Contents

HOIST IDENTIFICATION

The hoisting equipment in this manual shall be referred to as:

BETA MAX
MAX CLIMBER 1000
MATERIAL & EQUIPMENT HOIST SYSTEM

Manufactured by:

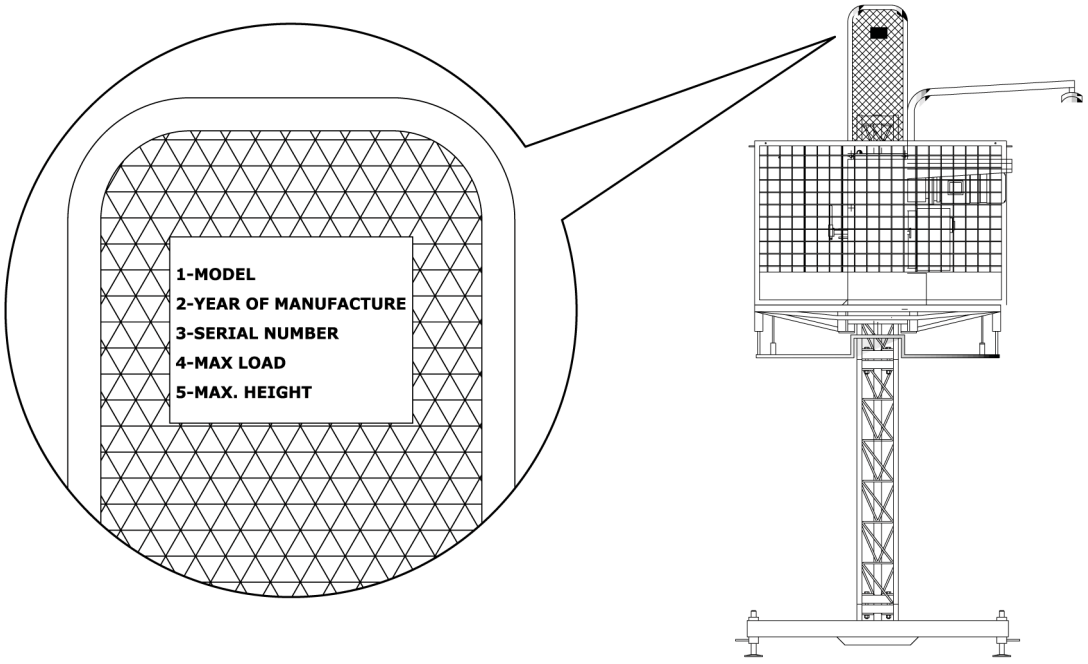
BETA MAX, INC.
PALM BAY, FLORIDA 32905

Machine Type:

Rack & Pinion Material Hoist

IDENTIFICATION PLATE LOCATION

The identification data is printed on a special plate attached directly to the machine in the position shown in the diagram below. State and federal regulations require the identification plate to be attached at all times in order to operate the equipment. Do not operate this equipment without the plate.



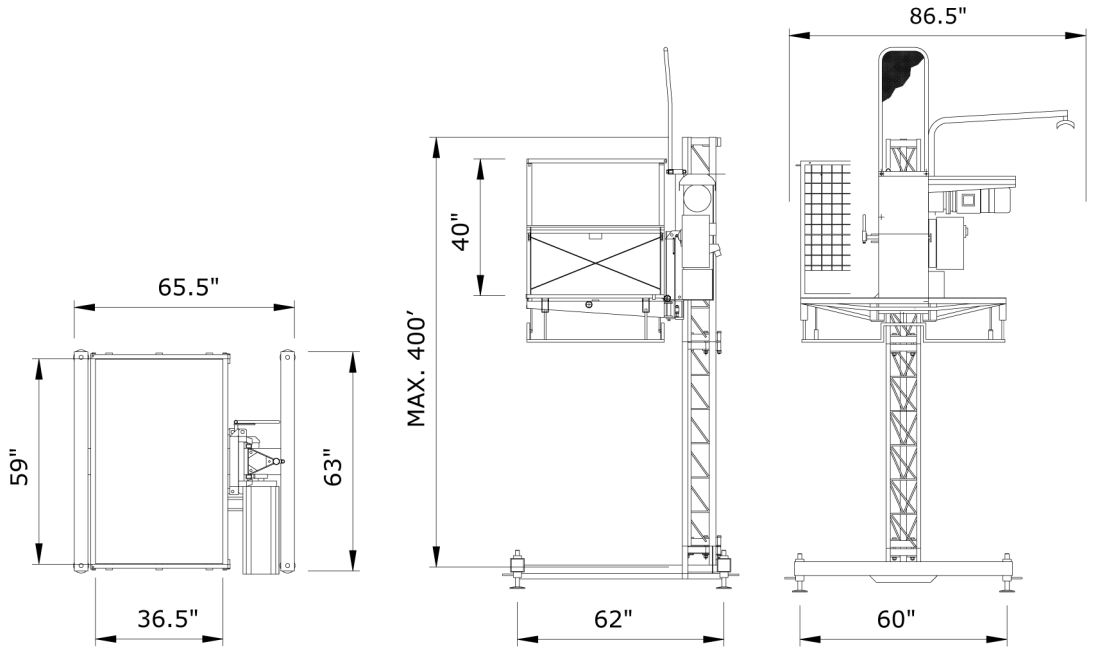
DESCRIPTION OF THE MACHINE

The Max Climber 1000 is a material lift that allows elevation up to 400 ft. in height along the vertical mast, anchored to a wall or scaffold system designed to bear loads up to 1000 lbs.

The lift is basically made up of the following components:

- A base unit fitted with adjustable leveling feet
- A vertical column, composed of modular elements that must be connected every 20 ft. to wall or support frame
- A deck driven by an electric motor via a rack & pinion coupling
- A series of securing bolts let the frame be held vertically
- A series of safety devices

The drawing illustrates the standard basic version of the machine:



The machine is fitted with a separate centrifugal-mechanical emergency over-speed brake (patented) that automatically engages if the descent speed exceeds approximately 20% of the normal, pre-set descent speed. The device enables a ratchet gear that allows the deck to stop in a gradual way at any point of the vertical mast.

The Beta Max Climber 1000 meets or exceeds OSHA & ANSI specifications for lifting and hoisting equipment.

MACHINE APPLICATION

The Max Climber 1000 must be used only to lift material and equipment to a maximum loaded weight of 1000 lbs. evenly distributed on the deck.

The equipment may only be used for professional purposes by personnel authorized by the owner and who have been previously trained in compliance with the regulations and guidelines of this manual.

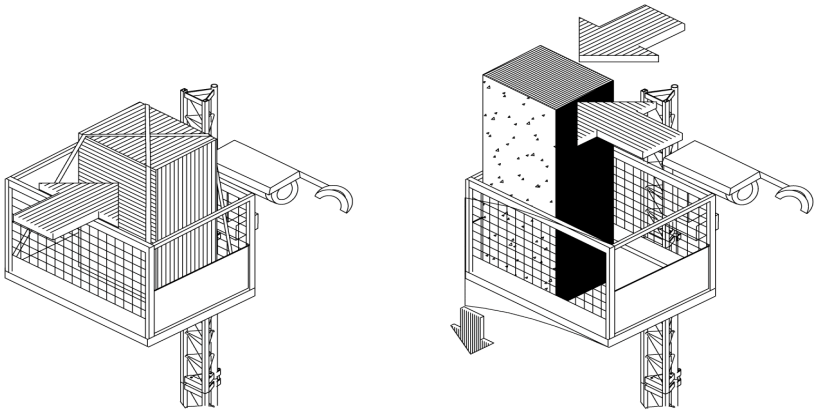
The lift must only be used:

- After correctly installing the base unit on a stable and adequately strong support surface.
- After correctly installing the vertical columns and securing bolts on the wall as required by specifications
- After checking the safety devices and accesses to the various floors
- After checking the emergency over-speed brake to ensure proper operation.
- In winds up to a maximum speed of 40 miles per hour.

Persons may only be carried during the assembly/disassembly and maintenance/inspection stages by carefully following all safety regulations.

WARNING

The diagram below illustrates the loading conditions that must always be heeded.



YES **NO**

Place goods as near as possible to the vertical mast. Fasten the material adequately.

Do not use the Max Climber 1000 lift:

- To carry persons or animals
- To carry protruding loads
- To carry loads that have not been properly tied down
- In harsh weather conditions (thunderstorms, high wind, snow, etc)
- In conditions of poor visibility (fog, night darkness, etc)
- In wind speeds in excess of 25 miles per hour when assembling system
- In wind speeds in excess of 40 miles per hour when using the system
- In temperatures below 27 degrees F
- Without terminal switches
- Without periodic maintenance
- When the vertical mast has not been firmly secured
- In explosive environments
- If submerged in liquids
- Near free flames

CAUTION

In all cases in which the system cannot be used, the deck must be lowered to the ground and the machine must be disconnected from power.

