CONSTRUCTION
Training Group

LEARNER GUIDE

Transporter Safety (TRO)

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CONSTRUCTION Training Group

ASSESSOR GUIDELINES – GENERAL

1. Introduction

1.1 Scope

As the Assessment Instruments follow the guidelines set down by the National Guidelines for Occupational Health and Safety Competencyy Standards for the operation of Loadshifting and Other Types of Specified Equipment, Assessors should be familiar with the publication.

1.2 Evidence of Competence

Evidence of competence is established in a number of ways. The methods used in the following instruments involve:

- Assessment of practical performance
- Written and/or oral answers to questions on underpinning knowledge.

2. Preparing for the Assessment

2.1 Study the instruments

You need to read the assessment instruments and specific instructions carefully before beginning an assessment.

2.2 Confirm Appointments

Prior to an assessment, you need to confirm the date, time and location of the assessment with the applicant and any other relevant people.

2.3 Equipment Availability

The availability of equipment, materials and a suitable working area must be organised and confirmed, prior to the assessment.

2.4 Workplace Factors

Because procedures vary greatly between workplaces, it is important for assessors to plan their approaches to meet the requirements of the individual workplace. Make sure you take the timeframe into account when planning the assessment and also make the applicant aware of any time limits.

2.5 Selecting Questions

Questions for the written/oral assessment should be randomly
selected, either by hand or using the computer system, if applicable.

3. Conducting the Assessment

3.1 Provide an Explanation

Begin by explaining clearly to the applicant what is required of them. Check that the applicant has provided (or has been provided with) the necessary tools and equipment.

3.2 Practical Performance

Complete the practical performance checklist, as the applicant works through the required tasks. Wherever possible, this should be done in a normal working environment.

Do not ask the applicant questions while he/she is performing a task, as this can be distracting, and may affect the time taken to complete the assessment.

If, at any time, the applicant is endangering themself or others, stop the assessment immediately.

This indicates that the applicant is not yet competent and may require further training, before being reassessed.

Assessments should also be stopped, if equipment or property is likely to be damaged.

3.3 Knowledge

The knowledge assessment covers both oral and written exercises. The model answers provided with the knowledge assessment instruments are not necessarily exhaustive. Use your own judgement when scoring alternative answers.

3.4 Recording Responses

Each item and question on the assessment form you use is accompanied by a box. Assessors must complete every box as follows:

✓	CORRECT PERFORMANCE/ ANSWER
X	NOT YET ACHIEVED
NA	NOT APPLICABLE
O	ORAL ASSESSMENT
S	SIMULATED ASSESSMENT

If a box is marked incorrectly, cross out the mistake, mark the correct response alongside, and initial the change.

4. Determining Competencies

4.1 Assessment Summary

A specific assessment summary is given for each certificate class. This is to be filled in and signed by the assessor and counter signed by the applicant.

The duplicate is given to the applicant. The original with digital identification photo is sent to the certificating authority by the assessor. The triplicate remains with the assessor.

4.2 Competency Requirements

In order for you to deem an applicant competent, he or she must have completed each section of the assessment to the standard required. You should note any time constraints when arriving at your decision.

The standard required for each instrument is specified in the specific guidelines and/or on the summary page at the end of each instrument.

4.3 Additional Comments

Where an applicant fails to meet the standard of competence, you should add a written comment on the Assessment Summary, which briefly explains the problem.

Advice to the applicant, on the appropriate remedial action should also be included. This will also assist the certificate assessor, in the event that the applicant undergoes future reassessment.

Likewise, if an applicant demonstrates outstanding or remarkable performance, this should be noted.

4.4 Further Investigation

As a certificate assessor, it is your role to determine whether or not an applicant has achieved the standard necessary for the certifying Authority to be able to grant an equipment operator HSO qualification card.

Whenever you are unsure of the applicant's performance or knowledge, ask additional questions, and obtain additional evidence, before making your final decision.

