

SKYJACK™

OPERATING MANUAL

CE

This manual MUST be kept and stored with the aerial platform at all times.



Rough Terrain Series
Engine Powered

Models:
MID SIZE 7127 & 7135
FULL SIZE 8831, 8841 & 9250

For Service please call 800 275-9522
Skyjack Inc. Service Center 3451 Swenson Ave., St. Charles, IL. 60174 FAX 630 262-006
For Parts in North America and Asia please call 800 965-4626
Skyjack Inc. Parts Center 3451 Swenson Ave., St. Charles, IL. 60174 FAX 888 782-4825
For Parts & Service in Europe please call 44-1691-676-235
Skyjack Europe, Glovers Meadow, Maesbury Rd., Oswestry, Shropshire, U.K.....FAX 44-1691- 676-239

SKYJACK™

OPERATING MANUAL CE

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USE THE SERIAL NUMBER OF YOUR MACHINE TO DETERMINE THE CORRECT OPERATING MANUAL TO USE						
MANUAL PART NUMBER	118945AA	122883AH	129907AB	129921AE (CE)	129922AE (ANSI/CSA)	
Release Date	January 2000	June 2002	August 2003	April 2006	April 2006	
M O D E L	Mid Size RTs	7027	33188 & Below	33189 & Above	Not Used	
		7127 7135 8243 8850	Not Used	340000 to 340268	340269 to 341123	341124 & Above
	Full Size RTs	8831	37054 & Below	37055 to 37361	37362 to 37451	37452 & Above
		8841	42202 & Below	42203 to 42837	42838 to 43103	43104 & Above
		9250	50771 & Below	50772 to 51094	51095 to 51388	51389 & Above

60101AJ

Rough Terrain Series ***Engine Powered***



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MID SIZE 7127 & 7135
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The Safety Alert Symbol identifies important safety messages on machines, safety signs in manuals or elsewhere. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.



This Safety Alert Symbol means attention!

Become alert! Your safety is involved.



DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

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



CAUTION

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

IMPORTANT

IMPORTANT indicates a procedure(s) essential for safe operation and which, if not followed, may result in a malfunction or damage to the machine.

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SKYJACK Inc. is continuously improving and expanding product features on its equipment, therefore, specifications and dimensions are subject to change without notice.

Aerial Platform Definition

A mobile device that has an adjustable position platform supported from ground level by a structure.

Purpose of Equipment

The SKYJACK Mid Size (Models 7127 & 7135) and Full Size (Models 8831, 8841 & 9250) Rough Terrain aerial platforms are designed to transport and raise personnel, tools and materials to overhead work areas.

Use of Equipment

The aerial platform is a highly maneuverable, mobile work station. Lifting and driving **MUST** be on a flat, level, compacted surface.

The aerial platform can be driven over uneven terrain only when the platform is fully lowered.

Manual

The operating manual is considered a fundamental part of the aerial platform. It is a very important way to communicate necessary safety information to users and operators. A complete and legible copy of this manual must be kept in the provided weather-resistant storage compartment on the aerial platform at all times.

Operator

The operator **MUST** read and completely understand both this operating manual and the safety panel label located on the platform and **ALL** other warnings in this manual and on the aerial platform. Compare the labels on the aerial platform with the labels found within this manual. If any labels are damaged or missing, replace them immediately.

Optional Accessories

The SKYJACK aerial platform is designed to accept a variety of optional accessories. These are listed under "Standard and Optional Features" in [Section 1.14](#).

Operating instructions for these options (**if equipped**) are located in [Section 2](#) of this manual.

For options not listed under "Standard and Optional Features", contact the SKYJACK Service Department at 44 1691-676-235 or fax: 44 1691-676-239, include the model and serial number for each applicable machine.

Scope of this Manual

- a. This manual applies to the CE version of the Mid Size and Full Size Rough Terrain aerial platform models listed on [Table 2-1](#).
 - **Equipment identified** with "CE" meets the requirements for the European countries, i.e., Machinery Directive 98/37/EC and EMC Directive 89/336/EEC and the corresponding EN standards.
- b. Operators are required to conform to national, state/provincial and local health and safety regulations applicable to the operation of this aerial platform.

1. About Your Aerial Platform

This section provides general information about your aerial platform. It describes the major components, standard and optional features, safety reminders and precautions.

1.1 Major Assemblies

The aerial platform consists of three major assemblies: the platform, the lifting mechanism and the base. An operator's control box is mounted on one of the platform guardrails. Auxiliary and emergency controls are located at the base.

1.2 Platform

The platform is constructed of a tubular support frame, a skid-resistant "diamond plate" deck surface and 1100mm hinged guardrails with 152mm toe boards and mid-rails. The platform can be entered from either side through a spring returned gate for Full Size RT's and from the rear through a spring returned gate on Mid Size RT's. The Mid Size RT's are equipped with a front extension platform. The Full Size RT's can be equipped with a front or both front and rear extension platforms.

1.3 Operator's Control Box

A removable control box, mounted at the front right of the platform, contains controls for aerial platform motion and emergency stopping.

1.4 Manual Storage Box

This weather-resistant box is mounted to the inside of the hydraulic cabinet door at the base or at the front of the platform. It contains the Operating Manual, the Operating/Maintenance and Parts Manual and other important documentation. The Operating Manual for this make and model of aerial platform **MUST** remain with the aerial platform and should be stored in this box.



1.5 Lifting Mechanism

The lifting mechanism is constructed of formed steel or tube sections making up a scissor-type assembly. The scissor assembly is raised and lowered by single-acting hydraulic lift cylinders with holding valves. A two-section pump, driven by an engine, provides hydraulic power to the lift cylinders.

1.6 Lowering Warning System

A lowering warning system automatically stops the lowering function before reaching the fully retracted position and sounds the alarm.

1.7 Maintenance Support

A maintenance support is located inside the lifting mechanism. When properly positioned, it can support the scissor assembly and empty platform. The maintenance support **MUST** be used during inspection and maintenance or when repairs are being performed within the lifting mechanism.

1.8 Base (Models 71xx & 8xxx)

The base is a rigid, one-piece weldment which supports two side cabinets.

- One cabinet contains the hydraulic components, up/down controls and electrical components. The other cabinet contains the fuel and hydraulic tanks.
- The propane cylinder is either located behind the access ladder or behind the fuel cabinet.
- The front axle has two wheels, steerable by a hydraulic cylinder and is either non-driven (2WD models) or drive shaft/gear box driven (4WD models).
- The rear axle is drive shaft/gear box driven and has a spring-applied hydraulically released disc parking brake.
- A roll-out tray at the front of the base supports an engine coupled with a two-section hydraulic pump providing power to the hydraulic system.
- An engine control panel is also located at the front of the base.
- The 12V starter battery is located in the hydraulic/electric cabinet (Models 8831 & 8841) or at the front of the engine roll-out tray (Models 71xx).

1.9 Base (Model 9250)

The base is a rigid, one-piece weldment which supports two side cabinets.

- One cabinet contains the hydraulic tank, hydraulic components, up/down controls, electrical components, emergency lowering battery and starter battery.
- The other cabinet contains the fuel tank and Liquid Propane (LP) tank (if equipped).
- The front axle has two wheels, steerable by a hydraulic cylinder and is either non-driven (2WD models) or drive shaft/gear box driven (4WD models).
- The rear axle is drive shaft/gear box driven and has two spring-applied hydraulically released parking brakes.
- A roll-out tray at the front of the base supports an engine coupled with a two-section hydraulic pump providing power to the hydraulic system.
- An engine control panel is also located at the front of the base.

1.10 Tilt Sensing System

The tilt sensing system, located on the base of the aerial platform, is designed to prevent lifting or driving when the machine is on a slope greater than a predetermined limit. If in this situation the platform must be fully lowered immediately.

1.11 Load Sensing System

The load sensing system is a safety device that will prevent any normal movement of the aerial platform from a stationary working condition after the rated load is reached and exceeded.

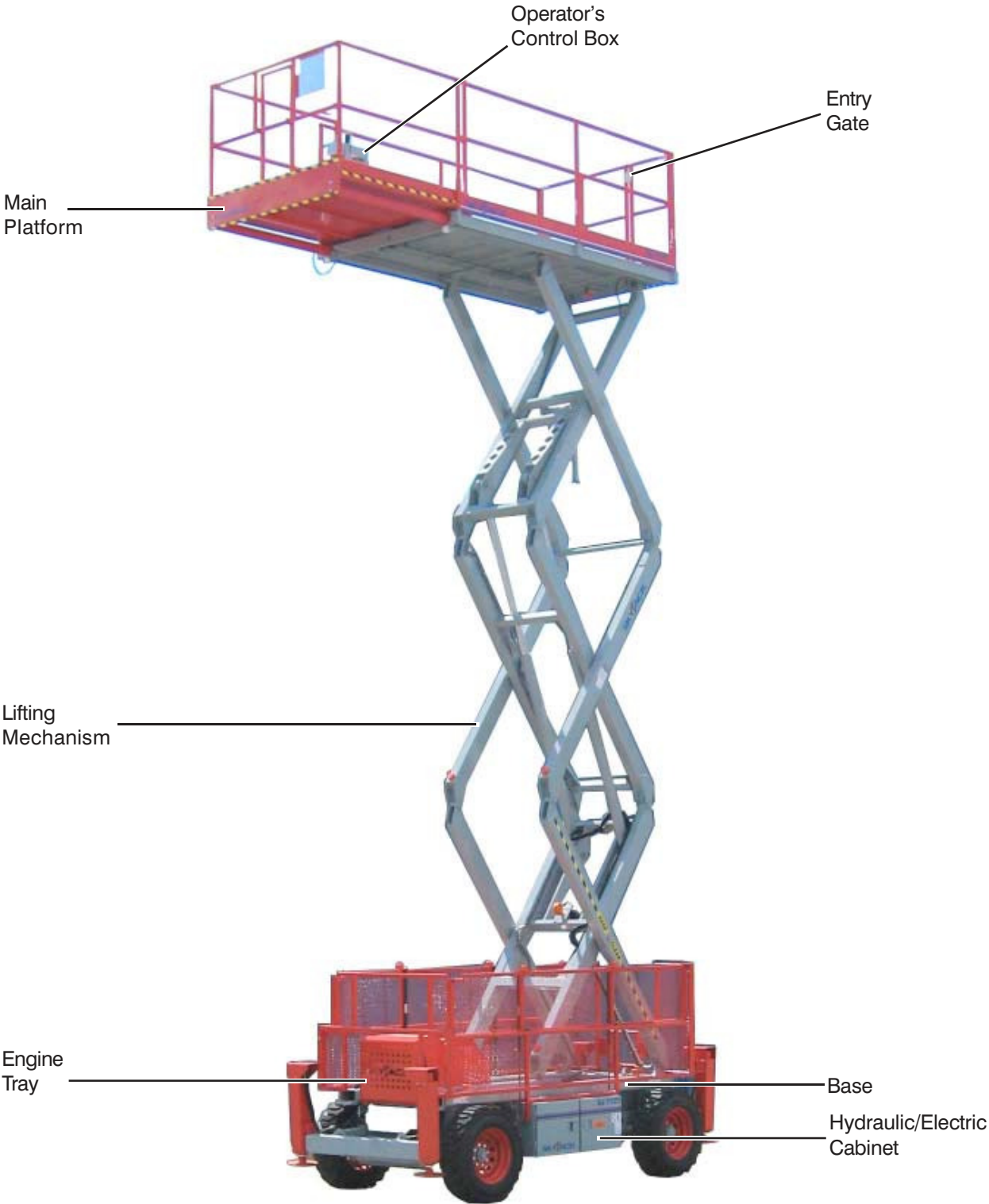
1.12 Serial Number Nameplate

The serial number nameplate, located at the rear of the machine, lists the following:

- Model number
- Serial number
- Machine weight
- Maximum drivable height
- Maximum capacities
- Maximum number of persons permissible on the platform
- Voltage
- System pressure
- Lift pressure
- Maximum platform height
- Maximum wheel load
- Maximum wind speed
- Maximum manual force
- Maximum incline

Use this information for proper operation and maintenance and when ordering service parts.

1.13 Major Components



SKYJACK Model 7127 Aerial Platform

Section 1 - About Your Aerial Platform

1.14 Standard and Optional Features

Rough Terrain Series – Mid-Size & Full-Size – Specifications - CE

MODEL	Mid-Size RT's		Full-Size RT's		
	7127	7135	8831	8841	9250
STANDARD EQUIPMENT					
Joystick control	*	*	*	*	*
Dual range (torque/speed) selector	*	*	*	*	*
Operator horn	*	*	*	*	*
Diamond pattern, all steel platform deck construction	*	*	*	*	*
Hinged guardrail system	*	*	*	*	*
Lanyard attachment rings	*	*	*	*	*
Front mounted manual extension deck	*	*			
Access ladders and gates at both sides of platform			*	*	*
AC outlet on platform	*	*	*	*	*
Self-centering scissors design			*	*	*
Flashing amber beacon	*	*	*	*	*
Movement alarm	*	*	*	*	*
Cabinets with lockable swing-out door	*	*	*	*	*
Hour meter	*	*	*	*	*
Tilt alarm with lift/drive cut out	*	*	*	*	*
Color-coded, numbered wiring system	*	*	*	*	*
Engine mounted on roll-out tray	*	*	*	*	*
Load sensing system	*	*	*	*	*
Scissor guards	*	*	*	*	*
25 hp Kubota diesel water-cooled engine	*	*	*	*	*
Tie down points	*	*	*	*	*
Grip lug air-filled tires	*	*	*	*	*
4-wheel drive package	*	*	*	*	*
Independently operated hydraulic outriggers					*
Spring-applied hydraulically released disc brake system	*	*	*	*	
Dual spring-applied hydraulically released parking brakes					*
OPTIONAL EQUIPMENT					
Front mounted manual extension deck			*	*	
Rear mounted manual extension deck			*	*	
Front mounted powered extension deck	*	*	*	*	*
Rear mounted powered extension deck			*	*	*
52 hp Nissan dual fuel - gasoline/propane engine	*	*	*	*	*
Grip lug foam-filled tires	*	*	*	*	*
2-wheel drive	*	*	*	*	*
Independently operated hydraulic outriggers	*	*	*	*	
1500 watt AC Inverter	*	*	*	*	*
3500 watt hydraulic AC generator	*	*	*	*	*

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Warning

Failure to comply with your required responsibilities in the use and operation of the aerial platform could result in death or serious injury!

1.15 Operator Safety Reminders

A study conducted by St. Paul Travelers showed that most accidents are caused by the failure of the operator to follow simple and fundamental safety rules and precautions.

You, as a careful operator, are the best insurance against an accident. Therefore, proper usage of this aerial platform is mandatory. The following pages of this manual should be read and understood completely before operating the aerial platform.

Common sense dictates the use of protective clothing when working on or near machinery. Use appropriate safety devices to protect your eyes, ears, hands, feet and body.

Any modifications from the original design are strictly forbidden without written permission from SKYJACK Inc.

