

# TEREX 72-41 LOADER



153 Flywheel Horsepower



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# TEREX 72-41 LOADER

**SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

## ENGINE

### Detroit Diesel 4-71N, 2 Cycle Diesel

Gross Vehicle HP @ 2300 RPM .....163  
Flywheel HP @ 2300 RPM .....153

Note: Above ratings at sea level and 60°F. (15.5°C). Gross Vehicle Horsepower rating includes standard engine equipment such as water pump, fuel pump and lubricating oil pump. Flywheel Horsepower is the net horsepower after deductions from gross vehicle horsepower for fan, alternator and air compressor requirements.

Number of Cylinders .....4  
Bore and Stroke .....4.25" x 5" (108 mm x 127 mm)  
Piston Displacement .....284 cu. ft. (8,04 liters)  
Maximum Torque @ 1400 RPM .....432 ft. lbs. (59,8 kg m)  
Oil-MIL-L-2104B .....SAE 30  
Fuel .....No. 2-D recommended  
Maximum RPM .....2300  
Idle Speed RPM .....700  
Governor type .....Limiting speed  
Air Cleaner .....(1) TEREX/Donaldson Dry Type (FWG-14)

## TRANSMISSION—Allison CRT-3630

3-Speed Forward and Reverse with Full Powershift. Two Lever Powershift Control.

### VEHICLE SPEEDS

	Forward MPH (km/h)	Reverse MPH (km/h)
1. Low	3.2 ( 5,1)	3.3 ( 5,3)
2. Intermediate	9.6 (15,4)	9.9 (15,9)
3. High	26.7 (43,0)	27.5 (44,3)

## TORQUE CONVERTER

Mounted integral with transmission.

Stall Ratio .....3.1:1

## AXLES

Front and rear axle shafts are the heavy duty, full floating type with outboard mounted planetary final drive. Four wheel drive. Axles may be removed independently of wheels and planetaries. Optional rear axle disconnect available.

Rear Axle Oscillation:

Degree (either side of center) .....±11°  
Wheel Lift (total) .....15" (381 mm)

## DIFFERENTIALS

Spiral bevel pinion and ring gear.

Ratio .....4.25:1

NoSPIN optional for rear axle.

## STEERING — Pivot Steer

60° pivot steer, 42° bucket swing. Full power steering from accumulator through steering gear and valve to steer cylinders. Mechanical follow-up link connection to axle for positive control. An accumulator is included in the circuit to provide steering assistance in both low RPM and emergency situations.

## STEERING HYDRAULIC SYSTEM

Two double acting steering cylinders,  
bore and stroke .....4" x 12.3" (102 mm x 312,4 mm)  
Accumulator — Free piston type precharged with nitrogen at  
600 psi (42,2 kg/cm<sup>2</sup>)

Hydraulic capacity: 2.5 gals. (9,4 liters). Automatic bleed-off of hydraulic pressure when engine is not in operation.

Pump — Gear type: ....24 GPM (90,8 liters/min.) @ 2300 RPM

System relief pressure .....1400 psi (98,5 kg/cm<sup>2</sup>)

Hydraulic Tank .....Pressurized Tank

The steering hydraulic system is completely separated from the bucket hydraulic system.

## BRAKES

Service - Air boosted hydraulic brakes with independent circuits for front and rear axles. Horn sounds in event of failure in either circuit. Automatic transmission declutch with brake pedal depression. Declutch application controlled through selector switch in the operator's compartment.

Brake Linings:

Diameter .....16" (406 mm)

Shoe width .....5" (127 mm)

Total Lining Area .....676 sq. in. (4358 cm<sup>2</sup>)

Parking - Mechanically expanding shoe off transmission output shaft. Pedal actuated.

Optional Emergency Brakes—Air boosted hydraulic brakes with separate circuits to front and rear axle. Failure in either circuit sounds audible alarm. Brakes may be manually applied or will apply automatically. (Meets SAE J237).

