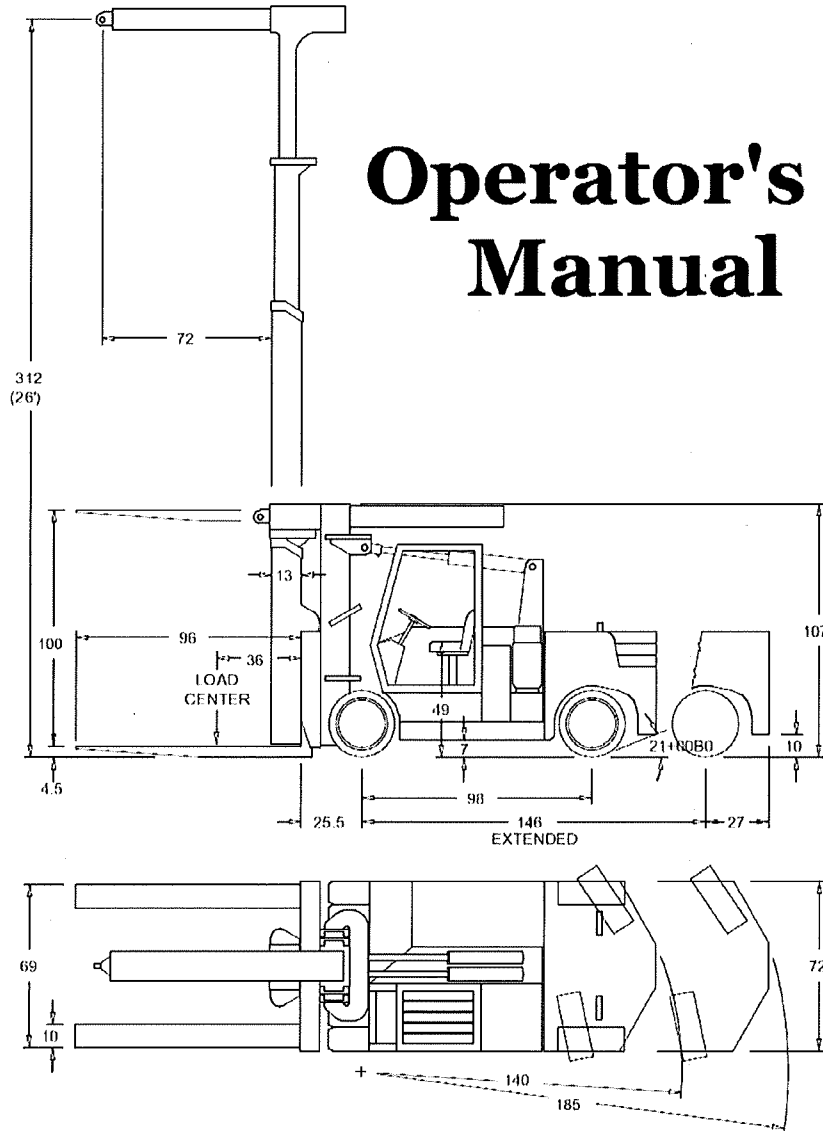


40/60

VERSA-LIFT

Operator's Manual



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40/60 Versa-Lift with 0 Counterweight Slabs

Slab Weight (lbs)
3750

Number of Slabs
0

Standard Wheel Base
98

		Lift Capacities w/Forks Only (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Fork Face (in)	36	22100	24400	26800	29100	31400
	48	18500	20500	22400	24300	26300
	60	15900	17600	19200	20900	22600
	72	14000	15400	16900	18300	19800
	84	12400	13700	15000	16300	17600

		Lift Capacities w/Boom Only (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Boom Face (in)	24	20500	22700	25000	27300	29600
	36	17200	19100	21000	22900	24800
	48	14800	16400	18100	19700	21400
	60	13000	14400	15900	17300	18800
	72	11600	12900	14100	15400	16700
	84	10400	11600	12800	13900	15100
	96	9500	10600	11600	12700	13700
	108	8700	9700	10700	11600	12600
	120	8100	9000	9900	10800	11700

		Lift Capacities w/Boom & Forks (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Boom Face (in)	24	19100	21400	23700	25900	28200
	36	16000	18000	19900	21800	23700
	48	13800	15500	17100	18700	20400
	60	12100	13600	15000	16500	17900
	72	10800	12100	13400	14700	16000
	84	9800	10900	12100	13200	14400

