



VUL-FRM-10-27-Skidsteer Loader_Backhoe_Tractor Inspection

Call Sign:	
Make:	
Model:	
Serial Number:	
Equipment Owner:	
Inspector:	
Date of Inspection:	



Compliance Audit

Question	Pass	Fail	N/A	Details (if Fail, N/A or Required)
Air Conditioning System	☐	☐	☐	
Equipment with enclosed cabins must have air conditioning systems that are operational and effective.				
Blind Spots Removed	☐	☐	☐	
Ensure driver has clear field of vision and no obstruction from ancillary equipment (stickers on windows/radios/GPS) If fitted with visual aids (side mirrors, reverse cameras), must be operational and effective.				
Cabin Dust Seals	☐	☐	☐	
Check door and window seals are in place and also for cracking and misalignment / tears / gaps.				
Controls and Interlock Safety Devices	☐	☐	☐	
Where applicable, functionally test all controls and interlocks.				
Height of Equipment	☐	☐	☐	
Label inside operators' cabin/transportable building to indicate the maximum height of the equipment (both travel height and maximum working height if applicable). Inspector must validate the height of the vehicle/equipment/transportable building to confirm the measurement indicated on the label.				
Instrumentation, Metering and Gauges	☐	☐	☐	
Instrumentation, metering and gauges are clearly visible, adequate and operational.				
Lights, indicators and lighting	☐	☐	☐	
Internal cab lighting must be effective for safe operation including emergency stops, access and controls. External lights (headlights, tail lights and indicators) must be clearly visible, adequate and operational. Lenses must be clean and capable to perform their intended function.				
Operating Manual	☐	☐	☐	
A copy of the equipment operating manual is either available in the equipment or in the site office.				
Steering	☐	☐	☐	
Check for excessive play or abnormal feel/noise. If fitted, check ancillary steering is functional.				



Question	Pass	Fail	N/A	Details (if Fail, N/A or Required)
Two-Way Radio	☐	☐	☐	
As a minimum, all vehicles and mobile equipment must have a site compliant, programmable and operational two-way radio, fitted to the equipment. It is the responsibility of the equipment owner to ensure the radio installed is approved for use on the operating site.				
Cabins	☐	☐	☐	
All equipment must have an enclosed cabin (where not enclosed a letter from the SSE must be obtained).				
Warning Device	☐	☐	☐	
Vehicles and mobile equipment must be fitted with manually operated audible warning device e.g. horn. Equipment fitted with air-horns must also be fitted with a secondary horn (electric). An automatically operating reversing alarm must be fitted and operational.				
Park Brake Alarm	☐	☐	☐	
For tractors, check function of audible and/or visual 'Park Brake Not Activated' alarm. This alarm is to be interlocked with the door or operator seat/seatbelt.				
Seatbelts and Seating	☐	☐	☐	
Provide occupants with a three-point (or greater) inertia reel seat belt or two-point inertia reel seat belt where this is not practical.				
Brackets, Pins and Hinge Points	☐	☐	☐	
Carry out a functional inspection to identify loose brackets, pins and hinge points and locking mechanisms; e.g., dozer belly guards, bonnets, doors and tilt cabins. Check that pin retainers are in place and that the pins are not slipping out. Check that all mounting bolts are secure by visual inspection.				
Diesel Fuel Only	☐	☐	☐	
Petrol powered equipment is restricted on site.				



