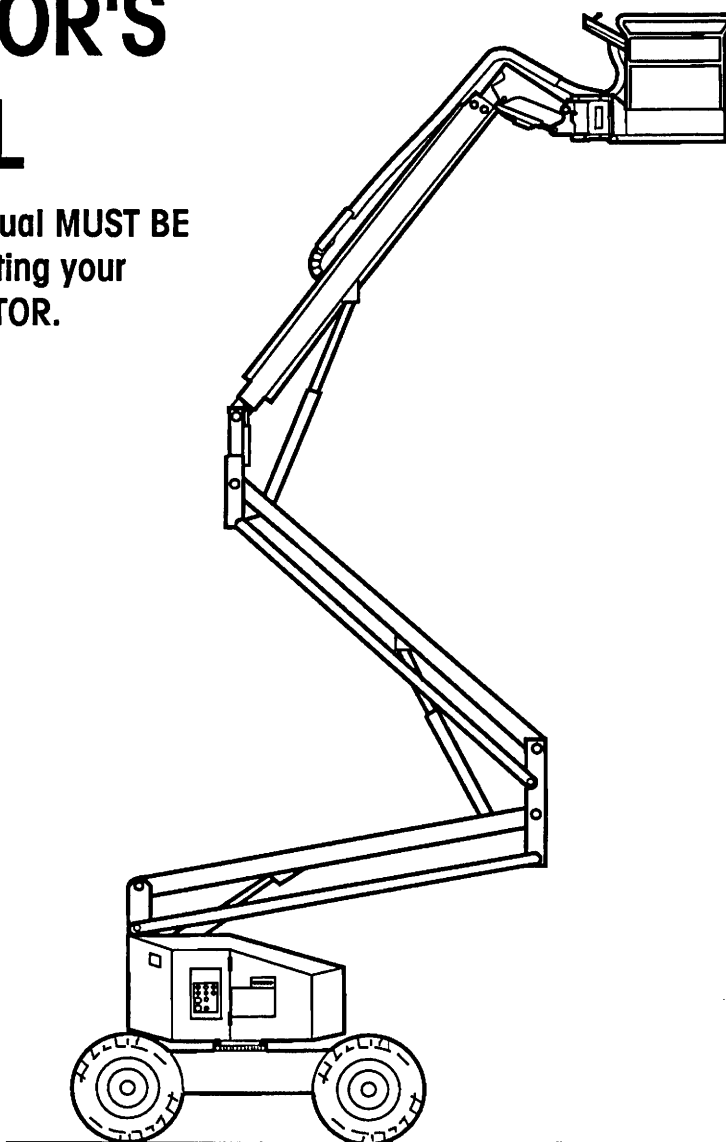


CONSTRUCTOR MODEL AT 60C

OPERATOR'S MANUAL

This Operator's Manual **MUST BE**
READ prior to operating your
AT 60C CONSTRUCTOR.



Art # A00.00420E

Part No. 89-446002 • Rev. "A.2" dated December, 1993 •

Table of Contents

Introduction	iii
Machine Specifications	iv
Range Diagram	vi
Gradeability Conversion Chart	vi

SAFETY

Safety Symbols	1-3
Safety Rules and Precautions	1-4
Safety-Related Decals	1-8
Safety and Control Decal Locations	1-10
Safety and Control Decal Descriptions	1-11

OPERATION

Unloading Procedures	2-3
Primary Machine Components	2-5
Operator Controls	
Ground Controls	2-6
Platform Controls	2-10
Startup Procedures	
Shift Checks	2-16
Machine Startup	2-17
Ground Operation and Checks	2-18
Emergency Pump Checks	2-19
Platform Operation and Checks	2-20
Operation	
Two Wheel/ Four Wheel Drive	2-24
Cold Weather Operation	2-25
Driving and Steering	2-25
Braking	2-26
Boom, Superstructure and Platform	2-26
Gasoline Engine Operation	2-27
Dual Fuel Engine Operation	2-27
Diesel Engine Operation	2-28
Shut-down Procedures	2-29
Transporting the Unit	
Towing Procedures (with Optional Towing Package)	2-30
Truck or Trailer Transport	2-32
Emergency System and Procedures	
Emergency Electrical Pump	2-34
Emergency Lowering	2-34



TABLE OF CONTENTS (CONTINUED)

MAINTENANCE

General Maintenance Tips	3-3
Shift Operational Checklist	3-4
Weekly Operational checklist	3-7
Monthly Operational Checklist	3-8
Semi-Annual Operational Checklist	3-10
Troubleshooting	
What to check if unit will not start:	3-12
What to check if functions will not operate:	3-12
Lubrication Chart	3-13

INDEX

APPENDIX

Applicable Standards and Regulations	A-3
ANSI/SIA A92.5 - 1992 (Partial)	
5.Responsibilities of Dealers	A-5
6.Responsibilities of Owners	A-7
7.Responsibilities of Users	A-10
8.Responsibilities of Operators	A-16
9.Responsibilities of Lessors	A-20
10.Responsibilities of Lessees	A-21
Simon Aerials Twelve Month Limited Warranty	
Transfer of Ownership Notice (Business Reply Cards)	
Catalog Comment Card (Business Reply Cards)	

INTRODUCTION

This Operator's Manual has been designed to provide you with the instructions needed to properly and safely operate your Simon AT60C Self-Propelled Aerial Work Platform.

DANGER

THIS OPERATOR'S MANUAL MUST BE READ AND UNDERSTOOD PRIOR TO OPERATING YOUR SIMON SELF-PROPELLED AERIAL WORK PLATFORM.

OPERATORS MUST BE AWARE OF AND COMPLY WITH ALL MANUFACTURER'S INSTRUCTIONS AND APPLICABLE OSHA/ANSI SAFETY GUIDELINES.

FAILURE TO COMPLY WITH MANUFACTURER'S INSTRUCTIONS AND OSHA/ANSI SAFETY GUIDELINES WILL RESULT IN SERIOUS INJURY OR DEATH.

Your Simon AT60C has been designed and built to provide many years of safe, dependable service. To obtain the full benefit of your AT60C, always follow the proper operating and maintenance procedures as outlined in this manual. Only trained, authorized personnel should be allowed to operate or service this machine. Service personnel should read and study this manual in order to gain a thorough understanding of the functions of the unit prior to making any repairs.

DANGER

MODIFICATIONS OF THIS MACHINE FROM THE ORIGINAL DESIGN AND SPECIFICATION WITHOUT WRITTEN PERMISSION FROM SIMON AERIALS INC. ARE STRICTLY FORBIDDEN. A MODIFICATION MAY COMPROMISE THE SAFETY OF THE MACHINE, SUBJECTING USERS TO SERIOUS INJURY OR DEATH. ANY SUCH MODIFICATION WILL VOID ANY REMAINING WARRANTY.

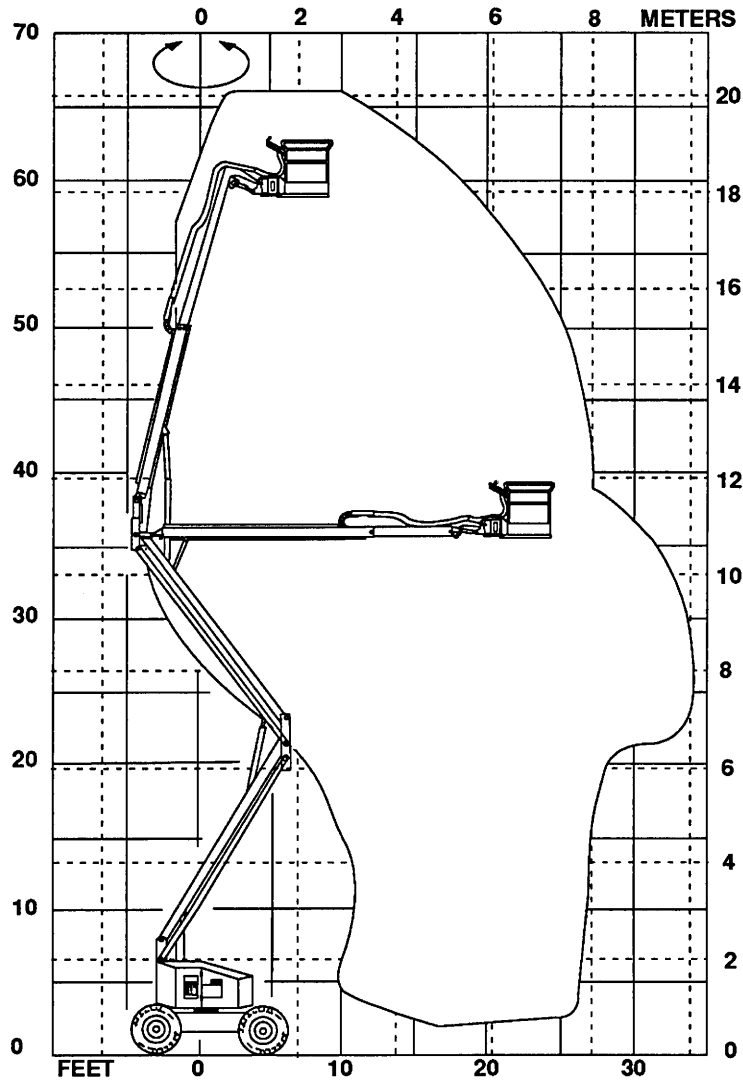
Simon reserves the right to change, improve, modify or expand features of its equipment at any time. Specifications, models or equipment are subject to change without notice, and without incurring any obligations to change, improve, modify or expand features of previously delivered equipment.

All Simon manuals are periodically updated to reflect changes that occur in the equipment. Please contact the factory with any questions you may have regarding your machine, or the availability of more recent manuals.

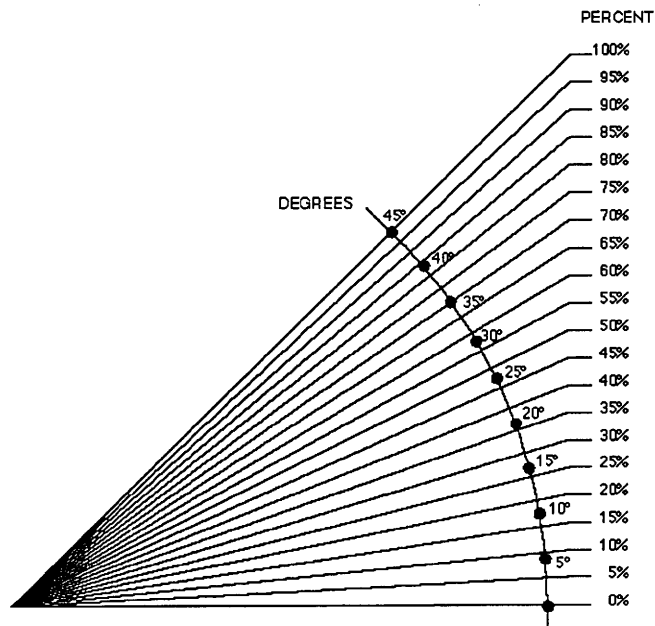
MACHINE SPECIFICATIONS

Working Height	66 Ft / 20.12 M
Platform Height	60 Ft / 18.29 M
Horizontal Reach	32 Ft / 9.75 M
Platform Capacity (unrestricted)	500 Lbs. / 225 Kg
Platform Size	30 In. x 60 In. / .76 M x 1.52 M
Stowed Length	22 Ft 11 In. / 6.99 M
Stowed Height	8 Ft 8 In. / 2.64 M
Machine Width	8 Ft 0 In. / 2.44 M
Wheelbase	7 Ft 10 In. / 2.38 M
Ground Clearance	12 In. / 0.31 M
Gross Weight	25,000 Lbs/ 11,340 Kg
Maximum Travel Speed:	
Booms Stowed	5 MPH / 8.0 KPH
Boom Extended or Elevated	0.5 MPH / 0.8 KPH
Outside Turning Radius	17 Ft 6 In. / 5.33 M
Inside Turning Radius	8 Ft / 2.44 M
Gradeability	15 ° / 27%
Platform Rotation	180°
Superstructure Rotation	360°, Stop To Stop
Tire Size	18.5 x 44 - 16.5" LT, Tubeless, 10 Ply Rated
Tire Pressure (not applicable to foam filled tires)	60 PSI / 4.14 Bar / 4.22 Kg/ cm ²
Drive System Output	33 GPM/ 125 LPM
Drive System Pressure:	
At Rest	110 PSI / 7.6 Bar / 7.73 Kg/ cm ²
Moving (except with Deutz Diesel engine)	1000 to 3500 PSI / 69 to 241 Bar / 70.3 to 246 Kg/ cm ²
Moving (with Deutz Diesel engine)	1000 to 3800 PSI / 69 to 262 Bar / 70.3 to 267 Kg/ cm ²
Drive Cross Port Relief Valve Setting:	
except with Deutz Diesel engine	3500 PSI/ 241 Bar / 246 Kg/ cm ²
with Deutz Diesel engine	3800 PSI/ 262 Bar / 267 Kg/ cm ²
Max. Drive Pump Inlet Vacuum (Under Normal Conditions)	5 In. Hg
Hydrostatic Pump Charge Pressure	110 PSI / 7.6 Bar / 7.73 Kg/ cm ²
Max. Charge Pump Inlet Vacuum (Under Normal Conditions)	5 In. Hg

RANGE DIAGRAM



GRADEABILITY CONVERSION CHART



SECTION 1: SAFETY



Table of Contents, Section 1

SAFETY

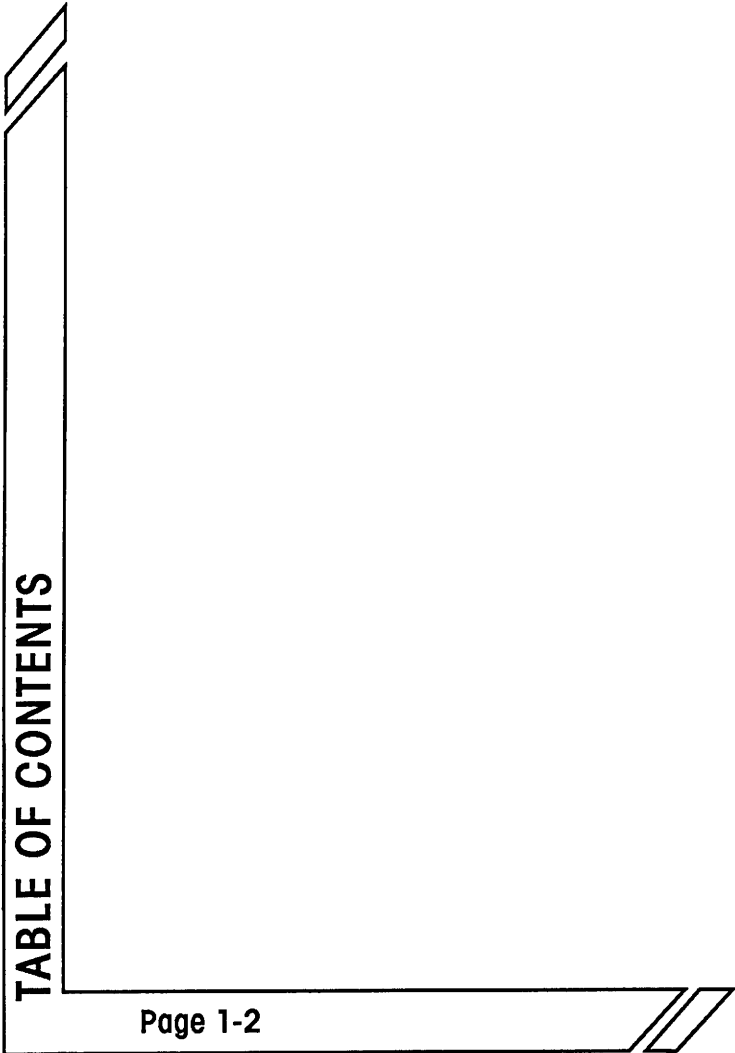
Safety Symbols 1-3

Safety Rules and Precautions 1-4

Safety-Related Decals 1-8

Safety and Control Decal Locations..... 1-10

Safety and Control Decal Descriptions 1-11



SAFETY SYMBOLS

This manual contains important information on the safe use of your SIMON Self-Propelled Aerial Work Platform. Your 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 aerial work platform 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 work platform in a safe manner.

To help you recognize important safety information, we have identified warnings and instructions that directly impact on safety with 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 is also used to alert against unsafe practices, and for property-damage-only situations.

One final 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.

SAFETY RULES AND PRECAUTIONS

 DANGER

- **ELECTROCUTION HAZARD!! THIS MACHINE IS NOT INSULATED!!** Maintain safe clearance from electrical 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 **AVOID CONTACT** between any part of the machine, or its load, and any electrical line or apparatus carrying up to 300 volts.

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

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

- Read and understand all safety and control information found on the machine and in this manual before operating the unit.
- Only trained, competent personnel should operate the aerial work platform.
- Be aware of all Government and Local rules which may apply to this machine and its safe operation.
- Approved safety belts must be worn at all times when operating the unit from the platform. In addition, approved headgear and other protective equipment must be worn as required. (In the U.S.A., OSHA approved equipment is required. For other countries, the appropriate equivalent government body should be consulted.)
- NEVER fasten safety belt to an adjacent structure while on the work platform.
- Make sure that entry gate to platform is secured before operating unit from the platform.
- DO NOT block the foot pedal or any function control in the operating position.
- DO NOT exceed the platform capacity of the unit in any configuration. Review the section titled "MACHINE SPECIFICATIONS", earlier in this manual, regarding this model's capacities and dimensions.

SAFETY RULES AND PRECAUTIONS (CONTINUED) **DANGER**

- SECURE all tools and other loose items to prevent injury to persons working on or below the work platform.
- DO NOT use scaffolding, ladders or similar items to extend your reach while on the work platform.
- DO NOT attempt to climb down the boom assembly, if the unit fails while the operator's platform is raised or extended.
- Since the machine may be operated from its ground controls, precautions should be taken to prevent unauthorized personnel from operating the work platform with the ground controls while the platform is in use.
- DO NOT attempt to open any hydraulic line or component without first relieving all system pressures and shutting off fluid flow from the tank.
- DO NOT allow anyone to tamper with, service or operate the machine from the ground control station while personnel are on the platform, except in an emergency.
- DO NOT alter, modify or disable any safety devices or interlocks.
- DO NOT refuel the unit near sparks or open flames. Gasoline and propane vapors, and Diesel fuel fumes are highly explosive.
- DO NOT use the aerial work platform outdoors in electrical storms or in high wind situations.
- DO NOT raise the aerial work platform unless the unit is on a firm, level surface.

SAFETY RULES AND PRECAUTIONS (CONTINUED) **DANGER**

- Use caution to prevent ropes, cords, hoses, etc. from becoming entangled in the unit's boom sections when being raised, lowered or repositioned.
- Ensure that the area surrounding the mobile platform is clear of personnel and equipment before: driving the unit; or raising, lowering or extending the boom; or swinging the superstructure; or, rotating or tilting the platform.
- Maintain a safe distance from overhead and ground obstacles, debris, drop-offs, holes, depressions, electrical wires and other hazards to travel.
- Limit travel speed according to conditions of the ground surface, congestion, slope, location of personnel or any other factors that could cause hazard of collision or injury to personnel.
- DO NOT sit, stand or climb on platform rails.
- DO NOT operate this machine while under the influence of any drugs or alcohol.
- DO NOT operate this machine if you are bothered by heights, seizures, or dizzy spells.
- DO NOT indulge in stunt driving or horseplay while operating this machine.

 WARNING

- Complete the "Operational Checklists" found in this manual (see Table of Contents) at designated intervals.
- Ensure that the machine is in "LOW" drive speed while unloading from a truck or trailer.
- Always attach the unit to a winch when loading or unloading from a truck or trailer. Simon does not recommend unassisted loading or unloading of any aerial work platform.
- With the platform swung away from the stowed position, use caution when selecting travel or steering direction. Travel and steer direction will be opposite switch or lever movement. Refer to the location of the superstructure lockpin hole for travel orientation.

