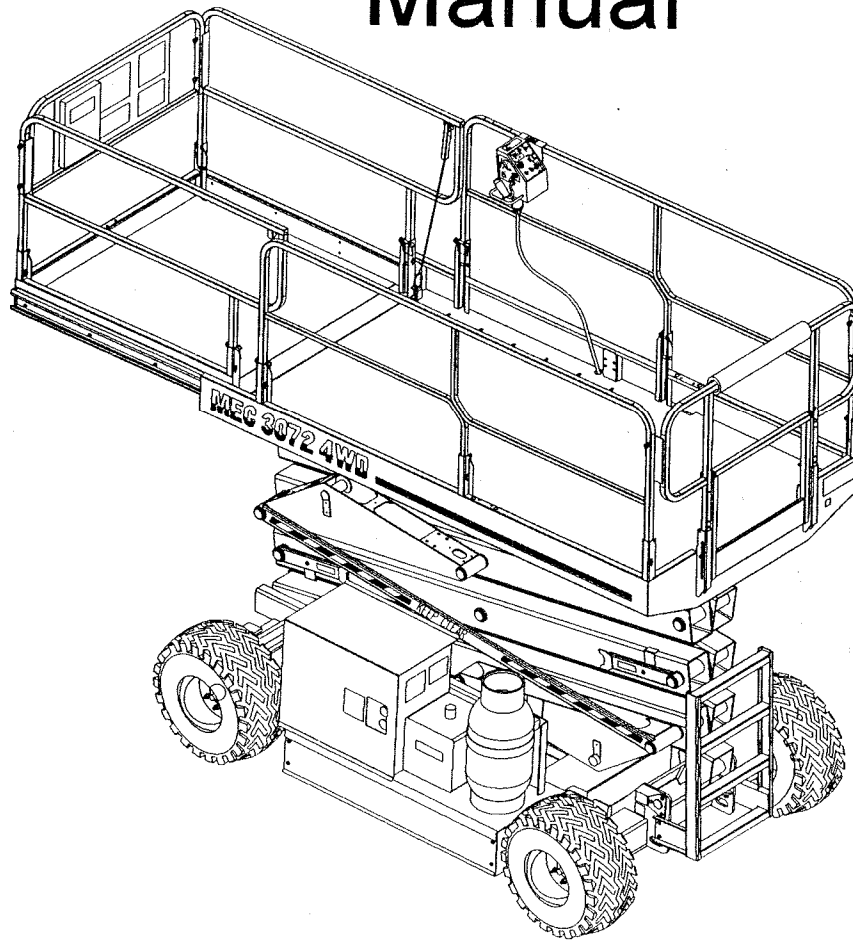


MEC 3072 4WD

Operation, Safety & Maintenance Manual



This manual is considered an important part of the aerial work platform. It is vital to communicate the necessary safety information to the operator. The operator must be familiar with the manual and reference it as required.

#9240

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 purchased 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.

Foreword

The purpose of this manual is to provide users with the operating procedures essential for the promotion of proper machine operation for its intended purpose. It is important to over stress proper machine usage. All information in this manual should be **READ** and **UNDERSTOOD** before any attempt is made to operate the machine. **YOUR OPERATING MANUAL IS YOUR MOST IMPORTANT TOOL** - keep it with the machine. **REMEMBER THAT ANY EQUIPMENT IS ONLY AS SAFE AS THE OPERATOR.**

BECAUSE THE MANUFACTURER HAS NO DIRECT CONTROL OVER MACHINE APPLICATION AND OPERATION, PROPER SAFETY PRACTICES ARE THE RESPONSIBILITY OF THE USER AND ALL OPERATING PERSONNEL.

ALL INSTRUCTIONS IN THIS MANUAL ARE BASED ON THE USE OF THE MACHINE UNDER PROPER OPERATING CONDITIONS, WITH NO DEVIATION FROM THE ORIGINAL DESIGN. ANY ALTERATION AND/OR MODIFICATION OF THE MACHINE IS STRICTLY FORBIDDEN WITHOUT EXPRESS WRITTEN APPROVAL FROM MAYVILLE ENGINEERING COMPANY, INC.

All procedures herein are based on the use of the machine under proper operating conditions, with no deviations from original design intent as per ANSI regulations.

Read and Comply

The ownership, use, service and/or maintenance of this machine is subject to various federal, state and local laws and regulations. It is the responsibility of the owner/user to be knowledgeable of these laws and regulations and comply with them. The owner/user/operator must be familiar with Sections 6, 7, 8, 9 and 10 of ANSI A92.6 Standard. These sections contain the responsibilities of the owners, users, operators, lessors and lessees concerning safety, training, inspection, maintenance, application and operation.



Any modification of this machine without the express written consent of the manufacturer is prohibited. Do not replace any component or part with anything other than the original MEC replacement parts without the manufacturer's consent.

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/SIAA92.6 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.



Failure to comply with safety precautions could result in death or serious injury.

Shut off all power, making the machine inoperative before making any adjustments, performing maintenance, or replacing components.

Platform should be in the fully stowed position if possible, or maintenance locks should be in place.

Hydraulic pressures should be relieved before loosening or replacing components.

Do not replace any component or part with anything other than original MEC replacement parts without the manufacturers consent.

Remove all rings, watches, and jewelry before performing any maintenance.

Restrain long hair, and do not wear loose clothing or neckties which could become caught or entangled in the equipment.

Observe and obey all warnings and cautions on machines and in manuals.

Keep oil, grease, water, etc. wiped from all standing surfaces and hand holds.

Use only approved, non flammable cleaning solvents.

Altering or disabling safety devices is strictly prohibited.

TABLE OF CONTENTS

| | |
|-------------------------------|----|
| Limited Owner Warranty | 2 |
| FOREWORD | 3 |
| Read and Comply | 3 |
| Fall Protection | 4 |
| SAFETY | 8 |
| PRE-DELIVERY INSPECTION | 11 |
| PRESTART INSPECTION | 12 |
| WORKPLACE INSPECTION | 18 |
| OPERATION | 19 |
| MAINTENANCE | 25 |
| TRANSPORTING | 27 |
| 3072 4WD SPECIFICATIONS | 28 |
| DECALS | 32 |
| CHECKLISTS | 36 |

WARNING

Do not perform installations, operate, service, replace, adjust, or maintain equipment on this machine until you have thoroughly read and understood all sections of the manual that apply to the job you are doing on this machine.

Failure to comply with all warnings posted on this machine and written in this manual could cause death, serious injury, or property damage.

SAFETY



Following are definitions of labeling you might encounter on aerial platforms:

Caution - Yellow - Hazards or unsafe practices which could result in minor personal injury or product damage.

Warning - Orange - Hazards or unsafe practices which could result in severe personal injury or death.

Danger - Red - immediate hazards which **will** result in severe personal injury or death.

MEC designs its work platforms to be safe and reliable. They are rugged and maneuverable, but must be used only for purposes intended. **That is to raise personnel, tools, and necessary equipment to overhead work areas.** Respect your machine; **do not** neglect or misuse it.

Do not operate or maintain this machine until this manual is read and operation of the machine, under the supervision of an experienced and qualified operator, has been completed.

Qualified Operator - A person with knowledge, experience, or training that is familiar with the operation to be performed and the hazards involved.

Never take chances. Do not use the machine if your physical or mental capabilities are limited. Due to illness or tiredness, or if you are taking over the counter or prescription drugs that might impair or limit your capabilities.

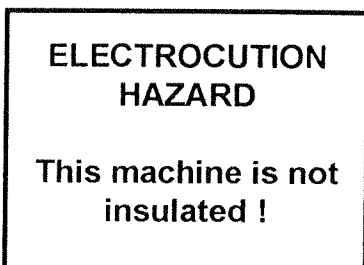
Certain hazards cannot be protected by mechanical means. It is essential that operators be competent, careful, physically and mentally fit and thoroughly trained in the safe operation of this machine.

If an individual fails to understand any segment of this manual, his or her supervisor can clarify the misunderstanding through written correspondence or a phone call to:

Mayville Engineering Co., Inc.
Aerial Work Platforms
715 South Street
Mayville, WI 53050 USA
Phone: 920-387-4500
800-387-4575
Fax: 920-387-5817

It is **important** that Mayville Engineering be notified immediately of any incident involving a MEC product. Even if no injury or property damage is visible. Failure to notify the manufacturer of an incident involving a MEC product within 48 hours, may void any warranty consideration on that particular machine.

SAFETY



Do not operate machine near power lines.

Do not allow machine, personnel, or conductive materials inside minimum safe approach distance. Allow for platform movement and wire sway or sag.

Assume all electrical parts and wires are energized unless known otherwise.

Keep it Safe !

