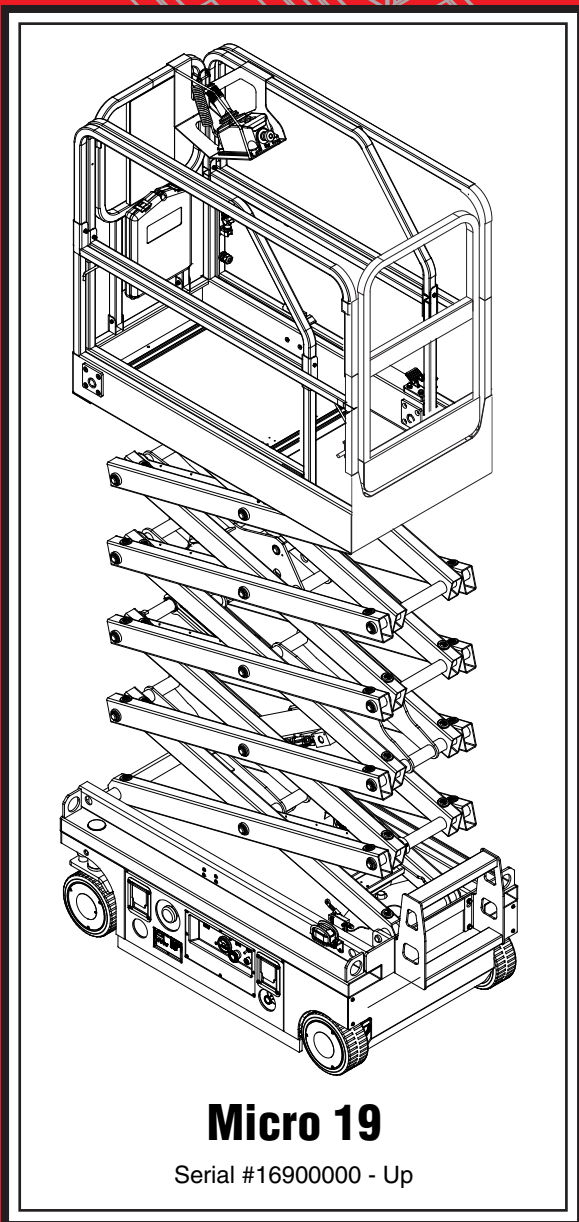


# Operator's Manual

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**Micro 19**

Serial #16900000 - Up

94553r1  
September 2017

# —Specifications—

| <b>Micro 19</b>                      |                    |   |
|--------------------------------------|--------------------|---|
| Working Height*                      |                    | 24.6 ft      7.5 m                            |
| Platform Height                      |                    | 18 ft      5.5 m                              |
| Maximum Drive Height                 |                    | 18 ft      5.5 m                              |
| Stowed Height                        | Top Guardrail      | 79 in.      2.0 m                             |
|                                      | Platform Floor     | 39 in.      1.0 m                             |
| Platform Extension Length            |                    | 23.6 in.      0.6 m                           |
| Machine Weight** (Unloaded)          |                    | 2690 lb      1220 kg                          |
| Lift Capacity                        | Total              | 500 lb      227 kg                            |
| Deck Extension Capacity              |                    | 1 Person / 220lb (100 kg)                     |
| Maximum Occupants                    |                    | 2   |
| Platform Length (Extended)           |                    | 78 in.      2 m                               |
| Platform Length (Retracted)          |                    | 54 in.      1.4 m                             |
| Width (Overall)                      |                    | 32 in.      0.81 m                            |
| Platform Dimensions (length x width) |                    | 53.9 x 27.6 in      1.37 x 0.7m               |
| Wheel Base                           |                    | 44.5 in      1.13 m                           |
| Turning Radius--Inside               |                    | 17.7 in.      0.45m                           |
| Ground Clearance--Stowed             |                    | 2.4 in      6 cm                              |
| Ground Clearance--Elevated           |                    | 0.6 in      1.5 cm                            |
| Drive Speed (Proportional)           | Stowed             | 0-2.5 mph      0-4 km/h                       |
|                                      | Raised or extended | 0-.5 mph      0-8 km/h                        |
| Gradability                          |                    | 25%/14°                                       |
| Maximum Side Slope--Stowed           |                    | 5°  |
| Ground Pressure/Wheel                |                    | 116 psi      8.2 kg/cm <sup>2</sup>           |
| Maximum Wheel Load                   |                    | 960 lb      435 kg                            |
| Occupied Floor Pressure              |                    | 242 psf      1177 kg/m <sup>2</sup>           |
| Maximum Operating Wind Speed         |                    | 28 mph / 12.5 m/sec (45 km/h)                 |
| Tire Size                            |                    | 9 x 4 inch/230 x 100mm                        |
| Lug Nut Torque                       |                    | 19 ft-lb / 25.5 Nm<br>Secured with cotter pin |
| Hydraulic Pressure                   |                    | 2320 psi/ 160 bar                             |
| Power System Voltage                 |                    | 24 Volt DC                                    |
| Battery Charger                      | Input              | 110-230 V AC, 50-60 Hz                        |
|                                      | Output             | 24 Volt DC                                    |
| Batteries                            |                    | Two 12 Volt Deep Cycle 115Ah                  |
| Airborne Noise Emissions             |                    | <70 dB  |

Meets applicable requirements of ANSI A92.6-2006.

\*Working Height adds 6 feet (2 m) to platform height. \*\*Weight may increase with certain options.

# Introduction

---

This Operator's Manual has been designed to provide you, the owner, user or operator, with the instructions and operating procedures essential to properly and safely operate your MEC Aerial Work Platform for positioning personnel, along with their necessary tools and materials, to overhead work locations.



***The Operator's Manual must be read and understood prior to operating your MEC Aerial Work Platform. The user/operator should not accept operating responsibility until he/she has read and understands the operator's manual as well as having operated the MEC Aerial Work Platform under supervision of an authorized, trained and qualified operator.***

***It is essential that the operator of the aerial work platform is not alone on the workplace during operation.***

***Modifications of this machine from the original design and specifications without written permission from MEC are strictly forbidden. A modification may compromise the safety of the machine, subjecting operator(s) to serious injury or death.***

---

Your MEC Aerial Work Platform has been designed, built, and tested to provide safe, dependable service. Only authorized, trained and qualified personnel shall be allowed to operate or service the machine.

MEC, as manufacturer, has no direct control over machine application and operation. Proper safety practices are the responsibility of the owner, user and operator.

If there is a question on application and/or operation contact:



## **MEC Aerial Platform Sales Corp.**

1401 South Madera Ave • Kerman, CA 93630 USA

Ph: 1-877-635-5438 • 559-842-1500 • Fax: 559-842-1522

[www.mecawp.com](http://www.mecawp.com)

# Safety

**DO NOT** operate this machine until you have read and understood this manual, have performed the Workplace Inspection, Pre-Start Inspection and Routine Maintenance, and have completed all the test operations detailed in the Operating Instructions section.

Failure to read, understand and follow all safety rules, warnings, and instructions could result in serious injury or death. For your safety and the safety of those around you, you must operate your machine as instructed in this manual.

MEC designs aerial work platforms to safely and reliably position personnel, along with their necessary tools and materials, at overhead work locations. The owner/user/operator of the machine should not accept responsibility for the operation of the machine unless properly trained.

ANSI and other applicable standards identify requirements of all parties who may be involved with self-propelled elevating work platforms. The ANSI/SIA A92.6-2006 Manual of Responsibilities is considered a part of this machine and can be found in the manual compartment, located at the platform control station. To ensure safe use of machine, inspections and training specified in ANSI/SIA A92.6-2006 must be performed at designated intervals as prescribed.

## California Proposition 65 Warning

This product contains chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

## Safety Alert Symbols

MEC manuals and decals use symbols and colors to help you recognize important safety, operation and maintenance information.



**RED** – Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**ORANGE** – Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



**YELLOW with alert symbol** – Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



**YELLOW without alert symbol** – Indicates a potentially hazardous situation which, if not avoided, may result in property damage.



**GREEN** – Indicates operation or maintenance information.

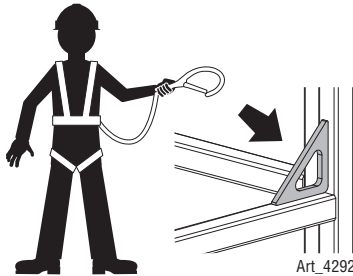
## Fall Protection

Operators must comply with employer, job site and governmental rules regarding the use of personal protective equipment.

**If required by your employer or job site**, use personal fall protection equipment (PFPE) when operating this machine.

All PFPE must comply with applicable governmental regulations, and must be inspected and used in accordance with the PFPE manufacturer's instructions.

Fall restraint must be properly attached to a designated anchorage point when driving or operating the machine. Attach only one fall restraint to each anchorage point.



## Electrocution Hazard



**ELECTROCUTION HAZARD! THIS MACHINE IS NOT INSULATED!**

**DEATH OR SERIOUS INJURY will result from contact with or inadequate clearance from any electrically charged conductor.**

**You must maintain a CLEARANCE OF AT LEAST 10 FEET (3.05 m) between any part of the machine, or its load, and any electrical line or apparatus carrying over 300 Volts up to 50,000 Volts. One foot (30.5 cm) additional clearance is required for every additional 30,000 Volts.**

**Observe Minimum Safe Approach Distance.**

This machine **is not** electrically insulated and **will not** provide protection from contact with or proximity to electrical current.

Maintain safe distances from electrical power lines and apparatus in accordance with applicable government regulations and the following chart:



### Minimum Safe Approach Distance

| Voltage<br>Phase to Phase | Minimum Safe Approach Distance |        |
|---------------------------|--------------------------------|--------|
|                           | Feet                           | Meters |
| 0 to 300 Volts            | Avoid Contact                  |        |
| Over 300V to 50kv         | 10                             | 3.1    |
| Over 50KV to 200KV        | 15                             | 4.6    |
| Over 200KV to 350KV       | 20                             | 6.1    |
| Over 350KV to 500KV       | 25                             | 7.6    |
| Over 500KV to 750KV       | 35                             | 10.7   |
| Over 750KV to 1000KV      | 45                             | 13.7   |

Allow for platform movement, electrical line sway or sag and beware of strong or gusty winds.

Keep away from the machine if it contacts energized power lines. Personnel on the ground or in the platform must not touch or operate the machine until energized power lines are shut off.

Do not use the machine as a ground for welding.

## Tip-over Hazards



Art\_2828

DO NOT exceed the maximum platform capacity. The weight of options and accessories will reduce the rated platform capacity and must be factored into the total platform load. Refer to the decals on the options.

DO NOT elevate the platform when the machine is on a surface that is soft and/or on a slope.

DO NOT depend on the tilt alarm as a level indicator. STOP if the tilt alarm sounds and the red light illuminates when the platform is raised. Use extreme caution to lower the platform. Move the machine to a firm, level surface.

**Driving:** DO NOT drive the machine on a slope that exceeds the maximum uphill, downhill or side slope rating. Slope rating applies to machines in the stowed position.

**Driving in stowed position:** use extreme care and reduce speed when driving across uneven terrain, debris, unstable or slippery surfaces, and near holes or drop-offs.

