



**DATE COMPLETED: August 2025** 

RISK ASSESSMENT OF: Workshop – Hi-Lift Jack Familisation Session

PREMISES EQUIPMENT  $\sqrt{}$  VEHICLE  $\sqrt{}$  SYSTEM OF WORK  $\sqrt{}$ 

DISCIPLINE LEAD SIGN OFF: DATE FOR REVIEW: August 2026

RISK ASSESSMENT BY: Ian Marritt

Notes:

See separate risk assessment for Logistics vehicle preparation, moving plant and Extrication Competition.

Control of public/spectators is covered by a separate risk assessment.

TASK	HAZARDS IDENTIFIED	WHO MAY BE HARMED AND HOW?	EXISTING CONTROLS	IS THE RISK  ADEQUATELY  CONTROLLED? (YES /  NO)	ADDITIONAL CONTROL MEASURES & COMMENTS	SECTION / PERSON RESPONSIBLE
1. Site set-up & zoning	Unauthorised access; poor segregation; moving vehicles/plant	Learners, instructors, observers – struck by vehicle, trip/fall	Exclusion zone of 10 metres when moving vehicles with FLT, Designated training area delineated by, barriers/cones/tape; instructor briefing; marshal at access	Y	Signage; enforce "hot/ warm/ cold" zones; maintain clear egress routes	Training Lead / Safety Officer
2. Manual handling of jack & cribbing	Musculoskeletal injury; foot crush; dropped loads	Learners/instructors – strains, crush injuries	Team lifts for heavy items greater than 15kg; handling brief; PPC and PPE as per guidelines	Y	Use mechanical handling equipment (trolleys/FLT) where practicable; rotate tasks to limit fatigue	Instructors

"]	U	eı	e	te	a:
	_				

Deleted: ;

**Deleted:** where possible

Deleted: boots/gloves





TASK	HAZARDS IDENTIFIED	WHO MAY BE HARMED AND HOW?	EXISTING CONTROLS	IS THE RISK ADEQUATELY CONTROLLED? (YES / NO)	ADDITIONAL CONTROL MEASURES & COMMENTS	SECTION / PERSON RESPONSIBLE
3. Vehicle preparation & stabilisation	Uncontrolled movement; suspension rebound; rolling	All – crush/impact	Wheel chocks both sides; gear/P-brake set; ignition off; keys controlled, battery disconnected	Y	Use additional stabilisation (wedges/struts as appropriate); confirm "zero movement" before lift	Safety Officer / Tool Controller
4. Selecting lift point	Structural failure; slipping; sharp edges	All – sudden drop, lacerations	Tutor selects and verifies rated lift point; visual/physical check, mark with paint pen	Y	Only use rated, structurally sound points; avoid corrosion/trim; never lift on glass/plastic	Instructors
5. Base placement on poor ground	Jack sinkage; tilt; instability	All – vehicle shift, jack kick-out	Ground mats/base plate available and utilised; visual check	Y	Always use a suitable <u>rated</u> base on soft/uneven ground; re-check plumb after pre-load	Tool Controller
6. Jack set-up & mechanism familiarisation	Mis-assembly; pawl orientation error	Learners – uncontrolled descent or no lock	Classroom/tool talk; tutor demonstration; function test with no load	Y	Supervisor sign-off per learner before live attempt	Instructors
7. Operating the handle (lift)	Handle "kick-back"; pinch points	Operator/spotter – hand/face injury	PPE inc. eye protection & gloves; "clear—handle" call; hand positioning brief	Y	Only one operator on handle; never straddle; maintain firm, controlled strokes; face/eyes away from arc	Instructors / Operator