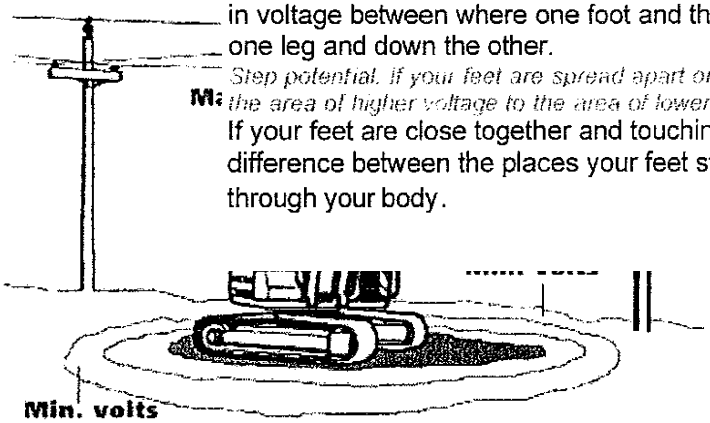
Diagram 1:

Step potential

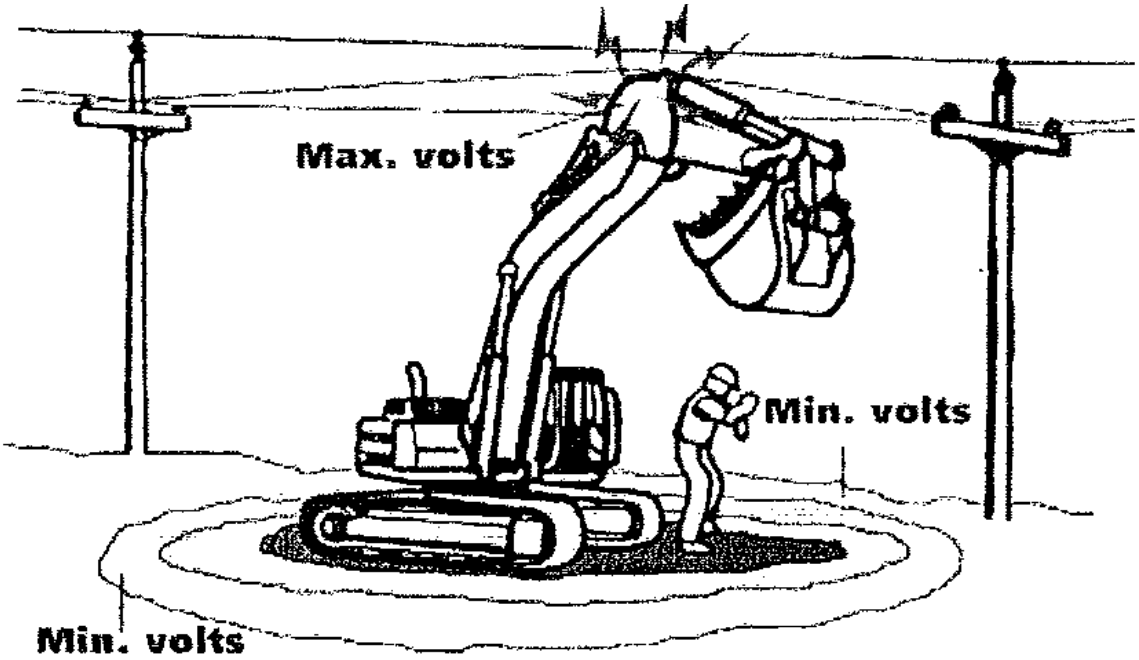
Step potential is the voltage difference between two places that are a step apart on energised ground. For example, if you are standing on energised ground, there could be a significant difference in voltage between where one foot and the other are placed, and an electric current could flow up one leg and down the other.

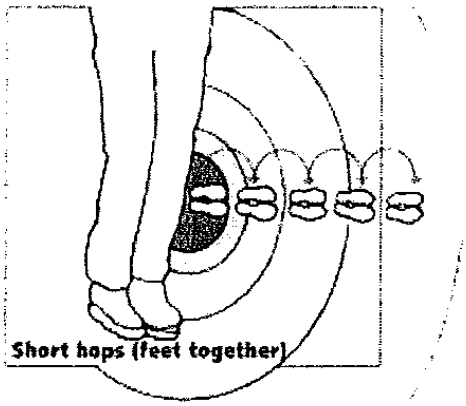
Step potential. If your feet are spread apart on energised ground, electricity can flow through your body from the area of higher voltage to the area of lower voltage

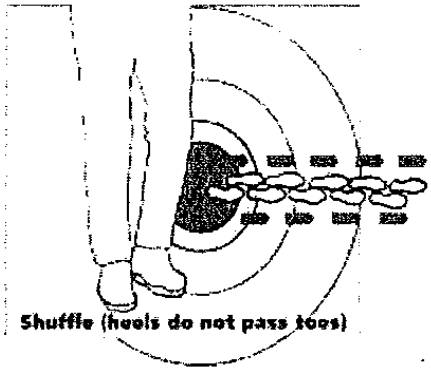
If your feet are close together and touching, you are fairly safe. Since there is almost no voltage difference between the places your feet stand, there is little reason for electricity to seek a path through your body.

