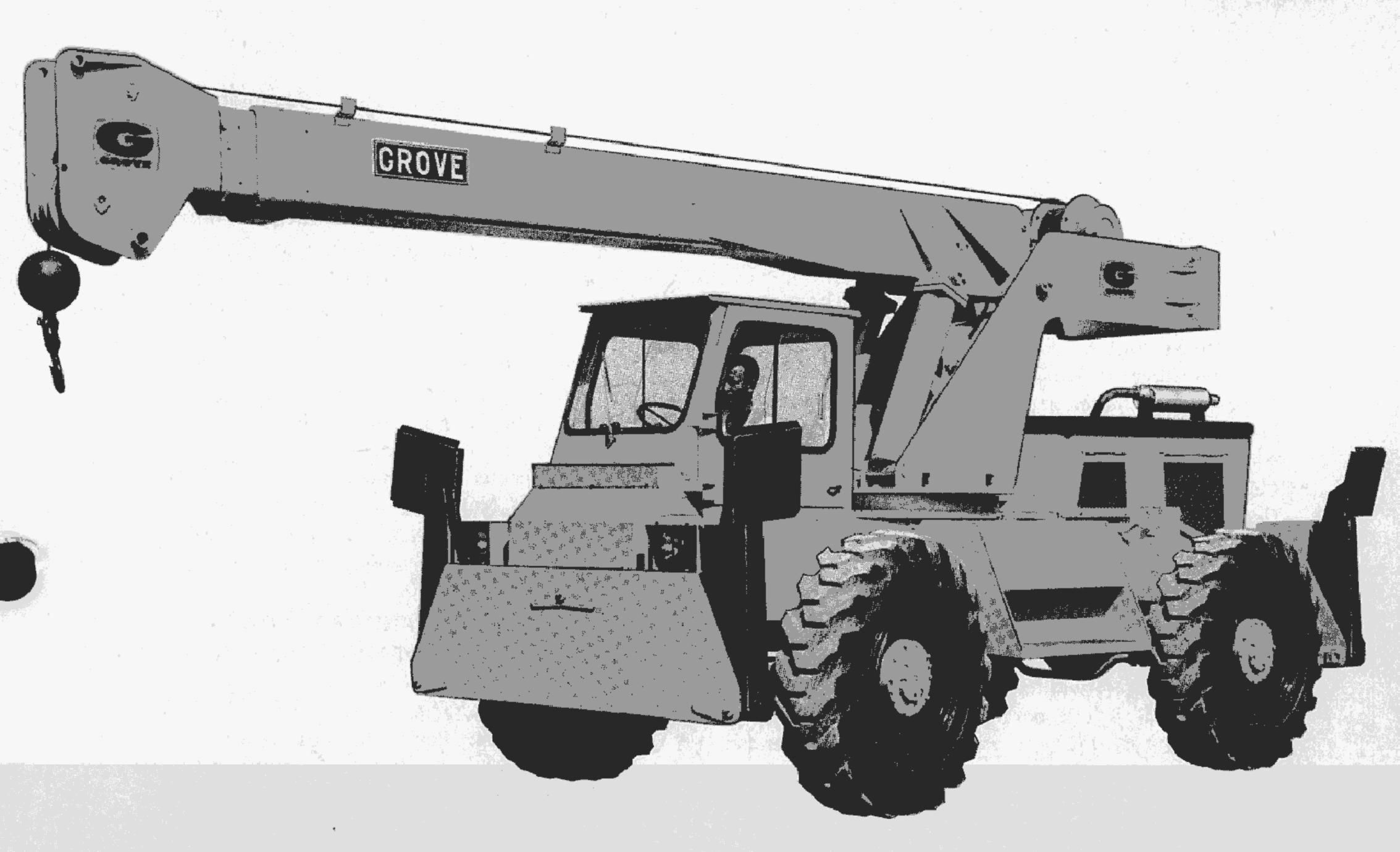
# GROVE FULL HYDRAULIC SELF-PROPELLED CRANE

# MODEL PT 48 8-Ton Capacity





#### **FEATURES**

- 16,000 lbs. Capacity at 10'
- 21-51 ft. Power Telescoping Boom
- Power Shift Transmission—6 speeds forward & reverse
- Hi-Lo range selection automatically shifts 4-wheel—2-wheel drive
- 4-Wheel Hydraulic Power Assist Steering & Brakes
- 75° Maximum boom elevation
- 360° Continuous rotation Ballbearing Swing Circle — Grove Planetary Swing
- Automatic Hydraulic Rear Axle Oscillation Lockouts
- Hydraulic Pump Disconnect



#### SPECIFICATIONS

BOOM - 21 ft. - 51 ft., 3 section, full power telescoping boom.

\*18 ft. - 42 ft., 3 section, full power telescoping boom. Boom telescope sections are individually controlled. Each boom section supported on graphite impregnated nylatron wear pads. Pendulum boom angle indicators on both sides of boom. Integral holding valves on each telescoping cylinder. Side adjustable wear pads to eliminate metal to metal contact of inner boom sections.

BOOM NOSE - Two sheaves mounted on heavy duty needle bearings. Removable pin type rope guards allow easy reeving. Rope dead end on one side of the boom nose.

BOOM ELEVATION - Dual double-acting hydraulic cylinders with holding valve. Elevation from 0° to 75°.

\*JIBS - 14 ft. "Stowaway" for 18-42 ft. boom. 17 ft. "Stowaway" for 21-51 ft. boom.

All jibs have self-equalizing suspension and jib backstops.

**SWING** - Ball bearing swing circle, 360° continuous rotation. "Grove Planetary Swing" with automatic disc swing brake. Swing speed 2.5 RPM.

\*ENCLOSED CAB - Frame mounted, all steel, full vision with fixed tinted skylight, laminated safety glass windows. Electric windshield wiper, electric fan-type defroster, hot water heater, dome light, left and right hand doors with locks. Right and left side sliding vent windows and window locks.

