The HM400-2 with the new EPA Tier 3 and EU Stage 3A emission certified “ecot3” engine offers all around maximum productivity with more horsepower and many features that enhance efficiency, while reducing maintenance costs. From rough terrain construction sites to landfills, the HM400-2 has the competitive advantage.

**Wide, spacious cab with excellent visibility**
- The wide cab offers a comfortable operator and passenger environment
- Viscous mounts support the cab while absorbing vibrations and noise
- Low-noise cab through improved sealing with integrated floor
  - Interior noise level 76 dB(A)
- Additional front under view mirrors provide superior visibility
- Air suspension seat is standard
- Power windows
- Electric heated rear window

**Hydro-pneumatic trailing arm suspension for all terrains.**
- The hydro-pneumatic suspension in both front and rear suspensions assures a comfortable ride even over rough terrain and keeps the tires on the ground at all times.

**Fully hydraulic articulated steering**
- Light and easy operation
- Minimum turning radius 8.7 m 28’7”
- Tilt and telescoping steering column fits any operator

**Tiltable cab** can be tilted rearward 32° to provide easy service.

**High performance and environment-friendly SAA6D140E-5 “ecot3” engine**
- Gross horsepower 338 kW 453 HP
- North American EPA Tier 3 and EU Stage 3A emission certified for 2006
- Engine power mode selection system realizes both greater productivity and improved fuel economy
- Higher engine output and torque improve productivity in all applications

KOMTRAX equipped machines can send location, SMR and operation maps to a secure website utilizing wireless technology. Machines also relay error codes, cautions, maintenance items, fuel levels, and much more.
Komatsu designed, electronically controlled transmission for a comfortable ride.
F6-R2 counter-shaft type transmission with K-ATOMiCS (Komatsu Advanced Transmission with Optimum Modulation Control System). Transmission shift hold button optimizes the operator control or the transmission will automatically shift through all gears.

**Easy-to-load body**
- Heaped capacity 22.3 m³ 29.2 yd³
- Low loading height 2970 mm 9’9”
- High strength body constructed of thick wear-resistant steel having 400 Brinell hardness

**High capacity, reliable, continuously cooled, wet type multiple-disc brake and retarder combination**
- Fully hydraulic controlled wet multiple-disc service brakes
- Retarder Absorbing Capacity (continuous descent) 472 kW 633 HP

**Interaxle & differential locks provide excellent traction in rough terrain.**
The oil-cooled multiple-disc interaxle lock and differential locks can be turned on and off during travel. In addition, the differential locks can lock up all three axle’s differentials 100% for maximum traction.

Photo may include optional equipment
The combination of high horsepower and an efficient engine with low emissions delivers maximum productivity at the lowest cost.

Komatsu's new "ecot3" engines are designed to deliver optimum performance under the toughest of conditions, while meeting the latest environmental regulations. This engine is Tier 3 EPA, EU Stage 3A and Japan emissions certified. "ecot3" - ecology and economy combined with Komatsu technology to create a high performance engine without sacrificing power or productivity.

**High-Performance Komatsu SAA6D140E-5 Engine**

The Komatsu engine delivers faster acceleration and higher travel speeds with high horsepower per ton. Advanced technology, such as Common Rail Injection system (CRI), air-to-air aftercooler, and an efficient turbo-charger enables the engine to be North American EPA Tier 3 and EU stage 3A emission certified. High torque at low speed, impressive acceleration, and low fuel consumption ensure maximum productivity.

**Komatsu-Designed Electronically Controlled Countershaft Transmission**

The Komatsu designed Electronically Controlled Transmission with K-ATOMiCS has been a success in Komatsu's rigid dump trucks. The electronic clutch modulation system ensures proper clutch pressure when the clutch is engaged. The total control system controls both the engine and transmission by monitoring the vehicle conditions. This high technology system assures smooth shifts without shock and maximizes power train life.

**Komatsu-Designed Interaxle and Differential Locking Systems**

The full-time six-wheel drive system reduces slippage. A wet multiple-disk interaxle clutch also locks the three axles in unison for greater traction. The interaxle lock and differential locks can be switched on and off while the truck is travelling, thereby boosting productivity. In addition, the differential lock switch, which is a three position switch, can lock up the rear axle differentials only, or all axles for maximum performance in the worst conditions.

