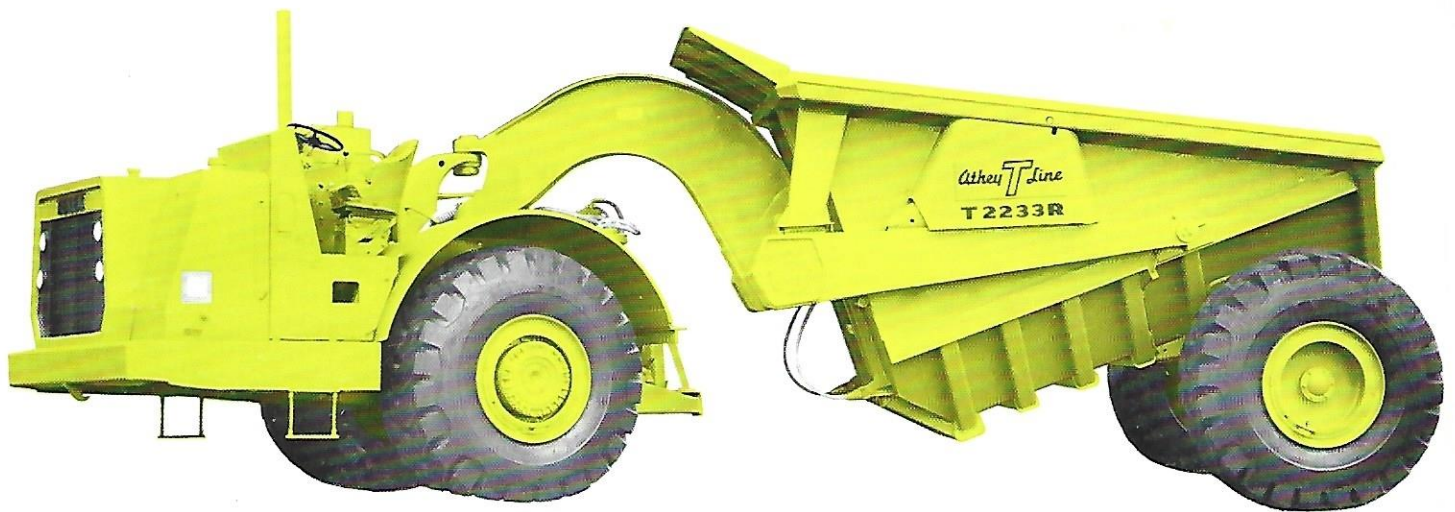


# Athey® T2233R ROCKER



## FEATURES OF THE T2233R

- Exceptional stability—load is low between the wheels.
- Articulated design eliminates frame distortion.
- Positive, controlled dumping
- Excellent payload to unit weight ratio.
- High-strength steel construction resists impact loads.
- Low, wide, profile for easy loading

# 33 TON ROCKER

## TEREX 33TOT TRACTOR AND ATHEY T2233R TRAILER

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

### CAPACITY

Struck (S.A.E.)	22 cu. yds. (16,8 m <sup>3</sup> )
Heaped (3:1)	24.5 cu. yds. (18,7 m <sup>3</sup> )
Heaped (S.A.E. 2:1)	26 cu. yds. (19,9 m <sup>3</sup> )
Rated Payload	33 tons 66,000 lbs. (29,938 kg)

### TRACTOR ENGINE

#### Detroit Diesel 8V-71N, 2 Cycle Diesel

Gross tractor HP @ 2100 RPM	318
Flywheel HP @ 2100 RPM	292
Number of cylinders	8
Bore and stroke	4 1/4" x 5" (108 mm x 127 mm)
Piston displacement	568 cu. in. (9,3 liters)
Maximum torque @ 1400 RPM	814 ft-lb (112,6 kg m)
Oil—MIL-L2104B	SAE 30
Fuel	No. 2-D recommended
Governor type	Limiting speed
Maximum RPM, full load	2100
Maximum RPM, no load	2250
Idle speed	700
Air cleaner	(1) Donaldson dry, T-type (STG-16)

### TRANSMISSION—Allison CLT-4465

Allison Torqmatic transmission with 400 series single stage converter. Automatic converter lock-up is standard in top five speed ranges. Torqmatic transmission has spur planetary gearing. Six speeds forward, one reverse. Full powershifting through hydraulically actuated multiple disc clutches.

