

Technical test - Practical

Telescopic handler - A17

Resources required – Endorsements A to C



Machine	<ul style="list-style-type: none"> • Telescopic Handler equipped with: <ul style="list-style-type: none"> - standard forks - ROPS, FOPS and seatbelt - rough terrain capability (not applicable for Endorsement A)
Area	<ul style="list-style-type: none"> • Flat surface for travelling on and for placing/stacking loads • Rough undulating terrain, (not applicable for Endorsement A) • Incline or inclines • Clear straight run not less than 20 metres in length
Other equipment	<ul style="list-style-type: none"> • Truck bed fitted with a headboard • Loading-out tower built out of scaffolding, either tube and fitting or system (quick lock), that meets current legislation • Items to create restrictions for manoeuvring • A replacement attachment (for an attaching/removal activity)
Loads	<ul style="list-style-type: none"> • LOAD 1 1 x load at least 50% of the rated capacity of the telescopic-handler • LOAD 2 3 x loads of equal dimensions that are suitable for stacking purposes • LOAD 3 1 x load weighting less than the machine lift capacity at full horizontal reach
Notes	<ul style="list-style-type: none"> • The machine selected for the test must meet the specification for the required endorsement, be in serviceable condition and conform with current legislation • The operator's manual must be with the telehandler • The weight of all loads must be known • The loading-out tower must be of a height that allows LOAD 1 to be placed using at least 75% of telehandler's full operating lift height • The truck bed can be simulated but must conform to road haulage standard specifications, including the ground/bed height • The slope must have an incline of 18% (1 : 5.5) with sufficient manoeuvring area at the top, or a straight ramp with an up and down route with a flat area at the summit • The equipment used to mark out the manoeuvring exercises such as the chicane must have a height of at least 1 metre • The restriction clearance for the reversing exercise must not be more than 300mm or 10% of the machine width (whichever is the greater) between the machine and the restriction sides

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Resources required *(Continued)*



Notes (Continued)	<ul style="list-style-type: none"> • Tape measure for the checking of load centres and fork widths etc. • Items for LOAD 2 must be safe for stacking • For endorsement C, the machine must be equipped with stabilisers <p>If a machine having an operating height in excess of 16 metres is being used for the test, the following concession may be used as an alternative</p> <p>A loading-out tower having a height of 12 metres may be used providing there is a minimum distance, as shown in the table, from the base of the tower to the fork tips of the telehandler when the tips of the forks are facing the tower</p>	
	Operating height (metres)	Minimum distance (metres)
	17	2
	18	2
	19 metres and above	3

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Activity instructions – Endorsements A to C



<p>Sequence</p>	<ul style="list-style-type: none"> • Activity 1 must be undertaken at the start of the test • Activities 2 – 10 and 12 can be undertaken in any order • Activity 10 may be incorporated during activities 6 – 9 • Activity 13 must be undertaken at the end of the test <p>The test must be completed within a given time. The specifications' section gives further information</p>
<p>Preparing for work</p>	<ol style="list-style-type: none"> 1. Complete all manufacturers' pre-start and running checks and prepare the telescopic-handler for travel as detailed in the operator's manual which must be referred to by the candidate during the activity <ul style="list-style-type: none"> • Additional information to be identified by the candidate referring to the operator's manual. Tester to decide what information will be identified
<p>Travelling & manoeuvring <i>(refer to specifications)</i></p>	<ol style="list-style-type: none"> 2. In an un-laden state and with LOAD 1: <ul style="list-style-type: none"> - travel up and down the slope - travel over rough terrain - pass through a chicane executing full right and left-hand turns in a forward and reverse direction - stop and restart on the incline whilst loaded - Reverse the telescopic handler in a straight line and through a restriction both un-laden and laden - The reversing exercise must be for a minimum of 20 metres - The restriction clearance for the reversing exercise must not be more than 300 mm or 10% of the machine width (whichever is the greater) between the machine and the restriction sides
<p>Setting up for work</p>	<ol style="list-style-type: none"> 3. Prepare and set the telescopic-handler for each lift 4. Remove the forks and fit an attachment
<p>Working tasks <i>(refer to specifications)</i></p>	<ol style="list-style-type: none"> 5. Lift and place LOAD 1 onto the loading out tower. When placed, move the telehandler away from the tower. Retrieve the load, lower to ground level and place at a given point 6. Lift and place 3 x LOAD 2 onto the truck bed. On completion, remove all loads (LOAD 2) from the truck bed 7. Stack 3 x LOAD 2 vertically on top of one another. On completion de-stack and place alongside each other in a straight line 8. Lift LOAD 3 and place at ground level at an indicated point using full reach (horizontal) of the telehandler 9. Lift LOAD 1 and reverse in a straight line for at least 20 metres, passing through a restriction at the end of the run 10. Carry out undercutting when lifting and placing a load
<p>Completing work</p>	<ol style="list-style-type: none"> 11. All loads to be placed at ground level following completion of each activity 12. Configure the telehandler for road travel
<p>Shutting down</p>	<ol style="list-style-type: none"> 13. Park the telehandler and carry out shut-down and securing procedures

