

DUMP TRUCK

HD325-6

Payload Capacity: **36.5metric tons/40U.S.tons**
Max. Vehicle Weight: **65,200kg143,740lb.**



Model shown may include optional equipment.

Excellent Productivity&Fuel Economy

- High-output Komatsu SAA6D140E 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)

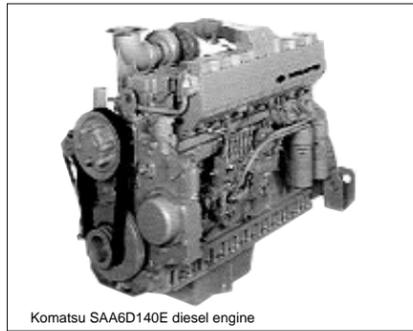
More Uptime

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

KOMATSU

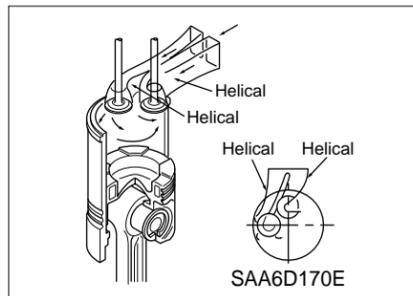
Excellent Productivity & Fuel Economy

High-output Komatsu SAA6D140E engine: The 15.2-liter power plant with turbocharger and aftercooler develops the largest output of 488 HP(364kW) at 2000 RPM in it's class.



Komatsu SAA6D140E 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.



SAA6D170E

7-speed, fully automatic K-ATOMiCS transmission:

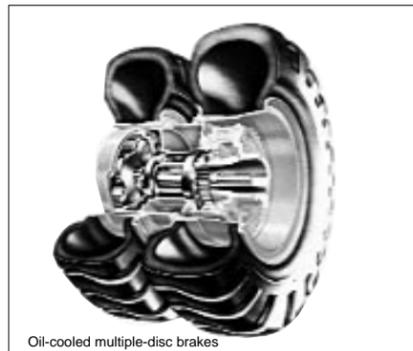
The K-ATOMiCS (Komatsu Advanced Transmission with Optimum Modulation Control System) automatically selects the optimum gear according to vehicle speed, engine speed and the shift position you've chosen. The result: the best gear for any driving situation.



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.



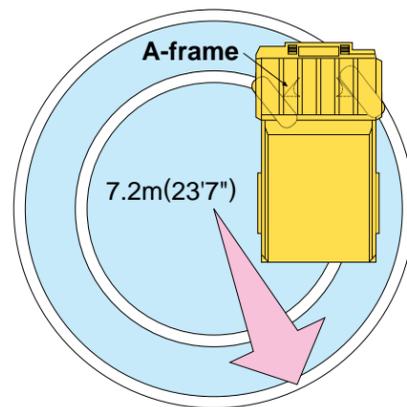
Oil-cooled multiple-disc brakes

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.

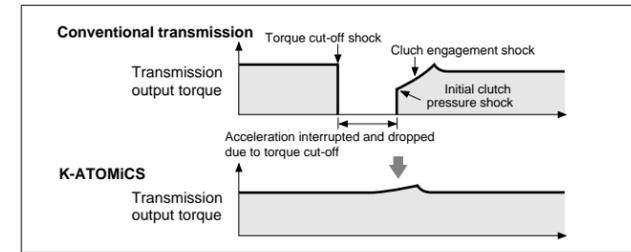
Small turning radius: The MacPherson strut type front suspension has a special A-frame between each wheel and the main frame. The wider space created between the front wheels and the main frame increases the turning angle of the wheels. The larger this turning angle, the smaller the turning radius of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



Enhanced Operating Comfort

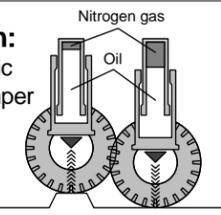
K-ATOMiCS—smooth acceleration / deceleration:

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.