**Driving with the platform elevated:** DO NOT drive on or near uneven terrain, unstable surfaces, curbs, drop-offs or other hazardous conditions. DO NOT drive the machine faster than .7 mph/1.1 km/h while elevated

DO NOT push off or pull toward any object outside the platform. DO NOT push the machine or other objects with the platform. DO NOT contact adjacent structures with the platform. DO NOT tie the platform to adjacent structures.



Art\_2834

**DO NOT DRIVE ON IRREGULAR OR UNSTABLE SURFACE**

| Maximum Allowable Side Force |
|------------------------------|
| 50 lbs (222 N) per person    |



Art\_2833

**DO NOT PUSH OR PULL OBJECTS OUTSIDE PLATFORM**

DO NOT use the platform controls to free a platform that is caught, snagged or otherwise prevented from normal motion by an adjacent structure.

DO NOT elevate the platform when wind speeds are in excess of 28 m.p.h. (12.5 m/s). If wind speeds exceed 28 m.p.h. (12.5 m/s) when the platform is elevated, carefully lower the platform and discontinue operation.

DO NOT increase the surface area of the platform (i.e. cover the rails with tarp or plywood). Increased surface area exposed to the wind will decrease machine stability.

DO NOT attach overhanging loads or use the machine as a crane. DO NOT place loads outside the platform perimeter.

NEVER transport tools and materials unless they are firmly secured. Secure all tools and loose materials.

NEVER alter or disable any machine components.

NEVER replace any part of the machine with items of different weight or specification.

NEVER modify or alter the work platform without written permission from MEC.

NEVER place ladders or scaffolds in the platform or against any part of the machine.

NEVER use the machine on a moving or mobile surface or vehicle.

Ensure that all tires are in good condition and lug nuts are properly torqued.

DO NOT operate the machine with the chassis trays open.

DO NOT alter or disable the limit switches or machine components that in any way affect safety and stability.

DO NOT replace items critical to machine stability with items of different weight or specification. DO NOT modify or alter this machine without prior written permission from the manufacturer.

DO NOT use batteries that weigh less than the original equipment. Each battery must weigh 55 lbs/25 kg. The batteries must weigh a minimum of 110 lbs/50 kg.



Art\_2831

**DO NOT ELEVATE IN WINDY CONDITIONS**



Art\_2832

**DO NOT USE AS CRANE**

## Fall Hazards



Art\_2826

**DO NOT CLIMB ON RAILS**

DO NOT sit, stand or climb on the platform guard rails. Maintain a firm footing on the platform floor at all times.

DO NOT exit the platform when elevated. DO NOT climb down from the platform when elevated.

Keep the platform floor clear of debris.

DO NOT fasten a fall restraint lanyard to an adjacent structure.

Ensure that the platform entry is properly closed and secured before operating the machine.

Ensure that the guard rails are properly installed and in good condition before operating the machine.

Operators must comply with employer and job site rules and governmental regulations regarding the use of personal protective equipment.



Art\_2825

**DO NOT EXIT PLATFORM WHEN ELEVATED**

## Collision Hazards



Art\_2835

Check path before moving for equipment, materials or other obstructions.

Check path before moving for overhead obstructions.

Check path before moving for crushing hazards when holding the platform rail.

Be aware of limited sight distance and blind spots when driving or operating.

Be aware of extended platform position(s) when moving the machine.

Observe and use color-coded direction arrows on the platform controls and platform decal plate for drive and steer functions.

Reduce travel speed when moving the machine on slopes, when near personnel and obstacles, or when surface conditions are wet, slippery or otherwise limiting.

DO NOT operate in the path of any crane unless the controls of the crane have been locked out and/or precautions have been taken to prevent any possible collision.

Stunt driving and horseplay are PROHIBITED.

Watch for personnel and obstructions below the platform when lowering the platform.

Keep hands and limbs out of scissors.

Use common sense and planning when operating the machine with the controller from the ground. Maintain safe distances between the operator, the machine and fixed objects.



Art\_2829



Art\_2827

## Additional Safety Hazards

---

### Explosion and Fire Hazards

---

DO NOT operate the machine in hazardous locations or locations where potentially flammable or explosive gasses or particles may be present.

### Damaged Machine Hazards

---

Conduct a thorough pre-start inspection of the machine and test all functions before each work shift to check for damage, malfunction and unauthorized modification. Tag and remove a damaged, malfunctioning or modified machine from service. DO NOT use a damaged, malfunctioning or modified machine.

Routine maintenance must be performed by the operator before each work shift. Scheduled maintenance must be performed by a qualified service technician at scheduled intervals. Tag and remove from service any machine that has not had scheduled preventative maintenance performed.

Check that all safety and instructional decals are in place and undamaged.

Check that the operator's, safety and responsibilities manuals are present in the storage container located in the platform. All manuals must be complete, undamaged and readable.

### Bodily Injury Hazards

---

DO NOT operate the machine when there is a hydraulic fluid or air leak. Hydraulic fluid or air under pressure can penetrate and/or burn skin.

All compartments must remain closed and secure during machine operation. Improper contact with components under any cover will cause serious injury. Only trained maintenance personnel should access compartments. The operator should only access a compartment when performing pre-operation inspection.

### Weld Line to Platform Safety (if equipped)

---

Read, understand and follow all warnings and instructions provided with the welding power unit.

Do not connect weld leads or cables unless the welding power unit is turned off at the platform controls.

DO NOT operate unless the weld cables are properly connected.

DO NOT connect the ground lead to the platform.

## Battery Safety

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### Burn Hazards

---

Batteries contain acid. Always wear protective clothing and eye wear when working with batteries.

Avoid spilling or contacting battery acid. Neutralize battery acid spills with baking soda and water.

### Explosion Hazard

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Keep sparks, flame and lighted tobacco away from batteries. Batteries emit explosive gas. The battery tray should remain open during the entire charging cycle.

### Electrocution Hazard

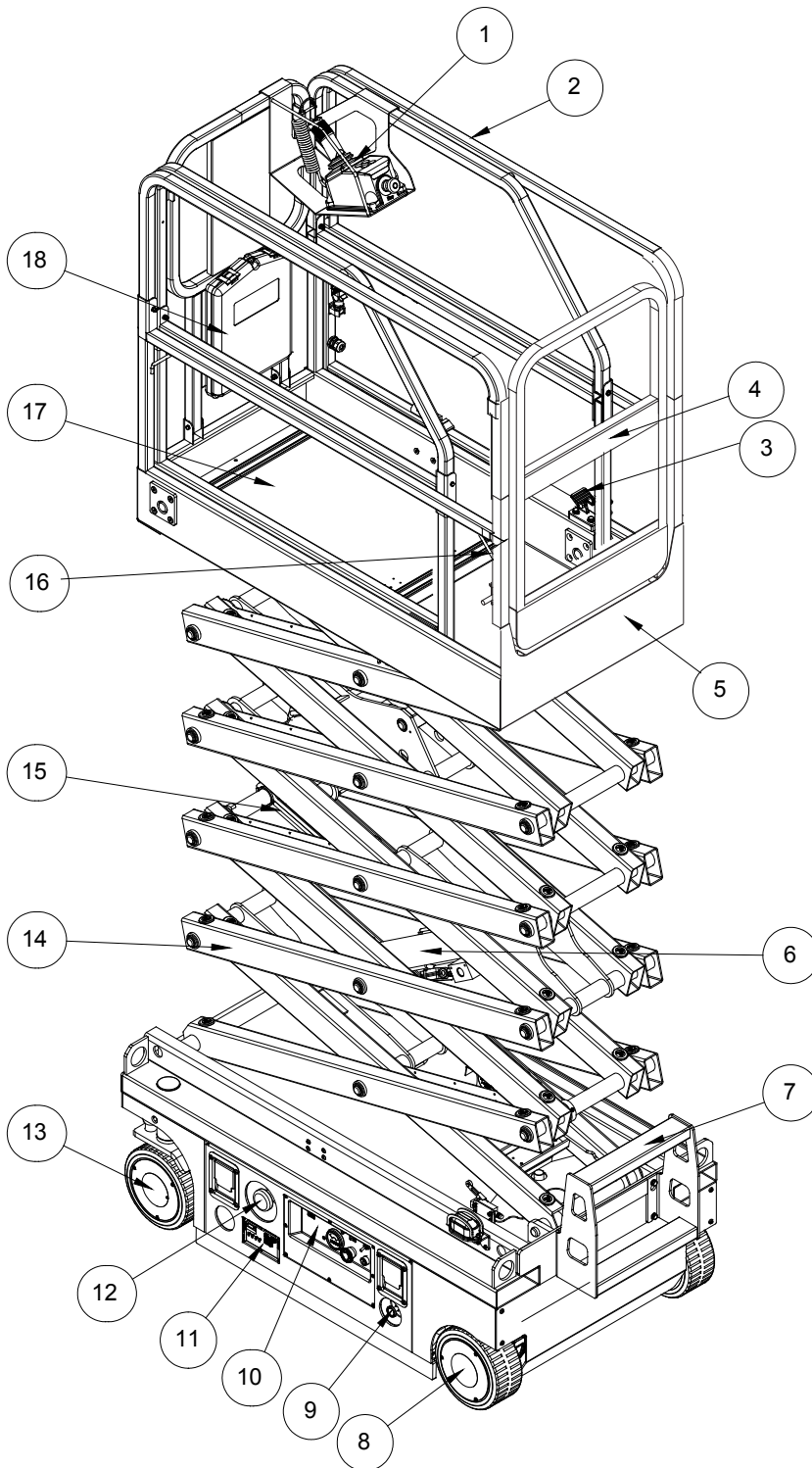
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Avoid contact with electrical terminals.



