

OPERATOR'S MANUAL CE SPECIFICATIONS

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ART_2760

**2591RT | 3391RT
4191RT
Scissorlift**

Serial # 2591RT: 9401000 - Up
Serial # 3391RT: 9501000 - Up
Serial # 4191RT: 9601000 - Up

**91787
September 2008**

SPECIFICATIONS

		2591RT		3391RT		4191RT	
Working Height*		31.6 ft*	9.62 m*	39.6 ft*	12.06 m*	47.6 ft*	14.5 m*
Platform Height		25.0 ft	7.62 m	33.0 ft	10.06 m	41.0 ft	12.5 m
	Platform Entry Height	5.6 ft	1.7 m	5.6 ft	1.7 m	6.2 ft	1.9 m
Stowed Height		8.5 ft	2.6 m	9.2 ft	2.8 m	9.8 ft	3 m
	Rails Up						
	Rails Folded Down	5.9 ft	1.8 m	6.6 ft	2 m	7.3 ft	2.24 m
Maximum Number of Occupants	0 m/s Wind (indoors)	5		4		4	
	12 m/s Wind (outdoors)	5		4		4	
Lift Capacity	Evenly Distributed	2000 lb	907 kg	1499 lb	680 kg	1000 lb	454 kg
	Rollout Deck Capacity	500 lb	227 kg	500 lb	227 kg	500 lb	227 kg
Maximum Operating Inclination		3°		3°		3°	
Platform Dimensions	Roll-Out Deck Extended	181.1 in	4.6 m	181.1 in	4.6 m	181.1 in	4.6 m
	Roll-Out Deck Retracted	131.9 in	3.35 m	131.9 in	3.35 m	131.9 in	3.35 m
	Deck Width	72.0 in	1.83 m	72.0 in	1.83 m	72.0 in	1.83 m
	Guard Rail Height	44.5 in	1.13 m	44.5 in	1.13 m	44.5 in	1.13 m
	Toe Board Height	7.1 in	18 cm	7.1 in	18 cm	7.1 in	18 cm
	Rollout Deck Length	48.0	1.22 m	48.0	1.22 m	48.0	1.22 m
Overall Length		144.1 in	3.66 m	144.1 in	3.66 m	144.1 in	3.66 m
	With Outriggers	181.1 in	4.6 m	181.1 in	4.6 m	181.1 in	4.6 m
Overall Width		90.1 in	2.3 m	90.1 in	2.3 m	90.1 in	2.3 m
Wheel Base		102.4 in	2.6 m	102.4 in	2.6 m	102.4 in	2.6 m
Wheel Track		78.7 in	2.0 m	78.7 in	2.0 m	78.7 in	2.0 m
Turning Radius	Inside	76.0 in	1.93 m	76.0 in	1.93 m	76.0 in	1.93 m
	Outside	194.9 in	4.95 m	194.9 in	4.95 m	194.9 in	4.95 m
Ground Clearance		12.0 in	30.5 cm	12.0 in	30.5 cm	12.0 in	30.5 cm
Machine Weight** (Unloaded) (Approx.)		8000 lb**	3629 kg**	8699 lb**	3946 kg**	9700 lb**	4400 kg**
Drive System (Proportional)		2 Wheel Drive Standard, 4 Wheel Drive Option					
	Drive Speed (Platform Elevated)	0 – 0.8 mph	0 – 1.3 km/h	0 – 0.8 mph	0 – 1.3 km/h	0 – 0.8 mph	0 – 1.3 km/h
	Drive Speed (Platform Lowered)	0 – 3.8 mph	0 – 6.1 km/hr	0 – 3.8 mph	0 – 6.1 km/hr	0 – 3.8 mph	0 – 6.1 km/hr
Brakes		Multi disc		Multi disc		Multi disc	
Lift/Lower Speed (Approx.)		25 sec / 30 sec		33 sec / 35 sec		40 sec / 50 sec	
Gradeability		45% / 24.2°		45% / 24.2°		45% / 24.2°	
Ground Pressure/Wheel (Maximum)		121 psi	8.50 kg/cm ²	137 psi	9.63 kg/cm ²	140 psi	9.84 kg/cm ²
Wind Speed		28 mph	12.5 m/sec	28 mph	12.5 m/sec	28 mph	12.5 m/sec
Noise Level		86 dB		86 dB		86 dB	
Vibration***		< 2.5m/s ²		< 2.5m/s ²		< 2.5m/s ²	
Tire Size-Standard		12-16.5 NHS "Outrigger"		12-16.5 NHS "Outrigger"		12-16.5 NHS "Outrigger"	
	12 PLY Foam Filled	Foam Filled		Foam Filled		Foam Filled	
Wheel Load		2,998 lb	1360 kg	3,060 lb	1388 kg	3,210 lb	1456 kg
Wheel Lug Nut Torque		150-166 ft/lb	204-225 Nm	150-166 ft/lb	204-225 Nm	150-166 ft/lb	204-225 Nm
Hydraulic Pressure	Main System	3000 psi	207 bar	3000 psi	207 bar	3000 psi	207 bar
	Lift System	2500 psi	172 bar	2500 psi	172 bar	2500 psi	172 bar
	Steer	1500 psi	103 bar	1500 psi	103 bar	1500 psi	103 bar
Hydraulic Fluid Capacity		23 GAL	87 liters	23 GAL	87 liters	23 GAL	87 liters
Fuel Capacity		15 GAL	57 liters	15 GAL	57 liters	15 GAL	57 liters
Power System – Voltage		12 Volts DC		12 Volts DC		12 Volts DC	
Alternator (Lighting Coil)		40 Amp		40 Amp		40 Amp	
Engine Availability		Kubota D1105, 25 HP (8.7kW), Diesel, Liquid Cooled					
Meets requirements of CE		*Metric equivalent of working height adds 2 m (6.6 ft.) to platform height. **Weight may increase with certain options or country standards. ***Vibration is not significant					



INTRODUCTION

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



The operator's manual must be read and understood prior to operating your MEC self-propelled scissors. The user/operator should not accept operating responsibility until he/she has read and understands the operator's manual as well as having operated the MEC scissor lift 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 Scissor Lift has been designed, built, and tested to provide safe, dependable service. Only authorized, trained and qualified personnel should be allowed to operate or service the machine.

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

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



MEC Aerial Platform Sales Corp.

1775 Park Street, Suite 77 • Selma, CA 93662 USA

Ph: 1-800-387-4575 • 559-891-2488 • Fax: 559-891-2448

www.mecawp.com

Machine Components

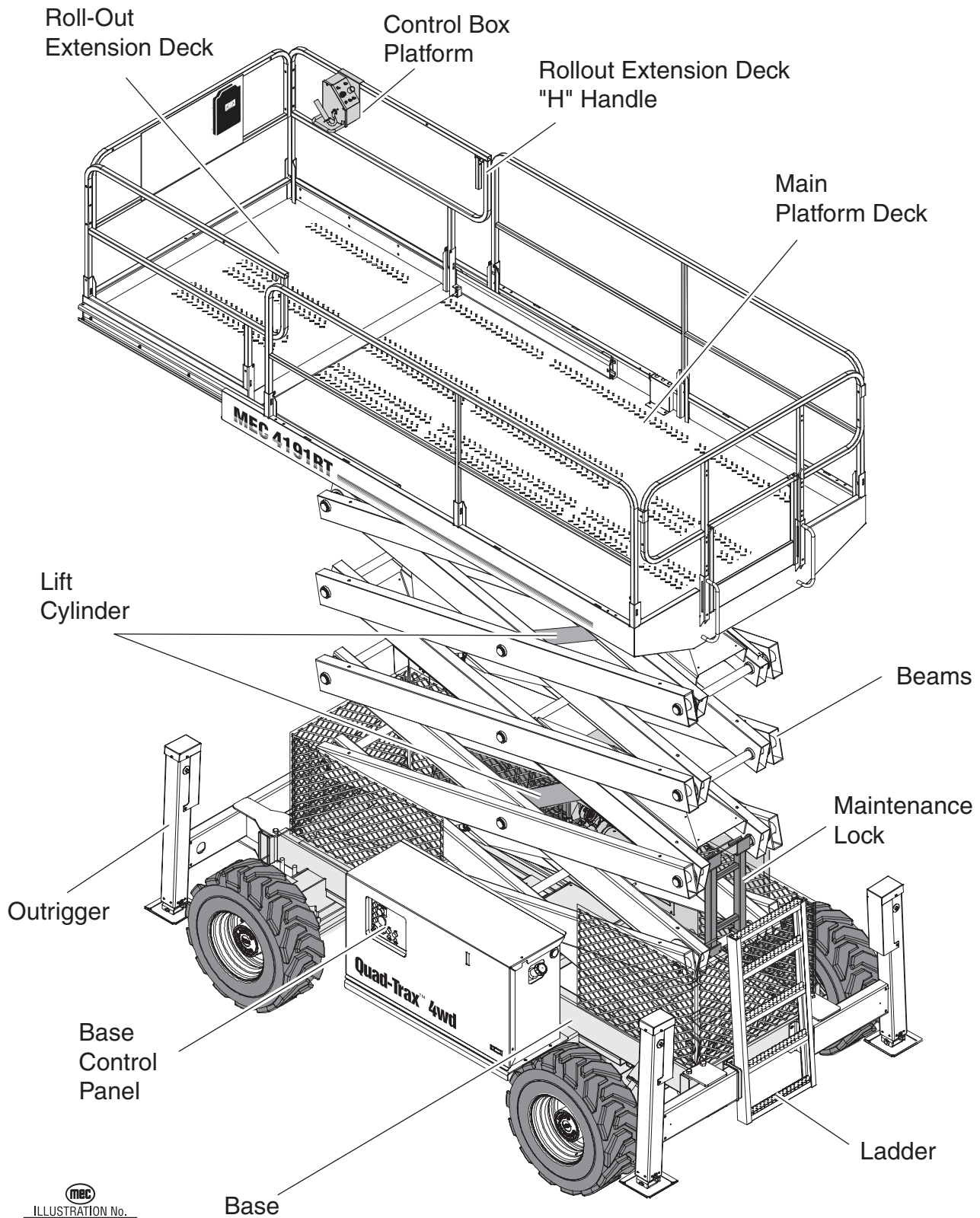
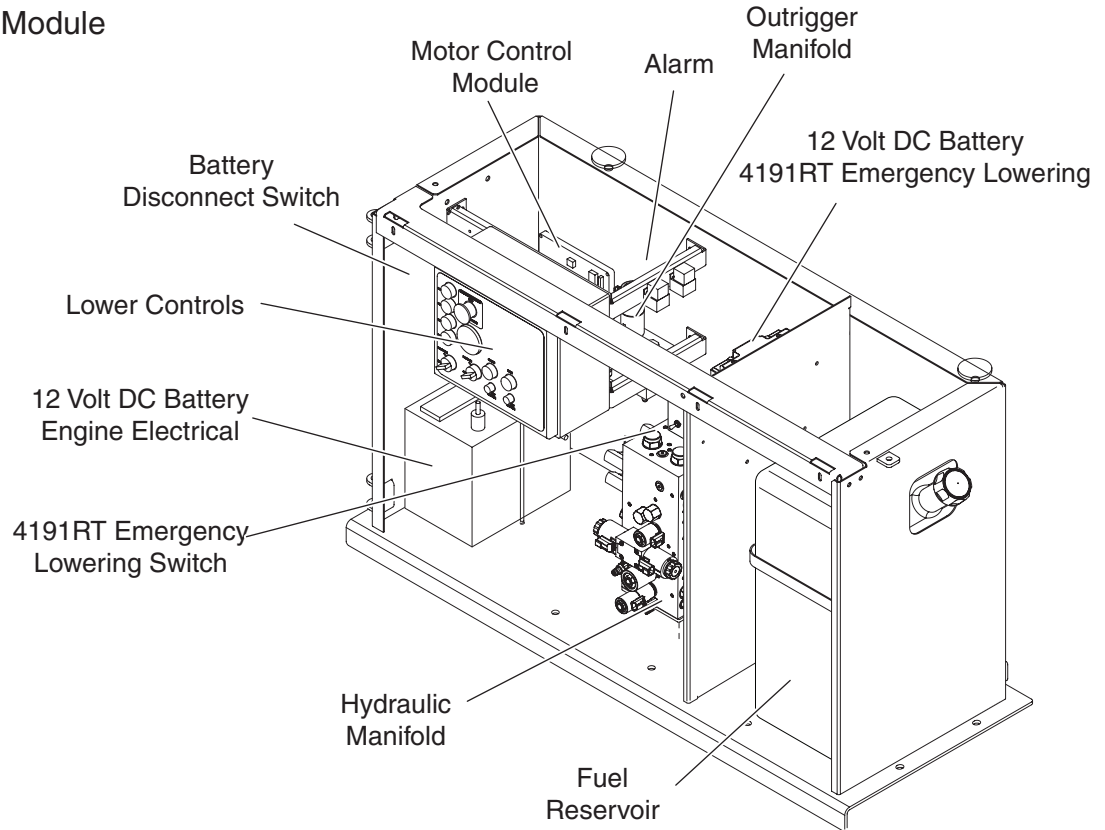