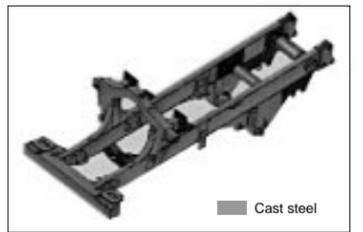
See Everything in Quiet Comfort: Wide windows in the front, side and back, plus plenty of space in the richly upholstered interior, give you a quiet, comfortable environment from which to see and control every aspect of your work.



More Uptime

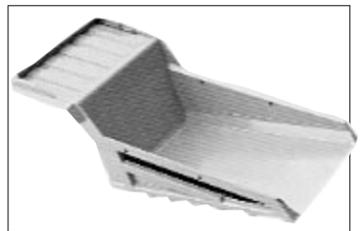
Sturdy, refined frame:

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



Cast steel

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 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.

Model shown may include optional equipment.



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.

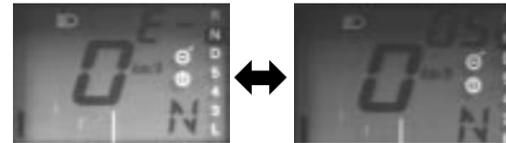


Service code display and memory function

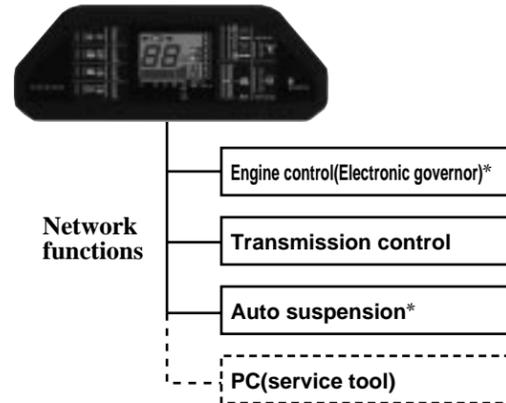
The contents of each controller are displayed on the electronic display panel in service codes. The stored vehicle information can be downloaded to a personal computer. This enables a quick response to problems and shortens maintenance time. This also shows the truck's current condition and facilitates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

Action code display function

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



Messages interchange once every second.



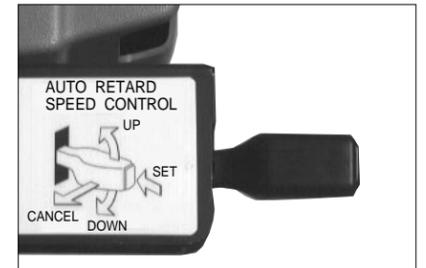
(* OPTION)

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(±5km/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

Body type	Linerless body (standard)	Rock body
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)	18 m ³ (23.5 cu.yd) 24 m ³ (31.4 cu.yd)	18 m ³ (23.5 cu.yd) 24 m ³ (31.4 cu.yd)
Body inside dimensions: Length Width Max.depth	5500 mm (18'1") 3380 mm (11'1") 1440 mm (4'9")	5485 mm (18'0") 3355 mm (11'0") 1430 mm (4'8")
Loading	3200 mm (10'6")	3200 mm (10'6")

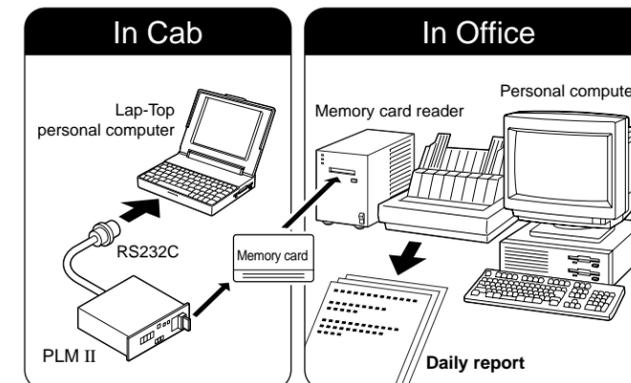
Side extension (optional) is available for each body.

