

# Mini Excavator

Three pump hydraulic system for smooth operation  
Offset boom that swings 50 degrees right and left  
Standard auxiliary hydraulics

## CK62

**Preliminary**



**case**®

**CK62**

# CK62 SPECIFICATIONS

## ENGINE

Make and Model.....Kubota S2800D  
 Fuel.....No. 2 diesel  
 No. of cylinders .....6  
 Bore and stroke .....3.6" x 3.5"  
 (85 mm x 82 mm)  
 Displacement .....170.3 in.<sup>3</sup> (2 791 cc)  
 Fuel Supply .....Solenoid pump  
 Fuel Induction .....Injectors (6)  
 Air Cleaner .....Single stage, dry type  
 Oil Filter.....Renewable cartridge  
 Lubrication.....Positive pressure  
 Cooling System.....Pressurized radiator  
 Horsepower  
 Net (SAE).....59 @ 2,600 rpm  
 (44 kW @ 2,600 r/min)  
 Torque, max.....117.2 ft-lb @ 1,400 rpm  
 (158.9 Nm @ 1,400 r/min)

**Note:** Horsepower specifications are valid to 9,843' (3 000 m) elevation.

(1) Gross engine horsepower and torque at flywheel per SAE Standard J1349.

## ELECTRICAL

Starting.....12 volt  
 Battery.....One (1) 12 volt  
 Alternator .....35 amp

## HYDRAULIC SYSTEM

**Pumps:** Three hydraulic pumps provide independent supply to the boom, dipperstick and swing (or the boom rotator).

### Pump Capacity

•Pump 1  
 Boom, bucket, right track...11.5 gal/min  
 (43.7 L/m)  
 •Pump 2  
 Combined boom, dipperstick,  
 left track, auxiliary .....11.5 gal/min  
 (43.7 L/m)  
 •Pump 3  
 Swing, boom swivel,  
 blade.....9.75 gal/min  
 (36.9 L/m)

The boom, dipperstick and swing may be used simultaneously without their speed being reduced.

The system also provides simultaneous swing and travel.

Main relief valve pressure setting .....2,845 psi (19 616 kPa)

**Oil Cooler:** Air to oil

**Control valves:** Open center, parallel flow

**Cylinders:** Double-acting, hydraulic cylinders for hoist, crowd and tool.

Hoist ....4.7" dia. x 27.7" stroke, 2.6" rod  
 (119 mm dia. x 704 mm stroke, 66 mm rod)

Crowd ..3.5" dia. x 33.1" stroke, 2.2" rod  
 (89 mm dia. x 841 mm stroke, 56 mm rod)

Tool.....3.1" dia. x 23.4" stroke, 2" rod  
 (79 mm dia. x 594 mm stroke, 51 mm rod)

**Boom**

Swing.....3.9" dia. x 14.4" stroke, 2.2" rod  
 (99 mm dia. x 366 mm stroke, 56 mm rod)

Blade .....4.3" dia. x 6.9" stroke, 2.4" rod  
 (109 mm dia. x 175 mm stroke, 61 mm rod)

### Cylinder cycle time (full stroke):

	Seconds
Hoist	
Extend.....	2.6
Retract .....	2.5
Crowd	
Extend.....	3.5
Retract .....	2.5
Tool	
Extend.....	3.8
Retract .....	2.3
Blade	
Extend.....	2.5
Retract .....	1.9

**Swing System:** 360 degrees continuously at 8.8 rpm.

**Final Drives:** Full hydrostatic drive is provided. Each track is driven by a separate piston motor and is controlled by a separate lever. Power is transferred to the tracks by spur-type reduction gears.

Track adjustment .....Hydraulic  
 Track effort (Drawbar pull).....14,441 lbs  
 (6 564 kg)

## CRAWLER UNDERCARRIAGE

Track frame.....Rigid  
 Track rollers (each side) .....5  
 Track gauge.....5'4" (1.62 m)  
 Length of track on ground..8'4" (2.54 m)  
 Shoes per track (each side).....40  
**Track shoe width** .....21.7" (551 mm)  
 Area track on ground.....4,300 sq. in.  
 Ground pressure.....3.55 psi (24.48 kPa)  
 Height of track shoe ..... 0.6" (15.9 mm)

## FRONT BLADE

Welded, unitized construction of blade and frame provides durability under rugged working conditions.

