

Starter guides and toolbox talks for *high-risk tasks*

Six step-by-step outlines for jobs that hurt people when a step is missed. Print them for a toolbox talk, tick the boxes as you go, or load them into Subtilitas and add your own photos.

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Every guide in this pack is a template. Adapt it to your own procedure, equipment and risk assessment, and have a competent person approve it, before anyone uses it. These outlines do not replace your risk assessment, training, supervision, permit systems or manufacturers' instructions.

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Template: adapt to your own procedure and risk assessment

Forklift daily pre-use check

When: at the start of every shift, before the truck is used, by the operator who will drive it. Written for a counterbalance truck; adjust for reach trucks and telehandlers.

BEFORE YOU START

Truck parked on level ground, forks fully lowered, parking brake on and key out. Wear hi-vis and gloves for the check.

STEPS

- 1 ☐ **Walk round the truck.** Look for damage to the body, overhead guard and load backrest, and for oil, fuel or hydraulic fluid on the floor underneath.
- 2 ☐ **Check the forks.** Look for cracks, bends and wear at the heel. Check the fork locking pins are in place.
- 3 ☐ **Check the mast, chains and hoses.** Chains evenly tensioned and lubricated with no damaged links. Hydraulic hoses with no leaks, chafing or bulges.
- 4 ☐ **Check the tyres and wheels.** No cuts, missing chunks or embedded objects, pneumatic tyres at the right pressure, and all wheel nuts present.
- 5 ☐ **Check the power source.** LPG: cylinder secured, connection tight, no smell of gas. Battery: charged, cables and plug undamaged, cover in place. Diesel: fuel, oil and coolant levels.
- 6 ☐ **Check the seat and seat belt.** Seat secure, belt latches and retracts.
- 7 ☐ **Check the plates and paperwork.** The capacity plate is fitted and readable and the thorough examination report is in date.
- 8 ☐ **Start the truck.** Test the horn, lights, beacon and reversing alarm.
- 9 ☐ **Test steering and brakes.** Moving slowly in a clear area, test the steering, the service brake and the parking brake.
- 10 ☐ **Test the hydraulics.** Lift, lower, tilt and operate any attachment through its full range, listening for unusual noise.
- 11 ☐ **Sign off.** Record the check against the truck's number.

Stop and report if any check fails. Do not use the truck: remove the key, tag it out of use and tell your supervisor.

TOOLBOX TALK

- Which defects on this list would stop you using the truck today?
- Where does the key go when a truck is tagged out of use?
- Who do you report a defect to on the night shift?

Further reading: HSE L117, Rider-operated lift trucks: operator training and safe use. LOLER 1998 and PUWER 1998.

ADAPTED AND APPROVED FOR THIS SITE

Site and equipment	Procedure or RAMS reference
Approved by (competent person)	Date and review date



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Oxy-fuel cutting set-up and shutdown

When: before cutting with portable oxy-acetylene or oxy-propane equipment. Builds on the five-step oxy cutter check that was the first Subtilitas guide.

BEFORE YOU START

A hot work permit if your site requires one. Flame-resistant clothing with long sleeves, gauntlets, safety boots, and goggles or a visor with the filter shade your risk assessment specifies. A fire extinguisher at hand and a fire watcher if the permit requires one.

STEPS

- 1 ☐ **Check the work area.** Remove or cover combustible material, check what is on the other side of walls, decks and bulkheads, and screen the area to protect others.
- 2 ☐ **Check the cylinders.** Upright, secured against falling, away from heat, with valves and threads free of oil and grease.
- 3 ☐ **Check the regulators.** The right regulator for each gas, undamaged, gauges readable and within the replacement date for your equipment.
- 4 ☐ **Check the safety devices.** Flashback arrestors fitted at the regulator outlets and non-return valves at the torch.
- 5 ☐ **Check the hoses.** The right colour for each gas (blue for oxygen, red for acetylene, orange for propane), no cracks, cuts, burns or tape repairs, and crimped fittings.
- 6 ☐ **Open the cylinder valves slowly.** If the acetylene cylinder uses a key, leave it on the valve so the cylinder can be closed quickly in an emergency.
- 7 ☐ **Set the working pressures** for the nozzle size, using the manufacturer's chart.
- 8 ☐ **Purge each hose separately** in a well-ventilated place away from any flame: oxygen first, then fuel gas.
- 9 ☐ **Leak test** every connection with an approved leak detection solution. Never use a flame.
- 10 ☐ **Light the torch** with a spark lighter, following the manufacturer's lighting sequence, and adjust to the flame you need.
- 11 ☐ **Cut.** Keep hoses away from the cut, sparks and slag, and out of walkways.
- 12 ☐ **Shut down** in the order the manufacturer specifies, close both cylinder valves, vent the hoses and release the regulator adjusting screws.