**Engine Power Mode Selection System**

The system allows selection of the appropriate mode between two modes <Power mode> or <Economy mode> according to each working condition. The mode is easily selected with a switch in the operator's cab.

**Power mode**

Great productivity can be attained by taking full advantage of high output power. It is appropriate for job sites where the truck meets high resistance.

**Economy mode**

Engine speeds for the maximum horsepower output and the downshift and upshift speeds are set to a lower level. It is appropriate for light work on the flat ground.
Hydro-Pneumatic Trailing Arm Suspension
The hydro-pneumatic suspension has been proven on Komatsu’s rigid dump trucks. The front axle hydro-pneumatic suspension employs a "De Dion" type design. The suspension is a trailing arm design which allows the truck to ride smoothly. The rear-axles are mounted on a dynamic equalizer structure equipped with hydro-pneumatic suspension. The entire vehicle’s hydro-pneumatic suspension delivers a comfortable ride and maximizes productivity.

Large Capacity Body and Box Section Frame Structure
The 22.3 m³ 29.2yd³ heaped capacity body is among the highest capacity in its class. The low loading height of 2970 mm 9'9" enables easy loading. The body is built of high strength wear-resistant steel with a Brinell hardness of 400, and the body shape provides excellent load stability and retains the load. Rugged enough for the toughest jobs, the HM400’s frame is designed using a rigid box structure with connecting torque tubes made of high strength low alloy steel.

Articulated Steering
Fully hydraulic articulated steering offers low-effort operating performance and maneuverability. A minimum turning radius of only 8.7 m 28'7" provides ability to work in tight areas.

Hydraulically Controlled Wet Multiple-Disc Brakes and Retarder
Wet multiple-disk brakes have been proven on Komatsu dump trucks and wheel loaders ensuring highly reliable and stable brake performance. The large-capacity, continuously cooled, wet-multiple disc brakes also function as a highly responsive retarder which gives the operator greater confidence at higher speeds when travelling downhill.

Retarder Absorbing Capacity (continuous descent):
472 kW 633 HP
The Komatsu cab is a state-of-the-art, wide comfortable cab. The low level of vibration and noise, plus the excellent visibility, ensure maximum productivity from the operator.

Low-noise Designed Cab
Integrated cab and floor provide an airtight cab. Engine compartment is also sealed. The low noise and sound insulated muffler/exhaust pipe contribute to reducing sound levels. The combined features offer a quiet and comfortable operator environment.

Wide, Spacious Cab with Excellent Visibility
The wide cab provides a comfortable space for the operator and a full size buddy seat. Large electrically operated windows and the operator’s seat positioned to the left side ensures superior visibility.

Ergonomically Designed Cab
The ergonomically designed operator’s compartment makes it very easy and comfortable for the operator to use all the controls. The result is more confident operation by operators for greater productivity.

The front under view mirrors are increased to three from one, and the rear view mirrors increased to four from two.

Newly employed laminated glass in the windshield assures safe operation. In addition, electric heated rear window facilitates defrosting.

Easy-to-See Instrument Panel
The instrument panel makes it easy to monitor critical machine functions. In addition, a caution light warns the operator of any problems that may occur. This Komatsu on-board monitoring system makes the machine very friendly and easy to service.

Steering Wheel and Pedals
Low effort pedals reduce operator fatigue when working continuously for long periods. The tiltable, telescoping steering column enables operators to maintain the optimum driving position at all times.
**Built-In ROPS/FOPS**
These structures conform to ISO 3471.

**Hydro-Pneumatic Suspension for All Terrains**
The hydro-pneumatic suspension, for both front and rear axles, assures a comfortable ride even over rough terrain and ensures maximum productivity and operator confidence.

**Viscous Cab Mounts**
Viscous mounts reduce the noise transmitted to the cab and achieve a quiet 76 dB(A) noise level

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**Air Suspension Seat Is Standard**
The air suspension, fabric-covered seat which is adjustable to the operator's weight is provided as standard. The air suspension seat dampens vibrations transmitted from the truck and reduces operator fatigue as well as holding the operator securely to assure confident operation.

