

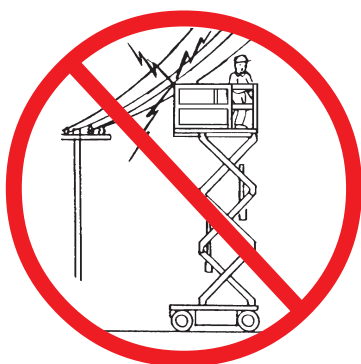
# Operator Manual

**MX15/19**

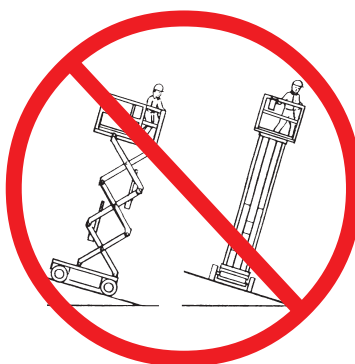
SERIAL NO. 12900-Current

## WARNING

All personnel shall carefully read, understand and follow all safety rules, operating instructions and the Scaffold Industry Association's **MANUAL OF RESPONSIBILITIES** before performing maintenance on or operating any UpRight aerial work platform.



**NEVER** operate the machine within ten feet of power lines. **THIS MACHINE IS NOT INSULATED.**



**NEVER** elevate the platform or drive the machine while elevated unless the machine is on firm level surface.



**NEVER** sit, stand or climb on guardrail or midrail.

**NEVER** operate the machine without first surveying the work area for surface hazards such as holes, drop-offs, bumps and debris.

**NEVER** operate the machine if all guardrails are not properly in place and secured with all fasteners properly torqued.

**SECURE** chain across entrance after mounting platform.

**NEVER** use ladders or scaffolding on the platform.

**NEVER** attach overhanging loads or increase platform size.

**LOOK** up, down and around for overhead obstructions and electrical conductors.

**DISTRIBUTE** all loads evenly on the platform. See the back cover for maximum platform loads.

**NEVER** use damaged equipment. (Contact UpRight for instructions. See toll free number on back cover.)

**NEVER** change operating or safety systems.

**INSPECT** the machine thoroughly for cracked welds, loose hardware, hydraulic leaks, damaged control cable, loose wire connections and wheel bolts.

**NEVER** climb down elevating assembly with the platform elevated.

**NEVER** perform service on machine while platform is elevated without blocking elevating assembly.

**NEVER** recharge batteries near sparks or open flame; batteries that are being charged emit highly explosive hydrogen gas.

**AFTER USE** secure the work platform against unauthorized use by turning key switch off and removing key.

**NEVER** replace any component or part with anything other than original UpRight replacement parts without the manufacturer's written consent.

## Introduction

This manual covers the MX15/19 Work Platforms. **This manual must be stored on the machine at all times.**

## Pre-Operation and Safety Inspection

**Read, understand and follow all safety rules and operating instructions and then perform the following steps each day before use.**

1. Open modules and inspect for damage, oil leaks or missing parts.
2. Check the level of the hydraulic oil with the platform fully lowered. The hydraulic reservoir is located at the rear of the machine. Remove the reservoir cap, oil should be visible on the dipstick. Add ISO #46 hydraulic oil if necessary.
3. Check that fluid level in the batteries is correct (See Battery Maintenance, Page 6).
4. Verify batteries are charged.
5. Check that A.C. extension cord has been disconnected from the plug in the right Chassis Module (Figure 4) and the module door secured.
6. Check that all guardrails are in place and all fasteners are properly tightened.
7. Carefully inspect the entire work platform for damage such as cracked welds or structural members, loose or missing parts, oil leaks, damaged cables or hoses, loose connections and tire damage.
8. Move machine, if necessary, to unobstructed area to allow for full elevation.
9. Turn Chassis and Platform Emergency Stop Switches ON (Figure 1 & 2) by pulling the button out.
10. Turn the Chassis Key Switch (Figure 1) to **CHASSIS**.
11. Push Chassis Lift Switch (Figure 1) to **UP**
12. Visually inspect the elevating assembly for damage or erratic operation. Check for missing or loose parts.
13. Verify that depression mechanism supports have rotated into position under machine.
12. Partially lower the platform by pushing Chassis Lift Switch to **DOWN**, and check operation of the audible lowering alarm.
13. Open the Chassis Emergency Lowering Valve (Figure 3) to check for proper operation, by pulling the knob out. When the platform is lowered, release the knob.
14. Turn the Chassis Key Switch to **DECK**.
15. Close and latch module doors.
16. Check that route is clear of persons, obstructions, holes and drop-offs, level and capable of supporting the wheel loads.
17. After mounting platform latch chain across entrance.
18. Pull Emergency Stop Button out to the ON position.
19. Position Drive/Lift Switch to **DRIVE**.
20. While depressing the Interlock Lever and Footswitch, slowly position the Control Lever to **FORWARD** then **REVERSE** to check for speed and directional control. The farther you push or pull the Control Lever from center the faster the machine will travel.
21. Push Steering Switch RIGHT then LEFT to check for steering control.
22. Push the Emergency Stop Switch Button.

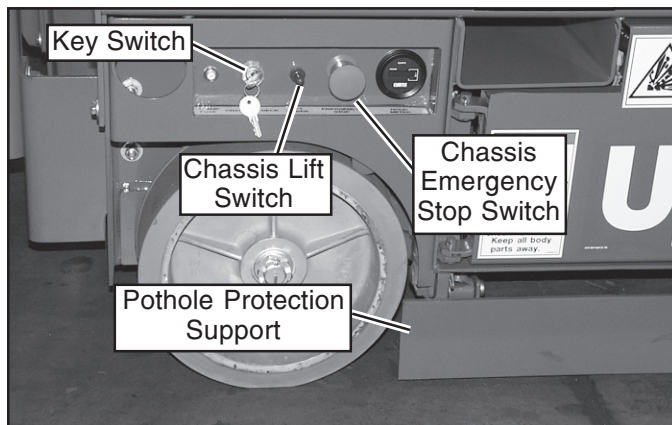


Figure 1: Chassis, Right Side

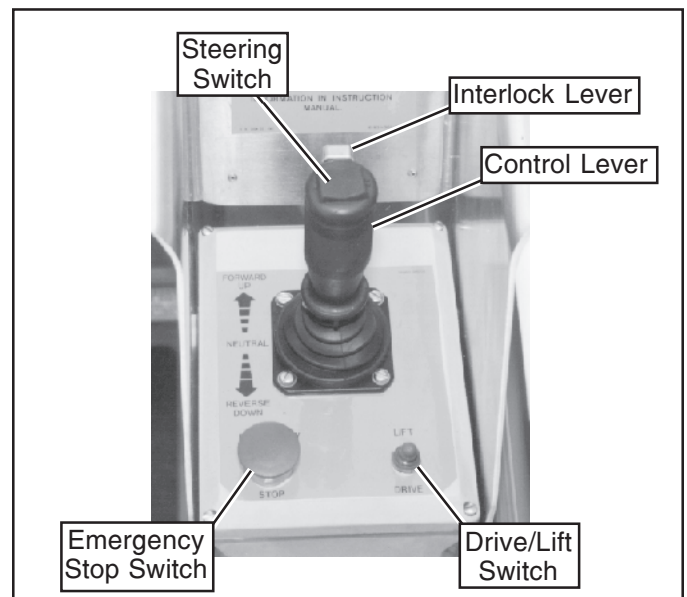


Figure 2: Controller

## Operation

**Before** operating work platform ensure that pre-operation and safety inspection has been completed, any deficiencies have been corrected and the operator has been thoroughly trained on this machine.

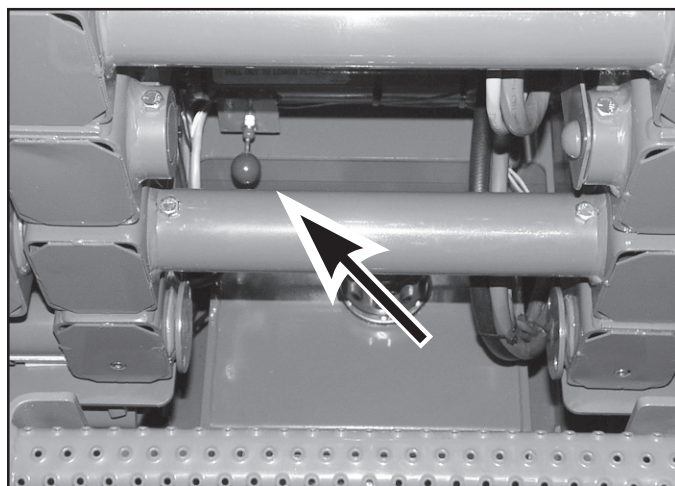
### Travel With Platform Lowered

1. Check that route is clear of people, obstructions, holes and drop-offs, is level and is capable of supporting wheel loads.
2. Verify Chassis Key Switch is turned to **DECK** and Chassis Emergency Stop Switch is ON, pull button out.
3. After mounting platform lower top guardrail and latch chain across entrance.
4. Check clearances above, below and to the sides of platform.
5. Pull Controller Emergency Stop Button out to ON position. When button is pushed down Emergency Stop Switch will automatically go to OFF position.
6. Position Drive/Lift Switch to **DRIVE**.
7. While depressing the Interlock Lever and Footswitch, slowly push or pull the Control Lever to **FORWARD** or **REVERSE** position to travel in the desired direction. The farther you push or pull the Control Lever from center the faster the machine will travel.

### Steering

1. Position Drive/Lift Switch to **DRIVE**.
2. While depressing the Interlock Lever and Footswitch, push the Steering Switch to RIGHT or LEFT to turn wheels in the desired direction. Observe the tires while maneuvering the work platform to ensure proper direction.

**NOTE: Steering is not self-centering. Wheels must be returned to straight ahead position by operating Steering Switch.**



**Figure 3: Emergency Lowering Valve Knob**

### Elevating Platform

1. Position Drive/Lift Switch to **LIFT**.
2. While depressing the Interlock Lever and Footswitch, push Control Lever forward to **UP**, the farther you push the Control Lever the faster the Platform will elevate.
3. If machine is not level the Tilt Alarm will sound and the machine will not lift or drive. **If the Tilt alarm sounds the platform must be lowered and the machine moved to a level location before attempting to re-elevate the Platform.**

**NOTE: Depression mechanism will automatically lower when platform is raised and automatically raise when platform is lowered completely and driven.**

### Travel With Platform Elevated

**NOTE: Work platform will travel at reduced speed when platform is elevated.**

1. Check that route is clear of persons, obstructions, holes and drop-offs, is level and capable of supporting the wheel loads.
2. Check clearances above, below and to the sides of platform.
3. Position Drive/Lift Switch to **DRIVE** position.
4. While depressing the Interlock Lever and Footswitch, push Control Lever to **FORWARD** or **REVERSE** for desired direction of travel.
5. If the machine is not level the Tilt Alarm will sound and the machine will not lift or drive. **If the Tilt Alarm sounds the platform must be lowered and the machine moved to a level location before attempting to re-elevate the platform.**

### Lowering Platform

1. Position Drive/Lift Switch to **LIFT**.
2. While depressing the Interlock Lever and Footswitch, pull back on the Control Lever.

### Emergency Lowering



## WARNING



If the platform should fail to lower, **NEVER** climb down the elevating assembly.

The Emergency Lowering Valve Knob is located between the scissors at the rear of the machine (Figure 3).

1. Open the Emergency Lowering Valve by pulling and holding the knob.
2. To close, release the knob.

The platform will not elevate if the Emergency Lowering Valve is open.

## After Use Each Day

1. Ensure that the platform is fully lowered.
2. Park the machine on level ground, preferably under cover, secure against vandals, children or unauthorized operation.
3. Turn the Key Switch to **OFF** and remove the key to prevent unauthorized operation.

## Parking Brake Release (Figure 4)

Perform the following only when the machine will not operate under its own power and it is necessary to move the machine or when towing the machine up a grade or winching onto a trailer to transport.

The Brake Adjustment/Release Bolt is located at the rear of the machine between the rear wheels.

1. To release the brakes loosen the jam nut and bolt until the brakes disengage from the tires.
2. The machine will now roll when pushed or pulled.
3. To re-engage the brakes tighten the bolt until the brakes have fully engaged the tires, secure the bolt with the locknut. Be sure to verify that the brakes have fully engaged the rear tires before the machine is operated.



### WARNING



Never operate work platform with the Parking Brakes released. Serious injury or damage could result.

Never tow faster than 1 ft./sec. (.3m/sec.).

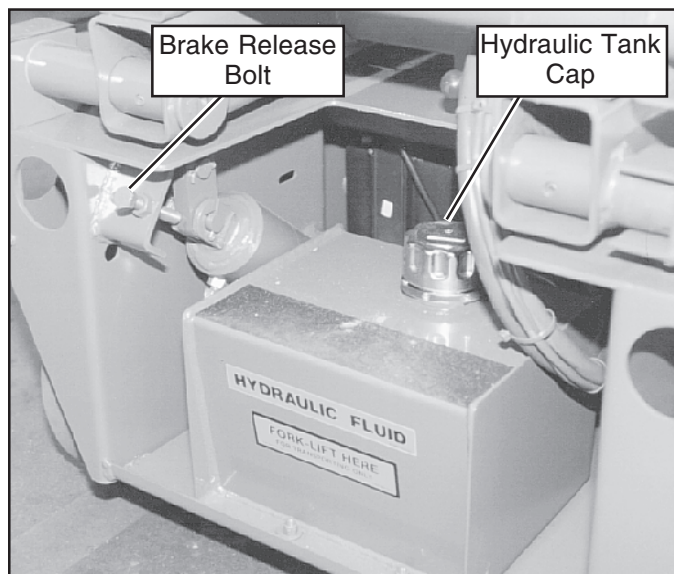


Figure 4: Chassis Rear View

## Transporting Work Platform

### By Forklift

**NOTE: Forklifting is for transporting only.**



### CAUTION



See specifications for weight of work platform and be certain that forklift is of adequate capacity to lift platform.

Forklift from side or rear using fork pockets provided (Figure 5).

### By Crane

1. Secure straps to chassis lifting/tie down points only (Figure 5).

### By Truck

1. Maneuver the work platform into transport position and chock wheels.
2. Secure the work platform to the transport vehicle with chains or straps of adequate load capacity attached to the chassis lifting/tie down points (Figure 5).



### CAUTION



Overtightening of chains or straps attached to tie down lugs may result in damage to work platform.

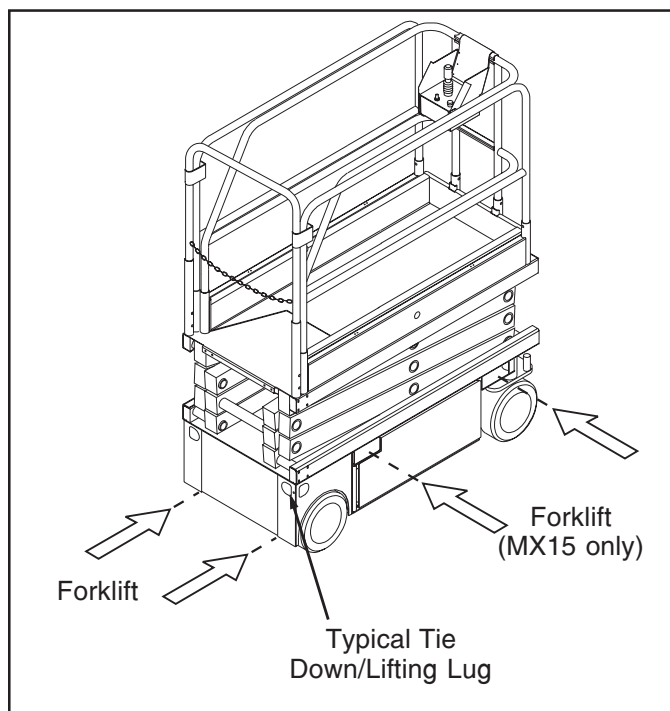


Figure 5: Transporting Work Platform



## Maintenance



### DANGER



Never perform service on the work platform in the Elevating Assembly area while the platform is elevated without first blocking the Elevating Assembly.

## Blocking Elevating Assembly (Figure 6)

### Installation

1. Park the work platform on firm level ground.
2. Verify Platform Emergency Stop Switch is ON.
3. Turn Chassis Key Switch to **CHASSIS**.
4. Position Chassis Lift Switch to **UP** and elevate platform approximately 7 Ft. (2.1 m).
5. Rotate Scissor Brace to a vertical position.
6. Lower Platform until end of Scissor Arm Weldment rests on Brace.

### Storage

1. Slowly raise Platform from the Chassis Controls, while holding Brace, until the end of the Scissor Arm Weldment clears the Scissor Brace.
2. Rotate Scissor Brace forward to rest on Chassis.

## Routine Service

Use the following table as a guide for routine maintenance, refer to the Service Manual for complete service instructions.

| SERVICE OPERATION                                    | INTERVAL |                          |                            |                            |
|--|----------|--------------------------|----------------------------|----------------------------|
|  | Daily    | Monthly<br>or<br>50 Hrs. | 6 Months<br>or<br>250 Hrs. | 2 Years<br>or<br>1000 Hrs. |
| Clean entire work platform                           | X        |                          |                            |                            |
| Check battery fluid level                            | X        |                          |                            |                            |
| Charge batteries                                     | X        |                          |                            |                            |
| Check tires for damage                               | X        |                          |                            |                            |
| Check hydraulic fluid level                          | X        |                          |                            |                            |
| Check for peeling, faded or missing labels & replace | X        |                          |                            |                            |
| Check deck and guardrail fasteners for proper torque | X        |                          |                            |                            |
| Inspect elevating assembly for bends or cracks       | X        |                          |                            |                            |
| Check for & repair collision damage                  | X        |                          |                            |                            |
| Check emergency lowering valve operation             | X        |                          |                            |                            |
| Check electric motor brushes                         |          | X                        |                            |                            |
| Check pivot pin retaining rings                      | X        |                          |                            |                            |
| Change hydraulic filter                              |          |                          | X                          |                            |
| Check all fasteners for proper torque                |          |                          | X                          |                            |
| Change hydraulic fluid                               |          |                          |                            | X                          |

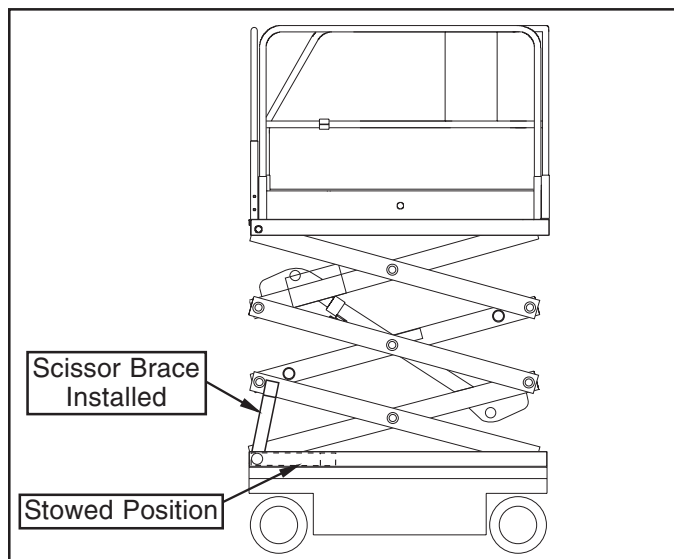


Figure 6: Blocking Elevating Assembly

## Battery Maintenance



### WARNING



Hazard of explosive gas mixture. Keep sparks, flame and smoking materials away from batteries.

Always wear safety glasses when working with batteries.

Battery fluid is highly corrosive. Rinse away any spilled fluid thoroughly with clean water.

Always replace batteries with UpRight batteries or manufacturer approved replacements weighing at least 62 lbs. (28 kg) each.

Check battery fluid level daily, especially if work platform is being used in a warm, dry climate.

If electrolyte level is lower than  $\frac{3}{8}$  in. (10 mm) above plates add distilled water **only**. DO NOT use tap water with high mineral content it will shorten battery life.

Keep terminals and tops of batteries clean.

Refer to the Service Manual to extend battery life and for complete service instructions.

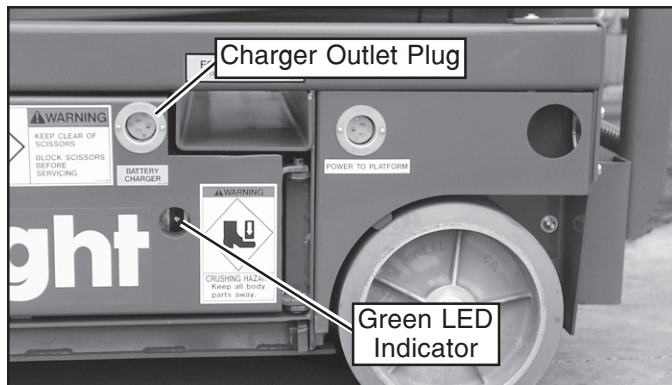


Figure 7: Chassis Module, Left Side

## Battery Charging

Charge batteries at end of each work shift or sooner if batteries have been discharged.



### WARNING



Charge batteries in a well ventilated area.

Do not charge batteries when the work platform is in an area containing sparks or flames.

Permanent damage to batteries will result if batteries are not immediately recharged after discharging.

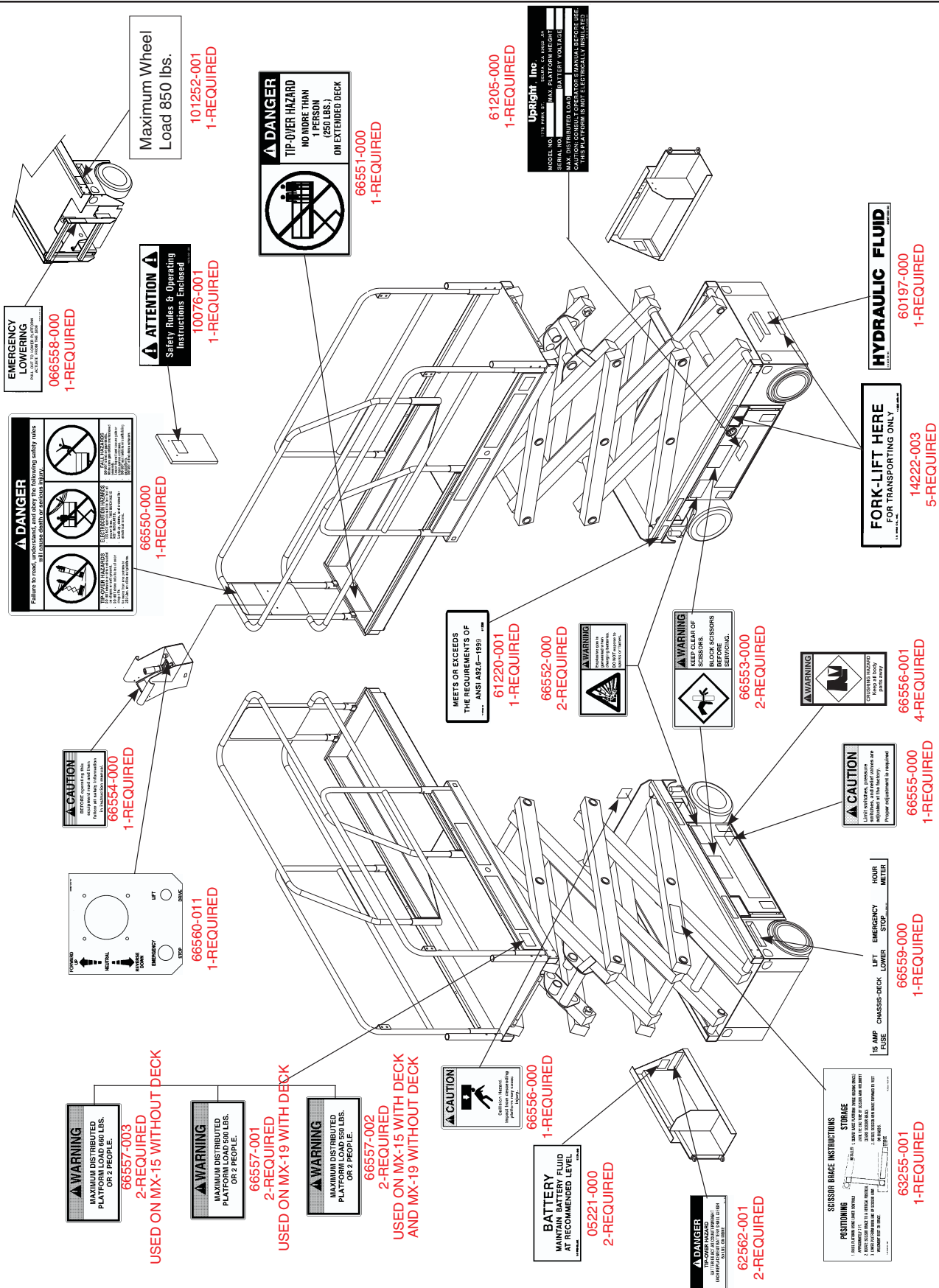
Never leave charger operating unattended for more than two days.

Never disconnect cables from batteries when charger is operating.

Keep charger dry.

1. Check battery fluid level. If electrolyte level is lower than  $\frac{3}{8}$  in. (10 mm) above plates add distilled water **only**.
2. Connect extension cord to charger outlet plug in Left Chassis Door. Connect extension cord (12 gauge conductor minimum and 50 ft. (15 m) in length maximum) to properly grounded outlet of proper voltage and frequency.
3. Charger turns on automatically after a short delay, the LED charge indicator will illuminate.
4. Charger turns off automatically when batteries are fully charged, the LED charge indicator will blink.

**NOTE: Labels can be ordered by using Part Number located by each label.  
For machines equipped with options consult service manual.**



**MX-SERIES LABEL INSTALLATION: THESE LABELS SHALL BE PRESENT AND IN GOOD CONDITION BEFORE OPERATING THE WORK PLATFORM. BE SURE TO READ, UNDERSTAND AND FOLLOW THESE LABELS BEFORE OPERATING THE WORK PLATFORM.**

## Specifications\*

| ITEM   | MX15  | MX19  |
|--|---|---|
| <b>Platform Size</b> (Inside min.)<br><b>Standard w/Deck</b><br><b>Optional w/o Deck</b>             | 22.5 in. x 98.5 in. (.57 m x 2.5 m)<br>26 in. x 62 in. (.66 m x 1.57 m)   | 22.5 in. x 98.5 in. (.57 m x 2.5 m)<br>26 in. x 62 in. (.66 m x 1.57 m)   |
| <b>Maximum Platform Capacity</b> (Distributed)<br><b>Standard w/Deck</b><br><b>Optional w/o Deck</b> | 550 lbs. (250 kg)<br>660 lbs. (300 kg)  | 500 lbs. (225 kg)<br>550 lbs. (250 kg)  |
| <b>Maximum Number of Occupants</b><br><b>Standard w/Deck</b><br><b>Optional w/o Deck</b>             | Two people, only one person on Deck<br>Two people   | Two people, only one person on Deck<br>Two people   |
| <b>Height</b><br>Working Height<br>Maximum Platform Height<br>Minimum Platform Height                | 20 ft. 9 in. (6.32 m)<br>14 ft. 9 in. (4.5 m)<br>36.2 in. (920 mm)  | 25 ft. (7.62 m)<br>19 ft. (5.8 m)<br>40.15 in. (1020 mm)  |
| <b>Dimensions</b><br>Weight<br>Overall Width<br>Overall Height (Lowered)<br>Overall Length (Deck in) | 1,962 lbs. (890 kg)<br>30 in. (760 mm)<br>76 in. (1.93 m)<br>63 in. (1.60 m)  | 2,160 lbs. (980 kg)<br>30 in. (760 mm)<br>80 in. (2.03 m)<br>63 in. (1.60 m)  |
| <b>Driveable Height</b>  | 14 ft. 9 in. (4.5 m)  | 19 ft. (5.8 m)  |
| <b>Surface Speed</b><br>Platform Lowered<br>Platform Raised  | 2.75 mph (4.43 km/h)<br>.75 mph (1.2 km/h)  | 2.75 mph (4.43 km/h)<br>.75 mph (1.2 km/h)  |
| <b>Energy Source</b>   | 24V battery pack (4-220 ampere hour, 6 Volt batteries, min. wt. 62 lbs (28.12 kg) each), 4 HP DC electric motor                   | 24V battery pack (4-220 ampere hour, 6 Volt batteries, min. wt. 62 lbs (28.12 kg) each), 4 HP DC electric motor                   |
| <b>System Voltage</b>  | 24 VDC  | 24 VDC  |
| <b>Battery Charger</b>   | 20 AMP, 120 VAC 60 Hz, Automatic  | 20 AMP, 120 VAC 60 Hz, Automatic  |
| <b>Battery Duty Cycle</b>  | 25% for 8 Hours   | 25% for 8 Hours   |
| <b>Hydraulic Tank Capacity</b>   | 3.4 gal (12.9 L)  | 3.4 gal (12.9 L)  |
| <b>Maximum Hydraulic System Pressure</b>   | 2500 psi (172 Bar)  | 2700 psi (186 Bar)  |
| <b>Lift System</b>   | One Single Stage Lift Cylinder  | One Single Stage Lift Cylinder  |
| <b>Drive Control</b>   | Proportional  | Proportional  |
| <b>Control System</b>  | Proportional Joystick Controller with Interlock Lever, Footswitch, Toggle Selector Switch, and Red Mushroom Emergency Stop Switch | Proportional Joystick Controller with Interlock Lever, Footswitch, Toggle Selector Switch, and Red Mushroom Emergency Stop Switch |
| <b>Horizontal Drive</b>  | Dual Front Wheel  | Dual Front Wheel  |
| <b>Tires</b>   | 12 in. (30.5 cm) diameter solid rubber, Non-marking   | 12 in. (30.5 cm) diameter solid rubber, Non-marking   |
| <b>Parking Brakes</b>  | Dual, Spring Applied, Hydraulic Release   | Dual, Spring Applied, Hydraulic Release   |
| <b>Turning Radius</b>  | 1 in. (25 mm) Inside  | 1 in. (25 mm) Inside  |
| <b>Maximum Gradeability</b>  | 25% (14°)   | 25% (14°)   |
| <b>Wheel Base</b>  | 48.5 in. (1.23 m)   | 48.5 in. (1.23 m)   |
| <b>Guardrails</b>  | 39 in. (1.02 m) or 43.5 in. (1.10 m)  | 39 in. (1.02 m) or 43.5 in. (1.10 m)  |
| <b>Toeboard</b>  | 6 in. (152 mm)  | 6 in. (152 mm)  |

\* Specifications subject to change without notice.

Meets or exceeds all applicable requirements of OSHA and ANSI A92.6-1999

Refer to Service Manual for complete parts and service information.

Hot weather or heavy use may reduce performance.

## FOR MORE INFORMATION

**UpRight**

Local Distributor:

TEL: (1) 800-926-5438 or (1) 559-662-3900

FAX: (1) 559-673-6184

Parts FAX: (1) 800-669-9884

801 South Pine Street

Madera, California 93637

<http://www.upright.com>

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