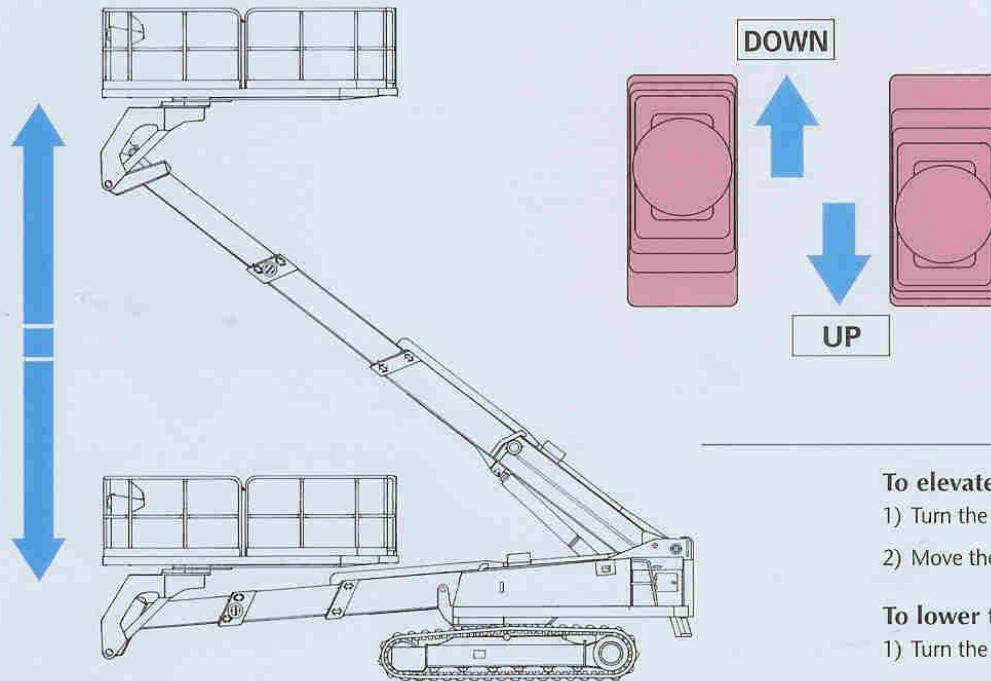


# OPERATING AND MOVING THE AC-125S AND AW-125S

## A Simple One-Lever, One-Operation System

AC-125S and AW-125S models have 4 operation levers each for boom rotation, telescoping, elevation, and deck rotation plus 2 traveling levers on the AC-125S and 1 traveling lever and a steering switch on the AW-125S.

This simple and secure system, which is based on a one-lever, one-operation concept, is designed to prevent mis-operation.

