

SIMON AERIALS INC.  
10600 W. Brown Deer Road  
Milwaukee, Wisconsin 53224  
Phone (414) 355-0802  
TWX: 910-262-3310  
FAX: (414) 355-0832  
Cable: SIMON MIL

## MODEL SILVER EAGLE SERIES

32/21(FUEL)  
(S/N VG1001 & UP)

41/24 (FUEL)  
(S/N W5100 & UP)  
(S/N WG5151 & UP)



**IMPORTANT**

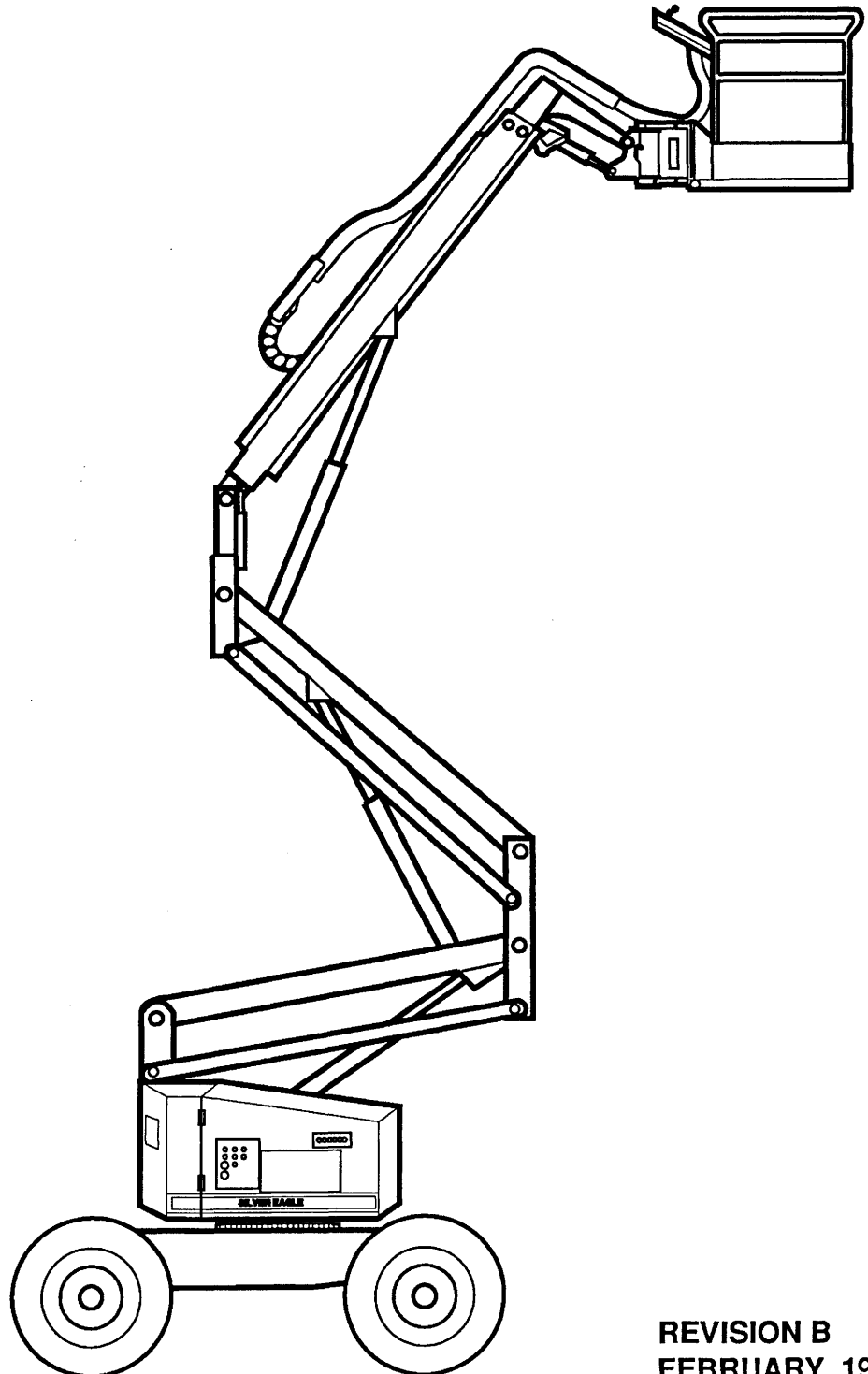
This manual is designed to instruct you in the proper operation of your Aerial Platform, and to make you aware of the many Safety Hazards that could affect the safe use and operation of your SILVER EAGLE. Operators must be aware of and comply with all manufacturer's instructions OSHA / ANSI safety guidelines.

This Operator's Manual must be read prior to operating your Simon SILVER EAGLE Aerial Platform.

PART NO. 89-410522

# SIMON

## OPERATOR'S MANUAL



REVISION B  
FEBRUARY, 1990

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Operation of the Silver-Eagle 32/21 or 41/24 is the same with the exception of the additional boom on model 41/24.

### LOADING INSTRUCTIONS

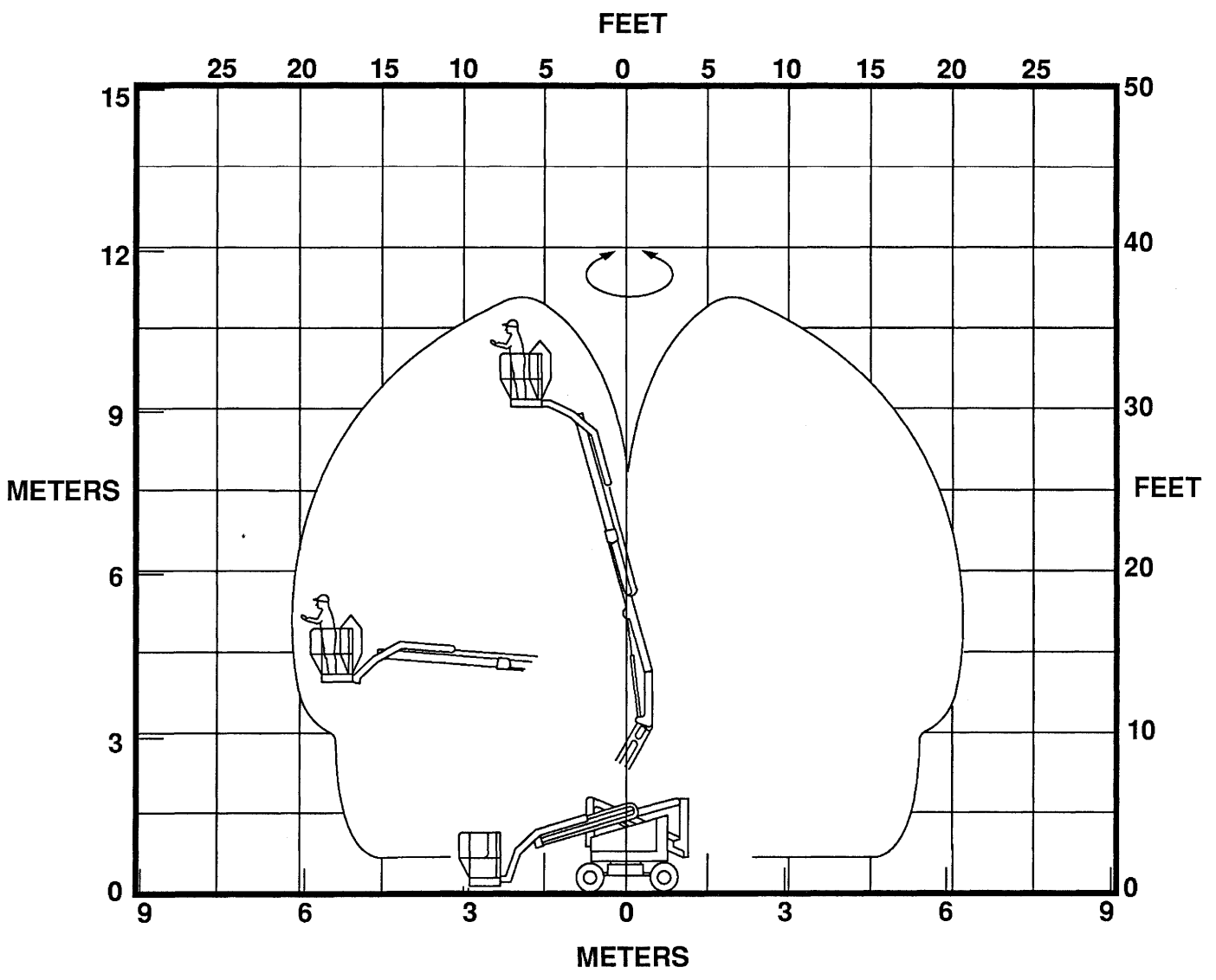
When loading the Silver-Eagle, drive the unit onto the truck/ trailer with chassis first and the platform last. In some cases it may be necessary to raise the platform to avoid hitting the ground.

