



Rider Operated Counterbalance and Reach Lift Trucks (ABA categories: B1, D1 & D2) **Basic Operating Skills Test**

Developed by the Accrediting Bodies Association for Workplace Transport (ABA)



BASIC OPERATING SKILLS TEST

Rider Operated Counterbalance and Reach Lift Trucks

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BASIC OPERATING SKILLS TEST

Rider Operated Counterbalance and Reach Lift Trucks

1. Introduction

This test has been developed and adopted by the Accrediting Bodies Association for Workplace Transport (ABA) as of 30/01/2017 for implementation no later than 01/09/2017 as a means of ensuring national, uniform standards for the testing of lift truck operators. Only lift truck instructors and examiners who have been trained in its application should carry out this testing process.

Continuous assessment of novice and existing lift truck operator's progression will naturally be undertaken during training by instructors, and subsequently by immediate supervisors at the operator's workplaces. This is routine and would normally be conducted fairly informally.

The test shall be administered by a lift truck instructor/examiner who is qualified in accordance with the Health and Safety Executive Approved Code of Practice (ACoP) and supplementary guidance "Rider operated lift trucks: operator training and safe use". The ACoP and guidance gives advice to employers on lift truck operator training and testing. Successful completion of basic operator training should be followed by job specific and familiarisation training, and supervision as described in the ACoP and guidance.

This test can be used as:

- a. Validation of a course of basic, refresher or conversion training
- b. Confirmation of existing standards
- c. Pre employment assessment
- d. Post incident assessment.

Successful completion of this test without prior training does not indicate that adequate training as described in the ACoP and guidance has been provided. Nor does it mean that accredited training and testing has been provided.

HOW DO WE TRAIN AND TEST NON-ENGLISH SPEAKERS?

Many training providers/instructors are now training and testing non-English speakers. You must ensure in all such cases that the applicable legal requirements are met. You should seek specialist legal advice if you are unsure what is required of you/your organisation.

As basic training covers technical information there is a need to ensure that the trainee has the underpinning knowledge in the operation and safety requirements of the equipment category. The Accrediting Bodies Association for Workplace Transport (ABA) strongly recommends that an accredited translator is used and that the answers given by the trainee are translated and written onto the answer sheet.

The translator must print and sign their name, and record their accrediting organisation and registration number, if any, for auditing purposes.

If the translator is not formally accredited the customer must provide some other written evidence of the translator's competence, impartiality and suitability to provide translation for the test. This must be attached to the test documentation for auditing purposes. If such information is not available at auditing the test may be invalidated.

The translator used must not be a co-trainee on the same course and must not alter the sense of any answers given by the trainee. Disciplinary sanctions may be taken in the event of any material changes being made by the translator to the trainee's responses. These may include the revocation of any certificate or registration awarded, and additional sanctions against the instructor or training provider.

TEST OBJECTIVES

Rider Operated Counterbalance and Reach Lift Trucks

2. Test Objectives

The overall objective of this formal, predetermined and validated test is to verify the candidate's ability to meet the minimum recognised basic safety standard.

Candidates must pass all elements of the test in order to be successful overall.

The test requires candidates to:

- a. Demonstrate understanding of **pre use checks**, identifying faults and deficiencies and taking the appropriate reporting/remedial action (see section 3)
- b. Undertake a **practical test**:
 - Manoeuvring a laden and unladen lift truck, forward and reverse
 - Carrying out a series of stacking and de-stacking exercises within the main aisle
 - Manoeuvring twice in each direction, laden, through a chicane
 - Culminating in depositing a load and parking the lift truck correctly (see section 4).
- c. Undertake an **associated knowledge test**, written or oral (see section 5)

PRE-USE INSPECTION

Rider Operated Counterbalance and Reach Lift Trucks

3. Pre-Use Inspection

The candidate will be required to carry out a pre-use check, and clearly demonstrate understanding of it. The pre-use check is a visual and functional safety check. It must be carried out in accordance with the Lift Truck manufacturer's recommendations and/or the candidate's company organisational procedures.

3.1 Marking

The examiner will assess whether the candidate meets the minimum standards necessary to carry out a pre use check correctly and efficiently.

13 of the 22 elements described in the pre-use inspection have been deemed safety critical and if missed/not checked there may be a significant risk to the health and safety of the operator and or any persons and infrastructure in the location of the lift truck. The following list of components are deemed as mandatory component checks. A candidate must carry out a full and correct check of these items, failure to do so will result in an automatic referral in this element of the test.

- Fork Arms/Attachment
- Carriage Plate
- Mast
- Mast Rollers and Slides
- Lift Chains
- Lift Chain Pulleys
- Rated Capacity Plate
- Hydraulic Systems
- Wheels
- Tyres
- Hydraulic Controls
- Drive and Braking
- Steering.

The remaining elements described and listed on the inspection sheet are still required to be appropriately inspected and the examiner will decide if the overall inspection was adequate or not and will pass/refer as appropriate.

The list of items on the pre-use inspection sheet should not be considered complete or finite. It is important to remember that all pre use inspections are to be carried out in accordance with the lift truck manufacturers recommendations.

The pre-use check sheets must be retained for future reference and the result recorded on the final assessment document.

PRE-USE INSPECTION SHEET

Rider Operated Counterbalance and Reach Lift Trucks (ABA Cat: B1, D1 & D2) Operator Use

No.	ITEM	CHECK COMPLETE	NOT APPLICABLE
1	FORK ARMS/ATTACHMENT		
2	CARRIAGE PLATE		
3	BACKREST EXTENSION		
4	MAST		
5	MAST ROLLERS/SLIDES		
6	LIFT CHAINS		
7	CHAIN PULLEYS		
8	HYDRAULICS		
9	WHEELS		
10	TYRES		
11	EXTERNAL CONDITION		
12	RATED CAPACITY PLATE		
13	OPERATING POSITION		
14	OPERATORS SEAT		
15	GAS TRUCKS		
16	STARTING PROCEDURE ENGINE TRUCKS		
17	STARTING PROCEDURE ELECTRIC TRUCKS		
18	LIGHTS		
19	AUDIBLE WARNINGS		
20	HYDRAULIC CONTROLS		
21	DRIVE & BRAKING		
22	STEERING		

All Pre-Use checks must be carried out in accordance with the specific instructions published in the relevant manufacturers operating handbook.

PRE-USE INSPECTION SHEET

Rider Operated Counterbalance and Reach Lift Trucks (ABA Cat: B1, D1 & D2)

Examiner/Instructor Use

Candidate Name:	Test Date:
Lift Truck Type:	Model:
Make:	Motive Power:

No.	ITEM	CHECK COMPLETE	NOT APPLICABLE
1	FORK ARMS/ATTACHMENT (MC)		
2	CARRIAGE PLATE (MC)		
3	BACKREST EXTENSION		
4	MAST (MC)		
5	MAST ROLLERS/SLIDES (MC)		
6	LIFT CHAINS (MC)		
7	CHAIN PULLEYS (MC)		
8	HYDRAULICS (MC)		
9	WHEELS (MC)		
10	TYRES (MC)		
11	EXTERNAL CONDITION		
12	RATED CAPACITY PLATE (MC)		
13	OPERATING POSITION		
14	OPERATORS SEAT		
15	GAS TRUCKS		
16	STARTING PROCEDURE ENGINE TRUCKS		
17	STARTING PROCEDURE ELECTRIC TRUCKS		
18	LIGHTS		
19	AUDIBLE WARNINGS		
20	HYDRAULIC CONTROLS (MC)		
21	DRIVE & BRAKING (MC)		
22	STEERING (MC)		
23	FAULT REPORTING PROCEDURE		

Candidate Result	PASS		REFERRED	
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Candidate Signature:
Examiners Name:
Examiners Signature:
Examiners Registration Number:

All Pre-Use checks must be carried out in accordance with the specific instructions published in the relevant manufacturers operating handbook.
MC = Mandatory component check - automatic referral if not fully completed.

PRE-USE INSPECTION

Rider Operated Counterbalance and Reach Lift Trucks

Explanation of the Criteria

The candidate will be observed carrying out the pre-use checks. At periodic planned stages, the instructor/examiner will interrupt the proceedings and question the candidate's understanding of the item under inspection. The explanatory notes will assist the instructor/examiner when questioning the candidate during the assessment process.

The following list of items must be fully and comprehensively understood by the candidate. Failure to do so will result in an automatic referral.

- Fork Arms/Attachment
- Carriage Plate
- Mast
- Mast Rollers and Slides
- Lift Chains
- Lift Chain Pulleys
- Rated Capacity Plate
- Hydraulic Systems
- Wheels
- Tyres
- Hydraulic Controls
- Drive and Braking
- Steering.