Ratios:	1st 4.00:1	2nd 2.82:1	3rd 2.00:1
	4th 1.41:1	5th 1.00:1	6th 0.71:1
			Reverse 4.77:1
Transfer Case	1.28:1		
Stall speed	1665 - 1765 RPM		
Maximum speed	31.2 MPH (50,2 km/hr)		

### TORQUE CONVERTER—Allison TC-490

Mounted integral with transmission. Maximum torque multiplication 2.60:1.

### DRIVE AXLE

Heavy duty, full floating axle with TEREX 305 single reduction bevel gear differential and planetary reduction in each wheel.

Ratios:	Differential	3.62:1
	Planetary	4.59:1
	Total Reduction	16.62:1

### STEERING SYSTEM

Full hydraulic type provided by two single stage, double acting cylinders. Full 90° swing to either right or left.

### BRAKES

Two shoe internal expanding type. Emergency braking system and air-water separator are standard.

Brake Lining:	
Diameter	23" (584 mm)
Shoe width	7" (178 mm)
Lining area—tractor axle	690 sq. in. (4452 cm <sup>2</sup> )

### TIRES AND RIMS

Tire Size	Rim Size
Standard — 29.5 x 29 - 34 PR, E-3	25" (635 mm)
Radial Steel Cord Tires available in 29.5 x 29 size	

### ELECTRICAL

Direct electric starting, 24 volt GM. Two heavy duty 12 volt 205 amp-hr batteries. Ventilated 50 amp alternator.

### SERVICE DATA

	U. S. Gal. (liters)
Water cooling system	22.8 gals. ( 86,1)
Fuel tank	150 gals. (667,8)
Crankcase (dry fill)	7 gals. ( 26,5)
Transmission and converter	8 gals. ( 30,3)
Hydraulic system	46 gals. (174,1)
Drive axle—Differential	11,8 gals. ( 44,5)
Drive axle—Planetary	2 gals. ( 7,6)

### STANDARD EQUIPMENT

Dry 'T' Type Air Cleaner, Full Flow Hydraulic Filtration, Engine Oil Pressure Gauge, Engine Temperature Gauge, Converter Oil Temperature Gauge, Clutch Pressure Gauge, Air Restriction Gauge, Positive Temperature Cooling System, Muffler, Maintenance and Parts Manuals, Emergency and Parking Brake System (SAE J-319B). Tachometer, Hourmeter, Air Pressure Gauge, Air Horn, Air Suspension Seat, Built in ROPS Pads, Full Width Front Fenders (SAE J-321A). Reverse Alarm (SAE J-994).

### OPTIONAL EQUIPMENT

Options to help user comply with occupational safety and health act:

Canopy, Roll Over Protective Structure (SAE J310A) Will Fit Over Optional Cab; Seat Belt (SAE J386); Reverse Alarm (SAE J994).

Other Options:

Brake Drum Guards, Cab, Cab Defroster and Heater, Sun Canopy, Down Shift Inhibitor, Power Locking Differential, Retarder, Bostrom Norseman Seat, Security Kit, Windshield and Wiper, Transmission Guard, Soundpac (Includes Cab).

## TRAILER

### DESIGN

Trailer is of frameless design. Smooth contours inside body expedite load dumping. Wide top opening and low profile for easy loading with a wide variety of equipment. Large single tires provide exceptional flotation while retaining maximum stability. 18° forward slope of body floor and sloping sides reduce loading shock.

### CONSTRUCTION

Body is all welded high-strength steel plate, reinforced with box sections. Floor is of 5/8" (15,8 mm) T-1 plate. Side Plates are 3/8" (9,42 mm) thick, and front panel is 1/2" (12,70 mm) thick. Drawbar and draft connection are of unit construction with 7/8" (22,23 mm) bottom plate, 5/8" (15,8 mm) top plate and 3/8" (9,42 mm) side plates. Axle member is of welded construction with 4 1/2" (114,30 mm) alloy steel axles bolted into place.

### OPERATION

Hydraulic power for actuating trailer body is obtained from integral, tractor-mounted hydraulic system. Trailer is actuated with a dump lever mounted to right of operator. Twin, two-stage hydraulic hoists lift body to 50° dump angle.