## MACHINE SPECIFICATIONS

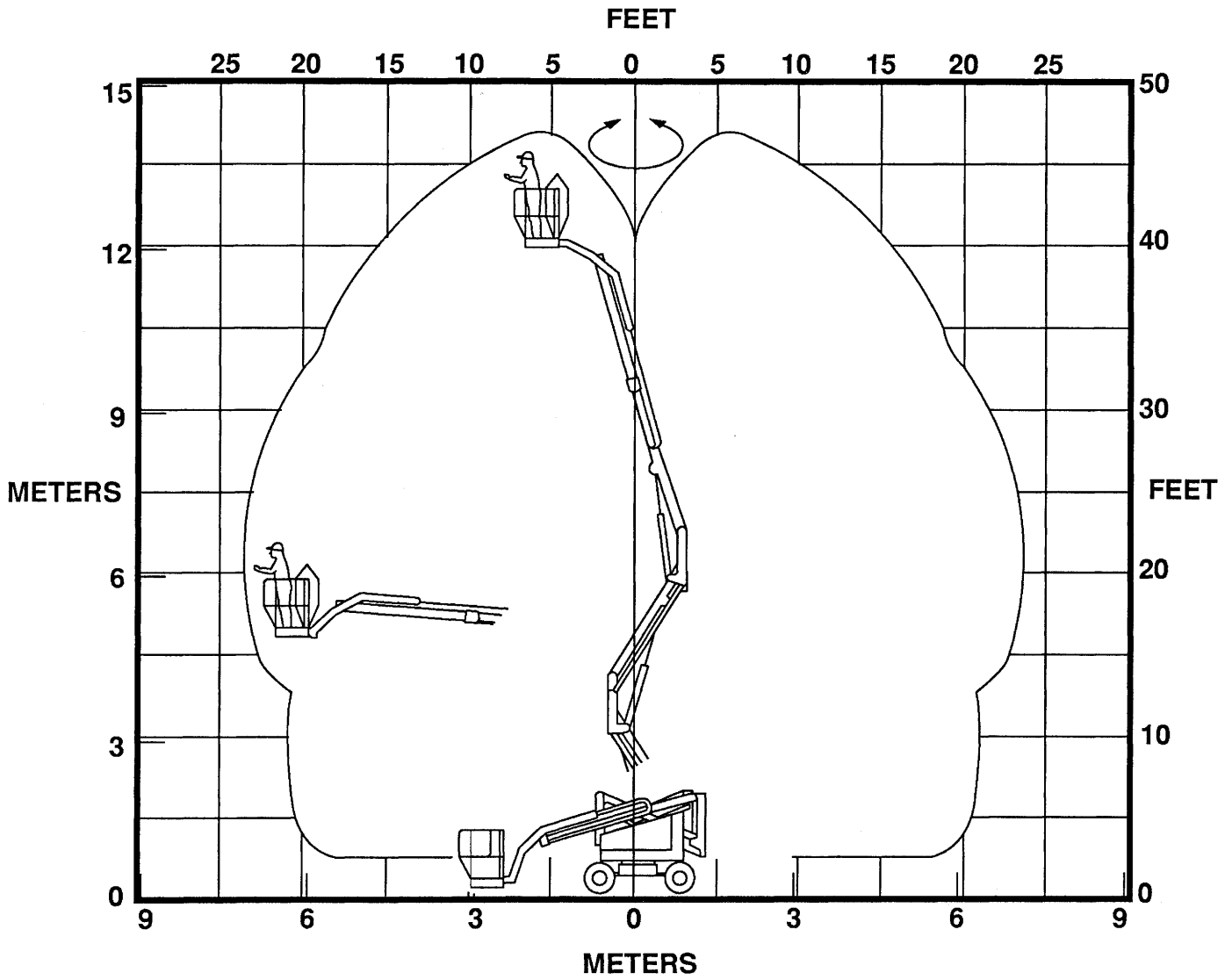
### SILVER-EAGLE 32/21 AND 41/24

	SE 32/21	SE 41/24
WORKING HEIGHT .....	38 FT (11.58 M)	47 FT (14.33 M)
PLATFORM HEIGHT .....	32 FT (9.75 M)	41 FT (12.50 M)
HORIZONTAL OUTREACH .....	21 FT (6.40 M)	24 FT (7.32 M)
PLATFORM CAPACITY (UNRESTRICTED) .....	500 LBS (227 KG)	500 LBS (227 KG)
PLATFORM DIMENSIONS .....	30 IN. X 60 IN. (0.76 M X 1.52 M)	30 IN. X 60 IN. (0.76 M X 1.52 M)
STOWED LENGTH .....	16 FT 4 IN. (4.98 M)	16 FT 11 IN. (5.16 M)
STOWED HEIGHT .....	6 FT 7 IN. (2.01 M)	6 FT 7 IN. (2.01 M)
WIDTH .....	5 FT 10 IN. (1.78 M)	5 FT 10 IN. (1.78 M)
WHEELBASE .....	6 FT 3 IN. (1.91 M)	6 FT 3 IN. (1.91 M)
OUTSIDE TURNING RADIUS .....	13 FT 6 IN. (4.12 M)	13 FT 6 IN. (4.12 M)
INSIDE TURNING RADIUS .....	6 FT 1 IN. (1.85 M)	6 FT 1 IN. (1.85 M)
TRAVEL SPEED-STOWED .....	3.0 MPH (4.8 KMPH)	3.0 MPH (4.8 KMPH)
TRAVEL SPEED-ELEVATED .....	0.5 MPH (0.8 KMPH)	0.5 MPH (0.8 KMPH)
GROUND CLEARANCE .....	8 IN. (0.20 M)	8 IN. (0.20 M)
GROSS WEIGHT .....	13,000 LBS (5897 KG)	16,000 LBS (7257 KG)
GRADEABILITY .....	15° (27%)	15° (27%)
PLATFORM ROTATION .....	180°	180°
TIRES (FOAM FILLED) .....	8.75-16.5 LT 8 PLY	8.75-16.5 LT 8 PLY
HYDRAULIC DRIVE OPERATING PRESSURE ...	2500 PSI (178 BARS)	2500 PSI (178 BARS)
HYDRAULIC LIFT OPERATING PRESSURE .....	2800 PSI (199 BARS)	2800 PSI (199 BARS)
SWING BEARING TORQUE .....	220 FT LBS.	220 FT LBS.
WHEEL LUG TORQUE .....	120 FT LBS.	120 FT LBS.
SUPERSTRUCTURE ROTATION .....	360°	360°
POWER SYSTEM ELECTRIC .....	NON-CONTINUOUS 12 VOLT BATTERY	NON-CONTINUOUS 12 VOLT BATTERY
ENGINE OPTIONS:		
ONAN (GAS/ DUAL FUEL) .....	24 HP, 3600RPM	24 HP, 3600 RPM
WISCONSIN (GAS/ DUAL FUEL) .....	35 HP, 2650 RPM	35 HP, 2650 RPM
KUBOTA (GAS/ DUAL FUEL) .....	24 HP, 3600 RPM	24 HP, 3600 RPM
DEUTZ (DIESEL) .....	35 HP, 3100 RPM	35 HP, 3100 RPM
PERKINS (DIESEL) .....	24 HP, 3600 RPM	24 HP, 3600 RPM

