



**WAGNER-MEINERT LLC**  
*Engineers – Contractors*

## **AERIAL LIFT SAFETY PROGRAM**

### **(Section 29)**

#### **PURPOSE:**

It is the policy of Wagner-Meinert, LLC to permit only trained and authorized personnel to operate aerial lifts. This policy is applicable to both daily operators and those who occasionally use an aerial lift. WMI employees will not use customer equipment unless certified operators are given permission from the appropriate personnel.

#### **SCOPE:**

The Occupational Health and Safety Administration's (OSHA) 29 CFR 1926.453 and 1926.454 rules and regulations apply to erecting, dismantling, fall protection, furnishing, and engaging in work on aerial platforms. Any temporary elevated or suspended work unit and its supporting structures used for supporting workers, material(s), or both are subject to the aforementioned rules and regulations.

#### **REFERENCES:**

Requirements and regulations pertaining to powered material handling equipment are found in the following publication:

Occupational Safety and Health Standards for Construction (29 CFR 1926.453).

Occupational Safety and Health Standards for Construction (29 CFR 1926.454).

#### **PROCEDURES:**

These written aerial lift operation procedures establish guidelines to be followed, whenever any employee works with aerial lifts at this company. The rules established are to be followed to:

Provide a safe working environment,  
Govern operator use of industrial lifts, and  
Ensure proper care and maintenance of aerial lifts.

FORMS:

**(APPENDIX 29A) SCISSOR-AERIAL DAILY INSPECTION CHECKLIST**

- 1.0 OBJECTIVES**
- 2.0 COMPETENT PERSON**
- 3.0 RESPONSIBILITIES**
- 4.0 TRAINING**
- 5.0 ROLES AND RESPONSIBILITY**
- 6.0 DOCUMENT MANAGEMENT:**
- 7.0 CHANGE CONTROL:**
- 8.0 PERSONNEL:**

**1.0 OBJECTIVES**

1.1 The objectives of the Aerial Lifts Safety Program include:

- 1.1.1 All aerial lifts shall be designed and constructed in conformance with applicable requirements of the American National Standards for "Vehicle Mounted Elevating and Rotating Work Platforms
- 1.1.2 To ensure that operators understand the limitations and safe operations of the equipment.
- 1.1.3 To ensure that all equipment is properly maintained and is kept good working order.
- 1.1.4 To ensure that equipment malfunctions are noted before accidents occur.
- 1.1.5 To ensure that non-qualified employees do not use this equipment.
- 1.1.6 To ensure that operators receive refresher training as necessary.
- 1.1.7 To ensure that qualified trainers are available to certify new operators and conduct refresher training.
- 1.1.8 Minimum Clearance for Live Wire Electricity ( See table 1.1.8 on next page)

Table 1.1.8 - Minimum Clearance Distances for Live-line Bare-hand Work (Alternating Current)

Voltage range (phase to phase) kilovolts	Distance in feet and inches for maximum voltage	
	Phase to ground	Phase to phase
2.1 to 15	2'0"	2'0"
15.1 to 35	2'4"	2'4"
35.1 to 46	2'6"	2'6"
46.1 to 72.5	3'0"	3'0"
72.6 to 121	3'4"	4'6"
138 to 145	3'6"	5'0"
161 to 169	3'8"	5'6"
230 to 242	5'0"	8'4"
345 to 362	17'0"	113'4"
500 to 552	111'0"	120'0"
700 to 765	115'0"	131'0"

## 2.0 COMPETENT PERSON

2.1 Each department using aerial lifts must select a competent person to oversee the aerial lift being used. The competent person also inspects all aerial lifts per the manufactures safety checks before each use. The competent person must have a complete grasp of functions, rules, and regulations as they pertain to the aerial lift he/she oversees. Competent persons will manage the daily activities on and around aerial lifts and ensure the following:

- 2.1.1 Fall protection - Basket occupants must wear a body harness attached to the basket.
- 2.1.2 Moving the lift - The lift must not be moved when the boom is elevated in a working position unless the lift is specifically designed to do so.
- 2.1.3 Lift controls - Lift controls must be tested daily prior to operating the boom.
- 2.1.4 Backup alarms – Audible and visual alarms must be tested and in working order before each use.
- 2.1.5 Boom and basket loads - The manufacturer's boom and basket maximum intended loads must not be exceeded.
- 2.1.6 Outriggers and brakes - Outriggers must be positioned on pads or solid ground when used. Brakes must be set anytime outriggers are used. Wheel chocks must be installed before the lift is used when working on an incline.

