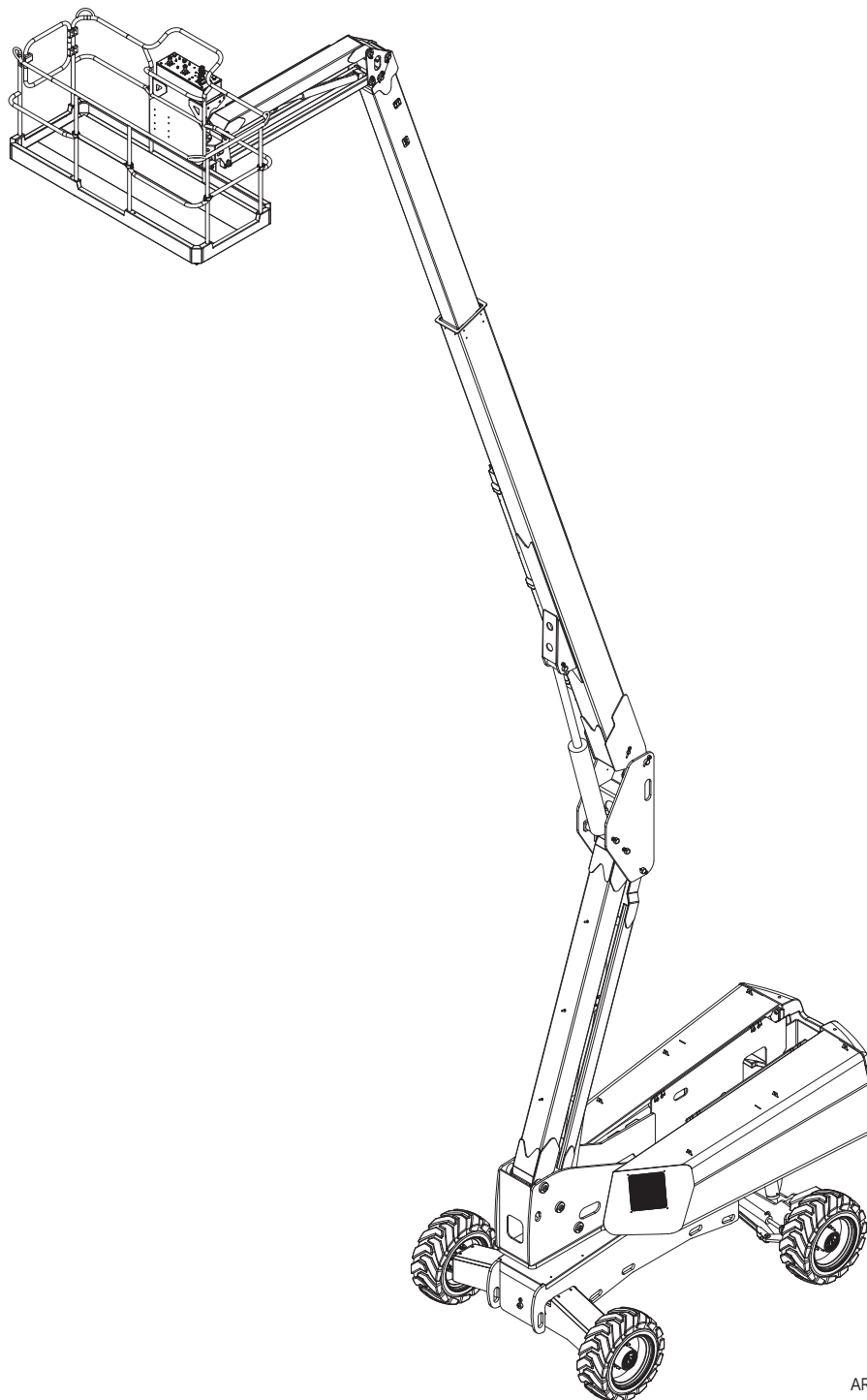




Operator's Manual

65-J Diesel



ART_4883

This manual applies to machines ANSI A92.20-2020 and CSA B354.6-2019.
Serial Number Range
14800200 - Up

Part # 96346
September 2022

Revision History

Date	Reason for Update
September 2020	New Release
April 2021	Updated Lift Capacity in Specifications To Include 600 lbs



MEC Aerial Work Platforms

1401 S. Madera Avenue, Kerman, CA 93630 USA
Toll Free: 1 - 877 - 632 - 5438
Phone: 1 - 559 - 842 - 1500
Fax: 1 - 559 - 842 - 1520
info@MECawp.com
www.MECawp.com

Table of Contents

Section 1 - Introduction	1
<i>Introduction</i>	1
Section 2 - Safety	2
<i>Safety</i>	2
<i>Safety Alert Symbols & Fall Protection</i>	3
Section 3 - Specifications	4
<i>Specifications</i>	4
Section 4 - Hazards	5
<i>Electrocution Hazards</i>	5
<i>Minimum Safe Approach Distance</i>	6
<i>Tip-over Hazards</i>	8
<i>Fall & Collision Hazards</i>	9
<i>Additional Safety Hazards</i>	10
Section 5 - Controls & Components	11
<i>Component Locations</i>	11
<i>Platform Controls</i>	12
<i>Base Controls</i>	14
Section 6 - Workplace Inspection	16
<i>Workplace Inspection</i>	16
Section 7 - Operating Instructions & Pre-Operation Function Tests	17
<i>Operating Instructions & Pre-Operation Function Tests</i>	17
<i>Base Controls Operation & Pre-Operation Functions Test</i>	20
<i>Platform Control Operation & Pre-Operation Functions Test</i>	24
<i>Platform Control Panel</i>	25
<i>Platform Operations Test</i>	26
<i>Drive Control Lever Operation</i>	29
<i>Auxiliary Power System & Test</i>	33
Section 8 - Machine Inspections and Maintenance	35
<i>Machine Inspections and Maintenance</i>	35
<i>Supporting the Boom Assembly</i>	37
<i>Pre-Start Inspection Checklist</i>	38
<i>Frequent Inspection Checklist</i>	39
<i>Annual Inspection Report</i>	40
<i>Routine Maintenance</i>	41
<i>Lubrication</i>	42
Section 9 - Troubleshooting	43
<i>Troubleshooting</i>	43
Section 10 - Warning and Instructional Decals	44
<i>Warning and Instructional Decals</i>	44

<i>Serial Plate Location</i>	48
------------------------------	----

Section 11 - Transport and Lifting Instructions	49
--	-----------

<i>Transport and Lifting Instructions</i>	49
---	----

<i>Boom Lifting Instructions</i>	53
----------------------------------	----

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.

This Operator's Manual and other manuals provided by MEC on the machine must be read and understood prior to operating your MEC Aerial Work Platform. The 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 at 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 the platform occupants and personal around the machine 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 Work Platforms

1401 S. Madera Avenue, Kerman, CA 93630 USA

Toll Free: 1 - 877 - 632 - 5438

Phone: 1 - 559 - 842 - 1500

Fax: 1 - 559 - 842 - 1520

info@MECawp.com

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 boom-supported elevating work platforms. The 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 A92.22 & A92.24 must be performed at designated intervals as prescribed.



This product can expose you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Safety Alert Symbols & Fall Protection

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



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



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



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



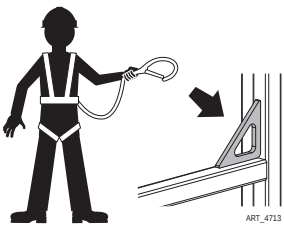
YELLOW without alert symbol and the word CAUTION – Indicates a potentially hazardous situation which, if not avoided, may result in property damage.



GREEN and the word NOTICE – Indicates operation or maintenance information.

Fall Protection

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



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

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

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

Specifications

Work Height*		71 ft	21.6 m		
Platform Height		65 ft	19.8 m		
Maximum Drive Height		Full Height			
Maximum Outreach		47 ft	14.3 m		
Turntable Swing		Continuous			
Jib Range Of Motion		135°			
Platform Rotation		180° (90° Each Side)			
Machine Weight** (Unloaded)		21,800 lb	9,890 kg		
Lift Capacity	Up To Serial #14800199	500 lb	227 kg		
	From Serial #14800200	600 lb	272 kg		
Maximum Occupants		2			
Stowed Height		102 in	2.59 m		
Overall Length		32 ft	9.8 m		
Overall Width		98 in	2.49 m		
Tailswing		50 in	1.27 m		
Wheel Base		101 in	2.56 m		
Platform Details	Width	90 in	2.3 m		
	Depth	40 in	1 m		
	Entry	1 End Swing Gate 2 Slide Bar Entries			
Turning Radius, Inside		6 ft 6 in	2 m		
Ground Clearance		15 in	38 cm		
Lift Speed		60 sec			
Extend Speed		30 sec			
Jib Lift Speed		15 sec			
Drive Speed (Proportional)	Stowed	0-4.0 mph	0-6.4 km/h		
	Raised or Extended	0-0.5 mph	0-0.8 km/h		
Gradeability	Stowed, Downhill	45%/24.2°			
	Stowed, Uphill	45%/24.2°			
Breakover Angle		40%/22°			
Axle Oscillation		10° (5° Each Side)			
Maximum Allowable Operating Wind Speed		28 mph	12.5 m/sec (45 km/h)		
Engine		Kubota V1505-T 44HP			
Fuel Type		Diesel			
Fuel Capacity		32 gal	120 liter		
Hydraulic Fluid Capacity		40 gal	150 liter	Sound Pressure At Workstation	80 dB(A)
Maximum Vibration		Does not exceed 8.2 ft/sec ² (2.5 m/sec ²) at operator's position		Sound Power Level	86 dB @ 1m
Ambient Operating Range		-20° F min 120° F max	-29° C min 49° C max	Ground Pressure/Wheel (Maximum)	69 psi 4.86 kg/cm²
Wheel Lug Nut Torque		150 lb-ft	203 Nm	Maximum Wheel Load	6,060 lb 2,750 kg

Meets requirements of ANSI A92.20-2020 and CSA B354.6-2019.
Allowable ambient temperature range: -20° F to 120° F (-29° C to 49°C).
Consult with MEC for operation outside of this range.
*Working Height adds 6 feet (2 m) to platform height.
**Weight may increase with certain options.

Electrocution Hazards

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 energized electrical line or apparatus carrying over 300 Volts up to 50,000 Volts. One foot (30.5 cm) additional clearance is required for every additional 30,000 Volts.

Observe Minimum Safe Approach Distance.

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

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



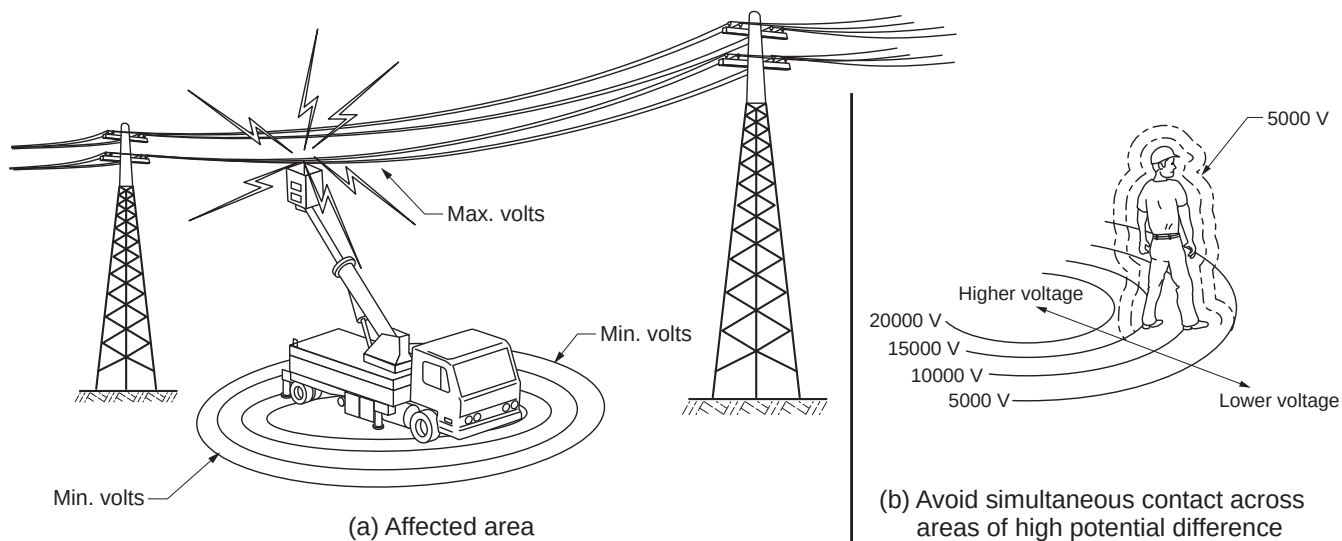
Minimum Safe Approach Distance

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

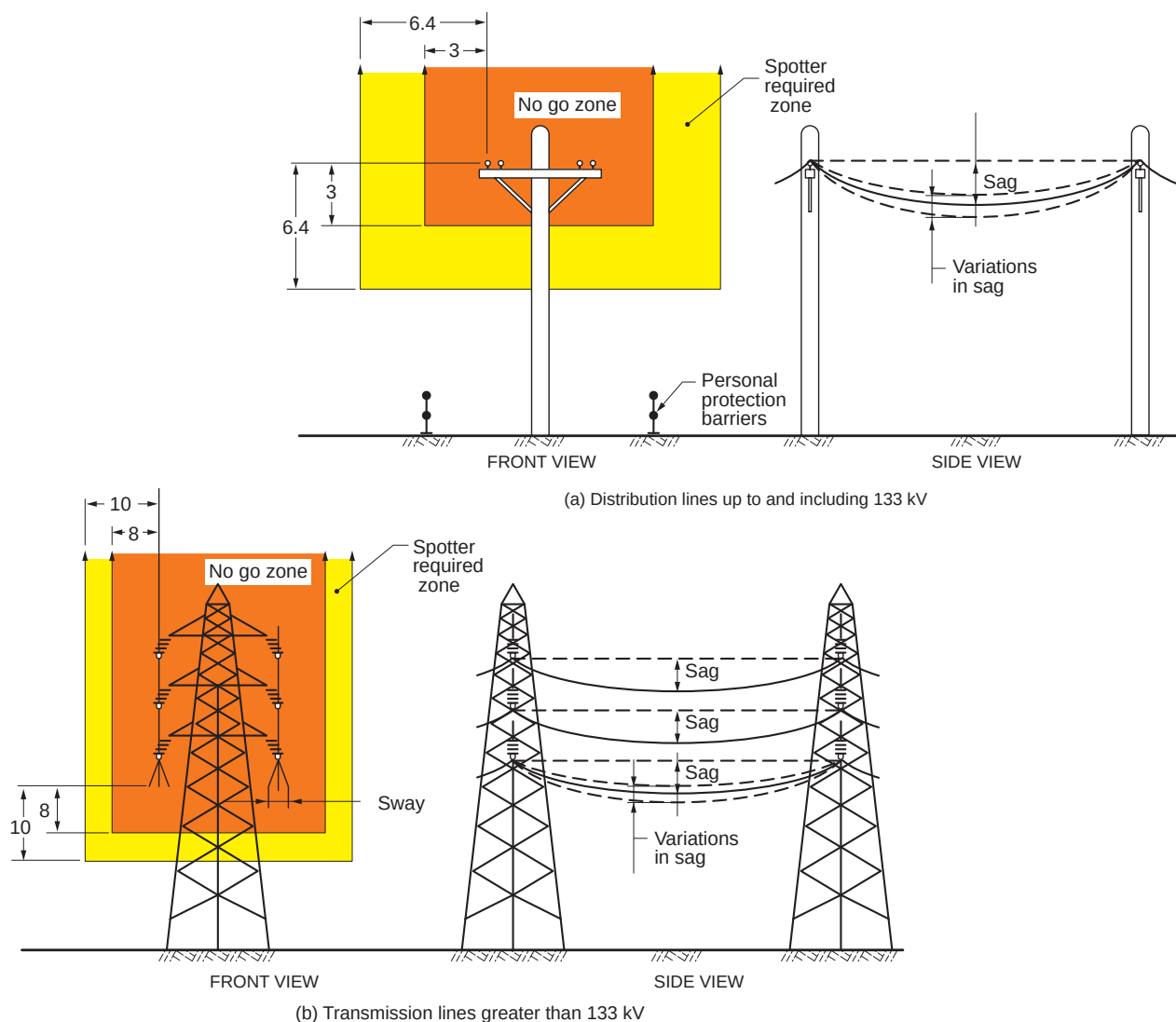
Allow for platform movement, electrical line sway or sag and beware of strong or gusty winds.