1.16 Electrocuting Hazard

This aerial platform is not electrically insulated. Maintain a Minimum Safe Approach Distance (MSAD) from energized power lines and parts as listed below. The operator **must allow** for the platform to sway, rock or sag. **This aerial platform does not provide protection from contact with or proximity to an electrically charged conductor.**

DO NOT USE THE MACHINE AS A GROUND FOR WELDING.
DO NOT OPERATE THE MACHINE DURING LIGHTNING OR STORMS.



DANGER

Avoid Power Lines

Minimum Safe Approach Distance

CE Guidance Note

“Avoidance of danger from Overhead Lines”

Adhere strictly to the governmental rulings and regulations applicable in your country.

FAILURE TO AVOID THIS HAZARD WILL RESULT IN DEATH OR SERIOUS INJURY!

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1.17 Safety Precautions

Know and understand the safety precautions before going on to next section.



Warning

Failure to heed the following safety precautions could result in tip over, falling, crushing, or other hazards leading to death or serious injury

- **KNOW** all national, state/provincial and local rules which apply to your MACHINE and JOBSITE.
- **TURN** the main power disconnect switch OFF when leaving the machine unattended. Remove the key to prevent unauthorized use of the aerial platform.
- **WEAR** all the protective clothing and personal safety devices issued to you or called for by job conditions.

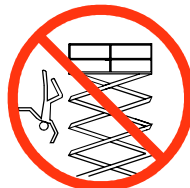
- **DO NOT** wear loose clothing, dangling neckties, scarves, rings, wristwatches or other jewelry while operating this lift.



- **AVOID** entanglement with ropes, cords or hoses.



- **AVOID** falling. Stay within the boundaries of the guardrails.



- **DO NOT** raise the aerial platform in windy or gusty conditions.



- **DO NOT** increase the lateral surface area of the platform. Increasing the area exposed to the wind will decrease machine stability.



- **DO NOT** drive or elevate the aerial platform if it is not on a firm level surface. Do not drive elevated near depressions or holes of any type, loading docks, debris, drop-offs and surfaces that may affect the stability of the aerial platform.



- **If operation in areas with holes or drop-offs is absolutely necessary**, elevated driving shall not be allowed. Position the aerial platform horizontally only with the platform fully lowered. After ensuring that all 4 wheels or outriggers (if equipped) have contact with level firm surface, the aerial platform can be elevated. After elevation, the drive function must not be activated.



- **Elevated driving** must only be done on a firm level surface.



- **DO NOT** ascend or descend a grade steeper than 25% (Model 9250), 30% (Models 8831 & 8841) or 35% (Models 71xx). When fully lowered, ascending or descending, only grades up to the above maximums are permissible.



1.17 Safety Precautions (Continued)

Know and understand the safety precautions before going on to next section.

- **DO NOT** operate on surfaces not capable of holding the weight of the aerial platform including the rated load, e.g., covers, drains and trenches.

- **DO NOT** operate an aerial platform that has ladders, scaffolding or other devices mounted on it to increase its size or work height. It is prohibited.



- **DO NOT** exert side forces on aerial platform while elevated.



- **DO NOT** use the aerial platform as a crane. It is prohibited.



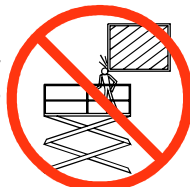
- **DO NOT** sit, stand or climb on the guardrails. It is prohibited.



- **DO NOT** climb on scissor arm assembly. It is prohibited.



- **BE AWARE** of overhead obstructions or other possible hazards around the aerial platform when driving or lifting.



- **DO NOT** raise the aerial platform while the machine is on a truck, fork lift or other device or vehicle.



- **BE AWARE** of crushing hazards. Keep all body parts inside platform guardrails.



- **DO NOT** lower the platform unless the area below is clear of personnel and obstructions.



- **ENSURE** that there are no personnel or obstructions in the path of travel, including blind spots.



- **BE AWARE** of blind spots when operating the aerial platform.
- **STUNT** driving and horseplay are prohibited.
- **ENSURE ALL** tires are in good condition and lug nuts are properly tightened.
- **DO NOT** alter or disable limit switches or other safety devices.
- **DO NOT** use the aerial platform without guardrails, locking pins and the entry gate/chain/bar in place.
- **DO NOT** exceed the rated capacity of the aerial platform. Do make sure the load is evenly distributed on the platform.

1.17 Safety Precautions (Continued)

Know and understand the safety precautions before going on to next section.

- **DO NOT** attempt to free a snagged platform with lower controls until personnel are removed from the platform.
- **DO NOT** position the aerial platform against another object to steady the platform.
- **DO NOT** place materials on the guardrails or materials that exceed the confines of the guardrails unless approved by Skyjack.



Warning

Entering and exiting the aerial platform should only be done using the three points of contact system.

- Use only equipped access openings and ladders.
- Enter and exit only when the aerial platform is in the fully retracted position.

- **Do use three points of contact to enter and exit the platform.** Enter and exit the platform from the ground only. Face the machine when entering or exiting the platform.
- **Three points of contact** means that two hands and one foot **OR** one hand and two feet are in contact with the aerial platform or the ground at all times during entering and exiting.



Warning

An operator should not use any aerial platform that:

- does not appear to be working properly.
- has been damaged or appears to have worn or missing parts.
- has alterations or modifications not approved by the manufacturer.
- has safety devices which have been altered or disabled.

Failure to avoid these hazards could result in death or serious injury.

Jobsite Inspection

- Do not use in hazardous locations.
- Perform a thorough jobsite inspection prior to operating the aerial platform to identify potential hazards in your work area.
- Be aware of moving equipment in the area. Take appropriate actions to avoid collision.

2. Operation

This section provides the necessary information needed to operate the aerial platform. It covers the basic and optional components of the machines, operation and start procedures, winching and towing procedures, loading/unloading, tires specifications, labels, platform capacities and tables related to the proper maintenance of this machine. It is important that the user reads and understands this section before operating the aerial platform.


2.1 General

In order for this aerial platform to be in good working condition, it is important that the operator follows the maintenance and inspection schedule referred to in this section.

2.1-1 Operator Qualifications

- **ONLY** trained and authorized personnel **SHALL** be permitted to operate an aerial platform.
- Safe use of this aerial platform requires the operator to understand the limitations and warnings, operating procedures and operator’s responsibility for maintenance. Accordingly, the operator **MUST** understand and be familiar with this operating manual, its warnings and instructions, manual of responsibilities and **ALL** warnings and instructions on the aerial platform.
- The operator **MUST** be familiar with employer’s work rules and related government regulations and be able to demonstrate the ability to understand and operate **THIS** make and model of aerial platform in the presence of a qualified person.


2.1-2 Operator’s Responsibility for Maintenance

 Warning
<p>Maintenance MUST be performed by competent personnel who are familiar with mechanical procedures.</p> <p>Death or serious injury could result from the use of an aerial platform that is not properly maintained or kept in good working condition.</p>

- The operator must be sure that the aerial platform has been properly maintained and inspected before using it.
- The operator must perform **ALL** the daily inspections found in [Table 2-7](#), even if the operator is not directly responsible for the maintenance of this aerial platform.

2.1-3 Maintenance and Inspection Schedule

- The inspection points covered in [Table 2-7](#) indicate the areas of the aerial platform to be maintained or inspected and at what intervals the maintenance and inspections are to be performed.
- The actual operating environment of the aerial platform may affect the maintenance schedule.

 Warning
<p>Use original or equivalent to the original parts and components for the aerial platform.</p>

2.1-4 Owner’s Inspections

It is the responsibility of the owner to arrange daily, weekly, monthly and annual inspections of the aerial platform. Refer to [Table 2-7](#) for recommended maintenance and inspection areas and intervals. A record of annual inspection is kept on a label located on the scissor assembly. Refer to [Table 2-2](#) in this manual.

2.2 Component Identification

The following descriptions are for identification, explanation and locating purposes only.

2.2-1 Main Power Disconnect Switch

Main Power Disconnect Switch - This switch is located at the front of the hydraulic/electric cabinet.



Figure 2-1. Main Power Disconnect Switch

1. **Main Power Disconnect Switch** - This switch, when in "OFF" position, disconnects power to all circuits. Switch MUST be in "ON" position to operate any circuit.

2.2-2 Motion Alarm

The aerial platform is equipped with a motion alarm. The alarm produces an audible sound when any control function is selected. On machines with certain options, a flashing amber light will accompany this alarm.

2.2-3 Tilt Alarm

The aerial platform is equipped with a device which senses when the machine is out of level in any direction. When activated, it disables drive and lift functions of the aerial platform and an alarm produces an audible sound accompanied by the amber light. If the alarm sounds, lower the platform completely, then reposition machine so that it is level before raising platform.

Note

If the tilt alarm sounds and the platform does not, or only partially raises, immediately lower the platform and ensure that the machine is on a firm **LEVEL** surface.

2.2-4 Base Controls

Base Controls - This control station is found on the rear of the base or rear of the hydraulic/electric cabinet. It contains the following controls:

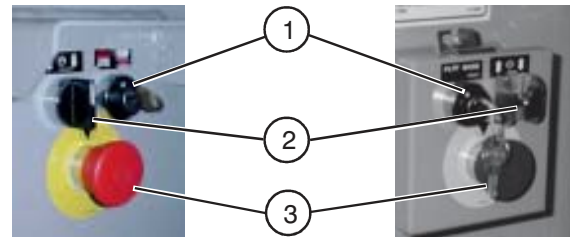


Figure 2-2. Base Control Station

1. **PLATFORM/BASE Select Key Switch** - Selecting "PLATFORM" position enables the operator's control box on the platform. Selecting "BASE" position enables the base control station.
2. **Platform UP/DOWN Select Switch** - This switch raises or lowers the platform to a desired height.
3. **Emergency Stop Button** - When depressed, this red "mushroom-head" push-button switch disconnects power to the control circuit.

Electrical Panel - This auxiliary control panel is located in the hydraulic/electric cabinet. It contains the following controls:

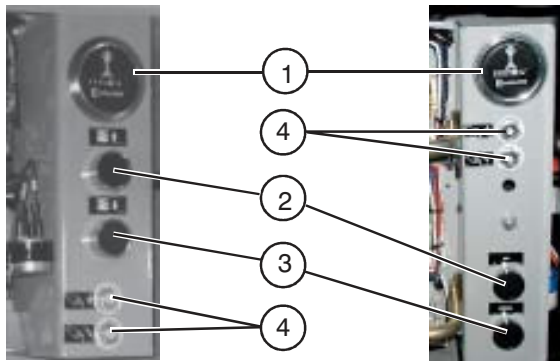


Figure 2-3. Electrical Panel

1. **Hourmeter** - This gauge records the accumulated operating time of the aerial platform.
2. **UP Push-Button Switch** - This push-button switch will raise the platform to desired height.
3. **DOWN Push-Button Switch** - This push-button switch will lower the platform to desired height.
4. **Circuit Breaker Resets** - In the event of a power overload or positive circuit grounding, the circuit breaker will pop out. Push the breaker back in to reset.

2.2-5 Propane Cylinder (If Equipped)

Propane Cylinder - The cylinder is located on the base of the machine. It has the following control:



Figure 2-4. Propane Cylinder

1. **Cylinder's Main Valve** - Turn this valve clockwise to shut off the fuel supply; counterclockwise to open it.

2.2-6 Engine Control Panel (Dual Fuel)

Engine Control Panel - This control panel is attached to the engine roll-out at the front of the base. It contains the following controls:

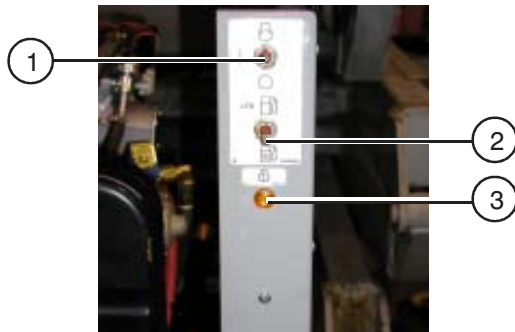


Figure 2-5. Engine Control Panel - Dual Fuel

1. **Engine OFF/ON/START Toggle Switch** - This three-position toggle switch, when set to the middle "ON" position, energizes the engine circuit. To start the engine, set toggle switch to the up position, the switch will return to middle position when released. To turn engine off, return the switch to the down position.
2. **Fuel Select Switch** - Used to switch between liquid propane gas and gasoline.
3. **Engine Warning Light** - When the engine's toggle switch is set to the "ON" position, this amber-colored light will flash continuously to indicate normal operation.

2.2-7 Engine Control Panel (Diesel)

Engine Control Panel - This control panel is attached to the engine roll-out at the front of the base. It contains the following controls:

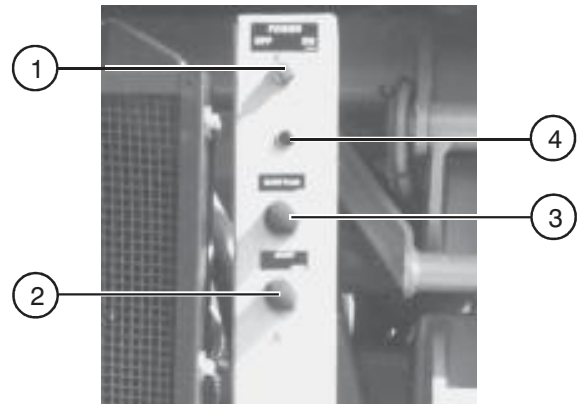


Figure 2-6. Engine Control Panel - Diesel Engine

1. **Engine OFF/ON Switch** - This plunger-type switch, when pulled out, energizes the engine circuit and the operator's control box. To stop engine, push plunger in.
2. **Engine Start Push-Button** - This push-button switch energizes the engine starter motor.
3. **Engine Glow Plug Push-Button** - This push-button switch energizes the glow plugs to aid in starting a cold diesel engine. Glow plugs are only active while button is pressed.
4. **Glow Plug Indicator Light** - This red lamp illuminates until the glow plugs have completed their timed heating cycle. When the lamp goes out, the engine is ready to be started.