**Dimensions**

Width .....84.6" (2.15 m)  
 Height.....15" (375 mm)  
 Lift above ground .....11" (285 mm)  
 Drop below ground.....17" (430 mm)

## SERVICE CAPACITIES

	U.S.Gal	Litres
Fuel tank.....	19.5	74.0
Hydraulic tank.....	36.5	138.0
Drive transmissions (each)	0.92	3.5
Engine crankcase (w/filter)	3.10	11.8
Coolant .....	1.84	8.4

## WEIGHTS

\*Operating.....13,725 lb (6 226 kg)

\***Note:** Includes full fuel, 175 lbs (79 kg) operator, 24" (610 mm) bucket, 5'1" (1.55 m) dipperstick, 9'9" (2.97 m) boom, 21.7" (551 mm) shoes.

## BREAKOUT FORCE

**Crowd** .....5,898 lbs (2 672 kg)  
**Bucket** .....7,033 lbs (3 190 kg)

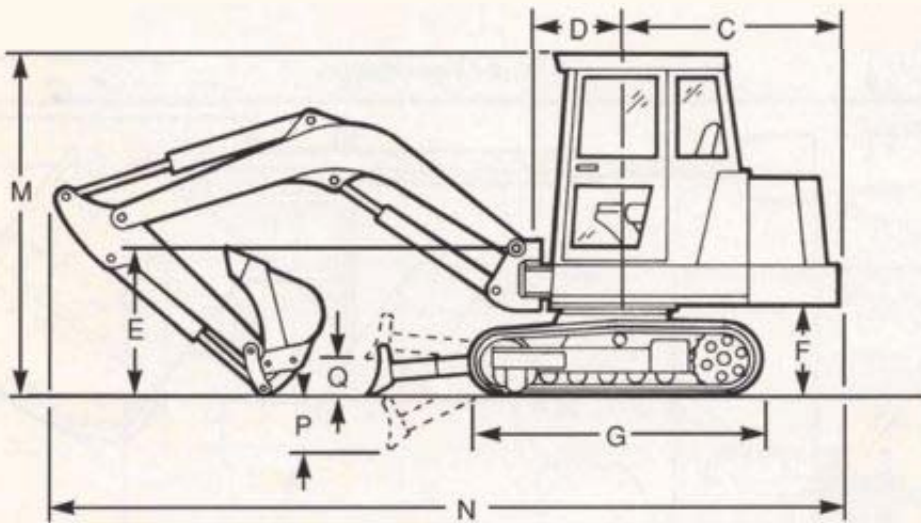
## STANDARD EQUIPMENT

Auxiliary hydraulic port • Cab heater • Cab—fully enclosed • Crawler-tractor type undercarriage • Engine hourmeter • Engine warning instruments • Horn • Hydraulic track adjusters • Hydraulic assist operator controls • Track drives, independently controlled, counter-rotation • 21.7" (551 mm) track shoes • 12-volt electrical system • Windshield wiper • Work lights • 9'9" (2.97 m) boom and 5'1" (1.55 m) dipperstick with 24" (610 mm) bucket

## BUCKETS:

Width	Type	Fl. <sup>3</sup> /litres <sup>3</sup>	Weight
12"	General Purpose	2.36 ft. <sup>3</sup>	216 lbs
(305 mm)		(.07)	(98 kg)
16"	General Purpose	3.51 ft. <sup>3</sup>	243 lbs
(406 mm)		(.10)	(110 kg)
18"	General Purpose	4.11 ft. <sup>3</sup>	262 lbs
(457 mm)		(.12)	(119 kg)
24"	General Purpose	5.98 ft. <sup>3</sup>	301 lbs
(610 mm)		(.17)	(137 kg)
30"	General Purpose.	7.91 ft. <sup>3</sup>	364 lbs
(762 mm)		(.22)	(165 kg)
36"	General Purpose	9.86 ft. <sup>3</sup>	404 lbs
(914 mm)		(.28)	(183 kg)
36"	Ditch Cleaning	6.04 ft. <sup>3</sup>	200 lbs
(914 mm)		(.17)	(91 kg)
48"	Ditch Cleaning	8.37 ft. <sup>3</sup>	248 lbs
(1 220 mm)		(.24)	(112 kg)
24"	Heavy Duty	6.1 ft. <sup>3</sup>	346 lbs
(610 mm)		(.17)	(157 kg)

