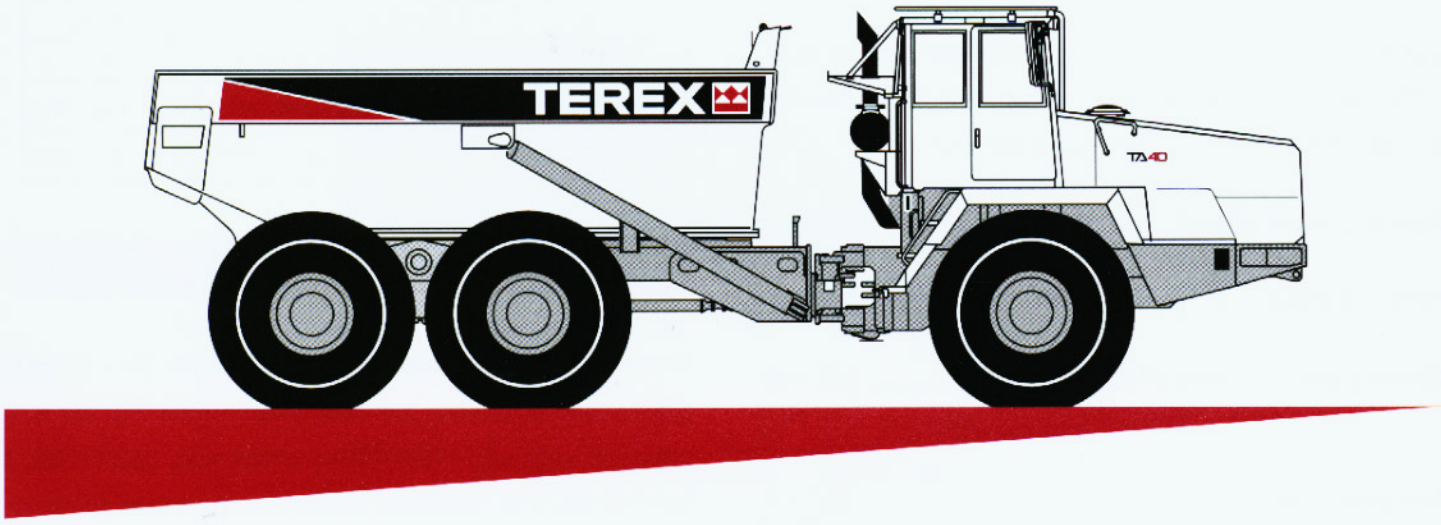
TEREX

TA40



- Emission-certified engine with electronic engine management
- Automatic limited slip differentials in each axle for superior traction
- 6 x 6 all-wheel drive with efficient ground-following suspension
- Spacious, comfortable cab for continuous high productivity
- Oil cooled disc brakes for low operating costs
- Maximum Payload - 36.5 tonne (40 US ton)
- Heaped Capacity - 22m^3 (29 yd^3)
- Gross Power - 332 kW (445 hp)

Form No. 820 AUG 2003

FRAME

Front and rear frames are all-welded high grade steel fabrications with rectangular box-section beams forming the main side and cross members. Inter-frame oscillation is provided by a large diameter cylindrical coupling with widely-spaced polymer bearings. Frames articulate 45° to either side for steering by means of two widely-spaced pivot pins in back-to-back sealed taper roller bearings.

ENGINE

Make/Model.....Detroit Diesel Series 60

Type .....Six cylinder, in line, four cycle diesel, turbocharged with air-to-air charge cooling, water-cooled. Electronic engine management.

Piston Displacement .....12.7 litres (774 cu. in.)

Bore x Stroke.....130 x 160 mm (5.12 x 6.30 in)

Gross power to SAE J1995 .....332 kW
.....(445 hp, 451 PS)

Net power at 2 200 rev/min 291kW
.....(390 hp, 395 PS)

Maximum Torque at 1 350 rev/min.....2 000 Nm
.....(1 475 lbf. ft)

Gross Power rated to SAE J1995 Jun 90.

Engine emission meets Tier 2 USA EPA / CARB MOH 40 CFR 89 and EU non-road mobile machinery directive.

24 volt electric start. 70A alternator. Two 12 volt 175 Ah batteries.

Dry-type air cleaner with safety element, automatic dust ejector and restriction indicator.

