

DUMP TRUCK

HD465-5

Payload Capacity: **55metric tons/61U.S.tons**
Max. Vehicle Weight: **96,100kg 211,860lb.**



Model shown may include optional equipments.

Excellent Productivity&Fuel Economy

- High-output Komatsu SAA6D170E engine with low fuel consumption
- 7-speed, fully automatic K-ATOMiCS (Komatsu Advanced Transmission with Optimum Modulation Control System)transmission
- Oil-cooled multiple-disc retarder & optional exhaust retarder

Operator Comfort & Safety

- K-ATOMiCS transmission provides smooth acceleration and deceleration
- Hydropneumatic suspension for a smoother ride
- Wide and sound-suppressing cab gives comfortable operator environment
- Keeping a constant downhill travel speed (ARSC,Option)

More Uptime

- Sturdy, refined frame and tough body construction
- Monitoring system for operational safety and reliability
- Adjustment-free caliper discs used for front wheel brakes and parking brake

KOMATSU

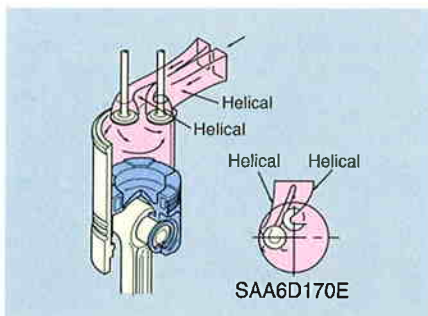
Excellent Productivity & Fuel Economy

High-output Komatsu SAA6D170E engine: The 23.15-liter power plant with turbocharger and aftercooler develops the largest output of 715 HP(533kW) at 2000 RPM in it's class.



Komatsu SAA6D170E diesel engine

Low fuel-consuming engine: High injection pressure creates an ideal fuel-air mixture for more combustion efficiency, while the ductile cast-iron pistons greatly reduce friction loss. For even more combustion efficiency, each cylinder has four valves—two for intake, two for exhaust. The two intake ports (both are helical type) produce optimum swirl for excellent combustion. The exhaust gas is smoothly and quickly ejected from the combustion chamber through the exhaust ports. All this helps to make the Komatsu-built engine a fuel miser.



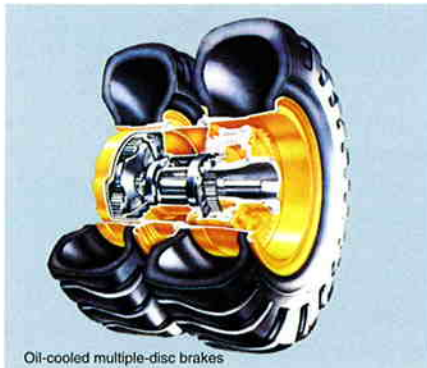
7-speed, fully automatic K-ATOMiCS transmission: The K-ATOMiCS (Komatsu Advanced Transmission with Optimum Modulation Control System) automatically selects the optimum gear according to vehicle speed, engine speed and the shift position you've chosen. The result: the best gear for any driving situation.



K-ATOMiCS (Komatsu Advanced Transmission with Optimum Modulation Control System)

Oil-cooled multiple-disc retarder and optional exhaust retarder:

The truck can be decelerated without frequent use of the brakes, allowing you to travel safer at higher speeds, even down long, steep slopes.



