

Under-Bridge Inspection Unit (UBIU) Safety Checklist

Site / Project	_____	Address	_____
Inspector name	_____	Company	_____
Date	_____	Time	_____

Documentation aid only. Adapt this resource to the site, manufacturer instructions, and applicable local requirements. It does not replace a competent person, professional judgment, legal advice, or a required statutory form.

Inspection checklist

I. Mobile Equipment (UBIU) Pre-Deployment Inspection

☐	Verify hydraulic fluid levels are within the manufacturer's specified range. Check for leaks in the hydraulic system (hoses, cylinders, and connections).	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Inspect outrigger pads for damage (cracks, deformation) and ensure they are of adequate size and load-bearing capacity for the ground conditions. Confirm proper placement on a stable surface.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Test boom extension, retraction, and rotation functions. Verify smooth operation and absence of unusual noises or vibrations. Check limit switches for proper functionality.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Confirm the functionality of all emergency stop buttons (platform and base). Ensure immediate shutdown of all hydraulic functions when activated.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Inspect tires for proper inflation, tread depth, and damage (cuts, bulges). Ensure lug nuts are tightened to the manufacturer's specified torque.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify the functionality of the horn, headlights, taillights, brake lights, and hazard lights. Ensure all lights are clean and visible.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Confirm the backup alarm is functional and audible. Ensure the alarm activates immediately when the vehicle is shifted into reverse.	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐	Verify all platform controls are clearly labeled and function as intended. Ensure smooth and responsive operation of all controls.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Confirm the UBIU has undergone a documented annual inspection by a qualified person within the last 12 months. Review the inspection report for any outstanding issues.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify the UBIU operator possesses valid certification for the specific make and model of the equipment. Review operator's training records.	☐ Pass	☐ Fail	☐ N/A	Notes: _____

II. Site Conditions and Traffic Control

☐	Review and implement a site-specific traffic control plan conforming to MUTCD standards. Ensure adequate signage, cones, and barriers are in place to protect workers and the public.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Assess the adequacy of the 'traffic shadow' provided by the UBIU and support vehicles. Adjust positioning as needed to maximize worker protection from passing vehicles.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Evaluate ground conditions for stability and load-bearing capacity. Ensure outrigger pads are placed on solid, level surfaces. Avoid soft soil, unstable slopes, and underground utilities.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Identify and address any overhead obstructions (power lines, bridges, trees) that could interfere with UBIU operation. Maintain safe clearance distances.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Monitor weather conditions (wind speed, temperature, precipitation). Suspend UBIU operations if conditions exceed manufacturer's limitations or create unsafe working conditions.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Implement measures to control pedestrian traffic in the work zone. Use signage, barriers, and flaggers to direct pedestrians away from the UBIU operating area.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Establish a clear communication system between the platform operator, ground personnel, and traffic control flaggers. Verify radios are functional and batteries are charged.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Ensure clear and unobstructed access for emergency vehicles. Designate an emergency contact person and post emergency contact information prominently.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Assess the site for potential environmental hazards (e.g., hazardous materials, confined spaces). Implement appropriate control measures.	☐ Pass	☐ Fail	☐ N/A	Notes: _____

III. Fall Protection Systems

☐	Inspect personal fall arrest systems (PFAS) for damage, wear, and proper fit. Ensure lanyards, harnesses, and connectors are in good working condition and meet ANSI Z359 standards.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify anchor points are capable of supporting at least 5,000 pounds per employee attached or are designed, installed, and used under the supervision of a qualified person as part of a complete personal fall arrest system which maintains a safety factor of at least two.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Ensure lanyard length is appropriate for the working height to prevent contact with lower levels. Calculate fall distance, including lanyard length, deceleration distance, and safety factor.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Inspect self-retracting lifelines (SRLs) for proper function and cable condition. Verify the SRL is securely attached to a suitable anchor point.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Confirm that workers are properly trained on the correct tie-off procedures. Ensure they understand the importance of using designated anchor points and avoiding pendulum swing hazards.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Develop and communicate a rescue plan in case of a fall. Ensure workers are trained on rescue procedures and have access to appropriate rescue equipment.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify that each worker inspects their harness before each use for any signs of damage, wear, or defects.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Ensure the area below the platform is clear of obstructions and personnel to prevent secondary injuries in case of a fall.	☐ Pass	☐ Fail	☐ N/A	Notes: _____

IV. Personal Protective Equipment (PPE)

☐	Ensure all personnel wear hard hats that meet ANSI Z89.1 standards. Inspect hard hats for damage and proper fit.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify all personnel wear safety glasses or face shields that meet ANSI Z87.1 standards. Ensure appropriate eye protection is selected based on the specific hazards present.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Confirm all personnel wear high-visibility clothing (vests, jackets) that meet ANSI/ISEA 107 standards. Ensure clothing is clean and visible.	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐	Ensure all personnel wear appropriate foot protection (safety shoes or boots) that meet ASTM F2413 standards. Inspect footwear for damage and proper fit.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify personnel wear appropriate gloves for the task being performed. Select gloves based on the specific hazards present (e.g., chemical exposure, abrasion, electrical hazards).	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Assess noise levels and provide hearing protection (earplugs or earmuffs) if noise levels exceed 85 dBA. Ensure workers are trained on the proper use and care of hearing protection.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Assess the need for respiratory protection based on potential airborne contaminants. If required, implement a respiratory protection program that meets OSHA 1910.134 standards.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
V. Documentation and Training					
☐	Verify that the UBIU operator's manual is readily available on site. Ensure personnel are familiar with the manual's contents.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Review UBIU inspection records to ensure compliance with inspection schedules and maintenance requirements. Verify that all identified deficiencies have been corrected.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Confirm that all UBIU operators have received documented training on the safe operation of the equipment. Verify training covers pre-operational inspections, hazard recognition, and emergency procedures.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify that all personnel working at heights have received documented training on fall protection systems. Ensure training covers proper use, inspection, and maintenance of fall protection equipment.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Confirm that all traffic control flaggers have received documented training on traffic control procedures. Verify training covers proper flagging techniques, communication protocols, and emergency response.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Verify a site-specific safety plan has been developed and communicated to all personnel. Ensure the plan addresses potential hazards, control measures, and emergency procedures.	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Confirm that daily safety briefings are conducted to discuss potential hazards, review safety procedures, and address any concerns. Document the topics covered and personnel in attendance.	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Findings

#	Item	Location	Severity	Action required
1				
2				
3				
4				
5				
6				
7				
8				

Signature

Inspector signature _____

Name _____

Date _____