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Machine Components

Control Module



Power Module

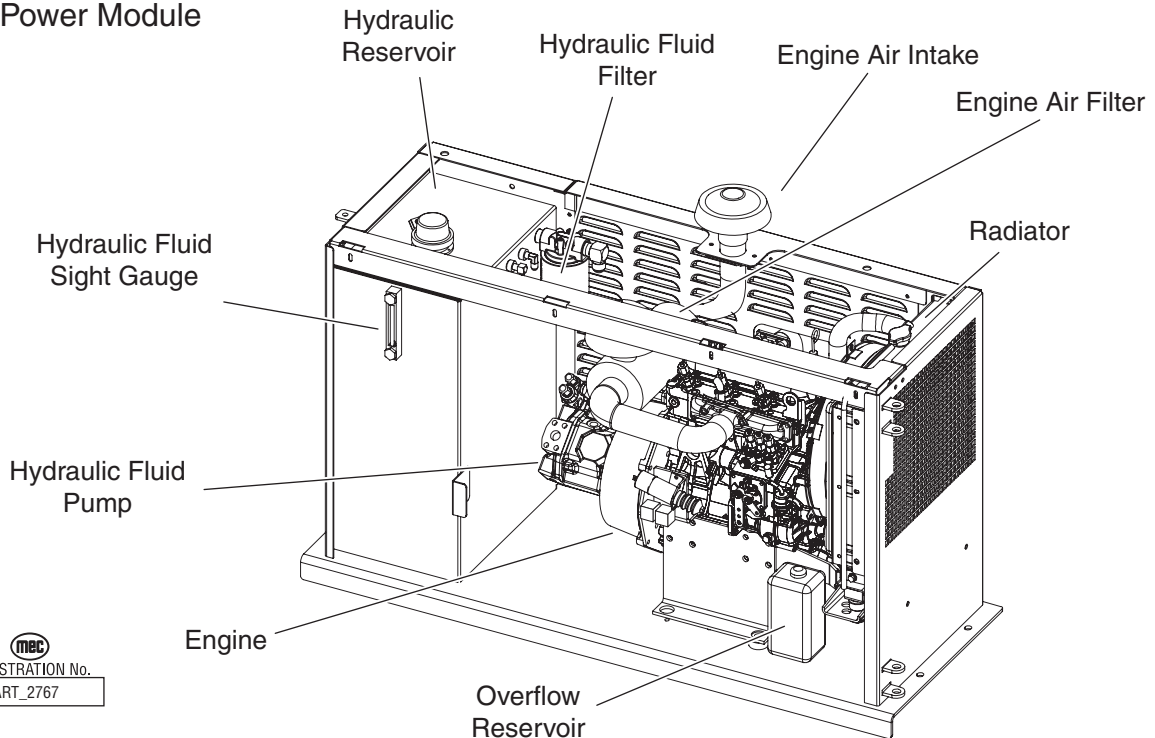
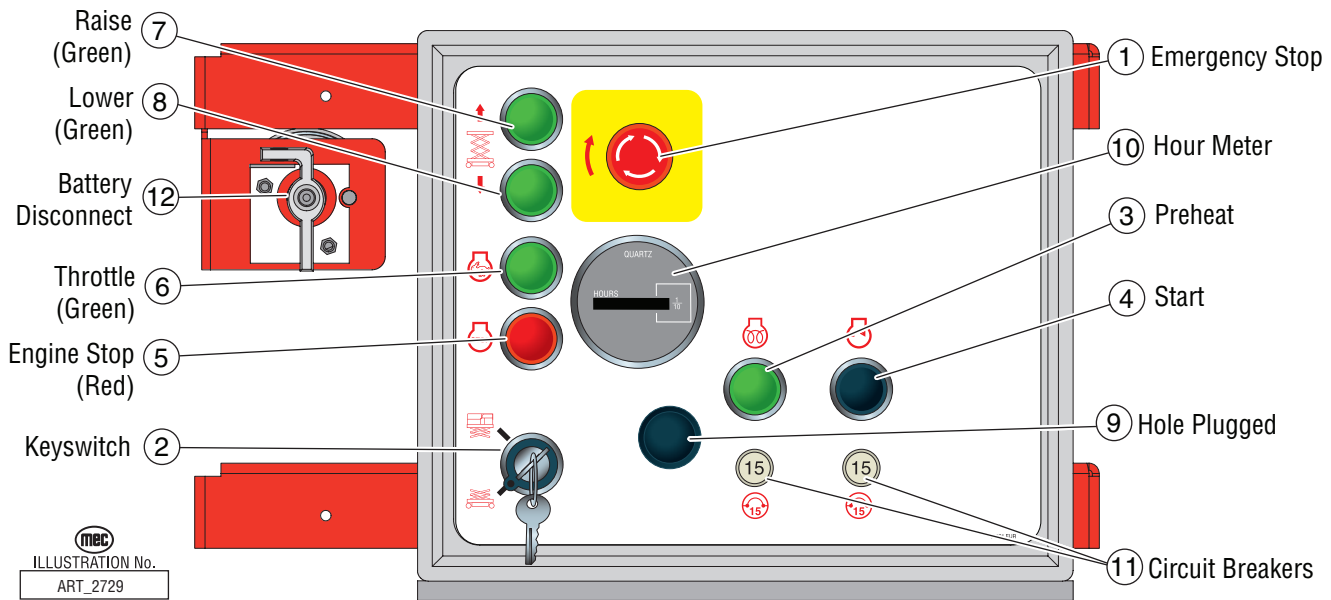


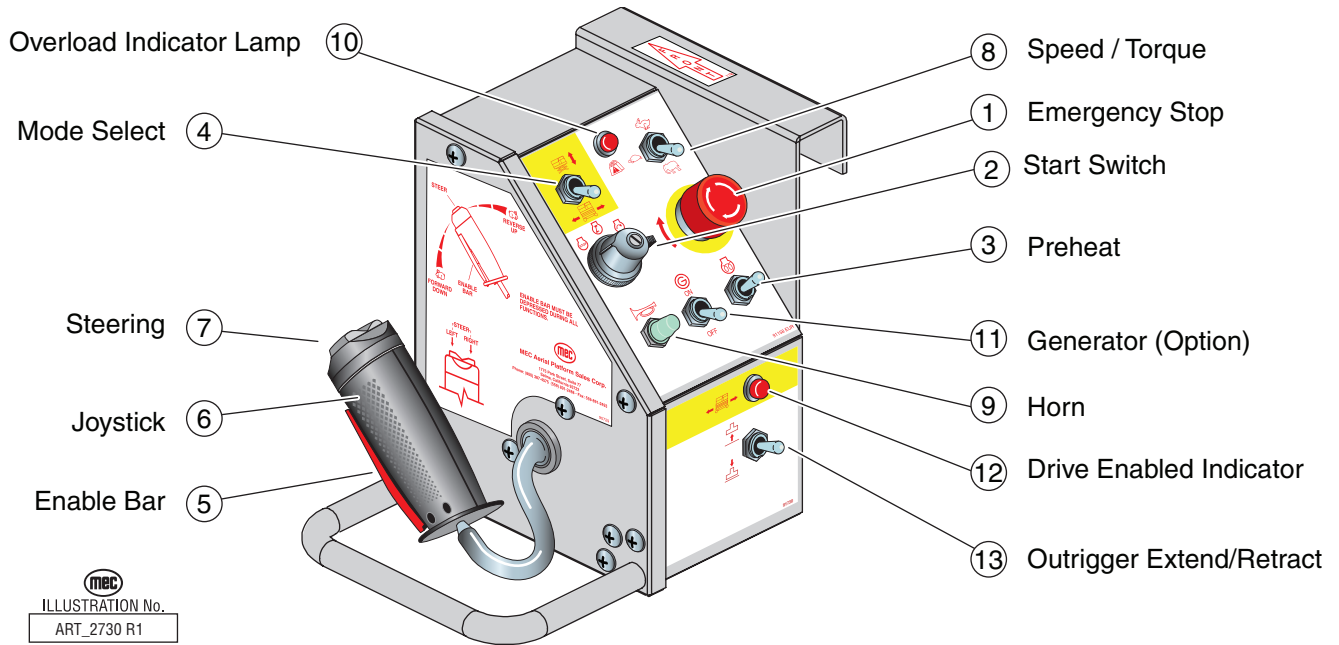

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Machine Controls



CONTROL	DESCRIPTION
1 Emergency Stop Button	Use to stop all functions in an emergency. Push for emergency stop. To reset turn clockwise.
2 Keyswitch	Select BASE position to control operation of machine using the lower controls. Select PLATFORM position to control operation of machine using the upper control box.
3 Preheat	Use to heat glow plugs in cold hard-start conditions.
4 Start Switch	Press the switch to start the engine. Release switch when engine starts running.
5 Engine Stop Switch	Press the switch to shut off engine from lower controls.
6 Throttle Switch	Press the switch to activate high engine speed before raising platform from lower controls.
7 Raise Switch	Use to control the lift of the platform from the base panel, when BASE position is selected.
8 Lower Switch	Use to control lowering of the platform from the lower controls when BASE position is selected.
9 N/A	Hole Plugged
10 Hour Meter	Indicates total elapsed time the engine has been operated.
11 Circuit-breakers	Pops out when there is excessive electrical load in the 12-volt control circuit. Push in to reset (see Service and Parts Manual).
12 Battery Disconnect Switch	Disconnects battery power supply. Turn <i>OFF</i> and padlock to secure machine from unauthorized use.

Machine Controls



CONTROL

DESCRIPTION

CONTROL	DESCRIPTION
1 Emergency Stop	Push to stop all functions in emergency. Reset by turning Button clockwise..
2 Start Switch	Turn key to start the engine. Switch will return to RUN position for normal operation. Turn key to <i>OFF position</i> to shut engine down.
3 Preheat	Use to heat glow plugs in cold hard-start conditions.
4 Mode Select	Desired selection will allow either the lift or drive function using controller handle.
5 Enable Bar	Must be depressed to activate drive, steer, and lift functions.
6 Joystick	DRIVE: Controls forward and reverse machine travel at stepped speeds. LIFT: With enable switch depressed, moving controller handle towards the operator will provide proportional platform lift. Moving the handle away from the operator will provide platform lowering at a fixed speed.
7 Steering	Push Steer Rocker Switch (thumb) to the left and hold to turn steer wheels to the left, right to turn steer wheels to the right.
8 Speed Switch	HIGH TORQUE selection will provide extra driving torque and reduce speed. MID RANGE selection will provide medium driving torque and speed. HIGH SPEED selection will provide high machine speed when platform is under approximately 10 Ft. (3 m).
9 Horn	Press button to sound warning horn.
10 Overload Indicator	Lamp <i>ON</i> indicates platform overloaded.
11 Generator Switch (Option)	Turn switch <i>ON</i> to engage optional A/C generator. Drive and Lift functions are disabled when generator is on.
12 Indicator Lamp	Lamp <i>ON</i> indicates outriggers are UP and machine will drive. Lamp <i>OFF</i> indicates outriggers are DOWN and machine will not drive.
13 Outrigger Switch	Push toggle switch UP to RETRACT (raise) the outriggers. Push toggle switch DOWN to EXTEND (lower) the outriggers.

SAFETY

Failure to read, understand, and follow all safety rules, warnings, and instructions will unnecessarily expose you and others to dangerous situations. For your safety and the safety of those around you, you must operate your machine as instructed in this manual.

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

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



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.



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



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



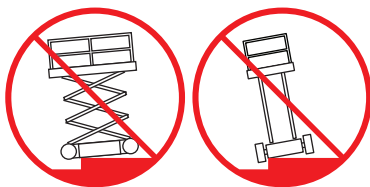
Indicates a situation which, if not avoided, may result in damage to the equipment.