\*OPEN CAB - Frame mounted, all steel full vision with fixed tinted skylight, laminated safety glass windows, electric windshield wiper, and dome light.

CAB INSTRUMENTATION - Engine oil pressure gage, engine water temperature gage, electric fuel gage, transmission and torque converter oil temperature gage, ammeter, engine hourmeter.

OUTRIGGERS - Hydraulic cantilever type integral with main frame, integral check valves. Width from centerline to centerline of outrigger pads, 12 ft. 4 in. extended. Sequence control arrangement eliminates accidental actuation.

MAIN FRAME - 18 in. rectangular box section, all welded and reinforced construction.

TRANSMISSION AND TORQUE CONVERTER - Engine mounted converter 2.91 stall ratio with PTO for hydraulic pumps. Remote mounted full powershift transmission with rear axle disconnect.

SPEEDS - 6 Forward and 6 Reverse.

AXLES - Front: Planetary drive with dual steering cylinders mounted rigid to frame.

Rear: Planetary drive with dual steering cylinders mounted to allow 0 in. to 12 in. oscillation.

OSCILLATION LOCKOUTS - Automatic hydraulic on rear axle. Allows oscillation only with boom over front.

**SERVICE BRAKES - Power assist hydraulic on all four wheels. Size 17-1/4 in. x 4 in.** 

PARKING BRAKES - Mechanical on front axle. Hand lever control. Size 13-3/8 in. x 2 in.

STEERING - Front: Power assist hydraulic control.

Rear: Full hydraulic; tiller bar control.

Independent front and rear steer control allows maximum maneuverability.

TIRES - 14:00x24-10 ply, loader-grader type (nylon) tubeless.

\*15.5x25-12 ply, loader-grader type (nylon) tubeless.

#### HYDRAULIC SYSTEM:

RESERVOIR - 62 gallon capacity all steel welded construction with integral baffles, and dip stick.