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

Minimum Safe Approach Distance



CLEARANCES FROM LIVE AERIAL CONDUCTORS



LEGEND

- = No shading, in the front views, indicates no proximity requirements
- = Light shading indicates spotter is required
- = Heavy shading indicates the NO GO ZONE

ART_3265

When working in the area of energized conductors the user shall direct and the operator shall comply with the requirements to:

- a. Stay at least 10 feet away from power lines with any part of their body, conductive object or any part of the MEWP.
- b. If work requires working nearer than 10 feet, stop and consult a qualified person with respect to electrical transmission and distribution to have appropriate measures taken (such as de-energizing and grounding).
- c. If there is a question that the power lines may carry more than 50kV, consult a qualified person with respect to electrical transmission and distribution before proceeding.
- d. If working or approaching closer than explained above, it shall only be done by a qualified person with respect to electrical transmission and distribution. Only qualified persons may work on electric circuit parts or equipment that has not been de-energized. Such persons shall be capable of working safely on energized circuits and shall be familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials and insulated tools.

Tip-over Hazards



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 or contact MEC.

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 elevate the platform when the machine is on a surface that is soft and / or on a slope.

STOP ALL MOVEMENT if the alarm sounds and the red Tilt Indicator Light illuminates when the platform is raised – see Tilt Indicator Light on page 23 for instructions.

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

DO NOT push off or pull toward any object outside the platform.



Maximum Allowable Side Force: 100 lbs (445 N).

NEVER transport tools and materials unless they are firmly secured. Secure all tools and loose materials. **DO NOT** carry materials or tools on the guardrails. **DO NOT** allow tools, supplies or any items to extend outside the platform.

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.

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

DO NOT attach overhanging loads or use the machine as a crane. Do not allow anything (hoses, cords, wires, ropes, etc.) to hang from the platform.

NEVER alter or disable any machine components.

DO NOT replace any part of the machine with anything except MEC-supplied or MEC-approved parts.

NEVER use ladders or scaffolds in the platform or allow them to touch any part of the machine.



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

Fall & Collision Hazards

Fall Hazards



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.

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



DO NOT ENTER OR EXIT PLATFORM WHEN ELEVATED

Ensure that all gates are 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 Fall Protective Equipment.

DO NOT exit the platform when elevated

Collision Hazards



ALWAYS check over, under and around the machine for personnel, structures and obstructions before activating any control function and continue to watch for hazards while operating the machine.

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

Check for overhead obstructions before moving.

DO NOT place the boom or platform against another structure.



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.

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

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

Weld Line to Platform Safety (if equipped)

- Read, understand and follow all warnings and instructions provided with the welding power unit.
- DO NOT connect weld leads or cables unless the welding power unit is turned off at the platform controls.
- DO NOT operate unless the weld cables are properly connected.
- DO NOT connect the ground lead to the platform. Do not use any part of the machine as a ground for welding.
- DO NOT hang wires or cables over guardrails or suspend from the platform.

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.

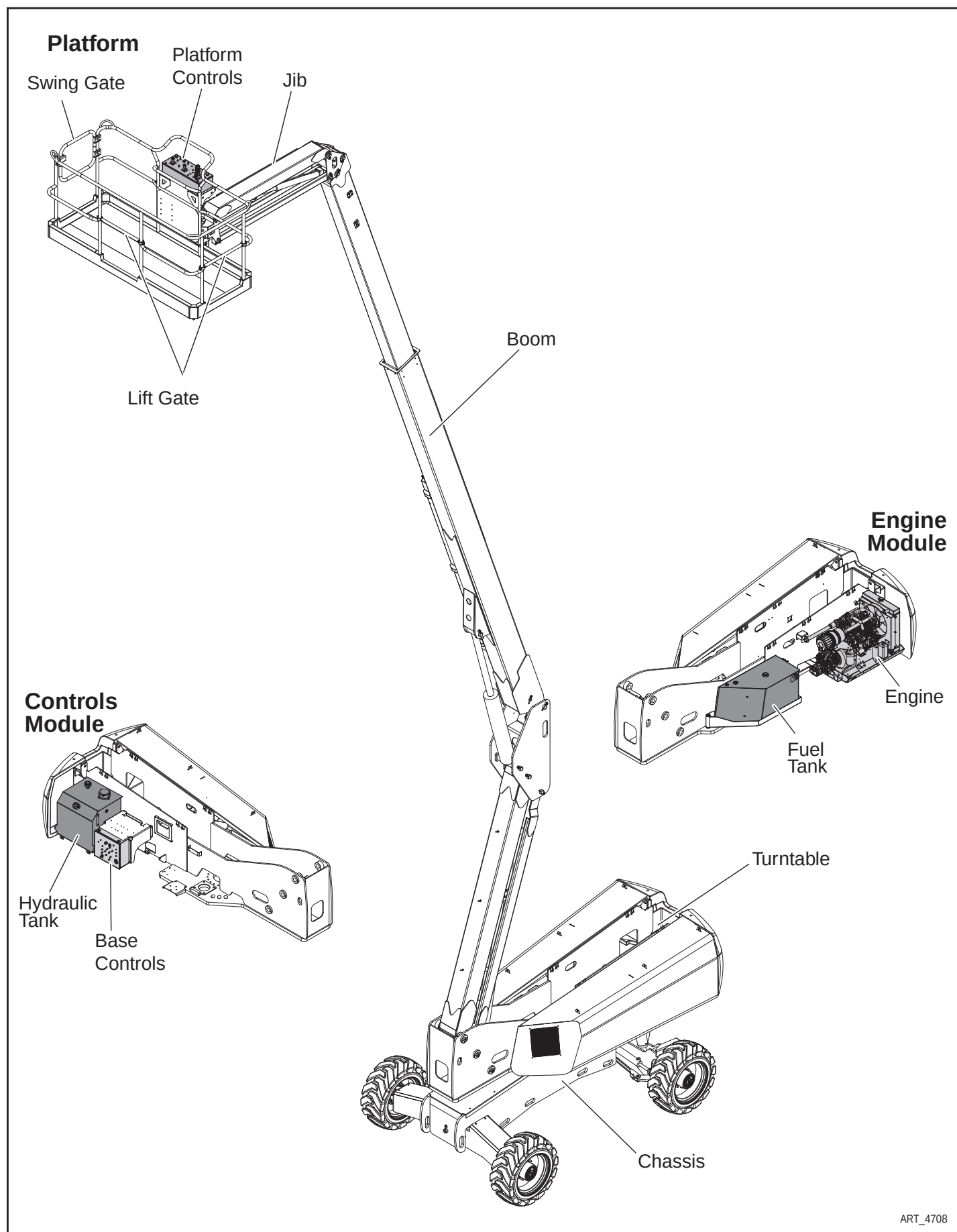
Explosion Hazard

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

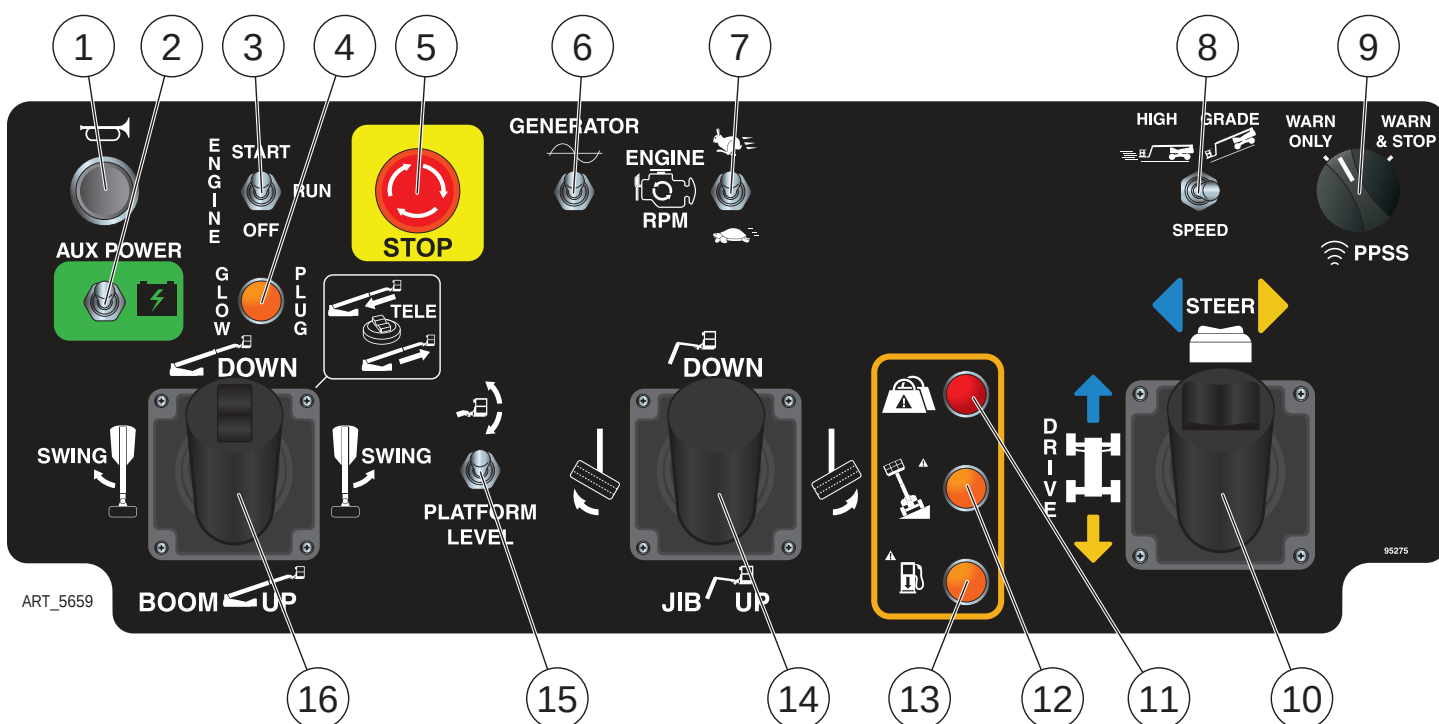
Electrocution Hazard

- Avoid contact with electrical terminals.

Component Locations



Platform Controls

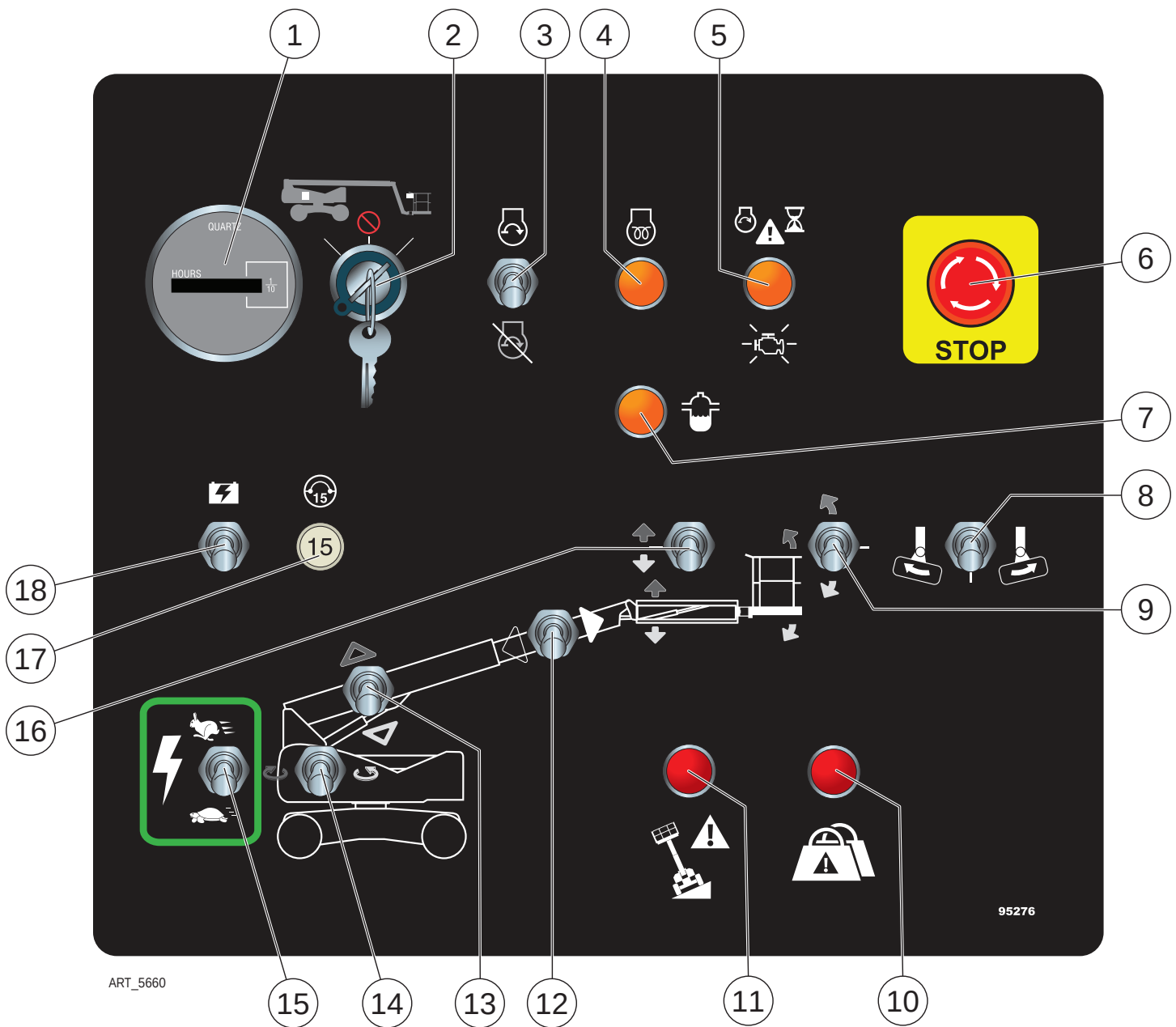


ALWAYS check over, under and around the machine for personnel, structures and obstructions before activating any control function and continue to watch for hazards while operating the machine.

Control		Description
1	Horn Button	Press to sound warning horn.
2	Auxiliary Power	If normal power fails, press and hold while using Boom Retract and Boom Lower functions.
3	Start/Stop Switch	Move this switch up to start engine. Press this switch down to stop engine.
4	Glow Plug Light	The light will turn on when the Kubota ECU determines it necessary to activate glow plugs before starting the engine.
5	Emergency Stop Switch	Press the EMERGENCY STOP switch at any time to stop all machine functions. Turn switch clockwise to reset.
6	Generator Switch (Optional)	Turn switch ON to engage optional AC generator. Generator switches off when any other function is enabled.
7	Engine Speed Select Switch	Use this switch to set the engine speed when functions are enabled. Setting this switch to low idle speed allows the operator to move the machine slowly and precisely. Move this switch up for high idle speed and fast function speed. Move this switch down for low idle speed and slow function speed.
8	Speed/Torque Switch	Move this switch to the left for high speed drive. Push this switch to the right for high torque drive.