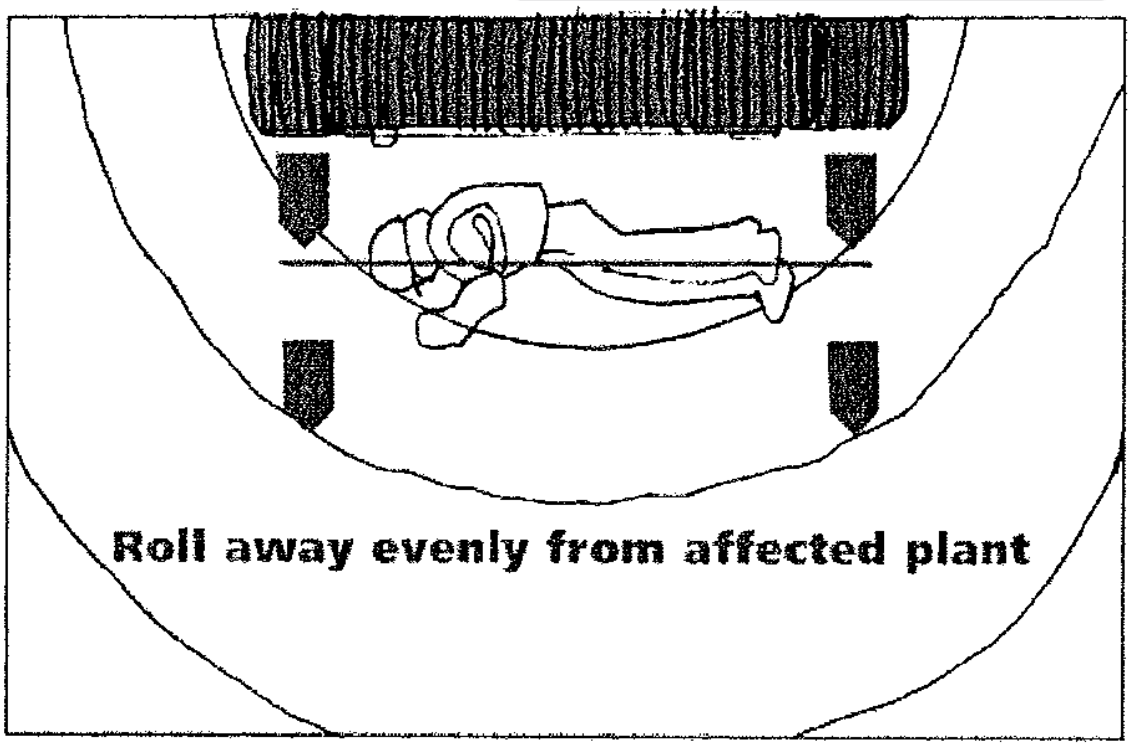


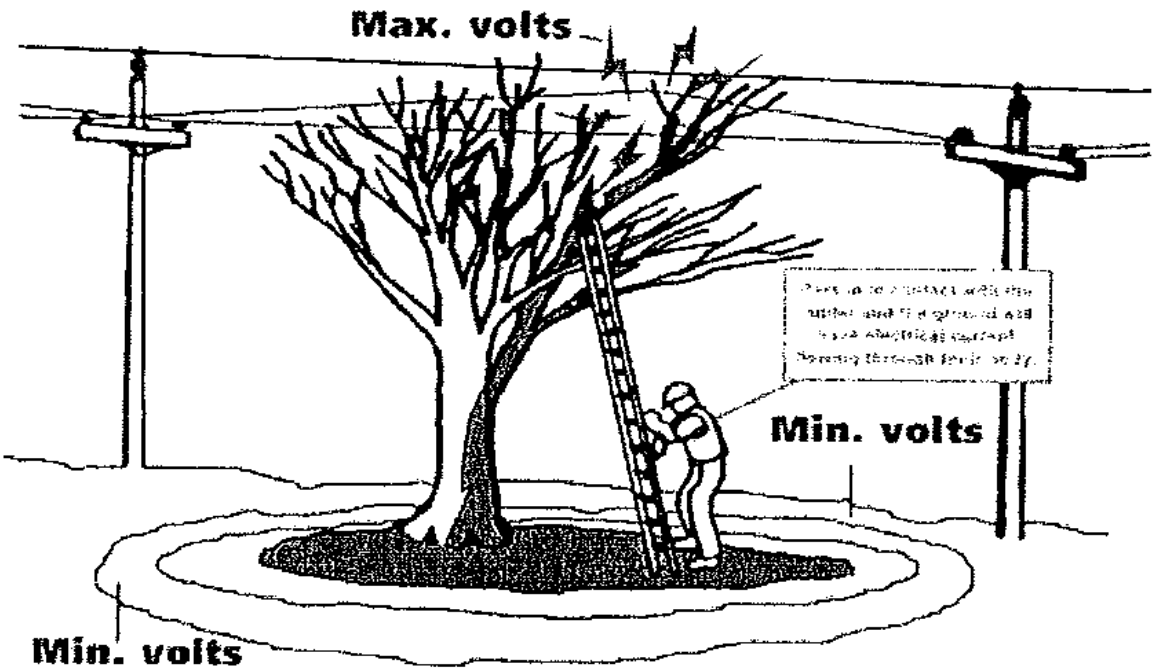
If anything touches a high-voltage power line or if a power line falls to the ground, electricity will flow to the ground, energising the tree or equipment and anything in contact with it. The surrounding ground may be extremely hazardous. The voltage gradually decreases from the point of contact until it reaches zero. The safe distance shown here—10 metres — is for line voltages up to and including 66 kV (66 000 V).




Short hops (feet together)


Shuffle (heels do not pass toes)


Roll away evenly from affected plant



Touch potential

Touch potential is another danger that comes from the difference in voltage. It occurs when you touch something that is energised while standing on the lower voltage ground. For example, if some equipment is in contact with a power line, it will be energised to the same voltage as the power line; the surrounding ground will be energised to a lower voltage. If you touch the energised equipment or tree at the same time as you touch the ground with your feet, electricity will flow through your body from the higher voltage equipment to the lower voltage ground.

Touch potential: Trees and equipment become energised when they contact a power line. Electricity can flow through a worker who touches the energised tree or equipment, often causing serious injury or death.

Currents greater than 75 mA can cause ventricular fibrillation (rapid, ineffective heartbeat) and will cause death in a few minutes.

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National Guidelines for OHS Competency Standards

Transporter Operator

PART ONE

PERFORMANCE ASSESSMENT