FILTER - Return line type, full flow with by-pass protection, replaceable cartridges. 10 micron rating.

PUMPS - Two main gear pumps, 73 GPM Capacity.

Pump disconnect lever operated from carrier deck.

Separate pump for front steer - 18.7 GPM.

control valves - Precision four-way double-acting with integral load check, main and circuit relief valves. Two individual valve banks permitting simultaneous independent control of two crane functions. Maximum operating pressure 2500 PSI.

POWER DISTRIBUTION - (Swing, boom telescope, rear steer) (Boom elevation, hoist, outriggers) (Front steer)

MISCELLANEOUS STANDARD EQUIPMENT - Cab guard, 2-3/4 lb. dry type fire extinguisher, electric horn, protecto seal gas cap.

#### HOIST SPECIFICATIONS:

**DESCRIPTION:** Power up and down, equal speed, planetary reduction with integral automatic brake.

HOIST DATA	MAIN HOIST Grove Model 15 S-11
Drum Dimensions	12 in. diameter 11 in. length 17.5 in. flange dia.
Performance Single line speed Single line pull	255 FPM (Max.) 8880 LB. (Max.)
Drum Rope Storage Capacity	**490 ft. of ½ dia. Rope (Max.)
Permissible Single Line Rope Pull Line	⅓ in. 6x37 Class • 7200 lb. ⅓ in. 19x7 Class • 615 <b>0</b> lb.

<sup>\*\* 6</sup>th Layer of rope not recommended for hoisting operations.

#### ENGINE SPECIFICATIONS

MAKE & MODEL
TYPE
BORE & STROKE
DISPLACEMENT
HORSEPOWER (NET)
GOVERNED RPM
TORQUE (NET)
ELECTRICAL SYSTEM
COMBUSTION SYSTEM
FUEL CAPACITY
ALTERNATOR

BATTERY

AIR CLEANER

HOURMETER

Ford 300
6 Cylinder Gasoline
4.00 in. x 3.98 in.
300 cu. in.
123 @ 2800 RPM
2800
253 lbs. ft. @1800 RPM
12 Volt Neg. Ground
4 Cycle
Naturally Aspirated
Liquid
49 Gallons
38 Amp., 12 Volt
(1) 62 A.H. 12 Volt
Oil Bath Type

Yes

\*Ford 391
8 Cylinder Gasoline
4.05 in. x 3.79 in.
391 cu. in.
152 @ 2500 RPM
2500
346 lbs. ft. @ 2100 RPM
12 Volt Neg. Ground
4 Cycle
Naturally Aspirated
Liquid
49 Gallons
38 Amp., 12 Volt

(1) 62 A.H. 12 Volt

Oil Bath Type

Yes

\*IH-UC-301 6 Cylinder Gasoline 3.812 in. x 4.39 in. 301 cu. in. 100 @ 2400 RPM 2800 240 lbs. ft. @1400 RPM 12 Volt Neg. Ground 4 Cycle Naturally Aspirated Liquid 49 Gallons 32 Amp., 12 Volt (1) 62 A.H. 12 Volt Dry Type Yes

\*GM 3-53N
3 Cylinder Diesel
3.875 in. x 4.50 in.
159.2 cu. in.
83 @ 2800 RPM
2800
193 lbs. ft. @ 1500 RPM
12 Volt Neg. Ground
2 Cycle
with Blower
Liquid
49 Gallons
55 Amp., 12 Volt
(1) 204 A.H. 12 Volt
Dry Type

Yes

\*GM 4-53N
4 Cylinder Diesel
3.875 in. x 4.50 in.
212 cu, in.
112 @ 2800 RPM
2800
257 lbs. ft. @ 1800 RPM
12 Volt Neg. Ground
2 Cycle
with Blower
Liquid
49 Gallons

