



Cat[®] SU482

Scoop

Specifications

Dimensions (approximate)

Overall length With Bucket	27 ft	8230 mm
Overall width At bucket	9 ft 3 in	2820 mm
At 21 in extended deck	10 ft 4 in	3150 mm
Wheelbase	11 ft	3350 mm
Scoop Utility Empty Weights		
Less Battery	22,250 lbs	10 090 kg
With 64-SS55-19 Battery	29,160 lbs	13 230 kg
With 64-SS55-21 Battery	30,000 lbs	13 610 kg
Battery Height from Ground		
With 64-SS55-19 Battery		
28x15-15 Tires	2 ft 2 in	660 mm
32X15-15 Tires	2 ft 6 in	760 mm
With 64-SS55-21 Battery		
28X15-15 Tires	2 ft 2 in	660 mm
32X15-15 Tires	2 ft 6 in	760 mm
Ground Clearance (No Axles Spacers)		
With 28 in Tires	6 in	150 mm
With 32 in Tires	8 in	200 mm
Minimum Canopy Height		
With 28 in Tires	3 ft 0 in	910 mm
With 32 in Tires	3 ft 2 in	965 mm
Main Frame Height		
With 28 in Tires	2 ft 2 in	660 mm
With 32 in Tires	2 ft 5 in	740 mm
Inside turn radius	9 ft 7 in	2920 mm
Outside turn radius	21 ft 8 in	6600 mm
Steering articulation	80° total	80° total
Tram Speed	5 mph	8 kph

Lift and Carry Capacity

7 tons (6.4 tonnes) at 48 in (1219 mm) from bucket mounting pin

Drive Train

Tram Motor

One proprietary design, mine traction, direct current, gear motor rated at 35 hp/26 kW (1 hour) at 1,600 rpm and 110 Volts; MSHA totally enclosed explosion proof; non ventilated cooling; foot mounted.

Reducer

A foot mounted 3.33:1 ratio gearbox

Drive Lines

Heavy duty off-highway driveshafts with slip joints

Axles

Kessler or John Deere

Kessler axles feature wheel and planetaries and wet disc brakes. John Deere axles feature in-board planetaries and wet disc brakes.

Brakes

Service & Emergency/Park

Spring applied hydraulic release SAHR

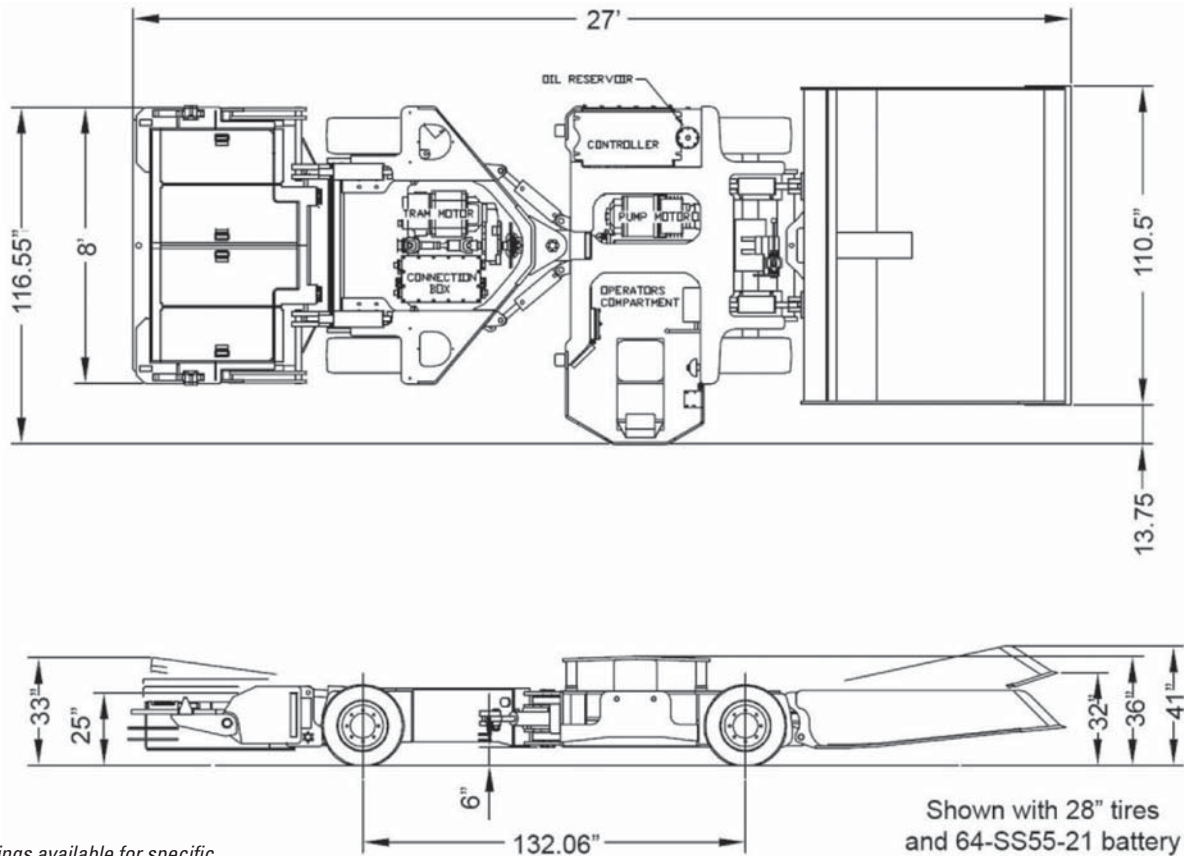
4-wheel wet disc

Left pedal activated

Controlled by reverse modulating valve (Kessler axle)

Controlled by modulating valve (Deere axle)

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*Detailed GA drawings available for specific dimensions and component locations

Hydraulics

Pump Motor

Mine duty, laminated frame, direct current motor rated at 16 hp/12 kW (1 hour); 110 Volts DC; MSHA totally enclosed explosion proof; non-ventilated cooling; and foot mounted.