Safety Rules And Precautions

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

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

TIPOVER HAZARDS



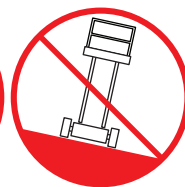
**DO NOT DRIVE NEAR
DROP-OFFS, HOLES
OPEN ELEVATOR SHAFTS,
AND LOADING DOCKS.**



**DO NOT ELEVATE PLATFORM ON
UNEVEN OR SOFT SURFACES
DO NOT DRIVE ONTO UNEVEN OR
SOFT SURFACES WHEN ELEVATED.**



**DO NOT RAISE PLATFORM
ON SLOPE, OR DRIVE
ONTO SLOPE WHEN ELEVATED.**



**DO NOT RAISE
PLATFORM IN
WINDY OR GUSTY
CONDITIONS.**

ART_2349

**DANGER**

- ◆ Only authorized, trained and qualified personnel should operate the machine.
- ◆ NEVER fasten a fall protection lanyard to an adjacent structure while on the platform.
- ◆ Make sure that the platform entry is properly closed and secure before operating the machine from the platform.
- ◆ NEVER exceed platform rated capacity. Review the Specifications table (see page 2) regarding model capacities and dimensions.
- ◆ Before operating the machine, read and understand all safety and control information found on the machine and in this manual.
- ◆ When operating the machine follow all safety and control information found on the machine and in this manual.
- ◆ Evenly distribute loads placed on the platform.
- ◆ NEVER use scaffolding, ladders or similar items to extend your reach while on the platform.
- ◆ NEVER climb down the beam assembly.
- ◆ NEVER exit or enter the platform while the platform is elevated.
- ◆ Towing or winching the machine requires that the brake be released. When the brake is released, there is no means to stop the machine's travel. MEC recommends using this procedure only in cases of emergency, and only for a short distance. Be on guard against machine runaway on sloping surfaces. Movement speed shall not exceed 5 MPH (8.0 kph).
- ◆ NEVER attempt to open any hydraulic line or component without first relieving all system pressure.
- ◆ NEVER alter, modify, or disable any safety devices or interlocks.
- ◆ NEVER recharge the battery near sparks or open flames. Lead-acid batteries generate EXPLOSIVE HYDROGEN GAS. Always wear safety glasses.
- ◆ NEVER use the machine outdoors during electrical storms or in high wind situations.
- ◆ ALWAYS observe the maximum wind speed of 12.5 m/s (28 mph).
- ◆ DO NOT increase the surface area of the platform or the load in windy conditions. Increase of the area exposed to the wind will decrease stability.
- ◆ Only elevate the platform when the machine is on a firm, level surface.
- ◆ SECURE all tools and other loose items to prevent injury to persons working on or below the platform.
- ◆ Precautions should be taken to prevent unauthorized personnel from operating the platform with the ground controls while the platform is in use.

**WARNING !!!**

- ◆ Unassisted loading or unloading of scissorlift from a truck or trailer is not recommended.
- ◆ Before disengaging brakes or disconnecting from a tow vehicle, ensure that the machine cannot roll.
- ◆ Complete the inspections at designated intervals.

**CAUTION**

- ◆ Use of the machine as a crane to lift oversized or hanging loads is prohibited.
- ◆ ALWAYS ensure that the route and areas are clear before driving, lifting or lowering.
- ◆ It is recommended to avoid sudden braking or steering. Go slowly and leave more maneuvering room during cold weather operation.
- ◆ Only lower the outriggers when the machine is on a firm, level surface. The surface must be capable of supporting the maximum ground pressure per wheel/outrigger (see specifications).
- ◆ DO NOT raise the platform unless all four outriggers are properly lowered and the machine is level.
- ◆ DO NOT adjust outriggers while platform is raised.
- ◆ DO NOT drive while outriggers are lowered.

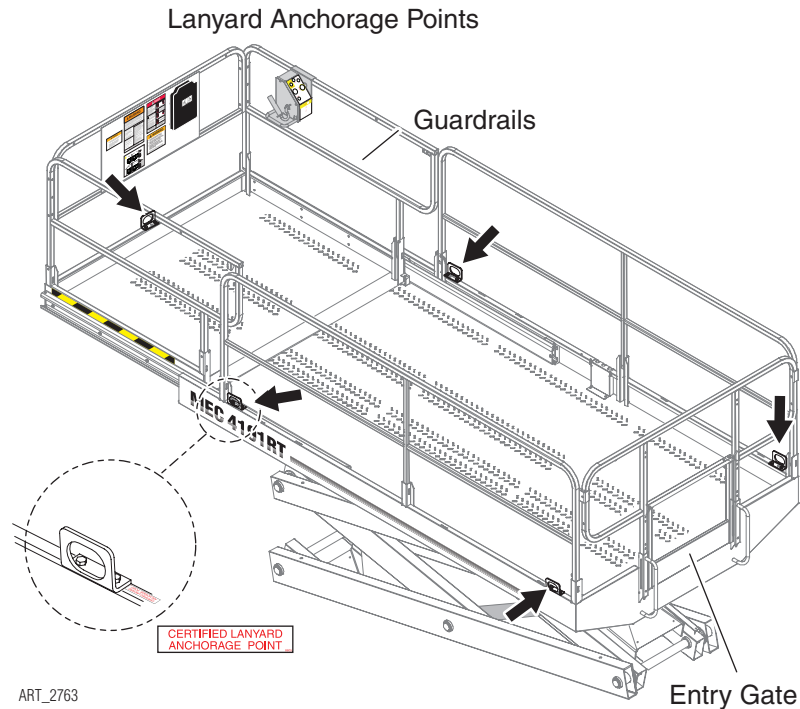
Fall Protection Notice

The Guardrail System around the perimeter of the platform is the fall protection system for self-propelled elevating work platforms. It is prohibited to use an Aerial Work Platform manufactured by MEC with any portion, or all, of the guardrails removed.

! WARNING !!!

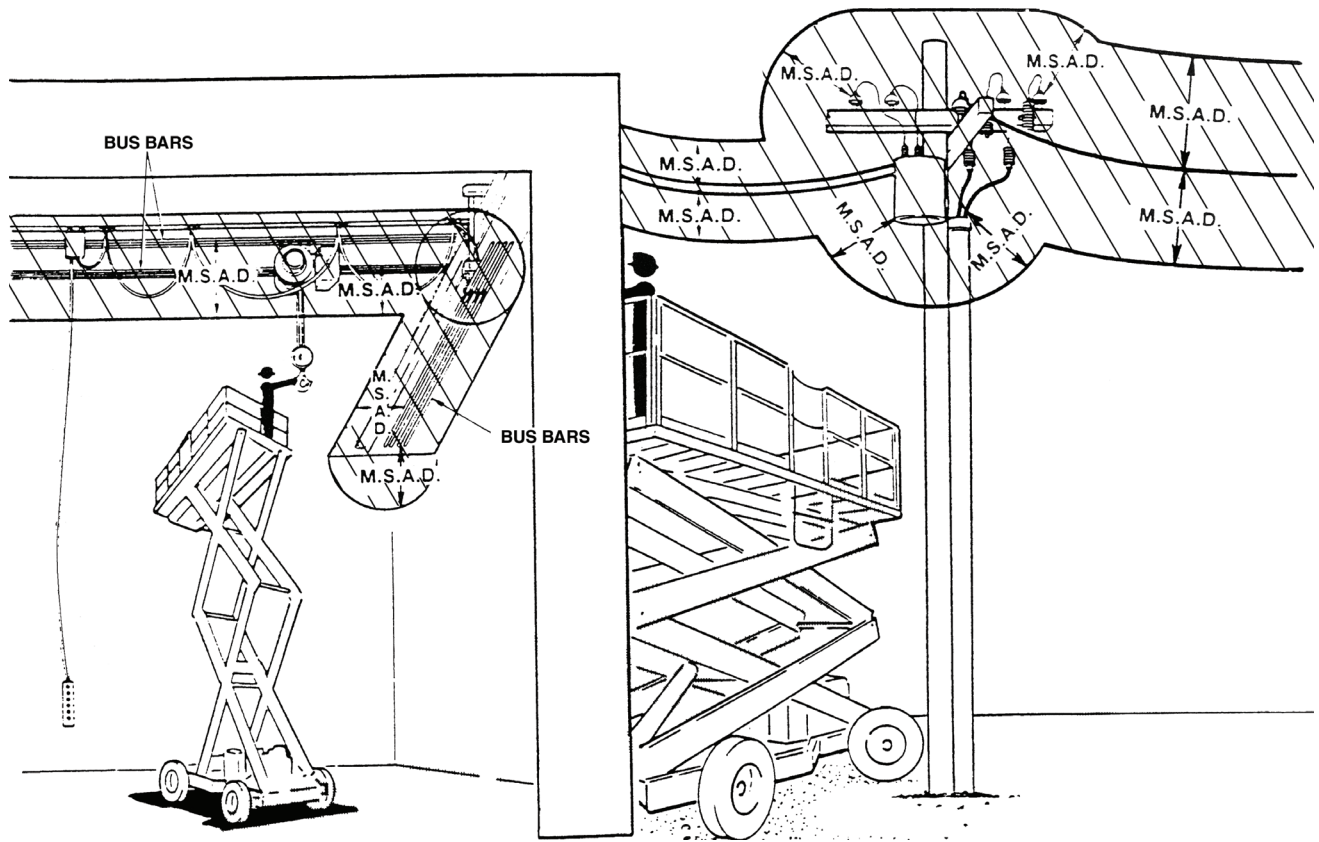
Lanyard anchorage points are recommended for work positioning restraints only.

Use of fall arrest systems attached to anchorage points on mobile equipment may cause machine to tip, resulting in serious injury or death.



! DANGER !

- ◆ **ELECTROCUTION HAZARD!!! THIS MACHINE IS NOT INSULATED!!**
- ◆ Maintain safe clearance from electrically charged conductors (power lines) and apparatus. You must allow for machine sway (side to side movement) when elevated and electrical line movement. This machine does not provide protection from contact with, or proximity to, an electrically charged conductor.
- ◆ You must maintain a **CLEARANCE OF AT LEAST 10 FEET (3.05 m)** between any part of the machine, or its load, and any electrical line or apparatus carrying over 300 Volts up to 50,000 Volts. One foot (30.5 cm) additional clearance is required for every additional 30,000 Volts.
- ◆ **DEATH OR SERIOUS INJURY** will result from contact with or inadequate clearance from any electrically charged conductor.
- ◆ Observe Minimum Safe Approach Distance as illustrated on next page.



M.S.A.D. = MINIMUM SAFE APPROACH DISTANCE

 **DENOTES PROHIBITED ZONE**

- DANGER:**
- DO NOT ALLOW MACHINE, PERSONNEL OR CONDUCTIVE MATERIALS INSIDE PROHIBITED ZONE.
 - MAINTAIN M.S.A.D. FROM ALL ENERGIZED LINES AND PARTS AS WELL AS THOSE SHOWN.
 - ASSUME ALL ELECTRICAL PARTS AND WIRES ARE ENERGIZED UNLESS KNOWN OTHERWISE.

- CAUTION:**
- DIAGRAMS SHOWN ARE ONLY FOR PURPOSES OF ILLUSTRATING M.S.A.D. WORK POSITIONS, NOT ALL WORK POSITIONS.

MINIMUM SAFE APPROACH DISTANCE (M.S.A.D.)
to energized (exposed or insulated) power lines and parts.

VOLTAGE RANGE (Phase to Phase)	MINIMUM SAFE APPROACH DISTANCE	
	(Feet)	(Meters)
0 to 300V	AVOID CONTACT	
Over 300V to 50KV	10	3.05
Over 50KV to 200KV	15	4.60
Over 200KV to 350KV	20	6.10
Over 350KV to 500KV	25	7.62
Over 500KV to 750KV	35	10.67
Over 750KV to 1000KV	45	13.72