### BRAKES

Air operated from tractor brake controls. Trailer brakes set first. Trailer has separate air reservoir and emergency relay valve to apply brakes automatically in event of air line failure. Diameter 22" (559 mm), width 7" (178 mm). Area 735 sq. in. (4742 cm<sup>2</sup>).

### WHEELS

Tapered roller bearings, spring-loaded rawhide oil seals. Axles are 4 1/2" (114,3 mm) diameter of high-strength, heat-treated alloy steel.

### TIRES

29.5 x 29, 34 PR E3  
(Opt.) Radial Steel Cord Tires available in 29.5 x 29 size.

### OPTIONAL EQUIPMENT

Body Liners — Recommended for high impact service or abrasive material. Liners are T-1 steel strips, 1/2" x 6" (12,7 mm x 152 mm), welded to floor and 3/8" x 10" (9,42 mm x 254 mm) to side plates, and angles welded horizontally to inside front plate of body.  
Ducktail — To provide extra casting distance.

## APPROXIMATE SHIPPING WEIGHTS

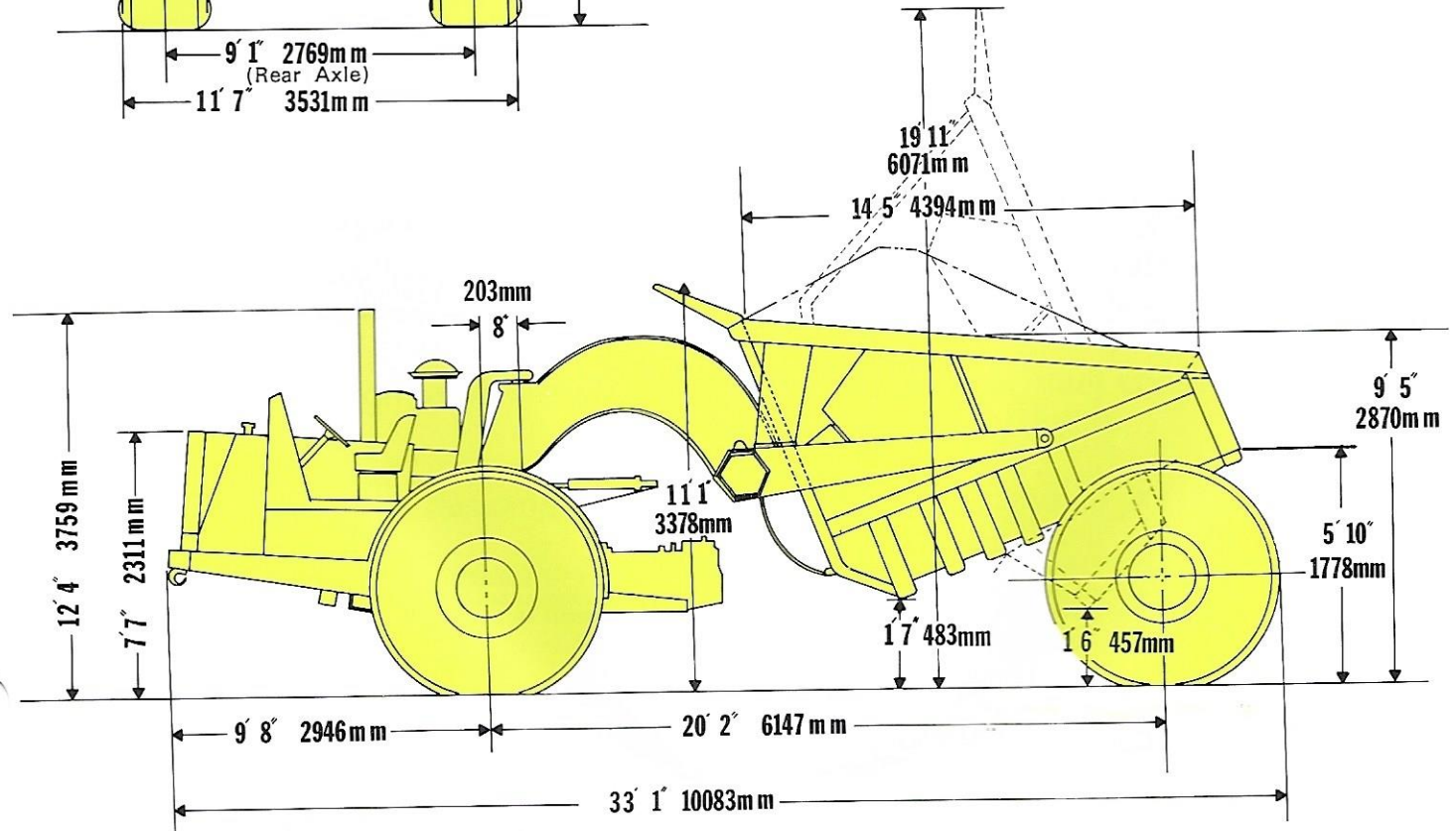
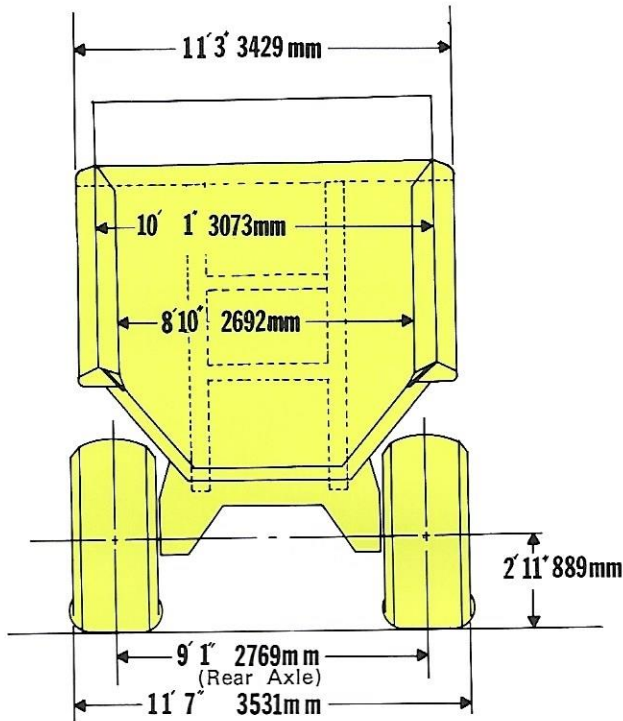
Tractor .....	27,500 lbs. (12,474 kg)
Trailer .....	26,300 lbs. (11,929 kg)

