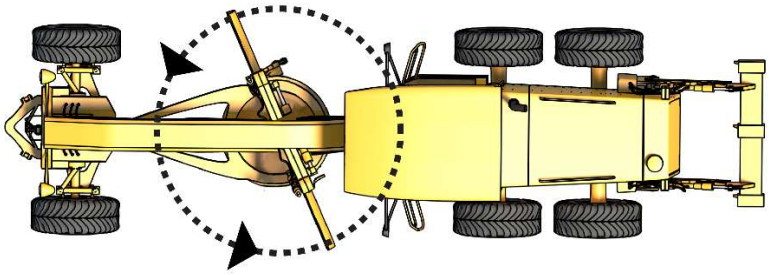


How to distribute dirt over a surface.

1. Align Grader up with start position



2. Rotate blade 30 to 40 degrees to distribute dirt.

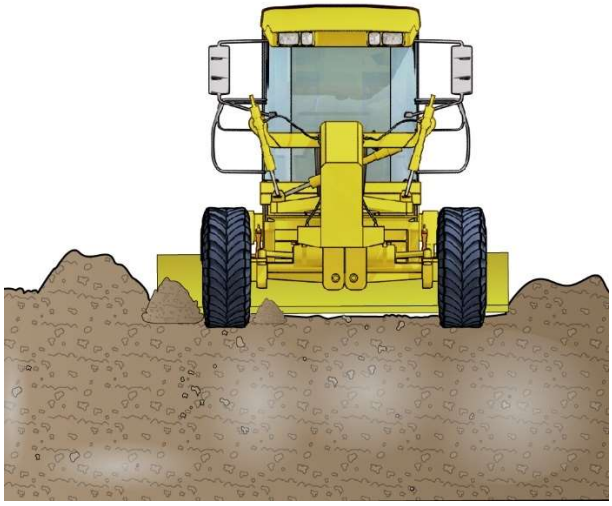


3. Angle wheels if necessary

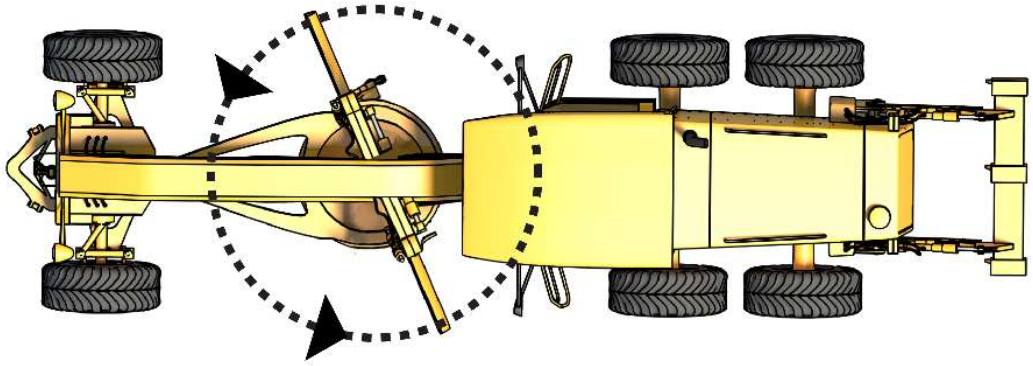
4. Drive forward.

How to use Grader to Create a drainage Dich or v neck ditch.

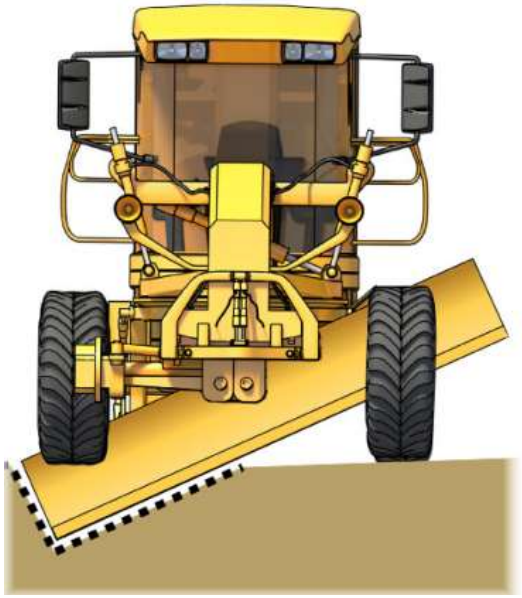
1. Align Grader up with start position



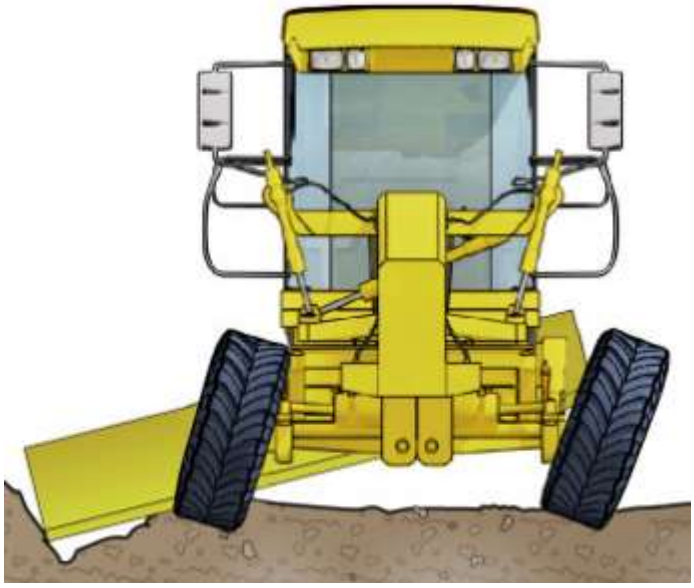
2. Rotate blade 30 to 40 degrees to distribute dirt.



3. Tilt the blade putting the leading corner closest to the ground.



4. Tilt wheels if necessary, the wheels should be tilted away from the ditch.



5. Drive Forward.