9	PPSS Switch (Optional)	Warn Only	When the PPSS first senses an object overhead it activates an intermittent audible alarm. The frequency of this alarm increases as the object comes closer to the sensors. Pay careful attention to the object the sensors have detected.
		Warn & Stop	If selected, the machine will stop when the warning alarm becomes continuous. Boom functions that elevate the platform are disabled; drive functions are disabled. Boom functions that lower the platform are allowed.
10	Drive/Steer Control Lever	Depending on the position of the turntable, the machine may move in unexpected directions when the Drive and Steer functions are activated. The color- and shape-coded arrows on the joystick decal correspond to similar arrow decals on the machine chassis. Be sure to check the arrows on the chassis before using the Drive or Steer functions.	
		Drive Function	Depress the enable bar on front of the control lever, then push the control lever forward or backward to drive the machine.
		Steer Function	Depress the enable bar on front of the control lever, then press the thumb switch on top of the control lever to steer left or right.
11	Overload Indicator Light	Light ON indicates too much weight on the platform. An audible alarm will sound and all machine function will stop. Remove weight from the platform to restore function and continue.	
12	Tilt Indicator Light	This amber light illuminates and an alarm sounds when the machine is not level. Follow the instructions on page 27 to safely lower the platform.	
13	Low Fuel Indicator Light	If this amber light is illuminated, the fuel level is low. Refuel soon.	
14	Jib/Platform Control Lever	Jib Lift/Lower Function	Depress the enable bar on front of the control lever, then pull the control lever backward to lift the jib. Depress the enable bar on front of the control lever, then push the control lever forward to lower the jib.
		Platform Rotate Function	Depress the enable bar on front of the control lever, then push the control lever right to rotate the platform counterclockwise. Depress the enable bar on front of the control lever, then push the control lever left to rotate the platform clockwise.
15	Platform Level Switch	Press and hold the Function Enable trigger on any control handle for 7 seconds to enable this function, then press this switch up to manually level the platform upward or down to manually level the platform downward.	
16	Boom/Turntable Control Lever	Turntable Rotate Function	Depress the enable bar on front of the control lever, then push the control lever to the left to rotate the turntable clockwise or right to rotate the turntable counterclockwise.
		Boom Lift/Lower Function	Depress the enable bar on front of the control lever, then pull the control lever back to elevate the boom. Depress the enable bar on front of the control lever, then push the control lever forward to lower the boom.
		Boom Extend/Retract Function	Depress the enable bar on front of the control lever, then push the thumb switch on top of control lever back to extend the boom. Depress the enable bar on front of the control lever, then push the thumb switch forward to retract the boom.

Base Controls



ALWAYS check over, under and around the machine for personnel, structures and obstructions before activating any control function and continue to watch for hazards while operating the machine.

Control		Description	
1	Hour Meter	Indicates total elapsed time of machine operation.	
2	Selector Switch	Platform	Select to operate from the platform control panel.
		Base	Select to operate from the base control panel.
		Off	Select to stop operation from either control panel.
3	Start/Stop Switch	Push switch up to start engine. Push switch down to stop engine.	
4	Glow Plug Light	The light will turn on when the Kubota ECU determines it necessary to activate glow plugs before starting the engine.	

5	Starter Time-out Indicator / Check Engine Light	When this amber light is illuminated, the starter circuit is temporarily disabled. The starter circuit times out if the starter is run continuously for 15 seconds without the engine starting. The starter functions resets after 30 seconds. When blinking, functions as an Engine ECU Fault Code indicator.
6	Emergency Stop Switch	Press the EMERGENCY STOP switch at any time to stop all machine functions. Turn switch clockwise to reset.
7	Water & Fuel Light	Indicates if water has contaminated fuel.
8	Platform Rotate Switch	Press and hold the Function Enable Switch (#15), then move this switch left to rotate the platform clockwise. Press and hold the Function Enable Switch (#15), then move this switch right to rotate the platform counterclockwise.
9	Platform Level Switch	Press and hold the Function Enable Switch (#15), then move this switch left to rotate the platform clockwise. Press and hold the Function Enable Switch (#15), then move this switch right to rotate the platform counterclockwise.
10	Overload Indicator Light	Light ON indicates too much weight on the platform. An audible alarm will sound and all machine function will stop. Remove weight from the platform to restore function and continue.
11	Tilt Indicator Light	This light illuminates and an alarm sounds when the machine is not level. Follow the instructions on page 23 to safely lower the platform.
12	Boom Extend/Retract	Press and hold the Function Enable Switch (#15), then move this switch right to extend the boom. Press and hold the Function Enable Switch (#15), then move this switch left to retract the boom.
13	Boom Lift/Lower	Press and hold the Function Enable Switch (#15), then move this switch up to lift the boom. Press and hold the Function Enable Switch (#15), then move this switch down to lower the boom.
14	Turntable Rotate	Press and hold the Function Enable Switch (#15), then move this switch left to rotate the turntable clockwise. Press and hold the Function Enable Switch (#15), then move this switch right to rotate the turntable counterclockwise.
15	Function Enable Switch	Press and hold this switch to enable boom, turntable and platform operations. Press down to operate the controls at slow speed. Press up to operate the controls at higher speed.
16	Jib Lift/Lower	Press and hold the Function Enable Switch (#15), then move this switch up to lift the jib. Press and hold the Function Enable Switch (#15), then move this switch down to lower the jib.
17	Circuit Breaker	Trips when there is excessive electrical load. Push to reset.
18	Auxiliary Power Switch	If normal power fails, press and hold while using boom retract and boom lower functions.

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.

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 energized 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.

See page 5 for more information.

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 & Pre-Operation 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 – see Fall Protection on page 3.

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.



ALWAYS check over, under and around the machine for personnel, structures and obstructions before activating any control function and continue to watch for hazards while operating the machine.

Prestart

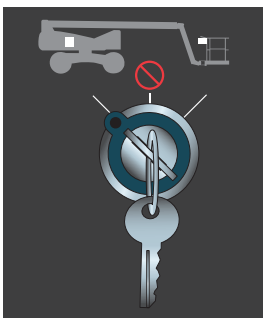


ART_3353

Perform *Prestart Inspection* (see page 38).

Check Emergency Stop Switches at both the base and platform controls – turn clockwise to reset.

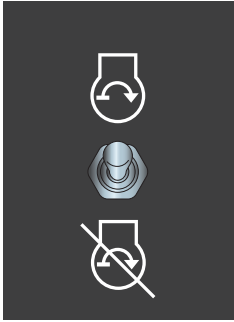
Starting Engine from Base Controls



ART_4714

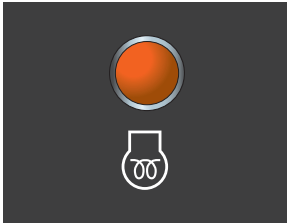
Be sure that the upper and lower EMERGENCY STOP Switches are reset.

Lower Control Box: Turn Key Switch to CHASSIS.



ART_4722

Move the Start/Stop switch upward to start. Release the switch when the engine starts.



ART_3343

The light will turn on when the Kubota ECU determines it necessary to activate glow plugs before starting the engine.

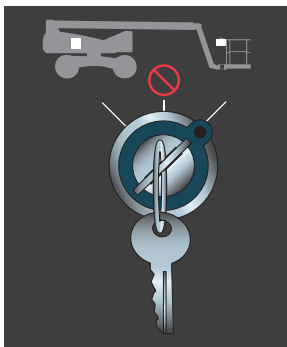


ART_4724

This light has 2 functions.

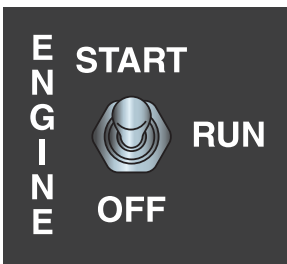
1. To protect the starter motor, power cuts off to the starter circuit when the starter motor has run continuously for 10 seconds without starting the engine. The Starter Circuit Cutout indicator light on the Lower Controls Box will turn on during this time. Power to the starter circuit reengages after 30 seconds.
2. Functions as Engine ECU Fault Code indicator. The light will Flash Engine Fault Code.

Starting Engine from Platform Controls



ART_4721

Lower Control Box: Turn the Key Switch to PLATFORM.



ART_4725

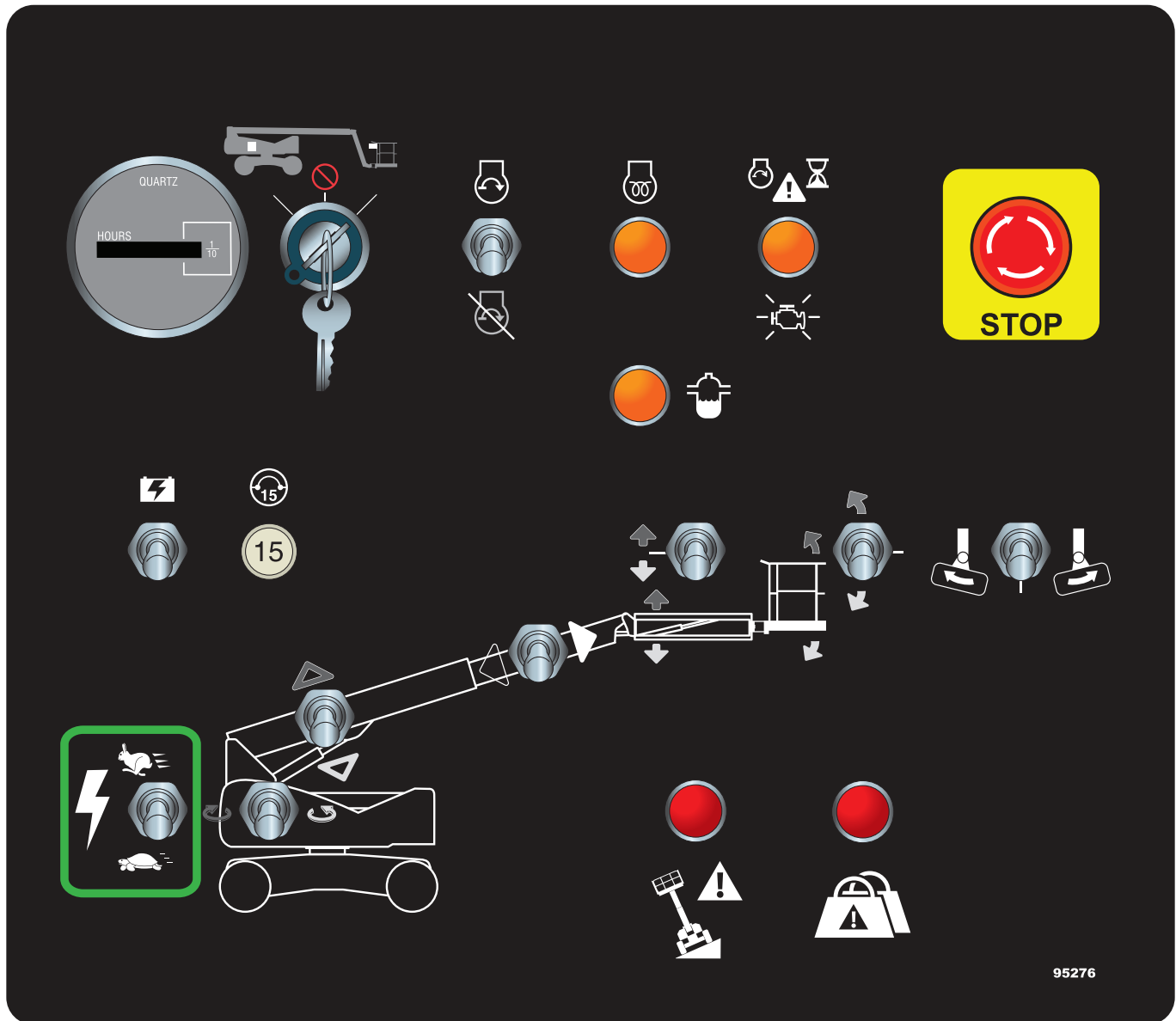
Platform Control Box: Move the Start/Stop switch UP to start. Release the switch when the engine starts.



The light will turn on when the Kubota ECU determines it necessary to activate glow plugs before starting the engine.

ART_3343

Base Controls Operation & Pre-Operation Functions Test



ART_5660



ALWAYS check over, under and around the machine for personnel, structures and obstructions before activating any control function and continue to watch for hazards while operating the machine.

Emergency Stop

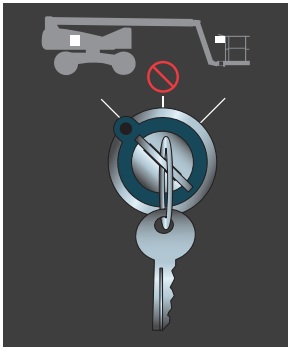


Press the Emergency Stop Switch at any time to stop all machine functions.

Turn switch clockwise to reset.

Depress the EMERGENCY STOP switch whenever the machine is not in operation. Turn switch clockwise to reset.

ART_3353

Select BASE Operation

ART_4714

Turn the Selector Key Switch to BASE.

Function Enable

ART_4715

Press and hold this switch to enable and operate machine functions from the base controls.

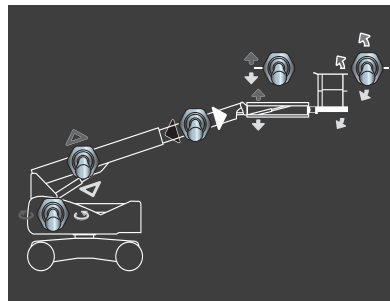
Press down to operate the controls at slow speed.

Press up to operate the controls at higher speed.

Releasing this switch will disable machine functions.



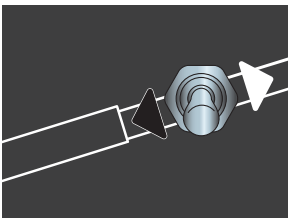
Do not elevate the platform if the machine is not on a firm level surface.



ART_4716

Base Control Boom/Platform Functions**Boom Extend/Retract**

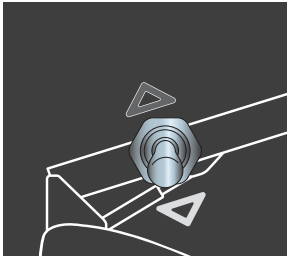
Move and hold the Extend/Retract switch on the base control panel to extend or retract the boom.



ART_4717

Test Operation

- Press and hold the Function Enable switch.
- Extend boom until it stops. Boom should extend to maximum length.
- Retract the boom until it stops. Boom should retract to minimum length.
- Releasing the switch will stop boom extension or retraction.
- Pressing the Emergency Stop Switch will stop boom extension or retraction.

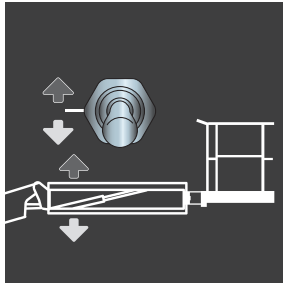
Boom Lift/Lower

ART_4718

Press and hold the Boom Lift/Lower switch on the base control panel to lift or lower the boom.

Test Operation

- Press and hold the Function Enable switch.
- Raise the boom until it stops.
- Lower the boom until it stops. Boom should rest on the turntable pads.
- Releasing the switch will stop Boom Lift/Lower function.
- Pressing the Emergency Stop Switch will stop boom lift/lower function.

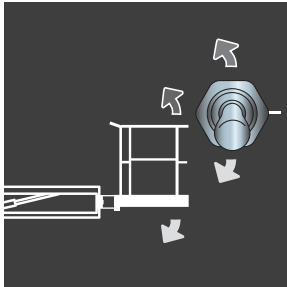
Jib Lift/Lower

ART_4720

Press and hold the Jib Lift/Lower switch on the base control panel to lift or lower the jib.

Test Operation

- Press and hold the Function Enable switch.
- Raise the jib until it stops.
- Lower the jib until it stops.
- Releasing the switch will stop Jib Lift/Lower function.
- Pressing the Emergency Stop Switch will stop jib lift/lower function.

Platform Level

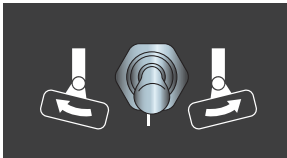
ART_4719

The platform will automatically level as the boom is lifted or lowered. The Platform Level function allows manual level adjustment of the platform. Manual leveling may be used to adjust the platform within 5° of level.

