



**ERGO
ROBOTIC
SOLUTIONS**

GM2000-26



Standard Features and Equipment

DRIVE

- Rear wheel steering
- 24 VDC battery dual-motor electric front drive
- Electric chassis drive includes transmission and automatic brakes
- Steering tiller includes directional and speed controls, E-Stop, and a belly button switch
- Solid rubber tires

CHASSIS

- Manual screw jack load compensating outriggers
- On-board 25 Amp battery charger with linear rate control, 110 volt, 60 hz. single phase
- Electrical circuit breakers

HYDRAULICS

- 3.2 HP, 24VDC 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, with automatic start-stop control
- Vacuum frame accepts variety of cup sizes, fully adjustable
- Vacuum cup assemblies include bi-directional coil spring loaded mounts
- Includes 4 standard 20" x 12" rectangular suction cups, 550 lbs. lift per cup in shear at 100% safety factor

CONTROL

- Wireless control console
- 20 direction manipulator motions standard
- Secondary forward reach to 11"
- Electronic proportional (micro motion) controls for all hydraulic function operation

CONSOLE

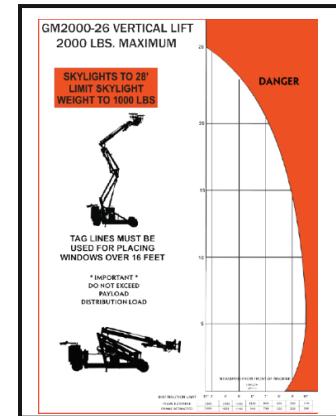
- Control console mounts to frame; removable for flexibility of operator.
- Console items include:
 - Hydraulic power selector: On, Off
 - Operating mode selector: normal, micro-motion
 - Multi-function controls for all manipulator end effector functions
 - Vacuum mode selector: On, Off, Release
 - Vacuum release switch

SAFETY

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

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Characteristic	Specification
Lift Capacity	2,000 lbs.
Closed Chassis Length	120"
Width	59"
Height: Retracted Clearance	88"
Height: Center of Lift Hub	312"
Turning Radius	0"
Unladen Weight	4,500 lbs.



Powered Manipulator Functions

Control	Assembly	Direction	Viewed from
1 A	Stage 2 Lift	Out-In	Side Elevation
1 B	Frame Extension	Chassis In-Out	Side Elevation
2 A	Boom	Raise-Lower	Side Elevation
2 B	Stage 1 Lift	Down-Up	Side Elevation
3 A	Boom	Telescoping Extend – Retract	Side Elevation
3 B	Crab Crawl **	Up-Down	Front Elevation
4	Manipulator – vacuum cup frame	Tilt Up-Down	Side Elevation
5	Manipulator – vacuum cup frame	Swivel Left-Right	Top Plan
6	Manipulator – vacuum cup frame	Side shift, 2" left & 2" right; 4" total	Front Elevation
7	Manipulator – vacuum cup frame	EZ Pick: 11" reach, out & down / up & in	Front Elevation
8	Manipulator – vacuum cup frame	Rotate – CW and CCW 180°	Front Elevation

** Optional control

- 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.