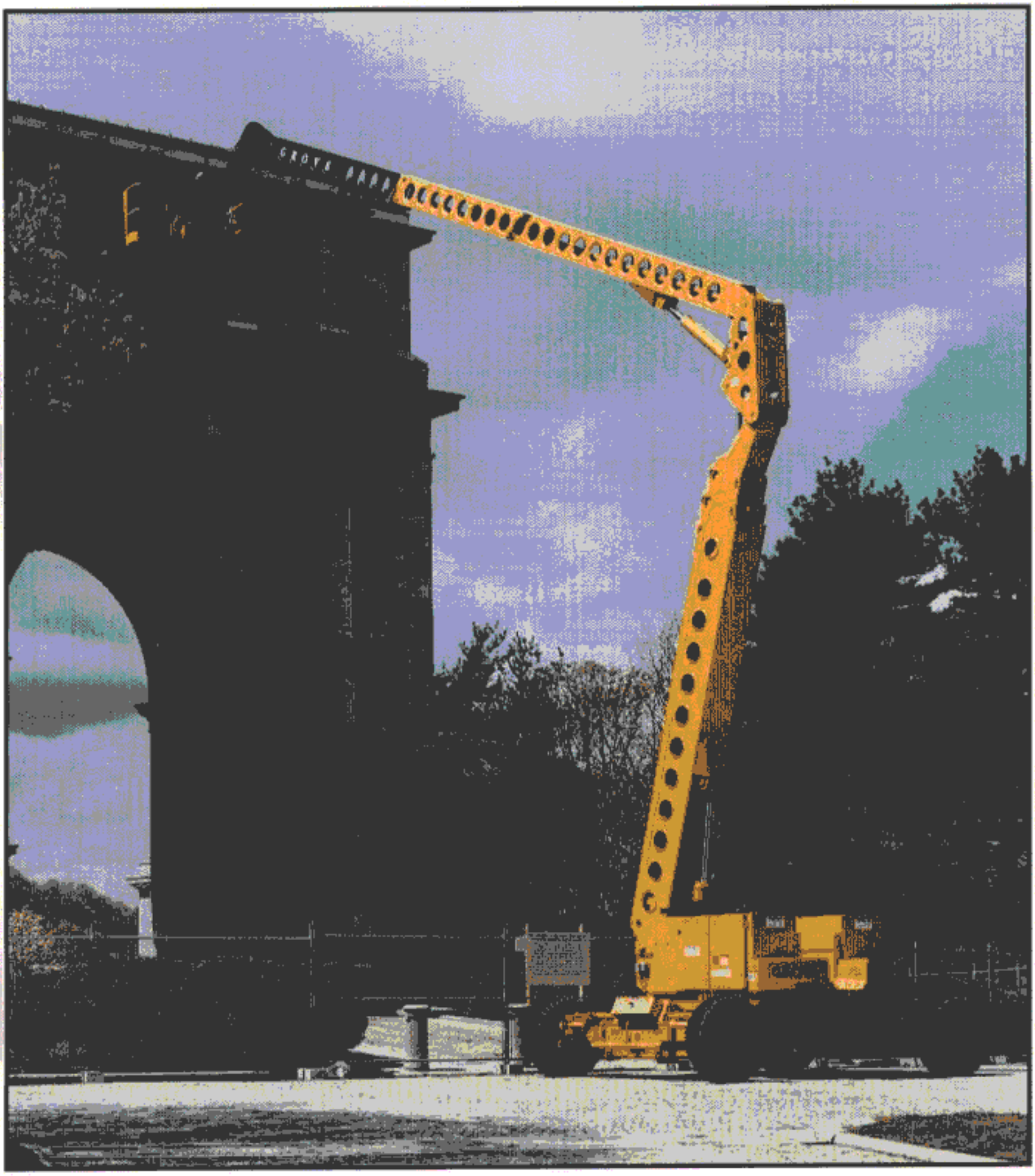
GROVE®
MANLIFT®
A GROVE WORLDWIDE COMPANY

AMZ131XT

Self-Propelled Aerial Work Platform



Grove Manlift expands the boundaries of self-propelled aerial work platforms with the AMZ131XT! Major features include:

- Unique 3-dimensional articulating boom design.
- Working height of 131 ft. (39.9 m).
- Maximum horizontal reach of 69 ft. 8 in. (21.2 m).
- Maximum up and over height of 61 ft. 9 in. (18.8 m).
- Standard four-wheel drive and steer.
- Hydraulically extendible axles.