SAFETY FEATURES & SPECIFICATIONS

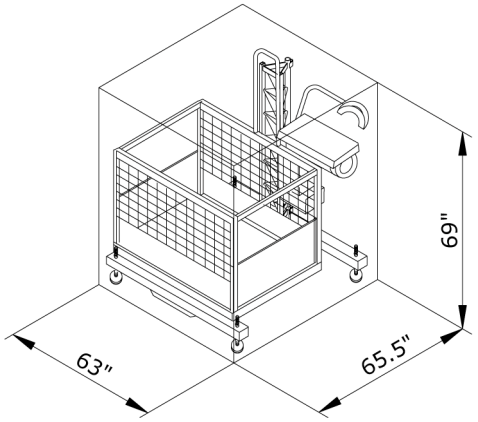
The Max Climber 1000 is equipped with these safety features:

- Down limit switch sensor
- Up limit switch sensor
- Deck turning and closing sensor
- Vertical mast closing sensor
- Loading ramp closing sensor
- Emergency over-speed brake enable sensor
- Floor stops control sensor
- Up & Down over limit sensor
- Self-actuating gear motor system
- Centrifugal mechanical braking system with gradual stop for increased safety
- Downward interruption sensor

The system can also be lowered when there is no power supplied by operating the release lever on the motor brake. (see section on continuation of assembling the mast, page 15)

Max Climber 1000 specification:

Lifting Capacity: ..... 1000 lbs. evenly distributed load
Maximum Mast Height: ..... 400 ft.
Lifting Speed: ..... 80 fpm
Vertical Mast Sections: ..... 5 ft. each
Weight of Vertical Mast: ..... 73 lbs. each
Max. Anchoring Distance: ..... every 20 ft.
Basket Dimensions: ..... 59” wide X 39” deep
Weight of Base Unit: ..... 986 lbs.
Power Supply: ..... 220V/60HZ/3 Phase
Working current: ..... 8 amps
Control voltage: ..... 48 volts
Motor power: ..... 3 kW



SAFETY GUIDELINES

The Max Climber 1000 has been designed and produced in compliance with current safety regulations. The user must heed all safety regulations required for the type of equipment used, the work environment and the operating conditions.

The equipment may only be used if the following safety regulations are heeded:

- The base must be installed on a sufficiently strong support surface according to the loads indicated.
- The whole ground area of the equipment must be adequately cordoned off and signposted.
- Access to the operating area must be reserved only to operators.
- Operators must wear safety helmet.
- Connect the electric power line with the grounded wire
- Check the stability of the wall on which the vertical mast is to be attached.
- Check that the access to the loading/unloading deck is adequately cordoned off.
- Do not assemble the system if wind speed exceeds 25 miles per hour.
- Do not use the lift if the wind speed exceeds 40 miles per hour.

TECHNICAL DESCRIPTION

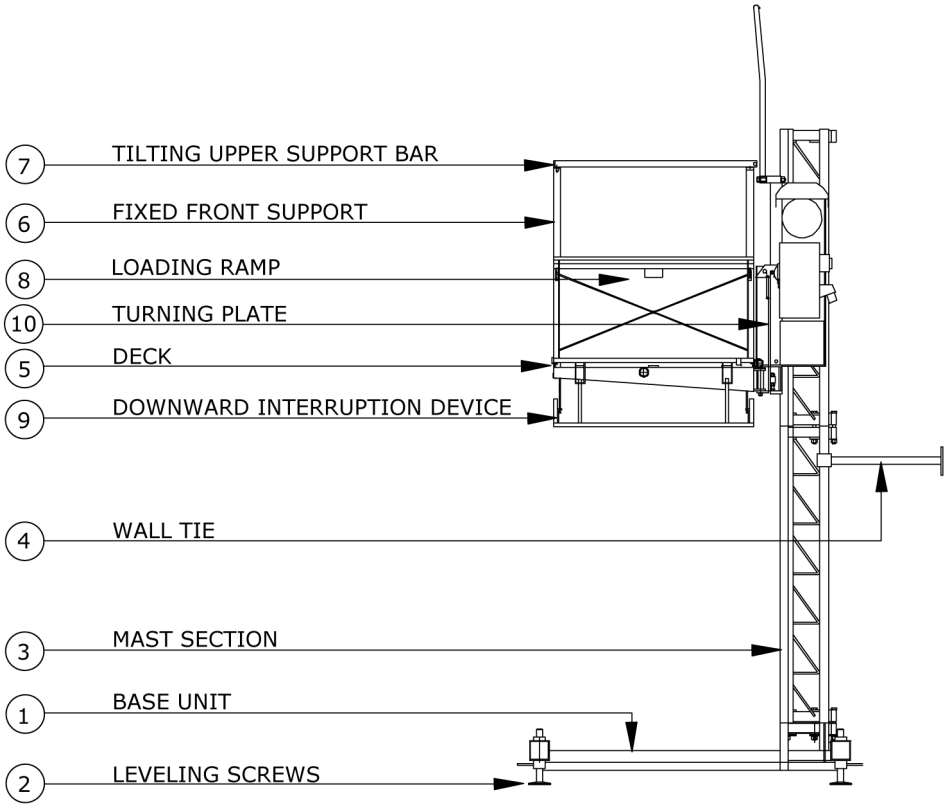
The Beta Max Climber 1000 Rack & Pinion Hoist is designed to elevate materials and equipment to a maximum of 400 feet. The motor driven deck climbs on a special vertical mast system.

The Base Unit (1) is made up of a welded tubular frame, with 4 leveling screws (2) on the bottom to regulate vertical alignment of the machine.

The vertical mast (3), 5 ft. in length, is made with latticed and welded tubular bars and a rack. It must be bolted with 4 securing bolts (4) every 5-ft. and tied in to a support wall or scaffolding every 20 ft.

The loading deck (5) consists of a welded sheet walkway on a support frame made of section bars. The walkway is limited by a pair of fixed guards (6) along the longer sides and two access gates are provided on the shorter sides equipped with tilting bar (7) and lower walkway (8) that can be let down. As soon as the lower walkway is opened, the lift is automatically locked.

To prevent accidental lowering on people, a downward interruption device (9) is installed to stop machine movement when it touches a foreign body.



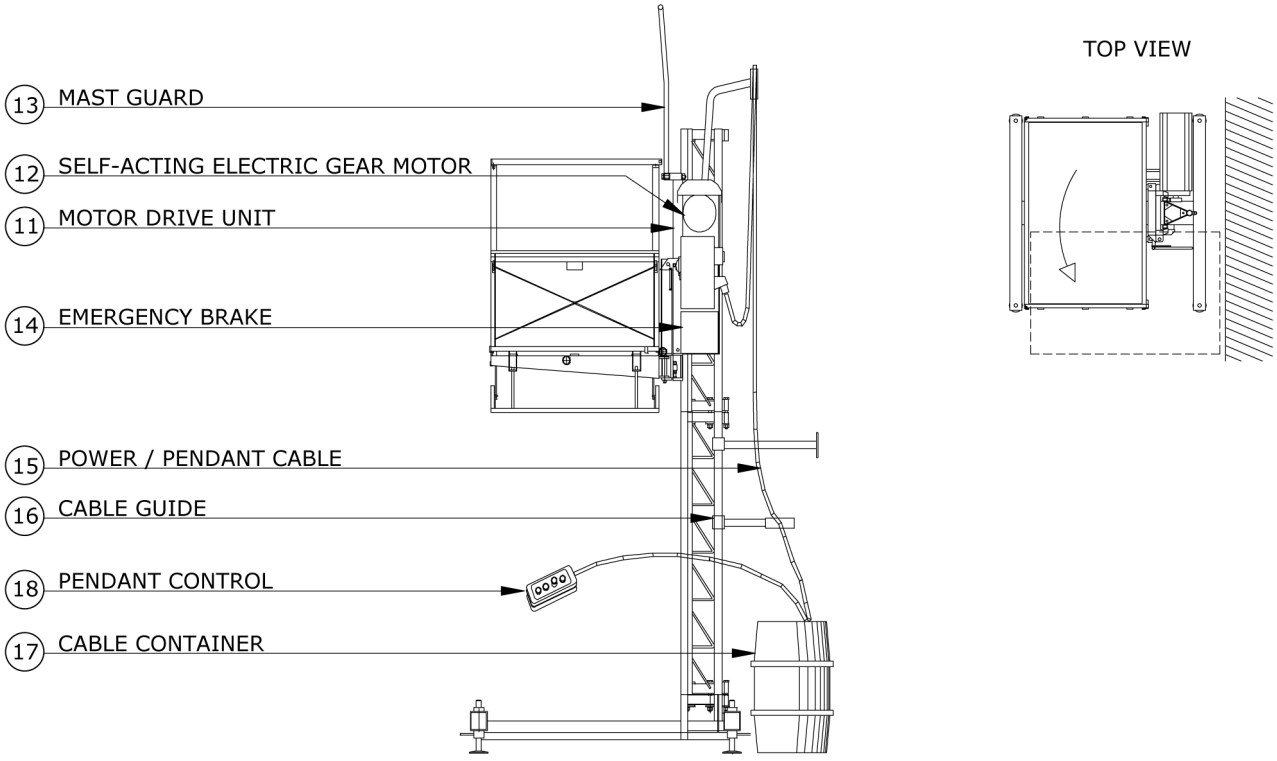
The motor drive unit (11) is made up of a welded tubular bar and section bar frame. It is fitted with a series of guide rollers. It is driven by a self-acting electric gear motor (12) that enmeshes on the rack of the vertical mast (3) via a pinion.