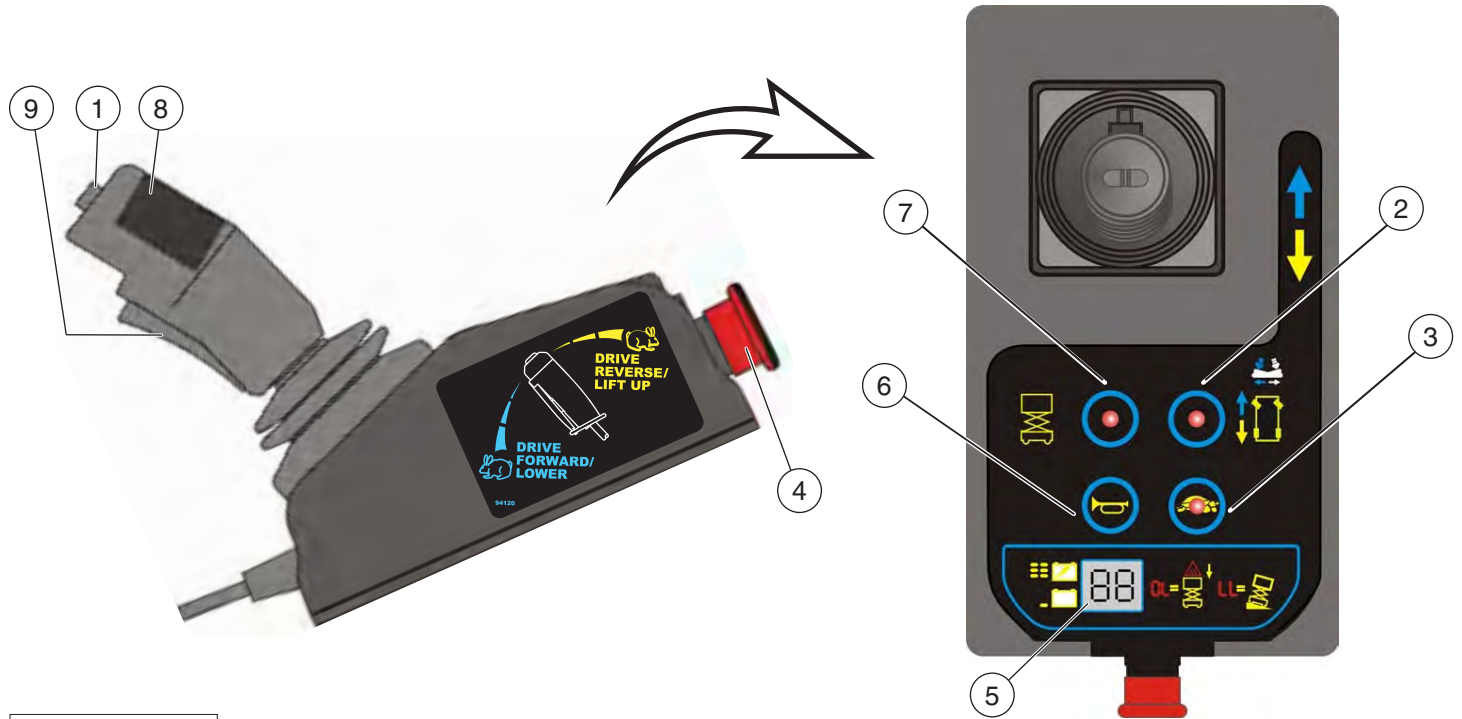
# Controls & Components

## Component Locations



- 1 Platform controller
- 2 Platform guard rails
- 3 Platform extension release pedal
- 4 Platform entry gate
- 5 Main Platform
- 6 Lift Cylinder
- 7 Entry ladder
- 8 Drive wheels
- 9 Emergency lowering knob
- 10 Ground Control Panel
- 11 Batteries charger
- 12 Main power switch
- 13 Steer Wheels
- 14 Scissor
- 15 Safety arms
- 16 Lanyard anchorage point
- 17 Platform extension
- 18 Manual storage container

# Platform Controls



**WARNING**

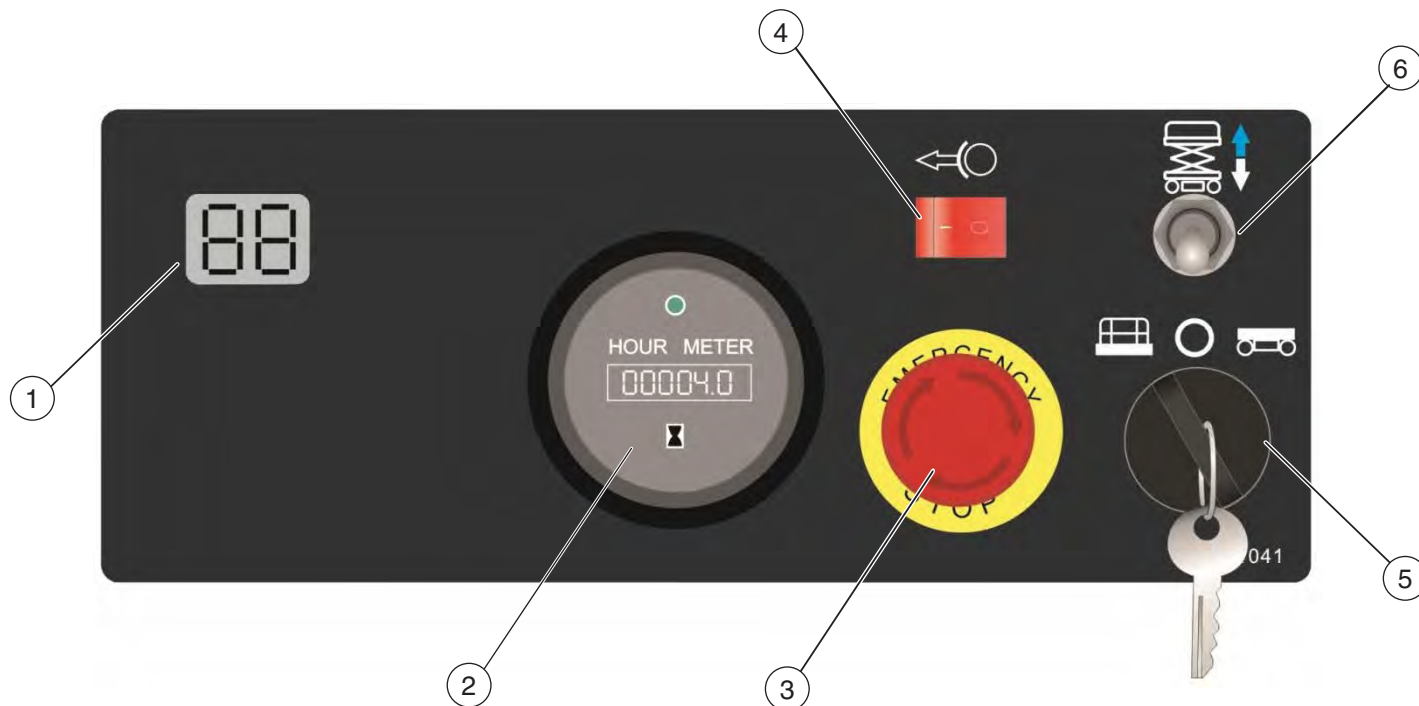
**ALWAYS be aware of the machine's position and of your surroundings before activating any control function.**

| CONTROL |                             | DESCRIPTION   |   |
|---------|-----------------------------|---|---|
| 1       | Thumb Rocker Switch         | Press the thumb rocker switch in either direction to activate steer function.       |   |
| 2       | Drive Select                | Press this button to select the drive function.                                     |   |
| 3       | Drive Speed Button          | Press this button to activate the slow or fast drive function.                      |   |
| 4       | Emergency Stop Switch       | Press the EMERGENCY STOP switch at any time to stop all machine functions.          |   |
|         |                             | Turn the button clockwise to the on position to operate the machine.                |   |
| 5       | LED Display                 | Indicates the state of battery charge and displays diagnostic codes when necessary. |   |
| 6       | Horn Button                 | Press to sound warning horn.  |   |
| 7       | Lift Select                 | Press this button to select the Lift function.                                      |   |
| 8       | Proportional Control Handle | DRIVE   | Proportionally controls Forward and Reverse travel. |
|         |                             | LIFT  | Proportionally controls Lift and Lower functions.   |
| 9       | Function Enable Switch      | Function Enable Switch for LIFT & DRIVE & STEER functions.                          |   |

**Lift function:** Press the Lift Select switch. Squeeze the Function Enable Switch then move the control handle in the direction indicated by the yellow arrow and the platform will raise. Squeeze the Function Enable Switch then move the control handle in the direction indicated by the blue arrow and the platform will lower. The descent alarm will sound while the platform is lowering.

**Drive function:** Press the Drive Select switch. Squeeze the Function Enable Switch then move the control handle in the direction indicated by the blue arrow on the control panel and the machine will move in the direction that the blue arrow points. Squeeze the Function Enable Switch then move the control handle in the direction indicated by the yellow arrow on the control panel and the machine will move in the direction that the yellow arrow points.

## Lower Controls



***ALWAYS be aware of the machine's position and of your surroundings before activating any control function.***

| CONTROL |                              | DESCRIPTION   |
|---------|------------------------------|---|
| 1       | LED                          | Displays diagnostic codes when necessary.   |
| 2       | Hour Meter                   |   |
| 3       | Emergency Stop Switch        | Press the EMERGENCY STOP switch at any time to stop all machine functions. Turn button clockwise to the on position to operate the machine. |
| 4       | Brake Release Switch         | See page 31 for instructions.   |
| 5       | Key Switch                   | PLATFORM    Select to operate from the platform control panel.  |
|         |                              | BASE         Select to operate from the base control panel.   |
|         |                              | OFF            Select to stop operation from either control panel.  |
| 6       | Platform Lift / Lower Switch | With the Key Switch in the BASE position, move this switch up to lift the platform or down to lower the platform.                           |

# Workplace Inspection

---

**DO NOT operate this machine until you have read and understood this manual, have performed the Workplace Inspection, Pre-Start Inspection and Routine Maintenance, and have completed all the test operations detailed in the Operating Instructions section.**

Inspect the workplace and determine whether the workplace is suitable for safe machine operation. Do this before moving the machine to the workplace.

Be sure the lift is the correct machine for the job.

Be aware of workplace conditions, and continue to watch for hazards while operating the machine.

## Workplace Inspection

---

Before operating the machine, check the workplace for all possible hazards, including but not limited to:

- drop-offs or holes, including those concealed by water, ice, mud, etc.
- sloped, unstable or slippery surfaces
- bumps, surface obstructions and debris
- overhead obstructions and electrical conductors
- other objects or equipment
- hazardous locations and atmospheres
- inadequate surface and support to withstand all load forces imposed by the machine
- wind and weather conditions
- the presence of unauthorized personnel
- other possible unsafe conditions

# Operating Instructions & Functions Test

---

**DO NOT operate this machine until you have read and understood this manual, have performed the Workplace Inspection, Pre-Start Inspection and Routine Maintenance, and have completed all the test operations detailed in the Operating Instructions section.**

This section provides instructions and tests for each function of machine operation. Follow all safety rules and instructions. The operator must conduct inspections and a Functions Test of the machine before each work shift to check that all machine systems are working properly.

Test the machine on a firm level surface with no debris, drop-offs, potholes or overhead obstructions. Perform each step outlined in this section.

This machine shall only be operated by trained and authorized personnel. If multiple operators use this machine, all must be trained, qualified and authorized to use it. New operators must perform a Pre-Start Inspection and Functions Test prior to operating the machine.

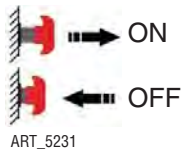
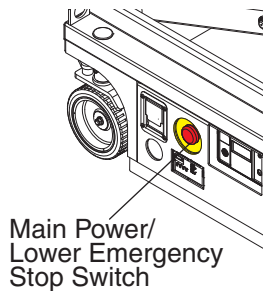
Operators must comply with all employer and job site rules and governmental regulations regarding the use of personal protective equipment.

DO NOT use a machine that is malfunctioning. If any function does not perform as described, tag the machine and remove for repair by a qualified service technician. After repairs are completed, a Pre-Start Inspection and Functions Test must be performed before using the machine.



**Check the area above and around the machine for obstructions and electrical power lines before operating the machine. The machine must have space to allow full elevation of platform.**

## Prestart



- Perform *Prestart Inspection* (see page 23).
- Check Emergency Stop Switches at the platform controls – turn clockwise to reset.

- Check Main Power/Lower Emergency Stop Switch. Must be in ON position.

