



GM5000-12



Standard Features and Equipment

DRIVE

- Solid rubber tires
- Front wheel drive steering in a tricycle configuration
- 24 VDC battery electric drive
- Electric chassis drive includes transmission and automatic brakes
- Steering tiller includes directional and speed controls, E-Stop, and a belly button switch

CHASSIS

- Extendable Chassis compounds counterweight effects and decreases overall weight
- Removable modular counterweight chassis mounted with power lift installation system
- Manual screw jack load compensator outriggers
- Built in 40 Amp battery charger with linear rate control, 110 volt, 60 hz. single phase
- Electrical circuit breakers

CONTROL

- 16 direction manipulator motions, standard
- Forward reach to 7" frame/mullion depth
- Electronic proportional dual mode control all function for micro motion operation

HYDRAULICS

- 2.8 HP, DC drive motor direct coupled to hydraulic pump
- All hydraulic functions are proportionally controlled, with valves for each boom or manipulator function

VACUUM

- Redundant vacuum pumps, non-lubricated positive displacement, automatic start-stop control
- Vacuum frame accepts variety of cup sizes, fully adjustable.
- Vacuum cartridges include bi-directional coil spring loaded mounts.
- Includes standard 12" x 20" rectangular suction cups

CONSOLE

- Console items include:
 - Hydraulic power On/Off switch
 - Operating mode selector: high vs. low
 - Multi-function controls for all manipulator end effector functions
 - Vacuum release switches
 - Vacuum gauge

SAFETY

- Speed and directional controls handlebar mounted separate from boom/manipulator controls
- Strobe light operates with master battery switch
- Low vacuum level alarm, audible horn
- Safety vacuum check valve valves
- Two button safety vacuum release valves
- Anti-tipping mechanism automatically prevents forward extension of load prior to unbalanced situation; forward tipping is prevented.

GM 5000-12 Dimensions

Characteristic	Specification
Lift Capacity	5,000 lbs.
Closed Chassis Length	120"
Open Chassis Length	168"
Width	44"
Height: Retracted Clearance	82"
Height: Center of Lift Hub	144"
Turning Radius	0"
Unladen Weight (with 1 fixed counterbalance)	5,400 lbs.
Counter Balance (Each)	545 lbs.
(4) 12- HD Bars	85 lbs. each
(12) 12" x 20" Cup Assemblies	35 lbs. each



Powered Manipulator Functions

Control	Assembly	Direction	Viewed from
1	Vacuum Switch	On-Off-Release	Top Plan
2	Vacuum Release Switch	Hold-Release	Top Plan
3	Frame Extension	In-Out	Top Plan
4	Boom Camber	Pivots forward and backward	Top Plan
5	Boom Extender	Raise-Lower	Top Plan
6	Boom Extender	Telescoping Extend – Retract	Top Plan
7	Manipulator – vacuum cup frame	Vertical Tilt	Top Plan
8	Manipulator – vacuum cup frame	Swivel (left-right)	Top Plan
9	Manipulator – vacuum cup frame	Side shift, 2" left & 2" right; 4" total	Top Plan
10	Manipulator – vacuum cup frame	Rotate – CW and CCW 180°	Top Plan
11	Hydraulic Control	On-Off	Top Plan
12	Hydraulic Speed	Hi-Low	Top Plan
13	Low Hydraulic Speed Control	Variable	Top Plan

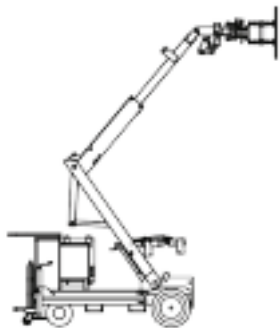
- All hydraulic controls use fine metering valves.
- The hydraulic circuits are equipped with counterbalance valves to prevent leak down and droop under load.
- Dual mode provides console mounted switch selection for micro motion control.

GM 5000-12 Load Chart

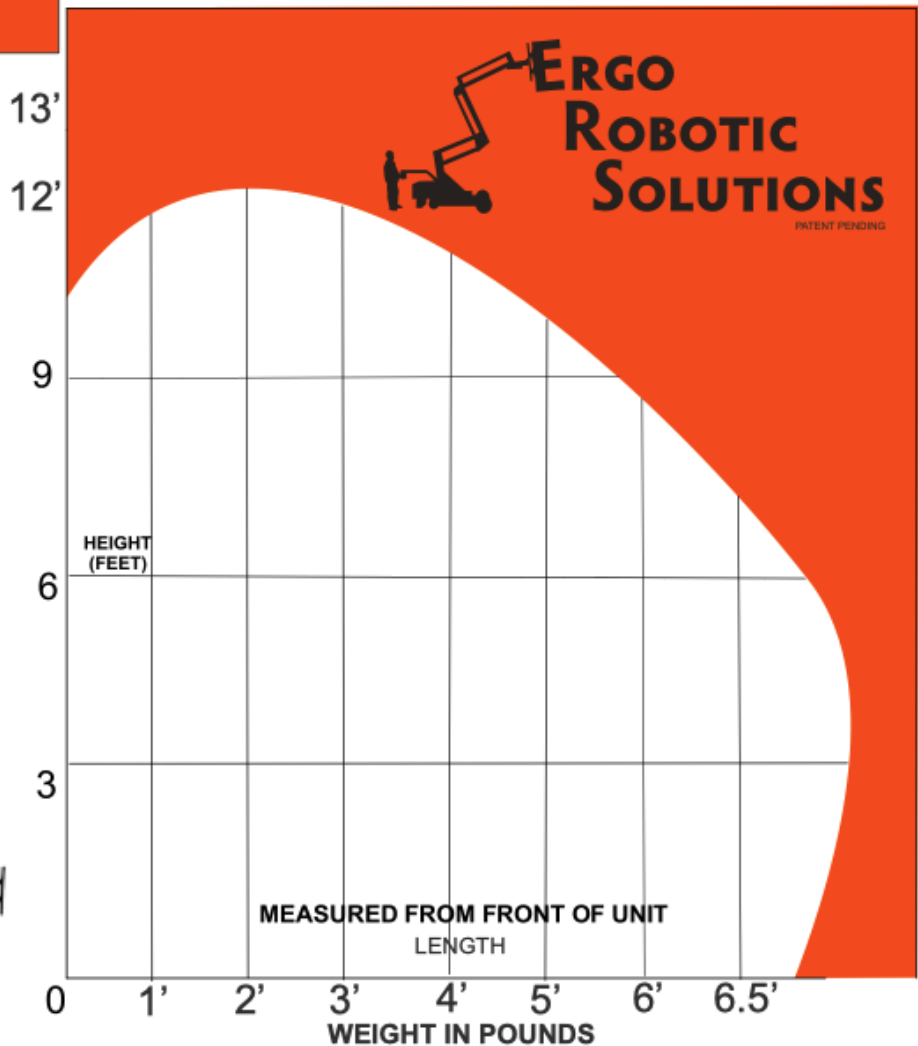
DANGER

**SKYLIGHT HEIGHT
TO 14 FEET**

GM5000-12 VERTICAL LIFT 5000 LBS. MAXIMUM



*** IMPORTANT *
DO NOT EXCEED
PAYLOAD
DISTRIBUTION LOAD**



**NUMBER OF
COUNTER
BALANCE
PLATES**

3

FRAME EXTENDED
FRAME RETRACTED

5000	5000	5000	4000	3600
5000	4100	3100	2400	2200

2

FRAME EXTENDED
FRAME RETRACTED

5000	4500	3800	3500	2800
5000	3400	2300	1800	1600

GM5000-12 DISTRIBUTION CHART