- Press and hold the Platform Level switch on the base control panel to manually adjust the level of the platform.

Test Operation

- Press and hold the Function Enable switch.
- Push the switch up and down.
- The platform level should change accordingly. Releasing the switch will stop platform level function.
- Pressing the Emergency Stop Switch will stop platform level function.

Platform Rotate

ART_4720

Press and hold the Platform Rotate switch on the base control panel to rotate the platform.

Test Operation

- Press and hold the Function Enable switch.
- Push the switch left and right. The platform should rotate accordingly.
- Releasing the switch will stop platform rotate function.
- Pressing the Emergency Stop Switch will stop platform rotate function.

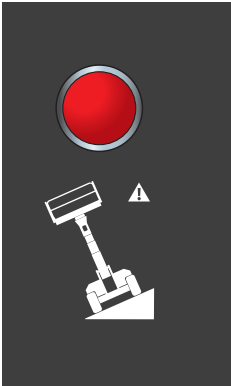
Tilt Indicator Light



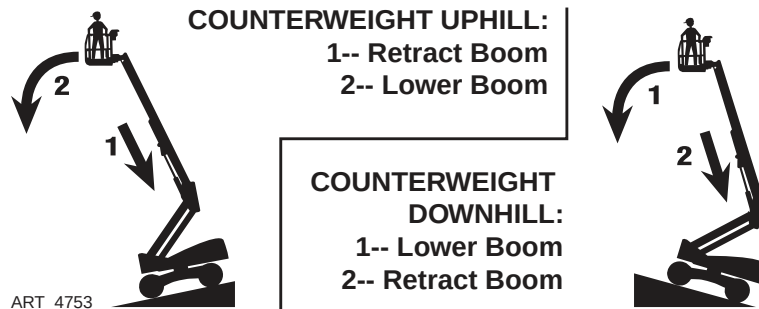
STOP ALL MOVEMENT if Tilt Alarm sounds.

Light ON and alarm sounding indicates an unsafe condition.

- STOP ALL MOVEMENT. The machine is not level.
- Look at the diagram to determine the condition of the counterweight as it relates to the slope, then use extreme caution while following the instructions. DO NOT rotate the turntable while lowering.



ART_3337b



- If the Tilt Alarm sounds while the counterweight is uphill, first retract the boom, then lower the boom.
- If the Tilt Alarm sounds while the counterweight is downhill, first lower the boom, then retract the boom.
- Move the machine to a firm, level surface before continuing operation.

Overload Light and Alarm



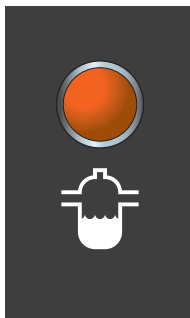
ART_3528

Light ON indicates too much weight on the platform.

An audible alarm will sound and all machine function will stop.

Remove weight from the platform to restore function and continue.

Water-Fuel Separator Light



ART_5658

Indicates if water has contaminated fuel.

Drain fuel and replace.

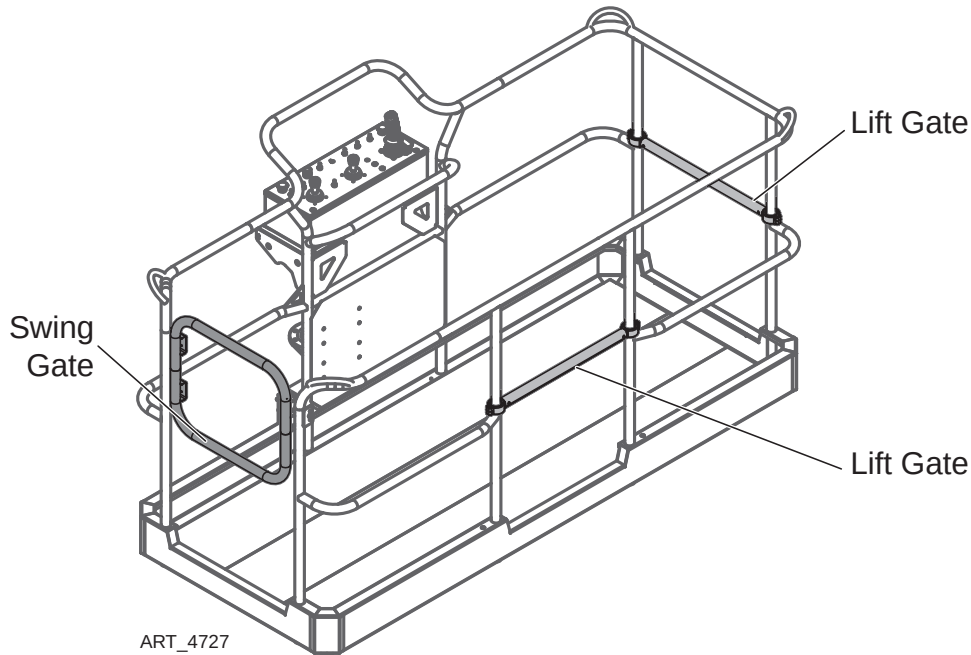
Platform Control Operation & Pre-Operation Functions Test

Entering The Platform

Personnel shall enter and exit the platform only at the Personnel Entry Gates, and only when the boom is fully retracted and lowered.

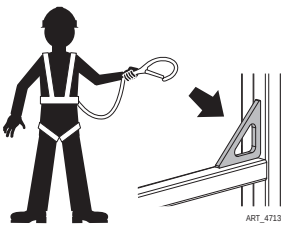
Ensure that all Personnel Entry Gates are properly closed and that the Swing Gate is latched in the closed position before operating the machine.

Personnel Entry Gates



Fall Protection

Personal fall protection equipment (PFPE) is required when operating this machine.

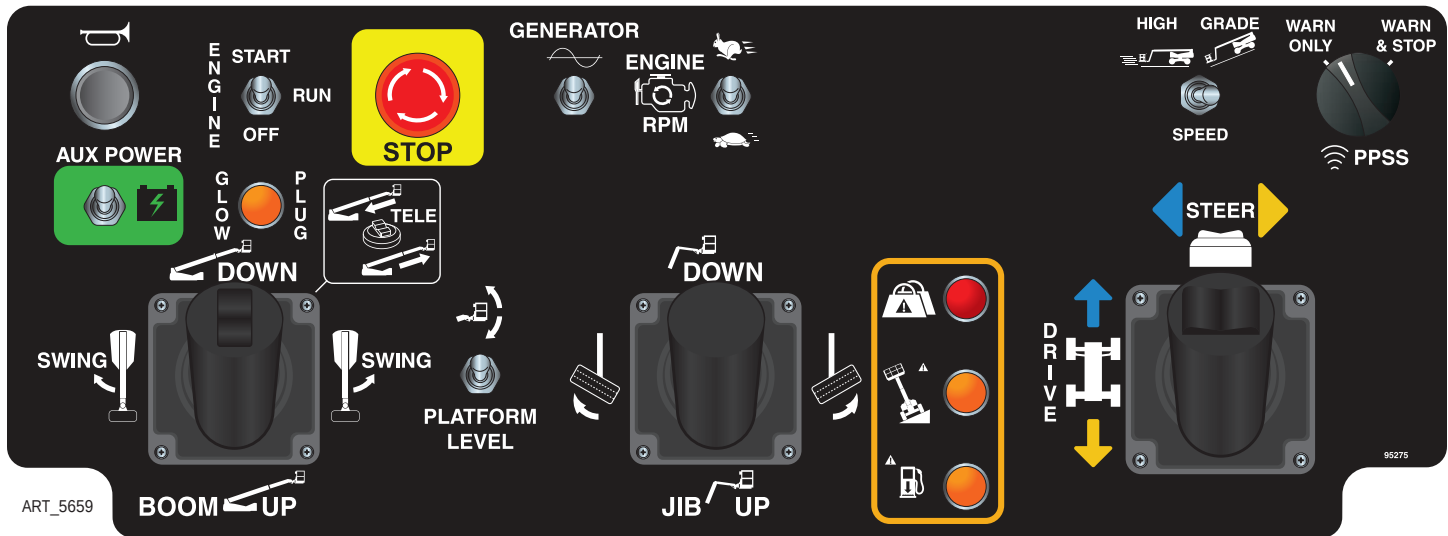


All PFPE must comply with employer and job site rules and applicable governmental regulations, and must be inspected and used in accordance with the PFPE manufacturer's instructions.

ALWAYS wear approved fall protection, properly attached to a designated anchor point, when operating the machine.

DO NOT attach more than one lanyard per anchor point.

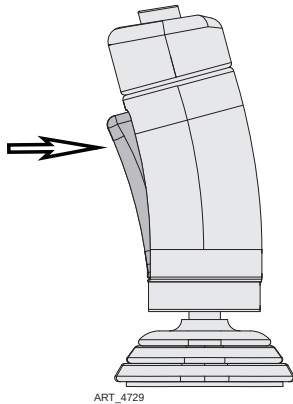
Platform Control Panel



WARNING ALWAYS check over, under and around the machine for personnel, structures and obstructions before activating any control function and continue to watch for hazards while operating the machine.

DO NOT hang anything over any control handle at any time.

Function Enable At Platform Controls



Note: If any Function Enable trigger or button is depressed for seven (7) seconds without any function being activated, the Enable System times out and deactivates. Release the trigger or button and reengage to activate the Function Enable System.

The Drive function and most boom functions are enabled by squeezing the trigger at the front of the appropriate control handle.

Platform Operations Test

Emergency Stop



ART_3353

Press the EMERGENCY STOP switch at any time to stop all machine functions.

Turn switch *clockwise* to reset.

Depress the EMERGENCY STOP switch whenever the machine is not in operation. Turn switch *clockwise* to reset.

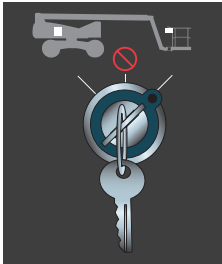
Activation of the EMERGENCY STOP switch will apply brakes immediately.



This will cause sudden platform movement as the machine comes to an abrupt stop.

Brace yourself and secure objects on the platform during operation of machine.

Select PLATFORM Operation



ART_4721

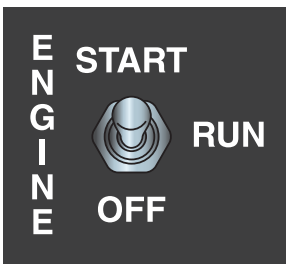
Base Controls: Turn the selector switch to PLATFORM.



ART_3343

The light will turn on when the Kubota ECU determines it necessary to activate glow plugs before starting the engine.

Operate from Platform



ART_4725

Enter the platform through one of the personnel entry gates. Close and secure the entry.

Press the Start/Stop switch UP to start. Release the switch when the engine starts.



ART_3359

Press the Horn Button to verify proper operation.

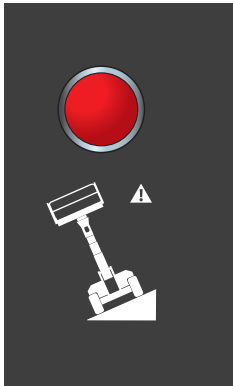
Tilt Indicator Light



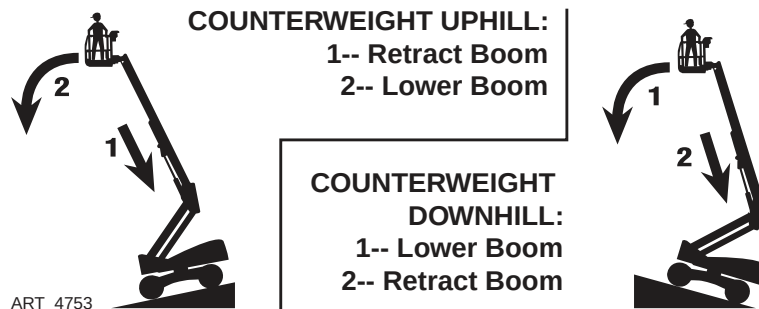
STOP ALL MOVEMENT if Tilt Alarm sounds. Death or Serious Injury may occur.

Light ON and alarm sounding indicates an unsafe condition.

- STOP ALL MOVEMENT. The machine is not level.
- Look at the diagram to determine the condition of the counterweight as it relates to the slope, then use extreme caution while following the instructions. DO NOT rotate the turntable while lowering.

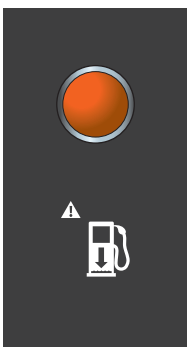


ART_3337b



ART_4753

- If the Tilt Alarm sounds while the counterweight is uphill, first retract the boom, then lower the boom.
- If the Tilt Alarm sounds while the counterweight is downhill, first lower the boom, then retract the boom.
- Move the machine to a firm, level surface before continuing operation.

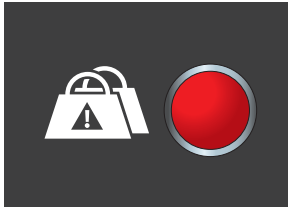


ART_3337

Low Fuel Indicator Light

Light ON indicates a low-fuel alert condition.

- Refuel soon.

Overload Light and Alarm

Light ON indicates too much weight on the platform.

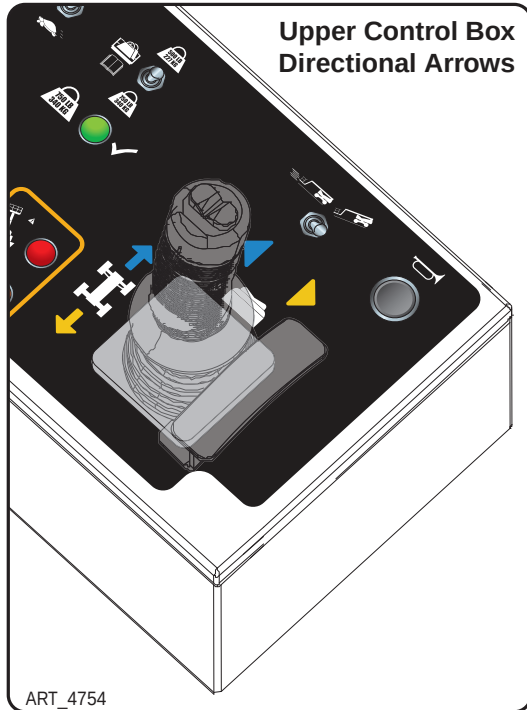
An audible alarm will sound and all machine function will stop.

Remove weight from the platform to restore function and continue.

ART_3529

Drive Control Lever Operation

Depending on the orientation of the boom and chassis, the Drive and Steer functions may move the machine in directions opposite of the motion of the control lever. The color- and shape-coded arrows on the control lever decal correspond to similar arrow decals on the machine chassis (see illustrations). Be sure to check the arrows on the chassis before activating and using the Drive or Steer functions.



- Drive Function speed is proportional and is controlled by the position of the control lever. The further it is moved from the neutral (center) position, the faster the speed will be.
- When the boom is elevated or extended out of the stowed position, the maximum drive speed is reduced to 0.5 mph (0.8 km/h). Drive function speed is still fully proportional to the position of the drive control handle.
- The control lever returns to the neutral (center) position when released.
- Steering Function is not proportional.

Note: The Steering Function does not automatically return the steering wheels to the centered position. Always check the position of the steering wheels before and during machine operation.