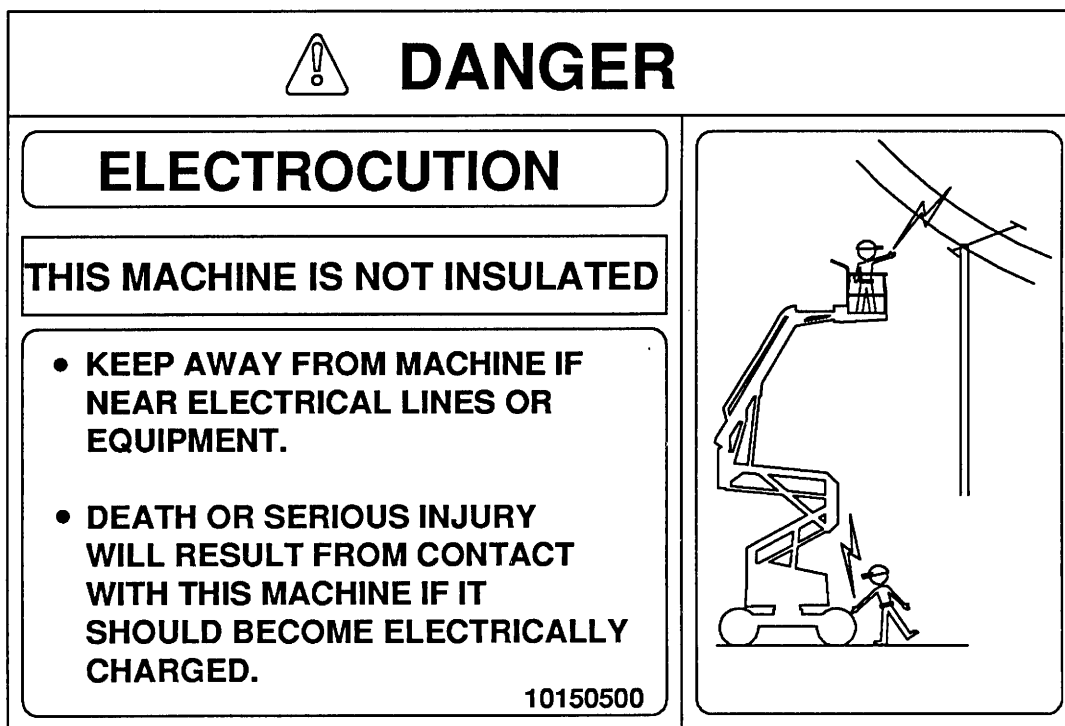
SAFETY RULES AND PRECAUTIONS (CONTINUED) **WARNING**

- Check fuel system for leaks or damaged fuel lines before operating unit. If any damage is found, contact your supervisor immediately. Machine shall be removed from service until diagnosis and any necessary repairs have been completed.
- Actuation of the red "EMERGENCY STOP" button will apply brakes immediately, causing unexpected platform movement as the machine comes to a sudden stop. Brace yourself.
- Immediately report any erratic noises, vibrations or malfunctions of the unit to supervisor. Machine shall be removed from service until diagnosis and any necessary repairs have been completed.
- Operating this equipment without all safety and control decals in place can be hazardous.

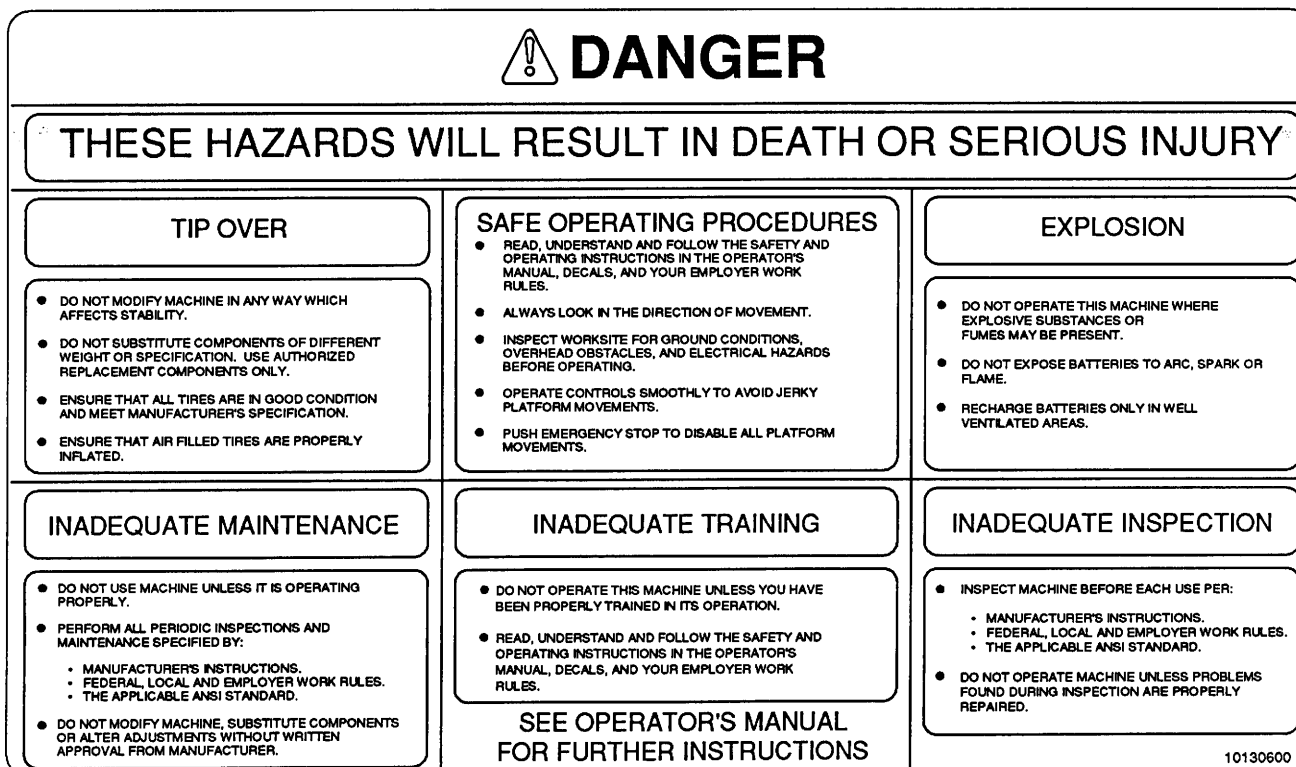
 CAUTION

- For transporting the machine, the platform must not be tied to the trailer bed in any way.
- Be sure to turn all hydraulic valves back "open" before starting the machine, or extensive pump damage will occur.
- DO NOT exceed the maximum platform horizontal pull of 100 pounds (45.4 kg).
- DO NOT use the boom or platform as a crane to lift oversized or hanging loads.
- DO NOT raise, extend, retract, tilt, rotate, or lower the platform into stationary objects, as this will cause damage to mechanical and hydraulic components.
- DO NOT use the platform or boom functions to push or tow the unit or another vehicle.
- Avoid sudden braking or steering, go slowly and leave more maneuvering room during cold weather operation until the machine is warm.
- DO NOT operate the unit in four wheel drive mode on high traction surfaces. Steering on high traction surfaces with hub engaged will damage drive train components.

SAFETY-RELATED DECALS

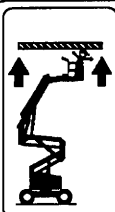


10-150500 Decal, "DANGER" ("Electrocution . . .")



10-130600 Decal, "DANGER" (Hazard listing at ground controls)

SAFETY-RELATED DECALS (CONTINUED)

 DANGER		
THESE HAZARDS WILL RESULT IN DEATH OR SERIOUS INJURY		
TIP OVER  - DO NOT EXCEED PLATFORM RATED LOAD. - DO NOT RAISE OR EXTEND BOOM - ON SOFT, UNEVEN, OR SLOPING SURFACES. - IN WINDS BEYOND 30 M.P.H.. - DO NOT DRIVE WITH BOOM RAISED OR EXTENDED: - ON SOFT, UNEVEN, OR SLOPING SURFACES. - NEAR POTHOLES OR DROPOFFS. - IF SO EQUIPPED, FULLY EXTEND AXLES BEFORE RAISING PLATFORM.	SAFE OPERATING PROCEDURES - READ, UNDERSTAND AND FOLLOW THE SAFETY AND OPERATING INSTRUCTIONS IN THE OPERATOR'S MANUAL, DECALS, AND YOUR EMPLOYER WORKRULES. - INSPECT WORKSITE FOR GROUND CONDITIONS, OVERHEAD OBSTACLES, AND ELECTRICAL HAZARDS BEFORE OPERATING. - ALWAYS LOOK IN THE DIRECTION OF MOVEMENT. - OPERATE CONTROLS SMOOTHLY TO AVOID JERKY PLATFORM MOVEMENTS. - PUSH EMERGENCY STOP TO DISABLE ALL PLATFORM MOVEMENTS.	ELECTROCUTION THIS MACHINE IS NOT INSULATED - AVOID CONTACT WITH ELECTRICAL LINES OR EQUIPMENT. - MAINTAIN A MINIMUM CLEARANCE OF 10 FEET FROM ELECTRIC LINES OR EQUIPMENT OVER 300 VOLTS. - ADDITIONAL CLEARANCE IS REQUIRED OVER 50,000 VOLTS. 
CRUSHING  - DO NOT POSITION PLATFORM INTO OVERHEAD OR OTHER OBSTACLES. - DO NOT EXTEND YOUR BODY OUTSIDE PLATFORM WHEN OPERATING. - CHECK FOR CLEARANCES FROM OBSTACLES BEFORE OPERATING.	INADEQUATE TRAINING - DO NOT OPERATE THIS MACHINE UNLESS YOU HAVE BEEN PROPERLY TRAINED IN ITS OPERATION. - READ, UNDERSTAND AND FOLLOW THE SAFETY AND OPERATING INSTRUCTIONS IN THE OPERATOR'S MANUAL, DECALS, AND YOUR EMPLOYER WORK RULES.	FALLING FROM PLATFORM  - DO NOT OPERATE THIS MACHINE UNLESS ENTRANCES ARE PROPERLY CLOSED. - USE SAFETY BELT OR BODY HARNESS AS REQUIRED BY FEDERAL, LOCAL, OR EMPLOYER REGULATIONS. - STAND FIRMLY ON PLATFORM AT ALL TIMES.
SEE OPERATOR'S MANUAL FOR FURTHER INSTRUCTIONS		

10151200

10-151200 Decal, "DANGER" (Hazard listing at platform controls)

PLATFORM CAPACITY
500 LBs. (225 kg)

10145300

10-145300 Decal, Platform Capacity [18-1/4" (464 mm) wide]

PLATFORM CAPACITY
500 LBs. (225 kg)

10148300

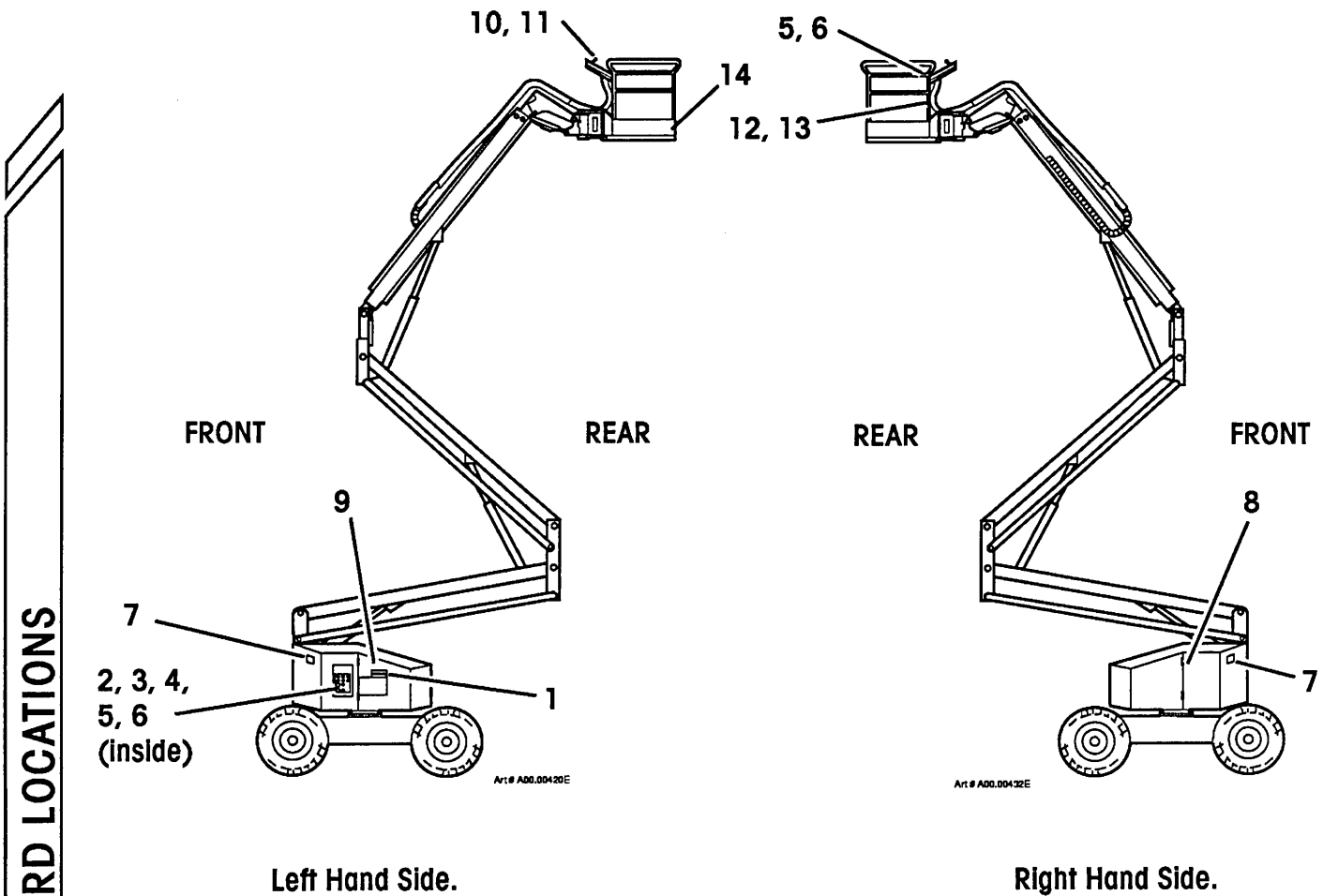
10-148300 Decal, Platform Capacity [4-1/2" (114 mm) wide]

SAFETY AND CONTROL DECAL LOCATIONS



OPERATING THIS EQUIPMENT WITHOUT ALL SAFETY AND CONTROL DECALS IN PLACE CAN BE HAZARDOUS.

If any of these items are damaged or missing, replace them immediately. Decals are shown for standard machine. Optional equipment may change the decal locations.



SAFETY AND CONTROL DECAL DESCRIPTIONS

Item No.	Part Number	Description	Qty.
1	2142790	Placard, Ground Control Valves	1
2	2142810	Placard, Ground Electrical Controls	1
3	10-130600	Decal "DANGER" (Hazard listing at Ground Controls)	1
4	10-012600	Decal, "OPEN HYDRAULIC TANK VALVES . . . "	1
5	10-007200	Decal, "DISENGAGE LOCKPIN . . . "	2
6	10-148300	Decal, "PLATFORM CAPACITY 500 LBS (225 kg)", [4-1/2" (114 mm) wide]	2
7	10-150500	Decal, "DANGER" ("Electrocution . . . ")	2
8	10-117900	Placard, "GASOLINE ONLY" (for versions with gasoline engine)	1
	10-151100	Placard, "DIESEL FUEL ONLY" (for versions with optional Diesel engine)	1
9	10-151300	Placard, "HYDRAULIC FLUID ONLY"	1
10	10-098700	Placard, Platform Control Valves	1
11	10-107100	Decal, Platform Electrical Controls	1
12	10-151200	Decal "DANGER" (Hazard listing at Platform Controls)	1
13	10-153300	Decal, "WARNING" ("Steering on hard surface . . . ") (2WD/ 4WD operation)	1
14	10-145300	Decal, "PLATFORM CAPACITY 500 LBS (225 kg)", [18-1/4" (464 mm) wide]	1

SECTION 2: OPERATION



Table of Contents, Section 2

OPERATION

Unloading Procedures	2-3
Primary Machine Components	2-5
Operator Controls	
Ground Controls	2-6
Platform Controls	2-10
Startup Procedures	
Shift Checks	2-16
Machine Startup	2-17
Ground Operation and Checks	2-18
Emergency Pump Checks	2-19
Platform Operation and Checks	2-20
Operation	
Two Wheel/ Four Wheel Drive	2-24
Cold Weather Operation	2-25
Driving and Steering	2-25
Braking	2-26
Boom, Superstructure and Platform	2-26
Gasoline Engine Operation	2-27
Dual Fuel Engine Operation	2-27
Diesel Engine Operation	2-28
Shut-down Procedures	2-29
Transporting the Unit	
Towing Procedures (with Optional Towing Package)	2-30
Truck or Trailer Transport	2-32
Emergency System and Procedures	
Emergency Electrical Pump	2-34
Emergency Lowering	2-34

UNLOADING PROCEDURES

WARNING

TO AVOID SERIOUS PERSONAL INJURY OR DEATH, ENSURE THAT THE MACHINE IS IN "LOW" DRIVE SPEED WHILE UNLOADING FROM A TRUCK OR TRAILER.

1. Inspect the outside of the unit for damage (including the underside). Inspect all hoses, boom sections and cables for chafing or shipping damage. Confirm that all wheel lug nuts and swing bearing bolts are tight (refer to specifications).
2. Remove the pin that locks the superstructure to the undercarriage near the swing bearing. Stow the lock pin in the location provided nearby.
3. Unlock and open both side compartments. Inspect all fuel, electrical and hydraulic connections for damage and security.
4. Connect battery cables to battery if required. Check electrolyte level.
5. Open the fuel tank valves and check fuel level.
6. Check engine oil level, and add as required per engine manufacturer's recommendations.
7. Check fluid level at the sight gauge on the hydraulic tank, and add fluid as required (see Lubrication Chart). Check that shutoff valves on the hydraulic tank are open.
8. Close side compartment covers.
9. Attach the unit to a winch for the unloading procedure.

WARNING

ALWAYS USE A WINCH TO ASSIST LOADING OR UNLOADING THE UNIT FROM A TRUCK OR TRAILER. CONNECT WINCH CABLE TO THE TIE DOWN OPENINGS ON THE UNDERCARRIAGE. UNASSISTED LOADING OR UNLOADING OF ANY MOBILE PLATFORM IS NOT RECOMMENDED.

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

UNLOADING PROCEDURES (CONTINUED)

- Start engine, using the ground controls.

NOTE: Refer to Startup Procedures and Operator Controls Descriptions in this section.

After a brief warmup period, select the "HIGH" engine speed. Turn and hold the pump power switch, and fully retract boom. This is called "deadheading", and will lead to full system pressure registering on the gauge at the ground control valve assembly. Check that the pressure is as stated in the specifications ("System Pump Pressure"). Select the "LOW" engine speed and allow the engine to slow to idle speed. Turn off engine.

- Remove all machine tie downs. Remove wheel chocks, if used. Turn the Ground/Platform switch to "PLATFORM CONTROLS".
- Enter the platform, and restart the engine using the platform controls. Select the "HIGH" engine speed, and test all platform functions.
- Raise the upper boom section so that the platform will clear any obstacles as the machine is driven down the loading ramp.
- Carefully drive the unit off the truck or trailer with the assistance of a winch.

CAUTION

Winch line and unit travel must be coordinated during this procedure.

