

# KOMATSU®

## 630E

**MAXIMUM GVW**  
294840 kg **650,000 lb**

**PAYLOAD**  
172 t **190 U.S. ton**

**GROSS HORSEPOWER**  
1491 kW **2,000 HP**



ELECTRIC DRIVE TRUCK

## 630E

# SPECIFICATIONS



## ENGINE

Make and model ..... Komatsu SSA16V159  
 Fuel ..... Diesel  
 Number of cylinders ..... 16  
 Operating cycle ..... 4 stroke  
 \*Rated brake power ..... 1492 kW **2,000 HP** @ 1900 rpm  
 \*\*Flywheel power ..... 1388 kW **1,860 HP** @ 1900 rpm  
 Weight (wet) ..... 5293 kg **11,670 lb**

NOTE: This engine requires an engine monitor. The only approved monitor is the Flight Systems Engine Saver.  
 \*Rated brake power is the output of the engine as installed in this machine, at governed rpm and with engine manufacturer's approved fuel setting. Accessory losses included are water pump, fuel pump and oil pump.  
 \*\*Flywheel power is the rated power at the engine flywheel minus the average accessory losses. Accessories include fan and charging alternator. Rating(s) represent gross engine performance in accordance with SAE J1349 conditions.



## ELECTRIC DRIVE

### AC/DC CURRENT

Alternator ..... G.E. GTA-22  
 Control ..... Statex III Fuelsaver  
 \*Motorized wheels ..... G.E. 788  
 \*\*Ratio ..... 26.82:1  
 Speed (maximum) ..... 51.0 km/h **31.7 mph**

\*Wheel motor application depends upon gross vehicle weight, haul road grade, haul road length, rolling resistance and other parameters. Komatsu and G.E. must analyze each job condition to assure proper application.  
 \*\*Optional ratios available.



## TIRES AND RIMS

Rock service, tubeless, tires (radial or bias ply)

\*Standard tire ..... 36.00 51  
 Standard five (5) piece rim  
 660 mm x 1295 mm x 127 mm **26" x 51" x 5"** patented Phase II  
 New Generation™ rim assembly with patented 127 mm **5"** double  
 forged flanges. Not interchangeable with other manufacturers' rims  
 due to improved design for greater load support and longer fatigue  
 life. Rated at 827 kPa **120 psi** cold inflation pressure.

\*Tires should meet application requirements for tkph/tmph, tread, compound, inflation pressure, ply rating or equivalent, etc.



## BODY

Rugged bolster and sill construction. Body is rubbermounted on frame. Deck-mounted mufflers standard. Pivot exhaust heating optional.

Bottom plate ..... 1034 mPa **150,000 psi**  
 tensile-strength-steel, 19 mm **0.75"**, two-piece construction  
 Front and side sheet ..... 690 mPa **100,000 psi**  
 tensile-strength-steel, front 12.7 mm **0.50"**, side 9.7 mm **0.38"**



## CAB

Deluxe interior, fully enclosed, superb working comfort, adjustable operator seat with air suspension and lumbar support, rubber-mounted, horn in center of steering wheel, padded armrest, panel-mounted circuit breaker, electric "wet" windshield wiper, horizontal sliding windows, excellent visibility, adjustable steering wheel, tinted safety glass windshield, 45,000 btu/hr heater and defroster, pressurized and filtered air intake. Standard ROPS.



## FRAME

Special alloy steel with integral front bumper, rear tubular cross members, continuous frame rail beam with variable section and rugged continuous horsecollar.

Plate material ..... 482.6 mPa **70,000 psi**  
 tensile strength steel  
 Top plate thickness ..... 38 mm **1.50"**  
 Bottom plate thickness ..... 38 mm **1.50"**  
 Side plate thickness ..... 16 mm **0.62"**  
 Drive axle mounting ..... Ball and socket joint at front  
 Drive axle alignment ..... Swing link between frame and axle



## BRAKING SYSTEM

Service brakes: all-hydraulic actuated

Front ..... Wheel speed disc.  
 Three calipers on a 1060 mm **40.00"** O.D. disc.  
 Rear ..... Dual disc armature speed  
 Two discs/side. One caliper/disc.  
 635 mm **25"** O.D.

Emergency brakes ..... Automatically applied prior  
 to hydraulic system pressure dropping below level  
 required to meet secondary stopping requirements.

Wheel brake locks ..... Switch-activated  
 Parking brakes ..... Spring-applied,  
 hydraulically released, with speed application protection.  
 Electric dynamic retarder (jmax) ..... 2811 kW **3700 hp**  
 Continuously rated (18 element) blown grids. Two-speed  
 overspeed retarding. Extended range retarding. Reverse retarding.