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Fire watch. Check the area, including the far side of the work, for smouldering material, and keep watching for the time set in your permit.

Stop and report if you smell gas, a hose or fitting is damaged, a flashback arrestor has operated, or the flame snaps back or goes out.

TOOLBOX TALK

- What would you do if a hose or cylinder valve caught fire?
- Why must oxygen never be used to blow dust off clothing or to freshen the air?
- How long is the fire watch on this job, and who is doing it?

Further reading: BCGA Code of Practice CP7, The safe use of oxy-fuel gas equipment.

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Lockout tagout: safe isolation of plant

When: before maintenance, cleaning, clearing a blockage or any work where the machine could start up or release stored energy.

BEFORE YOU START

The isolation procedure or isolation sheet for this machine, your own padlock and tag, a multi-lock hasp if more than one person is working, and an approved voltage indicator and proving unit if you are competent to carry out electrical tests.

STEPS

- 1 ☐ **Identify every energy source:** electrical, hydraulic, pneumatic, stored mechanical (springs and flywheels), gravity (raised parts), thermal and chemical. Use the isolation sheet rather than memory.
- 2 ☐ **Tell people.** Let the operators and anyone else affected know the machine is being isolated.
- 3 ☐ **Stop the machine** using its normal controls.
- 4 ☐ **Isolate.** Put each isolating device into the off position.
- 5 ☐ **Lock and tag.** Fit your own padlock and tag to every isolation point. If others are working, each person fits their own lock to a multi-lock hasp.
- 6 ☐ **Release or restrain stored energy.** Bleed hydraulic and air pressure, lower or block raised parts, let moving parts come to rest and let hot parts cool.
- 7 ☐ **Prove the isolation.** Try the start controls, check that pressure gauges read zero and, for electrical work, test for dead using prove, test, prove.
- 8 ☐ **Do the work.**
- 9 ☐ **Before restoring,** check that tools and materials are removed, guards are refitted and everyone is clear.
- 10 ☐ **Remove locks and restore.** Each person removes only their own lock. Tell the operators, then restore energy and test the machine.

Never remove someone else's lock, treat a stop button or emergency stop as an isolation, or work on a machine that is only switched off at the control panel.

TOOLBOX TALK

- Which machines here have more than one energy source?

- What do you do if you find a lock on an isolator and its owner has gone home?
- Where are the isolation sheets kept for this area?

Further reading: HSE HSG253, The safe isolation of plant and equipment, and HSG85, Electricity at work: safe working practices.

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Abrasive wheel change on a fixed grinder

When: mounting a new wheel on a bench or pedestal grinder. Only people who have been trained and appointed to mount abrasive wheels should do this.

BEFORE YOU START

The replacement wheel, the correct flanges and blotters, the right spanner, and eye protection.

STEPS

- 1 ☐ **Isolate the grinder** and lock it off.
- 2 ☐ **Check the wheel's markings.** Its maximum operating speed must be the same as or higher than the spindle speed on the machine's plate, and its size and bore must match the machine.
- 3 ☐ **Check the expiry date** if the wheel is resin-bonded and has one marked.
- 4 ☐ **Inspect the wheel** for chips, cracks and damage. For a vitrified wheel, do a ring test: hold it by the bore and tap it lightly with a non-metallic tool. A clear ring is good; a dull sound means it must not be used.
- 5 ☐ **Check the flanges.** Clean, flat, undamaged and matching in diameter.
- 6 ☐ **Mount the wheel** with the blotters in place. It should slide onto the spindle without forcing. Never enlarge the bore.
- 7 ☐ **Tighten the nut** only enough to hold the wheel firmly, following the manufacturer's instructions.
- 8 ☐ **Refit and adjust the guards.** Set the work rest as close to the wheel as practicable and set the tongue guard to the manufacturer's setting.
- 9 ☐ **Run it up.** Remove your lock, stand to one side and run the wheel at full speed for at least a minute with everyone clear of the line of the wheel.
- 10 ☐ **Sign off** and record the wheel change.