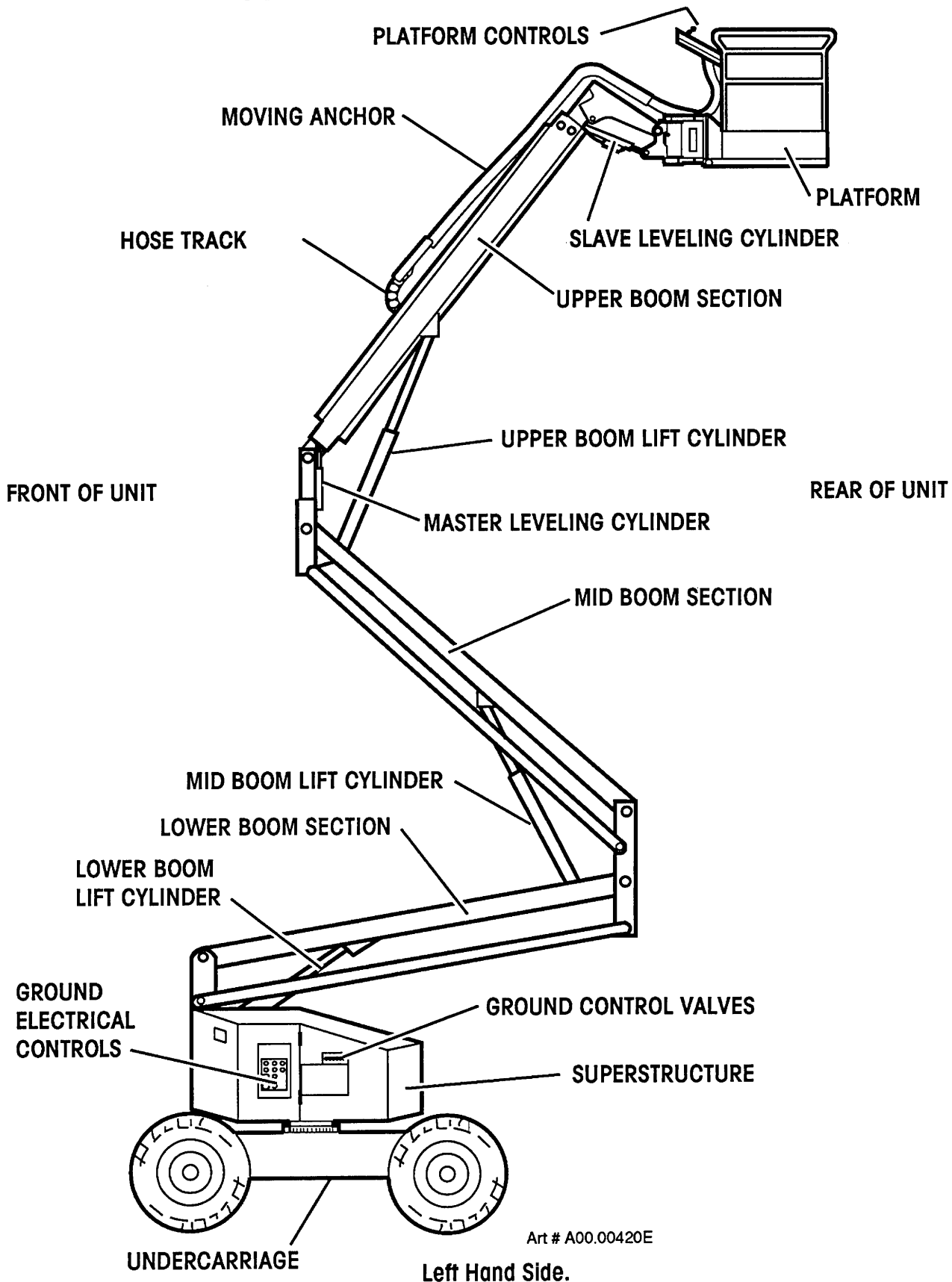
The brakes are automatically released for driving, and will automatically apply when the drive control lever is brought back to the "NEUTRAL" position.

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

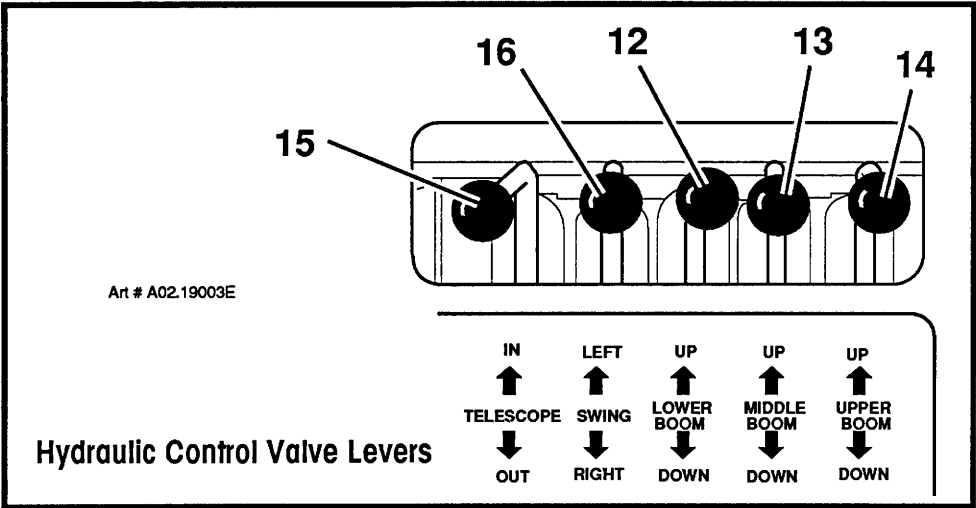
Upon initial unloading of the machine the Receipt Inspection Adjustment Report or Predelivery Inspection Adjustment Report must be completed and returned in order to activate the Simon Limited Warranty.

An Operator's Manual and a Receipt Inspection Adjustment Report are included with each machine leaving the factory.

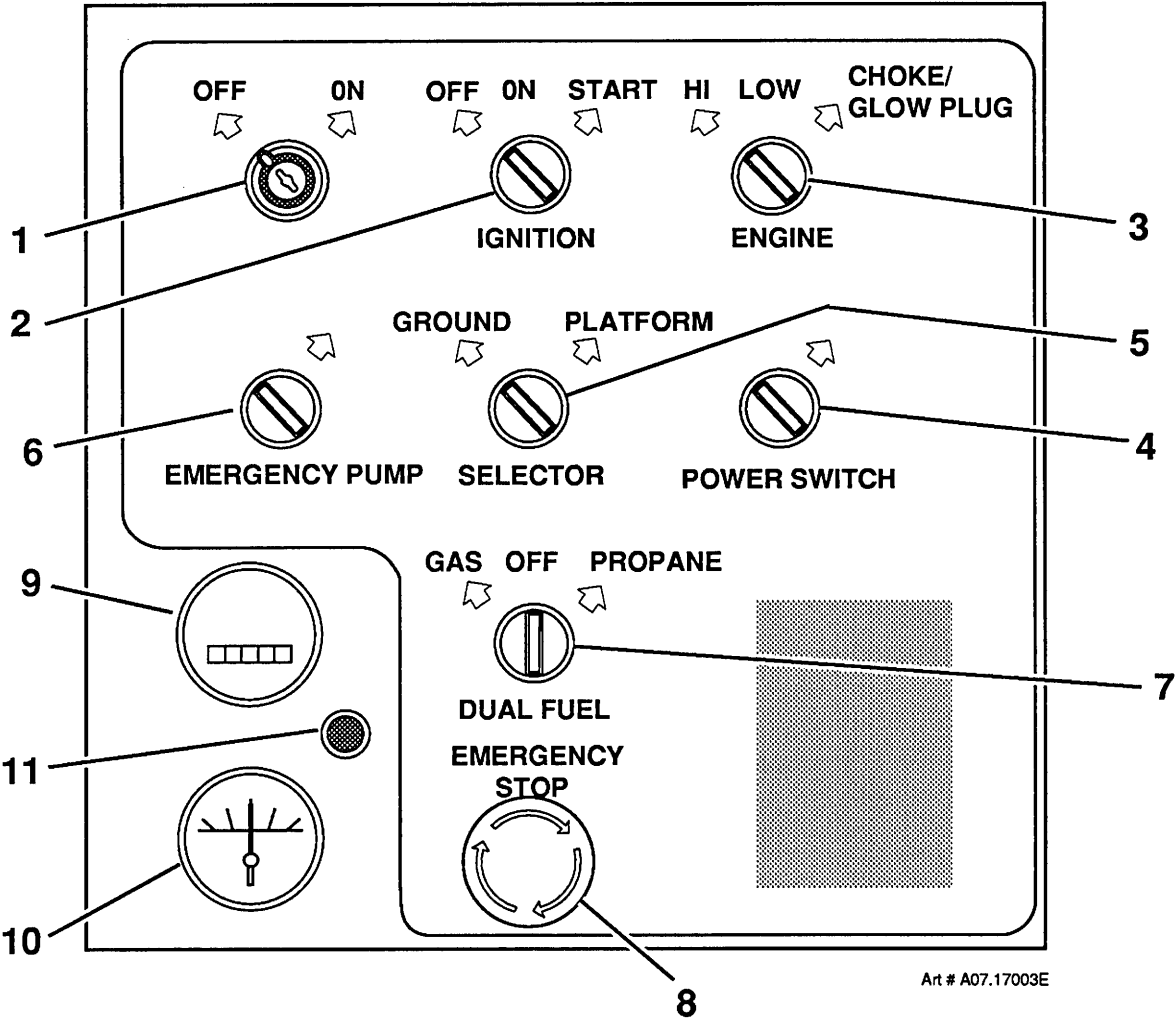
PRIMARY MACHINE COMPONENTS



OPERATOR CONTROLS
(GROUND CONTROLS)



Electrical Controls

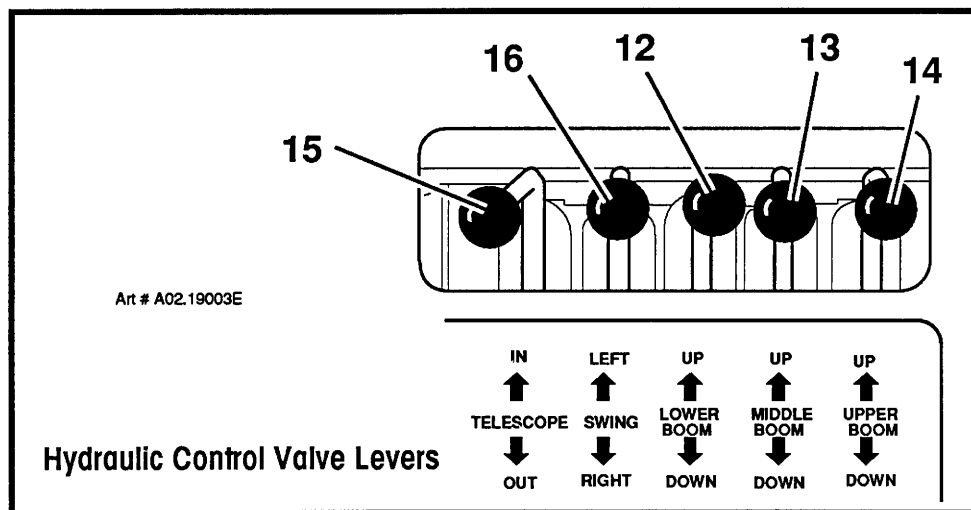


OPERATOR CONTROLS

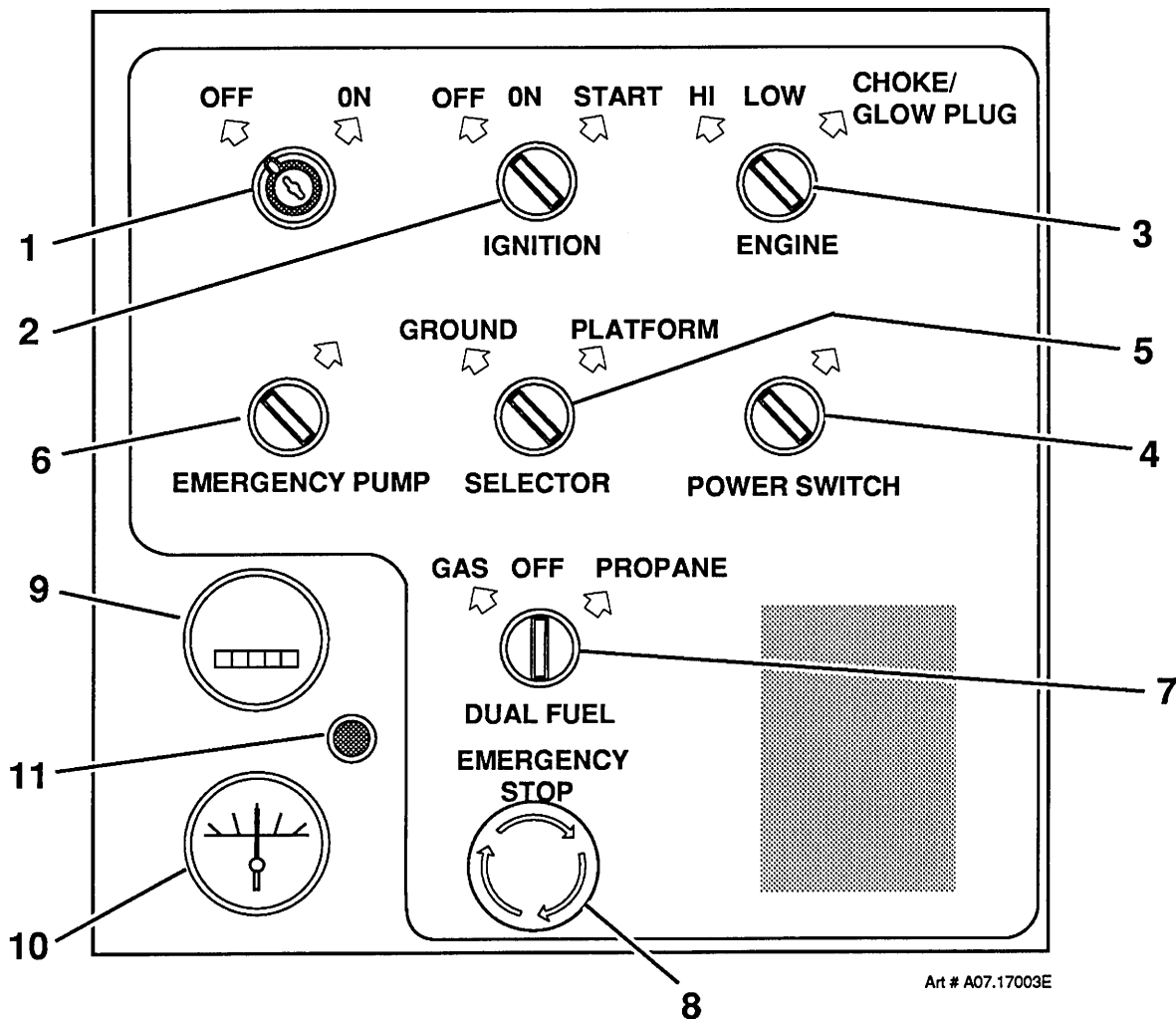
OPERATOR CONTROLS DESCRIPTION (GROUND CONTROL, CONTINUED)

Item	Control	Location	Description
1.	Main Power Key Switch	Ground Electrical Panel	Main power disconnect. The key may be removed to prevent unauthorized operation.
2.	Ignition Switch	Ground Electrical Panel	Three position ignition switch. Left (counterclockwise) position is "OFF". Center position is ignition "ON", and full clockwise rotation engages the starter.
3.	Engine Switch	Ground Electrical Panel	Turn right (clockwise) to activate the engine choke (with gas engine) or glow plug (for Diesels). Center position is low engine RPM. Full counterclockwise rotation engages high engine RPM.
4.	Power Switch	Ground Electrical Panel	Turn clockwise to permit operation of all lift functions from the ground.
5.	Ground/ Platform Selector Switch	Ground Electrical Panel	Selects ground or platform control of unit.
6.	Emergency Pump Switch	Ground Electrical Panel	Engage to operate any boom function should the engine become inoperable.
7.	Dual Fuel Selector (Option)	Ground Electrical Panel	Selects the type of fuel (gasoline or LP) used by the engine, if equipped with the "dual fuel" option.
8.	Emergency Stop Button	Ground Electrical Panel	Used to stop all functions in an emergency. Push for emergency stop. Turn clockwise to reset.
9.	Hour Meter	Ground Electrical Panel	Indicates the number of hours the machine has been operated in hours and tenths.
10.	Amp Meter	Ground Electrical Panel	Indicates the electrical system charge or discharge rate in amps.
11.	Circuit Breaker	Ground Electrical Panel	Pops out when there is excessive electrical load in the 12 volt control circuit. Push in to reset.

OPERATOR CONTROLS (GROUND CONTROLS)



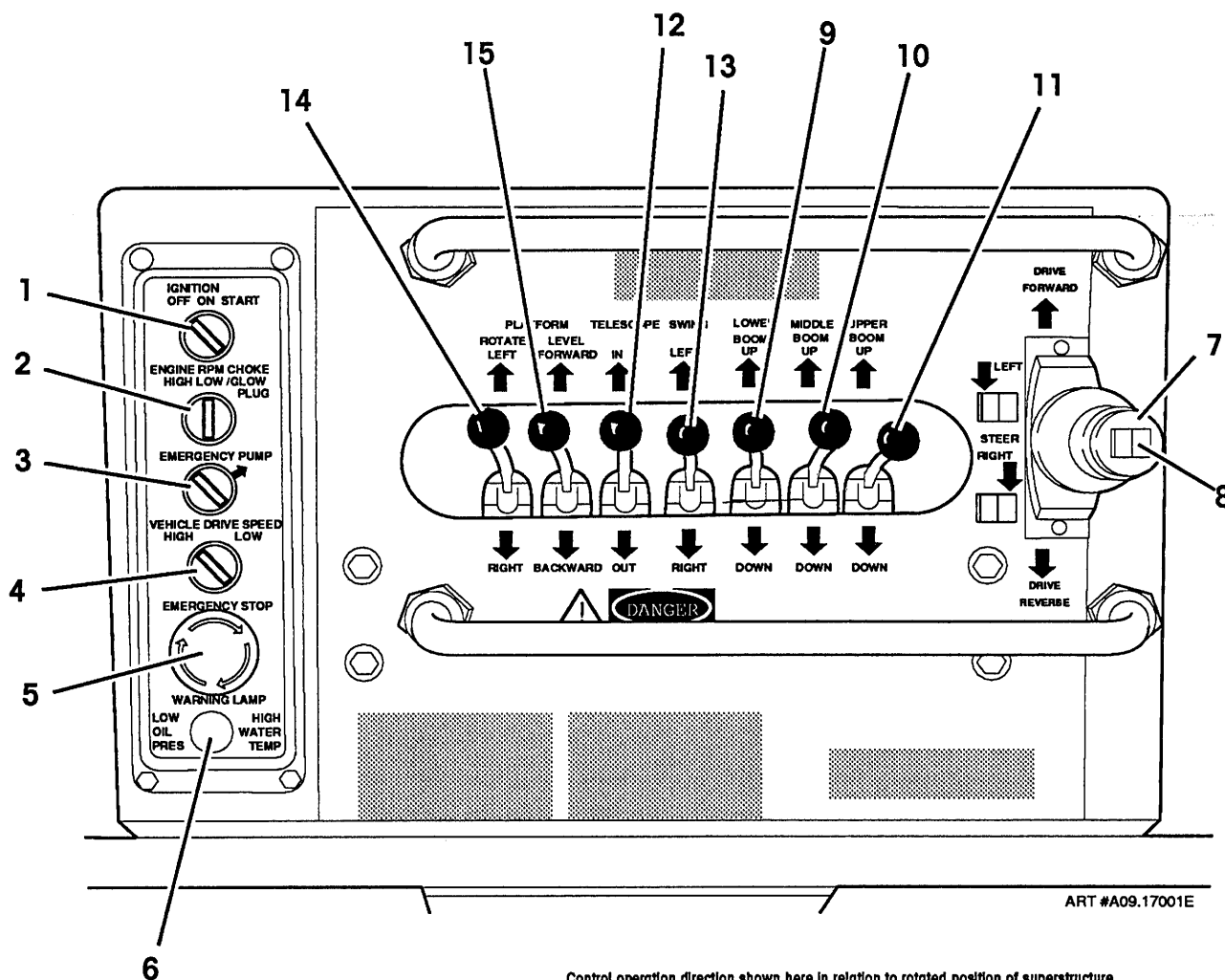
Electrical Controls



OPERATOR CONTROLS DESCRIPTION (GROUND CONTROLS, CONTINUED)

Item	Control	Location	Description
12.	Lower Boom Lever	Ground Valves, to right of Electrical Panel	Valve handle used to control the lower boom section. Move lever up to raise boom, down to lower boom. Each boom section can be raised and lowered independently.
13.	Middle Boom Lever	Ground Valves, to right of Electrical Panel	Valve handle used to control the middle boom section. Move lever up to raise boom, down to lower boom. Each boom section can be raised and lowered independently.
14.	Upper Boom Lever	Ground Valves, to right of Electrical Panel	Valve handle used to control the upper boom section. Move lever up to raise boom, down to lower boom. Each boom section can be raised and lowered independently.
15.	Boom Telescope (Extend) Lever	Ground Valves, to right of Electrical Panel	Valve handle which allows the telescopic upper boom to extend and retract, giving the operator access over obstacles. Move lever down to extend boom, up to retract boom.
16.	Swing Control Lever	Ground Valves, to right of Electrical Panel	Valve handle which controls the rotation of the superstructure on the undercarriage. Move lever up to swing the superstructure to the left (clockwise), down to swing to the right (counterclockwise). The superstructure rotates 360 degrees, with mechanical limiters to prevent continuous rotation.