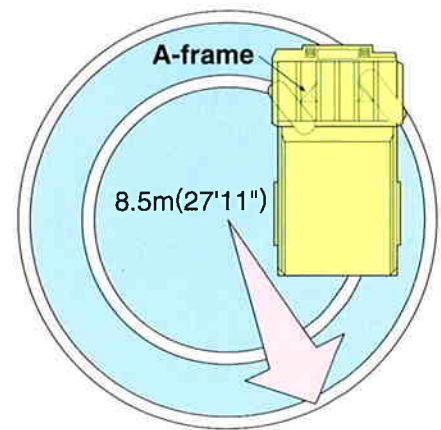
Oil-cooled multiple-disc brakes

A More Stable Ride in a More Maneuverable Truck

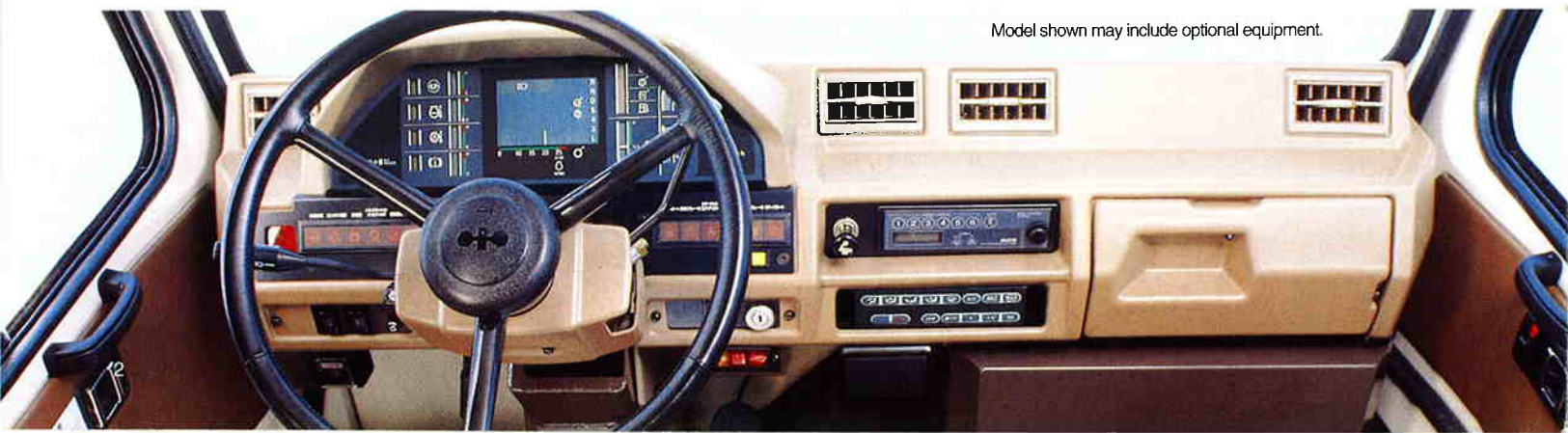
Long wheelbase and wide tread: With an extra-long wheelbase, a wide tread and an exceptionally low center of gravity, the HD465-5 hauls the load at higher speed for more production, and delivers supreme driving comfort over rough terrain.

Big body: A wide target area makes for easy loading with minimal soil spillage and more efficient hauling.

Small turning radius: The MacPherson strut type front suspension has a special A-frame between each wheel and the main frame. The wider space created between the front wheels and the main frame increases the turning angle of the wheels. The larger this turning angle, the smaller the turning radius of the truck.



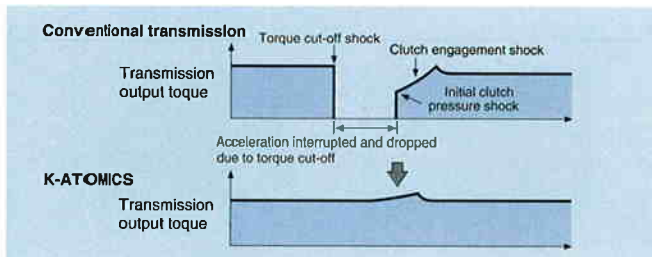
Model shown may include optional equipment.



Enhanced Operating Comfort

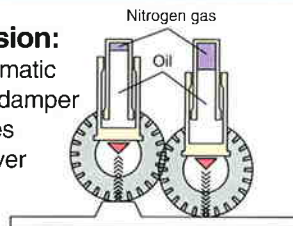
K-ATOMiCS—smooth acceleration / deceleration:

An electronically controlled valve is provided for each clutch pack in the transmission, allowing independent clutch engagement/ disengagement. Moreover, it enables an ideal change in clutch modulation pressure and torque cut-off timing in response to traveling conditions. The result is smooth shifting and responsive acceleration.



Hydropneumatic suspension:

All four wheels have hydropneumatic suspension with a fixed throttle damper control valve that greatly reduces pitching, rolling and bouncing over rough terrain.