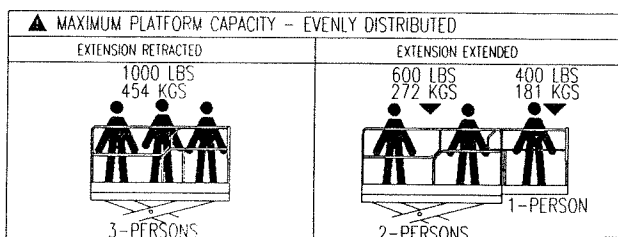
Under **no** circumstances will any person on the ground attempt to operate the base controls when the machine is in contact with electrical wires .

| Voltage Range Phase to Phase Minimum Safe Approach Distance | Feet | Meters |
|--|---------------|--------|
| | AVOID CONTACT | |
| 0 to 300V | | |
| Over 300V to 50 KV | 10 | 3.05 |
| Over 50 KV to 200 KV | 15 | 4.60 |
| Over 200 KV to 350 KV | 20 | 6.10 |
| Over 350 KV to 500 KV | 25 | 7.62 |
| Over 500 KV to 750 KV | 35 | 10.67 |
| Over 750 KV to 1000 KV | 45 | 13.72 |

Failure to meet minimum weight requirements may cause machine instability.

Replace tires with manufacturer's equipment only.

Do not exceed the load capacity of the platform.



Do not enter or exit platform while machine is in motion.

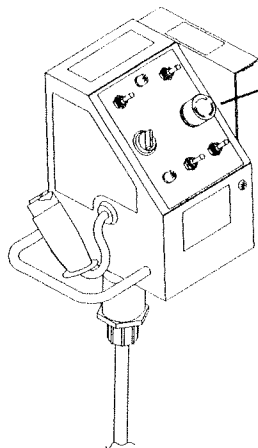
Keep platform floor clean and clear of debris.

Keep hands and limbs out of scissors.

Machine will move at less than 1 mph (1.6 kmh) when the platform is raised above approximately 10 feet (3.1m). Maximum ground speed with platform raised less than 10 feet (3.1m) is 1-2 mph (1.6-3.2 kmh).

SAFETY

Safety Features



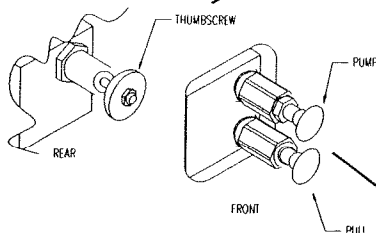
Emergency Stop - The Emergency Stop is a plunger type switch and is located in two places: on the upper control box and on the base control panel. Activate the Emergency Stop by depressing the red cap. To reactivate machine turn the red cap approximately a quarter turn clockwise until the cap pops out.

Speed Limit Switch - This switch limits driving speed when the platform is raised above approximately 10 feet (3.1 m). **Do not** alter or disable limit switches.

Automatic Parking Brake - The Automatic Brake is a spring-actuated, normally **on** system. Brakes are released during the drive cycle.

To Manually Lock Out Brakes: Turn thumbscrew clockwise until completely closed. Pump upper plunger until it has built up pressure and stops.

To Release Locked Out Brakes: Turn thumbscrew counter clockwise until fully open. The machine is in normal Drive/Lift mode with the thumbscrew in this position.

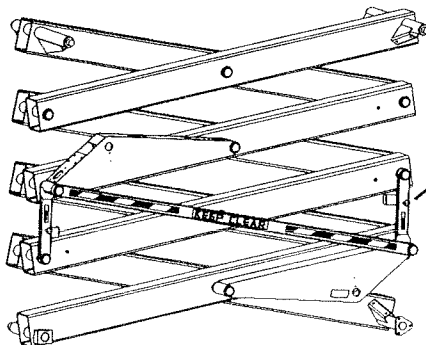


Emergency Down - If the platform cannot be lowered by the operator at the upper control box or base controls, the Emergency Down Controls are located on the left side of the unit, at the hydraulic cabinet.

To Lower Platform: Pull lower plunger out and hold. At the same time, pump uppermost plunger. To stop platform, release lower plunger.

Maintenance Locks **must** be used whenever machine is not in the fully stowed position.

Maintenance Lock Installation



- Remove load from platform.
- Raise platform until both maintenance locks can be pivoted, 1 up, 1 down.
- Pull release pin ring on rear maintenance lock and swing lock down, so notched end of lock is directly above pin.
- Pull release pin ring on front maintenance lock and swing up so notched end of lock is directly below pin.
- Hold front lock in position, slowly lower platform until beams rest completely on both locks.

Maintenance Lock Stowage

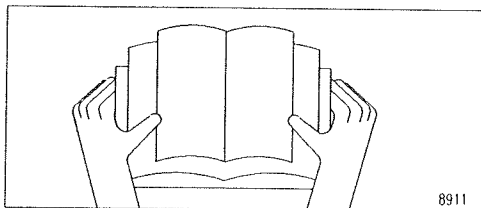
- Raise platform far enough so each maintenance lock will clear pins.
- Pull release pin on each lock and swing until even with beam.
- Align release pin with hole in beam and release engaging pin in beam.
- Lower platform to stowed position.

PRE-DELIVERY INSPECTION

- Maintenance Locks **must** be engaged prior to inspecting or servicing machine, when it is not in the fully stowed position.
- Remove all packing materials and inspect machine for damage during shipment. If any damage is found, please note it on the freight bill and report it to the shipper.
- Every machine is fully assembled when shipped from the factory. The fluid levels & fuel must be checked and added as required before initial use. Perform the Walk - A - Round Check as described checking for any possible operation problems. Have any problems corrected before using the machine.
- Record any missing or incorrectly located safety decals. Order and install before use. **All safety decals must be installed before use.** See decal layout at the back of this manual.
- Check each item in the Frequent Inspection Checklist as the inspection is performed. If any item is found to be incorrect make the necessary correction and check the repaired column.
- Reset both emergency stop switches.
- Press circuit breakers on base control panel to reset the breakers in case it has been tripped.

Note

File warranty claims according to policies and procedures which are listed in publication # 5638.



Equipment Literature

The machine is shipped with the following literature, which is inserted in the manual case located at the front rail of the platform.

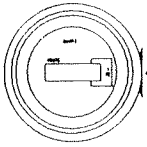
Material Safety Data Sheet - #6535
3072 4WD Operating Safety and Maintenance Manual - #9240
ANSI/SIA Manual of Responsibilities - #7822
Dealer Pre-Delivery Inspection Form - #7197
Warranty Registration Card - #5524
EMI Safety Manual - #7004

Replacement literature and parts manuals can be ordered by contacting the factory. To help us serve you, please be prepared to provide the complete publication name and part number.

PRESTART INSPECTION

This section provides identification of all controls and indicators. Check all controls and their functions.

Lower Control Panel



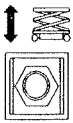
Operation Hour Meter - Optional meter records the number of hours unit has been operated.



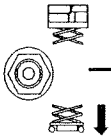
Emergency Stop Switch - Press red cap of switch. All power is turned off. To reset switch, turn red cap approximately 1/4 turn clockwise until cap "pops" out.



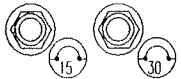
On/Off Switch - Primary power switch. Turn switch to "off" and remove key at the end of each operation.



Up/Down Switch - Up position raises platform. Down position lowers platform. Switch will return to center or neutral position when released.



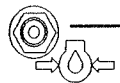
Base/Platform Switch - Power to controls at the platform or the base. Base controls will not operate unless switch is in the base position. Switch will return to platform position when released.



Circuit Breakers - Provide protection to the electrical system. When pushed in power will flow, When sticking out power is interrupted. Reset by pushing in.



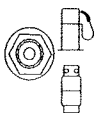
Alternator - glows when battery is no longer being charged.



Engine Oil Pressure - glows when engine oil pressure drops to an unsafe level.



Engine Temperature - glows when engine coolant reaches an unsafe temperature.



Gas/LP - Choose fuel type.



Engine Run/Idle - Selects engine running speed. Idle to start (snail), Run (rabbit) for higher engine speed.