No.	CRITERIA	EXPLANATORY NOTES
1	Fork Arms/Attachment Mandatory Component	Each fork arm should be checked for wear, cracks and distortion. Check for wear causing thin, jagged edges at the fork tip. Particular attention should be paid to the fork hooks and carriage plate, constant movement between these points causes wear and fracture. The fork arms should be equally spaced on the carriage with the fork retaining pins engaged and secure. Any attachment fitted must be attached appropriately and secure on the carriage plate (if applicable). Locking pins, welded joints, pivots should not be worn, cracked or seized. The attachment must not be bent, twisted or distorted and must be in good, functional working order.
2	Carriage Plate Mandatory Component	The carriage plate should have no obvious damage and sit square to the mast. The end stop bolts must be engaged and secure. The fork locking pins must fully engage into the castellations.
3	Back Rest Extension	Distortions, cracks and security.
4	Mast Mandatory Component	Checks should be made to the outer mast sections for damage, distortions and cracks. In addition the inner mast channels or runners must be inspected for undue wear, scoring, excessive dirt or any foreign bodies which may be fouling the mechanism.
5	Mast Rollers/Slides Mandatory Component	The mast guide rollers, including reach channel rollers must not show signs of uneven wear, incorrect tracking, flat spots and scoring. Mast slides must be intact and not loose.
6	Lifts Chains Mandatory Component	Check lift chains for evidence of deterioration, loose or worn pins, damaged pin rivet heads, worn, cracked or missing links and signs of rust on link plates. Chain anchor points must be inspected for damage, even adjustment and security of the locking nuts.
7	Chain Pulleys Mandatory Component	Chain pulleys should have no obvious damage, uneven wear and flat spots. The chains running over pulleys should show signs of tracking correctly between the riveted end of the chain pins and the inner walls of the pulley flanges.
8	Hydraulics Mandatory Component	All hydraulic rams, seals and couplings must be checked for damage and leaks. Particular attention should be given to where the piston emerges from the outer cylinder for any oil, corrosion and scoring on the piston. Examine all visible hydraulic hoses/pipes for kinks, damage, crushing, abrasion leaks or signs of fouling which could result in a possible hydraulic leak. Any hose reel mechanisms (if fitted) should be undamaged and running freely with no evidence of hydraulic oil leaks.
9	Wheels Mandatory Component	There should be no obvious missing or loose wheel nuts. The wheel rim and hub should be examined for damage, cracks and scoring. Inspect the stub axles and steering assembly for excessive dirt or any foreign bodies especially polythene shrink wrap, banding etc. which may be fouling the mechanism.

No.	CRITERIA	EXPLANATORY NOTES
10	Tyres Mandatory Component	Individual tyres should be checked for punctures and pressures [pneumatics], adequate and even tread across the same axle, damage, flat spots and deep cuts. All swarf, nails, flints, etc. should be removed from the tread. Incorrect wheel alignment results in uneven wear of the tyres and if the fault is great the steering ability of the truck is affected. Check the tyre side wall for evidence of deterioration and cracks.
11	External Condition	Examine the general condition and security of the machine's, overhead guard, battery and engine covers, doors and panels should be complete, damage free and secure. Inspect the bodywork for damage, rust, broken hinges, or locks, battery access panels etc. which could be detrimental to the trucks safe operation. Windscreens, mirrors [if fitted], lights and warning devices should be in working order, clean, and free from damage. When walking around the truck, the operator should check on top of the mast section, tie bars, overhead guard or cab, for articles which may have been left there which could fall when the truck is operated. In addition the operator should ensure there are no water, oil, fuel or any other type of fluid leaks. The truck's reach legs and channels should be free from damage and debris, any wheel guards or covers must not be in contact with the tyres.
12	Rated Capacity Plate Mandatory Component	The rated capacity plate must be fitted, it must be secure, clear and legible and display, at least, the maximum weight the lift truck can pick up, the load centre and the maximum lift height, appropriate to the lift truck and or any attachments fitted.
13	Operating Position	The floor and cockpit area should be dry and clear of dirt or any foreign bodies, which may be fouling the operating controls, safety switches or devices. Foot and hand operated controls and instruments should be intact, undamaged and functional. Visual gauges, decals and instruments should be unobstructed, clean and intact.

No.	CRITERIA	EXPLANATORY NOTES
14	Operator's Seat	Check anchor points, runners/slides and end stops are engaged, secure and undamaged . Ensure that under the seat is clear of any foreign bodies which may be fouling the adjusters and any safety interlock switches and weight function indicators. Inspect the operator's seat restraint [if fitted] for splits, cuts and general condition of the webbing. The buckle must securely retain the belt in place and be capable of being released when under tension. Check the seat and back rest adjusters to ensure they are intact, damage free and functional.
15	Gas Powered Trucks	The gas cylinder must be undamaged, mounted correctly with the locking pins or straps intact, engaged and secure. Examine the supply pipe for kinks, damage and signs of fouling where possible leaks could occur. Turn the gas supply valve on, check for leaks, particular attention should be given to the seals on all valves and couplings. The bottle orientation must be checked for accuracy. Coolant and Oil levels should be checked only if it is safe to do so.
16	Internal Combustion Engine Trucks*	Confirm adequate fuel level. Ensure that the ignition key switch and combined starter function correctly, any ignition lights should illuminate and the starter turns the engine, the key switch should also satisfactorily stop the engine. If appropriate the cold start and stop controls should be intact and functional. It is especially important that any oil pressure and charging lights are working. Physically and visually check any interlocks, instruments and gauges to ensure they are functioning in accordance with the manufacturer's operating handbook. Coolant and Oil levels should be checked only if it is safe to do so.
17	Starting Procedure - Electric Trucks	The traction battery is secure and the power supply cable is intact, connected and secure. Confirm adequate charge. Ensure the on/off key switch system activates the power and the isolator switch [if fitted] functions correctly. Physically and visually check any additional interlocks or gauges to ensure they are functioning in accordance with the specific manufacturer's operating handbook.
18	Lights	Any service lights fitted should be in working order. This includes direction indicators, reversing lights, brake lights, flashing beacons, road lights, presence lights, spot/working lights etc. Lenses should be free from damage, clear of debris, secure and be able to be seen at a reasonable distance by others.
19	Audible Warning Devices	The machine must not be operated if the horn is defective. If there is an audible warning device, check that it activates and can be heard, e.g. if you leave the cockpit without switching off the power or fail to apply the parking brake, selecting reverse gear, height, weight and pressure limit switches, etc.

No.	CRITERIA	EXPLANATORY NOTES
20	Hydraulic Controls Mandatory Component	All hydraulic driven parts (mast height, reach carriage, tilt mechanisms etc.) must be run to their end positions, to lubricate all the moving parts, checking for their serviceability, smooth operation, obvious leaks and that there is sufficient oil in the tank.
21	Drive and Braking Mandatory Component	Forward and reverse should be engaged to ensure their smooth operation and positive response to the accelerator pedal. The parking brake should be tested by slowly driving and then apply the brake, the truck must stop. The efficiency of the foot brake should be tested in both directions, braking must be even. The brake pedal should not travel to the cockpit floor. Lift trucks may be fitted with hydrostatic, rheostatic regenerative or opposite direction braking systems, in addition to mechanical brakes, these must be checked to ensure they are functional in accordance with the manufacturers operating handbook.
22	Steering Mandatory Component	Check for excessive play in the steering wheel before starting the truck. Avoid turning the wheels of the truck whilst stationary, this may subject the steering mechanism and tyres to unnecessary wear or strain. The operator should move the truck in both directions checking the steering operation fully on both locks. 180 and 360 degree steering systems should function correctly and any steering instrument indicators should correlate to the wheel position.
23	Fault Reporting	The candidate must satisfactorily explain the action to be taken in the event of discovering a fault on the truck at the start or during any operating period, i.e. isolating the truck, displaying of warning signage, any company policies and procedures, reporting to managers, supervisors etc, completion of documentation.

NOTE:

- a. The Pre-Use inspection information provided, has been determined as the minimum number of items to be checked on a lift truck before operation and is not definitive.
- b. All pre-use checks and attachment inspections must be carried out in accordance with the specific instructions published in the manufacturers operating handbook.

PRACTICAL TEST OF BASIC OPERATING SKILLS

Rider Operated Counterbalance and Reach Lift Trucks

4. Practical Test of Basic Operating Skills

This test has been devised to examine the critical skills required of a lift truck operator, these are:

- Starting and stopping the truck
- Driving forward and in reverse, including braking
- Steering accuracy
- Correctly placing a load on the forks
- Using hydraulic controls correctly and sympathetically
- Judging the position of fork tips at varying heights, laden and unladen
- Stacking and destacking accurately at various heights
- Observation of the working environment and judgement of speed, height, width and distance from within the confines of the machine.

The test is based on the safe application of these operations at a reasonable working pace. Care has been taken to design a course which covers all the critical skills, while being easily constructed on most company premises.

4.1 Setting up the Practical Test Course

Test Course Materials

The course has been designed to take advantage of existing pallets, loads, stacks, racking or other permanent constructions, subject to critical dimensions. All loads handled by the lift truck during the test should be of identical width, height, length and weight to simulate realistically the candidate's work. Where a candidate's work requires it, undercutting, with appropriate derating, may be necessary.

Chicane

The chicane may be constructed using hurdles, empty pallets or existing features and consist of the minimum one left and one right turn in either sequence. Care should be taken during construction to create the correct distance between each turn to be negotiated (see plan of course). Traffic cones and other materials which permit gaps in the chicane are not suitable for this purpose. The distance from the chicane to the test aisle is not critical.

However, care should be taken to allow sufficient separation distance so that the candidate, when emerging from the chicane, may position the truck correctly prior to undertaking the first stacking operation.

Note: If using empty pallets, care must be taken to ensure that the pallets are secured and stable, this is in order to reduce the risk of damage or injury to persons in the event of a pallet falling over.

Critical Dimensions

The width of the chicane will be the practical minimum negotiating width for the laden lift truck plus a clearance of 75mm at the critical points, (pivot point, truck and load extremities) of each turn (see plan of course).

Main Aisle

The width of the main aisle will be the manufacturer's minimum 90 degree stacking aisle width for that particular truck and any load overhang (from the tips of the forks to the front leading edge of the load) plus 300 mm for counterbalanced trucks and 200mm for reach trucks.

