

## Standard Equipment

CAB:  
 Air Conditioner  
 5.4kW (18 500 BTU/hr)  
 Acoustic Lining  
 Door Locks  
 Floor Mat  
 ROPS Protection Body  
 Cabguard ISO 3471  
 FOPS Protection ISO 3449

Heater and Defroster  
 10.3 kW (35 000 BTU/h)

Interior Light /Courtesy Light  
 Seat, Operator  
 Seat, Passenger  
 Seat Belts SAE J386  
 Steering Column - adjustable  
 Sun Visor - full cab width  
 Tinted Glass  
 Utility Compartment  
 Windshield Wipers, 2 speed,  
 and Washers

Controls:  
 Battery Isolator  
 Automatic Transmission Shift  
 Transmission Test Button  
 Power/Economy Key Switch  
 Manual Mode Key Switch

Gauges - electric:  
 Converter Temperature  
 Engine Coolant Temperature  
 Engine Oil Pressure  
 Fuel  
 Speedometer/Odometer  
 Tachometer/Hourmeter  
 Transmission Oil Pressure

Indicators - Light and Alarm:  
 Brake Pressure, front  
 Brake Pressure, rear  
 Steering Pressure  
 Steering / Brakes oil level  
 Transmission, "Do not shift"

Indicator Lights only:  
 Air Cleaner Restriction  
 Alternator Not Charging  
 Body Up  
 Brake Oil Temperature  
 Converter Drive  
 Coolant Level  
 Coolant Temperature  
 Direction Indicators  
 Engine Oil Pressure

Indicator Lights continued:  
 Headlamps, Main Beam  
 Parking Brake 'On'  
 Retarder 'On'  
 Steering Filter Restriction  
 Transmission 'Check'  
 Transmission Filter  
 Restriction  
 Transmission Manual Mode  
 Transmission Oil  
 Temperature  
 Warning Light Test

GENERAL:  
 Accumulator Steering  
 Air Cleaners (3), two stage  
 Body Down Signal  
 Body Heating, Exhaust  
 Body Hoist, Servo Actuated  
 Cold Start Kit  
 Coolant Filter  
 Diagnostic Pressure Test Points  
 Downshift Inhibitor  
 Dual Brake System  
 Engine pre-lube starter  
 Engine Pan Guard  
 Exhaust Muffler, part time  
 Front Brake Pressure Reduction  
 Selector  
 Fuel Sight Gauge  
 Headlights - Quartz Halogen (4)  
 Horn, Dual Electric,  
 117dB SAE J1105  
 Mud Flaps  
 Operator Arm Guard  
 Parking Brake  
 Rear View Mirrors -4  
 Radiator, replaceable tube core  
 Retarder, Transmission or Oil-  
 cooled Disc Brakes  
 Retarder Light-amber, rear  
 Reverse Alarm  
 Reversing Light quartz halogen  
 Rock Ejectors  
 Secondary Brake System  
 Security Kit  
 Side, Tail, Stop, Direction  
 Indicators and Hazard  
 Warning Lights  
 Tow Points, front and rear  
 Transmission Guard  
 Radio/Cassette Player

## Optional Equipment

Automatic Lubrication System  
 Body, Enlarged Capacity  
 Body Wear Plates  
 Fire Extinguisher  
 Electronic Tachograph  
 Fuel Tank Ladder  
 Fast Fuel Adaptor  
 Oil Heater  
 Reversing Light

Automatic Extinguisher  
 Battery Warm Coat  
 On-board Weighing System  
 Air Precleaner  
 Cold Protection Curtian  
 Spillguard Extension, folding  
 Engie Heater  
 Engie Cold Start Kit

## Weights

	K	lb
Chassis, with hoists	53 240	117 380
Body, standard	15 380	33 900
Net Weight	68 620	151 280
<b>Rating Payload</b>	<b>91 000</b>	<b>200 617</b>
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-57m<sup>3</sup> (74.5yd<sup>3</sup>)

High Torque Rise, Economical Cummins Engine

Automatic Electronic Control Allison Transmission

Full Hydraulic disc Brakes; Dual Mode Retardation

Brand New Cab with Full Scene, Low Noise



Specifications subject to change without notice.





**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**

Model .....Cummins QST30  
 Type .....4 Cycle Turbocharged/ Aftercooled  
 Gross Power @ 2 100 rev/min .....783 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 Torque .....4 629 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-4 .....19.5in 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 diameter .....965 mm (38 in)  
 Pad area, total ..... 2015 cm<sup>2</sup> (320 in<sup>2</sup>)  
 Rear Oil cooled, multiple disc, completely sealed from dirt and water.  
 Braking surface, total .....87 567 cm<sup>2</sup> (13 573 in<sup>2</sup>)

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/in<sup>2</sup>).

