

2558DF

Operator's Manual

**This Operator's Manual MUST
BE READ AND UNDERSTOOD
prior to operating your MEC
Aerial Work Platform**

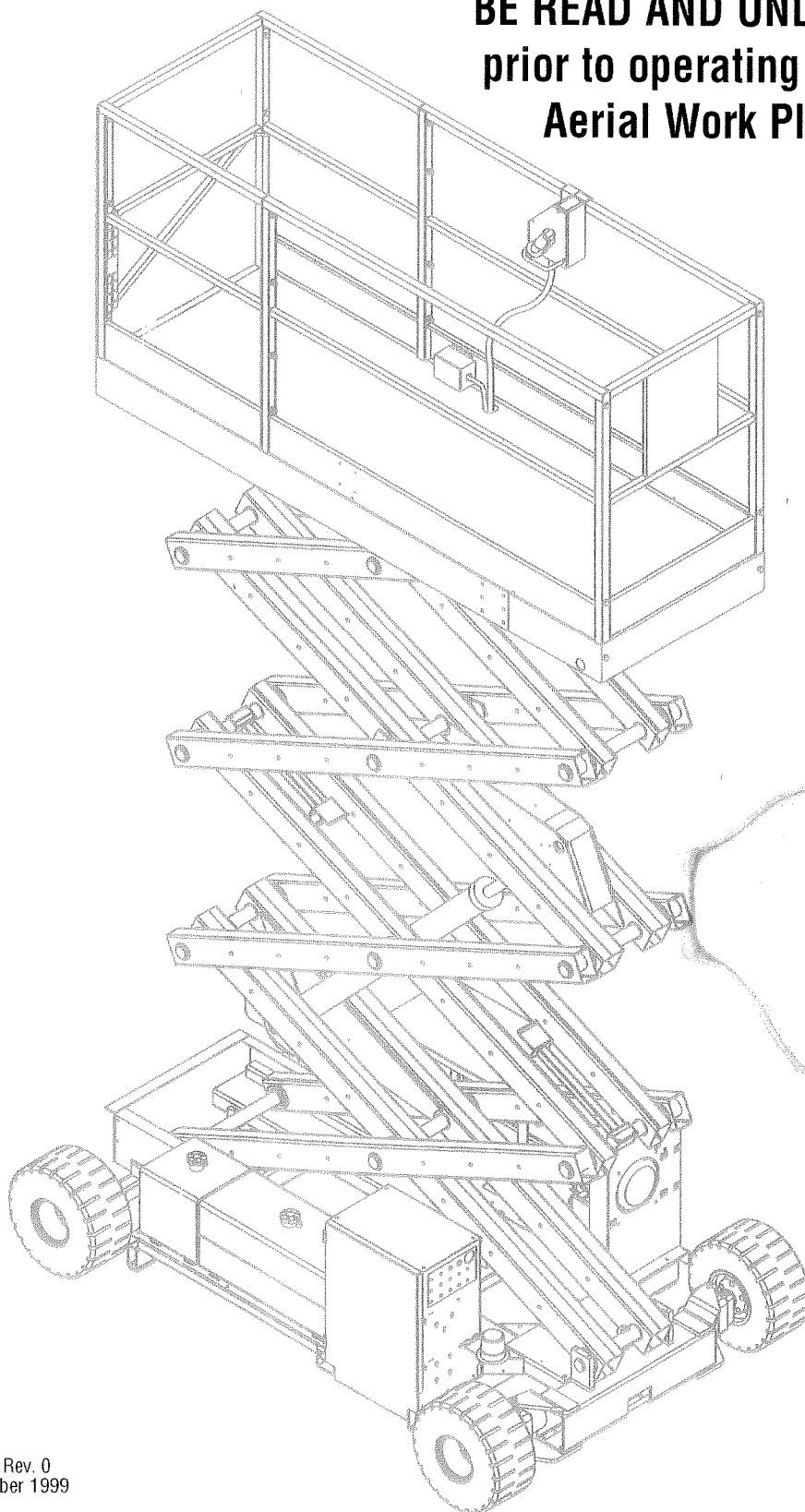


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Warranty



Introduction

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



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

MODIFICATIONS OF THIS MACHINE FROM THE ORIGINAL DESIGN AND SPECIFICATIONS WITHOUT WRITTEN PERMISSION FROM MEC ARE STRICTLY FORBIDDEN. A MODIFICATION MAY COMPROMISE THE SAFETY OF THE MACHINE, SUBJECTING OPERATOR(S) TO SERIOUS INJURY OR DEATH.

Your MEC Scissor Lift has been designed, built, and tested to provide many years of safe, dependable service. Only trained, authorized personnel should be allowed to operate or service the machine.

MEC, As Manufacturer, Has No Direct Control Over Machine Application And Operation. Proper Safety Practices Are The Responsibility Of The User And All Operating Personnel.

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



**Aerial Work Platforms
Mayville Engineering Co., Inc.**

An Employee Owned Company

210 Corporate Drive-Box 990 • Beaver Dam, WI 53916-0990 USA

Ph: 1-800-387-4575 • 920-887-2518 • Fax: 920-887-2480

E-mail: awp@mayvl.com • Web: www.mayvl.com

"2558DF" Operator's Manual



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Machine Specifications - 2558DF

Working Height	31 ft	9.45 m
Platform Height	25 ft	7.62 m
Stowed Height:	84 in	2.13 m
Folded Down Rails	42 in	1.07 m
Lift Capacity (Evenly Distributed):	1,250 lbs	568 kg
Fold-out Deck Capacity	300 lbs	136 kg
Platform Dimensions:	56 x 100 in	1.42 x 2.54 m
With Fold-Out Deck	56 x 142 in	1.42 x 3.61 m
Guard Rail Height	42 in	1.07 m
Toe Board Height	6 in	15.24 cm
Fold-out Deck Length	42 in	1.07 m
Overall Length	104 in	2.64 m
Overall Width	64 in	1.63 m
Wheel Base	86.5 in	2.19 m
Wheel Track	55.5 in	1.41 m
Turning Radius:		
Inside	48 in	1.35 m
Outside	134 in	3.40 m
Ground Clearance	4 in	10.0 cm
Machine Weight (Unloaded) (Approx.)	4,800 lbs	2180 kg
Drive System (Proportional):		
Drive Speed (Platform Elevated)	0 - 0.4 mph	0 - 0.64 kph
Drive Speed (Platform Lowered)	0 - 2.8 mph	0 - 4.5 kph
Lift/Lower Speed (Approx.)	40 sec/43 sec	
Gradeability	16.7° / 30%	
Ground Pressure/Wheel (Maximum)	44.8 psi	3.09 bar
Wind Speed (Maximum)	0 mph	0 kph - 0 mps
Tire Size-Standard (Foam Filled)	18.5 x 8.5 in	47.0 x 21.6 cm
Tire Pressure (Not Applicable For Foam Filled Tires)	N/A	N/A
Wheel Lug Nut Torque	75-85 ft lbs	102-115 Nm
Hydraulic Pressure:		
Main System	3,000 psi	207 bar
Lift System	2,250 psi	155 bar
Steer	1,500 psi	103 bar
Hydraulic Fluid Capacity	13 gal	49 liters
Fuel Capacity	10 gal	38 liters
Power System – Voltage	12 Volts DC	
Alternator	20 amp	
Engine Availability:		
Standard - KAWASAKI FD620 D; 20 HP (14.9 kW); DUAL-FUEL LIQUID COOLED		



SECTION 1: SAFETY

Safety Symbols

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

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

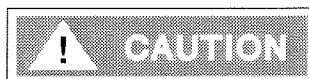
To help you recognize important safety information, we have identified warnings and instructions that directly impact on safety with the following signals:



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



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



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

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

Safety Rules And Precautions

- ◆ MEC designs self-propelled scissor lifts to be safe and reliable. They are intended to position personnel, along with their necessary tools and materials to overhead work locations.
- ◆ The owner/user/operator of the machine should not accept responsibility for the operation of the machine, unless properly trained.
- ◆ ANSI A92.6 and other applicable standards identify requirements of all parties who may be involved with self-propelled elevating work platforms. A copy of the ANSI Standard is considered a part of this machine and can be found in the manual compartment, located at the platform control station.



- ◆ **ELECTROCUTION HAZARD!!! THIS MACHINE IS NOT INSULATED!!** Maintain safe clearance from electrically charged conductors (power lines) and apparatus. You must allow for machine sway (side to side movement) when elevated and electrical line movement. This machine does not provide protection from contact with, or proximity to, an electrically charged conductor.

You must maintain a **CLEARANCE OF AT LEAST 10 FEET (3.05 m)** between any part of the machine, or its load, and any electrical line or apparatus carrying over 300 volts up to 50,000 volts. One foot (30.5cm) additional clearance is required for every additional 30,000 volts.

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

- ◆ Read and understand all safety and control information found on the machine and in this manual before operating the machine.
- ◆ Only trained, competent personnel should operate the scissorlift.
- ◆ NEVER fasten safety belt to an adjacent structure while on the platform.
- ◆ Make sure that entry chain/gate (if so equipped to platform) is secured before operating machine from the platform.
- ◆ Exceeding the platform rated capacity in any configuration is prohibited. Review the section titled "Machine Specifications" (earlier in this manual) regarding model capacities and dimensions.