The theoretical minimum 90 degree stacking aisle width may be obtained from the manufacturer if not already published in the technical literature supplied with the truck.

Loads along the main aisle should be stacked or racked in line at the appropriate levels with 75mm spacing between the loads or the racking uprights where applicable. The space at 'D' (see plan of course) should likewise allow for the width of load with 75mm spacing on either side.

Note: The dimension quoted by the manufacturer may be affected if non standard forks are fitted. In addition, the dimension will normally relate to use with standard pallets where the 1200mm face is across the forks.

Stacking Heights

On completion of the test the candidate will have stacked and destacked at high, eye and low level.

Load at 'A' (see plan of course)

The height of the load is not critical, but should be high enough to obscure candidate's vision, thus requiring them to make blind judgements of positioning while negotiating the chicane during stacking and destacking operations in the main aisle, and when depositing the load at the vertical face.

The part of the course forming the vertical face should be of sufficient height and width to permit the candidate to see it clearly when approaching it load leading.

The first load at 'A' should be positioned squarely within 150mm of, but not touching, the vertical face.

High Level at 'B'

Refers to the maximum stacking height normally to be found in the candidate's working environment for the particular lift truck and loads in use on the test. High level is a minimum of 3m stacking height. In situations where the maximum stacking height is less than 3m the certificate must clearly show the maximum stacking height used in test.

Eye Level at 'C'

Refers to the stacking position which requires the forks to be inserted at a height corresponding to the level of the candidate's eyes when in the normal operating position on the lift truck.

Low Level at 'D'

Refers to the stacking position at, or about, ground level.

Note: Should racking be involved, the levels referred to will correspond as closely as possible to the above requirements, depending on the level of beams available.

4.2 Alternative Test Construction

Every effort should be made to construct the course in one continuous area as shown in **test course A**, but, where the area is insufficient to construct the complete test course, the chicane may be entirely separate from the main aisle, effectively dividing the test into two parts.

In addition, the main aisle of the test course can be laid out as shown in the alternative at **test course B**.

Part 1.

Will start at the position shown on the course plan and will comprise picking up the load from the vertical face, driving through the chicane load leading and load trailing twice, depositing the load close to the vertical face and finally parking the truck at the finishing line. The examiner must record the time taken to complete Part 1 accurately.

Part 2.

Covering the various stacking and destacking operations will begin at the point where the end of the chicane nearer the main aisle might otherwise have been sited.

4.3 Administration and Testing Procedure

Duration of the Test

Candidates are tested not just on their ability to operate correctly and skillfully, but also to do so without undue slowness, hesitancy or excessive speed. Examiners should, therefore, determine a fair and reasonable time for completion of the test.

This will be affected by a number of factors which may include: actual stacking heights, lift speed, general manoeuvrability of the truck being used, distances between stacking positions, chicane and the main aisle, etc.

The examiner should carry out the complete test at a normal working pace, making careful note of the time taken. For the purpose of the test time penalties, this will be referred to as **the rehearsed time**.

Testing procedure

Prior to the test, the examiner must complete the various sections of the marking sheet, i.e. candidate's details, description of the truck, capacity, etc. (see the Practical Skills Test Marking Sheet).

During the test, only the candidate and the examiner should be in the immediate vicinity of the test area. This will eliminate any potential distractions or hazards to the examiner and candidate.

Before the test begins the examiner must ensure that the:

- Lift truck is correctly parked, in a secure state at a distance from the first load that requires the lift truck to be placed into the travel position and travel to the first load
- Steering wheels of the truck are in the straight line position
- Spread of the forks is both equidistant and suitable for the loads to be used.

Walk through the test course

At this point, the examiner will walk the candidate through the course, giving a brief explanation of each operation to be carried out during the test. They should be told that these instructions will be repeated, a step at a time, while the test is in progress. The test is undertaken to assess their operating skills and is not intended to check their memory.

Explanation of the marking sheet

The examiner must explain how the marking system works. Why some faults are more heavily weighted than others, areas of disqualification and the pass/fail cut off criteria. The examiner will explain that where a candidate commits in excess of 3 faults (i.e. 4 or more) in any one fault area where the penalty award is 5 points then that candidate will have not met the required test standard and will have been deemed to have failed the practical element of the test.

The examiner will direct the candidate through the course giving stage by stage directions on the operation to be carried out.

During the practical skills test the examiner must maintain a position where the candidate can be continuously observed without causing a distraction or hazard.

The practical skills test should be carried out as follows, (see plan of **course A**):

1. The candidate shall mount the truck at the start position
2. Drive forward, forks leading and pick up load at low level **A**
3. Drive through the chicane with load leading
4. Stack the load at high level **B**
5. Withdraw from the stack and reverse with forks trailing towards the chicane
6. Destack the load from eye level **C**
7. Reverse with load trailing towards the chicane
8. Stack the load at low level **D** squarely and in line with the adjacent stack
9. Withdraw from the stack and reverse with forks trailing towards the chicane
10. Destack the load from high level **B**
11. Withdraw from the stack and reverse with load trailing from the main aisle through the chicane to the start/finish line
12. Drive forward through the chicane into the main aisle and stack the load at eye level **C**
13. Withdraw from the stack and reverse with forks trailing towards the chicane
14. Pick up the load at low level **D**
15. Withdraw and reverse with load trailing through the chicane

16. Place the load squarely at low level **A** within 150mm of, but not touching, the vertical face
17. Withdraw the forks and reverse the truck until the fork tips are behind the start/finish line
18. Park the truck correctly
19. Dismount from the truck.

Notes

- a. All elements of the test must be completed
- b. Throughout the practical test course, critical dimensions and layout must be maintained.
- c. Each time candidates have to withdraw the truck from a stacking or destacking position in the main aisle, they should be instructed to drive forks/load trailing towards the chicane, this is to ensure both left and right hand approaches are included in the test. Upon successful completion, the test course must be restored to its original state, ready for further use without re-arrangement, except if loads need to be tidied up.

Explanation of the practical skills test result

The examiner will explain to the candidate, what faults occurred and why, time taken and the pass/fail result and where appropriate give recommendations.

Note: the test course layout has been designed and validated to ensure the test can be completed from within the confines of the lift truck. Therefore, candidates must be discouraged from dismounting from the truck during the test unless due to a potentially dangerous or hazardous occurrence. Every effort must be made to put the candidate at ease before and at the end of the practical test.

4.4 Marking

Practical test scoring and timing of the test will begin when candidates mount the truck and will finish when they have dismounted on completion of the test.

It is important that faults should be carefully and quickly recorded as they occur during the test, and the test must be administered by an examiner who is well acquainted with the faults list on the marking sheet (see the marking sheet and explanation of faults).

Reference to the marking sheet will show that a penalty has been allocated to each of the faults listed. Those faults deemed to be more serious for the purpose of the test have been allocated weighted penalties accordingly.

On each occasion when a candidate commits a fault, a cross should be marked against the appropriate fault. At the end the examiner must:

- Multiply the number of crosses recorded against each fault by the allocated penalty and enter the result in the award column
- Add up the recorded penalties and enter the total
- Add to this any time penalties incurred to arrive at the final total of penalties.

Where a candidate commits in excess of 3 faults (i.e. 4 or more) in any one area where the penalty award is 5 points then that candidate will have not met the required test standard and will have been deemed to have failed the practical test.

Time Penalties

The **set time** for completion of the test **without penalty**, will be **2 x rehearsed time** (twice the time recorded by the examiner taken to complete the test course when operating at a normal working pace). Clearly, it would be unfair for candidates to be judged against an exceptionally quick test drive by the examiner. Equally, an over cautious test drive would be undesirable, as it would effectively produce a set time for candidates which is too generous.

If the test drive is properly conducted, the resultant **set time** will closely match the time subsequently taken by an average candidate.

Examiners must monitor this aspect of their test results carefully. Wherever a wide variation occurs consistently between the **set time** and candidate's performance times, it would be wise to investigate whether a test drive conducted at above or below normal working pace is a contributory factor.

Candidates who take in excess of the **set time** will incur one penalty for each full or part minute in excess of the set time. Time lost through interruption of the test will not incur penalties.

The maximum test time allowed before disqualification will be 3 x rehearsed time.

Example:

Rehearsed time = 15 minutes (examiner's time)

Set time = 30 minutes (2 x rehearsed time)

Disqualification time = 45 minutes (3 x rehearsed time)

Note: The practical test of basic operating skills is not only designed to ensure candidates demonstrate safe lift truck operation, it is also designed to test their efficiency. In addition to the above timing calculations it would not be expected, in normal operating conditions, for the practical element of the basic operating skills test to take more than 45 minutes. Should undue hesitancy or a lack of confidence be shown by a candidate undergoing the test (even if the disqualification time has not been exceeded) examiners should consider referring the candidate.

Pass/Fail Criteria

The cut off for the practical skills test at basic operator level is **40** penalty points. Where penalties are incurred in excess of this figure, candidates will be deemed to have failed the test.

In addition, candidates will be disqualified for:

- **Unsafe stacking:** Where examiners observe a load or stack is to be left in a potentially unsafe state, they should act immediately to overcome the problem and disqualify the candidate
- **Violent collision:** Where the candidate allows any part of the lift truck or load to violently strike any part of the course
- **Operating dangerously:** Where the candidate operates dangerously or erratically, and the examiner considers it unsafe to continue the test.
- **Incurring more than 3 (i.e 4 or more) 5 point penalties in one area.**

Where failures occur, it would be sensible to study the marking sheet for evidence of any particular areas in which the candidate might be given further tuition prior to undertaking the test in the future. Any retest should not be made too soon, ample time should be allowed for the candidate to be effectively retrained before undergoing a further test.