**Electric Body Dump Control Lever**
The low effort lever makes dumping easier than ever.

**Supplementary Steering and Secondary Brakes**
Supplementary steering and secondary brakes are standard features.

Steering: ISO 5010-1992, SAE J1511
Brakes: ISO 3450-1996, SAE J1473
The HM400-2 has been designed to keep service time down and productivity up with a reduced number of grease points, easy access to filters, and longer intervals between oil changes.

**Tiltable Cab**
The cab can be tilted rearward 32° to provide easy maintenance/service for the engine and transmission.

**Note:** An external hydraulic pump is required to tilt the cab or a service crane can be used after easily removing only eight bolts. The hydraulic cylinder to tilt the cab is standard.

**Fewer Grease Points**
The number of grease points are minimized by using maintenance-free rubber bushings.

**Extended Service Intervals**
In order to minimize operating costs, service intervals have been extended:
- Engine oil 500 hours
- Transmission oil 1000 hours
- Engine oil filter 500 hours
- Transmission oil filters 1000 hours

**Guards**
The following guards are provided as standard:
- Protective grille for rear window
- Engine underguard
- Heavy duty transmission underguard
- Propeller shaft guards
- Exhaust thermal guard
- Fire prevention covers
- Rear tire guard
ENGINE
Model: Komatsu SAA6D140E-5
Type: Water-cooled, 4-cycle
Aspiration: Turbo-charged, after-cooled, cooled EGR
Number of cylinders: 6
Bore: 140 mm 5.51"
Stroke: 165 mm 6.50"
Piston displacement: 15.2 ltr 928 in³
Horsepower
SAE J1995: Gross 338 kW 453 HP
ISO 9249 / SAE J1349: Net 327 kW 438 HP
Rated rpm: 2400 rpm
Fan drive type: Mechanical
Fuel system: Direct injection
Governor: Electronically controlled
Lubrication system
Method: Gear pump, force-lubrication
Filter: Full-flow type
Air cleaner: Dry type with double elements and pre-cleaner, plus dust indicator
EPA Tier 3 certified

TRANSMISSION
Torque converter: 3-elements, 1-stage, 2-phase
Transmission: Full-automatic, counter-shaft type
Speed range: 6 speeds forward and 2 reverse
Lockup clutch: Wet, single-disk clutch
Forward: Torque converter drive in 1st gear, direct drive in 1st lockup and all higher gears
Reverse: Torque converter drive and direct drive in all gear
Shift control: Electronic shift control with automatic clutch modulation in all gear
Maximum travel speed: 58.5 km/h 36.4 mph

AXLES
Full time all wheel drive with 100% differential lock in all axles.
Final drive type: Planetary gear
Ratios:
  Differential: 3.417
  Planetary: 4.941

SUSPENSION SYSTEM
Front: Hydro-pneumatic suspension
Rear: Combined hydro-pneumatic and rubber suspension system

STEERING SYSTEM
Type: Articulated type, fully hydraulic power steering with two double-acting cylinders
Supplementary steering: Automatically actuated, electrically powered
Minimum turning radius, wall to wall: 8.7 m 287"
Articulation angle: 45° each direction

BRAKES
Service brakes: Full-hydraulic control, oil-cooled multiple-disc type on all wheels
Parking brake: Spring applied, caliper disc type
Retarder: Front and center axle brakes act as retarder

MAIN FRAME
Type: Articulated type, box-sectioned construction on front and rear
Connected by strong torque tubes.

BODY
Capacity:
  Struck: 16.5 m³ 21.6 yd³
  Payload: 22.3 m³ 29.2 yd³
  Capacity: 36.5 metric tons 40 U.S. tons
Material: 130 kg/mm² 185,000 psi
  high tensile strength steel
Material thickness:
  Bottom: 16 mm 0.63"
  Front: 8 mm 0.31"
  Sides: 12 mm 0.47"
Target area:
  (inside length x width): 5629 mm x 3194 mm 18'6" x 10'6"
  Heating: Exhaust heating (option)

HYDRAULIC SYSTEM
Hoist cylinder: Twin, 2-stage telescopic type
  Relief pressure: 20.6 Mpa 210 kg/cm² 2,990 psi
  Hoist time: 12 sec

CAB
Dimensions comply with ISO 3471 and SAE J1040-1988c ROPS
(Roll-Over Protective Structure) standards