## TIRES AND RIMS

Rims are bolted directly to the wheels for positive non-slip retention.

Tire Size	Rim Width
Standard - 20.5 x 25 - 12 PR, L-2.....	17" (432 mm)
Optional - 17.5 x 25 - 12 PR, L-2, L-3.....	14" (356 mm)
Optional - 18.00 x 25 - 12 PR, E-2, E-3.....	13" (330 mm)
Optional - 20.5 x 25 - 12 PR, L-3.....	17" (432 mm)
Optional - 23.5 x 25 - 12 PR, L-2, L-3.....	19.5" (495 mm)
Optional - 20.5 x 25 - 12 PR, L-2, L-3 tires w/steel tread plies and shredded wire in the sidewall, tread, and under-tread .....17" (432 mm)	
Optional - 23.5 x 25 - 12 PR, L-2, L-3 tires w/steel tread plies and shredded wire in the sidewall, tread, and under-tread .....19.5" (495 mm)	

## ELECTRICAL

Direct electrical starting, 24 volt, negative ground. Two 12 volt 8D 205 amp-hr batteries. Master disconnect switch positively disconnects batteries from all circuits. Delco-Remy model 25 SI sealed alternator, rated output 14 amps at 700 rpm, 49 amps at 2100 rpm. Transistorized voltage regulator integral with alternator. Key operated electrical on-off ignition with neutral start safety feature. All dash gauges illuminated. Two front lights, two rear working lights, one stop/tail light.

## BUCKET HYDRAULIC SYSTEM

Two double acting lift cylinders,  
bore and stroke .....6" x 36" (152,4 mm x 914 mm)

Two double acting bucket cylinders,  
bore and stroke .....4" x 35" (102 mm x 889 mm)

Pump — Gear Type ....76 GPM (288 liter/min.) @ 2300 RPM

System relief pressure .....2250 psi (158 kg/cm<sup>2</sup>)

Hydraulic Tank—pressurized tank, filter and sump screen serviceable without draining tank.

Control Valve—Three spool hydraulic control

Lift Arm Control Positions—Raise, hold, lower, float

Lift Arm kick out control valve—Adjustable

Bucket control positions—Rollback, hold, dump

Bucket leveling valve positions bucket for loading

## SERVICE DATA

Water Cooling System	8.75 gals. (33,1 liters)
Fuel Tank	50 gals. (189,3 liters)
Crankcase	3.25 gals. (12,3 liters)
Transmission: Dry Fill	9.5 gals. (35,9 liters)
Refill	7.5 gals. (28,4 liters)
Hydraulic Tank	23 gals. (87 liters)
Hydraulic System incl. Tank	37 gals. (140 liters)
Steering System Tank	6 gals. (22,7 liters)
Axles (differential & planetary)	2.2 gals. (8,3 liters)
Recommended Fluids & Lubricants	
Axles	Multipurpose type gear lube
Cooling system	Permanent type ethylene glycol base
Transmission	Type C-2 transmission fluid

## OPERATING DATA

Lifting Capacity @ 2' (610 mm) Bucket	
Hinge Pin Height (SAE)	26,800 lbs. (12156 kg)
Hydraulic Speeds At Wide-Open Throttle	
Raise Lift Arms	6.4 sec.
Lower Lift Arms	4.0 sec.
Dump Bucket	2.2 sec.

## STANDARD EQUIPMENT

**Instruments:** Engine Water Temperature Gauge, Ammeter, Engine Oil Pressure Gauge, Fuel Tank Gauge, Transmission Clutch Pressure Gauge, Two Air Pressure Gauges, Torque Converter Oil Temperature Gauge, Hourmeter, Air Cleaner Restriction Gauge.

**Filters:** Engine Oil Filters, Transmission Oil Filters, Hydraulic Oil Filters, Steering Oil Filters, Engine Air Cleaner.