ALTERNATIVE TEST COURSE B: PLAN AND ROUTE

Rider Operated Counterbalance and Reach Lift Trucks

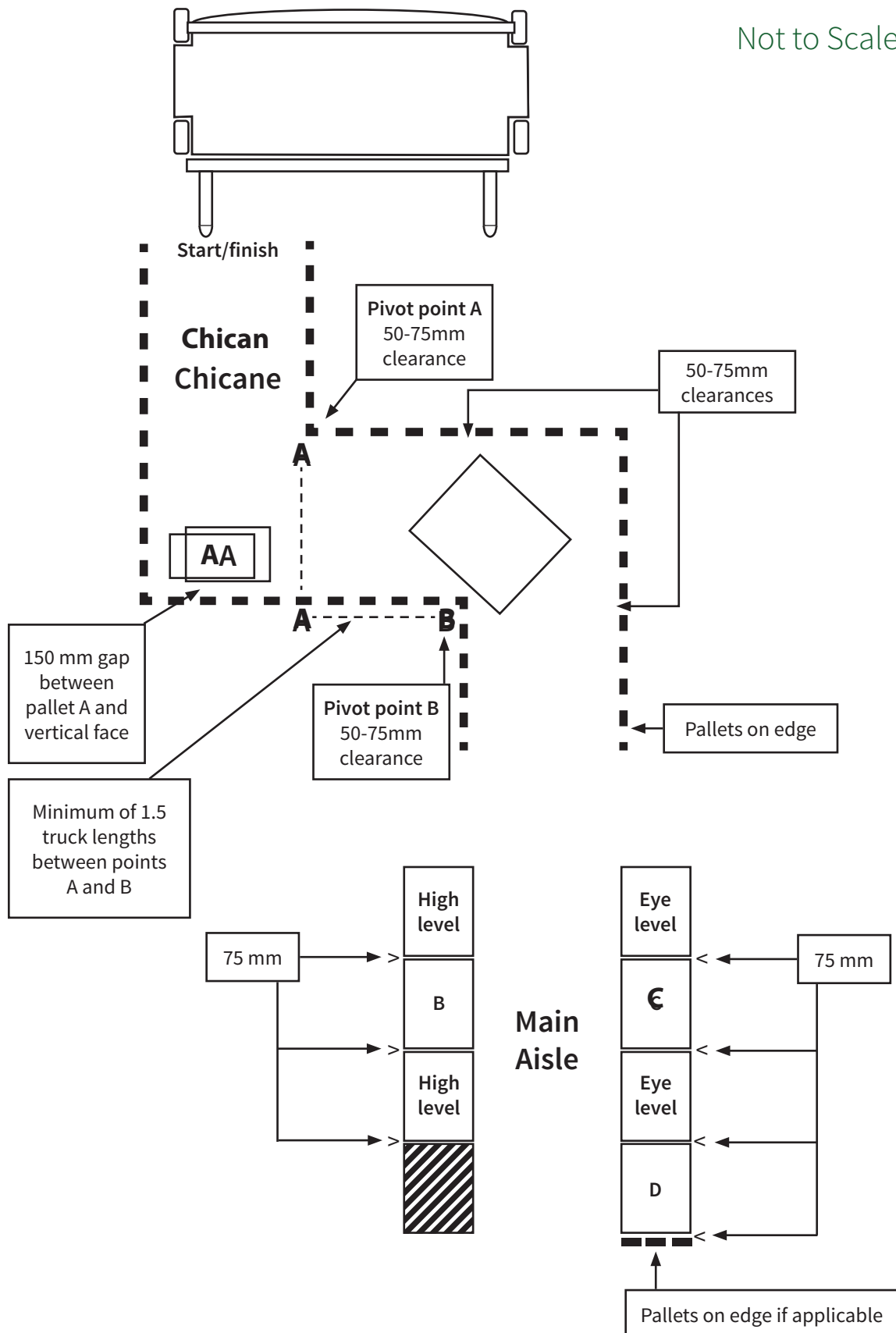
Where the area is insufficient to construct the main aisle as shown in **test course A**, the main aisle may be constructed as shown in **test course B**. The alternative practical skills test for course B should be carried out as follows:

1. The candidate shall mount the truck at the start position
2. Drive forward, forks leading and pick up load at low level **A**
3. Drive through the chicane with load leading
4. Stack the load at high level **B**
5. Withdraw from the stack and reverse with forks trailing away from the chicane
6. Destack the load from eye level **C**
7. Reverse the load trailing towards the chicane
8. Stack the load at low level **D** squarely and in line with the adjacent stack
9. Withdraw from the stack and reverse with forks trailing away from the chicane
10. Destack the load from high level **B**
11. Withdraw from the stack and reverse with load trailing from the main aisle through the chicane to the start/finish position
12. Drive forward through the chicane load leading
13. Stack the load at eye level **C**
14. Reverse with forks trailing away from the chicane
15. Pick up the load at low level **D**
16. Withdraw and reverse with load trailing through the chicane to the start/finish position
17. Place the load within 150mm of, but not touching, the vertical face at **A**
18. Withdraw the forks and reverse the truck until the fork tips are behind the start/finish line
19. Park the truck correctly
20. Dismount from the truck.

PLAN OF TEST COURSE A

Rider Operated Counterbalance and Reach Lift Trucks

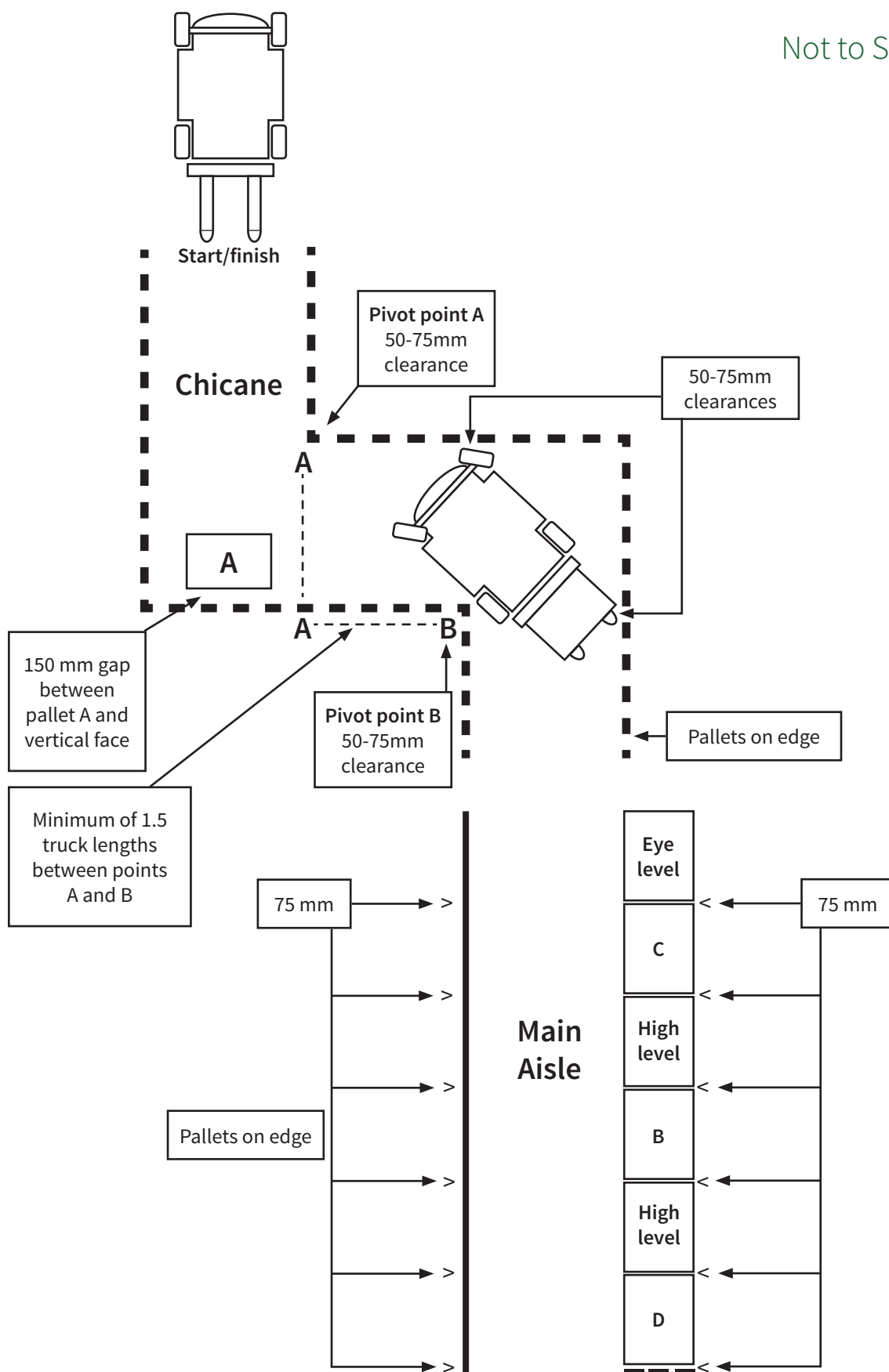
Not to Scale



PLAN OF TEST COURSE B

Rider Operated Counterbalance and Reach Lift Trucks

Not to Scale



Training Organisation:

PRACTICAL TEST OF BASIC OPERATING SKILLS

Rider Operated Counterbalance and Reach Lift Trucks (ABA Categories: B1, D1 & D2)

STANDARD MAX PENALTY POINTS ALLOWED

Instructor level 25 points | Operator level 40 points

Date of Test:	Truck Type:	Time A. Set Time: B. Start Time: C. Finish Time: D. Duration: Excess Time (D minus A) Max. penalty free time allowed = 2 x Rehearsed time Faults to be recorded as they occur by marking "X"
Candidate Full Name:	ABA WT Category:	
	Make:	
	Model:	
	Motive Power:	
	Rated Capacity:	
	Load Centre:	
	Height:	
Attachment:		
Address:		

ANY ALTERATION TO THIS FORM MAY INVALIDATE TEST

No.	Criteria observed	Faults	Penalty	Award
Operator safety and observation				
1	Mounts/dismounts incorrectly		3	
2	Limbs/body outside confines of truck		5	
3	Fails to check all round		5	
4	Fails to look in the direction of travel		5	
5	Fails to use appropriate safety device		5	
Steering and operating controls				
6	Unintentionally travels in wrong direction		5	
7	Brakes harshly/erratically		3	
8	Fails to release parking brake		1	
9	Rides foot brake		1	
10	Operates hydraulic controls when moving		5	
11	Selects wrong hydraulic control		3	
12	Excessive use of hydraulic controls		1*	
13	Rough use of hydraulic controls		3	
14	Fails to hold steering wheel when moving		5	
Manoeuvring and transporting				
15	Forks/load too high when travelling		5**	
16	Forks/load too low when travelling		5**	
17	Incorrect tilt when travelling		3	
18	Touches course/racking/load		3	
19	Shunts in chicane		3	
Stacking/De-stacking				
20	Incorrect set down at vertical face		1	
21	Shunts when stacking/destacking		3*	
22	Fails to apply parking brake/engage neutral		5	
23	Fork arms not central under load		3**	
24	Fork arms rubbing (entry/withdrawal)		3**	
25	Fork arms not fully inserted		5**	
26	Mast base touches stack/load		3	
27	Fork tips touch stack/load		3**	
28	Load/fork arms not level		3**	
29	Load incorrectly stacked		3	
30	Wheels not straight		3	
Parking				
31	Fails to apply park brake/engage neutral		5	
32	Fails to apply forward tilt		3	
33	Fails to lower fork arms		3**	
34	Fails to switch off/remove keys		3	
35	Wheels not straight		3	
Reach trucks only				
36	Lowers load onto reach legs		5	
37	Travels with reach extended		5	
			Add time penalties	
			Total Penalties	

* Allow 1 adjustment per operation

** The phrase 'fork arms' could include attachments, if applicable

MANDATORY DISQUALIFICATION (Tick appropriate box and record comment overleaf)	
Operates dangerously	Exceeds 3 occurrences of any one 5 point fault
Exceeds maximum time	Violent collision
Dismounts unnecessarily	Unsafe stacking

Practical	PASS	REFER
Pre-use check	PASS	REFER
Associated knowledge	PASS	REFER
Overall Result	PASS	REFER

Examiner's Name: _____

Registered No. _____

Signature (Examiner) _____

Signature (Candidate) _____

PRACTICAL TEST OF BASIC OPERATING SKILLS

Rider Operated Counterbalance and Reach Lift Trucks

Explanation of the Fault Criteria

FAULT No.	FAULT DESCRIPTION	EXPLANATORY NOTES
1	Mounts/dismounts incorrectly	Inserts key or turns the power on before mounting, fails to use secure and appropriate hand or foot holds correctly, mounts/dismounts on the wrong side of the machine, holds steering wheel or a control lever, fails to look all round before dismounting and alights in the incorrect manner e.g. jumps off. Mounting and dismounting should be conducted facing the lift truck. A penalty should be awarded each time any of these faults occur.
2	Limb/body outside confines of truck	Drives with a limb outside confines of the truck. Whilst it is necessary for operators to glance out occasionally so that their heads are outside the truck lines e.g. when aligning the truck or its load in a confined area etc, fingers, hands, arms legs and feet must always remain inside the confines of the machine. Where an operator has to lean outside the confines of the lift truck for the purpose of observation or alignment, the truck must be stationary with the controls in neutral and the parking brake applied and an all round visual check carried out before.
3	Fails to check all round	Fails to check all round before moving off and whilst operating. A thorough check all round is essential before moving off. Whilst manoeuvring observation of the rear end, fork and load swing and when operating the hydraulic controls e.g. raising/lowering tilting reaching etc. A perfunctory glance, i.e. merely 'going through the motions' is not sufficient and should result in a penalty.
4	Fails to look in direction of travel	Fails to look in the direction of travel whilst the truck is moving. Travelling with forks/load leading, this is self explanatory. When travelling with fork/load trailing, operators should be looking in the direction of travel with the occasional glance at the forks/load for possible fouling and to ensure load security.
5	Fails to use appropriate safety device	The lift truck horn should be used whenever there is the requirement to warn others of the lift truck presence if the operator suspects that they may not have seen or if the lift truck has to pass through a blind corner or entrance. If fitted seat belts should be worn, safety devices such as presence lights, flashing beacons should all be activated.
6	Unintentionally travels in wrong direction	Unintentionally selects wrong direction control and moves under power before correcting.
7	Brakes harshly/erratically	Emergency type braking where it is not, necessary.

FAULT No.	FAULT DESCRIPTION	EXPLANATORY NOTES
8	Fails to release parking brake	Attempts to move the truck without releasing the parking brake in either direction. This will not apply on lift truck types that have 'auto release' type parking brakes.
9	Rides foot brake	Rides foot brake unnecessarily. No faults should be recorded whenever the truck requires to be controlled in this manner during tight manoeuvres. No more than one fault should be recorded under this heading at each stage of the test, irrespective of whether the fault occurs frequently during the stage.
10	Operates hydraulic controls when moving	Whenever the hydraulic controls are operated the lift truck is to be placed in a secure state i.e. parking brake applied and in neutral. Where the configuration of the lift truck does not facilitate neutral no penalties are to be awarded. Penalties are to be awarded for any adjustment of the hydraulic controls whilst the truck is in motion.
11	Selects wrong hydraulic control	Selects and operates wrong hydraulic function [operates wrong lever or operates lever in wrong direction]. Fault to be recorded whenever the hydraulic pump motor is energised or mechanical movement of the mast/fork occurs.
12	Excessive use of hydraulic controls	Operators should not be penalised for failing to judge correct height of fork tips or tilt angle at first attempt during stacking/de stacking operations. One adjustment is allowed per operation, but where more than one adjustment is made i.e. either by lowering or raising the fork's etc. faults should be recorded for each additional adjustment at each operation. Only record adjustments when movement actually occurs. Penalties are to be awarded where a candidate operates more than one hydraulic control simultaneously (paddling the controls).
13	Rough use of hydraulic controls	Uses hydraulic controls roughly or unsympathetically. Harsh application, pumping with the levers and continuing to hold the lever in the engaged position (motor engaged) when the operation is complete.
14	Fails to hold steering wheel when moving	The steering wheel or assistor (if fitted) must be held firmly by at least one of the operators hands whenever the truck is moving. Penalties should not be awarded if the candidate releases the steering wheel/assistor when the lift truck is in a secure state i.e. park brake applied and in neutral.
15	Fork arms/load too high when travelling	Travels or turns with the forks/load above correct travel height. This refers to travelling [not inching forwards or reverse for alignment at face of stack] with heels of forks/load more than 100mm above the height recommended for the truck in use (e.g. a recommended 100/150mm plus 100mm = 200/250mm).
16	Fork arms/load too low when travelling	Travels or turns with forks/load below the height recommended for the truck in use, where there is a risk of the forks/load coming into contact with the ground.

FAULT No.	FAULT DESCRIPTION	EXPLANATORY NOTES
17	Incorrect tilt when travelling	Fork arms/load not tilted correctly for travel. Whilst travelling with an unladen lift truck the fork arms should be adequately tilted back from the horizontal as recommended for the lift truck in use. On trucks which have above average available back tilt it is not always necessary to apply full tilt. Whilst travelling with a laden truck the amount of back tilt must be adequate and appropriate as recommended for the type of load being transported and the environment in which the truck is operating.
18	Touches course/racking/load	Minor contact with or touches any part of the test course, due to a steering/judgement error. To be interpreted as making contact with any part of the truck/load however slight between: a) sides of chicane or the working aisle b) racking uprights or beams (above and below) c) adjacent stacks or supporting stacks. (see disqualification for violent collision)
19	Shunts in chicane	Shunts to negotiate chicane. A 'shunt' occurs when the operator's progress through the chicane is interrupted by the truck being manoeuvred in both directions in order to assist in alignment. A fault should be recorded for each shunt, regardless of distance travelled in opposite direction to that of the overall manoeuvre.
20	Incorrect set down at vertical face	Fails to deposit load correctly at vertical face. The load must be deposited square on to the vertical face and within 150mm, but not touching. (See plan of course).
21	Shunts when stacking/destacking	At each stacking/destacking operation, operators should not be penalised for failing to line up correctly on the first attempt. One 'shunt' is to be allowed per operation, however where more than one adjustment is made i.e. where the truck moves away from the stack and then moves toward the stack, faults should be recorded for each additional shunt at each stacking/destacking operation.
22	Fails to apply parking brake or engage neutral	Fails to apply parking brake and place direction controls in neutral when operating the hydraulic controls. Holding the truck on the footbrake or inching pedal is not acceptable. Where the lift truck has automatic parking brakes or the configuration of the lift truck does not facilitate neutral, no penalties are to be awarded. The lift truck manufacturers hand book should be consulted for specific instructions on operating procedure.
23	Fork arms not central under load	Fork arms more than 40mm off centre when lifted. This fault can only be recorded when the operator actually engages the load by lifting it off the floor, stack or racking beam/shelf.

