AUI Department of Environmental Safety & Security
Pre-Operation Inspection Checklist

Inspector Name: **Date:** **Time:**

Crane to be Inspected Pre-Operation:

***One inspection form per crane used**
*** Inspection must be conducted before equipment is used**
*** Maintain checklist as documentation of this requirement**

Item	Pass	Fail	N/A	Comments
1. Ask the operator, ground crew (riggers), and / or supervisor appropriate questions on load charts, rigging and load weight determinations and capacities.				
2. The load bearing surface is sufficient to handle the weight of the crane and the load. Check crane set-up and stability of outriggers and / or effectiveness of cribbing on crawlers.				
3. All personnel involved in the operation have appropriate PPE for the task. Note: At a minimum, hard hats and safety shoes / boots are required.				
4. The Operator is a certified crane operator.				
5. No power lines are located within the load radius plus the required clearance.				
6. The Signaler is familiar with standard hand signals for controlling crane operation.				
7. Weather conditions are acceptable. No thunderstorms, heavy winds or rains are forecast.				
8. The operator is aware that he/she shall respond only to signals from the appointed signal person. However, the operator shall obey a STOP signal at all times, no matter who gives it.				
9. The load to be lifted is within the rated capacity of the crane in its existing configuration as per the crane manufacturer's published lifting capacity.				
10. When loads not accurately known are to be lifted, the responsible supervisor has ensured the weight of the load does not exceed the crane ratings at the radius at which the lift is planned.				
11. Operations are conducted at speeds as to minimize dynamic effects. (Dynamic effect –loads introduced into the machine or its components due to acceleration or deceleration forces				
12. The load is attached to the hook by means of slings or other devices of sufficient capacity.				
13. The operator shall not leave the controls while the load is suspended.				
14. The area under the load is cordoned off to ensure that personnel are not permitted to stand or pass under a suspended load.				
15. If possible, rotate the crane to check all clearances and overall stability.				
16. Verify that high-voltage warning signs and a rating chart(s) with legible letters and figures are attached to the crane in a location accessible to the operator while at the controls.				

17. Check the boom angle indicator to ensure it is readable from the operator station.				
18. Check that all exposed moving parts are guarded.				
19. Inspect all wire rope (including standing ropes), drums, rigging, hardware and attachments.				
20. Remove any hook that is deformed or cracked from service. Hooks with cracks, excessive throat openings of 15%, or twists of 10 degrees or more, must be removed from service.				
21. Check for freedom of rotation of all swivels.				
22. Visually inspect the boom an jib for straightness and any evidence of physical damage, such as cracking, bending, or any other deformation of the welds.				
23. Look for corrosion under any attachments that are connected to the chords and lacing. Watch for cracking or flaking of paint that may indicate fatigue of the metal. Do not attempt to straighten members by hammering or heating them and drawing them out.				
24. Inspect tires for cuts, tears, breaks, and proper inflation.				
26. Visually check that the fuel, lubricating oil, coolant and hydraulic oil reservoirs are filled to proper levels.				
27. Check that the crane is equipped with a fully charged fire extinguisher and that the operator knows how to use it.				
28. Check operating mechanisms such as: locking mechanisms, hook roller brackets, limit switches, safety devices, hydraulic cylinders, instruments, electric wipers, seat belts, horn and lights.				
29. Check the turntable connections for weld cracks and loose or missing bolts.				
30. Check the outriggers to be sure that neither the beams nor the cylinders are distorted or cracked and that both the beams and cylinders extend and retract smoothly and hold the load.				
31. Inspect and test all brakes and clutches for proper adjustment and operation.				
32. Inspect boom hoist lockout and other operator aids, such as anti-two-block devices and load moment indicators, for proper operation and calibration.				
33. While the engine is running, check all gauges and warning lights for proper readings and operation all controls to see that they are functioning properly.				
34. Check for any broken or cracked glass that may affect the view of the operator				
35. Inspect hoist chains, including end connections for excessive wear, twists, distorted links interfering with proper function, or stretched beyond manufacture's recommendations.				
36. Sheave grooves shall be smooth and free from surface defects, cracks, or worn places that could cause rope damage.				
37. Lower load blocks must be equipped with close fitting guards.				
38. Hooks and blocks must be permanently labeled with rated capacity.				
39. Flexible hoses must be sound, show no signs of blistering or deformation to the outer covering, and no leaks at threaded or clamped joints that cannot be eliminated by normal tightening. No evidence of excessive abrasion or scrubbing on the outer surfaces of hoses, rigid tubing or hydraulic fittings.				