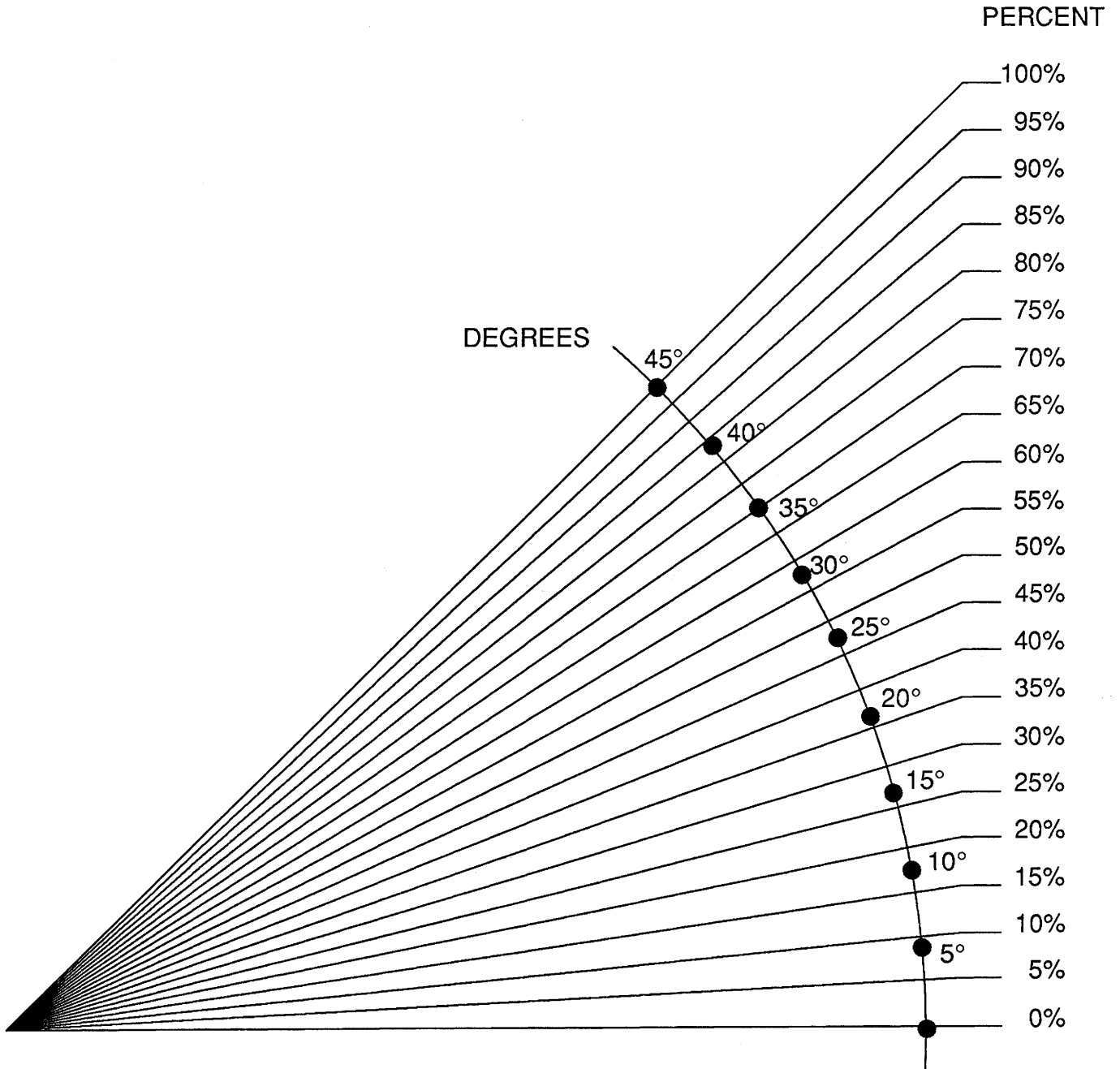
# WORKING ENVELOPE MODEL 32/21



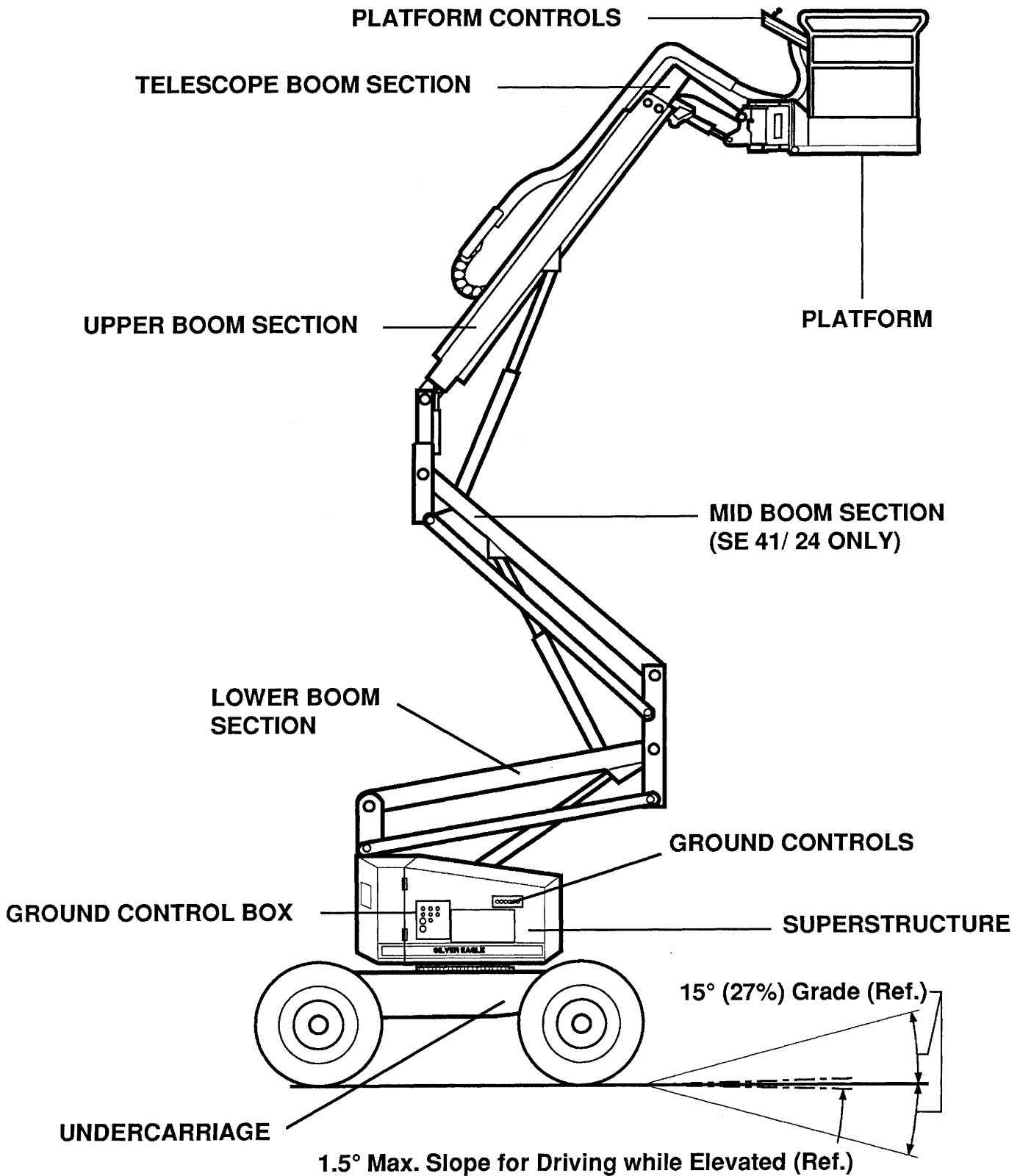
# WORKING ENVELOPE MODEL 41/24



# GRADEABILITY CONVERSION CHART



# PRIMARY MACHINE COMPONENTS (MODEL 41/24 SHOWN)





## SAFETY RULES AND PRECAUTIONS



**This manual is designed to instruct you in the proper operation of your Aerial Platform, and to make you aware of the many Safety Hazards that could affect the safe use and operation of your Simon SILVER EAGLE. Operators must be aware of and comply with all manufacturer's instructions and OSHA / ANSI safety guidelines.**

**This Operator's Manual must be read prior to operating your self-propelled SILVER EAGLE Aerial Platform.**

- Only trained, competent personnel should operate the SILVER EAGLE Aerial Platform.
- DO NOT exceed the safe working load of the unit in any configuration. Review this manual's specification data sheet regarding your particular model's capacities and dimensions.
- DO NOT raise the boom sections unless the unit is on a firm, level surface. (Recommended surface level for driving while elevated not to exceed a 1.5 degree slope.)
- DO NOT exceed the maximum platform horizontal pull of 66 lbs.
- DO NOT alter, modify or disable any safety devices or interlocks.
- DO NOT use the SILVER EAGLE Aerial Platform as a crane or hoist to lift oversized or hanging loads.
- DO NOT sit, stand or climb on platform rails.
- DO NOT use scaffolding, ladders or similar items to extend your reach while on the Aerial Platform.
- DO NOT use the unit in electrical storms or in high wind situations.
- OSHA approved safety belts and safety hats must be worn at all times when operating the SILVER EAGLE. Make sure that the entry bar to the platform is secured before operating.
- Since the platform may be lowered from its ground controls, precautions should be taken to prevent unauthorized personnel from operating the ground controls while the platform is in use.
- The operator should complete the "Daily Operational Checklist" found in this manual (see Table of Contents) prior to placing the unit in service.

## SAFETY RULES AND PRECAUTIONS

- The operator should immediately report any noises, vibrations or malfunctions of the unit to supervisors.
- The operator should note that the travel speed automatically decreases whenever the boom is elevated.
- The operator shall ensure that the area surrounding the aerial lift is clear of personnel and equipment before driving the unit, or raising or lowering the platform.
- The operator shall maintain a safe distance from overhead and ground obstacles, debris, drop-offs, holes, depressions, electrical wires and other hazards to travel.
- The operator shall 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.
- The operator shall use caution to prevent ropes, cords, hoses, etc. from becoming entangled in the unit's boom sections when being elevated, lowered, or repositioned.



