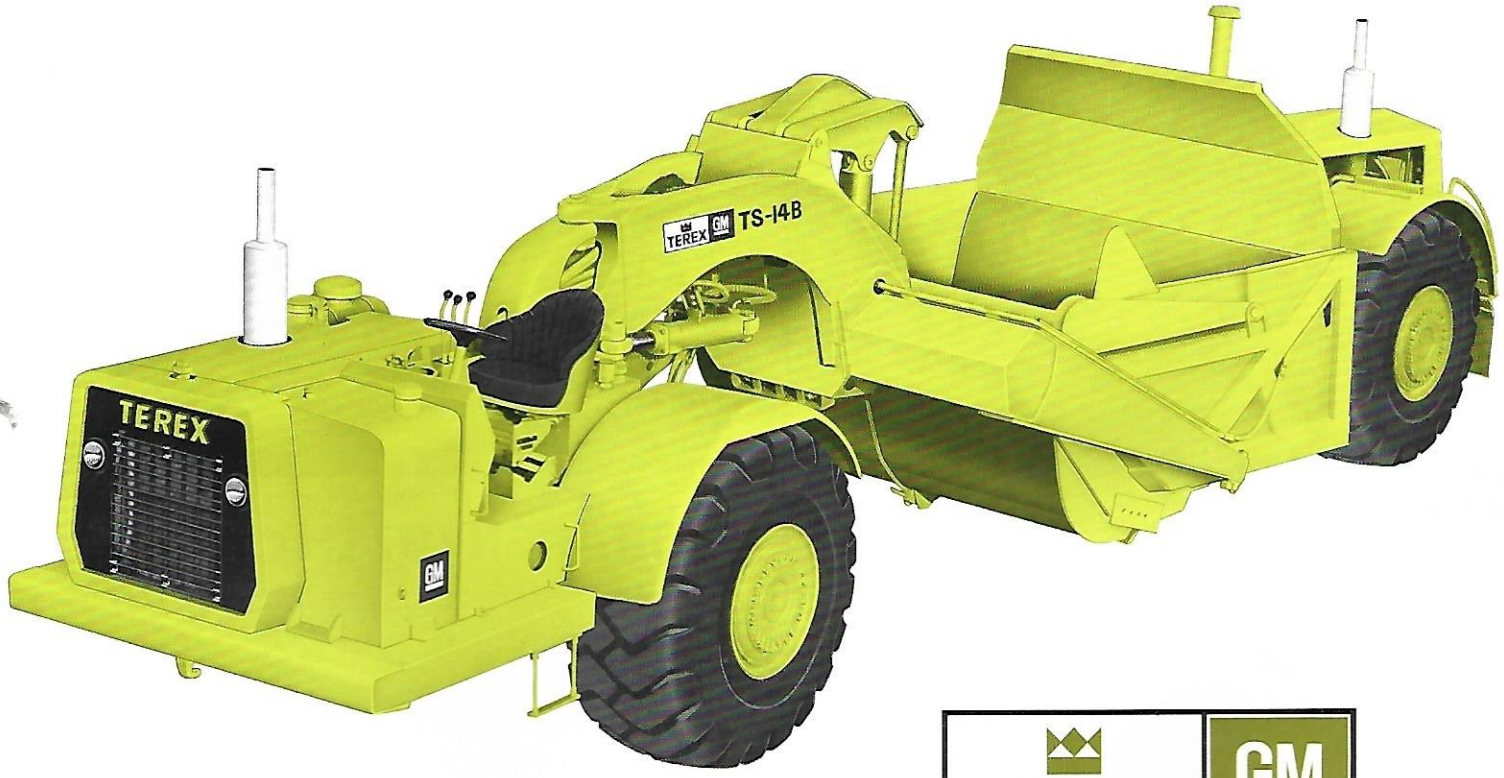
TEREX TS-14B SCRAPER



TEREX GM

- 288 Flywheel Horsepower
- All-Wheel Drive
- 47,000 lb. (21319 kg) Payload

MARCH 1974
Form No. S-5602

TEREX TS-14 B SCRAPER

MODEL 17UOT-97SH

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

CAPACITY

Struck Measure (S.A.E. Rating) .....14 cu. yds. (10,7 m³)
Heaped 3:1 slope .....16 cu. yds. (12,2 m³)
Heaped 1:1 (S.A.E. Rating) .....20 cu. yds. (15,3 m³)
Bowl has 42″ (1067 mm) backboard to prevent spillage.