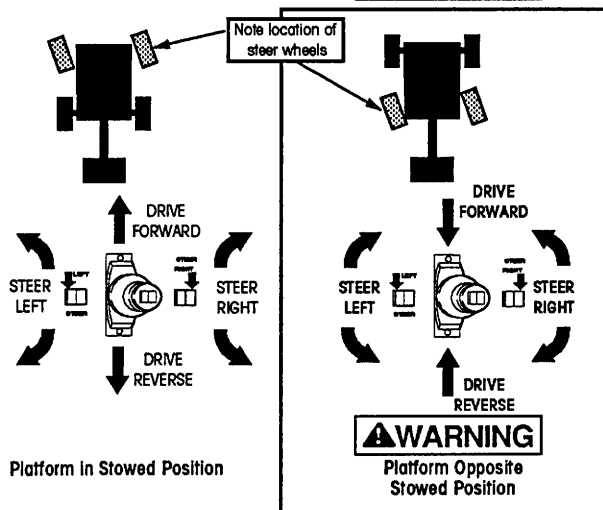
OPERATOR CONTROLS (PLATFORM CONTROLS)



ART #A09.17001E

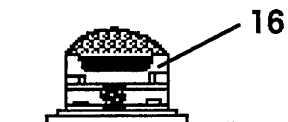
Control operation direction shown here in relation to rotated position of superstructure. Superstructure and undercarriage lock pin holes line up when operator in platform faces forward to steer wheels.

WARNING



WARNING

Platform Opposite Stowed Position



ON PLATFORM FLOOR

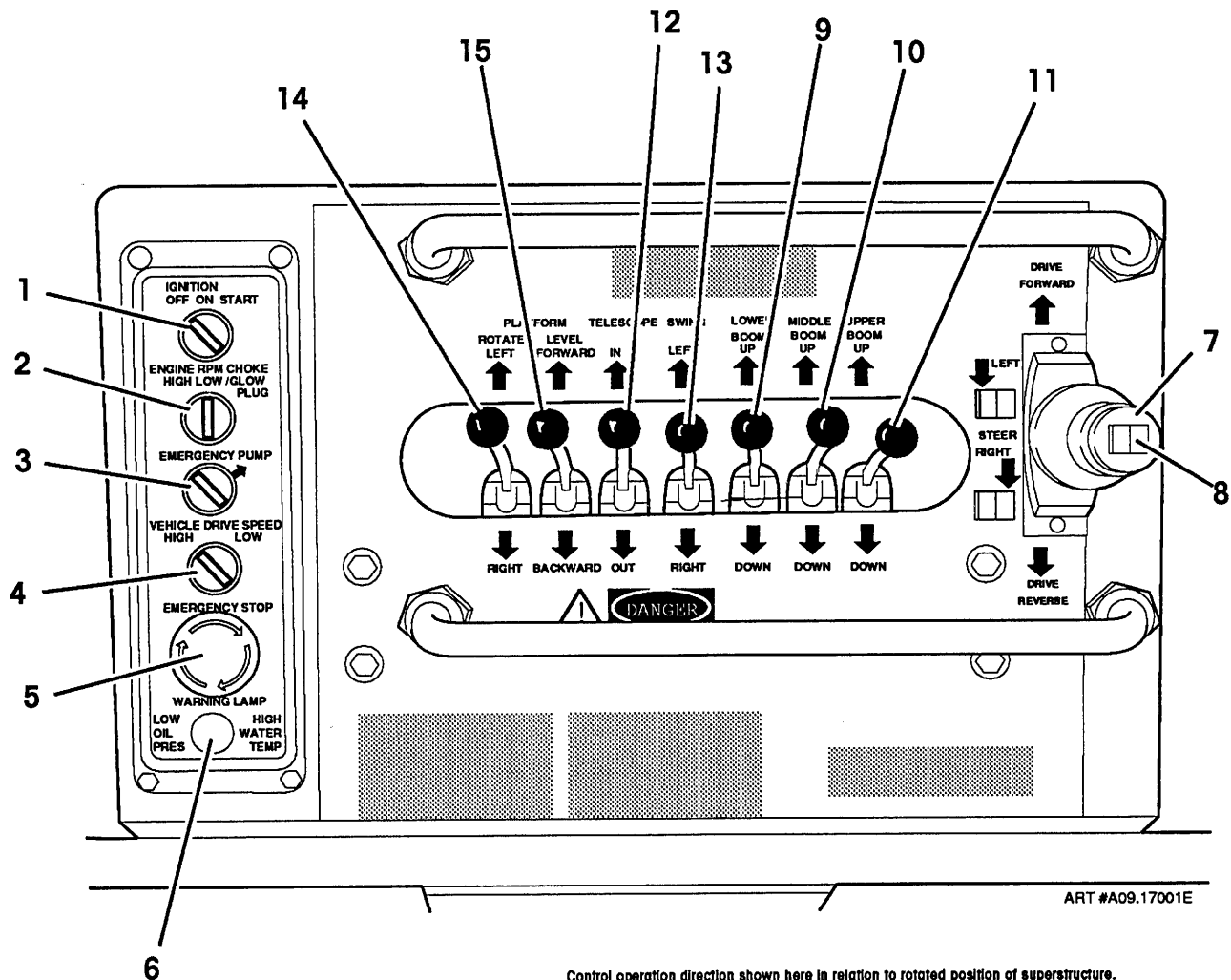
OPERATOR CONTROLS DESCRIPTION (PLATFORM CONTROLS)

Item	Control	Location	Description
1.	Ignition Switch	On Platform Console	Three position ignition switch. Left (counterclockwise) position is "OFF". Center position is ignition "ON", and full clockwise rotation engages the starter.
2.	Engine Switch	On Platform Console	Turn right (clockwise) to activate the engine choke (with gas engine) or glow plug (for Diesels). Center position is low engine RPM. Full counterclockwise rotation engages high engine RPM.
3.	Emergency Pump Switch	On Platform Console	Turn right (clockwise) to operate any function should the engine become inoperable.
4.	Vehicle Drive Speed Selector	On Platform Console	Shifts between high and low speed drive. NOTE: A gear change should only be made with drive controller in neutral.
5.	Emergency Stop Button	On Platform Console	Used to stop all functions in an emergency. Push for emergency stop. Turn clockwise to reset.
6.	Warning Lamp	On Platform Console	Red light that indicates low engine oil pressure or high engine coolant temperature. If this lamp should light, the engine will shut down automatically after a ten second delay.
7.	Drive Controller	On Platform Console	Controls forward and reverse machine travel at a speed proportional to handle movement.

WARNING

WITH THE PLATFORM SWUNG OVER THE STEERING WHEELS, USE CAUTION WHEN SELECTING THE TRAVEL DIRECTION. TRAVEL DIRECTION WILL BE OPPOSITE DRIVE CONTROL LEVER MOVEMENT.

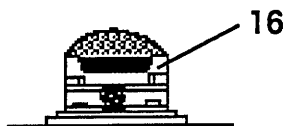
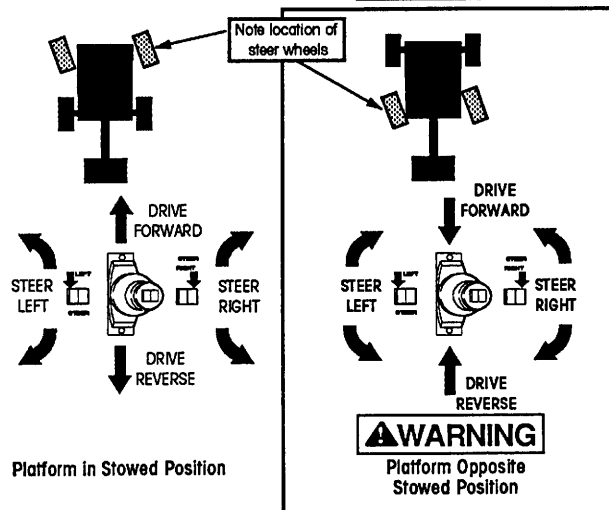
OPERATOR CONTROLS (PLATFORM CONTROLS)



ART #A09.17001E

Control operation direction shown here in relation to rotated position of superstructure. Superstructure and undercarriage lock pin holes line up when operator in platform faces forward to steer wheels.

WARNING



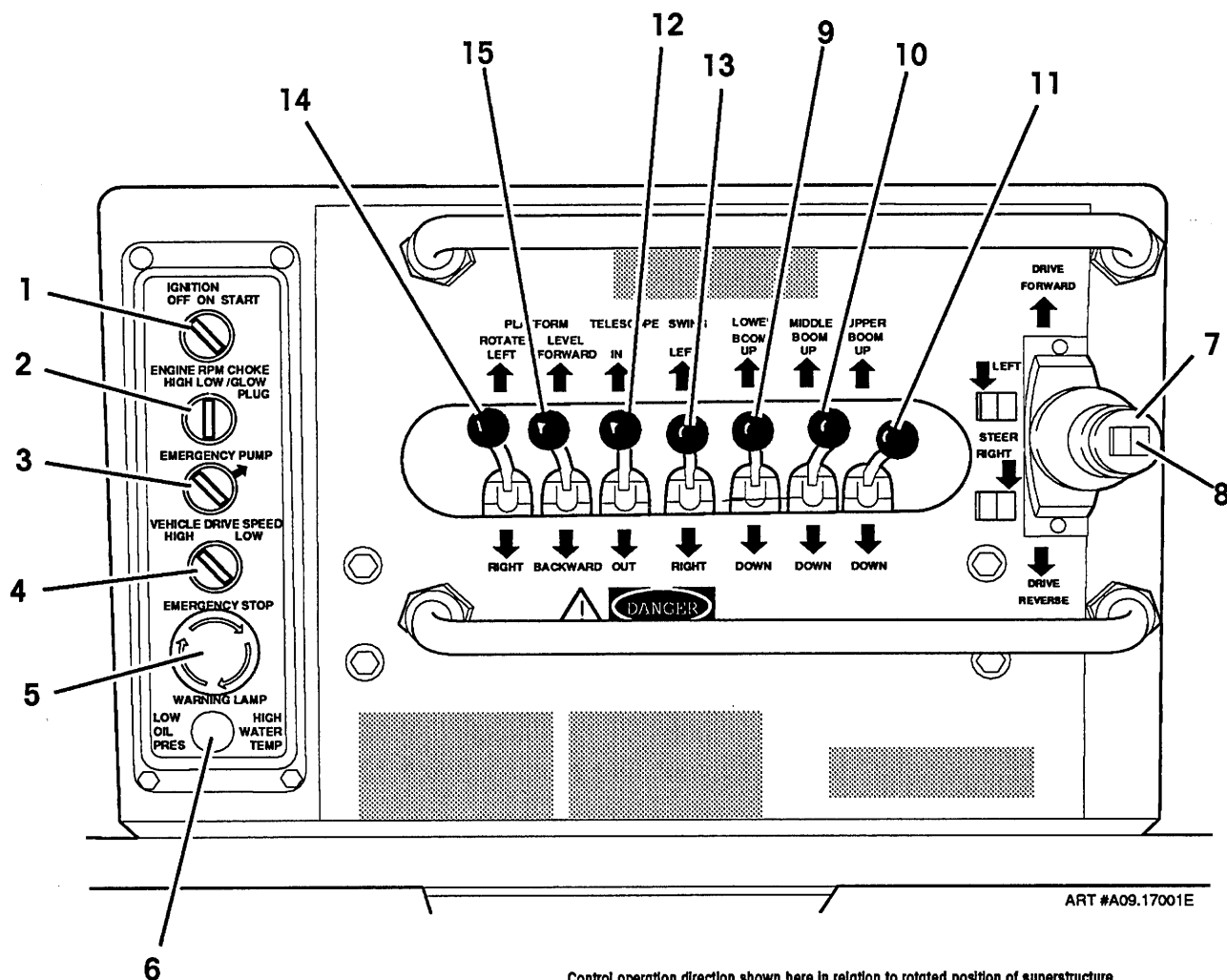
ON PLATFORM FLOOR

OPERATOR CONTROLS DESCRIPTION

(PLATFORM CONTROLS, CONTINUED)

Item	Control	Location	Description
8.	Steer Switch	On End of Drive Control Lever	Press switch left and hold to turn steer wheels to left, and right to turn steer wheels to right. Press and hold in opposite direction to straighten wheels.
 WARNING WITH THE PLATFORM SWUNG OVER THE STEERING WHEELS, USE CAUTION WHEN SELECTING THE STEERING DIRECTION. STEERING DIRECTION WILL BE OPPOSITE STEER SWITCH MOVEMENT.			
9.	Lower Boom Lever	On Platform Console	Valve handle used to control the lower boom section. Move lever forward to raise boom, back to lower boom. Each boom section can be raised and lowered independently.
10.	Middle Boom Lever	On Platform Console	Valve handle used to control the middle boom section. Move lever forward to raise boom, back to lower boom. Each boom section can be raised and lowered independently.
11.	Upper Boom Lever	On Platform Console	Valve handle used to control the upper boom section. Move lever forward to raise boom, back to lower boom. Each boom section can be raised and lowered independently.
12.	Boom Telescope (Extend) Lever	On Platform Console	Valve handle which allows the telescopic upper boom to extend and retract, giving the operator access over obstacles. Move lever back to extend boom, forward to retract boom.
13.	Swing Control Lever	On Platform Console	Valve handle which controls the rotation of the superstructure on the undercarriage. Move lever forward to swing the superstructure to the left (clockwise), back to swing to the right (counterclockwise). The superstructure rotates 360 degrees, with mechanical limiters to prevent continuous rotation.

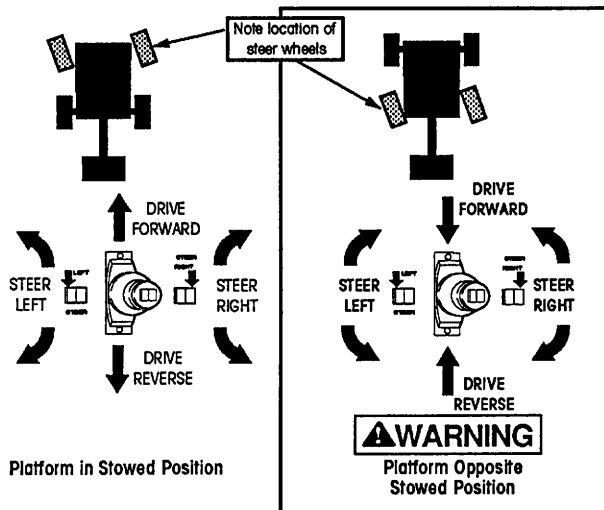
OPERATOR CONTROLS (PLATFORM CONTROLS)



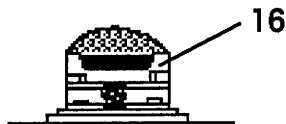
ART #A09.17001E

Control operation direction shown here in relation to rotated position of superstructure. Superstructure and undercarriage lock pin holes line up when operator in platform faces forward to steer wheels.

WARNING



OPERATOR CONTROLS



ON PLATFORM FLOOR

OPERATOR CONTROLS DESCRIPTION (PLATFORM CONTROLS, CONTINUED)

Item	Control	Location	Description
14.	Platform Rotate Lever	On Platform Console	Valve handle which controls the rotation of the platform. Move lever forward to rotate the platform to the left (clockwise), back to rotate to the right (counterclockwise). The platform will rotate 90 degrees from center in each direction.
15.	Platform Level Lever	On Platform Console	Valve handle which allows the platform to be manually leveled. Move lever forward to tilt the platform forward, back to tilt back.
16.	Foot Switch	On Platform Floor	Must be depressed to activate main hydraulic pump, allowing operation of any hydraulic function (drive, steer, boom or platform movement) from the platform. Depress foot switch before selecting function.
17.	Light Switch (Optional)	On Platform Console (Not Shown)	Flip switch to turn optional head and tail lights on and off.

STARTUP PROCEDURES

SHIFT CHECKS

Before the Simon AT60C Work Platform is put into use each shift, the following checks should be completed to make sure that the machine is safe and in good condition.

Refer to check lists at back of this manual for periodic maintenance requirements and additional procedures for severe duty applications:

- ___ Visually inspect all machine components, i.e. missing parts, torn or loose hoses, hydraulic fluid leaks, torn or disconnected wires, flat or damaged tires, etc. Both compartment doors can be opened to inspect components inside.
- ___ Check engine oil and fuel levels.
- ___ Check engine coolant level (on liquid cooled units).
- ___ Check battery electrolyte level and connections.
- ___ Check hydraulic fluid level with booms fully retracted and lowered.
- ___ Check that all shutoff valves on the hydraulic tank are open. When open, valve handles will be parallel with the length of the valve.



CAUTION

The shutoff valves on the hydraulic tank must be left open at all times, except during repairs or transport. If one or more of these valves are closed when the unit is running, extensive pump damage will occur.

- ___ Check wheel lug nuts for tightness. Check tire pressure (see Specifications page).
- ___ Check hoses and cables for worn areas.
- ___ Check hose carrier to make sure that it is not bent or sagging.
- ___ Inspect safety belt connections and check for worn areas on the belts.
- ___ Check platform rails and safety gate latch for damage.
- ___ Check pivot pins for security.
- ___ Check that all warning and instructional labels are legible and secure.

MACHINE STARTUP

DANGER

ALL OPERATORS MUST THOROUGHLY READ AND UNDERSTAND THE "SAFETY RULES AND PRECAUTIONS" SECTION OF THIS MANUAL PRIOR TO OPERATING THE MACHINE.

A COMPLETE VISUAL INSPECTION OF THE MACHINE MUST BE PERFORMED PRIOR TO OPERATIONAL CHECKS.

- Disengage lockpin before swinging the superstructure.
- Ensure that emergency stop button on ground control panel and platform console are disengaged. Turn clockwise to reset.
- Select the "GROUND" position of the ground/ platform switch.
- Turn the main power key switch to the "ON" position to energize the electrical system. Turn the ignition switch to the "ON" position.
- For gasoline engines, turn the engine selector to choke, hold it there and engage starter motor; or
for Diesel engines equipped with glow plugs, turn the engine selector to glow plug and hold it there for 30 seconds prior to engaging starter motor.
- Turn ignition selector to start engine. After a brief warmup period, select the "HIGH" engine RPM setting with the engine selector.
- Refer to the "Machine Specifications" section of this manual for the "System Pump Pressure" for this unit.
- Turn and hold the power switch to arrow, and fully retract boom. This is called "deadheading", and will lead to boom system pressure registering on the gauge at the ground control valve assembly.
- Check that the hydraulic pressure is as stated in the specifications.
- Raise or extend the boom, and push down on each of the three fastened corners of the tilt alarm located behind the electrical box. The alarm should sound as each corner is pressed beyond 5 degrees.

GROUND OPERATION AND CHECKS



BE SURE BOOM TRAVEL AREA IS CLEAR OF OBSTRUCTIONS.

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

- Disengage lockpin before using the turntable.
- Select the "GROUND" position of the ground/ platform switch.
- Turn the main power key switch to the "ON" position to energize the electrical system. Turn the ignition switch to the "ON" position.
- For gasoline engines, turn the engine selector to choke, hold it there and engage starter motor; or

for Diesel engines equipped with glow plugs, turn the engine selector to glow plug and hold it there for 30 seconds prior to engaging starter motor.

- Turn ignition selector to start engine. After a brief warmup period, select the "HIGH" engine RPM setting with the engine selector.
- Actuate the power switch on the ground control console.
- Slowly move the lower boom control lever up to operate the lower boom to the end of its movement.

- _____ Listen for any unusual noises.
- _____ Check for any vibration while the boom travels up or down.
- _____ Check for uneven or jerky operation.
- _____ Check for hydraulic leaks.
- _____ Check pivot pin security. Ensure that all securing bolts are in place on each pin locking point.

- Return the lower boom to its stowed position by slowly moving the control lever to the down position.

GROUND OPERATION AND CHECKS (CONTINUED)

- Operate the middle boom, upper boom, and telescope functions the same way.