The **AMZ131XT's** 3-dimensional boom design allows access to an incredible **6,273 ft.² (583 m²)** of working area without time consuming machine relocation. The result...increased productivity and reduced costs.

Hydraulically extendible axles provide a solid base that let you access a wide range of elevated work sites. With the axles in the retracted position, the **AMZ131XT** maintains a compact width for ease of transport.

The **AMZ131XT's** unsurpassed reach, performance and specifications make it ideal for applications such as petrochemical, bridge work, airports or any application that requires maximum reach and performance.

Standard Equipment

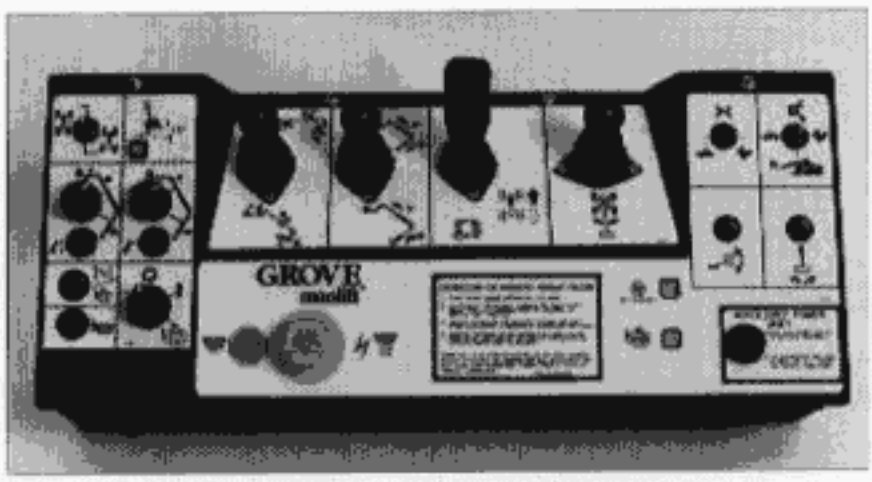
PLATFORM

All-welded 36 x 72 in. (0.91 x 1.83 m) tubular aluminum work platform assembly with inside handrails, sliding bar gate and 180° hydraulic platform rotator. 44 in. (1.12 m) high railings with mid-rails and 6 in. (0.15 m) toeboard.

110 volt AC wiring with plug and junction box on the turntable and two outlets on the platform, 15 amp resettable circuit breaker, and GFI (ground fault interrupter).

CONTROLS

Proportional controllers with "ramp-to-zero" for drive, lift, telescope and swing. Non-proportional control switches for platform level and platform rotation; and rocker switch mounted on the drive controller for thumb steer. Selection switches for boom/riser/jib lift, boom/riser telescope, high/low engine idle and function speed (low/torque/high). Control enable system* with engine run indicator light and foot pedal. Five degree tilt indicator light (LED). Push buttons for auxiliary power, engine start, choke, emergency stop and horn.

