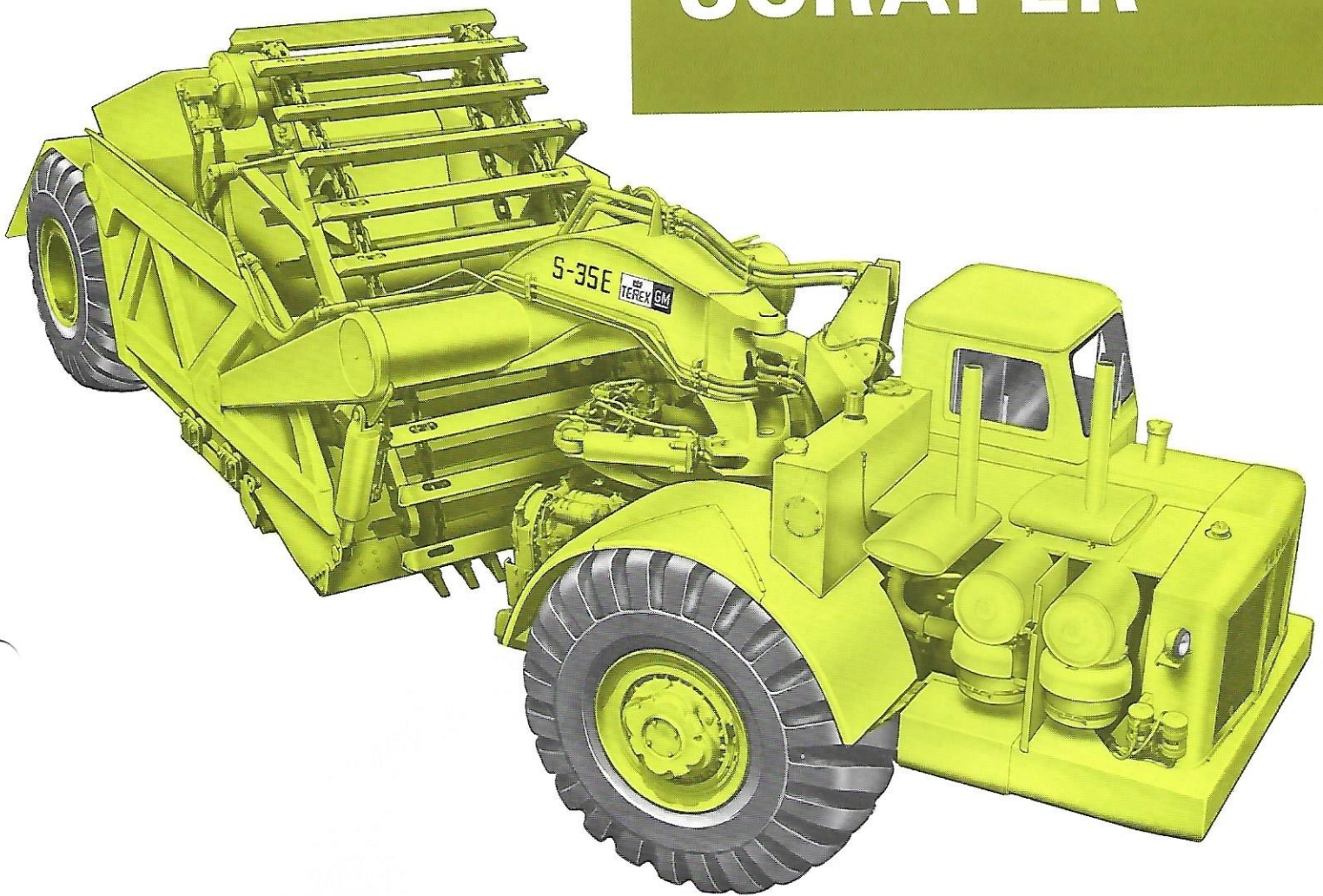


TEREX S-35E SCRAPER



- 457HP (341 kW) Flywheel Power
- Hydraulic Elevator Drive
- 84,000 lb. (38 102 kg) Payload

TEREX S-35E SCRAPER

MODEL 47LOT-90SH

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

CAPACITY

Heaped measure (S.A.E. Rating)35 yds.³ (26.8 m³)

TRACTOR (47LOT)

ENGINE

Detroit Diesel 12V-71T, 2 Cycle Diesel

Flywheel Power @ 2100 RPM457HP (341 kW)

Maximum Torque @

1400 RPM1380 ft. lbs. Torque (1 871 N·m)

NOTE: Above ratings applicable to 10,000 foot altitude. Gross Vehicle Power rating includes standard engine equipment such as waterpump, fuel pump and lubricating oil pump. Fly-wheel Power is the net power after deductions from Gross Vehicle Power for fan, alternator and air compressor requirements.