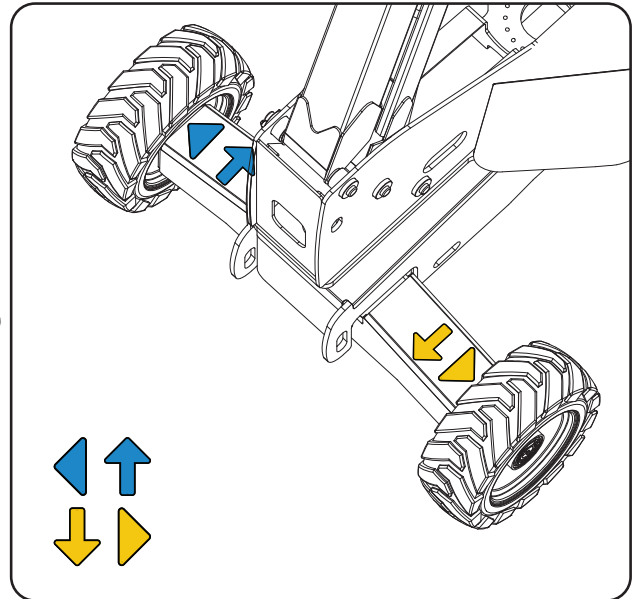
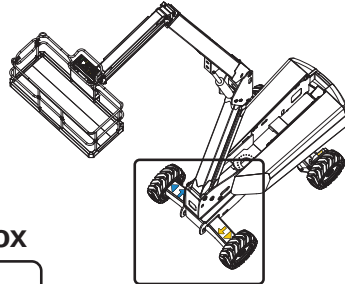
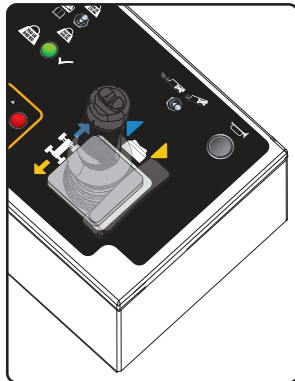
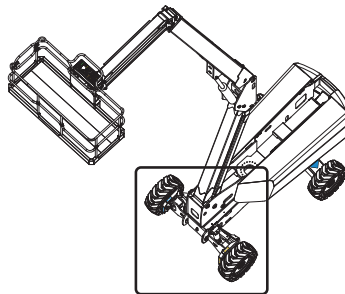
Test Operation

- **Drive:** Squeeze the enable trigger, then move the control lever in the desired direction of movement. The further it is moved from the neutral (center) position, the faster the speed will be.
- **Stop:** Return the control lever to the neutral (center) position. Releasing the control lever will also stop the machine. Releasing the trigger will result in a rapid stop.
- Extend the boom approximately 3 feet (1 m), then drive the machine. Speed should be reduced significantly from the fully-retracted, fully-lowered speed. Retract the boom.
- Elevate the boom approximately 10°, then drive the machine. Speed should be reduced significantly from the fully-retracted, fully-lowered speed. Lower the boom.
- **Steering:** Squeeze the enable trigger, then press the thumb switch on top of the control lever to steer in the desired direction.

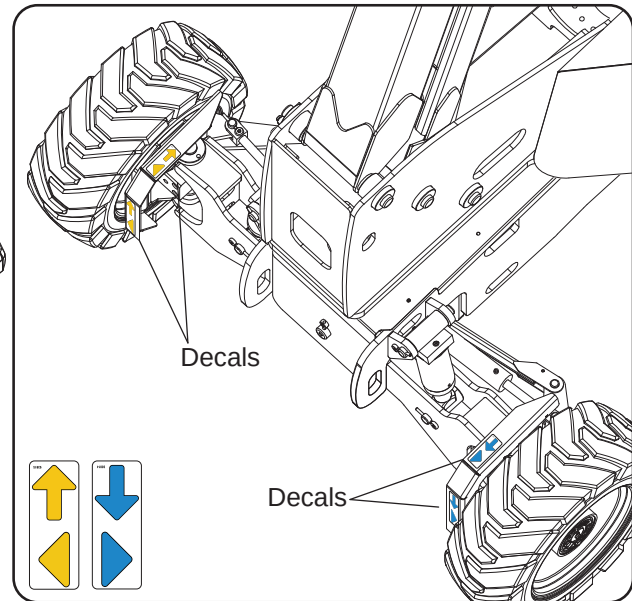
Note: The Steering Function does not automatically return the steering wheels to the centered position. Stay alert to the position of the steering wheels before and during machine operation

Drive & Steer Directional Arrows

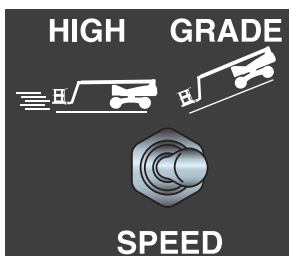
Pay careful attention to the Chassis Drive & Steer arrows for machine direction.

Upper Control Box**Platform over non-steering wheels****Platform over steering wheels**

When the platform is over the steering wheels, the machine moves in the opposite direction of the Control Lever.



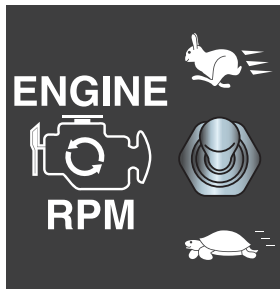
ART_4747

Speed/Torque Switch

Move this switch to the left for high speed drive. Move this switch to the right for high torque drive.

ART_4757

Engine Speed Select



ART_4755

Use this switch to set the engine speed when functions are enabled. Setting this switch to low idle speed allows the operator to move the machine slowly and precisely.

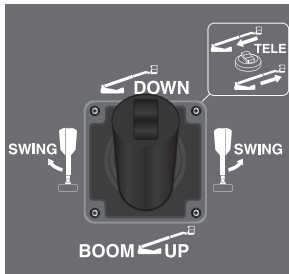
Move this switch up for high idle speed and fast function speed.

Move this switch down for low idle speed and slow function speed.

Boom Functions Control Lever

This control lever controls the Boom Extend/Retract, Boom Lift/Lower and Turntable Rotate functions. The control lever is fully proportional for the Boom Lift/Lower and Turntable Rotate functions.

These functions are enabled by pressing the trigger on the front of the control lever.



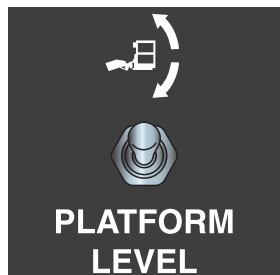
ART_4731

Test Operation

- **To test the Boom Extend/Retract function:**
 - Squeeze the enable trigger, then press and hold the thumb switch on top of the control lever rearward until the boom reaches full extension.
 - Squeeze the enable trigger, then press and hold the thumb switch forward to retract the boom.
- **To test the Boom Lift/Lower function:**
 - Squeeze the enable trigger, then pull the control handle back to lift the boom. Lift the boom completely.
 - Squeeze the enable trigger, then push the control handle forward to lower the boom. Lower the boom to its stowed position.
- **To test the Turntable Rotate function:**
 - Squeeze the enable trigger, then push the control handle to the left to rotate the turntable clockwise.
 - Squeeze the enable trigger, then push the control handle to the right to rotate the turntable counterclockwise.

Platform Level Switch

The platform will automatically level as the boom is lifted or lowered. The Platform Level function allows manual level adjustment of the platform. Manual leveling may be used to adjust the platform within 5° of level.



ART_4732

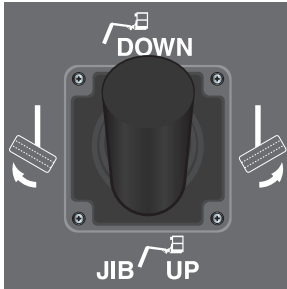
Test Operation

- **To test the Boom Extend/Retract function:**
 - Press and hold the Function Enable trigger on any control handle for 7 seconds.
 - Push the Platform Level switch up or down to adjust the position of the platform.
 - Platform Level power is disabled upon exceeding 5° out of level when out of the stowed position. Power is allowed only to the direction that returns the platform toward level.

Platform/Jib Functions Control Lever

The Platform/Jib Functions control lever controls the Platform Rotate and Jib Lift/Lower functions. The control lever is fully proportional for both functions.

These functions are enabled by pressing the trigger on the front of the control lever.

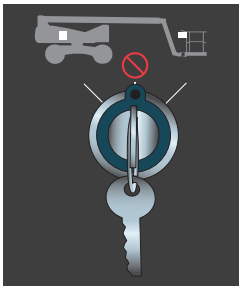


ART_4733

Test Operation

- **To test the Jib Lift/Lower function:**
 - Squeeze the enable trigger, then pull the control lever back to raise the jib.
 - Squeeze the enable trigger, then push the control lever forward to lower the jib.
- **To test the Platform Rotate function:**
 - Squeeze the enable trigger, then push the control lever left to turn the platform clockwise.
 - Squeeze the enable trigger, then push the control lever right to turn the platform counter clockwise.

Shutdown Procedure



ART_4734

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

Park the machine on a level surface.

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.

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

Auxiliary Power System & Test

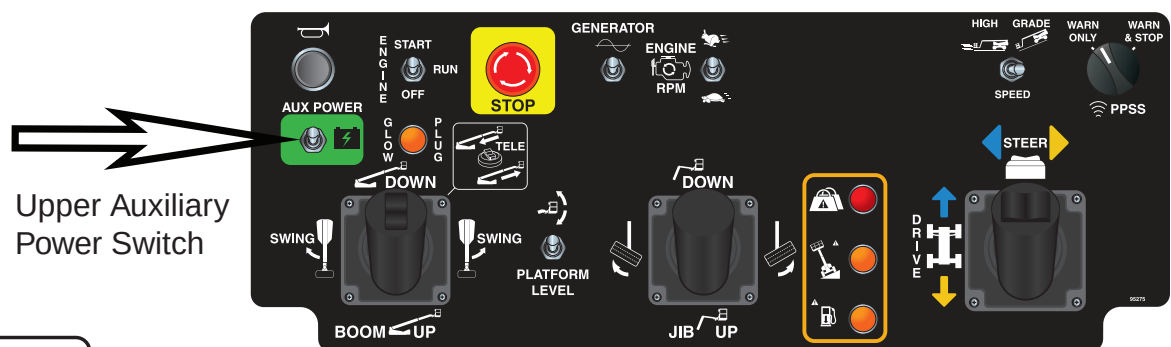
If primary power fails while the platform is elevated, use the Auxiliary Power System to safely lower the platform.



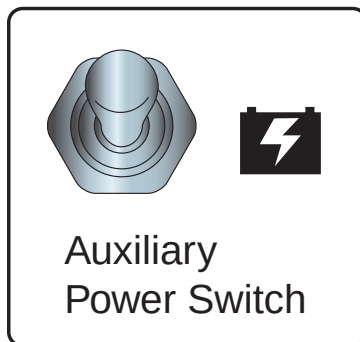
Do not climb down the boom assembly or exit the platform while elevated.

ALWAYS check over, under and around the machine for personnel, structures and obstructions before activating any control function and continue to watch for hazards while operating the machine.

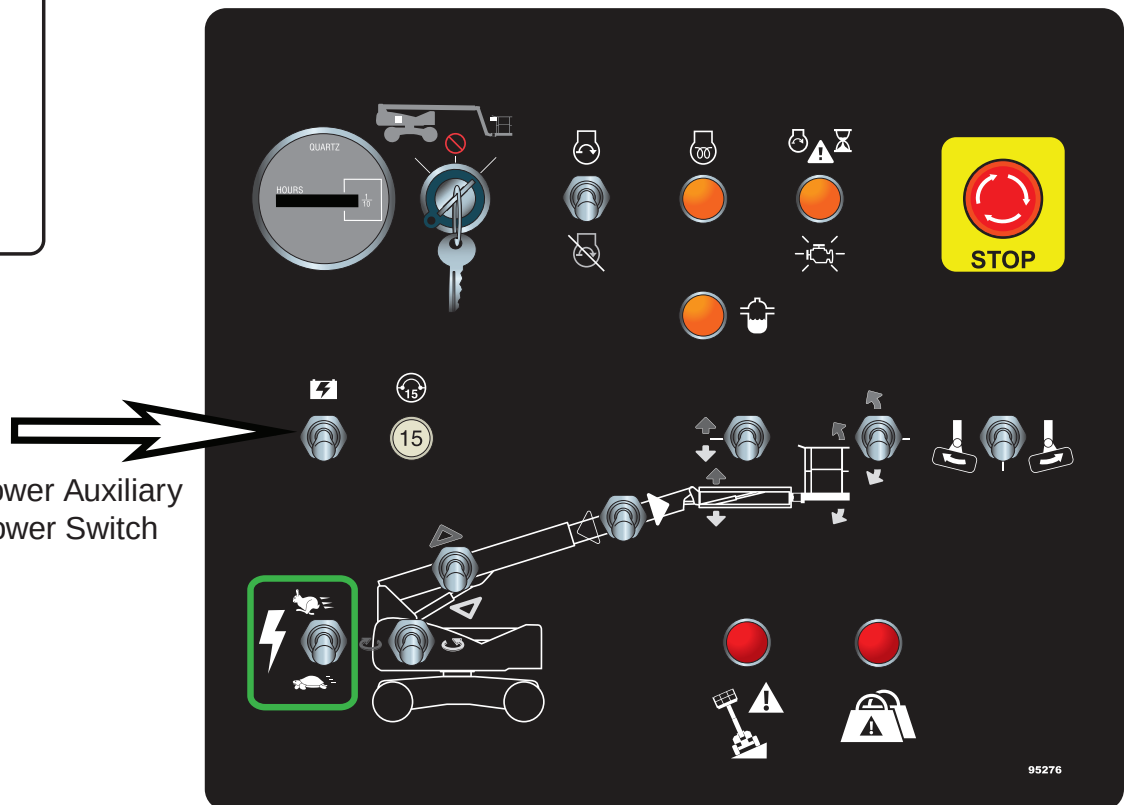
Platform Controls



Upper Auxiliary Power Switch



Base Controls



Lower Auxiliary Power Switch

ART_5661

The Auxiliary Power System is used to lower the platform in case of primary power failure. To lower

the platform, activate the Auxiliary Power Switch to run the auxiliary hydraulic pump.

This function uses battery power from the auxiliary battery to lower the platform.

- Push and hold the Auxiliary Power Switch, then use the Boom Extend/Retract function to retract the boom.
- Continue to hold the Auxiliary Power Switch, then use the Boom Lift/Lower function to lower the boom.

Note: Auxiliary Power activation stops the engine.

Note: The Auxiliary Power Switch serves as an enable switch. It is not necessary to use the primary function enable switch.

Test Operation

- Test the Auxiliary Power System from both control stations.
- Test any lift function for 5-10 seconds to verify proper operation.

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.

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 under the boom assembly with the platform elevated without first supporting the boom assembly.

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.

DO NOT hang anything over any control handle at any time.



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

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

Always clean the surrounding area before opening hydraulic systems.