Ideal driving position settings: The 5-way adjustable operator seat and the tilt-telescopic steering column create an optimum driving posture, for increased driving comfort and more control over the machine's operations.

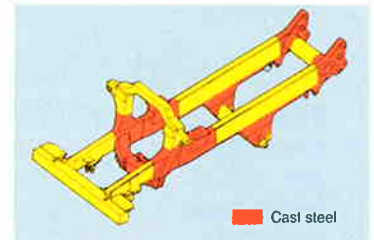
See Everything in Quiet Comfort: Wide windows in the front, side and back, plus plenty of space in the richly upholstered interior, give you a quiet, comfortable environment from which to see and control every aspect of your work.



More Uptime

Sturdy, refined frame:

Cast-steel components are employed in the main frame in critical areas where loads and shocks are most concentrated.



Rigorous dump body design: The standard dump body is made of 130 kg/mm² (184,900 PSI) high-tensile-strength steel for excellent rigidity and reduced maintenance costs. The V-shape design also increases structural strength. The side and bottom plates of the dump section are reinforced with ribs for added strength.



Adjustment-free brakes: The front service brakes and the parking brake are adjustment-free caliper disc type.

Easy maintenance: Greasing points have been centralized at three locations. Fuel and engine oil filters are also located together on the left-hand remote mount, for easy, remote inspection from the ground.

Reliable hydraulic system: The oil cooler is installed below the retarder, improving the reliability of the hydraulic system during sudden temperature rises. Further, in addition to the main filter, a 52-micron line filter is set at the entrance to the transmission control valve. This system helps prevent secondary faults.

Excellent footwork and durable power line: By adopting electronic modulation on all levels, peak torque when shifting is reduced, raising the endurance of the power line.

Electronic devices for excellent operation: In the harness connection, a dual-lock connector is used to prevent loosening from vibrations and contact failure. Also, the base boards for controllers and other devices are fixed by molding (with resin), realizing high water, dust and vibration resistance.

Advanced monitoring system

Availability rate with vehicle monitoring system

The electronic display panel shows current vehicle condition and how to fix them with action codes and check results with service codes. Thus, vehicle management is easier and the working rate is higher. At the same time the easlin data is saved to be used for later troubleshooting.

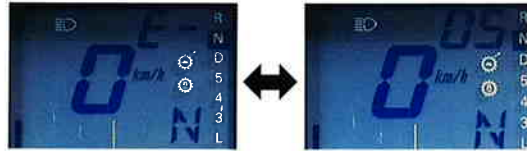


Service cord display and memory function

The contents of each controller are displayed on the electronic display panel in service codes. The stored vehicle information can be downloaded to a personal computer. This enables a quick response to problems and shortens maintenance time. This also shows the truck's current condition and facilitates management.

Action cord display function

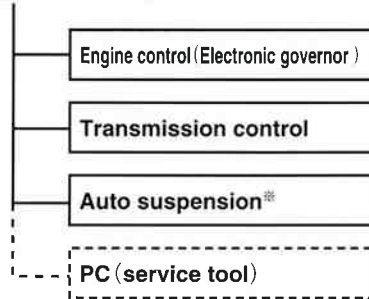
If abnormality on the truck occurs, an "E" appears on the electronic display panel with the appropriate action cord, which notifies the operator how to deal with the abnormality. The operator never misses an abnormality and can take the proper corrective action.



Messages interchange once every second.



Network functions



(※OPTION)

Protection Functions Supported by Electronic Control

Item	Function
Downshift inhibitor	Even if the driver downshifts accidentally, a speed appropriate to the current gear is automatically set, preventing over-runs.
Over-run inhibitor	When descending grades, if the vehicle's speed surpasses the maximum for the current gear, the rear brakes automatically operate, preventing over-runs.
Reverse inhibitor	The vehicle is prevented from moving backward when operating the body.
Forward/Reverse shift inhibitor	This device makes it impossible to shift from forward to reverse when the vehicle's speed surpasses 4 km/hour.
Anti-hunting system	When running near a shift point, smooth automatic shifting takes place.
Neutral safety	The engine is prevented from starting when the shift lever is in neutral.
Level control of max. speed*	Maximum speeds for the transmission are set in advance and can be controlled. Gears for which maximum speeds can be set (4-6)
Level control of max. speed (body up)*	The maximum speed during gear-shifts while loading can be set in advance.