**Additional Standard Accessories:** Air Horn, Neutral Start Key Actuated Ignition Switch, Muffler, Blower Fan, Adjustable Bucket Seat, Hydraulic Oil Cooler, Automatic Bucket Leveling Valve, Automatic Adjustable Lift Arm Kick-Out, Fenders, Right and Left Side Access Steps, Fan Guard, Hood sides, Security Locks, Dual Brakes, Transmission Declutch Control, Audible Low Brake Pressure Warning Front and Rear Working Lights, Sealed Alternator, Drawbar, Electrical Disconnect Master Switch, Emergency and Parking Brake System (SAE J237), Seat Belt (SAE J386).

**Note:** Standard equipment conforms to SAE J185, Access, Egress.

## OPTIONAL EQUIPMENT

**OPTIONS TO HELP USER TO COMPLY WITH OCCUPATIONAL SAFETY & HEALTH ACT:** ROPS Cab or Canopy (SAE J394), Reverse Alarm, Audible (SAE J994).

**Other Options:** Heater, Defroster Fan, Floodlights (2) Mounted On Top of Cab, NoSPIN Differential (Rear Axle), Rear Axle Disconnect, Rotating Beacon Light, Soundpac, Bottom Guard, Radiator Screen, Screened Hood sides, Heavy Duty Hydraulic Oil Cooler.

## ATTACHMENTS

General Purpose Buckets, Drott 4-in-1 Bucket, Rock Bucket Kit (Spade Nose), Fork Lift, Bucket Spillboards, Weld-On Bucket Teeth, Bolt-On Bucket Teeth, Hydraulic Controls for Front Attachments, Cepeco Wheels, Counterweight, Side Dump Bucket, Utility Blades, "V" Snow Plow, Blade Snow Plows, Log Grapples, Log-Lumber Grapples, Railroad Car Coupler, Automatic Fire Suppression System, Quick Coupler System, Tire Chains.

## OPERATING DATA — OPERATING WEIGHTS

**NOTE:** All dimensions, specifications and ratings conform to or exceed SAE (Society of Automotive Engineers) Specifications J732 (Specification definitions) & J742B (Bucket Rating) where applicable.

