KOMATSU®

830E-AC

MAXIMUM GVW
385848 kg 850,650 lb

GROSS HORSEPOWER
1865 kW 2,500 HP

ELECTRIC DRIVE TRUCK

Photo may include optional equipment.
### ENGINE

* Make and model: Komatsu SDA16V160
  * Fuel: Diesel
  * Number of cylinders: 16
  * Operating cycle: 4 cycle
  ** Rated brake power: 1865 kW @ 1900 rpm
  *** Flywheel power: 1761 kW @ 2360 rpm
  * Weight (wet): 8608 kg, 21,182 lb

* Tier 2 emissions certified. Tier 1 emissions engine is optional outside of North America.

** 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-41
  * Dual impeller in-line blower: 255 m³/min, 9,000 cfm
  * Control: AC torque control system
  * Motorized wheels: GE825
  * Ratio: 31.875:1
  * Speed (maximum): 64 km/h, 40 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.

### TIRES AND RIMS

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

* Standard tire: 40.00R57
  * Optional tire: 46.90R57

Standard five (5) piece rim

737 mm x 1488 mm x 152 mm 29" x 57" x 6" rims

Typical tire weight: 21081 kg, 46,476 lbs

* Rim should meet application requirements for 4000 hp, 100,000 psi, 1379 m Pa, etc.

### FRAME

Advanced technology, full butt-welded box-sectional ladder-type frame with integral ROPS supports, integral front bumper, rear tubular cross members, steel castings at all critical stress transition zones, rugged continuous horsecollar.

- Plate material: 482.6 mPa, 70,000 psi, tensile strength steel
- Casting material: 620.5 mPa, 90,000 psi, tensile strength steel
- Rail width: 305 mm, 12"
- Rail depth (minimum): 864 mm, 34"
- Top and bottom plate thickness: 32 mm, 1.25"
- Side plate thickness: 16 mm, 0.62"
- Drive axle mounting: Pin and spherical bushing
- Drive axle alignment: Swing link between frame and axle

### BRAKING SYSTEM

System meets ISO 3450/1996.

- Service brakes: all-hydraulic actuated.
  * Front: Three calipers on a 1213 mm 47.75" O.D. disc.
  * Rear: Two 635 mm 25" O.D. discs per side.

- 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 (max.): 2983 kW, 4000 hp

Continuously rated high-density blown grids w/retard at engine idle and retard in reverse propulsion.

### SUSPENSION

HYDRAIR® II

Variable rate hydro-pneumatic with integral rebound control.

- Max. front stroke: 335 mm, 13.2"
- Max. rear stroke: 279 mm, 11.0"
- Max. rear axle oscillation: ±10.3°

### COOLING SYSTEM

L&M radiator assembly, split-flow, with deareation-type top tank.

Radiator frontal area: 6.24 m², 67.2 ft²

### SERVICE CAPACITIES

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling system</td>
<td>568 L, 150 U.S. gal</td>
</tr>
<tr>
<td><em>Crankcase</em></td>
<td>280 L, 74 U.S. gal</td>
</tr>
<tr>
<td>Hydraulic system</td>
<td>946 L, 250 U.S. gal</td>
</tr>
<tr>
<td>Motor gear box</td>
<td>38 L, 10 U.S. gal</td>
</tr>
<tr>
<td>Fuel</td>
<td>4542 L, 1200 U.S. gal</td>
</tr>
</tbody>
</table>

* Includes lube oil filters
**DIMENSIONS**

All dimensions are with 147 m³ 193 yd³ body.

<table>
<thead>
<tr>
<th>Body</th>
<th>Struck</th>
<th>2:1 Heap</th>
<th>Loading Height*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>117 m³ 153 yd³</td>
<td>147 m³ 193 yd³</td>
<td>6.71 m 22'</td>
</tr>
</tbody>
</table>

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

**HYDRAULIC SYSTEM**

- Steering: Accumulator-assisted twin cylinders provide constant rate steering. Emergency steering automatically supplied by accumulator.
- Turning circle diameter (SAE): 28.4 m 93 ft
- Reservoir: 901 L 238 U.S. gal
- Filtration: In-line replaceable elements
- Suction: Single, full-flow, 100 mesh
- Hoist and steering: Dual, in-line, high-pressure.
- Brake component cabinet: Above-deck, easily accessible with diagnostic test connections.
- Hoist: Two 3-stage dual-acting outboard cylinders, internal cushion valve, over-center damping.
- Hoist times:
  - Power-up loaded: 21 sec
  - Power-down: 16 sec
  - Float-down empty: 17 sec
- Pumps:
  - Hoist: Tandem gear-type pump with output of 851 lpm 225 gpm@1900 rpm and 17240 kPa 2,500 psi
  - Steering and brake: Pressure compensating piston pump with output of 246 lpm 65 gpm @ 1900 rpm and 18961 kPa 2,750 psi
- System relief pressures:
  - Hoist: 17240 kPa 2,500 psi
  - Steering and Brake: 27580 kPa 4,000 psi

**ELECTRICAL SYSTEM**

- 4 x 8D 1450 CCA, 12 volt batteries, in series/parallel, bumper mounted with disconnect switch.
- Alternator: 24 volt, 140 amp
- Lighting: 24 volt
- Cranking motors: Two/24 volt