TRACTOR (17UOT)

ENGINE

Detroit Diesel 4-71N, 2 Cycle Diesel

Note: Two separate throttle controls for front and rear engines may be used separately or together.

Gross Tractor HP @ 2100 RPM 160
Flywheel HP @ 2100 RPM 144

NOTE: Above ratings at sea level and 60°F. (15,5°C.). Gross horsepower rating includes standard engine equipment such as water pump, fuel pump and lubricating oil pump. Flywheel horsepower is the net horsepower after deduction from gross horsepower for fan, alternator and air compressor requirements.

Number of Cylinders 4
Bore and Stroke .....4¼″ x 5″ (108 mm x 127 mm)
Piston Displacement .....284 cu. in. (4,7 liters)
Maximum Torque @ 1550 RPM .....407 ft-lb (56,3 kg m)
Oil-MIL-L-2104B .....SAE 30
Fuel .....No. 2-D recommended
Governor (type) .....Limiting Speed
Maximum RPM (full load) 2100
Maximum RPM (no load) 2240
Idle Speed 700
Air Cleaner .....(1) Donaldson Dry T-Type (STG-12)

TRANSMISSION—Allison CLT-3461

Allison Torqmatic Transmission with 400 series four element 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 3.81:1 2nd 2.74:1 3rd 1.94:1
4th 1.39:1 5th 1.00:1 6th 0.72:1
Reverse 4.35:1

Stall Speed .....1950-2050 RPM
Maximum Speed @ 2100 RPM .....23.0 MPH (37,0 km/hr)

TORQUE CONVERTER—Allison TC-420

Mounted integral with transmission. Maximum torque multiplication 2.88:1.

DRIVE AXLE

Heavy duty, full floating with Eaton 3910 single reduction bevel gear differential and planetary reduction in each wheel.

Ratios: Transfer 1.21:1
Differential 4.11:1
Planetary 5.33:1
Total Reduction 26.51:1

STEERING SYSTEM

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

Steering cylinder bore
and stroke .....5.5″ x 17.50″ (139,7 mm x 445 mm)
Steering pump
Type .....Gear
Drive .....Gear
Capacity @ 2100 RPM
& 1500 psi .....32 GPM (84,5 liters/min)
System Pressure @ 1500 RPM .....1950 psi (137,1 kg/cm²)

BRAKES (Tractor and Scraper)

Two shoe internal expanding type.
Brake Lining:
Diameter .....20″ (508 mm)
Shoe Width ..... 6″ (152 mm)
Lining Thickness .....¾″ (19 mm)
Lining Area—Tractor Axle .....520 sq. in. (3355 cm²)
Lining Area—Scraper Axle .....520 sq. in. (3355 cm²)
Air Compressor Capacity .....12 cfm (,340m³/min)
Air-water separator is standard.

TIRES & RIMS (Tractor and Scraper)

	Tire Size	Rim Width
Standard -	29.5-25-22 PR, E-3	25″ (635 mm)
Optional -	29.5-25-28 PR, E-3	25″ (635 mm)

Radial steel cord tires available.

NOTE: Productivity and performance capabilities of TEREX scrapers 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

12 volt GM. One heavy duty 12 volt, 150 amp-hr battery. 65 amp alternator.

SERVICE DATA

	U. S. Gal.	(Lit.)
Water Cooling System	10 gals.	(37,9)
Fuel Tank	95 gals.	(359,6)
Crankcase (dry fill)	3.8 gals.	(14,4)
Transmission & Converter	6 gals.	(22,7)
Hydraulic System	54 gals.	(204,4)
Drive Axle	4.6 gals.	(17,4)

SCRAPER (97SH)

ENGINE

Same as tractor.

TRANSMISSION

Stall Speed .....2050-2150 RPM
Other specifications and ratios same as tractor.

TORQUE CONVERTER

Same as tractor.