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



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

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

Supporting the Boom Assembly

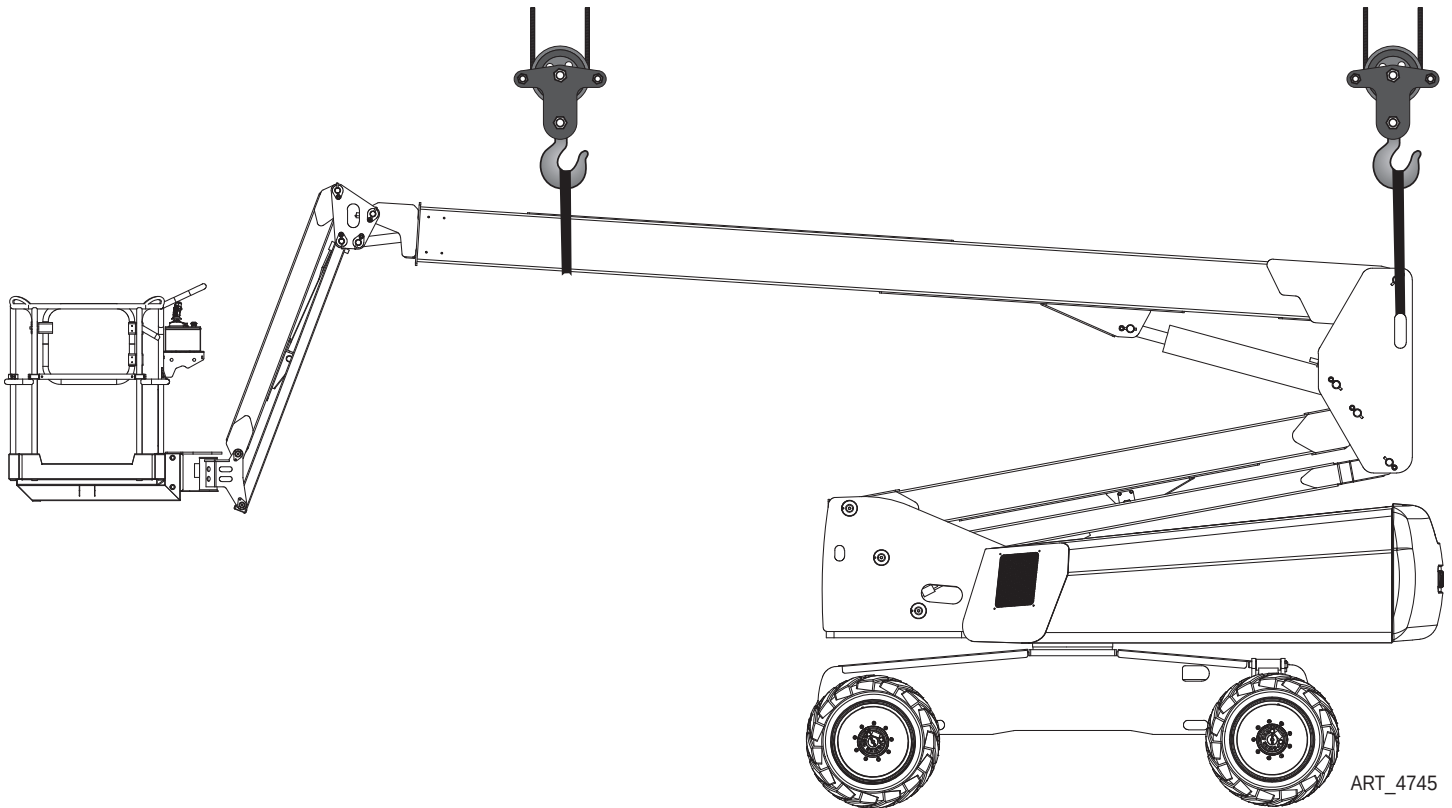
**WARNING**

NEVER perform work under the boom assembly with the platform elevated without first supporting the boom assembly.

DO NOT work beneath the boom assembly with the platform elevated unless the boom assembly is properly supported.

Use two slings and overhead hoist rated for 3 tons (2700 kg) or more.

Thread the sling through the opening in the boom post as shown below. Connect it to the overhead hoist, then lift enough that the weight of the boom assembly is being supported by the hoist.



ART_4745

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 the security and condition of the lanyard attachment points.
	Check all controls for any damage and proper function.
	Check all hoses and the cables for worn or chafed areas.
	Check the platform rails and sliding mid-rail entries for damage or modification. Check the swing gate for proper operation and latching.
	Check that all warning and instructional decals are legible and secure.
	Check the tires for damage.
	Check the tire pressure (not required for foam filled tires).
	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 engine coolant level at overflow bottle.
	Check fuel tank level.
	Secure all covers, panels and hoods.
	Ensure that all gates are properly closed and secured before operating the machine.

Frequent Inspection Checklist



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

Frequent Maintenance Inspections should be conducted by qualified service technicians only. Photocopy this page for reuse. Keep inspections records up to date. Record and report all discrepancies to your supervisor.

Model Number _____ Serial Number _____ Hour Meter Reading _____

Initial	Description
	Perform all checks listed on Pre-Start Inspection.
	Replace engine oil and filter after the first 100 hours of service.
	See Kubota engine operator's manual for other engine maintenance information.
	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 Specifications).
	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 Specifications).
	Check the Auxiliary Power System.
	Clean and lubricate all push button switches with dry lubricant and ensure that the switches operate freely in all positions.
	Check the tightness of the platform frame and the linkage pins.
	Check the overall platform and guardrail component security.
	Check the electrical mounting and hardware connections for security.
	Check the steering kingpins for excessive play.

Additional maintenance requirements for severe conditions

	If the machine is used in very dusty, exceptionally hot or exceptionally cold conditions, replace hydraulic filter element and air filter element (under normal conditions replace every 6 months or 300 hours, whichever comes first).
--	---

Date _____ Inspected By _____

Annual Inspection Report



Aerial Platform Sales Corp

1401 South Madera Avenue, Kerman, California 93630, USA

Tel: 559.842.1500 Toll Free: 1.877.632.5438 Fax: 559.842.1520

Email: info@MECawp.com

Web: www.MECawp.com

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

Date		Customer		Dealer	
Serial Number		Street		Street	
Model Number		City/State/Zip		City/State/Zip	
Date of Last Inspection		Phone Number		Phone Number	
Date Placed in Service		Contact		Contact	

	Y	N	R	U		Y	N	R	U		Y	N	R	U
Decals:					Base:					Operation:				
Proper Placement/Quantity					Cover Panels Secure					Wires Tight				
Legibility					Base Fasteners Tight					Switches Secure				
Correct Capacity Noted					Bolts Tight					All Functions Operational				
Rails:					Front Axle Mounting (4WD)					Auxiliary Power Operational				
All Rail Fasteners Secure					Rear Axle Mounting (4WD)									
Entry Gate Closes Properly					Front Axle/Front Wheel Assemblies:					Slow Speed Proximity Switch:				
Manual/Safety Data In Box					Wheel Motors-Mounting Secure					Set Properly				
Platform:					Wheel Motors-Leaks					Proximity Switches Adjusted				
Platform Bolts Tight					Lug Nuts Torqued Properly					Oil Filter Secure/Chg				
Platform Structure					Steering Cylinder Pins Secure					Oil Level Correct/Chg				
All Decals Present And Legible					Swing Bearing Lubed					Steering Pressure Set				
					Wheel Assemblies:					Drive Pressure Set				
					Brakes Operational					Lift Pressure Set				
					Wheel Motors-Mounting Secure					Engine:				
Wire Harnesses:					Wheel Motors-Leaks					Engine Mounts Tight				
Mounted Correctly					Lug Nuts Torqued Properly					Fuel Lines Secure				
Physical Appearance					Axle Lock Operational					Fuel Lines Free Of Leaks				
110/220V Outlet Safe/Working										Fuel Tanks Secure				
Elevating Assembly:					Component Area:					Fuel Shut Off Valves Func.				
Boom Structures					Valve Manifold(s) Secure					All Shields/Guards In Place				
Welds					Hoses Tight/No Leaks					Oil Level				
Retaining Rings					D/C Mtr(s) Secure/Operational					Oil Filter				
Cylinder Pins Secure					Contactors Secure					Air Filter				
Boom Shimming					Pump Secure									
Torque on Slew Ring Bolts					Batteries:					Operator's Manual Present:				
Transport Locks:					Secure					Manual Of Responsibilities Present:				
Secure					Fully Charged									
					Emergency Stop:									
					Breaks All Circuits									

Comments: _____

Signature/Owner-User: _____ Date: _____

Signature/Mechanic: _____ Date: _____



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 38.

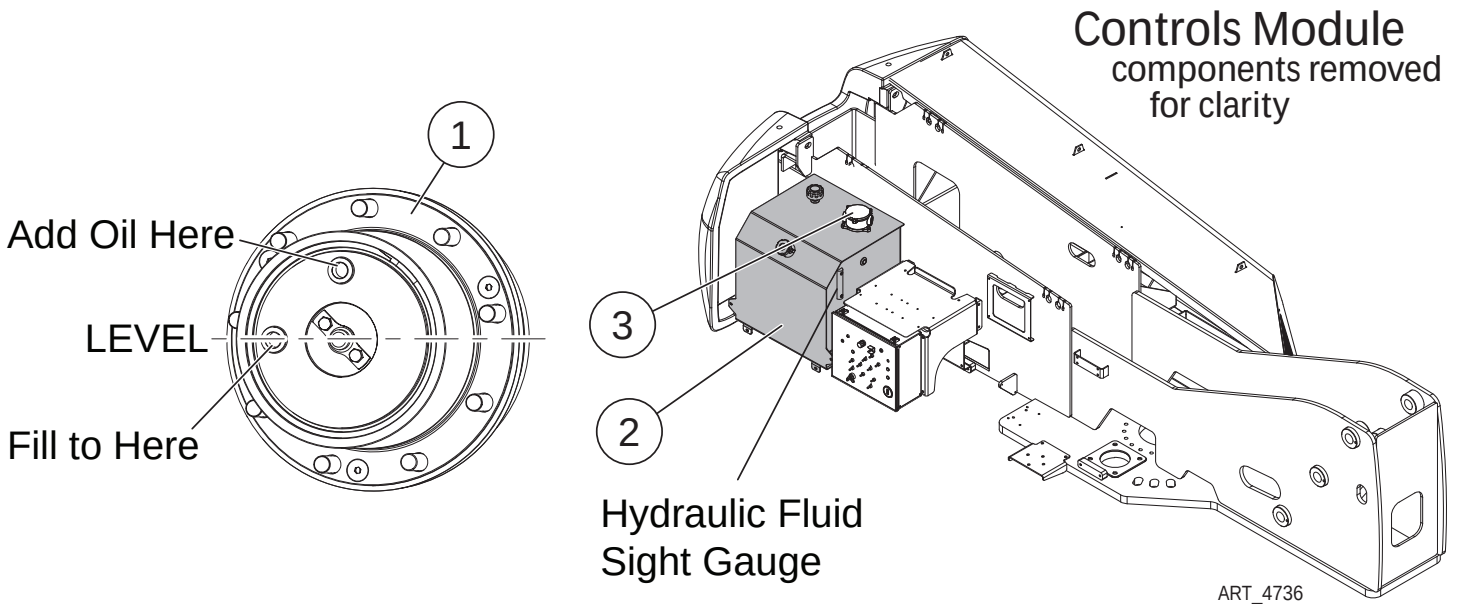
Frequent and Annual Maintenance

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.

Lubrication

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



No.	Item	Specification	Frequency
1	Hubs	SAE 90 Multipurpose Hypoid Gear Oil API Service Classification GL5	Scheduled Maintenance Check every three months or 150 hours, whichever occurs first. Change yearly or every 600 hours, whichever occurs first.
2	Hydraulic Reservoir	Fluid Type Chevron 1000THF Chevron Rando Premium MV Temperature Range > 30° F (0° C) < 30° F (0° C) Do not substitute other fluids as pump damage may result. Fill to the middle of the sight gauge with platform in the stowed position.	Routine Maintenance Check level daily Scheduled Maintenance Change yearly or every 600 hours, whichever occurs first
3	Hydraulic Filter	Filter Element (located inside Hydraulic Reservoir)	Scheduled Maintenance Normal Conditions Change every six months or 300 hours, whichever occurs first Severe Conditions -- very dusty, exceptionally hot or exceptionally cold conditions Change every three months or 150 hours, whichever occurs first

Troubleshooting

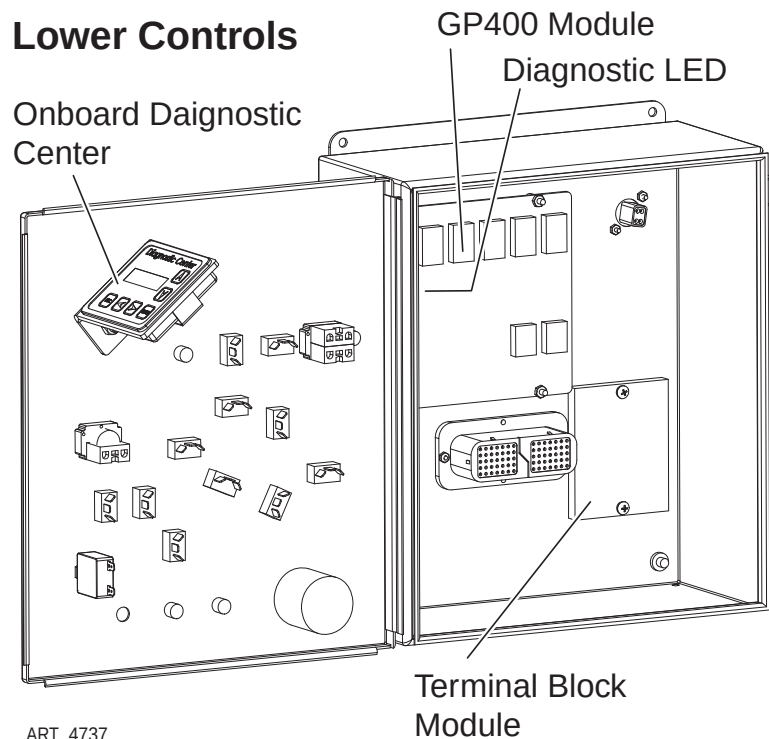
Should you experience erratic operation or notice any malfunction while operating this machine, discontinue use immediately.



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.