2.2-8 Operator's Control Box

Operator's Control Box - This metal control station is mounted at the right front of the platform. It contains the following controls:

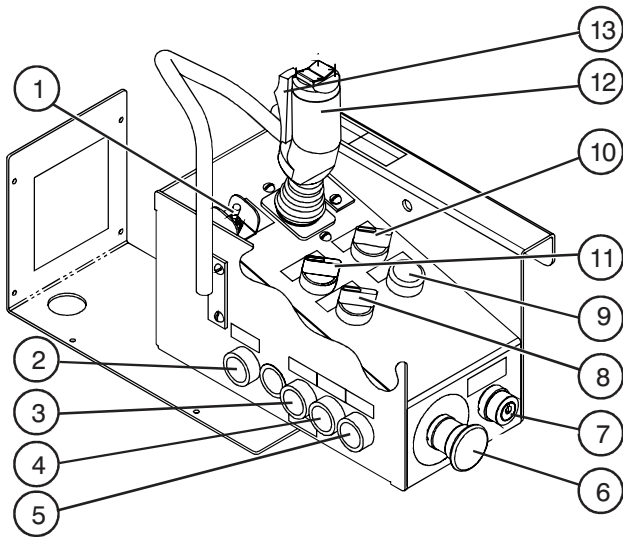




Figure 2-7. Operator's Control Box

1. **Torque Toggle Switch** - This toggle switch, when in the "  " position, cuts out high range and 3rd speed to provide maximum torque when climbing grades and on rough terrain. When in the "  " position, all three speeds are available.
2. **Horn Push-Button** - Located on the side of the operator's control box, this push-button switch, when depressed, sounds an automotive-type horn.
3. **Glow Plug Push-Button (Diesel Engines)** - Located on the side of the control box, this push-button switch energizes the glow plug to aid in starting a cold diesel engine.
4. **Engine Start Push-Button** - Located on the side of the control box, this push button energizes the engine starter motor.
5. **Lift Enable Push-Button** - When depressed and held, this push-button switch allows the lift functions to operate.
6. **Emergency Stop Button** - When depressed, this red "mushroom-head" push-button switch disconnects power to the control circuit.
7. **OFF/LIFT/DRIVE Select Key Switch** - Key to "OFF" position disconnects power to the control box. Key to "LIFT" position allows the lift enable push-button functions to operate. Key to "DRIVE" position allows the DRIVE/STEER controller functions to operate.
8. **UP/OFF/DOWN Select Switch** - This rotating select switch causes the platform to raise or lower.
9. **Operation Light** - The red-colored light indicates upper control availability and overload status. When the light is continuously illuminated, upper controls are available. When the light is flashing, it signals an overload function. Refer to [Section 2.2-16](#).
10. **LOW/HIGH Throttle Select Switch** - This rotary switch allows selection between high and low engine throttle speeds.
11. **LOW/HIGH Speed Range Select Switch** - This rotary switch selects "LOW" speed range (high torque) or "HIGH" speed range (low torque).
12. **DRIVE/STEER Controller** - A one-hand toggle-type lever to control drive motion, speed and steer motion. Internal springs return it to neutral when stick is released.
13. **DRIVE/STEER Enable Trigger Switch** - This momentary switch energized the DRIVE/STEER controller. It must be held depressed continuously while engaging either the drive or steer functions.

Note

The engine start push-button is interlocked with the oil pressure switch. If engine stalls or does not start immediately, this button will not work for a few seconds while oil pressure bleeds off.

2.2-9 Folding Guardrail System

Folding Guardrail System - This system, when folded down, reduces the retracted height of the aerial platform for transporting and traveling through doorways only.

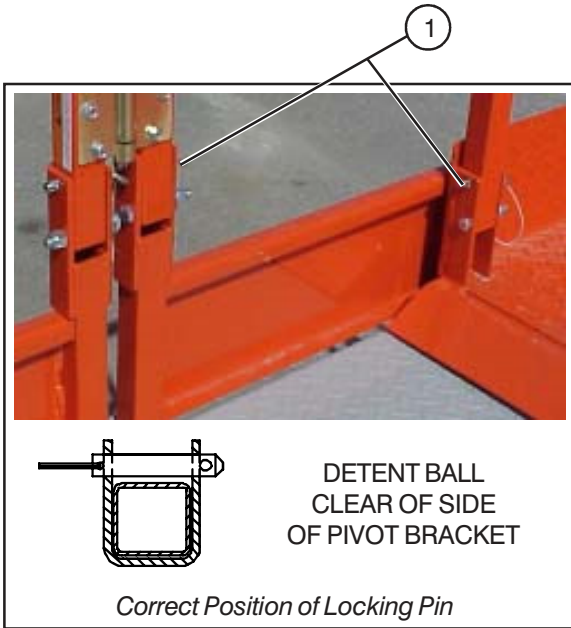


Figure 2-8. Folding Guardrail System

Warning
<p>The scissor assembly must be fully lowered before raising or lowering the guardrails.</p>

- Guardrail Locking Pin with Lanyard** - To fold the guardrail system down, remove the locking pin at each pivot point and lower each guardrail. To raise the guardrail system, swing up each guardrail and lock in place with the locking pins ensuring that the detent ball of each pin is all the way through and clear of the side of the pivot brackets (Figure 2-8).

Warning
<p>Before operating this aerial platform check the guardrail system for loose or missing locking pins. The guardrail system must be upright and all pins must be locked in place. Death or serious injury could result if the guardrail system is not upright or properly locked.</p>

2.2-10 Lanyard Attachment Ring

Lanyard Attachment Ring- Use this ring as an attachment point for safety belt/harness tethers. **DO NOT** attach belts/harnesses to any other point on the platform. **DO NOT** use this ring to lift, anchor, secure or support the platform or any other apparatus or material.



Figure 2-9. Lanyard Attachment Ring

Warning
<p>The lanyard attachment ring is used for travel restraint, within the limits of the platform only. It is not a fall arresting device! Use as such could result in death or serious injury.</p>

2.2-11 AC Outlet on Platform

AC Outlet on Platform - This outlet is a source of 110V or 220V power on the platform.

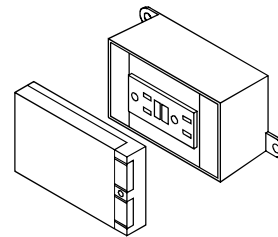



Figure 2-10. AC Outlet on Platform

2.2-12 Maintenance Support

Maintenance Support - The maintenance support is a safety mechanism designed to support the scissor assembly. When properly positioned it can support the scissor assembly and empty platform. The maintenance support **MUST** be used when inspection and/or maintenance is to be performed within the lifting mechanism. To lower the maintenance support, push lock lever rearward and the maintenance support will drop.



Figure 2-11. Maintenance Support

 Warning
<p>The maintenance support must be used when inspection and/or maintenance or repairs are to be performed within the lifting mechanism. Failure to use this safety mechanism could result in death or serious injury.</p>

Proper Use of Maintenance Support

- Remove all material from platform.
- Start engine.
- Raise platform until there is adequate clearance to swing down the maintenance support. Refer to [Section 2.5-5](#) on how to raise the platform using the base controls.
- Push lock lever rearward.
- Swing maintenance support down from storage bracket into a vertical position.
- Remove hands and arms from scissor assembly area.
- Lower platform until bottom end of maintenance support contacts the labeled cross bar and scissor assembly are supported by maintenance support. Refer to [Section 2.5-6](#) on how to lower the platform using the base controls.
- Turn off main power disconnect switch.

To Store the Maintenance Support

- Turn on main power disconnect switch.
- Start engine.

- Raise platform until there is adequate clearance to swing up the maintenance support.
- Swing bar up into storage bracket.
- Lower platform.

 Warning
<p>Do not reach through the scissor assembly when the platform is raised without the maintenance support properly positioned. Failure to avoid this hazard could result in death or serious injury.</p>

2.2-13 Parking Brake System

Models 71xx, 8831 & 8841

The brake manifold is mounted in the electrical/hydraulic cabinet located on the left side of the machine. The brakes **MUST** be manually disengaged before pushing, towing or winching. Refer to [Section 2.8-1a](#) for procedure on how to release the parking brakes manually. It contains the following controls:



Figure 2-12. Brake Manifold

1. Brake Valve Plunger
2. Parking Brake Release Hand Pump

Model 9250

The parking brake system is located at the rear axle on the back of the machine.



Figure 2-13. Parking Brake

1. **Parking Brake** - This spring-applied, hydraulically-released parking brake is automatic. The brakes pins **MUST** be manually disengaged before pushing, towing or winching. Refer to [Section 2.8-2a](#) for procedure on how to release the parking brakes manually.

2.2-14 Emergency Lowering System

Emergency Lowering System - This system allows platform lowering in the event of an emergency or an electrical system failure. Refer to [Section 2.9](#) for the emergency lowering procedures. The system contains the following controls:

Models 71xx, 8831 & 8841

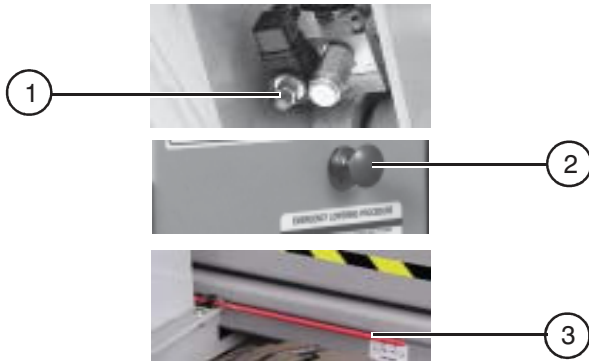


Figure 2-14. Emergency Lowering System

1. **Holding Valve Manual Override Knob** - Located on the holding valve at the bottom of each lift cylinder.
2. **Emergency Lowering Valve** - Located at the rear of the hydraulic/electric cabinet.
3. **Access Rod** - Located at the left side of the base.

Model 9250

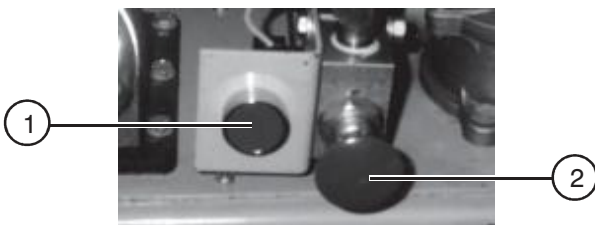


Figure 2-15. Emergency Lowering System

1. **Emergency Lowering Red Push-Button Switch**
Located on the hydraulic tank and accessed through a hole in the hydraulic/electric cabinet door.
2. **Emergency Lowering Valve** - Located on the hydraulic tank and accessed through a hole in the hydraulic/electric cabinet door.

2.2-15 Emergency Powered Extension Deck Retraction System

This system is located in the hydraulic/electric cabinet. In the event of an emergency or an electrical system failure, the operator can retract the powered extension deck from this base location.



Figure 2-16. Emergency Powered Extension Deck Retraction System

1. **Emergency Extension Deck Retraction Switch**
This switch, when depressed, activates the powered extension deck retraction system on the platform.

2.2-16 Overload Warning System

- The aerial platform is equipped with a load sensing system. A rapidly flashing red light at the operator’s controls will activate at loads just less than rated load (90%). An audible alarm will sound for approximately 2 seconds, 5 times per minute at rated load exactly. If the machine becomes overloaded, the flashing light and audible alarm continue and all electrically controlled machine movement functions stop. To resume normal operation, remove the overload from the platform. Refer to [Table 2-3](#) and [Table 2-4](#) for maximum platform capacities.
- If the machine during the operation comes in contact with an overhead obstruction the platform could become overloaded and all functions would stop. Release of the platform from this situation can only be effected by use of the emergency lowering system. Refer to [Section 2.9](#).

Note

After reaching full extension and upon lowering, the machine could stop and take an overload reading. Select “OFF” position with OFF/LIFT/DRIVE select key switch and release the lift enable push button. If the machine is overloaded, the flashing light and audible alarm continue and all electrically-controlled machine movement functions stop. To resume normal operation, remove the overload from the platform.

2.3 Component Identification (Special Options)

The following descriptions are for identification, explanation and locating purposes only of optional equipment.

2.3-1 Outrigger Controls (Auto-levelling) (If Equipped)

Outrigger Controls - Located on the operator's control box, these switches control each outrigger's extension and retraction.

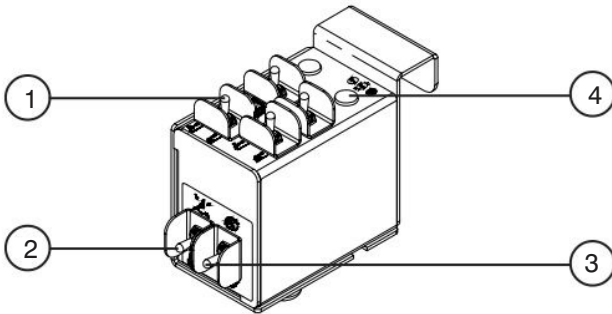


Figure 2-17A. Outrigger Controls With All Options on Auxiliary Control Box Console

1. **Outrigger UP/DOWN Control Toggle Switches** - These switches control the extension and retraction of each individual outrigger.
2. **Auto-Level Toggle Switch** - When this switch is in the "DOWN" position, each outrigger will extend and automatically adjust until the machine is level. When the toggle switch is in the "UP" position the outriggers will retract.
3. **Outrigger Enable Toggle Switch** - This toggle switch, when in the "UP" or "DOWN" position, will provide outrigger power needed in order to activate the auto-level toggle switch functions.
4. **Auto-Level Indicator Light** - This light functions when the auto and manual level functions are in use and illuminates to display the status of the auto-leveling outriggers. The indicator light has the following states:

OFF: This state indicates that the outriggers are fully retracted.

FLASHING RAPIDLY: This state indicates that the outriggers are extending but the platform is not level.

FLASHING: This state indicates that the outriggers are extended but the platform is not yet level.

SOLID: This state indicates that the outriggers are extended and the platform is level.

2.3-2 Outrigger Controls (Manual-levelling) (If Equipped)

Outrigger Controls - Located on the operator's control box, these switches control each outrigger's extension and retraction.



Figure 2-17B. Outrigger Controls on Operator's Control Box

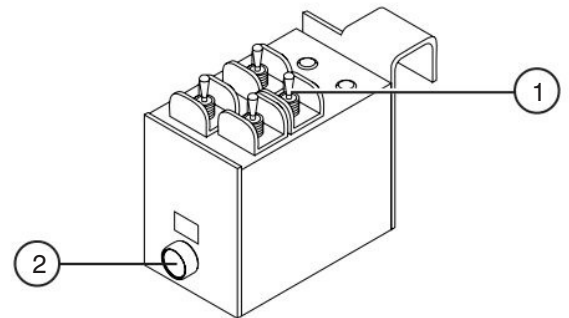


Figure 2-17C. Outrigger Controls on the Optional Auxiliary Control Box Console

1. **Outrigger UP/DOWN Control Toggle Switches** - These switches control the extension and retraction of each individual outrigger.
2. **Enable Push-Button** - When depressed and held, this push-button switch brings power to the outrigger circuit.

2.3-3 Powered Extension Deck Control Box (If Equipped)

This metal control box is mounted on one of the extension platform guardrails. It contains the following controls:

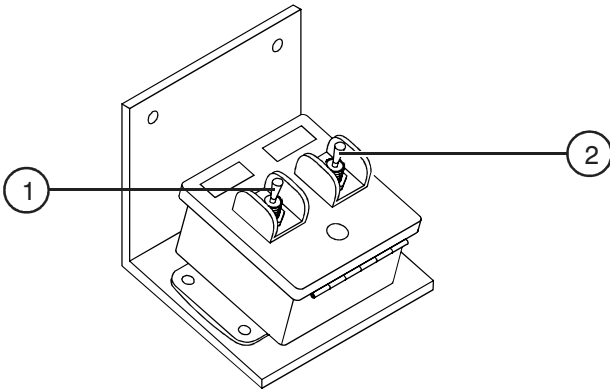


Figure 2-18. Powered Extension Deck Control Box

1. **Enable Switch** - This switch, when activated and held allows the extension deck EXTEND/RETRACT switch functions to operate.
2. **EXTEND/RETRACT Switch** - This switch, when activated, extends or retracts the powered extension deck. Refer to [Section 2.5-12](#) on how to extend/retract a powered extension deck.

2.3-4 Hydraulic Generator Control (If Equipped)

Hydraulic Generator Control - This switch is located on the auxiliary control box console (item 1).