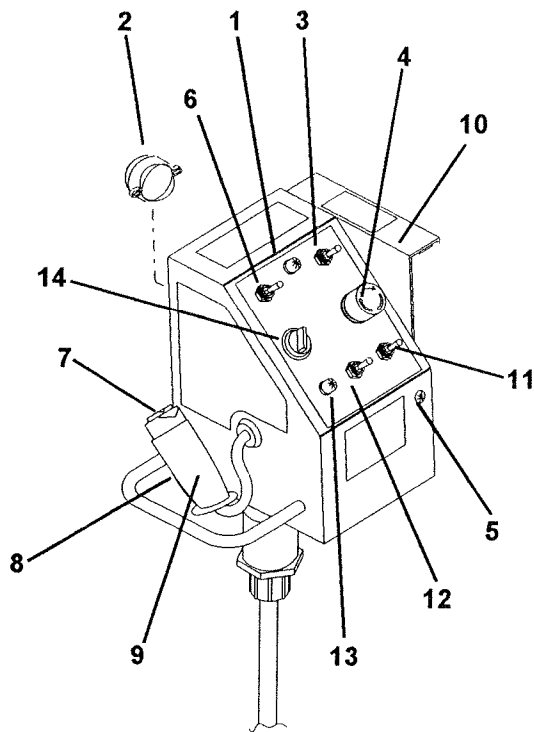


Choke - Push up to activate. Engine must be choked when starting cold on either fuel.



Engine Start/Run/Stop - Base control must be selected, on/off keyswitch is on, & select fuel type, before starting. Push up to start. Switch will return to run position for normal operation. Off to stop engine.

PRESTART INSPECTION



Upper Control Box - The control box can be removed by twisting plug on the box bottom counterclockwise. The box can then be secured elsewhere to prevent unauthorized use.

1. **Tilt Warning Light** - Optional light illuminates if unit is not level and platform is being raised.

2. **Tilt Alarm** - Optional alarm that sounds if unit is not level and platform is being raised.

3. **Torque On/Off Switch** - ON switch provides more power for driving particularly for going up an incline. (up to 35% gradeability) Ground speed is limited to 1-1/2 mph (2.4 kmh) with Torque On. Normal power in off position.

4. **Emergency Stop Switch** - Press red cap of switch. All power is turned off. To reset switch, turn red cap approximately a 1/4 turn clockwise until cap "pops" out.

5. **Horn Button** - Option, press button to sound horn, release button to stop.

6. **Mode Select Switch** - Lift, control handle will raise or lower platform. Drive, control handle will control steering and driving.

7. **Steering Thumb Switch** - Front wheels turn left when left side of rocker is pressed. Front wheels turn right when right side is depressed. Switch will return to neutral position when released. Wheels will remain in the last position until switch is pressed to move them to another position. The wheels will not straighten themselves.

8. **Enable Bar** - Must be held to use control handle. If bar is released movement of the machine will stop.

9. **Control Handle, Drive** - Pushing handle toward front of machine causes machine to move forward. Pulling handle toward rear of machine causes machine to move backwards. Handle returns to neutral position when released. Ground speed will increase as handle is pushed farther away from neutral.

Control Handle, Lift - Pulling handle toward rear of machine will raise platform. The further back the handle is pulled the faster the platform will lift. Pushing handle toward front of machine will lower platform. Lowering of the platform is at a fixed speed. Handle returns to neutral position when released.

10. **Holder Bracket** - Allows control box to be securely on the railing and positioned to operator preference.

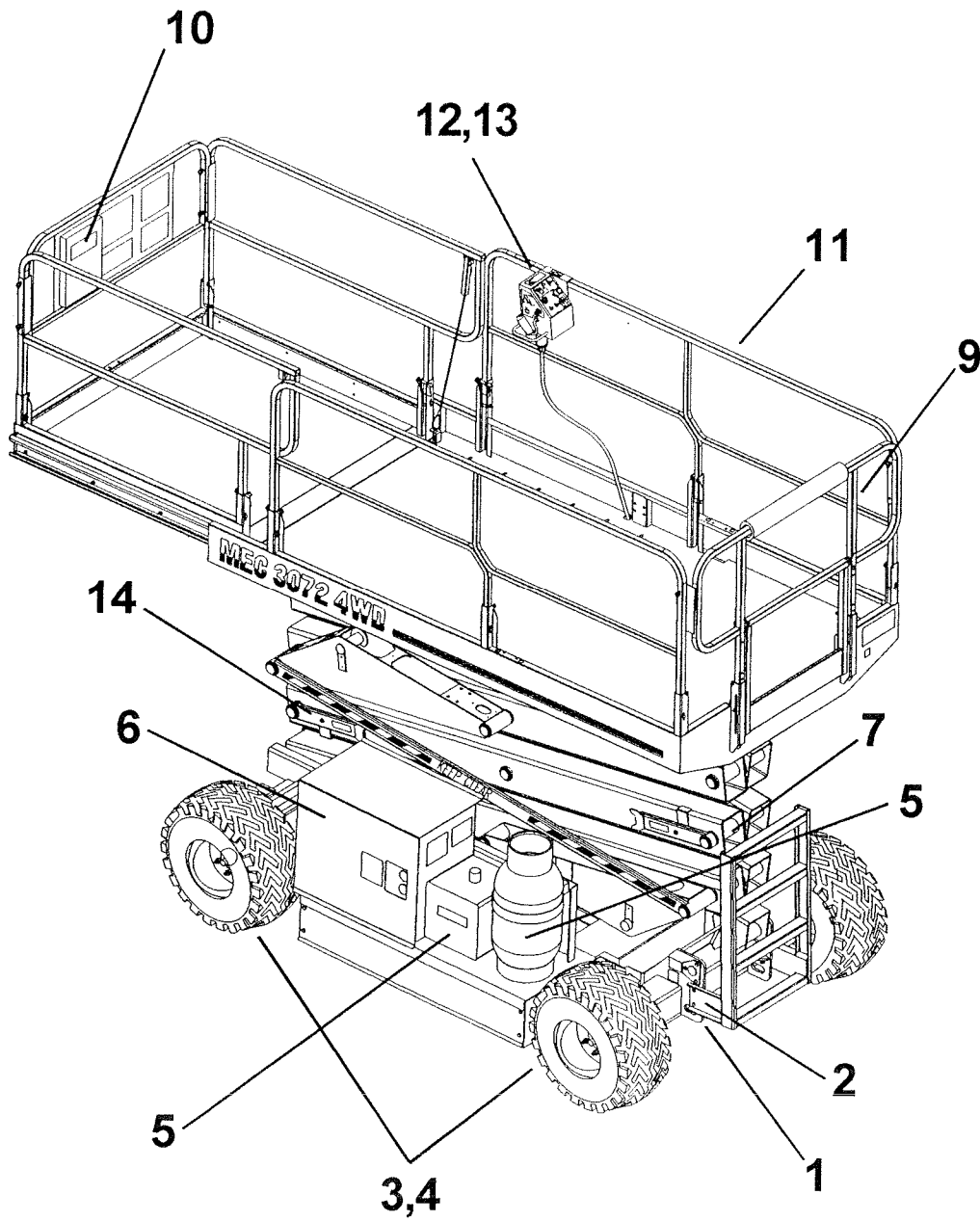
11. **Engine Run/Idle** - Selects running speed. Idle to start, Run for faster speed.

12. **Choke** - Engine must be choked when starting cold on either fuel.

13. **Oil Pressure** - Glows when engine oil pressure drops to an unsafe level.

14. **Engine Off/Run/Start** - Primary power switch.

PRESTART INSPECTION



PRESTART INSPECTION

MEC Aerial Work Platform Walk-A-Round Check

The Walk-A-Round Check is performed by the operator **before** using the unit for the first time of the day, or by a new operator even if the unit has been used during any part of the day. This check is **critical** to ensuring the **safe** operation of the unit. Any adjustments or replacement of damaged parts **must** be done **before** operation of unit.

When performing the check, visually inspect for obvious damage to specific parts of the unit including:

- Corroded, loose, or missing fasteners.
- Broken or leaking hydraulic, air, or fuel lines and filters.
- Worn, broken, or frayed insulation on power cables and wiring.
- Corroded, cracked, abraded, or bent structural members or welds (beams, frame, platform, pins, etc.)
- Review all operational and safety decals and placards, so that they are legible.