WEIGHT (APPROXIMATE)
Empty weight: 32,460 kg 71,560 lb
Gross vehicle weight: 69,040 kg 152,200 lb
Weight distribution:
  Empty: Front axle: 55.1%
  Center axle: 22.8%
  Rear axles: 22.1%
  Loaded: Front axle: 29.0%
  Center axle: 35.7%
  Rear axles: 35.3%

TIRES
Standard tire: 29.5 R25

SERVICE REFILL CAPACITIES
Fuel tank: 493 ltr 130.8 U.S. Gal
Engine oil: 50 ltr 13.2 U.S. Gal
Torque converter, transmission and retarder cooling: 115 ltr 30.4 U.S. Gal
Differentials (total): 97 ltr 25.6 U.S. Gal
Final drives (total): 33 ltr 8.7 U.S. Gal
Hydraulic system: 180 ltr 47.6 U.S. Gal
Suspension (total): 20.4 ltr 5.4 U.S. Gal
STANDARD EQUIPMENT FOR BASE MACHINE

ENGINE
- Alternator, 50A/24V
- Air cleaner, dry type with double elements and precleaner, plus dust indicator
- Batteries, 170 Ah/2 x 12V
- Electric governor
- Engine, Komatsu SAA6D140E-5, turbocharged and air-to-air aftercooled, high pressure common rail injection system, 2006 NA Tier 3 certified, diesel
- Exhaust muffler with stack
- Full-automatic F6 R2 transmission with K-ATOMIC shift control and automatic T/C lockup
- Starting motor, 11.0 kW
- Separator, fuel/water

CAB
- 12 volt outlet port
- Air conditioner/heater/defroster, electronically controlled
- Ashtray and cigarette lighter
- Cup holder
- Dual entry
- Electronic hoist control system
- Electronic maintenance display/monitoring system
- Floor mat
- Heater rear window
- Power windows
- Radio AM/FM with cassette
- Rear window guard
- Seat, air suspension, reclining (fabric)
- Seat belt, passenger and operator, 78 mm 3", retractable
- Storage space under seat and right armrest
- Sun visor, front window
- Tilt and telescopic steering wheel
- Tilt cab arrangement for easy serviceability
- Tinted glass
- Windshield washer and wiper (front and rear)

GUARD AND COVERS
- Engine oil pan
- Driveline guards, front and rear
- Transmission underguard
- Mudguards for front and rear tires
- Exhaust/muffler thermal guard

MONITORING SYSTEM
- Instrument panel (digital display with service meter and odometer, fuel gauge, speedometer, tachometer, coolant temperature, torque converter oil temperature, retarder oil temperature)
- Warning light and alarm system (parking brake, dump body float, fuel, secondary steering, coolant temperature, torque converter oil temperature, retarder oil temperature, battery charge, steering oil temperature, engine oil pressure, retarder oil pressure, tilt caution, engine system, transmission system, retarder system)

OTHER STANDARD EQUIPMENT
- Alarm, backup
- Body, 22.3 m³ 29.2 yd³
- Centralized greasing
- Differential lock in all axles, clutch type with electric controls
- Electric circuit breaker, 24 volt
- Hand rails for platform
- Horn, electric
- Hydropneumatic suspension, front and rear
- Interaxle lockup, clutch type
- KOMTRAX
- Ladders, left and right hand side
- Payload, dump counter
- Provision for tailgate
- Rearview mirrors
- Rearview mirrors, additional, left- and right-hand side
- Retarder/brake system, continuously cooled
- Rims for 29.5 x 25 tires (set of 6)
- Steering system, automatic electric supplemental
- Under view mirror, front

OPTIONAL EQUIPMENT

BODY
- Delete body
- Body exhaust heating kit
- Tail gate

LIGHTING SYSTEM
- Fog lights
- Side work lights, left and right side

OTHER
- Alternator, 75A/24V

TIRES
- Bridgestone . . . 29.5R25 VLT
- Michelin . . . . 29.5R25 XADN . . . . . . . . . . . . . . . .29.5R25 XADT
- Goodyear . . . 875/65 R29 GP4D

ALLIED ATTACHMENTS
- Automatic lubrication
- Body liners, steel and poly
- Body sideboards - 203 mm 8" high
- Tailgate field kit