TEREX

TA40

Articulated Truck

MAX. GROSS VEHICLE WEIGHT	67,804 - 151,579 lbs (30,820 - 68,820 kg)
GROSS ENGINE POWER	450 hp (336 kW)
MAX. PAYLOAD	41.8 tons (37.9 t)
HEAPED CAPACITY	30.3 yd³ (23.3 m³)

ARTICULATED TRUCK TA40

Specifications

Engine

Make/model	Detroit Diesel Series 60
Type 6 cylinder, in line, four cycle diesel, water-cooled, turbocharged with air-to-air cooling, electronic engine management.	
Piston displacement	855 in³ (14 L)
Bore x stroke	5.24 x 6.61 in (133 x 168 mm)
Gross power at 2,000 rpm (SAE J 1995)	450 hp (336 kW)
Net power at 2,000 rpm (SAE J 1349)	437 hp (326 kW)
Maximum torque at 1,350 rpm	1,548 lbf ft (2,100 Nm)
Engine emission meets USA EPA Tier 3 /CARB MOH 40 CFR 89 Tier 3 and proposed EUNRMM (non-road mobile machinery directive) Tier 3.	
24 volt electric start. 100A alternator. Two 12 volt 175 Ah batteries. Dry-type air cleaner with safety element, automatic dust ejector and restriction indicator.	

Note: Net horsepower with fan clutch disengaged.

Transmission

Allison HD4560 with integral retarder mounted directly to the engine. Fully automatic transmission with planetary gearing, electronic control with six forward and one reverse gear. 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.

Low Range			**Forward**				**Reverse**
Gear	1	2	3	4	5	6	1
mph	3.4	7.3	10.5	16.0	20.5	23.3	3.0
km/h	5.5	11.7	16.9	25.8	33.0	37.5	4.8
High Range			**Forward**				**Reverse**
Gear	1	2	3	4	5	6	1
mph	5.2	11	16.0	24.5	31.5	37.3	4.6
km/h	8.4	17.8	25.8	39.5	50.4	60.0	7.4

TEREX

Specifications

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 which houses nylon bushings. Frames articulate 45° to either side for steering by means of two widely-spaced pivot pins in back-to-back sealed taper roller bearings.

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 rear most axle. This differential and the transmission output differential are locked simultaneously using one switch selected by the operator.

Differential ratio	3.70:1
Planetary reduction	6.35:1
Overall Drivetrain reduction	23.50:1

Tires and Wheels

Tires	Standard 29.5 R 25 two star radial.
Rims	Standard 25 x 25.00
Wheels	3-piece earthmover rims with 19 stud fixing

Suspension

Front: Four trailing links and a panhard rod locate the front axle giving a high roll center. The optimised front axle position along with the wide spaced main and rebound mounts, mounted directly above the axle and long suspension travel, combine with the two heavy duty dampers each side to give excellent handling and ride.

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.

Pivot points on leading and trailing links are rubberbushed

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	Engine brake and transmission retarder are standard. Engine brake operates automatically should engine approach overspeed condition.

Steering

Hydrostatic power steering by two double-acting cushioned steering cylinders with pressure supplied by a variable displacement / load sensing piston pump. Secondary steering pressure is provided by a ground driven pump mounted on the dropbox. An audible alarm and warning light indicates should the secondary system activate.

System conforms to ISO 5010, SAE J53	
Steering angle to either side	45°
Lock to lock turns, steering wheel	4
System pressure	3,480 psi (240 bar)

Hoist

Two single-stage, double-acting hoist cylinders, cushioned at both ends of stroke. Variable displacement / load sensing piston pump driven from power take-off on transmission. Full flow return line filtration. Full electro-hydraulic hoist control, with electronic detent in power down.

System pressure	3,480 psi (240 bar)
Pump output flow rate	85.6 gpm (5.4 L/sec)
Raise time, loaded	12.5 sec
Power down	8 sec

Body

All welded construction, fabricated from high hardness (min. 360 BHN) 145,000 lbf/in^2 (1,000 MPa) yield strength steel.

Dual slope tailchute improves material ejection from body.

