

Wes Kerney Collection

TEREX MODEL 33-19 HAULER

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

CAPACITY (SAE):

Struck	.150 cu. yds. (114.7m3)
Heaped 1:1	287 cu. yds. (219.4m3)
Heaped 2:1	221 cu. yds. (168.2m3)
Heaped 3:1	198 cu, yds. (151.3m3)

ENGINE:

General Motors Electro-Motive	
Division Model 16-645E4	
Gross HP @ 900 RPM	3300
Flywheel HP @ 900 RPM	3000

NOTE: Above ratings at 29.9" Barometric pressure, 60°F ambient, 60°F fuel inlet temperature and .845 S.G. Gross vehicle horsepower rating includes standard engine equipment such as water pumps, fuel oil pump, lube oil pump. Flywheel horsepower is the net horsepower after deductions from gross vehicle horsepower for radiator cooling fans, traction motor cooling fan, 55 volt support alternator, 24 volt accessory alternator, and hydraulics.

Number of Cylinders	16
Cylinder Arrangement	45° 'V'
Cylinder Bore and Stroke	
9%, x 10" (230	x 254 mm)

Piston Displacement (Total)

10,320 cu. in. (169.15 lit.)

Operating Principle — 2-Stroke Cycle, Turbocharged, Intercooled, Unit injection.

Full Speed 900 RPM Idle Speed 315 RPM

Two Radiators — Sectional Design

Six (6) Sections Each

Radiator Frontal Area

5,328 sq. in. each (34,374 sq. cm each)

Two Hydraulically Driven Fans

Diameter 68" (1727 mm)

ELECTRIC DRIVE SYSTEM:

Generator — General Motors Electro-Motive Division 10-pole alternator, model AR10, rectified output, directly coupled to the engine.

Traction Motors — Four General Motors serieswound motors, model D79CF.

DRIVE AXLES:

Heavy duty, with full floating axle shafts, a pinion to gear first reduction and a planetary final reduction.

Ratios:	Std.
Pinion and Gear	6:1
Planetary	6:1
Total Reduction	36:1

SUSPENSION:

Front (independent) — Combination king pin and ride strut arrangement; rubber pad spring media.

Rear — Single rate ride struts with rubber pad spring media.

CAB:

Heavy duty welded steel construction, 66" (167 cm) wide, mounted to the left with entry from either side; insulated for sound and temperature control; tinted laminated safety glass in front and side windows; clear laminated safety glass in rear window; six-way adjustable operator's seat.

BODY:

Longitudinal "V" type floor with integral transverse box section stiffeners. The body is exhaust heated and rests on resilient impact absorption pads.

BODY PLATE THICKNESS

Plate	Thick	kness Min	imum Yield	Strength
	Inche	es (cm)	PSI	(kg/cm ²)
Floor	.75	(1.91)	130,000	(9,140)
Side	.38	(.96)	100,000	(7,031)
Front	.38	(.96)	100,000	(7,031)
Cab Guard-Main	.19	(.48)	100,000	(7,031)

The floor plate and rear bolster are high hardness (285 BNH minimum) abrasion resistant steel. The main cab guard, front and side plates are high strength heat treated steel plate. All other body material is moderate strength, low alloy steel, with a minimum yield of 45,000 psi (3,160 kg/cm²).

HOIST SYSTEM:

The body hydraulic system is independent of the steering system. There are two inverted body hoists, three-stage, power down in second and third stages. Mounted outboard of frame rails. Two tandem gear pumps with total capacity of 350 IGPM (1590 lit./min.) @ 2050 RPM (900 engine RPM).

Body	Raise	Time	 28 se	cs.
Body	Lower	Time	 30 se	cs.

FRAME:

Rigid full-box section with torque tube stiffeners. Box section front crossmember with removable top section for power plant removal.