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 not in neutral.

PLM II (Memory 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, MEDIUM 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 gires safety drive of the truck.

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

HD325-6 SPECIFICATIONS



ENGINE

Model.....KOMATSU SAA6D140E
 Type.....Water-cooled, 4-cycle
 Aspiration.....Turbocharged and aftercooled
 No. of cylinders.....6
 Bore x stroke.....140 mm x 165 mm 5.5"x6.5"
 Piston displacement.....15.23 ltr. 930 cu.in
 Performance:
 Gross horsepower.....508 HP 379 kW
 Flywheel horsepower.....488 HP 364kW (SAE J1349)
 495 PS 364 kW (DIN 6270)
 Rated RPM.....2000 RPM
 Max. torque.....221 kg-m 1600 ft-lb/1400 RPM
 Fuel system.....Direct injection
 Governor.....Max.-min. control
 Lubrication system:
 Lubrication method.....Gear pump, force-lubrication
 Filter.....Full-flow type
 Air cleaner.....Dry type with double elements
 and precleaner, plus dust indicator



TRANSMISSION

Torque converter.....3-elements, 1-stage, 2-phase
 Lockup clutch.....Wet, single-disk clutch
 Transmission.....Full-automatic, planetary gear
 type hydraulically actuated
 Speed range.....7 speeds forward and one reverse
 Forward.....Torque converter drive in 1st gear,
 direct drive in 1st lockup and all higher gears
 Reverse.....Torque converter drive
 Shift control.....Electronic shift control with automatic
 clutch modulation in all gear
 Max. travel speed.....70 km/h 43.5 MPH



AXLES AND FINAL DRIVES

Final drive type.....Planetary
 Rear axle.....Full-floating
 Rations:
 Differential.....3.125
 Planetary.....4.737



SUSPENSION

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



STEERING

Type.....Fully hydraulic power steering with
 two double-acting cylinder
 Emergency steering.....Manual contorol
 Min. turning radius.....7.2 m 23'7"



BRAKES

Service brakes:
 Front.....Air-over-hydraulic, caliper disc type
 Rear.....Air-over-hydraulic, oil-cooled, multiple-disc type
 Parking brake.....Spring applied, caliper disc type
 actuates on drive shaft.
 Retarder.....Air-over-hydraulic, oil-cooled,
 multiple-disc type rear brakes act as retarders.
 Emergency brake.....An emergency relay valve
 automatically actuates the service brakes when air pressure
 drops below the rated level. Manual operation is also possible.



FRAME

Type.....Box-sectioned construction
 Main frame material.....High-tensile-strength steel plate



BODY

Structure.....V-shape body
 Material.....130kg/mm² 184860 PSI
 high-tensile-strength steel
 Heating.....Exhaust heating
 Material thickness:
 Floor.....19 mm 0.75"
 Front.....12 mm 0.47"
 Sides.....9 mm 0.35"
 Target area (inside length x width).....5500 mm x 3380mm
 18'1" x 11'1"



BODY HOIST

Hoist cylinder.....Twin, 2-stage telescopic type
 Hydraulic pump capacity.....267 ltr./min. 70.5 U.S. gal/min
 Relief valve setting.....210 kg/cm² 3,000 PSI/20.6MPa
 Hoist time.....10 sec.



CAPACITY

Standard body:
 Struck.....18 m³ 23.5 cu.yd
 Heaped (2:1,SAE).....24 m³ 31.4 cu.yd
 Max. gross vehicle weight.....65200 kg 143740 lb
 Not to exceed 65200 Kg 143740 lb on 18.00-33 tires, including
 options, fuel and payload.
 Payload,maximum.....36.5 metric tons 40 U.S. tons
 rated.....32 metric tons 35 U.S. tons



WEIGHT (approximate)

Empty weight.....28700 kg 63270 lb
 Gross vehicle weight with 32 metric ton
 (35 short ton)payload.....60780 kg 134000 lb
 Weight distribution:
 Empty,front axle.....48%
 rear axle.....52%
 Loaded,front axle.....32%
 rear axle.....68%