TRANSMISSION

ZF 6WG 310 Fully automatic with manual override.

The transmission assembly consists of a torque converter close-coupled to a countershaft type gearbox with integral output transfer gearing. Automatic shifting throughout the range, with kick-down feature. Lockup in all forward gears. A torque-proportioning output differential transmits drive permanently to front and rear axles. This differential may be locked by the driver for use in difficult traction conditions. Integral hydraulic retarder is standard. This operates automatically should the engine approach overspeed conditions.

	Forward						Reverse		
Gear	1	2	3	4	5	6	1	2	3
km/h	6.0	9.3	14.6	22.7	33.3	51.7	6.0	14.6	33.3
mile/h	3.7	5.8	9.1	14.1	20.7	32.1	3.7	9.1	20.7

AXLES

Three axles in permanent all-wheel drive (6 x 6) with differential coupling between each axle to prevent driveline wind-up. Heavy duty axles with fully-floating axle shafts and outboard planetary reduction gearing.

Automatic limited slip differentials in each axle. Leading rear axle incorporates a through-drive differential to transmit drive to the rearmost axle. This differential and the transmission output differential are locked simultaneously using one switch selected by the driver.

Differential ratio 4.86:1

Planetary reduction 4.94:1

Overall Drivetrain reduction 24.0:1

TYRES AND WHEELS

Tyres: 29.5 R 25 two star radial.

Rims: 25 x 25.00

Wheels: 5-piece earthmover rims with 23 stud fixing

SUSPENSION

Front: Axle located by a three-point subframe permitting both vertical movement and oscillation. Rubber suspension elements with two heavy duty hydraulic dampers each side.

Axle vertical travel .....105 mm (4.2 in)

Rear: Each axle is coupled to the frame by three rubber-bushed links with lateral restraint by a transverse link. Pivoting inter-axle balance beams equalise load on each rear axle. Suspension movement is cushioned by rubber/metal laminated compression units between each axle and underside of balance beam ends.

Axle vertical travel .....± 115 mm (± 4.5 in)

Axle oscillation.....± 9°

Pivot points on rear suspension linkages are rubber-bushed and do not require lubrication.

BRAKES

All hydraulic system with sealed, forced oil cooled, multi discs on all axles. Independent circuits for front and rear brake systems. Warning lights and audible alarm indicate low brake system pressure. Brake system conforms to ISO 3450, SAE J1473.

Parking: Spring-applied, hydraulic-released disc on rear driveline.

Secondary: Secondary brake control actuates the service brakes.

Retardation: Hydraulic retarder integral with transmission. Automatic application prevents engine overspeed.

STEERING

Hydrostatic power steering by two double-acting, cushioned steering cylinders. Actuating pressure for steering operation supplied by main hydraulic gear pump, driven from power take-off on transmission.

Secondary steering pressure is provided by a ground-driven pump mounted on the transmission. An indicator lamp signals should the secondary system activate. Conforms to ISO 5010, SAE J53.

Steering components are protected by advanced full flow filtration on the return line.

Steering angle either side.....45°

Lock to lock turns, steering wheel.....4

System Pressure .....206 bar (3 000 lbf/in^2)

HOIST

Two single-stage, double-acting hoist cylinders, cushioned at both ends of stroke. Actuating pressure for body hoist supplied by main hydraulic gear pump, driven from power take-off on transmission. Full flow return line filtration. Hydraulic system features pressure test points for diagnostic servicing.

System pressure.....172 bar (2 500 lbf/in^2)

Pump output flow rate7.03 litre/sec (111 US gal/min)

Raise time, loaded 16 sec. Power down 12 sec.

BODY

All welded construction, fabricated from high hardness (min. 360 BHN) 1 000 MPa (145 000 lbf/in^2) yield strength steel. 25° tail chute angle provides good load retention without tailgate.