Heaped Capacity (S.A.E.)	*3 yd <sup>3</sup> (2,29 m <sup>3</sup> )	*2 <sup>3</sup> / <sub>4</sub> yd <sup>3</sup> (2,10 m <sup>3</sup> )	*2 <sup>1</sup> / <sub>2</sub> yd <sup>3</sup> (1,91 m <sup>3</sup> )	*3 <sup>1</sup> / <sub>4</sub> yd <sup>3</sup> (2,48 m <sup>3</sup> )	*5 yd <sup>3</sup> (3,82 m <sup>3</sup> )	3 yd <sup>3</sup> (2,29 m <sup>3</sup> )
Bucket Type	G.P.	G.P.	G.P.	G.P.	Matl. Hdg.	Drott 4-in-1
Struck Capacity	2.12 yd <sup>3</sup> (1,62 m <sup>3</sup> )	2.38 yd <sup>3</sup> (1,82 m <sup>3</sup> )	2.12 yd <sup>3</sup> (1,62 m <sup>3</sup> )	2.75 yd <sup>3</sup> (2,10 m <sup>3</sup> )	4.38 yd <sup>3</sup> (3,35 m <sup>3</sup> )	2.50 yd <sup>3</sup> (1,91 m <sup>3</sup> )
Bucket Width	115" (2921 mm)	108" (2743 mm)	115" (2921 mm)	115" (2921 mm)	115" (2921 mm)	113" (2870 mm)
Bucket Weight	1800 lbs. (816 kg)	1720 lbs. (780 kg)	1640 lbs. (744 kg)	1810 lbs. (821 kg)	2460 lbs. (1116 kg)	3600 lbs. (1633 kg)
At Maximum Lift						
Dump Clearance @ 45°	10'- 0" (3048 mm)	10'- 0" (3048 mm)	10'- 3" (3124 mm)	9'-10" (2997 mm)	9'- 2 <sup>1</sup> / <sub>2</sub> " (2807 mm)	9'-10" (2997 mm)
Reach to Tires @ 45°	3'- 5" (1041 mm)	3'- 5" (1041 mm)	3'- 2" (965 mm)	3'- 6 <sup>1</sup> / <sub>2</sub> " (1080 mm)	4'- 2 <sup>1</sup> / <sub>2</sub> " (1283 mm)	3'-5" (1041 mm)
Spillboard Clearance	16'- 4" (4978 mm)	16'- 4" (4978 mm)	16'- 4" (4978 mm)	16'- 6" (5029 mm)	17'- 7" (5359 mm)	17'-7" (5359 mm)
Overall Length Carry	21'- 1" (6426 mm)	21'- 1" (6426 mm)	20'-10" (6350 mm)	21'- 2 <sup>1</sup> / <sub>2</sub> " (6464 mm)	21'- 10 <sup>1</sup> / <sub>2</sub> " (6668 mm)	21'-5 <sup>1</sup> / <sub>2</sub> " (6541 mm)
Overall Length on Ground	20'-10" (6350 mm)	20'-10" (6350 mm)	20'- 6" (6248 mm)	21'- 0" (6400 mm)	21'-11" (6680 mm)	21'-4" (6502 mm)
Turning Radius Outside Bucket Corner	22'- 5" (6833 mm)	22'- 1" (6731 mm)	22'- 4" (6807 mm)	22'- 6" (6858 mm)	22'- 8" (6909 mm)	22'-5" (6833 mm)
Breakout Force @ 4" From Cutting Edge	26,000 lbs. (11794 kg)	26,000 lbs. (11794 kg)	29,900 lbs. (13563 kg)	24,700 lbs. (11204 kg)	18,900 lbs. (8573 kg)	22,100 lbs. (10025 kg)
Static Tipping Load						
Straight Ahead	21,800 lbs. (9888 kg)	21,880 lbs. (9925 kg)	21,960 lbs. (9961 kg)	21,790 lbs. (9884 kg)	21,140 lbs. (9589 kg)	20,000 lbs. (9072 kg)
Full Turn	19,400 lbs. (8800 kg)	19,480 lbs. (8836 kg)	19,560 lbs. (8872 kg)	19,390 lbs. (8795 kg)	18,740 lbs. (8500 kg)	17,600 lbs. (7983 kg)
Operating Weight						
Front	12,094 lbs. (5486 kg)	11,964 lbs. (5427 kg)	11,834 lbs. (5368 kg)	12,110 lbs. (5493 kg)	13,164 lbs. (5971 kg)	15,024 lbs. (6815 kg)
Rear	19,106 lbs. (8666 kg)	19,156 lbs. (8689 kg)	19,206 lbs. (8712 kg)	19,100 lbs. (8664 kg)	18,696 lbs. (8481 kg)	17,976 lbs. (8154 kg)
Total	31,200 lbs. (14152 kg)	31,120 lbs. (14116 kg)	31,040 lbs. (14080 kg)	31,210 lbs. (14157 kg)	31,860 lbs. (14452 kg)	33,000 lbs. (14969 kg)

**NOTE:** For a bucket equipped with teeth reduce dump clearance by 5" (127 mm)  
Other Special Buckets Available.

\*Predrilled Cutting Edge

## ADDITIONAL STABILITY INFORMATION

**Item**  
Counterweight  
ROPS Cab

**Operating Weight Change**  
+ 780 lbs. (+354 kg)  
+1280 lbs. (+581 kg)

**Full Turn Tipping Load Change**  
+1100 lbs. (+499 kg)  
+ 940 lbs. (+426 kg)

**Tires**  
17.5 x 25 - 12 PR, L-2

**Operating Weight Change**  
**Tires Only**      **With Hydroinflation**

**Full Turn Tipping Load Change**  
**Tires Only**      **With Hydroinflation**

17.5 x 25 - 12 PR, L-3

-1468 lbs. (-866 kg)      -274 lbs. (-124 kg)

-780 lbs. (-354 kg)      +488 lbs. (+221 kg)

