

# GRADALL®

## 524D

### 2-section or 3-section boom MATERIAL HANDLER



524D

## SPECIFICATIONS

### Performance

#### Rated Capacity

At 24 in. (610 mm) load center,  
6,000 lb. (2,722 kg)

#### Maximum Lift Height

24.5 ft. (7.5 m) or 32 ft. (9.8 m)

#### Frame Leveling

8 degrees

#### Lift Speed (boom retracted)

Empty, 121 f.p.m. (36.9 m/min);  
Loaded 79.3 f.p.m. (24.2 m/min)

#### Boom Speed

Extend 107.5 f.p.m. (32.8 m/min)  
Retract 131.3 f.p.m. (40 m/min)

#### Travel Speeds Forward and Reverse

4WD-2WD 7.5-16 mph (12-25.7 km/hr)

#### Operating Weight

With 48" (1.2 m) carriage and forks,  
524D-2S - 15,320 lb. (6,955 kg)  
524D-3S - 15,926 lb. (7,230 kg)

#### Drawbar Pull

Loaded 12,850 lbs. (5828 kg)

### Drive Line Specifications

#### Engine

Make and Model ... Cummins B3.9C-80  
Fuel ..... No. 2 Diesel  
Cycles ..... 4  
No. of Cylinders ..... 4  
Displacement ..... 239 cu. in. (3.9 L)  
Rated Speed ..... 2500 rpm  
Max. Gross BHP ..... 80 hp (60 Kw)  
Fuel Tank ..... 40 gal. (151.4 L)

#### Engine Filters

Two-stage dry air cleaner - centrifugal  
pre-cleaner with continuous dust ejector  
PLUS cleanable and replaceable dry filter  
element. Visual service indicator.

Replaceable element-type fuel filter/water  
separator. Full-flow replaceable-element  
engine oil filter.

#### Electrical System

Voltage - 12V  
Alternator - 63 amp  
Battery - 810 Cold Cranking AMP at 0°F

#### Hydrostatic Drive

5500 PSI (37923 kpa) closed loop with  
piston pump and motors.

All hydraulic connections ORS and Code  
62 O-ring flanges.

Integral reservoir with implement  
hydraulics.

8 micron suction filter for charge pump.

Self-contained, swashplate design,  
variable displacement, over center, piston  
pump. Neutral start switch. (Park brake  
must also be engaged to start.)

2WD and 4WD inching (524 only).  
2WD - 4WD switch on dash (524 only).  
Forward, neutral, reverse lever on left  
of steering column.

Single foot pedal control provides both  
braking and inching for lifting while  
maneuvering vehicle.

Electro/hydraulic traction lock valve for  
superior tractive effort (524 only).

#### Axles

Planetary hubs with piston motors on  
rear axle (524 only).

Piston motor-driven planetary front axle with  
high-bias, limited slip differential.

#### Brakes

Service - Hydraulic wet disc brake on each  
front wheel.

Hydraulic dynamic braking on front axle  
and both rear wheels.

#### Parking Brakes

Spring-applied electro/hydraulic release, fail  
safe on both front wheels.

Light on dash indicates when brake is on.

#### Tires

13:00x24 - G2 type (common wheel).  
Optional: 13.00R24 radial tires.

#### Cab

Certified FOPS/ROPS structure with horn,  
back-up alarm and right side rear view mirror.

#### Steering

Hydraulic power steering with manual  
backup. Rear wheel steering, 90° pivot  
around either front tire.

#### Instruments

Volt meter, hour meter, engine oil pressure  
gauge, fuel gauge, water temperature  
gauge. All gauges protected by clear  
acrylic covers.

#### Controls

Grouped for operator comfort and  
convenience.

Boom lift and crowd on single joystick.

Right-hand tilt and sway levers.

Foot throttle.

Floor mounted traction lock switch (524 only).

#### Hydraulic System-Implement

Single-section gear-direct from engine.

40 gal. (151.4 L) system capacity.

8 micron filter with visual service  
indicator and suction strainer.

Lift, crowd, tilt and sway cylinders have safety  
checks to prevent dropping of load in the  
event of hose or other hydraulic failure.

### Accessories & Options

#### Cab Enclosure

Lockable, split door. Windshield wiper.  
Heater & defroster fan.

#### Light Group

Consists of 2 cab-mounted headlights, 1  
backup/tail/stoplight and rotating beacon.

#### Auxiliary Hydraulic Circuit

Required for all attachments equipped with  
cylinders or other hydraulic components.  
Consists of valves, controls, hydraulic lines.

#### Radial Tires

#### Winch

#### Left Hand Tilt/Sway Control

#### Tilt on Joystick

### Attachments

#### Carriage

48" (1.2 m) & 66" (1.7 m)

#### Slope Pile Carriage

48" (1.2 m) & 66" (1.7 m)

#### 100° Swing Carriage

72" (1.8 m)

#### Pallet Forks

2' x 4' x 48" (50.8 mm x 101.6 mm x 1.2 m)

#### Cubing Forks

2' x 2' x 48" (50.8 mm x 50.8 mm x 1.2 m)

#### Vertical Mast

6' (1.8 m) with 48" (1.2 m)  
or 66" (1.7 m) Carriage

#### Truss Boom With or Without Winch

10' (3.0 m)

#### Bucket

.075 CY (0.57m<sup>3</sup>) or 1.25 CY (0.95 m<sup>3</sup>)

