

Advanced technical test - Practical

Excavator 360 above 10 tonnes - A59



Resources required

	<ul style="list-style-type: none"> The load-carrying vehicle must be rear tipping and have a minimum capacity equivalent to eight full bucket loads of the excavator being used for the test
--	---

Activity instructions - Additional

	<ul style="list-style-type: none"> Excavate four trenches at right angles to form a square (replaces Activities 4 and 5). The candidate must mark out the excavating area (although assistance may be sought from the tester, such as holding string lines)
--	--

Activity measurements – Additional - Endorsements A and B

Travel restrictions	<ul style="list-style-type: none"> 600 mm (Activity 2)
Trench depth	<ul style="list-style-type: none"> 1 m ± 25 mm and straight within ± 50 mm
Trench length	<ul style="list-style-type: none"> Machine weight: <ul style="list-style-type: none"> - 10 - 20 tonnes = 6 m - Over 20 tonnes = 8 m
Test timings	<ul style="list-style-type: none"> The test must be completed within 2 hours and 15 minutes. Note: Additional time may be allocated for Endorsement B for extended manoeuvring purposes

Activity measurements – Endorsements C

Load movement	<ul style="list-style-type: none"> Maximum height of underside of the load = 1 m (except Activity 12)
Load movement (Activity 12)	<ul style="list-style-type: none"> Maximum height of underside of the load from ground contours = 100 mm Maximum distance from obstacle = 500 mm
Obstacle Height (Activity 12)	<ul style="list-style-type: none"> Minimum of 1 m
Load placing (All activities)	<ul style="list-style-type: none"> 100 mm of a given position
Travelling with load	<ul style="list-style-type: none"> At least 12 m distance
Test timings	<ul style="list-style-type: none"> The test must be completed in a total time of 2 hours and 45 minutes if combining Endorsement C with Endorsements A or B

Note: The lifting operations activities must follow the requirements laid out in the joint industry 'Guidance on Lifting Operations in the Construction Sector When Using Excavators', published by the Construction-plant Association and can be downloaded free-of-charge from www.cpa.uk.net

Advanced technical test - Practical Excavator 360 above 10 tonnes - A59



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)		
Travelling	2. Restrictions cleared		
	3. Excavator set for travel		
	4. Encountered hazards cleared		
	5. Boom/dipper arm position when ascending and descending inclines		
	6. Faced direction of travel whilst moving		
Setting up	7. Allocated area checked and clear of hazards prior to each activity		
Working	8. Excavator laterally level whilst excavating		
	9. Excavated material clear of trench		
	10. Trenches conform to the stated sizes and tolerances		
	11. Full bucket loads when excavating (except for finishing work) and loading		
	12. Loading vehicle and excavator position prior to loading		
	13. Vehicle evenly loaded but not overloaded		
	14. Existing bucket removed and replacement bucket installed		
	15. Excavated area reinstated back to the original contours		
Shutdown	16. All shutdown and securing procedures		
Other	17. Legislation, manufacturers' and health and safety requirements complied with		
	18. Test completed within the given time		

All of these items must be awarded Achieved / Not achieved

Faults		Candidate incorrectly carried out the following:	Fault	Mark	Penalty
Travelling	1. Excavator mounting and dismounting			1	
	2. Identify information from the Operator's Manual			2	
	3. Full observation before moving			2	
	4. Full observation whilst travelling			2	
	5. Observation before slewing upper structure			2	
	6. Drive sprockets kept to the rear when travelling			1	
	7. Travel speed matched to the ground type and conditions			1	
	8. Minimising ground damage when turning (tracked machines only)			1	
Working	9. Site and set for excavating			2	
	10. Trench excavated in layers			1	
	11. Sideswiping with bucket			1	
	12. Edges of the excavations clean and clear			2	
	13. Material cleanly placed into the loading vehicle			1	
	14. Contact with vehicle avoided when loading			2	
	15. Use of steering/hydraulic controls			1	
Not exceeded five penalties			Total penalties		
					Achieved / Not achieved

Note: Mandatory item 16 – the candidate must ground the bucket, stop the engine and remove the key before exiting the cab; this must be adhered to at all times during the test.

Advanced technical test - Practical Excavator 360 above 10 tonnes - A59



Basic details – Endorsement C

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	19. All pre-start and running checks (or responses to relevant questions)		
	20. Excavator set for travel		
Travelling with load	21. Encountered hazards cleared		
	22. Boom/dipper arm position when ascending and descending inclines		
	23. Faced direction of travel when moving		
Setting up	24. Allocated area checked and clear of hazards prior to lifting activity		
	25. Communication arrangements confirmed with slinger/signaller		
	26. Excavator positioning prior to lifting loads		
Lifting operations	27. Excavator level prior to lifting and placing loads		
	28. No contact between load and excavator and/or other obstructions		
	29. Lifted, moved and lowered load in a controlled manner		
	30. Route assessed and travelled with the slung load in a controlled manner		
	31. Instructions conformed with		
	32. Stability of the machine maintained at all times		
	33. SWL not exceeded at any time		
Shutdown	34. Load remains freely suspended (except during lifting and placing)		
	35. Machine controls isolated when loads being attached/disconnected		
	36. Personnel clear of the 'danger' zone when lifting and moving loads		
Other	37. All shutdown and securing procedures		
	38. Legislation, manufacturers' and health and safety requirements complied with		
	39. Test completed within the given time		

All of these items must be awarded		Achieved / Not achieved		
Faults	Candidate incorrectly carried out the following:	Fault	Mark	Penalty
Travelling with loads	16. Excavator mounting and dismounting		1	
	17. Identify information from the Operator's Manual		2	
	18. Full observation before moving		2	
	19. Full observation whilst travelling with slung load		2	
	20. Observation before slewing upper structure		2	
	21. Drive sprockets kept to the rear when travelling		1	
	22. Travel speed matched to the ground type and conditions		1	
Lifting operations	23. Minimising ground damage when turning with slung load (tracked machines only)		1	
	24. All loads vertically lifted (load not dragged)		2	
	25. Each load lifted clear of surface and checked for integrity		1	
	26. Load swings minimised during travel and static lifts		2	
	27. Keeping load height within given tolerance		1	
	28. All loads placed at given points within the given tolerance		3	
	29. Use of steering/hydraulic controls		1	
Not exceeded five penalties		Total penalties		
Achieved / Not achieved				

Note:

- Mandatory Items 19, 37 and 39, and Item 15 in the faults section need not be marked if combining Endorsement C with Endorsements A or B.
- Existing CPCS cardholders holding Category A59 seeking Endorsement C need to be measured against all marking items in Endorsement C.
- Mandatory Item 35 – 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.