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Activity instructions – Endorsements A to C (Continued)



Notes	<ul style="list-style-type: none">• For activity 5, another activity must be undertaken after placing the load at height• For activities 2 (chicane) and 9, the restrictions must be higher than the height of the load. The forks may not be raised during manoeuvring activities.• The load stacking area for activity 7 must be at least 10 metres away from the truck bed• On activity 6:<ul style="list-style-type: none">- Should the load or pallet be narrower than fork carriage, the given measurement (maximum of 75mm) applies between the headboard and side of the carriage for the first load- On completion of the third load being placed, the machine must be moved away from the truck bed. All loads must be immediately removed again in the correct sequence before commencing another activity- The candidate must be instructed at the start of this activity to load the vehicle as though further loads are to be placed on the vehicle bed e.g. following the sequence whereby the vehicle is to be fully loaded• If the machine is hot, checks unable to be carried out (i.e. coolant) may be assessed by the Tester using verbal questions
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Activity measurements

Load placing	<ul style="list-style-type: none">• 100 mm of a given position
Load placing (vehicle bed)	<ul style="list-style-type: none">• Maximum of 75 mm clearance between all loads, and the loads and truck headboard
Load placing (stacking)	<ul style="list-style-type: none">• Maximum of 75 mm clearance between each load when placing back at ground level (activity 7)
Manoeuvring	<ul style="list-style-type: none">• Maximum clearance less than 300 mm or 10% of the machine's width (the greater applies) between the telehandler and chicane/restriction sides when undertaking each turn, or passing through the restriction
Manoeuvring LOAD	<ul style="list-style-type: none">• Maximum clearance less than 300 mm
Test timings	<ul style="list-style-type: none">• The test must be completed within 2 hours

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Resources required – Additional Endorsement E



Machine	<ul style="list-style-type: none"> Telescopic handler suitable for lifting suspended loads, equipped with an approved lifting hook able to attach a suitable lifting accessory
Area	<ul style="list-style-type: none"> Flat level surface for all travelling and manoeuvring activities with a suspended load
Other equipment	<ul style="list-style-type: none"> Applicable lifting accessories for attaching all suspended loads to the hook Items to create restrictions for manoeuvring Slinger/signaller assistance Structure or below-ground level location for placing a load out-of-sight of the operator
Loads	<ul style="list-style-type: none"> LOAD 4 1 x load at least 50% of the rated capacity* of the telehandler LOAD 5 1 x load being a minimum of 3 metres in length LOAD 6 2 x equal-sized loads (width and length) for stacking purposes
Notes	<ul style="list-style-type: none"> To aid flexibility to the test, a different machine may be used for the endorsement E test where a combined test is taking place. The machine used for the test must have an operating height of at least 5.8 metres * The rated capacity applies to manufacturers supplied figures for the lifting of suspended loads applicable to the approved attachment The load handling charts for suspended loads, including the use of the accessory, must be available for the machine being used for the test The lifting hook must be detachable from the machine and must be either mounted on the forks or attached directly to the carriage. NOTE: Hooks on block suspended by hoist ropes will not be permitted on the test The lifting hook attachment must be approved by the manufacturer of the telehandler being used on the test The lifting accessories must be of a length that provides a minimum of 1.2 metres vertical distance between the hook and the load The telehandler selected must be approved to lift and travel with suspended loads (with a raised boom), and equipped with a suitable load moment indicator or rated capacity indicator A lift plan must be devised by a competent person and available for reference by the operator. When devising the plan, consideration must be taken to ensure that: <ol style="list-style-type: none"> there is sufficient clearance between the load and front of the machine to account for load swing which may require (depending on model) the fitment of a jib