- ◆ Evenly distribute loads placed on the platform.
- ◆ SECURE all tools and other loose items to prevent injury to persons working on or below the platform.
- ◆ Use of scaffolding, ladders or similar items to extend your reach while on the platform is prohibited.
- ◆ Climbing down the beams assembly (armset), if the machine fails, while the platform is raised is prohibited.
- ◆ Precautions should be taken to prevent unauthorized personnel from operating the platform with the ground controls while the platform is in use.



- ◆ The “Moving the Machine” section (described later in this manual) requires that the brake be released. After performing this procedure, there is no means to stop the machine’s travel. MEC recommends using this procedure only in cases of emergency, and only for a short distance. Be on guard against machine runaway on sloping surfaces. Movement speed shall not exceed 5 MPH (8.0 kph).
- ◆ DO NOT attempt to open any hydraulic line or component without first relieving all system pressure.
- ◆ Altering, modifying, or disabling any safety devices or interlocks is prohibited.
- ◆ Recharging the battery near sparks or open flames is prohibited. Lead-acid batteries generate EXPLOSIVE HYDROGEN GAS. Always wear safety glasses.
- ◆ Use of the machine outdoors during electrical storms or in high wind situations is not recommended.
- ◆ Raise the platform when the machine is on a firm, level surface only.



- ◆ Unassisted loading or unloading of scissorlift from a truck or trailer is not recommended.
- ◆ Before disengaging or disconnecting hydraulic motors with brake assembly from a towing vehicle, ensure that the machine cannot roll.
- ◆ Complete the “Operational Checklist” at designated intervals.



- ◆ Use of scissorlift as a crane to lift oversized or hanging loads is prohibited.
- ◆ Raising, lowering or driving the scissorlift into stationary objects is prohibited.
- ◆ It is recommended to avoid sudden braking or steering. Go slowly and leave more maneuvering room during cold weather operation.

Fall Protection Notice

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

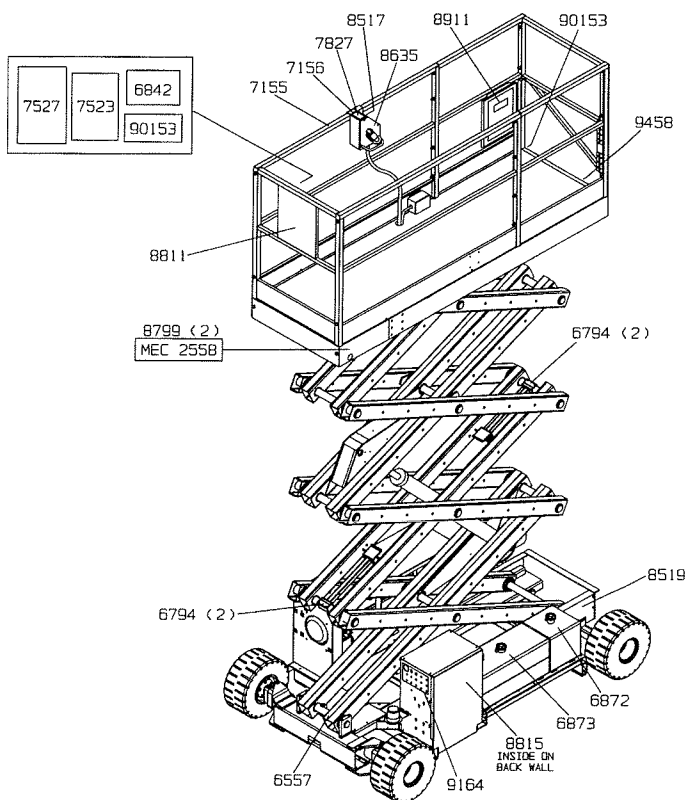
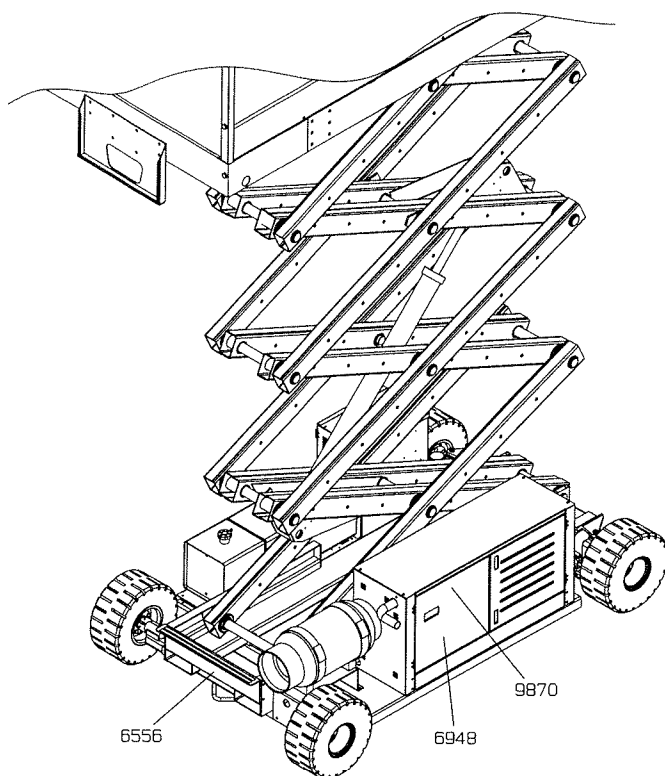
Lanyard anchorage points on this type of equipment are not required to conform to the applicable ANSI/SIA Standard.

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



USE OF FALL ARREST SYSTEMS ATTACHED TO ANCHORAGE POINTS ON MOBILE EQUIPMENT MAY CAUSE MACHINE TO TIP RESULTING IN SERIOUS INJURY OR DEATH.

Safety And Control Decal Locations

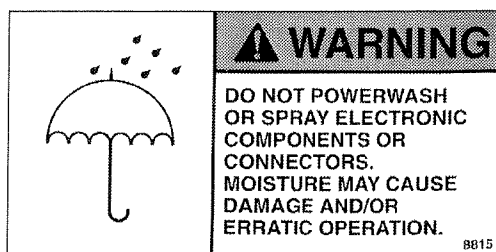


Safety And Control Decal Locations

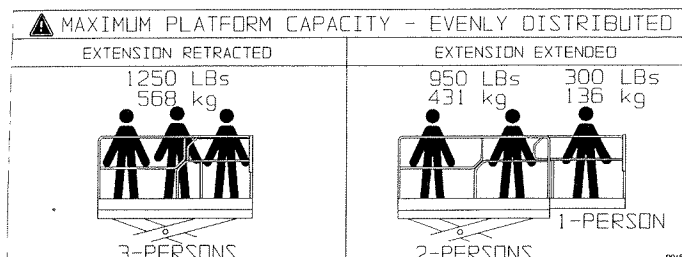
Item #	Part #	Description	Qty
1	6872	Gasoline Only	1
2	6873	Hydraulic Oil	1
3	6948	Fuel Tank Changeover	1
4	7155	Locate Control Box	1
5	7156	Direction - "Front"	1
6	90153	Platform Capacity (1250 LBS)	2
7	7523	Danger-Elec/Tip. Hazards	1
8	9239	Control Box - I.D.	1
9	8519	Warning - Tire Replacement	2
10	8635	Directions - Joystick	1
11	8815	Warning - Electrical Moisture	2
12	8911	Manual Compartment	1
13	9458	Made In USA	1
14	8517	Control Box - Platform	1
15	9164	Ground Control Panel	1
16	7527	Warning - Operator	1
17	6557	Emergency Down	1
18	8799	2558 (Model #)	2
19	8811	MEC Aerial Work Platform	1
20	6794	Maintenance Lock	4
21	7827	Warning - Light Indicates	1
22	6556	Fork Lift Pockets	1
23	6842	Extending Platform	1
24	9870	Caution - Hot Surface	1

Safety Related Decals

8815



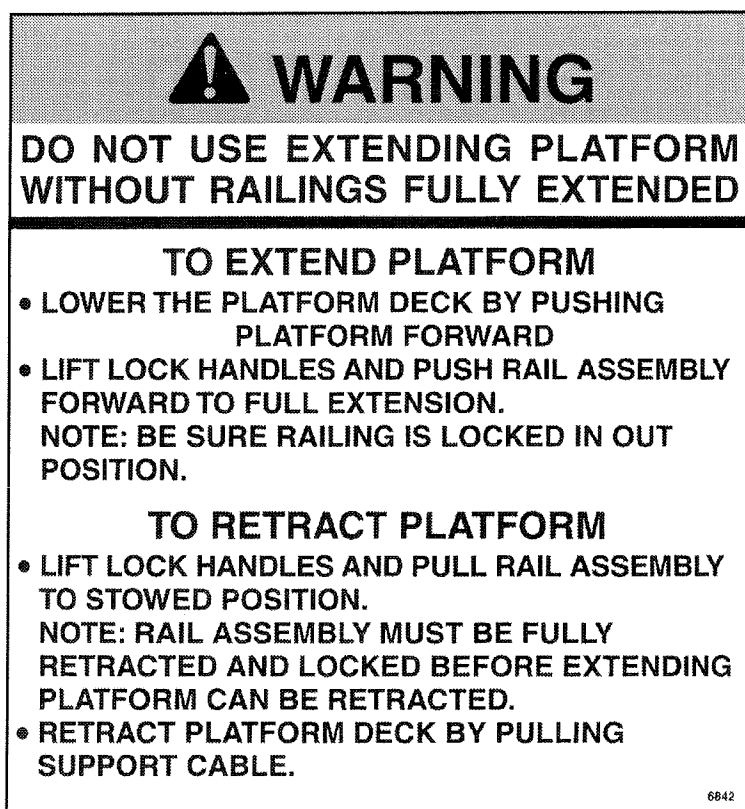
90153



6556



6842

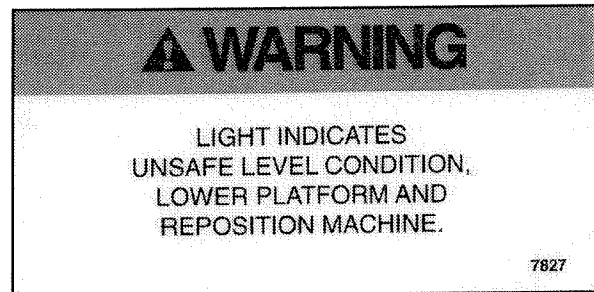


Safety Related Decals (Continued).....