An emergency over-speed brake (14) engages when the normal operating speed in the down direction is exceeded. A special ratchet gear for centrifugal force expands and activates the brake. If the brake is enabled, a special terminal switch stops movement.

The electric power for the gear motor is supplied via a power and pendant control cable (15). To prevent the cable from interfering with the machinery, special cable guides (16) must be attached every 30-ft. The cable is gathered in a special container (17) placed on the base unit.

To make loading and unloading easier, two ramps (8) are lowered to form a support deck. When the ramps are opened the movement of the system is stopped. The lift movement is controlled via a suspended control pendant (18) that is located near the ground or directly connected to the electric board during the assembly and disassembly stages.

The loading deck can be turned 90 degrees, which allows getting closer to the scaffolding or building. If the deck is not properly closed, a terminal switch stops any hoist movement.



WARRANTY INFORMATION

Beta Max, Incorporated warrants its equipment to be free from defects in material and under normal use and service.

Our obligation under this warranty, as outlined below, is limited to repairing or replacing, at our discretion, any part of the unit, which proves upon examination to be defective in material or workmanship. The item is to be returned to Beta Max, Incorporated through an authorized distributor. The warranty period below is from the date that the equipment is sold to the original purchaser*. Return shipments must be prepaid.

High Wear Items:	
Wire rope, pulleys, hooks, shackles	30 days or 1 month
Electrical:	
Pendant switches, electrical plugs and cable	90 days or 3 months
Mechanical:	
Motor, brake, wire rope drum, trolley wheels	1 year
Gears:	
Gear reduction drive assembly	5 years

Any parts proven to be defective upon our inspection will be repaired or replaced at no cost for the parts. The obligation under this warranty includes labor and freight costs if determined the product failed under normal usage within the above described time.

The manufacturer reserves the right to have the warranty serviced by the distributor from whom the unit was purchased. The distributor will make arrangements with the factory for repairs or replacement of parts with the terms of this warranty. Distributors must get a return authorization number from Beta Max before any item is returned for repairs or replacement.

Beta Max, Incorporated's obligation is limited to replacing parts and does not include replacing the complete unit. This warranty is void on any unit that has been modified or tampered with, repaired by persons other than a factory representative or an authorized Beta Max distributor, repaired with other than Beta Max standard parts, or damaged by reasons of accident, alteration, misuse or abuse.

This warranty is in lieu of all other warranties, expressed or implied. We do not authorize any person or representative to make other guarantee or to assume for us any liability in connection with the sale of our products other than those contained herein. Any agreement outside of or contradictory to the foregoing shall be void and of no effect.

*"Original Purchaser" definition: for rental machines: Dealer, for resale machines: First user.

MACHINE PACKAGING AND TRANSPORTING

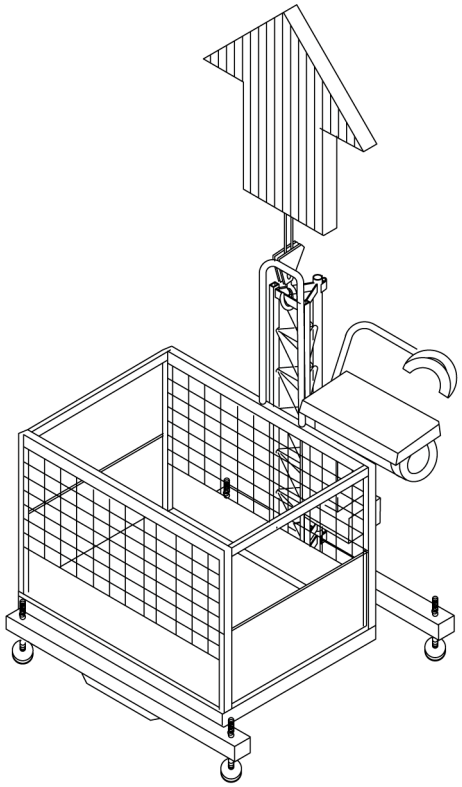
The machine is packaged and fastened with metal strapping. The electric parts and most delicate components can be protected with a plastic sheet until delivery.

Take off the plastic sheet, if present, and make sure that it is not within children's reach. Make sure the system has not been damaged before delivery. If it has, immediately inform the manufacturer or dealer before using the system. Check that the moving parts of the machine are fitted and comply with supply specifications. Check for any discrepancies compared to the ordered equipment. If there are any, always advise the manufacturer or dealer before use.

The machine is delivered with the base unit completely assembled (base, initial mast section and loading deck) and equipped with fittings, fixed to pallets with strapping. Additional mast sections are packed under the base unit on the same pallet.

The other mast sections are packaged on other pallets. The pallets must be unloaded and handled using a forklift (minimum required capacity 2200 lbs. with outreach of 4 ft.)

Should the machine be moved with a crane or another hook-lifting tool, insert the hook only in the mast flange plate as shown in diagram below.



LOADING & UNLOADING SUPPORT

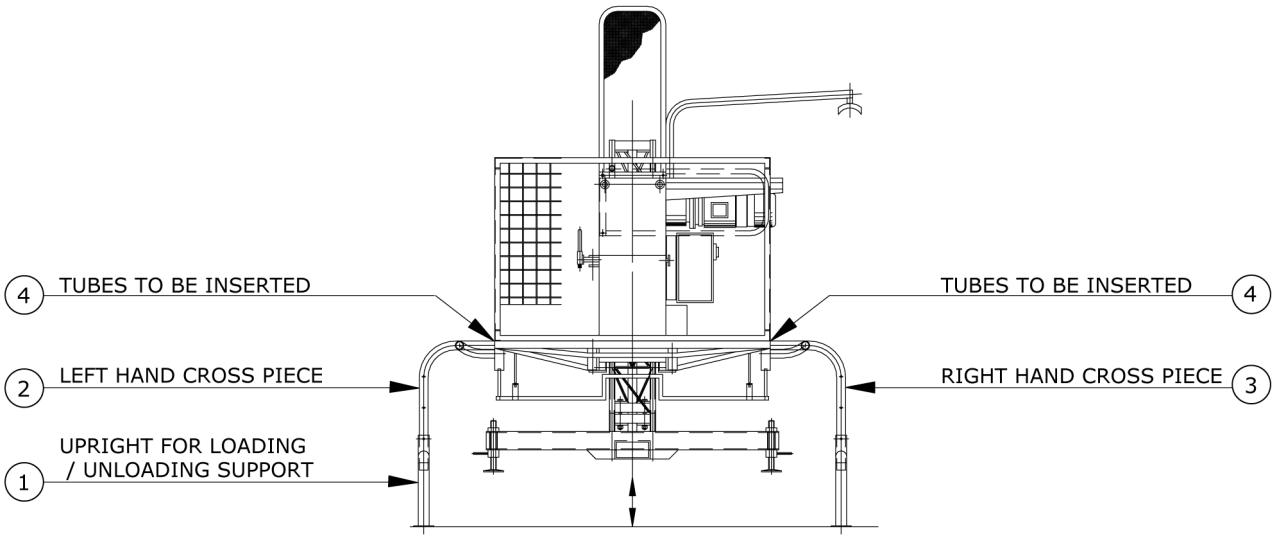
To make transporting the Max Climber 1000 easier, the system has optional loading/unloading supports. The supports can be ordered with the original system or purchased at a later date.The loading & unloading supports consist of two uprights (1), one left-hand cross piece and one right-hand cross piece (2-3). Before starting any operation, unload any vertical mast sections (except the initial base section) from the deck.

A. Loading the machine on a vehicle:

- Connect the machine to the power supply
- Move the deck up to about 3-ft. using the control pendant
- Insert the left-hand cross piece (2) in the upright (1) and lock it at the height required using the pegs
- Do the same to the right-hand crosspiece
- Fit the two units in the relevant tubes (4) welded at the bottom of the deck.
- Lower the deck so that the uprights (1) touch the ground, the base is lifted. Follow this procedure to reach the height required.
- Place the vehicle under the lift base.
- Start raising the system. The deck will now lower to allow the base system to rest on the vehicle bed.
- Continue this operation until the uprights (1) can be removed. Disconnect the power supply and fasten the machine for transport.