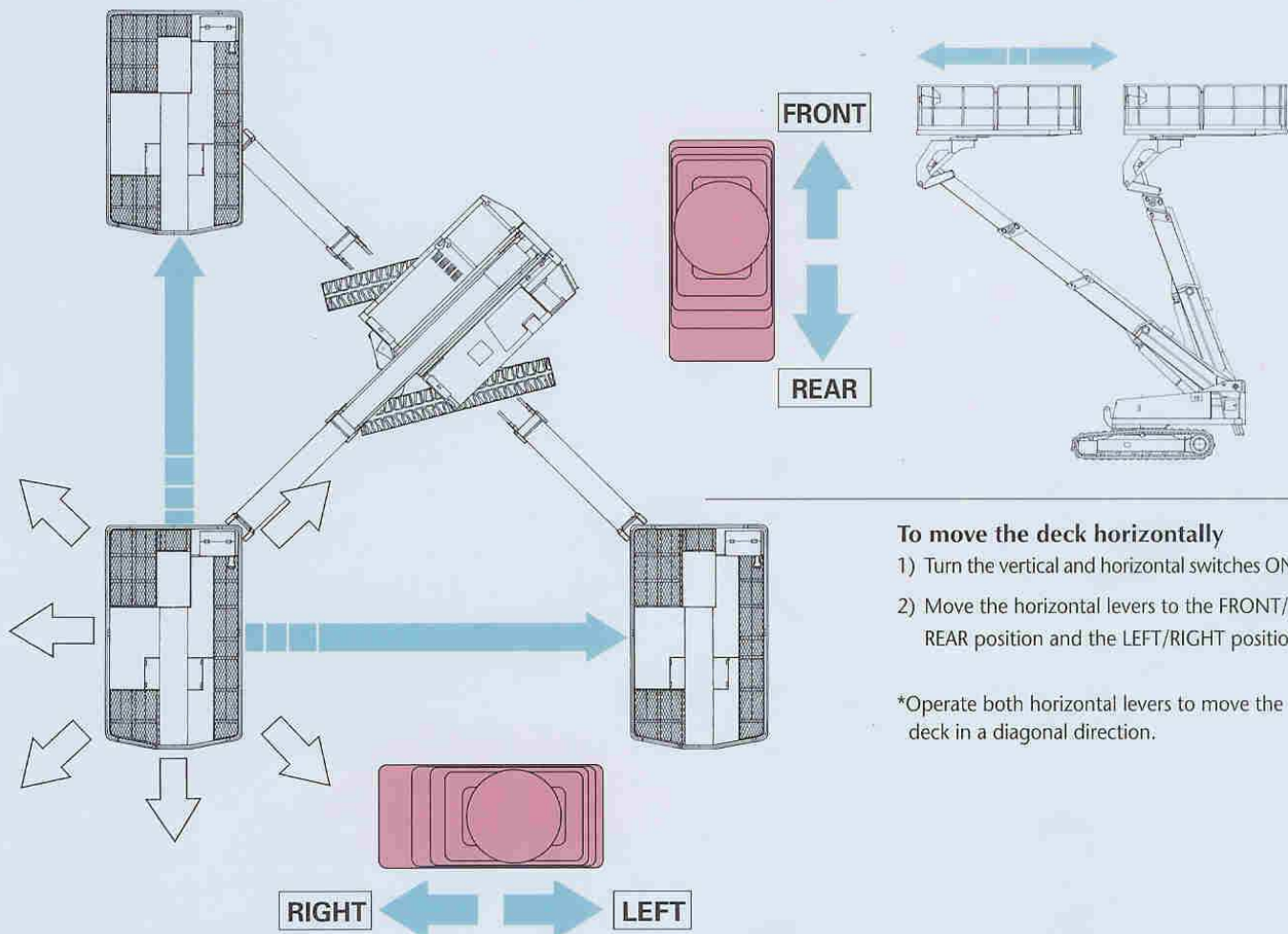


### To elevate the deck vertically

- 1) Turn the vertical and horizontal switch ON.
- 2) Move the vertical lever to the UP position.

### To lower the deck vertically

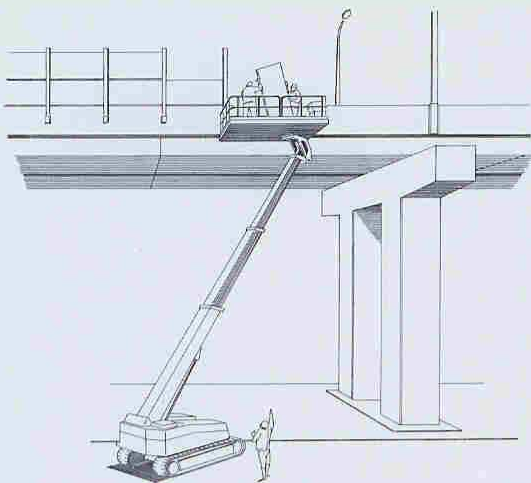
- 1) Turn the vertical and horizontal switches ON.
- 2) Move the vertical lever to DOWN position.



### To move the deck horizontally

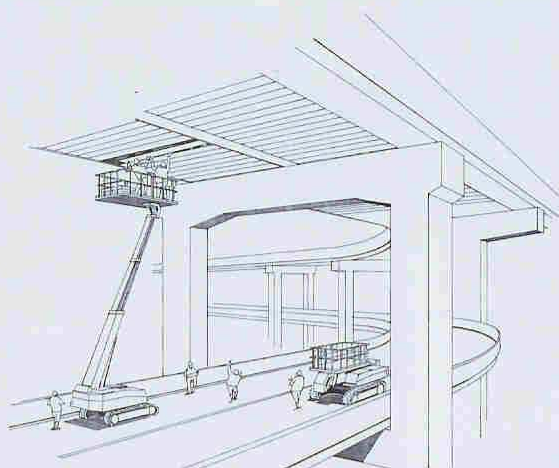
- 1) Turn the vertical and horizontal switches ON.
- 2) Move the horizontal levers to the FRONT/REAR position and the LEFT/RIGHT position.