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Assessor Guidelines – Specific (Performance Assessment)

ASSESSMENT INSTRUMENT – SPECIATIONS
The following performance assessment covers the Loadshifting Standard elements from [NOHSC:7019(1992) which apply to a Transporter Operator

1. The assessment requires the transporter operator to check the equipment, plan the work and to safely and competently operate, the equipment.

The assessment is performed in three sections:

1.1 Conduct routine pre-operational check on Transporter Operator.

1.2 Inspect the site and plan the work.

1.3 Conduct pre-operational and post start up checks.

2.1 Drive the Transporter Operator to the work area.

2.2 Load – unload equipment safely

3.1 Shut down the equipment and secure the site.

2. The performance assessment can be conducted at any location which has

- Sufficient clear space to operate the machine
- Ground suitable for loading and unloading equipment

3. Equipment and resources required:

- Various items of equipment
- Transporter platform

4. Unless other arrangements are agreed to by the assessor, it will be the responsibility of the applicant, applicant's employer or trainer to provide the required equipment and resources.

5. To be assessed an applicant must wear:

- Safety helmet (where required)
- Appropriate footwear
- Other protective clothing and equipment as appropriate.

6. The performance of each applicant is to be recorded on the assessor's checklist.

7. Safety of personnel:
When an applicant is working dangerously, recklessly or without the necessary co-ordination, the assessor must direct the applicant to cease work and terminate those parts of the assessment immediately.