(※OPTION)

Options to update the Value

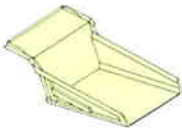

Keeping a constant downhill travel speed

Auto Retarding Speed Control (ARSC)

In addition to standard exhaust brakes, ARSC is available as an option. This allows you to simply set the downhill travel speed and go down slopes at a constant speed. As a result, you can concentrate on steering. The speed can be set at increments of 1 km/h per one click (± 5 km/h of maximum speed set) to match the optimum speed for the slope. Also, since the retarder hydraulic pressure is always monitored, the speed is automatically Lowered to prevent overheating.



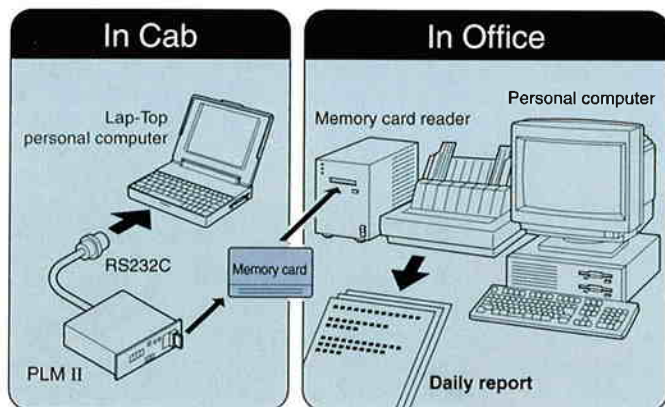
Body

	Linerless body (standard)	Rock body
Body type		
Applications	Hauling clay, sand and gravel	Hauling rocks
Features	<ul style="list-style-type: none"> •Suitable for loading clay, sand and gravel •Liner is not incorporated 	<ul style="list-style-type: none"> •Suitable for loading rocks at quarries, limestone mining site or construction work •Steel liner is incorporated throughout the entire body
Body capacity:Struck Heaped (2:1)	25 m ³ (32.7 cu.yd) 34.2 m ³ (44.7 cu.yd)	25 m ³ (32.7 cu.yd) 34.2 m ³ (44.7 cu.yd)
Body inside dimensions:		
Length	6450 mm (21'2")	6435 mm (21'1")
Width	3870 mm (12'8")	3845 mm (12'7")
Max.depth	1685 mm (5'6")	1675 mm (5'6")
Loading	3600 mm (11'10")	3600 mm (11'10")

Side extension (optional) is available for each body.

PLMII (IC card type payload meter)

This system allows the production volume and the working conditions on the dump truck to be analyzed and managed directly via a personal computer. It can store up to 2900 working cycles.



※ The memory card, card reader and software for data processing are optionally available.

Engine exhaust retarder:

The retarder capacity is increased by 30%, so faster speed is permitted on the downward slope. This improves safety and hauling performance.

Three-mode hydropneumatic suspension (optional):

To further enhance driving comfort, automatic three-mode suspension is optionally available. This enables the operator to select one of three cushioning effects (SOFT, NORMAL or HARD), depending on road conditions, for improved damping control.

ABS (Anti-lock brake system)

ABS is introduced to construction machinery first in the industry by Komatsu's outstanding electronics technology. This system prevents the tire lock under slippery condition while applying service brake and gives safety drive of the truck.