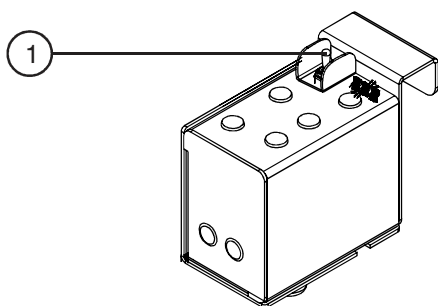


Figure 2-19. Hydraulic Generator Control

1. **Hydraulic Generator OFF/ON Switch** - This switch starts and stops the base-mounted generator.

Note

While hydraulic generator is on, lift and drive are disabled.

2.3-5 1500W AC Inverter (If Equipped)

Inverter - The inverter is located on the base of the machine. It has the following controls:



Figure 2-20. 1500W AC Inverter

Note


The inverter operation is automatic. These controls do not need to be manipulated for normal operation.

1. **ON/OFF Switch** - This diagnostic slide switch will activate or terminate inverter operation. It should remain in the "ON" position.
2. **Status LEDs** - These LEDs indicate the operating or fault status of the inverter .
3. **15 Amp Circuit Breaker** - In the event of a power overload or circuit grounding, the circuit breaker will pop out. Press the breaker back in to reset.
4. **GFCI Outlet** - During inverter operation, this outlet provides AC power.

2.4 Setup Procedure

The following are descriptions of normal operating procedures. A qualified operator **MUST** read and completely understand these descriptions before operating this aerial platform.

- 1. Before a new aerial platform is put into operation it must be carefully inspected for any evidence of damage resulting from shipment and inspected periodically thereafter. Refer to [Table 2-7](#), Maintenance and Inspection Schedule.
- 2. Remove all packing materials and inspect for damage incurred during transport. Report any damage to delivery carrier immediately.
- 3. Inspect aerial platform thoroughly and remove any foreign objects.
- 4. Raise all guardrails to their upright position and lock in place with locking pins. Refer to [Section 2.2-9](#).

 Warning
<p>Before operating this aerial platform check the guardrail system for loose or missing locking pins. The guardrail system must be upright and all pins must be locked in place. Death or serious injury could result if the guardrail system is not upright or properly locked.</p>

- 5. Ensure the main power disconnect switch is switched to the "OFF" position.
- 6. Remove the operator's control box from its shipping container and secure it to the guardrail at the right front of the platform.
- 7. Attach the control cable and power extension deck cable (**if equipped**) to the machine's control cable.

- 8. Move the aerial platform to a firm, level test area where the platform can be later vertically extended to its maximum working height. If the aerial platform is to be pushed, towed or winched, refer to [Sections 2.8-1 and 2.8-2](#) for winching and towing procedures.
- 9. Open the fuel tank cabinet door. If required, fill the fuel reservoir. Close the fuel tank cabinet door. Refer to [Section 2.6](#) for refueling procedures.
- 10. Machines with Dual Fuel:
Make sure propane hose coupler is properly secured at propane cylinder and valve on propane cylinder is opened all the way.
- 11. Close the fuel tank cabinet door.



 Warning
<p>Follow all local and federal rules for propane handling.</p>

- 12. Open the hydraulic tank cabinet door.
- 13. Check the tank's hydraulic oil level (scissor assembly must be fully lowered). Level should be at or slightly above the top mark on the sight glass.

Note
<p>If required, add a quality grade hydraulic oil such as ATF Dexron III (ESSO). Never mix hydraulic oils.</p>

- 14. Close the hydraulic tank cabinet door.


15. Check the battery fluid level. If fluid level is not at the FULL mark on battery, add distilled or demineralized water only. The battery is located either at the front of the engine or at the cabinet on the right side of the machine.

 Warning	
Explosion Hazard Keep flames and sparks away. Do not smoke near batteries.	
Battery Acid Is Extremely Corrosive Wear proper eye and facial protection as well as appropriate protective clothing. If contact occurs, immediately flush with cold water and seek medical attention.	

16. From the base control panel, carefully raise the platform. Refer to [Section 2.5-5](#) for procedure on how to raise the platform.
17. Unlatch and carefully swing down the maintenance support. Refer to [Section 2.2-12](#) for procedure to properly position the maintenance support.

 Warning	
The maintenance support must be used during inspection and maintenance or repairs are to be performed within the lifting mechanism. Failure to avoid this hazard could result in death or serious injury.	

18. From the base control panel, carefully lower the platform until the scissor assembly is firmly resting on the maintenance support. Refer to [Section 2.5-6](#) for procedure on how to lower the platform.
19. Inspect all hoses, fittings, wires, cables, valves, etc. for leaks, loose or missing parts, hidden damage and foreign material.
20. Raise the platform until there is an adequate clearance to swing up maintenance support and lock in position.
21. Raise the platform to the maximum extension height.

 Warning	
Be aware of overhead obstructions or other possible hazards around the machine when lifting.	

22. Fully lower the platform.

2.5 Start Operation

Carefully read and completely understand ALL of this Operating Manual and ALL warnings and instruction labels on the aerial platform.


Before operating this aerial platform, perform the pre-start inspection and the tasks on the operator’s check-list as described in this section.

2.5-1 Pre-Start Inspection

It is the responsibility of the operator to perform a pre-start inspection.

The pre-start inspection is a visual inspection performed by the operator prior to each work shift.

1. Ensure that there are no obstacles around the aerial platform and in the path of travel such as holes, drop offs, debris, ditches and soft fill.
2. Ensure that there are no electrical cords and hoses in the path of travel.
3. Make sure all guardrails and locking pins are in place and locked in position.
4. Check overhead clearances.


 Warning
<p>Do not use or operate the aerial platform if any component appears to be altered, damaged or if it is tagged or locked out for non-use or repair. Operation of aerial platform while in any of the above states may result in death or serious injury.</p>

 Warning
<p>Do not operate this aerial platform without proper authorization and training. Failure to avoid this hazard could result in death or serious injury.</p>

2.5-2 Operator’s Checklist

It is the user’s responsibility to inspect the machine operation before the start of each shift:

1. Operating and emergency controls.
2. Safety devices and limit switches.
3. Personal protective devices.
4. Tires and wheels.
5. Outriggers **(if equipped)** and other structures.
6. Air, hydraulic and fuel system(s) for leaks.
7. Loose or missing parts.
8. Cables and wiring harnesses.
9. Placards, warnings, control markings and operating manuals.
10. Guardrail system including locking pins.
11. Engine oil level.
12. Battery fluid level.
13. Hydraulic reservoir level.
14. Coolant level.
15. Parking brakes (check operation).

 Warning
<p>An operator should not use any aerial platform that:</p> <ul style="list-style-type: none"> • does not appear to be working properly. • has been damaged or appears to have worn or missing parts. • has alterations or modifications not approved by the manufacturer. • has safety devices which have been altered or disabled. <p>Failure to avoid these hazards could result in death or serious injury.</p>

2.5-3 Setting the Base Controls

1. Turn the main power disconnect switch to "ON" position.
2. On the engine tray post:
 - For Diesel engine, pull out the ON/OFF plunger style switch to the "ON" position.
 - For Dual Fuel engine, select "ON" position with OFF/ON/START toggle switch and select desired fuel supply.
 - **To switch from Liquid Propane Gas to Gasoline:**
Move fuel select switch to the "GASOLINE" position.
 - **To switch from Gasoline to Liquid Propane Gas:**
Move fuel select switch to the "LIQUID PROPANE GAS" position.

2.5-4 Setting the Platform Controls

1. Before entering the platform, ensure that the emergency stop button is pulled out and the PLATFORM/BASE select key switch is set to "PLATFORM."
2. Use the ladder of the aerial platform to access the aerial platform deck. Close the gate.
3. Ensure that you maintain three points of contact when using the ladder to mount the platform.
4. At the main control box, pull out the emergency stop button.
5. Insert key into OFF/LIFT/DRIVE select key switch and turn it to "LIFT" position.

Note

All previously-listed switch conditions must be met in order to start the engine.

6. Turn the LOW/HIGH throttle select switch to the "LOW" position.

**Caution**

Do not start the engine in the high throttle position.

7. If the diesel engine is cold, depress and hold glow plug push-button for 15 to 20 seconds.
8. Depress and hold the engine start push-button until the engine starts, then release. **DO NOT** overcrank the starter.

2.5-5 To Raise the Platform using the Base Controls

1. Use ladder to dismount the platform.
2. Ensure that you maintain three points of contact when using the ladder to dismount the platform.
3. On the base controls, select "BASE" from the PLATFORM/BASE select key switch. Select "↑" (UP) on the platform UP/DOWN select switch to raise the platform and release the switch to stop raising.

2.5-6 To Lower the Platform using the Base Controls

1. On the base controls, select "BASE" from the PLATFORM/BASE select key switch. Select "↓" (DOWN) on the platform UP/DOWN select switch to lower the platform and release the switch to stop raising.

Lowering Warning System - A lowering warning system automatically stops the lowering function before reaching the fully retracted position and sounds the alarm. After the operator has released the down controls and taken time to check that no person is near the scissors, the lowering function can be reactivated.

2.5-7 To Raise the Platform using the Operator's Control Box



Warning

Be aware of overhead obstructions or other possible hazards around the machine when lifting.

1. Ensure the emergency stop button is pulled out and the engine is running.
2. Select "LIFT" position with OFF/LIFT/DRIVE select key switch.
3. Depress and hold the enable push-button, then select "↑" (UP) position using the UP/OFF/DOWN select switch. Release switch to stop raising.



Warning

To protect against unintended movement of the aerial platform, push in the emergency stop button after you have arrived at your desired location or elevation.

Note

If the tilt alarm sounds and the platform does not, or only partially raises, immediately lower the platform and ensure that the machine is on a firm **LEVEL** surface.

Note

Some models may be equipped with lift cut out at 8m. To raise the platform higher, outriggers **MUST** support the machine.

2.5-8 To Lower the Platform using the Operator's Control Box**Warning**

Do not lower the platform unless the area below is clear of personnel and obstructions.

1. Ensure the emergency stop button is pulled out and the engine is running.
2. Select "LIFT" position with OFF/LIFT/DRIVE select key switch.
3. Depress and hold the enable push-button, then select "↓" (DOWN) position using the UP/OFF/DOWN select switch. Release switch to stop lowering. A warning alarm will sound while lowering.

Lowering Warning System - A lowering warning system automatically stops the lowering function before reaching the fully retracted position and sounds the alarm. After the operator has released the down controls and taken time to check that no person is near the scissors, the lowering function can be reactivated.

**Warning**

To protect against unintended movement of the aerial platform, push in the emergency stop button after you have arrived at your desired location or elevation.

2.5-9 To Drive Forward or Backward**Warning**

Be aware of blind spots when operating the aerial platform.

**Warning**

Ensure that there are no personnel or obstructions in the path of travel, including blind spots.

1. Ensure the emergency stop button is pulled out and the engine is running.
2. Select "DRIVE" position with the OFF/LIFT/DRIVE select key switch.
3. Activate and hold the enable trigger switch by squeezing it towards the controller.
4. Push or pull the controller handle forward or backward to the desired speed and direction of platform travel.
5. Return the joystick to the neutral center position to stop. Release the enable trigger switch.

**Warning**

To protect against unintended movement of the aerial platform, push in the emergency stop button after you have arrived at your desired location or elevation.

2.5-10 To Steer

1. Select "DRIVE" position with OFF/LIFT/DRIVE select key switch.
2. Activate and hold the enable trigger switch (by squeezing it towards the joystick), then press the rocker on top of the controller handle in the direction you wish to steer.

Note

Steering is not proportional.
Driving and steering may be active at the same time.

2.5-11 To Select High Torque or High Speed

1. **High Torque:** Select "LOW" position with the LOW/HIGH speed range select switch. Select "LOW" range when climbing grades, traveling in rough terrain and when loading or unloading the aerial platform. To climb a grade, select "⬇️" position using the torque toggle switch.

Warning

Machine must be in fully retracted position when operated on any grade. Driving while elevated on any grade may result in death or serious injury.

2. **High Speed:** Select "HIGH" position with the LOW/HIGH speed range select switch. Select "HIGH" range when traveling on a hard level surface with the platform fully lowered.

2.5-12 To Extend/Retract the Powered Extension Deck (If Equipped)

1. To extend the powered extension deck, ensure the emergency stop button is pulled out.
2. Select "LIFT" position with OFF/LIFT/DRIVE select key switch.
3. On the powered extension deck control box, activate the enable switch, then push the EXTEND/RETRACT switch to the "⬆️" (EXTEND) position until desired extension is reached. Release switch to stop.

4. To retract the platform, ensure the emergency stop button is pulled out and select "LIFT" position using the OFF/LIFT/DRIVE select key switch.
5. On the powered extension deck control box, activate the enable switch, then push the EXTEND/RETRACT switch to the "⬆️" (RETRACT) position until desired extension is reached. Release switch to stop.

Warning

To protect against unintended movement of the aerial platform, push in the emergency stop button after you have arrived at your desired location or elevation.

2.5-13 To Extend/Retract the Manual Extension Deck

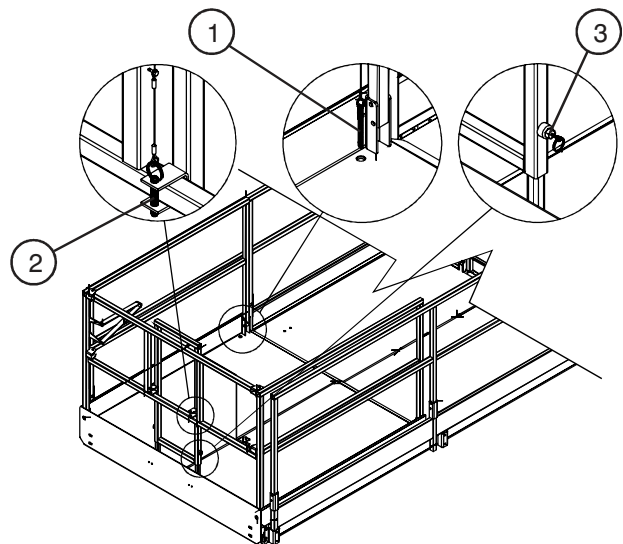


Figure 2-21. Manual Extension Deck

1. To extend/retract the manual extension deck, remove the locking pin (item 1) then remove the push bar locking pins (item 2) and rotate the push bar towards the main platform. Extend the push bar until it locks at full extension and push/pull the extension deck using the push bar.
2. Upon full extension or retraction, reinsert the locking pin on the platform (item 1) to prevent accidental movement of the manual extension deck during travel or transport.

- When the push bar is not in use, pull the plungers (item 3) on the push bar and retract it, then rotate it back to its resting position and lock it into place with the locking pins (item 2).

2.5-14 Hydraulic Outriggers (Auto-levelling) (If Equipped)

These devices are mounted to the four corners of the base. When properly positioned, they increase the stability of the aerial platform.

2.5-14a Before Operation

- Check overhead clearances and ground obstructions. This will require the operator to move around the aerial platform.
- Check that the platform is fully lowered. (The outrigger controls are not functional when the platform is raised.)
- Check that the supporting surface under the tires and outrigger pads is level, firm and capable of supporting aerial platform and rated load. **DO NOT** place outrigger pad on a street drain, manhole cover or other unsupported surface.