B. Unloading the machine from a vehicle:

Connect the machine to the power supply. Follow the instructions detailed on page 14.

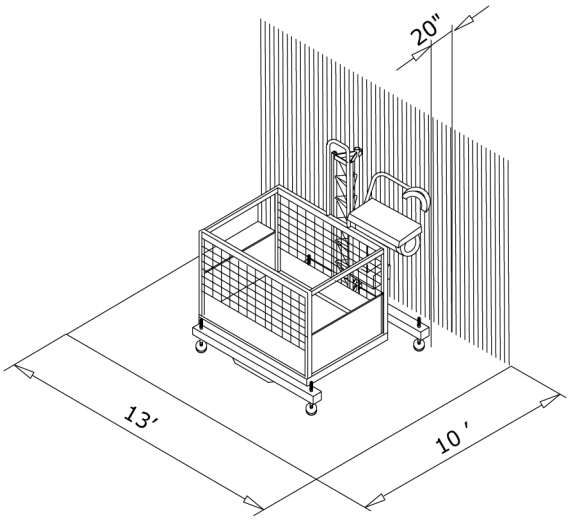


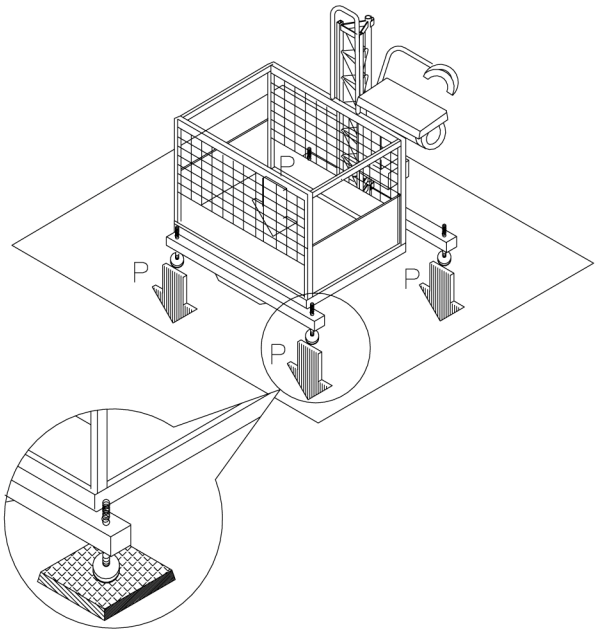
INSTALLATION OF THE BASE UNIT

Only trained workers authorized for operation must install the lift.

The machine must be installed on a floor capable of bearing the following loads relative to the height of the vertical mast.

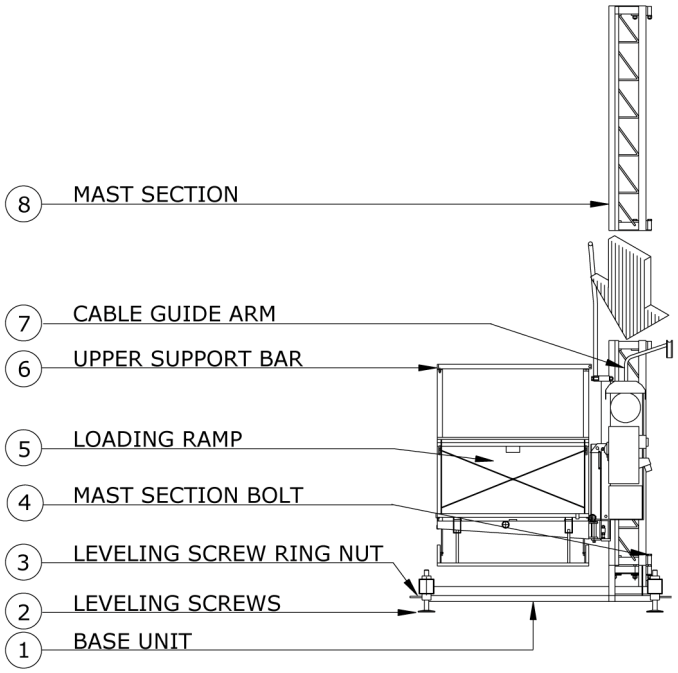
COLUMN HEIGHT IN FEET	MACHINE WEIGHT IN POUNDS	LOAD CAPACITY IN POUNDS	TOTAL LOAD IN POUNDS
5	986	1000	1986
80	2398	1000	3398
165	3828	1000	4828
245	5258	1000	6258
330	6688	1000	7688
400	7832	1000	8832





To assemble the machine, use a pair of 24mm hexagonal wrenches.

- Lay the base unit on the ground
- Check that the distance from the wall or support frame is correct for type of bolting supplied (min. 20 in.)
- Use a level to check the horizontal alignment of the base (1) and vertical alignment of the mast.
- Make adjustments to level using the 4 adjusting screws (2). After leveling, lock screws with ring nuts (3)
- Make sure the screws (4) of the vertical mast on the base (1) are firmly tightened.
- Check that the loading ramps (5) and the upper support bar (6) work properly
- Swivel the cable guide (7) to it's operating position and lock it.
- Fit the 2nd (8) mast section and lock it with the bolts provided.



CAUTION

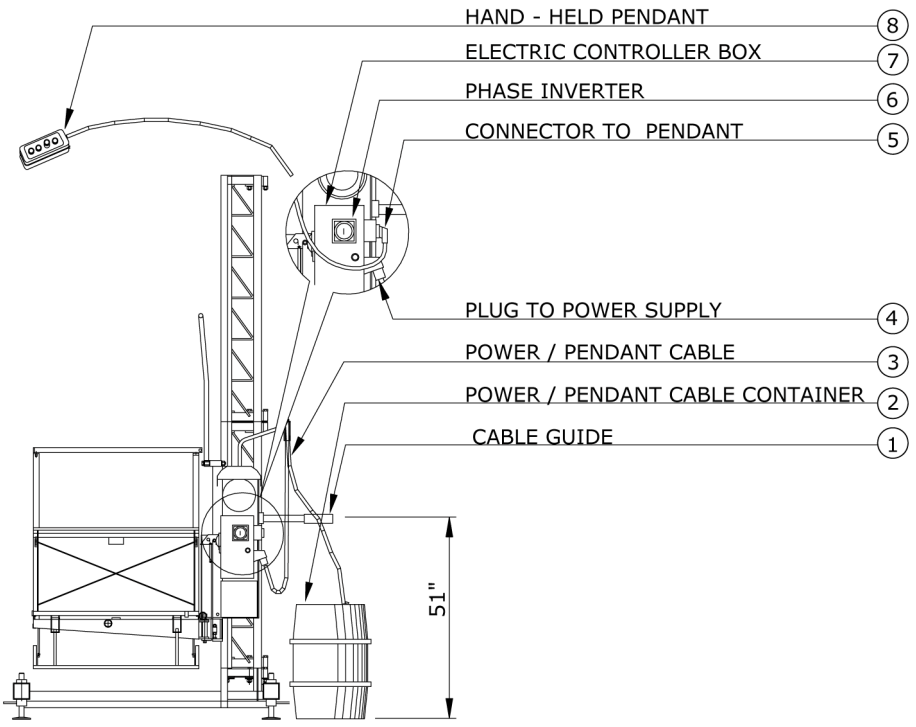
Regular tightening of the 4 vertical mast bolts ensures the stability of the machine in use. Periodically check that they are tightened. Only use class 8.8 (12) bolts.

Check the vertical alignment of the mast again in both directions and make necessary corrections by always turning the leveling screws on the base unit and locking in place.

Before connecting the machine to the power supply make sure that:

1.The line is grounded and is fitted with a differential cut-out switch
2.The power supply matches the machine specifications
3.The power supply cable is the correct size
4.The grounded wire of the system has been connected

- About 4 ft. above the ground attach the first cable guide arm (1) and fix it with a clamp
- Place the box (2) for the power/pendant cable (3) to ensure that cable freely winds & unwinds
- Plug the machine into electric power line by inserting plug (4)
- Couple the connector (5) of the control board (8). Test movement by depressing up/down buttons
- Should the control not coincide with the motor phase, a special device prevents any movement.
- The phase inverter (6) fitted on the door lock mechanism of the control box (7) needs to be operated
- Enable ascent. A safety device, proximity switch stops the motor unit from going off course???



The lift is now ready for installation of the next vertical mast sections.