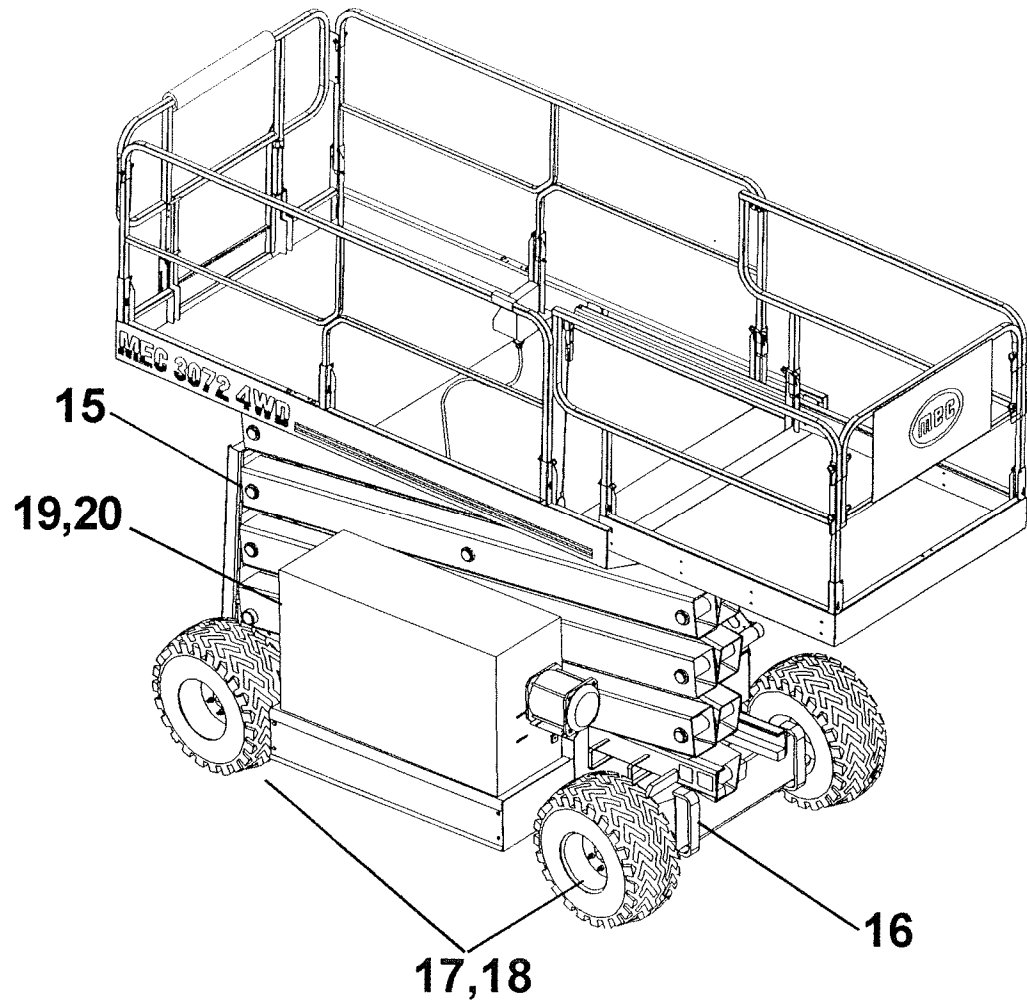
Begin the check by standing at the rear, center of the unit. Raise and lower the unit as necessary to view specific parts, or to mount and dismount the platform. **Use maintenance locks when machine is not in the stowed position.** The number of the check in the listing matches a corresponding number in an illustration to help the operator understand and locate the check to be performed.

1. Tiedown Rings - Check for broken welds and secure attachment.
2. Ladder - Check ladder for secure and proper installation and obvious damage.
3. Tire Condition - Check for excessive wear and damage to tires. Check tire pressure, see tire sidewall for manufacturer's recommendation.
4. Wheel Condition - Check wheels for bent rims and any loose or missing lug nuts. **Weekly** - Torque nuts to 75-85 ft. lbs. (102-115 N M).
5. The gasoline tank must be filled with unleaded regular gasoline.
6. Hydraulic Fluid Level - **Weekly** - Fluid should be visible within 2 inches (5.1 cm) of the top of the tank.
7. Broken Welds on Scissors Pivot Collars - Check for broken welds on scissors where each pivot pin collar is attached.
8. LPG tank is shipped approximately 1/2 full.
9. Rear Closure - Check rear closure for loose or missing fasteners and obvious damage. Check that it is secure and operates properly.

Mount Platform

10. Platform Railings - Check all railings for secure and proper installation and obvious damage.
11. Manual Case - Check that all documents are in case on front railing. You will find a list of documents on page 11.
12. Upper Control Box Assembly - Check for obvious damage to switches, indicators and guards.
13. Test upper control box assembly controls and indicators:
 - a. Steer left and right.
 - b. Drive forward/reverse at various speeds with TORQUE OFF.
 - c. Operate brakes on a grade.
 - d. Drive forward/reverse at various speeds with TORQUE ON.
 - e. Raise platform 15 - 20 feet (4.6 - 6.1 m). Drive forward to check the fast drive speed cut out with platform raised.
 - f. Raise platform to full extension at various speeds.
 - g. Lower platform to stowed position.
 - h. While slowly driving forward or backward, press emergency stop. Unit will stop quickly and completely.
 - i. Turn red cap of emergency stop switch 1/4 turn clockwise until cap "pops" out.
14. Maintenance Locks - Check locks for secure attachment to pivot pin with retaining ring and is not bent. Check receiver for damage. Check that storage pin is in place on lock and securely holds lock in secured position.

PRESTART INSPECTION



PRESTART INSPECTION

Lower Platform and Dismount

15. Broken Welds on Scissors Pivot Collars - Check for broken welds on scissors where each pivot pin collar is attached.
16. Tiedown Rings - Check for broken welds and secure attachment.
17. Tire Condition - Check for excessive wear and damage to tires. Check tire pressure, see tire sidewall for manufacturer's recommendation.
18. Wheel Condition - Check Wheels for bent rims and any loose or missing lug nuts. Weekly - Torque nuts to 75 - 85 ft lbs. (102-115 N M)
19. Lower Control Panel - Check for obvious damage to switches, indicators, and guards.
20. Check Operation of Base Controls:
 - a. Hold the base/platform switch in the base position.
 - b. Hold the up/down switch in the up position to raise platform a few feet (a meter). Release switches.
 - c. Press emergency stop. Hold base/platform switch in base position and toggle the up/down switch both up and down. No platform movement should occur.
 - d. Turn red cap of emergency stop switch 1/4 turn clockwise until cap "pops" out.
 - e. Hold the base/platform switch in the base position and hold the up/down switch in the down position, lowering platform to the stowed position. Release switches.



All pivot areas of scissors and lift cylinder must be checked for wear. A loud scraping noise means the D.U. bearings are damaged and need replacing. Failure to do so will result in extensive damage to structural members and bushings which could create a hazardous condition and could result in injury or death to personnel.

Owner of unit will ensure that an annual inspection is performed no later than thirteen months from the date of the last inspection.

WORKPLACE INSPECTION

The operator **must** check the area where the machine will be used for possible hazards such as:

- Holes or Drop Offs
- Bumps and Floor Obstructions
- Debris
- Overhead Obstructions
- High Voltage Conductors
- Hazardous Locations and Atmospheres
- Inadequate Surface to Hold Weight of Machine
- Wind and Weather
- Presence of Unauthorized People
- Slopes and Unstable Surfaces

And Any Other Possibly Unsafe Conditions

OPERATION



WARNING

Read and understand all safety rules and operating instructions. Improper use of this machine could result in serious injury or death.



WARNING

Do not operate machine from lower control panel with personnel on platform, except in an emergency.

Modifications to the machine will only be made with prior written permission by manufacturer. This includes attaching any framework or mounting attachments for holding tools or materials on the platform or guardrails.

Wear safety equipment as required by worksite rules.

Look for and report any hazardous locations.

Be sure there is no slope or grade exceeding the units rating.

Use any stabilizing mechanisms. (outriggers etc.)

Guardrails installed and any gates or closures are shut.

When around other equipment, precautions **must** be taken to comply with local rules or safety standards established for the workplace. Warnings such as but not limited to: flags, roped off areas, flashing lights, and barricades **will** be used.

The operator **will** prevent use by unauthorized persons.

The machine **must** not be used as a crane, or to push, pull or support another object.

The machine **cannot** be operated from a truck, trailer, railway cars, floating vessels, scaffolds, or other similar equipment.

Capacities **will not** be exceeded.

Personnel **must** keep a firm footing on the platform floor. Use of boards, ladders, or any other devices on the machine for achieving additional height or reach are prohibited.

Immediately report any problems or malfunctions that become apparent. Any problems or malfunctions **will** be repaired before continued use.

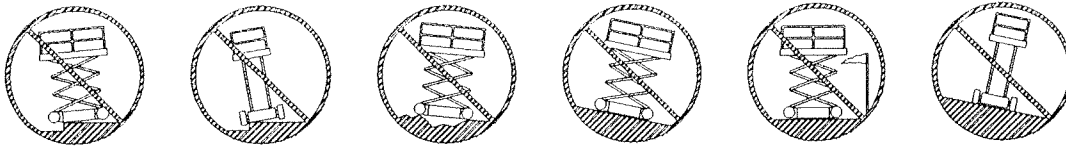
Minimum safe approach distances to all electrical parts and wires. See chart in safety section. **Machine is not insulated !**

Maintain a safe distance from overhead obstructions.

Carrying materials larger than the platform (drywall etc.) **must** be evenly distributed and be safely handled by people working on the platform.