8. The items in the shaded boxes are of critical importance. Failure to get any of these correct means that competency has not been achieved and the applicant must be failed.

9. In cases where criteria cannot be physically performed the applicant is required to demonstrate his/her understanding of these criteria by answering relevant questions orally, or by stimulation.
The type of answer provided is to be shown on the assessment sheet as:

O	Oral Assessment
S	Stimulated assessment
N/A	Not applicable

10. Where an applicant is assessed as 'not yet competent' he/she must be informed of the reason(s) in order to gain further appropriate training.

11. The full performance assessment can take up to forty minutes.

12. The applicant's competence in each unit is to be summarised for both performance and knowledge on the summary sheet. Competency is achieved for a unit when the required number of boxes for the unit have been ticked or marked "O", "S", or "N/A".
Overall competency is achieved when all competence in all units has been assessed.

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Conduct Routine Checks:

1.1 Routine checks on vehicle/equipment:
Tyre condition and inflation, condition of wheels.
Checks liquid levels:

- ☐ Fuel
- ☐ Engine oil
- ☐ Coolant

Checks equipment for defects:

- ☐ Damaged or broken parts
- ☐ Hoses and fittings

Plan Work and Check Equipment
1.2 Inspects site and plans work
Identify Hazards

- ☐ Rough/uneven/unstable terrain
- ☐ Obstructions
- ☐ Soft and sloping edges
- ☐ Restricted operator vision area
- ☐ Plant, personnel
- ☐ Wet slippery conditions
- ☐ Services eg power, gas

Operational Checks
1.3 Conducts pre-operational and post start-up checks in accordance with manufacturer's specifications/operating manual.

- ☐ Mounts correctly
- ☐ Adjusts seat, secures safety belt
- ☐ In neutral, park brake on
- ☐ Warning device
- ☐ Personnel clear
- ☐ Starts engine
- ☐ Gauges, warning lights
- ☐ Familiarisation of controls
- ☐ Braking system
- ☐ Steering

2. Drives Unit:
2.1 Drives to the work area

- ☐ Ensures travel direction clear
- ☐ Travels at safe speed
- ☐ Obeys road and warning signs
- ☐ Selects appropriate route
- ☐ Attachments in correct travel position

Load – unload equipment:
2.2 Load – unload equipment safely

- ☐ Select level surface
- ☐ Platform level
- ☐ Brakes applied
- ☐ Clears debris from platform
- ☐ Obeys signs, signals (if applicable)
- ☐ Personnel kept clear
- ☐ Attachments at correct height
- ☐ Enters, exits platform at correct angle and speed
- ☐ Aware of balance point (if Applicable)
- ☐ Positions equipment on platform
- ☐ Attachments lowered
- ☐ Brakes – locks applied
- ☐ Secures equipment on platform as per load restraint regulations
- ☐ Maintains safe distance from edge as directed by supervisor, site instructions, signing or barricades

3. Shuts down equipment and secures site:

3.1 Shuts down equipment and secures site
Parks equipment –

- ☐ Attachments lowered to ground
- ☐ Parks away from danger areas and in a suitable location

Shuts down equipment –

- ☐ Neutralises controls
- ☐ Sets parking brake/safety lock applied
- ☐ As per Operation Manual
- ☐ Moves controls to release pressure
- ☐ Removes keys
- ☐ Locks cabin (If applicable)
- ☐ Dismounts correctly

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National Guidelines for OHS Competency Standards

Transporter Operator Safety

ORAL/WRITTEN ASSESSMENT

Assessor Guidelines – Specific (Knowledge Assessment)

1. Knowledge assessment for Transporter Operator is divided into three units.

2. To satisfy the requirements for competency the applicant must correctly answer (either in writing or orally) the specified number of questions in each of the following sections:

   1.1 Conduct routine checks

   Select 5

   1.2 Plan work

   Select 7

   2.1 Drives Unit – Loads/unloads equipment

   Select 8

   3.1 Shut down equipment

   Select 4

3. The full knowledge assessment of twenty four (24) questions can take up to forty-five (45) minutes.

4. The items in the shaded boxes are of critical importance. Failing to get any of these correct means that competency has not been achieved and the applicant must fail.