Question	Pass	Fail	N/A	Details (if Fail, N/A or Required)
Emergency Stops	☐	☐	☐	
Emergency stop devices must be clearly marked "EMERGENCY STOP". Emergency stops must have the following features: red button / switch, deliberate on/off activation, manual de-activation. Reactivation will not restart the plant. Emergency stops are to be tested and verified as operational. Operational test is to be carried out for all Emergency Stops. As a minimum, emergency stops are to be fitted so there is one in the cab for the operator, within the zone of reach and located so as to minimise the risk of inadvertent operation and one accessible at ground level where the cab is accessed by stairs or ladder. Emergency stops must not be located in front of out blowing fans or air flows. Emergency stops must not be wired to cut out communications (site two-way radios) upon activation.				
Equipment Modifications	☐	☐	☐	
Compliance plate must be provided for all modified equipment. Registered Professional Engineer Queensland (RPEQ) certificates must be provided for structural modifications.				
Isolation and Lockout	☐	☐	☐	
A suitable lockout system is to be provided to enable physical isolation of the unit as per AS 4871.6. The isolation devices must be capable of being padlocked and clasped in the OFF position. ON and OFF positions should be clearly identified. In circuits at Extra Low Voltage (ELV – below 50Vac or 120Vdc) potential, isolation may be achieved by switching the positive/negative conductor only. All circuits above ELV must achieve positive isolation by switching all active and neutral conductors. Battery isolators are to be red in colour and disconnect power to all electrical loads. If fitted, Starter Motor Isolators must be yellow in colour. Systems such as fire protection, communication (site two-way radios), GPS, or tyre monitoring systems are permitted to not be controlled by the battery isolation switch, provided they have separate isolator switches for their circuit(s)." The isolation and lockout systems are to be tested and verified as safe and functional. Isolation process must include isolation of the jump-start receptacle. Check that all exposed terminals are protected from arcing. Isolation switches are not to be positioned in a potential crush zone (e.g. between position 1 or 2 wheels and chassis, or in articulation points).				

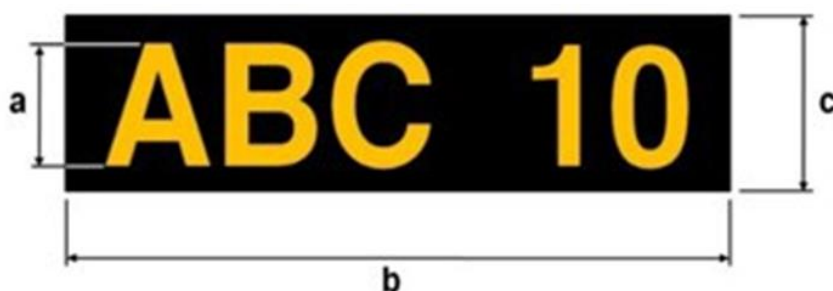


Question	Pass	Fail	N/A	Details (if Fail, N/A or Required)
High Visibility Call Sign	☐	☐	☐	

Identification must be clearly visible at all times. Identification numbers must be located on both sides and rear of the vehicle/equipment and must meet the following requirements:

- Reflective yellow or green coloured letters and numbers on a black background, as close as practicable to the format detailed below.
- A type face of Helvetica Narrow Bold, with standard spacing (no compression).

Use	a (letters)	b (width)	c (height)
Light vehicles Buses Medium Vehicles	200mm	-	260mm
Mobile equipment less than 120T	290mm	-	370mm
Mobile equipment 120T or greater	400mm	-	500mm



- Space between letters and numbers must be an 'em' space (relates to typography).
- All mobile equipment must be identifiable from 360 degrees in accordance with the table above.

Where it is impractical for rear facing call signs to meet the size requirements above, the largest allowable size shall be selected such that it is still readable from a 50m distance. When fitted on road registrable vehicles they must be made from non-reflective material.

Auxiliary equipment not requiring positive radio contact (complete list provided in Definitions section) only require plant identification numbers, and are not required to meet the sign size requirements listed in the above table.



Question	Pass	Fail	N/A	Details (if Fail, N/A or Required)
Jump Start Receptacle	☐	☐	☐	
Mobile equipment (and where fitted on medium vehicles) must have a jump start receptacle that can be an Anderson or CAT style plugs. These must not bypass the battery or starter motor isolator. Standard configuration is: 12V must utilise a 175 A plug; 24V must utilise a minimum of a 350 A plug; and - These will be clearly labelled. This requirement is not applicable electric drive equipment.				
Reflective Yellow Tape	☐	☐	☐	
The vehicle must have reflective yellow tape on both sides, minimum of 50mm width. Reflective tape must be positioned to indicate the overall length of machine.				
Signage	☐	☐	☐	
All machine controls and service points must be provided with clear signage to indicate function. Check that the equipment is fitted with clearly visible permanent markings, signs, compliance and identification plates on safety devices and systems including, but not limited to: ROPS; FOPS; pressure vessels; fire suppression systems; emergency exits; electrical cubicles/enclosure panels; accumulator reliefs, tow, confined space; crush points; rotating and hot parts; E-stops; pressure reliefs; spring under compression chambers; limits of operation in cab; hearing protection in noisy environments; unique Hi-Vis plant ID. All vehicles and trailers having inflated tyres must have a tyre supplier placard. Where a hazard could exist from misinterpretation of a symbol, the meaning of the symbol must be clarified in writing.				
Structural Damage Inspection	☐	☐	☐	
Visual check for cracks, deformation or excessive rust.				
Towing System	☐	☐	☐	
Towing equipment must have the coupling (hitch) maximum towing capacity clearly indicated via a placard or label. Ensure that there are connection points for safety chains. Ensure draw bar is securely mounted and not cracked. Where any part of the coupling or drawbar is removable ensure the bolts, studs, nuts etc. fastening those parts must have a locking device such as U clip, split pin, spring washer or nylon nut. Rudd lugs are not permitted on Vulcan Mine as towing points.				
Windscreens, Windows, Mirrors and Wipers	☐	☐	☐	
Check that the windscreen does not have any significant cracks or damage. Check operation of wipers and water spray are effective. Windows must be fitted with OEM specification glass (minimum).				