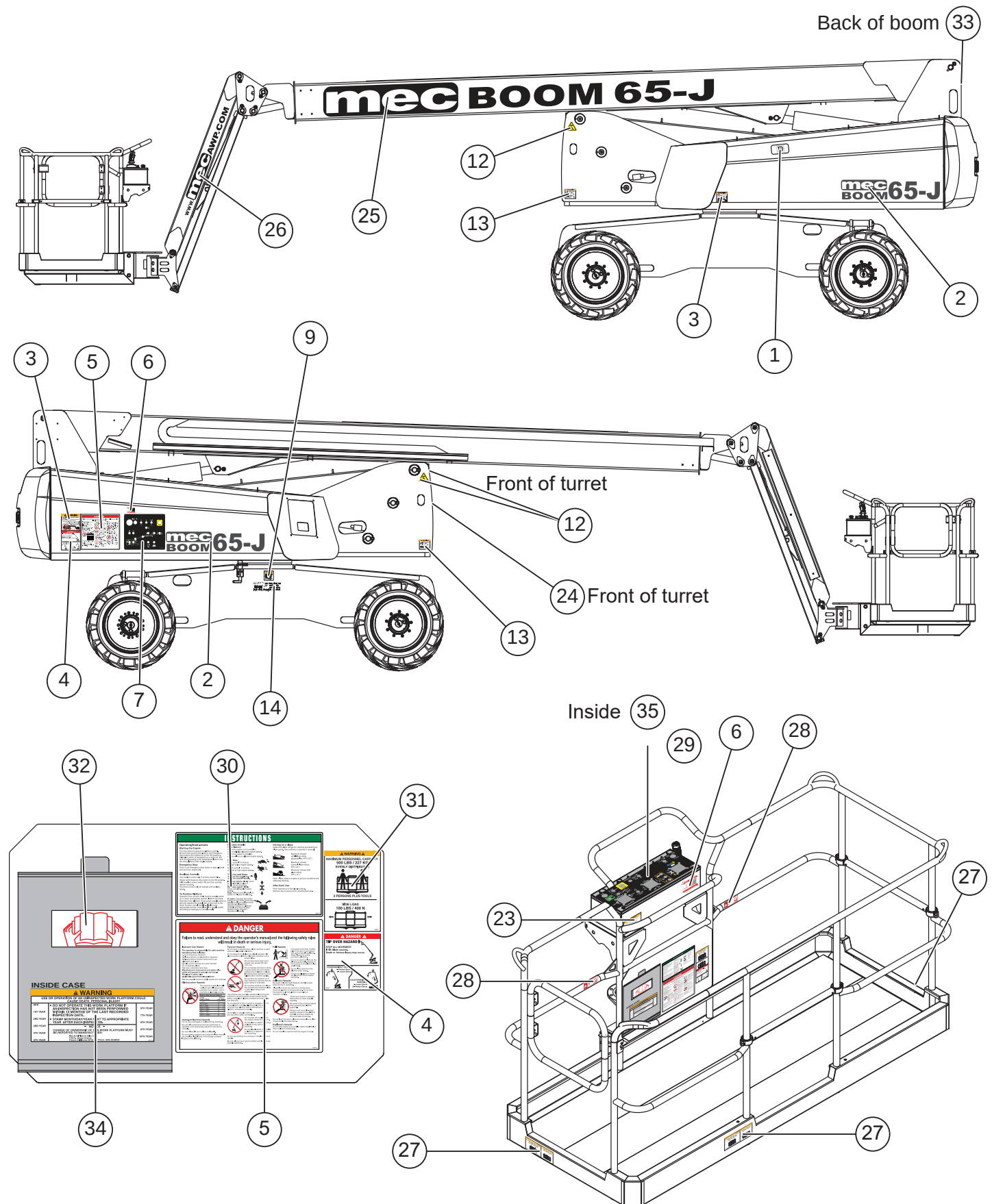
Machine functions will not operate

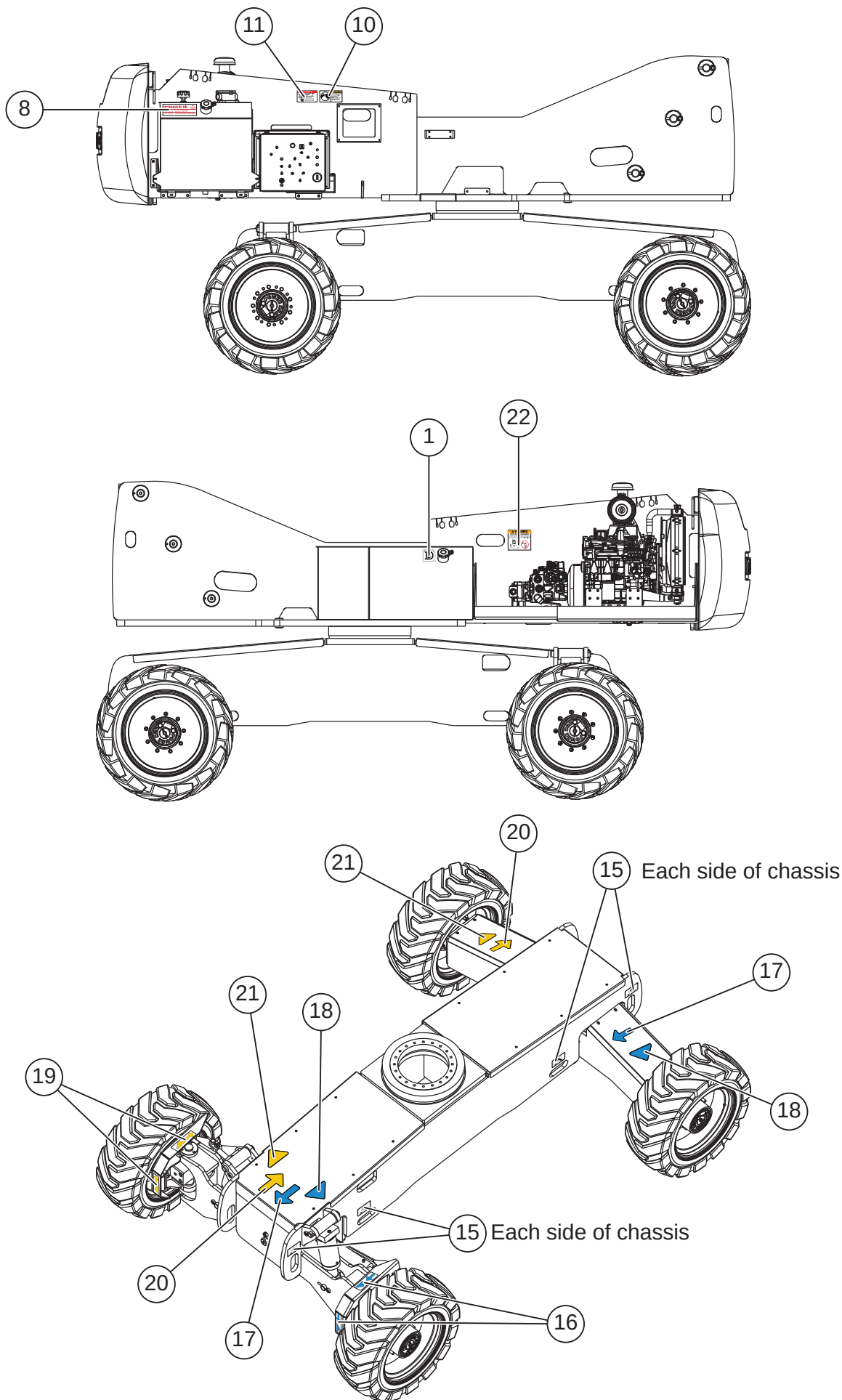
- Adequate fuel supply?
- Proper fuel blend (i.e. winter blend in cold weather)?
- Battery properly connected?
- Battery fully charged?
- Circuit Breaker tripped?
- Function toggle switch or the Enable Switch not activated?
- Selector Key Switch in proper position?
- Both Emergency Stop Switches reset?
- Hydraulic fluid level low?
- Obvious fluid leak or damaged component?
- Wires disconnected, broken, or loose?
- GP400 Diagnostic LED OFF?
 - LED should be ON. If not ON or FLASHING, refer to Service & Parts Manual or contact MEC Technical Support
- Error code at Onboard Diagnostic Center?
 - See Troubleshooting section in the Service & Parts Manual or contact MEC Customer Service.

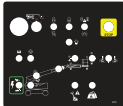
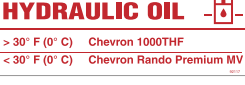
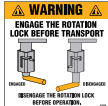
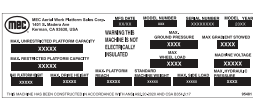
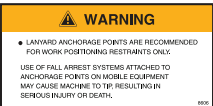
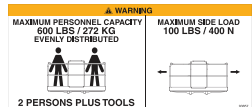
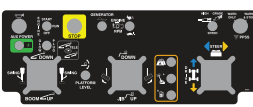


Warning and Instructional Decals

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



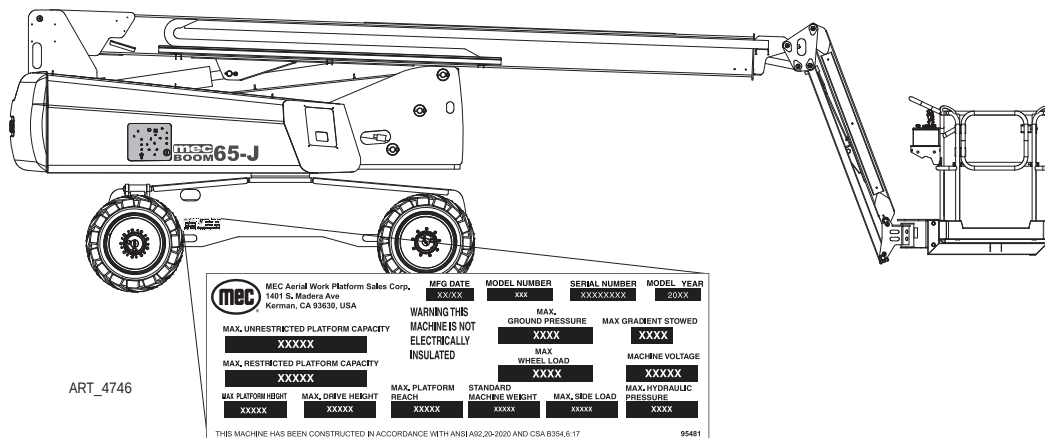


1  93182 Qty. - 2	2  95060 Qty. - 2	3  93801 Qty. - 2	4  93807 Qty. - 2	5  93755 Qty. - 2
6  95269 Qty. - 2	7  95276 Qty. - 1	8  92117 Qty. - 1	9  93855 Qty. - 1	10  90732 Qty. - 1
11  93805 Qty. - 1	12  91850 Qty. - 3	13  93804 Qty. - 2	14  95481 Qty. - 1	15  91973 Qty. - 8
16  93814 Qty. - 2	17  91971 Qty. - 2	18  91981 Qty. - 2	19  93815 Qty. - 2	20  91972 Qty. - 2
21  91982 Qty. - 2	22  93806 Qty. - 1	23  8606 Qty. - 1	24  90751 Qty. - 1	25  95059 Qty. - 1
26  92416 Qty. - 1	27  93857 Qty. - 3	28  91970 Qty. - 2	29  95275 Qty. - 1	30  93754 Qty. - 1
31  93911 Qty. - 1	32  8911 Qty. - 1	33  90719 Qty. - 1	34  90718 Qty. - 1	35  92236 Qty. - 1

Item	Part Number	Description	Qty.
1	93182	Decal, Diesel - Ultra Low Sulfur Diesel Only	2
2	95060	Decal, MEC Boom 65-J, Module Door	2
3	93801	Decal, Compartment Access	2
4	93807	Decal, Danger Tipover	2
5	93755	Decal, Danger Panel	2
6	95269	Decal, MEC Duralink - 65-J	2
7	95276	Decal, ANSI 2020 65-J Lower Control Box	1
8	92117	Decal Hydraulic Fluid Range	1
9	93855	Decal, Rotation Lock, 60-J	1
10	90732	Decal, Warning No Powerwash	1
11	93805	Decal, Electrocution Hazard	1
12	91850	Decal, Caution Triangle Overhead Clearance	3
13	93804	Decal, Crush Hazards	2
14	95481	Serial Plate, ANSI A92.20 Booms	1
15	91973	Decal, Tie Down	8
16	93814	Decal, Blue Arrows, Small	2
17	91971	Decal, Boom Blue Arrow, Forward	2
18	91981	Decal, Boom Blue Arrow, Left	2
19	93815	Decal, Yellow Arrows, Small	2
20	91972	Decal, Boom Yellow Arrow, Reverse	2
21	91982	Decal, Boom Yellow Arrow, Right	2
22	93806	Decal, Explosion Hazard Ether	1
23	8606	Decal, Warning Lanyard Anchorage	1
24	90751	Decal, Power To Platform	1
25	95059	Decal, MEC BOOM 65-J, Main Boom	1
26	92416	Decal, Website	1
27	93857	DECAL, 60-J Platform Capacity, 600-LB option	3
28	91970	Decal, Boom Harness Attach Point	2
29	95275	Decal, 60-J Upper Controls - PPSS Selector Switch Platform Overload	1
30	93754	Decal, Instructions Panel	1
31	93911	Decal, 60-J Platform Capacity Tall, 600-LB option	1
32	8911	Decal, Manuals Inside Icon	1
33	90719	Decal, MEC Oval	1
34	90718	Decal, Warning Annual Inspection	1
35	92236	Decal, EZ-CAL Port	1

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. The Serial Plate is located on the side of the chassis below the Base Controls.



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 Identifies the model year of the machine.

MAX. PLATFORM UNRESTRICTED CAPACITY The maximum safe load (material, persons + equipment) which can be correctly placed on the platform within any range of motion.

MAX. PLATFORM RESTRICTED CAPACITY On optionally equipped machines, the maximum safe load (material, persons + equipment) which can be correctly placed on the platform when used within a restricted range of motion.

MAX. HYDRAULIC SYSTEM PRESSURE The maximum pressure generated by the machine's hydraulic system.

MAX. WHEEL LOAD The maximum safe weight applied to each wheel. Calculated with all available options installed. $Fw = 30\% (Wm + Wc + Wopt)$

MACHINE VOLTAGE The electrical voltage at which the machine operates.

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

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

MAX. PLATFORM REACH The maximum horizontal outreach of the extended boom.

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

MAX. GROUND PRESSURE The amount of pressure exerted on the surface at each wheel. Calculated with all available options installed. $Pmax = 30\% (Wm + Wc + Wopt) / \text{Contact Area}$

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

Transport and Lifting Instructions

Safety Information

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



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

ONLY properly trained and qualified operators shall load and unload this machine.

Free-wheel configuration for Winching or Towing.

RUNAWAY HAZARD!

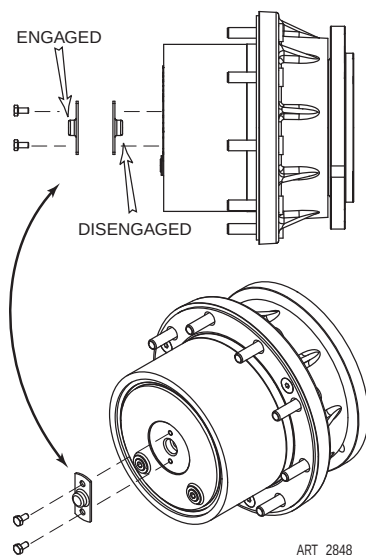


After releasing the brakes there is nothing to stop machine travel. Machine will roll freely on slopes.

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.



Disengage Brakes before Towing or Winching

- Chock the wheels.
- Remove the Torque Engage Cap and reinstall with the bump facing inward on all four (4) hubs.

Engage Brakes before Driving

- Remove the Torque Engage Cap and reinstall with the bump facing outward on all four (4) hubs.

Driving or Winching onto or off of a Transport Vehicle

Before loading the machine, orient the turntable so that the platform is over the non-steering wheels so that the Rotation Lock may be engaged later in the loading process.

ONLY properly trained and qualified operators shall load and unload this machine.

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



Whether winching or driving the machine on to a truck or trailer, always check the area for dangerous situations before moving the machine.

If driving the machine, always use a second person acting as a spotter to make sure the person loading the machine avoids dangerous situations.

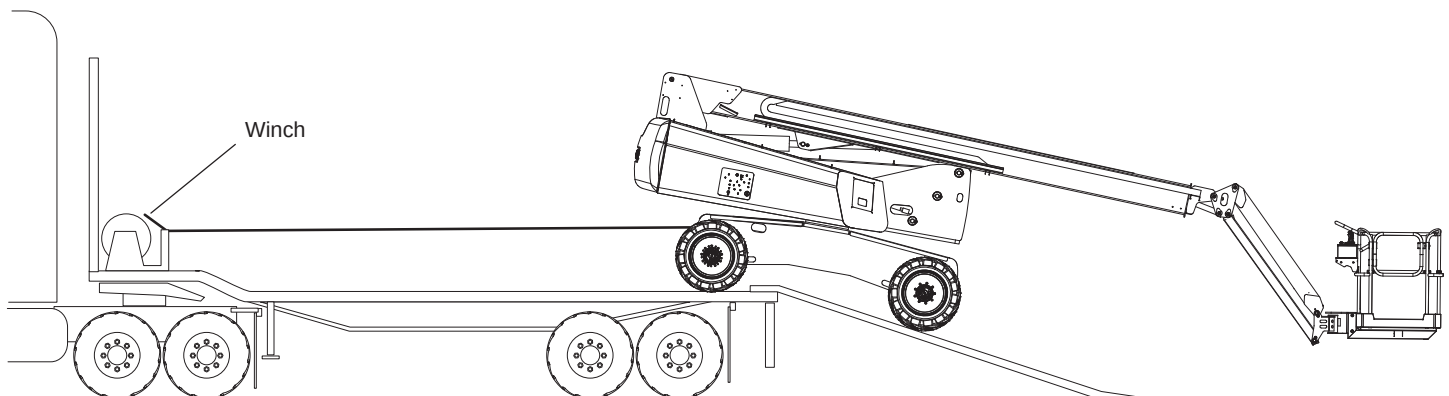
Driving

- Turn the Base Key Switch to PLATFORM. Check that the Emergency Stop Switch is reset by turning it clockwise.
- Enter the platform and reset the Platform Emergency Stop Switch.
- Test platform control functions.
- Raise the jib slightly for platform ground clearance.
- Carefully drive the machine off or on to the transport vehicle.
- Make sure you can see the second person giving guidance.

Note: The brakes are automatically released for driving and will automatically apply when the control lever is returned to neutral which causes the machine to stop.