FAULT No.	FAULT DESCRIPTION	EXPLANATORY NOTES
24	Fork arms rubbing (entry/withdrawal)	Wooden pallets: this refers to the forks rubbing against the top or bottom deck, fouling the dividing timbers or blocks. Corner post pallets/stillages/plastic boxes: applies to the forks rubbing against the underside of the pallet or the top of the lower pallet and/or its load, fouling the corner posts and cupped feet.
25	Fork arms not fully inserted	Load not housed as close as possible against the heel of both fork arms (see disqualification operating dangerously).
26	Mast base touches stack/load	If the mast base or reach mechanism including the reach legs comes into contact with any loads or racking systems whilst conducting stacking or destacking operations then a penalty should be awarded. (see disqualification for violent collision)
27	Fork tips touch stack/load	Tips of the fork arms or load make contact with pallet, rack, stack or vertical face This refers to the operators weakness in judging distances between the tips of the forks and a) the leading edge of a load b) pallets, racking, stacks or the vertical face. (see disqualification for violent collision)
28	Load arms not level	Fork arms not level during insertion or withdrawal. When laden the load must be level prior to depositing onto the floor/load bearing beams or structure. Faults are to be recorded at the point of actual deposit or lift.
29	Load incorrectly stacked	This applies when a load has been actually deposited and the operation completed. When placed into a racking systems all loads must be uniformly distributed on the load bearing beams. Faults should be recorded when the load is: a) stacked out of alignment with base load b) stacked out of alignment with the racking c) placed out of alignment with the adjacent stacks
30	Wheels not straight	On completion of the turn in the aisle prior to any hydraulic functions being performed any steering lock must be removed and the steering axle wheels aligned for straight ahead before attempting pallet engagement.
31	Falls to apply parking brake or engage neutral	When preparing the lift truck for parking, the park brake and neutral must be applied. Where the lift truck has automatic parking brakes or the configuration of the lift truck does not facilitate neutral, no penalties are to be awarded. The lift truck manufacturer's hand book should be consulted for specific instructions on operating procedure.

FAULT No.	FAULT DESCRIPTION	EXPLANATORY NOTES
32	Fails to apply toward tilt	The forks are to be tilted forward so that the chamfered underside of the forks is substantially parallel to the ground. If the lift truck configuration does not allow for sufficient forward tilt movement, full forward tilt available should be applied. Tilt must be applied prior to lowering the forks.
33	Fails to lower fork arms	As far as reasonably practicable, after being tilted forward the forks should be lowered until full ground contact has been made with the chamfered underside of the forks. The heels of the forks should be as low as reasonably practicable. No penalty will be awarded in situations where the heels do not touch the ground but the fork chamfer is in full ground contact.
34	Fails to switch off/remove key	This must be completed before the operator dismounts. Penalty to be awarded in full if the operator switches off but fails to remove the key. Where key card or other electronic control systems are in use the lift truck must be shut down in accordance with the manufacturer's instructions prior to the operator dismounting.
35	Wheels not straight	Fails to leave wheels in a straight ahead position.
36	Lowers load onto reach legs	This refers to when the operator unintentionally lowers the load/pallet onto the reach legs, before reaching out or when returning to the travel position with a laden truck after completing a destacking operation. When this occurs as a result of selecting the wrong hydraulic control (see item 11). Record under one fault heading only.
37	Travels with reach extended	The mast must be fully retracted during unladen or laden travel. This fault does not refer to inching with the reach extended when: a) carrying out minor adjustments for fork/load alignment b) ensuring fork arms are fully inserted.

ASSOCIATED KNOWLEDGE EXAMINATION

Rider Operated Counterbalance and Reach Lift Trucks

5. Theory Test

The theory test paper consists of 5 open and 20 multiple choice questions designed to establish the candidate's knowledge of the safe operating practices generally found within the industry and specific to the candidate's working environment.

A bank of open and multiple choice questions is included with this publication. The multiple choice questions are divided into 2 sections, Safety (MS) and Operational (MO).

5.1 Administration

Examiners should formulate several (we would suggest 3) theory question papers from the bank of questions supplied. The questions provided within the bank of questions **are the only questions that are allowed to be used for the associated knowledge examination**. Organisations wishing to use alternative questions must have **prior approval from the ABA**. The theory questions chosen will consist of 5 open questions, 10 Safety (MS) questions and 10 Operational (MO) questions.

Mandatory Questions

In the bank of multiple choice questions there are 5 that are in bold type. These are mandatory questions that must appear in every question paper. If a candidate gets any of the mandatory questions incorrect then the overall result of the associated knowledge examination will be a referral (regardless of the overall score).

Ideally, 20 questions should apply to all sectors of industry and, where practicable, 5 questions specific to the candidate's working environment.

By logical selection from the batches, a varied stock of test papers may be assembled, each of these must be allocated an appropriate identification (paper number), which must be recorded on the candidate's answer sheet and final assessment document by the examiner for future reference.

Where it has been determined that English is not their first language or the candidate experiences literacy and numeracy difficulties then the candidate may take the test orally. See notes on testing non English speaking candidates in the introduction section of this document.

The examiner must then pose the questions on an individual candidate basis and all answers must be documented and recorded on the final assessment document for future reference.

5.2 Marking

The minimum mark of **80%** is required to achieve a pass in the test.

Each **open** question is worth up to a maximum of 4 marks in proportion to the accuracy of the answer given i.e. if a question asks the candidate to name 4 items and the candidate only provides 3 answers that the examiner is satisfied with, then only 3 marks will be awarded, alternatively if only one answer is provided that satisfies the examiner then only 1 mark would be awarded.

Each multiple choice question is worth 4 marks for a correct answer and 0 for an incorrect answer, **proportional marking for multiple choice questions is not permitted.**

Errors must be explained to the candidate.

Examiners should accept suitable and appropriate answers should a candidate provide an answer for an open question that is not in the list of model answers provided

Candidates who do not pass the test should undergo the appropriate remedial tuition and at a later time re-take a new batch of 25 questions.

5.3 Conduct of Theory Test

This consists of 3 sets of questions:

- 5 open questions which will normally be presented in written form (or presented orally by the instructor/examiner if candidate needs dictate this).
- 10 multiple choice questions on Safety which will normally be presented in written form and requires the candidate to select the correct answer by ticking a box.
- 10 multiple choice questions on Operational matters which will normally be presented in written form and requires the candidate to select the correct answer by ticking a box.

TOTAL: 25 Questions

Each question in each set is worth a maximum of 4 marks making a total of 100 marks available.

Open Questions (O)

From the bank of questions supplied, the instructor/examiner selects 5.

Each of these can be presented orally or in written form.

Marking will be proportional to the answers given up to the maximum of 4 marks per question.

Safety Multiple Choice Questions (MS)

From the bank of safety questions the instructor/examiner selects 10 questions which ideally are related to the candidate's operational requirements and again these can be presented in written or oral form.

Each answer is worth either **4** marks for being correct or nothing. Proportional marking for multiple choice questions is not permitted.

Operational Multiple Choice Questions (MO)

From the bank of operational questions the instructor/examiner selects 10 questions which ideally are related to the candidate's operational requirements. These again can be presented in written or oral form.

Each answer is worth either **4** marks or nothing. Proportional marking for multiple choice questions is not permitted.

Administration

The questions used from each set and the subsequent marks awarded are to be recorded on the candidates answer sheet and final assessment document by the examiner for future reference.

Question Bank

'OPEN' TEST QUESTIONS

5 questions to be chosen, 4 marks per question = 20 marks (20% of paper)

1. Name 4 main safety checks you would make before loading or unloading a flat bed or curtainsider lorry.
 - A. Lorry brakes or wheels chocked
 - B. Lorry bed condition, width, height, level and curtains out of the way
 - C. Lorry driver where is he/she and what is required
 - D. A support stand is positioned on an unsupported semi trailer

2. Give 4 reasons why it is important to carry loads up to the heel of the forks.
 - A. To keep the load centre as far back as possible
 - B. To maintain truck stability
 - C. Maintain load stability against the fork arms and carriage/load guard
 - D. Keep the truck and its load as short as possible for confined spaces

3. Give 4 reasons why a lift truck can tip over sideways (lateral instability).
 - A. Turning too fast
 - B. Load offset
 - C. Uneven load
 - D. Sideshift not centred
 - E. Forks not evenly spaced
 - F. Side sloping ground
 - G. Turning with mast/load raised
 - H. Turning on an incline
 - I. Live load

4. A truck's rated capacity is 1800kg at 500mm load centre (LC). You have a load of 33 bags weighing 50kg each and a pallet weighing 30kg. The pallet measures 1200mm x 1000 mm. Can you safely handle this pallet heeled up in either direction? Please explain your answer.
 - A. Total load = 1650kg + 30kg = 1680kg at 500 LC. The truck can lift the load at 500mm load centre, but taking into account the additional 100mm load centre, the truck cannot handle the pallet at that longer load centre as the rated capacity of the lift truck at 600mm LC is 1500kgs ($1800\text{kg} \times 500\text{mm} \div 600\text{mm} = 1500\text{kg}$).