18.00 x 25 - 12 PR, E-2

-1332 lbs. (-604 kg)      -138 lbs. (-63 kg)

-708 lbs. (-321 kg)      +560 lbs. (+254 kg)

18.00 x 25 - 12 PR, E-3

+364 lbs. (+165 kg)      +2144 lbs. (+973 kg)

+193 lbs. (+88 kg)      +2083 lbs. (+945 kg)

20.5 x 25 - 12 PR, L-2

+744 lbs. (+337 kg)      +2524 lbs. (+1145 kg)

+397 lbs. (+180 kg)      +2287 lbs. (+1037 kg)

20.5 x 25 - 12 PR, L-3

- 0 -      +1970 lbs. (+894 kg)

- 0 -      +2095 lbs. (+950 kg)

23.5 x 25 - 12 PR, L-2

+344 lbs. (+156 kg)      +2314 lbs. (+1050 kg)

+183 lbs. (+83 kg)      +2278 lbs. (+1033 kg)

23.5 x 25 - 12 PR, L-3

+1072 lbs. (+486 kg)      +3712 lbs. (+1684 kg)

+570 lbs. (+259 kg)      +3375 lbs. (+1531 kg)

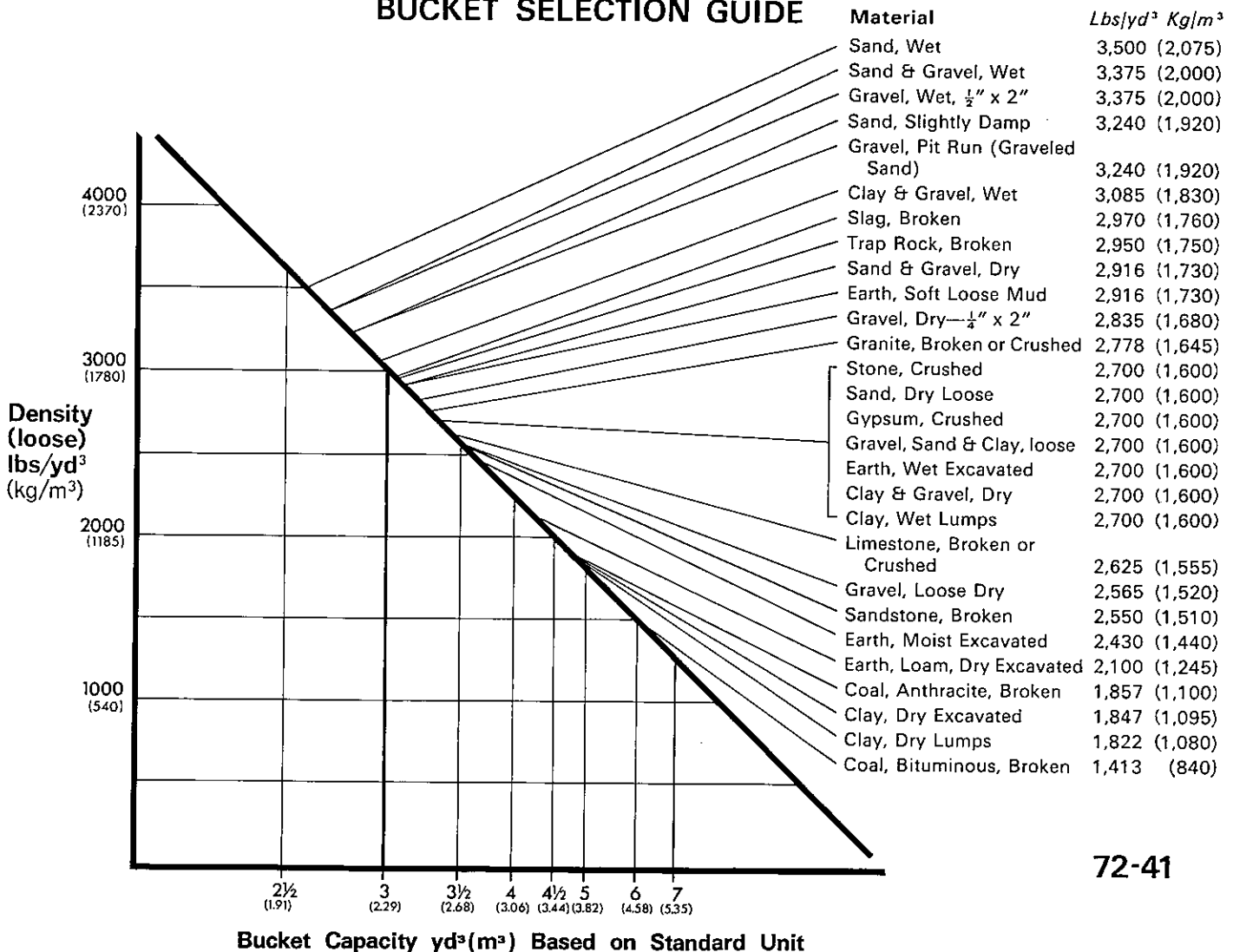
23.5 x 25 - 12 PR, L-3

+1552 lbs. (+704 kg)      +4192 lbs. (+1901 kg)

+825 lbs. (+374 kg)      +3630 lbs. (+1647 kg)

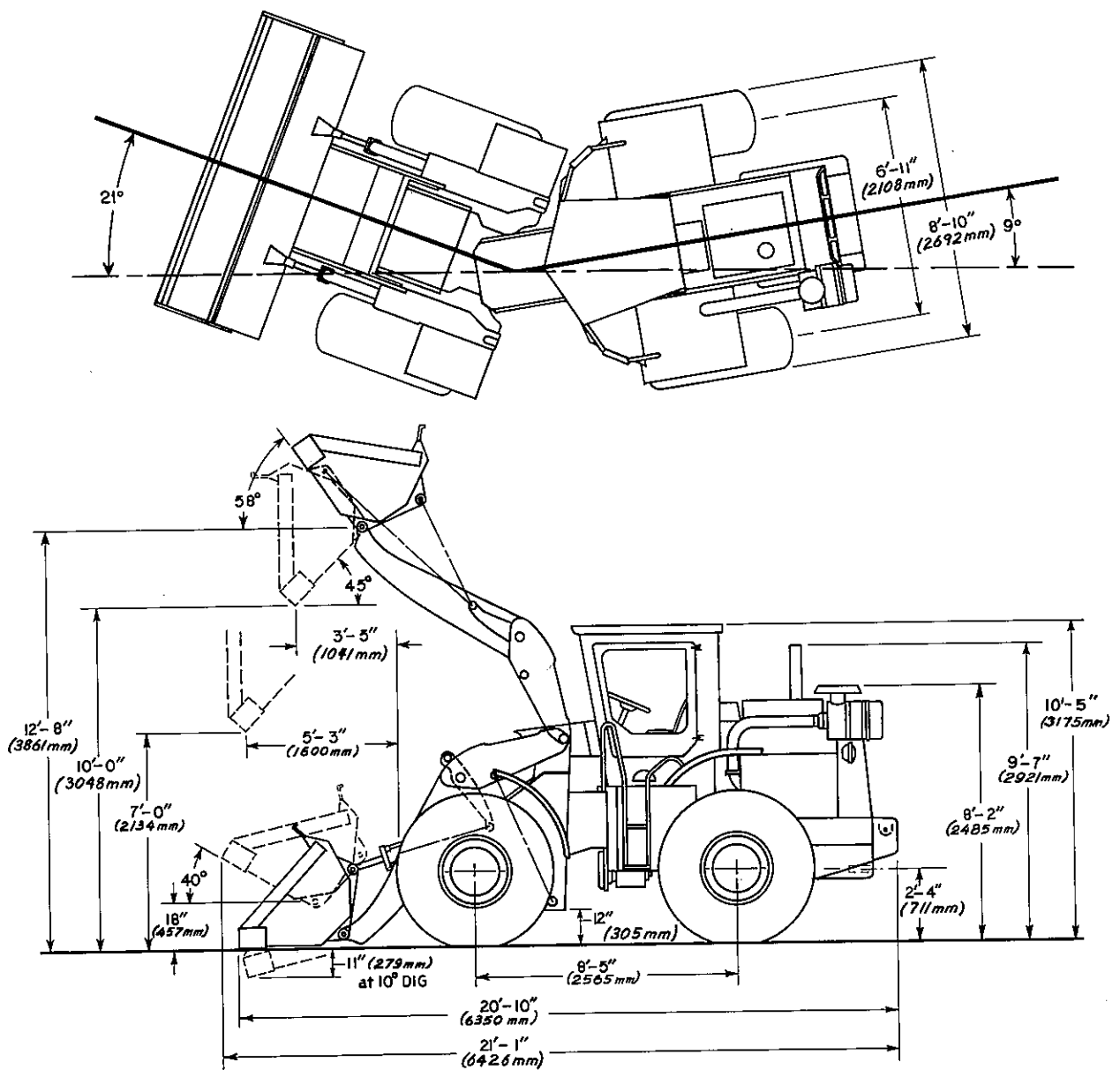
NOTE: Hydroinflation (75% fill CaCl<sub>2</sub> solution) in rear tires only.  
Changes based upon unit equipped with standard 20.5 x 25 - 12 PR, L-2 tires.

