Photo may include optional equipment.
930E-4SE Electric Drive Truck

Specifications

**Engine**
Make and model: Komatsu SSDA19V170
Fuel: Diesel
Number of cylinders: 18
Operating cycle: 4 cycle
Gross flywheel power: 2,611 kW @ 1900 rpm
Net flywheel power*: 2,558 kW @ 1900 rpm
Weight (wet): 10100 kg
22,266 lb

* Net flywheel power is the rated power at the engine flywheel minus the average accessory losses. Accessories include fan and charging alternator.

Power ratings above represent engine performance in accordance with SAE J1995 and J1349 conditions.

**Electric Drive**
AC Current
Alternator: GTA-39
Dual impeller in-line blower: 453 m³/min 16,000 cfm
Control: AC Torque Control System
Motorized wheels*: GDY106 AC Induction Traction Motors
Ratio**: 32.62:1
Speed (maximum): 64.5 km/h

* 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, radial tires
Standard tire*: 53/80 R63
Taper Lock
914 mm x 1600 mm x 127 mm 36" x 63" x 5.0"

* Tires should meet application requirements for tph/mph, tread, compound, inflation pressure, ply rating or equivalent, etc.

**Body**
All-welded steel flat floor body with horizontal bolsters and full canopy.
Eyebrow, rear wheel rock ejectors, body up sling, and rubber mounts on frame are standard. Pivot exhaust heating optional.

**CAB**
Advanced Operator Environment with integral 4-post ROPS/FOPS structure (meets J1040 Apr88), adjustable air suspension seat w/ lumbar support and arm rests, passenger seat, maximum R-value insulation, tilt and telescoping steering wheel, electric windshield wipers w/washer, tinted safety glass, power windows, Komatsu Payload Weighing System, 55,000 Btu/hr heater and defroster, 21,600 Btu/hr air conditioning (HFC - 134A refrigerant).

**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.

**Braking System**
Service brakes: oil-cooled, hydraulic-actuated, multiple disc brakes at each wheel. Traction system wheel slip/slide control.
Max. service apply pressure: 17237 kPa 2500 psi
Total friction area per brake: 97025 cm² 15,038 in²
Secondary brakes: Automatically applied prior to hydraulic system pressure dropping below level required to meet secondary stopping requirements.
Wheel brake locks: Switch activated
Parking brakes: Multiple disc, spring-applied, hydraulically-released, dry brakes on inboard end of each wheel motor rotor shaft. Rated to hold on ±15% grade @ maximum gross vehicle weight.
Electric dynamic retarder: Max 4026 kW 5400 hp
Continuous 2909 kW 3900 hp

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

**Suspension**
Variable rate hydro-pneumatic with integral rebound control
Max. front stroke: 328 mm 12.92"
Max. rear stroke: 239 mm 9.40"
Max. rear axle oscillation: ±6.5"

* Rear suspensions are inverted.

**Cooling System**
L&M radiator assembly, split-flow, with deareation-type top tank measuring 3277 mm x 2164 10'9" x 71"

**Service Capacities**
Cooling System: 719 L 190 U.S. gal
Crankcase*: 341 L 90 U.S. gal
Hydraulic system: 1325 L 350 U.S. gal
Motor gear box (each): 95 L 25 U.S. gal
Fuel: 5300 L 1400 U.S. gal

* Includes lube oil filters.
**ELECTRIC DRIVE TRUCK**

**ELECTRICAL SYSTEM**

- 4 x 8D and 2 x 30H, 220-amper-hour batteries, bumper-mounted with disconnect switch.
- Alternator: 24 volt, 140 amp
- Lighting: 24 volt
- Cranking motors: two/24 volt

**WEIGHT DISTRIBUTION**

- Empty Vehicle:
  - Front axle: 104,459 kg (230,293 lb), 48.5%
  - Rear axle: 110,847 kg (244,377 lb), 51.5%
  - Total (wet, 100% fuel): 215,307 kg (474,670 lb)

- Loaded Vehicle at maximum GVW rating:
  - Front axle: 165,956 kg (365,871 lb), 32.8%
  - Rear axle: 339,649 kg (748,799 lb), 67.2%
  - Total: 505,755 kg (1,115,000 lb)

**NOTE:** GVW shall not exceed 505,755 kg (1,115,000 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.

**HYDRAULIC SYSTEM**

- Steering: Accumulator assisted with twin double acting cylinders provide constant rate steering. Secondary steering automatically supplied by accumulator.
- Turning circle diameter (SAE): 29.7 m (977"
- Reservoir: 947 L (250 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 dampening.
- Hoist times:
  - Power-up loaded: 21 sec
  - Power-down: 23 sec
  - Float-down empty: 24 sec
- Pumps:
  - Two pumps, single package, end of alternator
  - Hoist and brake cooling: Tandem gear pump with output of 1022 lpm (270 gpm) at 1900 rpm and 17237 kPa (2,500 psi)
  - Steering and brake: Pressure-compensating axial piston pump with output of 246 lpm (65 gpm) at 1900 rpm and 18961 kPa (2,750 psi)
- System relief pressures:
  - Hoist and brake cooling: 17237 kPa (2,500 psi)
  - Steering and brake: 27579 kPa (4,000 psi)
- Quick disconnects standard for systems diagnostics and buddy dump.

**DIMENSIONS**

All dimensions are with 218 m³ (285 yd³) body (optional body).