***All Load Capacities are Rated with the Mast Vertical

40/60 Versa-Lift with 1 Counterweight Slabs

Slab Weight (lbs) Number of Slabs Standard Wheel Base
 3750 1 98

		Lift Capacities w/Forks Only (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Fork Face (in)	36	27000	29900	32800	35700	38600
	48	22600	25000	27400	29900	32300
	60	19400	21500	23600	25700	27800
	72	17000	18900	20700	22500	24300
	84	15200	16800	18400	20100	21700

		Lift Capacities w/Boom Only (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Boom Face (in)	24	25300	28100	31000	33800	36700
	36	21200	23600	26000	28400	30800
	48	18300	20300	22400	24400	26500
	60	16000	17800	19600	21500	23300
	72	14300	15900	17500	19100	20700
	84	12900	14300	15800	17300	18700
	96	11700	13100	14400	15700	17000
	108	10800	12000	13200	14400	15600
	120	10000	11100	12200	13300	14500

		Lift Capacities w/Boom & Forks (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Boom Face (in)	24	23900	26800	29600	32500	35300
	36	20100	22500	24900	27200	29600
	48	17300	19300	21400	23500	25500
	60	15200	17000	18800	20600	22400
	72	13500	15100	16800	18400	20000
	84	12200	13700	15100	16600	18000

***All Load Capacities are Rated with the Mast Vertical

40/60 Versa-Lift with 2 Counterweight Slabs

Slab Weight (lbs)
3750

Number of Slabs
2

Standard Wheel Base
98

		Lift Capacities w/Forks Only (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Fork Face (in)	36	31900	35400	38900	42300	45800
	48	26700	29600	32500	35400	38300
	60	22900	25400	27900	30500	33000
	72	20100	22300	24500	26700	28900
	84	17900	19900	21800	23800	25700

		Lift Capacities w/Boom Only (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Boom Face (in)	24	30100	33500	36900	40300	43800
	36	25200	28100	31000	33800	36700
	48	21700	24200	26700	29100	31600
	60	19100	21200	23400	25600	27800
	72	17000	18900	20900	22800	24800
	84	15300	17100	18800	20600	22300
	96	14000	15600	17200	18700	20300
	108	12800	14300	15700	17200	18700
	120	11900	13200	14600	15900	17300

		Lift Capacities w/Boom & Forks (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Boom Face (in)	24	28700	32200	35600	39000	42400
	36	24100	27000	29800	32700	35600
	48	20800	23200	25700	28200	30700
	60	18200	20400	22600	24700	26900
	72	16200	18200	20100	22100	24000
	84	14700	16400	18200	19900	21600

***All Load Capacities are Rated with the Mast Vertical

40/60 Versa-Lift with 3 Counterweight Slabs

Slab Weight (lbs)
3750

Number of Slabs
3

Standard Wheel Base
98

		Lift Capacities w/Forks Only (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Fork Face (in)	36	36800	40800	44900	49000	53000
	48	30800	34200	37600	41000	44400
	60	26400	29400	32300	35200	38100
	72	23200	25800	28300	30900	33500
	84	20700	22900	25200	27500	29800

		Lift Capacities w/Boom Only (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Boom Face (in)	24	34900	38900	42900	46900	50900
	36	29200	32600	36000	39300	42700
	48	25200	28100	31000	33900	36800
	60	22100	24700	27200	29700	32300
	72	19700	22000	24200	26500	28800
	84	17800	19800	21900	23900	26000
	96	16200	18100	19900	21800	23600
	108	14900	16600	18300	20000	21700
	120	13700	15300	16900	18500	20100

		Lift Capacities w/Boom & Forks (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Boom Face (in)	24	33500	37500	41500	45500	49500
	36	28100	31500	34800	38200	41600
	48	24200	27100	30000	32900	35800
	60	21300	23800	26400	28900	31400
	72	19000	21200	23500	25800	28000
	84	17100	19100	21200	23200	25300