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CONDUCT ROUTINE CHECKS:
(Select 5 from Q1-7 including shaded boxes)

1. What should be the first check of your Transporter Operator at the start of your shift?

   Walk around it looking for visual defects

2. What action would you take with any structural defects you found while conducting an external check on the equipment?

   Report the defects to the authorised person or take action according to company policy.

3. Name three pre-operational checks that should be carried out on the Transporter Operator before it is started.

   Radiator, fuel, oil, damaged parts, hoses and fittings

4. What warning divide must function on the Transporter Operator to warn personnel that the Transporter Operator is to travel, or is travelling in reverse?

   A reversing or motion warning alarm

5. How would you remove the radiator filler cap of a Transporter Operator that has not completely cooled off?

   Slightly loosen cap to release pressure and then slowly remove cap

6. What should be provided on the Transporter Operator to prevent the operator from being dislodged from the seat of the Transporter Operator?

   A safely belt

7. What would you look for to ensure that attachments are securely attached to the equipment?

   Safety Pins/clips/locks in place

PLAN WORK:
(Select 7 from Q8-17 including shaded boxes)

8. Why should side hill travel be avoided where possible?

   There is a greater risk of turning the equipment over with side hill travel

9. What effect would a rough or stony surface have on the operating speed of the equipment?

   It would decrease the safe operating speed of the equipment

10. Where danger exists, what should be posted or positioned to warn persons of a danger?

    Warning signs, barricades

11. How should the flow of road traffic be controlled where signs and barricades are considered inadequate to control a potential hazard?

    By a Traffic Controller or by Police Officer

12. What checks should be made before loading/unloading equipment?

    Check for services in area

13. What is the danger of travelling near the edge of the fill? (List 2)

    The edge of fill may collapse. The Transporter Operator could tip or rollover. Injury to operator

14. If there is a likelihood of the equipment being overturned what must be provided to protect the operator?

    A rollover protective structure and safety belts

15. Which is the preferred route of travel, diagonally across or directly down a sloping surface?
Directly down the sloping surface

16. Why shouldn't a gear change be made while driving equipment up a steep sloping surface?

If the gear change was missed the equipment may not be able to be safely controlled

17. What gear should be selected to travel down a steep sloping surface?

A low gear. The gear required to climb the sloping surface

DRIVES UNIT
(Select 8 from Q18-31 including shaded boxes)

18. What is the danger of travelling or turning with highly raised attachments?
The equipment could overturn

19. Is it permissible to carry passengers on the equipment?

No, only if there is approved seating and seatbelts

20. Is it permissible to hoist persons in the bucket of the equipment?

No

21. Is it permissible to attach slings to the teeth of the bucket?

No

22. As an operator would you leave an unattended Transporter Operator engine running?

No

23. Before reversing a Transporter Operator what precaution should be taken?
Ensure the direction of travel is clear

24. Would you coast the Transporter Operator downhill?

No

25. What direction would you approach and how would you cross a ditch?

At an angle and slowly

26. When travelling, what would you do before travelling down a steep grade?

Reduce speed with service break and select the appropriate gear for the grade

27. How would you dismount from a Transporter Operator that has contacted live power lines?

Jump clear ensuring contact with the ground and Transporter Operator is not at the same time

28. What actions would you take if equipment you are operating started to slide over an embankment or edge?

Immediately stop the equipment. Get help if it is not possible to drive or reverse out slowly.

29. What is the danger of loading/unloading from a platform that is not level?

The equipment could slip over the side

30. Why is it important to obey the spotter's directions?

The spotter has better vision to the platform

31. What aids can be used to assist in point of balance areas?

Hydraulic attachments eg booms, buckets, rippers

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SHUT DOWN EQUIPMENT
(Select 4 from Q32-37 including shaded boxes)

32. Name the areas where you would not park the Transporter Operator

    Access ways, near overhangs, refuelling sites, tidal or flood areas, adjacent to an excavation

33. Where possible, what type of surface should be selected to park the Transporter Operator on?

    A level surface

34. Which direction should the Transporter Operator face if it has to be parked on a sloping surface?

    Across the slope

35. When leaving the Transporter Operator, what should be done with the attachments?

    Lowered and pressure removed from lines, or if left in raised position, safety pins, locks in place

36. What shall be provided when a Transporter Operator has to be parked on or protrudes onto an access way?

    Barricades, lights and signs

37. For what reason should the key be removed from the ignition of the Transporter Operator?

    To prevent unauthorised