Plate thicknesses:

Floor and tailchute .....15 mm (0.59 in)

Sides .....12 mm (0.47 in)

Front.....10 mm (0.39 in)

Volume: Struck (SAE) .....17.0 m^3 (22.2 yd^3)
Heaped 2:1 (SAE) .....22.0 m^3 (28.8 yd^3)

STANDARD EQUIPMENT

Cab:
- Air Conditioner R 134A
  - 8 kW (27 300 BTU/hr)
- Cigar Lighter, 24v
- Engine Diagnostic Facility
- Inspection Lamp Socket, 24v
- Heater and Demister
  - 9.5 kW (32 400 BTU/hr)
- Insulation, Thermal and Acoustic
- Interior Light
- Mirrors, Rear View, 6
- Mug Holder
- Radio / Cassette Player
- ROPS/FOPS Protection
  - ISO 3471/3449
  - SAE J1040 Apr 88/J231
- Seat Belts, Retractable J386
- Seat, Operator, air suspension, high back, headrest and adjustable armrests
- Seat, Passenger
- Storage Compartment
- Sun Blind
- Sun Visor (external)
- Tinted Glass
- Transmission Visual Display Unit
- Window Protection Grille, rear
- Wiper and Washer, front and rear windows

Gauges:
- Fuel Level
- Speedometer, with Odometer
- Tachometer, with Hourmeter
- Transmission Oil Temp.

Indicator Lights:
- Direction Indicators
- Headlight High Beam
- Retarder

Warning Lights:
- Body Up
- Brake Pressures (2)
- Check Engine
- Coolant Level
- Inter-Axle Diff. Locks 'On'
- Parking Brake 'On'
- Secondary Steering
- Stop Engine
- Transmision 'Stop'
- Warning Lights Test Button

Audible Warning of Low Brake Pressure

General:
- Air Filter, Dual Element with Restriction Indicator
- Articulation Locking Bar
- Battery Master Switch
- Body Prop
- Diagnostic Pressure Test Points
- Engine Hood, hinged
- Engine Underguard, hinged
- Exhaust Muffler
- Fan, modulating
- Horn, electronic 117dB,
- Hydraulic Filter Restriction Indicator
- Hydraulic Oil Cooler
- Hydraulic Retarder

Lights:
- High Level working Lamps
- Headlamps, 4, Halogen.
- Side, Tail, Stop, Reverse & Hazard Warning Lights
  - Direction Indicators
- Mudflaps, front
- Neutral Start Interlock
- Nitrogen Inflated Tyres
- Rear Light Guards
- Reverse Alarm, Audible J994
- Security Kit
- Tow Points, front and rear

OPTIONAL EQUIPMENT

- Automatic Lubrication
- Body Options:
  - Exhaust Heating
  - Liner Plates
  - Side Extensions
  - Spillguard Extension (folding)
  - Tailgate - Scissor, chain operated
  - Tailgate, Underhinged
- Engine Brake (Jacobs)
- Fire Extinguisher
- Headlamp Guards, hinged
- Lights:
  - Beacon, flashing
  - Fog, rear
  - Reverse, flashing
  - Working, rear facing
- Mirror, front mounted
- Mud Flaps, in front of leading rear wheels
- Television Monitor, Rear View
- Tool Kit, Hand

SERVICE DATA

Fuel tank	463 litres (122.0 US gal)
Hydraulic System (steering, braking & body)	209 litres (55 US gal)
Brake Cooling System	199 litres (52.6 US gal)
Cooling System	80 litres (21.1 US gal)
Engine Crankcase (with filters)	37 litres (9.8 US gal)
Transmission & Filters (dry fill)	56 litres (14.8 US gal)
Transmission & Filters (wet fill)	28 litres (7.4 US gal)
Differential (Front)	37.5 litres (9.9 US gal)
Differential (Centre)	38 litres (10 US gal)
Differential (Rear)	31.5 litres (8.3 US gal)
Planetaries (each)	8.5 litres (2.2 US gal)