DRIVE AXLE

Heavy duty, full floating with Eaton 3910 single reduction bevel gear differential and planetary reduction in each wheel. NoSPIN differential standard, allows lock up of both wheels in poor traction areas.

Ratios: Transfer 1.21:1
Differential 4.11:1
Planetary 5.33:1
Total Reduction 26.51:1

CONTROLS

Three lever control allows independent operation of the apron, bowl and ejector. Hydraulic valves are mechanically actuated.

CUTTING EDGE

Four section cutting edge with variable length drop center. All blades interchangeable and reversible.
Cutting edge dimensions
16″ x 28.50″ x 1″ (406 mm x 723,9 mm x 25,4 mm)

BOWL

Two identical and interchangeable hydraulic cylinders are used to operate the scraper bowl. The bowl cylinders are connected to the bowl through levers and linkage.

Bowl cylinder bore and stroke .....9.17″ x 18.22″ (232,9 mm x 462,8 mm)

APRON

Full floating type with large opening for easy ejection. The apron cylinder is connected to the apron by a ¾″ cable 14′ long.

Apron cylinder bore and stroke .....9.17″ x 24.97″ (232,9 mm x 634,2 mm)

EJECTION

Positive roll-out type ejection actuated by a single acting hydraulic cylinder. Apron and ejector cylinders are identical.

Ejector cylinder bore and stroke .....9.17″ x 24.97″ (232,9 mm x 634,2 mm)

HYDRAULIC SYSTEM

Hydraulic system is full flow filtered and has one reservoir with one tandem pump for steering and scraper controls.

Scraper Bowl Control Pump
- Type .....Gear
- Drive .....Gear
- Capacity @ 2100 RPM & 1500 psi .....52 GPM (196,8 liters/min)

System Pressure @ 1500 RPM .....1500 psi (105,5 kg/cm²)

SERVICE DATA

	U. S. Gal.	(Lit.)
Water Cooling System	10 gals.	(37,9)
Fuel Tank	80 gals.	(302,8)
Crankcase (dry fill)	3.8 gals.	(14,4)
Transmission and Converter	6 gals.	(22,7)
Drive Axle	4.6 gals.	(17,4)

DIMENSIONS

Wheelbase—Drive to Scraper Axle	23′- 2″	(7061 mm)
Length (overall)	39′- 7″	(12060 mm)
Width (overall)	11′- 3½″	(3442 mm)
Height (max.)	10′- 4″	(3150 mm)
Apron Opening	6′-10½″	(2096 mm)
Width of Cutting Edge	9′- 6½″	(2908 mm)
Width of Cut	9′-10″	(2997 mm)
Depth of Cut (max.)	1′- 2″	(356 mm)
Depth of Spread (max.)	2′- 4″	(711 mm)
Clearance Under Drive Axle	1′-11″	(584 mm)
Clearance Under Bowl	1′-11″	(584 mm)
Non-Stop 180° Turning Width for vehicle clearance	33′- 0″	(10058 mm)

WEIGHTS

NET WEIGHT DISTRIBUTION

Drive Axle	55.2%	29,175 lbs.	(13234 kg)
Scraper Axle	44.8%	23,625 lbs.	(10716 kg)
Total		52,800 lbs.	(23950 kg)
PAYLOAD		47,000 lbs.	(21319 kg)

GROSS WEIGHT DISTRIBUTION

Drive Axle	49.6%	49,453 lbs.	(22432 kg)
Scraper Axle	50.4%	50,347 lbs.	(22837 kg)
Total		99,800 lbs.	(45269 kg)

TRACTOR AND SCRAPER

STANDARD EQUIPMENT

Dry T-Type Air Cleaners, Full Flow Hydraulic Filtration, Engine Oil Pressure Gauges, Engine Temperature Gauges, Converter Oil Temperature Gauges, Clutch Pressure Gauges, Ammeters, Air Restriction Gauges, Mufflers, Maintenance and Parts Manuals.

Tractor Only: Tachometer, Hourmeter, Air Pressure Gauge, Air Horn, Air Suspension Seat.

Scraper Only: NoSPIN Differential, Power Train Warning Alarm.