### **THE BOOM OF 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.**

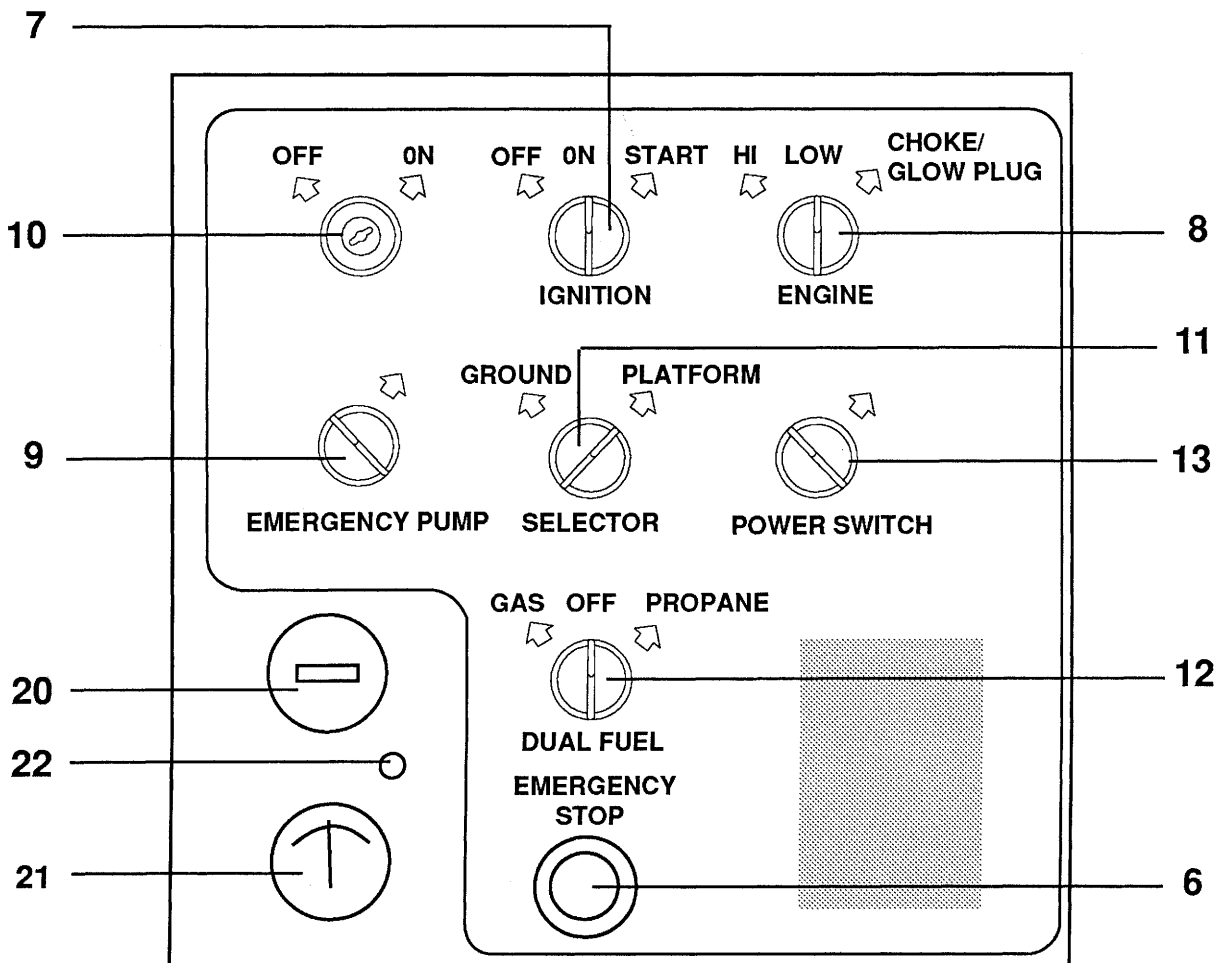
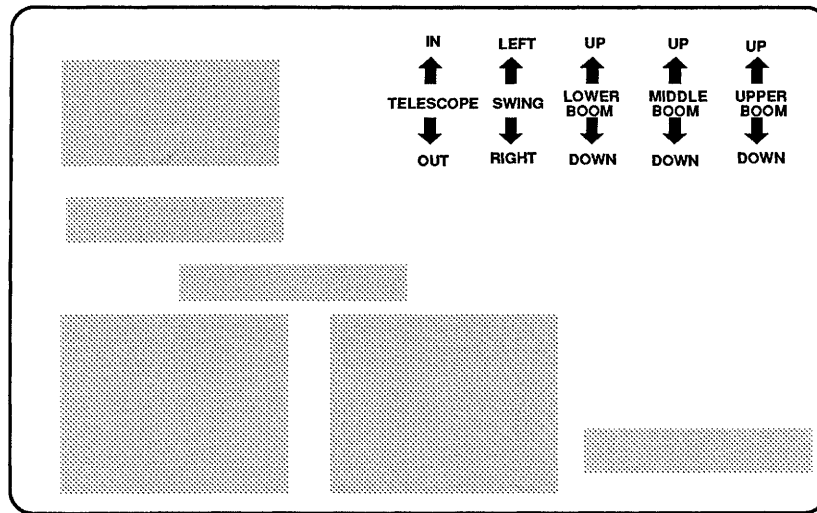
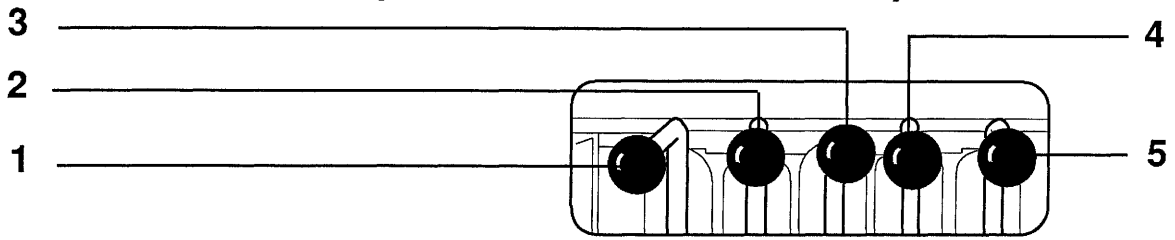
**You must maintain a CLEARANCE OF AT LEAST 10 FEET between any part of the machine, or its load, and any electrical line or apparatus carrying over 300 volts up to 50,000 volts. One foot additional clearance is required for every additional 30,000 volts.**

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

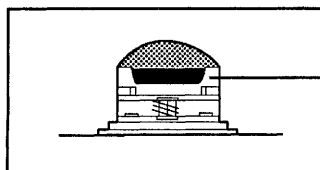
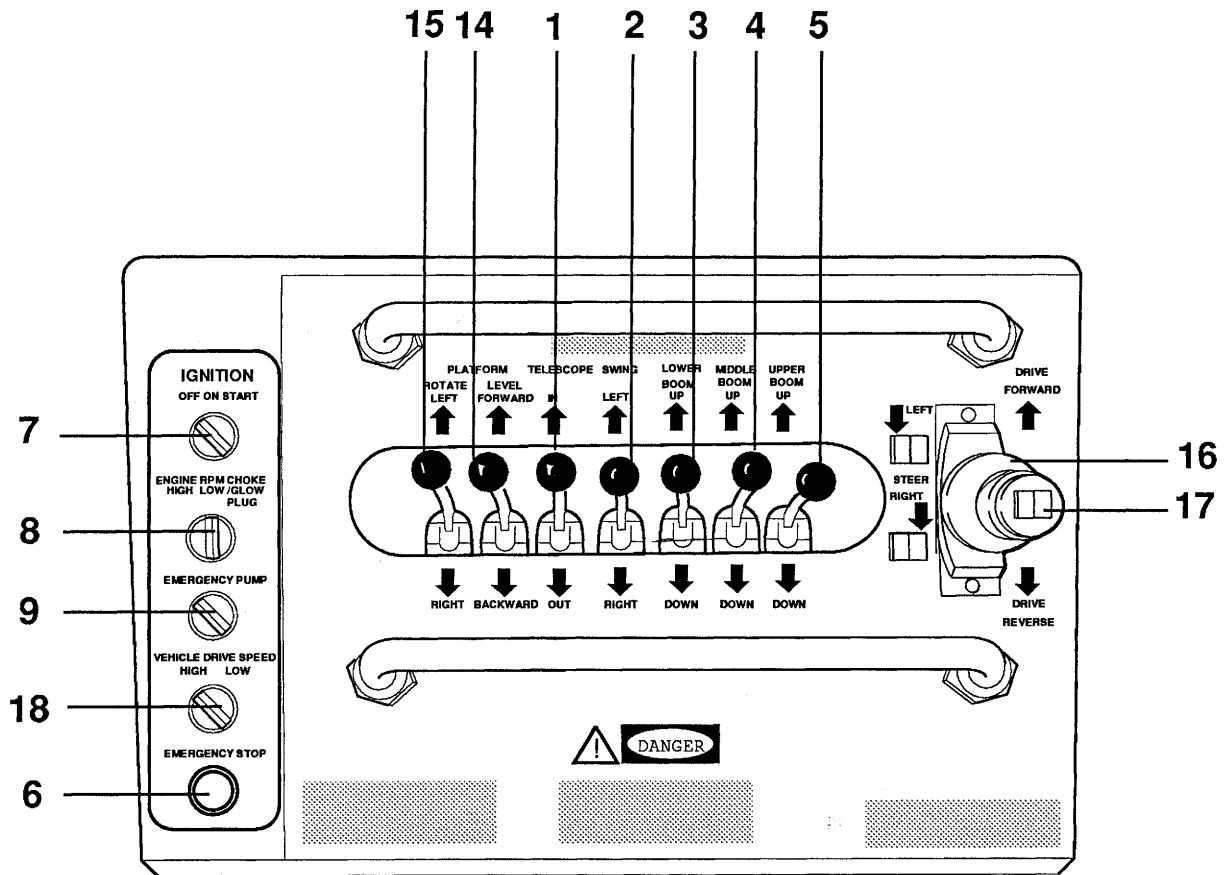
### **GAS OR DUAL FUEL UNITS**