ASSEMBLING THE VERTICAL MAST

After installing the base unit of the system, the vertical mast sections can now be assembled. For this purpose, two operators may board the lift and operate as described in this section. Get onto the deck by lifting the bars that must then be closed again and locked before proceeding.

WARNING

While assembling the machine, never rotate the deck and keep it in the locked position. The deck can only be rotated after the mast has been fastened to the wall or scaffold using the clamps provided.

CAUTION

In case of an emergency that requires the system be stopped immediately, press the red STOP button located on the pendant.

CAUTION

The vertical mast, for safety purposes, must always be assembled and disassembled on the deck by two authorized workers wearing safety helmets and full body harness.

- Load the 1st mast section onto the deck and lower the mast guard. The unit will only operate if the mast guard is in the closed and straight up position.
- Fit and connect the 1st mast section with the bolts provided.
- Align and fit, 6 ft. above the ground, the 1st securing bolt (temporary safety bolt for assembly/disassembly)
- Lower base unit to ground and load 2 mast sections and 1 complete securing bolt on the deck.
- Raise the base unit and assemble the mast using the securing bolt.
- Lower the deck to the ground and leave the deck to conduct the emergency braking tests.

CAUTION

A proximity switch is built into the motor drive unit that automatically stops the lift near the end of the top mast. If stopped, the base unit can only travel in the down direction.

CAUTION

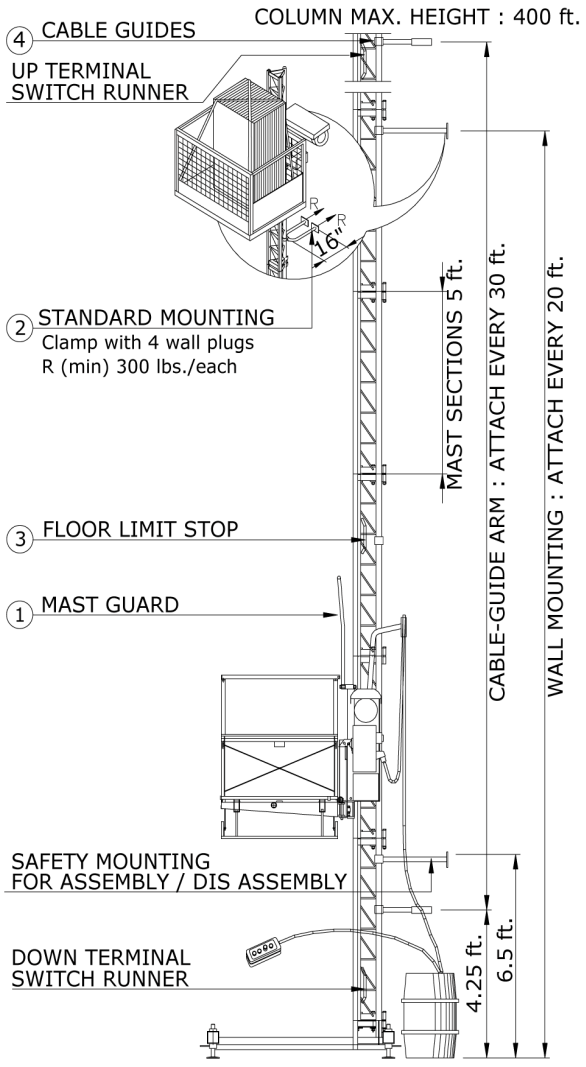
If any of the acting limit switches and sensors detect an "open" condition, all power will be cut to the system. To restore power, depress the green button on the pendant.

CAUTION

If the nuts and bolts of the mast sections are not tightened, the system could overturn.

CONTINUATION OF ASSEMBLING THE VERTICAL MAST

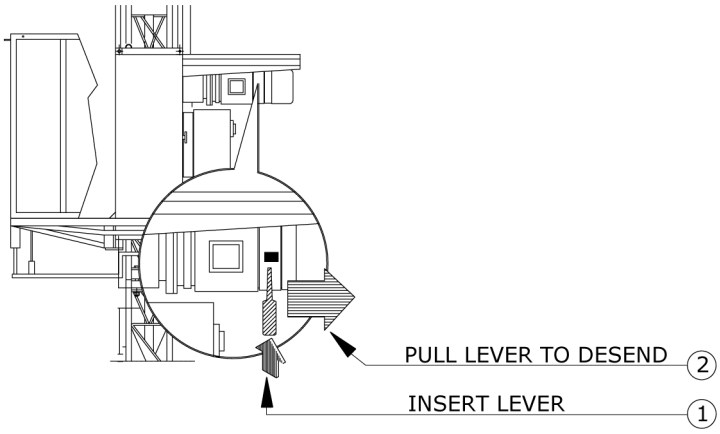
- Raise the deck to the top limit of the pre-assembled mast, lower the mast guard (1) and set the next mast section in place making sure the bolts are tightened.
- To reactivate ascent, always put the mast guard (1) in the closed and straight up position.
- Proceed as described above for the remaining mast sections until system is built to desired height.
- If necessary, attach floor stops (3) at desired levels during mast assembly. The floor stop will allow the unit to automatically stop at pre-set levels.
- Make sure that each floor access is properly cordoned off and fitted with warning signs…"free fall hazard."
- Attach cable guides (4) every 30-ft. in normal conditions and every 20 ft. in windy conditions.
- Secure the vertical mast to the building or scaffold every 20-ft. using clamps provided (2).
- After assembling the last mast section, fit the up limit switch. Install the last wall or scaffold clamp even if the distance from the previous one is less than 20 ft., also make sure the Mast Straightening Tie is attached at this position using the 90 degree fixed clamp.
- After assembling the vertical mast, lower the deck to the ground.
- Remove the pendant from the on-board control panel and reconnect it to the standard operating pendant connector.



CAUTION

Should the electric power supply fail while assembling or disassembling the system, and consequently the deck stops with persons on board, the lift can be lowered by operating the motor brake following these steps:

- Take the release lever (1) screwed on the motor casing and screw it onto the nearby hole
- Release the brake by pulling the lever (2) very slowly to perform a very slow descent down to the height where one can exit the deck.



It is very important that the manual descent be done very slowly (no more than 20 fpm) because a quick descent will activate the emergency over-speed brake. Once the emergency over-speed brake is activated the unit must move up to begin using the manual brake release again and without power the unit is unable to move up or down.

THE SYSTEM IS NOW READY FOR REGULAR SERVICE AND NO PERSON IS PERMITTED TO RIDE ON THE DECK.

To disassemble the system, follow instructions on previous pages but in reverse order.

EMERGENCY BRAKE TESTS

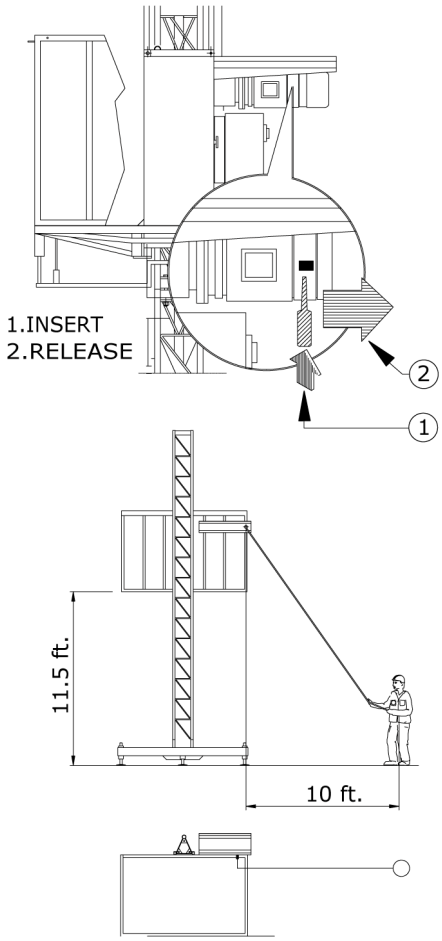
The emergency over-speed brake test must conducted every 3 months and/or whenever the system is assembled by trained personnel.

To conduct the test the following conditions must be met:

- The machine must be firmly secured
- The access under the deck must be completely cleared and cordoned off
- The loading deck must be raised to a height of 11.5 ft. above the ground
- The machine must be unloaded

To simulate the operation of the emergency brake, the motor brake must be disabled. By disabling the brake, the loading deck accelerates down until the emergency brake is applied. Therefore, trained workers must perform this operation with utmost care. Take the following steps:

- Take the release lever (1) that is screwed on the motor casing and screw it into the nearby threaded hole.
- Connect the lever (1) with a rope made of nylon or similar material at least 1/4-1/2 inches in diameter
- Move about 10 ft. from the loading deck and pull the rope. This action will open the motor brake.
- At this point the unit always descends faster until the emergency brake is activated.
- The downward movement should not exceed 12 inches from when emergency brake is activated until locked.
- Should the unit not stop, immediately release the rope to reactivate the motor brake (to stop the machine)
- In this case, immediately contact the manufacturer or dealer since the emergency brake is not operating
- Should the test be positive, load the machine with 550 lbs. and then 1100 lbs. and conduct test again.
- After checking efficiency of emergency brake, lower the unit to ground by first pressing up button, this will reactivate the emergency brake and then pressing the down button.
- The loading deck will stop at the bottom limit switch
- Remove the rope, unscrew the lever (1) and place it in the motor casing.