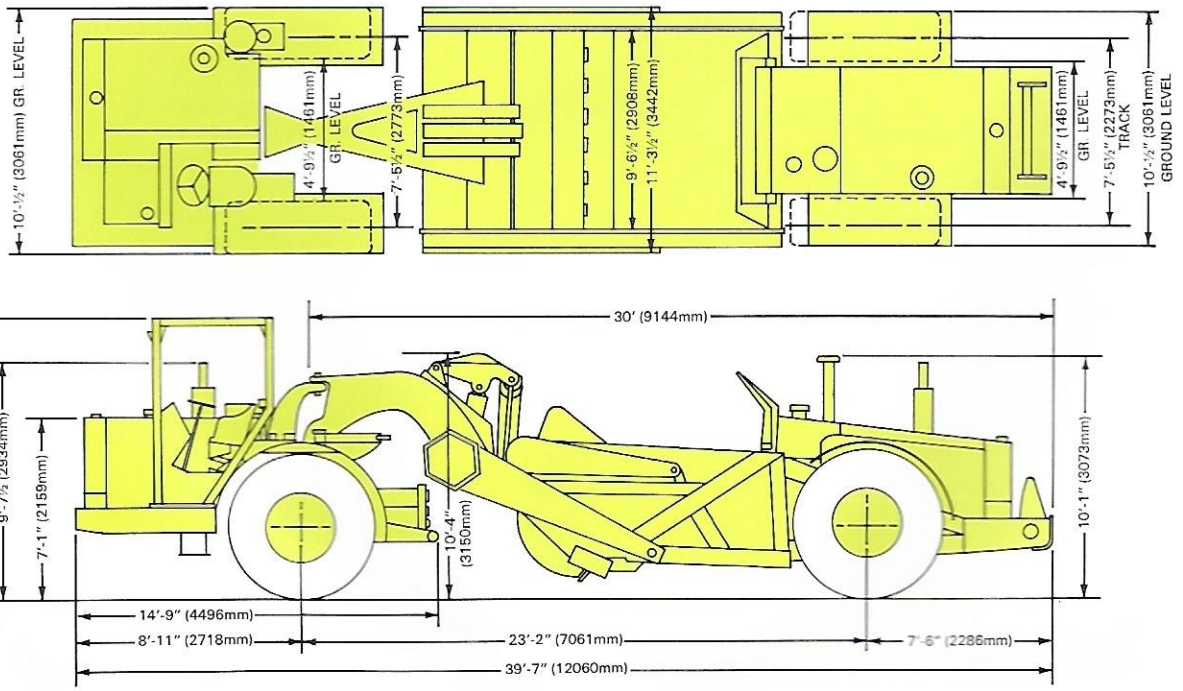
OPTIONAL EQUIPMENT

OPTIONS TO HELP USER COMPLY WITH OCCUPATIONAL SAFETY AND HEALTH ACT. Emergency and Parking Brake System (SAE J319B) Includes Individual Tractor Wheel Brake Control. Canopy, Roll-Over Protective Structure (SAE J320A) will fit over optional cab. Seat Belt (SAE J386). Reverse Alarm (SAE J994).

OTHER OPTIONS: Security Kit, Brake Drum Guards, Cab, Windshield and Wiper, Cab Defroster and Heater, Twin Hitch, Roller Push Block, Severe Application Kit, Heavy Duty Side Cutters, Spillguard Extension, Downshift Inhibitors, Apron Cable Roller, Aspirated Rear Engine Air Cleaner, Severe Duty Rear Radiator Guard, Scraper Fenders, Soundpac (Includes Cab).