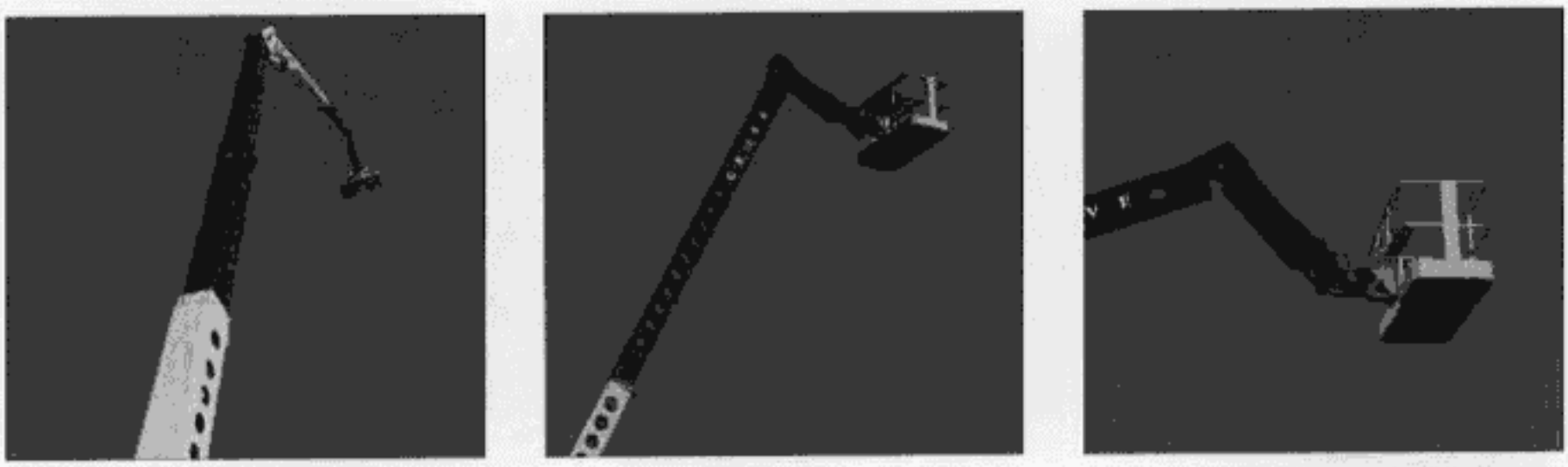


User-friendly controls feature color coded symbols with written descriptions for easy function identification.

Lower control panel features non-proportional control switches for lift, telescope, swing, platform level and platform rotate and mast level override. Selection switches for lower/upper control, boom/riser/jib lift, boom/riser telescope, axle/boom function selection and auxiliary power. Voltmeter, hourmeter, and ignition switch. Green LED indicating axles are pin locked.

Electric motor and gear pump driven off the starter batteries provides auxiliary power. Controllable from both control stations.

Lockable battery disconnect switch.



Getting to 131 ft. (39.9 m) - ***The telescoping riser (left), main boom (center) and articulating jib (right) combine to provide unparalleled three-dimensional up, and over and down reach for a machine of this size.***

RISER/BOOM/JIB

All-steel 3-section Vierendeel-embossed trapezoidal riser** with integrally pinned self-leveling mast. Telescoping mid and fly sections extend by a 2-stage double acting cylinder with integral load holding valve.

All-steel 2-section Vierendeel-embossed V-trap boom with articulating jib attached to fly section. Telescoping fly section extends by a double acting cylinder with integral load holding valve

8 ft. (2.44 m) articulating jib section is an all-steel mechanical parallelogram which provides +5° to -90° of articulating reach relative to the main boom.

Telescoping riser and boom sections supported by adjustable low-friction wear pads.

Internal power guides in both the riser and boom route hydraulic and electric lines to the platform.

Double-acting lift cylinders with integral load holding valves provide riser, boom and jib elevation

Ball bearing swing circle with 360° continuous rotation. Hydraulically driven Grove planetary gear box. Automatic spring applied, hydraulically released disc brakes. Plunger type mechanical house lock.

HYDRAULIC SYSTEM

Pressure/flow compensated, variable displacement axial piston pump with 43 gpm (162.8 lpm) capacity. Maximum system operating pressure of 3,700 psi (259 bar).

Electrically activated consolidated valve bank provides simultaneous function capability.

10 micron hydraulic pressure and return filters.

102 gal. (386 liter) steel, strap-mounted hydraulic reservoir with integral sight level gauge and magnetic plugs.

POWER PLANT

Ford CSG-649 6-cylinder water cooled engine with

110 hp (82 kw) @ 2,500 rpm.

60 amp alternator. (Cummins)

95 amp alternator. (Ford)

2 x 12-volt DC negative ground batteries connected in series with 700 CCA @ 0° F (-17° C).

45 gal. (170 liter) steel fuel tank with sight gauge.

CHASSIS

Hydraulically extendible front and rear axles with automatic locking cylinders*. Hydraulic jacks on the front and rear raise the chassis for axle extension/ retraction.

Four-wheel, two speed planetary drive hubs on the front and rear wheels. Rotary flow dividers provide differential traction.

Dual counterbalance valve provides dynamic braking. Automatic spring-applied hydraulically released disc type parking brakes on all four drive wheels.

Four wheel crab and coordinated steering.

Tilt alarm, all motion alarm.

Lifting and tie down lugs.