Stunt driving and horseplay are prohibited !

OPERATION



WARNING

If tilt alarm sounds and/or tilt light illuminates when platform is raised, lower platform completely and reposition machine so it is level.

Limit speed according to area conditions. i.e. ground conditions, congestion, visibility, slope, and people.

Maintain a clear path of travel. Stay a safe distance from obstacles, debris, drop offs, holes, depressions, ramps, and other hazards.

The machine **must** not be positioned against another object to steady the unit.

If unit becomes caught or prevented from normal motion by structures or obstacles, all personnel **will** be removed before attempting to free unit.

Care shall be taken to prevent rope, electric cords, and hoses, etc. From becoming tangled in the machine.

The operator **must** be sure that area is clear of personnel and equipment before lowering platform.

When fueling or charging batteries the machine **will** be shut down. This **must** be done in a well ventilated area, free of flame, sparks or other hazards which may cause fire or explosion. **No Smoking !**

Altering or disabling safety devices is prohibited !

WARNING

Platform extension must be locked in place at all times.

Sheet loading gate must be in lowered locked position before operating from platform.

Entrance gate/chain must be in closed position before operating from platform.

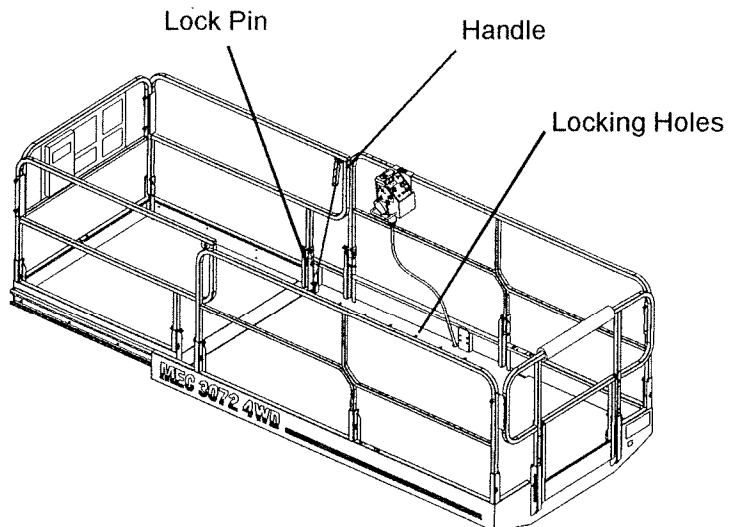
Failure to follow instructions could cause death, personal injury and property damage.

Extending Extended Platform

With your right hand, squeeze handle and hold so pin disengages from locking holes. Locking holes are spaced 6" (15.3 cm) apart.

With your left hand, grasp rail and push platform out to desired position.

Release handle so lock pin securely engages in one of the locking holes in platform.



Retracting Extended Platform

With your right hand, squeeze handle and hold so pin disengages from locking holes. Locking holes are spaced 6" (15.3 cm) apart.

With your left hand, grasp rail and pull platform in to desired position.

Release handle so lock pin securely engages in one of the locking holes in platform.

OPERATION



Always use “three point contact” when entering or exiting the platform.

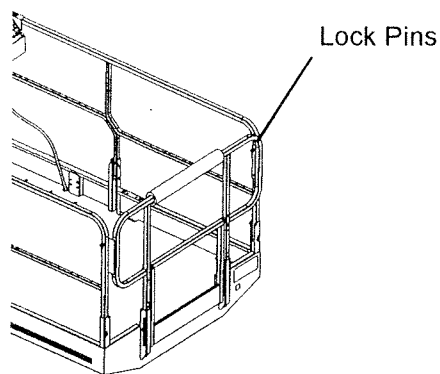
Meaning: 3 out of 4 arms and legs are in contact with the machine at all times.

Never enter or exit platform while machine is moving.

Sheet Loading Gate

To Raise Gate:

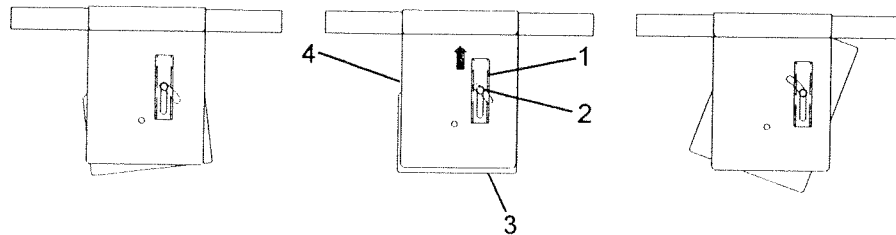
1. Pull out wire lock pin located on rear gate rail.
2. Slide upper section of gate up and align lock pin with hole.
3. Insert lock pin into hole.



To Lower Gate:

1. Pull out wire lock pin located on rear gate rail.
2. Slide upper section of gate all the way down and align lock pin with hole.
3. Insert lock pin into hole.

OPERATION



Adjustable Control Box

1. Lock Bracket ----- Move bracket up, in direction of arrow, to lock control box onto railing.
2. Thumbscrew ----- Loosen thumbscrew to allow bracket to move. Position control (Not Shown) box to the desired angle. Tighten screw to secure control box.
3. Control Box ----- In this view it is in the centered position.
4. Control Box Holder Bracket ----This allows the Control Box to be placed securely on the railing. The angled slot allows the Control

A "time-out" will occur if the enable bar on the joystick is depressed for more than 20 seconds without actuating any other controls. Release the enable bar and joystick for 1 second then depress bar and move joystick this will reactivate the controls.

OPERATION



WARNING

FLAMMABLE LIQUIDS

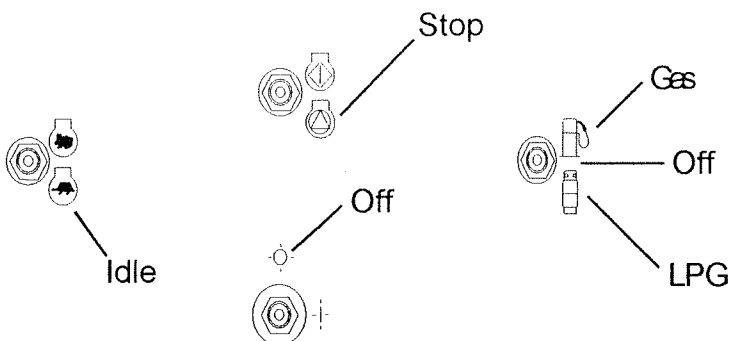
Do not smoke or use other combustibles while changing LPG tanks.

Do not change tanks near flames or sparks. Escaping fumes could cause explosion if ignited by flame or spark.

Switching Fuel Types

The engine is designed to run on either gasoline or LPG. Switching from one fuel type to the other can be accomplished only from the base, using the LP/OFF/GAS selector on the lower control panel. Make the switch while the engine is running.

While the engine is running, place the LP/OFF/GAS selector in the OFF position. When the engine begins to hesitate immediately place the selector in the GAS or LP position. It is important that the former fuel be consumed by the engine before using the new fuel selection.

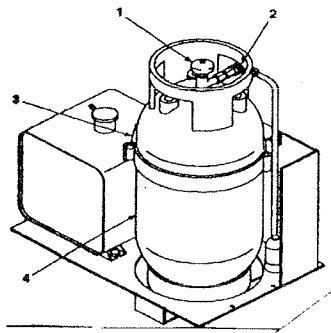


Machine Shutdown

1. Lower the platform fully.
2. If the engine has been operating at high speed, allow it to idle for a few minutes. The engine temperature will drop and equalize throughout the engine block.
3. Shut off the engine by placing the START/RUN/STOP selector in the STOP position.
4. Place the LP/OFF/GAS selector in the OFF position. This shuts off both fuel valves.
5. Shut off the master keyswitch and remove key.

Changing LPG Tank

The replacement tank must contain fuel manufactured to Natural Gas Processors Association Specification HD-5. No other LPG fuel is recommended for use in this engine.



1. Close shut off valve on top of fuel tank.
2. Start engine on LPG fuel and run until engine stops. Purging the fuel lines.
3. Disconnect fuel hose fitting from tank valve.
4. Release tank strap latches and carefully lift tank from its bracket.
5. Position new tank so that valve outlet aligns with fuel hose fitting.
6. Connect fuel hose fitting to tank valve.
7. Secure tank strap latches.
8. Connect fuel line to fuel shut off valve on tank.
9. Use soapy water to check fuel line for leaks. Check connections for leaks. Repair leaks immediately.

MAINTENANCE



WARNING

Keep machine clear of lubricants and other combustible material.

Maintenance Safety

Disconnect all power before maintaining machine.

Check that all controls are in the **off** position.

Secure machine from any movement.