55 Amp., 12 Volt

Dry Type

Yes

(1) 204 A.H. 12 Volt



#### **SPECIFICATIONS**

#### SPEED AND GRADEABILITY

FORWARD DRIVE	TRANSMISSION RANGE	GEAR SHIFT	MAXIMUM SPEED (MPH)	GRADEABILITY @ STALL (%)	TRACTIVÉ EFFORT AT STALL (Lbs.)
4 Wheel Drive	Low	<b>1s</b> t	2.4	78†	31,235
4 Wheel Drive	Low	2nd	4.5	53.5	16,500
4 Wheel Drive	Low	3rd	12.4	18.4	6,044
2 Wheel Drive	High	1st	5.7	42.2	13,134
2 Wheel Drive	High	2nd	10.8	21.3	6,927
2 Wheel Drive	High	3rd	29.5	6.5	2,542

Note: Performance based on 29,700 lbs. GVW and standard SAE engine rating conditions using standard tires, transmissions and axles. Performance data may vary plus or minus 10% due to variations in engine performance and vehicle weights.

†Limited by rolling resistance and coefficient of friction .8.

#### **WORKING WEIGHTS**

STANDARD MACHINE	AXLE WEIGHT DISTRIBUTION		
WITH	GVW (lb.)	FRONT (lb.)	REAR (lb.)
21 to 51 ft. Boom	32,660†	18,340	14,320
18 to 42 ft. Boom	29,700††	16,960	12.740

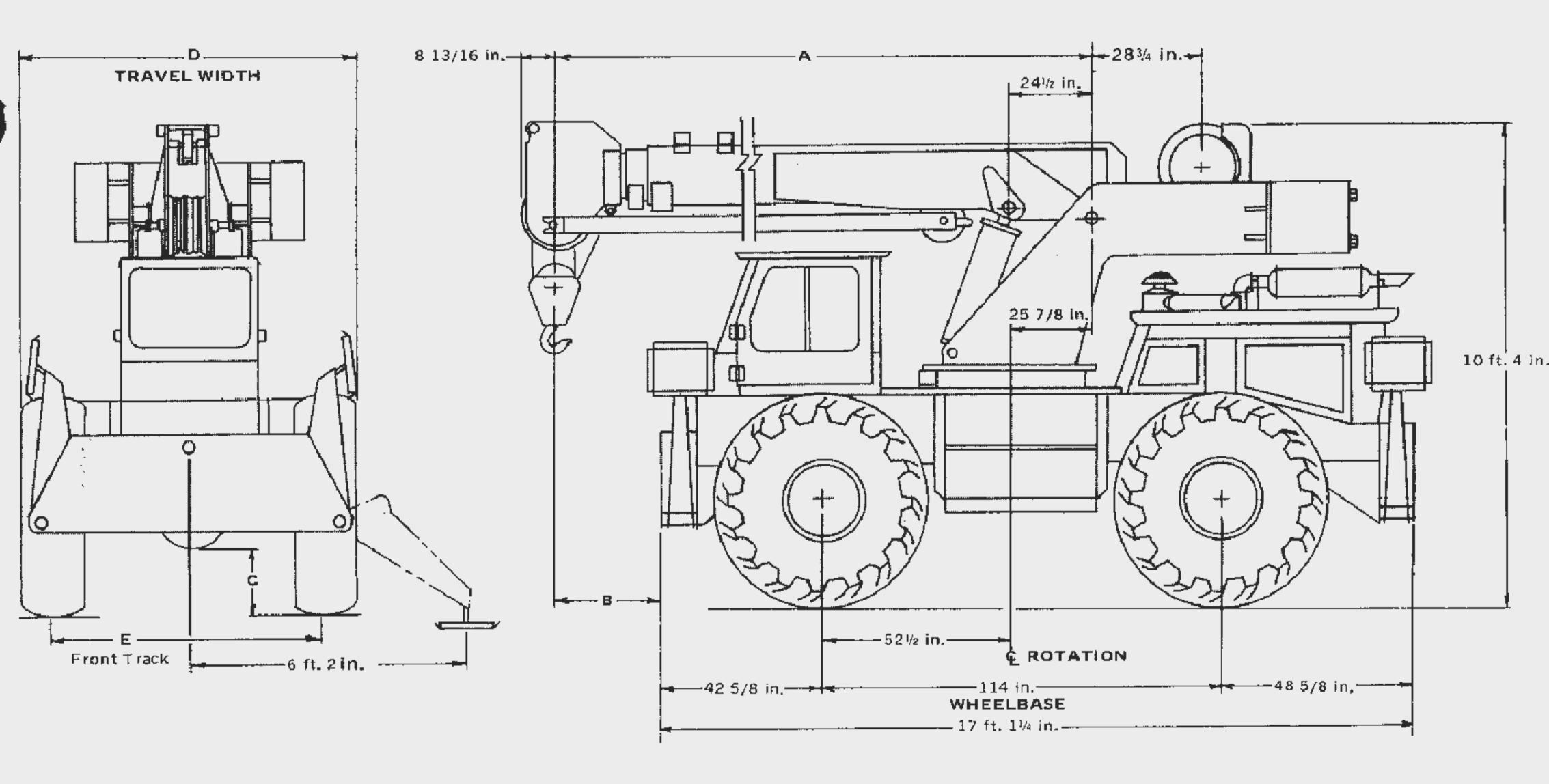
NOTE: Weights may vary plus or minus 3% due to manufacturing tolerances.