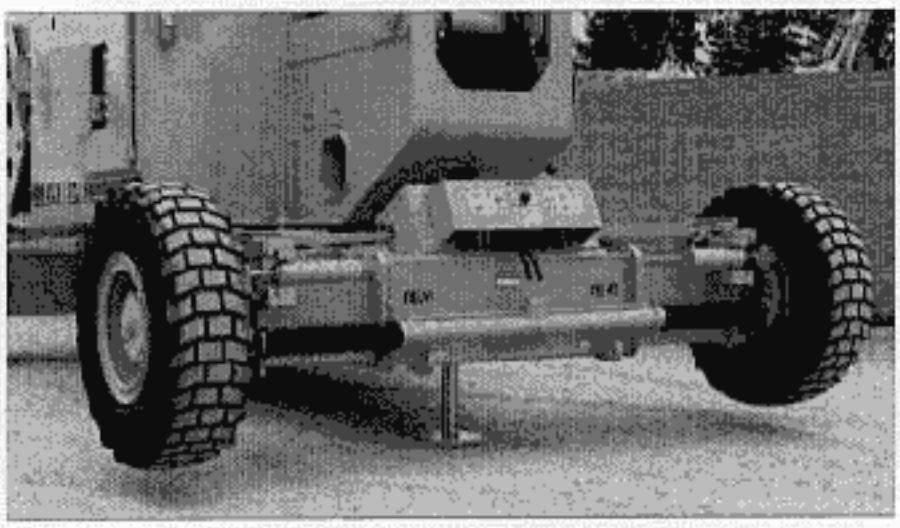
Options (consult price list for all available options)

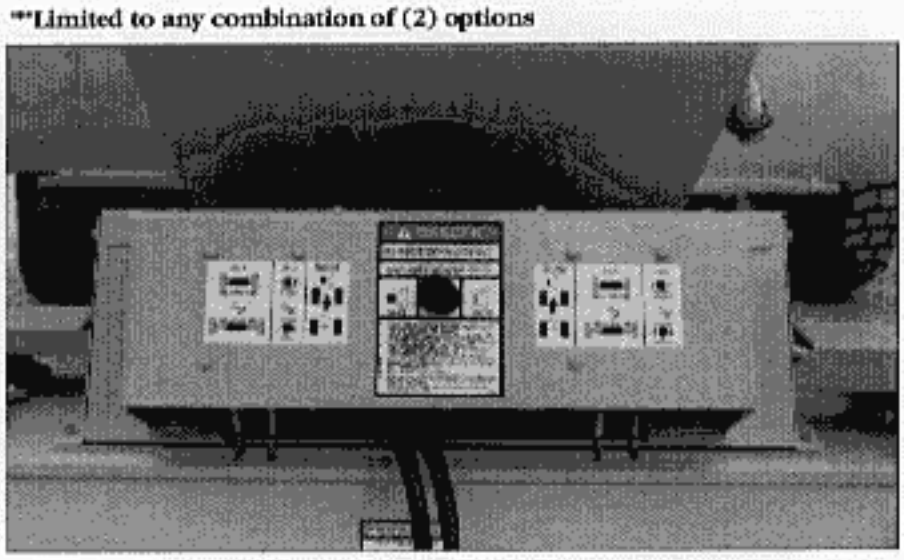
- Ford CSG-649 dual/fuel engine.
- Cummins 4BT3.9 4-cylinder turbo charged water cooled diesel with 100 hp (75 kw) @ 2,500 rpm and 60 amp alternator.
- 96 in. (2.44 m) platform (500 lbs. capacity).
- 2000 watt 110V AC generator***.
- Air power to platform***.
- Weld leads to platform***.
- Oxygen/acetylene lines to platform***.
- Hostile Environment Protection Package.

***Patented Grove feature**

****Patent Pending**

*****Limited to any combination of (2) options**





Patented Tie-Rod Extendible and Retractable telescopic axles can be set up in under 2 minutes by one man with no manual pinning required. Dual hydraulic jacks lift the chassis (left) for axle extension/retraction. All axle function controls are in one location (right) for convenient operation.