## Functions Test

- 1 Select a test area that is firm, level and free of obstruction.
- 2 Be sure the battery pack is connected.
- 3 Turn the main power switch to ON (pulled out) position.

### At the Ground Controls

- 4 Turn the ground red Emergency Stop button clockwise to the on position
- 5 Pull out the platform red Emergency Stop button to the on position.
- 6 Turn the key switch to ground control.
- 7 Observe the diagnostic LED readout on the ECU window.

- ⊙ Result: The LED should look like the picture at right.



- Test Emergency Stop**
- 8 Push in the ground red Emergency Stop button to the off position.
    - ⊙ Result: No functions should operate.
  - 9 Turn the ground red Emergency Stop

### Test Up/Down Functions

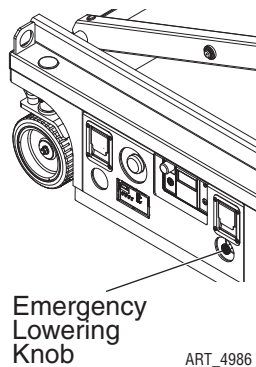


**Check the area above and around the machine for obstructions and electrical power lines before operating the machine.**

A buzzer with different sound frequency is controlled in central system. The descent alarm sounds at 60 beeps per minute. The alarm that goes off when the machine is not level sounds at 150 beeps per minute.

- 10 Turn the Key Switch to off or platform position.
- 11 Move up and hold the platform up / down switch.
  - Result: No function should operate.
- 12 Turn the Key Switch to ground control position.
- 13 Move up and hold the Platform Up switch.
  - Result: The platform should raise.
- 14 Move down and hold the Platform Down switch.
  - Result: The platform should lower to end. The descent alarm should sound while the platform is lowering.

### Test the Emergency Lowering



- 15 Activate the up function and raise the platform approximately 2 ft / 60 cm.
- 16 Pull the emergency lowering knob.
  - Result: The platform should lower. The descent alarm will not sound.

### At the Platform Controls

- 17 Turn the Key Switch to platform control.

### Test Emergency Stop

- 18 Push in the platform red Emergency Stop button to the off position.
  - Result: No functions should operate.
- 19 Turn the red Emergency Stop button clockwise to the on position.
  - Result: The LED indicator light should come on.

### Test the Horn

- 20 Push the horn button.
  - Result: The horn should sound.

## Test Function Enable and Up/Down Functions



**Check the area above and around the machine for obstructions and electrical power lines before operating the machine.**

- 21 Do not hold the function enable switch on the control handle.
- 22 Slowly move the control handle in the direction indicated by the blue arrow, then in the direction indicated by the yellow arrow.
- ⊙ Result: No functions should operate.
- 23 Press the lift function select button.
- 24 Press and hold the function enable switch on the control handle.
- 25 Slowly move the control handle in the direction indicated by the yellow arrow.
- ⊙ Result: The platform should raise.
- 26 Release the control handle.
- ⊙ Result: The platform should stop raising.
- 27 Press and hold the function enable switch. Slowly move the control handle in the direction indicated by the blue arrow.
- ⊙ Result: The platform should lower. The descent alarm should sound while the platform is lowering.

### Test the Steering

- Note:** When performing the steer and drive function tests, stand in the platform facing the steer end of the machine.
- 28 Press the drive function select switch.
  - 29 Press and hold the Function Enable Switch on the control handle.
  - 30 Depress the thumb rocker switch on top of the control handle in the direction identified by the blue left arrow on the control panel.
    - Result: The steer wheels should turn in the direction that the blue left arrow points on the control panel.
  - 31 Depress the thumb rocker switch in the direction identified by the white right arrow on the control panel.
    - Result: The steer wheels should turn in the direction that the white right arrow points on the control panel.

### Test Drive and Braking

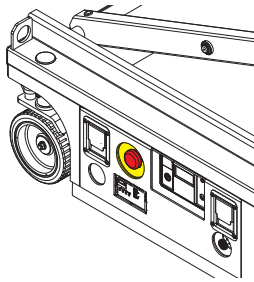
- 32 Press and hold the Function Enable Switch on the control handle.
- 33 Slowly move the control handle in the direction indicated by the blue up arrow on the control panel until the machine begins to move, then return the handle to the center position.
  - Result: The machine should move in the direction that the blue up arrow points on the control panel, then come to an abrupt stop.
- 34 Press and hold the Function Enable Switch on the control handle.
- 35 Slowly move the control handle in the direction indicated by the yellow down arrow on the control panel until the machine begins to move, then return the handle to the center position.
  - Result: The machine should move in the direction that the yellow down arrow points on the control panel, then come to an abrupt stop.

**Note:** The brakes must be able to hold the machine on any slope it is able to climb.

### Test Limited Drive Speed

- 36 Press the lift Function Enable Switch. Raise the platform approximately 5 ft / 1.5 m from the ground.
  - 37 Press the drive function select switch.
  - 38 Press and hold the Function Enable Switch on the control handle.
  - 39 Slowly move the control handle to the full drive position.
- Result: The maximum achievable drive speed with the platform raised should not exceed 0.55 ft per second / 16.7 cm/s.
  - If the drive speed with the platform raised exceeds 0.55 ft per second / 16.7 cm/s, immediately tag and remove the machine from service.

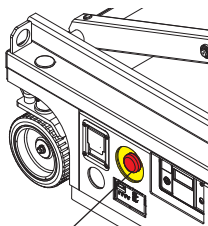
## Operating Instructions



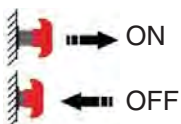
**Check the area above and around the machine for obstructions and electrical power lines before operating the machine.**

### Emergency Stop

- Push in the red Main Power/Lower Emergency Stop Switch button to the off position at the ground controls or the platform controls to stop all machine functions.
- Repair any function that operates when either red Emergency Stop button is pushed in.



Main Power/  
Lower Emergency  
Stop Switch



ART\_5231

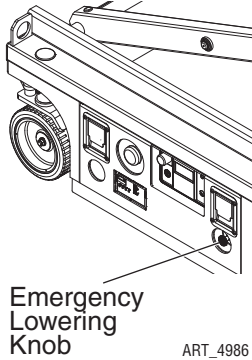


## Emergency Lowering

### WARNING

***If the control system fails while the platform is elevated, use the emergency lowering procedure to safely lower the platform.***

***Do not climb down the scissor assembly or exit the platform.***



The Emergency Lowering System is used to lower the platform in case of power failure.

- Pull the Emergency Lowering Knob to lower the platform.

## Operation from Ground

Drive and steer functions are not available from the ground controls.

- 1 Turn the Key Switch to ground control.
- 2 Set the red Emergency Stop buttons to the ON position at both the ground and platform controls.
- 3 Be sure the battery pack is connected before operating the machine.



### WARNING

***Check the area above and around the machine for obstructions and electrical power lines before operating the machine.***

## To Position Platform

Move the up/down toggle switch according to the markings on the control panel.





ART\_4989

## Operation from Platform

- 1 Turn the Key Switch to platform control.
- 2 Set the red Emergency Stop buttons to the ON position at both the ground and platform controls.
- 3 Be sure the battery pack is connected before operating the machine.

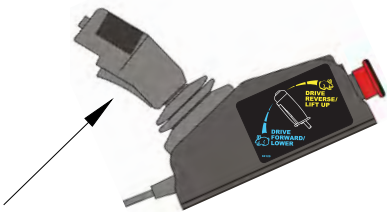
### WARNING

**Check the area above and around the machine for obstructions and electrical power lines before operating the machine.**



### To Position Platform

- 1 Press the lift function select button.
- 2 Press and hold the Function Enable Switch on the control handle.
- 3 Move the control handle according to the markings on the control panel.

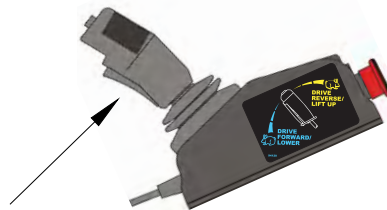


**Function Enable Switch**

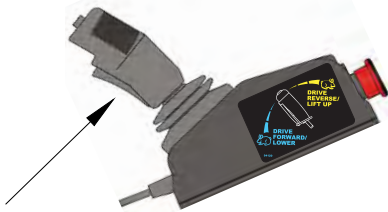
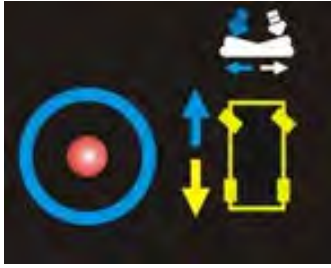


### To Steer

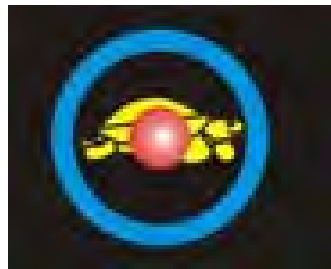
- 1 Press the drive function select button.
- 2 Press and hold the Function Enable Switch on the control handle.
- 3 Turn the steer wheels with the thumb rocker switch located on the top of the control handle.



**Function Enable Switch**



Function Enable Switch



## To Drive

- 1 Press the drive function select button.
- 2 Press and hold the Function Enable Switch on the control handle.
  - Increase speed: Slowly move the control handle off center.
  - Decrease speed: Slowly move the control handle toward center.
  - Stop: Return the control handle to center or release the Function Enable Switch.

Use the color-coded direction arrows on the platform controls to identify the direction the machine will travel.

Machine travel speed is restricted when the platform is raised.

Battery condition will affect machine performance. Machine drive speed and function speed will drop when the battery level indicator is flashing.

## To Reduce Drive Speed

The drive controls can operate in two different drive speed modes. When the drive speed button light is on, slow drive speed mode is active. When the button light is off, fast drive speed mode is active.

Press the drive speed button to select the desired drive speed.

## Driving On A Slope

Determine the slope and side slope ratings for the machine and determine the slope grade.

Maximum forward/rearward slope rating, stowed position 25%.

Maximum side slope rating, stowed position 5°.

**Note:** Slope rating is subject to ground conditions and adequate traction.

Press the drive speed button to the slow drive speed mode.

## To determine the slope grade

Measure the slope with a digital inclinometer OR use the following procedure.

You will need:

- Carpenter's level
- Straight piece of wood, at least 3.3 ft / 1 m long
- Tape measure

Lay the piece of wood on the slope.

At the downhill end, lay the level on the top edge of the piece of wood and lift the end until the piece of wood is level.

While holding the piece of wood level, measure the distance from the bottom of the piece of wood to the ground.

Divide the tape measure distance (rise) by the length of the piece of wood (run) and multiply by 100.

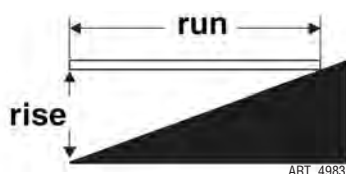
Example:

$$\text{Run} = 12 \text{ ft} / 3.6 \text{ m}$$

$$\text{Rise} = 12 \text{ in} / 0.3 \text{ m}$$

$$12 \text{ in} \div 12 \text{ ft} = 0.083 \times 100 = 8.3\%$$

$$0.3 \text{ m} \div 3.6 \text{ m} = 0.083 \times 100 = 8.3\%$$



ART\_4983

If the slope exceeds the maximum slope or side slope rating, the machine must be winched or transported up or down the slope. See Transport and Lifting section.