TASK	HAZARDS IDENTIFIED	WHO MAY BE HARMED AND HOW?	EXISTING CONTROLS	IS THE RISK  ADEQUATELY  CONTROLLED? (YES /  NO)	ADDITIONAL CONTROL MEASURES & COMMENTS	SECTION / PERSON RESPONSIBLE
8. Lifting the vehicle	Instability; over- travel; exceeding SWL	All – crush/impact	Capacity brief; progressive lift; supervisor oversight	Y	"Lift an inch—crib an inch" rule; stop at pre-set maximum height; continuous stability checks	Training Lead / Spotter
9. Cribbing & secondary support	Load borne by jack alone; crib collapse	Patient/crew – load drop, entrapment	Timber crib sets available; tutor demo	Y	Build stable box/step crib stacks; maintain hard contact; no one under load supported only by jack	Cribbing Lead
10. Working around simulated patient	Contact injury; inadequate protection; stress	Simulated patient/learners – knocks, anxiety	Use a manikin by default; No live patients to be used and padding	Y	<b>T</b>	Medical Lead / Safety Officer
11. Communication & command	Miscommunication; delayed stop	All – escalation of error	Pre-agreed hand signals/voice calls; safety stop, stop, stop, allocation	Y	Assign: Operator, Spotter, Cribbing Lead, Safety Officer; single point of command; "STOP, STOP, STOP" safety word	Training Lead
12. Equipment failure	Pawl/slip; bent bar; strap/shackle failure	All – sudden drop	Pre-use inspection; remove damaged kit	Y	Maintain asset register; quarantine on defect; use only rated accessories	Tool Controller

Deleted: if

**Deleted:** Dedicated "casualty guardian"; cover with hard/soft protection boards; minimum personnel in hot zone

Deleted: volunteer

Deleted: ,

Deleted: and guardian

Deleted: Casualty Guardian,





TASK	HAZARDS IDENTIFIED	WHO MAY BE HARMED AND HOW?	EXISTING CONTROLS	IS THE RISK ADEQUATELY CONTROLLED? (YES / NO)	ADDITIONAL CONTROL MEASURES & COMMENTS	SECTION / PERSON RESPONSIBLE
13. Environmental conditions	Heat/cold, rain, wind; low light	All – fatigue, slips, poor visibility	Weather check; hydration; lighting available	Y	Suspend in lightning/high winds; apply lighting for dusk/dark	Safety Officer
14. SRS/vehicle hazards	Unexpected airbag/pretensioner; sharp edges; fluids	All – impact, burns, cuts	General vehicle safety brief; identification of safety risks using Rescue App, sharp edges taped	Y	Avoid undeployed SRS zones where practicable; 12V vehicle battery isolation where safe/appropriate; cover sharps	Instructors
15. Lowering & reset	Uncontrolled descent; finger traps	Operator/crew – crush/pinch	Tutor demonstration; "clear—handle" protocol	Y	Controlled, incremental lowering onto cribbing; remove jack only when fully off-load	Instructors
16. Housekeeping & demobilisation	Trip hazards; left tools	All – trips/cuts	Tool count-back; area sweep	Y	Close-down checklist; secure kit storage	Tool Controller

## 1. Objective

Deliver a safe, structured awareness session that enables learners to understand the capabilities, limits and safe operating procedures of hi-lift jacks when used to raise part of a vehicle to relieve load on a simulated patient.

## 2. Scope

**Deleted:** battery





TASK	HAZARDS IDENTIFIED	WHO MAY BE HARMED AND HOW?	EXISTING CONTROLS	IS THE RISK ADEQUATELY CONTROLLED? (YES / NO)	ADDITIONAL CONTROL MEASURES & COMMENTS	SECTION / PERSON RESPONSIBLE
------	--------------------	-------------------------------	-------------------	---	--	---------------------------------

Applies to all instructors, learners, safety staff and observers participating in the session at the designated training area, using training vehicles and standardised props/cribbing.

### 3. Responsibilities

- Training Lead: Accountable for compliance with this risk assessment and session control; ensures this risk assessment and session plan are implemented and briefed to all crew.
- Safety Officer: Responsible for exclusion zones, undertake pre-start brief of critical safety risks, accountable for maintaining dynamic risk assessment (DRA), stop authority.
- Tool Controller: Equipment selection, inspection, quarantine of defects.
- Instructors: Brief/demonstrate/supervise, enforce controls and comms.
- Cribbing Lead: Builds/inspects secondary supports, confirms hard contact.
- Spotter: Monitors vehicle movement/jack alignment; calls immediate stop if unsafe.
- Casualty Guardian/Medical Lead: Protects simulated patient; monitors welfare and any live volunteer if used.