ILLUSTRATION No.
ART_2351

Safety and Instructional Decals

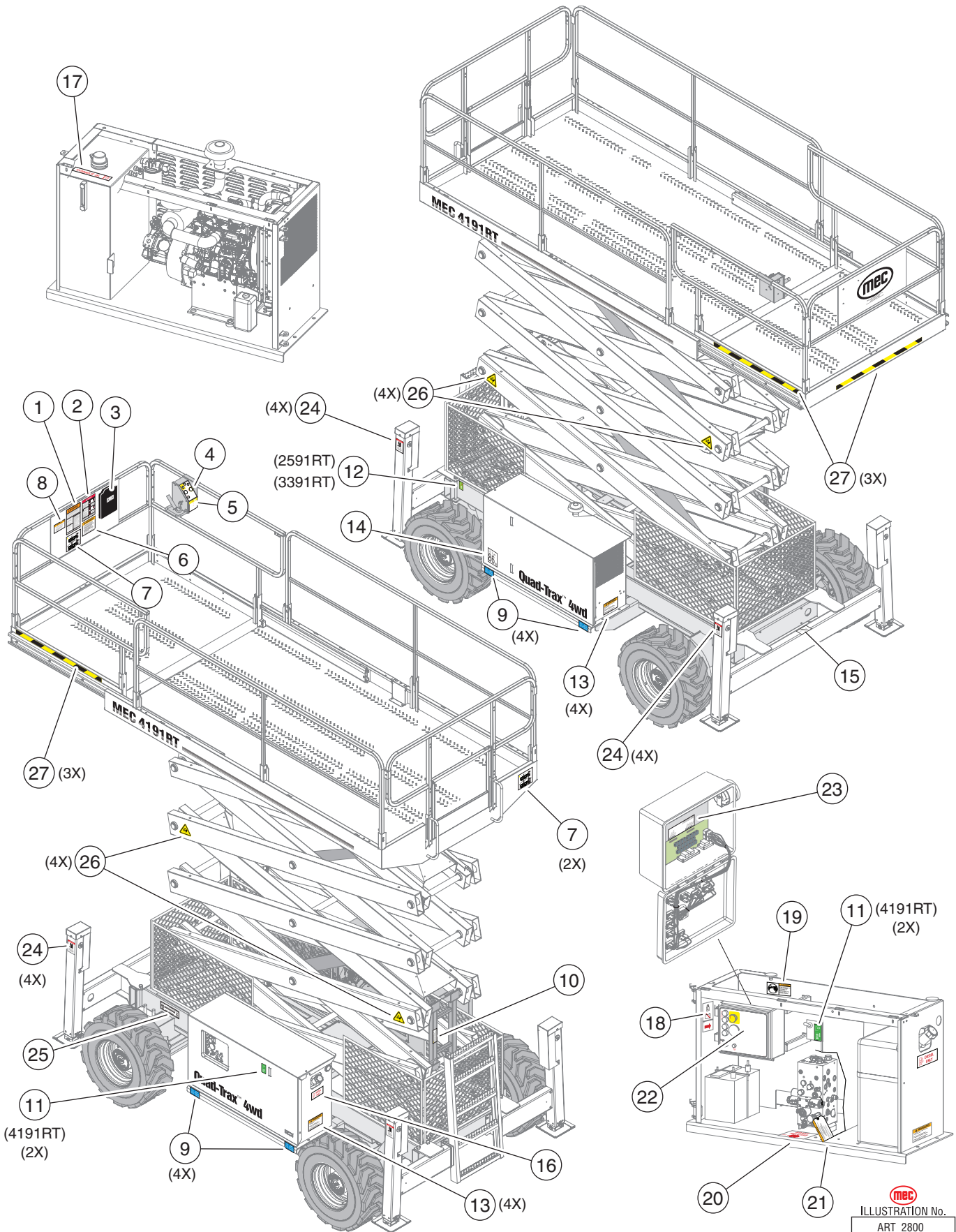


ILLUSTRATION No.
ART_2800

Safety and Instructional Decals

1 91456

WARNING

INSPECT MACHINE AND MAKE SURE THAT IT IS OPERATING PROPERLY, THAT ALL NAME PLATE AND SAFETY AND CONTROL DECALS ARE IN PLACE AND LEGIBLE, AND THAT THE MACHINE IS IN ACCORDANCE WITH THE MANUFACTURER'S MAINTENANCE REQUIREMENTS CONTAINED IN THE OPERATION AND MAINTENANCE MANUAL AND THE DAILY SAFETY CHECKLIST. OPERATE MACHINE WITH EXTREME CAUTION, WATCH FOR OBSTRUCTIONS WHICH MAY STRIKE PLATFORM, PERSONNEL, CONTROLS, OR MACHINE. OPERATE CONTROLS SLOWLY FOR SMOOTH PLATFORM MOTION.

FOR DRIVING ON ANY GRADE OR SLOPE:

- PLATFORM MUST BE FULLY LOWERED.
- DO NOT EXCEED MAXIMUM PLATFORM OR DRIVEWAY RAMP SPEEDS. EXCESSIVE SPEEDS CAN LEAD TO AN UNBALANCED PLATFORM, SLIPPERY SURFACES, OR LOSS OF CONTROL OF PLATFORM.
- DO NOT DRIVE ON SLOPE OR OVER 2% INCLINE.
- DO NOT OPERATE ON DOWN-SLOPE THAT IS GREATER THAN THE MAXIMUM ALLOWED IN THE OPERATION AND MAINTENANCE MANUAL.

FOR DRIVING WITH PLATFORM ELEVATED:

- DRIVE ONLY ON A SMOOTH, FIRM AND LEVEL SURFACE FREE OF OBSTRUCTIONS.
- DO NOT EXCEED MAXIMUM PLATFORM OR DRIVEWAY RAMP SPEEDS.
- LOAD MUST BE IMPROBINGLY DISTRIBUTED.
- USE EXTREME CAUTION.

IMPROPER OPERATION OF THIS MACHINE COULD CAUSE DEATH OR SERIOUS INJURY.

2 90721

DANGER

YOU MUST NOT OPERATE THIS MACHINE UNLESS YOU HAVE BEEN TRAINED IN THE SAFE OPERATION OF THE MACHINE. THE MANUAL INCLUDES COMPLETE KNOWLEDGE OF THE SAFETY AND OPERATING INSTRUCTIONS FOR THE WORKER USING MANUAL. YOUR EMPLOYER'S WORK RULES AND APPLICABLE GOVERNMENT REGULATIONS. AN UNTRAINED OPERATOR SUBJECTS HIMSELF AND OTHERS TO DEATH OR SERIOUS INJURY.

TIP-OVER HAZARDS

- DO NOT OPERATE PLATFORM ON SLOPE OR DRIVEWAY RAMP.
- DO NOT OPERATE PLATFORM ON SLOPE OR DRIVEWAY RAMP WHEN ELEVATED.
- DO NOT OPERATE PLATFORM ON SLOPE OR DRIVEWAY RAMP WHEN ELEVATED.
- DO NOT OPERATE PLATFORM ON SLOPE OR DRIVEWAY RAMP WHEN ELEVATED.

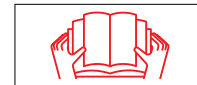
ELECTROCUTION HAZARD

THIS MACHINE IS NOT INSULATED.

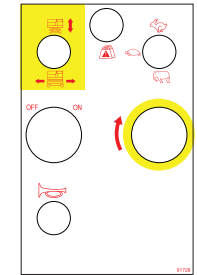
- DO NOT OPERATE PLATFORM ON SLOPE OR DRIVEWAY RAMP WHEN ELEVATED.
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- DO NOT OPERATE PLATFORM ON SLOPE OR DRIVEWAY RAMP WHEN ELEVATED.

DEATH OR SERIOUS INJURY WILL RESULT FROM CONTACT OR INADEQUATE CLEARANCE.

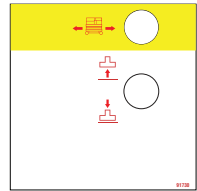
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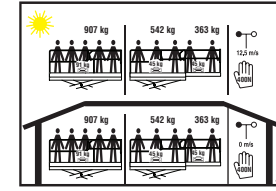
6 90730

WARNING

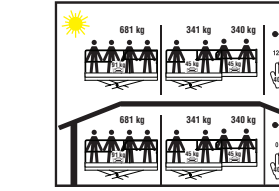
- PLATFORM EXTENSION MUST BE LOCKED IN PLACE AT ALL TIMES.
- SHEET LOADING GATE MUST BE IN LOWERED LOCKED POSITION BEFORE OPERATING FROM PLATFORM.
- PLATFORM ENTRANCE MUST BE PROPERLY CLOSED AND ALL GUARDRAILS PROPERLY IN PLACE AND SECURED BEFORE OPERATING FROM PLATFORM.

FAILURE TO FOLLOW INSTRUCTIONS COULD CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

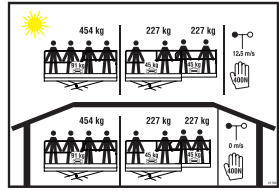
7 91786 (2591RT)



7 91785 (3391RT)



7 91784 (4191RT)



8

WARNING

- LANYARD ANCHORAGE POINTS ARE RECOMMENDED FOR WORK POSITIONING RESTRAINTS ONLY.
- USE OF FALL ARREST SYSTEMS ATTACHED TO ANCHORAGE POINTS ON MOBILE EQUIPMENT MAY CAUSE MACHINE TO TIP, RESULTING IN SERIOUS INJURY OR DEATH.

9 91781 (2591RT)

MAX

2998 lbs.
1360 kg

9 91782 (3391RT)

MAX

3060 lbs.
1388 kg

9 91783 (4191RT)

MAX

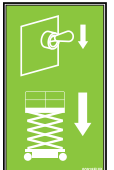
3210 lbs.
1456 kg

10 90717EUR

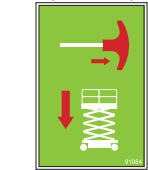
MAINTENANCE LOCK

ENSURE LOCK IS IN PLACE BEFORE DOING MAINTENANCE ON ELEVATED WORK PLATFORM.

11 90918EUR (4191RT)



12 91084 (2591RT) (3391RT)



13 90725

WARNING

- REPLACE TIRES WITH MANUFACTURER'S EQUIPMENT ONLY.
- FAILURE TO USE MANUFACTURER'S TIRES MAY CAUSE MACHINE INSTABILITY.
- REFER TO SERVICE AND PARTS MANUAL FOR REPLACEMENT PART NUMBER.

14 91388

LWA

86 dB

15 91389



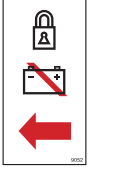
16 9378

DIESEL ONLY

17 6873

HYDRAULIC OIL

18 9052



19 90732

WARNING

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

20 90267

BRAKE RELEASE

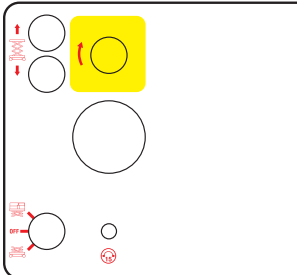
PUMP

21 8867

WARNING

- "HOLDING BRAKE RELEASE" TO BE USED ONLY FOR MANUAL CONTROL OF WHEEL BARE SYSTEMS OUT OF SERVICE.
- BEFORE RETURNING MACHINE TO SERVICE, INSURE BRAKE SYSTEMS OPERATE.
- CHECK BRAKING FUNCTION PER SERVICE MANUAL.

22 91729



23 91109

DIAGNOSTICS LED'S

LED INDICATES FUNCTION ENABLED

- STEER RIGHT
- STEER LEFT
- UP / UP
- DOWN / DOWN
- THROTTLE

24 9465

DANGER

STAND CLEAR

OUTRIGGER CONTACT WILL CAUSE SERIOUS CRUSHING INJURY

25 91775

MEC MODEL NUMBER SERIAL NUMBER MODEL YEAR XXXX XXXX XXXX 20XX		CE	
MAX. WIND SPEED 0 mph	MAX. PLATFORM CAPACITY INCLUDING PERSONS XXX kg = X PERSONS + XXX kg EQUIPMENT	MAX. ALLOWABLE MANUAL FORCE XXX N	MAX. ALLOWABLE INCLINATION XX° & XX°
12.0 mph	XXX kg = X PERSONS + XXX kg EQUIPMENT	XXX N	MAX. LOAD PER WHEEL XXX kg
MAX. PLATFORM HEIGHT X.X m	MAX. ALLOWABLE HEIGHT TO STANDARD MACHINE HEIGHT XXX kg	OPTIONAL EQUIPMENT ADDS TO STANDARD MACHINE HEIGHT LEVELING OUTRIGGERS + XXX kg	MAX. GROUND PRESSURE PER WHEEL XX kg/cm²

26 9910



27 7982



OPERATION

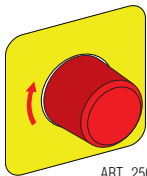


Do not operate the machine if tests reveal a defect.

Before use each day or at the beginning of each shift, a visual inspection and functional test shall be performed. Repairs must be made prior to operating the machine to ensure safe operation.

Prestart

- ◆ Perform *Prestart Inspection* (see page 28).



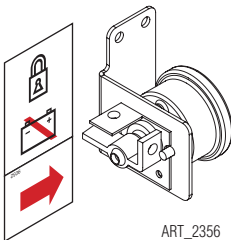
ART_2506

- ◆ Ensure that EMERGENCY STOP switch on the lower control panel is reset. Reset the switch by turning it clockwise.



ART_2507

- ◆ Ensure that EMERGENCY STOP switch on the upper controls is reset. Reset the switch by turning it clockwise.



ART_2356

- ◆ Ensure that the battery disconnect switch is in the ON position. Located in control module, to the left of control panel.

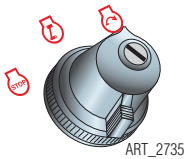
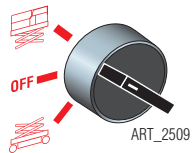
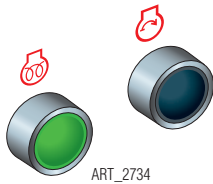
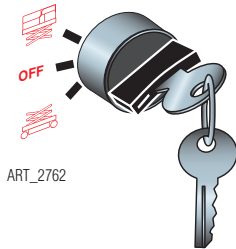
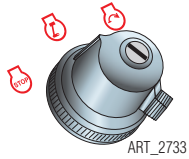
Diesel Engine

Ensure that the EMERGENCY STOP switches at the platform and lower controls are reset.

Starting a Diesel Engine

Start engine from Lower Control Panel

1. **Upper Control Box:** Turn the engine start switch to RUN.
2. **Lower Control Box:** Turn the key switch to BASE.
3. Press and hold the START button, releasing when the engine starts.
4. If engine is cold, press and hold the GLOW button for the recommended times shown below. With button held, press and hold START button until engine starts. Release both buttons once engine starts.



