

EXCAVATOR OPERATIONS — 360-DEGREE

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

Quick hitch locking checks · slew and crush zones · lifting duties under LOLER · buried services

KD-RAMS-PL-009 Rev A0

Statutory basis: LOLER 1998 reg 8 — every lifting operation properly planned by a competent person, appropriately supervised and carried out in a safe manner — and reg 9 — lifting equipment thoroughly examined, at least every 6 months for an accessory for lifting and every 12 months for other lifting equipment, or in accordance with an examination scheme, and after exceptional circumstances; PUWER 1998 for the excavator, its quick hitch and attachments as work equipment, including reg 26 — where anyone carried could be crushed if the machine rolls over, a suitable restraining system; CDM 2015 reg 25(4) — no construction work liable to create a risk from an underground service unless suitable and sufficient steps have been taken to prevent it, with HSE HSG47 (3rd edition, 2014). This document is the recorded safe system of work required by HSWA 1974 s.2(2)(a) and MHSWR 1999 regs 3 and 5. Written for Great Britain; in Northern Ireland the equivalent Northern Ireland regulations apply.

1 DOCUMENT AND PROJECT IDENTIFICATION

RAMS REFERENCE	PROJECT / SITE REF	SITE NAME AND ADDRESS	DATE PREPARED	NEXT REVIEW DATE
CLIENT / PRINCIPAL CONTRACTOR	PLANNED START	DURATION	OPERATIVES	SUPERVISING THE WORK

2 SCOPE OF WORKS

Operation of 360-degree tracked and wheeled excavators for digging, loading, grading and handling materials: changing attachments on a quick hitch and proving they are locked, controlling the slew and crush zones around the machine, working near buried services, and lifting operations where the excavator is used to lift a slung load.

This document does not cover: the excavation itself, its support and inspection (KD-RAMS-GW-001), service trenches (KD-RAMS-GW-004), the weekly operator check sheet (KD-PLT-EX-001), the toolbox talk on the swing (KD-TBT-SR-045), demolition with excavators (the KD-RAMS-DM series), and any lift outside the machine's rated duties, which needs a crane (KD-RAMS-PL-003).

SITE-SPECIFIC SCOPE, LOCATIONS AND LIMITATIONS

3 RISK ASSESSMENT — SCORE EACH RISK FOR THIS SITE, THEN ADD WHAT IS MISSING

The hazards and controls below are the starting point for this activity, written by a working main contractor. They are not complete for your site until a competent person has scored each risk, added the site-specific hazards, and struck out anything that does not apply. Rate risks High / Medium / Low before and after controls.

1. Attachment falling from a quick hitch that is not locked

At risk: Anyone near the bucket, banksmen, people in the excavation

Controls: HSE's safety alert on quick hitches followed deaths where the retaining pin was not in place. A checking system applies before work starts and every time an attachment is changed: the operator confirms visually that the locking mechanism is engaged and the manufacturer's retaining pin or safety device is fitted — from the ground if it cannot be seen from the cab — and then makes a physical check that the attachment is held, in the way the hitch manufacturer's instructions describe, before it is used. Only the pin designed for that hitch is used; operators are trained on the hitch fitted to their machine; the supervisor makes random checks; nobody works under the bucket. Loose pins or clips are retained or attached to the hitch so they cannot be lost, and bolts, wire or other substitutes are never used. The hitch itself is thoroughly examined under LOLER 1998 — every 12 months, or at the competent person's interval, when permanently on the machine, and six-monthly as a lifting accessory when it is not — as HSE's alert sets out.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

2. Struck by the machine or bucket within the slew radius

At risk: Banksmen, operatives, everyone nearby

Controls: The slew radius, including the counterweight, barriered or marked where people work near the machine; nobody enters it until the operator has seen them, grounded the bucket and engaged the hydraulic isolation lever, and given the agreed signal; mirrors and cameras clean and working; a banksmen where the operator cannot see the working area.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

3. Crushed between the counterweight or tracks and a fixed object

At risk: Banksmen, operatives

Controls: The machine positioned so the counterweight cannot slew within trapping distance of walls, stacks, barriers or other plant; where that cannot be achieved, the gap is closed off so nobody can enter it; tracking and slewing stop whenever anyone is near the tail.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

4. Lifting a slung load — a lifting operation

At risk: Slingers, everyone near the lift

Controls: An excavator lifting a load on slings is carrying out a lifting operation: planned by a competent person, supervised and carried out safely (LOLER 1998 reg 8), with a current thorough examination for the machine's lifting use and for every accessory (reg 9). The machine configured for lifting as its manufacturer requires — load chart in the cab, rated capacity indicator working, a marked lifting point, and any safety devices the manufacturer requires for lifting duty; loads within the duty for the radius; a trained slinger-signaller; no slinging from bucket teeth; the load kept low and travel avoided.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

5. Striking buried services*At risk: Operator, everyone nearby*

Controls: No digging until services are located and marked as HSE HSG47 (3rd edition, 2014) sets out and the permit to dig is issued (KD-PTW-EX-005); the operator is shown the markings; digging near a located service only as the permit and KD-RAMS-GW-001 allow; marker tape, ducts, pipe surround or changed fill stop the dig (CDM 2015 reg 25(4)).