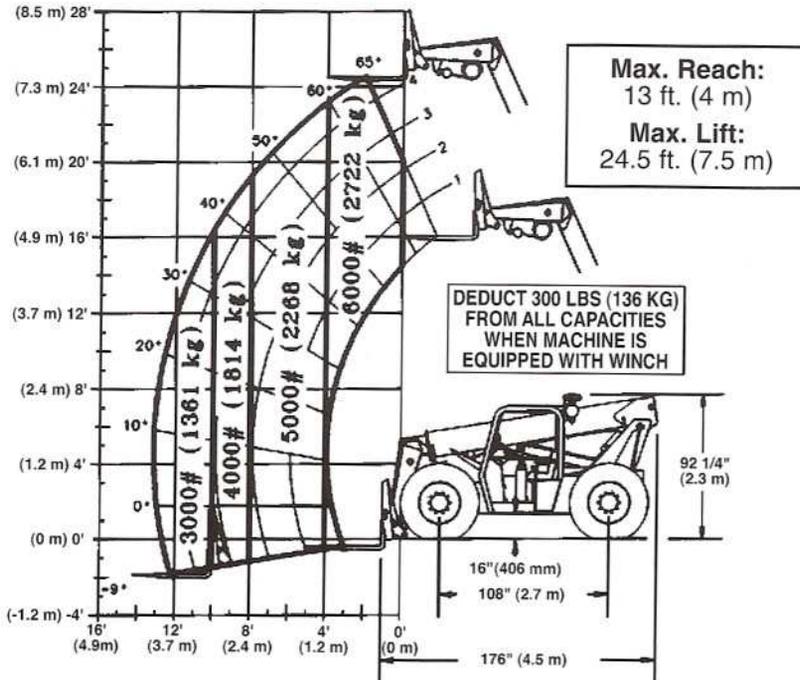
#### Work Platform

#### Instant Hook

# 524D

## MATERIAL HANDLER

### 524D-2S (2-Section Boom)



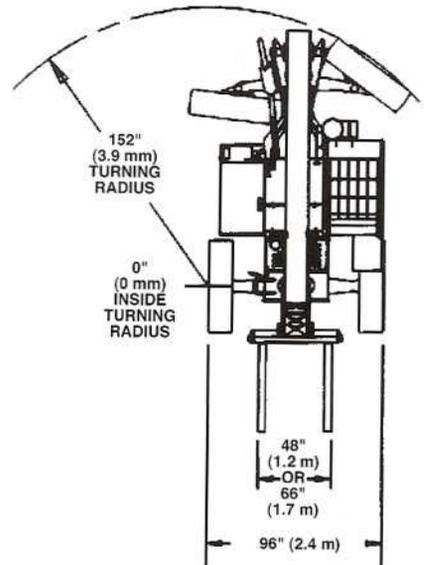
#### IMPORTANT

Rated lift capacities shown are with machine equipped with carriage and pallet forks and on a firm, level surface with undamaged, properly inflated tires. Machine specifications and stability are based on rated lift capacities at specific boom angles and boom lengths. If specifications are critical, the proposed application should be discussed with your dealer.

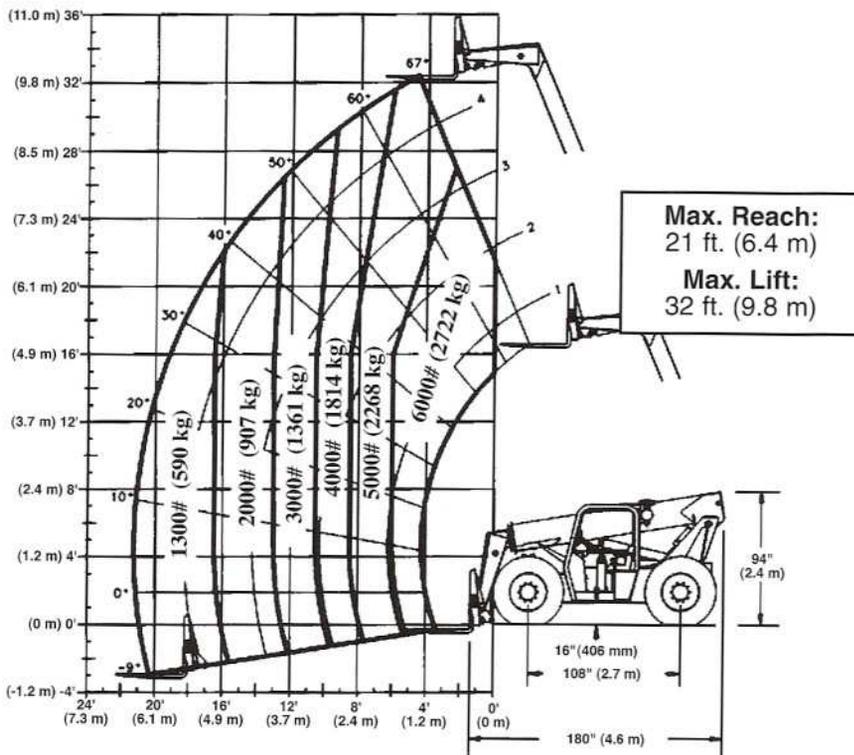
DO NOT exceed rated lift capacity loads, as unstable and dangerous machine conditions will result.

DO NOT tip the machine forward to determine the allowable load.

Use only Gradall approved attachments with the proper material handler model/attachment load capacity chart displayed in the operator's cab. OSHA requires all rough terrain forklift operators to be trained according to OSHA 29 CFR 1910.178 (i).



### 524D-3S (3-Section Boom)



*This machine is designed to meet specifications of ASME B56.6b-1998. It is Gradall Policy to continually improve its products. Therefore, designs, materials and specifications are subject to change without notice and without incurring any liability on units already sold. Units shown may have optional equipment. See applicable specifications and price lists for optional equipment.*

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