SERVICE REFILL CAPACITIES

Coolant.....106 ltr. 28.0 U.S. gal
 Fuel tank.....500 ltr. 132.1 U.S. gal
 Engine oil.....37 ltr. 9.8 U.S. gal
 Torque converter, transmission and
 retarder cooling.....90 ltr. 23.8 U.S. gal
 Differential.....45 ltr. 11.9 U.S. gal
 Final drive (left and right).....26 ltr. 6.9 U.S. gal
 Hydraulic system.....129 ltr. 34.1 U.S. gal
 Suspension (total).....43.8 ltr. 11.6 U.S. gal



CAB AND ROPS

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

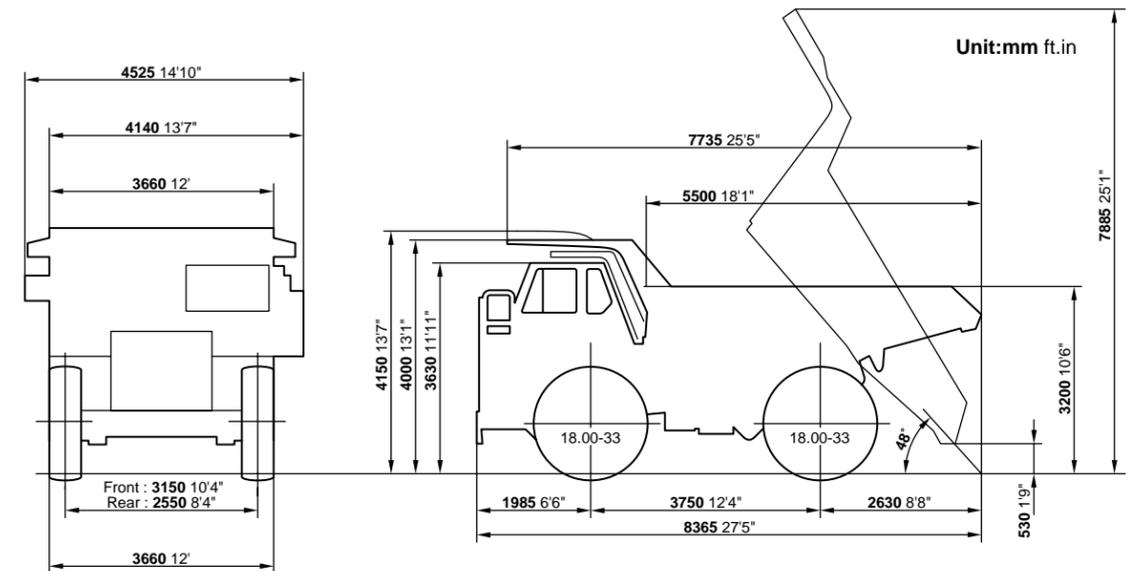


TIRES

Standard, front and rear.....18.00-33-28PR



DIMENSIONS



STANDARD EQUIPMENT

- | | | | |
|---|---|--|--|
| <p>Engine:</p> <ul style="list-style-type: none"> •Alternator, 50-ampere •Batteries, 2 X 12-volt 170AH •Engine, Komatsu SAA6D140E •Starting motor, 1 X 11.0-kW <p>Cab:</p> <ul style="list-style-type: none"> •Cab, steel, sound suppression type •Electronic display/monitoring system •Mud guards (frame mounted, front) | <ul style="list-style-type: none"> •Seat, belt, 50mm width •Seat, suspension type with reclining •Steering wheel, tilt able & telescopic <p>Lighting system:</p> <ul style="list-style-type: none"> •Back-up light •Hazard light system •Headlights with dimmer switch •Stop and tail lights and turn signal lights | <p>Safety:</p> <ul style="list-style-type: none"> •Back-up alarm •Brakes: 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 | <p>Others:</p> <ul style="list-style-type: none"> •Electric circuit breaker, 24-volt •Hot area arrangement (-20C thru +50C) •Side markers •18.00 - 33 - 28 PR tires |
|---|---|--|--|