2.5-14b Extending the Outriggers

- Ensure the emergency stop button is pulled out and the engine is running. Select the "LIFT" position with OFF/LIFT/DRIVE select key switch.
- Check that the platform is fully lowered. (The outrigger controls are not functional when the platform is raised.)
- Select the "UP" or "DOWN" position with the outrigger enable toggle switch in order to provide power to the outrigger circuit.
- Auto Level: While holding the outrigger enable toggle switch, activate the auto-level toggle switch in the "DOWN" position until the the auto-level indicator light stops flashing and remains on in a solid state. The machine should be completely supported by the outriggers and level at this point.

- Manual Level: While holding the outrigger enable toggle switch, extend each outrigger using the individual outrigger toggle switches until the platform is fully supported by the outriggers and is level. The indicator light will flash while the platform is being leveled, the light will remain solid once the platform is level. The indicator light has the following states:

OFF: This state indicates that the outriggers are fully retracted.

FLASHING RAPIDLY: This state indicates that the outriggers are extending but the platform is not level.

FLASHING: This state indicates that the outriggers are extended but the platform is not yet level.

SOLID: This state indicates that the outriggers are extended and the platform is level.

- Check that each outrigger pad is in firm contact with a suitable supporting surface!** Make adjustments if necessary using the independent outrigger controls.
- Operate all (non drive) functions as described in their respective sections.

Note

Each outrigger pad must be in firm contact with the ground for most aerial platform functions to work.

Note

Drive functions are disabled if the outriggers are in any position other than fully retracted.



Warning

If alarm sounds during operation, the aerial platform is not level or an outrigger does not have firm ground contact. Lower the platform immediately! Make the necessary adjustments to level the aerial platform.

2.5-14c Retracting the Outriggers

1. Ensure the emergency stop button is pulled out and the engine is running. Select the "LIFT" position with OFF/LIFT/DRIVE select key switch.
2. Lower the aerial platform.
3. Auto Retract: Select and hold the outrigger enable toggle switch in either the "UP" or "DOWN" position, then activate the the auto-level toggle switch in the "UP" position until the outriggers are fully retracted.
4. Manual Retract: Select and hold the outrigger enable toggle switch in either the "UP" or "DOWN" position, then push and hold pairs (front or rear) of outrigger UP/DOWN toggle switches to "UP" position until the outriggers are fully retracted.

Note
Limit switches are used to protect the outriggers from being damaged. If aerial platform will not drive, visually check to see that ALL outriggers are fully retracted.

2.5-15 Hydraulic Outriggers (Manual-levelling) (If Equipped)

These devices are mounted to the four corners of the base. When properly positioned, they increase the stability of the aerial platform.

2.5-15a Before Operation


1. Check overhead clearances and ground obstructions. This will require you, the operator to move around the aerial platform.
2. Check that the platform is fully lowered. (The outrigger controls are cut out when the platform is raised.)
3. Check that the supporting surface under the tires and outrigger pads is level, firm and capable of supporting aerial platform and rated load. **DO NOT** place outrigger pad on a street drain, manhole cover or other unsupported surface.

2.5-15b Extending the Outriggers

1. Ensure the emergency stop button is pulled out and the engine is running. Select the "LIFT" position with OFF/LIFT/DRIVE select key switch.
2. Depending on how your model is equipped, an enable push button may need to be depressed in order to provide power to the outrigger circuit. Therefore, if necessary, depress and hold the enable push-button, then push and hold each outrigger UP/DOWN toggle switch to "DOWN" position extending each of the outriggers to obtain firm ground contact.
3. **Check that each outrigger pad is in firm contact with a suitable supporting surface!** Make adjustments as necessary.
4. Extend the outriggers until the aerial platform is completely supported by outriggers then use the independent controls to level the base of the aerial platform. **Again, check that each outrigger pad is in firm contact with a suitable supporting surface!**
5. Operate all (non drive) functions as described in their respective sections.

Note
Each outrigger pad must be in firm contact with the ground for most aerial platform functions to work.

Note
Drive functions are disabled if the outriggers are in any position other than fully retracted.

 Warning
If alarm sounds during operation, the aerial platform is not level or an outrigger does not have firm ground contact. Lower the platform immediately! Make the necessary adjustments to level the aerial platform.

2.5-15c Retracting the Outriggers

1. Fully lower the platform.
2. If necessary, depress and hold the enable push-button, then push and hold pairs (front or rear) of outrigger UP/DOWN toggle switches to "UP" position until the outriggers are fully retracted.

Note

Cut out switches are used to protect the outriggers from being damaged. If aerial platform will not drive, visually check to see that ALL outriggers are fully retracted.

2.5-16 Hydraulic Generator (If Equipped)**To start the hydraulic generator:**

1. Select the "LIFT" position with the OFF/LIFT/DRIVE select key switch.
2. With the engine running, momentarily flip the hydraulic generator toggle on the auxiliary control box to the energized position. The engine will automatically switch to high throttle and the generator will start.

To restore normal operation:

1. Flip the toggle switch to the "OFF" position. The generator will turn off.

Note

Activating any lift or outrigger functions, changing the key switch setting, activating the emergency stop or an engine stall will turn off the generator. The platform may be lowered during generator operation.

2.5-17 Electrical Inverter (If Equipped)

The inverter is operational with alternating current available at all times when, and only when, the engine is running at high throttle. Deselecting the high idle throttle setting or stopping the engine will turn the inverter off.

Checking the status of the inverter

1. During routine operation, the ON/OFF switch should remain in the "ON" position. To prevent automatic inverter operation when high throttle is activated, slide the ON/OFF switch on the inverter to the "OFF" position.
2. Inverter state is indicated by the LEDs on the face of the inverter. A glowing green LED indicates normal operation. If a fault occurs, the status LEDs will indicate the area responsible. After the fault condition is corrected, the inverter will automatically reset itself.

2.5-18 Shutdown Procedure

1. Completely lower the platform.
2. Push in emergency stop button located on operator's control box.
3. Turn OFF/LIFT/DRIVE select key switch to "OFF" position and remove the key from the control box.

**Warning**

Ensure that you maintain three points of contact when using the ladder to mount/dismount the platform.

4. Dismount the platform using the ladder.
5. Push in emergency stop button located on base control station.
6. On the engine tray post:
 - For diesel engine, push in the OFF/ON plunger style switch to the "OFF" position.
 - For dual fuel engine, select "OFF" position with OFF/ON/START toggle switch.
7. Turn main power disconnect switch to "OFF" position.

2.6 Refueling Procedures

This section provides the operator with the procedure on how to refuel the engine with regular fuel and install the propane cylinder.



IMPORTANT

Before using your aerial platform make sure there is enough fuel to finish the job.



Warning

Follow all local and federal regulations for propane handling.

- Use extreme caution while refueling aerial platforms.
- Ensure that the engine and all systems are turned off before refueling.
- Refuel the aerial platform **ONLY** in a well ventilated area away from open flame and other sources of ignition, authorized by your employer and supervisor.
- Liquid Propane Gas fuel is a gas that is heavier than air. It will settle in low spots. Any flame or spark could cause a fire that could cause serious injury.
- When changing Liquid Propane Gas cylinder: Check all connections for damage or missing parts. Never try to start an aerial platform if you smell gas.
- Gasoline engine models: Use only unleaded gasoline with an octane rating 87 or higher.



Warning

Do not smoke in an area where aerial platforms are stored or refueled.

2.6-1 Regular Fuel

1. Ensure that the engine and all systems are turned off and the emergency stop button is depressed.
2. Open the fuel cabinet door and remove the fuel cap.
3. Carefully pour fuel into tank ensuring that no spillage occurs.
4. Securely replace the fuel cap.
5. Ensure that there are no leaks in the fuel system.
6. Wipe up any spilled fuel.
7. Dispose of rags in an approved container.

2.6-2 Propane**Warning**

Follow all local and federal regulations for propane handling.

Removing a Propane Cylinder

1. Ensure that the engine and all systems are turned off and emergency stop button is depressed.
2. Turn the propane cylinder's main valve clockwise to shut off the fuel supply to the engine.
3. Start the engine and allow the engine to stop naturally and restart engine to ensure that the fuel lines are empty.
4. Disconnect the hose from the empty propane cylinder by detaching the coupling. Turn the fitting counterclockwise.
5. Loosen the two propane cylinder straps by pulling up on the metal clips. Disconnect the straps from the hooks.
6. Remove the propane cylinder.

Installing a Propane Cylinder

1. Ensure that the engine and all systems are turned off and emergency stop button is depressed.
2. Place the propane cylinder on the bracket OR in the cabinet.
3. Ensure that the metal peg on the bracket or the cabinet is inserted into the hole on the rim at the top of the cylinder. This helps secure the cylinder in place.
4. Reconnect the propane cylinder straps to the hooks and ensure they are tightly fastened.
5. Attach the coupler to the cylinder and turn clockwise to tighten the fitting.
6. Wet the pipe connection to the cylinder with soap water or neutral detergent. Open the valve ¼ turn counterclockwise and check for any gas leaks.
7. Wipe off the soap water or detergent after inspection is completed.
8. Open the main valve fully if there are no leaks.

Note

The Mid Size & Full Size Rough Terrain Series aerial platform is now ready for use by an authorized, qualified operator who has read and completely understands ALL of [Section 2](#), OPERATION, in this manual.

2.7 Loading/Unloading

KNOW all national, state/provincial and local rules which apply to your loading/unloading of aerial platforms.

Only qualified personnel shall operate machinery during loading/unloading.

Be sure vehicle capacity and loading equipment hoists, chains, straps, etc. are sufficient to withstand maximum aerial platform weight.

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

2.7-1 Lifting

When it is necessary to lift the Skyjack aerial platform the following conditions must be met:

- The platform must be fully lowered.
- The main power disconnect switch must be in the "OFF" position.
- The hydraulic/electric and fuel cabinets must be closed and securely latched.
- The extension deck must be retracted and secured.
- The control box must be secured to the railings or removed.
- The platform must be cleared of all personnel, tools, and materials.
- The lifting/rigging may be attached to all four lifting points as illustrated in [Figure 2-22](#).

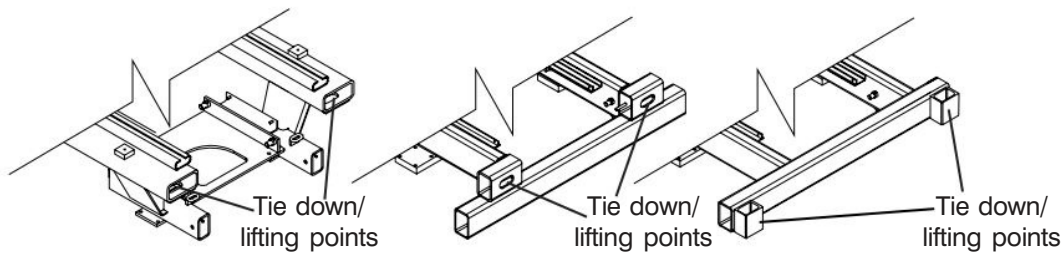


Figure 2-22. Tie Downs/Lifting Points

Note

The mass of the aerial platform is as per [Table 2-1](#). The center of gravity is approximately located in the middle of the aerial platform, front to back and side to side, as illustrated in [Figure 2-23](#). Vertically, the center of gravity is approximately just above the base chassis.

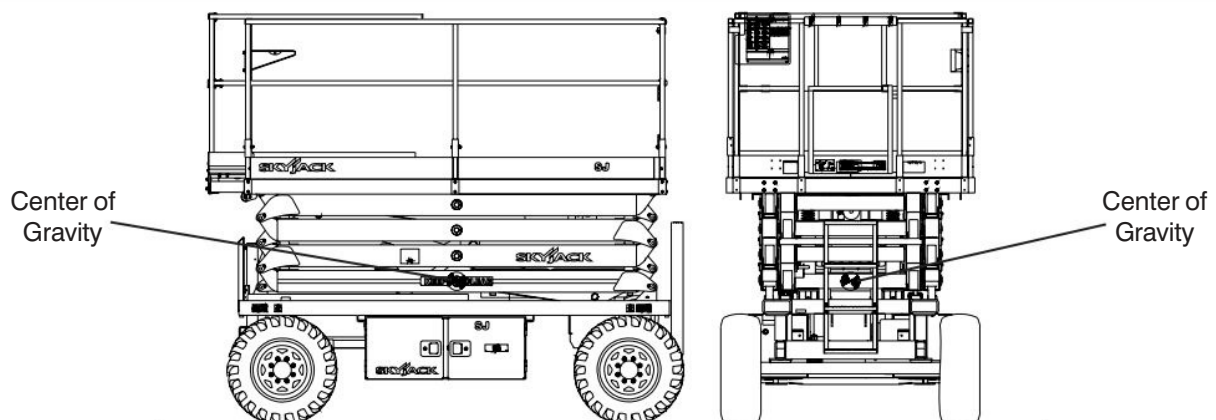


Figure 2-23. Center of Gravity

Note

The aerial platform can be lifted with a forklift from the sides but Skyjack does not recommend this use. Lift with forks in designated pockets as illustrated in [Figure 2-24](#).

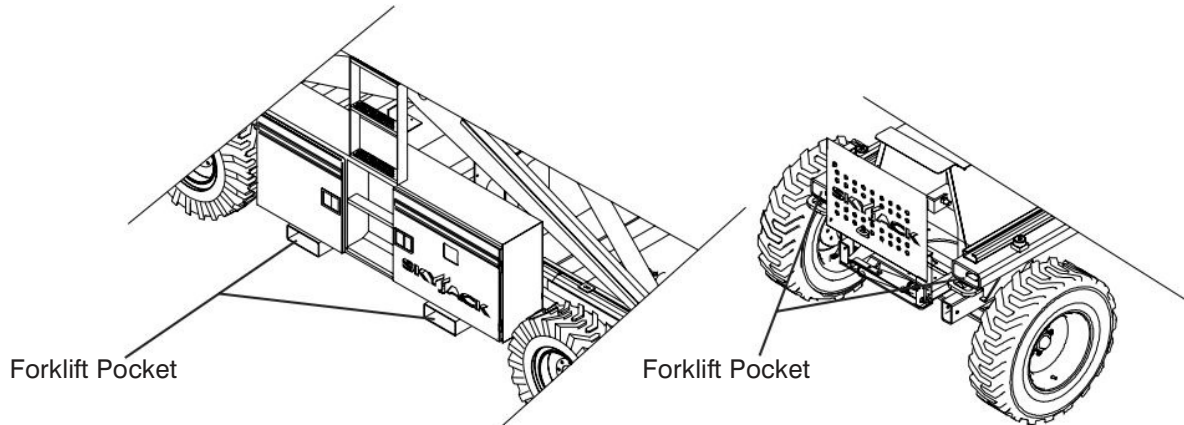


Figure 2-24. Forklift Pockets

2.7-2 Driving

When driving the aerial platform:

- Ramp or dock capacity should be sufficient to withstand maximum machine weight.
- Ramp should be equipped with side guards to prevent inadvertent fall from the ramp.
- Incline should not exceed machine gradeability (refer to [Table 2-1](#)).
- Aerial platform brakes should be checked for proper operation.
- Aerial platform speed should be on high torque setting.