Question	Pass	Fail	N/A	Details (if Fail, N/A or Required)
Access and Egress	☐	☐	☐	
Check that the machine has two means of egress from the operator's cabin with at least one means of easy egress (normal access), and 1 means of emergency egress. Check that the bottom step of any access stairs/ladder does not exceed a maximum of 600mm (target 400mm) from ground level with equipment in normal stationary position. For Skidsteer Loaders with attachments, the first step height may be up to 700mm. Check that all access steps leading edges are clearly highlighted and non-slip. Check that personnel are able to maintain three points of contact while ascending or descending equipment.				
Flashing Beacon	☐	☐	☐	
Flashing operational light must be fitted and be able to be turned off. Flashing light must be mounted to achieve maximum visibility. Must be an amber flashing beacon for normal operations.				
High Visibility Flag Mount	☐	☐	☐	
Equipment must have provision for a flag to be fitted.				
Implement Safety Lock (Lift Arm Brace)	☐	☐	☐	
Check that the implement safety lock is fitted and functional.				
Quick Hitch	☐	☐	☐	
Check that equipment fitted with quick hitches have provision for a safety pin to retain the implement and that the pin is correctly fitted on the quick hitch. There must be means to prevent the quick hitch from releasing the implement while in operation.				
Tyres, Wheels and Tracks - Non-Road Going	☐	☐	☐	
Tyre wheel and track assemblies must be free of abnormal damage, deterioration or uneven wear. Check that rims and tyre are OEM approved for the equipment. Check that rims and tyres 600mm (24 inch) or larger have a unique identification system in place. Equipment owners must provide evidence of current service hours and/or last rim inspection report compiling to the requirements of AS 4457.				
Fire Extinguishers	☐	☐	☐	
Must have a 4.5 kg / hand-held, dry chemical powder. Where not possible a smaller one may be fitted with SSE approval. Fire extinguishers must be inspected and tested in accordance with AS 1851.				



Question	Pass	Fail	N/A	Details (if Fail, N/A or Required)
Falling Object Protective Structure (FOPS)	☐	☐	☐	
FOPS must be designed, manufactured, and installed as per ISO 3449 / AS 2294.1, and there must be a compliance plate mounted on the structure.				
Roll Over Protective Structure (ROPS)	☐	☐	☐	
ROPS must be designed, manufactured, and installed as per ISO 3471 / AS 2294.1, and there must be a compliance plate mounted on the structure.				
Battery System	☐	☐	☐	
Battery boxes where fitted must be ventilated, drained and of robust construction; terminals clean and bracket secure; leads properly secured and not showing signs of heat or abrasion; (+) terminal insulated (one battery fitted), or all terminals insulated (battery bank). The location of batteries must be clear of all ignition sources. Surface mobile equipment must have Valve Regulated Lead Acid (VRLA) batteries (also called 'sealed' or 'maintenance free' batteries) installed.				
Engine / Drive Motor	☐	☐	☐	
Check engine / drive motor for leaks. Check mounts, wiring, and piping are secure. Check that the exhaust system is secure, free from damage / leaks and is fit for purpose. Check that exposed rotating parts that are easily accessible (not behind a cover, under the machine, or under the bonnet in the case of light vehicles) have protection fitted to protect against inadvertent contact.				
Extra Low Voltage (ELV) <50Volts AC or <120 Volts DC	☐	☐	☐	
Exposed copper wiring is prohibited. Single insulation at connection plugs is permitted up to 100mm provided that there is adequate support and protection against damage. Electrical connections must be rated a minimum of IP2X. Check that all exposed terminals are protected from arcing. Check that all operator interfaces are ELV. Check that all connections are terminated so that they cannot loosen or overheat under normal conditions of service. Check that disconnected cables have been removed or properly terminated. If equipment is above ELV an Electrical Inspection must be completed.				
Glands / Bushing of Cables	☐	☐	☐	
Check where wiring is threaded through conduits, partition walls etc. They should be adequately glanded or bushed so that wiring and cabling does not come in contact with any surfaces that may degrade the sheathing or insulation of any wiring. All wiring should be positioned / secured such that the potential to rub onto vibrating or abrasive surfaces is minimised.				