fincludes 17 ft. jib and hook block.

ttincludes 14 ft. jib and hook block.

#### DIMENSIONS

TAIL SWING — 8 ft, ½ in.
TURNING RADIUS — 14 ft, 7½ in.



воом	А	В
18 ft 42 ft.	17 ft. 7 in.	7 ft. 6 in.
21 ft 51 ft.	20 ft. 7 in.	10 ft. 6 in.

TIRE SIZE	С	D	E
14.00x24	14 7/16 in.	95 13/16 in.	79 1/2 in.
15.50x25	13 in.	95 1/2 in.	79 1/2 in.

#### \*DENOTES OPTIONAL EQUIPMENT

## MORE PROFITABLE MORE VERSATILE

# for a wider variety of lifting & handling jobs!

THE PREFERENCE FOR GROVE

CRANES among profit-minded users reflects the user's need for the versatility and advanced design engineering offered in all Grove Hydraulic Cranes. They add up to profit-making performance . . . a measurable value that tells him he is getting his money's worth on his Grove Crane investment. That's why the smart crane buyers have made Grove their NUMBER ONE CHOICE.

A FULL LINE OF HYDRAULIC CRANES... in addition to a full line of rough terrain cranes, Grove also offers a complete line of carrier-mounted cranes including an 80-ton model with a boom tip height of 208'. Ask your Grove Distributor for details.





### HYDRAULC CRANES

GROVE MANUFACTURING COMPANY A Division of Walter Kidde & Company, Inc. Shady Grove, Pa. 17256

#### RIGID FRAME . . . EXCELLENT STABILITY!

An 18" deep all-welded and reinforced rectangular box section frame, including outrigger housings as an integral structural part, provides the rigidity needed to resist the torsional stresses encountered in rough-terrain operation. This assures the proper alignment of components, resulting in longer service life . . . more on-the-job availability. Outriggers are set or retracted by a special safety control arrangement which makes it impossible to accidentally retract the outriggers once set.



### COMFORTABLE CABS DESIGNED FOR OPERATOR CONVENIENCE!

Grove cabs are built to provide maximum visibility and comfort for the operator. Controls are arranged for operator convenience, especially during simultaneous operations. The optional fully enclosed cab features skylight, safety glass windows, electrical windshield wiper and heater.

#### BALL-BEARING SWING CIRCLE!

A large 40" "sealed-for-life" 360° continuous rotation ball-bearing swing circle. Grove planetary drive and automatic disc swing brake provide a minimum of maintenance and smooth continuous swing.