Put platform in **fully stowed** position. If this is not possible use maintenance locks.

Relieve all hydraulic pressure before loosening or removing hydraulic components.

Replace all components with those that are equal or identical to the original.

Lubrication & Fluids

The aerial work platforms are almost lubrication free. Pivot points within the scissors include self-lubricating bearings. Other requirements:

Rails.....Sheet Gate Slide Area.....Light Grease.....Semi-annually

Scissors.....Platform Slides (1).....Light Grease.....Semi-annually

Base Slides (2).....Light Grease.....Semi-annually

Rear Axle.....Rear Hubs.....Bearing Grease.....Annually

Hydraulics.....Hydraulic Oil.....Standard 10W.....Annually
Non-Detergent
Hydraulic Oil

Hydraulic Oil Filter.....10 Micron.....Annually
Spin On
Oil Filter



WARNING



Do not powerwash or spray electronic components or connectors. Moisture may cause damage and/or erratic operation.

MAINTENANCE



WARNING

Never inspect hydraulic hoses with hands. Escaping fluids can cause serious injury. Use a piece of cardboard or other material to inspect for leaks. Escaping fluid under pressure can be invisible and penetrate the skin, causing serious injury.

If any fluid is injected into the skin, seek medical attention immediately.

Hydraulic System Bleeding

The hydraulic system is self-bleeding. After the system has been drained, such as during the replacement of a hydraulic component, move the machine up and down for six cycles and recheck the reservoir fluid level between each cycle. Fill as required.

Hydraulic Pump/Motor Servicing

The brushes and commutator should be checked every six months and replaced if necessary $\frac{1}{4}$ " minimum length on brushes.

Time spans vary depending on how the machine is used.

Check and Fill Hydraulic Reservoir

1. Lower platform to **fully stowed** position.
2. Remove filler cap by turning to the left.
3. Check hydraulic fluid level. Fluid should be 2 inches (5.1 cm) from the top of the tank. Add fluid as necessary.
4. Replace filler cap.
5. Keep fluid clean during storage and use.

Oil Filter Replacement

The spin-on oil filter in the hydraulic system should be changed yearly.

Replace with filter part number: **6156 only**.

Service Helps

If machine is not functioning, check the following items **BEFORE** calling a service technician:

1. Base control switch is not in base position on control panel.
2. Circuit breaker needs to be reset.
3. Emergency stop switch is activated. (Either on lower control panel or upper control box.) to reset turn red cap approximately a quarter turn clockwise until the cap pops out.

TRANSPORTING

Loading, Unloading and Transporting

Common sense and planning must be used to control the movement of the machine when loading, unloading or transporting.

The transport vehicle must be parked on a level surface and secured to prevent rolling while the machine is being loaded.

Vehicle capacity, loading equipment, and surfaces must be capable of supporting machine weight and meeting ANSI/OSHA Standards. The platform of the machine must remain fully stowed during all loading, unloading and transporting.

The machine must be secured to the transport vehicle with chains or straps of ample load capacity. The tiedown loops are provided to secure the unit during transportation.

The machine may be towed, from the winch point, up to 1,000 ft. (305 m) at a speed no greater than 3 mph (4.8 kmh).

To tow the unit, the Brake Lockout Lever must be raised when energizing a drive function and held until locked. If a drive function doesn't work, the two compression springs must be loosened by backing off the retaining bolts.

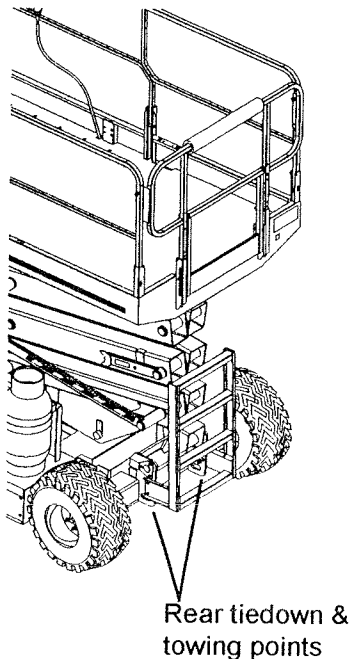
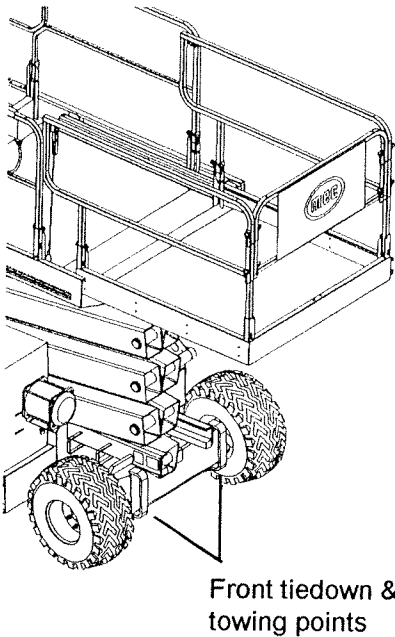
Parking and Storing

Drive the machine to a reasonably well protected and ventilated area.

Make sure the platform is in the fully stowed position.

Depress red caps on Emergency Stop Switches.

If necessary, cover the caution and warning decals and the control box so they will be protected from the environment.



3072 4WD SPECIFICATIONS

Provided here is the important dimensional, capacity, and capability information. Because we constantly strive to improve our products, we may make changes to these specifications without issuing a notice to you.

| | | | |
|-------------------------|---|-----------------|----------------------|
| Height | Working Height | 36' | (11 m) |
| | To Platform - Extended | 30' | (9.2 m) |
| | To Platform - Stowed | 60" | (152.4 cm) |
| | To Top of Rails - Stowed | 106" | (269 cm) |
| | Rails Folded - Stowed | 76" | (193 cm) |
| | Guardrail Height | 43.5" | (111 cm) |
| | Kick Panels | 6" | (15 cm) |
| | | | |
| Ground Clearance | | 5.5" | (13.9 cm) |
| | | | |
| Length | | 116" | (295 cm) |
| | | | |
| Width | | 72" | (183 cm) |
| | | | |
| Platforms | Main Platform Surface | 60" x 110" | (152 cm x 279 cm) |
| | Extended Platform | 48" long | (122 cm) |
| | | | |
| Entrance Opening | Normal Position | 29" x 42" | (73.7 cm x 106.7 cm) |
| | Sheet Loading Position | 29" x 49" | (73.7 cm x 125 cm) |
| | | | |
| Lift Capacity | Main Platform Total 3 persons + materials Evenly Distributed | 1000 lbs | (454 kg) |
| | Extended Platform Not To Exceed 1 person + materials Evenly Distributed | 400 lbs. | (181 kg) |
| | | | |
| Gradeability | Unit must be Fully Stowed | 35% | |
| | | | |
| Weight | Approximately | 5730 lbs | (2600 kg) |
| | | | |
| Turning Radius | Inside | 63.5" | (161.3 cm) |
| | Outside | 162.5" | (412.75 cm) |

3072 4WD SPECIFICATIONS

| | | |
|--------------|----------------------|---|
| Speed | Two Speed Lift/Lower | 26 & 54 seconds lift/28 seconds down |
| | Drive Slow | .47 mph (.76 kmh) |
| | Medium | 1.05 mph (1.69 kmh) |
| | Fast | 1.95 mph (3.14 kmh) |
| Tires | Pneumatic | |
| | (Puncture Sealed) | 26" x 12" x 12" (66 cm x 30.5 cm x 30.5 cm) |

Note: Tires On The MEC 3072 4WD **Must** Be Replaced With Manufacturer's Tires To Maintain The Stability Factor Of The Machine. Check Lug Nuts Weekly.