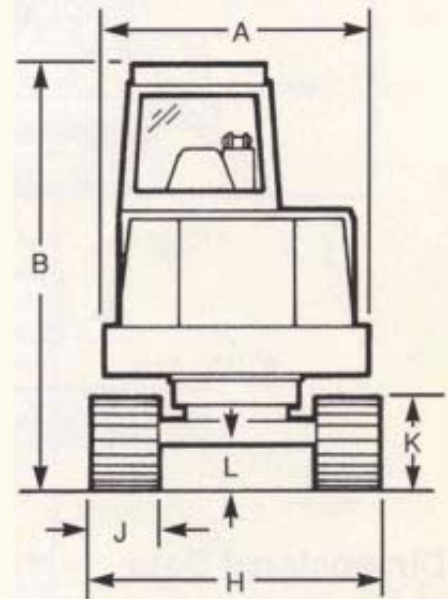
# Dimensional Data



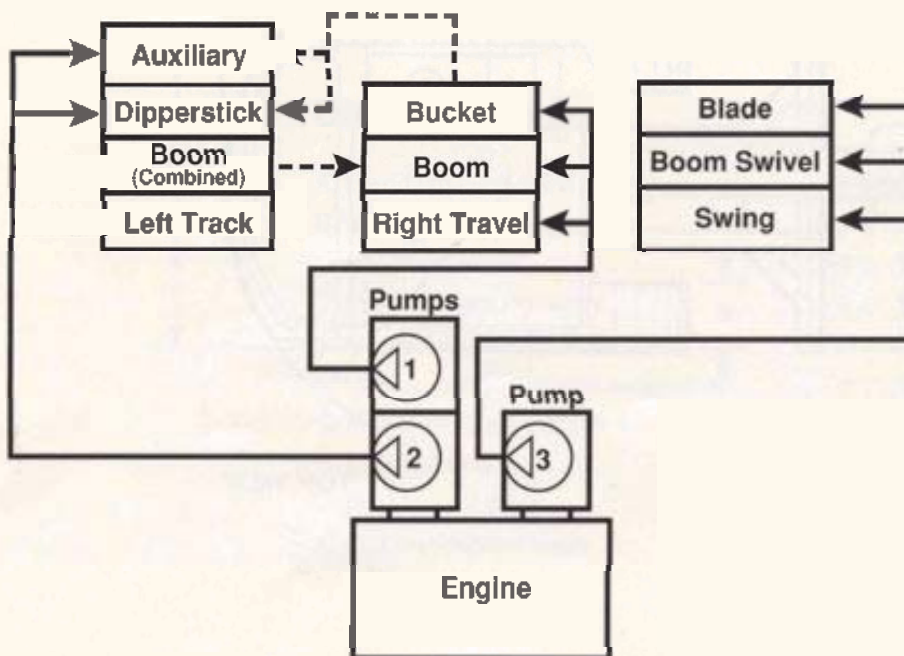
## SAE SPECIFICATIONS

- A. Platform width .....6'0.4" (1.84 m)
- B. Maximum height of cab above grade .....8'4.8" (2.56 m)
- C. Swing clearance.....5'6" (1.69 m)
- D. Distance from boom base pin to axis of rotation..2'7" (787 mm)
- E. Height of boom base pin above grade.....3'9" (1.14 m)
- F. Distance from bottom of counterweight to grade .....2'3" (686 mm)

- G. Overall length of track ..8'4" (2.54 m)
- H. Overall width.....84.6" (2.15 m)
- J. Track shoe width.....21.7" (551 mm)
- K. Track height.....24" (610 mm)
- L. Underclearance .....11.8" (300 mm)
- M. Height-overall transport position.....8'4.8" (2.56 m)
- N. Length-overall transport position.....19'5" (5.91 m)
- P. Drop below ground .....17" (430 mm)
- Q. Lift above ground.....11" (285 mm)



## CK62 HYDRAULIC SYSTEM



## Hydraulic System

A double section gear pump (1 and 2) powers the travel, boom, dipperstick, bucket, and auxiliary functions. Each pump is rated at 11.5 gpm (43.7 L/min).

