OPERATOR’S MANUAL

This Operator’s Manual MUST BE READ AND UNDERSTOOD prior to operating your MEC Aerial Work Platform.
## Table Of Contents

**Introduction** ........................................................................................................ iii

**Machine Specifications**

1532ES .................................................................................................................. iv
1932ES .................................................................................................................. v

**Section 1: Safety**

Safety Symbols ....................................................................................................... 1-2
Safety Rules And Precautions .............................................................................. 1-3
Fall Protection Notice .......................................................................................... 1-5
Safety And Control Decal Locations ............................................................... 1-6
Safety Related Decals ......................................................................................... 1-8

**Section 2: Operation**

Unloading Procedures .......................................................................................... 2-2
Primary Machine Components .......................................................................... 2-3
Operator Controls ............................................................................................... 2-4
  Base Controls .................................................................................................... 2-5
  Platform Controls ............................................................................................. 2-7
PreStart Inspection ............................................................................................... 2-8
  Machine Start Up .............................................................................................. 2-8
  Base Control Operation And Checks ............................................................ 2-9
  Platform Control Operation And Checks ..................................................... 2-10
Operation ............................................................................................................ 2-11
  Driving And Steering ....................................................................................... 2-11
  Braking ............................................................................................................. 2-12
  Elevating The Platform .................................................................................. 2-12
  Lowering The Platform .................................................................................. 2-12
  Extending The Roll-Out Extension Deck ..................................................... 2-13
Charging the Batteries ......................................................................................... 2-13
Shut Down Procedure ......................................................................................... 2-14
Moving The Machine .......................................................................................... 2-14
Emergency Systems And Procedures .............................................................. 2-16
  Emergency Lowering ...................................................................................... 2-17
Section 3: Maintenance

General Maintenance Tips ................................................................. 3-2
Shift Operational Checklist .............................................................. 3-4
Weekly Operational Checklist ............................................................ 3-6
Monthly Operational Checklist .......................................................... 3-7
Quarterly Operational Checklist ......................................................... 3-8
Semi-Annual Operational Checklist .................................................. 3-9
Troubleshooting .............................................................................. 3-11
  What To Check If Machine Will Not Start ......................................... 3-11
  What To Check If Functions Will Not Operate .................................. 3-11
Lubrication Diagram ................................................................. 3-12
Lubrication Chart ........................................................................ 3-13

Warranty
Introduction

This Operations and Safety manual has been designed to provide you, the customer, with the instructions and operating procedures essential to properly and safely operate your MEC Self-Propelled Scissors for its intended purpose of positioning personnel, along with their necessary tools and materials to overhead work locations.

⚠️ DANGER ⚠️

THE OPERATOR’S MANUAL MUST BE READ AND UNDERSTOOD PRIOR TO OPERATING YOUR MEC SELF-PROPELLED SCISSORS. THE USER/OPERATOR SHOULD NOT ACCEPT OPERATING RESPONSIBILITY UNTIL THE OPERATOR’S MANUAL HAS BEEN READ AND UNDERSTOOD AS WELL AS HAVING OPERATED THE MEC SCISSORLIFT UNDER SUPERVISION OF AN EXPERIENCED AND QUALIFIED OPERATOR.

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 Scissor Lift has been designed, built, and tested to provide many years of safe, dependable service. Only trained, authorized personnel should 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 User And All Operating Personnel.

If There Is A Question On Application And/Or Operation Contact:

Aerial Work Platforms
Mayville Engineering Co., Inc.
An Employee Owned Company
210 Corporate Drive-Box 990 • Beaver Dam, WI 53916-0990 USA
Ph: 1-800-387-4575 • 920-887-2518 • Fax: 920-887-2480
E-mail:awp@mayvl.com • Web: www.mayvl.com

# Machine Specifications - 1532ES

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value 1</th>
<th>Value 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Working Height</strong></td>
<td>21 ft</td>
<td>6.40 m</td>
</tr>
<tr>
<td><strong>Platform Height</strong></td>
<td>15 ft</td>
<td>4.57 m</td>
</tr>
<tr>
<td><strong>Stowed Height:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Folded Down Rails</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Lift Capacity (Evenly Distributed):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roll-out Deck Capacity</td>
<td>600 lbs</td>
<td>272 kg</td>
</tr>
<tr>
<td><strong>Roll-out Deck Capacity</strong></td>
<td>250 lbs</td>
<td>113 kg</td>
</tr>
<tr>
<td><strong>Platform Dimensions:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With Roll-Out Deck</td>
<td>30 x 66 in</td>
<td>0.76 x 1.68 m</td>
</tr>
<tr>
<td>Guard Rail Height</td>
<td>43.5 in</td>
<td>1.10 m</td>
</tr>
<tr>
<td>Toe Board Height</td>
<td>7.5 in</td>
<td>19.05 cm</td>
</tr>
<tr>
<td>Roll-out Deck Length</td>
<td>36 in</td>
<td>0.91 m</td>
</tr>
<tr>
<td><strong>Overall Length</strong></td>
<td>74 in</td>
<td>1.88 m</td>
</tr>
<tr>
<td><strong>Overall Width</strong></td>
<td>32 in</td>
<td>0.81 m</td>
</tr>
<tr>
<td><strong>Wheel Base</strong></td>
<td>50 in</td>
<td>1.27 m</td>
</tr>
<tr>
<td><strong>Wheel Track</strong></td>
<td>27.37 in</td>
<td>0.70 m</td>
</tr>
<tr>
<td><strong>Turning Radius:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inside</td>
<td>1.5 in</td>
<td>3.81 cm</td>
</tr>
<tr>
<td>Outside</td>
<td>61 in</td>
<td>1.55 m</td>
</tr>
<tr>
<td><strong>Ground Clearance</strong></td>
<td>2.87 in</td>
<td>72.90 cm</td>
</tr>
<tr>
<td><strong>Machine Weight (Unloaded) (Approx.)</strong></td>
<td>2725 lbs</td>
<td>1236 kg</td>
</tr>
<tr>
<td><strong>Drive System (Proportional):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive Speed (Platform Elevated)</td>
<td>0 - 0.46 mph</td>
<td>0 - 0.74 km/h</td>
</tr>
<tr>
<td>Drive Speed (Platform Lowered)</td>
<td>0 - 2.1 mph</td>
<td>0 - 3.38 km/h</td>
</tr>
<tr>
<td><strong>Lift/Lower Speed (Approx.)</strong></td>
<td>17 sec / 20 sec</td>
<td></td>
</tr>
<tr>
<td><strong>Gradeability</strong></td>
<td>25% / 14 degrees</td>
<td></td>
</tr>
<tr>
<td><strong>Ground Pressure/Wheel (Maximum)</strong></td>
<td>89 psi</td>
<td>6.13 bar</td>
</tr>
<tr>
<td><strong>Wind Speed (Maximum)</strong></td>
<td>0 mph</td>
<td>0 km/h</td>
</tr>
<tr>
<td><strong>Tire Size-Standard (Solid, non-marking rubber)</strong></td>
<td>14 in dia. x 4.5 in</td>
<td>355.6 x 114.3 mm</td>
</tr>
<tr>
<td><strong>Tire Pressure (Not Applicable For Foam Tires)</strong></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Wheel Lug Nut Torque</strong></td>
<td>75-85 ft lbs</td>
<td>102-115 Nm</td>
</tr>
<tr>
<td><strong>Hydraulic Pressure:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main System</td>
<td>2750 psi</td>
<td>190 bar</td>
</tr>
<tr>
<td>Lift System</td>
<td>1900 psi</td>
<td>131 bar</td>
</tr>
<tr>
<td>Steer</td>
<td>900 psi</td>
<td>62 bar</td>
</tr>
<tr>
<td><strong>Hydraulic Fluid Capacity</strong></td>
<td>3 gal</td>
<td>11.36 liters</td>
</tr>
<tr>
<td><strong>Fuel Capacity</strong></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Power System – Voltage</strong></td>
<td>24 Volts DC</td>
<td></td>
</tr>
<tr>
<td><strong>Battery Charger</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>120 Volt AC, 60 Hz, 5.6 Amp</td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td>24 Volt DC, 15 Amps Tapering, Timed Shutoff</td>
<td></td>
</tr>
<tr>
<td><strong>Batteries</strong></td>
<td>Four 6 Volt deep-cycle; 218 Amp hours @ 20 hour rating</td>
<td></td>
</tr>
<tr>
<td><strong>Electric Motor</strong></td>
<td>2.0 h.p.(1.49kW): 3000 r.p.m.</td>
<td></td>
</tr>
</tbody>
</table>
# Machine Specifications - 1932ES

<table>
<thead>
<tr>
<th>Specification</th>
<th>25 ft</th>
<th>7.62 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Height</td>
<td>25 ft</td>
<td>7.62 m</td>
</tr>
<tr>
<td>Platform Height</td>
<td>19 ft</td>
<td>5.79 m</td>
</tr>
<tr>
<td>Stowed Height:</td>
<td>79.5 in</td>
<td>2.02 m</td>
</tr>
<tr>
<td>Folded Down Rails</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Lift Capacity (Evenly Distributed):</td>
<td>450 lbs</td>
<td>204 kg</td>
</tr>
<tr>
<td>Roll-out Deck Capacity</td>
<td>225 lbs</td>
<td>102 kg</td>
</tr>
<tr>
<td>Platform Dimensions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With Roll-Out Deck</td>
<td>30 x 66 in</td>
<td>0.76 x 1.68 m</td>
</tr>
<tr>
<td>Guard Rail Height</td>
<td>43.5 in</td>
<td>1.10 m</td>
</tr>
<tr>
<td>Toe Board Height</td>
<td>7.5 in</td>
<td>19.05 cm</td>
</tr>
<tr>
<td>Roll-out Deck Length</td>
<td>36 in</td>
<td>0.91 m</td>
</tr>
<tr>
<td>Overall Length</td>
<td>74 in</td>
<td>1.88 m</td>
</tr>
<tr>
<td>Overall Width</td>
<td>32 in</td>
<td>0.81 m</td>
</tr>
<tr>
<td>Wheel Base</td>
<td>50 in</td>
<td>1.27 m</td>
</tr>
<tr>
<td>Wheel Track</td>
<td>27.37 in</td>
<td>0.70 m</td>
</tr>
<tr>
<td>Turning Radius:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inside</td>
<td>1.5 in</td>
<td>3.81 cm</td>
</tr>
<tr>
<td>Outside</td>
<td>61 in</td>
<td>1.55 m</td>
</tr>
<tr>
<td>Ground Clearance</td>
<td>2.87 in</td>
<td>72.90 cm</td>
</tr>
<tr>
<td>Machine Weight (Unloaded) (Approx.)</td>
<td>3060 lbs</td>
<td>1388 kg</td>
</tr>
<tr>
<td>Drive System (Proportional):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive Speed (Platform Elevated)</td>
<td>0 - 0.46 mph</td>
<td>0 - 0.74 km/h</td>
</tr>
<tr>
<td>Drive Speed (Platform Lowered)</td>
<td>0 - 2.1 mph</td>
<td>0 - 3.38 km/h</td>
</tr>
<tr>
<td>Lift/Lower Speed (Approx.)</td>
<td>17 sec / 20 sec</td>
<td></td>
</tr>
<tr>
<td>Gradeability</td>
<td>25% / 14 degrees</td>
<td></td>
</tr>
<tr>
<td>Ground Pressure/Wheel (Maximum)</td>
<td>97.5 psi</td>
<td>6.72 bar</td>
</tr>
<tr>
<td>Wind Speed (Maximum)</td>
<td>0 mph</td>
<td>0 km/h</td>
</tr>
<tr>
<td>Tire Size-Standard (Solid, non-marking rubber)</td>
<td>14 in dia. x 4.5 in</td>
<td>355.6 x 114.3 mm</td>
</tr>
<tr>
<td>Tire Pressure (Not Applicable For Foam Tires)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Wheel Lug Nut Torque</td>
<td>75-85 ft lbs</td>
<td>102-115 Nm</td>
</tr>
<tr>
<td>Hydraulic Pressure:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main System</td>
<td>2750 psi</td>
<td>190 bar</td>
</tr>
<tr>
<td>Lift System</td>
<td>2200 psi</td>
<td>152 bar</td>
</tr>
<tr>
<td>Steer</td>
<td>900 psi</td>
<td>62 bar</td>
</tr>
<tr>
<td>Hydraulic Fluid Capacity</td>
<td>3 gal</td>
<td>11.36 liters</td>
</tr>
<tr>
<td>Fuel Capacity</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Power System – Voltage</td>
<td>24 Volts DC</td>
<td></td>
</tr>
<tr>
<td>Battery Charger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>120 Volt AC, 60 Hz, 5.6 Amp</td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td>24 Volt DC, 15 Amps Tapering, Timed Shutoff</td>
<td></td>
</tr>
<tr>
<td>Batteries</td>
<td>Four 6 Volt deep-cycle; 218 Amp hours @ 20 hour rating</td>
<td></td>
</tr>
<tr>
<td>Electric Motor</td>
<td>2.0 h.p. (1.49 kW): 3000 r.p.m.</td>
<td></td>
</tr>
</tbody>
</table>
Safety Symbols

This section of the manual contains important information of the safe use of your MEC Scissors. Failure to read, understand, and follow all safety rules, warnings, and instructions will unnecessarily expose you and others to dangerous situations. For your safety and the safety of those around you, you must operate your machine as instructed in this manual.

You, the operator, are the single most important factor for safety when using any piece of equipment. Learn to operate your machine in a safe manner.

To help you recognize important safety information, we have identified warnings and instructions that directly impact on safety with the following signals:

```
⚠️ DANGER ⚠️

“DANGER” INDICATES AN IMMINENTLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL RESULT IN DEATH OR SERIOUS INJURY. THIS SIGNAL WORD IS LIMITED TO THE MOST EXTREME SITUATIONS.
```

```
⚠️ WARNING!!!

“WARNING” INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY.
```

```
⚠️ CAUTION

“CAUTION” indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. “Caution” is used for property-damage only accidents.
```

NOTE: The best method to protect yourself and others from injury or death is to use common sense. If you are unsure of any operation, don’t start until you are satisfied that it is safe to proceed and have discussed the situation with your supervisor.
Safety Rules And Precautions

- MEC designs self-propelled scissor lifts to be safe and reliable. They are intended to position personnel, along with their necessary tools and materials to overhead work locations.

- The owner/user/operator of the machine should not accept responsibility for the operation of the machine, unless properly trained.

- ANSI A92.6 and other applicable standards identify requirements of all parties who may be involved with self-propelled elevating work platforms. A copy of the ANSI Standard is considered a part of this machine and can be found in the manual compartment, located at the platform control station.

⚠️ DANGER ⚠️

- ELECTROCUTION HAZARD!!! THIS MACHINE IS NOT INSULATED!!
  Maintain safe clearance from electrically charged conductors (power lines) and apparatus. You must allow for machine sway (side to side movement) when elevated and electrical line movement. This machine does not provide protection from contact with, or proximity to, an 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 (30.5cm) additional clearance is required for every additional 30,000 volts.

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

- Read and understand all safety and control information found on the machine and in this manual before operating the machine.

- Only trained, competent personnel should operate the scissorlift.

- NEVER fasten safety belt to an adjacent structure while on the platform.

- Make sure that entry chain/gate (if so equipped to platform) is secured before operating machine from the platform.

- Exceeding the platform rated capacity in any configuration is prohibited. Review the section titled “Machine Specifications” (earlier in this manual) regarding model capacities and dimensions.
♦ Evenly distribute loads placed on the platform.

♦ SECURE all tools and other loose items to prevent injury to persons working on or below the platform.

♦ Use of scaffolding, ladders or similar items to extend your reach while on the platform is prohibited.

♦ Climbing down the beams assembly (armset), if the machine fails, while the platform is raised is prohibited.

♦ Precautions should be taken to prevent unauthorized personnel from operating the platform with the ground controls while the platform is in use.

⚠️ DANGER ⚠️

♦ The “Moving the Machine” section (described later in this manual) requires that the brake be released. After performing this procedure, there is no means to stop the machine’s travel. MEC recommends using this procedure only in cases of emergency, and only for a short distance. Be on guard against machine runaway on sloping surfaces. Movement speed shall not exceed 5 MPH (8.0 kph).

♦ DO NOT attempt to open any hydraulic line or component without first relieving all system pressure.

♦ Altering, modifying, or disabling any safety devices or interlocks is prohibited.

♦ Recharging the battery near sparks or open flames is prohibited. Lead-acid batteries generate EXPLOSIVE HYDROGEN GAS. Always wear safety glasses.

♦ Use of the machine outdoors during electrical storms or in high wind situations is not recommended.

♦ Raise the platform when the machine is on a firm, level surface only.

⚠️ WARNING!!! ⚠️

♦ Unassisted loading or unloading of scissorlift from a truck or trailer is not recommended.

♦ Before disengaging or disconnecting hydraulic motors with brake assembly from a towing vehicle, ensure that the machine cannot roll.

♦ Complete the “Operational Checklist” at designated intervals.
CAUTION

♦ Use of scissorlift as a crane to lift oversized or hanging loads is prohibited.

♦ Raising, lowering or driving the scissorlift into stationary objects is prohibited.

♦ It is recommended to avoid sudden braking or steering. Go slowly and leave more maneuvering room during cold weather operation.

Fall Protection Notice

The Guardrail System around the perimeter of the platform is the fall protection system for self-propelled elevating work platforms per the American National Standards Institute ANSI/SIA A92.6 Standard. It is prohibited to use an Aerial Work Platform manufactured by Mayville Engineering Company, Inc. with any portion, or all, of the guardrails removed.

Lanyard anchorage points on this type of equipment are not required to conform to the applicable ANSI/SIA Standard.

However, if anchorage points for lanyard attachments are required by site authorities or other regulations, the anchorage points on all equipment manufactured by Mayville Engineering Company, Inc. are recommended to be used for work positioning restraints of personnel only. Lanyard lengths are to be determined by operator/owner to restrict the operator to the confines within the Guardrail System.

WARNING!!!

USE OF FALL ARREST SYSTEMS ATTACHED TO ANCHORAGE POINTS ON MOBILE EQUIPMENT MAY CAUSE MACHINE TO TIP RESULTING IN SERIOUS INJURY OR DEATH.
## Safety And Control Decal Locations

<table>
<thead>
<tr>
<th>#</th>
<th>Part #</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8911</td>
<td>Manual Case</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>9137</td>
<td>Platform Capacity (1532ES) - 600 LBS., Large</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>8969</td>
<td>Platform Capacity (1932ES) - 500 LBS., Large</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>7527</td>
<td>Operator Warning</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>8767</td>
<td>Lock Warning</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>7523</td>
<td>Danger - Elec/Tip Hazards</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>8635</td>
<td>Joystick Directions</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>90268</td>
<td>Platform Capacity (1532ES) - 600 LBS., Small</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>90401</td>
<td>Platform Capacity (1932ES) - 500 LBS., Small</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>8950</td>
<td>Pothole Obstruction</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>7155</td>
<td>Locate Control Box</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>7156</td>
<td>Front</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>8391</td>
<td>Control Box</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>7827</td>
<td>Warning Light</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>90292</td>
<td>Control Box ID</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>9458</td>
<td>Made in USA</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>8519</td>
<td>Tire Replacement Warning</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>6556</td>
<td>Fork Pockets</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>8779</td>
<td>Battery Charging</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>90264</td>
<td>Emergency Down</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>9052</td>
<td>Battery Disconnect</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>6873</td>
<td>Hydraulic Fluid</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>8815</td>
<td>Electrical Moisture Warning</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>9138</td>
<td>Model Number - 1532ES</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>8816</td>
<td>Model Number - 1932ES</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>7982</td>
<td>Safety Stripe</td>
<td>A/R</td>
</tr>
<tr>
<td>24</td>
<td>8503</td>
<td>Keep Clear</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>6794</td>
<td>Maintenance Lock</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>90263</td>
<td>Control Panel - Base</td>
<td>1</td>
</tr>
<tr>
<td>27</td>
<td>8520</td>
<td>Battery Replacement</td>
<td>1</td>
</tr>
<tr>
<td>28</td>
<td>N/A</td>
<td>Serial Number Plate</td>
<td>1</td>
</tr>
<tr>
<td>29</td>
<td>8402</td>
<td>Rail Stripe</td>
<td>A/R</td>
</tr>
<tr>
<td>30</td>
<td>8811</td>
<td>Mec Oval</td>
<td>1</td>
</tr>
<tr>
<td>31</td>
<td>90267</td>
<td>Brake Release</td>
<td>1</td>
</tr>
<tr>
<td>32</td>
<td>8599</td>
<td>Lift Cylinder Valve Instruction</td>
<td>1</td>
</tr>
</tbody>
</table>
Safety Related Decals (Continued).....

8519

⚠️ WARNING
- REPLACE TIRES WITH MANUFACTURER'S EQUIPMENT ONLY.
- FAILURE TO USE MANUFACTURER'S TIRES MAY CAUSE MACHINE INSTABILITY.
- REFER TO MAINTENANCE MANUAL FOR REPLACEMENT PART NUMBER.

8816

MEC 1932ES

8520

⚠️ WARNING
- REPLACEMENT BATTERY MUST WEIGH A MINIMUM OF 60 POUNDS / 27.3 kg
- FAILURE TO MEET MINIMUM WEIGHT REQUIREMENT MAY CAUSE MACHINE INSTABILITY.

8767

⚠️ WARNING
- PLATFORM EXTENSION MUST BE LOCKED IN PLACE AT ALL TIMES.
- SHEET LOADING GATE MUST BE IN LOWERED LOCKED POSITION BEFORE OPERATING FROM PLATFORM.
- ENTRANCE GATE/CHAIN MUST BE IN CLOSED POSITION BEFORE OPERATING FROM PLATFORM.

Failure to follow instructions could cause death, personal injury and property damage.

8779

⚠️ WARNING
BATTERIES PRODUCE EXPLOSIVE GAS.
CHARGE BATTERIES IN WELL VENTILATED AREA.
DO NOT EXPOSE TO SPARKS OR FLAMES.

8815

⚠️ WARNING
DO NOT POWERWASH OR SPRAY ELECTRONIC COMPONENTS OR CONNECTORS.
MOISTURE MAY CAUSE DAMAGE AND/OR ERRATIC OPERATION.

9138

MEC 1532ES

90267

BRAKE RELEASE

PUMP

90292

THIS CONTROL BOX TO BE USED WITH MEC 1532ES, 1932ES, AND 2033ES MODELS ONLY

8911


January 2000
Safety Related Decals (Continued)......

8969

<table>
<thead>
<tr>
<th>MAXIMUM PLATFORM CAPACITY - EVENLY DISTRIBUTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENSION RETRACTED</td>
</tr>
<tr>
<td>500 LBS</td>
</tr>
<tr>
<td>227 kg</td>
</tr>
<tr>
<td>2 - PERSONS</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>EXTENSION EXTENDED</td>
</tr>
<tr>
<td>250 LBS</td>
</tr>
<tr>
<td>113 kg</td>
</tr>
<tr>
<td>1 - PERSON</td>
</tr>
</tbody>
</table>

90264

EMERGENCY DOWN PROCEDURE

- LOCK OPEN VALVE ON LIFT CYLINDER ABOVE.
- PULL MANUAL ACTIVATOR TO LOWER PLATFORM.
- TO RETURN TO NORMAL OPERATION RESET LIFT CYLINDER VALVE.

9137

<table>
<thead>
<tr>
<th>MAXIMUM PLATFORM CAPACITY - EVENLY DISTRIBUTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENSION RETRACTED</td>
</tr>
<tr>
<td>600 LBS</td>
</tr>
<tr>
<td>272 kg</td>
</tr>
<tr>
<td>2 - PERSONS</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>EXTENSION EXTENDED</td>
</tr>
<tr>
<td>350 LBS</td>
</tr>
<tr>
<td>158 kg</td>
</tr>
<tr>
<td>1 - PERSON</td>
</tr>
</tbody>
</table>

90263

8635

7156

7156

9458

MADE IN USA

8391

SECTION 2: OPERATION
Unloading Procedures

♦ Inspect the outside of the machine for damage. Inspect all hoses, beam assemblies (armset), and cables for chafing or road damage. Confirm that all wheel lug nuts are tight (refer to the “Machine Specifications”).

♦ Unlock and open side compartments. Inspect all fuel, electrical, and hydraulic connections for damage and security.

♦ Turn battery switch to ON position. Check electrolyte level.

♦ Check engine oil level and add as required per engine manufacturer’s recommendations.

♦ Check that fluid level is to the fill mark on the hydraulic tank and add fluid as required (see “Lubrication Chart”).

♦ Close side compartments.

⚠️ WARNING!!!

ALWAYS ATTACH THE MACHINE TO A WINCH WHEN LOADING OR UNLOADING FROM A TRUCK OR TRAILER IF DRIVEN OFF. WE DO NOT RECOMMEND UNASSISTED LOADING OR UNLOADING OF ANY SCISSORLIFT.

READ AND UNDERSTAND ALL SAFETY, CONTROL, AND OPERATING INFORMATION FOUND ON MACHINE AND IN THIS MANUAL BEFORE OPERATING THE MACHINE.

♦ Attach the machine to a winch for the unloading.

♦ Perform Machine Start-up procedures in this section. Refer to Operator Controls Descriptions, as necessary. Turn off engine.

♦ Remove all machine tie downs. Remove wheel chocks, if used. Turn the Base/Platform selector switch to the “PLATFORM” position.

♦ Enter the platform, and start the engine using the platform controls. Test all platform functions.

♦ Carefully drive the machine off the truck or trailer with the winch still attached.

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

♦ Before placing the machine into service, all operators must read and understand the contents of this Operator’s Manual.
Primary Machine Components

- Control Box
- Platform
- Roll-out Extension Deck
- Main Platform Deck
- Beams
- Base Control Panel
- Lift Cylinder
- Ladder
- Base
Operator Controls (Continued)

**BASE CONTROLS**

<table>
<thead>
<tr>
<th>CONTROL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Lift/Lower Switch</td>
<td>Use to control the lift and lowering of the platform from the base panel, when &quot;BASE&quot; position is selected as the primary control station.</td>
</tr>
<tr>
<td>2 Circuit-breaker</td>
<td>Pops out when there is excessive electrical load in the 12-volt control circuit. Push in to reset.</td>
</tr>
<tr>
<td>3 Base/Off/Platform Selector Switch</td>
<td>Select &quot;BASE&quot; position to control operation of machine using the base controls. Select &quot;PLATFORM&quot; position to control operation of machine using the platform console. <strong>NOTE:</strong> A key shall be provided for European machines and will be removable in &quot;PLATFORM&quot; position only.</td>
</tr>
<tr>
<td>4 Battery Gauge (Optional)</td>
<td>Indicates percent of charge left in batteries.</td>
</tr>
<tr>
<td>5 Emergency Stop Button</td>
<td>Use to stop all functions in an emergency. Push for emergency stop. To reset turn clockwise.</td>
</tr>
<tr>
<td>6 Hour Meter</td>
<td>Indicates total elapsed time the machine has been operated.</td>
</tr>
</tbody>
</table>
Operator Controls (Continued)

Platform Controls

8391

1. MODE SELECT
   - LIFT
   - DRIVE

2. ACTIVATE SIDE LEVER TO CONTROL DIRECTION AND SPEED
   - PULL FOR EMERGENCY STOP
   - TWIST TO RESET

3. HORN, TILT, TORQUE
   - WARNING, OFF

8635

1a. FORWARD DOWN
1b. REVERSE UP
1c. STEER
1d. DISABLE BAR MUST BE DEPRESSED FOR DRIVE, STEER, AND LIFT FUNCTIONS

Mayville Engineering Co., Inc.
Aerial Work Platform Division
216 Corporate Drive P.O. Box 990
Beaver Dam, Wisconsin 53915-0990
Ph: (920) 887-1315 / (800) 887-4075
FAX: (920) 887-0480
## Operator Controls (Continued)

### PLATFORM CONTROLS

<table>
<thead>
<tr>
<th>CONTROL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Mode Selector</td>
<td>Desired selection will allow either the lift or drive function using controller handle.</td>
</tr>
<tr>
<td><strong>1a</strong> Enable Switch</td>
<td>Must be depressed to active drive, steer, and lift functions.</td>
</tr>
<tr>
<td><strong>1b</strong> &quot;Forward/Reverse&quot;</td>
<td>Controls forward and reverse machine travel at speed proportional to handle movement.</td>
</tr>
<tr>
<td><strong>1c</strong> &quot;Left/Right&quot;</td>
<td>Push Steer Rocker Switch (thumb) to the left and hold to turn steer wheels to the left, right to turn steer wheels to the right.</td>
</tr>
<tr>
<td><strong>1d</strong> &quot;Lift/Lower&quot; Controller</td>
<td>With enable switch depressed, moving controller handle toward the operator (up) will provide platform lift at a speed proportional to handle movement. Moving the handle away from the operator (down) will provide platform lowering at a fixed speed.</td>
</tr>
<tr>
<td><strong>2</strong> Tilt Warning Light</td>
<td>Indicates that machine is not level.</td>
</tr>
<tr>
<td><strong>3</strong> Torque On/Off Switch</td>
<td>“ON” selection will provide extra driving torque and reduce drive speed when the platform is under approximately 7 ft (2.13 m). “OFF” position is the normal mode.</td>
</tr>
<tr>
<td><strong>4</strong> Horn</td>
<td>Press button to sound warning horn.</td>
</tr>
<tr>
<td><strong>5</strong> Emergency Stop Button</td>
<td>Push to stop all functions in emergency. Reset by turning clockwise.</td>
</tr>
</tbody>
</table>
Prestart Inspection

Before use each day or at the beginning of each shift, the machine shall be given a visual inspection and functional test. Repairs (if any) must be made prior to operating the machine as it is critical to ensure safe operation of the machine.

♦ Visually inspect all machine components; for loose or missing parts, hydraulic fluid leaks, loose or damaged wires. Check for structural or weld cracks.

♦ Check fluid levels with the platform fully lowered.

♦ Check the wheel lug nuts for tightness (Refer to “Machine Specifications”).

♦ Check that all warning and instructional labels are legible and secure.

♦ Check the platform guard rail system. Look at the chain or gate and make sure they latch properly and/or close.

♦ Ensure that emergency stop buttons on the base control panel and the platform controls are disengaged. Reset by turning clockwise.

♦ Ensure that the battery cutoff switch is in the “ON” position.

MACHINE START UP

1. Ensure the battery disconnect switch, located on Base Control Box, is open.

2. Place the base/platform select switch to the desired position.

3. The machine can now be operated from the selected position.

Note: If the machine fails to operate, inspect the motor controller inside the motor compartment. A green LED located on the controller should be illuminated. If the LED is not illuminated, refer to the troubleshooting section.
BASE CONTROL OPERATION AND CHECKS

WARNING!!!

BE SURE AREA ABOVE THE MACHINE IS CLEAR OF OBSTRUCTIONS TO ALLOW FULL ELEVATION OF PLATFORM.

DO NOT OPERATE THE MACHINE IF THE FOLLOWING CHECKS REVEAL A DEFECT.

◆ Turn selector switch to “BASE” position.

◆ Activate the Lift/ Lower switch on the base control panel to elevate the platform to the end of its movement. Releasing the switch should stop elevation.

◆ Test the “Emergency Stop” function. While the platform is moving, press the Emergency Stop button, platform should stop.

◆ Reset by rotating clockwise.

◆ Lower the platform about halfway by switching the Lift/ Lower switch. Releasing the switch should stop the lowering.

◆ Check for proper operation and hydraulic leaks.

◆ Lower platform to the stowed position.
PLATFORM CONTROL OPERATION AND CHECKS

- Select the “Platform” position on the selector switch at base control station.
- From the platform, close the chain/gate securely to the platform.
- Press the horn button briefly to check if working properly.

**IMPORTANT:** The Enable Switch must be activated to operate the controller for Drive, Steer, and Lift/Lower Function.

- Check for proper operation and hydraulic fluid leaks.
- Move mode selector switch to “Lift” position, depress Enable bar and move control handle “up” (toward the operator).
- Test emergency stop function by pressing down on the red Emergency Stop switch. Reset by rotating clockwise.
- To lower platform, depress the Enable bar and move control handle “down” (away from the operator).

![WARNING!!!]

**IF PLATFORM SHOULD FAIL TO LOWER DO NOT ATTEMPT TO CLIMB DOWN THE BEAM ASSEMBLY. SERIOUS INJURY MAY RESULT.**

- Move the mode select switch to “Drive” position, depress Enable bar and move control handle “forward” and “backward” to check drive direction. Releasing the Enable bar or returning control handle to center position will stop motion of drive.
- Test the “Emergency Stop” function. While driving in both directions. Reset “Emergency Stop” by rotating the switch clockwise.
- Test Left/Right steering by depressing Enable bar on control handle and pressing the rocker switch at the top of the handle. Press left side of switch for left steer direction and right side for right steer direction.

**IMPORTANT:** Always check front steer wheel direction before driving.
Operation

⚠️ DANGER ⚠️

THE OPERATOR MUST BE AWARE OF THE ENVIRONMENT. DO NOT RAISE THE PLATFORM IF THE MACHINE IS NOT ON A FIRM LEVEL SURFACE.

SAFE OPERATION BEGINS WITH A SAFETY CONSCIOUS EQUIPMENT OPERATOR.

Perform prestart inspection. Remember to place the selector switch in the “Platform” position before getting in the platform for operation.

DRIVING AND STEERING

⚠️ WARNING !!! ⚠️

CHECK THAT THE ROUTE OF TRAVEL TO BE TAKEN IS CLEAR OF PERSONS, OBSTRUCTIONS, DEBRIS, HOLES, AND DROP OFFS, AND IS CAPABLE OF SUPPORTING THE MACHINE.

NOTE: To activate drive function, activate mode selector switch in “Drive” position. Depressing the Enable bar, drive and steer functions can be achieved. Steer wheels will not center themselves after a turn, and must be returned to the straight-ahead position with the steer switch.

Controller handle movement “away” from the operator will give FORWARD travel and pulling the handle “towards” the operator will give REVERSE travel.

Travel speed is proportional and is controlled by the movement of the controller handle. The further it is moved the faster the speed will be. The controller handle returns to neutral (center) position when released.
BRAKING

WARNING!!

ACTIVATION OF THE PLATFORM "EMERGENCY STOP" BUTTON WILL APPLY BRAKES IMMEDIATELY. THIS MAY CAUSE UNEXPECTED PLATFORM MOVEMENT AS THE MACHINE COMES TO A SUDDEN STOP. BRACE YOURSELF AND SECURE OBJECTS ON THE PLATFORM DURING OPERATION OF MACHINE.

NOTE: For parking, the brake is automatically applied when the forward/reverse drive controller is positioned in the center (neutral) position.

ELEVATING THE PLATFORM

Using Platform Controls

To elevate the platform, activate mode selector switch in the "Lift" position. Depressing the Enable bar and moving controller handle "towards" the operator will elevate the platform. Rate of lift is proportional and is dependent on the movement of the controller handle.

Using Base Controls

With selector switch in the "Base" position, press and hold the Lift/ Lower toggle switch on the base control panel in the "Up" position until the desired height is reached or until the platform reaches maximum height.

LOWERING THE PLATFORM

Using Platform Controls

To lower the platform, activate mode selector switch to the "Lift" position. Depressing the Enable bar and moving the controller handle "away" from the operator will lower the platform. Rate of descent is fixed - platform lowers at same rate regardless of handle position.

Using Base Controls

With selector switch in the "Base" position, press and hold the Lift/ Lower toggle switch in the "Down" position until the desired platform height is reached or until the platform reaches the stowed position.
EXTENDING THE ROLL-OUT EXTENSION DECK

♦ Lift handle at the rear of the extension deck to raise spring-loaded pin from the locked position.

♦ With handle raised, push the deck out to the desired extended length and release the handles for the spring-loaded pin to lock into position.

♦ Extensions can be achieved in intervals of 6 inches (15 cm) throughout the entire length of the roll-out extension deck.

![WARNING!!!]

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

CHARGING THE BATTERIES

![WARNING!!!]

LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES. KEEP SPARKS AND FLAME AWAY FROM BATTERIES. NO SMOKING!

♦ Plug the battery charger into 115 volt, 60 Hz AC outlet, using #12 AWG grounded extension cord to recharge the batteries.

To determine if the batteries are fully charged, plug the charger in. A drop in the charge rate (shown on the ammeter) to 1-4 amps within a few minutes indicates that the batteries are fully charged.

![WARNING!!!]

DO NOT OPERATE THE UNIT WHILE CHARGING. BE SURE TO DISCONNECT THE CHARGER FROM THE OUTLET BEFORE MOVING THE UNIT.
SHUTDOWN PROCEDURE

♦ When finished with the machine, place the platform in the stowed position.

♦ Park the machine on a level surface.

♦ Carefully exit the platform using a constant three (3) point dismount/grip.

♦ Place selector switch at base control panel in the “Off” position.

   NOTE: Leaving the selector switch in the base or platform position for an extended time will drain the battery. Always put the selector switch in “Off” position when leaving the machine at the end of the work day.

♦ Put a padlock on the battery disconnect switch to prevent unauthorized operation.

MOVING THE MACHINE

Machine can be winched or moved short distances in case of power failure at speeds not to exceed 5 MPH (8.05 kph).

Towing/Winching the Machine

Your machine is equipped with a brake release.

Release Brakes Before Towing:

♦ Push the free wheeling valve located on the main manifold.

♦ Using the hand pump at the rear of Base, pump valve until pressure is built.

♦ Machine is now ready for towing.
MOVING THE MACHINE (continued)

DANGER

AFTER RELEASING THE BRAKES, THERE IS NOTHING TO STOP THE MACHINE'S TRAVEL. MACHINE WILL ROLL FREELY ON SLOPES. BE ON GUARD AGAINST RUNAWAY. DO NOT DRIVE MACHINE WITH BRAKES RELEASED.

To Reset Brakes:

- Brakes will reset when drive function is activated or reset by pulling on free wheeling valve.
Emergency Systems And Procedures

⚠️ WARNING!!!

IF THE CONTROL SYSTEM FAILS WHILE THE PLATFORM IS ELEVATED, HAVE AN EXPERIENCED OPERATOR USE THE EMERGENCY LOWERING PROCEDURE TO SAFELY LOWER THE PLATFORM.

DO NOT ATTEMPT TO CLIMB DOWN BEAMS (SCISSORS) ASSEMBLY.

⚠️ WARNING!!!

BEFORE LOWERING PLATFORM, RETRACT THE DECK EXTENSION.
Emergency Lowering

The Emergency Down System is used to lower the platform in case of power or valve failure. To lower the platform, perform the following steps:

1. Pull and turn knurled knob on lift cylinder counterclockwise to lock the valve in open position.

2. Pull manual activator (override valve) on main manifold to lower platform to desired height.

3. To return to normal operation, turn knurled knob on lift cylinder clockwise. Valve will automatically lock.
SECTION 3: MAINTENANCE
GENERAL MAINTENANCE TIPS

Regular inspection and conscientious maintenance is the key to efficient economical operation of your scissorlift. It will help to assure that your equipment will perform satisfactorily with a minimum of service and repair.

The actual operating environment of the machine governs the inspection schedule. Correct lubrication is an essential part of the preventative maintenance to minimize wear on working parts and ensure against premature failure. By maintaining correct lubrication, the possibility of mechanical failure and resulting downtime is reduced to a minimum.

⚠️ DANGER ⚠️

NEVER PERFORM SERVICE ON THE MACHINE (WITH THE PLATFORM ELEVATED) WITHOUT FIRST BLOCKING THE BEAMS (SCISSORS) ASSEMBLY IN PLACE!

- Block scissors assembly using maintenance lock(s) if machine is in the elevated/extended position.

- Never leave hydraulic components or hoses open. They must be protected from contamination (including rain) at all times.

- 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 be as harmful as no lubrication.

- Watch for makeshift “fixes” which can jeopardize safety as well as lead to more costly repair.
GENERAL MAINTENANCE TIPS (Continued)........

⚠️ WARNING!!!

IMMEDIATELY REPORT TO YOUR SUPERVISOR ANY DEFECT OR MALFUNCTION. ANY DEFECT SHALL BE REPAIRED PRIOR TO CONTINUED USE OF THE SCISSORLIFT.

INSPECTION AND MAINTENANCE SHOULD BE PERFORMED BY QUALIFIED PERSONNEL FAMILIAR WITH THE EQUIPMENT.

HYDRAULIC FLUID UNDER PRESSURE CAN PENETRATE AND BURN SKIN, DAMAGE EYES, AND MAY CAUSE SERIOUS INJURY, BLINDNESS, AND EVEN DEATH. CORRECT LEAKS IMMEDIATELY.

FLUID LEAKS UNDER PRESSURE MAY NOT ALWAYS BE VISIBLE. CHECK FOR PIN HOLE LEAKS WITH A PIECE OF CARDBOARD, NOT YOUR HAND.

⚠️ CAUTION

Failure to perform preventive maintenance at recommended intervals may result in the unit being operated with a defect that could result in injury or death of the operator.
SHIFT OPERATIONAL CHECKLIST

All checks must be completed before operation of the MEC Scissor Lift.

MODEL NUMBER____________ SERIAL NUMBER____________

1. Keep inspection records up-to-date.
2. Record and report all discrepancies to your supervisor.
3. A dirty machine cannot be properly inspected.

KEEP YOUR MACHINE CLEAN!!

WARNING!!

THIS CHECKLIST MUST BE USED AT THE BEGINNING OF EACH SHIFT OR AFTER EVERY SIX TO EIGHT HOURS OF USE. FAILURE TO DO SO COULD AFFECT THE SAFETY OF THE OPERATOR. ALWAYS REMEMBER, A LITTLE PREVENTATIVE MAINTENANCE CAN SAVE MUCH MORE THAN IT COSTS.

INITIAL  DESCRIPTION

________  1. Perform a visual inspection of all machine components, i.e. missing parts, torn or loose hoses, hydraulic fluid leaks, torn or disconnected wires, damaged tires etc. Replace components as necessary.

________  2. Check the hydraulic fluid level with the platform fully lowered.

________  3. Check the tires for damage. Check wheel lug nuts for tightness.

________  4. Check the hoses and the cables for worn areas or chafing. Replace if necessary.

________  5. Check the platform rails and safety gate for damage.

________  6. Check the pivot pins for security.

________  7. Check that all warning and instructional labels are legible and secure.
<table>
<thead>
<tr>
<th>INITIAL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8. Inspect the platform control. Ensure the load capacity is clearly marked.</td>
</tr>
<tr>
<td></td>
<td>9. Check the hydraulic system pressure (See Machine Specification). If the pressure is low, determine the reason and repair in accordance with accepted procedures as outlined in the service manual.</td>
</tr>
<tr>
<td></td>
<td>10. Check the base controls for proper operation. Check all switches and push buttons for proper operation.</td>
</tr>
<tr>
<td></td>
<td>11. Check the platform controls for proper operation. Check all switches and push buttons, as well as ensuring that the drive controller returns to neutral.</td>
</tr>
</tbody>
</table>

DATE__________________________  INSPECTED BY__________________________
WEEKLY OPERATIONAL CHECKLIST

All checks must be completed before operation of the MEC Scissor Lift.

MODEL NUMBER________________ SERIAL NUMBER________________

1. Keep inspection records up-to-date.
2. Record and report all discrepancies to your supervisor.
3. A dirty machine cannot be properly inspected.

KEEP YOUR MACHINE CLEAN!!

WARNING!!!

THIS CHECKLIST MUST BE USED AT WEEKLY INTERVALS OR EVERY 25 HOURS, WHICHEVER OCCURS FIRST. FAILURE TO DO SO COULD AFFECT THE SAFETY OF THE OPERATOR. ALWAYS REMEMBER, A LITTLE PREVENTATIVE MAINTENANCE CAN SAVE MUCH MORE THAN IT COSTS.

<table>
<thead>
<tr>
<th>INITIAL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Perform all checks listed on Shift Operational Checklist.</td>
</tr>
<tr>
<td></td>
<td>2. Check wheel lug nuts for proper torque (see “Machine Specifications”).</td>
</tr>
<tr>
<td></td>
<td>3. Inspect all arms and pivot points for signs of wear and/or damage.</td>
</tr>
<tr>
<td></td>
<td>4. Lubricate all grease fittings (see Lubrication Chart).</td>
</tr>
<tr>
<td></td>
<td>5. Check all wire connections.</td>
</tr>
<tr>
<td></td>
<td>6. Check battery electrolyte level and connections.</td>
</tr>
</tbody>
</table>

DATE__________________________ INSPECTED BY__________________________
MONTLY OPERATIONAL CHECKLIST

All checks must be completed before operation of the MEC Scissor Lift.

MODEL NUMBER___________ SERIAL NUMBER__________

1. Keep inspection records up-to-date.
2. Record and report all discrepancies to your supervisor.
3. A dirty machine cannot be properly inspected.

KEEP YOUR MACHINE CLEAN!!

⚠️ WARNING!!!

THIS CHECKLIST MUST BE USED AT MONTHLY INTERVALS OR EVERY 100 HOURS, WHICHEVER OCCURS FIRST. FAILURE TO DO SO COULD AFFECT THE SAFETY OF THE OPERATOR. ALWAYS REMEMBER, A LITTLE PREVENTATIVE MAINTENANCE CAN SAVE MORE THAN IT COSTS.

INITIAL DESCRIPTION

_____ 1. Perform all checks listed on Shift and Weekly Operational Checklists.

_____ 2. Inspect the condition of hydraulic fluid in the reservoir. Oil should have a clear amber color.

_____ 3. Inspect the entire machine for signs of damage, broken welds, loose bolts, improper or makeshift repairs.

_____ 4. Check the pin joints and retaining rings for security.

_____ 5. Check if tires are leaning in or out.

_____ 6. Check that all adjustable flow valves are locked, check setting if any are not locked.

_____ 7. Check that the platform does not drift down with a full load.

_____ 8. Check the electrical motor brushes.

DATE___________________ INSPECTED BY_____________________


January 2000
QUARTERLY OPERATIONAL CHECKLIST

All checks must be completed before operation of the MEC Scissor Lift.

MODEL NUMBER________________ SERIAL NUMBER________________

1. Keep inspection records up-to-date.
2. Record and report all discrepancies to your supervisor.
3. A dirty machine cannot be properly inspected.

KEEP YOUR MACHINE CLEAN!!

⚠️ WARNING!!!

THIS CHECKLIST MUST BE USED AT QUARTERLY INTERVALS OR EVERY 300 HOURS, WHICHEVER OCCURS FIRST. FAILURE TO DO SO COULD AFFECT THE SAFETY OF THE OPERATOR. ALWAYS REMEMBER, A LITTLE PREVENTATIVE MAINTENANCE CAN SAVE MUCH MORE THAN IT COSTS.

INITIAL   DESCRIPTION

_________  1. Perform all checks listed on Shift, Weekly and Monthly Operational Checklists.

Additional Maintenance Requirements For Severe Usage Applications.

INITIAL   DESCRIPTION

_________  2. Change hydraulic filter element.

DATE_________________________ INSPECTED BY_____________________

Page 3-8
January 2000

SEMI-ANNUAL OPERATIONAL CHECKLIST

All checks must be completed before operation of the MEC Scissor Lift.

MODEL NUMBER_________  SERIAL NUMBER_________________

1. Keep inspection records up-to-date.
2. Record and report all discrepancies to your supervisor.
3. A dirty machine cannot be properly inspected.

KEEP YOUR MACHINE CLEAN!!

⚠️ WARNING!!

THIS CHECKLIST MUST BE USED AT SIX MONTH INTERVALS OR EVERY 500 HOURS, WHICHEVER OCCURS FIRST. FAILURE TO DO SO COULD AFFECT THE SAFETY OF THE OPERATOR. ALWAYS REMEMBER, A LITTLE PREVENTATIVE MAINTENANCE CAN SAVE MUCH MORE THAN IT COSTS.

INITIAL   DESCRIPTION

_____  1. Perform all checks listed on Shift, Weekly, Monthly and Quarterly Operational Checklist.

_____  2. Have a hydraulic fluid sample analyzed at a test laboratory. Comply with the test results and recommendations to ensure long, trouble free operation.

IMPORTANT: If Hydraulic Fluid Has Been Regularly Maintained It Should Only Require Changing Once Every Year Depending On Maintenance, Temperature, Application, Duty Cycle, And Atmospheric Conditions.

_____  3. Check the operation speeds to ensure they are within specified limits (see Machine Specifications).

_____  4. Check the emergency lowering system.

_____  5. Clean and lubricate all push button switches with dry lubricant and ensure that the switches operate freely in all positions.
9. Check the tightness of the platform frame and the linkage pins.

10. Check the overall platform stability.

11. Check the electrical mounting and hardware connections for security.

12. Replace the filter element.

13. Check the king pins for excessive play.

DATE________________________ INSPECTED BY______________________
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.

WHAT TO CHECK IF MACHINE WILL NOT START

♦ Battery cutoff switch?
♦ Selector switch turned to proper position (base/platform)?
♦ Emergency stop buttons at both base and platform activated? (Rotate clockwise to release).
♦ Batteries fully charged?
♦ Are any wires pulled out or loose?
♦ No oil pressure?

WHAT TO CHECK IF FUNCTIONS WILL NOT OPERATE:

♦ Is a function toggle switch or the enable switch not activated?
♦ Is the Base/Off/Platform switch in the proper position?
♦ Hydraulic fluid level low?
♦ Obvious fluid leak or damaged component?
♦ Are any wires pulled out or loose?
Lubrication Diagram

Hydraulic Lubrication

Wheel Motor Mount Lubrication
<table>
<thead>
<tr>
<th>NO.</th>
<th>ITEM</th>
<th>SPECIFICATION</th>
<th>FREQUENCY OF LUBRICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hydraulic Reservoir</td>
<td>Anti-Wear 150 SSU (ISO 32/mil spec 0-5606)</td>
<td>Check Daily. Analyze Every Six (6) Months Or 500 Hours. Change Yearly Or Every 1,000 Hours, Whichever Occurs First.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fill To The Top Of The Sight Gauge With Platform In The Stowed Position.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Hydraulic Filter</td>
<td>Filter Element</td>
<td>Change Every Six Months Or 500 Hours, Whichever Occurs First For Normal Usage. Change Every Three Months Or 300 Hours, Whichever Occurs First For Severe Usage.</td>
</tr>
</tbody>
</table>
Limited Owner Warranty

Mayville Engineering Company, Inc. (MEC) 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 further warrants the structural weldments of the main frame and scissor arms as defined in MEC's current Warranty Policy & Procedures, 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 and prorated thereafter up to one (1) year.

Warranty claims within such warranty period shall be limited to repair or replacement, at MEC's option, of the defective part in question and labor to perform the necessary repair or replacement based on MEC's then current flat rate, provided the defective part in question is shipped prepaid to MEC and is found upon inspection by MEC to be defective in material and/or workmanship.

Mayville Engineering Company, Inc. 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 is authorized to alter the terms of this warranty, or in any manner assume on behalf of MEC any liability or obligation which exceeds MEC's obligations under this warranty.