\*Operate both horizontal levers to move the deck in a diagonal direction.



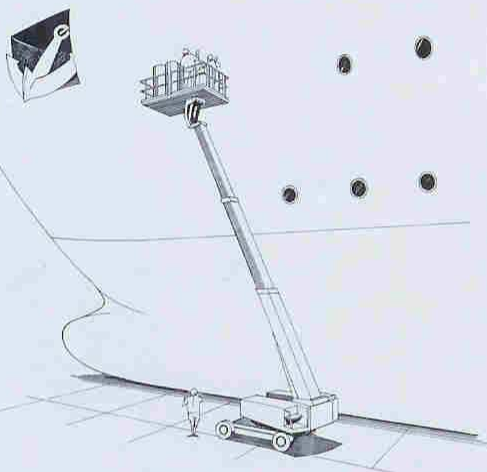
#### **Building Sound-insulating Walls along Freeways**

- 1) Work proceeds efficiently with SuperDeck moving horizontally alongside elevated highway structures.
- 2) The wide deck can carry workers and materials at the same time.
- 3) A wide area of work can be covered with the carrier remaining set up in just one location.



#### **For Construction Work on Elevated Highways, including Work on the Sides and Bottoms of Freeways**

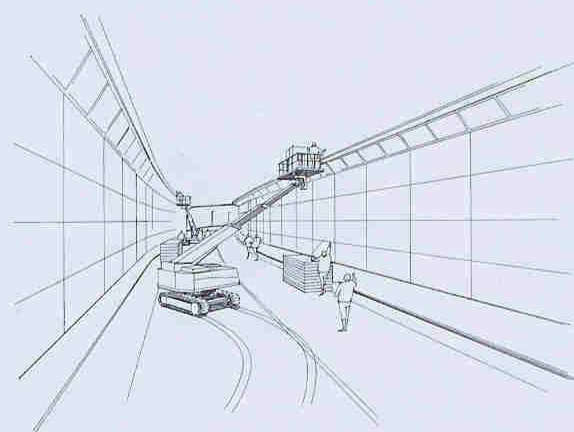
- 1) SuperDeck can perform at work sites with bad footing, in narrow spaces, or at approaches or openings that are on an incline.
- 2) Work can be easily and continuously performed over a wide area by moving the deck horizontally and vertically.
- 3) The wide deck can carry workers, tools and materials at the same time.



#### **For Welding and Painting Work in Shipyards**

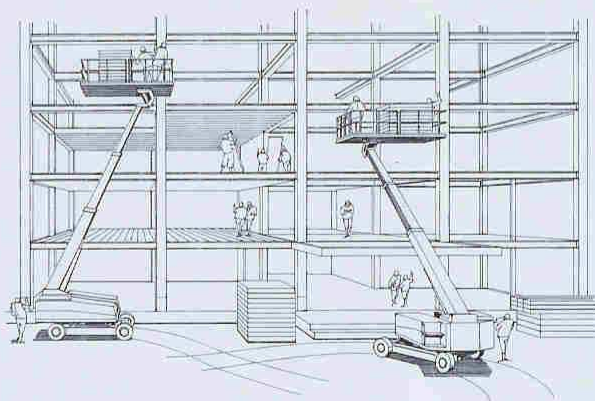
- 1) Work over a wide area can be handled with no stops by moving the deck vertically and horizontally.
- 2) Moving the deck on wheels can raise productivity

## **SUPERDECK — A NEW LEVEL OF PERFORMANCE AT A WIDE VARIETY OF JOB SITES**



#### **For Lighting and for Finishing Work on Ceilings in underground passages**

- 1) Continuous work can be easily performed by moving the deck vertically and horizontally.
- 2) Wide deck can carry workers and materials at the same time
- 3) Vehicle space easily secured.