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Resources required – Additional Endorsement E (Continued)



	<ul style="list-style-type: none">b) boom extension is sufficient to ensure clearance between the telehandler chassis and load but no more than neededc) that the length of the lifting accessories minimises the travel height of the boom whilst not exceeding the included angle of the accessoryd) hand lines are specified to allow appropriate external control of the load whilst keeping the slinger/signaller clear of the machine's travel path• The structure or below-ground level location must be suitable for landing the load, but must be of sufficient height or depth so that the whole of the load and the lower portion of the lifting accessory cannot be seen from the operating position. If a below-ground level landing place is chosen, it must be a safe environment for the slinger/signaller to handle the load. If a ground level structure is chosen, it must be of sufficient strength to resist movement should the load inadvertently contact the structure• Each lifting accessory must be a minimum of a two-leg chain or wire rope sling, or a fibre or webbing sling that supports the load from at least two points• Each lifting accessory must be fit for purpose and certificated• A hand or tag line must be used to control at least one of the loads on the test and should be used on all loads if appropriate which ensures that the slinger/signaller is kept clear of any potential contact with the machine, load or structure. The method statement for the hand line must stipulate that:<ul style="list-style-type: none">- the rope is at least 16mm in diameter- it is free of knots, kinks, fraying or any form of damage- it is of a suitable length allowing easy control of the load but with minimal excessive free length- it is attached to the load and cannot unintentionally become free, with the parts of the rope secured by a shackle/ karabiner or other device with a sprung latch, and not tied in a knot- the free end of the rope does not have an eye or loop (although the secured end may require an eye to accommodate the shackle)• The slinger/signaller must hold a CPCS card bearing the category of A40A or A40E and competent in dealing with pick-and-carry duties. The Tester cannot undertake this role
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Note 1: Candidates requiring endorsement E must undertake the test process for, or hold endorsements A - C.

Note 2: Due to a level of incidents involving telescopic handlers, particularly with the movement of suspended loads, the Strategic Forum for Construction Plant Safety Group have produced a document titled 'Good Practice Guide to the Safe Use of Telehandlers in Construction' and a supplementary 'Good Practice Guide for the Lifting and Travelling with Suspended Loads using Telehandlers'.

It is essential that those both planning and conducting testing activities are conversant with the content of each document and that the test procedures and marking reflect all good practices contained therein. Both documents are free to download from www.cpa.uk.net/sfpsg/.

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Activity instructions – Endorsement E



<p>Sequence</p>	<ul style="list-style-type: none"> Activities 15 to 20 can be undertaken in any order during the test <p>The test must be completed within a given time. The specifications' section gives further information</p>
<p>Setting up for work</p>	<p>14. Fit the lifting hook, check, prepare and set the telehandler for the lifting of each suspended load</p>
<p>Working tasks suspended loads <i>(refer to specifications)</i></p>	<p>15. Lift LOAD 4 and travel for a minimum distance following a route that includes passing through a chicane executing full right and left-hand turns in a forward and reverse direction</p> <p>16. Place LOAD 4 at a given point</p> <p>17. Lift LOAD 5 and reverse in a straight line for at least 10 metres and pass through a restriction at the end of the run</p> <p>18. Place LOAD 5 onto the vehicle bed</p> <p>19. Lift and place one of the loads at a given point which is below ground level or behind a structure. Once landed return to the original start point</p> <p>20. Create a stack using each of LOAD 6 at a given location</p>
<p>Completing work</p>	<p>21. All loads to be placed at ground level following completion of each activity</p> <p>22. Remove the lifting hook and return the machine ready for fork-use operations</p>
<p>Additional for existing A17 candidates</p>	<p>23. Complete all manufacturers' pre-start and running checks and prepare the telescopic-handler for travel</p> <p>24. Park the telehandler and carry out shut-down and securing procedures</p>
<p>Notes</p>	<ul style="list-style-type: none"> Prior to this section of the test proceeding, the forks must be fitted to the telehandler Activities 1 and 13 need to be undertaken by existing CPCS cardholders holding category A17 seeking endorsement E in addition to items 14 – 22 For activities 15 (chicane) and 17, the restrictions must be higher than the lower part of the load. The boom may not be raised during manoeuvring activities