## BUCKET SELECTION GUIDE



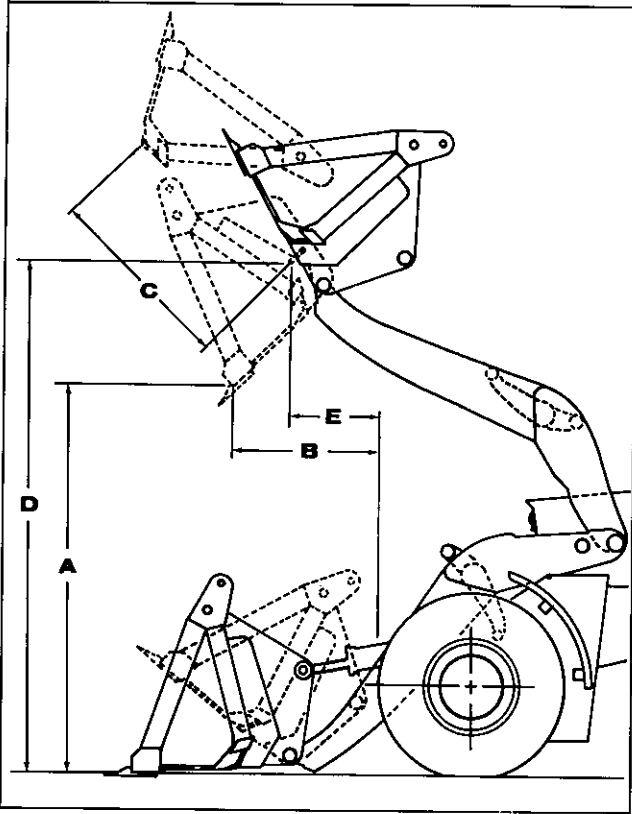
## ADDITIONAL DIMENSIONAL INFORMATION

Tire Size and Type	Vertical Dimensions Change	Turning Radius Outside Rear Tires	Reach at Max. Height Change	Machine Width	Vehicle Track
20.5 x 25, L-2 (Std.)	— 0 —	19'-8" (5994 mm)	— 0 —	8'-10" (2692 mm)	6'-11" (2108 mm)
17.5 x 25, L-2	-2.50" (-63,5 mm)	19'-4" (5892 mm)	+2.8" (+71,1 mm)	8'- 7" (2616 mm)	6'-11" (2108 mm)
17.5 x 25, L-3	-2.0" (-50,8 mm)	19'-4" (5892 mm)	+2.8" (+71,1 mm)	8'- 7" (2616 mm)	6'-11" (2108 mm)
18.00 x 25, E-2	+2.5" (+63,5 mm)	19'-6" (5944 mm)	-1.8" (-46 mm)	8'-11 <sup>3</sup> / <sub>4</sub> " (2737 mm)	6'-11" (2108 mm)
18.00 x 25, E-3	+3.2" (+81,3 mm)	19'-6" (5944 mm)	-2.2" (-55,9 mm)	8'-11 <sup>3</sup> / <sub>4</sub> " (2737 mm)	6'-11" (2108 mm)
20.5 x 25, L-3	+ .7" (+17,8 mm)	19'-8" (5994 mm)	+ .4" (+10,2 mm)	8'-10" (2692 mm)	6'-11" (2108 mm)
23.5 x 25, L-2	+2.25" (+55,9 mm)	19'-2" (5842 mm)	-2.6" (-66,0 mm)	9'- 5" (2870 mm)	7'- 2" (2184 mm)
23.5 x 25, L-3	+3.0" (+76,2 mm)	19'-2" (5842 mm)	-2.5" (-63,5 mm)	9'- 5" (2870 mm)	7'- 2" (2184 mm)



NOTE: Unit Shown with 3 yd. G.P. Bucket, 20.5 x 25 - 12 PR, L-2 Tires, and TEREX ROPS Cab.

## 4-in-1 BUCKET



<b>Bucket</b>		<b>(mm)</b>
S.A.E. Rated Capacity .....	3 yd <sup>3</sup>	(2,29 m <sup>3</sup> )
Overall Width.....	113"	(2870)
Max. Tiltback at Ground .....	40°	
At Max. Lift:		
A. Dump Clearance @ 45° Dump.....	9'-10"	(2997)