#### **For construction work on buildings, particularly work on external walls**

- 1) You can easily handle work above structures or materials that would otherwise be obstacles.
- 2) You can easily move left, right, up or down to smoothly cover a wide area of work
- 3) SuperDeck can be mounted on wheels that do not scratch or disfigure the surface of roads or floors. This enables continuous work from the outside to the inside of buildings.



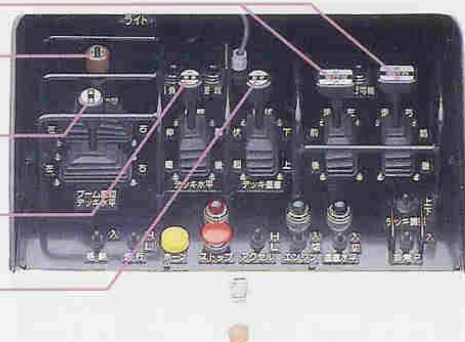
Traveling lever

Deck swing lever

Boom swing horizontal lever

Extension horizontal lever

Up and down vertical lever

**Functional Design with Centralized Control Panels**

The control panels on the deck and on the turntable are easy to read and easy to use. The deck can be swung and the boom can be rotated, telescoped, and raised and lowered by simple lever operation on the deck.

**Automatic Housing Function Eliminates Troublesome Operations**

The automatic, computer-controlled housing function comes as standard equipment. Once the elevation angle exceeds five degrees, the housing switch can be used to automatically set the deck in any location. This function eliminates troublesome control operations. Anyone can simply and quickly handle the housing work.

# INDUSTRY FIRSTS

**A CONTINUOUS 360-DEGREE DECK SWING FUNCTION,  
A WIDE DECK THAT HANDLES 800-KG (1764 lb) LOADS  
TWO TYPES OF CARRIAGES**

**Tadano's SuperDeck represents a significant advance over aerial platforms currently used, particularly in terms of an expanded domain of work that can be handled.**

SuperDeck can handle work involving movement in three dimensions, something the conventional stage-type aerial platforms cannot do. Wide working space — 3.5m x 2.1m / 12ft 6in x 6ft 11in (7.35 square meters) — also provided, which can carry loads as heavy as 800 kg.



RUBBER ROLLERS

**White Rubber Crawler Leaves No Marks on Floor of Work Site**

The AC-125S is equipped with a powerful motor, and the speed control can be adjusted to the work environment to allow for safe, smooth turns and tight turns. The white rubber crawler, with low vibration and high maneuverability, provides superior traveling performance on rough terrain. The AC-125S leaves no marks or scratches on concrete or finished surfaces.



WHEELS

**White Non-Puncture Tires**

The AW-125S comes with hard, white, non-puncture tires that provide optimum stability. These are provided as standard equipment. The hydraulic motor drive can be freely adjusted for operation at extremely slow or at high speeds, a function that allows smooth and efficient loading and unloading of the carriage at the job site. Also the powerful motor can drive the vehicle out of mud or a puddle even if one set of wheels is stuck or raised up.



MAINTENANCE

**Design Details Created with Maintenance in Mind**

Large doors, an engine coolant reserve tank, and many other details are carefully designed to make daily inspections and maintenance work on engine, hydraulic and electrical systems as easy as possible.

FUNCTIONS

**Wider Deck Enable A Wider Scope of Work.**

The deck swing is 360 degrees. Plus, the functions that can be performed on deck remain the same no matter what the deck or boom swing angles are and no matter where the load on the deck is located. No functional restrictions apply to the positioning of the carriage. The full range of functions can be performed no matter which direction the carriage is faced in.



# Enhanced SAFETY FEATURES Support HIGH-PERFORMANCE

## Higher Level of Safety Provided by AMC (Automatic Moment and Motion) Controller

Working conditions and the load on the deck are monitored real-time by a computer. This system, which is called the Automatic Moment and Motion Controller (AMC), prevents accidents caused by overload. AMC automatically prevents the range of work exceeding the proper limit for a given load.

## Smooth and Comfortable Operation Provided by Shock-free Start and Stop Function

All motions, including boom and deck swing and boom extension and elevation are controlled by a special shock-prevention device designed to ensure smooth start and stop operations. Stopping is smoothly achieved even if the emergency brakes are mistakenly applied. This function also ensures smooth boom extension and elevation at the end of cylinder strokes or when a lever is suddenly moved.