## Operation from Ground with Controller

### WARNING

**Use extreme caution when operating the machine with the controller from the ground**

Maintain safe distances between operator, machine and fixed objects.

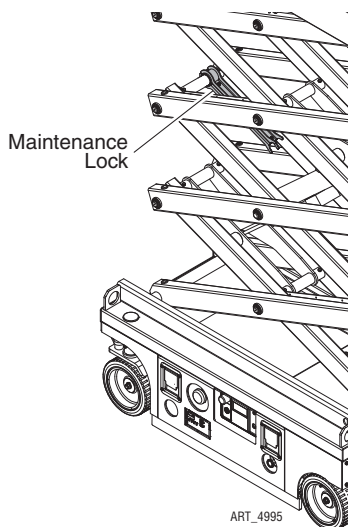
Be aware of the direction the machine will travel when using the controller.

## Battery Level Indicator



Use the LED diagnostic readout to determine the battery level.

## Maintenance Lock

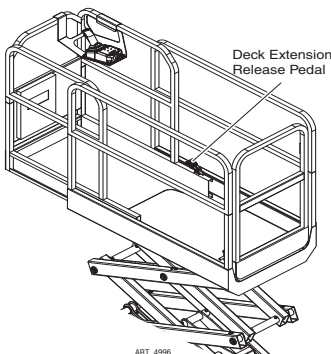


- 1 Raise the platform approximately 7.2ft / 2.2m from the ground.
- 2 Rotate the Maintenance Lock away from the machine and let it hang down.
- 3 Lower the platform until the Maintenance Lock rests securely on the link. Keep clear of the Maintenance Lock when lowering the platform.

### DANGER

**Don't engage the Maintenance Lock unless the platform is empty of tools and material.**

## To Extend and Retract the Deck Extension



- 1 Press the platform lock pin foot pedal on the extension deck.
- 2 Push the platform extension guardrail to extend the platform to the desired position.

Do not stand on the platform extension while extending or retracting it.

**! WARNING**

**IF THE ROLL-OUT DECK IS EXTENDED CHECK FOR CLEARANCE UNDER DECK AREA BEFORE LOWERING PLATFORM.**

## Error Indicator Readout

Consult the Service & Parts Manual for Alarm Code descriptions.



ART\_4985

## Shutdown Procedure

- When finished with the machine, place the platform in the stowed position.
- Park the machine on a level surface.
- Turn the Key Switch to the OFF position and remove the key to prevent unauthorized use.
- Carefully exit the platform using a constant three (3) point dismount/grip.
- Push in the red Main Power/Lower Emergency Stop Switch button to the OFF position when leaving the machine at the end of the work day.
- Charge the batteries.

## Battery Charging

**! WARNING**

**The charger surface can get hot while operating. Contact with the skin or surrounding materials should be avoided.**

**To reduce the risk of an electric shock, connect only to a properly grounded single-phase (3 wire) outlet.**

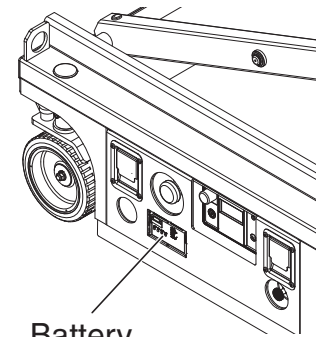
**Do not use an external charger or booster battery.**

**Charge the battery in a well-ventilated area.**

**! CAUTION**

**Use proper AC input voltage for charging as indicated on the machine.**

**Use only MEC authorized batteries and chargers.**



Battery Charger

ART\_4997

**IMPORTANT—** Be sure to disconnect the charger from the outlet before attempting to operate the unit.

The charger will indicate the status of the charge cycle.

# Maintenance

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**DO NOT** operate this machine until you have read and understood this manual, have performed the Workplace Inspection, Pre-Start Inspection and Routine Maintenance, and have completed all the test operations detailed in the Operating Instructions section.

The operator must conduct a Pre-Start Inspection of the machine and test all functions before each work shift to check for damage, malfunction and unauthorized modification. The inspection is designed to discover if anything is apparently wrong with a machine before the operator performs the function tests.

Tag and remove a damaged, malfunctioning or modified machine from service. **DO NOT** use a damaged, malfunctioning or modified machine.

Use the Pre-Start Inspection to determine what Routine Maintenance is required. The operator may perform only the routine maintenance items specified in this manual.

**IMPORTANT**—Scheduled maintenance inspection checklists are included in this manual for use only by qualified service technicians. Only qualified service technicians may perform repairs to the machine. After repairs are completed, the operator must perform a Pre-Start Inspection before proceeding to the Functions Test.



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**Hydraulic fluid under pressure can penetrate and burn skin, damage eyes, and may cause serious injury, blindness, and death. Repair leaks immediately. Fluid leaks under pressure may not always be visible. Check for pin hole leaks with a piece of cardboard, not your hand.**

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**NEVER perform work or inspection on the machine with the platform elevated without first blocking the scissor assembly with the Maintenance Lock (see page 18).**

**Perform scheduled maintenance at recommended intervals. Failure to perform scheduled maintenance at recommended intervals may result in a defective or malfunctioning machine and may result in injury or death of the operator. Keep maintenance records current and accurate.**

**Immediately report any damage, defect, unauthorized modification or malfunction to your supervisor. Any defect must be repaired prior to continued use. DO NOT use a damaged, modified or malfunctioning machine.**

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**Never leave hydraulic components or hoses open. Plug all hoses and fitting immediately after disassembly to protect the system from outside contamination (including rain).**

**Never open a hydraulic system when there are contaminants in the air.**

**Always clean the surrounding area before opening hydraulic systems.**

**Use only recommended lubricants. Improper lubricants or incompatible lubricants may cause as much damage as no lubrication.**

**Watch for makeshift "fixes" which can jeopardize safety as well as lead to more costly repair.**

**Inspection and maintenance should be performed by qualified personnel familiar with the equipment.**

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## Routine Maintenance

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**NEVER perform work or inspection on the machine with the platform elevated without first blocking the scissor assembly with the Maintenance Lock. See page 18 for instructions.**

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**IMPORTANT**—The operator may perform only maintenance items on the Pre-Start Inspection Checklist. Frequent and Annual maintenance must be performed by qualified service technicians.

**Pre-Start Inspection** Perform routine maintenance as identified in the *Pre-Start Inspection Checklist* on page 23.

## Frequent and Annual Maintenance

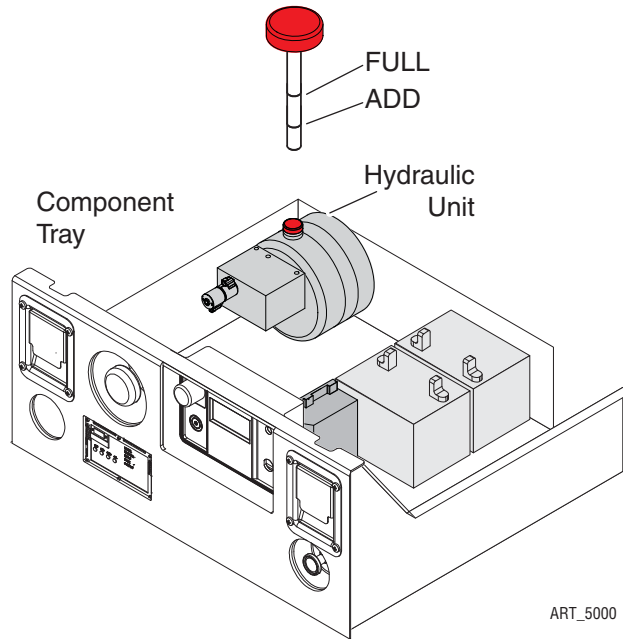
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Frequent Inspection Checklists and Annual Inspection Reports must be completed by qualified service technicians trained and authorized to perform maintenance on this machine, and must be done in accordance with the procedures outlined in the service manual. Scheduled maintenance inspection checklists are included in this manual for use by qualified service technicians.

Machines that have been out of service for more than three months must have the Frequent Inspection Checklists completed before returning to service.

# Lubrication

Operator may perform routine maintenance only. Lubrication listed as Scheduled Maintenance must be performed by a qualified service technician.



## Lubrication

| No. | ITEM                          | SPECIFICATION  | FREQUENCY  |
|-----|-------------------------------|--|--|
| 1   | Hydraulic Reservoir           | Mobile Fluid DTE 10, DTE 13 M, or AW32<br><br><b>Do not substitute other fluids as pump damage may result.</b><br>Fill to the middle of the dipstick with platform in the stowed position. | <b>Routine Maintenance</b><br>Check hydraulic oil level every week<br><b>Scheduled Maintenance</b><br>Change yearly or every 600 hours, whichever occurs first   |
| 2   | Hydraulic Cap Breather Filter | Breather Filter (located inside Filler Cap)  | <b>Scheduled Maintenance</b><br><b>Normal Conditions</b><br>Change every six months or 300 hours, whichever occurs first<br><b>Severe Conditions--very dusty, exceptionally hot or exceptionally cold conditions</b><br>Change every three months or 150 hours, whichever occurs first |



## Pre-Start Inspection Checklist

---

The operator must conduct a Pre-Start Inspection of the machine before each work shift.

DO NOT use a damaged or malfunctioning machine.

| Initial | Description  |
|---------|--|
| _____   | Be sure that the operator's manual are complete, legible and in the storage container located in the platform. |
| _____   | Be sure that all decals are legible and in place. See Decals section.  |
| _____   | Check for hydraulic oil leaks.   |
| _____   | Check for battery fluid leaks.   |

Check the following components or areas for damage, improperly installed or missing parts and unauthorized modifications:

- \_\_\_\_\_ Electrical components, wiring and electrical cables
- \_\_\_\_\_ Battery connections
- \_\_\_\_\_ Hydraulic hoses, fittings, cylinders and manifolds
- \_\_\_\_\_ Battery pack and connections
- \_\_\_\_\_ Drive motors
- \_\_\_\_\_ Tires and wheels
- \_\_\_\_\_ Ground strap
- \_\_\_\_\_ Limit switches, alarm and beacon
- \_\_\_\_\_ Nuts, bolts and other fasteners
- \_\_\_\_\_ Platform entry gate
- \_\_\_\_\_ Safety arm
- \_\_\_\_\_ Platform extension
- \_\_\_\_\_ Scissor pins and retaining fasteners
- \_\_\_\_\_ Platform control joystick

Check entire machine for:

- \_\_\_\_\_ Cracks in welds or structural components
- \_\_\_\_\_ Dents or damage to machine
- \_\_\_\_\_ Be sure that all structural and other critical components are present and all associated fasteners and pins are in place and properly tightened
- \_\_\_\_\_ Be sure that the Component Tray is closed and latched and the batteries are properly connected.