CONVERSION CHART

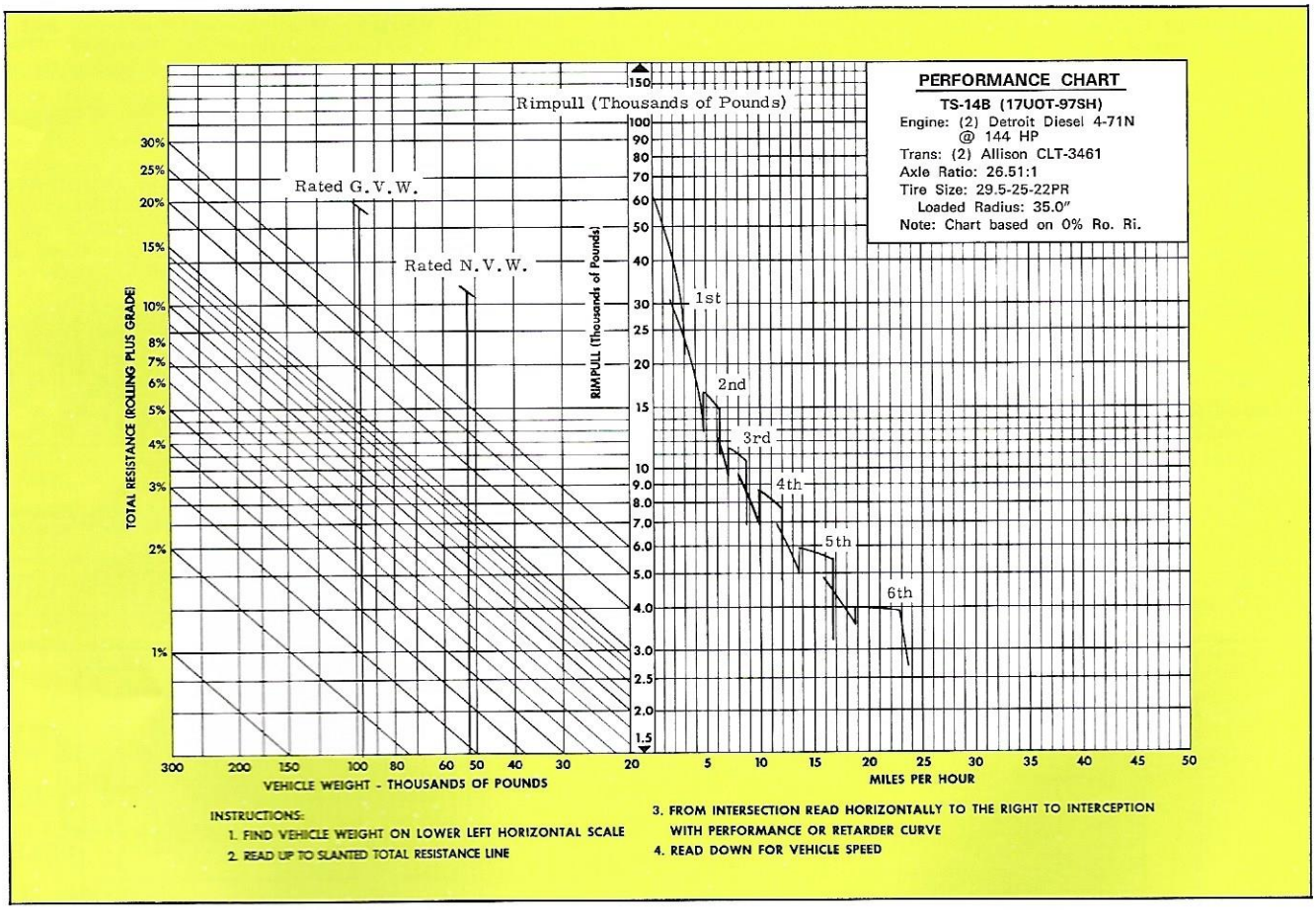
1 mile	=1.609 kilometers	1 U.S. Gal. coolant	=8.3 lbs. (approx.)
1 foot	=30.48 centimeters	1 lb.	=0.4536 kilograms
1 inch	=2.54 centimeters	1 sq. in.	=6.452 sq. centimeters
1 U.S. Gal.	=3.785 liters	1 sq. ft.	=929 sq. centimeters
1 U.S. Gal.	=0.833 Imp. gals.	1 sq. yd.	=0.836 sq. meters
1 U.S. Gal. diesel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



HEIGHT TO TOP OF OPTIONAL CAB 10′-8½″ (3264mm)

ALL VERTICAL MEASUREMENTS ARE FIGURED WITH BOWL AT 12″ (305mm) CARRY.

OVERALL LENGTH WITH OPTIONAL TWIN HITCH
BAIL RAISED - 44′-7½″ (13602mm)
BAIL LOWERED - 46′-0½″ (14040mm)



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