AURY

TR 60

Off-Highway
Rigid Truck

- Long life, emission- certified engine with electronic management system
- Dual mode retardation - Oil rear disc brakes or hydraulic retarder
- Rugged construction for durability in tough conditions
- High - visibility cab with de -luxe interior
- Smooth shifting, electronically-Controlled transmission
- Maximum Payload-55 tonne (60 US ton)
- Maximum Gross Vehicle Weight-95 680 kg (210 940 lb)
- Heaped Capacity-35m^3 (46yd^3)
- Power-522kW (700hp)

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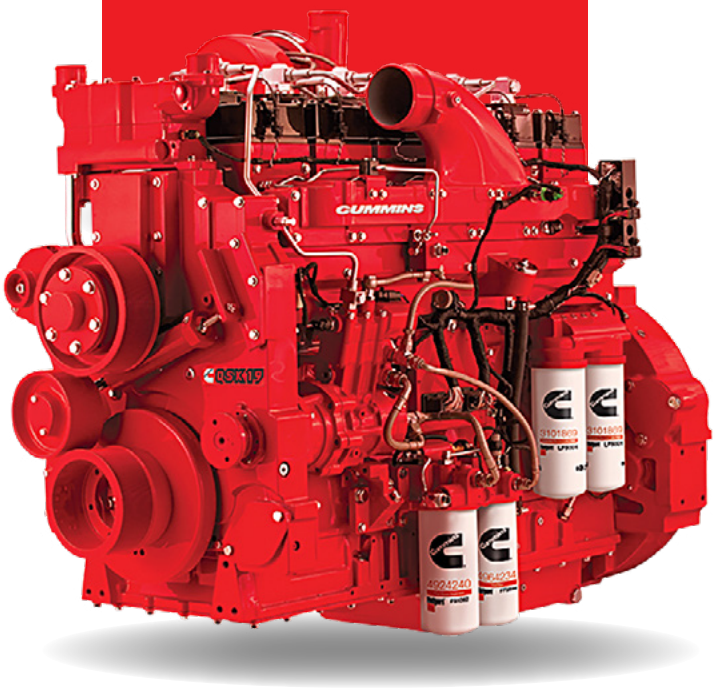


>> FRAME

Full box section frame rails, integral front bumper, closed-loop cross member and torque tubes of 290MPa (42 000 lbf/n^2) yield strength steel, Crossmember connections are 655 MPa (95 000 lbf/n^2) steel castings.

>> ENGINE

Model - Cummins QSK19-C700

Type - 4 Cycle, Turbocharged/After cooled

Gross Power @ 2 100 rev/min - 522kW (700hp)

Net Power @ 2 100 rev/min - 462kW (620hp)

Gross Power rated to SAE j1995 Jun 90. Engine emission meets Tier 3 USA EPA/CARB MOH 40 CFR 89 and proposed EU non-road mobile machinery directive.

Maximum Torque - 2 983 Nm (2 200 lbf ft) @ 1 300 rev/min

Cylinders/ Configuration - 6 in line

Bore x Stroke - 159 × 159 mm (6.25× 6.25 in)

Displacement - 19.0 litres (1159 in^2)

24 volt negative ground electrical system. Two 12 volt 165 Ah batteries with master disconnect switch 8.9 kW starter. Neutral start. 70A alternator with integral voltage regulator.

TRANSMISSION

Allison 6620 ORS automatic electronic control with Soft Shift feature. Planetary gearing with six speeds forward and two reverse. Integral TC 682 torque converter with automatic lock-up in all speed ranges. Hydraulic Retarder. With body up, gear range in limited to 1st forward.

Speed	Forward						Reverse	
	1st	2nd	3rd	4th	5th	6th	R1	R2
Ratio	4.00	2.68	2.01	1.35	1.00	0.67	5.12	3.46
Km/h	8.5	14.2	18.9	28.2	38.1	57	7.4	11.0
Mile/h	5.9	8.8	11.8	17.5	23.7	35.5	4.6	6.8

DRIVE AXLE

AURY NHL heavy duty axle with full foaling axle shafts, single reduction spiral bevel gear differential, and planetary reduction at each wheel.

Ratios:

Differential	3.73:1
Planetary	5.80:1
Total Reduction	21.63:1

SUSPENSION

Front: Manufactured king pin strut-type independent front wheel suspension by 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	251 mm (9.9 in)
	Rear	182 mm (7.2 in)
Maximum Rear Axle Oscillation		± 6.5 Degrees

TYRES

Standard:	Front and Rear 24.00-35(42PR) E-4
Rim Width	17 in

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 Brakes:	Dry Disc	
	Disc diameter	711 mm (28 in)
	Pad area, total	1 394cm^2 (216 in^2)
Rear Brakes:	Oil cooled, multiple disc, completely sealed from dirt and water. Braking Surface, total 47 151 cm^2 (7 308 in^2)	

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. 670 kW (900 hp) continuous retardation.