Pump

Fixed displacement, helical gear tantom pumps rated at 20 total gpm (78 total lpm) at 1,600 rpm. Pump is directly mounted to the pump motor housing.

Reservoir

35 gal (132 L) capacity with magnetic particle sump strainer and 10 micron return line filter with by-pass. A dipstick is provided in the top of the oil tank for oil level monitoring.

Reservoir Fill System

Fill cap assembly in top of reservoir tank.

Valve Bank

Five section, parallel (flow through) type with 2,250 psi (15.5 MPa) internal relief and 1,700 psi (11.7 MPa) steering relief. Valve bank is rated at 40 gpm (151 lpm).

Hydraulics (continued)

Hydraulic PTO

Two (2) quick coupler connections, 1,200 psi (8.3 MPa) maximum recommended operating pressure.

Steering Cylinder

Two (2) 4 in (102 mm) bore, double acting cylinders with forged rods and self-aligning bearings.

Lift Cylinder

Two (2) 6 in (152 mm) bore, double acting cylinders with forged rods and self-aligning bushings.

Hydraulic Hose and Fittings

JIC fittings with high pressure hosing; MSHA 2G flame resistant approved.

Fire Suppression

Four point, 20 lbs (9 kg), multi-purpose, ABC dry chemical fire suppression system manually actuated from operator's compartment and remote location.

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Frame

Heavy duty with bends utilized where applicable to reduce the number of indeterminate stresses introduced by welding; constructed of ASTM 572-GR50 steel with T-1 steel at high stress or wear areas; 10 in (254 mm) extended operator's deck with side egress access.

Center Section

Heavy duty ball bearing with unlimited oscillation; internal grease seals to prevent contamination of the ball bearings, and pivot points designed to distribute loads using self-aligning, one piece heavy duty radial bearings.

Operator's Compartment

1. Extended Operator's Deck
2. Control Station or Control Stick Which Houses the Master Switch for Park, Forward and Reverse; Light Switch for Front and Rear Lights; Pump Motor Start Button and Automatic Park Brake Release
3. Right Foot Accelerator Pedal
4. Left Foot Brake Pedal
5. Tape Strip Panic Switch that De-Energizes Electrical System and Applies Automatic Brake
6. Warning Gong
7. Manual Circuit Breaker Lever Re-Set Handle
8. Valve Bank Hydraulic Functions:
 - Steering
 - Bucket
 - Bucket Eject
 - Winch/Power Take Off
 - Battery Changer
9. System Pressure Gauge
10. Accumulator Pressure Gauge
11. Park Brake Release Pressure Gauge

Electrical Controls

1. Model BUC2000, microprocessor controlled, IGBT, contactorless, 128VDC, 1200 amp traction motor controller, with infinitely variable, stepless, machine speed control, equipped with on-board dashboard display for machine information of battery capacity, battery voltage, motor currents, elapsed time hour meter, and troubleshooting diagnostics information
2. Microprocessor controlled, IGBT, contactorless, 128VDC, 350 amp, pump motor controller, limits starting current, and provides LED based diagnostics
3. Mine duty, 600 amp frame circuit breaker, with UVR (under voltage release) trip unit

Manuals

Two Parts Manuals
Two Operation and Preventive Maintenance Manuals
Two Electrical Troubleshooting Guides
Two Battery Maintenance Manuals
Two Battery Maintenance Charts
One LinkOne CD which includes all above manuals in electronic format

Operator's Compartment Options

21 in (533 mm) deck extension to provide better visibility in the lower seams

Diff-Lock-hydraulically activated differential lock that allows all four wheels to have equal torque during difficult floor conditions. The Diff-Lock is activated by a floor mounted, foot operated push button.

Tire/Wheel Option

28x15-15 Tires – Customer specified tire brand and fill type
32x16-15 Tires – Customer specified tire brand and fill type

Operator Control Options

Left hand control stick that incorporates the most common operator functions

Ergonomically designed control stick for one-hand control of pump motor, park brake, travel direction, traction assist, stop/shutdown and headlight controls

Speed control accomplished by right foot activated pedal

Tapeswitch stop switches located on both sides of operator

Manual Disconnect Switch

Battery Plug - Single Connector Option

J&R 2000, 5-pole, Brass w/Captive

Wrench - brass plug with a captive wrench to install or remove the battery plugs

Battery plug is rated at 600 amps

Other connector options available upon request

Lighting System Option

Ocenco, Halogen, 12VDC, 50 watt - two front headlights with protective guard, and two rear headlights with protective guard.

MCI 120V

MCI 12V

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Center Section Cable Location Option

All cables over the top of center section. Cables are protected with additional guarding and covers. This will add 3 in to overall frame height.

Auxiliary Components

Battery Change Cables

Machine Battery

Battery Tray

Battery with Plastisol Coated Tray (Single Connector)

Battery Receptacle Kit

Battery Filling System

Battery Charger Options

Single output for one battery

Dual output for two batteries

Battery Charger Accessories

Heavy Duty Charger Case

Sled consisting of heavy duty, protection frame work and equipped with lifting mechanisms designed to be engaged by the optional QDS Lift System.

Other Options

Schroder Test Mate

PA approval Kit

Park Brake Pressure Switch

Center Section Lock Bar

Venturi Jet Fill

Traction Motor Over Speed Protection

BUC 2000 HAND Held Calibrator
(Control adjustments and Troubleshooting)

All specifications are subject to change without notice.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at mining.cat.com and www.cat.com

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