## SUSPENSION

HYDRAIR® II

Variable rate hydro-pneumatic with integral rebound control.  
 Max. front stroke ..... 335 mm **13.2"**  
 Max. rear stroke ..... 409 mm **16.1"**  
 Max. rear axle oscillation ..... ±10.0°



## COOLING SYSTEM

L&M radiator assembly with sight gauge. Deaeration-type top tank.

Radiator frontal area ..... 4.26 m² **45.9 ft²**



## SERVICE CAPACITIES

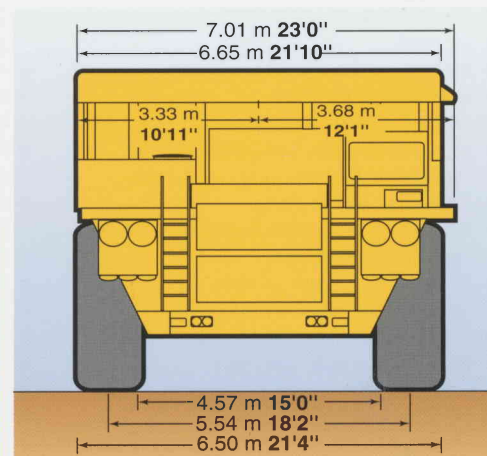
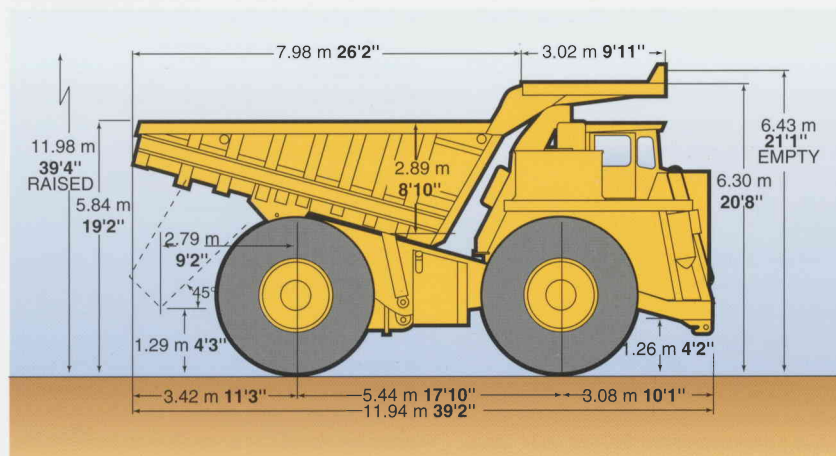
Cooling system	314 L	<b>83 U.S. gal</b>
*Crankcase	223 L	<b>59 U.S. gal</b>
Hydraulic system	549 L	<b>145 U.S. gal</b>
**Motor gear box	(788) 40 L	<b>10.5 U.S. gal</b>
Fuel	3217 L	<b>850 U.S. gal</b>

\* Includes lube oil filters  
 \*\* Each wheel





### DIMENSIONS



All dimensions are with 103 m<sup>3</sup> 135 yd<sup>3</sup> body.

Bodies	Struck	2:1 Heap	Loading Height*
Standard	77 m <sup>3</sup> 101 yd <sup>3</sup>	103 m <sup>3</sup> 135 yd <sup>3</sup>	5.84 m 19'2"

\*Exact load height may vary due to tire make, type, and inflation pressure.



### HYDRAULIC SYSTEM

- Steering . . . . . Accumulator-assisted twin cylinders provide constant rate steering. Emergency power steering automatically applied by accumulator(s).
- Turning circle diameter (SAE) . . . . . 24.4 m 80 ft
- Reservoir . . . . . 496 L 131 U.S. gal
- Filtration . . . . . In-line replaceable elements
- Suction . . . . . Single, full-flow, 100 mesh
- Hoist and steering . . . . . Dual, full-flow, in-line, high-pressure, 7 micron.
- Brake component cabinet. . . . . Above-deck, easily accessible with diagnostic test connections.
- Hoist. . . . . Two 3-stage cylinders with new-concept design and sealing system. Internal cushion valve and over-center damping provide reliability and smoother dumping.
- Hoist times
  - Power-up loaded . . . . . 22 sec
  - Power-down. . . . . 13 sec
  - Float-down empty . . . . . 19 sec
- Pumps . . . . . Vane-type pump with output of 538 liters 142 gpm at 1900 rpm
- System relief pressures
  - Hoist . . . . . 17237 kPa 2,500 psi
  - Steering and Brake . . . . . 20850 kPa 3,000 psi
- Quick disconnects standard for powering disabled truck and for system diagnostics.