____ Listen for any unusual noises.
____ Check for any vibration while the boom travels.
____ Check for uneven or jerky operation.
____ Check for hydraulic leaks.
____ Check pivot pin security. Ensure that all securing bolts are in place on each pin locking point.

- Operate the boom swing function.

____ Listen for any unusual noises.
____ Check for any vibration while the superstructure rotates.
____ Check for uneven or jerky operation.
____ Check for hydraulic leaks.
____ Ensure that all securing bolts are in place.

EMERGENCY PUMP OPERATION AND CHECK

- While operating a boom function up, press the emergency stop button on the ground control console. All machine functions should stop, including the engine. Reset emergency stop button.

With engine off:

- Actuate the emergency pump switch.
- Slowly move the boom lever in the down position.

____ Listen for any unusual noises.
____ Check for uneven or jerky operation.
____ Check for hydraulic leaks.

- Once movement has been established, return the boom section to the stowed position and release the emergency pump switch.

IMPORTANT: The emergency pump is designed for emergency descent only and should not be operated for extended periods of time.

PLATFORM OPERATION AND CHECKS

- Complete the Ground Operational Checks before you perform the platform checks.
- Select the "PLATFORM" control position on the ground/platform selector switch.
- If the unit is on a high traction surface, make sure disconnect hub on steer axle is in "Disengaged" position (refer to "Two Wheel/ Four Wheel Drive", under "Operation"). There is no visible means to determine two wheel or four wheel drive mode. Check if disconnect hub can be turned to "Disengaged" position.

CAUTION

Steering on high traction surfaces with disconnect hub engaged may damage drivetrain components. Do NOT operate the unit in four wheel drive mode on high traction surfaces.

- Enter the Platform. Close the gate securely and connect the safety belt to the platform.
- Turn the ignition switch to the "ON" position.
- For gasoline engines, turn the engine selector to choke, hold it there and engage starter motor; or
for Diesel engines equipped with glow plugs, turn the engine selector to glow plug and hold it there for 30 seconds prior to engaging starter motor.

NOTE: If engine has been running for ground operational checks, it should not require choke or glow plugs to restart.

- Turn ignition selector to start engine. After a brief warmup period, select the "HIGH" engine RPM setting with the engine selector.

WARNING

BE SURE BOOM TRAVEL AREA IS CLEAR OF OBSTRUCTIONS.

DO NOT OPERATE THE MACHINE IF THESE CHECKS REVEAL ANY DEFECT OR ABNORMALITY.

- After a brief warm up period, select the "HIGH" engine RPM setting.

PLATFORM OPERATION AND CHECKS (CONTINUED)

- Actuate the foot pedal power switch, mounted on the floor of the platform.
- Slowly move the lower boom control lever up to operate the lower boom to the end of its movement.

_____ Listen for any unusual noises.
 _____ Check for any vibration while the boom travels up or down.
 _____ Check for uneven or jerky operation.
 _____ Check for hydraulic leaks.

- Return the lower boom to its stowed position by slowly moving the control lever to the down position.

- Operate the middle boom, upper boom, and telescope functions the same way.

_____ Listen for any unusual noises.
 _____ Check for any vibration while the boom travels.
 _____ Check for uneven or jerky operation.
 _____ Check for hydraulic leaks.

- Operate the boom swing function.

_____ Listen for any unusual noises.
 _____ Check for any vibration while the superstructure rotates.
 _____ Check for uneven or jerky operation.
 _____ Check for hydraulic leaks.

- Operate the platform level function by slowly operating the platform level lever forward and backward. Return the platform to a level position.

_____ Listen for any unusual noises.
 _____ Check for any vibration while the platform tilts forward or backward.
 _____ Check for uneven or jerky operation.
 _____ Check for hydraulic leaks.
 _____ Check pivot pin security. Ensure that all securing bolts are in place on each pin locking point.

- Operate the platform rotate function by slowly moving the platform rotate lever forward and backward. Return the platform to the center position.

_____ Listen for any unusual noises.
 _____ Check for any vibration while the platform rotates.
 _____ Check for uneven or jerky operation.
 _____ Check for hydraulic leaks.

PLATFORM OPERATION AND CHECKS (CONTINUED)

WARNING

ACTUATION OF THE RED "EMERGENCY STOP" BUTTON WILL APPLY BRAKES IMMEDIATELY!

THIS MAY CAUSE UNEXPECTED PLATFORM MOVEMENT AS THE MACHINE COMES TO A SUDDEN STOP.

- While operating a boom function, press the emergency stop button on the platform control console. All machine functions should stop, including the engine. Reset emergency stop button and restart engine.
- Turn the Drive Speed Selector Switch to "LOW".

WARNING

WITH THE PLATFORM SWUNG OVER THE STEER WHEELS, USE CAUTION WHEN SELECTING THE TRAVEL DIRECTION. TRAVEL AND STEERING DIRECTION WILL BE OPPOSITE CONTROL OPERATION.

- With the Foot Pedal engaged slowly move the drive lever forward. The machine should smoothly accelerate in the direction of the control lever movement. Movement alarm sounds whenever the vehicle is in motion.

- Listen for any unusual noises.
- Check for any vibration while the unit travels.
- Check for uneven or jerky operation.
- Check for hydraulic leaks.
- Report and repair any problem.

- Return the Drive Control Lever to neutral. The unit should come to a complete stop. The movement alarm should shut off.
- Raise the upper boom section to just above horizontal, and repeat the drive tests. The machine should travel a maximum of 0.5 M.P.H. (0.8 K.P.H.), which is noticeably slower than in the previous tests. Higher travel speeds are possible only with upper boom retracted and positioned below horizontal while the lower and mid booms are in the stowed position.

PLATFORM OPERATION AND CHECKS (CONTINUED)

- Return all boom sections to the stowed position.



High speed should only be used on firm, level surfaces.

- Turn the drive speed switch to "HIGH", and repeat the drive tests.

NOTE: Change in speed should be made only with Drive Controller in center (neutral) position and the foot pedal released. If drive speed switch is changed while machine is moving, the shift will not occur until the unit comes to a stop.

- Release the foot pedal.

IMPORTANT: All machine operations should stop upon release of Foot Pedal.

- Turn the Drive Speed Selector Switch to "LOW", and allow the engine to slow to idle speed.
- Test the emergency stop function by pushing emergency stop button. All functions should stop, including the engine. Reset the emergency stop button.

OPERATION

WARNING

DUE TO THE DESIGN OF THE SIMON AT60C, IT IS POSSIBLE TO DRIVE THROUGH LOCATIONS IN WHICH IT WOULD BE UNSAFE TO RAISE THE PLATFORM.

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

DO NOT RELY ON THE TILT ALARM TO WARN YOU OF AN UNSAFE CONDITION.

SAFE OPERATION BEGINS WITH A SAFE OPERATOR.

Perform Start-Up Procedures. Remember to place the ground/ platform control switch in the "PLATFORM CONTROLS" position before going to the platform for operation.

Enter platform, close and secure safety gate, and attach safety belt.

TWO WHEEL/ FOUR WHEEL DRIVE

CAUTION

Steering on high traction surfaces with disconnect hub engaged may damage drivetrain components. Do NOT operate the unit in four wheel drive mode on high traction surfaces.

For two wheel drive mode, turn disconnect hub on steer axle to "Disengaged" position.

- There is no visible means to determine two wheel or four wheel drive mode. Check if disconnect hub can be turned to "Disengaged" position.
- It may be necessary to slowly drive unit while turning disconnect hub from engaged to disengaged position.

For four wheel drive mode, turn disconnect hub on steer axle to "Engaged" position.

COLD WEATHER OPERATION

- In below freezing weather, the hydraulic fluid should be allowed to warm before full operation of the unit.
- Check for water contamination of the fluid.
- Check for and remove ice on the platform, and swing gear teeth prior to operation.
- Check that all valves operate smoothly, and return freely to the neutral position.

CAUTION

Avoid sudden braking or steering, go slow and leave more maneuvering room during cold weather operation until the hydraulic fluid warms up.

DRIVING AND STEERING

WARNING

ENSURE THAT TRAVEL ROUTE IS CLEAR OF PERSONNEL AND DEBRIS.

High engine speed is recommended when driving. The Foot Pedal power switch must be fully depressed during all driving operations.

WARNING

WITH THE PLATFORM SWUNG OVER THE STEER WHEELS, USE CAUTION WHEN SELECTING THE TRAVEL DIRECTION. TRAVEL AND STEERING DIRECTION WILL BE OPPOSITE CONTROL OPERATION.

Push the Drive Controller Lever forward to give forward motion, or pull the Lever back to give reverse motion. The drive speed of the unit is proportionally controlled by the amount of movement made to the Lever. When booms are elevated or extended, the machine operates only at "creep" speed.

Steering is achieved by depressing the Rocker Switch, on top of the Drive Control Lever, to the left or right as required. Press in the opposite direction to return to straight ahead position.

DRIVING AND STEERING (CONTINUED)

Although the unit can be driven with the platform positioned at either end of the unit, the operator may find driving easier from the stowed position (platform located over non-steering axle). When driving with platform over steering end, remember that all directions given to the steer and drive controls will be reversed.

When descending a ramp (incline), it is necessary to control the speed of the unit. Slowing is achieved by moving the Drive Controller Lever back towards the center (neutral) position.

BRAKING

For parking, the brakes are automatically applied when the drive control lever is in the center "neutral" position.



RELEASE OF THE DRIVE CONTROL LEVER OR ACTUATION OF THE RED "EMERGENCY STOP" BUTTON WILL APPLY BRAKES IMMEDIATELY!

THIS MAY CAUSE UNEXPECTED PLATFORM MOVEMENT AS THE MACHINE COMES TO A SUDDEN STOP.

BOOM, SUPERSTRUCTURE AND PLATFORM

High engine speed is recommended when operating any functions. Press the foot switch, then select the required function. Available functions are:

- Lower Boom UP or DOWN
- Mid Boom UP or DOWN
- Upper Boom UP or DOWN
- Upper Boom EXTEND or RETRACT
- Superstructure SWING LEFT or RIGHT
- Platform level FORWARD or BACKWARD
- Platform rotate LEFT or RIGHT

Each of these functions can be selected by moving the appropriate lever in the proper direction.

NOTE: Function speeds are proportional to the distance the levers are moved. Multiple control operation is possible by selecting more than one function at a time.

GASOLINE ENGINE OPERATION

- Turn the ignition switch to "START" and the engine switch to "CHOKE". As soon as the engine starts, release both switches.

DUAL FUEL ENGINE OPERATION

GASOLINE OPERATION

- Operate the machine as normal.

GASOLINE TO PROPANE SWITCHING

This switching can only be done using the ground controls. The machine should only be switched to propane while the engine is running.

- Engine RPM switch should be in "HI" position.
- Open valve on propane tank.
- Turn dual fuel selector switch on the ground control panel to the "OFF" position. Allow the engine to run until it consumes the fuel in the carburetor bowl.
- As soon as the engine starts to miss, turn the selector switch on the ground control panel to the "PROPANE" position. Turn the fuel select control handle a quarter turn counterclockwise to unlock it, and push it in. Then, turn the handle clockwise to lock in position. The engine should run normally as soon as the switch engages and handle is pushed in.

PROPANE TO GASOLINE SWITCHING

This switching can only be done using the ground controls. The machine should only be switched to gasoline while the engine is running.

- Engine RPM switch should be in "HI" position.
- Turn dual fuel selector switch on the ground control panel to the "OFF" position. Allow the engine to run until it consumes the propane in the intake manifold. ENGINE WILL STALL.
- Turn the selector switch on the ground control panel to "GAS". Turn the fuel select control handle a quarter turn counterclockwise, and pull it out. Then turn it clockwise to lock in position, and restart engine. The engine will run normally.

NOTE: When operating on propane, the engine will run for several seconds after the ignition is shut off. This allows the propane to clear the intake manifold.

- Close valve on propane tank.

DIESEL ENGINE OPERATION

FOR DIESEL ENGINES EQUIPPED WITH GLOW PLUGS:

- Turn the glow plug switch and hold for 30 seconds (when the engine is cold) prior to engaging the starter motor.

SHUT-DOWN PROCEDURES

- When finished with the unit, place the booms in the stowed position.
- Park the unit on a level surface. Secure to prevent vandalism and to discourage children from climbing or playing on it.
- Turn the ignition throttle switch to "LOW", and allow the engine to slow to idle speed.
- Place the ground/ platform selector lever in the "GROUND" position.
- Switch the ignition selector on the main control box to the "OFF" position.
- Turn off the main power key switch. Remove key to prevent unauthorized operation.

TRANSPORTING THE UNIT

TOWING PROCEDURES (WITH OPTIONAL TOWING PACKAGE)



With drive disengaged, machine has no brakes and will roll freely on a slope. Attach tow bar or winch cable or block tires before disengaging drive.

1. Remove tow bar from mounts on undercarriage and install tow bar onto tow bracket located on the center steer arm. Be sure retaining clip is in place to prevent hitch pin from coming loose while machine is being towed.
2. Attach tow bar to towing vehicle. Ensure that tow bar is securely locked onto tow hitch.
3. Pull out the black knob on the end of the steering disconnect valve (steer wander valve), located next to the center steer arm, to hydraulically disengage the steer system.
4. Start engine and run at high speed.

NOTE: If engine is not operational, the emergency pump can be used.

5. Press blue brake release push button (located at the front of the superstructure, on the bracket welded to the hydraulic tank) and close ball valve by rotating handle until it is perpendicular to the valve body. Then, release the blue brake push button. and turn engine off.
6. Disengage the drive by selecting "DRIVE DISENGAGED" position with the transfer case shift rod. It may be necessary to roll the unit slightly to allow the transfer case to shift between the drive and neutral positions.

TOWING PROCEDURES (CONTINUED)

The tow vehicle must have sufficient braking capability to stop itself as well as the Constructor. Tow speed should not exceed 6 mph.

To return the unit to operational mode:

1. Return transfer case shift rod to "DRIVE ENGAGED" position.
2. Press blue brake release push button and open ball valve.
3. Push in the black knob on the end of the steer wander valve.
4. Remove tow bar from tow bracket and return it to storage position on side of undercarriage.

TRUCK OR TRAILER TRANSPORT

WARNING

ALWAYS USE A WINCH TO ASSIST LOADING OR UNLOADING THE UNIT FROM A TRUCK OR TRAILER. CONNECT WINCH CABLE TO THE TIE DOWN OPENINGS ON THE UNDERCARRIAGE.

UNASSISTED LOADING OR UNLOADING OF ANY MOBILE PLATFORM IS NOT RECOMMENDED.

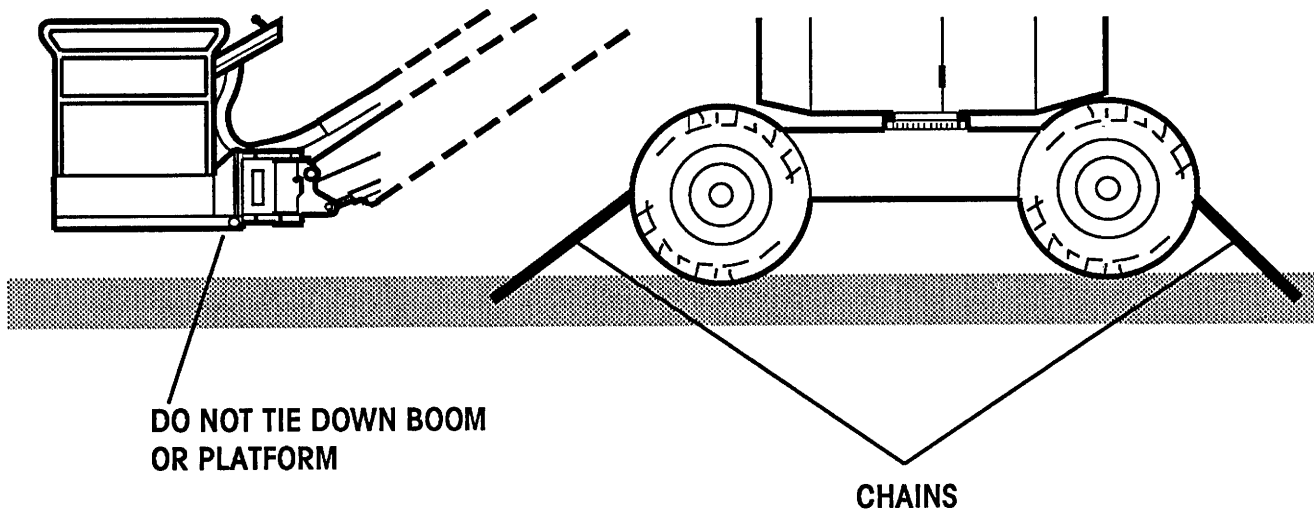
1. Enter the platform, and start the engine using the platform controls. Select the "LOW" drive speed.
2. Raise the upper boom to allow greater ground clearance so that the platform will clear any obstacles as the machine goes up the loading ramp.
3. Using a winch, carefully maneuver the unit onto the truck or trailer. (Moving drive levers off of center "neutral" position will release brakes.)
4. Lock the superstructure to the undercarriage by installing the lock pin provided.

CAUTION

To avoid damaging the unit, the platform MUST NOT be tied to the trailer bed in any way.

TRUCK OR TRAILER TRANSPORT (CONTINUED)

- 5 Ensure that the boom is fully retracted, and that the platform will **not** contact any other item, including the bed of the truck or trailer.



AT60C Tie Down (recommended)

6. Use two (2) 1/2 inch, "Grade 7" chains to the tie down cut outs.

NOTE: Ratchet type load binders are recommended. If using lever type load binders, wire or strap them shut, or wrap chains around them to prevent opening.

7. The negative battery cables should be disconnected for long distance transport. It is recommended that the fuel and hydraulic tank valves be closed as well.

EMERGENCY SYSTEM AND PROCEDURES



IF THE UNIT FAILS WHILE THE OPERATOR'S PLATFORM IS RAISED OR EXTENDED, DO NOT ATTEMPT TO CLIMB DOWN THE BOOM ASSEMBLY. SERIOUS INJURY MAY RESULT.

EMERGENCY ELECTRICAL PUMP

The AT60C Mobile Platform has a battery powered emergency pump. This pump can be activated from the operator's platform or ground control station to briefly operate the machine when the unit has lost engine power.

- Turn and hold the emergency pump switch on the platform or ground control console to the arrow.
- Select the proper function as desired to fit the situation.

To prevent the battery from completely discharging and the emergency pump from overheating, release the emergency pump switch to allow a 30 second rest period after every 30 seconds of operation. Once the unit has been safely positioned, correct the cause of the failure before returning the unit to service.

EMERGENCY LOWERING

It is not possible for us to foresee every emergency situation that could arise during operation of this machine. Information on the following pages describes three typical emergency situations, and lists appropriate actions that can be taken.

When faced with an emergency, above all please remember:

- Stay calm.
- Think through the situation before operating the machine.
- Get help if necessary.

SITUATION: Platform elevated, operator not incapacitated, but unit will not respond to platform controls.

POSSIBLE CONDITION:

- One or more functions not operating correctly.
- Unit movement from unselected control lever.
- Unit function will not stop unless power is switched off.

CORRECTIVE ACTION

1. Remove foot from foot switch.
2. Press the red emergency stop button.
3. Evaluate the nature of the failure. Return to the ground, using the emergency pump and lowering procedure (see "Emergency Electrical Pump", earlier in this section).
4. If unable to return to the ground using the platform controls and the emergency pump, contact an experienced operator to lower the machine using the emergency pump and lowering procedure (see "Emergency Electrical Pump" earlier in this section).

 **DANGER**

DO NOT TRY TO CLIMB DOWN THE BOOM SECTIONS.

HAVE AN EXPERIENCED OPERATOR USE THE EMERGENCY PUMP TO SAFELY LOWER THE PLATFORM.

5. Report the incident to your supervisor immediately.

SITUATION: Unit elevated, with operator incapacitated at platform controls.



DO NOT TOUCH UNIT !!!

DETERMINE THE CAUSE OF THE PROBLEM BEFORE YOU TOUCH THE MACHINE.

CORRECTIVE ACTION

1. Have someone summon first aid or rescue squad.
2. Attempt to talk to operator before taking any rescue measures.
3. **Before attempting emergency lowering procedure, check to see if the operator is:**
 - **in a pinned position, or**
 - **would be endangered if platform is moved.**
4. After establishing that the machine is not in contact with live power lines, lower the platform as necessary, using emergency procedures (see "Emergency Electrical Pump", earlier in this section).
5. Render first aid to the operator.
6. Report the incident to your supervisor immediately.