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.

STEERING

Independent hydrostatic steering with closed-center 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 waiting light indicates should the system pressure fall below 83 bar (1 200 lbf in^2).

Steering conforms to ISO 5010.

Maximum Tyre Steering Angle	39^0

TR60 | AURY

HOIST

Two body hoist 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 Relief Pressure	190 bar (2 750 lbf/ in^2)
Body Hydraulic Pump Flow Rate @ 2 100 rev/ min	227 litre/min (60 US gal/min)
Body Raise Time	13 Seconds
Body Lower Time	9 Seconds

BODY

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

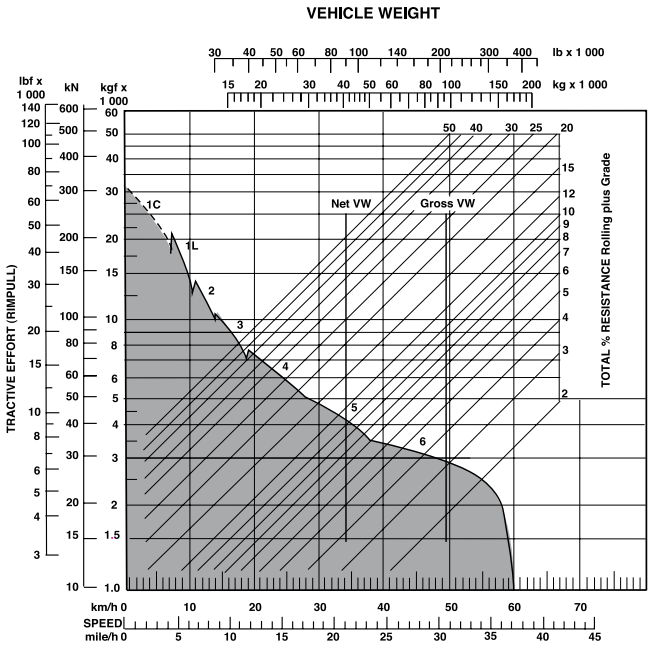
FOPS Protection ISO 3449.

Thickness:	Floor	19 mm (0.75 in)
	Side	10 mm (0.39 in)
	Front, lower	10 mm (0.39 in)
Volumes:	Struck (SAE)	26 m^3 (34 yd^3)
	Heaped 2:1 (SAE)	35 m^3 (46 yd^3)

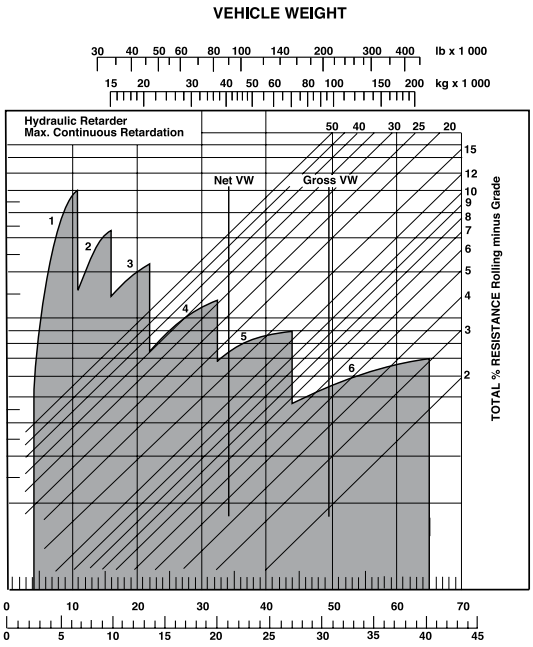
PERFORMANCE DATA

Graphs based on 0% Rolling Resistance.