***NEVER perform work or inspection on the machine with the platform elevated without first blocking the scissor assembly with the Maintenance Lock. See page 18 for instructions.***

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# Frequent Inspection Checklist



***This checklist must be used at 3-month intervals or every 150 hours of machine use, whichever occurs first. Failure to do so could result in death or serious injury.***

Frequent Maintenance Inspections should be conducted by qualified service technicians only. Photocopy this page for reuse. Keep inspections records up to date. Record and report all discrepancies to your supervisor. See the Service & Parts Manual for specific instructions.

**Model Number** \_\_\_\_\_ **Serial Number** \_\_\_\_\_ **Hour Meter Reading** \_\_\_\_\_

| Initial | Description |
|---------|-------------|
|---------|-------------|

- \_\_\_\_\_ Perform all checks listed on Pre-Start Inspection.
- \_\_\_\_\_ Inspect the condition of hydraulic fluid in the reservoir. Oil should be a clear and amber in color.
- \_\_\_\_\_ Batteries
- \_\_\_\_\_ Electrical wiring
- \_\_\_\_\_ Tires and wheels
- \_\_\_\_\_ Emergency stop
- \_\_\_\_\_ Key switch
- \_\_\_\_\_ Horn (if equipped)
- \_\_\_\_\_ Drive brakes
- \_\_\_\_\_ Drive speed - raised

## Additional maintenance requirements for severe conditions

If the machine is used in very dusty, exceptionally hot or exceptionally cold conditions, replace the Hydraulic Cap Breather Filter (under normal conditions replace every 6 months or 300 hours, whichever comes first).

**DATE** \_\_\_\_\_ **INSPECTED BY** \_\_\_\_\_



# Annual Inspection Report



## Annual Inspection Report

**MEC Aerial Platform Sales Corp.**  
 1401 S. Madera Avenue • Kerman, CA 93630 USA  
 800-387-4575 • 559-842-1500 • Fax: 559-842-1522

Date \_\_\_\_\_  
 Serial Number \_\_\_\_\_  
 Model Number \_\_\_\_\_  
 Date Of Last Inspection \_\_\_\_\_  
 Date Placed In Service \_\_\_\_\_

Customer \_\_\_\_\_  
 Street \_\_\_\_\_  
 City/State/Zip \_\_\_\_\_  
 Phone Number \_\_\_\_\_  
 Contact \_\_\_\_\_

Dealer \_\_\_\_\_  
 Street \_\_\_\_\_  
 City/State/Zip \_\_\_\_\_  
 Phone Number \_\_\_\_\_  
 Contact \_\_\_\_\_

- Check each item listed below.
- Use proper Operator's, Service and Parts manual for specific information and settings.
- If an item is found to be "Unacceptable" make the necessary repairs and check the "Repaired" box.
- When all items are "Acceptable", the unit is ready for service.

**Key:** 'Y' Yes/Acceptable  
 'N' No/Unacceptable  
 'R' Repaired  
 'U' Unnecessary/Not Applicable

|                              | Y | N | R | U |                               | Y | N | R | U |                                    | Y | N | R | U |
|------------------------------|---|---|---|---|-------------------------------|---|---|---|---|------------------------------------|---|---|---|---|
| <b>Decals:</b>               |   |   |   |   | <b>Base:</b>                  |   |   |   |   | <b>Operation:</b>                  |   |   |   |   |
| Proper Placement/Quantity    |   |   |   |   | Cover Panels Secure           |   |   |   |   | Wires Tight                        |   |   |   |   |
| Legibility                   |   |   |   |   | Base Fasteners Tight          |   |   |   |   | Switches Secure                    |   |   |   |   |
| Correct Capacity Noted       |   |   |   |   | Bolts Tight                   |   |   |   |   | All Functions Operational          |   |   |   |   |
| <b>Rails:</b>                |   |   |   |   | <b>Axle/Wheel Assemblies:</b> |   |   |   |   | <b>Emergency Down:</b>             |   |   |   |   |
| All Rail Fasteners Secure    |   |   |   |   | Wheel Mounting Secure         |   |   |   |   | Operational                        |   |   |   |   |
| Entry Gate Closes Properly   |   |   |   |   | Steering Cylinder Pins Secure |   |   |   |   | <b>Slow Speed Limit Switch:</b>    |   |   |   |   |
| Manual/Safety Data In Box    |   |   |   |   | Pivot Points Lubed            |   |   |   |   | Set Properly                       |   |   |   |   |
|                              |   |   |   |   | Castle Nut Torqued Properly   |   |   |   |   | <b>Pothole Bars:</b>               |   |   |   |   |
| <b>Extending Platform:</b>   |   |   |   |   | Cotter Pinned                 |   |   |   |   | Operate Smoothly                   |   |   |   |   |
| Slides Freely                |   |   |   |   |                               |   |   |   |   | Lock In Place                      |   |   |   |   |
| Latches In Stowed Position   |   |   |   |   |                               |   |   |   |   | Limit Switches Adjusted            |   |   |   |   |
| Latches In Extended Position |   |   |   |   | <b>Component Area:</b>        |   |   |   |   | <b>Pressures &amp; Hydraulics:</b> |   |   |   |   |
| Cable Secure                 |   |   |   |   | Valve Manifold(s) Secure      |   |   |   |   | Oil Level Correct/Chg              |   |   |   |   |
|                              |   |   |   |   | Hoses Tight/No Leaks          |   |   |   |   | Steering Pressure Set              |   |   |   |   |
| <b>Platform:</b>             |   |   |   |   | D/C Mtr(s) Secure/Operational |   |   |   |   | Lift Pressure Set                  |   |   |   |   |
| Platform Bolts Tight         |   |   |   |   | Contactors Secure             |   |   |   |   | Replace Breather Cap               |   |   |   |   |
| Platform Structure           |   |   |   |   | Pump Secure                   |   |   |   |   | Inspect Hydraulic Oil:             |   |   |   |   |
|                              |   |   |   |   | <b>Batteries:</b>             |   |   |   |   | Replace If Needed                  |   |   |   |   |
|                              |   |   |   |   | Secure                        |   |   |   |   |                                    |   |   |   |   |
|                              |   |   |   |   | Fully Charged                 |   |   |   |   |                                    |   |   |   |   |
| <b>Wire Harnesses:</b>       |   |   |   |   | <b>Battery Charger:</b>       |   |   |   |   |                                    |   |   |   |   |
| Mounted Correctly            |   |   |   |   | Secure                        |   |   |   |   |                                    |   |   |   |   |
| Physical Appearance          |   |   |   |   | Operational                   |   |   |   |   |                                    |   |   |   |   |
| 110/220V Outlet Safe/Working |   |   |   |   | <b>Emergency Stop:</b>        |   |   |   |   |                                    |   |   |   |   |
|                              |   |   |   |   | Breaks All Circuits           |   |   |   |   |                                    |   |   |   |   |
| <b>Elevating Assembly:</b>   |   |   |   |   | <b>Maintenance Lock:</b>      |   |   |   |   |                                    |   |   |   |   |
| Beam Structures              |   |   |   |   | Secure                        |   |   |   |   |                                    |   |   |   |   |
| Welds                        |   |   |   |   | Operational                   |   |   |   |   |                                    |   |   |   |   |
| Retaining Rings              |   |   |   |   |                               |   |   |   |   |                                    |   |   |   |   |
| Cylinder Pins Secure         |   |   |   |   |                               |   |   |   |   |                                    |   |   |   |   |
| Scissor Slide Blocks*        |   |   |   |   |                               |   |   |   |   |                                    |   |   |   |   |

\*See Service & Parts Manual for instructions

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature/Mechanic: \_\_\_\_\_  
 Signature/Owner-User: \_\_\_\_\_

Date: \_\_\_\_\_  
 Date: \_\_\_\_\_

P/N 90728 Rev. 3 -- 13305E

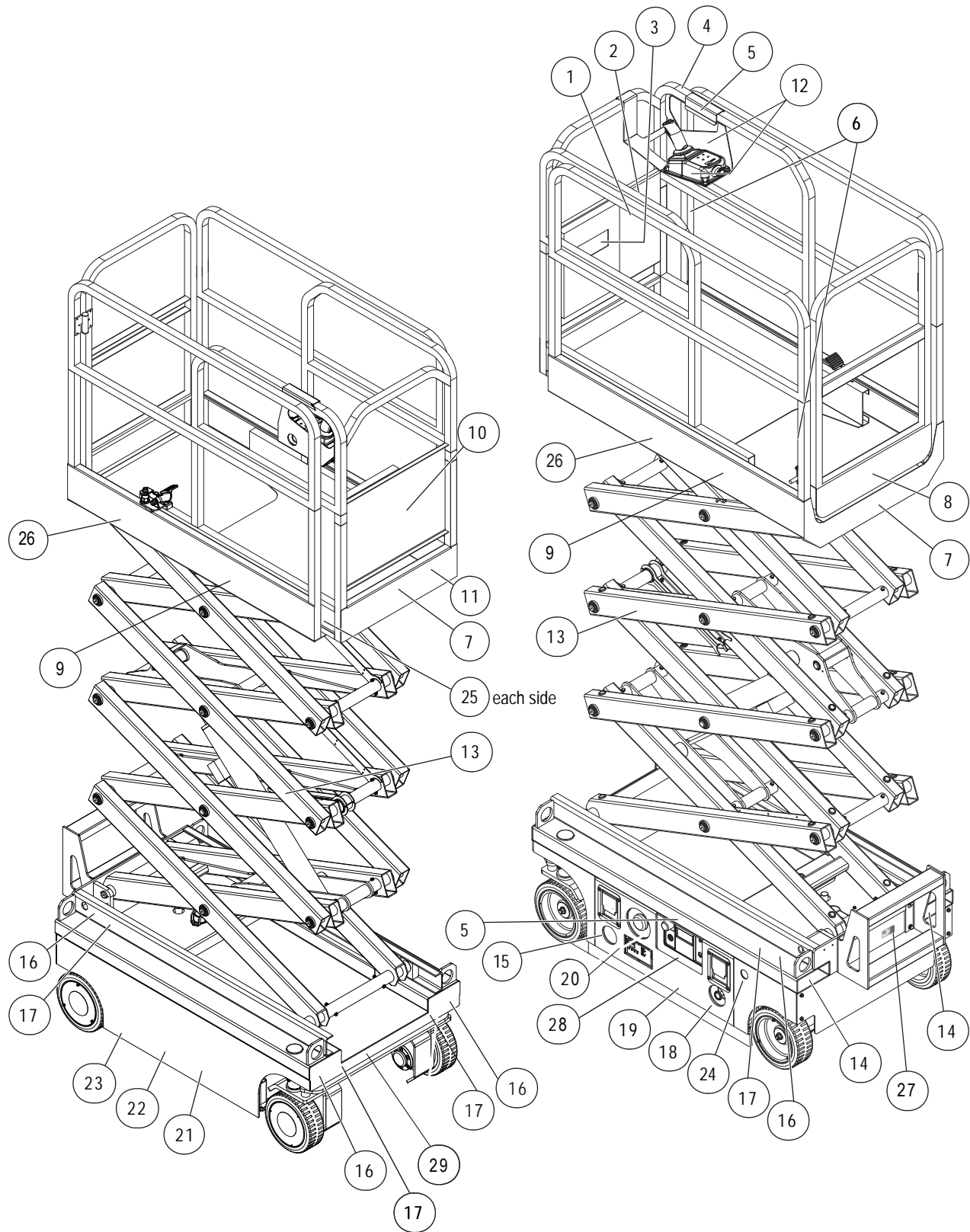


## Warning and Instructional Decals

All warning and instructional decals must be present, legible and secure.