When flow from pump 2 is not used for the dipperstick, auxiliary or left track function, it is directed to the boom function of pump 1 for combined flow.

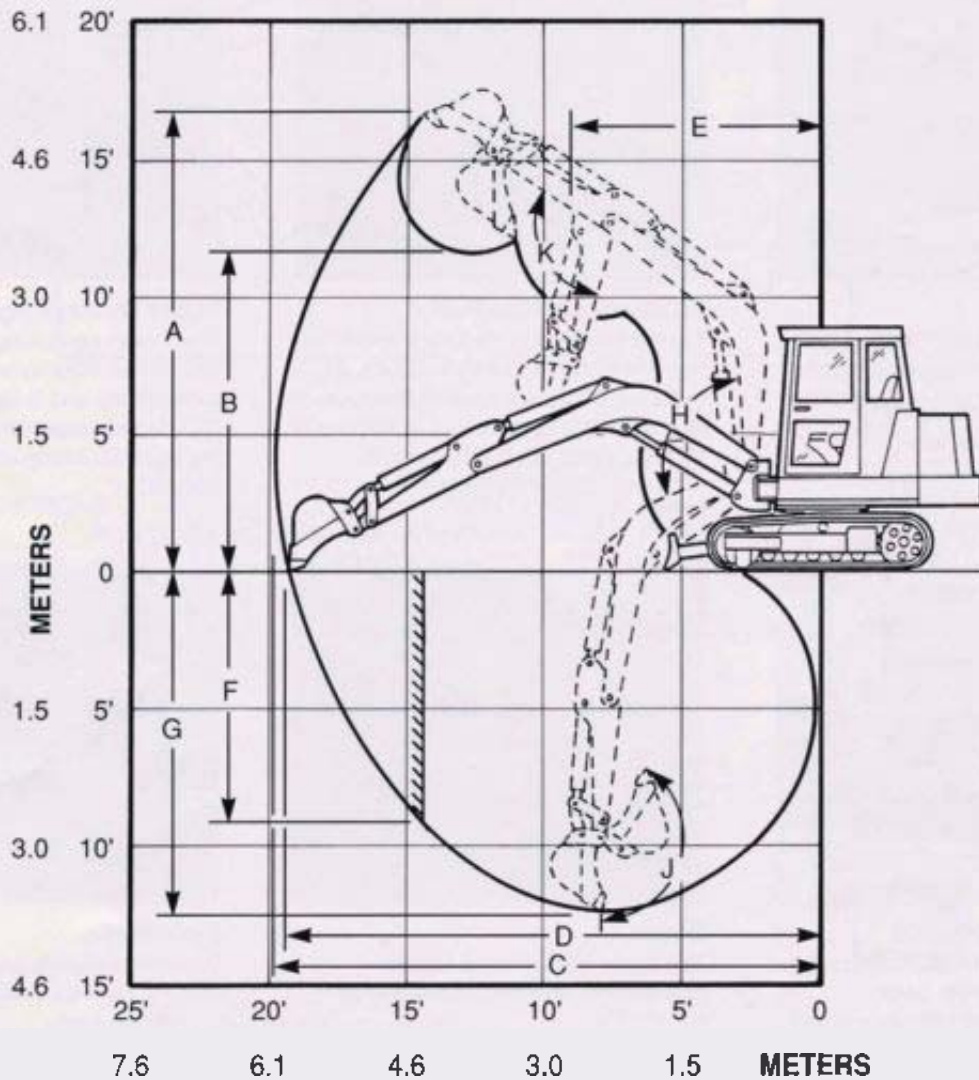
When flow from pump 1 is not used for the right travel, boom or bucket, it is directed to the auxiliary and dipperstick functions of pump 2 for combined flow.