***All Load Capacities are Rated with the Mast Vertical

40/60 Versa-Lift with 4 Counterweight Slabs

Slab Weight (lbs) Number of Slabs Standard Wheel Base
 3750 4 98

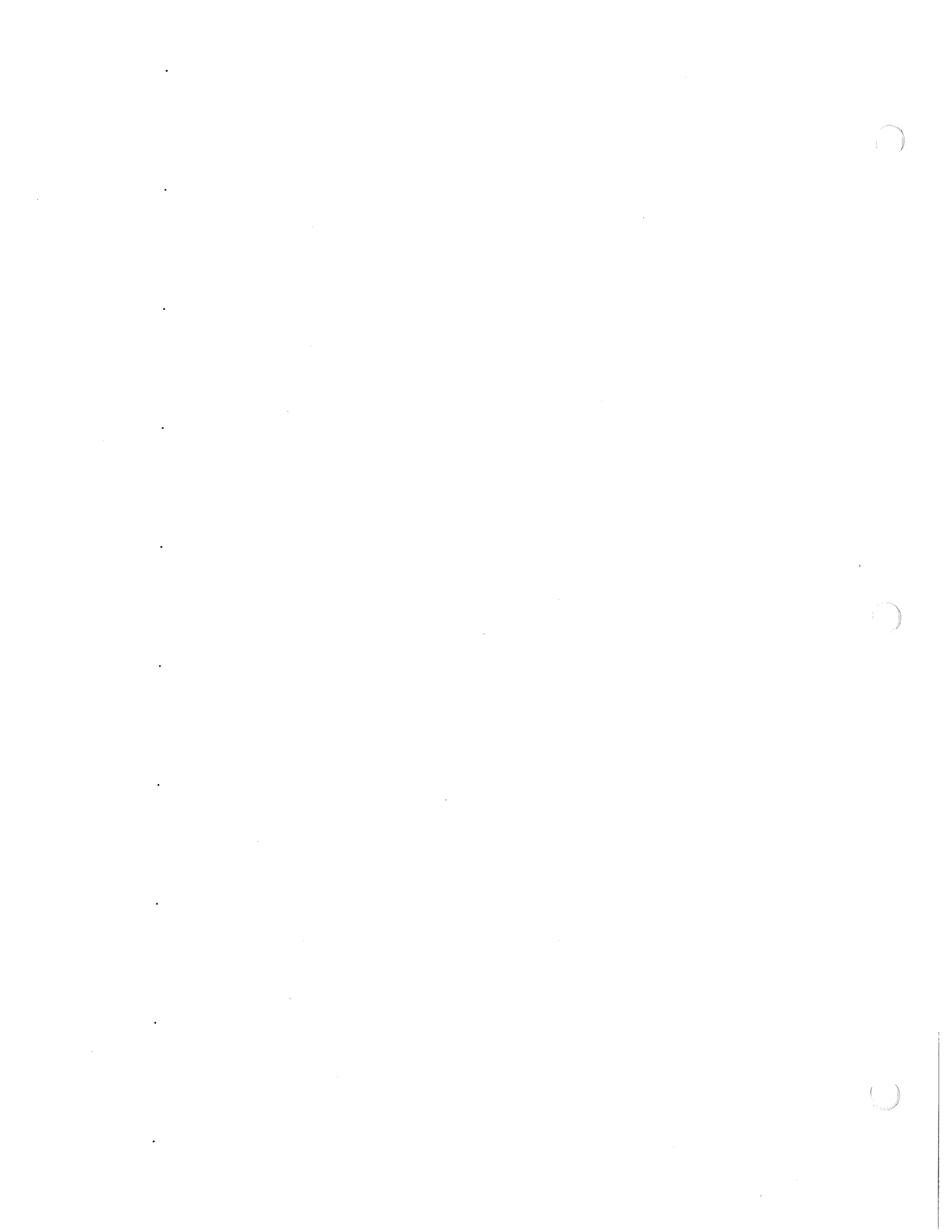
		Lift Capacities w/Forks Only (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Fork Face (in)	36	41600	46300	51000	55600	60300
	48	34800	38700	42600	46500	50400
	60	30000	33300	36600	40000	43300
	72	26300	29200	32100	35100	38000
	84	23400	26000	28600	31200	33800

		Lift Capacities w/Boom Only (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Boom Face (in)	24	39700	44200	48800	53400	58000
	36	33300	37100	41000	44800	48600
	48	28700	32000	35300	38600	41900
	60	25200	28100	31000	33900	36800
	72	22400	25000	27600	30200	32800
	84	20200	22600	24900	27200	29600
	96	18400	20600	22700	24800	26900
	108	16900	18900	20800	22800	24700
	120	15600	17400	19200	*21000	*21000

* Structural Limitations

		Lift Capacities w/Boom & Forks (lbs)				
		Counter Weight Extension (in)				
		0	12	24	36	48
Load Center From Boom Face (in)	24	38300	42900	47500	52100	56600
	36	32200	36000	39800	43700	47500
	48	27700	31000	34300	37600	40900
	60	24300	27200	30100	33000	35900
	72	21700	24300	26900	29400	32000
	84	19600	21900	24200	26600	28900

***All Load Capacities are Rated with the Mast Vertical



Introduction

This manual will cover general safety rules, basic operations of lift truck, and a lubrication schedule. This manual cannot include all possible operating hazards and procedures, but will give a general overview.

