

Standard Equipment

CAB:	Indicator Lights continued:
Air Conditioner	Headlamps, Main Beam
5.4kW (18 500 BTU/hr)	Parking Brake 'On'
Acoustic Lining	Retarder 'On'
Door Locks	Steering Filter Restriction
Floor Mat	Transmission 'Check'
ROPS Protection Body	Transmission Filter
Cabguard ISO 3471	Restriction
FOPS Protection ISO 3449	Transmission Manual Mode
	Transmission Oil
Heater and Defroster	Temperature
10.3 kW (35 000 BTU/h)	Warning Light Test
Interior Light /Courtesy Light	GENERAL:
Seat, Operator	Accumulator Steering
Seat, Passenger	Air Cleaners (3), two stage
Seat Belts SAE J386	Body Down Signal
Steering Column - adjustable	Body Heating, Exhaust
Sun Visor - full cab width	Body Hoist, Servo Actuated
Tinted Glass	Cold Start Kit
Utility Compartment	Coilant Filter
Windshield Wipers, 2 speed,	Diagnostic Pressure Test Points
and Washers	Downshift Inhibitor
Controls:	Dual Brake System
Battery Isolator	Engine pre-lube starter
Automatic Transmission Shift	Engine Pan Guard
Transmission Test Button	Exhaust Muffler, part time
Power/Economy Key Switch	Front Brake Pressure Reduction
Manual Mode Key Switch	Selector
Gauges - electric:	Fuel Sight Gauge
Converter Temperature	Headlights - Quartz Halogen (4)
Engine Coolant Temperature	Horn, Dual Electric,
Engine Oil Pressure	117dB SAE J1105
Fuel	Mud Flaps
Speedometer/Odometer	Operator Arm Guard
Tachometer/Hourmeter	Parking Brake
Transmission Oil Pressure	Rear View Mirrors -4
Indicators - Light and Alarm:	Radiator, replaceable tube core
Brake Pressure, front	Retarder, Transmission or Oil-
Brake Pressure, rear	cooled Disc Brakes
Steering Pressure	Retarder Light-amber, rear
Steering / Brakes oil level	Reverse Alarm
Transmission, "Do not shift"	Reversing Light quartz halogen
Indicator Lights only:	Rock Ejectors
Air Cleaner Restriction	Secondary Brake System
Alternator Not Charging	Security Kit
Body Up	Side, Tail, Stop, Direction
Brake Oil Temperature	Indicators and Hazard
Converter Drive	Warning Lights
Coolant Level	Tow Points, front and rear
Coolant Temperature	Transmission Guard
Direction Indicators	Radio/Cassette Player
Engine Oil Pressure	

Specifications subject to change without notice.

Optional Equipment

Automatic Lubrication System	Automatic Extinguisher
Body, Enlarged Capacity	Battery Warm Coat
Body Wear Plates	On-board Weighing System
Fire Extinguisher	Air Precleaner
Electronic Tachograph	Cold Protection Curtian
Fuel Tank Ladder	Spillguard Extension, folding
Fast Fuel Adaptor	Engie Heater
Oil Heater	Engie Cold Start Kit
Reversing Light	

Weights

	K	lb
Chassis, with hoists	53 240	117 380
Body, standard	15 380	33 900
Net Weight	68 620	151 280
Rating Payload	91 000	200 617
Permissible gross weight*	160 000	352 734

* Permissible gross vehicle weight with options, attachments, full fuel tank and payload.

Weight distribution:	Front Axle	Rear Axle
Empty	49%	51%
Loaded	34%	66%

Service Capacities

SERVICE CAPACITIES	litres	(US gal)
Engine Crankcase and Filters	134	(35.4)
Transmission and Filters	100	(26.0)
Cooling System	304	(80.3)
Fuel Tank	1090	(288.0)
Steering Hydraulic Tank	61	(16.1)
Steering Hydraulic System (Total)	72	(19.0)
Body Hydraulic Tank	297	(78.5)
Body Hydraulic System and		
Brake Cooling System	557	(147.1)
Planetaries (Total)	57	(15.1)
Differential	61	(16.1)
Front Ride Strut (Each)	27	(7.1)
Rear Ride Strut (Each)	18	(4.8)
Power Take Off	4	(1.1)



TR100A Dump Truck

Rated Payload-91t (100 US Ton)

Heaped capacity-57m³ (74.5yd³)

High Torque Rise, Economical Cummins Engine

Automatic Electronic Control Allison Transmission

Full Hydraulic disc Brakes; Dual Mode Retardation

Brand Now Cab with Full Scene, Low Noise



Frame

Full box section frame rails, integral front bumper, closed-loop crossmember and rear torque tubes of high yield strength steel and tail seat. Crossmember connections are high strength alloy steel castings.