Winching

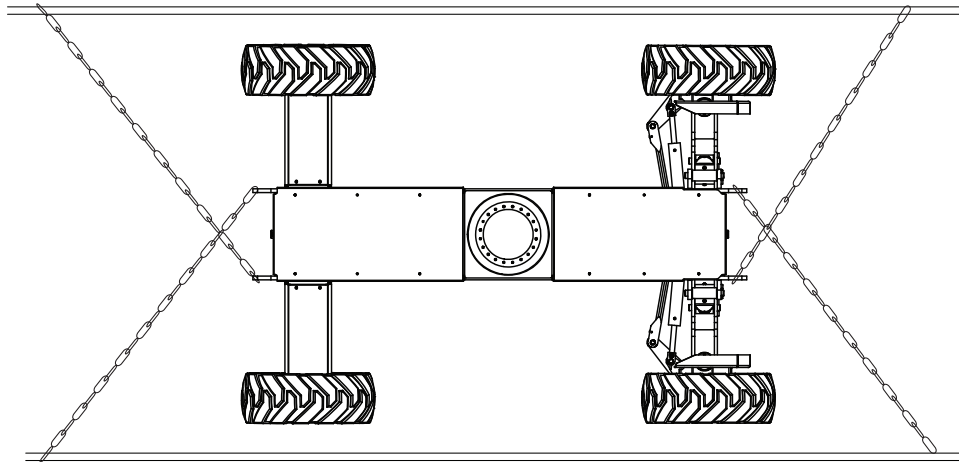
- Chock the wheels, then disengage brakes (see Disengage Brakes before Towing or Winching on page 49).
- Carefully operate the winch to lower the machine down the ramp or pull the machine up the ramp.
- Chock the wheels and engage the brakes before disengaging the winch.



Securing to Truck or Trailer for Transport

- Turn the key Selector Key Switch to OFF and remove the key before transport.
- Turn the Battery Disconnect Switch to OFF before transport.
- Inspect the entire machine for loose or unsecured items.
- Secure the chassis.
- Engage the Rotation Lock.
- Secure the platform.

Securing the Chassis



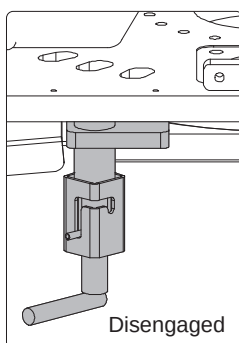
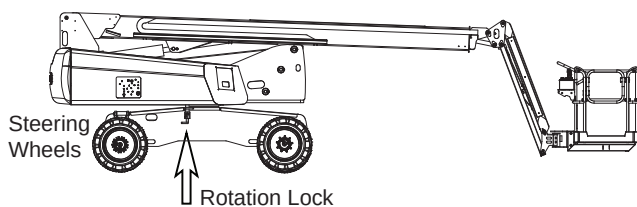
ART_4742

Make sure each of your chains is rated to hold the machine's weight (see serial number plate or Specifications). Use at least 4 chains.

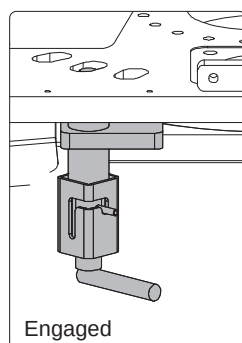
Do not attach chain hooks directly to the machine. Loop the chain through the tie-down point and connect the chain hook to the chain.

Be sure chains are arranged so that they do not damage the machine.

Engaging The Rotation Lock



Disengaged



Engaged

ART_4743

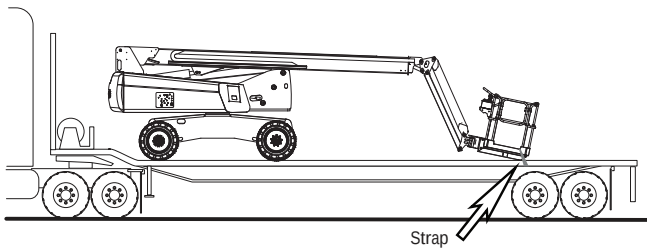
Before transport, rotate the turntable so that one of the three locking holes aligns with the Rotation Lock located on the chassis. The lock holes are located on the bottom of the Controls Module. The Rotation Lock is located on the chassis behind the left front wheel.

Lift the Rotation Lock using the attached pin, then rotate to the right and lower it into the shallow depression to engage.

See illustration.

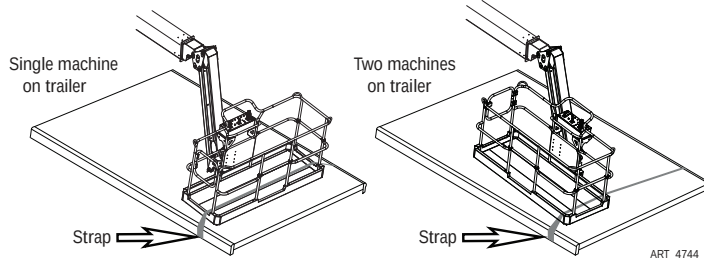
Disengage the Rotation Lock before operation.

Securing the Platform



With the boom completely stowed, raise the jib slightly, then use the Platform Level function to lower the platform until the front of the platform touches the trailer surface.

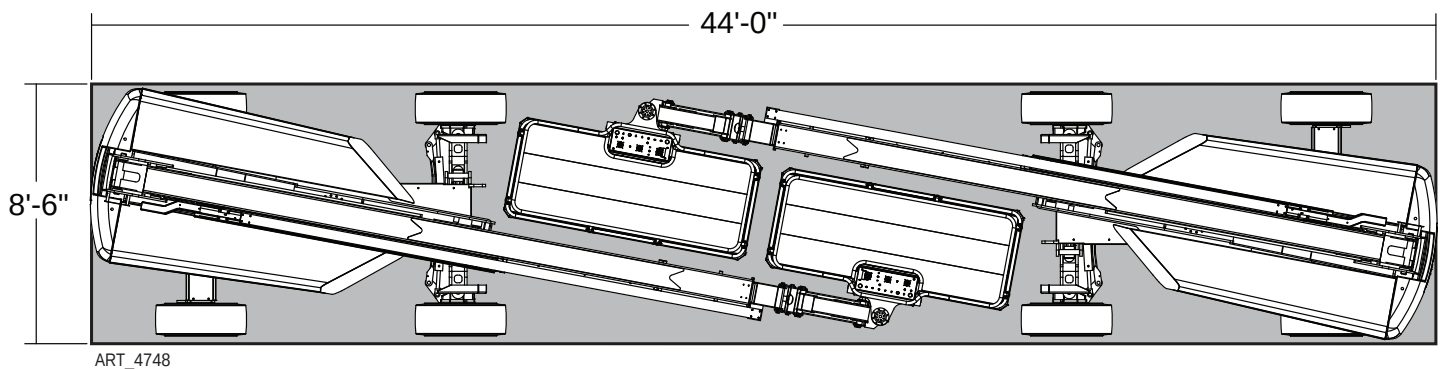
Route the tie-down strap as shown through the width of the platform, over the toe boards of both side entry points. Tighten securely but do not over-tighten.



It may be necessary to turn the platform 90 degrees when loading two machines on the same trailer. In this case, route the strap over the toeboard and through the end of the platform as shown.

Loading Two Machines

Two machines may be loaded onto a single trailer by rotating the turntable of each machine and rotating the platforms as shown below.



- Extend the boom of each machine approximately 15 inches (38 cm).
- Arrange the machines as shown. The distance between the ends of the counterweights should be 44 ft - 45 ft (13.4 m - 13.7 m).
- Secure the chassis of each machine as previously instructed on page 51.
- Engage the Rotation Lock of each machine as previously instructed on page 51, using one of the side turntable locking holes.
- Secure the platform of each machine as previously instructed above.

Boom Lifting Instructions

Only qualified riggers should rig and lift this machine.

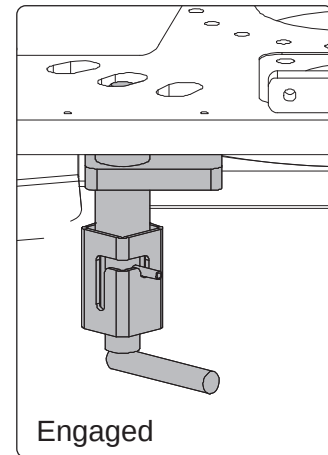
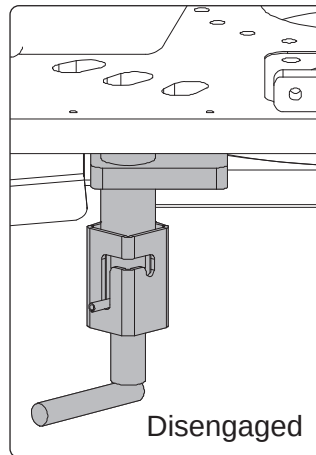
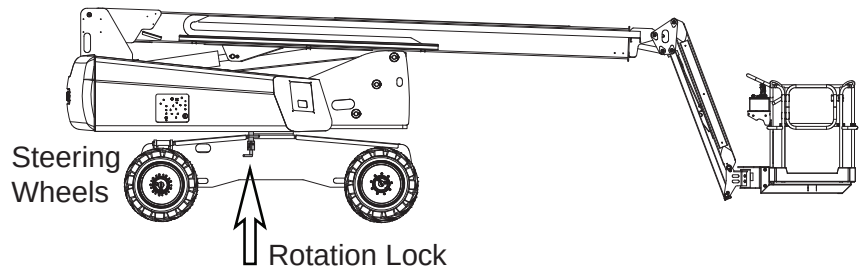


Ensure that the crane capacity, loading surfaces, chains, straps and slings are sufficient to withstand a machine weight of 20,000 lbs (9,070 kg).

Ensure that the platform is unloaded and that all material and tools have been removed.

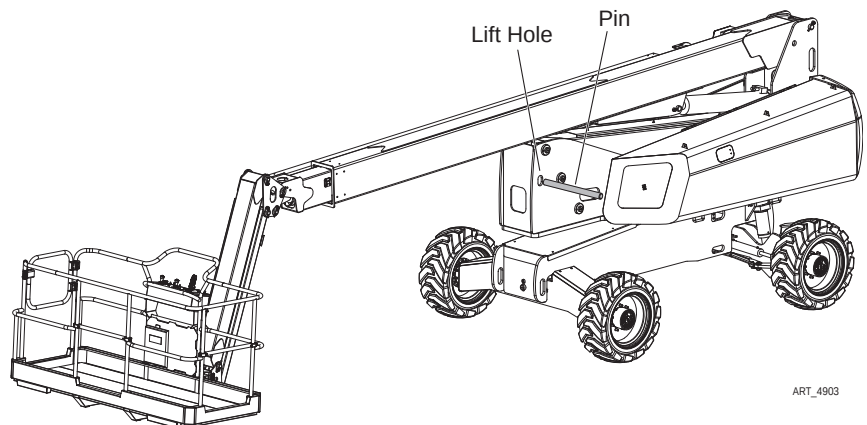
1. Rotate the turntable so that the platform and boom are opposite the steering axle. Lower the boom completely so that it rests on the front of the turntable.
2. Engage the Rotation Lock. Rotate the turntable so that the center of the three locking holes aligns with the Rotation Lock located on the chassis. The lock holes are located on the bottom of the Controls Module. The Rotation Lock is located on the chassis behind the left front wheel.

Lift the Rotation Lock using the attached pin, then rotate to the right and lower it into the shallow depression to engage.



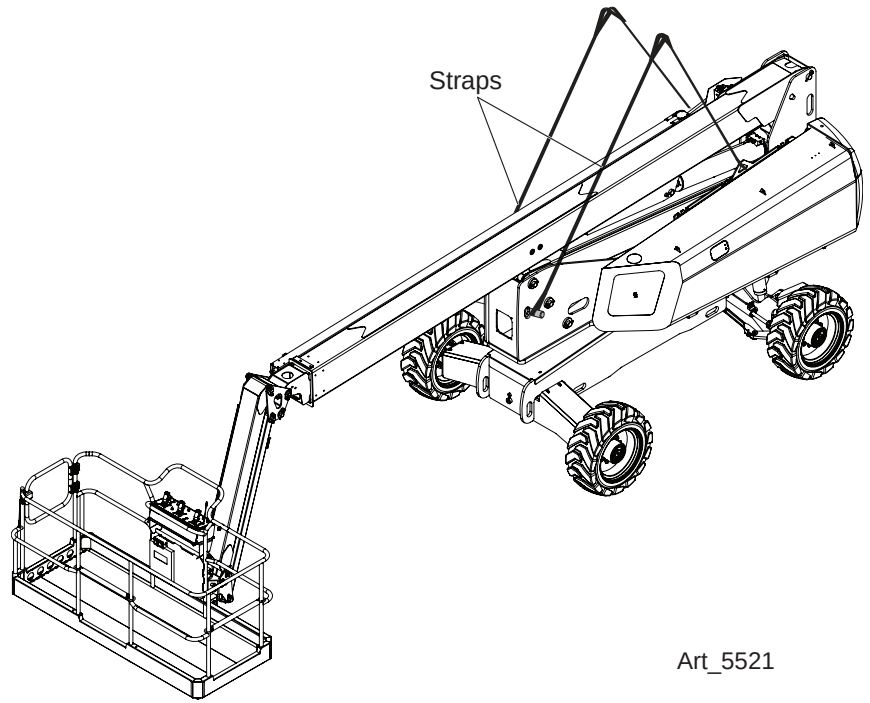
ART_4743

3. Place a 2-inch (5 cm) diameter pin at least 30 inches (80 cm) long through the hole at the platform end of the turntable as indicated in the illustration. Be careful to avoid hydraulic lines.



ART_4903

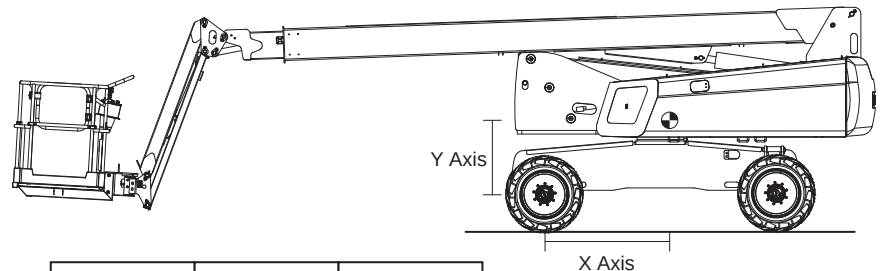
4. Attach straps to each end of the pin and secure appropriately. Place padding between the straps and the machine to protect the machine finish.
5. Attach straps to each of the triangle shaped lifting points on the turntable side sheets above each module door. Shackles and clevis pins may be necessary.



6. Locate the machine's center of gravity and rig as shown below. Center of gravity measurements are taken from the center of the non-steering wheel.

Carefully lift the machine.

7. When the machine is in place disengage the Rotation Lock before operation.



Center of Gravity	X Axis	Y Axis
65-J Boom	60 in / 152 cm	33.4 in / 85 cm

Distance from center of non-steering wheel

ART_4899

This procedure is finished.

Notes

Notes

Notes



MEC Parts Order Form

Phone: 559-842-1523

Fax: 559-400-6723

Email: Parts@mecawp.com

Please Fill Out Completely:

Date: _____

Account: _____

Bill to: _____

Ordered By: _____

Your Fax No.: _____

Ship to: _____

Purchase Order Number _____

*** All orders MUST have a Purchase Order Number*

Ship VIA _____

***Fed Ex shipments require Fed Ex account number*

Part Number	Description	Quantity	Price

All back-ordered parts will be shipped when available via the same ship method as original order unless noted below:

_____ Ship complete order only - No Backorders

_____ Ship all available parts and contact customer on disposition of back-ordered parts

_____ Other (Please specify)

Signature _____



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. 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 Work Platforms

1401 S. Madera Avenue, Kerman, CA 93630 USA

Toll Free: 1 - 877 - 632 - 5438

Phone: 1 - 559 - 842 - 1500

Fax: 1 - 559 - 842 - 1520

info@MECawp.com

www.MECawp.com