Lift Truck Application

The Versa-Lift is a specialty cushion (solid) tired machine for moving heavy loads on smooth dry surfaces. This machine should be operated using the same safety rules as any other lift truck. The Versa-Lift also has other features not found on common lift trucks like a telescoping frame, removable counterweights and a special boom attachment. These features allow for many variations in capacity and different methods of lifting a load.

General Safety Rules

- Inspect the lift truck before operations
- Never drive under the influence of drugs or alcohol
- Wear the proper safety equipment when required
- Be aware of no smoking areas
- Don't block safety or emergency equipment
- Watch for pedestrians
- Slow down when on slippery or loose surfaces
- Know your weight and axle loads when crossing floors
- Know your available capacity, load weight and the load center before attempting a lift
- Always use your seat belt
- No riders on the lift truck
- Do not lift anyone on the forks
- Do not allow anyone to walk under raised forks
- Sound horn when crossing intersections
- Watch out for people in your work area
- Keep under the overhead guard when lifting
- Keep hands and legs inside the operator's station
- If the load blocks your view, go backward
- Never turn on a grade
- Carry the load tilted back whenever possible
- Don't jump from a tipping lift truck. Stay in the seat
- Chock wheels of trailer when docking the machine
- Keep hands and legs out of all pinch points
- Stay clear of telescoping frame when operating
- Never park on a grade
- Set the parking brake when stopped

Operating Hazards

- Fast turning with an empty truck can turn over easier than a loaded truck
- Sharp turns with a load up can turn the truck over even when moving slowly

- Rear steering swings the tail of the machine out into possible obstacles or out of the aisle
- Telescoping frame with steer turned moves the lift truck sideways
- Never carry loose or uneven materials
- Spread the forks to fit the load
- Long loads reduce the capacity consult the capacity chart
- Avoid swinging the load with the boom
- Boom capacity is with a vertical mast
- Watch low overhead structures
- Operate machine in a well ventilated area

Accidents happen when:

- 1. The operator is not properly trained.**
- 2. The operator is not experienced with the lift truck.**
- 3. Basic safety rules are not followed.**
- 4. The truck was not maintained in a safe operating condition.**

Operating Procedures

How To Operate

Be sure that the operator understands the information in the operator's manual as well as general safety procedures for operating a lift truck. Check over the machine to make sure it is in good working condition. Put the safety belt on and follow the instructions above for starting the machine.

Starting Procedure

The right foot control pedal is the speed control forward as well as backward and must be in the centered neutral position in order for the engine to be started. Check to see that the parking brake knob located on the dash, to the operator's right, is pushed in so that the brake will be set when started. The engine idle control is also on the dash and should be adjusted to a low idle and then the ignition key can be turned to start the engine. If engine is running on gasoline the choke can be used to assist starting the engine when cold. Check gauges for normal conditions for water temp and oil pressure.

Speed Selection

The Versa-Lift has two speeds which can be selected at any time by flipping the switch on the dash. The low speed is for when more power and finer control are required to handle a load and high speed is for traveling with no load. The foot pedal control on the right regulates speed forward and backward in whichever speed you have selected.

Engine Speed

The Versa-Lift has an infinite variable throttle switch. You can choose any speed between idle and 2500 rpm.

Brake

There are no service brakes on this machine because the hydrostatic transmission accelerates and decelerates the machine using the right foot control pedal. The only brake is a parking brake and it is spring actuated and hydraulically released so whenever the engine is off the brake is set. However, when the engine is running, the brake knob on the dash must be pushed to set the brake and pulled to release it.

ALWAYS SET THE PARKING BRAKE WHILE PARKED. THE MACHINE MAY MOVE EVEN WHEN THE OPERATORS FOOT IS OFF THE PEDAL. The brake should be used during normal operations for holding the machine steady especially on inclines. The hydrostatic transmission is capable of holding the machine on an incline by applying the pedal in the opposite direction but for holding over long periods of time use the brake.