Engine

ModelCummins QST30
 Type4 Cycle Turbocharged/ Aftercooled
 Gross Power @ 2 100 rev/min783 kW (1 050 hp)
 Net Power @ 2 100 rev/min 727 KW (975 hp)

Gross Power rating to SAE J1995 June 90.
 Engine requires no deration up to 3 050 m (10 000 ft) altitude.
 Maximum Torque4 629 Nm (3 414 lbf ft) @ 1 300 rev/min
 Cylinders/Configuration 12V
 Bore x Stroke 140 x 165 mm (5.51 x 6.5 in)
 Displacement 30.5 litres
 24 volt negative ground electrical system. Four 12 volt 195 Ah Batteries with master disconnect switch. Two 9 kW starters. Neutral start. 100A alternator with integral voltage regulator

Transmission

Allison H8610AR CEC2 Automatic Electronic Control. Remote Mounted in the frame with integral TC 890 torque converter and planetary gearing. Six speeds forward, one reverse. Automatic lock-up in all speed ranges. Downshift inhibitor. Hydraulic retarder. Speeds with standard planetary:

	Forward						Reverse
	1st	2nd	3rd	4th	5th	6th	R1
Ratios:	4.24	2.32	1.69	1.31	1.00	0.73	5.75
km/h:	8.2	15.0	20.6	26.5	34.8	47.6	6.0
mile/h:	5.1	9.3	12.8	16.5	21.6	29.6	3.8

Drive Axle

Heavy duty axle with full floating axle shafts, single reduction spiral bevel gear differential, and planetary reduction at each wheel.

		Standard
Ratios:	Differential	2.16:1
	Planetary	13.75:1
	Total Reduction	29.70:1

Suspension

Front: King pin strut type independent front wheel suspension uses self-contained, variable rate, nitrogen/oil cylinders.
 Rear: Variable rate nitrogen/oil cylinders with A-frame linkage and lateral stabilizer bar.
 Maximum Strut Stroke: Front 235 mm (9.25 in)
 Rear 175 mm (6.90 in)
 Maximum Rear Axle Oscillation ±7.0 Degrees

Tyres

Standard: Front and Rear 27.00-49 (48PR) E-419.5in Rim Width
 Consult tyre manufacturers for optimum tyre selection and correct t-km/h (ton-mile/h) capacity for application.

Brakes

SERVICE - All hydraulic brake system control. Transmission mounted pressure compensating piston pump provides hydraulic pressure for brakes and steering. Independent circuits front and rear. Each circuit incorporates a nitrogen/hydraulic accumulator which stores energy to provide instant braking response.

Front Dry Disc
 Disc diameter965 mm (38 in)
 Pad area, total 2015 cm² (320 in²)
 Rear Oil cooled, multiple disc, completely sealed from dirt and water.
 Braking surface, total87 567 cm² (13 573 in²)

PARKING - Rear brakes applied by spring loaded opposing piston on disc pack, hydraulically released.

RETARDATION - Modulated lever control of rear disc brakes or hydraulic retarder in transmission. 920 kW (1 234 hp) continuous.

SECONDARY - Park push button solenoid control applies service and parking brakes. Automatically applies when engine is switched off. Parking brake applies when system pressure falls below a pre-determined level.

Brakes conform to ISO 3450, SAE J1473 Oct 90.

Steering

Independent hydrostatic steering with closed-centre steering valve, accumulator and pressure compensating piston pump. Accumulator provides uniform steering regardless of engine speed. In the event of loss of engine power it provides steering of approximately two lock-to-lock turns.

A low pressure warning light activates should the system pressure fall below 83 bar (1 200 lbf/in²).

Steering conforms to ISO 5010, SAE J53.

Maximum Tyre Steering Angle 39°

Hoist

Two body hoists mounted inside the frame rails. Hoists are two-stage with power down in the second stage. The body hydraulic system is independent of the steering hydraulic system.