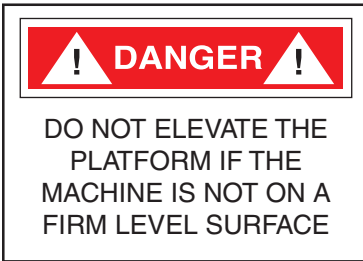
Start engine from Upper Control Box

1. **Lower Control Box:** Turn the key switch to PLATFORM.
2. **Upper Control Box:** Turn the engine start switch to START, releasing when the engine starts.
3. If engine is cold, lift and hold the GLOW switch for the recommended times shown below. With switch held, turn the engine start switch until engine starts. Release both switches once engine starts.

Refer to the following table for some recommended preheat times for different ambient temperatures:

Preheating Time	Ambient Temperature
5 seconds (approx.)	Above 50°F (10°C)
10 seconds (approx.)	50°F (10°C) to 23°F (-5°C)
20 seconds	Below 23°F (-5°C)
20 seconds	Limit Of Continuous Use

Lower Control Operation And Checks



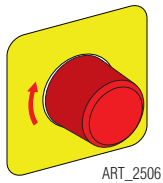
Important: BE SURE the area above the machine is clear of obstructions to allow full elevation of platform. DO NOT OPERATE the machine if tests reveal a defect.
ELECTROCUTION HAZARD: observe safety rules outlined on pages 10-11.

Start the engine.

Emergency Stop

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

- ◆ Reset the switch by turning it clockwise.

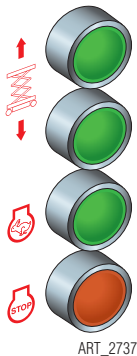


Elevate Platform

1. Press and hold the THROTTLE switch to increase engine speed.
2. Press and hold the RAISE button to elevate the platform.

Test Operation

- ◆ Elevate to maximum height.
- ◆ Releasing the button will stop elevation.
- ◆ Pressing the EMERGENCY STOP switch will stop elevation.



Lower Platform

Press the LOWER button. Release when the desired platform height is reached.

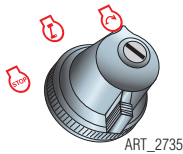
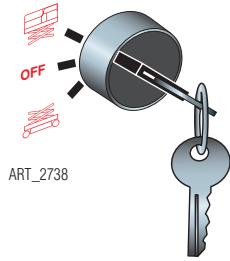
Test Operation

- ◆ Lower the platform to the stowed position.
- ◆ Releasing the button will stop descent.
- ◆ Pressing the EMERGENCY STOP switch will stop descent.

Inspection

- ◆ Check for proper operation and hydraulic leaks.
- ◆ Set the maintenance lock before inspecting any items inside or around the scissor arms.
- ◆ Lower the platform to the stowed position.
- ◆ Turn off engine.

Upper Control Operation and Checks



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.

1. **Lower Control Box:** Turn the key switch to PLATFORM.
2. Enter platform and close and secure the entry.
3. **Upper Control Box:** Turn the engine start switch to start the engine.
4. If equipped, press the horn button to verify proper operation.

Emergency Stop (Platform)

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

- ◆ Reset the switch by turning it clockwise.

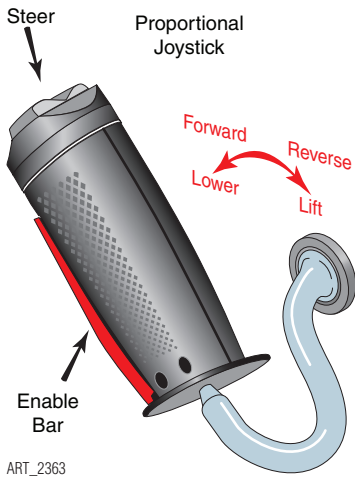
WARNING !!!

Activation of the platform 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 of machine.

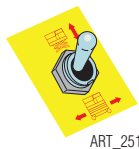


Platform Overload Indicator

The Platform Overload Indicator will light and the platform will not lift when the sensor detects too much weight in the platform. Refer to the platform capacity label and adjust the platform load accordingly.



ART_2363



ART_2512

Joystick Operation

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

Elevate Platform

1. Place the MODE SELECT switch in the LIFT position.
2. Squeeze the enable bar and move the joystick toward you.

Test Operation

- ◆ Rate of lift is proportional and is dependent on the movement of the joystick.
- ◆ Elevate to maximum height.
- ◆ Release the joystick and/or enable bar, or move the joystick to the neutral (center) position to stop elevation.
- ◆ Pressing the EMERGENCY STOP switch will stop elevation.

! WARNING !!!

Do Not elevate platform unless guardrails are installed and secure.

! WARNING !!!

If the roll-out deck is extended check for clearance under deck area before lowering platform.

! WARNING !!!

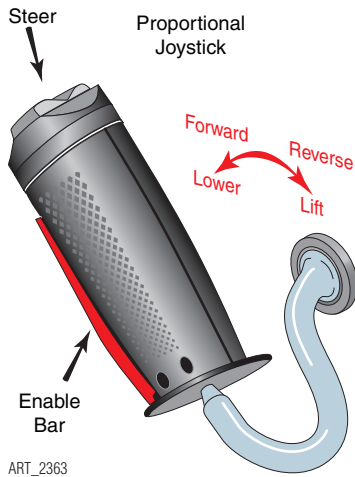
If platform should fail to lower do not attempt to climb down the scissor assembly. Serious injury may result.

Lower Platform

1. Place the MODE SELECT switch in the LIFT position.
2. Move the joystick away from you.

Test Operation

- ◆ Rate of descent is fixed - platform lowers at same rate regardless of handle position.
- ◆ Release the joystick or move it to the neutral (center) position to stop descent.
- ◆ Pressing the EMERGENCY STOP switch will stop descent.



ART_2363

Steer

IMPORTANT: Always check front steer wheel direction before driving.

1. Place the MODE SELECT switch in the DRIVE position.
2. Squeeze the enable bar and press the steering switch with your thumb to steer left or right.
 - ◆ Release the enable bar or steering switch to stop steering.
 - ◆ The wheels will not center themselves after a turn. They must be returned to the straight-ahead position with the steering switch.



ART_2515

Drive Speed

Drive speed is selectable when the platform is down. When the platform is elevated above 10 Feet (3 m) the machine defaults to MID RANGE and the switch is locked-out (non functioning).

1. HIGH SPEED: allows speeds up to 3 m.p.h. (4.8 km/h).
2. MID RANGE: allows speeds up to 0.4 m.p.h. (0.6 km/h).
3. HIGH TORQUE: use to drive up or down a slope that is too steep for normal operation.



ART_2513

Drive Forward

1. Place the MODE SELECT switch in the DRIVE position.
2. Squeeze the enable bar and move the joystick away from you.
 - ◆ Drive speed is proportional and is dependent on the movement of the joystick.
 - ◆ Release the enable bar or return the joystick to the center position to stop.
 - ◆ Pressing the EMERGENCY STOP switch will stop drive.

Drive Reverse

1. Place the MODE SELECT switch in the DRIVE position.
2. Squeeze the enable bar and move the joystick toward you.
 - ◆ Drive speed is proportional and is dependent on the movement of the joystick.
 - ◆ Release the enable bar or return the joystick to the center position to stop.
 - ◆ Pressing the EMERGENCY STOP switch will stop drive.

! WARNING !!!

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

Brake

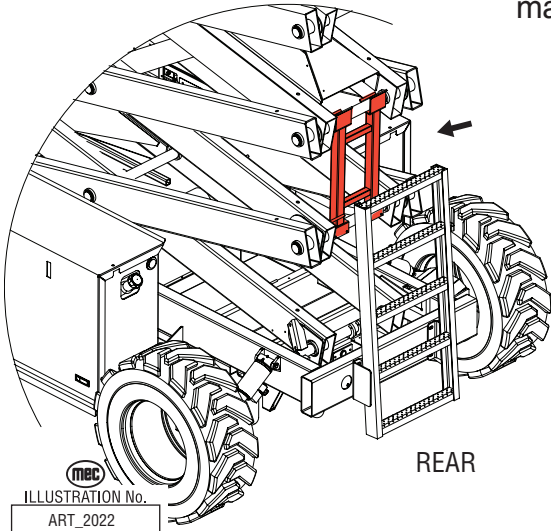
For parking, the brake is automatically applied when the joystick is in the neutral (center) position.

Set Maintenance Lock

Set the maintenance lock before inspecting any items inside or around scissor beams, or beneath the platform.

- ◆ Elevate the platform about halfway.
- ◆ Rotate the maintenance lock into position.
- ◆ Lower platform until the scissor assembly is supported by the maintenance lock.

Maintenance Lock In Position



Inspect Machine

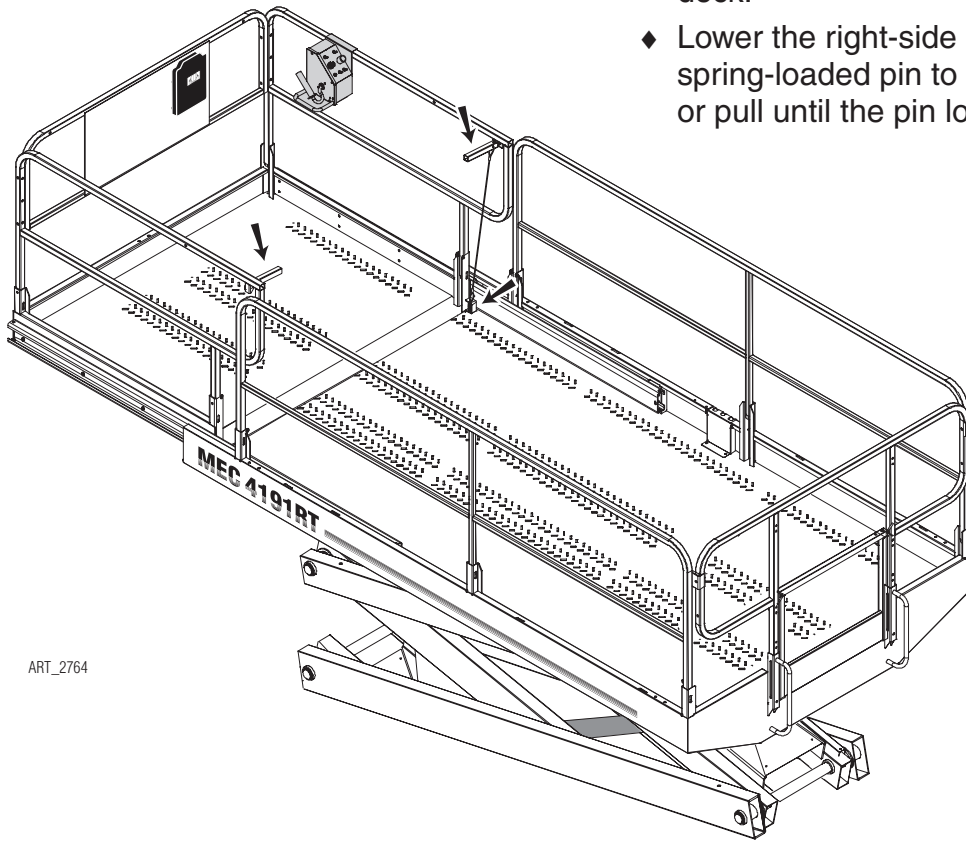
Walk around the machine and inspect for;

- ◆ frayed cables or wires.
- ◆ hydraulic fluid leaks.
- ◆ missing or loose bolts.
- ◆ proper tire pressure.
- ◆ missing or loose wheel lug nuts.
- ◆ weld or structural cracks.
- ◆ defects or missing parts.

Extending the Roll-out Extension Deck

The deck will extend in intervals of 8 inches (20 cm) throughout the entire length of the roll-out extension deck. There are two (2) handles that hang from the top rail at the end of the extension deck. Both handles are used to push or pull the extension deck to the desired position. The right-side handle is attached by cable to a spring-loaded pin at the deck.

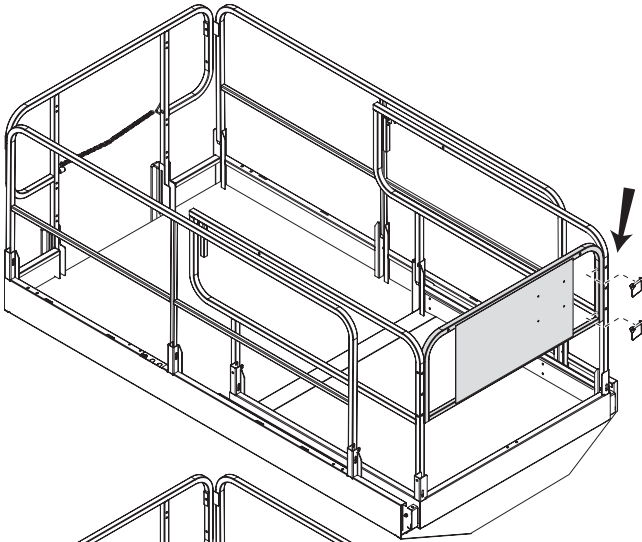
- ◆ Lift the right-side handle to raise the spring-loaded pin from the locked position.
- ◆ With right-side handle raised, lift the left-side handle and push to extend or pull to retract the deck.
- ◆ Lower the right-side handle enough for the spring-loaded pin to engage and continue to push or pull until the pin locks into position.