## Optimum, Safe Speeds are Maintained with Speed Restriction System

Travelling, elevation, and swing speeds are automatically controlled by a speed restriction device. From the moment the deck is elevated three meters above the ground, traveling speed is automatically switched from high speed to low speed. Travelling is prevented when the elevation is over nine meters and if the deck is overloaded. In addition, elevation and swing speeds are automatically adjusted to optimum levels for every given boom length and work radius.

## Chassis Inclination Warning Device — An Added Safety Feature

A voice message warns the operator when the chassis tilts three degrees or more.

## State-of-the-Art Warning Devices Indicate Condition of Machine

Warning devices installed as standard equipment include a remaining fuel warning device and warning devices for engine coolant temperature, hydraulic pressure, and charge. These enable the operator to be constantly aware of machine conditions and verify safety even when working in high places.

## Carefully Designed to Handle Electrical Trouble

A centralized console system is used to make repair and replacement as easy as possible in the event the electrical system were to break down. An easy-to-read trouble detection system is also installed to facilitate rapid adjustments or repairs. A lever function on the turntable is also installed to enable the operator to safely lower himself from high places when the electrical system fails.

## Complete Range of Voice Messages keeps Operator Fully Aware of Working Conditions

The machine is equipped with 19 voice messages (in a woman's voice) to keep operators and nearby personnel fully informed of work conditions. These messages tell them why the machine has automatically stopped and provide guidance for solving problems.

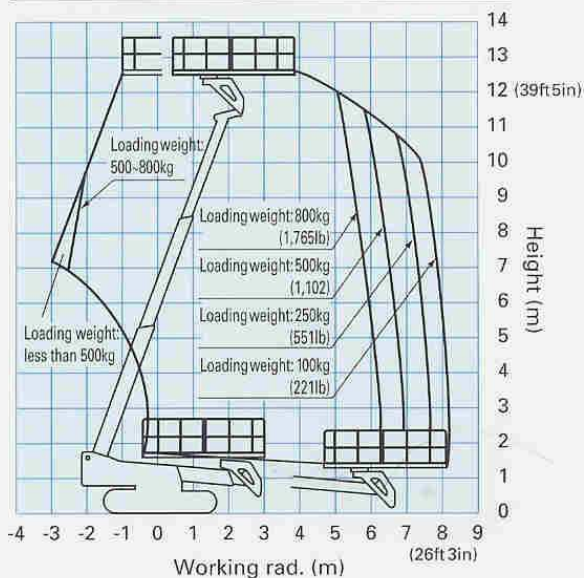
## MAIN VOICE MESSAGES

Message	Work Situation
"Please set the chassis horizontal."	- The deck is over 3 meters (9ft 10in) off the ground and the deck is tilting.
"The deck slews now to the right to house."	- The message tells the operator when to start automatic housing action.
"You are carrying too much load. Please remove some of the load."	- When the moment reaches 100% of strength.
"This is the limit of working area."	- When the moment reaches 100% of stability.
"This is the limit of working area at the rear."	- When the moment reaches 100 of stability at rear.
"The deck is at too high a position for driving."	- When operating the traveling lever while the deck height is 9 meters (29ft 6in) or more.