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

6. Overturning — slopes, edges, soft ground and loads beyond the duty*At risk: Operator, everyone nearby*

Controls: Work on firm, level ground within the manufacturer's gradient limits; tracks kept back from excavation edges and never undermined; heavy loads not slewed downhill; attachments matched to the machine and its load chart. Where there is a risk of the machine rolling over, its roll-over protection and restraining system are in place (PUWER 1998 reg 26) and the seat belt is worn as the manufacturer's instructions require.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

7. Overhead power lines within reach of the boom*At risk: Operator, everyone nearby*

Controls: Where the boom could reach within 10 m of an overhead line, work only under KD-RAMS-PL-006 and the overhead lines permit, with height and slew restraints set and proven.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

8. Falls getting on and off the machine*At risk: Operator*

Controls: Steps and handholds clean and intact; three points of contact; never jumping down from tracks or the cab.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

9. Plant and pedestrian interface*At risk: Everyone on site*

Controls: Segregated routes and crossings; banksman/marshal for reversing and blind movements; high-vis; eye contact and acknowledgement before approach; vision aids and alarms functional — checked daily.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

10. Untrained or unfamiliar operators*At risk: Operators, everyone nearby*

Controls: CPCS/NPORS (or IPAF for MEWPs) verified before the seat; familiarisation on the specific model recorded; no keys left in machines; authorised-operator list held at the control point.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

11. Noise from cutting, fixing and plant*At risk: Operatives, others in the area*

Controls: Select quieter methods and tools where practicable; hearing protection in designated zones and for noisy operations; agree noisy-works windows with the occupier in occupied buildings.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

Site-specific hazards not listed above — every site has at least one:

HAZARD	WHO IS AT RISK	CONTROLS	INITIAL H/...	RESIDUAL...	ACTION OWNER	BY WHEN

4 METHOD — SEQUENCE OF WORK

- Confirm the operator's training and authorisation for the machine and its quick hitch; complete the pre-use check and record it (KD-PLT-EX-001).
- Before digging, walk the area with the operator: services markings, edges, overhead lines, structures and the slew clearance.
- Barrier or mark the slew radius; agree the approach signal and the hydraulic isolation rule.
- Fit the attachment; engage the lock; visually confirm the locking mechanism and retaining pin — from the ground if needed — then physically prove it is held before use.
- Repeat the check every time an attachment is changed; record changes where the site requires it.
- Dig under the permit to dig; stop on marker tape, ducts, pipe surround or anything unexpected.
- For a lift: follow the lift plan, confirm the lifting configuration, thorough examination and accessories are in date, use the marked lifting point and a slinger-signaller, keep the load low.
- Nobody under the bucket or load; nobody in the slew radius without the isolation signal.
- STOP on an unlocked or doubtful hitch, a service strike, ground movement at an edge, an overload warning, or anyone in the slew radius.

10 Park on level ground away from edges, bucket grounded, isolation lever engaged, engine off, key removed.

SITE-SPECIFIC AMENDMENTS TO THE SEQUENCE

5 PLANT, EQUIPMENT AND MATERIALS

360-degree excavator with quick hitch and retaining pin — hitch thorough examination in date

Attachments matched to the machine

Load chart and rated capacity indicator for lifting duty

Slings and accessories with current thorough examination

Slew radius barriers

Cable avoidance tool and signal generator

INSPECTION / THOROUGH EXAMINATION REFS

COSHH ASSESSMENT REFS

6 PPE — THE LAST LINE OF CONTROL, NOT THE FIRST

Head protection

Safety footwear

High visibility

Gloves — task-rated

Eye protection

Hearing protection

RPE TYPE, FACE-FIT STATUS, AND ANY OTHER PPE REQUIRED

7 PERMITS REQUIRED BEFORE THIS WORK STARTS

A permit authorises this work in that place, on that day. It extends the safe system of work in this document — it does not replace it (HSE HSG250). The site issues the permit; record its number before work starts.

KD-PTW-EX-005 — Excavation & Permit to Dig

Before any ground is broken.

PERMIT NUMBER

KD-PTW-LO-008 — Lifting Operations Permit

Whenever the excavator lifts a slung load.

PERMIT NUMBER

8 EMERGENCY ARRANGEMENTS — COMPLETE FOR THIS SITE

FIRST AIDER AND LOCATION

NEAREST A&E

ASSEMBLY POINT

HOW THE ALARM IS RAISED

EMERGENCY ACCESS FOR THIS WORK AREA

SPILL / ENVIRONMENTAL RESPONSE

9 BRIEFING RECORD — EVERYONE WORKING UNDER THIS RAMS SIGNS BEFORE STARTING

By signing you confirm the contents of this RAMS have been explained to you, you understand the hazards and controls, and you will work to the sequence stated. Tell the supervisor if the work or the site does not match this document — work stops until it does.

NAME	COMPANY	SIGNATURE	DATE

10 PREPARED AND ACCEPTED

Prepared / adapted for this site by — I confirm I have adapted this document to the site, scored the risks, and that it describes how the work will actually be done.

PRINTED NAME	ROLE / COMPETENCE	COMPANY	SIGNATURE	DATE	TIME

Accepted for the site by — principal contractor or site manager review.

PRINTED NAME	ROLE	COMPANY	SIGNATURE	DATE	TIME

Review this RAMS if the work, the site or the law changes, and at least before each new phase of the works. Flatten the completed PDF before filing so the record cannot be silently edited.

R REVISION HISTORY

Every revision of this document, and every review that found nothing to change. The revision on the front of this sheet is the one you are holding — check kubitdocs.com for the current one before use.

Rev	Date	Class	What changed	Authorised by
D0	2026-09-12	first-issue	First issue.	— not yet approved —
A0	2026-09-12	review	Approved for issue by the author. Content unchanged from the reviewed draft; the draft status strip is removed. No independent third-party review has been carried out.	Author — director, UK principal contractor, SMSTS. Not an independent review.

Class: first-issue · material (the law, a control, a field or the scope changed — past buyers are notified) · editorial (wording or layout only) · review (checked, nothing changed) · withdrawal. Revision prefix D = draft, not approved and not for sale; A = approved for issue by the person named, on the date shown.