A single-section gear pump (3) powers the swing, boom swivel and blade functions. This pump is rated at 9.8 gpm (36.9 L/min).

Operating pressure is 2,845 psi (19 616 kPa).



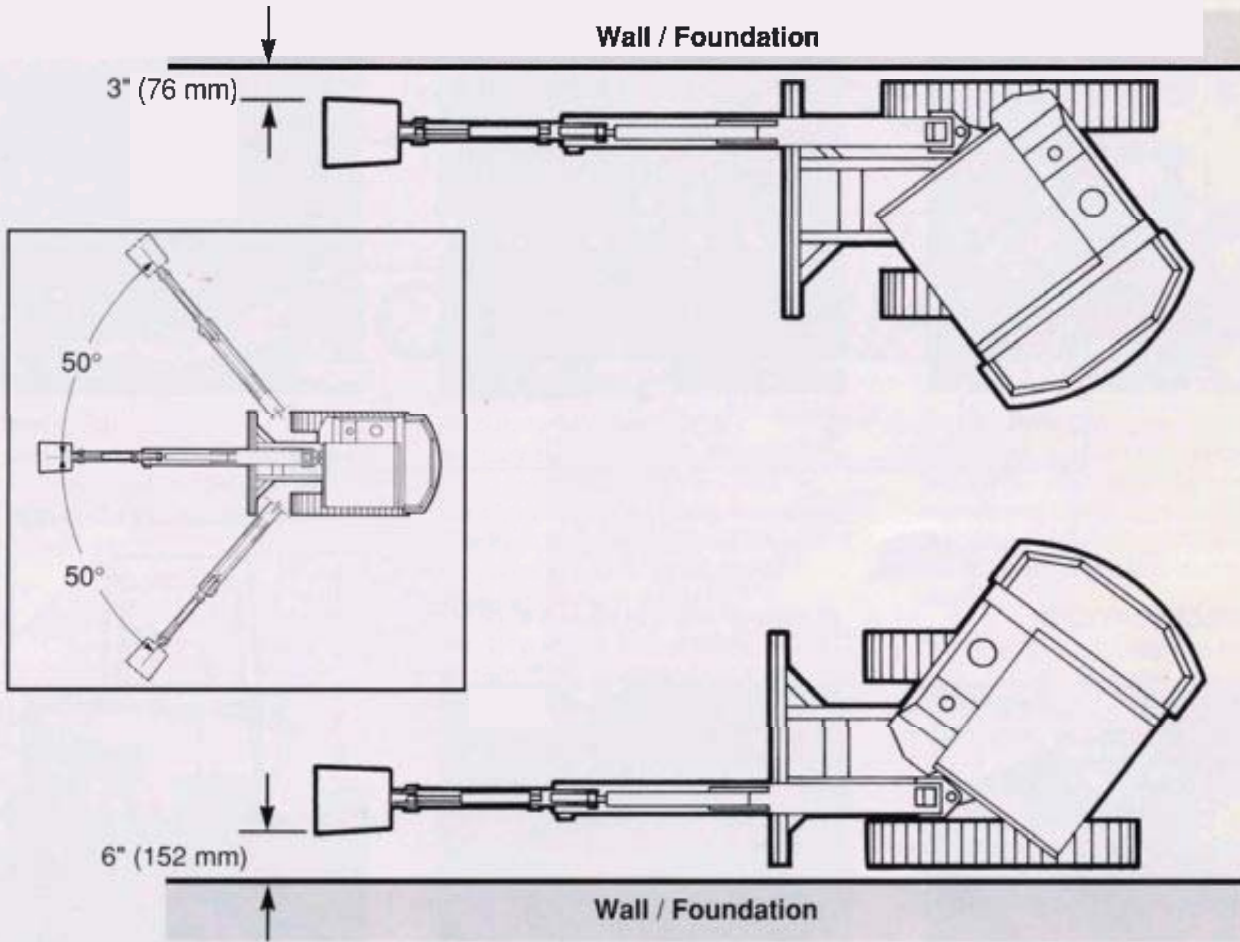
## Operating Data - 5'1"(1.55 m) Dipperstick with 24" (610 mm) Bucket