 **Warning**

When transporting, the aerial platform must be secured to the truck or trailer deck. Tie downs are available as illustrated in [Figure 2-22](#).

2.8 Winching and Towing

This section provides the operator with procedures about towing and winching and on how to manually release the parking brakes.

2.8-1 Winching and Towing Procedures (Models 71xx & 8xxx)

Warning

Ensure platform is fully lowered before winching or towing. Sudden motion could cause the aerial platform to become unstable. Death or serious injury could result.

Warning

In emergency situations where machine functions are not available and lowering is impeded by an obstacle, the utmost care must be taken to move the machine far enough to clear the obstacle. In such cases operation must be extremely smooth with no sudden movements and must not exceed a speed of 50mm/sec.

Warning

When pushing, towing or winching, do not exceed 3.2 km/h.

Warning

Do not push, tow or winch either vehicle on to a slope, or brake the towing vehicle rapidly. Do not pull the aerial platform down an incline towards a winch.

Parking Brake System:

The brake manifold is mounted in the electrical/hydraulic cabinet located on the left side of the machine. The brake **MUST** be manually disengaged before pushing, towing or winching.

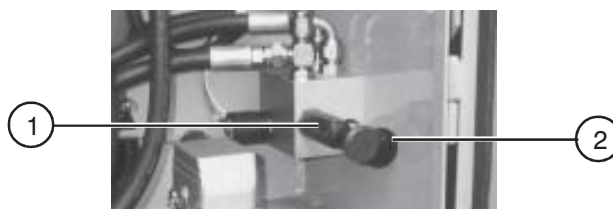


Figure 2-25. Parking Brake Release Hand Pump and Brake Plunger

1. Parking brake release hand pump
2. Brake valve plunger

2.8-1a To Release the Parking Brake Manually

Warning

Do not manually disengage the parking brake if the aerial platform is on a slope.

1. Make sure that the aerial platform is on level ground. Chock or block the wheels to keep the aerial platform from rolling.
2. Turn the main power disconnect switch to the "OFF" position.
3. In the hydraulic cabinet, depress the black plunger on the brake valve until the plunger stays in.
4. Grasp the red hand pump plunger and rapidly depress (60 to 80 pumps) until firm resistance is felt. The brake is now released.
5. Remove the wheel chocks or blocks then push, tow or winch the aerial platform to the desired location.

Warning

The parking brake **MUST** be re-engaged immediately after reaching the desired location.

6. Position the machine on a firm and level surface.
7. Chock or block the wheels to prevent the aerial platform from rolling.
8. Re-engage the parking brake by pulling out the black brake valve plunger.

2.8-2 Winching and Towing Procedures (Model 9250)

Warning

Ensure platform is fully lowered before winching or towing. Sudden motion could cause the aerial platform to become unstable. Death or serious injury could result.

Warning

In emergency situations where machine functions are not available and lowering is impeded by an obstacle, the utmost care must be taken to move the machine far enough to clear the obstacle. In such cases operation must be extremely smooth with no sudden movements and must not exceed a speed of 50mm/sec.

Warning

When pushing, towing or winching, do not exceed 3.2 km/h.

Warning

Do not push, tow or winch either vehicle on to a slope, or brake the towing vehicle rapidly. Do not pull the aerial platform down an incline towards a winch.

Parking Brake System:



Figure 2-26. Parking Brake

- Parking Brake** - This spring-applied, hydraulically released, parking brake is automatic. Pins retracted and extended by single-acting hydraulic cylinders engage brake discs on the rear wheels when lifting, lowering, parking and steering. The pins disengage when driving. The brake pins **MUST** be manually disengaged for pushing, towing or winching.

2.8-2a To Release the Parking Brakes Manually

Warning

Do not manually disengage the parking brakes if the aerial platform is on a slope.

- Make sure that the aerial platform is on level ground. Chock or block the wheels to keep aerial platform from rolling.
- Turn main power disconnect switch to "OFF" position.
- For Left-Side Brake:** Using a 19mm wrench, rotate the block on the brake pin 90° clockwise. The brake pin should be clear of the brake disc.
- For Right-Side Brake:** Using a 19mm wrench, rotate the block on the brake pin 90° counterclockwise. The brake pin should be clear of the brake disc.
- Remove the wheel chocks or blocks, then push, tow or winch the aerial platform to the desired location.

Warning

The parking brake **MUST** be re-engaged immediately after reaching the desired location.

- Position the machine on a firm and level surface.
- Chock or block the wheels to prevent the aerial platform from rolling.

8. Re-engage the parking brake by doing the following steps.
9. **For Left-Side Brake:** Using a 19mm (3/4") wrench, rotate the block on the brake pin 90° counterclockwise.
10. **For Right-Side Brake:** Using a 19mm (3/4") wrench, rotate the block on the brake pin 90° clockwise.

2.9 Emergency Lowering Procedures

This section guides the operator on how to use the emergency lowering system. This system allows platform lowering in the event of an emergency or an electrical system failure.

2.9-1 Emergency Lowering Procedure (Models 71xx, 8831 & 8841)



Warning

Keep clear of scissors mechanism when using emergency lowering valve.

1. Remove any obstructions from a descending platform.
2. The extension platform(s) may need to be retracted or the platform may need to be moved to clear the obstruction. Refer to [Section 2.8-1](#), "Winching and Towing Procedures", for proper instructions.

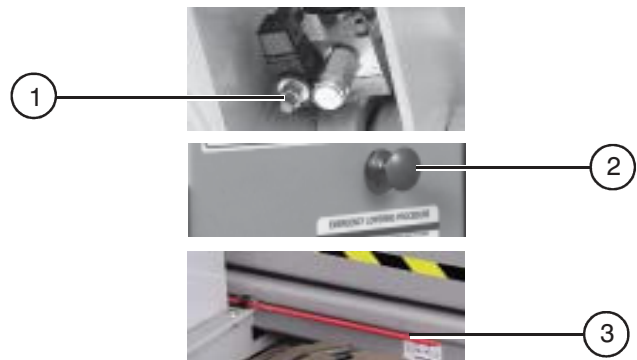


Figure 2-27. Emergency Lowering System

3. Locate the holding valve override knobs (item 1) at the base of each lift cylinder. Depress and turn counterclockwise. If necessary, use the access rod (item 3) that is located on the base of the machine.
4. On the hydraulic cabinet, pull out and hold the emergency lowering valve (item 2) to lower the platform.
5. To restore normal operation, depress and turn the holding valve override knobs clockwise.

**2.9-2 Emergency Lowering Procedure
(Models 8243, 8850 & 9250)**



Warning

Keep clear of scissors mechanism when using emergency lowering valve.

1. Remove any obstructions from a descending platform.
- 2a. The extension deck(s) may need to be retracted or the aerial platform may need to be moved to clear the obstruction. Refer to [Section 2.8-1](#) or [Section 2.8-2](#), "Winching and Towing Procedures", for proper instructions.
- 2b. Emergency Powered Extension Deck Retraction System (If Equipped):

This system is located in the hydraulic/electric cabinet. In the event of an emergency or an electrical system failure operator can retract the powered extension deck from this base location.



Figure 2-28. Emergency Powered Extension Deck Retraction System

This switch, when depressed, activates the powered extension deck retraction system on the platform.

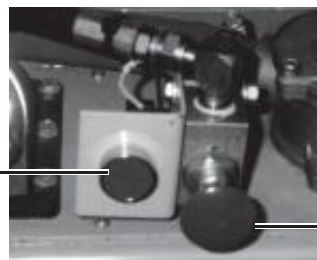


Figure 2-29. Emergency Lowering System

3. On the hydraulic cabinet, depress and hold the emergency lowering red push-button switch (item 1) to activate the auxiliary lowering valves. Pull out and hold the emergency lowering valve (item 2) to lower the platform. No further actions are required to restore normal operation.

Table 2-1. Specifications and Features

Model		Mid Size RT's		Full Size RT's		
		7127	7135	8831	8841	9250
Weight*		3724 kg	4392 kg	4554 kg	4962 kg	6591 kg
Width		1.82 m		2.21 m		2.34 m
Length		3.81 m		3.5 m		4.47 m
Platform Size		1.63 x 2.97 m		1.73 x 3.39 m		1.88 x 4.27 m
Height	Working	10.1 m	12.5 m	11.28 m	14.3 m	17.1 m
	Platform Elevated	8.2 m	10.7 m	9.4 m	12.5 m	15.2 m
	Platform Lowered	1.54 m	1.73 m	1.50 m	1.75 m	2.01 m
	Drive	Full		7.9 m		
Tires		Refer to Table 2-5 for tire specification and usage.				
Speed	Normal Drive	4.8 km/h		5.6 km/h	5.6 km/h	3.2 km/h
	Elevated Drive	0.56 km/h		0.97 km/h	0.97 km/h	0.97 km/h
	Raise (Rated Load)	31 sec.	38 sec.	58 sec.	56 sec.	67 sec.
	Lower (Rated Load)	46 sec.	43 sec.	44 sec.	53 sec.	72 sec.
Engine (RPM)	Nissan Dual Fuel	900 (Idle) / 1400 (Low) / 2800 (High)		1400 (Low) / 2800 (High)		
	Kubota Diesel	1600 (Low) / 2800 (High)		1300 (Low) / 2800 (High)		
	Kubota Dual Fuel	2050 (Low) / 3500 (High)		N/A		
Gradeability		30%		30%		25%

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* Weights are approximate; refer to serial nameplate for specific weight. Values shown are for standard 2WD machines on air tires with a manual extension platform (Mid Size RT's) and no extension platforms (Full Size RT's).

CE Kubota Diesel Models	
Sound Pressure & Power Levels	
NET INSTALLED POWER:	17.1kW
SOUND PRESSURE @ OPERATOR STATION:	79 dB
GUARANTEED SOUND POWER LEVEL:	103 dB

Table 2-2. Owner's Annual Inspection Record

Model Number _____				Serial Number _____				
Recording Date								
Recording Year #	1	2	3	4	5	6	7	8
Owner's Name								
Inspected By								

60141AA

As described earlier in this section, this decal is located on the scissor assembly. It must be completed after an annual inspection has been completed. Do not use the aerial platform if an inspection has not been recorded in the last 13 months.

Table 2-3. Maximum Platform Capacities (Evenly Distributed)

MODEL		Total		First Extension		Second Extension	
		Capacity	Number of Occupants	Capacity	Number of Occupants	Capacity	Number of Occupants
7127	One Extension Platform	681 kg	5	227 kg	2	Not Available	
7135	One Extension Platform	454 kg	4	159 kg	1	Not Available	
8831	No Extension Platform	1134 kg	6	Not Available			
	One Extension Platform	908 kg	6	227 kg	2	Not Available	
	Two Extension Platforms	771 kg	6	227 kg	2	227 kg	2
8841	No Extension Platform	771 kg	5	Not Available			
	One Extension Platform	681 kg	5	227 kg	2	Not Available	
	Two Extension Platforms	681 kg	5	227 kg	2	227 kg	2
9250	No Extension Platform	907 kg	5	Not Available			
	One Extension Platform	681 kg	5	227 kg	2	Not Available	
	Two Extension Platforms	681 kg	5	227 kg	2	227 kg	2

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NOTE:

Occupants AND materials are not to exceed rated load.
 Capacities listed are for standard machines equipped with #6 tires except for model 9250A which is equipped with foam filled tires.
 Refer to capacity label at sides of platform for additional information and for models equipped with options.

BEAUFORT SCALE	Wind Speed				Ground Conditions
	m/s	km/h	ft/s	mph	
3	3.4 - 5.4	12.5 - 19.4	11.5 - 17.75	5 - 12.0	Papers and thin branches move, flags wave
4	5.4 - 8.0	19.4 - 28.8	17.75 - 26.25	12.0 - 18	Dust is raised, paper whirls up, and small branches sway.
5	8.0 - 10.8	28.8 - 38.9	26.25 - 35.5	18 - 24.25	Shrubs with leaves start swaying. Wave crests are apparent in ponds or swamps.
6	10.8 - 13.9	38.9 - 50.0	35.5 - 45.5	24.5 - 31	Tree branches move. Power lines whistle. It is difficult to open an umbrella.
7	13.9 - 17.2	50.0 - 61.9	45.5 - 65.5	31 - 38.5	Whole trees sway. It is difficult to walk against the wind.


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Warning

This aerial platform is equipped with a load sensing system. Do not exceed the rated capacity of the aerial platform. Failure to avoid this will prevent operation of all normal controls/functions of the aerial platform.
To resume normal operation remove the additional loads.

Table 2-4. Tire Specifications


Warning

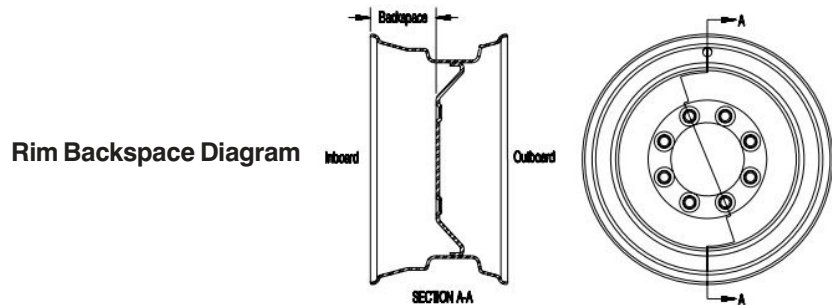
Air pressure can affect stability. Temperature changes can affect air pressure. It is important to visually inspect all tires for proper tire inflation prior to use. Tires should be checked by end user on a daily basis. Tire inflation pressures must be checked weekly with a calibrated gauge. If the measured pressure is less than the specification, reinflate to the pressure specified below. Tires must not be inflated above the recommended specification. **DO NOT** intermix tires of different types on one machine. Use only tires of type originally supplied.

Tire		Fill Specification			Usage [†]						
		Fill Type	Ply Rating	Pressure (Factory) (kPa)	MID SIZE				FULL SIZE		
Size	7127				7135	8243	8850	8831	8841	9250	
#6A	10-16.5 CARLISLE US LOADER	Air	10	517.1*	S	S	S	N/A	S	S	S
#6A	10-16.5 OTR OUTRIGGER (Non-Marking)		10	517.1*	O	O	O	N/A	O	O	O
#7A	31-15.5-15 GOODYEAR TERRA XTRAC		8	310.3*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
#6F	10-16.5 CARLISLE US LOADER	Foam	10	N/A	O	O	O	S	O	O	O
#6F	10-16.5 OTR OUTRIGGER (Non-Marking)		10	N/A	O	O	O	O	O	O	O
#7F	31-15.5-15 GOODYEAR TERRA XTRAC		8	N/A	O	O	O	O	O	O	O

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* Factory preset @ 20°C, Check pressures regularly as tires can lose pressure over time and over different ambient temperatures even under normal conditions.