B. Reach @ 45° Dump .....	3'-5"	(1041)
Max. Dump Angle.....	50°	
Max. Tiltback.....	60°	
Overall Operating Height.....	17'-7"	(5359)
<b>Clam-Dozer</b>		
C. Max. Clam Opening.....	5'-1"	(1549)
At Max. Lift with Clam Open and Cutting Edge @ 45°:		
D. Dump Clearance.....	12'-8"	(3861)
E. Reach.....	2'-7"	( 787)
Height of Moldboard.....	4'-2"	(1270)

### EXPORT SHIPPING INFORMATION (Approximate)

**Machine—including lift arms, rims, and standard tires**

Length .....	17'-8" (5385 mm)
Height .....	7'- 9" (2362 mm)
Width .....	8'-11" (2718 mm)
Volume .....	1232 cu. ft. (34,88 m <sup>3</sup> )
Weight .....	28,800 lbs. (13064 kg)

**ROPS Cab—when not included on vehicle**

Length .....	4'-5" (1346 mm)
Height .....	5'-6" (1676 mm)
Width .....	4'-7" (1397 mm)
Volume .....	111.3 cu. ft. (3,15 m <sup>3</sup> )
Weight .....	1280 lbs. (581 kg)

**Bucket—General Purpose—3 yd<sup>3</sup>**

Length .....	9'-7" (2921 mm)
Height .....	3'-7" (1092 mm)
Width .....	3'-9" (1143 mm)
Volume .....	129 cu. ft. (3,65 m <sup>3</sup> )
Weight .....	1900 lbs. (862 kg)

CONVERSION CHART		
1 mile	=1.609 kilometers	1 U.S. Gal.
1 foot	=30.48 centimeters	coolant
1 inch	= 2.54 centimeters	1 lb.
1 U.S. Gal.	=3.785 liters	=6.452 sq. centimeters
1 U.S. Gal.	=0.833 imp. gals.	1 sq. ft.
1 U.S. Gal.	=7.3 lbs. (approx.)	1 sq. yd.
diesel fuel	=7.3 lbs. (approx.)	1 cu. yd.
		=0.7646 cu. meters

● Revisions this printing.



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