Torque Specifications

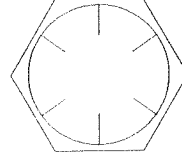
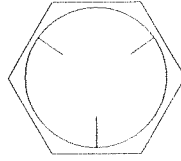
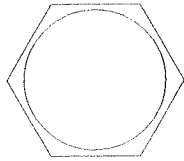
| | | |
|----------------------------------|------------------|----------------|
| Tire Lug Nuts | 75 - 85 FT. LBS. | (102 - 115 NM) |
| Hydraulic Valve | | |
| Valve To Manifold (cartridge) | 12 FT. LBS. | (16.3 NM) |
| Valve Nut To Valve | 15 IN. LBS. | (1.7 NM) |
| Hydraulic Drive Motor | 300 FT. LBS. | (407 NM) |

Then Tighten To Next Slot On Castle Nut And Install Cotter Pin.

| | | |
|------------------|------------------------------|-----------------------------------|
| Engine | 20 HP Kawasaki | Liquid Cooled, Dual Fuel - Gas/LP |
| Hydraulic | Hydraulic Reservoir Capacity | 12 Gallons (45.5 liters) |
| | Hydraulic Filter | 10 Micron Cartridge, P/N 6156 |
| | Hydraulic Pressure Settings: | |
| | Main Line | 2750 PSI (18961 KPA) |
| | Lift | 2200 PSI (15169 KPA) |
| | Steering | 1200 PSI (8274 KPA) |
| | Counterbalance | 750 PSI (5171 KPA) |
| Fuel Tank | Capacity | 5 Gallons (19 liters) |

3072 4WD SPECIFICATIONS

Bolt Torque



| Bolts | Grade 2 | Grade 5 | Grade 8 |
|------------|---------------------|---------------------|---------------------|
| 1/4" - 20 | 49 in lbs. (5.5 NM) | 76 in lbs. (8.6 NM) | 9 ft lbs. (12 NM) |
| 5/16" - 18 | 8 ft lbs. (11 NM) | 3 ft lbs. (18 NM) | 18 ft lbs. (24 NM) |
| 3/8" - 16 | 15 ft lbs. (20 NM) | 23 ft lbs. (31 NM) | 33 ft lbs. (45 NM) |
| 7/16" - 14 | 24 ft lbs. (33 NM) | 37 ft lbs. (50 NM) | 52 ft lbs. (70 NM) |
| 1/2" - 13 | 37 ft lbs. (50 NM) | 57 ft lbs. (77 NM) | 80 ft lbs. (109 NM) |

Grade markings for bolts grades 2, 5 and 8 are based on SAE J429. Markings may be raised or depressed. (Manufacturer's option)

Note:

Any bolt replacement should be of the same grade or greater than the original bolt. Any questions, call factory for verification.

Floor Loading Pressure

In certain field applications there is a need to specify the weight and rated work load of a machine in terms of "Floor Loading Pressure". There are two basic measurements on this subject that must be considered: **Local Concentrated Pressure** and **Overall Uniform Pressure**.

Local Concentrated Pressure

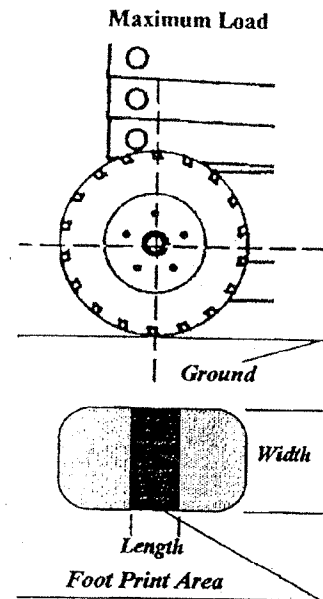
This measurement is of concern in conditions where the floor surface (i.e. tile floor) on which the machine is being used needs to be protected from indentations or breaking due to high pressure being exerted on a relatively small area. This pressure is extremely high, especially for solid or monofilled tires, since the harder the tire the smaller the footprint.

Local concentrated pressure is based on:

- (1) The maximum load exerted on one tire of the machine
- (2) The actual measured footprint area of the particular tire

$$\text{Foot Print} = \text{Length} \times \text{Width}$$

$$\text{PSI} = \frac{(\text{GVW} + \text{Rated Load}) \div \text{Foot Print}}{4 \text{ (Tires)}}$$



Overall Uniform Pressure

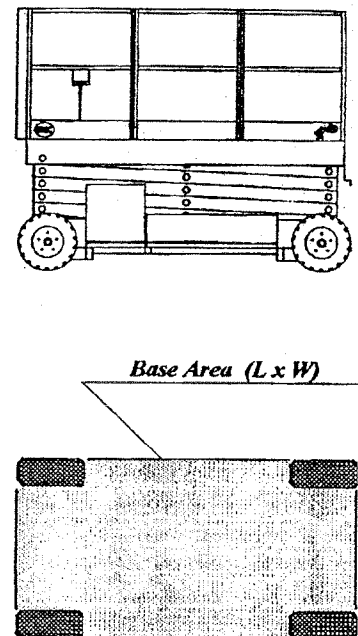
This pressure is of concern in conditions where the machine(s) is being used on a beam supported floor or surface. The machine's *overall uniform pressure* requires checking to ensure it does not exceed the maximum allowable pressure the floor can support. Maximum allowable pressure is determined by the architect or structural engineer, and therefore, cannot be exceeded for reasons of public safety.

Overall Uniform Pressure is calculated based on:

- (1) Combined load of machines GVW plus rated load
- (2) Machine's base area. The base area is defined as the area of the base or the area drawn by lines to the outside of the tires as projected onto the ground; whichever is greater.

$$\text{PSI} = \frac{\text{GVW} + \text{Rated Load}}{\text{Base Area}}$$

$$\text{PSF} = \text{PSI} \times 144$$

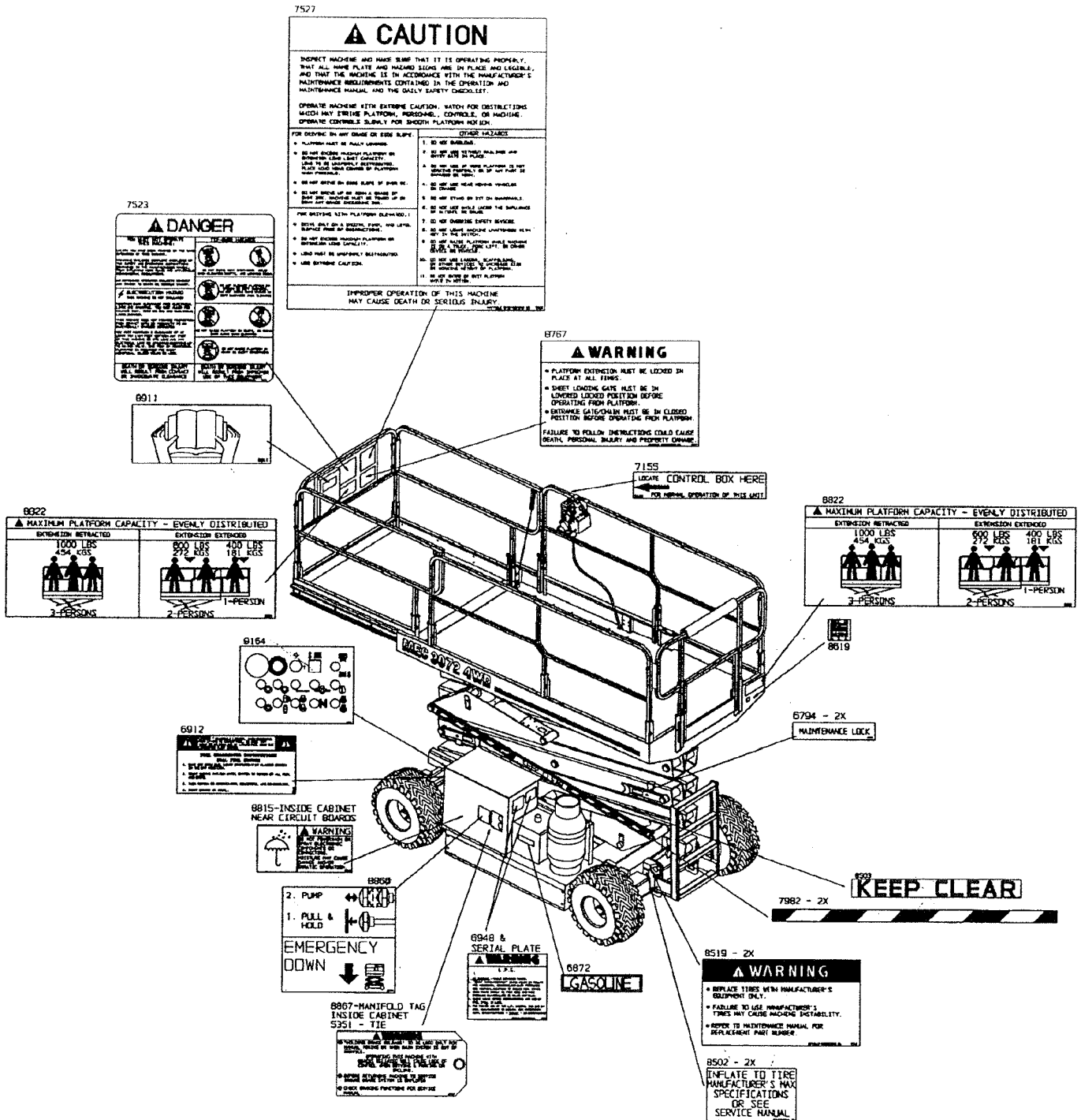


DECALS

Decal Replacement

Decals are installed in various locations on the machine. Each decal contains either a precautionary comment or helpful information for the user. If any decal listed is not legible or missing, the machine is considered not operational and must not be used until the decal is replaced. Decals can be obtained from your local MEC dealer.