| No. | Part No.  | Qty. | Description   |
|-----|-----------|------|---|
| 1   | 9414137UM | 1    | Danger - Safety Rules   |
| 2   | 9414103   | 1    | Danger - Tip-over Hazard                                      |
| 3   | 8911      | 1    | Decal, Manual Inside  |
| 4   | 9314015   | 1    | Instructions - Platform Controller Normal Position            |
| 5   | 9314013   | 2    | Instructions - Refer The Operator To The Instructions For Use |
| 6   | 9414123   | 2    | Label - Lanyard Anchorage                                     |
| 7   | 9414055UM | 2    | Label - Capacity 500 Ibs                                      |
| 8   | 94115     | 2    | MEC Oval small  |
| 9   | 94114     | 2    | MEC Square  |
| 10  | 90719     | 1    | MEC Oval Large  |
| 11  | 9413013   | 1    | Danger - Crushing Hazard                                      |
| 12  | 94120     | 1    | Decal, Control Handle, Side                                   |
| 13  | 9313011   | 2    | Instructions - Safety Arm                                     |
| 14  | 9311011   | 2    | Instructions - Forklift Pockets                               |
| 15  | 90750     | 1    | Decal, Battery Charger  |
| 16  | 9311015   | 4    | Instructions - Tie Down Point                                 |
| 17  | 9311013   | 4    | Instructions - Lift Point                                     |
| 18  | 9311017   | 1    | Instructions - Emergency Lower                                |
| 19  | 9411043   | 1    | Warning - Tip-over Hazard                                     |
| 20  | 9311105   | 1    | Notice - Main Power Switch Operation                          |
| 21  | 9411011   | 1    | Danger - Explosion / Burn Hazard                              |
| 22  | 9411029   | 1    | Warning - Inspected And Operation Properly                    |
| 23  | 9211017   | 1    | Decal - Manufacturer's Plate                                  |
| 24  | 90751     | 1    | Decal, Power To Platform                                      |
| 25  | 91850     | 2    | Decal, Crush Hazard   |
| 26  | 94559     | 2    | Decal, Micro 19   |
| 27  | 94374     | 1    | Decal, Serial #, Small  |
| 28  | 94558     | 1    | Decal, Ground Console Panel                                   |
| 29  | 94423     | 1    | Decal, Direct Electric Drive                                  |

### Decal Locations



Decals (continued)

Platform

1 9414137UM

**⚠ DANGER**

Failure to read, understand and obey the operator's manual and the following safety rules will result in death or serious injury.

**Improper Use Hazard**  
 Do not exceed the maximum side force or maximum occupant ratings for this machine.  
 The operator is responsible for safe machine operation. This includes:  
 1. Avoid hazardous situations.  
 2. Always perform a pre-operation inspection.  
 3. Always perform function tests prior to use.  
 4. Inspect work place.  
 5. Only use the machine as it was intended.

**Do not operate unless you are properly trained to safely operate this machine and you read, understand and obey:**  
 • Manufacturer's instructions and safety rules, safety and operator's manuals and decals  
 • Employer's safety rules  
 • Applicable government regulations

**Electrocution Hazards**  
 This machine is not electrically insulated and will not provide protection from contact with or proximity to electrical current.

| Minimum Safe Approach Distance |                                |
|--------------------------------|--------------------------------|
| Voltage                        | Minimum Safe Approach Distance |
| Up to 300V                     | Avoid Contact                  |
| 300V to 600V                   | 15' (4.6m)                     |
| 600V to 1000V                  | 15' (4.6m)                     |
| 1000V to 2000V                 | 20' (6.1m)                     |
| 2000V to 3000V                 | 25' (7.6m)                     |
| 3000V to 750 kV                | 35' (10.7m)                    |
| 750 kV to 1000 kV              | 45' (13.7m)                    |

**Tip-Over Hazards**  
 Do not elevate the platform unless the machine is on a firm level surface. Do not elevate the platform on or drive while elevated onto soft, sloped or uneven surfaces. Do not drive near drop-offs, holes, elevator shafts, loading docks or other hazards.  
 Do not depend on tilt alarm as a level indicator. The tilt alarm sounds in platform only when machine is on a severe slope.  
 Do not drive the machine on a slope that exceeds the maximum slope or side slope rating of the machine. Platform must be fully lowered when driving on any grade or side slope.  
 Do not elevate the platform when wind speeds may exceed 28 mph (12.5 m/s). Do not operate the machine in strong or gusty winds. Do not increase the surface area of the platform. Increasing surface area exposed to the wind will decrease machine stability.  
 Do not exceed the maximum platform or deck extension load capacity. Uniformly distribute the load. Place load near the center of the platform when possible.  
 Do not alter or disable safety components that in any way affect safety and stability.

**Fall Hazards**  
 Do not place or attach overhanging loads to any part of this machine.  
 Do not place ladders or scaffolds on platform or against any part of this machine.  
 Do not use this machine on a moving or mobile surface or vehicle.  
 Be sure all ties are in good condition, that ladders are properly latched and that other pins are installed.  
 Securely close all platform entries before operating the machine.  
 Do not sit, stand or climb on the platform guard rails. Maintain a firm footing on the platform floor at all times.  
 Do not use this machine without guard rails and platform entries properly in place.  
 Do not climb down from the platform when tilted.  
 Do not use this machine without guard rails and platform entries properly in place.

**Collision/Crushing Hazards**  
 Be aware of limited sight distance and blind spots when driving or operating.  
 Check work area for overhead obstructions or other hazards.  
 Be aware of crushing hazards when grasping the platform guard rails.  
 Do not use near moving vehicles or cranes.  
 Do not lower the platform unless the area below is clear of personnel and obstructions.  
 Keep all body parts away from the elevating assembly. Use extreme caution when operating the machine from the ground with the platform controller.  
 Observe and use directional arrows on platform controls for drive and steer functions.

**Explosion Hazards**  
 Do not recharge batteries near sparks or open flames.

**Damaged Machine Hazards**  
 Do not use a damaged or malfunctioning machine.  
 Be sure all maintenance has been performed as specified in the appropriate operator's and service manuals.  
 Be sure all decals are in place and legible.  
 Be sure safety, operator's and responsibilities manuals are complete, legible and in the storage container located on the platform.

3 8911



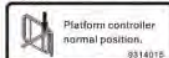
2 9414103

**⚠ DANGER**

**Tip-over Hazard**  
 If tilt alarm sounds, until it is an severe slope, death or serious injury could occur.

1. Lower the platform.  
 2. Move the machine to level surface.

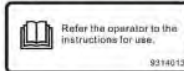
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5 9314013



8 94115



25 91850



10 90719



7 94561

**⚠ WARNING**

MAXIMUM PLATFORM CAPACITY - EVENLY DISTRIBUTED

| EXTENSION RETRACTED | EXTENSION EXTENDED | SIDE LOAD         |
|---------------------|--------------------|-------------------|
| 530 LBS<br>240 kg   | 310 LBS<br>140 kg  | 220 LBS<br>100 kg |
| 2 PERSONS           | 1 PERSON           | 1 PERSON          |

100 LBS  
445 N

11 9413013

**⚠ DANGER**

**Crushing Hazard**  
 Contact with moving parts will result in death or serious injury.

• Do not stand under or around platform during operation.  
 • Keep away from moving parts.  
 Failure to follow these instructions could result in death or serious injury.

12 94120



Scissor Arms

13 9313011



9 94114



26 94559



Chassis

14 9311011



17 9311013



18 9311017



19 9411043

**⚠ WARNING**

**Tip-over Hazard**  
 Do not use batteries that weigh less than the original equipment. Batteries are used as counterweight and are critical to machine stability. Each battery must weigh 55 lbs / 25 kg. The batteries must weigh a minimum of 110 lbs / 50 kg.

23 94113

**MEC** Aerial Work Platform

| MODEL NUMBER                      | MODEL YEAR |
|-----------------------------------|------------|
| XXXXXX                            | XXXX       |
| SERIAL NUMBER                     | MODEL YEAR |
| XXXXXXXXXX                        | XXXX       |
| MAXIMUM CAPACITY                  | XXXX LBS   |
| ADD 100% TO 10% OPERATOR'S WEIGHT | XXXX LBS   |
| MAX. PLATFORM HEIGHT              | XX FT      |
| MACHINE WEIGHT                    | XXXX LBS   |
| ELECTRICAL VOLTAGE                | XX VOLTS   |
| MAX. LOAD PER WHEEL               | XXXX LBS   |

THIS MACHINE HAS BEEN CONSTRUCTED TO ACCOMMODATE THE FOLLOWING LOADS AND OPERATING CONDITIONS:  
 1. ALL LOADS MUST BE EVENLY DISTRIBUTED.  
 2. ALL LOADS MUST BE WITHIN THE PLATFORM'S CAPACITY.  
 3. ALL LOADS MUST BE WITHIN THE PLATFORM'S REACH.

15 90750



20 9311105

**NOTICE**

Cut off the power when the machine is repaired or not used for long period.

ON OFF

22 9411029

**⚠ WARNING**

THIS MACHINE MUST NOT BE USED UNTIL IT IS INSPECTED AND OPERATING PROPERLY.

- Do not operate this machine unless you have been properly trained by a qualified person and authorized to operate this machine. Your training includes reading and understanding the safety, operating and maintenance instructions in manufacturer's manuals, knowing your employer's work rules and applicable governmental regulations.
- Follow the instructions in the Operating Manual and applicable standards for daily, frequent, and annual inspections.
- Do not replace items (e.g. Batteries, wheels, Counterweight, etc.) with items of different weight or specification because this will affect stability of machine.
- Do not modify or change machine without written approval from manufacturer.
- Operate this machine with extreme caution. STOP all operation if malfunction occurs.
- Improper use of this machine could cause death or serious injury.
- Inspection on this machine is required according to ANSI A92.6 section 6.7 & 8.

21 9411011

**⚠ DANGER**

**Explosion/Burn Hazard**  
 Ignition of explosive gases or contact with corrosive acid will cause death, burns or blindness.

Keep all open flames and sparks away. Wear personal protective equipment, including face shield, gloves and long sleeve shirt.

**READ MANUALS**  
 Read all manuals prior to operation.

**DO NOT OPERATE** equipment if you do not understand the information in the manuals.

Consult your supervisor, the cover to the manufacturer.