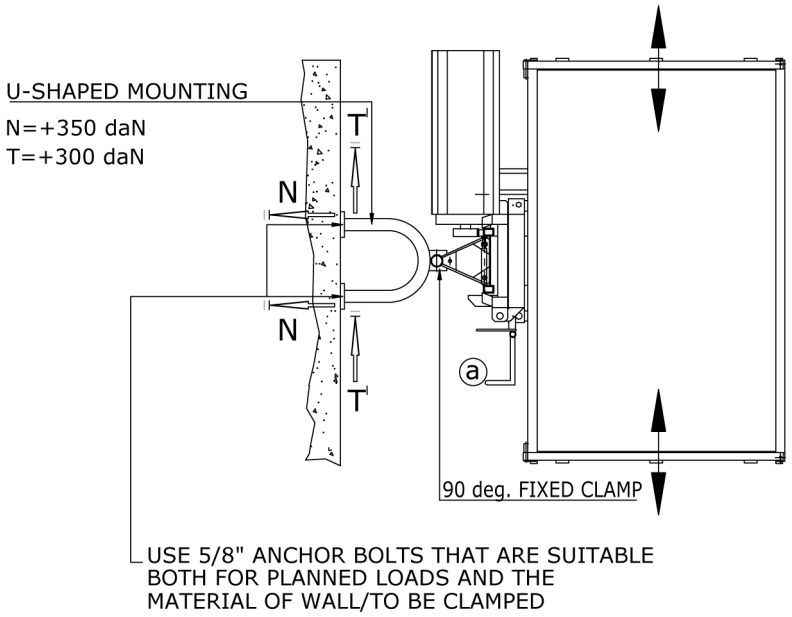
NEVER LEAVE THE RELEASE LEVER IN THE BRAKE!

Should the braking of either the motor brake or the emergency over-speed brake be too slow or too sudden, the brake control must be adjusted by following instructions in the section, "NON-ROUTINE MAINTENANCE",page 24.

WALL MOUNTING

Standard Wall Mounting:

The wall mounting, which must be secured every 20-ft., is used to vertically support the whole mast tower and is a very important element to the safe and proper use of the machine. Therefore, make sure all screws and clamps are tightened and check frequently.

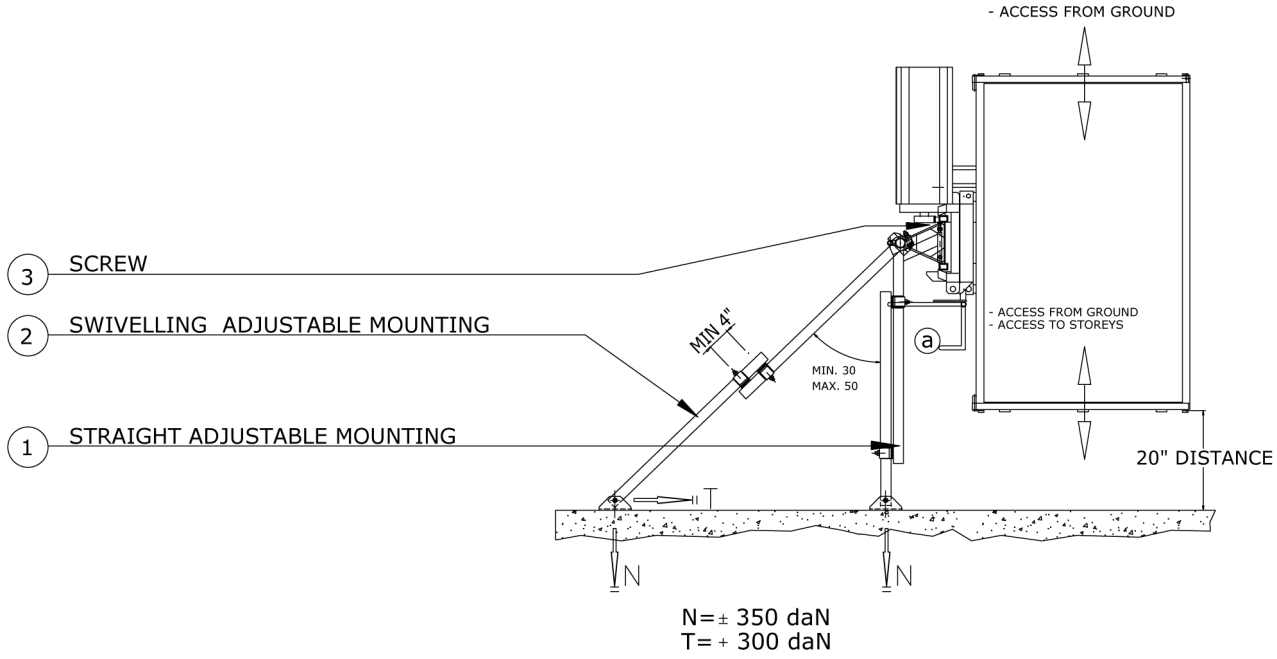


WARNING

Not to interfere with the bolts, fasten the release lever (a) of the turning plate parallel to the deck wall.

SPECIAL WALL MOUNTING

- Place the element (1) by first loosening the bolt (3). Then place element (2) and adjust its distance.
- Fit element (1) and (2) to a wall with wall plugs or to a metal frame with swivel clamps able to bear the indicated loads.
- Check the vertical alignment of the unit. Loosen the bolt (3) until it touches the pipe of the vertical mast, this stiffens the securing point, do not secure the corner for cement of similar structures.



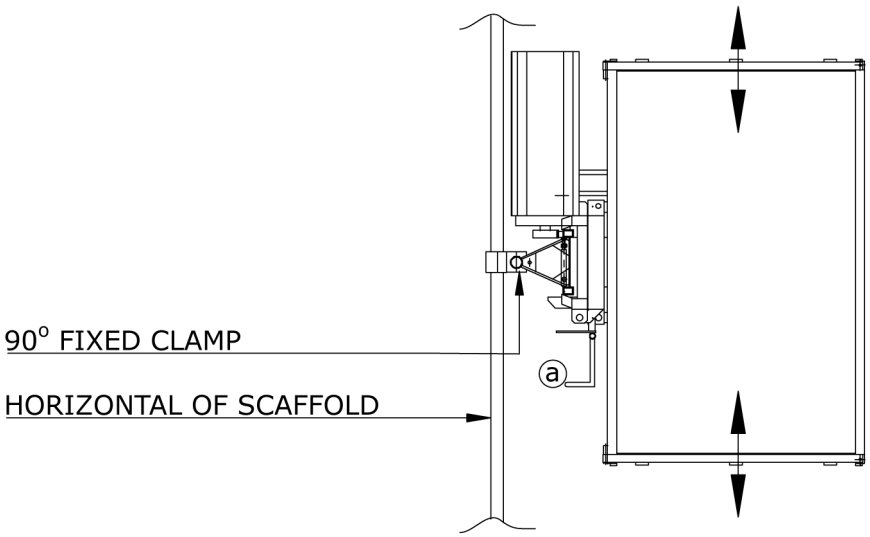
Use **5/8wall plugs** suitable both for the indicated loads and the type of wall material. Should the lift be connected to scaffold, make sure the scaffold can bear the transmitted loads.

WARNING

Not to interfere with the bolts, fasten the release lever (a) of the turning plate parallel to the deck wall.

SCAFFOLD MOUNTING

For securing The Max Climber 1000 to a scaffold sysytem use 90 degree fixed clamps at both the vertical mast section and the horizontil member of scaffolding.



TESTING BEFORE USE

After assembling the entire vertical mast and before starting to use the machine, a complete up and down run needs to be traveled for a general check of the installation. This specifically includes:

- Checking the safety devices
- Checking the vertical mast has been properly assembled
- Checking the limit switches on the floor stops and the base & top
- Checking for any interference of the deck with obstacles present along the run
- Checking that all bolts are properly tightened

After conducting the above checks, the machine operator is advised to sign an operation authorization form.