Performance Data

Graphs based on 2% Rolling Resistance

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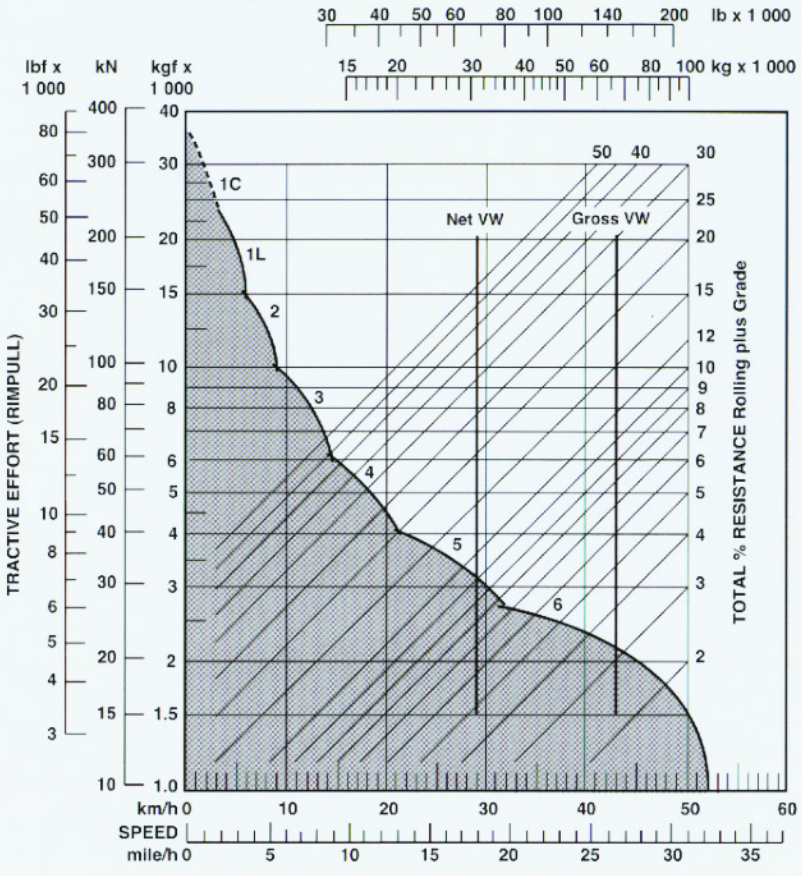
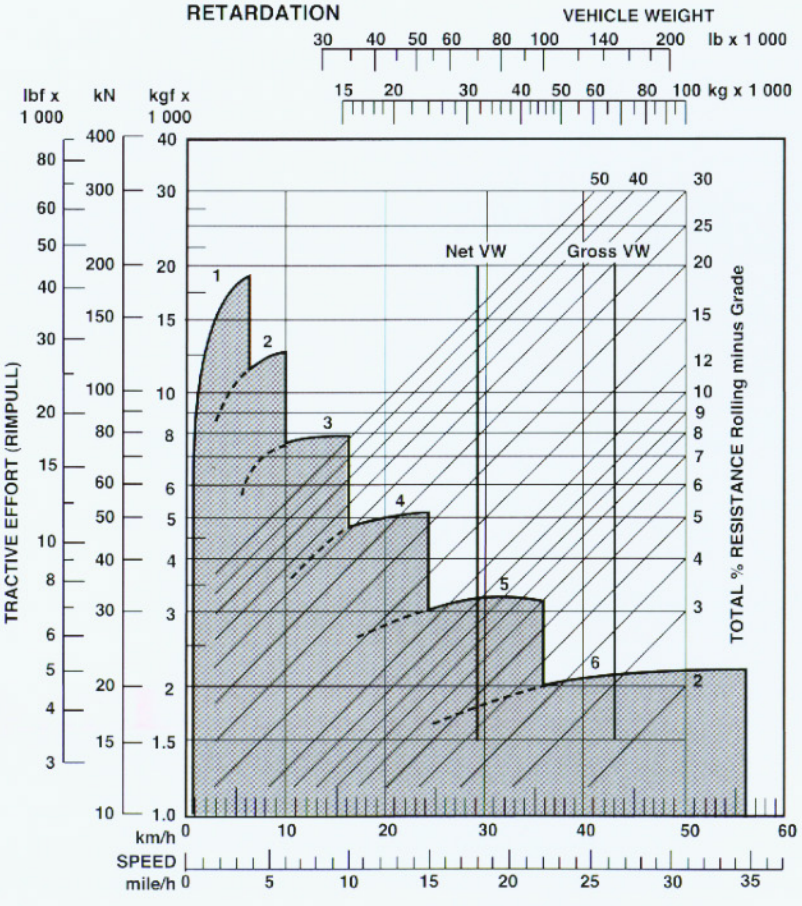
GRADEABILITY



RETARDATION



Instructions: From intersection of Vehicle Weight with Percentage Resistance line read across to determine maximum Gear attainable, and then downwards for Speed.