ROPS: This protects the operator and cab should the truck turn over. (meets SAES1040 APR88 and ISO 3471)

HD465-5 SPECIFICATIONS



ENGINE

ModelKOMATSU SAA6D170E
 TypeWater-cooled, 4-cycle
 AspirationTurbocharged and aftercooled
 No. of cylinders6
 Bore x stroke170 mm x 170 mm 6.7"x6.7"
 Piston displacement23.15 ltr. 1410 cu.in
 Performance:
 Gross horsepower739 HP 551 kW
 Flywheel horsepower715 HP 533kW (SAE J1349)
 Rated RPM2000 RPM
 Max. torque309 kg-m 2220 ft-lb/3.03 kN-mat 1400 RPM
 Fuel systemDirect injection
 GovernorElectrical, all speed control
 Lubrication system:
 Lubrication methodGear pump, force-lubrication
 FilterFull-flow type
 Air cleanerDry type with double elements
 and precleaner, plus dust indicator



TRANSMISSION

Torque converter3-elements, 1-stage, 2-phase
 Lockup clutchWet, double-disk clutch
 TransmissionFull-automatic, planetary gear
 type hydraulically actuated
 Speed range7 speeds forward and one reverse
 ForwardTorque converter drive in 1st gear,
 direct drive in 1st lockup and all higher gears
 ReverseTorque converter drive
 Shift controlElectronic shift control with
 automatic clutch modulation in all gear
 Max. travel speed70 km/h 43.5 MPH



AXLES AND FINAL DRIVES

Final drive typePlanetary
 Rear axleFull-floating
 Ratios:
 Differential3.267
 Planetary5.143



SUSPENSION

Independent, hydropneumatic suspension cylinder with fixed throttle to dampen vibration.



STEERING

TypeFully hydraulic power steering with
 two double-acting cylinder
 Emergency steeringManual control
 Min. turning radius8.5 m 27'11"



BRAKES

Service brakes:
 FrontAir-over-hydraulic, caliper disc type
 RearAir-over-hydraulic, oil-cooled, multiple-disc type
 Parking brakeSpring applied, caliper disc type
 actuates on drive shaft.
 RetarderAir-over-hydraulic, oil-cooled,
 multiple-disc type rear brakes act as retarders.
 Emergency brakeAn emergency relay valve
 automatically actuates the service brakes when air pressure
 drops below the rated level. Manual operation is also possible.



FRAME

TypeBox-sectioned construction
 Main frame materialHigh-tensile-strength steel plate



BODY

StructureV-shape body with V-bottom
 Material130 kg/mm² 184860 PSI/20.6MPa
 high-tensile-strength steel
 HeatingExhaust heating
 Material thickness:
 Floor19 mm 0.75"
 Front12 mm 0.47"
 Sides9 mm 0.35"
 Target area (inside length x width)6450 mm x 3870mm
 21'2" x 12'8"



BODY HOIST

Hoist cylinderTwin, 2-stage telescopic type
 Hydraulic pump capacity384 ltr./min. 101.5 U.S. gal/min
 Relief valve setting210 kg/cm² 3000 PSI/20.6 MPa
 Hoist time11.5 sec.



CAPACITY

Standard body:
 Struck25 m³ 32.7 cu.yd
 Heaped (2:1,SAE)34.2 m³ 44.7 cu.yd
 Max. gross vehicle weight96100 kg 211860 lb
 Not to exceed 96100 Kg 211860 lb on 24.00-35 [Radial] tires,
 including options, fuel and payload.
 Payload,maximum55 metric tons 61 U.S. tons



WEIGHT (approximate)

Empty weight41100 kg 90610 lb
 Gross vehicle weight with 46 metric ton
 (55 short ton)payload87180 kg 192020 lb
 Weight distribution:
 Empty, front axle47%
 rear axle53%
 Loaded, front axle32%
 rear axle68%



SERVICE REFILL CAPACITIES

Coolant171 ltr. 45.2 U.S. gal
 Fuel tank780 ltr. 206.1 U.S. gal
 Engine oil61 ltr. 16.1 U.S. gal
 Torque converter and transmission69 ltr. 18.2 U.S. gal
 Differential95 ltr. 25.1 U.S. gal
 Retarder cooling143 ltr. 37.8 U.S. gal
 Final drive (left and right)31.5 ltr. 8.3 U.S. gal
 Hydraulic system95 ltr. 25.1 U.S. gal
 Suspension (total)56.4 ltr. 14.9 U.S. gal



CAB AND ROPS

Dimensions comply with ISO 3471 and SAE J1040-1988c
 ROPS (Roll-Over Protective Structure) standards. The cab is
 mounted on rubber pads and well insulated.