Number of cylinders12
 Bore and stroke4 1/4" x 5" (108 mm x 127 mm)
 Piston Displacement852 in.³ (13.9 litres)
 Oil-MIL-L-2104BSAE 30
 FuelNo. 2-D recommended
 Governor typeLimiting speed
 Maximum RPM, full load2100
 Maximum RPM, no load2275
 Idle Speed700
 Air cleaners(2) Donaldson dry, T-type (STG-16)

TRANSMISSION—Allison VCLBT-5965

Allison Torqmatic Transmission with Variable Capacity Converter. Automatic converter lock-up standard in top five speed ranges. Torqmatic transmission has spur planetary gearing. Full power-shifting through hydraulically actuated multiple disc clutches.

Ratios: 1st 4.00:1 2nd 2.68:1 3rd 2.01:1
4th 1.35:1 5th 1.00:1 6th 0.67:1

Reverse 5.12:1

Stall Speed1850-1950 RPM

TORQUE CONVERTER—Allison VTC-690

Mounted integral with transmission. Maximum torque multiplication 2.38:1.

DRIVE AXLE

Heavy duty, full floating with single reduction bevel gear differential and planetary reduction in each wheel. TEREX 601 operator controlled power locking differential standard, allows lock up of both wheels in poor traction areas.

Ratios: Differential 2.93:1
Planetary 9.10:1
Total Reduction26.66:1

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 stroke7.00" x 20.75" (178 mm x 527 mm)

Steering pump

TypeGear

DriveGear

Capacity @ 2100 RPM & 2000 psi
(13 790 kPa)80 GPM (302.8 l/min)

System Pressure @ 1500 RPM2000 psi (13 790 kPa)

BRAKES

Four shoe internal expanding type.

Brake Lining:

Diameter26" (660 mm)

Shoe width5" (127 mm)

Lining Thickness3/4" (19 mm)

Lining area-tractor axle1194 in.² (7 704 cm²)

Air compressor capacity24 cfm (.680 m³/min)

TIRES AND RIMS (Tractor and Scraper)

Tire Size Rim Width
Standard - 37.5 x 33 - 36 PR, E-3.....32" (813 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

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

SERVICE DATA

	U.S. Gal.	(litres)
Water Cooling System	29 gals.	(109.8)
Fuel Tank	200 gals.	(757.0)
Crankcase (dry fill)	8.5 gals.	(32.2)
Transmission & Converter	18 gals.	(68.1)
Hydraulic System	104 gals.	(393.6)
Drive Axle	24.25 gals.	(91.8)

SCRAPER (90SH)

BRAKES

Two shoe internal expanding type.

Brake Lining:

Diameter26" (660 mm)

Shoe width10" (254 mm)

Lining area-scraper axle982 in.² (6 336 cm²)

ELEVATOR

DriveVane-type hydraulic motor with gear reduction.

Elevator Pump

TypeGear

DriveGear

Capacity @ 2100 RPM & 2000 psi
(13 790 kPa)145 GPM (548.8 l/min)

System Pressure @ 2100 RPM2000 psi (13 790 kPa)

Reduction ratio50.8:1

Length12'-8" (3 861 mm)

Drive Sprockets

Number2

Number of teeth per sprocket12
RPM

Low speed52.4

High speed63.8

Reverse52.4

Chains

Number2

Number of links per chain80

Chain pitch4.5" (114.3 mm)

Speeds

Low speed236 ft./min (71.9 m/min)

High speed287 ft./min (87.4 m/min)

Reverse236 ft./min (71.9 m/min)

Flights

Number20

Length8'-0" (243.8 mm)

Width6" (152.5 mm)

CONTROLS

Two lever hydraulic control operation for bowl and ejection. Separate air control for elevator operation.

CUTTING EDGE

Three section cutting edge with variable length drop center. Six bolt-on ripping teeth provide maximum penetration. The two end sections are interchangeable. All sections are reversible.

Cutting Edge Dimensions

Outside sections

14" x 32⁷/₈" x 1¹/₄" (355.6 mm x 835.0 mm x 31.8 mm)

Center section

19" x 65⁷/₈" x 1¹/₄" (482.6 mm x 1673.2 mm x 31.8 mm)

BOWL

Bowl employs two single stage double acting hydraulic cylinders. Cylinders are interchangeable.

Bowl cylinder bore

and stroke8" x 30" (203 mm x 762 mm)

EJECTION

Combination sliding floor and ejector end gate. Controlled by two single stage, double acting hydraulic cylinders. As sliding floor opens, strike off blade automatically swings into position to provide smooth, even spreading of material.