GRADEABILITY

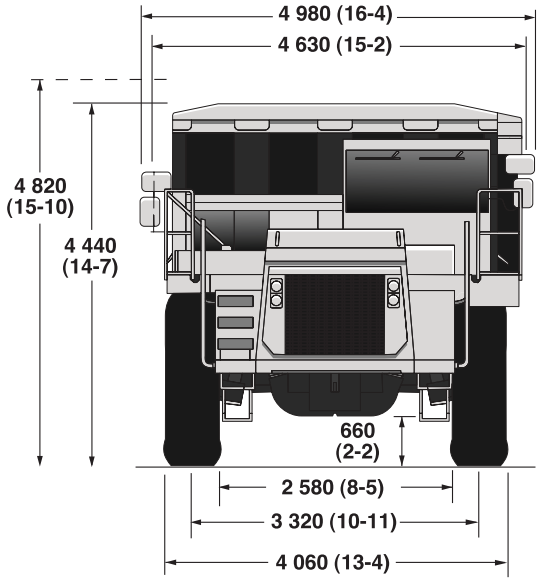


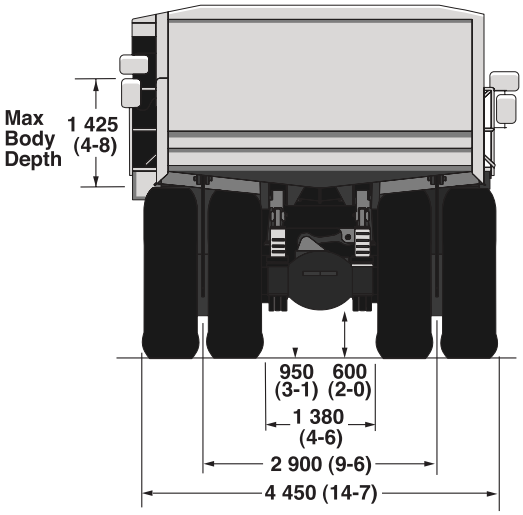
RETARDATION

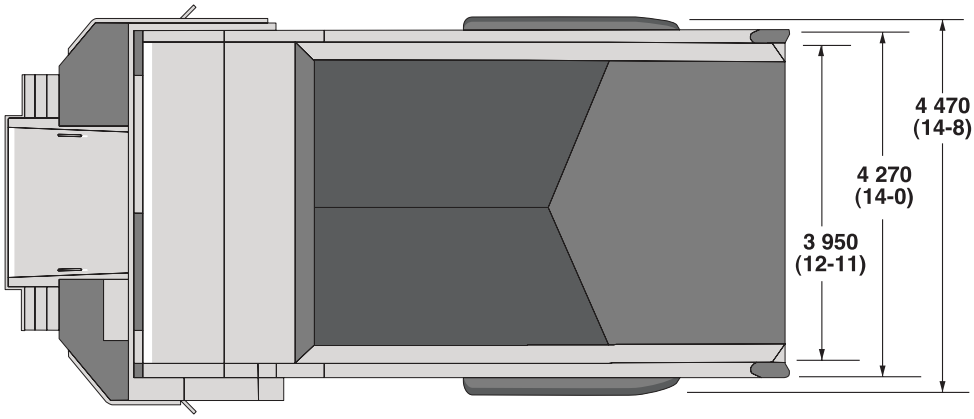


Instructions: From intersection of Vehicle Weight with Percentage Resistance line read across to determine maximum Gear attainable, and then downwards for Vehicle Speed.

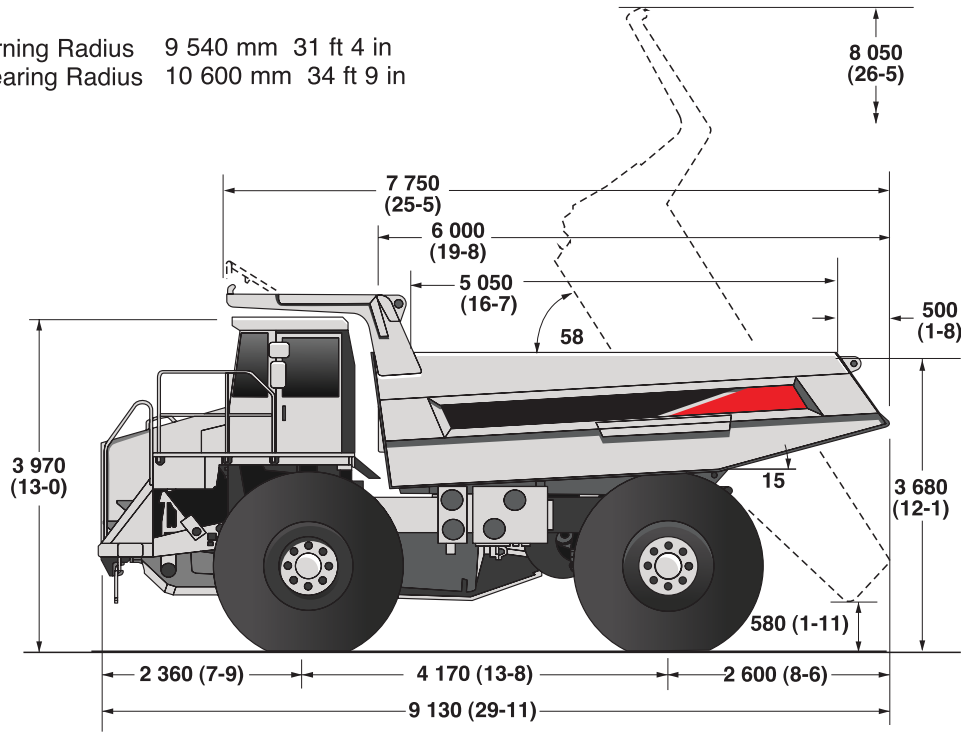
Dimensions in mm (ft-in)