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Activity instructions – Endorsement E (Continued)



<p>Notes (Continued)</p>	<ul style="list-style-type: none"> • On activity 18, Load 5 need not be detached after placing on to the vehicle bed • For item 19, the landing area must have sufficient height or depth so that the load and attaching points between the accessory and the load are out of sight of the candidate when landed • All loads must be attached and detached to and from the machine by the slinger • To ensure impartiality of the test, the slinger can only control but cannot position each load when stacking or placing e.g. physically exerting effort on a load for positioning, and cannot give instructions relating how the machine should be configured e.g. which component of the machine should be operated • For the purposes of the test, all hand signals are to conform with BS 7121 part 1 and the Health and Safety (Safety Signs and Signals) Regulations 1996
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Activity measurements

Load placing	<ul style="list-style-type: none"> • 100 mm of a given position
Manoeuvring	<ul style="list-style-type: none"> • Maximum clearance less than 300 mm or 10% of the machine's width (the greater applies) between the telehandler and load, and chicane/restriction sides when undertaking each turn, or passing through the restriction
Reversing	<ul style="list-style-type: none"> • Maximum clearance less than 300 mm
Load travelling	<ul style="list-style-type: none"> • Maximum clearance of 300 mm clearance between load and ground
Test timings	<ul style="list-style-type: none"> • The test must be completed within a total time of 2 hours and 35 minutes if combining endorsement E with endorsements A to D <p>OR</p> <ul style="list-style-type: none"> • The test must be completed within a total time of 45 minutes if part of stand-alone test for existing cardholders adding endorsement E only <p>Note: The time of 45 minutes does not include activity 1</p>

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Basic details



Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
Endorsement: A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/>	Start time of test:
Make and model:	Duration:

Mandatory	Correctly carried out during the test?	Y/N
Preparing	1 All pre-start and running checks (or responses to relevant questions)	
	2 Identify and select correct PPE and weather-related equipment to be worn	
Travelling	3 Telehandler set for travel	
	4 Seat belt worn	
	5 Full observation before moving and reversing	
	6 Restrictions and hazards cleared	
	7 Full control maintained when ascending and descending slopes	
	8 Travel direction on slopes	
	9 No opposite movement of intended direction when restarting on slopes	
	10 Limbs and body kept within confines of cab (when travelling)	
	11 Straight line kept during reversing activity	
	12 Loads secure on forks	
	Setting up	13 Allocated area checked and clear of hazards prior to lifting
14 Loads assessed for weight and condition prior to lifting		
15 Forks spaced to match loads		
16 Stabilisers set (if applicable) and forklift level prior to lifting or placing loads		
17 Removal and replacement of an attachment		
Working tasks	18 Lift capacity within safe limit	
	19 Machine's stability maintained at all times	
	20 Loads/pallets and surrounding area not damaged during operations	
	21 Sequence of loads placed and removed onto and from truck bed	
	22 Parking brake applied and neutral selected before lifting and placing loads	
	23 Undercut loads	
Completing	24 Loads left safe and secure	
Shutdown	25 All shut down and securing procedures	
Other	26 Legislation, manufacturers' and health and safety requirements complied with	
	27 Test completed within the given time	