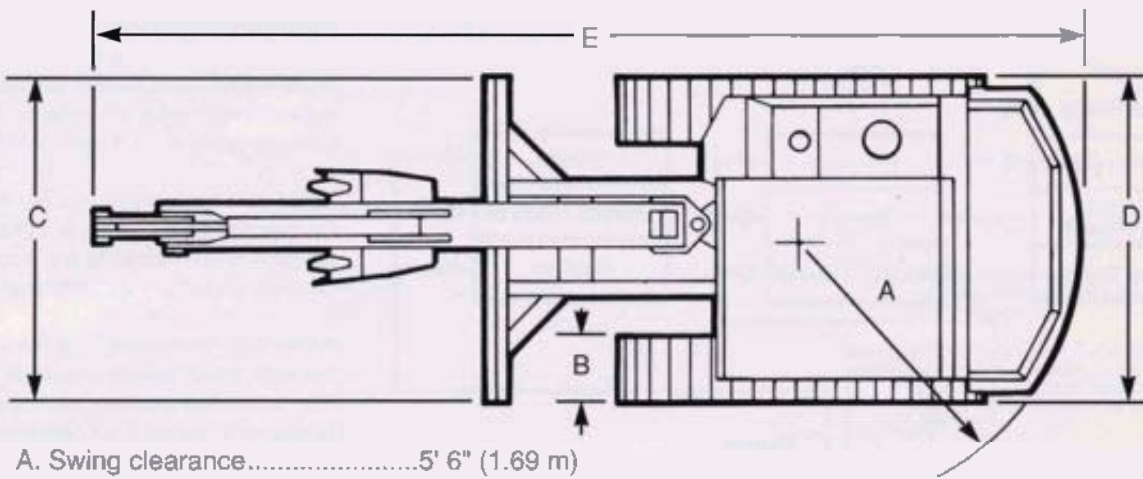
### Dimensional Data

A. Maximum excavation height.....	16' 9"	(5.11 m)
B. Maximum unloading height .....	11' 6"	(3.50 m)
C. Maximum reach.....	19' 9"	(6.01 m)
D. Maximum ground reach.....	19' 3"	(5.88 m)
E. Minimum forward radius.....	8' 11.5"	(2.73 m)
F. Maximum depth vertical excavation .....	9' 1"	(2.76 m)
G. Maximum digging depth .....	12' 4"	(3.76 m)
H. Boom pivot angle.....	112.9°	
J. Bucket pivot angle .....	183.5°	
K. Dipperstick pivot angle .....	119.9°	

# Operating Data - 5'1"(1.55 m) Dipperstick with 24" (610 mm) Bucket



## Dimensional Data



TOP VIEW

- A. Swing clearance.....5' 6" (1.69 m)
- B. Track shoe width.....21.7" (551 mm)
- C. Blade width.....84.6" (2.15 m)
- D. Overall width.....84.6" (2.15 m)
- E. Length-overall transport  
position.....19' 5" (5.91 m)

# Equipment Data



### Compact Size

The compact size of the CK62 makes it ideal for close quarter operation and easy maneuverability on the job site.



### Auxiliary Service Ports

Auxiliary service ports to the end of the boom are standard on the CK62. An extra large hydraulic return line routed directly to the tank facilitates the use of hammers and other attachments requiring low back pressure.



### Super Swing Angle

The boom can swing 50 degrees right and left for digging beside walls, foundations and in tight quarters. The 360 degree upperstructure swing allows the operator to dig and load in tight quarters.



### Three Pump Hydraulics

With a three pump hydraulic system the operator can control the boom, dipperstick and swing with precision. Hydraulic assist control means ease of operation and maximum productivity.



### Blade

The blade can be used for site preparation, leveling, stabilizing or backfilling.



### Flotation

Whether it travels on grass or pavement, there is minimal damage due to low ground pressure.

**NOTE:** All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

**IMPORTANT:** J I Case reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Units shown may be equipped with non-standard equipment.

**J I Case**

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