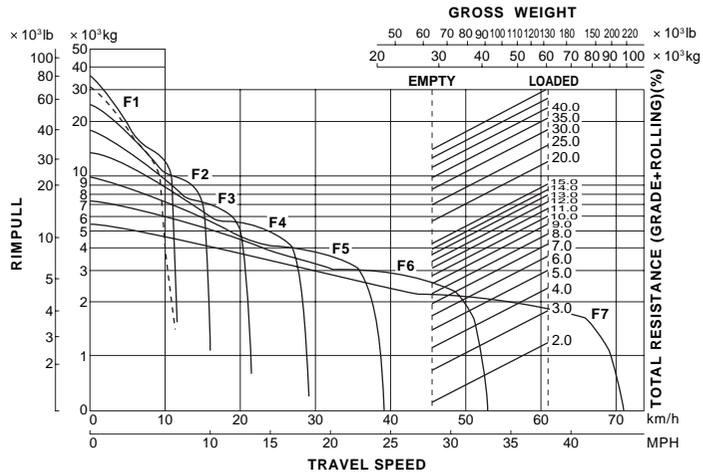
OPTIONAL EQUIPMENT

- | | | | |
|--|--|---|---|
| <p>Cab:</p> <ul style="list-style-type: none"> •Air conditioner •Ashtray and cigarette lighter •Heater and defroster •Radio, AM •Radio, AM/FM with cassette •Seat belt, 78mm width •Seat belt, 78mm width for passenger seat •Seat, fabric materials •Seat, passenger •Sun visor, additional •Windows and windshield glass tinted safety glass <p>Body:</p> <ul style="list-style-type: none"> •Body positioner •Extensions, side walls, 200mm [570kg] •Rubber liners [5200kg] •Spill guard, 150mm [90kg] •Spill guard, 250mm [145kg] •24M3 rock body [4250kg] •Liner [4250kg] | <p>Tire:</p> <ul style="list-style-type: none"> •18.00 - 33 tires •18.00 R33 tires <p>Lighting system:</p> <ul style="list-style-type: none"> •Back-up lights, additional •Fog lights •Work light, RH and LH side <p>Safety:</p> <ul style="list-style-type: none"> •Automatic slip regulation (ASR) •Auto-lock brake system (ABS) •Auto-retard speed control(ARSC) •Emergency steering, autmatic •Front brake cut-off system •Retarder, engine exhaust •Roll-over protective structure with Fops [850kg] •Roll-over protective structure [770kg] •Under view mirror <p>Gauge:</p> <ul style="list-style-type: none"> •Dump position alarm & warning light •Engine oil filter warning alarm and light •Payload meter I printer type | <ul style="list-style-type: none"> •Payload meter II Memory card type •Revograph •Revograph/Tachograph •Tachograph <p>Guard:</p> <ul style="list-style-type: none"> •Engine under guard [25kg] •Platform guard, RH side [35kg] •Propeller shaft guard, front [15kg] •Propeller shaft guard, rear [25kg] •Transmission under guard [95kg] <p>Arrangement:</p> <ul style="list-style-type: none"> •Batteries for cold area arrangement •Cold area arrangement (-30C thur 40C) •Poor fuel (contained water) arrangement •Sandy and dusty area arrangement | <p>Others:</p> <ul style="list-style-type: none"> •Air dryer •Alcohol injector •Alternator, 75-ampere •Auto greasing system •Centerized greasing •Differential lock •Engine side covers •Fast fill coupler for fuel tank •Fire extinguisher •Gas charge tool •Gas spring for engine hood •Muffler (no body heating type) •PM service connectors •Pull hook, rear •Radiator shutter, canvas type •Spare parts for first service •Tool kit •Vandalism protection |
|--|--|---|---|