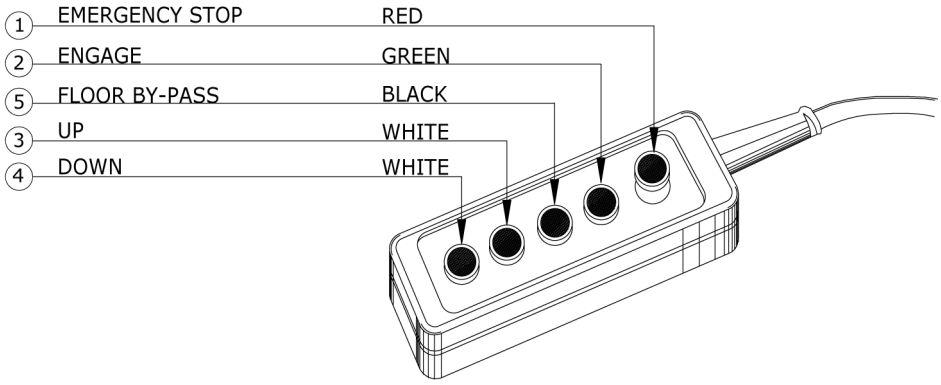
Before using the machine, make sure that:

- The operating area is regularly cordoned off
- The floor accesses are properly closed with barriers and signage
- The machine is properly placed on the ground sufficient to bear the total weight
- The vertical mast is firmly secured to the wall or scaffold every 20-ft.
- The machine has not been tampered with
- Electrical connections have been made properly
- The pendant is connected
- Safety devices are enabled and in good working condition
- Environmental conditions are favorable (see section on safety guidelines)

MACHINE CONTROLS AND OPERATOR'S GUIDE

CAUTION

Ensure that the red, emergency stop button is not depressed.



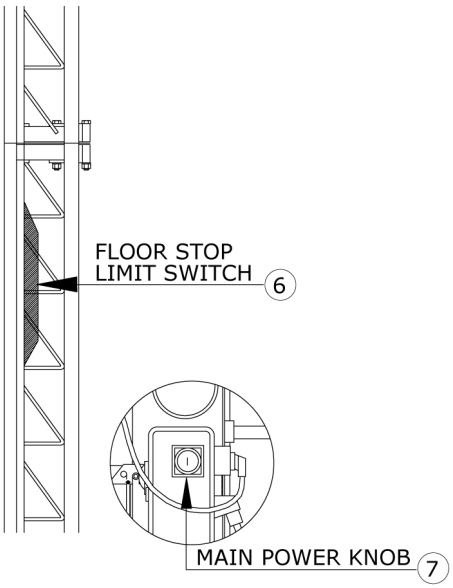
REGULAR OPERATION:

You must first press the green engage button to engage contacts in the controller. The hoist is now ready for regular operation. Depress the up or down button to raise or lower the basket. The emergency stop button will disconnect all power to the system and should only be used in emergency situations where normal operation must stop immediately. When the emergency stop button has been depressed you must start again by depressing the engage button to ready for up or down movement.

FLOOR BY-PASS OPERATION:

The Max Climber can be operated with optional floor stops (6) (see section on assembling the vertical mast) which allow the basket to stop at pre-set floors. When raising the basket the system will automatically stop when the basket detects a floor stop. To by-pass any floor stop you must press both the black, floor by-pass button and the up or down button simultaneously. If the basket stops at a floor stop, you must press the floor by-pass button and the up or down button to begin operation again.

The main control panel is fitted with a power knob (7) with a door lock and a phase inverter function. Turn the power knob to activate the electric power supply.



START UP:

To start up the machine:

- Enable the power knob on the control panel
- Grip the pendant
- Press the start button
- Press the up button to raise the deck a few feet.
- Release the up button and check the machine stops regularly (must stop instantly)
- Press the down button and return to the ground.
- Enable ascent until the required level has been reached
- When the required level has been reached the operator on that level may open the barrier, release the stop lock of the turning plate and turn the deck.
- Lift the protecting bar and lower the access ramp of the deck.
- Unload goods
- Close the ramp, lower the protecting bar and turn the deck to the regular operating position.
- Close the barrier on the working level again.

CAUTION

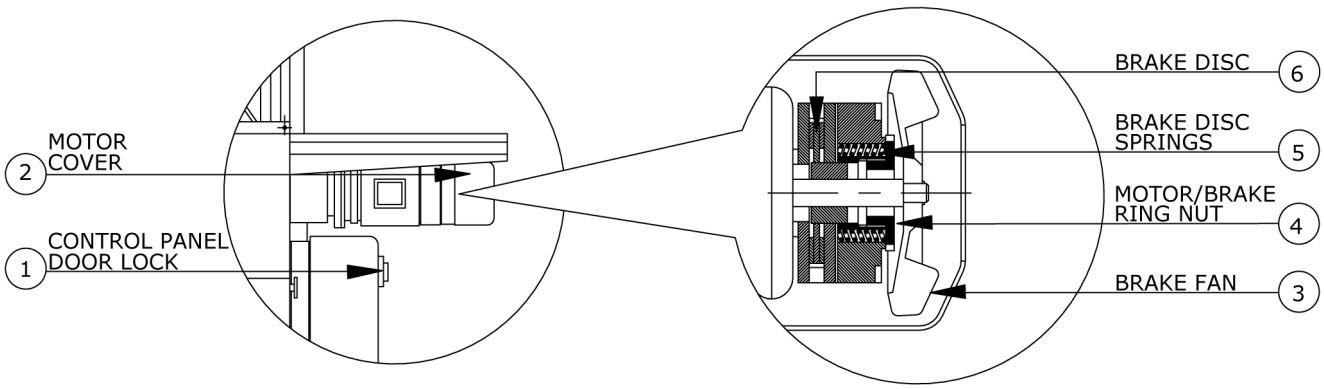
WHEN NOT USING THE MACHINE, MAKE SURE THE DECK IS LOWERED TO THE GROUND, DISABLE THE MAIN POWER KNOB ON THE CONTROL PANEL TURNING IT TO “0”, UNPLUG FROM POWER SUPPLY AND REMOVE PENDANT FROM POWER SUPPLY CABLE TO PREVENT USE BY UNAUTHORIZED PERSONS.

ADJUSTMENTS AND REGULATIONS

The Max Climber 1000 does not require any special adjustment after being delivered. However, if need be, take the following steps to adjust the service and emergency over-speed brakes:

A. Should the machinery not be moving and tend to slip, the service brake needs adjusting. This operation must be carried out only by the technical support center or by a trained and authorized technician.

- Lower the deck to the ground
- Disable the electric power line by using the main power knob (1) on the control panel
- Open the motor cover
- Screw the motor brake ring nut (4) with a wrench clockwise about 180 degrees so as to increase pressure of the springs (5) on the brake disc (6). Conduct an unloaded operation test and a fully loaded operation test.
- Refit the motor cover and enable the main power knob of the control panel.



B. Instructions for adjusting the emergency over-speed brake can be found in the section “NON-ROUTINE MAINTENANCE” on page 25.

MAINTENANCE OF THE MAX CLIMBER 1000

The Max Climber 1000 has been designed and manufactured with the correct components to reduce maintenance and to ensure efficient operation. The user has to make sure periodic maintenance is carried out to always maximize machine efficiency. The simple operations and the checks required, if performed regularly, let you always keep the machine in efficient and safe working order.

The main steps that the user has to take are described below:

PERIODIC MAINTENANCE

At least once a week and after any adverse weather conditions, check the whole machine. This is to specifically include:

- Efficiency of electric safety devices
- Wall-mounted or scaffold-mounted securing bolts are stable and tightened

At least once per month check that the:

- Bolts are tightened on each vertical mast section and on each mounting clamp
- Gear motor unit clamping bolts are tightened
- Mast sections have not moved, shifted or rotated
- Motor drive guide and sliding rollers smoothly run on the column
- Gear motor unit works efficiently. Also check its noise level to see if there are any gear irregularities
- Gear reducer is correctly lubricated and the motor brake works efficiently
- Emergency over-speed brake works efficiently, by greasing the pins and the ratchet gear.
- Power supply/pendant control cable are in good working order
- Whole machine is clean
- Rack is greased to reduce wear on both the rack and the lifting pinion

NON-ROUTINE MAINTENANCE

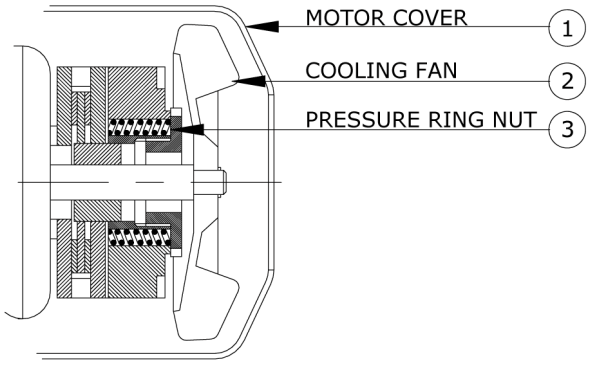
At least once per month or whenever you doubt their efficiency, check the service and emergency over-speed brakes. These checks need to be performed by a trained and authorized person.