Stop and report if the wheel's speed rating is lower than the spindle speed, the ring test sounds dull, or a guard is missing or damaged.

TOOLBOX TALK

- Why do we stand to one side when a new wheel is first run up?
- Who on this site is appointed to change wheels?

- What happens if the work rest gap is too wide?

Further reading: HSE HSG17, Safety in the use of abrasive wheels. PUWER 1998.

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MEWP pre-use inspection

When: at the start of each shift, by a trained operator, before a boom or scissor lift is used.

BEFORE YOU START

An operator trained and familiarised on this type of MEWP, a rescue plan agreed and a ground rescue person briefed, and a harness with a short restraint lanyard for boom-type machines.

STEPS

- 1 ☐ **Check the paperwork.** Thorough examination in date (every six months for MEWPs), familiarisation done and the operator's manual on board.
- 2 ☐ **Check the ground and surroundings.** Firm and level enough for the machine, with no voids, covers or soft ground. Note overhead cables, structures and traffic, and set up the exclusion zone.
- 3 ☐ **Walk round.** Check the structure, welds, pins and keepers, look for hydraulic leaks, and check tyres or tracks for damage.
- 4 ☐ **Check outriggers or stabilisers,** if fitted, with pads and spreader plates present and in good condition.
- 5 ☐ **Check the platform.** Guardrails secure, gate self-closing, floor clear, anchor points undamaged, and the safe working load and wind rating plates readable.
- 6 ☐ **Check fuel or battery charge** and the hydraulic oil level.
- 7 ☐ **Test the ground controls.** Emergency stop, ground control override and the emergency lowering system.
- 8 ☐ **Test the platform controls.** Emergency stop, hold-to-run controls, travel and boom functions through their range, and the tilt, overload and motion alarms.
- 9 ☐ **Check the harness and lanyard.** Webbing, stitching, buckles and connectors, with the lanyard short enough to keep you inside the platform.
- 10 ☐ **Sign off** against the machine's number.

Stop and report if any check fails. Take the MEWP out of use, tag it and tell your supervisor.

TOOLBOX TALK

- Who is the ground rescue person today, and can they use the ground controls?
- What is the maximum wind speed for this machine?

- What would you do if someone became trapped against an overhead structure?

Further reading: BS 8460, Safe use of MEWPs. Code of practice. IPAF guidance. LOLER 1998.

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Confined space entry permit steps

When: before anyone enters a confined space such as a tank, vessel, silo, pit, chamber or enclosed duct, where there is a risk from gas, fumes, lack of oxygen, flooding or engulfment.

BEFORE YOU START

First ask whether the work can be done from outside. If entry is needed, it needs a risk assessment, a safe system of work and, normally, a permit to work issued by an authorised person.

STEPS

- 1 ☐ **Issue the permit.** The authorised person names the space, the work, the entrants, the attendant and the time limits.
- 2 ☐ **Isolate the space.** Lock off mechanical and electrical equipment, and blank or disconnect pipework rather than relying on closed valves.
- 3 ☐ **Clean, purge and ventilate** the space as the permit sets out.
- 4 ☐ **Test the atmosphere from outside** with a calibrated gas detector, for oxygen, flammable gas and any toxic gases named in the risk assessment. Test at the top, middle and bottom.
- 5 ☐ **Record the readings** on the permit. Do not enter if any reading is outside the limits the permit sets.
- 6 ☐ **Check the rescue arrangements** are in place before anyone goes in: the rescue team, the equipment at the entrance (such as a tripod, winch and harness) and a way to raise the alarm.
- 7 ☐ **Brief everyone.** Entrants and attendant agree the hazards, how they will communicate and the signal to get out.
- 8 ☐ **Enter.** Entrants wear the equipment the permit lists, including a personal gas monitor. The attendant stays at the entrance throughout and logs everyone in and out.
- 9 ☐ **Keep monitoring.** Everyone leaves at once if an alarm sounds, ventilation fails or conditions change.
- 10 ☐ **Close the permit.** When the work is complete, everyone leaves, the attendant confirms the count and the permit is handed back and closed.

Never go in to help someone who has collapsed unless you are part of the trained rescue team with the right breathing apparatus. Would-be rescuers are often among those killed in confined space incidents.

TOOLBOX TALK

- Which spaces on this site count as confined spaces?
- Who is the authorised person today?
- What is the signal to get out, and what does the attendant do next?

Further reading: the Confined Spaces Regulations 1997 and HSE L101, Safe work in confined spaces.

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