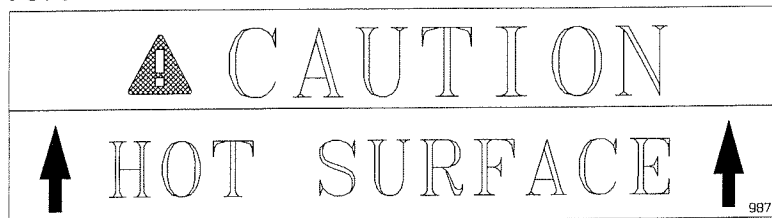
6794



7827



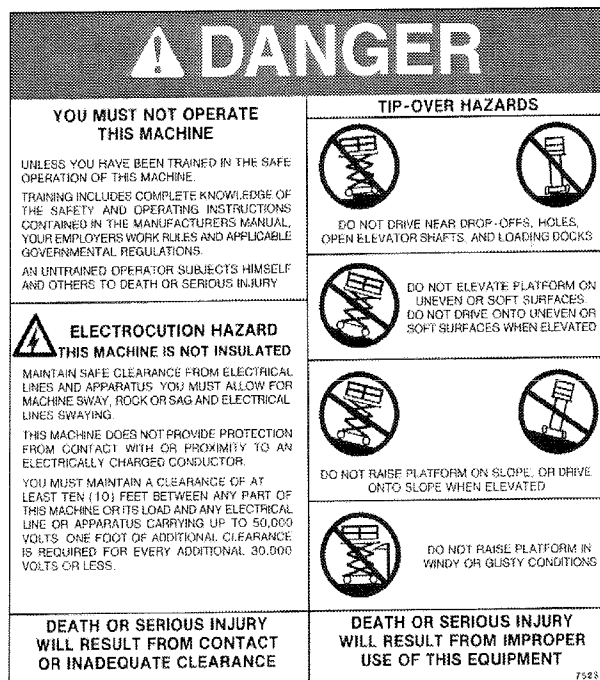
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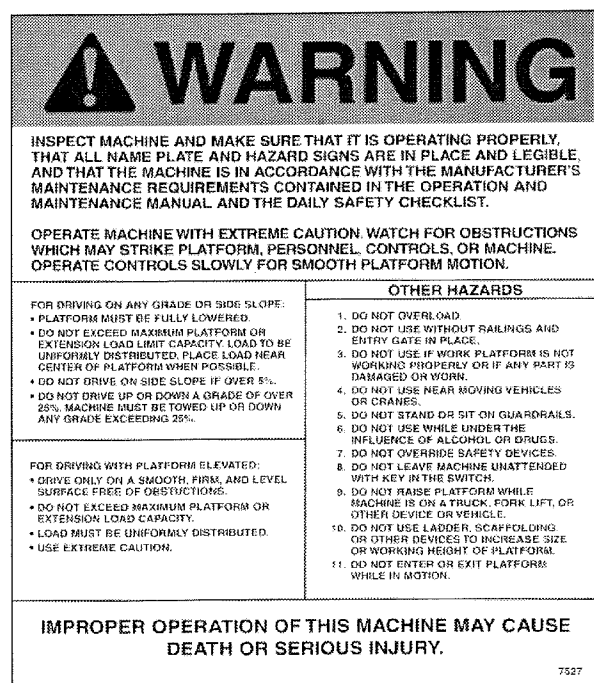
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7523



7527







SECTION 2: OPERATION

Unloading Procedures

- ◆ Inspect the outside of the machine for damage. Inspect all hoses, beam assemblies (armset), and cables for chafing or road damage. Confirm that all wheel lug nuts are tight (refer to the "Machine Specifications").
- ◆ Unlock and open side compartments. Inspect all fuel, electrical, and hydraulic connections for damage and security.
- ◆ Check battery electrolyte level.
- ◆ Check engine oil level and add as required per engine manufacturer's recommendations.
- ◆ Check that fluid level is to the fill mark on the hydraulic tank and add fluid as required (see "Lubrication Chart").
- ◆ Close side compartments.



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

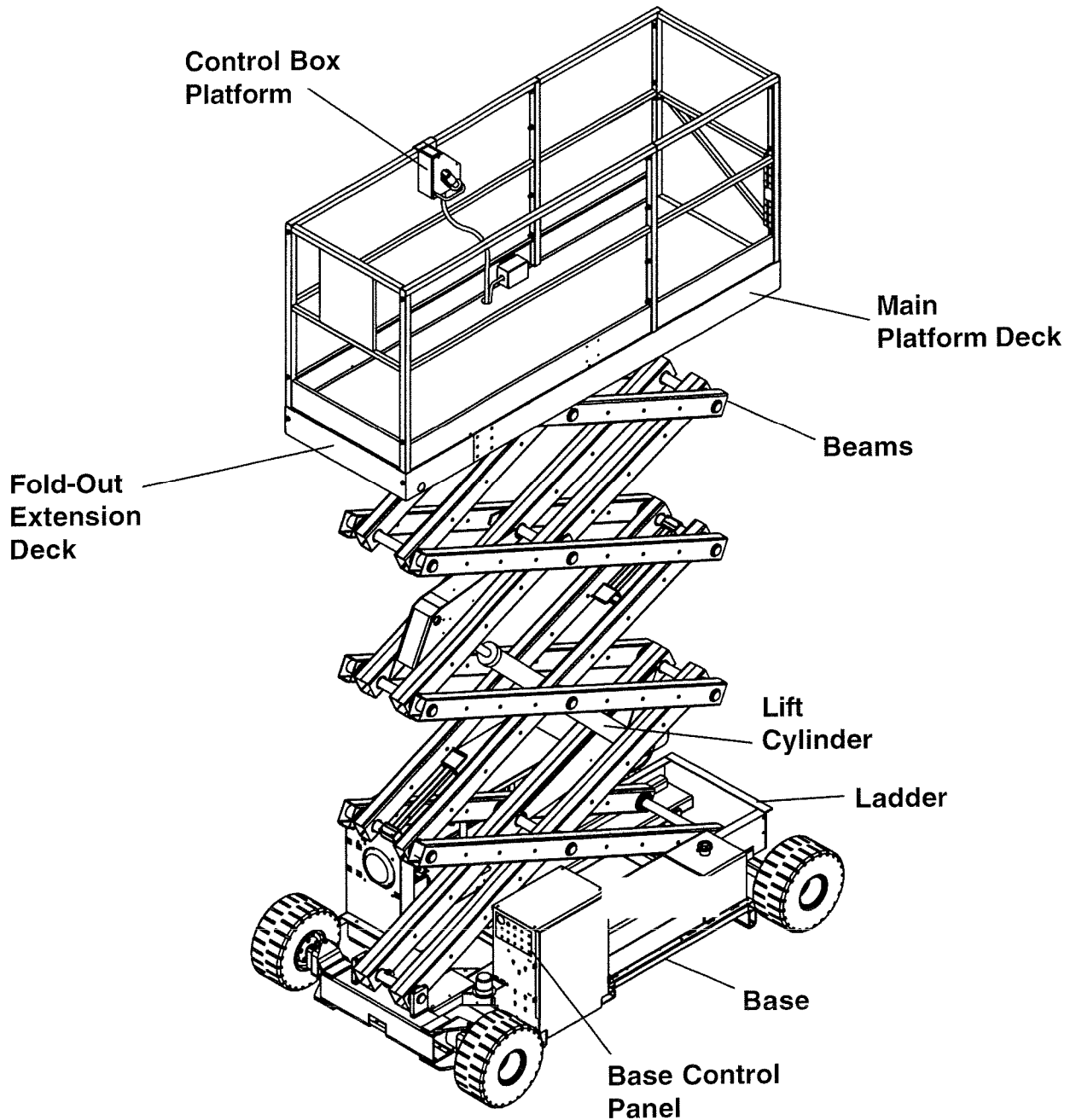
READ AND UNDERSTAND ALL SAFETY, CONTROL, AND OPERATING INFORMATION FOUND ON MACHINE AND IN THIS MANUAL BEFORE OPERATING THE MACHINE.