5. Give 4 examples of places where you should **not** park an industrial lift truck.
 - A. In or near doorways
 - B. Near switches and electricity boards
 - C. Near firefighting equipment
 - D. Blind corners
 - E. Inclines
 - F. Loading bays
 - G. Wet or muddy areas
 - H. Soft ground or generally in the way of others

6. Name 4 different types of ground surfaces or conditions a lift truck operator could encounter.
 - A. Uneven
 - B. Wet/dry
 - C. Icy or greasy
 - D. Very smooth/rough
 - E. Loose surface
 - F. Sloping or inclined
 - G. Railway tracks or gullies
 - H. Speed bumps

7. Name 2 effects that ground conditions can have on a lift truck.
 - A. Lift truck instability
 - B. Loss of adhesion/braking
 - C. Damage or loss of load
 - D. Damage to the lift truck

8. Name 2 precautions a lift truck operator can take when operating on different types of ground or surface.
 - A. Drive at a speed according to the conditions
 - B. Use the foot brake according to the conditions
 - C. Be observant and aware of changes in ground conditions
 - D. Refrain from aggressive steering
 - E. Ensure that the truck is stable and secure before using the hydraulic controls

9. Give 4 examples which could cause a lift truck to tip forwards (longitudinal instability).
 - A. Exceeding the rated capacity of the lift truck
 - B. Extended load centre
 - C. Load not fully heeled up
 - D. Heavy braking
 - E. Rough/jerky hydraulic usage
 - F. Too much forward tilt at height
 - G. Live load
 - H. Hard acceleration in reverse with a load
 - I. Forks under an adjacent load/structure
 - J. Incorrect direction on a slope when laden
 - K. Travelling with the reach carriage extended

10. In relation to a truck's capacity, which 3 items of information **must** be printed on a truck's rating plate?
 - A. Lifting capacity in kilograms
 - B. Load centre in millimeters
 - C. Stacking height in millimeters

11. Name 4 checks you **must** make to a load before picking it up.
 - A. Its weight
 - B. Its load centre
 - C. The location where you are to collect or deposit the load
 - D. Its condition and security
 - E. What the load consists of
 - F. Is the load 'live'
 - G. What material the pallet is made from

12. List 8 components that **must** be checked on a lift truck pre-use inspection.
 - A. Forks
 - B. Carriage plate
 - C. Backrest extension
 - D. Mast
 - E. Mast Rollers and slides
 - F. Hydraulic system and controls
 - G. Lift chains and pulleys
 - H. Oil leaks
 - I. Engine transmission and hydraulic oil levels
 - J. Coolant level
 - K. Adequate fuel

- L. Wheels and tyres
 - M. General condition and security of the truck
 - N. Operator's Seat
 - O. Operating Position
 - P. Rated Capacity Plate
 - Q. Lights
 - R. Driving and Braking
 - S. Steering
 - T. Audible warning
- 13. The Health and Safety at Work Act 1974, etc. gives 4 responsibilities/duties of operators and employees. What are they?**
- A. Duty of safety to themselves
 - B. Duty of safety to others
 - C. Co operation with management on aspects of safety
 - D. Not to interfere, misuse, abuse, be reckless or modify anything provided for Health and Safety or Welfare
- 14. Give 2 reasons why it is advisable to stop just a short distance from the stack.**
- A. Assist with accuracy
 - B. Reduce damage
 - C. Discourage pedestrians walking between the lift truck and the stack
- 15. Name 4 precautions you must take while refuelling or recharging a lift truck.**
- A. Wear the correct PPE
 - B. Ensure no naked flames or smoking
 - C. Follow the manufacturer's/organisational recommendations and procedures
 - D. Do not use a mobile phone
 - E. Ventilate the battery
- 16. If, in an emergency, you had to park a lift truck on an incline, name 4 precautions you should take before leaving it.**
- A. Parked correctly with the fork tips on the ground
 - B. In neutral
 - C. Switched off
 - D. Keys left in the truck
 - E. Parking brake applied
 - F. Chocks under the wheels

- 17. Why must you never drive or operate an industrial lift truck across an incline?**
 - A. Industrial trucks are not designed to operate on side slopes and there is a strong possibility it will overturn.

- 18. Name 8 precautions you must take if a manned platform is to be fitted to a lift truck.**
 - A. It must be secured to the forks or carriage so that it cannot come off
 - B. The platform must meet the construction and inspection requirements set out by the HSE
 - C. There must be a safe method of use agreed before starting the work
 - D. Only authorised persons operate and are lifted in the manned platform
 - E. The operator must not leave the lift truck whilst the occupants are in the cage
 - F. Only the lift and lower lever shall be used
 - G. No other hydraulic levers should be used
 - H. The lift truck must be on level ground
 - I. The operation must be for occasional non-scheduled use
 - J. A thorough risk assessment of the lift must be in place
 - K. The lift truck must be secured by use of the handbrake and neutral applied
 - L. The thorough examination frequency of the lift truck must be at least 6 monthly
 - M. Persons are not to be transported within the cage
 - N. A method of communication is agreed between the operator and person(s) lifted prior to the work commencing

- 19. State 2 reasons why is it important that loaded pallets are placed tight to one another and against the headboard when loading a lorry.**
 - A. To ensure the full load does not move during transport, especially when braking
 - B. To ensure that the lorry can get a full load.

- 20. You have a lift truck fitted with a side shift. State 4 hazards this can present.**
 - A. Reduced capacity
 - B. Reduced visibility
 - C. The need to re-centre after use to maintain stability, manoeuvrability and accuracy
 - D. Care must be taken to operate it in the correct direction to avoid contact with other loads or infrastructure

- 21. Name 4 precautions you should take as you approach and negotiate blind corners.**
 - A. Decrease speed
 - B. Sound the horn
 - C. Drive wide to increase visibility
 - D. Operate with caution and be prepared to stop

22. Name 2 reasons why the parking brake and neutral must be applied when using any hydraulic controls.

- A. To ensure the lift truck is stable during the operation of the controls
- B. The operator can, concentrate on the stacking/destacking operation
- C. Engine speed to operate the hydraulics can be utilised

23. State 4 safety factors to consider when charging a lift truck battery.

- A. The correct charger has been chosen
- B. The charger is switched off prior to connection to the lift truck battery
- C. The battery is ventilated sufficiently
- D. The electrical cables are not at risk of entrapment
- E. The connector is connected to the battery not the lift truck

24. When refuelling an LPG powered lift truck state 4 safety precautions that **must** be taken.

- A. The lift truck must be parked up, correctly secured, switched off and isolated
- B. Correct PPE must be worn, e.g. eye protection and rubberized type gloves
- C. No smoking or naked flames
- D. No mobile phone usage
- E. An earth strap must be clamped onto the lift truck
- F. The manufacturer's specific refuelling procedures must be followed
- G. All equipment must be stowed correctly after use

25. When refuelling a diesel powered lift truck state 4 safety precautions that **must** be taken.

- A. The lift truck must be parked up, correctly secured, switched off and isolated in a suitable location
- B. Correct PPE must be worn, e.g. eye protection and suitable fuel resistant gloves
- C. No smoking or naked flames
- D. No mobile phone usage
- E. Spill kits should be available
- F. The manufacturer's specific refuelling procedures must be followed
- G. All equipment must be stowed correctly after use
- H. The filler cap should be refitted

26. State the recommended operational procedure for stacking a laden pallet in an industrial racking system with a reach truck.
- Approach the racking location and stop with the load 100mm-150mm from the racking system
 - Reduce the tilt ensuring that the pallet is stable
 - Raise the pallet to the required location height
 - Drive in with the truck and stop with the reach legs within 50mm of the racking system
 - Extend the reach mechanism so the pallet is equally spaced on the beams
 - Ensure that the pallet is level
 - Lower the pallet onto the beam
 - Retract the reach
 - Reverse in a straight line away from the racking system so the fork tips are clear
 - Lower the forks into the travel position

MULTIPLE CHOICE QUESTIONS – SAFETY

10 questions to be chosen 4 marks per question = 40 marks (40% of paper)

Note: The questions in **BOLD** are mandatory questions and must be included in your question papers and must be answered correctly by the candidate in order to pass the associated knowledge test.