IMPORTANT: Any incident involving personal injury must be immediately reported to the local Simon Aerials Distributorship as well as to Simon Aerials Inc.

SITUATION: Platform in contact with live power lines and operator incapacitated.

 **DANGER**

DO NOT TOUCH UNIT !!!!

CORRECTIVE ACTION

1. Have someone summon first aid or rescue squad.
2. Contact authorized personnel to disconnect power supply touching unit.
3. **Before attempting emergency lowering if operator is unconscious, check to see if he is:**
 - In a pinned position, or
 - would be endangered if platform is moved.
4. **AFTER POWER IS CUT**, lower the platform as necessary, using emergency procedures (see "Emergency Electrical Pumps", earlier in this section).
5. **Report the incident to your supervisor immediately.**

IMPORTANT: Any incident involving personal injury must be immediately reported to the local Simon Aerials Distributorship as well as to Simon Aerials Inc.

SECTION 3: MAINTENANCE



Table of Contents, Section 3

Maintenance

General Maintenance Tips 3-3

Shift Operational Checklist 3-4

Weekly Operational checklist 3-7

Monthly Operational Checklist 3-8

Semi-Annual Operational Checklist 3-10

Troubleshooting

 What to check if unit will not start: 3-12

 What to check if functions will not operate: 3-12

Lubrication Chart 3-13

GENERAL MAINTENANCE TIPS

- Never leave hydraulic components or hoses open. They must be protected from contamination (including rain) at all times.
- Never open a hydraulic system or engine when there are contaminants in the air.
- Use only recommended lubricants. Improper lubricants or incompatible lubricants may be as harmful as no lubrication.
- ALWAYS clean the surrounding area before opening hydraulic or engine systems.
- Watch for makeshift "fixes" which can jeopardize safety as well as lead to more costly repairs.
- Any work platform found not to be in safe operating condition should be removed from service until repaired. All repairs should be made by authorized personnel in conformance with the manufacturer's operating, maintenance, and repair manuals.

SHIFT OPERATIONAL CHECKLIST

All checks must be completed before operation of the unit.

These checklists can be copied as needed to aid in performing these inspections.

DATE: _____ INSPECTED BY: _____

MODEL NUMBER: _____ SERIAL NUMBER: _____

GENERAL INFORMATION

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 Simon AT60C clean!!



THIS CHECKLIST MUST BE USED AT DAILY INTERVALS OR AFTER EVERY 6 TO 8 HOURS OF USE, WHICHEVER IS SOONER. FAILURE TO DO SO COULD ENDANGER THE LIFE OF THE OPERATOR. ALWAYS REMEMBER, A LITTLE PREVENTIVE MAINTENANCE CAN SAVE MUCH MORE THAN IT COSTS.

INITIAL	DESCRIPTION
_____	1. Check unit for any prior-shift or transportation damage, i.e. missing parts, torn or loose hoses, hydraulic oil leaks, torn or disconnected wires, flat or damaged tires etc. The compartment doors on both sides can be opened to inspect components inside.
_____	2. Check for unit damage, broken welds, improper or makeshift repairs.
_____	3. Check hydraulic system for leaks, examine hoses for signs of excessive wear, chafing or twisting. Replace worn hoses if necessary.
_____	4. Check engine oil and fuel levels.
_____	5. Check engine coolant level (liquid cooled engine only).
_____	6. Check hydraulic fluid level with all cylinders retracted. Inspect condition of hydraulic fluid in the reservoir. Fluid should be a clear amber color.
_____	7. Check that hydraulic pressure is as stated in the specifications.

SHIFT OPERATIONAL CHECKLIST (CONTINUED)

INITIAL	DESCRIPTION
_____	8. Check if wheel lug nuts are tight.
_____	9. Check tires for cracks or other damage, and proper inflation pressure (see specifications).
_____	10. Check hose track to verify that it is not bent or sagging.
_____	11. Inspect the work platform and boom structure for signs of damage and broken welds. Check gate latch for damage
_____	12. Check safety belt connection.
_____	13. Check battery terminals for tight connections and cleanliness.
_____	14. Check emergency pump for operation and that pressure is as stated in the specifications.
_____	15. Check pressure gauge on filter assembly. Replace element if gauge reads 20 PSI or higher. We recommend replacing both suction and return filter elements at the same time.
_____	16. Check that no attempt had been made to override the drive interlock system by a previous operator.
_____	17. Check warning and operating instruction decals for legibility.
_____	18. Once all pre-inspection checks have been completed, test the Simon Constructor's ground control station for proper operation.
_____	19. Check platform controls for proper operation.
_____	20. Check pin joints and retaining bolts for security.
_____	21. With the booms raised, check for the smooth operation of creep speed drive.
_____	22. With the only upper boom raised, check operating speeds to ensure they are within specified limits.
_____	23. Follow engine daily service requirements. Refer to the Engine Maintenance Manual supplied with your Constructor.

Continued on following page . . .

SHIFT OPERATIONAL CHECKLIST (CONTINUED)

INITIAL DESCRIPTION

Additional Maintenance Requirements for Harsh Environments

- | | |
|-------|---|
| _____ | • Inspect cylinder boots, valve spool boots, etc., for cuts or other damage after every 8 hours of service. Repair or replace if necessary. |
| _____ | • Check hydraulic system for leakage after every 8 hours of operation. |
| _____ | • Follow engine severe duty service requirements. Refer to the Engine Maintenance Manual supplied with your Constructor. |

WEEKLY OPERATIONAL CHECKLIST

DATE: _____ INSPECTED BY: _____

MODEL NUMBER: _____ SERIAL NUMBER: _____

These checklists can be copied as needed to aid in performing these inspections.

GENERAL INFORMATION

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 Simon AT60C clean!!



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

INITIAL

DESCRIPTION

- | | |
|-------|--|
| _____ | 1. Perform all checks listed on daily operational checklist. |
| _____ | 2. Check wheel lug nut torque (see specifications). |
| _____ | 3. Lubricate swing bearing and drive pinion gear. |

Additional Maintenance Requirements for Harsh Environments

- | | |
|-------|--|
| _____ | • Lubricate all grease fittings (see Lubrication Chart). |
| _____ | • Apply proper lubricant to swing bearing and drive pinion gear (see Lubrication Chart). |
| _____ | • Follow engine severe duty service requirements. Refer to the Engine Maintenance Manual supplied with your Constructor. |

MONTHLY OPERATIONAL CHECKLIST

DATE: _____ INSPECTED BY: _____

MODEL NUMBER: _____ SERIAL NUMBER: _____

These checklists can be copied as needed to aid in performing these inspections.

GENERAL INFORMATION

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 Simon AT60C clean!!**



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

INITIAL

DESCRIPTION

- | | |
|-------|--|
| _____ | 1. Perform all checks listed on daily and weekly operational checklists. |
| _____ | 2. Lubricate all grease fittings (including drive shafts). |
| _____ | 3. Clean and lubricate all hydraulic valve spool linkages. |
| _____ | 4. Torque (16) nuts on (8) "U"-bolts used for axle mounting (see specifications). |
| _____ | 5. Check protective rubber cover around hoses at moving anchor tip boom, support posts, boom hose passages and at swing bearing. |
| _____ | 6. Check boom hose carrier for sag and other damage. If damaged, repair the cause of damage, i.e. hoses too tight, breaking cross braces and worn, cracked or abraded hoses. |
| _____ | 7. Check torque of swing bearing bolts (see specifications). |

Continued on following page . . .

CHECKLIST

MONTHLY OPERATIONAL CHECKLIST (CONTINUED)

INITIAL	DESCRIPTION
_____	8. Check adjustment and security of swing drive. There should be a slight amount of backlash between the turntable and undercarriage when properly adjusted. Check torque of mounting bolts (see specifications).
_____	9. Check oil level in swing drive. It should be half filled.
_____	10. Check oil level in both axles, planetary box and transfer case. (Refer to Lubrication Chart.)
_____	11. Follow engine monthly service requirements. Refer to the Engine Maintenance Manual supplied with your Constructor.
_____	12. Adjust air gap between disc brake pads and brake disc to 0.012 inch (0.305 mm) on all four brake calipers.
_____	13. Visually inspect brake pads for cracks, chips and gouges.

Additional Maintenance Requirements for Harsh Environments

EVERY 90 DAYS

- Replace suction and return filter elements.
- Change engine oil and filter.

SEMI-ANNUAL OPERATIONAL CHECKLIST

DATE: _____ INSPECTED BY: _____

MODEL NUMBER: _____ SERIAL NUMBER: _____

These checklists can be copied as needed to aid in performing these inspections.

GENERAL INFORMATION

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 Simon AT60C clean!!



THIS CHECKLIST MUST BE USED AT SIX MONTH INTERVALS OR EVERY 500 HOURS, WHICHEVER IS SOONER. FAILURE TO DO SO COULD ENDANGER THE LIFE OF THE OPERATOR. ALWAYS REMEMBER, A LITTLE PREVENTIVE MAINTENANCE CAN SAVE MUCH MORE THAN IT COSTS.

INITIAL

DESCRIPTION

- | | |
|---|--|
| <div style="border-left: 1px solid black; height: 15px; margin-bottom: 10px;"></div> <div style="border-left: 1px solid black; height: 15px; margin-bottom: 10px;"></div> <div style="border-left: 1px solid black; height: 15px; margin-bottom: 10px;"></div> <div style="border-left: 1px solid black; height: 15px; margin-bottom: 10px;"></div> <div style="border-left: 1px solid black; height: 15px; margin-bottom: 10px;"></div> <div style="border-left: 1px solid black; height: 15px; margin-bottom: 10px;"></div> | <ol style="list-style-type: none"> 1. Perform all checks listed on daily, weekly and monthly operational checklists. 2. Have hydraulic fluid sample analyzed at a test laboratory. Follow the recommendations of test results. <p style="margin-top: 20px;">NOTE: 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.</p> <ol style="list-style-type: none"> 3. Inspect the entire machine for signs of damage and broken welds. 4. Check operating speeds to ensure they are within specified limits. 5. Check operation of emergency power system. 6. Check all decals for legibility. |
|---|--|

Continued on following page . . .

CHECKLIST

SEMI-ANNUAL OPERATIONAL CHECKLIST (CONTINUED)

INITIAL

DESCRIPTION

7. Clean and lubricate all switches with an electrical contact cleaner and ensure that the switches operate freely in all positions.
8. Check the electrical mounting and hardware connections for security.
9. Check that engine RPM is as stated in the specifications.
10. Replace both suction and return filter elements.
11. Check tightness of upper frame, swing bearing and swing drive mounting bolts. (Refer to specifications for proper torque values.)
12. Inspect entire machine for worn or damaged components. Replace as necessary.
13. Follow engine semi-annual service requirements. Refer to the Engine Maintenance Manual supplied with your Constructor.
14. Remove brake calipers and check brake pad thickness. Replace linings when they reach a minimum thickness of 0.150 inch (3.810 mm).

EVERY YEAR

15. Drain and replace fluid from hydraulic reservoir. Drain and replace fluid from axles, planetary box and transfer case. If badly contaminated, it may be necessary to disassemble and inspect components.

EVERY TWO YEARS

16. Drain and replace fluid from swing drive. If badly contaminated, it may be necessary to disassemble and inspect components.

Additional Maintenance Requirements for Harsh Environments

EVERY SIX MONTHS

- Drain and replace fluid from swing drive, axles, and transfer case.
- Follow engine severe duty service requirements. Refer to the Engine Maintenance Manual supplied with your Constructor.

TROUBLESHOOTING



SHOULD YOU EXPERIENCE ERRATIC OPERATION OR NOTICE ANY MAL-FUNCTION WHILE RUNNING YOUR CONSTRUCTOR, CONTINUE OPERATION ONLY LONG ENOUGH TO RETURN TO THE GROUND POSITION IF POSSIBLE.

IMMEDIATELY REPORT THE INCIDENT TO YOUR SUPERVISORS, AND DISCONTINUE USING THE UNIT UNTIL IT HAS BEEN CHECKED BY A TRAINED, QUALIFIED MECHANIC.

WHAT TO CHECK IF UNIT WILL NOT START:

- Is the key switch turned on?
- Is the ground/ platform selector switch in the proper position?
- Are all emergency stop buttons released?
- Are all battery cables connected?
- Is the battery charged?
- Are any wires pulled out or loose?
- Is there proper fuel (gasoline, propane or Diesel) in the fuel tank?
- If equipped for propane fuel operation, is the propane tank valve open.
- If equipped for propane fuel operation, is the fuel selector switch in the proper position.

WHAT TO CHECK IF FUNCTIONS WILL NOT OPERATE:

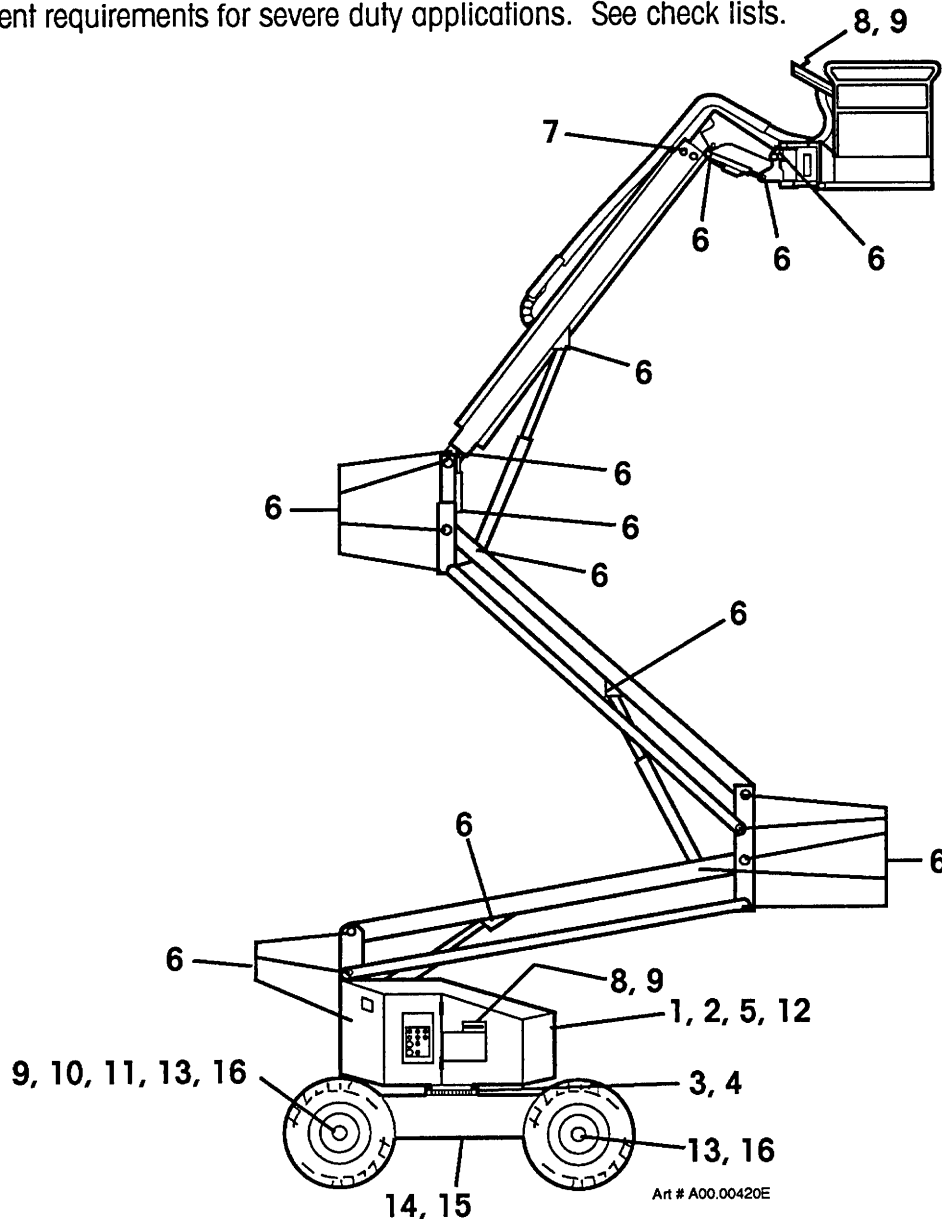
- Is a function control lever or the platform foot pedal activated?
- Is the ground/ platform selector switch in the proper position?
- Is the engine speed switch at the correct RPM ("Hi" speed, not "LOW" speed)?
- Has the turntable lock pin not been removed?
- Is there an obvious oil leak or damaged component?
- Is the hydraulic fluid level low?
- Are any wires pulled out or loose?

LUBRICATION CHART

NO.	ITEM	SPECIFICATION AND QUANTITY	FREQUENCY OF LUBRICATION
1.	Hydraulic reservoir	Mobil DTE-15 to "Full" mark with all cylinders retracted.	Check level & condition each shift. Analyze 6 months or 500 hours.*†. Change yearly or 1000 hours.*†
2.	Hydraulic filters (suction and return lines)	Filter elements.	Check gauge each shift. Change 6 months or 500 hours.*†
3.	Swing bearing race	Lithium N.L.G.I. #2 EP. Purge old grease.	Weekly or every 25 hours.*†

* Whichever occurs first.

† Different requirements for severe duty applications. See check lists.



Art # A00.00420E

LUBRICATION CHART (CONTINUED)

NO.	ITEM	SPECIFICATION AND QUANTITY	FREQUENCY OF LUBRICATION
4.	Swing bearing gear teeth	Dry moly lube spray.	Weekly or every 25 hours.*†
5.	Swing drive gear box	Fill to plug. SAE 140 EP or N.L.G.I. #00 EP oil.	Check bimonthly or every 200 hours.*† Change every two (2) years or 2,000 hours.*†
6.	Boom pivot pins and Cylinder pins	Lithium N.L.G.I. #2 EP. Purge old grease.	Monthly or every 100 hours.*†
7.	Boom wear pads	Silicone spray.	Monthly or every 100 hours.*†
8.	Hydraulic control handle pivot pins	WD 40 Spray or equivalent penetrating oil.	Monthly or every 100 hours.*†
9.	Valve spool linkage	WD 40 Spray or equivalent penetrating oil.	Monthly or every 100 hours.*†
10.	Steering hub and U-joints	Lithium N.L.G.I. #2 EP. Clean and repack.	Monthly or every 100 hours.*†
11.	Steering linkage	Lithium N.L.G.I. #2 EP. Purge old grease.	Monthly or every 100 hours.*†
12.	Swing drive gear box top bearing	Lithium N.L.G.I. #2 EP. Purge old grease.	Check monthly or every 100 hours.*† Change every two (2) years or 2,000 hours.*
13.	Axle Differentials	EP-90W to fill plug.	Check monthly or every 100 hours.*† Change every year or 1,000 hours.*
14.	Planetary gearbox	EP-90W to fill plug.	Check monthly or every 100 hours.*† Change every year or 1,000 hours.*

* Whichever occurs first.