Specifications — AMZ131XT

Platform

Working Height	131 ft. (39.9 m)
Platform Height	125 ft. (38.1 m)
Riser Height:	
Retracted	34 ft. 4 in. (10.5 m)
Extended	61 ft. 9 in. (18.8 m)
Horizontal Reach:	
Riser Retracted	69 ft. 8 in. (21.2 m)
Riser Extended	62 ft. 7 in. (19.1 m)
Platform Capacity	600 lbs. (272 kg)

Dimensions

Platform Size	36 x 72 in. (0.92 x 1.83 m)
Overall Height (stowed)	9 ft. 10 in. (3.0 m)
Overall Length	39 ft. 4 in. (11.99 m)
Overall Width:	
Axles Retracted	8 ft. 6 in. (2.6 m)
Axles Extended	12 ft. (3.7 m)
Turning Radius (inside):	
Axles Retracted	15 ft. 3-1/2 in. (4.66 m)
Axles Extended	14 ft. 6 in. (4.42 m)
Turning Radius (outside):	
Axles Retracted	24 ft. 11 in. (7.59 m)
Axles Extended	28 ft. 6 in. (8.69 m)
Wheel base	14 ft. (4.27 m)
Tailswing (beyond tires):	
Riser Extended	3 ft. 8 in. (1.1 m)
Riser Retracted	Zero

Performance

Maximum Drive Speed	2.5 mph (4.0 km/h)
*Gradeability (theoretical)	50%
Tires	14.75/80R20 Foam Filled
Swing Speed	0.5 RPM

Power Source

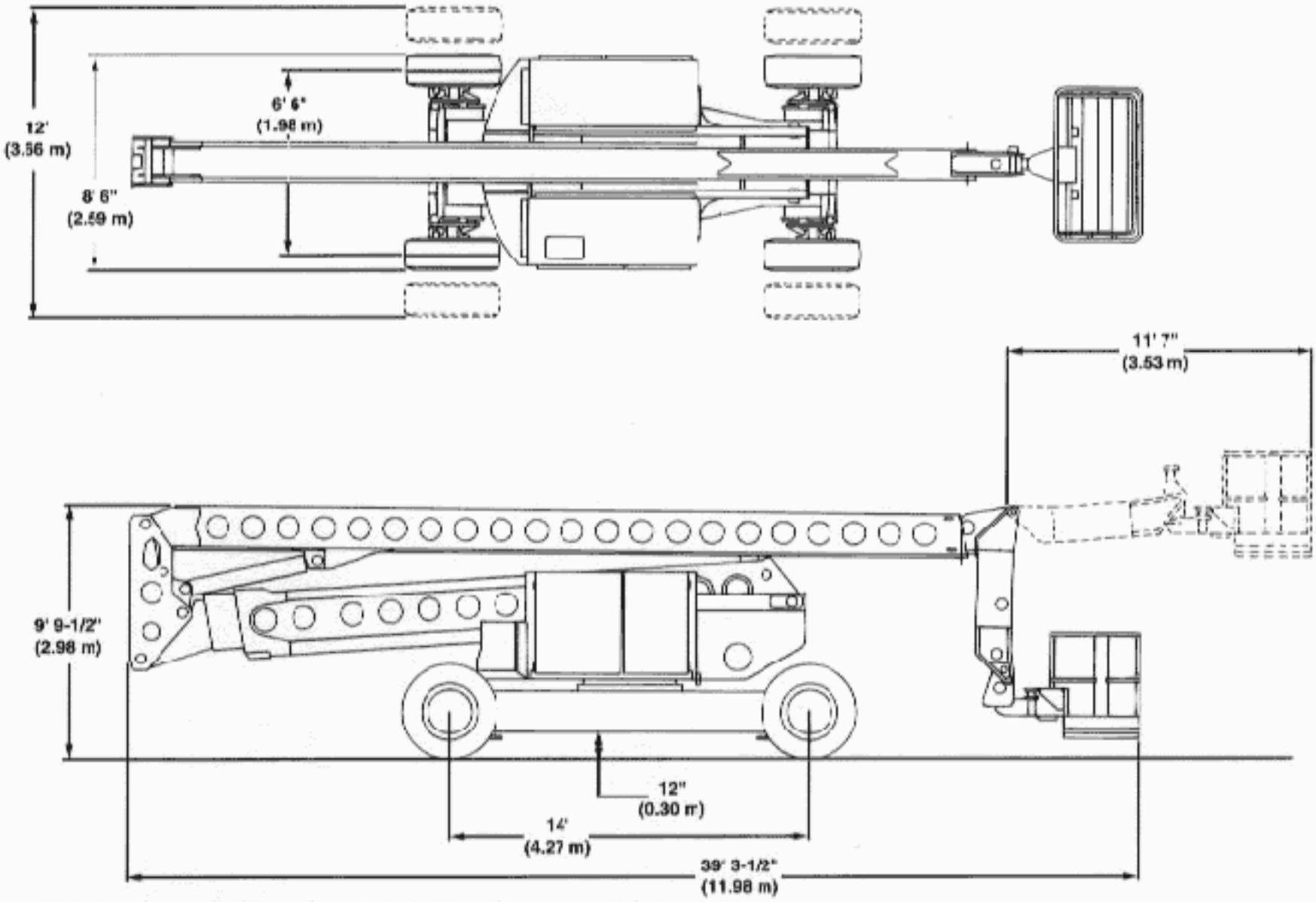
Engine Make/Model	Ford CSG-649
Engine Horsepower	110 hp (82 kw)
Fuel Tank Capacity	45 gallons (170 liters)