System pressure190 bar (2750 lbf/in²)
 Body Hydraulic Pump Flow Rate @ 2 100 rev/min392 litre/min (97 US gal/min)
 Body Raise Time 16.3 Seconds Body Lower Time 18 Seconds

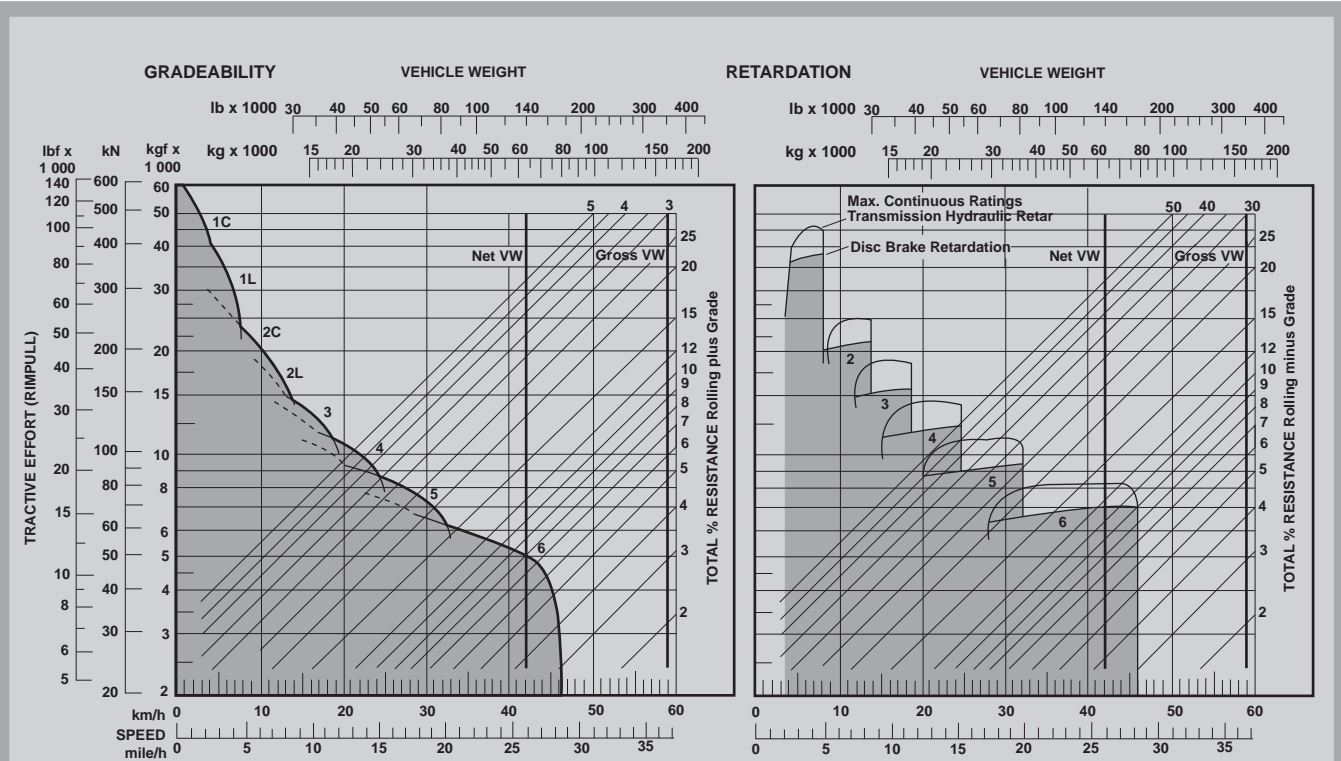
Body

Longitudinal 'V' type floor with integral transverse box-section stiffeners. The body is haust heated and rests on resilient impact absorption pads.
 Body wear surfaces are high hardness abrasion resistant steel of yield strength.

Thickness: Floor19 mm (0.75 in)
 Side10 mm (0.39 in)
 Front, lower10 mm (0.39 in)
 ROPS Cabguard SAE J1040 Feb 86, ISO 3471
 Volumes: Struck (SAE)41.6 m³ (54.4 yd³)
 Heaped 2:1 (SAE)57.0 m³ (74.5 yd³)

Performance Data

Graphs based on 0% Rolling Resistance



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