[] shows the amount of increased weight

TRAVEL PERFORMANCE

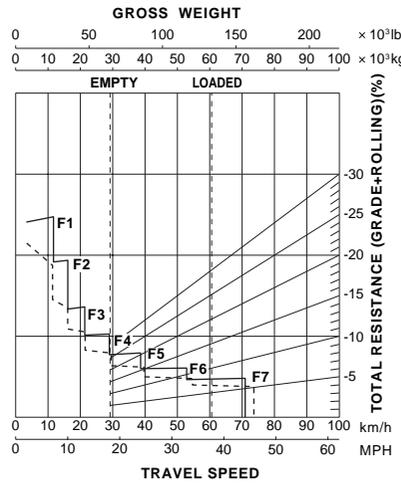
To determine travel performance: Read from gross weight down to the percent of total resistance. From this weight-resistance point, read horizontally to the curve with the highest obtainable speed range, then down to maximum speed. Usable rimpull depends upon traction available and weight on drive wheels.



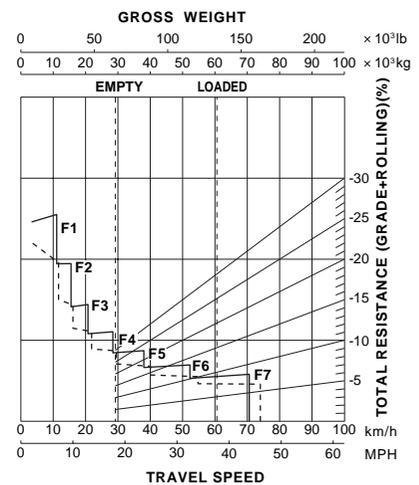
BRAKE PERFORMANCE

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.

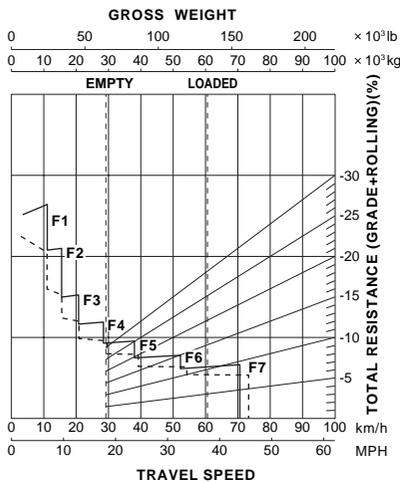
Grade distance: 1500 m (4920 ft)



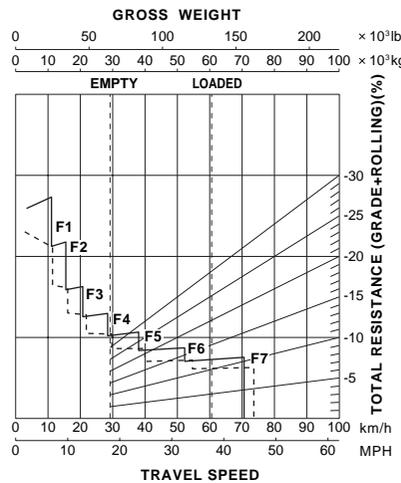
Grade distance: 900 m (2950 ft)



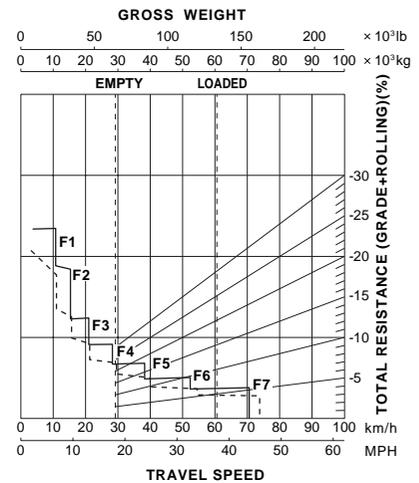
Grade distance: 600 m (1970 ft)



Grade distance: 450 m (1480 ft)



Grade distance: Continuous Descent



Performance line :
 Solid lines... Exhaust retarder brake, additional (OPTION)

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