- ◆ Attach the machine to a winch for the unloading.
- ◆ Perform Machine Start-up procedures in this section. Refer to Operator Controls Descriptions, as necessary. Turn off engine.
- ◆ Remove all machine tie downs. Remove wheel chocks, if used. Turn the Base/Platform selector switch to the "PLATFORM" position.
- ◆ Enter the platform, and start the engine using the platform controls. Test all platform functions.
- ◆ Carefully drive the machine off the truck or trailer with the winch still attached.

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

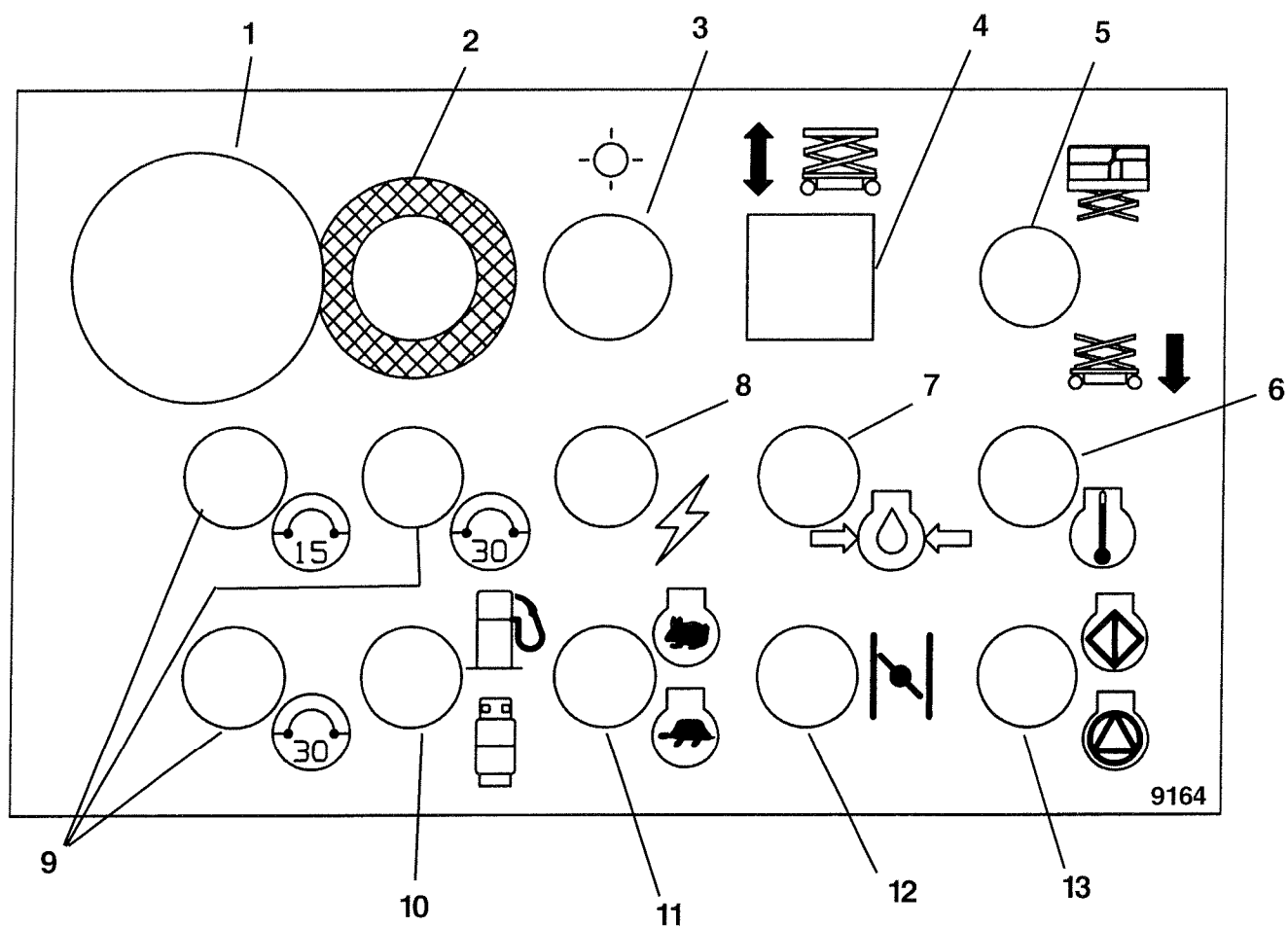
- ◆ **Before placing the machine into service, all operators must read and understand the contents of this Operator's Manual.**

Primary Machine Components



Primary Components.pcx

Operator Controls



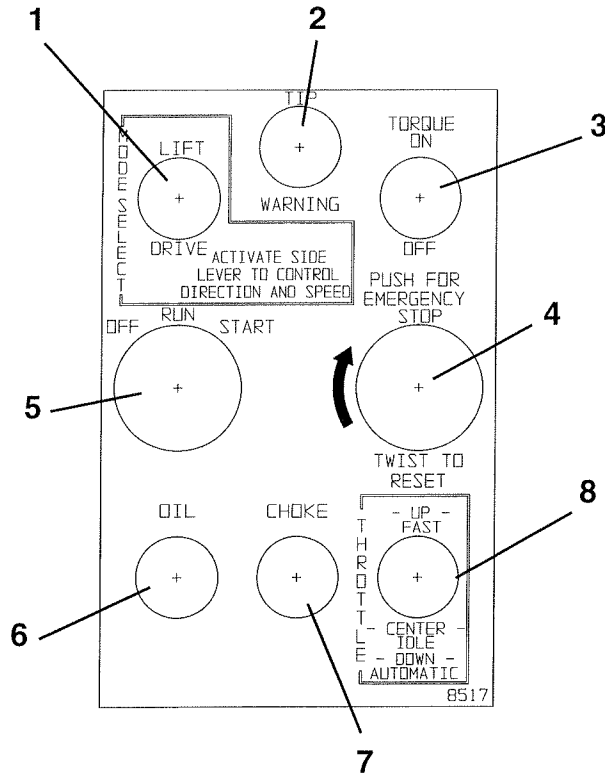
Base Control Dual Fuel

Operator Controls (Continued)....

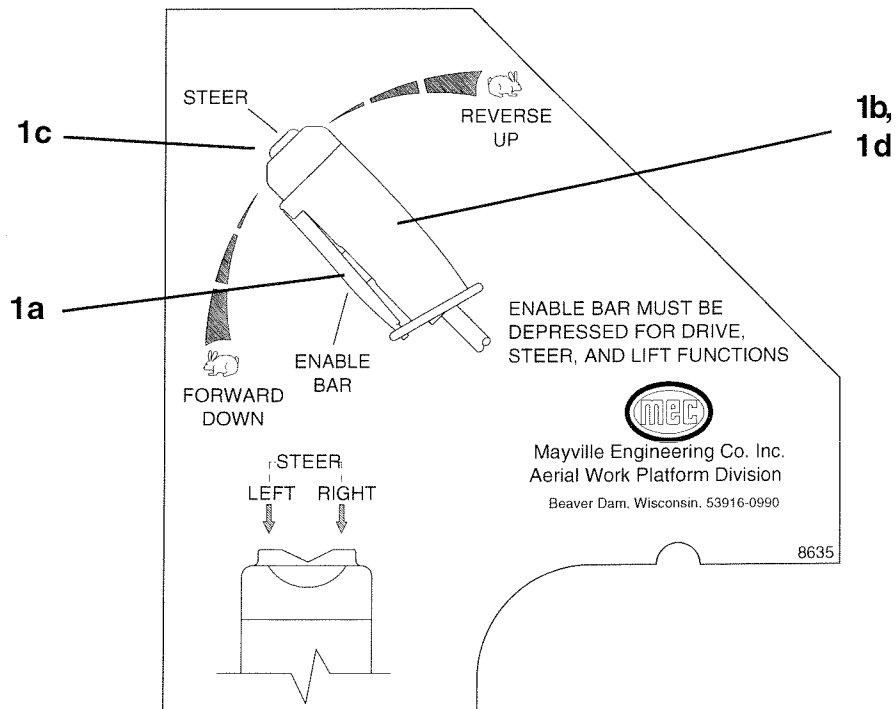
BASE CONTROLS

	CONTROL	DESCRIPTION
1	Hour Meter (Optional)	Indicates total elapsed time the engine has been operated.
2	Emergency Stop Button	Use to stop all functions in an emergency. Push for emergency stop. To reset turn clockwise.
3	"On/Off" Key Switch	Use to turn on the primary power.
4	Lift/Lower Switch	Use to control the lift and lowering of the platform from the base panel, when "BASE" position is selected as the primary control station.
5	Base/Off/Platform Selector Switch	Select "BASE" position to control operation of machine using the base controls. Select "PLATFORM" position to control operation of machine using the platform console. NOTE: A key shall be provided for European machines and will be removable in "PLATFORM" position only.
6	Engine Temperature	Indicates engine temperature.
7	Engine Oil Pressure Gauge (Optional)	Indicates engine oil pressure.
8	Alternator Light	Indicates that the battery charging is inadequate.
9	Circuit-breaker	Pops out when there is excessive electrical load in the 12-volt control circuit. Push in to reset.
10	Gas/Propane	Flip toggle UP for gasoline fuel; and DOWN for propane fuel.
11	Idle/Run Selector	Use to select/control engine speed. Switch should be in "IDLE" position to start engine and "RUN" to operate a function requiring high engine speed.
12	Choke-Manual	Use to operate the manual choke when starting dual fuel engine or heating glow plug for some Diesel engines.
13	Engine Off/Run/Start	Move the switch to the up/start position to start the engine. Release switch when engine starts running.
14	Emergency Lowering	Pull 'T' handle on cable (located at center of lower weldment above the front axle) to lower platform (not shown).
15	Emergency Brake Release	Pull out ring (located under the rear axle) while activating drive function until notched bar locks in place (not shown)

Operator Controls (Continued)....