## WEIGHT DISTRIBUTION (lbs.)

	Front	Rear	Total
Empty	37,300 (16,919 kg)	16,500 ( 7,484 kg)	53,800 (24,403 kg)
Loaded	56,568 (25,659 kg)	63,232 (28,682 kg)	119,800 (54,341 kg)
% Loaded	47.2	52.8	

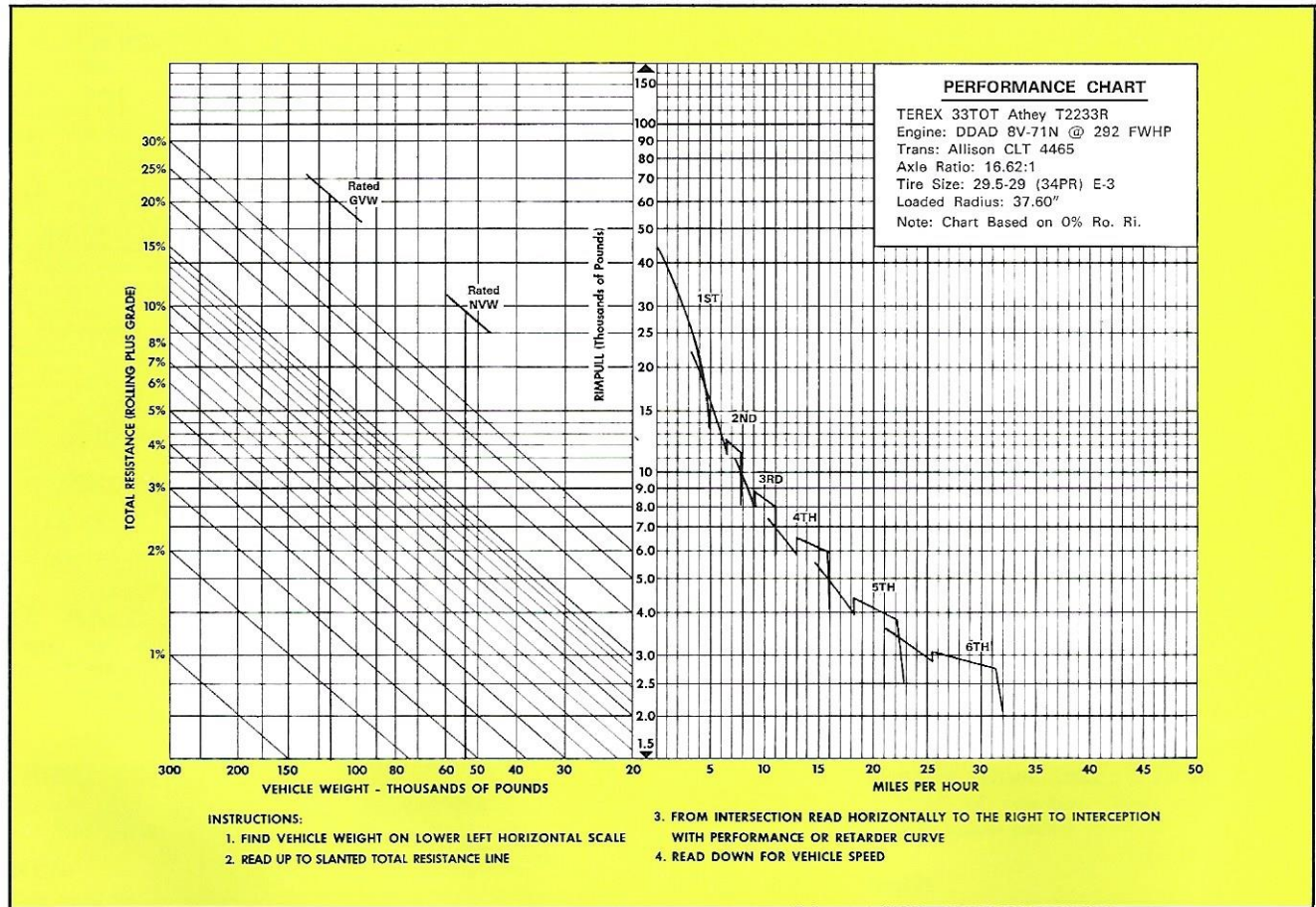
## OVERALL DIMENSIONS

Height	
Body down .....	11' 1" (3378 mm)
Top of body at extreme dumping angle .....	19' 11" (6071 mm)
Loading height, side average .....	9' 5" (2870 mm)
Discharge height at extreme dumping angle .....	1' 6" (432 mm)
Overhang of body discharge lip behind rear tire at extreme dumping angle .....	6" (127 mm)
Tread	
Tractor .....	7' 5½" (2273 mm)
Trailer .....	9' 1" (2769 mm)
Wheelbase	
Haul position .....	20' 2" (6147 mm)
Dump position .....	14' 11" (4547 mm)
Ground Clearance .....	1' 7" (483 mm)
Non-stop turning width	
Body up .....	28' (8534 mm)
Body down .....	32' (9754 mm)
Dumping angle .....	50°
Total braking area, tractor and trailer .....	1425 sq. in. (9194 cm <sup>2</sup> )
Length	
Trailer .....	24' 5" (7442 mm)
Tractor and Trailer .....	33' 1" (10,084 mm)
Body, inside at top .....	14' 5" (4394 mm)
Width	
Overall .....	11' 7" (3531 mm)
Body, inside at top .....	8' 10" (2692 mm)



### CONVERSION CHART

1 mile	=1.609 kilometers	1 U.S. Gal.	=8.3 lbs. (approx.)
1 foot	=30.48 centimeters	coolant	
1 inch	=2.54 centimeters	1 lb.	=0.4536 kilograms
1 U.S. Gal.	=3.785 liters	1 sq. in.	=6.452 sq. centimeters
1 U.S. Gal.	=0.833 imp. gals.	1 sq. ft.	=929 sq. centimeters
1 U.S. Gal.		1 sq. yd.	=0.836 sq. meters
diesel fuel	=7.3 lbs. (approx.)	1 cu. yd.	=0.7646 cu. meters



All products of Athey Products Corporation are sold only under its standard warranty; and Athey Products Corporation reserves the right to change and/or improve its products at any time without incurring any obligation to make such changes and/or improvements in products covered by these specifications or other Athey literature.

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