† Usage: (S)standard Or (O)ptional
(N/A) Not Available



Rim Size	Backspace (mm)					
	7127		7135	8831	8841	9250
Serial Number	Contact Skyjack Service Department					
#6 & #6F	121mm	95 mm	95 mm	121mm	121mm	95 mm
#7 & #7F	All models are 135 mm					

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Table 2-5. Floor Loading Pressure

MODEL		TOTAL MACHINE WEIGHT	TOTAL MACHINE LOAD		
			WHEEL	LCP **	OUP **
		kg	kg	kPa	kg/m ²
7127	min*	3596	1438	701.2	732.4
	max*	5530	2212	835.0	1126.3
7127 Outrigger Pads	min*	4249	1700	328.8	759.1
	max*	5530	2212	427.9	987.8
7135	min*	4018	1607	736.4	818.4
	max*	5498	2199	1391.4	1119.8
7135 Outrigger Pads	min*	4445	1778	343.9	794.0
	max*	5498	2199	425.5	982.2
8831	min*	4390	1756	764.6	726.4
	max*	6492	2597	1461.0	1074.1
8831 Outrigger Pads	min*	4785	1914	370.3	766.9
	max*	6492	2597	502.4	1040.5
8841	min*	4799	1920	792.2	794.0
	max*	6728	2691	1505.8	1113.2
8841 Outrigger Pads	min*	5194	2078	401.9	832.4
	max*	6728	2691	520.7	1078.4
9250	min*	6674	2670	888.7	876.3
	max*	8358	3343	1693.4	1097.5
9250 Outrigger Pads	min*	6674	2670	516.4	710.6
	max*	8358	3343	646.8	890.0

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* **min** - Total machine weight with no options
max - Machine weight + all options

** **LCP - Locally Concentrated Pressure** is a measure of how hard the machine presses on the areas in direct contact with the floor. The floor covering (tile, carpet, etc.) must be able to withstand more than the indicated values above.

OUP - Overall Uniform Pressure is a measure of the average load the machine imparts on the whole surface directly underneath it. The structure of the operating surface (beams, etc.) must be able to withstand more than the indicated values above.

NOTE:

The **LCP** or **OUP** that an individual surface can withstand varies from structure to structure and is generally determined by the engineer or architect for that particular structure.

Floor Loading Pressure

Local Concentrated Pressure (LCP):

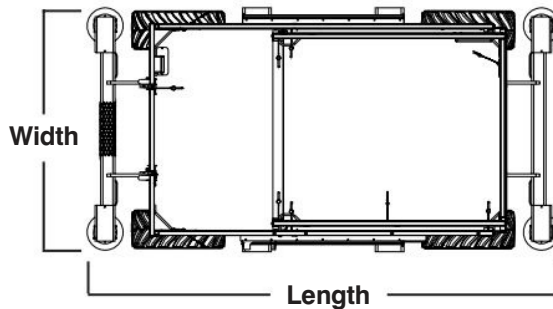
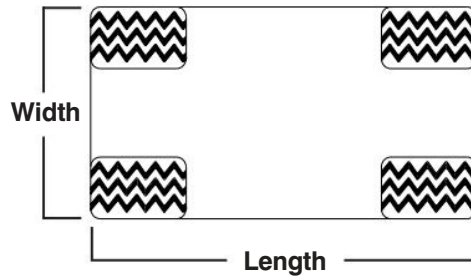
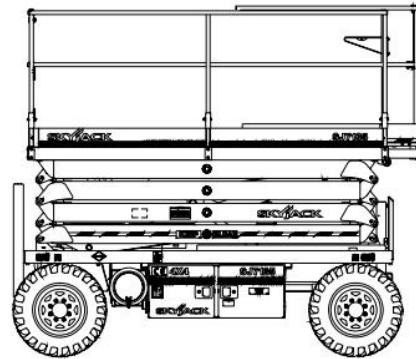
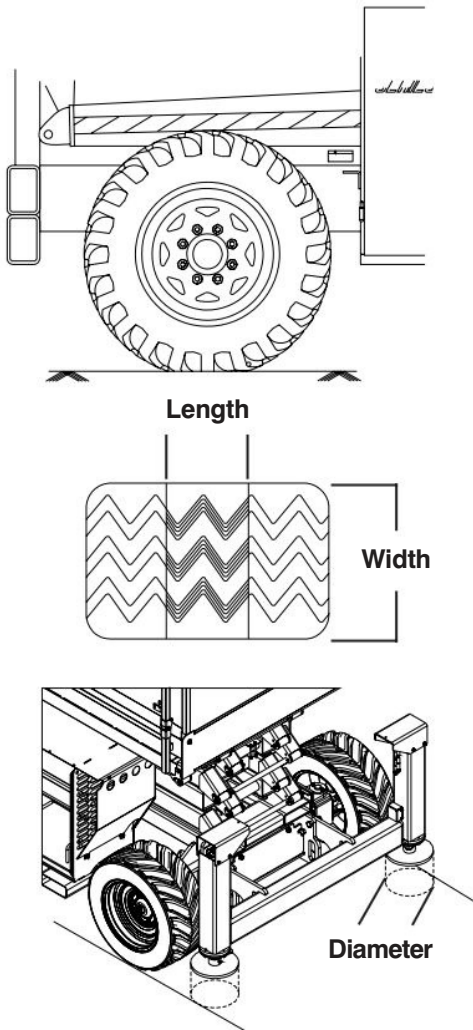
$$\text{Foot Print Area} = \text{Length} \times \text{Width} = \delta r^2$$

$$\text{LCP} = \frac{\text{Weight of Machine} + \text{Capacity (kg)}}{\text{Foot Print Area} \times 4 \text{ (Tires)}}$$

Overall Uniform Pressure (OUP):

$$\text{Base Area} = \text{Length} \times \text{Width}$$

$$\text{OUP} = \frac{\text{Weight of Machine} + \text{Capacity (kg)}}{\text{Base Area}}$$



 **Warning**

Intermixing tires of different types or using tires of types other than those originally supplied with this equipment can adversely affect stability. Therefore, replace tires only with the exact original Skyjack-approved type. Failure to operate with matched approved tires in good condition may result in death or serious injury.

General Maintenance

Before attempting any repair work, disconnect the battery by turning the main power disconnect switch to the "OFF" position. Preventive maintenance is the easiest and least expensive type of maintenance.

Table 2-6. Maintenance and Inspection Schedule

	Daily	Weekly	Monthly	3 Months	6 Months	12 Months*
Engine						
Fuel leaks	A			A		A
Engine oils	H & I			H & I		H & I
Engine RPM			G	G		G
Fuel filter					F	F
Belts/hoses			A & C	A & C		A & C
Muffler				B, C & J		B, C & J
Air cleaner			A	A	I	A & I
Fuel tank cap	B & C			B & C		B & C
Coolant level	A & L			A & L		A & L
Mechanical						
Structural damage/welds	A			A		A
Locking pins/retainers	A & B			A, B & C		A, B & C
Parking brake(s)	B			B		B
Tires/wheels & fasteners	A, B, C & R	O & S		A, B, C, R, O & S		A, B, C & O
Guides/rollers & slider pads	A, B & N			A, B & N		A, B & N
Railings/entry chains/gates	A, B & C			A, B & C		A, B & C
Bolts and fasteners	A	C		A & C		A & C
Maintenance support		B		B		B
Gear oil**			A & H	A & H		A, H & F
Rust			A	A		A
Wheel bearings & king pins	A			A, B & E		A, B & E
Steering cylinder & tie rod	A			A, B & E		A, B & E
Electrical						
Battery fluid level	A			A		A
Control switches/indicator lights ***	A & B			A & B		A & B
Cords & wiring	A			A		A
Battery terminals			A & C	A & C		A & C
Generator/receptacle	A	B		A & B		A & B
Terminals & plugs			C	C		C
Limit switches	B			B		B
Tilt switch	A & B	B		A & B		A & B
Hydraulic						
Hydraulic oil	H			H		H & Q
Hydraulic hoses/fittings	A & P		C	A, C & P		A, C & P
Lift/lowering speeds		G		G		G
Cylinders		A & B		A & B		A & B
Emergency lowering system	B	B		B		B
Lift capacity			D	D		D
Hydraulic oil filter					F	F
Miscellaneous						
Labels and manual	A, K & M			A, K & M		A, K & M
Lanyard attachments	A & C			A & C		A & C
Check for applicable service bulletins					A	A
Notes						
A. Visually inspect. B. Check operation. *** C. Check tightness. D. Check relief valve setting. Refer to serial number nameplate. E. Lubricate. F. Replace. G. Refer to Table 2-1 , "Specifications and Features." H. Check oil level. I. Refer to engine manual. J. Check noise level. K. Replace if missing or illegible. L. Check only when cooled. M. Proper manual must be in box.			N. Ensure there is no metal to metal contact with slider, slider side or running surface. Check for free movement of surface. Also check for free movement of the slider pin through the slider and pad. O. Ensure proper torquing procedure and sequence is followed. P. Check for leaks. Q. Have oil sample tested. R. Visually inspect for proper inflation. S. Check pressure with a calibrated gauge. (Refer to Table 2-4 .) * Record inspection date and signature. ** Gear Oil Requirements: Axle: ESSO GX 85W-140 Center Drive: ESSO GX 85W-140 *** Since the enable switch works in conjunction with lift/drive or steer function, to inspect operation of the joystick enable switch activate the steer controller once with activating the enable switch and once without activating the enable switch.			

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Warning

Use original or equivalent to the original parts and components for the aerial platform.

Table 2-7. EC Declaration of Conformity

EC Declaration of Conformity

We, SKYJACK INC., [*], declare under our sole responsibility that the product Scissor Type Elevating Work Platform

Model number: [*]

Serial number: [*]

To which this declaration relates is in conformity with the following directives:

Machinery Directive 98/37/EC

Notified body is: [*]

EC type Examination Certificate No: [*]

Machinery Directive 98/37/EC as related to Load Sensing System

Notified body is: [*]

EEC Type Examination Certificate No: [*]

Directive 89/336/EEC

Certified laboratory: [*]

The Technical Construction File is maintained at:

[*]

The authorized representative located within the community is:

[*]

Place of issue:

[*]

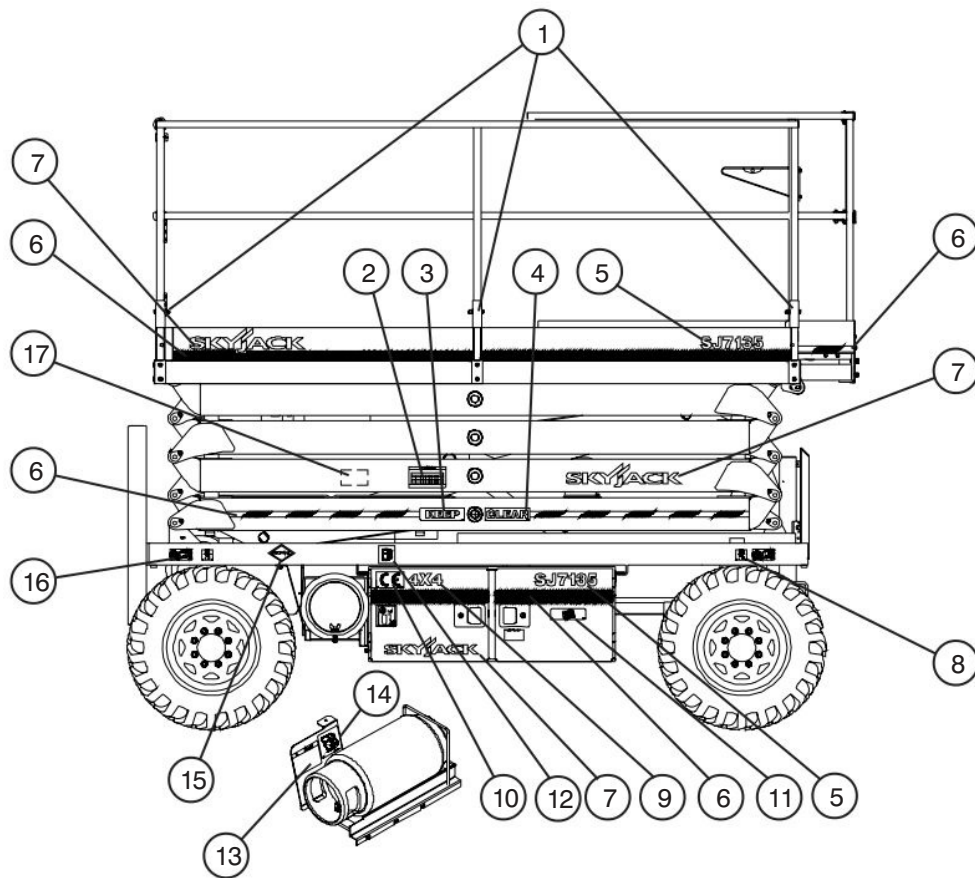
Note: In case of unauthorized modification, this Declaration becomes invalid.

Test Engineer:

Quality Coordinator:

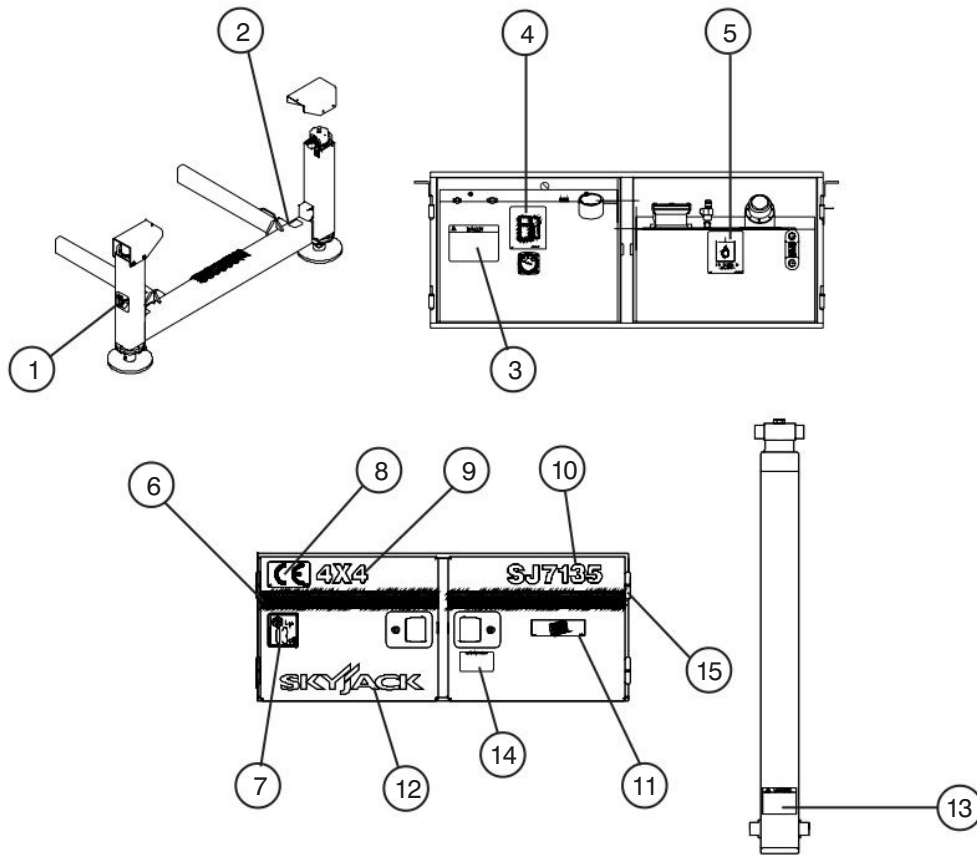
[*] For information refer to the English EC Declaration of Conformity provided with your aerial platform.