Hand Lever Controls

The control levers on the right control the lift, tilt and boom lift in order left to right. The levers are pulled to get lift or to tilt the mast back and the levers are pushed for lowering or tilting the mast forward. The frame extension is controlled by an electric switch on the dash. **THE OPERATOR MUST TURN AND LOOK AROUND THE BACK OF THE MACHINE TO MAKE SURE NO ONE IS NEAR WHEN MOVING THE FRAME. THE STEER WHEELS SHOULD BE IN THE STRAIGHT POSITION BEFORE TELESCOPING THE FRAME BECAUSE TURNED STEER WHEELS WILL SHIFT THE FRONT OF THE MACHINE SIDE TO SIDE.**

Fork Removal And Installation

The carriage has two fork shafts to make it easier to remove the forks. Unbolt the carriage shaft retainers on both sides of the carriage shaft. Pull out the shaft to release the fork. Repeat the procedure for the other side. The installation of the forks should be performed in the opposite order ending with the carriage shaft retainers being securely fastened. A large pinch bar is provided to aid in the positioning of the forks. Notches have been placed above the carriage bar to gain leverage on the fork eye.

Boom Removal and Installation

The boom attachment should be removed utilizing the boom stand provided. The horizontal boom should be extended all the way out so it will balance on the boom stand. Remove the retainer pin at the bottom of the boom and disconnect the hydraulics (The hydraulic quick-disconnects have a pressure release valve built into them and should be set to the closed position before disconnecting). Lower the boom onto the boom stand posts until the boom is released. The installation of the boom is performed in the opposite order ending with the installing of the retainer pin. The boom can also be lifted off the carriage using the lifting eyes on the upper stage if the pin connecting the upper stage to the intermediate stage is in place.

Boom Vertical Extension

The boom has two hydraulic cylinders that are attached to the intermediate stage and are controlled by the third hydraulic lever on the operator's dash. The upper boom stage can be lifted by disconnecting the boom cylinders from the intermediate stage and raising them into the upper stage sockets. The boom retainer pin connecting the intermediate stage to upper stage must be relocated to the lugs that connect the stationary boom to the intermediate stage (This is required to keep the intermediate stage from being dragged up with the upper stage). **IF A LOAD IS BEING LIFTED WITH THE UPPER STAGE, THE PINS MUST BE INSTALLED ON THE ROD END OF THE CYLINDERS. DO NOT USE THE CYLINDER SOCKETS ON THE UPPER BOOM TO LIFT A LOAD. THE UPPER BOOM SOCKETS ARE ONLY TO BE USED WHEN LIFTING THE UPPER BOOM SECTION WITHOUT A LOAD.** A rectangular pin is supplied in the storage compartment that will fit into a hole in the upper stage to retain it. The boom cylinders can then be lowered and pinned to the intermediate stage for achieving greater height.

Boom Horizontal Extension

The horizontal boom is to be extended back and forth to the required position for lifting each

load in order to keep the center of gravity of the load as close to the boom face as possible. This is done by pulling the horizontal retainer pin and then turning the crank until a hole is lined up for the horizontal retainer pin to be installed. THE HORIZONTAL BOOM RETAINER PIN MUST BE IN PLACE AT ALL TIMES EXCEPT WHILE MOVING THE HORIZONTAL BOOM. THE HORIZONTAL BOOM COULD COME OUT OF THE SOCKET IF THE PIN IS NOT IN PLACE.

Boom Lifting Eye Insert

The lifting eye insert is retained by a pin into the end of the horizontal boom. This insert can be removed and turned around if the double lifting eye end is required. THE LIFTING EYE INSERT CANNOT BE SLID OUT OF ITS LOCATION (FULLY INSERTED) TO ACHIEVE MORE REACH. DO NOT REPLACE THE LIFTING EYE INSERT WITH OTHER LONGER EXTENSIONS WITHOUT CONSULTING THE FACTORY.

Remote Controls (Optional)

The remote control system is activated by the MANUAL/REMOTE switch located on the dash. The remote control transmitter hangs around the neck and buckles to the waist. Switch the XMIT toggle to the ON position and the red light beside the switch will flash showing the transmitter is on. The ENGINE switch is used to start the engine and to shut it off. The IDLE switch should be set to IDLE when starting the engine and then 1500 and 2000 RPM can be selected for more engine power and speed. The SLOW/FAST switch allows for all functions on the remote to be fine tuned if slower and smoother operation is required. The DRIVE, MAST, TILT, BOOM, optional WINCH, and STEER levers are all proportional controls where the function is faster when the lever is pushed.

The remote control system is activated by the MANUAL/REMOTE switch located on the dash. The remote control transmitter hangs around the neck and buckles

Display

See the "Smart Controls Guide" for detailed information on the 7" display and other components.