Hydraulics

Reservoir Capacity	102 gallons (386 liters)
Hydraulic Pump Type	Axial Piston
Auxiliary Power	Yes

Shipping Information

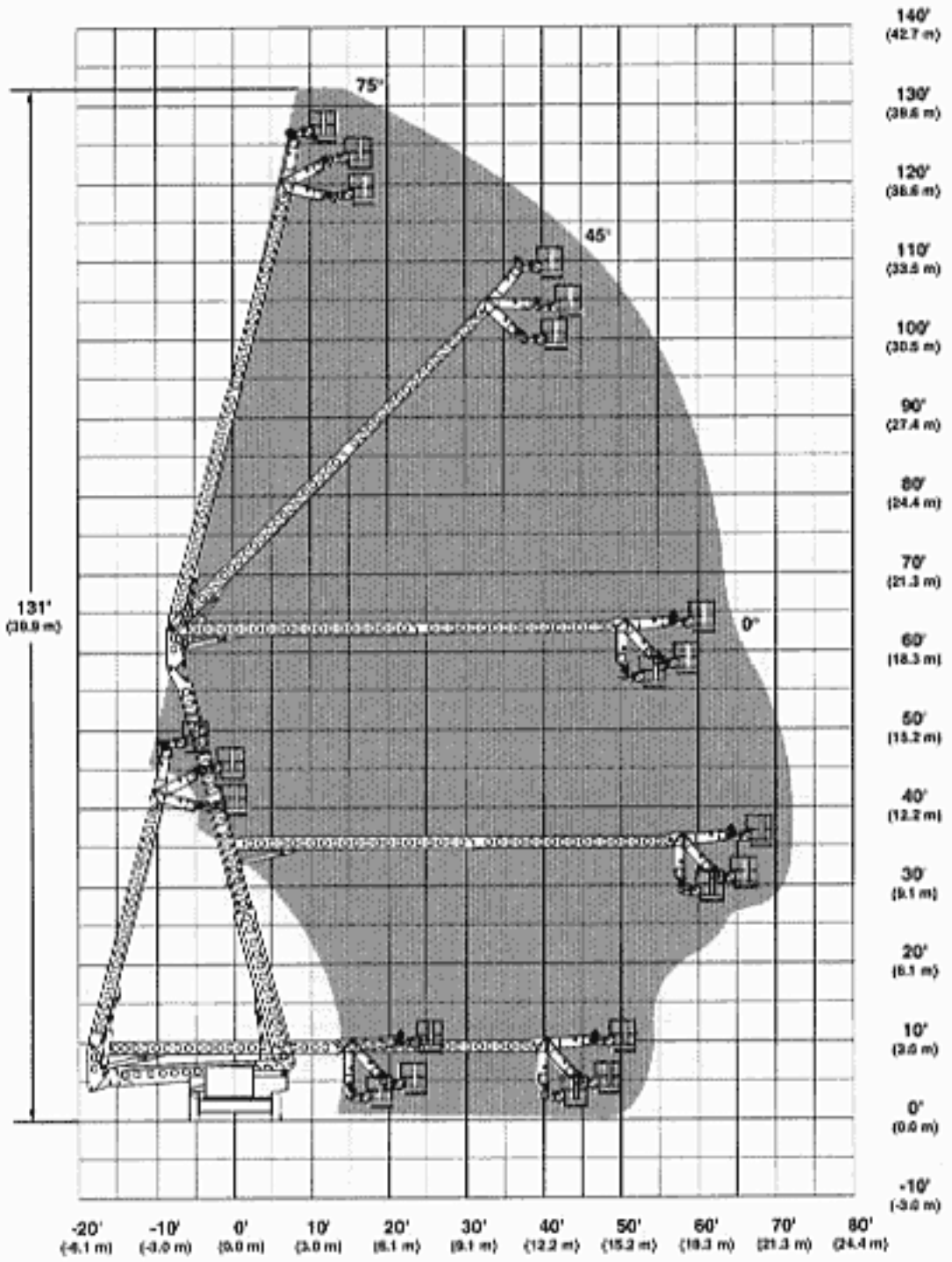
Weight	47,900 lbs. (21727 kg)
Shipping Cube	3,274 cu. ft. (92.7 m³)