Labels and Nameplates



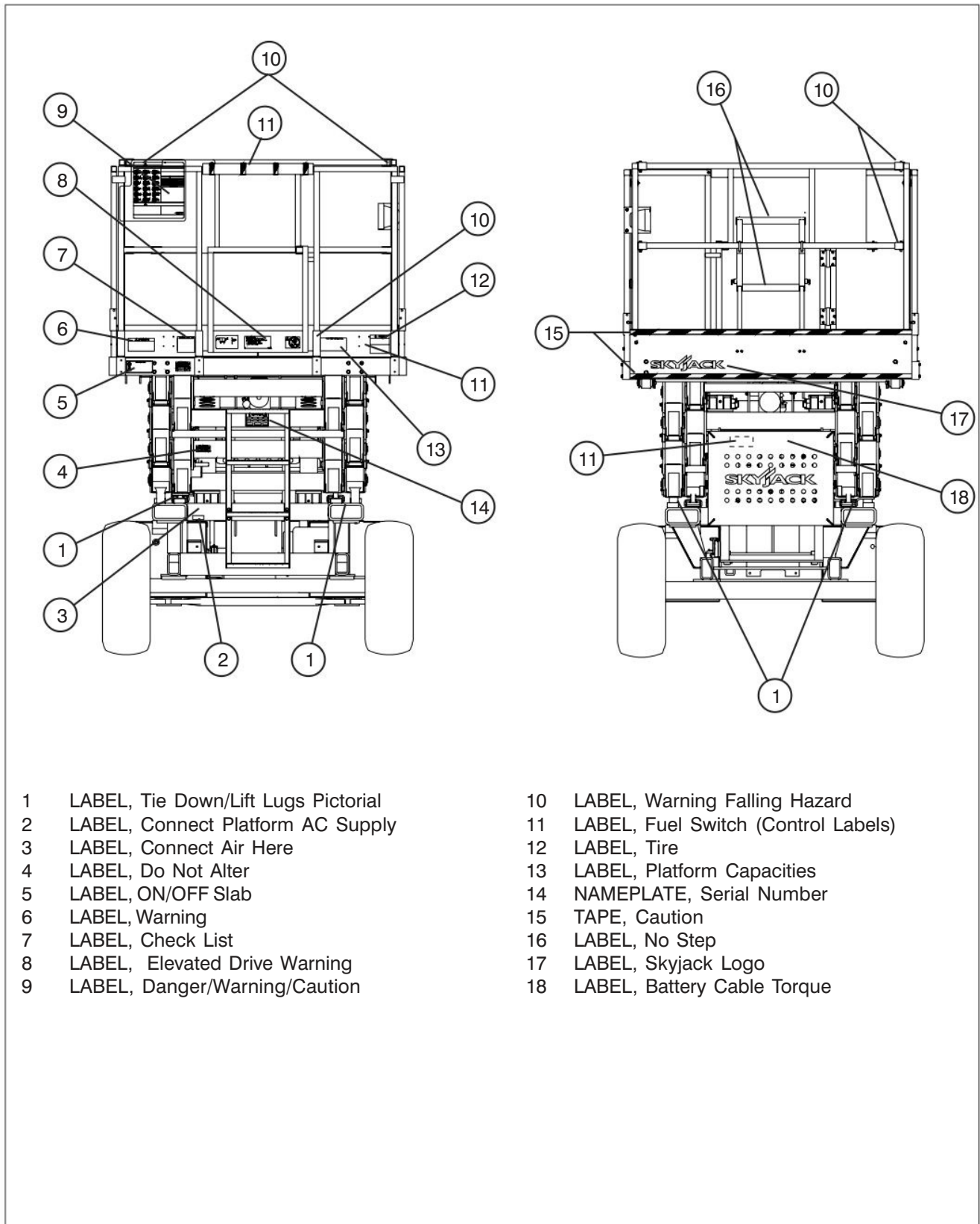
- | | | | |
|---|---|----|---|
| 1 | LABEL, Warning Falling Hazard Pictorial | 10 | LABEL, "CE" |
| 2 | LABEL, Annual Inspection | 11 | LABEL, Manual Enclosed |
| 3 | LABEL, Keep | 12 | LABEL, "Use Gasoline Only" |
| 4 | LABEL, Clear | | LABEL, "Use Diesel Fuel Only" |
| 5 | LABEL, Model Number | 13 | LABEL, Explosive |
| 6 | TAPE, Caution | 14 | LABEL, "Use Liquid Propane" |
| 7 | LABEL, Skyjack Logo | 15 | LABEL, Propane |
| 8 | LABEL, Tire Pressure | 16 | LABEL, Wheel Offset/Pressure/Torque Pictorial |
| 9 | LABEL, 4 Wheel Drive | 17 | LABEL, Maintenance Support (Located on other side of machine) |

Labels and Nameplates

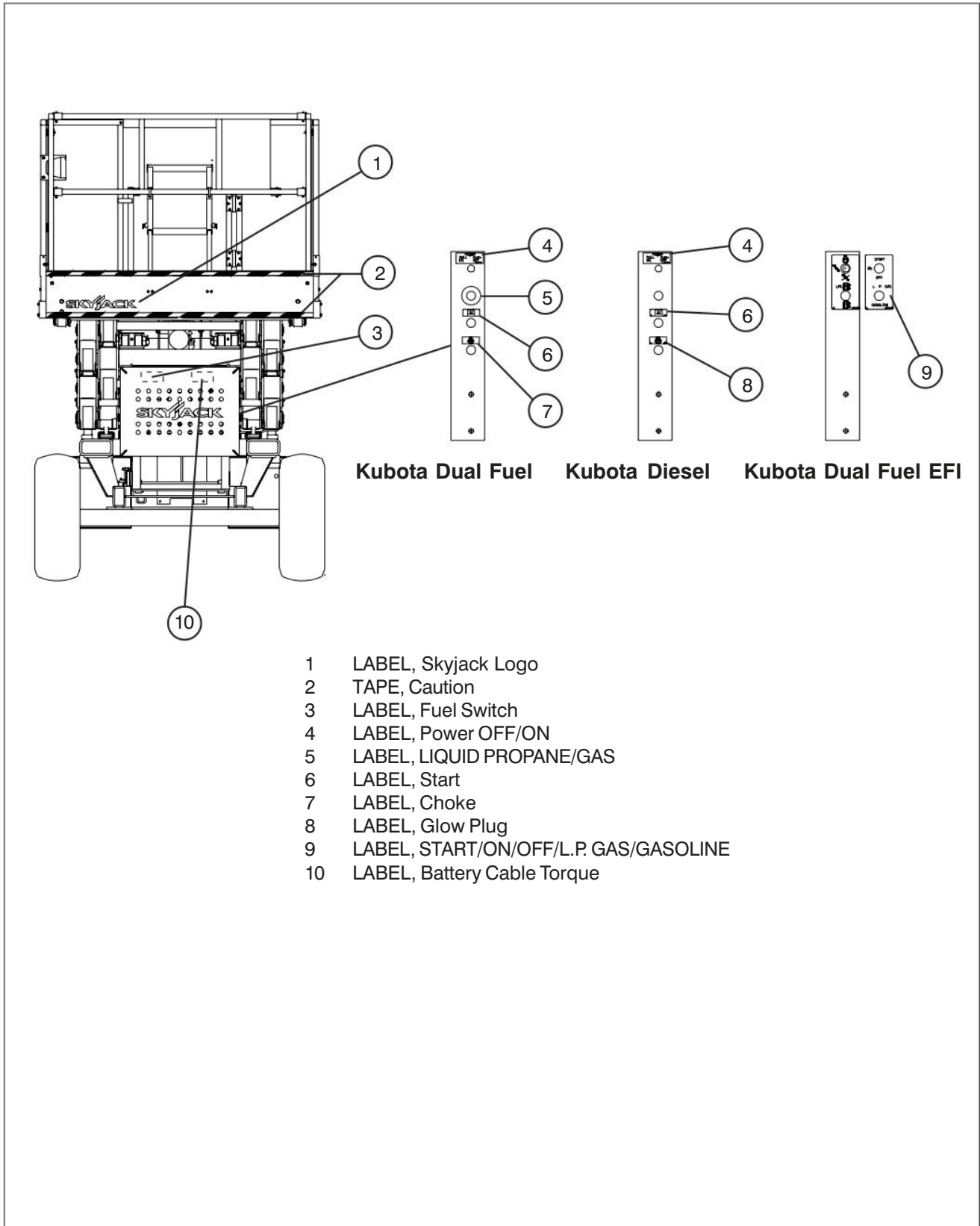


- 1 LABEL, Danger! Hand/foot pinch
- 2 LABEL, Do Not Alter
- 3 LABEL, Explosive
- 4 LABEL, "Unleaded Fuel Only"
- 5 LABEL, "Use Hydraulic Oil"
- 6 TAPE, Caution
- 7 LABEL, Noise Level
- 8 LABEL, "CE"
- 9 LABEL, 4 Wheel Drive
- 10 LABEL, Model Number
- 11 LABEL, Warning Manual Box
- 12 LABEL, Skyjack Logo
- 13 LABEL, Orifice
- 14 LABEL, Emergency Lowering (Model SJ9250 only)
- 15 LABEL, Emergency Lowering (Located on cabinet side)

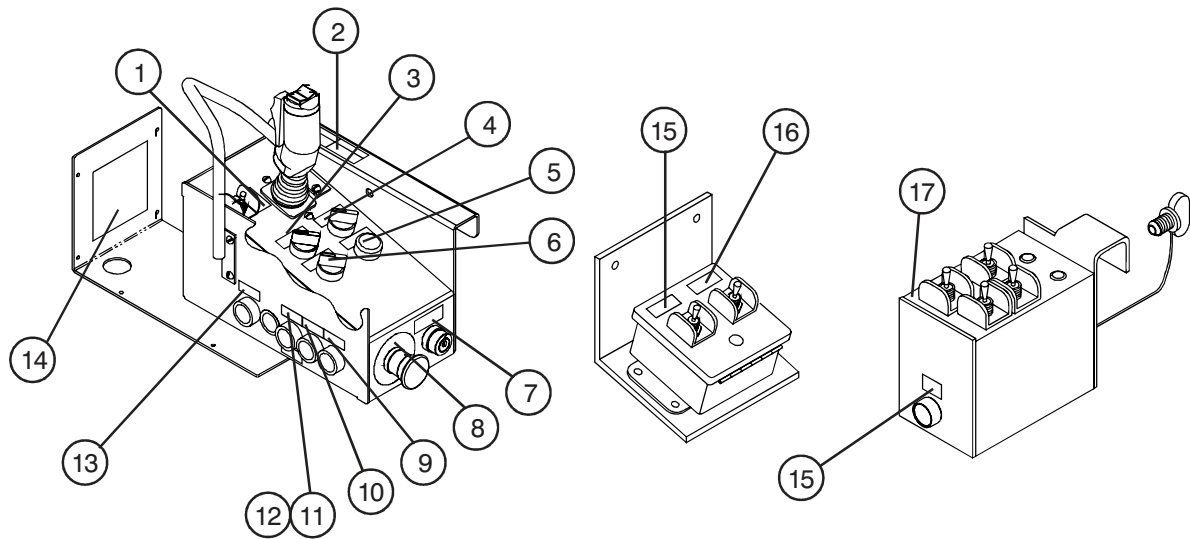
Labels and Nameplates



Labels and Nameplates

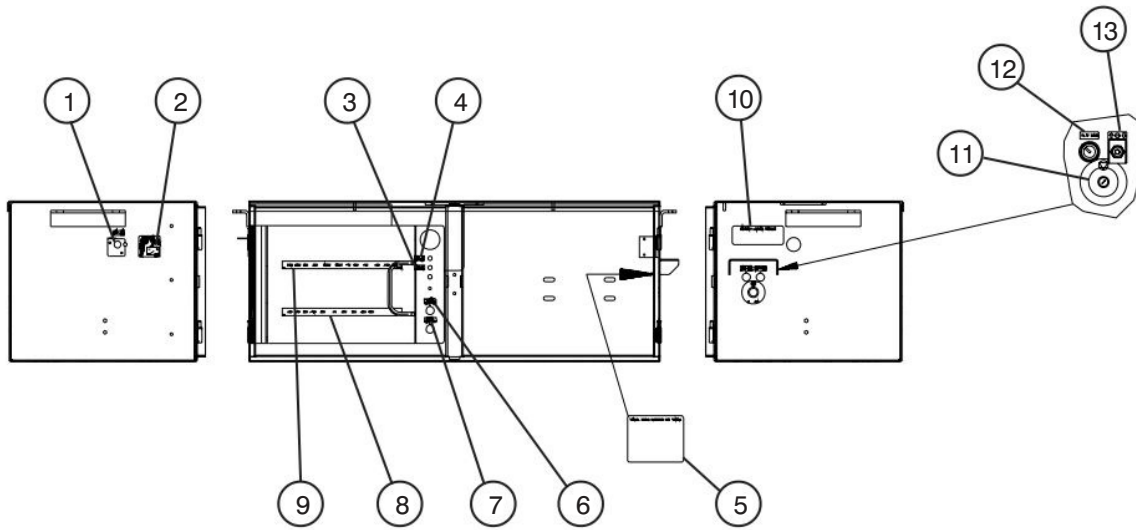


Labels and Nameplates

**Operator's Control Box****Powered Extension Deck
Control Box****Outrigger Control Box**

- | | | | |
|---|------------------------------------|----|--------------------------------|
| 1 | LABEL, Torque Switch | 10 | LABEL, Start |
| 2 | LABEL, Steer/Drive | 11 | LABEL, Choke |
| 3 | LABEL, LOW/HIGH Range | 12 | LABEL, Glow Plug |
| 4 | LABEL, LOW/HIGH Throttle | 13 | LABEL, Horn |
| 5 | LABEL, Power ON/Overload Indicator | 14 | LABEL, Joystick Connector |
| 6 | LABEL, UP/OFF/DOWN | 15 | LABEL, Enable |
| 7 | LABEL, OFF/LIFT/DRIVE | 16 | LABEL, Platform EXTEND/RETRACT |
| 8 | LABEL, Emergency Stop | 17 | LABEL, Outrigger |
| 9 | LABEL, Lift Enable | | |

Labels and Nameplates



- 1 LABEL, ON/OFF (Power)
- 2 LABEL, Battery Disconnect Switch
- 3 LABEL, Ground Reset
- 4 LABEL, Power Reset
- 5 LABEL, Manual Brake Release
- 6 LABEL, UP
- 7 LABEL, DOWN
- 8 LABEL, Lower Relay Identification
- 9 LABEL, Upper Relay Identification
- 10 LABEL, Emergency Lowering
- 11 LABEL, Emergency Stop (If Equipped)
- 12 LABEL, PLATFORM/BASE Select (If Equipped)
- 13 LABEL, UP/OFF/DOWN (If Equipped)



MOBILE ELEVATING PLATFORMS

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