Sliding floor control cylinder

bore and stroke6" x 30" (152.5 mm x 762 mm)

Ejector end gate control cylinder

bore and stroke8" x 30" (203 mm x 762 mm)

HYDRAULIC SYSTEM

Hydraulic system is filtered and has one reservoir with one single pump and one tandem pump. The single pump supplies the elevator at low speed. The large section of the tandem pump supplies the steering, bowl and ejector functions while the small section supplies the high elevator speed.

Steering, Bowl, and High Elevator Speed Control Pump

TypeTandem, Gear
DriveGear

Capacity @ 2100 RPM & 2000 psi

(13 790 kPa)80 GPM (302.8 l/min)

Capacity @ 2100 RPM & 2000 psi

(13 790 kPa)32 GPM (121.1 l/min)

System Pressure @ 1500 RPM2000 psi (13 790 kPa)

DIMENSIONS (At 21¹/₂" carry with standard tires)

Wheelbase—Drive to Scraper Axle29'- 5" (8 967 mm)

Length—Overall47'- 0" (14 326 mm)

Length—Scraper

(hitch to push block)36'- 9" (11 201 mm)

Length—Tractor (overall)16'-11" (5 156 mm)

Width—Overall	12'- 0" (3 658 mm)
Height—Maximum at Bowl Carry	13'- 5" (4 089 mm)
Height—Blade down	12'-10" (3 912 mm)
Width of Cut	11'- 8" (3 556 mm)
Depth of Cut	7 ³ / ₄ " (197 mm)
Clearance—Under Drive Axle	2'-3 ¹ / ₂ " (673 mm)
Clearance—Under Bowl	1'-9 ¹ / ₂ " (546 mm)
Non-Stop 180° Turning Width	42'- 0" (12 800 mm)
Width—Center-to-Center Tractor Tire	8'- 0" (2 438 mm)

WEIGHTS

DISTRIBUTION—NET WEIGHT

Drive Axle	62%	61,200 lbs. (27 760 kg.)
Scraper Axle	38%	37,700 lbs. (17 100 kg.)
Total		98,900 lbs. (44 860 kg.)

PAYLOAD 84,000 lbs. (38 102 kg.)

DISTRIBUTION—GROSS WEIGHT

Drive Axle	48.5%	88,600 lbs. (40 189 kg.)
Scraper Axle	51.5%	94,300 lbs. (42 774 kg.)
Total		182,900 lbs. (82 963 kg.)

STANDARD EQUIPMENT (Tractor and Scraper)

Tachometer, Hourmeter, Engine Temperature Gauge, Engine Oil Pressure Gauge, Converter Oil Temperature Gauge, Clutch Pressure Gauge, Ammeter, Air Pressure Gauge, Air Horn, Air Restriction Gauge, Air Suspension Seat, Cutting Edge Teeth, Cutting Edge Floodlight, Power Locking Differential, Parts and Maintenance Manuals, Mufflers, Retarder, Seat Belt (SAE J386), Emergency and Parking Brake System (SAE J319B).