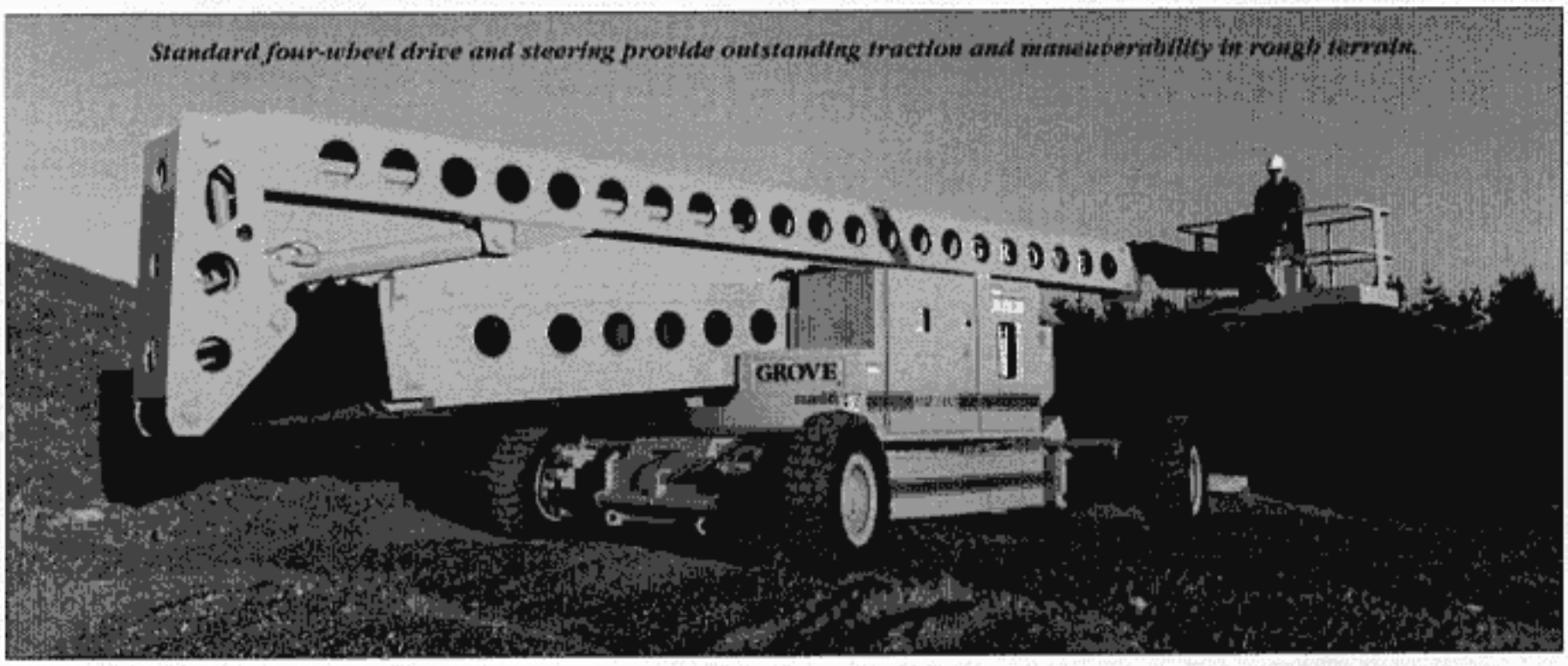


* Published machine gradeability is theoretical. Machine to be in a stowed driving position. Always operate machine on a firm, level surface when elevated.

Range Diagram

AMZ131XT





Standard four-wheel drive and steering provide outstanding traction and maneuverability in rough terrain.