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 pressure .....190 bar (2750 lbf/in<sup>2</sup>)  
 Body Hydraulic Pump Flow Rate @ 2 100 rev/min .....392 litre/min (97 US gal/min)  
 Body Raise Time 16.3 Seconds Body Lower Time 18 Seconds

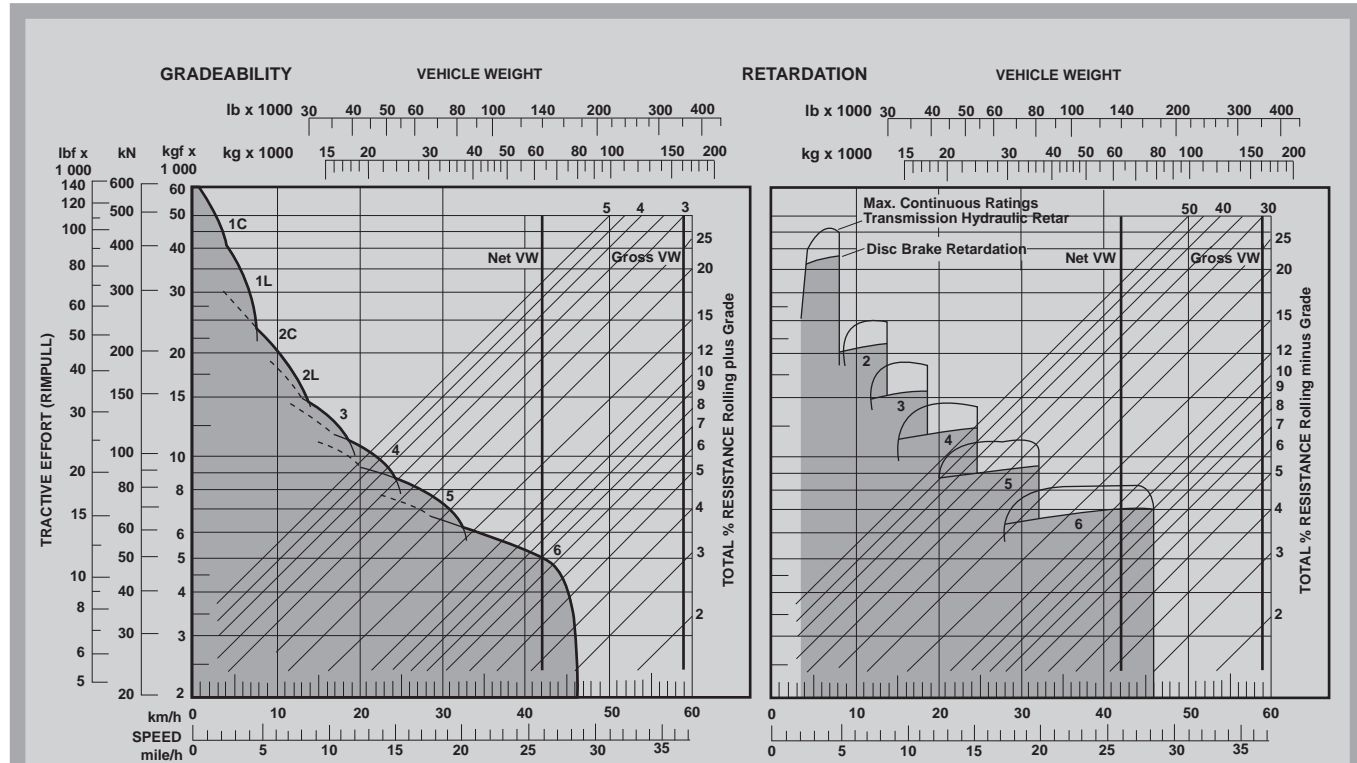
**Body**

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: Floor .....19 mm (0.75 in)  
 Side .....10 mm (0.39 in)  
 Front, lower .....10 mm (0.39 in)  
 ROPS Cabguard SAE J1040 Feb 86, ISO 3471  
 Volumes: Struck (SAE) .....41.6 m<sup>3</sup> (54.4 yd<sup>3</sup>)  
 Heaped 2:1 (SAE) .....57.0 m<sup>3</sup> (74.5 yd<sup>3</sup>)

**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