- Who is responsible for checking that the lift truck is in good working order before use?**
 - The management**
 - The maintenance department**
 - The operator
 - The insurer**
- The truck's maximum carrying capacity will be reduced when:**
 - The load centre is increased
 - The load centre is decreased**
 - The load obscures your view**
 - When travelling in reverse**

3. Whose responsibility is it to ensure the safety of pedestrians while operating a lift truck?
 - A. The lift truck operator
 - B. Management
 - C. The pedestrians themselves
 - D. The human resources department

4. From the list below select the last thing the operator should do before moving off?
 - A. Put their seat belt on
 - B. Engage drive
 - C. Look around
 - D. Sound the horn

5. Lift trucks are more likely to turn over sideways when they are:
 - A. Loaded and driven slowly around corners
 - B. Loaded and driven quickly in a straight line
 - C. When braking hard
 - D. Unladen and turning sharply

6. What position should a lift truck's mast be in to comply with the manufacturer's stated lifting capacity?
 - A. Slightly tilted backwards with the truck on level ground
 - B. It doesn't matter as the mast angle does not affect the rated capacity
 - C. Slightly tilted forwards with the truck on level ground
 - D. Vertical with the truck on level ground

7. What is the difference between Net weight and Gross weight?
 - A. Net weight = the product only: Gross weight = the weight of the product, pallet and packaging
 - B. Net weight = the weight of the load: Gross weight = the weight of the load and the pallet
 - C. They are both the same and refer to the weight of the truck
 - D. Gross weight only applies to live loads

8. What is meant by the term "load centre" as it applies to lift trucks?
 - A. The width that the forks should be set on the carriage plate
 - B. The length of the truck and the load
 - C. The measurement to the middle of the load
 - D. It is the measurement given forward from the front face of the fork arms to the centre of gravity of the load

9. Prior to operating a lift truck in the working environment, the operator must have “written authorisation” issued by:
 - A. The instructor who carried out the training.
 - B. The employer
 - C. The lift truck supplier
 - D. The lift truck manufacturer

10. Enforcement of the Health and Safety at Work Act 1974, etc. is the responsibility of:
 - A. The Health and Safety Commission (HSC)
 - B. The European Commissions United Inspectors (ECU)
 - C. The Health and Safety Executive and Local Authorities
 - D. The Police

11. The lift truck’s “rated capacity” applies with the mast in the:
 - A. Vertical position
 - B. Tilted back position
 - C. Tilted forward position
 - D. Reach carriage extended position

12. When driving an unladen lift truck how should the forks be set?
 - A. With full back tilt
 - B. As low as practicable and tilted forward to prevent damage
 - C. As low as practicable and tilted back
 - D. As low as possible and parallel to the ground

13. When sounding the lift truck’s horn at a blind corner you should:
 - A. Make several short sharp blasts
 - B. Give one long blast to attract attention
 - C. Give one short toot to save discharging the battery
 - D. Give several long blasts

14. Health and Safety legislation places responsibility for safety at work on:
 - A. The employers
 - B. The employees
 - C. Everyone on the premises
 - D. Lift truck operators only

15. An Approved Code of Practice is:

- A. A requirement by law that everyone must comply.
- B. Advice to duty holders on how to comply with legislation.
- C. A registration scheme for the licensing of lift truck operators.
- D. Written by a manufacturer on how to operate a lift truck

16. Undercutting is used when:

- A. The operator cannot see the pallet slots so places the forks under the pallet
- B. The forks are longer than the pallet and the pallet is adjacent to a wall or another pallet or the pallet cannot be heeled up immediately
- C. The forks are shorter than the pallet and the load has to be carried carefully
- D. Loading lorries

17. How must the forks be positioned when handling metal stillages?

- A. As wide as possible to prevent the load slipping sideways
- B. Spaced to take an equal weight on each fork as with pallets
- C. Fairly narrow to allow for easy entry/withdrawal and to keep the weight on the forks
- D. As close as possible

MULTIPLE CHOICE QUESTIONS – OPERATIONAL

10 questions to be chosen 4 marks per question = 40 marks (40% of paper)

1. What is the recommended way to approach a stack to place or retrieve a load?

- A. Drive slowly forward, raise the forks to the required height, stop, apply the parking brake
- B. Stop not more than 150mm from the stack, apply the parking brake, select neutral, adjust tilt and raise the forks
- C. Stop at least a metre from the stack, raise the forks to the required height, drive slowly forward
- D. Stop 150mm from the stack, apply the park brake and select neutral and with full back tilt enter the pallet

2. In normal circumstances, if the load on the forks obscures your view, you should:
 - A. Dismount, check that the way is clear, then drive slowly forward sounding the horn
 - B. Travel in reverse, looking in the direction of travel
 - C. Ask your Supervisor to guide you with hand signals
 - D. Conduct an all-round check and proceed forwards very slowly with your head just outside the safety cage

3. When parking a lift truck how should the forks be positioned?
 - A. The tips not more than 100 150mm high with the heels touching the floor
 - B. The heels not more than 100 150mm high with the tips touching the ground
 - C. The heels as low as possible with the tips touching the ground
 - D. The heels touching the ground with the tips within 100mm of the ground

4. How much back tilt is required when transporting a palletised load?
 - A. Sufficient back tilt to cater for the type of load and ground conditions
 - B. Full tilt to keep the load against the vertical face of the forks
 - C. Back tilt just off the vertical to prevent the load from slipping forward
 - D. The forks should be level to deposit a load

5. Before starting to load a rigid flatbed lorry or trailer from ground level, the lift truck operator must check that:
 - A. The lorry driver has checked the load
 - B. The lorry's tyre pressures are correct for the weight of the load
 - C. The destination of the lorry
 - D. The lorry driver is aware that loading is to take place, the lorry engine is turned off, the lorry parking brake(s) are applied and the lorry wheels chocked (if necessary)

6. A lift truck must always be driven across railway lines, traffic calming speed bumps, drainage gullies, etc.:
 - A. As quickly as possible
 - B. With forks trailing
 - C. Slowly and, if possible, diagonally
 - D. Straight onto the obstacle

7. When driving a laden truck up an incline the forks should be:
 - A. Trailing
 - B. Leading
 - C. Tilted forward
 - D. Reach carriage extended

8. When an unladen truck is being driven on an incline, the forks/attachment should face downhill. This is to improve:
 - A. Stability, traction and adhesion
 - B. Visibility and steering
 - C. Speed and reduce tyre wear
 - D. Time keeping

9. When tilting a load forward at height, why is there an increased risk of the truck tipping forward?
 - A. The lateral forces placed over the rear axle will increase
 - B. The load centre will increase
 - C. The combined centre of gravity moves forward
 - D. A small amount of tilt at height does not affect stability

10. In winter months loads stacked outside may be covered in ice and snow, the effect of this will:
 - A. Increase the carrying capacity of the truck
 - B. Make no change to the truck or weight of the load
 - C. Increase the weight of the load
 - D. Increase the friction between the pallet and the forks

11. While operating a lift truck what would you do if you saw some rubbish/dunnage lying in a gangway or warehouse location?
 - A. Inform the supervisor
 - B. Park the truck in a safe place and remove the obstruction
 - C. Inform the other truck operators and get it moved at break time
 - D. Ignore it as the next shift have cleaners that will move it

12. When travelling on slopes with a reach truck where should the load be carried on the forks?
 - A. With the load facing uphill and tilted forwards
 - B. With the load facing downhill and tilted forward
 - C. With the load facing uphill and tilted back
 - D. With the load facing up hill with reach carriage extended to increase stability

13. Why do you stop the truck no more than 150mm from the stack before raising the forks?
 - A. To assist with accuracy and discourage people walking between the forks and the stack
 - B. To save too many movements of the truck when manoeuvring
 - C. To save using the parking brake too many times
 - D. To allow pedestrians to pass through the gap at the rear of the truck

14. When following another lift truck down an aisle, how many truck lengths clearance is it recommended to leave?
 - A. One length
 - B. Two length
 - C. Three lengths
 - D. Four lengths

15. The brakes on the truck you are operating seem to be faulty. What are you going to do?
 - A. Inform the supervisor
 - B. Stop immediately and seek assistance
 - C. Drive slower and get the fault checked at the next break time
 - D. As long as the parking brake works it will be ok to finish the job and then report the fault

16. As a general rule, how should the forks be positioned on the carriage to take a loaded wooden pallet?
 - A. As wide as possible to prevent the load tipping off
 - B. Spread so as to take an equal weight on each fork
 - C. Fairly close together to allow easy entry of the forks
 - D. As close to the centre block as possible

17. The safe use of the hydraulic controls requires the following:
 - A. Parking brake applied
 - B. Parking brake applied and transmission in neutral
 - C. Clutch disengaged and footbrake applied
 - D. A fully charged battery

18. When the load centre is increased:

- A. The load carrying capacity is not affected
- B. The load carrying capacity is increased
- C. The load carrying capacity is not affected if it is a live load
- D. The load carrying capacity is reduced

19. What is the meaning of “free lift” in connection with lift trucks?

- A. The distance the forks can be raised before the mast begins to extend
- B. The tolerance allowed for fork clearance whilst entering the pallet
- C. Passengers may be carried on the truck to assist the operator
- D. Because the hydraulics do not use power when being lowered

20. When preparing to move off, the safest procedure is as follows:

- A. Transmission engaged – look over both shoulders – park brake off – move
- B. Look over shoulders – transmission engaged – park brake off – move
- C. Park brake off – transmission engaged – look over both shoulders – move
- D. Park brake off – look over both shoulders – engage transmission and move off

21. When transporting a palletised load on level ground, the correct position of the forks is:

- A. With the forks as near to the ground as possible and parallel to the ground
- B. With the forks 100mm – 150mm off the ground and tilted back sufficiently to stabilise the load
- C. With the forks 100mm – 150mm of the ground and fully tilted back
- D. With the forks 100mm – 150mm from the ground and tilted forwards

ASSOCIATED KNOWLEDGE TEST MARKING SHEET

Rider Operated Counterbalance and Reach Lift Trucks

Organisation question paper reference number:		Test date:	
Candidate Name:			

Question	Theory Test Paper No:	Mark
1		/4
2		/4
3		/4
4		/4
5		/4

	A	B	C	D		A	B	C	D
6 (MQ)					16				
7 (MQ)					17				
8 (MQ)					18				
9 (MQ)					19				
10 (MQ)					20				
11					21				
12					22				
13					23				
14					24				
15					25				

Minimum pass mark: 80%

Percentage Score:		Pass:		Refer:	
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Mandatory questions answered correctly?

Yes:		No:	
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Candidate signature:	
Examiner name:	
Examiner signature:	