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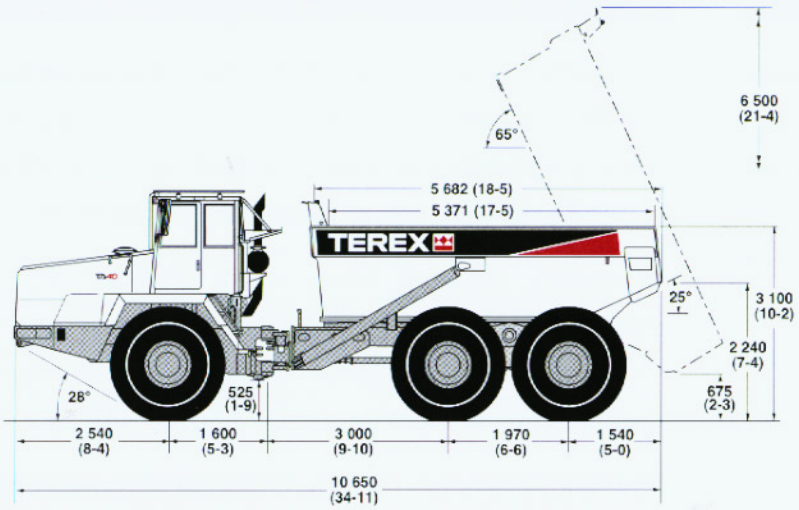
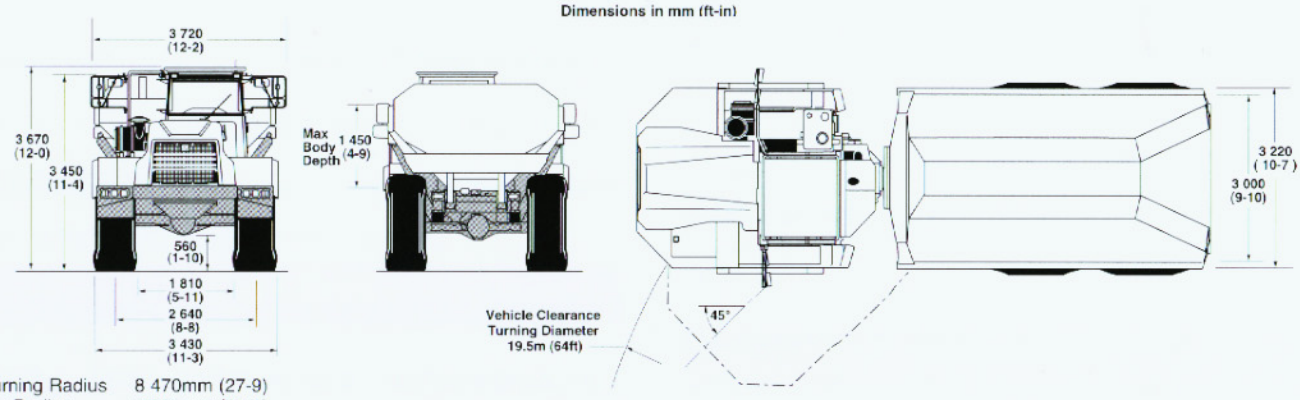


Dimensions in mm (ft-in)



SAE Turning Radius 8 470mm (27-9)
Clearing Radius 8 950mm (29-4)

WEIGHTS

Standard unit	kg	lb
Net Distribution		
Front Axle	15 275	33 675
Bogie Axle Leading	7 750	17 085
Bogie Axle Trailing	7 705	16 985
Vehicle, Net	**30 730**	**67 745**
Payload	**36 500**	**80 470**
Gross Distribution		
Front Axle	20 170	44 465
Bogie Axle Leading	23 530	51 875
Bogie Axle Trailing	23 530	51 875
Vehicle Gross	**67 230**	**148 215**
Bare Chassis	24 670	54 390
Body	5 400	11 905
Hoists, pair	660	1 455

GROUND PRESSURE

At 15% sinkage of unloaded radius and specified weights using 29,5 R25 Tyres.

Standard Unit	kPa	PSi
Unloaded		
Front	102	15.8
Rear	52	7.5
Loaded		
Front	135	19.6
Rear	158	22.9

DISTRIBUTOR:

Specifications subject to change without notice

(1300 65 8888)

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