- The operator should check fuel system for leaks or damaged fuel lines before operating unit. If any damage is found, the operator should contact supervisor immediately.
- **DO NOT** refuel the SILVER EAGLE near sparks or open flames. Gasoline and propane vapors are highly explosive.

# GROUND CONTROLS (MODEL 41/24 SHOWN)



# PLATFORM CONTROLS (MODEL 41/ 24 SHOWN)

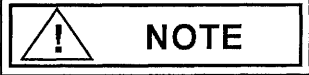


LOCATED ON PLATFORM FLOOR

## OPERATOR CONTROLS DESCRIPTION AND FUNCTION

Item No.	Control	Location	Description
1	Boom Telescope (Extend) Lever	Ground Panel/ Platform Console	Valve handle which allows the telescoping upper boom to extend and retract, giving the operator access over obstacles.
2	Swing Lever	Ground Panel/ Platform Console	Valve handle which controls the rotation of the superstructure on the undercarriage. The superstructure can rotate a full 180 degrees in each direction from the stowed position, with mechanical swing limiters to stop continuous rotation.
3	Lower Boom Lever	Ground Panel/ Platform Console	Valve handle used to control the raising and lowering of the lower boom section. Each boom section can be controlled independently.
4	Middle Boom Lever (41/24 only)	Ground Panel/ Platform Console	Valve handle used to control the raising and lowering of the middle boom section. Each boom section can be controlled independently.
5	Upper Boom Lever	Ground Panel/ Platform Console	Valve handle used to control the raising and lowering of the upper boom section. Each boom section can be controlled independently.
6	Emergency Stop Button	Ground Panel/ Platform Console	Used to stop all functions in an emergency. Push for emergency stop. Turn clockwise to reset.
7	Ignition Switch	Ground Panel/ Platform Console	Three position switch. Full left position is "OFF". Center position is ignition "ON", full right engages the starter.
8	Engine Throttle	Ground Panel/ Platform Console	Three position switch. Full left position for "HIGH" RPM. Center position for "LOW" (idle) RPM. Full right position for engine "CHOKE" (or "GLOW PLUG" on some diesels).
9	Emergency Pump Switch	Ground Panel/ Platform Console	Permits operation of any boom function should the engine powered hydraulics become inoperable.




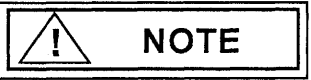
## OPERATOR CONTROLS DESCRIPTION AND FUNCTION

Item No.	Control	Location	Description
10	Main Power Key Switch	Ground Panel	Main power disconnect. The key may be removed to prevent unauthorized operation.
11	Ground/Platform Control Selector	Ground Panel	Selects "GROUND" or "PLATFORM" control of unit.
12	Dual Fuel Selector (if so equipped)	Ground Panel	Selects the type of fuel ("GAS" or "PROPANE") used by the engine.
			
<p>This switch has an "OFF" position which should be used to clear the carburetor bowl of gasoline when changing from gasoline to L.P.</p>			
13	Power Control	Ground Panel	Must be rotated to operate all controls on the ground panel.
14	Platform Level Lever	Platform Console	Valve handle which allows the platform to be manually leveled, or tilted forward and back.
15	Platform Rotate Lever	Platform Console	Valve handle which allows the platform to be rotated left (counterclockwise) or right (clockwise).
16	Drive Controller	Platform Console	Drive handle which controls all forward and reverse drive functions at a speed proportional to handle movement.



**With the platform swung over the steering wheels, use caution when selecting the travel direction. Travel direction will be opposite drive controller movement.**

## OPERATOR CONTROLS DESCRIPTION AND FUNCTION

Item No.	Control	Location	Description
17	Steer Switch	Platform Console	<p>Controls the steering wheels.</p> <div style="text-align: center;">  </div> <p><b>With the platform swung over the steering wheels, use caution when selecting the steering direction. Steering direction will be opposite steer switch movement.</b></p>
18	Vehicle Drive Speed Switch	Platform Console	<p>Shifts between "HIGH" and "LOW" speed drive.</p> <div style="text-align: center;">  </div> <p>A gear change can only be made with Drive Controller (#16) in neutral.</p> <div style="text-align: center;">  </div> <p><b>High gear should only be used on firm, level surfaces.</b></p> <div style="text-align: center;">  </div> <p>The drive limit switches are activated when any boom section is raised, reducing maximum ground speed.</p>
19	Foot Pedal	Platform Floor	Pedal must be depressed to provide power for controls.
20	Hour Meter	Ground Panel	Indicates the number of hours the machine has been operated in hours and tenths.
21	Ampmeter	Ground Panel	Indicates the current charge or discharge rate in amps.
22	Circuit Breaker	Ground Panel	Pops out when there is excessive electrical load in the 12 volt control circuit. Push in to reset.

# START-UP PROCEDURES

## DAILY CHECKS

Before the SILVER EAGLE is put into use each day, or cold-started after an extended period during use, the following checks should be completed to ensure that the machine is safe and in good condition:

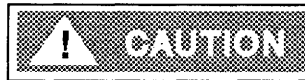
- \_\_\_ Perform a visual inspection of all machine components, i.e. missing parts, torn or loose hoses, hydraulic oil leaks, torn or disconnected wires, flat or damaged tires etc. The compartment doors on both sides can be opened to inspect components inside.
- \_\_\_ Check engine oil and fuel tank levels.
- \_\_\_ Check engine coolant level (liquid cooled units only).
- \_\_\_ Check battery electrolyte level and connections.
- \_\_\_ Check hydraulic fluid level.
- \_\_\_ Check tires for damage.
- \_\_\_ Check wheel lug nuts for proper torque (120 ft. lbs.).
- \_\_\_ Check hoses for worn areas.
- \_\_\_ Check hose carrier to verify that it is not bent or sagging.
- \_\_\_ Check safety belt connections and worn areas on the belt.
- \_\_\_ Check platform rails and gate latch for damage.
- \_\_\_ Check pivot pins for security.
- \_\_\_ Check that all labels are legible and secure.
- \_\_\_ Start engine and check that hydraulic pressure is as stated on the data plate.
- \_\_\_ Check that no attempt had been made to override the drive interlock system by a previous operator.
- \_\_\_ 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.



## GROUND OPERATION AND CHECKS



All operators must thoroughly read and understand the section of this manual entitled "Safety Rules and Precautions" prior to operating this machine.



**A complete visual inspection of the machine should be performed prior to operational checks.**

- Disengage lockpin before using the turntable.
- Select the "GROUND" position on the ground/ platform selector switch.
- Turn the key switch to "ON" to energize the machine's electrical system.
- Individually push down on each of the three fastened corners of the tilt alarm. The alarm should sound when pressing each corner.
- Turn the ignition switch to "START" while engaging the "CHOKE" with the choke/ glow plug switch. As soon as the engine starts, allow both switches to return to their center positions. See "Engine Operation" in "Operation" section for diesel starting procedures or propane operation on dual fuel versions.
- After a brief warm up period, select the "HI" engine RPM setting.
- Actuate the power switch on the ground control console.