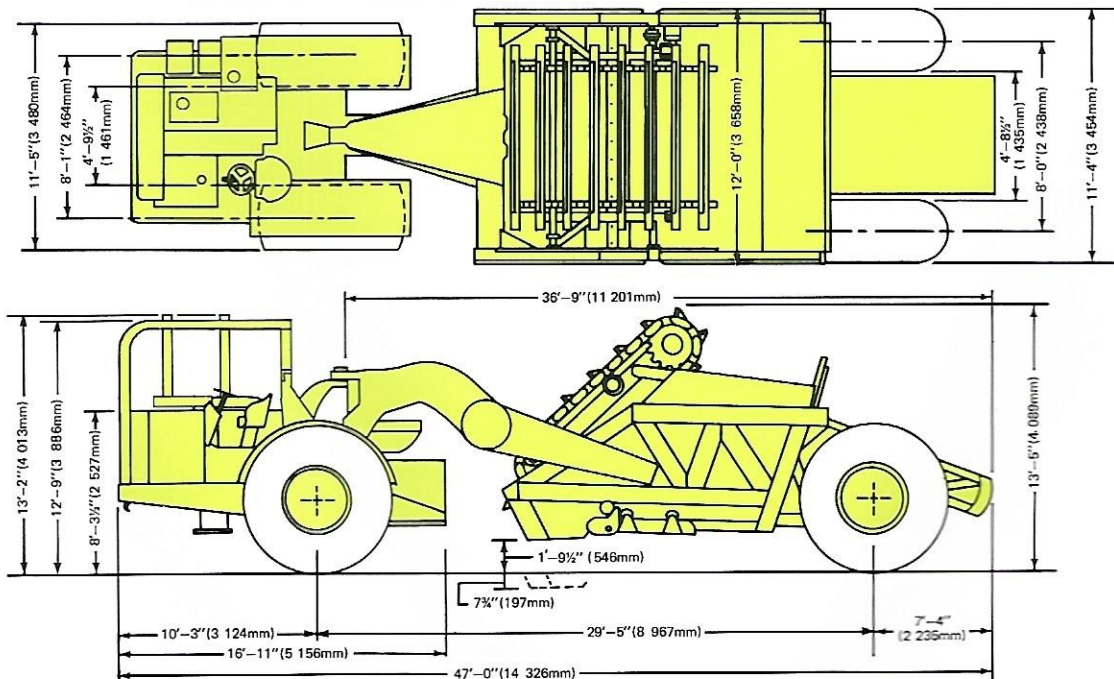
OPTIONAL EQUIPMENT

OPTIONS TO HELP USER COMPLY WITH OCCUPATIONAL SAFETY AND HEALTH ACT: Roll Over Protective Structure (SAE J320A) Will Fit Over Optional Cab; Soundpac, Including Cab, Reverse Alarm (SAE J994).

OTHER OPTIONS: Cab, Defroster and Heater, Windshield With Wiper, Security Kit, Rear Fenders, Transmission Guard, Brake Drum Guards (Tractor Only), Downshift Inhibitor.

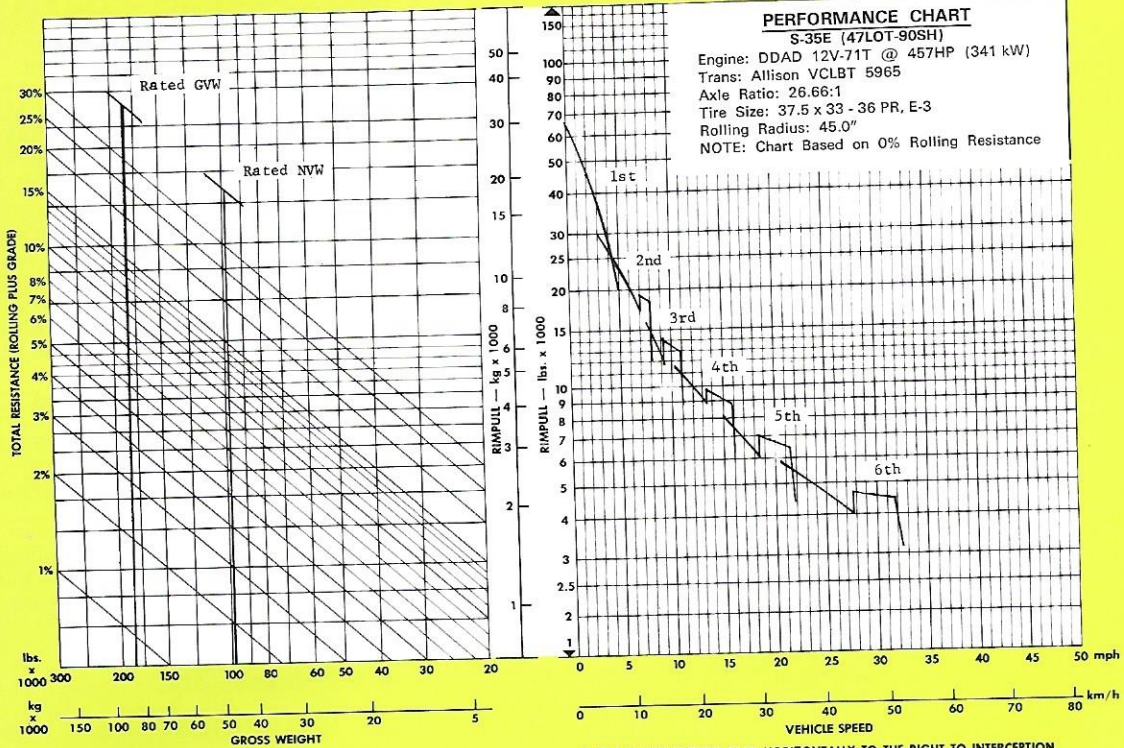
CONVERSION CHART

1 mile	= 1.609 kilometres	1 lb.	= 0.4536 kilograms
1 foot	= 304.8 millimetres	1 ft. lb.	= 1.356 newton-metres
1 inch	= 25.4 millimetres	1 PSI	= 6.8948 kPa
1 U.S. Gal.	= 3.785 litres	1 in. ²	= 6.452 centimetres ²
1 U.S. Gal.	= 0.833 imp. gals.	1 in. ³	= 0.0164 litres
1 U.S. Gal.	= 7.3 lbs. (approx.)	1 ft. ²	= 929 centimetres ²
1 U.S. Gal.	= 8.3 lbs. (approx.)	1 yd. ²	= 0.836 metres ²
coolant	= 8.3 lbs. (approx.)	1 yd. ³	= 0.7646 metres ³