| <u>Quantity</u> | <u>Part Number</u> | <u>Description</u> |
|-----------------|--------------------|-------------------------------|
| 1 | 8911 | Manual Case |
| 1 | 7523 | Caution Elec./Tip Hazard |
| 1 | 7527 | Caution |
| 1 | 8767 | Lock Warning |
| 2 | 8822 | Capacity |
| 1 | 8619 | Made In USA |
| 2 | 6794 | Maintenance Locks |
| 1 | 7827 | Warning Light |
| 4 | 8519 | Tire Replacement |
| 1 | 8635 | Directions Joystick #2 |
| 1 | 9239 | Control Box ID |
| 2 | 7982 | Safety Stripe |
| 4 | 8502 | Inflate Tire |
| 1 | 7155 | Control Box Placement |
| 1 | 9164 | Base Controls |
| 1 | 8866 | Emergency Down |
| 1 | | Serial Number Plate |
| 2 | 8402 | Rail Stripe |
| 2 | 9186 | MEC 3072 4WD |
| 1 | 8950 | Platform Stops Short |
| 1 | 8811 | MEC Oval |
| 1 | 6912 | Fuel Changeover |
| 1 | 6873 | Hydraulic Fluid |
| 1 | 7156 | Front |
| 1 | 8517 | Control Box |
| 1 | 8503 | Keep Clear |
| 1 | 8815 | Moisture Warning |
| 1 | 8867 | Brake Manifold Tag (5351 Tie) |
| 1 | 6948 | LPG Instruction |
| 1 | 6872 | Gasoline |

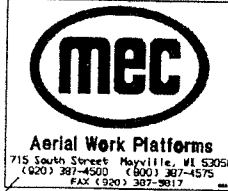


DECALS

9186 - 2X

MEC 3072 4WD

8811



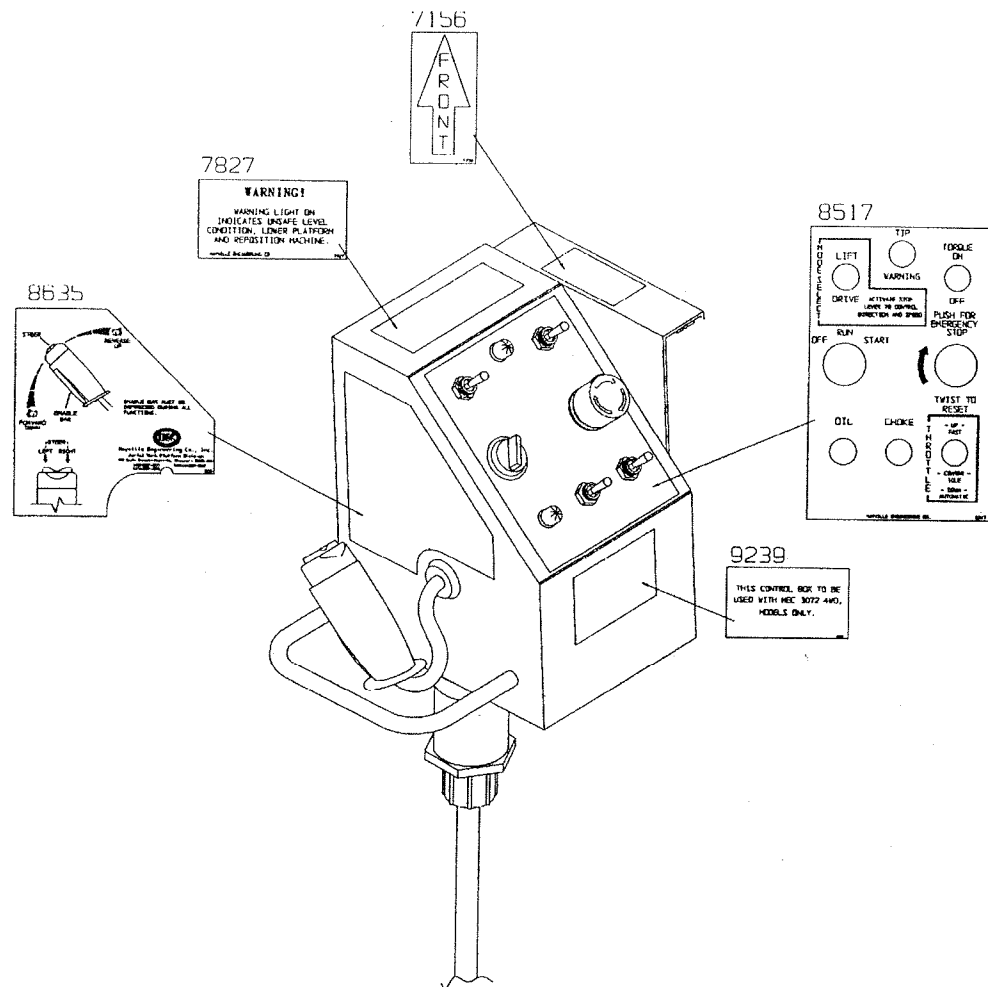
6873 - INSIDE ON TANK
HYDRAULIC OIL

8502 - 2X
INFLATE TO TIRE
MANUFACTURER'S MAX
SPECIFICATIONS
OR SEE
SERVICE MANUAL

8510 - 2X

WARNING
• REPLACE TIRES WITH MANUFACTURER'S
EQUIPMENT ONLY.
• FAILURE TO USE MANUFACTURER'S
TIRES MAY CAUSE MAJOR INSTABILITY.
• REFER TO MAINTENANCE MANUAL FOR
REPLACEMENT PART NUMBER.

DECALS



ART729 R0
BM15746
2/13/98

CHECKLISTS

Frequent Inspection Checklist

Some of the components may or may not affect your particular machine. Check all that apply.

| | Legible, Operational and/or Physically Correct | Not Legible, Operational and/or Physically Correct | Corrected or Repairs Made to Unit |
|---|--|--|--|
| Wheels | | | |
| Rims - Corrosion, Cracks, Bends etc. | | | |
| Tires | | | |
| Excessive Wear/Damage | | | |
| Tire Pressure | | | |
| Battery | | | |
| Check Wiring | | | |
| Check Fluid Level | | | |
| Inspect Commutator and Brushes | | | |
| Hydraulics | | | |
| Check Hoses | | | |
| Check Fittings | | | |
| Replace Oil Filter | | | |
| Scissors | | | |
| Check for Damage ie: Corrosion, cracks, Bends etc. | | | |
| Maintenance Locks | | | |
| Drive and Lift Mechanism | | | |
| Oil Steering Pivot Pins | | | |
| Oil Brake Pivot Pins | | | |
| Grease Rear Spindles | | | |
| Main Frame | | | |
| Check Structure ie: corrosion, cracks, bends etc. | | | |
| Check Pivot Pins | | | |
| Check All Fasteners | | | |
| Control System | | | |
| Damage to Switches, Indicators and Guards | | | |
| Check Terminals and Plugs | | | |
| Check Cords | | | |
| Safety Decals | | | |
| Decals in Place and Legible | | | |

CHECKLISTS

Frequent Inspection Checklist Cont'd

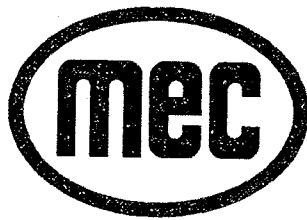
| | Legible, Operational and/or Physically Correct | Not Legible, Operational and/or Physically Correct | Corrected or Repairs Made to Unit |
|--|--|--|--|
| Platform | | | |
| Rear Closure | | | |
| Railing Secure in Pockets | | | |
| All Fasteners Secure | | | |
| Railings Not Bent | | | |
| Proper Written Materials in Case | | | |
| Fuel System | | | |
| Check for Leaks (LPG or Gasoline) | | | |
| Check Hoses | | | |
| Functions | | | |
| Base/Upper Control Box | | | |
| Steer: Left/Right | | | |
| Drive: Forward/Reverse | | | |
| Hi Torque/High Speed | | | |
| Fast Speed Cut Out When Platform is Elevated | | | |
| Emergency Down | | | |
| Platform Raises to Full Extension | | | |
| Brakes Operational | | | |
| Emergency Stop | | | |
| Pothole System Operational | | | |

Comments:

Signature/Inspectors

Date:

Reproduce Form as Needed. Save completed forms for future reference.



Aerial Work Platforms

Mayville Engineering Co.

715 South Street
Mayville, Wisconsin 53050 USA

(920) 387 - 4500
1-800-387-4575
FAX (920) 387 - 5817