## MAIN SPECIFICATIONS AC-125S / AW-125S

DECK	Load capacity	800kg (1,764lb)
	Maximum height	12.5m (41ft) (deck bottom)
	Working radius	8.2m (26ft 11in)
	Outside dimensions of deck	3.5m x 2.1m x 0.95m (11ft 6 in x 6ft 11 in x 3ft 1 in) (Length x width x height of handrails)
	Deck swing	360° continuous
	Deck swing speed	0.8rpm
DECK DEVICES	Automatic leveling system	Synchronized with the elevation cylinder
	Swing system	Hydraulic motor driven by worm reduction gear, ball bearings
	Boom elevation speed	From -5° to 70° in 36s
BOOM	Boom extension speed	4.88m to 10.78m in 27s * Boom swing - 360° continuous
	Boom swing speed	0.8rpm
	Boom configuration	3-section hydraulic synchronized telescoping boom with welded box-type cross section
	Boom elevation	Double-acting hydraulic cylinder
	Boom extension	Double-acting hydraulic cylinder, synchronized with wire rope
OPERATIONS	Boom swing	Driven by hydraulic motor with worm reduction gear and ball bearings
	Deck	Boom rotation, telescoping, elevation, deck swing, traveling, deck vertical and horizontal move, deck leveling, automatic housing system, acceleration, emergency pump, horn, engine start and stop, emergency stop, traveling speed switch (Monitor : AMC limit, engine condition, deck vertical and horizontal move, emergency stop)
	Turntable	Boom rotation, telescoping, elevation, deck swing, traveling, deck leveling, automatic housing system, emergency pump, starter key switch, emergency stop, horn (Monitor : AMC inspection, emergency stop), steering switch (AW-125S only)
	CONTROL DEVICES	Elevation speed control, swing speed control, travel speed control, deck horizontal and vertical movement control, automatic housing control
SAFETY DEVICES		Automatic moment and motion controller (AMC), voice message, foot switch, lever guards, emergency lamp, emergency stop device (with indicator lamp); remaining fuel warning device, warning devices for engine coolant temperature, hydraulic pressure, and charge; chassis inclination warning; warning devices for travel and swing; hydraulic cylinder lock device; hydraulic safety valves
	STANDARD SPECIAL DEVICES	Hour meter
STANDARD SPECIAL ACCESSORIES		Tools, grease pump
OPTION EQUIPMENT		Safety belt; electric power inlet and outlet wiring 100V, 10A; working lamp (deck)

## WORKING RANGE AC-125S AW-125S



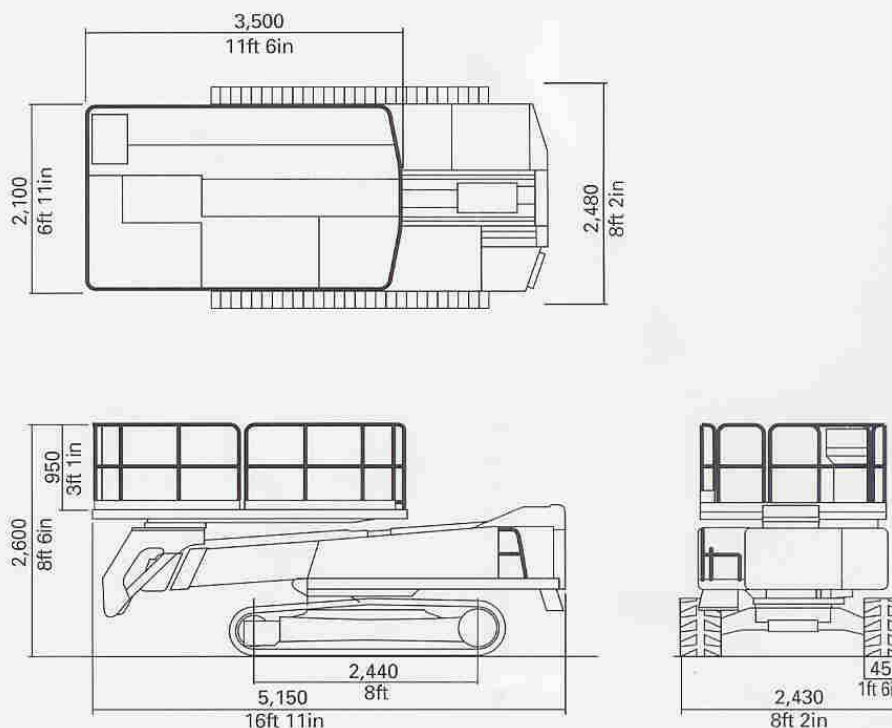
## MAIN SPECIFICATION AC-125S

<b>Engine</b>	<b>Model</b>	Crawler
	<b>Model</b>	Isuzu 4JB1
	<b>Displacement</b>	2,771cc
	<b>Maximum output</b>	51PS (37kw) /2,100rpm
	<b>Maximum torque</b>	18kg-m (130.2ft lb) /2,000rpm
<b>Traveling System</b>		Hydraulic motor driven through planetary reduction gears
<b>Crawler</b>		White rubber crawler
<b>Battery Voltage</b>		24V
<b>Fuel tank Capacity</b>		190liters (50.2gal)
<b>Dimensions</b>	<b>Overall length</b>	5,150mm (16ft 11in)
	<b>Overall width</b>	2,480mm (8ft 2in)
	<b>Overall height</b>	2,600mm (8ft 6in)
	<b>Crawler length</b>	3,055mm (10ft)
	<b>Rear end turning radius</b>	2,300mm (7ft 7in)
	<b>Lowest elevation</b>	290mm (11in)
	<b>Crawler shoe width</b>	450mm (1ft 6in)
<b>Vehicle Weight</b>		8,900kg (19,621lb)
<b>Maximum Speed</b>		1.8km/h (1.1mph)