**BE SURE BOOM TRAVEL AREA IS CLEAR OF OBSTRUCTIONS.**

**DO NOT OPERATE THE MACHINE IF THESE CHECKS REVEAL A DEFECT.**

- 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.
  
- Operate the middle boom, upper boom, and swing functions the same way.
  - \_\_\_\_\_ 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.
  
- Operate the boom telescope function by raising the upper boom section parallel to the ground and extending and retracting the boom.
  - \_\_\_\_\_ 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 all boom sections to a stowed position. Release the power switch.



**All machine operations should stop upon release of power switch.**

- Select the "LOW" engine RPM setting. Allow the engine to slow to idle speed. Shut the engine off.

## EMERGENCY PUMP OPERATION AND CHECKS

With engine off:

- Actuate the emergency pump switch.
- Slowly move the lower boom lever in the "UP" position.
  - \_\_\_\_\_ 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.
- Once movement has been established, return the boom section to the stowed position and release the emergency pump switch.



**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" position on the ground/ platform selector switch.
- Enter the platform. Close the gate securely and connect the safety belt to the platform.
- Turn the ignition switch to "START" while engaging the "CHOKE" with the choke/ glow plug switch. As soon as the engine starts, allow both switches to return to their center positions.



If engine has been running for ground operational checks, it should not require choke to re-start.

- After a brief warm up period, select the "HI" engine RPM setting.
- Actuate the foot pedal power switch, mounted on the floor of the platform.



**BE SURE BOOM TRAVEL AREA IS CLEAR OF OBSTRUCTIONS.**

**DO NOT OPERATE THE MACHINE IF THESE CHECKS REVEAL A DEFECT.**

- 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 at each pin locking point.
- 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 swing functions the same way.
  - \_\_\_\_\_ 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.
  
- Operate the boom telescope function by raising the upper boom section parallel to the ground and extending and retracting the boom.
  - \_\_\_\_\_ 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.
  
- 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 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.
  
- 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 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 all boom sections to a stowed position.
  
- Release the foot pedal power switch.



**All machine operations should stop upon release of foot pedal.**

## DRIVE FUNCTION OPERATION AND CHECKS

- Turn the drive speed selector switch to "LOW".
- With the foot pedal engaged slowly move the drive lever forward. The machine should smoothly accelerate in the direction of the control lever movement. Note operation of audible "movement alarm" when driving.



**THE MOVEMENT ALARM IS PROVIDED FOR YOUR PROTECTION,  
AND THE PROTECTION OF PERSONS IN THE IMMEDIATE AREA.**

**DISABLING THIS IMPORTANT SAFETY DEVICE MAY RESULT IN  
DEATH OR SERIOUS INJURY.**



With the platform swung over the steering wheels, use caution when selecting the travel direction. Travel direction will be opposite drive controller movement and steering direction will be opposite steering rocker switch operation.

- \_\_\_\_\_ Listen for any unusual noises.
- \_\_\_\_\_ Check for any vibration.
- \_\_\_\_\_ Check for uneven or jerky operation.
- \_\_\_\_\_ Check for hydraulic leaks.

- Return the drive control lever to "NEUTRAL". The unit should come to a complete stop. The movement alarm should shut off.
- Raise the lower boom section to half height, operate the drive control lever again. The machine should only travel at approximately 0.5 MPH. High speed travel is possible only with upper boom retracted and positioned below horizontal while the lower and mid booms are in the stowed position.
- Return the machine to the stowed position.

- Switch the drive speed selector switch to "HI" and repeat the drive tests with the boom stowed and raised.



**A gear change should only be made with drive controller in center (NEUTRAL) position. High gear should only be used on firm, level surfaces.**

- \_\_\_\_\_ Listen for any unusual noises.
  - \_\_\_\_\_ Check for any vibration.
  - \_\_\_\_\_ Check for uneven or jerky operation.
  - \_\_\_\_\_ Check for hydraulic leaks.
- Operate the steering rocker switch and check for proper steering control.
  - Return the machine to the stowed position.
  - Release the foot pedal. Turn the engine speed control to "LOW" , and allow the engine to slow to idle speed.
  - Shut the engine off.



**All machine functions should stop upon release of the foot pedal.**

## EMERGENCY PUMP OPERATION AND CHECKS

With engine off:

- Actuate the emergency pump switch.
- Slowly move the lower boom lever in the "UP" direction.
  - \_\_\_\_\_ 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.
- Once movement has been established, return the boom section to the stowed position and release the emergency pump switch.



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

## OPERATION



**WITH THE ADVANCED DESIGN OF THE SILVER EAGLE 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!!!! SAFE OPERATION BEGINS WITH A SAFE OPERATOR.**

Perform Start-up Procedures. Remember to place the ground / platform selector in the "PLATFORM" position before going to the platform for operation.

Enter platform, close safety gate and attach safety belt.

## DRIVING AND STEERING



Check that the route of travel to be taken is clear.

The foot pedal power switch must be fully depressed during all driving operations.

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 proportional to the amount of movement of the lever. When any boom is elevated or extended, the machine operates at reduced speed.

Steering is achieved by depressing the rocker switch, on top of the lever, to the left or right as required.

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). If driving is attempted with platform over "steering" end, it must be remembered 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 controller lever is positioned in the center (neutral) position.



**ACTUATION OF THE PLATFORM EMERGENCY STOP BUTTON WILL APPLY BRAKES IMMEDIATELY! THIS MAY CAUSE VIOLENT PLATFORM MOVEMENT AS MACHINE COMES TO A SUDDEN STOP.**



## BOOM, SUPERSTRUCTURE AND PLATFORM

Depress the foot pedal to activate hydraulic system.



The foot pedal power switch must be fully depressed during platform operation.

Select the required function. Available functions are:

- Lower boom "UP" or "DOWN"
- Middle boom "UP" or "DOWN"
- Upper boom "UP" or "DOWN"
- Extend (telescope) boom "IN" or "OUT"
- Superstructure swing "LEFT" or "RIGHT"
- Platform level "FORWARD" or "BACKWARD"
- Platform rotate "LEFT" or "RIGHT"

All of these functions are controlled by moving the appropriate lever forward or back.

Multiple control operation is possible by using more than one lever. However, this will reduce the flow to individual functions, slowing their response time.

## EMERGENCY PUMP

If the engine is not operational:

- Actuate the emergency pump switch.
- Slowly move the required functions to lower the platform to the stowed position. Drive and steer functions are not available when using the emergency pump.



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

## ENGINE OPERATION

### GASOLINE ENGINE OPERATION

- Turn the ignition switch to "START" while engaging the "CHOKE" with the choke/glow plug switch. As soon as the engine starts, allow both switches to return to their center positions.

### DUAL FUEL ENGINE OPERATION

#### Gasoline Operation

- Turn the dual fuel switch to "GAS" and operate the machine as normal.

#### Gasoline To Propane Switching

**The machine should only be switched to propane while the engine is running.**

- Engine RPM switch should be in "HIGH" position.
- Turn dual fuel selector switch 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 to "PROPANE". The engine should run normally as soon as the switch engages.

#### Propane To Gasoline Switching

- Turn the fuel selector switch to "GAS". No special procedures are required.



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.

### DIESEL ENGINE OPERATION

#### PERKINS ENGINE ONLY (DUETZ ENGINE IS NOT EQUIPPED WITH GLOW PLUGS)

- Turn the "ENGINE" switch to the "GLOW PLUG" position and hold for 30 to 45 seconds prior to engaging the starter motor.

## OPERATION IN COLD WEATHER

- In below zero weather, the hydraulic oil should be allowed to warm before full operation of the unit.
- Check for water contamination of the oil.
- Check for ice on the platform, rotation teeth and steering linkage.
- Check that all valves operate smoothly and return freely to the neutral position.



**CARE MUST BE TAKEN TO AVOID SUDDEN BRAKING WHEN THE GROUND SURFACE IS ICY. IT IS RECOMMENDED THAT ALL DRIVING OPERATIONS ARE CARRIED OUT SLOWLY AND A SAFE MARGIN IS ALLOWED FOR MANEUVERING AROUND OBJECTS.**

## OPERATION IN HIGH WINDS

- The SILVER EAGLE should not be operated in high wind situations.
- Special care should be taken when operating the SILVER EAGLE in areas where sudden gusts of wind could arise.

## SHUT-DOWN PROCEDURES

- When finished with the SILVER EAGLE, place the boom in the stowed position.
- Place the ground/platform selector in the "GROUND" position.
- Turn off the key switch.

## EMERGENCY SYSTEM AND PROCEDURES



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

### EMERGENCY ELECTRIC PUMP

Each SILVER EAGLE has an emergency pump which can be operated from the operator's platform or at the ground control station to safely return the platform to the ground position. Turn and hold the emergency pump switch to the "ON" position and operate the boom control levers for controlled descent.