STEERING:

Full time power steering with dual steering cylinders and independent pressure compensated piston pump. Closed centre steering valve. Three accumulators provide full power steering at low engine speed, provide temporary steering reserve if the engine fails with reserve of two lock to lock turns. Low pressure warning signals operator when system pressure falls below 1200 PSI (84.3 kg/cm²). Maximum tire steering angle 35½°. Rear tandem axles have a 5° steering angle when actuated at a preset steering angle of the front wheels.

BRAKING SYSTEMS:

Service Brakes — Independent front and rear systems actuated by a single treadle. They are of the internal expanding type, mechanically actuated by air over oil pressure.

Front — Two-shoe internal expanding type, 42" x 14" (1067 x 356 mm).

Braking Area — 2180 sq. in. (14,065 cm²)

Rear — Three-shoe internal expanding type, 42" x 18" (1067 x 457 mm).

Braking Area — per axle — 2820 sq. in. (18,194 cm²).

Total Contact Area — 7820 sq. in. (50,455 cm²). System Air Compressor — 60 cfm (1700 litres per minute).

Total Brake Air Reservoir Capacity — 93,120 cu. in. (1,526,236 cm³)

Fail Safe and Parking Brakes—Fail safe brakes are automatically actuated if an air pressure drop to 45 psi occurs. They are applied mechanically to the drive wheels, and have the capacity to stop the fully loaded vehicle. The fail safe brakes can also be manually actuated by the operator, to act as a parking brake.

Dynamic Brakes — Fully blown grid resistors, continuously rated at 5400 HP.

TIRES AND RIMS (Tubeless):

Standard	Rim Size	
Front-40.00 x 57 (60PF	R) E3 29.00" (736.6 mm	1)
Drive-40.00 x 57 (60PF		1)

NOTE: Productivity and performance capabilities of TEREX haulers are such that under specific job conditions the Ton-MPH capability of Standard or Optional tires can be exceeded. Operation above the Ton-MPH rating may lead to premature tire problems. TEREX recommends that the user consult the tire manufacturer, and evaluate all job conditions in order to make the proper tire selection.

ELECTRICAL SYSTEM:

24 volt electrical accessories with 150 psi (10.2 atm) air start system. Two 12-volt batteries, and a 75 ampere Delco Remy 25SI alternator with integral transistorized voltage regulator. Master battery disconnect switch in cab.

SERVICE DATA:

	IMP. GAL	US GAL.	LIT.
Engine Lube			
Oil System	278	333	1262.7
Engine Cooling			
System	215	258	976.5
Fuel Tank Capacity	1300	1560	5904.6
Hoist Hydraulic			
Tank	350	420	1589.7
Steering Hydraulic			
Tank	30	36	136.3

WEIGHTS:	lb.	kg
Vehicle Less Body	437,000	198,222
Body	72,500	32,885
Net Vehicle Weight	509,500	231,105
Payload	700,000	317,514
Gross Vehicle Weight	1,209,500	548,620

NET WEIGHT DISTRIBUTION:

Front—Per Tire	89,200	40,442
Rear-Per Tire	41,400	18,778

GROSS WEIGHT DISTRIBUTION:

Front—Per Tire	115,000	52,163
Rear-Per Tire	122,400	55,519

TIRE SPACING:

Inside Front	17'-4"	5283 mm
Inside Drive	8'-9"	2667 mm
Outside Front	25'-8"	7823 mm
Outside Drive	25'-7"	7797 mm

GENERAL DIMENSIONS:

Wheelbase	29'-11"	9118.4	mm
(Front axle centre to centre tandems)	re betw	reen rea	ar
Top of Cab Guard to		877 ST277 S	
Ground	22'-7"	6883.3	mm
Cab Floor to Ground	14'-5"	4394.2	mm
Loading Height	18'-7"	5664.1	mm
Overall Length	66'-9"	20345	mm
Overall Width	25'-7"	7797.7	mm
Front Axle Track	21'-6"	6553	mm
Drive Axle Track	17'-2"	5232	mm
Ground Clearance (bottom of rear axle housing)	2'-4.8"	* 732	mm
Turning Circle on Front Wheel Track (with rear axle steering)	140′	42.67	m

*This dimension is taken for a loaded vehicle.