Platform Control Dual Fuel



Operator Controls (Continued)....

PLATFORM CONTROLS

	CONTROL	DESCRIPTION
1	Mode Selector	Desired selection will allow either the lift or drive function using controller handle.
1a	Enable Switch	Must be depressed to active drive, steer, and lift functions.
1b	"Forward/Reverse"	Controls forward and reverse machine travel at speed proportional to handle movement.
1c	"Left/Right"	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.
1d	"Lift/Lower" Controller	With enable switch depressed, moving controller handle toward the operator (up) will provide platform lift at a speed proportional to handle movement. Moving the handle away from the operator (down) will provide platform lowering at a fixed speed.
2	Tilt Warning Light	Indicates that machine is not level.
3	Torque On/Off Switch	"ON" selection will provide extra driving torque and reduce drive speed when the platform is under approximately 10 ft (3.05 m). "OFF" position is the normal mode.
4	Emergency Stop Button	Push to stop all functions in emergency. Reset by turning clockwise.
5	Engine Off/Run/Start	Use to turn on the primary power. Machines equipped with ANTI-RESTART FEATURE PROHIBITS accidental restart when engine is running.
6	Engine Oil Pressure Light	Indicates engine oil pressure has dropped to unsafe level.
7	Choke/Glow Plug/Preheat Switch	Operate when starting dual fuel engine or heating glow plug for diesel engines.
8	Throttle "Fast/Idle/Automatic"	In "FAST" position engine maintains maximum RPM. In "IDLE" position engine maintains minimum RPM. In "AUTOMATIC" position engine responds to maximum RPM whenever the enable switch is activated and reduces RPM automatically within 5 seconds of release of enable switch.
9	Horn (Optional)	Press button to sound warning horn (not shown)
10	Tilt Alarm (Optional)	Sound indicates machine is not level and the platform is being raised (not shown)

Prestart Inspection

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

- ◆ Visually inspect all machine components; for loose or missing parts, hydraulic fluid leaks, loose or damaged wires. Check for structural or weld cracks.
- ◆ Check engine oil, fuel and fluid levels with the platform fully lowered.
- ◆ Check the wheel lug nuts for tightness (Refer to “Machine Specifications”).
- ◆ Check that all warning and instructional labels are legible and secure.
- ◆ Check the platform guard rail system. Look at the chain or gate and make sure they latch properly and/ or close.
- ◆ Ensure that emergency stop buttons on the base control panel and the platform controls are disengaged. Reset by turning clockwise.

STARTING DUAL FUEL ENGINE

From Base Control Station

1. Place the selector switch to "Base" position.
2. Place the fuel selector switch to the desired fuel selection, "Gas" or "LP".
3. Ensure speed selector switch is in the "Idle" position.
4. Press and hold the "Start" switch, releasing when the engine starts. Cold starts may require "Choke" switch to be pressed with "Start" switch.

From Platform Control Station

1. Place the selector switch at the base control station to the "Platform" position.
2. Place the fuel selector switch to the desired fuel selection, "Gas" or "LP".
3. Ensure speed selector switch is in the "Automatic" position.
4. Check to see if Emergency Stop is deactivated.
5. Press and hold the "Start" switch, releasing when the engine starts. Cold starts may require "Choke" switch to be pressed with "Start" switch.

Switching Fuels

1. When the engine begins to "hesitate" immediately place the selector switch in the new desired (Gas/Propane) position.
2. It is important that the old fuel, in the fuel system, be consumed by the engine before introducing the "new" fuel.

BASE CONTROL OPERATION AND CHECKS



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

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

- ◆ Turn selector switch to “BASE” position.
- ◆ Start engine.
- ◆ Activate the Lift/ Lower switch on the base control panel to elevate the platform to the end of its movement. Releasing the switch should stop elevation.
- ◆ Test the “Emergency Stop” function.
While the platform is moving, press the Emergency Stop button, platform should stop.
- ◆ Reset by rotating clockwise.
- ◆ Lower the platform about halfway by switching the Lift/ Lower switch. Releasing the switch should stop the lowering.
- ◆ Check for proper operation and hydraulic leaks.
- ◆ Lower platform to the stowed position.
- ◆ Turn off engine.

PLATFORM CONTROL OPERATION AND CHECKS

- ◆ Select the "Platform" position on the selector switch at base control station.
- ◆ From the platform, start the engine.
- ◆ Press the horn button briefly (if equipped with).

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

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



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

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

IMPORTANT: Always check front steer wheel direction before driving.

Operation



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

**SAFE OPERATION BEGINS WITH A SAFETY CONSCIOUS
EQUIPMENT OPERATOR.**

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

DRIVING AND STEERING



**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.**

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

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

BRAKING

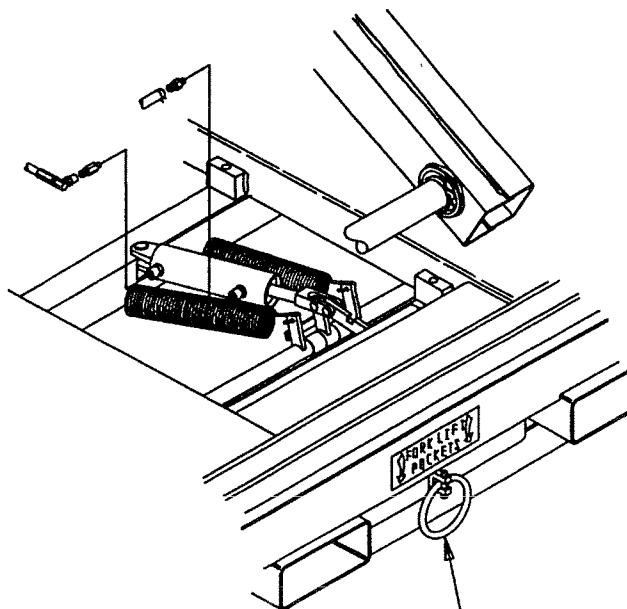


ACTIVATION OF THE PLATFORM “EMERGENCY STOP” BUTTON WILL APPLY BRAKES IMMEDIATELY. THIS MAY CAUSE UNEXPECTED PLATFORM MOVEMENT AS THE MACHINE COMES TO A STOP. BRACE YOURSELF AND SECURE OBJECTS ON THE PLATFORM DURING OPERATION OF MACHINE.

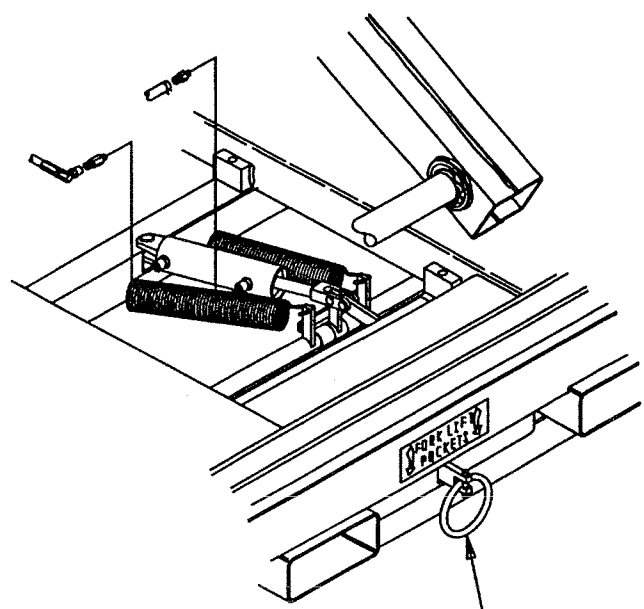
NOTE: For parking, brake is spring applied when the “Forward/Reverse” drive controller is positioned in the center (neutral) position. (An orifice is utilized to control braking). During drive, a valve hydraulically releases the brake.

Brake Adjustment

- ◆ Release tension from brake rod by pulling manual release ring out while activating a drive function.
- ◆ Continue lifting the bar until it locks in place.