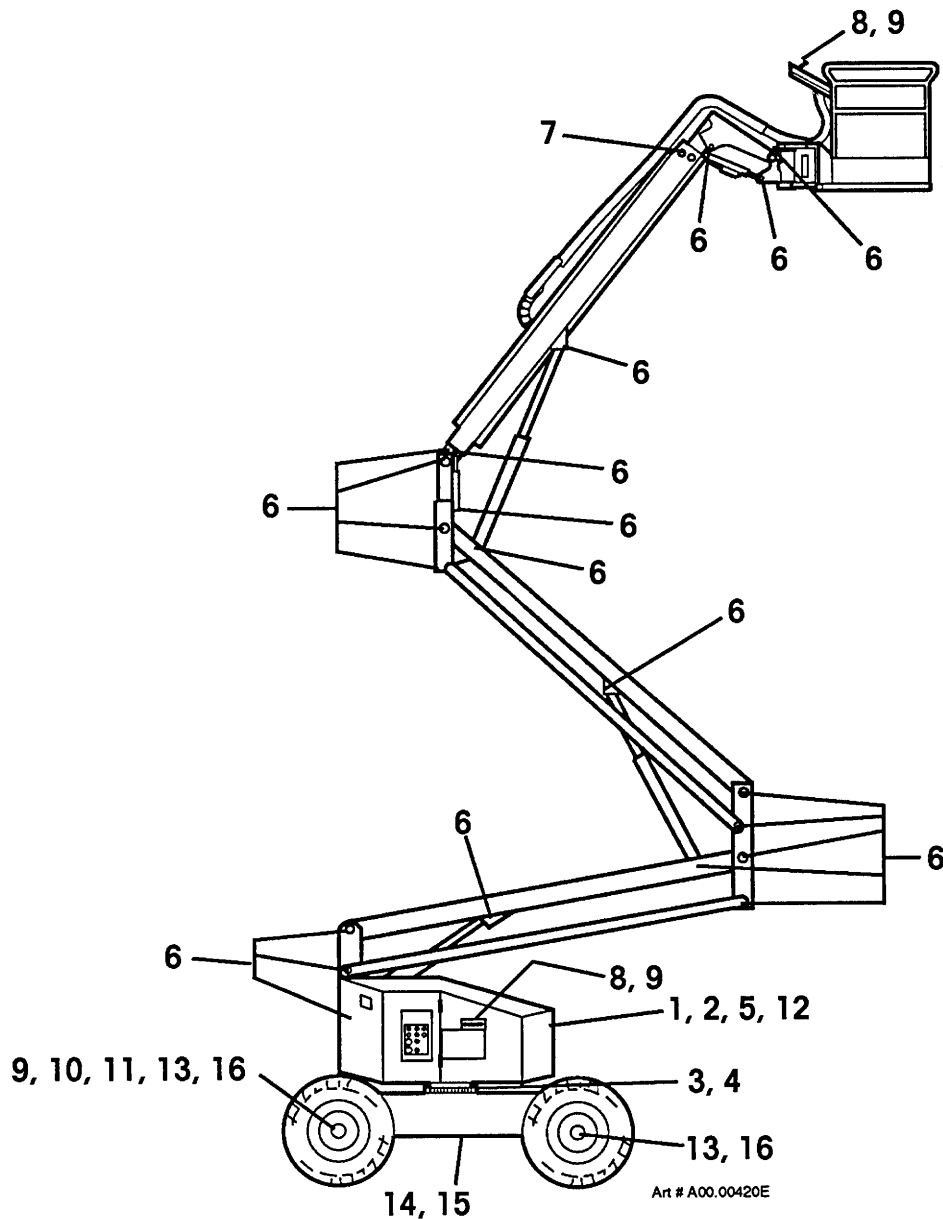
† Different requirements for severe duty applications. See check lists.

LUBRICATION CHART (CONTINUED)

NO.	ITEM	SPECIFICATION AND QUANTITY	FREQUENCY OF LUBRICATION
15.	Transfer case	Automatic transmission fluid (Type F) to fill plug.	Check monthly or every 100 hours.*† Change every year or 1,000 hours.*
16.	Drive shaft, U-joints and slip joints	Lithium N.L.G.I. #2 EP. Grease.	Monthly or every 100 hours.*†

* Whichever occurs first.

† Different requirements for severe duty applications. See check lists.



INDEX

A

Amp Meter 2-7
ANSI/ SIA A92.5-1992 (Partial) A-5
Applicable Standards and Regulations A-3

B

Belt, Safety 1-4
Boom Lever, Lower 2-7, 2-13
Boom Lever, Middle 2-9, 2-13
Boom Lever, Upper 2-9, 2-13
Boom, Superstructure and Platform 2-26
Boom Telescope (Extend) Lever 2-9, 2-13
Braking 2-26

C

Checklist, Harsh Environment
Operational 3-6, 3-7, 3-9, 3-11
Checklist, Monthly Operational 3-8
Checklist, Semi-Annual Operational 3-10
Checklist, Shift Operational 3-4
Checklist, Weekly Operational 3-7
Checks, Shift 2-16
Circuit Breaker 2-7
Cold Weather Operation 2-24
Controls (Operator), Ground Station 2-6
Controls (Operator), Platform 2-10

D

Decals, Safety-Related 1-8
Diesel Engine Operation 2-28
Drive Controller 2-11
Drive Speed Selector 2-11
Driving and Steering 2-24, 2-25, 2-26
Dual Fuel Engine Operation 2-27
Dual Fuel Selector (Option) 2-7

E

Electrical Storms 1-5
Electrocution Hazard 1-4
Emergency Electrical Pump 2-34
Emergency Lowering 2-34
Emergency Pump 2-7, 2-11
Emergency Pump
Operation and Check 2-19
Emergency Stop Button 2-7, 2-11
Emergency System and Procedures 2-34
Engine Switch 2-7, 2-11

F

Foot Switch 2-15
Four Wheel Drive 2-22

G

Gasoline Engine Operation 2-25
Gradeability Conversion Chart vi
Ground Operation and Checks 2-18
Ground/ Platform Selector 2-5

H

Harsh Environment
Operational Checklist 3-6, 3-7, 3-9, 3-11
High Wind 1-5
Hour Meter 2-7

I

Ignition Switch 2-7, 2-11
Introduction iii

L

Lamp, Warning 2-11
Light Switch (Optional) 2-15
Lowering, Emergency 2-34
Lower Boom Lever 2-7, 2-13
Lubrication Chart 3-13, 3-14, 3-15

M

Machine Components 2-5
Machine Startup 2-17
Main Power Key Switch 2-7
Maintenance Tips 3-3
Meter, Amp 2-7
Meter, Hour 2-7
Middle Boom Lever 2-9, 2-13
Monthly Operational Checklist 3-8

O

Operation 2-24
Operation, Cold Weather 2-24
Operation, Diesel Engine 2-28
Operation, Dual Fuel Engine 2-27
Operation, Gasoline Engine 2-25
Operation and Checks, Ground 2-18
Operation and Checks, Platform 2-17
Operator Controls, Ground Station 2-6
Operator Controls, Platform 2-10

P

Placard Locations	1-10, 1-11
Platform, Boom, Superstructure and	2-26
Platform Level Lever	2-15
Platform Operation and Checks	2-17
Platform Rotate Lever	2-15
Power Switch	2-7
Precautions, Safety Rules and	1-4

R

Range Diagram	v
Regulations, Applicable Standards and	A-3
Rules and Precautions, Safety	1-4

S

Safety Belt	1-4
Safety Rules and Precautions	1-4
Safety Symbols	1-3
Safety-Related Decals	1-8
Selector, Drive Speed	2-11
Selector, Dual Fuel (Option)	2-7
Selector, Ground/ Platform	2-5
Semi-Annual Operational Checklist	3-10
Shift Checks	2-16
Shift Operational Checklist	3-4
Shut-Down Procedures	2-29
Specifications	iv, v
Standards and Regulations, Applicable	A-3
Startup Procedures	2-16
Steer Switch	2-13
Steering, Driving and	2-24, 2-25, 2-26
Storms, Electrical	1-5
Superstructure, Boom and Platform	2-26
Swing Control Lever	2-9, 2-13
Symbols, Safety	1-3

T

Telescope (Extend) Lever, Boom	2-9, 2-13
Towing Procedures	2-30
Transporting the Unit	2-30
Troubleshooting	3-12
Truck or Trailer Transport	2-32, 2-33
Two Wheel/ Four Wheel Drive	2-22

U

Unloading Procedures	2-3
Upper Boom Lever	2-9, 2-13

V

Vehicle Drive Speed Selector	2-11
------------------------------------	------

W

Warning Lamp	2-11
Weather, Cold (Operation in)	2-24
Weekly Operational Checklist	3-7
Wind, High	1-5

APPENDIX



Table of Contents, Appendix

Applicable Standards and Regulations A-3

ANSI/SIA A92.5 - 1992 (Partial)

 5.Responsibilities of Dealers A-5

 6.Responsibilities of Owners A-7

 7.Responsibilities of Users A-10

 8.Responsibilities of Operators A-16

 9.Responsibilities of Lessors A-20

 10.Responsibilities of Lessees A-21

Simon Aerials Twelve Month Limited Warranty

Transfer of Ownership Notice (Business Reply Cards)

Catalog Comment Card (Business Reply Cards)

APPLICABLE STANDARDS AND REGULATIONS

In addition to the operational instructions provided herein, various standards and governmental regulations also apply to the use and operation of your Simon Aerial Work Platform.

Attached hereto are copies of some of the applicable codes, regulations and standards with which you must comply if this unit is operated in the U.S.A. These standards were in effect (as attached) on the date your unit was manufactured. You must comply with these, or other applicable standards as defined by your governing bodies as they are updated over time.

For complete, current copies of U.S.A. standards, you must annually write to:

**American National Standards Institute
1430 Broadway
New York, NY 10018**

Request: ANSI/ SIA A92.5 (current)

Specific state or local regulations may also apply. You must consult the appropriate regulating authority for the area in which the equipment will be operated in order to obtain current copies of these regulations.

ANSI/SIA A92.5 - 1992 (PARTIAL)

5. RESPONSIBILITIES OF DEALERS

5.1 Basic Principles. Sound principles of safety, training, inspection, maintenance, application and operation consistent with all data available regarding the parameters of intended use and expected environment shall be applied in the training of operators, in maintenance, application, safety provisions and operation of the aerial platform with due consideration of the knowledge that the unit will be carrying personnel.

5.2 Manuals. Dealers shall keep and maintain copy(ies) of the operating and maintenance manual(s) required in section 4.19 of this standard. Operating manual(s) shall be provided with each rental, lease, or sale delivery. These manual(s) shall be stored in the location required by section 4.20 of this standard. These manual(s) are considered an integral part of the aerial platform and are vital to communicate necessary safety information to users and operators. In addition, parts and maintenance manual(s) shall be provided with each sale delivery.

5.3 Predelivery Preparation. Aerial platforms shall be inspected, serviced and adjusted to manufacturer's requirements prior to each delivery by sale, lease or rental.

5.4 Maintenance Safety Precautions. Before adjustments and repairs are started on an aerial platform, the following precautions shall be taken as applicable:

- (a) Powerplant stopped and starting means rendered inoperative.
- (b) All controls in the "off" position and all operating systems secured from inadvertent motion by brakes, blocks, or other means.
- (c) Boom and platform lowered to the full down position, if possible, or otherwise secured by blocking or cribbing to prevent dropping.
- (d) Hydraulic oil pressure relieved from all hydraulic circuits before loosening or removing hydraulic components.
- (e) Safety props or latches installed where applicable as prescribed by the manufacturer.

5.5 Replacement Parts. When parts or components are replaced, they shall be identical or equivalent to original aerial platform parts or components.

5.6 Training. Whenever a dealer directs or authorizes an individual to operate an aerial platform he shall ensure that the individual has been trained under the direction of a qualified person in accordance with the manufacturer's operating manual and requirements listed in section 8, of this standard, before operating the aerial platform.

5.6.1 Training on Delivery. Manufacturer's operating instruction and required training on the proper use and operation of the aerial platform shall be provided upon each delivery by sale, lease or rental.

5. RESPONSIBILITIES OF DEALERS (CONTINUED)

5.7 Operation. When a dealer operates an aerial platform in sales demonstrations or otherwise for his beneficial use, he and his operating personnel shall assume the responsibilities of users as specified in section 7 and responsibilities of operators as specified in section 8 of this standard.

5.8 Assistance to Owners and Users. If a dealer is unable to answer an owner's or user's question relating to rated capacity, intended use, maintenance, repair, inspection or operation of the aerial platform, the dealer shall obtain the proper information from the manufacturer and provide that information to the owner or user.

5.9 Record Retention. Dealer(s) shall retain the following records for at least three years:

- (a) Name and address of the purchaser of each aerial platform by serial number and date of delivery.
- (b) Records of the person(s) trained upon each delivery of an aerial platform.
- (c) Records of the predelivery preparation performed prior to each delivery.

5.10 Modifications. Modification or alteration of an aerial platform shall be made only with prior written permission of the manufacturer.

5.11 Manufacturers Safety Bulletins. The dealer shall comply with safety related bulletins as received from the manufacturer.

5.12 Ownership Records. When a change in ownership of an aerial device occurs, it shall be the responsibility of the seller to notify the manufacturer, or successor, of the unit, model and serial number and the name and address of the new owner within sixty (60) days.

6. RESPONSIBILITIES OF OWNERS

6.1 Basic Principles. Sound principles of safety, training, inspection, maintenance, application and operation consistent with all data available regarding the parameters of intended use and expected environment shall be applied in the performance of the responsibilities of owners with due consideration of the knowledge that the unit will be carrying personnel.

6.2 Manuals. Owners shall keep and maintain copy(ies) of the operating and maintenance manual(s) required in section 4.19 of this standard. Operating manual(s) shall be provided with each rental, lease or sale delivery. The operating manual(s) shall be stored in the location required in section 4.20 of this standard. These manual(s) are considered an integral part of the aerial platform and are vital to communicate the necessary safety information to users and operators. In addition, parts and maintenance manual(s) shall be provided with each sale delivery.

6.3 Predelivery Preparation. Aerial platforms shall be inspected, serviced and adjusted to manufacturer's requirements prior to each delivery by sale, lease or rental.

6.4 Maintenance. The owner of an aerial platform shall arrange that the maintenance specified in this standard is properly performed on a timely basis. The owner shall establish a preventive maintenance program in accordance with the manufacturer's recommendations and based on the environment and severity of use of the aerial platform. The owner shall arrange that frequent and annual inspections are performed. All malfunctions and problems identified shall be corrected before the aerial platform is returned to service.

6.5 Frequent Inspection. The owner of an aerial platform shall cause a frequent inspection to be performed on the aerial platform:

- (a) That has been in service for three (3) months or 150 hours, whichever comes first.
- (b) Before putting into service a machine which has been out of service for a period longer than three (3) months of time.

The inspection shall be made by a person qualified as a mechanic on the specific make and model of the aerial platform. The inspection shall include all items specified by the manufacturer for a frequent inspection and shall include but not be limited to the following:

- (a) All functions and their controls for speed(s), smoothness and limits of motion.
- (b) Lower controls including the provisions of overriding of upper controls.
- (c) All chain and cable mechanisms for adjustment and worn or damaged parts.
- (d) All emergency and safety devices.
- (e) Lubrication of all moving parts, inspection of filter element(s), hydraulic oil, engine oil, and coolant as specified by the manufacturer.
- (f) Visual inspection of structural components and other critical components such as fasteners, pins, shafts, turntable attachment bolts, and locking devices.
- (g) Placard, warnings and control markings.

6.5 Frequent Inspection (continued).

- (h) Additional items specified by the manufacturer.
- (i) Correction of all malfunctions and problems identified and further inspection if necessary.
- (j) After correction or replacement of any component, the unit shall be inspected and tested in accordance with above paragraph 6.5.

6.6 Annual Inspection. The owner of an aerial platform shall cause an annual inspection to be performed on the aerial platform no later than thirteen (13) months from the date of the prior annual inspection. The inspection shall be performed by a person(s) qualified as a mechanic on the specific make and model of the aerial platform. The inspection shall include all items specified by the manufacturer for an annual inspection.

6.7 Maintenance Safety Precautions. Before adjustments and repairs are started on an aerial platform, the following precautions shall be taken as applicable:

- (a) Powerplant stopped and starting means rendered inoperative.
- (b) All controls in the "off" position and all operating systems secured from inadvertent motion by brakes, blocks or other means.
- (c) Elevating assembly and platform lowered to the full down position, if possible, or otherwise secured by blocking or cribbing to prevent dropping.
- (d) Hydraulic oil pressure relieved from all hydraulic circuits before loosening or removing hydraulic components.
- (e) Safety props or latches installed where applicable as prescribed by the manufacturer.

6.8 Replacement Parts. When parts or components are replaced, they shall be identical or equivalent to original aerial platform parts or components.

6.9 Maintenance Training. The owner shall train his maintenance personnel in inspection and maintenance of the aerial platform in accordance with sections 6.4, 6.5, 6.6, 6.7, 6.8 and 7.3.3 of this standard and with the manufacturer's recommendations.

6.10 Operator Training. Whenever an owner directs or authorizes an individual to operate an aerial platform, he shall ensure that the individual has been trained in accordance with the manufacturer's operating manual and requirements listed in section 8 of this standard before operating the aerial platform.

6.10.1 Training on Delivery. Manufacturer's operating instructions and required training on the proper use and operation of the aerial platform shall be provided upon each delivery by sale, lease or rental.

6.11 Operation. When an owner operates an aerial platform, he shall have the responsibilities of users as specified in section 7 of this standard and his operating personnel shall have responsibilities of operators as specified in section 8 of this standard.

6.12 Assistance to Users and Operators. If an owner is unable to answer a user's or operator's questions relating to rated capacity, intended use, maintenance, repair, inspection or operation of the aerial platform, the owner shall obtain the proper information from the dealer or manufacturer and provide that information to the user or operator.

6.13 Record Retention. The owner shall retain the following records for at least three (3) years:

- (a) Name and address of the purchaser of each aerial platform by serial number and date of delivery.
- (b) Records of the person(s) trained upon each delivery of an aerial platform.
- (c) Written records of the frequent and annual inspections shall be kept by the owner when he performs the inspection. The record shall include deficiencies found, corrective action and identification of the person(s) performing the inspection and repairs.
- (d) Records of the predelivery preparation performed prior to each delivery.

6.14 Modifications. Modification or alteration of an aerial platform shall be made only with prior written permission of the manufacturer.

6.15 Manufacturer's Safety Bulletins. The owner shall comply with safety related bulletins as received from the manufacturer or dealer.

6.16 Ownership Records. When a change in ownership of an aerial device occurs, it shall be the responsibility of the seller to notify the manufacturer, or successor, of the unit, model and serial number and the name and address of the new owner within 60 days.

7. RESPONSIBILITIES OF USERS

7.1 Basic Principles. The information in this standard must be supplemented by good job management, safety control and the application of sound principles of safety, training, inspection, maintenance, application and operation consistent with all data available and regarding the parameters of intended use and expected environment. Since the user has direct control over the application and operation of aerial platforms, conformance with good safety practices in this area is the responsibility of the user and his operating personnel including the operator. Decisions on the use and operation of the aerial platform must always be made with due consideration for the fact that the machine will be carrying personnel whose safety is dependent on those decisions.

7.2 Manuals. Users shall keep and maintain copy(ies) of the operating and maintenance manual(s) required in section 4.19 of this standard. The operating manual(s) shall be stored in the location required in section 4.20 of this standard. These manuals are considered an integral part of the aerial platform and are vital to communicate the necessary safety information to users and operators.

7.3 Inspection and Maintenance. Users shall inspect and maintain the aerial platform as required to ensure proper operation. The frequency of inspection and maintenance shall be determined by the manufacturer's recommendations and be compatible with operating conditions and the severity of the operating environment. Aerial platforms that are not in proper operating condition shall be immediately removed from service until repaired. Repairs shall be made by a qualified person and the repairs shall be in conformance with the manufacturer's recommendations.

7.3.1 Frequent Inspection. An inspection as outlined in section 6.5 of this standard shall be conducted.

7.3.2 Annual Inspection. An inspection as outlined in section 6.6 of this standard shall be conducted.

7.3.3 Pre-start Inspection. Before use each day or at the beginning of each shift, the aerial platform shall be given a visual inspection and functional test including but not limited to the following:

- (a) Operating and emergency controls.
- (b) Safety devices.
- (c) Personal protective devices, including fall protection.
- (d) Air, hydraulic and fuel system leaks.
- (e) Cables and wiring harness.
- (f) Loose or missing parts.
- (g) Tires and wheels.
- (h) Placards, warnings, control markings and operating and safety manual(s).
- (i) Outriggers, stabilizers, extendible axles and other structures.
- (j) Guardrail system.
- (k) Items specified by the manufacturer.

7.3.4 Maintenance Safety Precautions. Before adjustments and repairs are started on an aerial platform, the following precautions shall be taken as applicable:

- (a) Powerplant stopped and starting means rendered inoperative.
- (b) All controls in the "off" position and all operating systems secured from inadvertent motion by brakes, blocks or other means.
- (c) Boom and platform lowered to the full down position, if possible, or otherwise secured by blocking or cribbing to prevent dropping.
- (d) Hydraulic oil pressure relieved from all hydraulic circuits before loosening or removing hydraulic components.
- (e) Safety props or latches installed where applicable as prescribed by the manufacturer.
- (f) Precautions specified by the manufacturer.

7.4 Replacement Parts. When parts or components are replaced, they shall be identical or equivalent to original aerial platform parts or components.

7.5 Maintenance Training. The user shall train his maintenance personnel in inspection and maintenance of the aerial platform in accordance with sections 7.3, 7.3.1, 7.3.2, 7.3.3 and 7.3.4 of this standard and with the manufacturer's recommendations.