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

### EMERGENCY DRIVE FUNCTION

The emergency pump will not provide control or operation of the drive or steering functions. Should it be necessary to move or steer the unit you must do the following.

#### **WITHOUT optional towing package:**

- Securely attach the SILVER EAGLE to a tow vehicle.
- Remove drive shaft from rear axle.
- Remove steering cylinder rod end pin from steering linkage to allow steering wheels to track tow vehicle.

#### **WITH optional towing package:**

- Securely attach the SILVER EAGLE to a tow vehicle with tow bar provided.
- Disengage rear drive shaft by lifting back plate and moving the lever to the other side of the lock plate. (You have to rock the machine back and forth to accomplish this.)
- Pull out on the steer wander valve.

The tow vehicle must have sufficient braking capability to stop itself as well as the SILVER EAGLE. Tow speed should not exceed 4 mph.

## EMERGENCY SITUATION AND LOWERING

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



**DO NOT TRY TO CLIMB DOWN THE BOOM.**

**HAVE AN EXPERIENCED OPERATOR USE THE EMERGENCY PUMP CONTROL AT GROUND STATION TO SAFELY LOWER THE PLATFORM. REPORT THE INCIDENT TO YOUR SUPERVISOR IMMEDIATELY.**

### **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 pedal.
2. Push "Emergency Stop" button.
3. Evaluate the nature of the failure. Return to the ground, using the emergency pump and lowering procedure (see "Emergency Pump", under "Operations").
4. If unable to return to the ground using the platform controls, contact an experienced operator to lower the machine using the ground control panel.
5. **Report the incident to your supervisor immediately.**

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



**DANGER!!! 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. **Check to see if operator is in a pinned position before attempting emergency lowering procedure.**
4. After establishing that the machine is not in contact with live power lines, lower the platform using the emergency lowering procedure (see "Emergency Pump", under "Operations").
5. Render first aid to the operator.

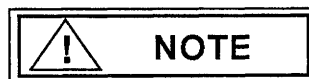
**SITUATION: Platform in contact with live power lines and operator incapacitated.**



**DANGER!!! DO NOT TOUCH UNIT!!!!**

**CORRECTIVE ACTION**

1. Contact authorized personnel to disconnect power supply touching unit.
2. Have someone summon first aid or rescue squad.
3. If operator is unconscious, check to see if he is in a pinned position.
4. **AFTER POWER IS CUT**, use the emergency lowering procedure to bring platform with operator to a safe location to render first aid (see "Emergency Pump", under "Operations").



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

# MAINTENANCE

## 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.



# DAILY OPERATIONAL CHECKLIST

All checks must be completed before operation of the Simon SILVER EAGLE.

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 SILVER EAGLE clean!!**



**THIS CHECKLIST MUST BE USED DAILY. 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 a visual inspection of all machine components, 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 engine oil and fuel tank levels.  |
| _____ | 3. Check engine coolant level (liquid cooled units only).  |
| _____ | 4. Check battery electrolyte level and terminal connections.   |
| _____ | 5. Check hydraulic fluid level.  |
| _____ | 6. Check tires for damage and correct tire pressure (65 psi).  |
| _____ | 7. Check wheel lug nuts for proper torque (120 ft. lbs.).  |
| _____ | 8. Check hoses for worn areas.   |
| _____ | 9. Check hose carrier to verify that it is not bent or sagging.  |
| _____ | 10. Check safety belt connections and worn areas on the belt.  |
| _____ | 11. Check platform rails and gate latch for damage.  |
| _____ | 12. Check pivot pins for security.   |

## DAILY OPERATIONAL CHECKLIST

### INITIAL

### DESCRIPTION

- |       |  |
|-------|--|
| _____ | 13. Check that all labels are legible and secure.  |
| _____ | 14. Start engine and check that hydraulic pressure is as stated on the data plate.   |
| _____ | 15. Check that no attempt had been made to override the drive interlock system by a previous operator.   |
| _____ | 16. 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. |
| _____ | 17. If all pre-inspection checks have been completed, the operator is ready to test the Simon SILVER EAGLE's ground control station for proper operation.                      |
| _____ | 18. Check emergency pump for operation.  |
| _____ | 19. Check platform controls for proper operation.  |
| _____ | 20. With platform raised, check for smooth operation of low speed drive.   |
| _____ | 21. Follow engine daily service requirements. Refer to the Engine Maintenance Manual supplied with your SILVER EAGLE.  |

### ADDITIONAL MAINTENANCE REQUIREMENTS FOR SEVERE USAGE APPLICATIONS

### INITIAL

### DESCRIPTION

#### DAILY

- |       |   |
|-------|---|
| _____ | 22. Inspect cylinder boots, valve spool boots, etc., for cuts or other damage after every 8 hours of service. Repair or replace if necessary. |
| _____ | 23. Check hydraulic system for leakage after every 8 hours of operation.  |

#### WEEKLY

- |       |  |
|-------|--|
| _____ | 24. Inspect condition of hydraulic fluid. Fluid should have a clear amber color.   |
| _____ | 25. Lubricate all grease fittings.   |
| _____ | 26. Apply Moly-Kote 321 R bonded lubricant to swing bearing and drive pinion gear. |

# MONTHLY OPERATIONAL CHECKLIST

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 SILVER EAGLE clean!!**



**THIS CHECKLIST MUST BE USED AT MONTHLY INTERVALS. 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. Lubricate all grease fittings (including drive shaft).   |
| _____ | 3. Inspect condition of hydraulic fluid in the reservoir. Fluid should have a clear amber color.                                      |
| _____ | 4. Check hydraulic system for leaks. Examine hoses for signs of excessive wear, chafing or twisting. Replace worn hoses if necessary. |
| _____ | 5. Inspect the work platform and boom structure for signs of damage and broken welds.   |
| _____ | 6. Check the low speed drive to ensure it is within specified limits.   |
| _____ | 7. Check operation of emergency pump.   |
| _____ | 8. Check all decals for legibility.   |
| _____ | 9. Clean and lubricate all valve spool linkages.  |
| _____ | 10. Check pin joints and retaining bolts for security.  |
| _____ | 11. Check tires for cracks and damaged areas.   |
| _____ | 12. Check wheel lug nuts for tightness (120 ft. lbs.).  |

## MONTHLY OPERATIONAL CHECKLIST

### INITIAL

### DESCRIPTION

- |       |  |
|-------|--|
| _____ | 13. Check for unit damage, broken welds, improper or makeshift repairs.  |
| _____ | 14. Torque nuts on u-bolts used for axle mounting blocks to 260 ft. lbs.   |
| _____ | 15. Check protective rubber cover around hoses at moving anchor tip boom, support posts, boom hose passages and at swing bearing.  |
| _____ | 16. 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.                                |
| _____ | 17. Check torque of swing bearing bolts. The correct torque is 220 ft. lbs.  |
| _____ | 18. Check adjustment and security of swing drive. Correct torque of mounting bolts is 80 ft/lbs. There should be a slight amount of backlash between the turntable and undercarriage when properly adjusted. |
| _____ | 19. Check oil level in swing drive. It should be half filled.  |
| _____ | 20. Check oil level in axle and planetary box. (Refer to Lubrication Chart.)   |
| _____ | 21. Follow engine monthly service requirements. Refer to the Engine Maintenance Manual supplied with your SILVER EAGLE.  |

### ADDITIONAL MAINTENANCE REQUIREMENTS FOR SEVERE USAGE APPLICATIONS

### INITIAL

### DESCRIPTION

#### 90 DAYS

- |       |  |
|-------|--|
| _____ | 22. Replace suction and return filter elements.  |
| _____ | 23. Change engine oil and filter, and follow all other engine severe usage requirements. Refer to the Engine Maintenance Manual supplied with your SILVER EAGLE. |

# SEMI - ANNUAL OPERATIONAL CHECKLIST

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 SILVER EAGLE clean!!**



**THIS CHECKLIST MUST BE USED AT 6 MONTH INTERVALS. 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 Monthly Operational Check Lists.

\_\_\_\_\_

2. Have hydraulic fluid sample analyzed at a test laboratory. Follow the recommendations of test results.



If hydraulic fluid has been regularly maintained, it should only require changing once every year, depending on maintenance, temperature, application, duty cycle, and atmospheric conditions.

\_\_\_\_\_

3. 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.

\_\_\_\_\_

7. Clean and lubricate all pushbutton 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 on data plate.

## SEMI - ANNUAL OPERATIONAL CHECKLIST

INITIAL	DESCRIPTION
_____	10. Replace both suction and return filter elements.
_____	11. Check tightness of upper frame, swing bearing and swing drive mounting bolts. (Refer to monthly service for torque values.)
_____	12. Drain and replace fluid from swing drive, axle and planetary box. If badly contaminated, it may be necessary to disassemble and inspect components.
_____	13. Inspect entire machine for worn or damaged components. Replace as necessary.
_____	14. Tune engine, and follow all other engine semi-annual service requirements. Refer to the Engine Maintenance Manual supplied with your SILVER EAGLE.
_____	15. Lubricate all hydraulic valve spool linkages.
_____	16. Lubricate swing bearing and drive pinion gear.