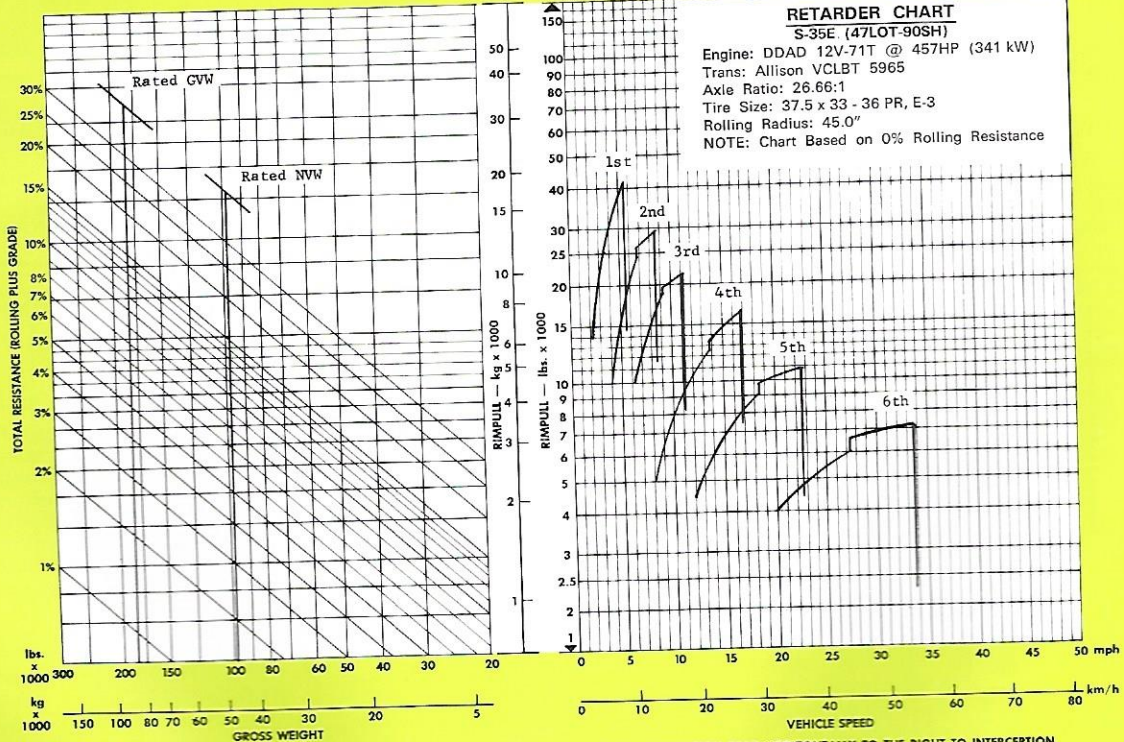
ALL VERTICAL MEASUREMENTS ARE WITH BOWL AT 12" (305mm) CARRY.

HEIGHT TO TOP OF OPTIONAL CAB 11'-5¹/₄" (3 486mm) ROPS CANOPY IS OPTIONAL.



INSTRUCTIONS:
1. FIND VEHICLE WEIGHT ON LOWER LEFT HORIZONTAL SCALE
2. READ UP TO SLANTED TOTAL RESISTANCE LINE

3. FROM INTERSECTION READ HORIZONTALLY TO THE RIGHT TO INTERSECTION WITH PERFORMANCE OR RETARDER CURVE
4. READ DOWN FOR VEHICLE SPEED



INSTRUCTIONS:
1. FIND VEHICLE WEIGHT ON LOWER LEFT HORIZONTAL SCALE
2. READ UP TO SLANTED TOTAL RESISTANCE LINE

3. FROM INTERSECTION READ HORIZONTALLY TO THE RIGHT TO INTERSECTION WITH PERFORMANCE OR RETARDER CURVE
4. READ DOWN FOR VEHICLE SPEED



Products of General Motors

Worldwide Sales • Service • Parts
Manufactured in Australia • Brazil • Canada
• India • Luxembourg • Scotland
• South Africa • United States