7. RESPONSIBILITIES OF USERS (CONTINUED)

7.6 Operator Training. Whenever a user directs or authorizes an individual to operate an aerial platform, he shall ensure that the individual has been trained in accordance with the manufacturer's operating and maintenance manual, the user's work instructions and requirements listed in section 8 of this standard before operating the aerial platform.

7.6.1 Model Training. The user shall be responsible for the operator being trained on the model of the aerial platform that he will be operating. Such training shall be in an area free of obstructions, under the direction of a qualified person for a time sufficient to determine that the trainee display proficiency in knowledge and actual operation of the aerial platform. Only properly trained and authorized personnel shall be permitted to operate the aerial platform.

7.6.2 Trainee Records. A record of the trainee's aerial platform instructions shall be maintained by the user for at least three (3) years.

7.7 Before Operation. Before authorizing an operator to operate an aerial platform, the user shall ensure that the operator has:

- (a) Been instructed by a qualified person in the intended purpose and function of each control.
- (b) Read and understood the manufacturer's operating instruction(s) and users safety rules, or been trained by a qualified person on the contents of the manufacturer's operating instruction(s) and users safety rules.
- (c) Understood by reading or by having a qualified person explain all decals, warnings and instructions displayed on the aerial platform.
- (d) Determine that the purpose for which the aerial platform is to be used is within the scope of the intended applications defined by the manufacturer.
- (e) Been provided with approved fall protection devices and other safety gear for all personnel in the platform.

7.8 Work Place Inspection. Before the aerial platform is used and during use, the user shall check the area in which the aerial platform is to be used for possible hazards such as but not limited to:

- (a) Drop-offs or holes.
- (b) Bumps and floor obstructions.
- (c) Debris.
- (d) Overhead obstructions and high voltage conductors.
- (e) Hazardous locations.
- (f) Inadequate surface and support to withstand all load forces imposed by the aerial platform in all operating configurations.
- (g) Wind and weather conditions.
- (h) Presence of unauthorized persons.
- (i) Other possible unsafe conditions.

7.9 During Operation. The aerial platform shall be used in accordance with this standard. The user shall ensure that before each movement of the aerial platform, if repositioning of the platform, that the operator shall ensure:

- (a) The aerial platform is operated on a surface within the limits specified by the manufacturer.
- (b) The outriggers, stabilizers, extendible axles, or other stability enhancing means, are used as required by the manufacturer.
- (c) Guardrails are installed and access gates or openings are closed per manufacturer's instructions.
- (d) The load and its distribution on the platform and any platform extension are in accordance with the manufacturer's rated capacity for that specific configuration.
- (e) There is adequate clearance from overhead obstructions.
- (f) The minimum safe approach distance (M.S.A.D.) to energized power lines and parts, as listed in Table 1 are maintained. (See Fig. 3, page 23 of complete standard, for examples of safe operating procedures.)
- (g) The precautions defined in 7.3.3, 7.7, 7.8, 7.9, 7.10 and 7.11 of this standard are followed during operation of the aerial platform.

7.10 Hazardous Locations. It shall be the responsibility of the user to determine the hazard classification of any particular atmosphere or location according to ANSI/NFPA 505 -1987.

7.10.1 Hazardous Locations. Aerial platforms operated in hazardous locations shall be approved and of the type required by ANS/NFPA 505-1987.

7.11 Warnings and Instruction. The user shall direct his operating personnel and supervise their work to ensure operation of the aerial platform in compliance with this standard.

7.11.1 Personnel Footing. Personnel shall maintain a firm footing on the platform floor while working therein. Use of planks, ladders or any other device on the aerial platform for achieving additional height or reach shall be prohibited.

7.11.2 Precaution from Other Moving Equipment. When other moving equipment or vehicles are present, special precautions shall be taken to comply with local ordinances or safety standards established for the workplace. Warnings such as, but not limited to, flags, roped-off areas, flashing lights and barricades shall be used.

7.11.3 Reporting Problems or Malfunctions. The operator shall immediately report to his supervisor any problem or malfunctions which become evident during operation. Any problems or malfunctions that affect the safety of operations shall be repaired prior to continued use.

7.11.4 Altering Safety Devices. Altering or disabling of interlocks or other safety devices shall be prohibited.

7.11 Warnings and Instruction (Continued).

7.11.5 Entanglement. Care shall be taken to prevent rope, electric cords and hoses from becoming entangled in the aerial platform.

7.11.6 Capacity Limitation. Rated capacities shall not be exceeded when loads are transferred to the platform at any height.

7.11.7 Work Area. The operator shall ensure that the area surrounding the aerial platform is clear of personnel and equipment before lowering the platform.

7.11.8 Fueling. The engine shall be shut down while fuel tanks are being filled. Fuelings shall be done in a well-ventilated area free of flame, sparks or other hazards which may cause fire or explosion.

7.11.9 Battery Charging. Batteries shall be charged in a well-ventilated area free of flame, sparks or other hazards which cause fire or explosion.

7.11.10 Improper Platform Stabilization. The aerial platform shall not be positioned against another object to steady the platform.

7.11.11 Misuse as a Crane. The aerial platform shall not be used as a crane.

7.11.12 Operating Area. The aerial platform shall not be operated from a position on trucks, trailers, railway cars, floating vessels, scaffolds or similar equipment unless the application is approved in writing by the manufacturer.

7.11.13 Travel Speed. Under all travel conditions, the operator shall limit travel speed according to conditions of ground surface, congestion, visibility, slope, location of personnel, and other factors causing hazards of collision or injury to personnel.

7.11.14 Elevated Driving Requirements. Before and during driving while the platform is elevated, the operator shall:

- (a) Maintain a clear view of the path of travel.
- (b) Maintain a safe distance from obstacles, debris, drop-offs, holes, depressions, ramps and other hazards to ensure safe elevated travel.
- (c) Maintain a safe distance from overhead obstacles.

7.11.15 Stunt Driving. Stunt driving and horseplay shall not be permitted.

7.11.16 Unauthorized Use. Means shall be used to protect against use by unauthorized person(s).

7.12 Operation of the Aerial Platform. If a user is also the operator of an aerial platform, he shall have the responsibilities of operators specified in section 8 of this standard as well as responsibilities of users as specified in section 7 of this standard.

7.13 Assistance to Operator. If a user is unable to answer an operator's question(s) relating to rated capacity, intended use, maintenance, condition of the aerial platform, or safety of operation of the aerial platform the user shall obtain the proper information from the dealer, owner or manufacturer and provide that information to the operator before use of the aerial platform in the application of concern.

7.14 Shutdown of Aerial Platform. The user shall direct his operating personnel to cease operation of the aerial platform in case of any suspected malfunction(s) or any potentially hazardous condition(s) that may be encountered. Further information concerning safe operation shall be requested from the owner, dealer or manufacturer before further operation.

7.15 Record Retention. The user shall retain the following records for at least three (3) years:

- (a) Records of the operator(s) trained on each model of an aerial platform.
- (b) Written records of the frequent and annual inspection shall be kept by the user when he performs the inspection(s). The records shall include the date of inspection, any deficiencies found, the corrective action recommended and identification of the person(s) performing the inspection.
- (c) Written records of all repairs accomplished on the aerial platform shall include the date of any such repair, a description of the work accomplished and identification of the person(s) performing the repair.

7.16 Modifications. Modification or alteration of an aerial platform shall be made only with prior written permission of the manufacturer.

7.17 Manufacturer's Safety Bulletins. The user shall comply with safety related bulletins as received from the manufacturer, dealer or owner.

8. RESPONSIBILITIES OF OPERATORS

8.1 Basic Principles. The information in this standard must be supplemented by good judgement, safety control and caution in evaluating each situation. Since the operator is in direct control of the aerial platform, conformance with good safety practices in this area is the responsibility of the operator. The operator must make decisions on the use and operation of the aerial platform with due consideration for the fact that his own safety as well as the safety of other personnel in the platform is dependent on those decisions.

8.2 Manuals. The operator shall be aware that the operating and safety manuals, including the manual which defines the responsibilities of dealers, owners, lessors, lessees, users and operators are stored on the aerial platform and the location where they are stored. The operator shall be familiar with the manuals stored on the aerial platform and consult them when questions arise with respect to the aerial platform.

8.3 Pre-start Inspection. Before use each day or at the beginning of each shift, the aerial platform shall be given a visual inspection and functional test including but not limited to the following:

- (a) Operating and emergency controls.
- (b) Safety devices.
- (c) Personal protective devices, including fall protection.
- (d) Air, hydraulic and fuel system(s) leaks.
- (e) Cables and wiring harness.
- (f) Loose or missing parts.
- (g) Tires and wheels.
- (h) Placards, warnings, control markings and operating manual(s).
- (i) Outriggers, stabilizers, extendible axles and other structures.
- (j) Guardrail system.
- (k) Items specified by the manufacturer.

8.4 Problems or Malfunctions. Any problems or malfunctions that affect the safety of operations shall be repaired prior to the use of the aerial platform.

8.5 Training. The operator shall be trained on the same model of aerial platform or one having operating characteristics consistent with the one to be used during actual work site operation. Under the direction of a qualified person, the trainee shall operate the aerial platform for a sufficient period of time to demonstrate proficiency and knowledge in the actual operation of the aerial platform. Care shall be taken to ensure the area of such operation has a minimum of obstacles and is conducive to training. Only properly trained and authorized personnel shall be permitted to operate the aerial platform.

8.6 Before Operation. Before being authorized to operate the aerial platform, the operator shall have:

- (a) Been instructed by a qualified person in the intended purpose and function of each of the controls.
- (b) Read and understood the manufacturer's operating instruction(s) and users safety rules, or been trained by a qualified person on the contents of the manufacturer's operating instruction(s) and users safety rules.
- (c) Understood by reading or by having a qualified person explain all decals, warnings and instructions displayed on the aerial platform.

8.7 Work Place Inspection. Before the aerial platform is used and during use, the operator shall check the area in which the aerial platform is to be used for possible hazards such as, but not limited to:

- (a) Drop-offs or holes.
- (b) Bumps and floor obstructions.
- (c) Debris.
- (d) Overhead obstructions and high voltage conductors.
- (e) Hazardous locations.
- (f) Inadequate surface and support to withstand all load forces imposed by the aerial platform in all operating configurations.
- (g) Wind and weather conditions.
- (h) Presence of unauthorized persons.
- (i) Other possible unsafe conditions.

8.8 During Operation. The aerial platform shall be used in accordance with this standard. The operator shall ensure the following before each elevation of the platform:

- (a) Ensure the aerial platform is operated on a surface within the limits specified by the manufacturer.
- (b) Ensure the outriggers, stabilizers, extendible axles or other stability enhancing means, are used as required by the manufacturer.
- (c) Ensure that guardrails are installed and access gates or openings are closed per manufacturer's instructions.
- (d) Ensure the load and its distribution on the platform and any platform extension(s) are in accordance with the manufacturer's rated capacity for that configuration.
- (e) Ensure there is adequate clearance from overhead obstructions.
- (f) Ensure that the minimum safe approach distances (M.S.A.D.) to energized power lines and parts are maintained. (See Fig.3, page 23 of complete standard for examples of safe operating procedures.)
- (g) Ensure all personnel in the platform are wearing fall protection devices and other safety gear as required at all times.

8. RESPONSIBILITIES OF OPERATORS (CONTINUED)

8.9 Hazardous Locations. It shall be the responsibility of the user to determine the hazard classification of any particular atmosphere or location according to ANSI/NFPA 505-1987.

8.9.1 Hazardous locations. Aerial platforms operated in hazardous locations shall be approved and of the type required by ANSI/NFPA 505-1987.

8.10 Warnings and Instructions. The operator shall ensure the operation of the aerial platform is in compliance with this standard.

8.10.1 Personnel Footing. Personnel shall maintain a firm footing on the platform floor while working therein. Use of planks, ladders or any other device on the aerial platform for achieving additional height or reach shall be prohibited.

8.10.2 Precaution for Other Moving Equipment. When other moving equipment or vehicles are present, special precautions shall be taken to comply with local ordinances or safety standards established for the workplace. Warnings such as, but not limited to, flags, roped-off areas, flashing lights and barricades shall be used.

8.10.3 Reporting Problems or Malfunctions. The operator shall immediately report to his supervisor any problems or malfunctions which become evident during operation. Any problems or malfunctions that affect the safety of operation shall be repaired prior to continued use.

8.10.4 Reporting Potentially Hazardous Locations. The operator shall immediately report to his supervisor any potentially hazardous location(s) (environment) which become evident during operation.

8.10.5 Altering Safety Devices. Altering or disabling of interlocks or other safety devices shall be prohibited.

8.10.6 Entanglement. Care shall be taken to prevent rope, electric cords and hoses from becoming entangled in the aerial platform.

8.10.7 Capacity Limitation. Rated capacities shall not be exceeded when loads are transferred to the platform at any height.

8.10.8 Work Area. The operator shall ensure that the area surrounding the aerial platform is clear of personnel and equipment before lowering the platform.

8.10.9 Fueling. The engine shall be shut down while fuel tanks are being filled. Fueling shall be done in a well-ventilated area free of flame, sparks or other hazards which may cause fire or explosion.

8.10.10 Battery Charging. Batteries shall be charged in a well-ventilated area free of flame, sparks or other hazards which cause fire or explosion.

8.10.11 Improper Platform Stabilization. The aerial platform shall not be positioned against another object to steady the platform.

8.10.12 Misuse as a Crane. The aerial platform shall not be used as a crane.

8.10.13 Unusual Operating Support Conditions. The aerial platform shall not be operated from a position on trucks, trailers, railway cars, floating vessels, scaffolds or similar equipment unless the application is approved in writing by the manufacturer.

8.10.14 Travel Speed. Under all travel conditions, the operator shall limit travel speed according to conditions of ground surface, congestion, visibility, slope, location of personnel and other factors causing hazards of collision or injury to personnel.

8.10.15 Elevated Driving Requirements. Before and during driving while the platform is elevated, the operator shall:

- (a) Maintain a clear view of the path of travel.
- (b) Maintain a safe distance from obstacles, debris, drop-offs, holes, depressions, ramps and other hazards to ensure safe elevated travel.
- (c) Maintain a safe distance from overhead obstacles.

8.10.16 Stunt Driving. Stunt driving and horseplay shall not be permitted.

8.10.17 Unauthorized Use. The operator shall implement means provided to protect against use by unauthorized person(s).

8.10.18 Misuse as a Jack. The boom and platform of the aerial platform shall not be used to jack the wheels off the ground unless the machine is designed for that purpose by the manufacturer.

8.10.19 Driving on Slopes. The aerial platform shall not be driven on grades, side slopes or ramps exceeding those for which the aerial platform is rated by the manufacturer.

8.10.20 Snagged Platform. If the platform or elevating assembly become caught, snagged or otherwise prevented from normal motion by adjacent structure or other obstacles such that control reversal does not free the platform, all personnel shall be removed from the platform before attempts are made to free the platform using ground controls.

8. RESPONSIBILITIES OF OPERATORS (CONTINUED)

8.11 Assistance to Operator. If an operator encounters any suspended malfunction of the aerial platform, or any hazard or potentially unsafe condition relating to capacity, intended use or safe operation, he shall cease operation of the aerial platform and request further information as to safe operation from his management or the owner, dealer, or manufacturer before further operation of the aerial platform.

8.12 Modifications. Modifications or alteration of an aerial platform shall be made only with prior written permission of the manufacturer.

9. RESPONSIBILITIES OF LESSORS

9.1 Basic Principles. Sound principles of safety, training, inspection, maintenance, application and operation consistent with all data available regarding the parameters of intended use and expected environment shall be applied in the performance of responsibilities of lessors with due consideration of the knowledge that the unit will be carrying personnel.

9.2 Lessor. A lessor is a person(s) or entity who leases, rents, loans or otherwise provides an aerial platform to another party for the beneficial use of that party (the user). A lessor may also be a dealer, owner, lessee, user or operator.

9.2.1 Lessor as a Dealer. When a lessor uses the aerial platform as a dealer, he shall have the responsibilities of dealers as specified in section 5 of this standard.

9.2.2 Lessor as an Owner. When a lessor uses the aerial platform as an owner, he shall have the responsibilities of owners as specified in section 6 of this standard.

9.2.3 Lessor as a User. When a lessor uses the aerial platform as a user, he shall have the responsibilities of users as specified in section 7 of this standard.

9.2.4 Lessor as an Operator. When a lessor uses the aerial platform as an operator, he shall have the responsibilities of operators as specified in section 8 of this standard.

10. RESPONSIBILITIES OF LESSEES

10.1 Basic Principles. Sound principles of safety, training, inspection, maintenance, application and operation consistent with all data available regarding the parameters of intended use and expected environment shall be applied in the performance of responsibilities of lessees with due consideration of the knowledge that the unit will be carrying personnel.

10.2 Lessee. A Lessee is a Person(s) or entity to whom an aerial platform is provided by lease, rental, loan or other arrangement. A lessee may also be a user or operator.

10.2.1 Lessee as a Dealer. When a lessee uses the aerial platform as a dealer, he shall have the responsibilities of dealers as specified in section 5 of this standard.

10.2.2 Lessee as an Owner. When a lessee uses the aerial platform as an owner, he shall have the responsibilities of owners as specified in section 6 of this standard.

10.2.3 Lessee as a User. When a lessee uses the aerial platform as a user, he shall have the responsibilities of users as specified in section 7 of this standard.

10.2.4 Lessee as an Operator. When a lessee uses the aerial platform as an operator, he shall have the responsibilities of operators as specified in section 8 of this standard.



Limited Warranty

Simon Aerials Inc. (the "Company") warrants, to the original Buyer only,

- (a) that new units of equipment manufactured and sold by it conform to the Company's published specifications;
- (b) that all component parts manufactured by it shall be free from defects in material or workmanship for 12 months from the date the unit is first placed in service;
- (c) that all structural components manufactured by it shall be free of any structural defect in materials or workmanship for 60 months from the date the new unit is first placed in service. Structural components covered under this section include and are limited to superstructure weldments, undercarriage weldments, boom weldments, platform support weldments (excluding rotary actuator), scissor arm weldments, turntable weldments, extendable axle weldments, and outrigger or stabilizer weldments; and
- (d) that component parts not manufactured by the Company shall be free from defects in material or workmanship for the period warranted by the Company's vendor.

If the Buyer discovers within the warranty period a failure to conform to the Company's published specifications or a defect in material or workmanship, it must promptly submit written notice of such condition to the Company and return the non-conforming part(s) to the factory, freight prepaid, together with a properly completed Simon Aerials Inc. Warranty Claim Form as furnished by the Company. In no event shall such notice be accepted later than 30 days following expiration of the applicable warranty period. If, after inspection by factory Quality Assurance personnel, the returned part(s) are judged to be not in conformity with specifications or defective in material or workmanship, the Company will correct such condition by delivering repaired or new replacement part(s) to the Buyer, free of charge. Any labor cost involved in removal or replacement of such part(s) shall be the responsibility of the Buyer. This remedy is the Buyer's **exclusive** remedy for breach of warranty.

This warranty does not cover damage caused by shipment, misuse of the unit (including operation beyond unit specification limits), failure to properly service and maintain the unit in accordance with the Company's Manual or Factory Service Bulletins, alteration of the unit, or natural disasters (such as fire, flood, wind and lightning) and shall be void if

- (1) the unit is altered or repaired contrary to the Company's authorized instructions,
- (2) the unit is altered or repaired in such a way as to affect its performance or reliability, or
- (3) the unit is mounted on a chassis or carrier which does not meet the Company's published minimum requirements.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

If field repair or parts replacement is necessary on warranted components, the Company will reimburse distributors for direct labor costs incurred therefor according to the Company's current authorized field service rate, providing that advance approval for said work is granted by Simon Aerials Service Department. In no event shall the Company be liable for any indirect, incidental, consequential or special damage (including without limitation loss of profits, loss of revenue, cost of capital, cost of substitute equipment, downtime, claims of third parties and injury to person or property) based upon any claim of breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory. This limited warranty allocates the risks of product failure between the Company and the Buyer, and that allocation is recognized by both parties and is reflected in the price of the goods.



This written warranty is understood to be the complete and exclusive agreement between the parties, superceding all prior agreements, oral or written and all other communications between the parties relating to the subject matter of this warranty. No employee, agent or distributor of the Company or any other person is authorized to state or imply any additional warranties on behalf of the Company, nor to assume for the Company any other liability in connection with any of its products, unless made in writing and signed by an officer of the Company.