#### 4. Procedures

#### 4.1 Pre-session briefing

- Learning outcomes; hazards; controls; role allocation; emergency word ("STOP, STOP").
- Confirm PPC and PPE: helmet or bump cap, eye protection, cut-resistant gloves, safety boots, long sleeves, hi-vis as required.

#### 4.2 Area & vehicle preparation

- Establish hot/warm/cold zones and egress routes.
- 12 Volt vehicle battery isolated (and removed if practicable)
- Chock wheels; select park/gear; ignition off; keys to instructor.

Deleted: Overall

Deleted: Zoning,





TASK	HAZARDS IDENTIFIED	WHO MAY BE HARMED AND HOW?	EXISTING CONTROLS	IS THE RISK ADEQUATELY CONTROLLED? (YES / NO)	ADDITIONAL CONTROL MEASURES & COMMENTS	SECTION / PERSON RESPONSIBLE
------	--------------------	-------------------------------	-------------------	---	--	---------------------------------

• Tape/cover sharp edges; remove loose objects; consider 12V isolation where appropriate and safe.

#### 4.3 Equipment checks

- Inspect jack column, foot, climbing pins/pawls, handle, shear bolt, base plate; confirm smooth lock-up/no deformation.
- Inspect cribbing (sound timber, no splits), mats, rated straps/shackles if used.

#### 4.4 Set-up

- Select rated lift point; place base on firm level surface or mat; pre-load jack and confirm plumb.
- Assign Operator, Spotter, Cribbing Lead, Casualty Guardian.

#### 4.5 Lift method ("lift an inch — crib an inch")

- Operator conducts small, controlled strokes; Spotter confirms stability each increment.
- Cribbing Lead places box/step crib to hard contact.
- No person under any part of the vehicle until secondary support is fully bearing the load.

#### 4.6 Handle control

- Use "clear—handle" call before each stroke; keep body out of handle arc; do not release a loaded handle.
- If the handle slips/kicks back: release pressure and call STOP; reset under instructor guidance.

#### 4.7 Casualty protection

• Only manikin to be used in this scenario. No live Volunteer to be utilised as casualty,

Deleted: Prefer

**Deleted:**; if live volunteer is used, provide boards/drapes, constant communication, and immediate stop authority to the guardian...





TASK	HAZARDS IDENTIFIED	WHO MAY BE HARMED AND HOW?	EXISTING CONTROLS	IS THE RISK ADEQUATELY CONTROLLED? (YES / NO)	ADDITIONAL CONTROL MEASURES & COMMENTS	SECTION / PERSON RESPONSIBLE
------	--------------------	-------------------------------	-------------------	---	--	---------------------------------

### 4.8 Abnormal events / emergency

 Any unplanned movement, equipment fault or loss of stability: call "STOP, STOP, STOP", secure load onto cribbing, step back to warm zone; instructor recovers.

#### 4.9 Lowering & demobilisation

- Lower in controlled, incremental steps onto cribbing; remove jack only when vehicle is fully supported by cribbing or ground.
- Tool count-back and area sweep; defects recorded and quarantined.

### 5. Training & Competency

- Instructor-to-learner ratio appropriate to experience (guide: 1:4–1:6); demonstration, then closely supervised practice.
- Learners must pass a short knowledge and practical check (mechanism, capacity limits, comms, cribbing principles) before any live lift with a casualty prop.

### 6. Monitoring & Review

- Safety Officer conducts ongoing DRA; near misses recorded.
- Post-session debrief: what went well, what to change (equipment, method, briefing).
- Review this assessment at least annually or after any incident/change of equipment.

Risk Assessment Author	Date	Role	Approved	Amendments required	Amendments actioned
Author					





lan Marritt	1/9/2025	Education Lead	DRAFT,		
David Cockbain	1/9/2025	H&S Lead	Yes	Included in review	
		Discipline Lead			
		Director Of Operations			

Deleted: Yes