

A59

Excavator 360 above 10 Tonne

Intermediate Certificate

Unit A59 **Excavator 360 above 10 Tonne**
Tracked (Option A)
Wheeled (Option B)

Learning outcomes

On completion of this unit, the candidate will be able to:

1. Identify the basic construction, purpose and function of components and the purpose and use of all controls and gauges.
2. Identify and comply with manufacturers' instructions in accordance with the operator's handbook, other information sources and applicable legislation.
8. Explain precautions to be taken for underground and overhead services and other hazards.
3. Carry out all pre-use and running checks.
9. Excavate below ground level on a variety of excavations in different ground types.
4. Configure the excavator for site travel.
10. Place spoil into various sizes of vehicles/hoppers.
5. Travel the machine over varying types of terrain, including rough, undulating ground and
11. Grade, spread and level different types of terrain.
12. Remove and re-attach buckets.
6. Manoeuvre the excavator in confined areas.
13. Place the machine in an out-of-service condition.
7. Set the machine to excavate.

14. Explain the loading and unloading procedures on and off a transporter.

Evidence requirements

To achieve the learning outcomes the candidate must complete a theory test and a practical test.

Practical Test

A. Equipment specification

1. Serviceable 360 excavator that meets current legislation, fitted with a standard excavating bucket, with the operator's manual.
2. Rear tipping dump truck or tipping lorry with driver, having a minimum capacity equivalent to 6 full bucket loads of the excavator being used for the test.
3. An area of ground, clear of hazards which must include:
 - a) uneven, rough terrain
 - b) a slope(s) not less than 18% (1:5.5) incline, having sufficient manoeuvring room at the top and bottom
 - c) a flat area to allow excavations up to 2 metres deep
 - d) a stockpile of material for loading purposes.
4. A replacement bucket for changing purposes.
5. Cones/materials etc., to create restrictions for travelling and manoeuvring.
6. Appropriate marking, sighting and lining equipment to ensure excavation levels and centres.

B. Exercise specification

The candidate is required to:

1. Carry out full pre-start and running checks as required by the manufacturer.
2. Prepare the excavator for travel.
3. Travel to the excavating area. The route must include:
 - a) travelling up and down the incline(s)
 - b) passing through a restriction being no more than the width of the excavator plus 800 mm
 - c) travelling over rough, uneven terrain.
4. Excavate a vertical trench to a depth of 1 metre 35 mm. The trench must be straight within 60 mm. The minimum length of the trench will be as follows:
Excavator operating weight: 10 – 20 tonne = 15 metres
over 20 tonne = 20 metres
5. On completion of item 4, excavate a square excavation with vertical sides, 3 x buckets wide to the depth 1.5 metres 35 mm.
6. On completion of item 5, reinstate and compact the earthworks back to the original state.
7. Load material into a vehicle to capacity.
8. Remove the existing bucket and attach the replacement.
9. Travel the excavator to a park position, shut down and secure.

The practical test is marked using the Operator Assessment Form (sections A and B). The candidate must also complete a theory test paper which is centrally set by Lantra Awards and marked by the assessor. For this unit, there is a maximum of 35 marks available and the pass mark is 80% (28 or more marks for correct answers). The theory test mark is entered on the Operator Assessment Form (section C). Candidates must pass all three sections to achieve the unit.