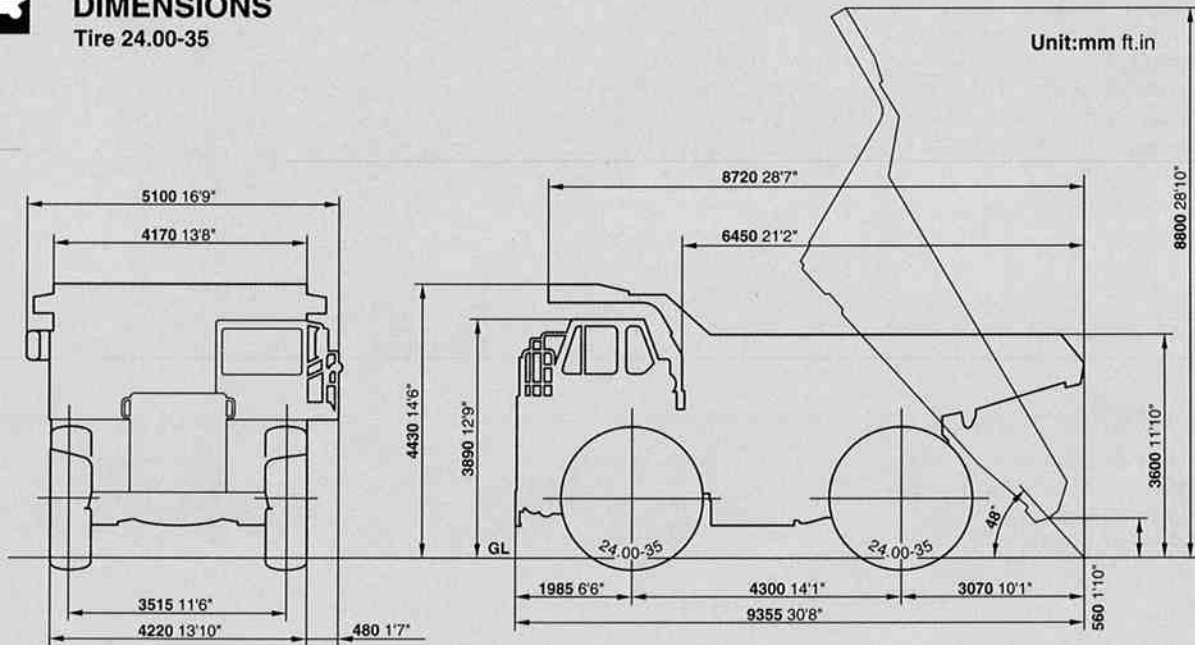
TIRES

Standard, front and rear24.00-35-36PR
 24.00R 35
 21.00-35



DIMENSIONS

Tire 24.00-35



STANDARD EQUIPMENT

Engine:

- Alternator, 50-ampere
- Automatic idling settingsystem for engine low idle speed control
- Batteries, 2 X 12-volt 200AH
- Engine, Komatsu SAA6D170E
- Starting motor, 2 X 7.5-kW

Cab:

- Cab, steel, sound suppressiontype
- Electronic display/ monitoring system
- Mud guards (frame mounted, front)
- Seat, belt, 50mm width

- Seat, passenger
- Seat, suspension type with reclining
- Steering wheel, tilt able &telescopic

Lighting system:

- Back-up light
- Hazard light system
- Headlights with dimmer switch
- Stop and tail lights and turn signal lights

Safety:

- Back-up alarm
- Brakes with brake oil flow control valve: emergency brake: actuates all service brakes (front, rear and parking, 3-way)
- Catwalk with hand rails
- Coolant temperature alarm and light
- Hand rails for platform
- Horn, air

- Ladders, LH and RH side
- Rear view mirrors

Others:

- Body positioner
- Electric circuit breaker,24-volt (-20C thru +50C)
- Side markers
- 24.00-35-36PR tires (21.00-35-32PR tires are also available.)
- Tire guards, for use with tire size 24.00

OPTIONAL EQUIPMENT

Cab:

- Air conditioner
- Ashtray and cigarette lighter
- Heater and defroster
- Passenger seat (fabric)
- Radio, AM
- Radio, AM/FM with cassette
- Seat belt, 78mm width
- Seat belt, 50mm width for passenger seat
- Seat, fabric materials
- Sun visor, additional
- Windows and windshield glass tinted safety glass

Body:

- Extensions, side walls, 200mm [710kg]
- Extensions, side walls, 300mm [930kg]
- Rubber liners [6300kg]
- Spill guard, 300mm [75kg]
- 34M3 rock body [5250kg]
- Liner [5250kg]

Tire:

- 21.00 - 35 tires, 24.00 - 35 tires
- 21.00R35 tires, 24.00R35 tires

Lighting system:

- Fog lights
- Work light, RH and LH side

Safety:

- Additional rear view mirror (RH)
- Automatic slip regulation (ASR)
- Auto-lock brake system (ABS)
- Auto-retard speed control (ARSC)
- Buzzer, caution for dumping
- Emergency steering, automatic
- Front brake cut-off system
- Retarder, engine exhaust
- Roll-over protective structure with Fops [1250kg]
- Roll-over protective structure [1150kg]
- Tire stopper blocks
- Under view mirror

Gauge:

- Dump position alarm & warning light
- Payload meter I printer type
- Payload meter II IC card type
- Revograph
- Revograph/Tachograph
- Tachograph

Guard:

- Engine under guard [65kg]
- Platform guard, RH side [55kg]
- Propeller shaft guard, front [15kg]
- Propeller shaft guard, rear [40kg]
- Transmission under guard [80kg]

Arrangement:

- Cold area arrangement (-30C thur 40C)
- High altitude arrangement
- Poor fuel (contained water) arrangement

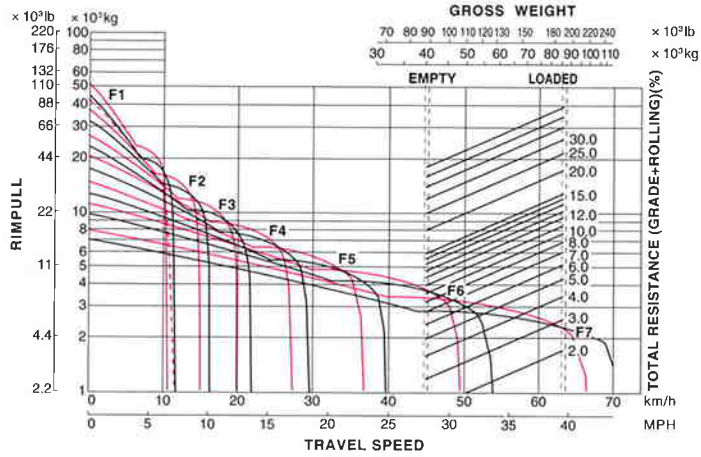
Others:

- Air dryer
- Alcohol injector
- Alternator, 75-ampere
- Auto greasing system
- Batteries, 4 X 24 - volt 200 - ah
- Differential lock
- Engine side covers
- Fast fill coupler for fuel tank
- Fire extinguisher
- Gas charge tool
- Muffler (no body heating type)
- PM service connectors
- Radiator shutter, canvas type
- Spare parts for first service
- Tool kit
- Vandalism protection

[] shows the amount of increased weight

TRAVEL PERFORMANCE

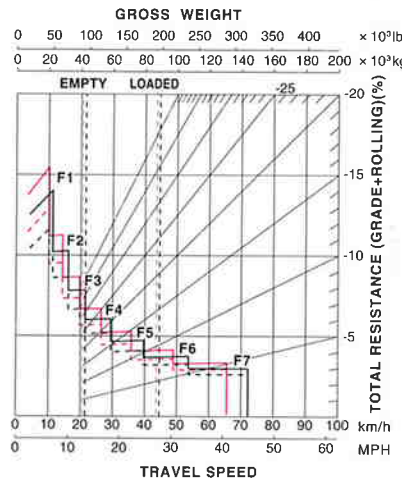
To determine travel performance: Read from gross weight down to the percent of total resistance. From this weight-resistance point, read horizontally to the curve with the highest obtainable speed range, then down to maximum speed. Usable rimpull depends upon traction available and weight on drive wheels.