Question	Pass	Fail	N/A	Details (if Fail, N/A or Required)
Radiator Pressure Relief System	☐	☐	☐	
The radiator must have a method for relieving pressure build-up prior to the removal of the radiator cap, such as a pressure relief cap, expansion tank, two stage caps or similar. All venting must be away from personnel. This requirement is not applicable for electric drive equipment.				
Safety Guards	☐	☐	☐	
When the machine is in the stationary position and the engine is running the guarding of rotating components and hot surfaces must not allow any person to touch these parts from the ground or access- way or platform. All guards must require the use of a tool to remove and replace or be fitted with an interlock to stop motion. The tool can be an implement such as a key or wrench to operate a fastener, in accordance with AS/NZS 4024.1601. Where inspection or cleaning covers are provided and their removal exposes dangerous parts of the machine which are within reach, such covers must be clearly labelled "DANGER – Isolate drive before removing cover".				
Hot Surfaces, Exhaust System	☐	☐	☐	
Where personnel are exposed to hot surfaces (e.g. exhaust / turbo) while carrying out normal operations, heat shielding / lagging or barriers must also be fitted. Check that warning signs are fitted to access points, warning personnel of hot surfaces.				
Fuel System	☐	☐	☐	
Check for any degradation in the fuel system. Check that all fuel pipes are routed in a manner which gives them maximum mechanical protection and away from hot engine surfaces. - Where required check removable caps in place. - Where high flow / quick fill arrangements are present; - Tank breather/vent overflow hoses must go to ground away from operator/ hot surfaces - Tank breathers/vents are fitted, serviceable, and functional, - Quick fill couplings (tank receivers) are serviceable, free from damage and functional.				
Hydraulic Hoses, Cylinders and Fittings	☐	☐	☐	
Check degradation of hoses, all hoses are suitably supported and segregated to prevent rubbing, all pins and clips for visual signs of wear or damage. Inspect all hydraulic hoses / fitting / cylinders / control valves for visible cuts, signs of wear or damaged outer casings. That suitable guarding has been installed for hydraulic hoses, located within 1.0 m of the operator control station(s). Steel guarding or burst sleeving is adequate where no other component or structure performs this function however glass is not sufficient for this purpose. For flexible hydraulic hoses in close proximity to hot engine components (turbo/exhaust) without suitable lagging, they must be fitted with thermal and/or burst protection. If burst sleeving has been installed, check that both ends of the hose are secured as per OEM recommendations.				



Question	Pass	Fail	N/A	Details (if Fail, N/A or Required)
Braking System Test Record	☐	☐	☐	
Brake testing of wheeled equipment must be completed to the requirement of the site standard for Braking Systems Performance. A copy of the 'Brake Test Record Form' as well as the test results (either inertia test and/or transducer test docket) must be included.				
Maintenance and Inspection Records	☐	☐	☐	
Equipment is to be routinely maintained and records kept to ensure that it remains "fit-for-purpose". Example copies of documentation must be provided as evidence that the equipment is part of an ongoing maintenance program and references the OEM maintenance recommendations, such as; • pre-start inspection sheet with defects identified; • completed service sheets with defects repaired; and • evidence of service history within the previous 12 months. Not applicable for brand new equipment or equipment that has been purchased without previous maintenance (a full equipment inspection must be completed prior to compliance) records undergoing an initial inspection.				



Completion

Score (0/1) 0%			
Question	Yes	No	Details
Have any of the listed requirements been marked as a "fail"?	☐	☐	
General recommendations/comments			
Paragraph of equipment			
Please provide photos of all 4 sides of the equipment, in addition to the photos taken for individual compliance item evidence.			
Name:	Signature:		Date: