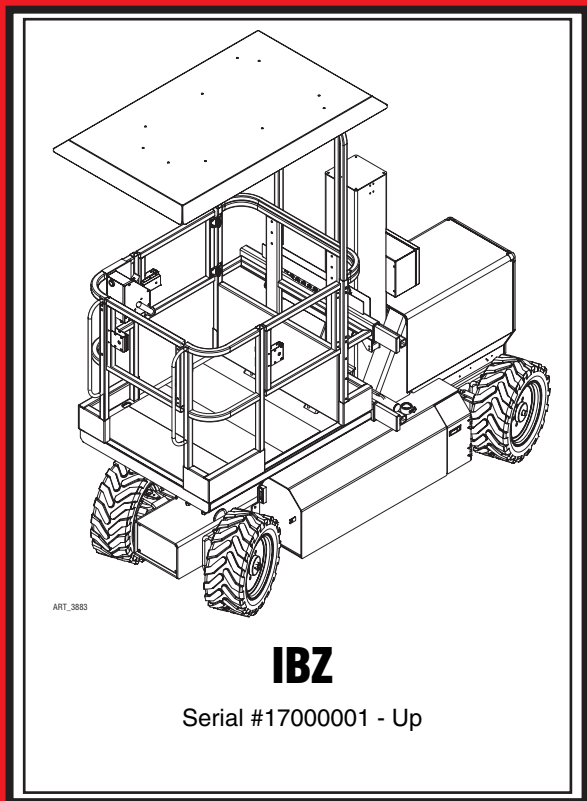


Operator's Manual

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93050
October 2012

—Specifications—

IBZ				
Working Height*	12.5 ft	4.0 m		
Platform Height	6.5 ft	2.0 m		
Maximum Drive Height	6.5 ft	2.0 m		
Machine Weight** (Unloaded)	4400 lb	1996 kg		
Maximum Platform Capacity	600 lb	272 kg		
Maximum Occupants	2			
Stowed Height	Including canopy	9 ft 6 in	2.9 m	
	Excluding canopy	7 ft 0 in	2.13 m	
Overall Length		113 in	2.87 m	
Overall Width		48 in	1.22 m	
Wheel Base		85 in	2.16 m	
Platform Dimensions	Length	53 in	1.35 m	
	Platform Width	48 in	1.22 m	
Turning Radius,	Inside	11 ft	3.35 m	
	Outside	16 ft	4.88 m	
Ground Clearance		8 in	20 cm	
Lift/Lower Speeds		6 sec/6 sec		
Side Shift Speeds		6 sec		
Drive Speed	Stowed	6 mph	9.6 km/h	
(Proportional)	Raised or extended	3 mph	4.8 km/h	
Gradeability	Stowed, downhill	40%/21.8°		
	Stowed, uphill	40%/21.8°		
Breakover Angle		39%/ 21.3°		
Maximum Operating Wind Speed		28 mph	12.5 m/sec (45 km/h)	Engine Kubota D1105E, 24.8 HP (18.5 kW) Tier 4 Compliant Liquid-Cooled Diesel
Ground Pressure/Wheel (Maximum)		100 psi	7.0 kg/cm ²	Fuel Type Diesel
Maximum Wheel Load		1500 lbs	680 kg	Fuel Capacity 40 gal 150 liter
Tire Size		23 in. od	.58 m od	Alternator 120 amp
Wheel Lug Nut Torque		130 ft/lb	176 Nm	Battery One 1000 CCA 12V Type 31
Maximum Hydraulic Pressure	Main System	4000 psi	276 bar	Noise Level 86 dB @ 1m
	Lift System	2400 psi	165 bar	Control System 12V DC
Hydraulic Fluid Capacity		32 gal	120 liter	Brakes 4 wheel multi disc
Meets applicable requirements of ANSI A92.6-2006 Section 4				
*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

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.

Electrocution Hazard



ELECTROCUTION HAZARD! THIS MACHINE IS NOT INSULATED!

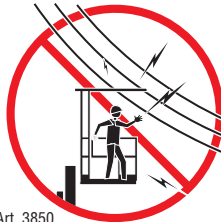
DEATH OR SERIOUS INJURY will result from contact with or inadequate clearance from any electrically charged conductor.

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.



Art_3849



Art_3850

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 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_3851

DO NOT OVERLOAD



Art_3852

DO NOT DRIVE ON IRREGULAR OR UNSTABLE SURFACE



Art_3853

DO NOT PUSH OR PULL OBJECTS OUTSIDE PLATFORM

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.

STOP if the alarm sounds and the red light illuminates when the platform is raised. Use extreme caution to lower the platform.

Driving: DO NOT drive the machine on a slope that exceeds the maximum uphill or downhill 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 push off or pull toward any object outside the platform.

Maximum Allowable Side Force

ANSI and CSA
100 lbs (445 N)

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.

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.

Fall Hazards



Art_3856

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.

Keep the platform floor clear of debris.

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

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

Only exit the platform when elevated if the platform is in close proximity to a rail-car catwalk surface, with the floor surfaces at equal height.

Only exit the platform when stowed through the front Ground Entry Gate using the handholds and step provided.

Collision Hazards



Art_3858

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.

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.



Art_3859



Art_3860

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.

Battery Safety

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

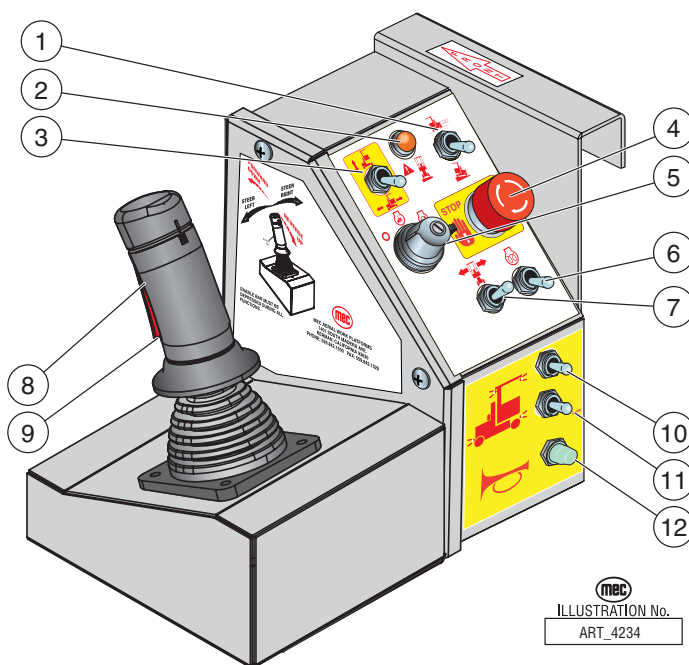
Keep sparks, flame and lighted tobacco away from batteries. Batteries emit explosive gas.

Electrocution Hazard

Avoid contact with electrical terminals.

Controls & Components

Platform Controls


WARNING

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

CONTROL		DESCRIPTION
1	Speed/Torque Selector Switch	Move this switch to the up for high speed drive. Push this switch to down for high torque drive.
2	Tilt Indicator Light	If illuminated, the machine is not level. Carefully lower the platform, then move the machine to a firm, level surface.
3	Lift/Drive Switch	Move this switch UP to enable the Lift function. Move this switch DOWN to enable the Drive function.
4	Emergency Stop Switch	Press the EMERGENCY STOP switch at any time to stop all machine functions. Turn switch <i>clockwise</i> to reset
5	Start/Stop Switch	Turn switch fully right to start the engine. Turn switch left to stop the engine.
6	Glow Switch	Move this switch UP to activate glow plugs prior to cold starting the engine.
7	Side Shift Switch	Move this switch LEFT to move the platform left. Move this switch RIGHT move the platform right.
8	Control Handle	DRIVE In Drive Mode, proportionally controls Forward and Reverse travel.
		LIFT In Lift Mode, proportionally controls Lift and Lower functions.
		STEER In Drive Mode, proportionally controls Steer Left and Steer Right by sideways motion.
9	Enable Bar	Squeeze to enable DRIVE, STEER, and LIFT functions from the Control Handle.
10	Platform Light Switch	Operates the work lights mounted on the Platform.
11	Chassis Light Switch	Operates the work lights mounted on the Chassis.
12	Horn Button	Press to sound warning horn.

Lower Controls

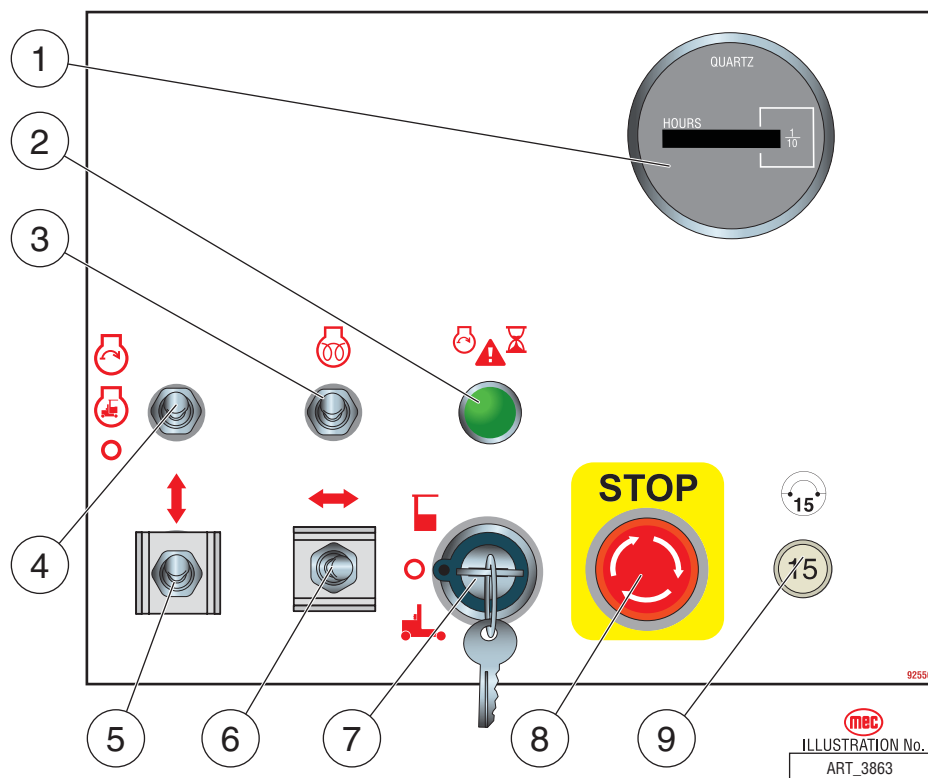


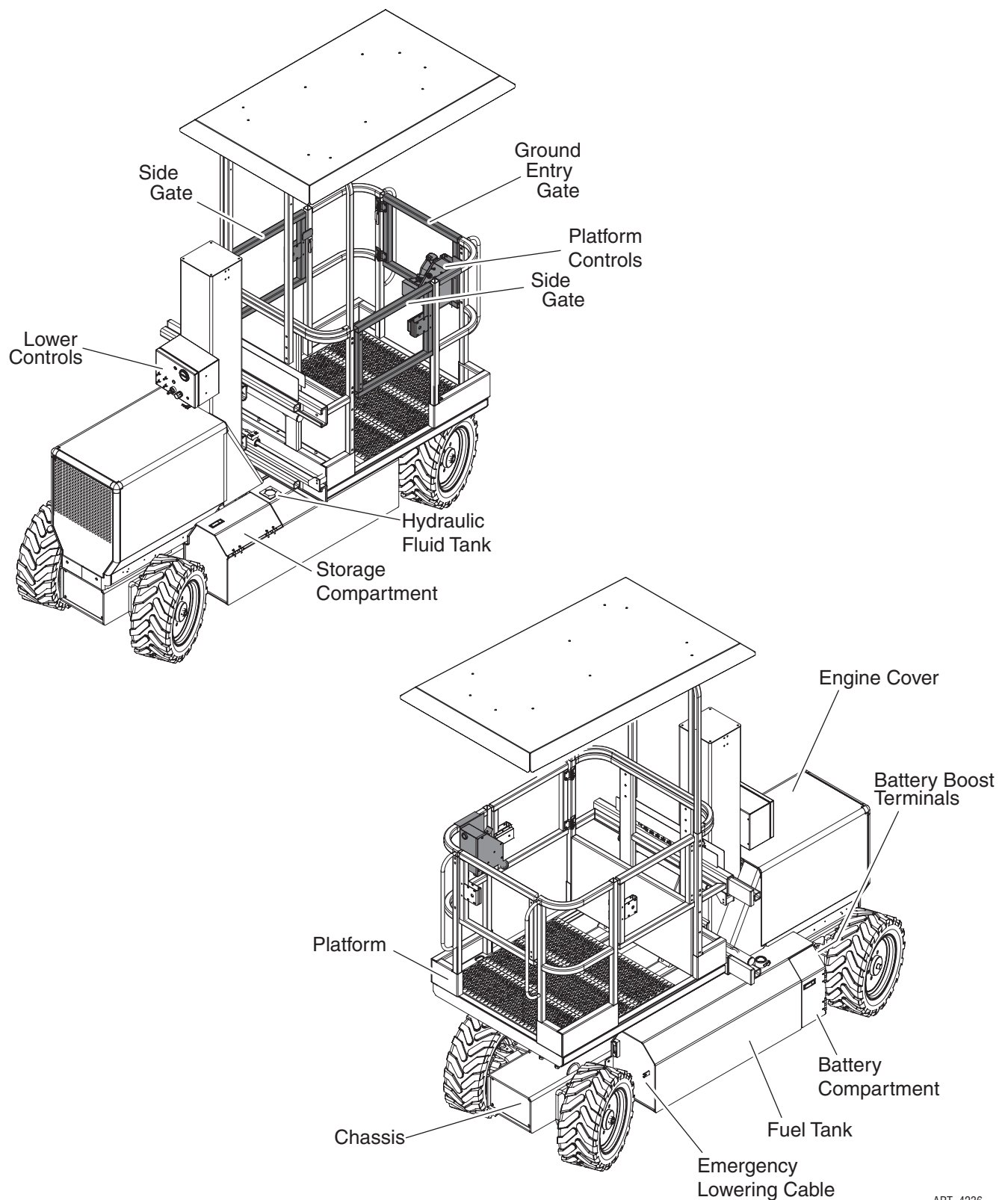
ILLUSTRATION No.
ART_3863

WARNING

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

CONTROL		DESCRIPTION
1	Hour Meter	Indicates total elapsed time of machine operation.
2	Starter Circuit Cutout indicator	To protect the starter motor, power will cut off to the starter circuit when the starter motor has run continuously for 15 seconds without starting the engine. The Starter Circuit Cutout indicator light will turn on at the Base Control panel and power to the starter circuit will cut out for 30 seconds.
3	Glow Switch	Press this switch UP to activate glow plugs prior to starting
4	Start/Stop Switch	Push Switch UP to start the engine. Push switch DOWN to stop the engine.
5	Lift/Lower Switch	With the Selector Switch in the BASE position, move this switch up to lift the platform or down to lower the platform.
6	Side Shift Switch	Move this switch LEFT to move the platform left. Move this switch RIGHT move the platform right.
7	Selector Switch	Top PLATFORM: Select to operate from the platform control panel.
		Middle OFF: Select to stop operation from either control panel.
		Bottom BASE: Select to operate from the base control panel.
8	Emergency Stop Switch	Press the EMERGENCY STOP switch at any time to stop all machine functions. Turn switch <i>clockwise</i> to reset
9	Circuit Breaker	Trips when there is excessive electrical load. Push to reset.

Component Locations



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 & Function Tests

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.

Prestart

- Perform *Prestart Inspection* (see page 25).
- Check Emergency Stop Switches at both the base and platform controls – turn clockwise to reset.



ART_3817



ART_3866

Starting Engine From Base Controls

Be sure that the upper and lower Emergency Stop switches are reset
The Start/Stop Switch at the Base Controls box is a three-position switch.



Up	Engine Start
Middle	Engine Run
Down	Engine Off

- **Lower Control Box:** Turn Key Switch to BASE.



- Move the Start/Stop Switch UP to start the machine



- **Cold Start:** Move and hold the Glow Switch UP as indicated in the Preheat table.
- With the Glow switch held up, press and hold the Start/Stop switch UP until the engine starts.
- Release both switches when the engine starts.

Preheat Table

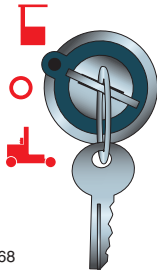
Ambient Temperature	Preheat Time
Above 50°F (10°C)	5 Seconds
50°F to 23°F (10°C to -5°C)	10 Seconds
Below 50°F (-5°C)	20 Seconds
20 Seconds = Limit of Continuous Use	

- To protect the starter motor, power will cut off to the starter circuit when the starter motor has run continuously for 15 seconds without starting the engine. The Starter Circuit Cutout indicator light will turn on and power to the starter circuit will cut out for 30 seconds.



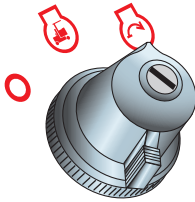
Starting Engine From Platform Controls

- **Lower Control Box:** Turn the Key Switch to PLATFORM.



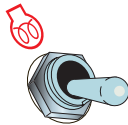
ART_3868

- **Platform Box:** Turn the Engine Start Switch to START - release when the engine starts.



ART_3875

- **Cold Start:** Move and hold the Glow Switch up as indicated in the Preheat table.
- With the Glow switch held up, press and hold the Start/Stop switch UP until the engine starts.
- Release both switches when the engine starts.



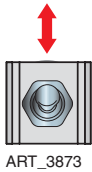
ART_3876

Preheat Table

Ambient Temperature	Preheat Time
Above 50°F (10°C)	5 Seconds
50°F to 23°F (10°C to -5°C)	10 Seconds
Below 50°F (-5°C)	20 Seconds
20 Seconds = Limit of Continuous Use	

- To protect the starter motor, power will cut off to the starter circuit when the starter motor has run continuously for 10 seconds without starting the engine. The Starter Circuit Cutout indicator light will turn on at the Base Control panel and power to the starter circuit will cut out for 30 seconds.

Lift/Lower Function



- With the engine running, press and hold the Lift/Lower switch on the base control panel to lift or lower the platform.

Test Operation

- Raise the platform until it stops. Platform should lift to full height.
- Lower the platform until it stops. Platform should lower completely.
- Releasing the switch will stop Lift/Lower function.
- Pressing the Emergency Stop Switch will stop Lift/Lower function.

Side Shift Function



- With the engine running, press and hold the Side Shift switch on the base control panel to shift the platform left or right.

Test Operation

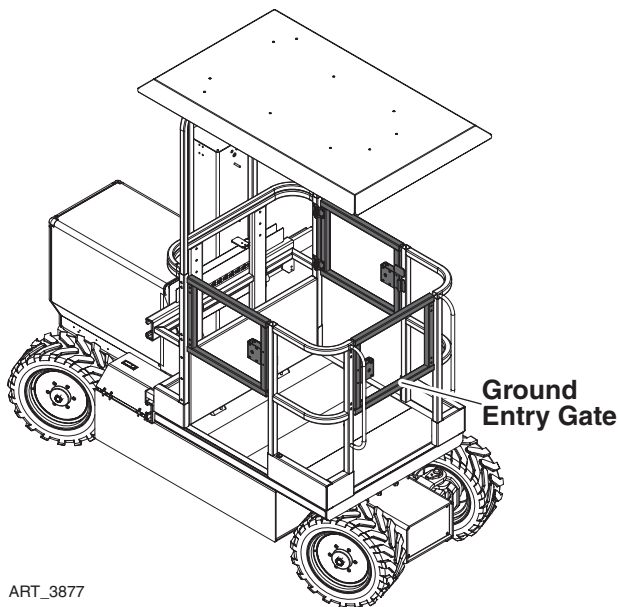
- Push the switch left until the platform stops. Platform should move fully left.
- Push the switch right until the platform stops. Platform should move fully right.
- Releasing the switch will stop Side Shift function.
- Pressing the Emergency Stop Switch will stop Side Shift function.

Platform Control Operation and Test

Entering The Platform



Ensure that all entry gates are securely closed before operating this machine.



Personnel shall enter and exit the platform only through one of three Personnel Entry Gates.

Check that all gates are properly securely closed before operation.

Only exit the platform when elevated if the platform is in close proximity to a rail-car catwalk surface, with the floor surfaces at equal height.

Only exit the platform when stowed through the front Ground Entry Gate using the handholds and step provided.

Platform Control Panel



IMPORTANT—Before moving, 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.

Platform Operations Test

Emergency Stop



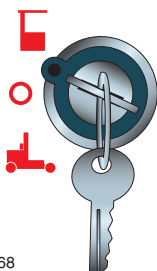
ART_3823

- Press the EMERGENCY STOP switch at any time to stop all machine functions.
- Turn switch *clockwise* to reset.



Activation of the EMERGENCY STOP switch 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.

Select PLATFORM Operation

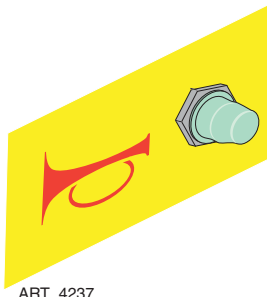


ART_3868

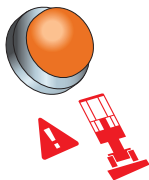
- **Base Controls:** Turn the selector switch to PLATFORM.

Operate from Platform

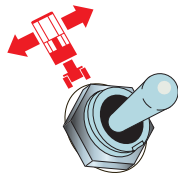
- Enter the platform through one of the personnel entry gate. Close and secure the entry.
- Start the engine (see *Starting Engine From Platform Controls* on page 13).
- Press the Horn Button to verify proper operation.



ART_4237



ART_3878



ART_3881

Tilt Indicator Light

Light ON and alarm sounding indicates an unsafe condition.

- **STOP.** The machine is not level. Carefully lower the platform. Move the machine to a firm, level surface.

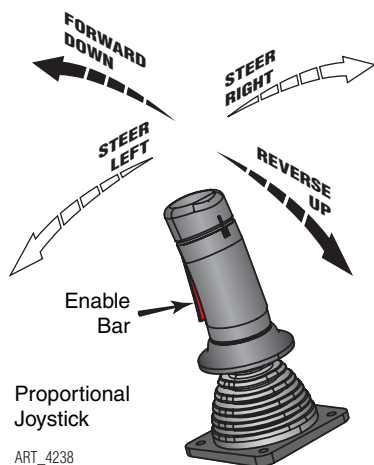
Side Shift Function

- With the engine running, press and hold the Side Shift switch on the platform control panel to shift the platform left or right.

Test Operation

- Push the switch left until it stops. Platform should move fully left.
- Push the switch right until it stops. Platform should move fully right.
- Releasing the switch will stop Side Shift function.
- Pressing the Emergency Stop Switch will stop Side Shift function

Control Lever Operation

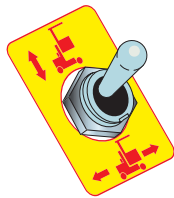


- Function speed is proportional and is controlled by the movement of the control lever.
- The further it is moved forward, the faster the speed will be.
- The control lever returns to the neutral (center) position when released.



WARNING

If the platform fails to lower DO NOT attempt to climb down the elevating assembly. Serious injury may result – see Emergency Lowering System on page 20.



Elevate Platform

- Place the Lift/Drive Switch in the LIFT position.
- Squeeze the enable bar and move the control lever toward you.

Test Operation

- Rate of lift is proportional and is dependent on the movement of the control lever.
- Elevate to maximum height.
- Releasing the Enable Bar or the Control Lever will stop elevation.
- Pressing the Emergency Stop Switch will stop elevation.

Lower Platform

- Place the Lift/Drive Switch in the LIFT position.
- Move the control lever away from you.

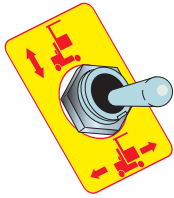
Test Operation

- Rate of descent is fixed - platform lowers at same rate regardless of handle position.
- Pressing the Emergency Stop Switch will stop descent.



Check that the route is clear of persons, obstructions, debris, holes and drop-offs, and is capable of supporting the machine.

Steering



ART_3880

- Place the Lift/Drive Switch in the DRIVE position.
- Squeeze the Enable Bar.
- Move the Control Lever left or right to steer left or right.

Test Operation

- The position of the wheels is related directly to the left/right position of the Control Lever.
- Releasing the Enable Bar or returning the Control Lever to center will stop steering function.
- As soon as the Enable Bar is engaged, the wheel position will change to match the position of the Control Lever.



ART_3882

Drive Torque (Speed Control)

Drive speed is selectable until the platform is elevated. When the platform is elevated the machine defaults to High Torque speed and the switch is locked-out (non functioning).

- HIGH SPEED: 6 mph (9.6 km/h); allows higher drive speeds for travel across flat ground.
- HIGH TORQUE: 3 mph (4.8 km/h); use to drive up or down a slope that is too steep for normal speed.

Drive Forward



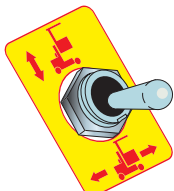
ART_3880

- Place the Lift/Drive Switch in the DRIVE position.
- Squeeze the enable bar and move the control lever away from you.

Test Operation

- Drive speed is proportional and is dependent on the movement of the control lever.
- Releasing the enable bar or returning the control lever to the center position will stop drive.
- Pressing the EMERGENCY STOP switch will stop drive.

Drive Reverse



ART_3880

- Place the Lift/Drive Switch in the DRIVE position.
- Squeeze the enable bar and move the control lever toward you.

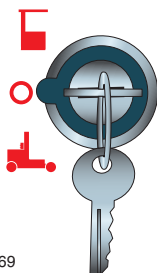
Test Operation

- Drive speed is proportional and is dependent on the movement of the control lever.
- Releasing the enable bar or returning the control lever to the center position will stop drive.
- Pressing the EMERGENCY STOP switch will stop drive.

Brakes

- For parking, the brakes are automatically applied when the control lever is positioned in the neutral (center) position.

Shutdown Procedure



ART_3869

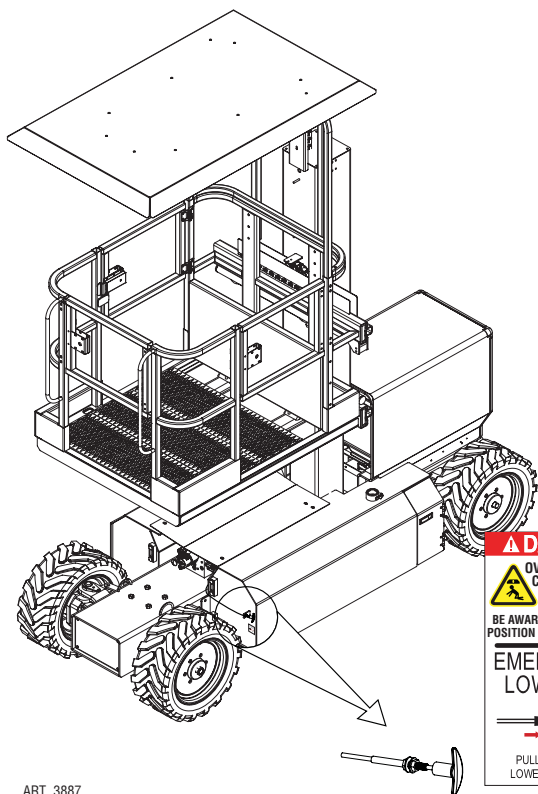
- When finished with the machine, place the platform in the stowed position.
- Park the machine on a level surface.
- Carefully exit the platform through the front Ground Entry Gate using a constant three (3) point dismount/grip.
- Turn the Selector Key Switch to the OFF position and remove the key to prevent unauthorized use.
- Always put the switch in OFF position when leaving the machine at the end of the work day.

Emergency Lowering System

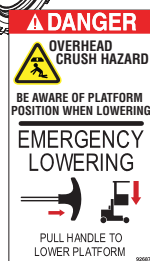
**DANGER****OVERHEAD CRUSH HAZARD!****BE AWARE OF PLATFORM POSITION WHEN LOWERING THE PLATFORM.****WARNING**

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 elevating assembly or exit the platform.



ART_3887



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

To lower the platform, pull the Emergency Lowering Handle, located at the front of the fuel tank.

Maintenance

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.

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.



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.



NEVER perform work or inspection on the machine with the platform elevated without first supporting the elevating assembly (see page 22).

Failure to perform scheduled maintenance at recommended intervals may result in injury or death. 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.



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 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.

Routine Maintenance

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 25.

Frequent and Annual Maintenance

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.

Supporting The Elevating Assembly

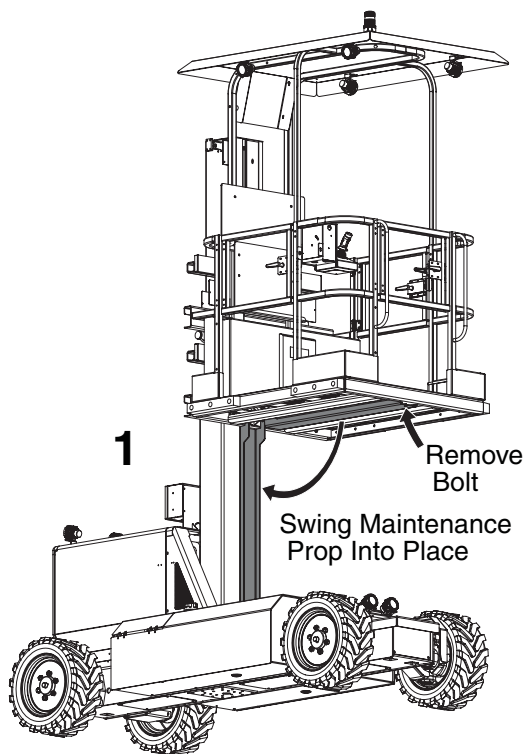
WARNING

DEATH OR SERIOUS INJURY HAZARD!

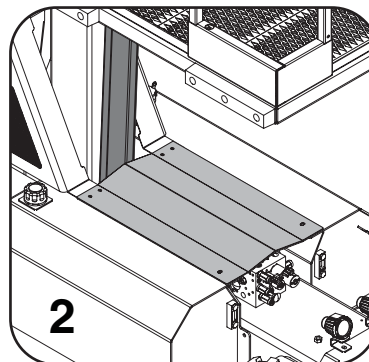
NEVER perform work or inspection on the machine with the platform elevated without first supporting the elevating assembly with an overhead crane or hoist.

CAUTION

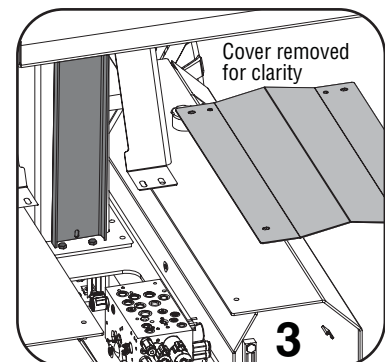
DO NOT lower the platform with the Maintenance Prop in contact with the chassis cover.



ART_4240



ART_4241



The elevating assembly must be supported before working on or inspecting the machine with the platform elevated.

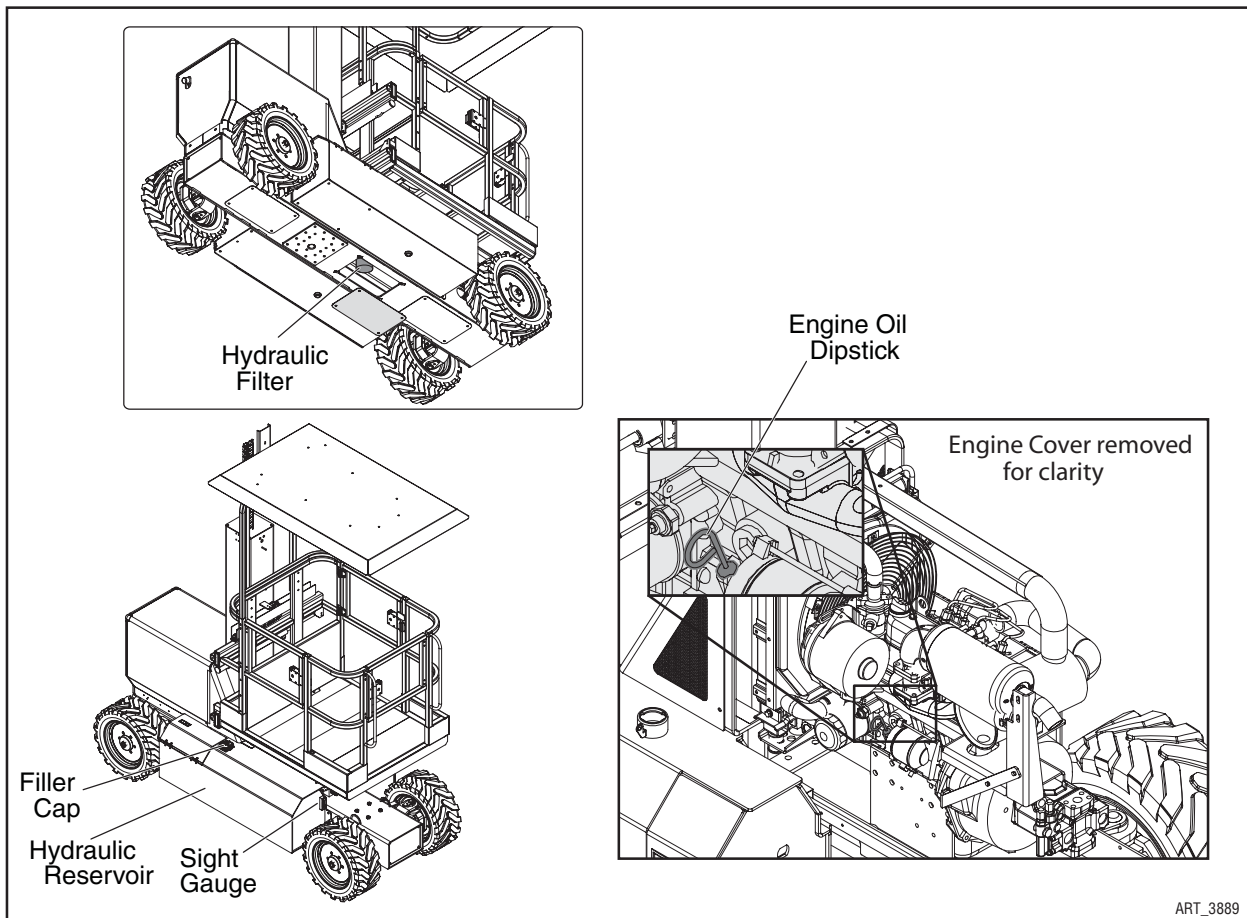
Use the Side Shift function to center the platform, then raise the platform to approximately 6 ft. Remove the bolt holding the Maintenance Prop into place and allow it to swing down until it touches the mast (1).

Carefully lower the platform, ensuring that (2) the end of the Maintenance Prop drops behind the chassis cover. Continue to lower until (3) the Maintenance Prop comes to rest at the base of the mast behind the mast mounting bolts.

To stow the Maintenance Prop, raise the platform until the prop clears the chassis cover. Swing the Maintenance Prop back to the stowed position and replace the bolt that holds it in place.

Lubrication

Operator may perform Routine Maintenance only. Scheduled Maintenance must be performed by a qualified service technician.



Lubrication

No.	ITEM	SPECIFICATION	FREQUENCY
1	Hydraulic Reservoir	Fluid Type Mobile 424 Mobile DTE13M Mobile DTE11M	Temperature Range > 30° F (0° C) 0° F (-18° C) ~ 30° F (0° C) < 0° F (-18° C)
Routine Maintenance Check sight gauge level daily. Scheduled Maintenance Change yearly or every 600 hours, whichever occurs first.			
DO NOT substitute other fluids as pump damage may result. Fill to the middle of the sight gauge with platform in the stowed position.			
2	Hydraulic Filter Element (located inside the chassis and accessed from underneath)		Scheduled Maintenance Normal Conditions Change every six months or 300 hours, whichever occurs first Severe Conditions--very dusty, exceptionally hot or cold conditions Change every three months or 150 hours, whichever occurs first
3	Engine Oil IMPORTANT -- Change oil and filter after the first 50 hours of service. For complete service information consult the engine manual that came with the machine.		Routine Maintenance Check oil level daily. Dipstick should read FULL. Add 10w-30 motor oil (API rating of CF or higher) as needed. Normal Conditions Change engine oil every 200 hours. Change oil filter every 400 hours. Severe Conditions--very dusty, exceptionally hot or cold conditions Change engine oil and oil filter every 200 hours.

Machine Inspections and Maintenance

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.

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.



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.



NEVER perform work or inspection on the machine with the platform elevated without first supporting the elevating assembly (see page 22).

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.



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 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.

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
_____	Check that the operator's manual and manual of responsibilities are in the storage container located on the platform.
_____	Perform a visual inspection of all machine components. Look for missing parts; torn or loose hoses; hydraulic fluid leaks; loose, torn or disconnected wires; damaged tires; etc.
_____	Check all structural components of the machine for cracked welds, corrosion and collision damage.
_____	Check all hoses and the cables for worn or chafed areas.
_____	Check the platform rails and personnel entries for damage or modification.
_____	Check that all warning and instructional decals are present, legible and secure.
_____	Check the tires for damage.
_____	Check that all structural components, pins and fasteners are present and properly tightened.
_____	Check for fluid leaks.
_____	Check hydraulic fluid level (check with platform fully lowered).
_____	Check engine oil level (check with engine off).
_____	Check engine coolant level at overflow bottle.
_____	Check fuel tank level.
_____	Check that battery is clean and secure. Check terminals for proper tightness. Check for corrosion.
_____	Secure all covers, panels and guard rails.
_____	Ensure that the personnel entries are properly closed and secured before operating the machine.

Frequent Inspection Checklist



This checklist must be used every 200 hours of machine use. 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.

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 amber color.
_____	Check battery electrolyte level and connections.
_____	Check wheel lug nuts for proper torque (see <i>Specifications</i>).
_____	Check if tires are leaning in or out.
_____	Inspect all structure and pivot points for signs of wear and/or damage.
_____	Check the pin joints and retaining rings for security.
_____	Inspect the entire machine for signs of damage, broken welds, loose bolts, improper or makeshift repairs.
_____	Check that the platform does not drift down with a full load.
_____	Check all wire connections for tightness and corrosion.
_____	Check the operation speeds to ensure they are within specified limits (see <i>Specifications</i>).
_____	Check the Emergency Lowering System.
_____	Clean and lubricate all push-button switches with dry lubricant and ensure that the switches operate freely in all positions.
_____	Check the overall platform and guardrail component security.
_____	Check the electrical mounting and hardware connections for security.
_____	Check the steering kingpins for excessive play.
_____	Change engine oil.

Every 400 hours:

_____ Change engine oil filter.

Additional maintenance requirements for severe conditions

If the machine is used in very dusty, exceptionally hot or exceptionally cold conditions:

- _____ Replace hydraulic filter (under normal conditions, replace every 300 hours).
- _____ Replace engine oil filter (under normal conditions, replace every 400 hours).

DATE _____ **INSPECTED BY** _____



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 _____

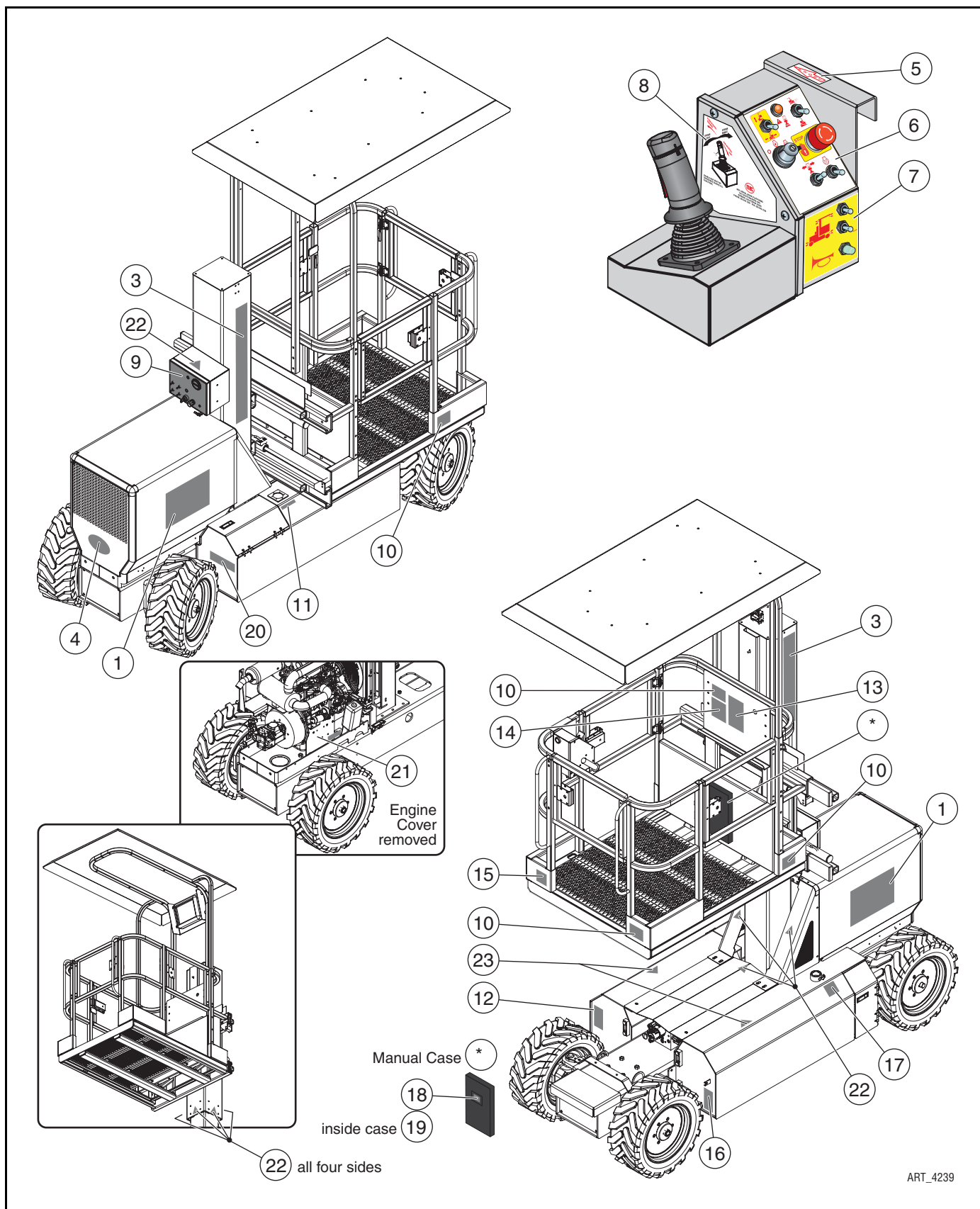
Dealer _____
Street _____
City/State/Zip _____
Phone Number _____
Contact _____

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

[illegible]

Warning and Instructional Decals

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

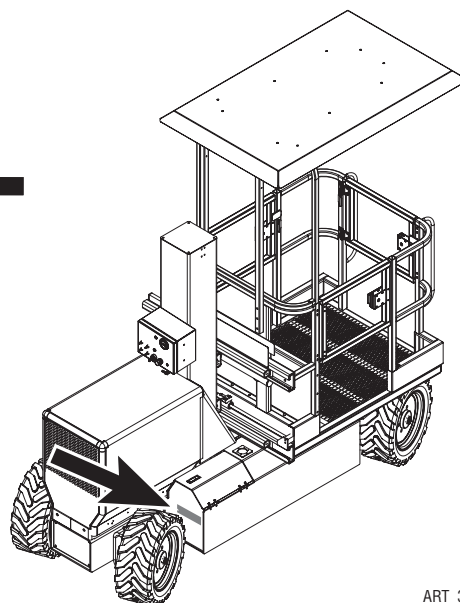


Serial Plate Location

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

mec MEC AERIAL PLATFORM SALES CORP.		MFG DATE XX/XX	MODEL NUMBER XXXXXX	SERIAL NUMBER XXXXXXXXXX	MODEL YEAR 20XX
MAX. PLATFORM CAPACITY INCLUDING PERSONS XXX LBS = X PERSONS + EQUIPMENT XXX kg = X PERSONS + EQUIPMENT		ELECTRICAL VOLTAGE XX VOLTS		MAX. MANUAL FORCE XXX LBS XXX N	
MAX. DRIVE HEIGHT XX FT X.X m	MACHINE WEIGHT XXXX LBS XXX kg	MAX. GROUND PRESSURE PER WHEEL XX PSI XXX kg/cm ²	MAX. LOAD PER WHEEL XXX LBS XXX kg	MAX. HYDRAULIC SYSTEM PRESSURE XXXX PSI XXX bar	
MAX. PLATFORM HEIGHT XX FT X.X m	MAX. WIND SPEED X MPH X m/s				

THIS MACHINE HAS BEEN CONSTRUCTED IN ACCORDANCE WITH SECTION 4 OF ANSI A92.8 COVERED BY US PAT. #5,476,050 & CANADIAN PAT. # 2,115,870



ART_3888

Serial Plate Description

MFG DATE. Month / Year of manufacture.

MODEL NUMBER. Identifies the machine.

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

MODEL YEAR. Model year of manufacture.

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

ELECTRICAL VOLTAGE. The voltage at which this machine operates.

MAX. SIDE LOAD. The maximum safe force that the occupant can exert laterally on an object outside the platform.

MAX. DRIVE HEIGHT. The maximum safe platform height at which the machine can be driven.

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.

MAX. WIND SPEED. The maximum wind speed at which this platform may be safely operated.

MAX. GROUND PRESSURE PER WHEEL. The amount of pressure exerted on the surface at each wheel. Calculated with all available options installed.

$$P_{max} = 30\% (W_m + W_c + W_{opt}) / \text{Contact Area}$$

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

$$F_w = 30\% (W_m + W_c + W_{opt})$$

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

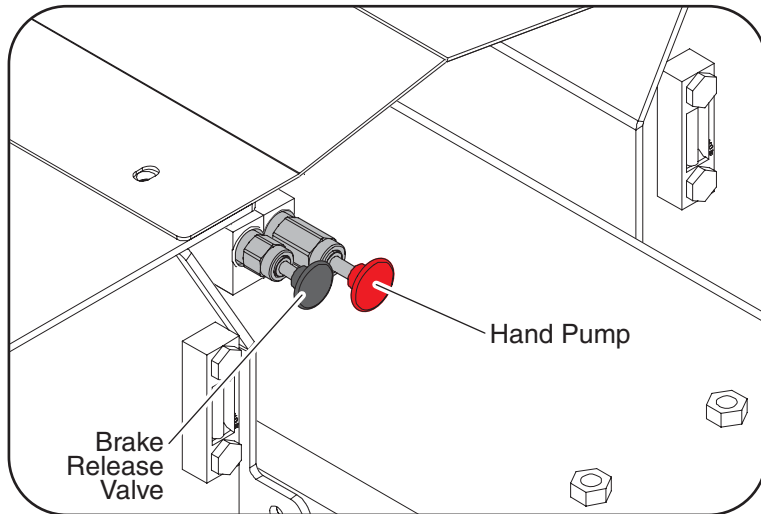
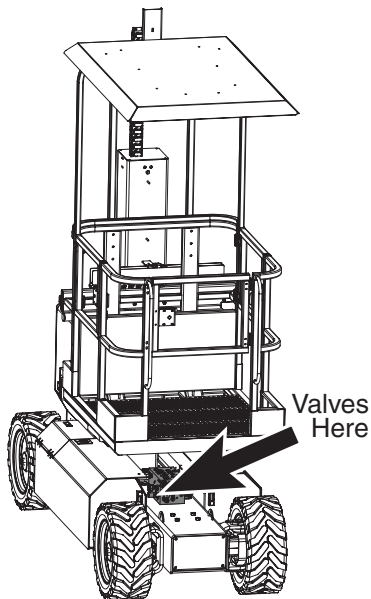
- Battery properly connected?
- Battery fully charged?
- Circuit Breaker tripped?
- Function toggle switch or the Enable Bar not activated?
- Selector Key Switch in proper position?
- Both Emergency Stop Switches reset?
- Hydraulic fluid level low?
- Obvious fluid leak or damaged component?
- Wires disconnected, broken, or loose?

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 5 MPH (8 km/h). Before towing or winching the machine, it is necessary to release the brakes. Reset the brakes after towing or winching.



ART_4242

Disengage Brakes before Towing or Winching

- Chock the wheels.
- Push and hold the black button on the Brake Release Valve.
- Press the red button on the Hand Pump valve 8-10 times until there is firm resistance and the brakes release.

Engage Brakes

The brakes may re-engaged:

- manually by pulling the black button out on the Brake Release Valve, or
- automatically by engaging the drive function.

**WARNING**

Be sure that the brakes are engaged before removing the wheel chocks.



Limited Owner Warranty

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, unless otherwise specified by a superseding document. 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.



MEC Aerial Platform Sales Corp.

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www.mecawp.com