- 2.1.7 Barricades & signs - The area beneath an operating aerial lifts must be cordoned off and access to that area must be restricted. Restricting access may be accomplished through the use of barricades and signs.

### **3.0 RESPONSIBILITIES**

#### 3.1 Safety Director:

- 3.1.1 Responsible for developing and revising the written Aerial Lift Safety Program. In addition, the Safety Director will be responsible for the training requirements and maintain documentation of training.

#### 3.2 Job Site Foreman

- 3.2.1 The foreman on the job site is the competent person responsible for seeing that the Aerial Lift Safety Program is adhered to.

#### 3.3 Safety Committee

- 3.3.1 Safety Committee is responsible for auditing the entire Aerial Lift Safety Program and providing training assistance/materials to the department utilizing Aerial Lifts.

#### 3.4 All Employees

- 3.4.1 Employees are responsible for operating Aerial Lift equipment according to safe and proper techniques outlined in training classes. In addition, employees are responsible for notifying the foreman of any unsafe conditions related to the equipment.

#### 3.5 Project Manager

- 2.6.1 Are responsible for assuring that field personnel have the required training for use of aerial lifts.

### **4.0 TRAINING**

#### 4.1 Aerial Lifts

- 4.1.1 Aerial lifts are considered any of the following: vehicle-mounted aerial devices to elevate personnel to work areas not accessible from the ground; extendible boom platforms, aerial ladders, articulating booms, vertical towers, and a combination of any such devices. All employees who may on occasion work on aerial platform must be trained. Training covers the proper use, inspection of, and hazards associated with aerial lifts.

- 4.1.2 Aerial lifts may be modified for uses other than those intended by the manufacturer provided the modification has been certified in writing by the manufacturer.

- 4.2 When working on an elevated platform, several factors must be considered:
- 4.2.1 Fall protection - Basket occupants must wear a body harness attached to the basket. Also personnel will stand firmly on the floor of the lift and will not climb on the side rails or the edge of the basket.
  - 4.2.2 Moving the lift - The lift must not be moved when the boom is elevated in a working position unless the lift is specifically designed to do so.
  - 4.2.3 Lift controls - All controls must be tested daily prior to operating the boom.
  - 4.2.4 Boom and basket loads - The manufacturer's boom and basket maximum intended loads must not be exceeded.
  - 4.2.5 Outriggers and brakes - Outriggers must be positioned on pads or solid ground when used. Brakes must be set anytime outriggers are used. Wheel chocks must be installed before the lift is used when working on an incline.
  - 4.2.6 Barricades & signs - The area beneath an operating aerial lifts must be cordoned off and access to that area must be restricted. Restricting access may be accomplished through the use of barricades and signs.

## **5.0 ROLES AND RESPONSIBILITY**

### **5.1 Wagner-Meinert, Inc**

- 5.1.1 Appoint an individual(s) as a competent person, ensure that they have been properly trained and can effectively oversee aerial lift requirements.
- 5.1.2 Provide appropriate type(s) of aerial lifts.

### **5.2 Competent Person**

- 5.2.1 Attend Aerial Lift Safety Training.
- 5.2.2 Manage daily activities involving work performed on aerial lifts.
- 5.2.3 Perform required inspections of aerial lifts.

### **5.3 Supervisors**

- 5.3.1 Ensure aerial lift(s) are being inspected at predetermined intervals.
- 5.3.1 Ensure aerial lift safety requirements are followed.

## 5.4 Safety Director

5.4.1 Provide general training and competent person training.

5.4.2 Assist competent person in establishing aerial lift inspection guidelines.

5.4.3 Provide periodic audits of the aerial lift safety program.

## 5.5 Individual

5.5.1 Attend Aerial Lift Training

5.5.2 Adhere to aerial lift safety requirement

## 6.0 DOCUMENT MANAGEMENT:

The Safety Director is responsible for developing and maintaining the program.