<table>
<thead>
<tr>
<th>Bodies</th>
<th>Struck</th>
<th>2:1 Heap</th>
<th>&quot;Loading Height&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>171 m³</td>
<td>224 yd³</td>
<td>211 m³ 276 yd³</td>
</tr>
</tbody>
</table>

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

- Air cleaners, Donaldson SRG
- Air filter evacuators
- Alternator (24 volt/140A)
- Auto lubrication system (Lincoln) w/ground level fill & level indicator
- Batteries-4 x 8D and 2 x 30H (1450 CCA’s)
- Battery charging cable and socket
- Body over center device
- Brakes: oil-cooled, multiple disc front & rear
- Circuit breakers, 24 volt
- Control cabinet
- Electric start
- Eliminator system for engine lubrication
- Filters, high pressure hydraulic
- Gate valves on hydraulic tank
- Ground level radiator fill
- Komatsu Payload Weighing System–PLM-III
- Mirrors, LH flat and RH rectangular convex
- Mud flaps
- Muffled exhaust-deck-mounted
- Power supply, 24 volt and 12 volt DC
- Quick disconnects (hoist and diagnostics)
- Radiator sight gauge
- Removable power module unit (radiator, engine, alternator, blower)
- Retard speed control
- Reverse retarding
- Rock ejectors
- Thermostatic Fan Clutch
- Wiggins Fast-Fill Fuel System (in tank and left side remote)
- Service Center–LH
- Body Impact Plate

### Operator Environment & Control:

- All hydraulic service brakes with secondary auto apply
- Battery disconnect switch
- Body up sling
- Brake lock and drive system interlock
- Circuit breakers, 24 volt
- Diagonal staircase across grille, L to R
- Dynamic retarding with continuous rated element grids
- Engine shutdown at ground level
- Hoist propulsion interlock
- Horns (electric–front and back-up)
- Integral ROPS/FOPS Cab Level 2
- Engine hourmeter, oil pressure gauge, coolant temperature gauge, hydraulic oil temperature gauge
- Engine shutdown w/“Smart Timer” delay
- Floor mat (double barrier)
- Fuel gauge in cab and on tank
- Fuel low level light and buzzer
- Gauges (w/backlight)
- Headlight switch
- Heater and defroster (heavy-duty)
- Heater switch
- High beam selector and indicator
- Horn (center of steering wheel)
- Indicator lights (amber):
  - Check engine w/alarm
  - Circuit breaker tripped
  - Coolant high temperature w/alarm
  - Drive system reset switch

### Standard High Visibility Deluxe Cab:

- AC Drive Interface Display
- Air cleaner vacuum gauges
- Air conditioner HFC-134A
- Alarm System warning lights (red)
- Accumulator pre-charge
- Brake/hydraulic oil temperature w/alarm
- Coolant low level w/alarm
- Drive system temperature w/alarm
- Electric system fault w/alarm
- Hydraulic oil level w/alarm
- Low engine oil pressure w/alarm
- Low brake pressure w/alarm
- No propel/retard power w/alarm
- Stop engine no propel w/alarm
- Steering pressure w/alarm
- AM/FM/CD/MP3 and weather band
- Column-mounted retarder control
- Digital tachometer and speedometer
- Dome light
- Engine hourmeter, oil pressure gauge, coolant temperature gauge, hydraulic oil temperature gauge
- Engine shutdown w/”Smart Timer” delay
- Floor mat (double barrier)
- Fuel gauge in cab and on tank
- Fuel low level light and buzzer
- Gauges (w/backlight)
- Headlight switch
- Heater and defroster (heavy-duty)
- Heater switch
- High beam selector and indicator
- Horn (center of steering wheel)
- Indicator lights (amber):
  - Check engine w/alarm
  - Circuit breaker tripped
  - Coolant high temperature w/alarm
  - Drive system reset switch
- Drive system temperature w/alarm
- Dump body up
- Dynamic retarding
- Lincoln Lube
- Low Fuel
- Manual back-up lights
- Park brakes applied
- Propel system not ready
- Reduced propel system mode
- Retard at continuous level
- Retard speed control
- Service brakes
- Starter circuit
- Timed engine shutdown
- Insulation (Max R-Value)
- Operator seat, adjustable w/air suspension, lumbar support and arm rests
- Panel lighting (adjustable)
- Passenger seat
- Power windows
- Pressurized cab air system w/ fan and light
- Single brake/retarder pedal
- Starter key switch
- Sunvisor (adjustable)
- Tilt & telescoping steering wheel
- VHMS w/ORBCOMM
- Voltmeter (battery output)
- Windshield (tinted safety plate)
- Windshield wiper (dual) and washer (electric)

### Lighting:

- Back-up lights–rear mount (2) halogen
- Back-up lights–R and L - deck mount (2) halogen
- Brake and retard lights on top of cab
- Clearance lights
- Control cabinet service light (LED)
- Electric system fault w/alarm
- Engine compartment service lights
- Fog lights (2) halogen
- Headlights (8) halogen
- Stairway lights
- Manual back-up light, switch and indicator
- Payload lights R and L (LED)
- Platform lights R, L and Center
- Stop & tail lights (2) (LED)
- Turn signals halogen
- Under-hood service lights

### Optional Equipment

- Body Liners*
- Fire extinguisher 9 kg 20 lb
- Heated Body
- Hot start engine coolant (220V 2-2500W)
- Hot start engine oil (220V 2-600W)
- Hubometer (miles or kilometers)
- Modular Mining Systems (MMS) ready
- Mufflers between frame rails
- Radiator shutters
- Service Center–RH
- Special language decals
- Suspensions, cold weather

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

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