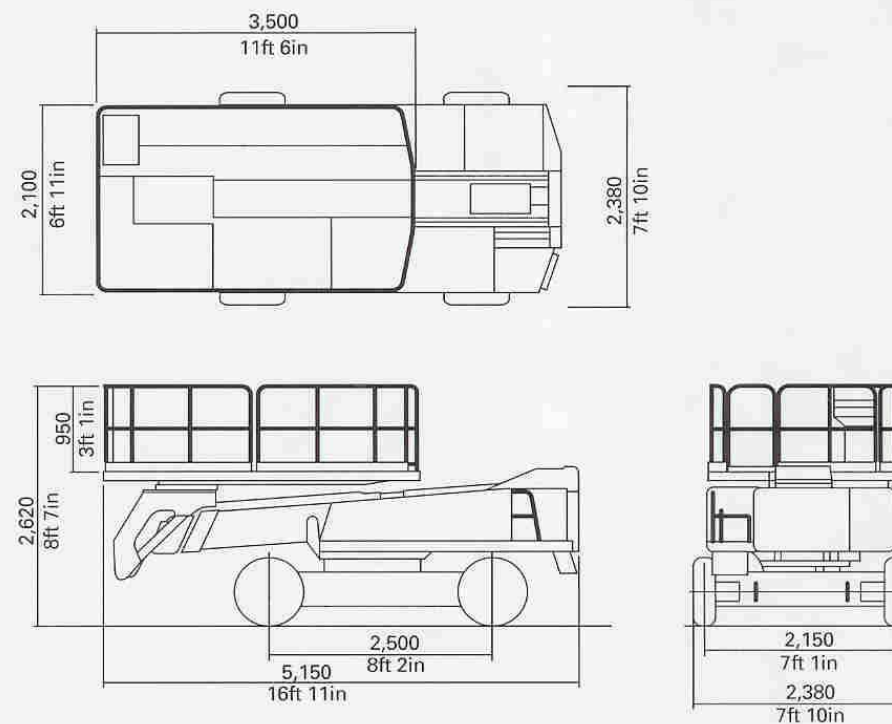
## MAIN SPECIFICATION AW-125S

<b>Engine</b>	<b>Model</b>	Wheel
	<b>Model</b>	Isuzu 4JB1
	<b>Displacement</b>	2,771cc
	<b>Maximum output</b>	51PS (37kw) /2,100rpm
	<b>Maximum torque</b>	18kg-m (130.2ft lb) /2,000rpm
<b>Traveling System</b>		Hydraulic motor driven eccentric differential reduction gear. Automatic parking brake and with free wheel mechanism
<b>Battery Voltage</b>		24V
<b>Fuel tank Capacity</b>		190liters (50.2gal)
<b>Dimensions</b>	<b>Overall length</b>	5,150mm (16ft 11in)
	<b>Overall width</b>	2,380mm (7ft 10in)
	<b>Overall height</b>	2,620mm (8ft 7in)
	<b>Wheel base</b>	2,500mm (8ft 2in)
	<b>Tread</b>	Rear wheels: 2,150 (7ft 1in) Front wheels: 2,150 (7ft 1in)
	<b>Rear end turning radius</b>	2,300mm (7ft 7in)
	<b>Lowest elevation</b>	200mm (8in)
<b>Tires</b>		Non-puncture Rear wheels: 250-15 Front wheels: 250-15
<b>Vehicle Weight</b>		8,700kg (19,180lb)
<b>Maximum Speed</b>		4.5km/h (2.8mph)

## DIMENSIONS AC-125S



## DIMENSIONS AW-125S



\*Some specifications are subject to change.