CAUTION

All maintenance jobs must be carried out with the deck on the ground and with the power supply off. Unplug the power supply cable and switch off the main power knob on the control panel.

Gear Motor:

- Change the oil for the first time after 100 hours of operation
- Then change the oil every 2000 hours of operation or at least once per year
- Empty and fill through the caps provided
- The gear reducer is immediately emptied after operation with hot oil to prevent deposits
- Clean the caps (especially the magnetic cap) before putting them back on

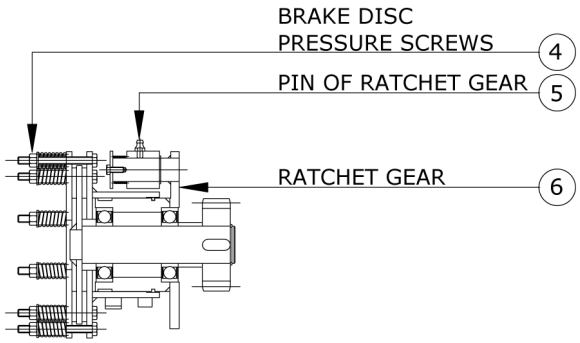


Adjusting the service brake:

See section on adjustments and regulations on page 24

Adjusting the Emergency Over-speed Brake:

- Lower the machine to the ground
- Disable the electric power line with the main power knob on the control panel
- Open the emergency over-speed brake guard by removing the screws
- Adjust all brake disc pressure screws (4) until the required load has been reached
- Use the lubricator (5) to grease the pin of the ratchet gear (6)
- Conduct an operational test before using the machine as described on page "Emergency Brake Tests"



In case of damage, other non-routine maintenance or repair jobs must be carried out only by the technical support department that will issue a regular maintenance declaration and enter it in this manual in the assigned space.

TROUBLE-SHOOTING

The potential failures that may occur on the Max Climber System can mainly be attributed to the electric system. In this case it is always advisable to contact the manufacturer's technical support department

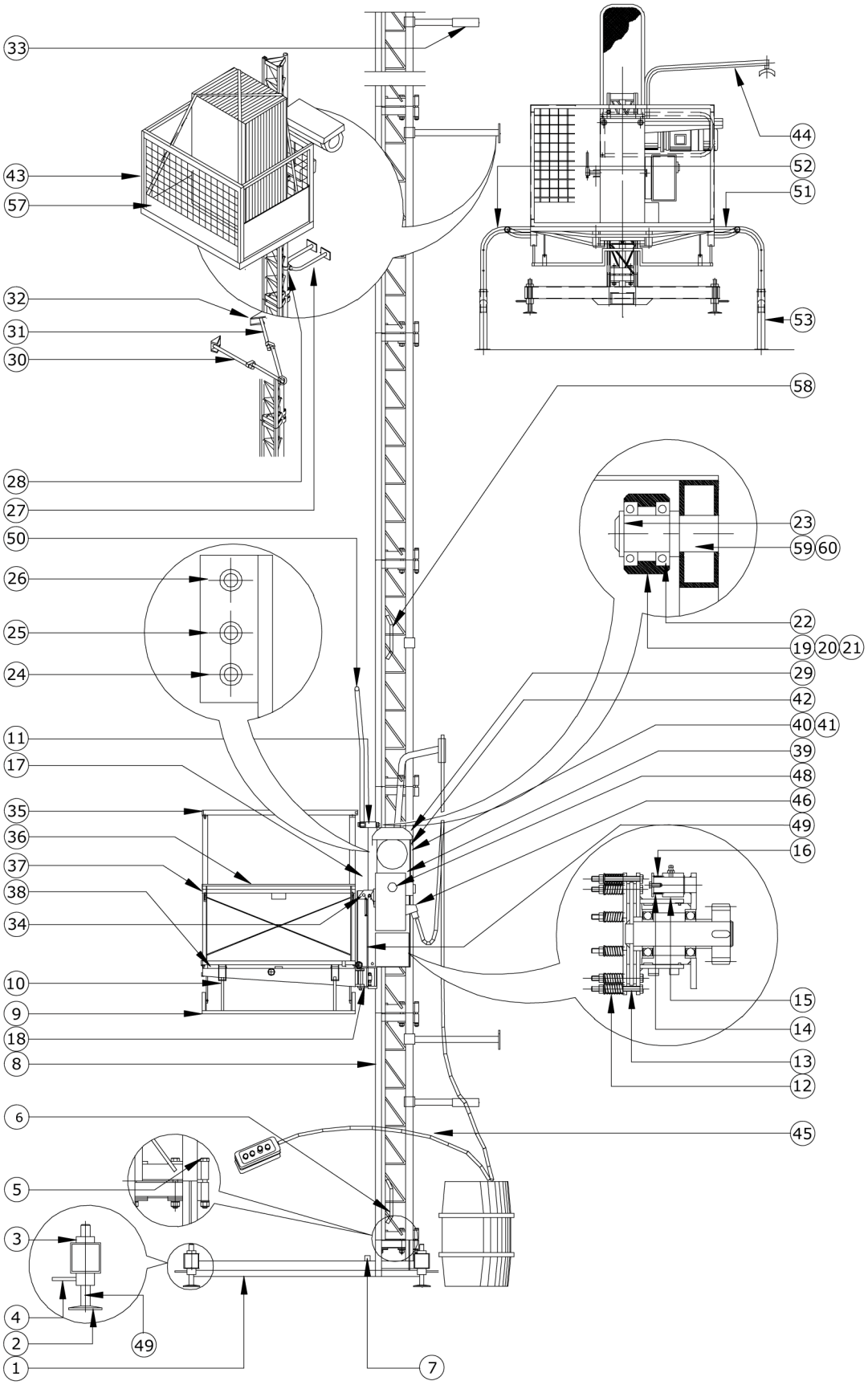
PART	PROBLEM	CAUSE	REMEDY
Control Panel	Deck is jammed	Electric power failed	Restore power supply
Control Panel	Deck is jammed	Fuse has broken	Replace fuse in control panel
Emergency O/S Brake	Deck is jammed	Ratchet gear spring is broken	Replace the spring with an original part
Service Brake	Slow or inadequate braking	Linings are worn or electromagnet is broken	Replace linings or electromagnet

WARNING

To ensure safety, reliability and the validity of the guarantee, always use only original spare parts!

SPARE PARTS

1	BASE FRAME	**31**	DIAGONAL ADJUSTABLE BRACKET
2	BASE LEVELING JACK	**32**	BASE PLATE
3	BASE LEVELING JACK TOP NUT	**33**	CABLE GUIDE
4	BASE LEVELING JACK BOTTOM NUT	**34**	SPRING PLATFORM LOCK
5	MAST BOLT AND NUT	**35**	PROTECTION BAR FOR ERECTION PLATFORM
6	DESCENT LIMIT SWITCH SKID	**36**	LOADING RAMP
7	RUBBER BUFFER	**37**	LOADING RAMP HANDLE
8	MAST SECTION	**38**	LIMIT SWITCH ON LOADING RAMP
9	ANTI-CRUSH GRID	**39**	COMPLETE CONTROL PANEL
10	SPRINGS	**40**	GEAR BOX
11	PHOTOCELL	**41**	ELECTRICAL MOTOR 240V
12	BRAKE SPRING	**42**	
13	BRAKE LINING	**43**	
14	BRAKE WHEEL	**44**	CABLE SUPPORT ARM
15	RATCHET GEAR- SAFETY BRAKE	**45**	COMPLETE PENDANT
16	SPRING	**46**	MANINS CONNECTOR
17	UPPER PLATFORM PIVOT	**47**	
18	LOWER PLATFORM PIVOT	**48**	CONTROL CONNECTOR
19	COMPLETE WHEEL (SPECIAL PLASTIC)	**49**	LEVELING JACK
20	STEEL SIDE ROLLER	**50**	MAST GUARD
21	STEEL FRONT ROLLER	**51**	UNLOADING SUPPORT RIGHT
22	GUIDE ROLLER BEARING	**52**	UNLOADING SUPPORT LEFT
23	CIRCLIP	**53**	UNLOADING SUPPORT BASE
24	SAFETY BRAKE PINION	**54**	LIMIT SWITCH TYPE 1
25	IDLER PINION	**55**	LIMIT SWITCH TYPE 2
26	DRIVE PINION	**56**	LIMIT SWITCH TYPE 3
27	STANDARD U BRACKET	**57**	SPRING FOR LOADING RAMP
28	STANDARD BRACKET CLAMP	**58**	LANDING LIMIT SKID
29	GEAR BOX COVER	**59**	GUIDE ROLLER SHORT PIN
30	STRAIGHT ADJUSTABLE BRACKET	**60**	GUIDE ROLLER LONG PIN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