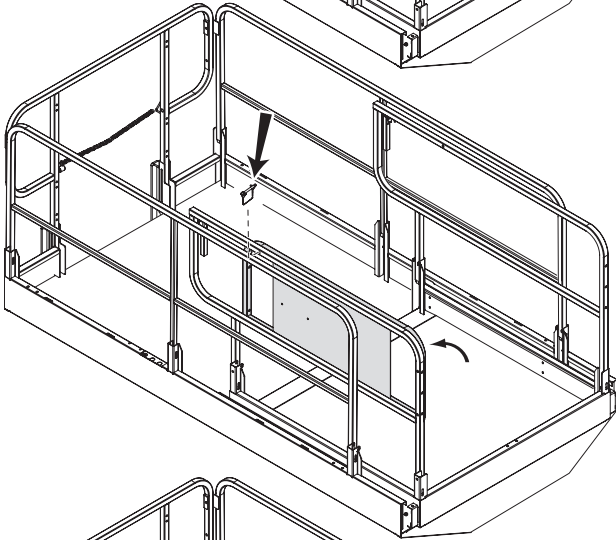
ART_2764

Lowering The Platform Railings

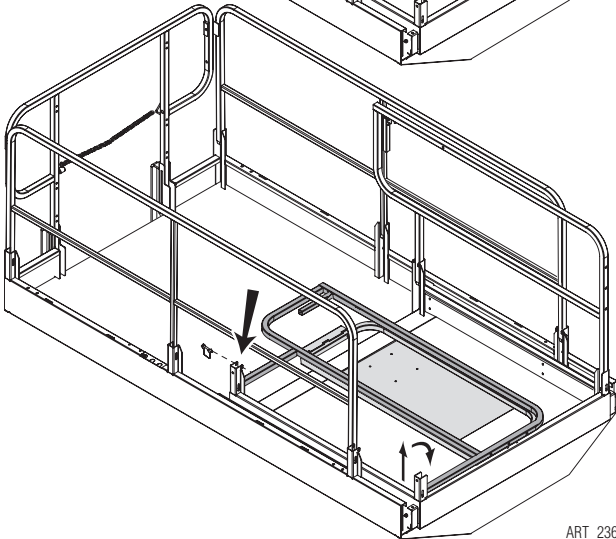
Place the upper control box on the platform floor and proceed as follows.



1. Remove the safety snap pins holding the front extension rail to the corner post.

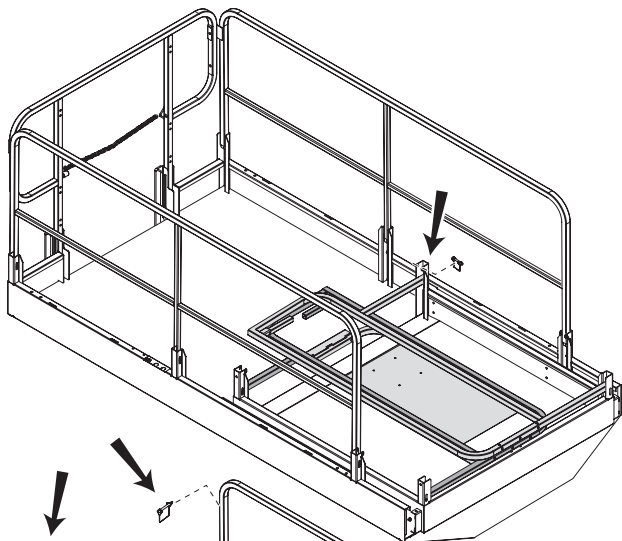


2. Swing the front extension rail back, next to the right side extension rail and secure with a safety snap pin.

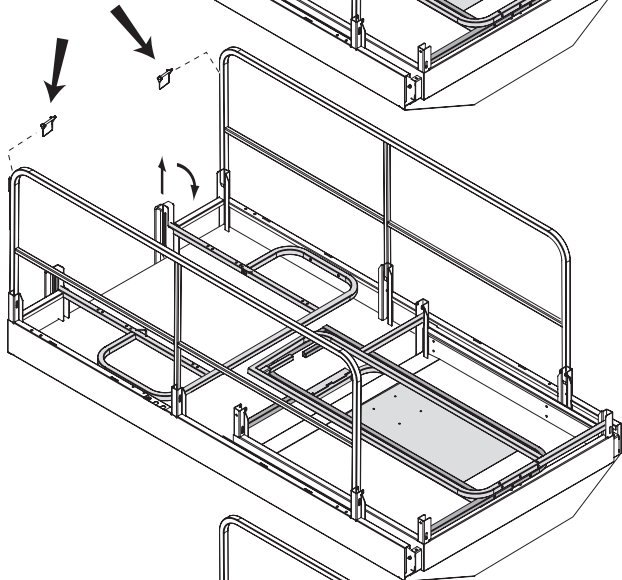


3. Remove the safety snap pin from the rear right side extension rail corner post. Lift the rail, pivot, and place on the platform floor.

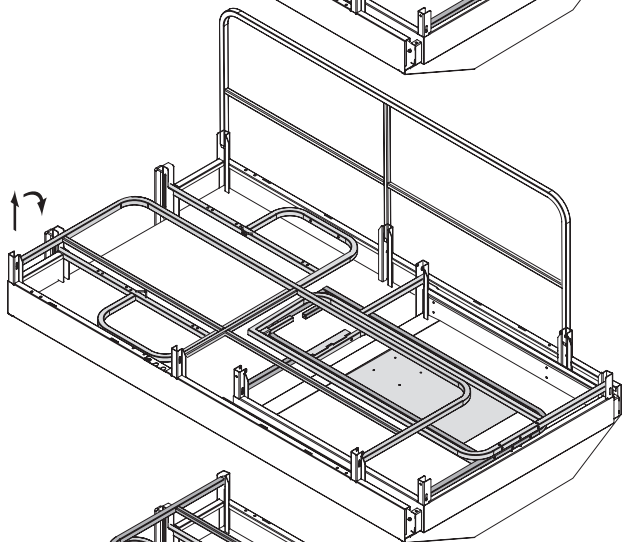
ART_2366



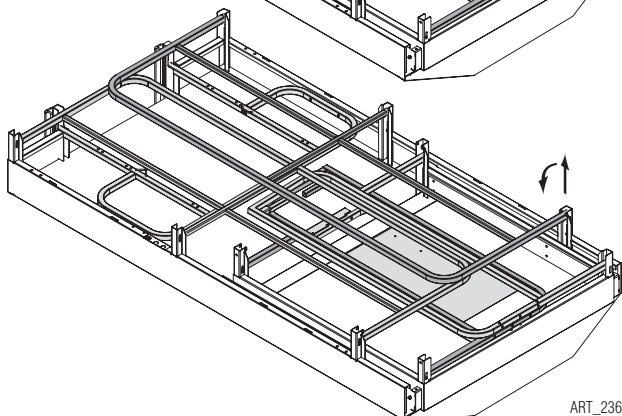
4. Remove the safety snap pin from rear left side extension rail corner post. Lift the rail, pivot and place on top of the right side extension rail.



5. Remove the safety snap pins holding the entry railing to the corner posts. Lift the entry rail, pivot, and place on the platform floor.



6. Lift the right side rail, pivot, and place on top of the entry rail.



7. Lift the left side rail, pivot, and place on top of the right side rail.

To return the machine to normal operation mode, lift all rails into their upright position, install all safety snap pins, and position the upper control box on the extension rail.

ART_2367

Emergency Systems And Procedures

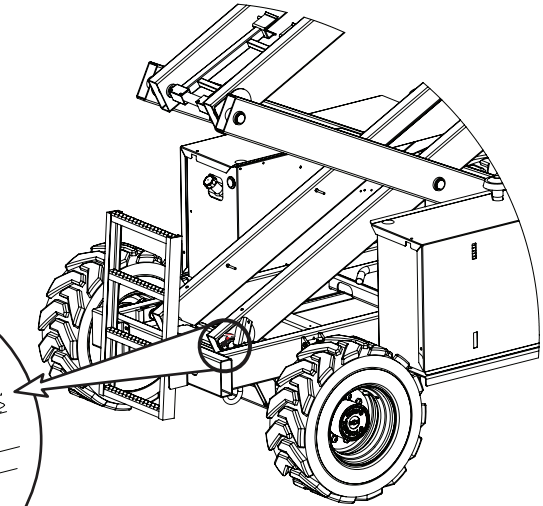
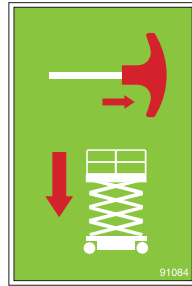
Emergency Lowering - 2591RT and 3391RT

Emergency Down system is used to lower the platform in case of power or valve failure. To lower the platform, pull the red "T" handle located at the rear of the machine. Lowering stops when you release the "T" handle.

WARNING !!!

If the control system fails while the platform is elevated, have an experienced operator use the emergency lowering procedure to safely lower the platform.

Do not attempt to climb down beams (scissor assembly).



ART_2765

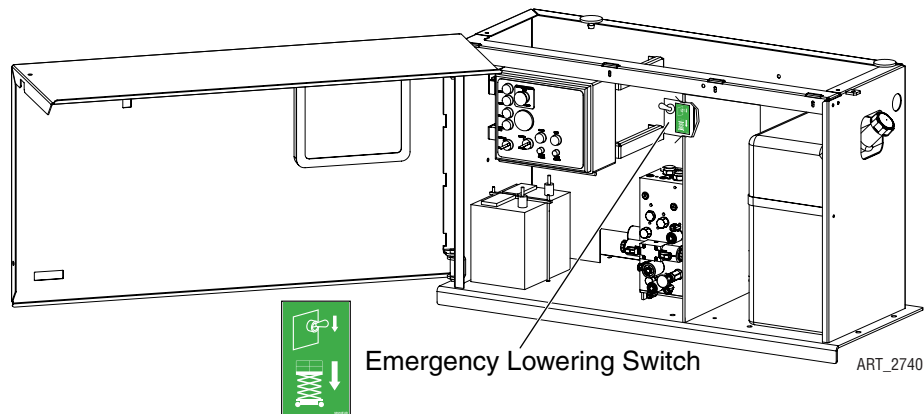
Emergency Lowering - 4191RT

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

1. Push and hold the toggle switch down to lower the platform.
2. Once the platform is fully lowered, release the toggle switch to close the valve.

WARNING !!!

Before lowering platform, retract the deck extension.



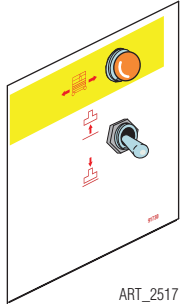
Emergency Lowering Switch

ART_2740

! WARNING !!!

**DO NOT REMOVE
OUTRIGGERS**

Removing the outriggers will cause instability. As a consequence, the machine may tip, resulting in serious injury or death.



ART_2517

Outriggers

The engine must be running for the outriggers to operate.

Only lower the outriggers when the machine is on a firm, level surface. The surface must be capable of supporting the maximum ground pressure per wheel/outrigger (see specifications).

Extend

Push down and hold the EXTEND/RETRACT toggle switch.

- ◆ The outriggers will extend and level the machine. When the machine is level and ready to operate, the outrigger will stop automatically.
- ◆ The indicator lamp will turn *OFF*, indicating that outriggers are down and machine drive function is disabled.

Retract

Push up and hold the EXTEND/RETRACT toggle switch.

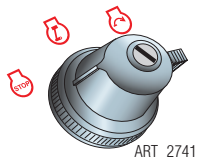
- ◆ The outriggers will retract.
- ◆ The indicator lamp will turn *ON*, indicating that the outriggers are up and machine drive function is enabled.

Shutdown Procedure

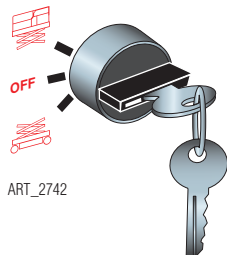
- ◆ When finished with the machine, fully lower the platform to the stowed position.
- ◆ Park the machine on a level surface.
- ◆ Shut off the engine by placing the engine start switch in the *OFF* position.
- ◆ Carefully exit the platform using a constant three (3) point dismount/grip.
- ◆ Turn the key switch at the lower control station to the *OFF* position and remove the key to prevent unauthorized use.
- ◆ Turn the battery disconnect switch to the *OFF* position.

NOTE: Leaving the battery disconnect switch in the ON position for an extended time will drain the battery. Always put the switch in OFF position when leaving the machine at the end of the work day.