### ADDITIONAL MAINTENANCE REQUIREMENTS FOR SEVERE USAGE APPLICATIONS

INITIAL	DESCRIPTION
_____	17. Replace fuel filter, and follow all other severe usage requirements. Refer to the Engine Maintenance Manual supplied with your SILVER EAGLE.

## TROUBLESHOOTING



**SHOULD YOU NOTICE ANY MALFUNCTION OR EXPERIENCE ERRATIC OPERATION WHILE RUNNING THIS UNIT, CONTINUE OPERATION ONLY LONG ENOUGH TO RETURN TO THE GROUND POSITION IF POSSIBLE.**

**IMMEDIATELY REPORT THE INCIDENT TO YOUR SUPERVISOR AND DISCONTINUE USING THE UNIT UNTIL IT HAS BEEN CHECKED BY A TRAINED EQUIPMENT MAINTENANCE PERSON.**

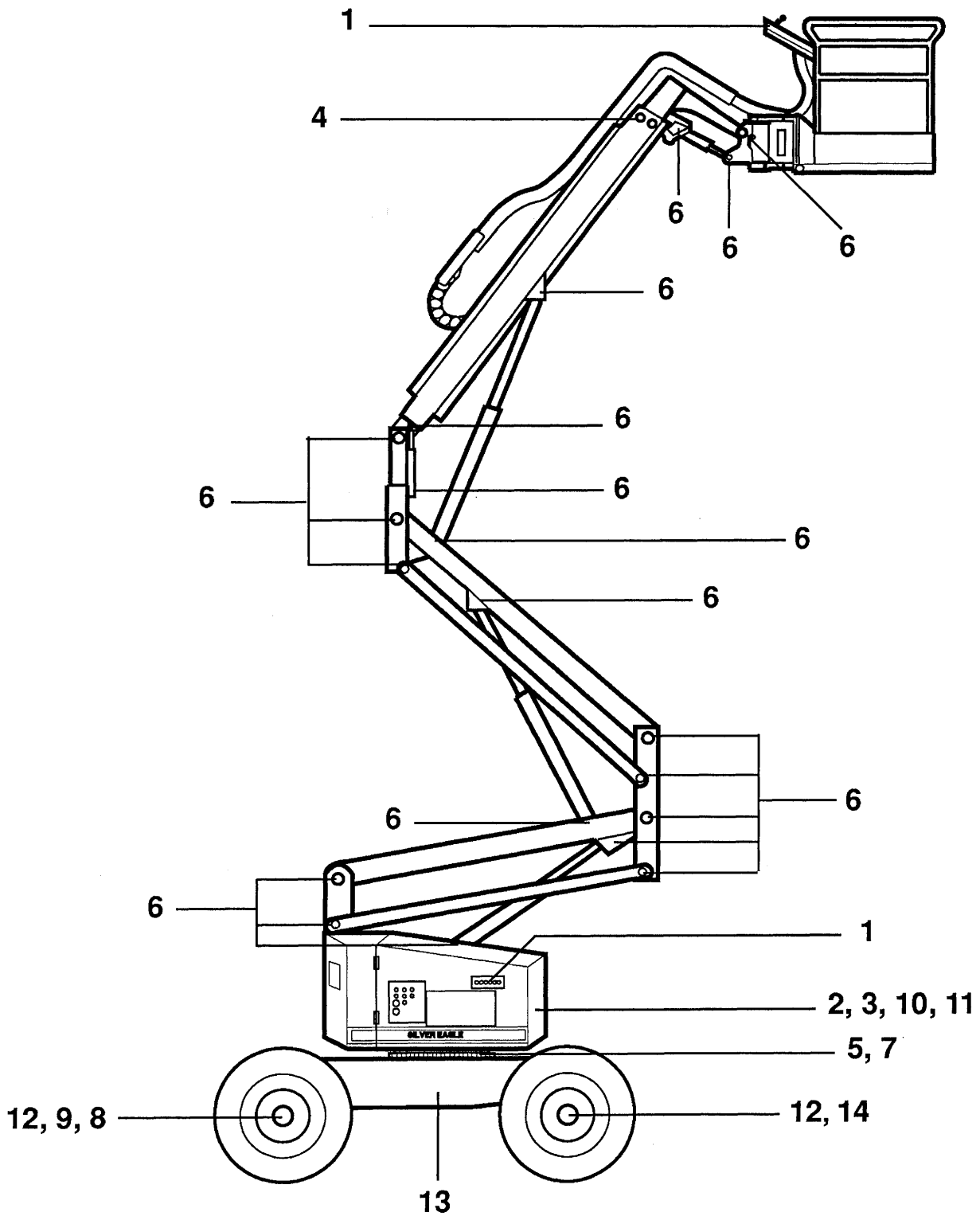
### **WHAT TO CHECK IF UNIT WILL NOT START:**

- Key switch turned on?
- Emergency stop button released? Turn clockwise to reset.
- Ground/ platform selector switch in proper position?
- Battery cables connected?
- Fuel in fuel tank - gas, propane or diesel?
- Propane tank valve open, if so equipped?
- Fuel selector switch in proper position?
- Wires pulled out or loose?
- Key switch turned to "OFF" position prior to a restart attempt in order to reset delay relay?

### **WHAT TO CHECK IF FUNCTIONS WILL NOT OPERATE:**

- Ground/ platform selector switch in proper position?
- Power switch or platform foot pedal not activated?
- Hydraulic oil level low?
- Turntable lockpin not removed?
- Engine switch at correct RPM?
- Obvious oil leak or damaged component?
- If equipped with tow package option, is the tow drive or steering disengaged?
- Wire connections pulled out or loose?
- Are the hydraulic tank ball valves open?

### LUBRICATION DIAGRAM





## LUBRICATION CHART

NO. ON DIAGRAM	ITEM	SPECIFICATION AND QUANTITY	FREQUENCY OF LUBRICATION
1	CONTROL VALVE HANDLES PIVOT PINS	WD 40 SPRAY	MONTHLY OR EVERY 100 HRS.*
2	HYDRAULIC RESERVOIR	MOBIL DTE-15 TO FULL MARK W / ALL CYLINDERS RETRACTED	CHECK DAILY ANALYZE EVERY 6 MONTHS CHANGE YEARLY
3	HYDRAULIC FILTERS	FILTER ELEMENTS	CHANGE EVERY 6 MONTHS
4	BOOM WEAR PADS	SILICONE SPRAY	MONTHLY OR EVERY 100 HRS.*
5	SWING BEARING	LITHIUM N.L.G.I. #2 EP (PURGE OLD GREASE)	MONTHLY OR EVERY 100 HRS.*
6	PIVOT PINS	LITHIUM N.L.G.I. #2 EP (PURGE OLD GREASE)	MONTHLY OR EVERY 100 HRS.*
7	SWING BEARING GEAR TEETH	LITHIUM N.L.G.I. #2 EP GREASE OR DRI-LUBE	EVERY 6 MONTHS OR 500 HRS.*
8	STEERING SPINDLES	LITHIUM N.L.G.I. #2 EP (PURGE OLD GREASE)	MONTHLY OR EVERY 100 HRS.*
9	STEERING LINKAGE	LITHIUM N.L.G.I. #2 EP (PURGE OLD GREASE)	MONTHLY OR EVERY 100 HRS.*
10	SWING DRIVE GEAR BOX	LITHIUM N.L.G.I. #2 EP (PURGE OLD GREASE)	CHECK BI-MONTHLY OR EVERY 200 HRS.*
	TOP BEARING		CHANGE EVERY 2 YEARS OR 2,000 HRS.*
11	SWING DRIVE GEAR BOX	N.L.G.I. #00 EP OR SAE 140 WT. EP OIL (FILL TO PLUG)	CHECK BI-MONTHLY OR EVERY 200 HRS.*
			CHANGE EVERY 2 YEARS OR 2,000 HRS.*
12	DIFFERENTIAL	EP-90W TO FILL PLUG	CHECK MONTHLY CHANGE YEARLY
13	PLANETARY GEARBOX	EP-90W TO FILL PLUG	CHECK MONTHLY CHANGE YEARLY
14	DRIVE SHAFT, U-JOINTS AND SLIP JOINTS	LITHIUM N.L.G.I. #2 EP GREASE	CHANGE MONTHLY OR EVERY 100 HRS.*

\* WHICHEVER OCCURS FIRST.



## 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.