### ELECTRICAL SYSTEM

- 2 x 8D 1450 CCA, 12 volt batteries, in series/parallel, deck-mounted with disconnect switch.
- Alternator. . . . . 24-volt, 110 amp
- Lighting. . . . . 24-volt



### WEIGHT DISTRIBUTION

Empty Vehicle	kg	lb	%
Front axle . . . . .	60215	132,750	48.5
Rear axle . . . . .	63812	140,680	51.5
Total (wet, 50% fuel) . . . . .	124028	273,430	

Loaded Vehicle at maximum GVW rating			
Front axle . . . . .	101715	224,244	34.5
Rear axle . . . . .	193120	425,756	65.5
Total . . . . .	294840	650,000	

NOTE: GVW shall not exceed 294840 kg 650,000 lb including options, liners, fuel and payload, subject to application approval by Komatsu.

NOTE: Komatsu trucks comply with SAE specifications for cab noise, ROPS, steering and braking. Cover photos and illustrations may show optional equipment. Materials and specifications subject to change without notice.



## STANDARD EQUIPMENT

- Air cleaners, dry-type SRG
- Air start
- Air system filter/moisture ejector
- Alternator (24V/110A)
- Auto lubrication system
- Batteries (2 x 8D, 1450 CCA 12 volt)
- Body down indicator/body up buzzer
- Body over center device
- Brakes: Wheel speed disc front, dual disc (armature speed) rear
- Fast-fill fuel system (in tank, right side)
- Filters, high pressure hydraulic
- FLOC – Fast Lube Oil Change
- Fuel Saver – G.E. Control
- Gate valve on hydraulic tank
- Komatsu control cabinet
- Mirrors, LH flat & RH rectangular convex
- Mud flaps
- Muffled exhaust, deck-mounted
- On-board load box
- PLM I – Komatsu Payload Weighting System
- Power Supply (25 amp)
- Quick disconnects (air, steering, hoist)
- Radiator sight gauge
- Removable power module unit (radiator, engine, alternator, blower)
- Retard speed control
- Reverse retarding
- Rock ejectors
- Thermostatic fan clutch
- Two-speed overspeed retarding
- Vari-volt alternator control
- Fast Fill Fuel System (in tank)

### SAFETY:

- All-hydraulic service brakes with emergency auto apply
- Battery disconnect switch
- Body prop cable
- Brake lock and drive system interlock

- Dynamic retarding with continuous rated grids
- Hoist interlock
- Horns (back-up – electric; front – air)
- Maintenance and power lockout
- Parking brake with warning light and speed application protection
- Power steering with auto emergency steering
- Protective deck handrails
- Pump drive guard
- Radiator fan guard
- ROPS, cantilevered
- Seat belts (wide, retractable)
- Skid-resistant coating on walkways
- Slippery road brake switch
- 24-volt circuit breakers

### CAB:

- Accumulator pre-charge light
- Air cleaner vacuum gauges
- Air conditioner, HFC 134A
- Air pressure gauge
- Armrest (padded, driver's door)
- Automatic buzzer for low air pressure
- Blower pressure indicator light
- Dome light
- Engine hourmeter, oil pressure gauge, coolant temperature gauge
- Engine oil high temperature alarm
- Engine shutdown
- Flight Systems Engine Saver
- Floor mat
- Fuel gauge in cab and on tank
- Fuel low level light and buzzer
- Gauges (backlighted)
- Headlight switch
- Heater and defroster (heavy-duty)
- Heater switch
- High beam selector and indicator
- Horn (center of steering wheel)

- Indicator lights for dynamic retarding, overspeed, service brakes
- Insulation
- Motorized wheel temperature warning alarm
- Operator seat (adjustable with air suspension and lumbar support)
- Panel lighting (adjustable)
- Passenger seat
- Pressurized cab air system
- Recessed door handles
- Sliding glass windows
- Speedometer
- Starter key switch
- Steering system warning light and buzzer
- Sun visor (adjustable)
- Tachometer
- Tilt steering wheel
- Voltmeter (battery output)
- Warning system lights and buzzers for coolant low level, coolant high temperature, electric cooling blower, low oil pressure, ground relay
- Wheel brake lock w/drive system interlock
- Windshield wiper and washer (electric)

### LIGHTING:

- Back-up lights (2)
- Clearance lights
- Control cabinet service light
- Dynamic retarding, rear (2) and top of cab (2)
- Headlights, bumper (4)
- Ladder lights
- Manual back-up light switch
- Service light in rear axle
- Stop and tail lights (2)
- Turn signals
- Under-hood service lights



## OPTIONAL EQUIPMENT

- Additional high-mounted headlights
- Aftercooler
- Air cleaner dust evacuators
- AM/FM/Cassette radio
- Arctic protection package (suspensions, antifreeze/lube below -40° C)

- Body liners – standard body\*
- Deck metered back-up lights
- Fast-fill fuel system - LH
- Filtered air inlet system
- Fire extinguisher (20 lb.)
- Fog lights

- Hot start (engine oil, coolant, hydraulic tank)
- Hubodometer
- Radiator shutters (thermostatically controlled)
- Service center - RH

\*Available factory-installed or non-installed. All other options and accessories listed are available factory installed only.

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