27 94374



24 90751

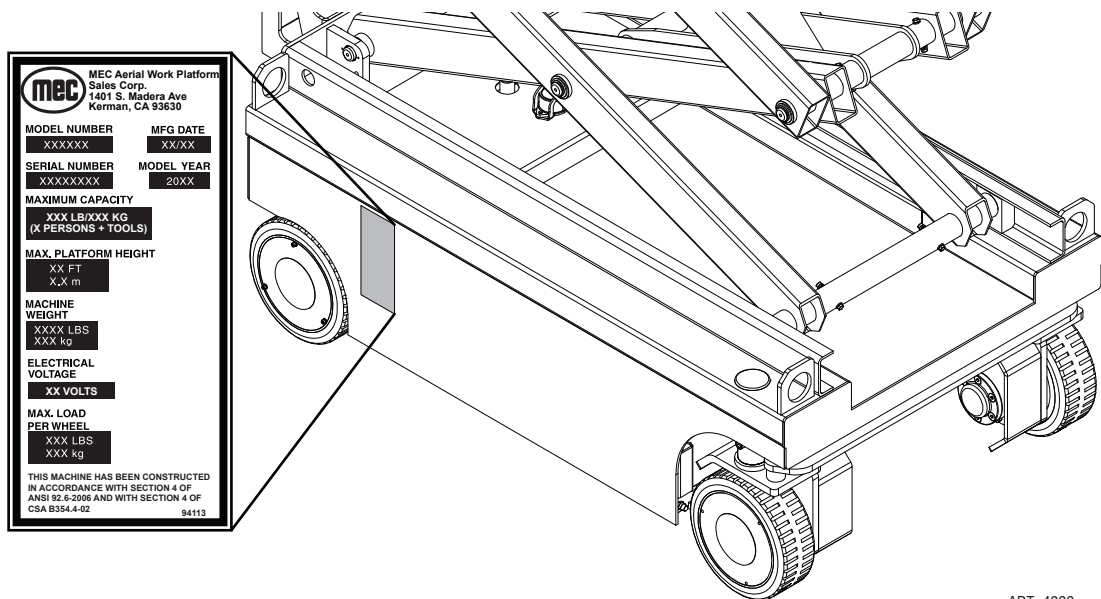


28 94558



## Serial Plate Location

The serial plate is attached to the machine at the time of manufacture. Important information about the machine is recorded on the serial plate.



ART\_4999

## Serial Plate Description

**MODEL NUMBER.** Identifies the machine.

**MFG DATE.** Month / Year of manufacture.

**SERIAL NUMBER.** Identifies a machine with reference to its original owner. Refer to the number when requesting information or ordering parts.

**MODEL YEAR.** Machine model year.

**MAX. CAPACITY .** The maximum safe load (material, persons + equipment) which can be correctly placed on the platform at any elevation.

**MAX. PLATFORM HEIGHT.** The maximum attainable height measured from level ground surface to platform floor.

**MACHINE WEIGHT.** The weight of the machine with no options.

**ELECTRICAL VOLTAGE.** The voltage at which this machine operates.

**MAX. LOAD PER WHEEL.** The maximum safe weight applied to each wheel. Calculated with all available options installed.

$$Fw = 30\% (Wm + Wc + Wopt)$$

**MAX HYDRAULIC SYSTEM PRESSURE.** The maximum pressure at which this machine operates.

# Troubleshooting

## WARNING

***Should you experience erratic operation or notice any malfunction while operating this machine, discontinue use immediately. Call for assistance and report the incident to your supervisor, and do not use the machine until it has been checked by a trained, qualified mechanic.***

### Machine functions will not operate

- Master disconnect turned on?
- Batteries properly connected?
- Batteries fully charged?
- Key Switch in proper position?
- Both Emergency Stop Switches reset?
- Function Enable Switch not activated?
- Hydraulic fluid level low?
- Obvious fluid leak or damaged component?
- Wires disconnected, broken, or loose?
- Diagnostic panel on?
- Platform Control Box Fault Code present? Refer to service manual or contact MEC Technical Support.

# Transport and Lifting Instructions

## Safety Information

### WARNING

***This section is provided for reference and does not supersede any government or company policy regarding the loading, transport or lifting of MEC machinery.***

***Truck drivers are responsible for loading and securing machines, and should be properly trained and authorized to operate MEC machinery. Drivers are also responsible for selecting the correct and appropriate trailer according to government regulations and company policy. Drivers must ensure that the vehicle and chains are strong enough to hold the weight of the machine (see the serial number plate for machine weight).***

***While loading and unloading, the transport vehicle must be parked on a level surface and secured to prevent rolling.***

## Loading

### Free-wheel configuration for Winching or Towing

### DANGER

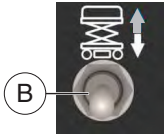
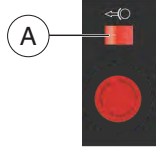
#### ***RUNAWAY HAZARD!***

***After releasing the brakes there is nothing to stop machine travel. Machine will roll freely on slopes. ALWAYS chock the wheels before manually releasing the brakes.***

The machine can be winched or towed short distances at speeds not to exceed 2.5 MPH (4 km/h). Before towing or winching the machine, it is necessary to release the brakes. Reset the brakes after towing or winching.



## Disengage Brakes before Towing or Winching



- 1 Chock the wheels.
- 2 Turn Key Switch to OFF position.
- 3 Ensure both upper and lower E-Stops are on.
- 4 Press and hold Brake Rocker Switch (A) and Lift/Lower Switch (B) down, turn the Key Switch to the Ground position.
- 5 Hold Brake Rocker Switch (A) and Lift/Lower Switch (B) until a continuous alarm sounds, confirming brakes are released.

### Resetting Brakes

Press the Emergency Stop button, then push the Brake Release Switch to the right to reset the brake.

## Driving or Winching onto or off of a Transport Vehicle

### WARNING

***Always attach the machine to a winch when loading or unloading from a truck or trailer by driving. Read and understand all safety, control, and operating information found on the machine and in this manual before operating the machine.***

Before loading or unloading the machine, check that:

- The deck extension, controls and component trays are secure.
- The platform is fully lowered.
- All loose items have been removed.

Before driving or winching the machine:

- Attach the machine to a winch.
- Remove all machine tie downs. Remove wheel chocks.

### Driving

- Turn the Base Key Switch to PLATFORM. Check that the Emergency Stop Switch is reset by turning it clockwise.
- Enter the platform and reset the Platform Emergency Stop Switch.
- Test platform control functions.
- Carefully drive the machine off the transport vehicle with the winch attached.

**Note:** The brakes are automatically released for driving and will automatically apply when the machine stops.

### Winching

- Disengage brakes (see *Free-wheel configuration for Winching or Towing* on page 30).
- Carefully operate the winch to lower the machine down the ramp.
- Chock the wheels and engage the brakes.

### Lifting The Machine With A Forklift

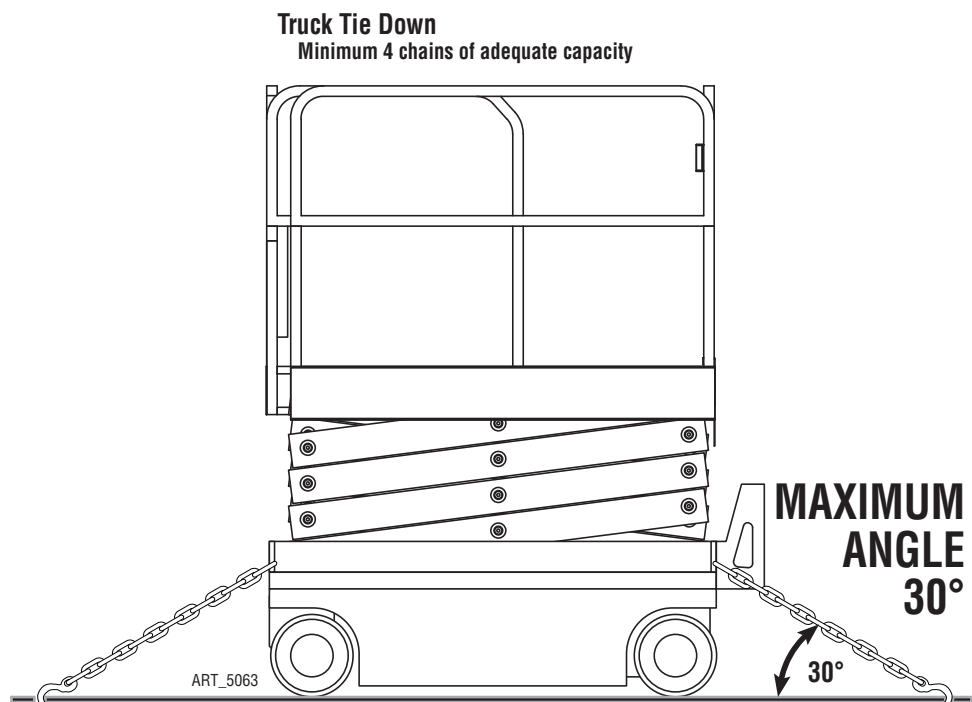
- Position the forklift forks in line with the forklift pockets.
- Drive forward to the full extent of the forks.
- Raise the machine 6 in / 15 cm and then tilt the forks back slightly to keep the machine secure.
- Be sure the machine is level when lowering the forks.

### Securing to Truck or Trailer for Transport

- Turn the Key Switch to OFF and remove the key before transport.
- Inspect the entire machine for loose or unsecured items.
- Chock the wheels
- Use the tie-down points on the chassis for anchoring down to the transport surface.
- Use chains or straps of ample load capacity.
- Use a minimum of four (4) chains or straps.
- Adjust the rigging to prevent damage to the chains and the machine.

#### CAUTION

**Ensure that angle of each hold-down chain or strap does not exceed 30° relative to the trailer deck.**



### Lifting Instructions

#### WARNING

**Only qualified riggers should rig and lift the machine.**

**Ensure that the crane, loading surfaces, spreader bars, cables, chains and straps are of sufficient capacity to withstand the machine weight. See the serial plate for the machine weight.**

- Fully lower the platform. Be sure the deck extension is retracted and the controls and component trays are closed and secure. Remove all loose items from the machine.
- Determine the center of gravity of the machine.
- Attach rigging to the designated lift points *only*.



## **Limited Owner Warranty**

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MEC Aerial Platform Sales Corp. warrants its equipment to the original purchaser against defects in material and/or workmanship under normal use and service for one (1) year from date of registered sale or date the unit left the factory if not registered. MEC Aerial Platform Sales Corp. further warrants the structural weldments of the main frame and scissor arms to be free from defects in material or workmanship for five (5) years from date of registered sale or date unit left the factory if not registered. Excluded from such warranty is the battery(s) which carries a ninety (90) day warranty from described purchase date. Warranty claims within such warranty period shall be limited to repair or replacement, MEC Aerial Platform Sales Corp's option, of the defective part in question and labor to perform the necessary repair or replacement based on MEC Aerial Platform Sales Corp's then current flat rate, provided the defective part in question is shipped prepaid to MEC Aerial Platform Sales Corp. and is found upon inspection by MEC Aerial Platform Sales Corp. to be defective in material and/or workmanship. MEC Aerial Platform Sales Corp. shall not be liable for any consequential, incidental or contingent damages whatsoever. Use of other than factory authorized parts; misuse, improper maintenance, or modification of the equipment voids this warranty. The foregoing warranty is exclusive and in lieu of all other warranties, express or implied. All such other warranties, including implied warranties of merchantability and of fitness for a particular purpose, are hereby excluded. No Dealer, Sales Representative, or other person purporting to act on behalf of MEC Aerial Platform Sales Corp. is authorized to alter the terms of this warranty, or in any manner assume on behalf of MEC Aerial Platform Sales Corp. any liability or obligation which exceeds MEC Aerial Platform Sales Corp's obligations under this warranty.



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