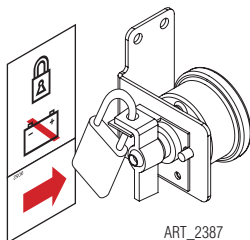
- ◆ Put a padlock on the battery disconnect switch to prevent unauthorized use.



ART_2741



ART_2742



ART_2387

MAINTENANCE

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

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



- ◆ Never perform service on the machine with the platform elevated without first blocking the scissor assembly in place using the maintenance lock!
- ◆ Never leave hydraulic components or hoses open. They must be protected from contamination (including rain) at all times.
- ◆ Never open a hydraulic system when there are contaminants in the air.
- ◆ Always clean the surrounding area before opening hydraulic systems.
- ◆ Use only recommended lubricants. Improper lubricants or incompatible lubricants may be as harmful as no lubrication.
- ◆ Watch for makeshift “fixes” which can jeopardize safety as well as lead to more costly repair.

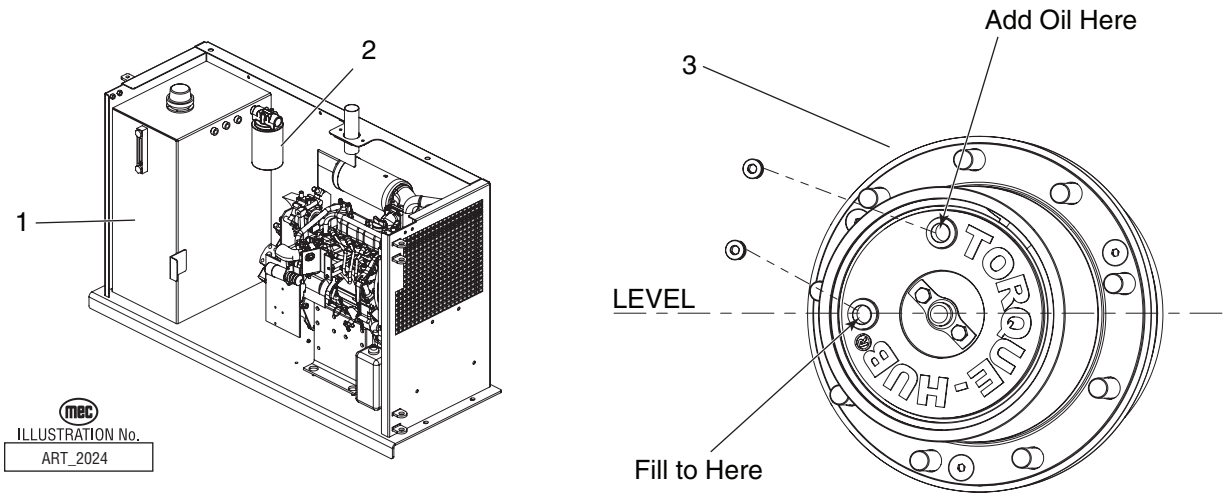


- ◆ Hydraulic fluid under pressure can penetrate and burn skin, damage eyes, and may cause serious injury, blindness, and even death. Correct leaks immediately.



- ◆ Failure to perform preventive maintenance at recommended intervals may result in the unit being operated with a defect that could result in injury or death of the operator.
- ◆ Immediately report to your supervisor any Defect or malfunction. Any defect shall be repaired prior to continued use of the scissor lift.
- ◆ Inspection and maintenance should be performed by qualified personnel familiar with the equipment.
- ◆ Fluid leaks under pressure may not always be visible. Check for pin hole leaks with a piece of cardboard, not your hand.
- ◆ Engine coolant level must be checked only after engine has cooled. If radiator cap is removed while the coolant is at normal operating temperature, pressure within the coolant system will force hot liquid out through the filler opening and possibly cause severe scalding.

Lubrication Diagram



MEC
ILLUSTRATION No.
ART_2024

NO.	ITEM	SPECIFICATION	FREQUENCY OF LUBRICATION
1	Hydraulic Reservoir	Fill to the middle of the sight gauge with platform in the stowed position Mobile Fluid 424 <i>Do not substitute with lower grade fluids as pump damage may result</i>	Check daily Change yearly or every 1,000 hours, whichever occurs first
2	Hydraulic Filter	Filter Element	Normal Usage Change every six months or 500 hours, whichever occurs first Severe Usage Change every three months or 300 hours, whichever occurs first
3	Hubs	SAE 90 Multipurpose Hypoid Gear Oil. API Service Classification GL5	Check Every Three Months or 250 Hours, whichever occurs first for Normal Usage Change Yearly or every 1000 Hours, whichever occurs first for Severe Usage.

PRESTART INSPECTION



This inspection must be completed before machine use each day or at the beginning of each shift. Failure to do so could result in death or serious injury.

- ◆ User/Operator is responsible for the Pre-Start Inspection.
- ◆ Keep inspection records up-to-date.
- ◆ Record and report all discrepancies to your supervisor.

MODEL NUMBER _____ **SERIAL NUMBER** _____

INITIAL	DESCRIPTION
_____	1. Perform a visual inspection of all machine components, i.e. missing parts, torn or loose hoses, hydraulic fluid leaks, torn or disconnected wires, damaged tires etc. Replace components as necessary.
_____	2. Check the hydraulic fluid level with the platform fully lowered.
_____	3. Check the tires for damage. Check wheel lug nuts for tightness.
_____	4. Check the tire pressure (not required for foam filled tires). (See Machine Specification).
_____	5. Check the hoses and the cables for worn areas or chafing. Replace if necessary.
_____	6. Inspect the lower limit switch. Ensure that switch is in the proper position and that fasteners are secure.
_____	7. Check the platform rails and entry safety chain or gate for damage.
_____	8. Check the pivot pins for security.
_____	9. Check that all warning and instructional labels are legible and secure.
_____	10. Inspect the upper control. Ensure the load capacity is clearly marked.
_____	11. Check the hydraulic system pressure (See <i>Specifications</i>). If the pressure is low, determine the reason and repair in accordance with accepted procedures as outlined in the service manual.
_____	12. Check the lower controls for proper operation. Check all switches and push buttons for proper operation.
_____	13. Check the upper controls for proper operation. Check all switches and push buttons, as well as ensuring that the drive controller returns to neutral.
_____	14. Follow the engine daily service requirements. Refer to the Engine Operator Manual.

DATE _____ **INSPECTED BY** _____



MONTHLY INSPECTION



This checklist must be used at monthly intervals or every 100 hours, whichever occurs first. Failure to do so could result in death or serious injury.

- ◆ User/Operator is responsible for the Weekly Inspection.
- ◆ Keep inspection records up-to-date.
- ◆ Record and report all discrepancies to your supervisor.

MODEL NUMBER _____ **SERIAL NUMBER** _____

INITIAL	DESCRIPTION
_____	1. Perform all checks listed on Prestart Inspection.
_____	2. Inspect the condition of hydraulic fluid in the reservoir. Oil should have a clear amber color.
_____	3. Check battery electrolyte level and connections.
_____	4. Check wheel lug nuts for proper torque (see “Machine Specifications”).
_____	5. Check if tires are leaning in or out.
_____	6. Inspect all beams and pivot points for signs of wear and/or damage.
_____	7. Check the pin joints and retaining rings for security.
_____	8. Inspect the entire machine for signs of damage, broken welds, loose bolts, improper or makeshift repairs.
_____	9. Check that the platform does not drift down with a full load.
_____	10. Lubricate the king pins, steering cylinder pivot points, and tie rod ends (see Lubrication Chart).
_____	11. Check all wire connections.
_____	12. Check that all adjustable flow valves are locked, check setting if any are not locked.
_____	13. Check outriggers for proper operation (if equipped).
_____	14. Follow the engine monthly service requirements. Refer to the Engine Operator Manual.

DATE _____ **INSPECTED BY** _____



QUARTERLY INSPECTION



This checklist must be used at quarterly intervals or every 300 hours, whichever occurs first. Failure to do so could result in death or serious injury.

- ◆ User/Operator is responsible for the Weekly Inspection.
- ◆ Keep inspection records up-to-date.
- ◆ Record and report all discrepancies to your supervisor.

MODEL NUMBER _____ **SERIAL NUMBER** _____

INITIAL	DESCRIPTION
_____	1. Perform all checks listed on Prestart/Monthly Inspection.
_____	2. Check the operation speeds to ensure they are within specified limits (see <i>Specifications</i>).
_____	3. Check the emergency lowering system.
_____	4. Clean and lubricate all push button switches with dry lubricant and ensure that the switches operate freely in all positions.
_____	5. Check the tightness of the platform frame and the linkage pins.
_____	6. Check the overall platform and guardrail component stability.
_____	7. Check the electrical mounting and hardware connections for security.
_____	8. Check outriggers for proper operation (if equipped).
_____	9. Check the king pins for excessive play.
_____	10. Follow engine quarterly service requirements. Refer to the Engine Operator Manual.

Additional Maintenance Requirements For Severe Usage Applications.

- | | |
|-------|--|
| _____ | 11. Replace hydraulic filter element (under normal usage, replace every six [6] months). |
| _____ | 12. Follow the engine severe usage service requirements.
Refer to the Engine Operator Manual. |

DATE _____ **INSPECTED BY** _____



ANNUAL INSPECTION

Annual Inspection Report



Aerial Platform Sales Corp.

1775 Park Street, Suite 77 • Selma, CA 93662 USA
800-387-4575 • 559-891-2488 • Fax: 559-891-2493

Date _____
Serial Number _____
Model Number _____
Date Of Last Inspection _____
Date Placed In Service _____

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

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

- Check each item listed below.
- Use proper Operator's, Service and Parts manual for specific information and settings.
- If an item is found to be "Unacceptable" make the necessary repairs and check the "Repaired" box.
- When all items are "Acceptable", the unit is ready for service.
- Please fax a copy to MEC at (559) 891-2488 or email to EMAIL ADDRESS

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

	Y	N	R	U		Y	N	R	U		Y	N	R	U
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)					Emergency Down:				
All Rail Fasteners Secure					Rear Axle Mounting (4WD)					Operational				
Entry Gate/Chain Closes Properly					Front Axle/Front Wheel Assemblies:					Slow Speed Limit Switch:				
Manual/Safety Data In Box					Wheel Motors-Mounting Secure					Set Properly				
Rear Rail Pad In Place					Wheel Motors-Leaks					Pothole Bars:				
Extending Platform:					Lug Nuts Torqued Properly					Operate Smoothly				
Slides Freely					Steering Cylinder Pins Secure					Lock In Place				
Latches In Stowed Position					Pivot Points Lubed					Limit Switches Adjusted				
Latches In Extended Position					Drive Assembly Front Hubs:					Pressures & Hydraulics:				
Rail Latches Work Properly					Castle Nut Torqued Properly					Oil Filter Secure/Chg				
Cable Secure					Cotter Pinned					Oil Level Correct/Chg				
Platform:					Rear Axle/Rear Wheel Assemblies:					Steering Pressure Set				
Platform Bolts Tight					Brakes Operational					Drive Pressure Set				
Platform Structure					Wheel Motors-Mounting Secure					Lift Pressure Set				
Platform Overload System:					Wheel Motors-Leaks					Engine:				
Functional					Lug Nuts Torqued Properly					Engine Mounts Tight				
Calibrated					Axle Pivot Libed (4WD)					Fuel Lines Secure				
Wire Harnesses:					Axle Lock Operational					Fuel Lines Free Of Leaks				
Mounted Correctly					Component Area:					Fuel Tanks Secure				
Physical Appearance					Valve Manifold(s) Secure					Fuel Shut Off Valves Func.				
110/220V Outlet Safe/Working					Hoses Tight/No Leaks					All Shields/Guards In Place				
Scissors:					D/C Mtr(s) Secure/Operational					Oil Level				
Beam Structures					Contactors Secure					Oil Filter				
Welds					Pump Secure					Air Filter				
Retaining Rings					Batteries:					Options Operational:				
Upper Cylinder Pins Secure					Secure					Hour Meter				
Lower Cylinder Pins Secure					Fully Charged					Battery Indicator				
Lower Beam Mounts tight					Battery Charger:					Warning Light				
Rollers Turn Freely					Secure					Warning Horn				
Maintenance Locks:					Operational					Generator				
Secure					Emergency Stop:					Converter				
Operational					Breaks All Circuits									

Comments: _____

Signature/Mechanic: _____ Date: _____
Signature/Owner-User: _____ Date: _____

TROUBLESHOOTING

! WARNING !!!

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

Call for assistance and report the incident to your supervisor, and do not use the machine until it has been checked by a trained, qualified mechanic.

What to check if machine will not start



- ◆ Battery cutoff switch?
- ◆ Selector switch turned to proper position (base/ platform)?
- ◆ Emergency stop buttons at both base and platform activated? (Rotate clockwise to release).
- ◆ Start switch on Upper Control Box turned to RUN position?
- ◆ Battery fully charged?
- ◆ Are any wires pulled out or loose?
- ◆ Is there proper fuel (gas, propane, or diesel) in the fuel tank?
- ◆ If equipped for dual fuel operation, is the fuel selector switch in the proper position?
- ◆ No oil pressure?