Plate thicknesses:	Floor and tailchute	0.58 in (15 mm)
	Sides	0.47 in (12 mm)
	Front	0.31 in (8 mm)
Volume:	Struck (SAE)	22.8 yd^3 (17.4 m^3)
	Heaped 2:1 (SAE)	30.3 yd^3 (23.3 m^3)

Service Capacities

Fuel tank	119 gal (450 L)
Hydraulic system	87.2 gal (330 L)
Cooling system	17.7 gal (67 L)
Engine crankcase (with filters)	8.4 gal (32 L)
Dropbox	2.6 gal (10 L)
Transmission & filters (including cooler)	16.1 gal (61 L)
Transmission & filters (wet fill)	7.4 gal (28 L)
Differential (front)	8.7 gal (33 L)
Differential (center)	8.9 gal (34 L)
Differential (rear)	8.7 gal (33 L)
Planetaries (each)	2.4 gal (9 L)

Standard Equipment

CAB
Air conditioner 35,500 BTU/hr (10.4 kW)
Cigar lighter, 24v
Coathook
Engine diagnostic facility
Heater and demister 35,415 BTU/hr (9.5 kW)
Hydraulic diagnostic facility RS232
Inspection lamp socket, 24v
Insulation, thermal and acoustic
Interior light
Mirrors, rear view, 4
Mug holder
Radio/cassette
Seat, passenger ROPS/FOPS protection ISO 3471/3449 SAE J1040 Apr 88/J231
Seat belts, retractable J386
Seat, operator, air suspension
Steering wheel, tilt/telescopic
Storage compartment
Sun blind
Tinted glass
Transmission visual
Display unit
Window protection grille, rear
Wiper and washer, front and rear windows
GAUGES
Fuel level
Hourmeter
Speedometer/odometer
Tachometer
Transmission temperature
Water temperature
Volt meter
Brake cooling temperature
INDICATOR LIGHTS
Turn signals
Headlight high beam
AUDIBLE ALARMS
Brakes tractor, low pressure
Brakes trailer, low pressure
Engine stop
Transmission check
Steering, low pressure
Engine check
Diff locks
WARNING LIGHTS
Alternator charging
Body up
Brake pressure - front and rear
Engine check
Engine 'Stop'
Fuel, low level
Diff. locks 'On'
Parking brake 'On'
Steering pressure
Transmission check
Oil filter change
Air filter change
GENERAL
Air filter, dual element with restriction indicator
Articulation locking bar and oscillation lock pin
Battery master switch
Body prop
Diagnostic test points
Downshift inhibitor
Engine underguard, hinged
Engine brake
Fan, modulating
Headlamp guards
Horn, electronic
LIGHTS
Headlamps, 4, halogen side, tail, stop, reverse.
Hazard warning and direction indicators
Work lights, roof-mounted
Light guards, rear
Mudflaps, front
Mudflaps, in front of leading rear wheels
Neutral start interlock
Pivot protection guard
Reverse alarm, audible J994
Servo body hoist
Tow points, front and rear
Transmission sump guard
Tire Inflation, nitrogen (6 tires)

Optional Equipment

BODY OPTIONS
Exhaust heating
Liner plates
Side extensions
Spillguard extension
Tailgate – scissor chain operated
Tailgate – underhinged
Fast fuel adaptor
Fire extinguisher
First aid kit
LIGHTS
Beacon, flashing
Fog, rear
Reverse, flashing
Working, rear facing
Mirror, front mounted
Mirrors, heated
Parking brake guard
Seat heated
Television monitor, rear view
Tool kit, hand

GENERAL
Auto lube system
Cold start kit
Fast fuel adapter
Fire extinguisher
First aid kit
Headlamp guards, hinged
Jake brake
Mirror, front mounted
Mirrors, heated
Mud flaps, in front of leading rear wheels
Parking brake guard
Tachograph
Television monitor, rear view
Tool kit, hand

Weights

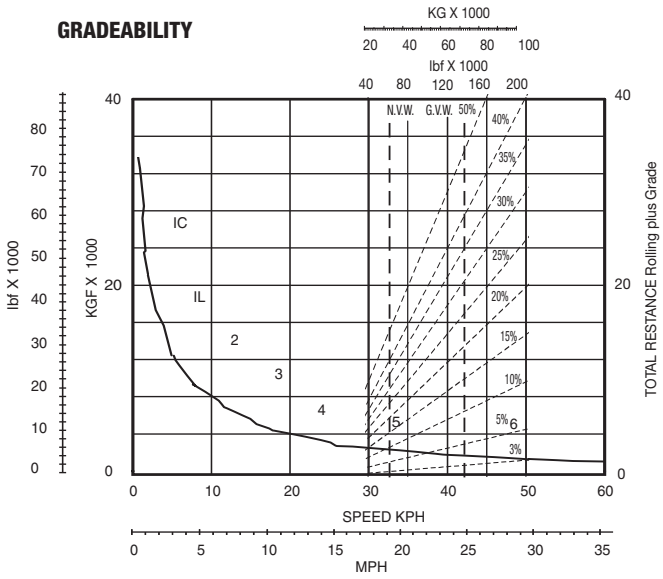
Net Distribution	
Front axle	34,936 lbs (15,880 kg)
Bogie axle, leading	16,500 lbs (7,500 kg)
Bogie axle, trailing	16,368 lbs (7,440 kg)
Vehicle, Net	67,804 lbs (30,820 kg)
Payload	83,775 lbs (38,000 kg)
Gross Distribution	
Front axle	40,304 lbs (18,320 kg)
Bogie axle, leading	55,000 lbs (25,000 kg)
Bogie axle, trailing	55,000 lbs (25,000 kg)
Vehicle, Gross	151,579 lbs (68,820 kg)
Hoists, pair	1,455 lbs (660 kg)