Faults	All of these items must be awarded Candidate incorrectly carried out the following:	Achieved / Not achieved		
		Fault	Mark	Penalty
Travelling	1 Telehandler mounting and dismounting		1	
	2 Identify information from the Operator's Manual		2	
	3 Full observation whilst travelling		2	
	4 Gear ratios matched to ground and work speed		2	
	5 Travel speed matched to ground conditions and type		1	
	6 All loads placed at the given points within the given tolerance		2	
	7 Boom kept fully retracted during travel		2	
	8 Forks or loads kept low but clear of the ground during travel		1	
Working	9 Position and set the forklift when lifting or placing loads		2	
	10 Loads entered and exited cleanly		1	
	11 Loads heeled whilst travelling		1	
	12 Loads lowered within 1 metre after removing from truck bed		1	
	13 Sequence of using hydraulic/lifting controls		2	
	14 Smooth use of steering, braking, transmission and hydraulic controls		1	
Not exceeded eight penalties		Total penalties		
				Achieved / Not achieved

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Basic details – Endorsement E (Suspended loads)

Test ref:	Candidate name:
Tester name:	Candidate ref:
Tester ref:	Date of test:
	Start time of test:
Make and model:	Duration:

Mandatory		Correctly carried out during the test?	Y/N
Preparing	28 All pre-start and running checks (or responses to relevant questions)		
	29 Seatbelt worn at all times		
Travelling	30 Telehandler set for travel		
	31 Full observation before moving with suspended load		
	32 Encountered hazards cleared		
	33 No contact between load and telehandler and/or other obstructions		
	34 Route assessed and travelled with the suspended load in a controlled manner		
Setting up	35 Personnel clear of the machine travel path when travelling with a load		
	36 Allocated area checked and clear of hazards prior to lifting activity		
	37 Relevant lifting accessory attached to each load		
	38 Machine isolated (stopped engine) and secure when cab exited		
Working tasks	39 Communication arrangements confirmed with slinger/signaller		
	40 Telehandler positioning prior to lifting the load		
	41 Telehandler level prior to lifting and placing the load		
	42 Lifted and lowered load in a controlled manner		
	43 Instructions conformed with		
	44 Stability of the machine maintained at all times		
	45 SWL not exceeded at all times		
	46 Load remains freely suspended (except during lifting and placing)		
	47 Machine hydraulic controls isolated when load being attached/disconnected**		
	48 Full view of slinger/signaller maintained at all times during lifting, travel and placing activities		
49 Personnel clear of any danger zones when lifting and placing loads			
Completing	50 Loads left stable, safe and secure		
Shutdown	51 All shutdown and securing procedures		
Other	52 Legislation, manufacturers' and health & safety requirements complied with		

Faults		All of these items must be awarded Candidate incorrectly carried out the following:	Achieved / Not achieved		
			Fault	Mark	Penalty
Travelling	15 Telehandler mounting and dismounting		1		
	16 Full observation whilst travelling with suspended load		2		
	17 Travel speed matched to the ground type, load types and conditions		1		
	18 Boom extension minimised during travel movements – laden only		3		
	19 Boom kept fully retracted during travel - unladen		1		
	20 Loads kept at minimum height during travel		3		
Working	21 Reversing movements minimised		2		
	22 All loads vertically lifted e.g. load drag minimised		2		
	23 Lifting accessories kept clear of the ground		1		
	24 Suspended load lifted clear of surface and checked for integrity		1		
	25 Load swings minimised during travel and static lifts		2		
	26 Load placed at given points within the given tolerance		3		
27 Use of steering/hydraulic/braking controls		1			
Not exceeded eight penalties			Total penalties		
Achieved / Not achieved					

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Note:

- *Mandatory items 27 and 51, and item 14 in the faults section need not be marked if combining endorsement E with endorsements A to C*
- *Existing CPCS cardholders already holding category A17 seeking endorsement E need to be measured against all marking items in this marking sheet.*

*** Mandatory item 46 - If the candidate does not isolate the operating controls during the load attaching/detaching activity, the Tester must immediately inform the candidate to do so. The candidate has the option to continue the test but be informed they have not achieved on the test at this time.*

The definition of isolated is where no movement of the machine's boom (extension and raising/lowering) or carriage can occur when the operating controls are activated. Depending on the machine, this may be a case of activating an electronic/manual isolation control or requires engine shutdown. Testers should be clear of the method to be used prior to the test commencing.