**WEIGHT DISTRIBUTION**

<table>
<thead>
<tr>
<th>Empty Vehicle Weight</th>
<th>kg</th>
<th>lb</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Wet, 100% fuel, no options, standard Komatsu body, standard tires)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front axle</td>
<td>81279</td>
<td>179,190</td>
<td>50</td>
</tr>
<tr>
<td>Rear axle</td>
<td>82921</td>
<td>182,810</td>
<td>50</td>
</tr>
<tr>
<td>Total EVW</td>
<td>164200</td>
<td>362,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross Vehicle Weight (Nominal)</th>
<th>kg</th>
<th>lb</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front axle</td>
<td>127330</td>
<td>280,715</td>
<td>33</td>
</tr>
<tr>
<td>Rear axle</td>
<td>258519</td>
<td>569,936</td>
<td>67</td>
</tr>
<tr>
<td>Total</td>
<td>386088</td>
<td>850,650</td>
<td></td>
</tr>
<tr>
<td>Nominal Payload*</td>
<td>221648</td>
<td>488,650</td>
<td>244 U.S. ton</td>
</tr>
</tbody>
</table>

*Nominal payload is as defined within Komatsu America Corporation's payload policy documentation. In general, the nominal payload must be adjusted for the specific vehicle configuration and site application. The figures above are provided for basic product description purposes. Please contact your Komatsu Corp. distributor for specific application requirements.
• Air cleaners, Donaldson SSG with dust evacuators
• Alternator (24 volt/140A)
• Auto lubrication system –90 lbs.
• Batteries (4 x 8D, 1450 CCA 12 volt)
• Battery charging receptacle, 24 V
• Body down indicator/body up buzzer
• Body over center device
• Brakes: Front: Wheel speed disc; Rear: dual disc armature speed
• Electric start
• Filters, high pressure hydraulic
• Gate valves on hydraulic tank
• Komatsu IG BT control cabinet
• Komatsu Payload Weighing System-PLM III
• Mirrors, LH flat and RH rectangular convex
• Mud flaps
• Muffled exhaust, deck-mounted
• On-board load box
• Quick disconnects (steering and hoist)
• Radiator sight gauge
• Removable power module unit (radiator, engine, alternator, blower)
• Retard grids, continuous rated, 14 element
• Retard speed control
• Reverse retarding
• Rock ejectors
• Thermostatic Fan Clutch
• Fast-Fill Fuel System (in-tank)
• Service Center (radiator, engine, hydraulics)

OPERATOR ENVIRONMENT AND CONTROL:
• All-hydraulic service brakes with emergency auto apply
• Battery disconnect switch
• Body up cable
• Brake lock and drive system interlock
• Circuit breakers, 24 volt
• Diagonal staircase across grill
• Dynamic retarding with continuous rated grids
• Engine shutdown at ground level
• Hoist interlock

STANDARD HIGH VISIBILITY DELUXE CAB:
Instrumentation
• Alarm System warning lights (red)
  - Accumulator pre-charge
  - Coolant low level w/alarm
  - Coolant high temperature w/alarm
  - Electric drive system cooling blower w/alarm
  - Electric system fault w/alarm
  - Engine coolant temperature gauge
  - Hydraulic oil level w/alarm
  - Hydraulic oil temperature w/alarm
  - Low engine oil pressure w/alarm
  - Low brake pressure w/alarm
  - Motorized wheel temperature stop engine w/alarm
  - Steering pressure w/alarm
• Air cleaner vacuum indicators
• Air conditioner HFC 134a
• AM/FM cassette radio, CD player
• Blower pressure indicator light
• Digital tachometer and speedometer
• Dome light
• Engine hourmeter
• Engine shutdown
• Floor mat
• Fuel gauge in cab and on tank
• Fuel low level warning
• Gauges (backlighted)
• Headlight switch
• Heater and defroster (heavy-duty)
• Heater switch

OPTIONAL EQUIPMENT
(Optional equipment may change operating weight).
• Additional high-mounted headlights
• Arctic protection package (suspensions, antifreeze/lube below -40º C)
• Back-up lights, deck-mounted
• Body liners
• Eliminator, Centinel, Reserve
• Fire extinguisher 9 kg 20 lb
• Fog lights
• Hot starts (engine oil, coolant, hydraulic tank)
• Hubometer
• Mufflers between frame rails
• Pivot exhaust (heated body)
• High beam selector and indicator
• Indicator lights (amber): 20 lb
• 5-minute idler timer
• Auto lube alarm
• Check engine w/alarm
• Circuit breaker tripped
• Dynamic retarding
• Dump body up
• Hydraulic oil filter
• Low fuel level
• Manual back-up lights
• Park brakes applied
• Retard speed control
• Service brakes
• Starter circuit
• Insulation (Max R-Value)
• Oil pressure gauge (engine)
• Operator seat, adjustable w/air suspension, lumbar support and arm rests
• Panel lighting (adjustable)
• Passenger seat
• Power windows
• Pressurized cab air system
• RS232 port–PLM III
• Starter key switch
• Steering system warning light and buzzer
• Sunvisor (adjustable)
• Tilt and telescoping steering wheel
• Komtrax Plus
• Windshield (tinted)
• Windshield wipers and washer (electric)

LITING:
• Back-up lights (2)
• Brake and retard lights on top of cab
• Clearance lights
• Control cabinet service light
• Dynamic retarding, rear (2)
• Headlights—(4) halogen
• Ladder lights
• Manual back-up light, switch and indicator
• Service light in rear axle
• Stop and tail lights (2)
• Turn signals
• Under-hood service lights

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