**Brake Release Ring
(Brake disengaged)**

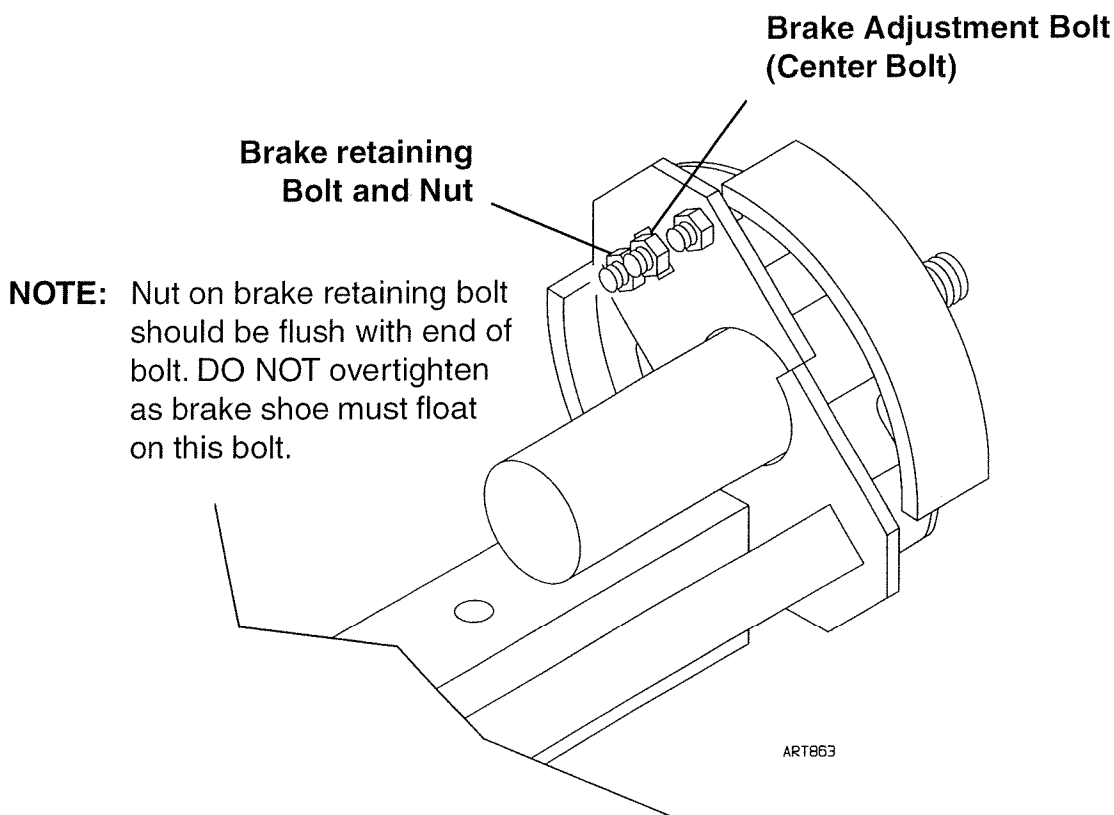


**Brake Release Ring
(Brake engaged)**

Brake Adjustment (continued)

- ◆ Raise rear of machine until wheels/tires do not touch the floor/ground.

NOTE: Both rear wheel brakes are applied independently and so the adjustment must be the same.



- ◆ Loosen lock nut from brake adjustment bolt. If wheel turns freely, move bolt towards inside of mounting bracket until wheel becomes tight.
- ◆ Back off on adjustment bolt until wheel turns with some resistance/drag.
- ◆ Tighten adjustment lock nut and check if wheel turns the same. DO THIS TO BOTH SIDES.
- ◆ Lower machine to floor and drive test to check brake application. (The notched bar will disengage/release with activation of drive function).

NOTE: Adjust brakes so that parking brake holds machine on the rated incline (See Machine Specifications).

ELEVATING THE PLATFORM

Using Platform Controls

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

Using Base Controls

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

LOWERING THE PLATFORM

Using Platform Controls

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

Using Base Controls

With selector switch in the "Base" position, press and hold the Lift/ Lower toggle switch in the "Down" position until the desired platform height is reached or until the platform reaches the stowed position.

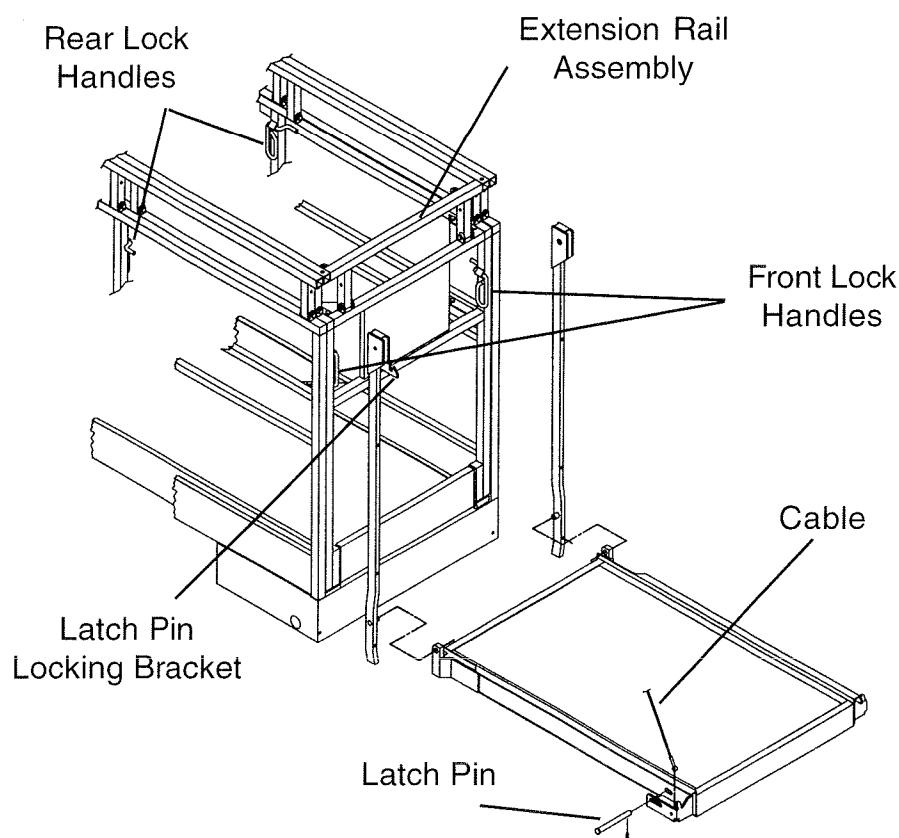
FOLD-OUT EXTENSION DECK

Extending

- ◆ Lifting the latch pin located on right hand side of extension. Push fold-out deck forward.
- ◆ Lift front lock handles and push rail assembly forward to pull extension.
- ◆ Lift rear lock handles and lock in full extended position.



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



FOLD-OUT EXTENSION (Continued)....

Retracting

- ◆ Lift rear lock handles and pull rail assembly to stowed position.
- ◆ Lift front lock handles to lock rails in stowed position.
- ◆ By pulling support cable, retract/pull extension deck up and insure latch pin is fully engaged in the locking bracket.



**DO NOT USE FOLD-OUT EXTENSION DECK WITHOUT
RAILINGS FULLY EXTENDED.**

SHUTDOWN PROCEDURE

- ◆ When finished with the machine, place the platform in the stowed position.
- ◆ Park the machine on a level surface.
- ◆ Shut off the engine by placing the Engine Start/ Off switch in the "Off" position.
- ◆ Carefully exit the platform using a constant three (3) point dismount/grip.
- ◆ Place selector switch at base control panel in the "Off" position.

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

MOVING THE MACHINE

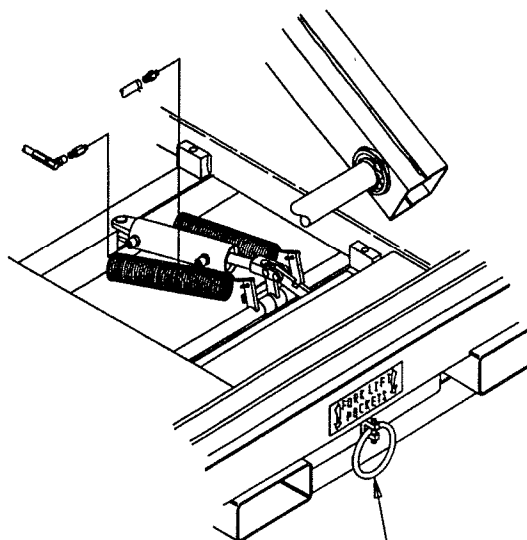
Machine can be winched or moved short distances in case of power failure at speeds not to exceed 5 MPH (8.05 kph).

Towing/Winching the Machine

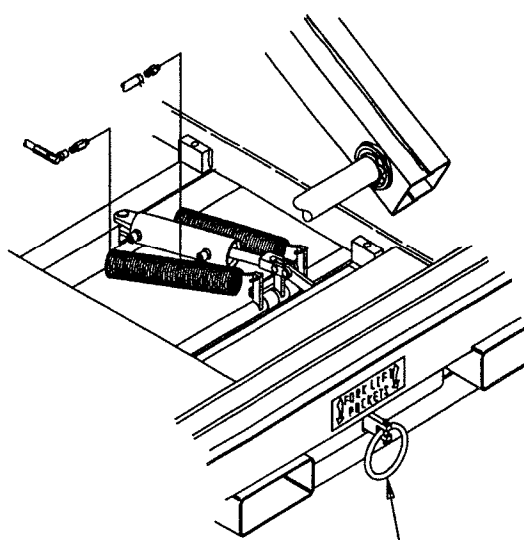
Your machine is equipped with a manual brake release.

Release Brakes Before Towing:

- ◆ Pull out manual brake release ring located at the rear of machine (under rear axle) to release tension from brake rod while activating drive function until notched bar locks in place.