What to check if functions will not operate

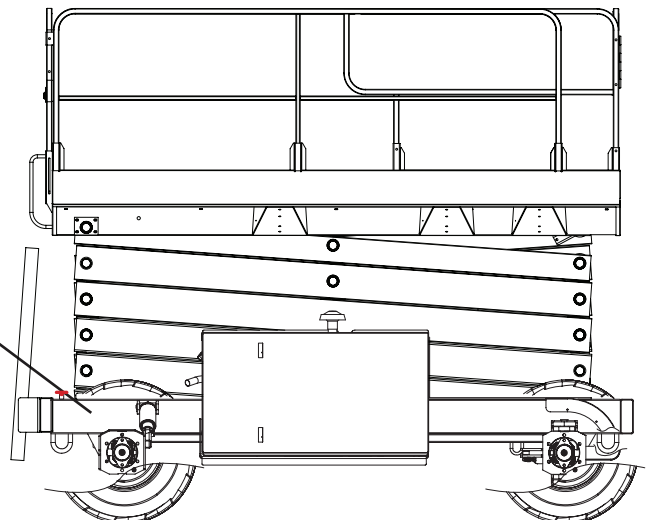
- ◆ Battery disconnect switch?
- ◆ Batteries fully charged?
- ◆ Is a function toggle switch or the enable switch not activated?
- ◆ Is the BASE/PLATFORM switch in the proper position?
- ◆ Check EMERGENCY STOP switches at both base and platform?
- ◆ Hydraulic fluid level low?
- ◆ Obvious fluid leak or damaged component?
- ◆ Are any wires pulled out or loose?

Serial Plate

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 AERIAL PLATFORM SALES CORP. 1775 PARK STREET, SUITE 77 SELMA, CA, USA			MFG. DATE: XXXX MODEL NUMBER: XXXXX SERIAL NUMBER: XXXXXXXX MODEL YEAR: 20XX
MAX. WIND SPEED 0 m/s 123 m/s	MAX. PLATFORM CAPACITY INCLUDING PERSONS XXX kg = X PERSONS + XXX kg EQUIPMENT XXX kg = X PERSONS + XXX kg EQUIPMENT	MAX. ALLOWABLE MANUAL FORCE XXX N	MAX. ALLOWABLE INCLINATION XX°/XX°
MAX. PLATFORM HEIGHT XX m	MAX. DRIVE HEIGHT XX m	STANDARD MACHINE WEIGHT XXXX kg	MAX. LOAD PER WHEEL XXX kg
OPTIONAL EQUIPMENT ADDS TO STANDARD MACHINE WEIGHT LEVELING OUTRIGGERS = XXX kg		MAX. GROUND PRESSURE PER WHEEL XX kg/cm ²	

ART_2757



Serial Plate Item Information Defined

MFG DATE

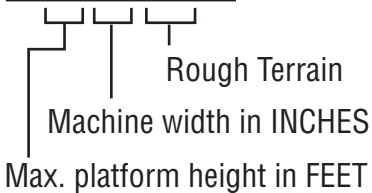
XX/XX



MONTH ART_2377

MODEL NUMBER

4191 RT



ART_2766

MFG DATE

Month / Year of manufacture.

MODEL NUMBER

Identifies the machine.

SERIAL NUMBER

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

MAX. WIND SPEED

The maximum safe wind speed at which the machine can be elevated.

MAX. PLATFORM CAPACITY INCLUDING PERSONS

The maximum safe load (persons + equipment) which can be evenly distributed on the platform at any elevation.

MAX. ALLOWABLE MANUAL FORCE

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

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. LOAD PER WHEEL

The maximum safe weight applied to each wheel. Calculated with all available options installed.

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

MAX. GROUND PRESSURE PER WHEEL

The amount of pressure exerted on the surface at each wheel. Calculated with all available options installed.

$$Pmax = 30\% (Wm + Wc + Wopt) / \text{Contact Area}$$

STANDARD MACHINE WEIGHT

The weight of the machine with no options.

OPTIONAL EQUIPMENT ADDS TO STANDARD MACHINE WEIGHT

The weight of installed optional equipment.

TRANSPORT AND LIFTING INSTRUCTIONS

Lifting Instructions

WARNING !!!

Only qualified riggers should rig and lift the machine.

Be sure the crane capacity, loading surfaces and straps or lines are sufficient to withstand the machine weight.
See the serial plate for the machine weight.

Lift using a Crane

- ◆ Fully lower the platform. Be sure the extension deck, controls and module doors are secure. Remove all loose items on the machine.
- ◆ Determine the center of gravity of the machine using the table and picture on this page.
- ◆ Attach the rigging only to the designated lifting points on the machine (see illustration).
- ◆ Adjust the rigging to prevent damage to the machine and to keep the machine level.

Securing to Truck or Trailer for Transport

- ◆ Always lock the extension deck in the retracted position when the machine is transported.
- ◆ Turn the key switch to the OFF position and remove the key before transport.
- ◆ Turn the battery disconnect switch to the OFF position before transport.
- ◆ Inspect the entire machine for loose or unsecured items.
- ◆ Use chains or straps of ample load capacity.
- ◆ Use a minimum of two chains or straps.
- ◆ Adjust the rigging to prevent damage to the chains and the machine.

Center of Gravity	X Axis	Y Axis
2591RT	50 in. / 127 cm	36 in. / 91 cm
3391RT	50 in. / 127 cm	38 in. / 97 cm
4191RT	50 in. / 127 cm	40 in. / 102 cm

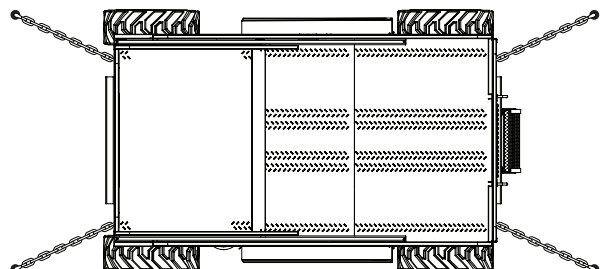
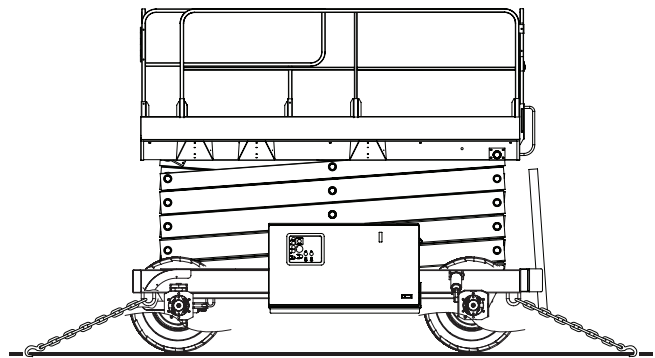
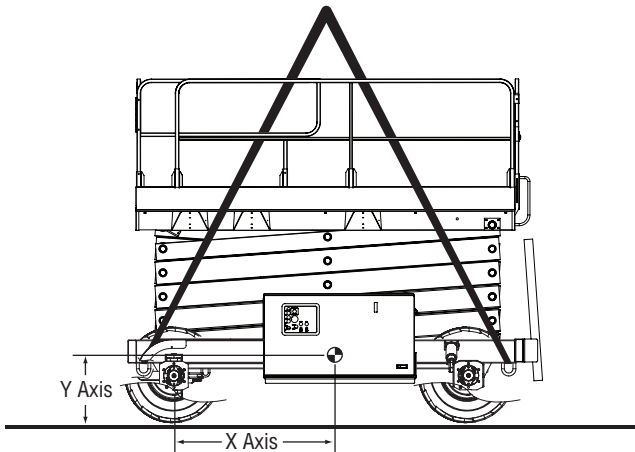



ILLUSTRATION No.
ART_2758

UNLOADING PROCEDURES

WARNING !!!

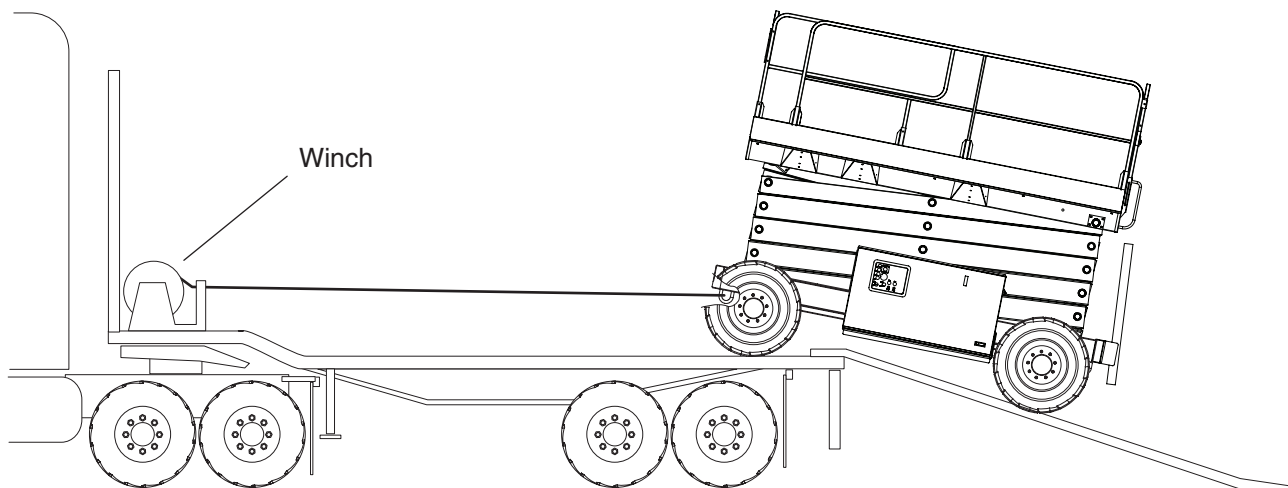
We do not recommend unassisted loading or unloading.

Always attach the machine to a winch when loading or unloading from a truck or trailer if driven off.

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

- ◆ Attach the machine to a winch for the unloading.
- ◆ Remove all machine tie downs. Remove wheel chocks, if used. Turn the BASE/PLATFORM selector switch to the PLATFORM position.
- ◆ Enter the platform, reset EMERGENCY STOP switch (rotate clockwise and release). Test all platform functions.
- ◆ Carefully drive the machine off the truck or trailer with the winch attached.

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



ART_2759

Towing the Machine



CAUTION

Prior to manually releasing brakes, ensure wheels are chocked to prevent machine from moving.

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

Before towing or winching the machine it is necessary to manually release the brake. Reset the brakes after towing or winching .



DANGER

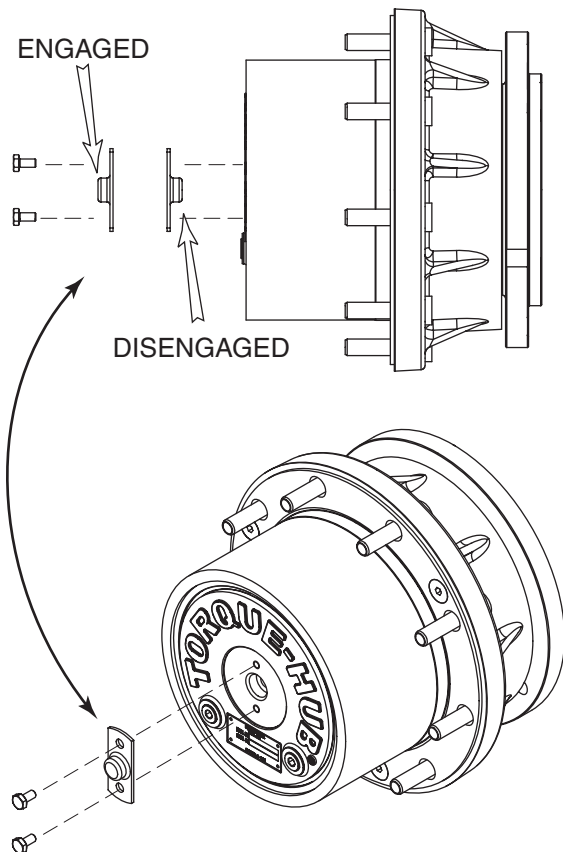
RUNAWAY HAZARD
AFTER RELEASING THE BRAKES, THERE IS NOTHING TO STOP MACHINE TRAVEL. MACHINE WILL ROLL FREELY ON SLOPES.

Disengage Brakes Before Towing or Winching

- Chock the wheels.
- Remove the Torque Engage Cap and reinstall with the bump facing *inward* on all four hubs (see illustration).
- Machine is now ready for towing.

Engage Brakes Before Driving

- Remove the Torque Engage Cap and reinstall with the bump facing *outward* on all four hubs (see illustration).
- Machine is now ready for driving.





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.



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