Turning Radius 9 540 mm 31 ft 4 in
Clearing Radius 10 600 mm 34 ft 9 in



>> STANDARD EQUIPMENT

CAB

- Air Conditioner
- Acoustic Lining
- Door Locks
- Floor Mat
- FOPS Protection
- ISO 3449
- Heater and Defroster
- Interior Light/Courtesy Light
- Radio
- Seat, with High Back
- 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

- Air Cleaner Restriction
- Alternator Not Charging
- Body Up
- Brake Oil Temperature
- Converter Drive
- Coolant Level
- Direction Indicators
- Coolant Temperature
- Engine Oil Pressure
- Headlamps, Main Beam
- Parking Brake 'On'
- Retarder 'On'
- Steering Filter Restriction
- Transmission 'Check'
- Transmission Filter Restriction
- Transmission Manual Mode
- Transmission Oil Temperature
- Warming Light Test

GENERAL

- Accumulator Steering
- Air Cleaners (2), two stage
- Body Down Signal
- Body Heating, exhaust
- Body Hoist, Servo Actuated
- Coolant Filter
- Diagnostic Pressure Test Points
- Downshift Inhibitor
- Dual Brake System
- Engine Management System
- Engine Pan Guard
- Exhaust Muffler, part time
- Fuel Sight Gauge
- Headlights-Quartz Halogen (4)
- Horn, Dual Electric,
- Mud Flaps
- Operator Arm Guard
- Parking Brake
- Rear View Mirrors (4)
- Retarder, Rear Disc Brakes
- Retarder, Transmission
- Retarder Light-amber, rear
- Reverse Alarm
- Reversing light-quartz halogen
- Rock Ejectors
- Secondary Brake System
- Security Kit
- Separate Steering and Body Hoist Hydraulic Systems
- Shed Plates, rear
- Side, Tail, Stop, Direction Indicators and Hazard Warning Lights
- Tow Points, front and rear
- Transmission Guard

Specifications subject to change without notice.

OPTIONAL EQUIPMENT

Automatic Lubrication System	Fire Extinguisher	On—board Weighing System
Body, Heavy Duty	Fire Suppression System	Spillguard Extension, folding
Body Wear Plates (floor, end, side and front protection)	Front Brake Reduction	Tachograph
Exhaust Muffler, full time	Selector	Television Monitor, Rear View
Fan Clutch	Hoodsides	Tool Kit, Hand
Fast Fuel Adaptor	Nitrogen Inflated Tyres	Traction Bias Differential

WEIGHTS

	Kg	lb
Chassis, with hoists	30 600	67 460
Body, standard	10 650	23 480
Net Weight	41 250	96 560
PAYLOAD, maximum	54 430	114 380
Maximum Gross Weight*	95 680	210 940
FOR UNIT EQUIPPED WITH OPTIONAL HD ROCK BODY		
Chassis, with hoists	30 600	67 460
Body, Heavy Duty, Rock	13 200	29 100
Net Weight	43 800	96 560
PAYLOAD, maximum	51 880	114 380
Maximum Gross Weight*	95 680	210 940

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

WEIGHT DISTRIBUTION	Front Axle	Rear Axle
Empty	48%	52%
Loaded	34%	66%

SERVICE DATA

SERVICE CAPACITIES	LITRES	(US gal)
Engine Crankcase and Filters	66	(17.5)
Transmission and Filters	85	(22.5)
Cooling System	170	(44.9)
Fuel Tank	606	(160.0)
Steering Hydraulic Tank	61	(16.0)
Steering Hydraulic System (Total)	72	(19.0)
Body Hydraulic Tank	216	(57.0)
Body Hydraulic and Brake Cooling System	258	(68.0)
Planetaries (Total)	43	(11.4)
Differential	52	(1.7)
Front Ride Strut (Each)	14	(3.7)
Rear Ride Strut (Each)	17	(4.5)
Power Take Off	2	(0.53)

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