**Brake Release Ring
(Brake disengaged)**



**Brake Release Ring
(Brake engaged)**



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

To Reset Brakes:

- ◆ Push down on manual brake release ring.
 - OR**
 - ◆ Activate drive function for brakes to reset.
- MACHINE IS NOW READY FOR NORMAL OPERATION.**

Emergency Systems And Procedures



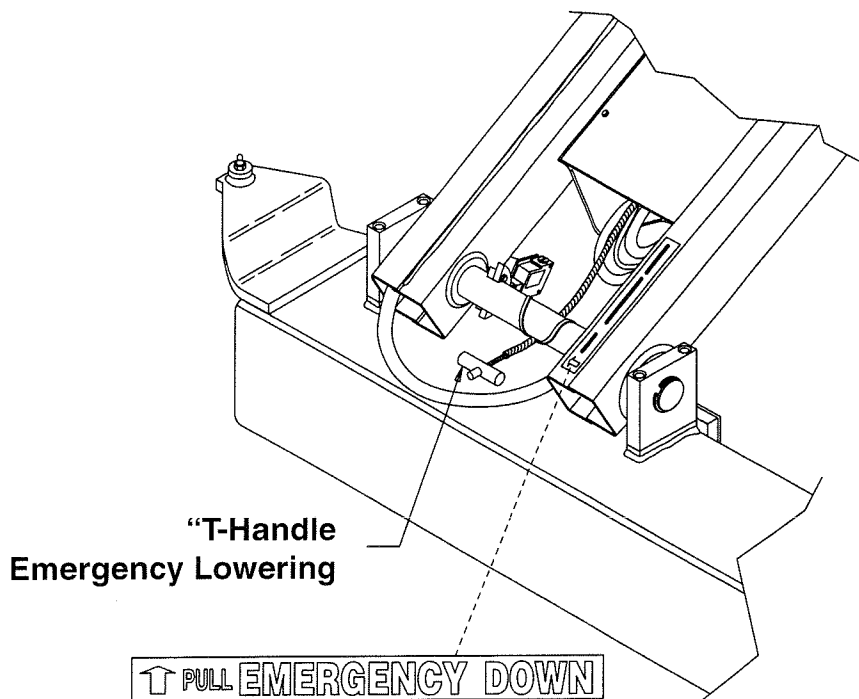
IF THE CONTROL SYSTEM FAILS WHILE THE PLATFORM IS ELEVATED, HAVE AN EXPERIENCED OPERATOR USE THE EMERGENCY LOWERING PROCEDURE TO SAFELY LOWER THE PLATFORM.

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

EMERGENCY LOWERING



BEFORE LOWERING PLATFORM, RETRACT THE DECK EXTENSION.



EMERGENCY LOWERING (continued)

The manual descent valve is used in the event of power failure to lower the platform (which is gravity powered).

The Emergency Lowering Control is located at the center of lower beam weldment above the front axle.

The "T" handle of the Emergency Lowering Control is connected by a cable to the manual descent valve on the lift cylinder. Pulling this handle opens the valve allowing the lowering of platform.



SECTION 3: MAINTENANCE

GENERAL MAINTENANCE TIPS

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

The actual operating environment of the machine governs the inspection schedule. Correct lubrication is an essential part of the preventive 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 BEAMS (SCISSORS) ASSEMBLY IN PLACE!

- ◆ Block scissors assembly using maintenance locks if machine is in the elevated/extended position.
- ◆ Never leave hydraulic components or hoses open. They must be protected from contamination (including rain) at all times.
- ◆ Never open a hydraulic system when there are contaminants in the air.
- ◆ Always clean the surrounding area before opening hydraulic systems.
- ◆ Use only recommended lubricants. Improper lubricants or incompatible lubricants may be as harmful as no lubrication.
- ◆ Watch for makeshift “fixes” which can jeopardize safety as well as lead to more costly repair.

GENERAL MAINTENANCE TIPS (Continued)....



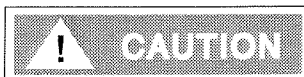
IMMEDIATELY REPORT TO YOUR SUPERVISOR ANY DEFECT OR MALFUNCTION. ANY DEFECT SHALL BE REPAIRED PRIOR TO CONTINUED USE OF THE SCISSORLIFT.

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

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

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

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.



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

SHIFT OPERATIONAL CHECKLIST

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

MODEL NUMBER _____ SERIAL NUMBER _____

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

KEEP YOUR MACHINE CLEAN!!



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

INITIAL	DESCRIPTION
_____	1. Perform a visual inspection of all machine components, i.e. missing parts, torn or loose hoses, hydraulic fluid leaks, torn or disconnected wires, damaged tires etc. Replace components as necessary.
_____	2. Check the hydraulic fluid level with the platform fully lowered.
_____	3. Check the tires for damage. Check wheel lug nuts for tightness.
_____	4. Check the 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. Check the platform rails and safety gate for damage.
_____	7. Check the pivot pins for security.
_____	8. Check that all warning and instructional labels are legible and secure.



SHIFT OPERATIONAL CHECKLIST (Continued)....

INITIAL	DESCRIPTION
---------	-------------

- | | |
|-------|--|
| _____ | 9. Inspect the platform control. Ensure the load capacity is clearly marked. |
| _____ | 10. Check the hydraulic system pressure (See Machine Specification). If the pressure is low, determine the reason and repair in accordance with accepted procedures as outlined in the service manual. |
| _____ | 11. Check the base controls for proper operation. Check all switches and push buttons for proper operation. |
| _____ | 12. Check the platform controls for proper operation. Check all switches and push buttons, as well as ensuring that the drive controller returns to neutral. |
| _____ | 13. Follow the engine daily service requirements. Refer to the Engine Maintenance Manual. |

DATE _____ INSPECTED BY _____

WEEKLY OPERATIONAL CHECKLIST

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

MODEL NUMBER _____ SERIAL NUMBER _____

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

KEEP YOUR MACHINE CLEAN!!



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

INITIAL	DESCRIPTION
_____	1. Perform all checks listed on Shift Operational Checklist.
_____	2. Check wheel lug nuts for proper torque (see "Machine Specifications").
_____	3. Inspect all arms and pivot points for signs of wear and/or damage.
_____	4. Lubricate the rear axle spindle, steering cylinder pivot points, and the brake linkage (see Lubrication Chart).
_____	5. Check all wire connections.
_____	6. Check battery electrolyte level and connections.
_____	7. Follow the engine weekly service requirements. Refer to the Engine Maintenance Manual.

DATE _____ INSPECTED BY _____

MONTHLY OPERATIONAL CHECKLIST

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

MODEL NUMBER _____ SERIAL NUMBER _____

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

KEEP YOUR MACHINE CLEAN!!



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

INITIAL	DESCRIPTION
_____	1. Perform all checks listed on Shift and Weekly Operational Checklists.
_____	2. Inspect the condition of hydraulic fluid in the reservoir. Oil should have a clear amber color.
_____	3. Inspect the entire machine for signs of damage, broken welds, loose bolts, improper or makeshift repairs.
_____	4. Check the pin joints and retaining rings for security.
_____	5. Check if tires are leaning in or out.
_____	6. Check that all adjustable flow valves are locked, check setting if any are not locked.
_____	7. Check that the platform does not drift down with a full load.
_____	8. Follow engine monthly service requirements. Refer to the Engine Maintenance Manual.

DATE _____ INSPECTED BY _____

QUARTERLY OPERATIONAL CHECKLIST

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

MODEL NUMBER _____ SERIAL NUMBER _____

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

KEEP YOUR MACHINE CLEAN!!



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

INITIAL	DESCRIPTION
---------	-------------

- | | |
|-------|--|
| _____ | 1. Perform all checks listed on Shift, Weekly and Monthly Operational Checklists. |
| _____ | 2. Follow engine quarterly service requirements. Refer to the Engine Maintenance Manual. |

Additional Maintenance Requirements For Severe Usage Applications.

INITIAL	DESCRIPTION
---------	-------------

- | | |
|-------|--|
| _____ | 3. Change hydraulic filter element. |
| _____ | 4. Follow the engine severe usage service. Refer to the Engine Maintenance Manual. |

DATE _____ INSPECTED BY _____



SEMI-ANNUAL OPERATIONAL CHECKLIST

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

MODEL NUMBER _____ SERIAL NUMBER _____

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

KEEP YOUR MACHINE CLEAN!!



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

INITIAL DESCRIPTION

- | | |
|-------|--|
| _____ | 1. Perform all checks listed on Shift, Weekly, Monthly and Quarterly Operational Checklist. |
| _____ | 2. Have a hydraulic fluid sample analyzed at a test laboratory. Comply with the test results and recommendations to ensure long, trouble free operation. |

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

- | | |
|-------|--|
| _____ | 3. Check the operation speeds to ensure they are within specified limits (see Machine Specifications). |
| _____ | 4. Check the emergency lowering system. |
| _____ | 5. Clean and lubricate all push button switches with dry lubricant and ensure that the switches operate freely in all positions. |

SEMI-ANNUAL OPERATIONAL CHECKLIST (Continued)....