If after reading this program, you find that improvements can be made, please contact the Safety Director. We encourage all suggestions because we are committed to the success of our written Aerial Lift Safety Program. We strive for clear understanding, safe behavior, and involvement from every level of the company.

## 7.0 CHANGE CONTROL:

All management system changes are reviewed, approved or disapproved by the Safety Committee.

This program was initially developed on December 14, 2007, replacing the former Aerial Lift Safety Program entirely.

Revision No. 1 (December 14, 2007)

Revision No. 2 (February 27, 2008)

Revision No. 3 (February 24, 2010)

Revision No. 4 (January 13, 2011)

Revision No. 5 (October 7, 2011)

## 8.0 PERSONNEL:

The Owners of Wagner-Meinert have the ultimate responsibility for the Aerial Lift Safety Program. They have designated the Safety Director to manage the Aerial Lift Safety Program.



## Scissor-Aerial Inspection Checklist (Appendix 29A)

Unit Number:	Inspection Type A-B-R=Ready	A B R	Serial Number:	Date:
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Hour Meter:	Make:	Model:	Location:
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**Instructions:** Perform all items for appropriate type inspection as indicated by the non-shaded areas in columns A, B, C.  
**A = Quarterly Inspections, B = Annual Inspections, R = Ready to Use Inspection**  
**Mark the appropriate Worksheet Code after each item in the inspection column**

Worksheet Codes:	X = OK, Adjusted, or serviced	N = Not Applicable	F = Follow Up Needed
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		Intervals: R A B		
<b>Visual Inspection:</b>				
1.	Inspect jobsite for potential overhead and other hazards			
2.	Inspect overall appearance, condition, and check for damage			
3.	Inspect fluid levels and check for leaks			
4.	Check for missing components unauthorized modifications			
<b>Engine:</b>				
5.	Inspect Engine Mounts			
6.	Check Engine Oil			
7.	Change fuel filters and fuel water service separator			
8.	Check Air Filter Restriction Gauge			
9.	Inspect Air Induction System			
10.	Clean air filter dust valve			
11.	Inspect belt condition, alignment, and tension			
12.	Inspect idler pulleys			

13.	Inspect cooling fan, shroud, and water pump condition			
14.	Inspect and clean radiator and oil cooling fins if applicable			
15.	Pressure test radiator and cap			
16.	Test coolant protection level			
17.	Change Coolant (and coolant filters if applicable)			
18.	Inspect Exhaust System			
19.	Ensure engine idle, throttle, and RPM are set properly			
20.	Inspect hoses			
21.	Inspect fuel system			
22.	Check charging system output			

		Intervals: R A B		
<b>Transmission / Drive Train</b>				
23.	Check fluid level in torque hubs			
24.	Change fluid in torque hubs			
25.	Inspect axle bearings			
26.	Test freewheeling functionality			
<b>Electrical Systems</b>				
27.	Ensure emergency stop switches, safety lock outs function			
28.	Inspect battery charger for proper operation			
29.	Inspect battery hold downs			
30.	Perform battery load test			
31.	Inspect all visible electric cords, cables, wires, and connections			
<b>Plat form Assembly</b>				
32.	Inspect that plat form in installed and secure with mounting hardware free of damage and secure			
33.	Inspect lanyard anchorage points, platform guardrails, floor, gate, and latches			
<b>Hydraulics</b>				
34.	Inspect extend deck			
35.	Inspect around all hydraulic components			
36.	Ensure that hydraulic fluid is clean			
37.	Change hydraulic filters			
38.	Change hydraulic oil			
39.	Check hydraulic pressures and settings are properly adjusted			
40.	Inspect all hoses, pipe clamps, and retaining hardware			
41.	Inspect tank, sight glass, and cap system			
<b>Tires and Wheels</b>				
42.	Inspect wheel condition, rim condition, and proper tightness of lug nuts			
43.	Inspect tire condition & inflation			
44.	Inspect and repack wheel bearings			

Inspected By: \_\_\_\_\_