Articulated Truck

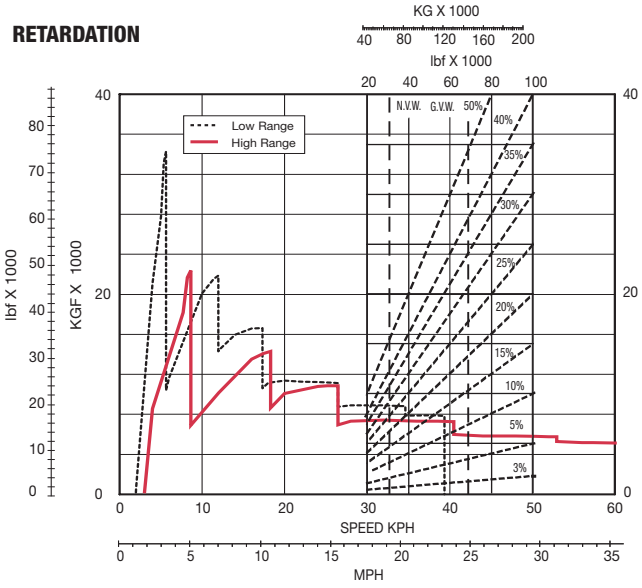
TA40

Performance Data (Graphs Based On 0% Rolling Resistance)

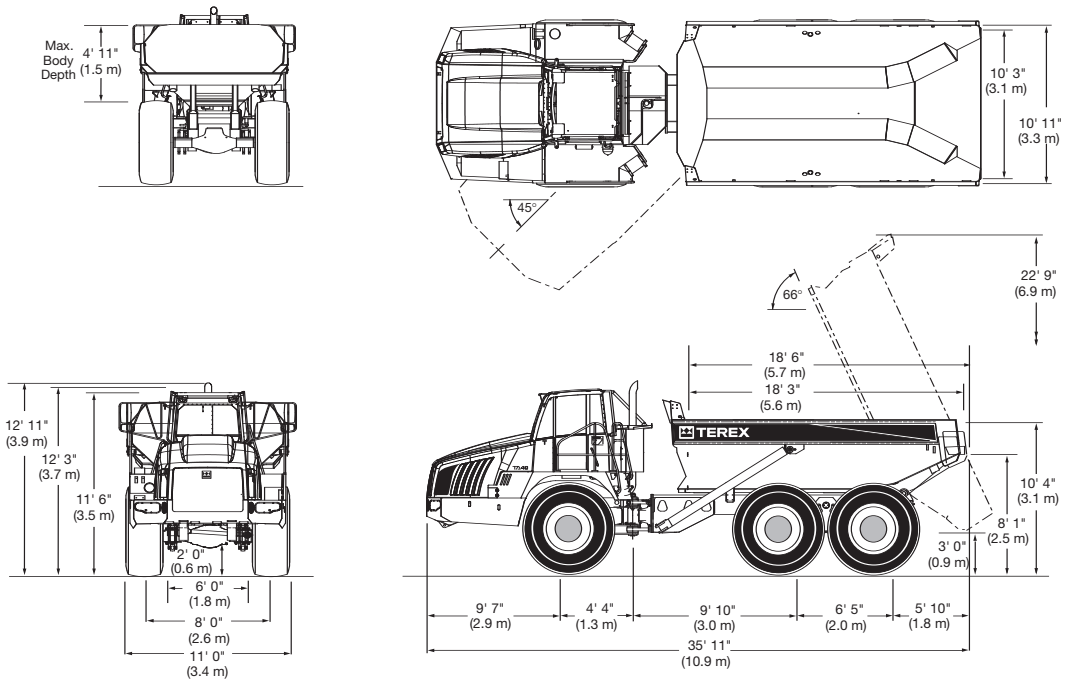
GRADEABILITY



RETARDATION



Dimensions



TEREX

For more information, product demonstration, or details on purchase, lease and rental plans, please contact your local TEREX Distributor.

TEREX Construction Americas

8800 Rostin Road
Southaven, MS 38671
USA

TEL 662-393-1800
SALES 866-837-3923
PARTS & TECH SUPPORT 888-201-6008
FAX 662-393-1700
EMAIL sales@terexca.com
WEB terexca.com

TA40 5K 0106A Part #109091