BODY:

Length Inside	36'-8"	11175 mm
Width Inside	23'-6"	7163 mm
Depth	5'-7.5"	1715 mm

STANDARD EQUIPMENT:

Dual Brake System; Emergency Brake System (Fail Safe); Parking Brake (Combined with Emergency Brakes); Hand Controlled Rear Axles Brake; Air Horn; Back-up Lights and Audible Signal; Emergency Steering (Accumulator Type); Seat Belts; Padded Dashboard.

Engine Alarms for: High Crankcase Pressure, Low Coolant Level, Low Oil Pressure.

Sectional Core Radiators, Continuously Rated Dynamic Brakes, Hydraulic drive for engine cooling fans, Enclosed (and pressurized) engine room, Double Wall Cab Construction with Insulation, Interior Sound Treatment, 6-Way Adjustable Bostrom Westcoaster Driver Seat w/Deluxe Cushions, Passenger Seat w/Back Rest and Deluxe Cushions, Seat Belts (Driver and Passenger), Heater-Defroster, Dual Windshield Wipers (Air Actuated), Utility Compartment, Sun Visors (Driver and Passenger), Tinted Safety Glass (Front and Side Windows), Illuminated Instrument Panel, Illuminated Console, Floor Mat, Interior Light, Coat Hook, Headliner, Air Horn, Electrically Controlled Hoist System, Parking Brake Switch, Headlight Dimmer Switch, Emergency Engine Shut-down Switch, Master Battery Switch.

Gauges: Engine Water Temperature, Engine Lube Oil Pressure, Brake System Air Pressure, Starting System Air Pressure, Ammeter, Tachometer, Speedometer, Hourmeter.

Indicators: Low air pressure, Air Cleaner Restriction, Steering Hydraulic Filter, Main Hydraulic Filter, High Beam, Low Steering Pressure.

Rock Ejectors, Dry-type Air Cleaners, Heated Body with Exhaust Diverter Valve, Separate Steering and Body Hydraulic Systems, Sealed Alternator, Air Starter, 4 Headlights (High and Low Beams), Combination Tail and Stop Light, Back-Up Light, Dynamic Brake Light, Brake Dirt Shields, High Speed Fueling Provision.

OPTIONAL EQUIPMENT:

The following options have been developed for the 33-19:

Radiator Shutters, Fire Extinguisher System, Manual Fire Extinguisher, Outside Mirrors-Both Sides of Unit, Passenger Seat and Seat Belt, Extra Rock Tread Tires, Floor Wear and End Protection Plates, Automatic Lube System, Rear Bumper, High Speed Pressure Fueling, Optional Body Size, Supplementary Electric Steering, Hubodometer (E3 Tires), External Hydraulic, Air and Electrical Connections, Low Air Pressure Alarm, Windshield Washers, Traction Motor Cut-out Switch, Tachograph, Moisture Ejector, Body-up Warning Light, Body-up Power Interlock with Override Switch, Body Travel Limit Switch with Override, Body Hoist Interlock, Extended Range Dynamic Braking, Air Conditioning with External Air, Clearance Lights, High Mounted Headlights, Traction Motors Series Parallel Switch, Filter Change Indicator, Low Hoist Hydraulic Oil Level Alarm. Low Fuel Oil Indicator, Ladder on Fuel Tank, Exhaust Heated Body, Directional Lights and Switch, Hot Engine Alarm Light, Service Lights in Electrical Cabinet, Service Lights in Engine Hood, Mud Flaps, Hydraulic Filter Restriction Gauge, Service Brake Power Interlock.

NOTE: The following equipment conforms to SAE codes: SAE J166 - Safety Brakes, SAE J - Safety Steering (Not finalized by SAE), SAE J386 - Seat Belts, SAE J919 - Sound, SAE J952 - Sound, SAE J321A - Fenders.