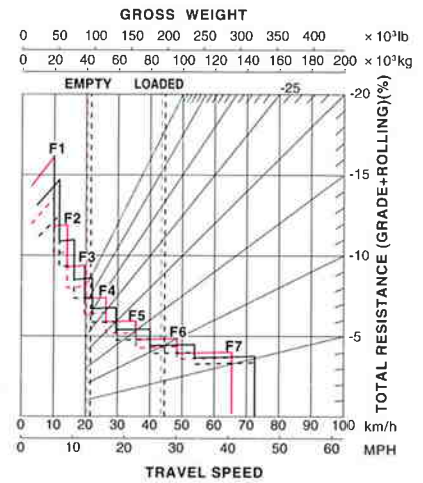
BRAKE PERFORMANCE

To determine brake performance: These curves are provided to establish the maximum speed and gearshift position for safer descents on roads with a given distance. Read from gross weight down to the percent of total resistance. From this weight resistance point, read horizontally to the curve with the highest obtainable speed range, then down to maximum descent speed the brakes can safely handle without exceeding cooling capacity.

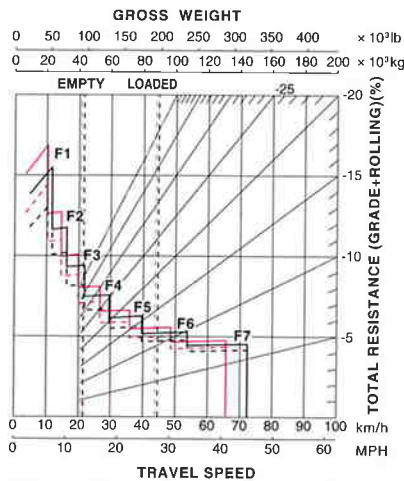
Grade distance: 1500 m (4920 ft)



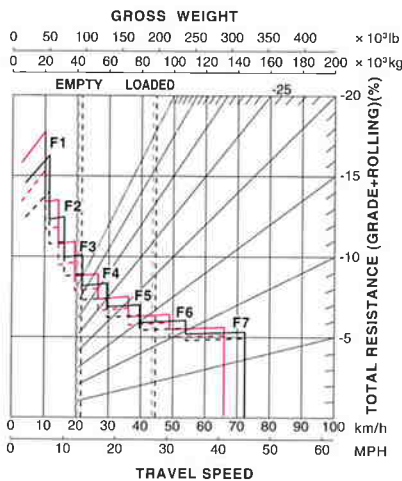
Grade distance: 900 m (2950 ft)



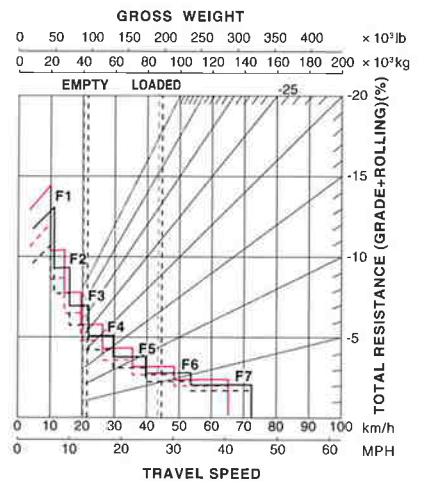
Grade distance: 600 m (1970 ft)



Grade distance: 450 m (1480 ft)



Grade distance: Continuous Descent



Performance line :

Black lines... 24.00-35 tires

Red lines... 21.00-35 tires

Solid lines... Exhaust retarder brake, additional (OPTION)

Gross weight line :

Black lines... HD465 (24.00-35 tires)

Red lines... HD465 (21.00-35 tires)

Standard equipment may vary for each country, and this specification sheet may contain attachments and optional equipment that are not available in your area. Please consult your Komatsu distributor for detailed information.

KOMATSU

OZTRAC EQUIPMENT SALES PTY. LTD.