INITIAL	DESCRIPTION
---------	-------------

- | | |
|-------|--|
| _____ | 9. Check the tightness of the platform frame and the linkage pins. |
| _____ | 10. Check the overall platform stability. |
| _____ | 11. Check the electrical mounting and hardware connections for security. |
| _____ | 12. Replace the filter element. |
| _____ | 13. Check the king pins for excessive play. |
| _____ | 14. Follow engine semiannual service requirements. Refer to the Engine Maintenance Manual. |

DATE _____ INSPECTED BY _____



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.

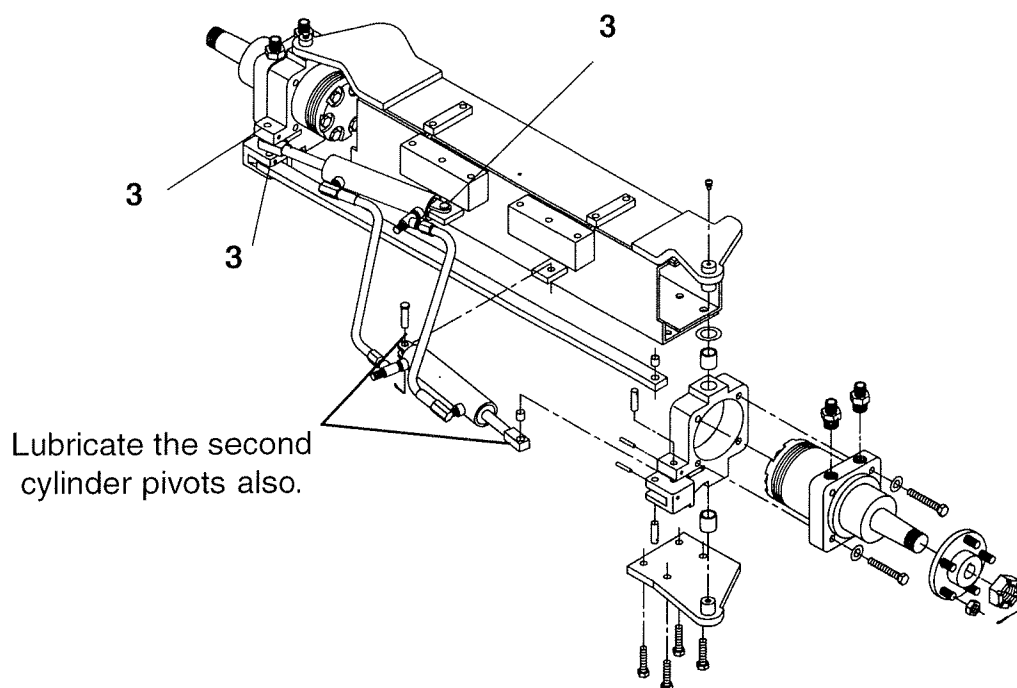
WHAT TO CHECK IF MACHINE WILL NOT START

- ◆ Selector switch turned to proper position (base/ platform)?
- ◆ Emergency stop buttons at both base and platform activated? (Rotate clockwise to release).
- ◆ 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?

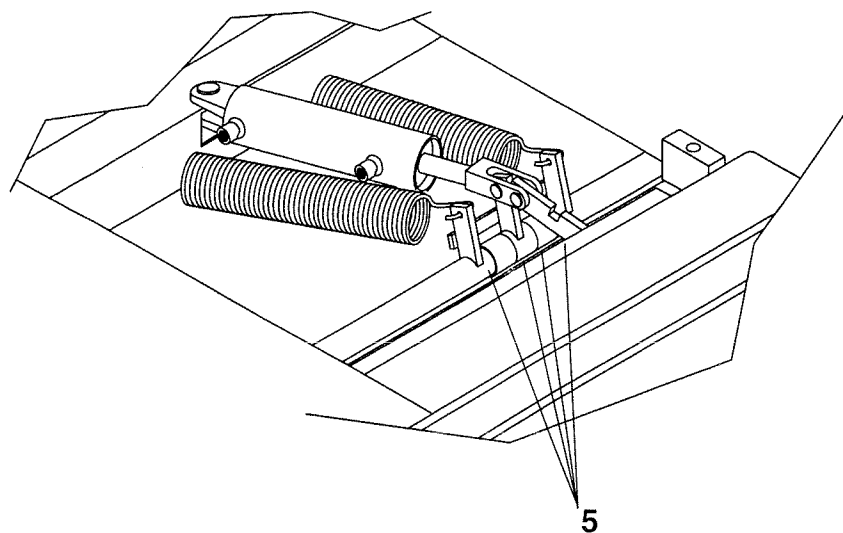
WHAT TO CHECK IF FUNCTIONS WILL NOT OPERATE:

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

LUBRICATION DIAGRAM



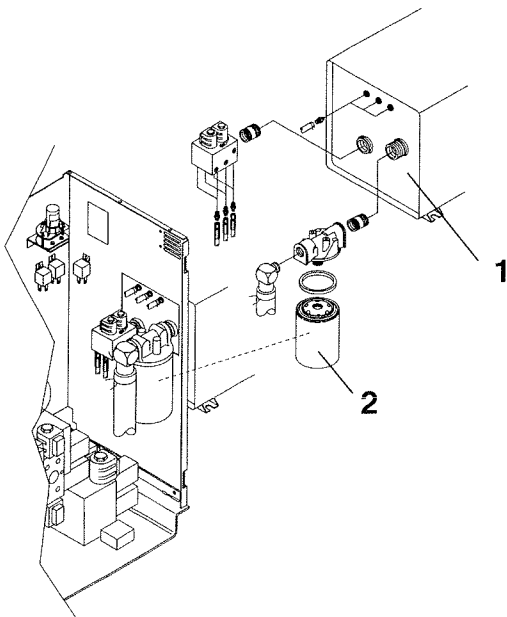
Steering Cylinder Pivot Lubrication



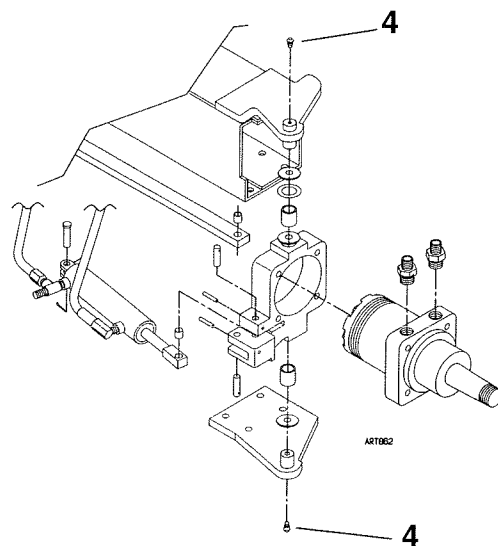
Brake Linkage Lubrication

LUBRICATION CHART

NO.	ITEM	SPECIFICATION	FREQUENCY OF LUBRICATION
1	Hydraulic Reservoir	Anti-Wear 150 SSU (ISO 32/mil spec 0-5606) Fill To 2 inches Below The Top Of The Tank	Check Daily. Analyze Every Six (6) Months Or 500 Hours. Change Yearly Or Every 1,000 Hours, Whichever Occurs First.
2	Hydraulic Filter	Filter Element	Change Every Six Months Or 500 Hours, Whichever Occurs First For Normal Usage. Change Every Three Months Or 300 Hours, Whichever Occurs First For Severe Usage.
3	Steering Cylinder Pivot	Gear Oil - EP 90 Add A Few Drops To Each Pivot Point.	Weekly Or Every 25 Hours, Whichever Occurs First.
4	Rear Axle Spindle	Lithium N.L.G.I. #2 EP Purge Old Grease.	Weekly Or Every 25 Hours, Whichever Occurs First.
5	Brake Linkage	Gear Oil - EP 90 Add A Few Drops To Each Pivot Point.	Weekly Or Every 25 Hours Whichever Occurs First.



Hydraulic Lubrication



Rear Axle Spindle Lubrication



Limited Owner Warranty

Mayville Engineering Company, Inc. (MEC) warrants its equipment to the original purchaser against defects in material and/or workmanship under normal use and service for one (1) year from date of registered sale or date the unit left the factory if not registered.

MEC further warrants the structural weldments of the main frame and scissor arms as defined in MEC's current Warranty Policy & Procedures, to be free from defects in material or workmanship for five (5) years from date of registered sale or date unit left the factory if not registered. Excluded from such warranty is the battery(s) which carries a ninety (90) day warranty from described purchase date and prorated thereafter up to one (1) year.

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

Mayville Engineering Company, Inc. shall not be liable for any consequential, incidental or contingent damages whatsoever. Use of other than factory authorized parts; misuse, improper maintenance, or modification of the equipment voids this warranty.

The foregoing warranty is exclusive and in lieu of all other warranties, express or implied. All such other warranties, including implied warranties of merchantability and of fitness for a particular purpose, are hereby excluded.

No Dealer, Sales Representative, or other person purporting to act on behalf of MEC is authorized to alter the terms of this warranty, or in any manner assume on behalf of MEC any liability or obligation which exceeds MEC's obligations under this warranty.





Aerial Work Platforms

Mayville Engineering Co., Inc.

An Employee Owned Company

210 Corporate Drive • P.O. Box 990 • Beaver Dam, WI • 53916-0990 USA

1-800-387-4575 • PH: 920-887-2518 • FAX: 920-887-2480

Email: awp@mayvl.com • Web: www.mayvl.com