

# CX210 Excavator



## ENGINE

Model ..... Case 6TAA-5904  
Type ..... 4-stroke, turbocharged  
Cylinders ..... 6  
Bore/Stroke ..... 4.02" x 4.72"  
(102 x 120 mm)  
Displacement ..... 359 in<sup>3</sup> (5.9 L)  
Fuel injection ..... Direct  
Fuel injection pump ..... Electronic  
Fuel ..... Diesel  
Cooling ..... Liquid  
Horsepower per SAE J1349  
Net .... 138 hp (98 kW) @ 1950 rpm  
Maximum torque @ 1600 rpm  
Net ..... 392 lb-ft (532 N·m)

## BOOM/ARM

### Boom

Length ..... 18'8" (5.7 m)  
Boom w/arm cylinder  
& plumbing ..... 3,607 lb (1636 kg)  
Hoist cylinders (2) .... 373 lb (169 kg) ea  
Total weight ..... 4,352 lb (1974 kg)

### 9'10" Arm (3.0 m)

Length ..... 9'10" (3.0 m)  
Bare arm ..... 1,431 lb (649 kg)  
Bucket cylinder linkage  
& plumbing ..... 791 lb (359 kg)  
Total arm weight .. 2,222 lb (1008 kg)

### 7'10" Arm (2.4 m)

Length ..... 7'10" (2.4 m)  
Bare arm ..... 1,296 lb (588 kg)  
Bucket cylinder linkage  
& plumbing ..... 791 lb (359 kg)  
Total arm weight .. 2,088 lb (947 kg)

## UNDERCARRIAGE

Number of top rollers  
Top, each track ..... 2  
Bottom, each track ..... 7  
Number of shoes  
Triple grouser – each track ..... 49  
Link pitch ..... 7.48" (190 mm)

## HYDRAULICS

Pumps (2) ..... Variable displacement  
axial piston design

### Capacity –

Maximum ..... 2 x 53.1 gpm  
(201 L/min)

### System relief pressure –

Standard ..... 4975 psi (34.3 MPa)  
Power Boost ..... 5410 psi (37.3 MPa)

### Control valves –

4-spool section for left track travel,  
boom #1, bucket #1 & #2, arm #2

5-spool section for right track  
travel, boom #2, auxiliary, swing  
and arm #1

Boom and arm holding valves

### Pilot control hydraulic system –

Pump (1) ..... Gear design  
Maximum capacity ..... 5.3 gpm  
(20.1 L/min)

Relief pressure .... 566 psi (3.9 MPa)

### Swing –

Motor (1) ..... Fixed displacement  
axial piston design

Speed ..... 0-11.9 rpm

Brake ..... Spring-applied  
hydraulically released  
with dual cushion relief

Tail swing radius ..... 9'3" (2.82 m)

### Travel –

Motor (2) ..... Two-speed  
axial piston design

Final drive ..... Planetary gear  
reduction

Drawbar pull .... 41,140 lb (183 kN)

### Travel Speeds –

Auto shift high to low

Forward/Reverse

Low ..... 2.1 mph (3.3 km/h)

High ..... 3.4 mph (5.5 km/h)

### Travel control valve –

Dual stage relief and counter-  
balance design

## HYDRAULIC CYLINDERS

### Boom cylinders (2) –

Bore diameter ..... 4.7" (120 mm)

Rod diameter ..... 3.3" (85 mm)

Stroke ..... 49.4" (1255 mm)

### Arm cylinder (1) –

Bore diameter ..... 5.3" (135 mm)

Rod diameter ..... 3.7" (95 mm)

Stroke ..... 58" (1474 mm)

### Bucket cylinder (1) –

Bore diameter ..... 4.5" (115 mm)

Rod diameter ..... 3.1" (80 mm)

Stroke ..... 39.8" (1012 mm)

## ELECTRICAL

Voltage ..... 24 volts,  
negative ground

Alternator ..... 45 amp

Batteries (2) ..... Low-maintenance  
112 Ah (20 hr rate)

## SERVICE CAPACITIES

### Hydraulic tank

Refill capacity ..... 32 gal (120 L)

Total system ..... 54 gal (206 L)

Final drive (per side) ..... 5 qt (4.7 L)

Swing drive ..... 5.1 qt (4.8 L)

### Engine

w/filter change ..... 26.3 qt (24.9 L)

Fuel ..... 90 gal (340 L)

Radiator ..... 28.5 qt (27 L)

## OPERATING WEIGHT

With 9'10" (3.0 m) arm, 31.5"  
(800 mm) track shoes, 1,546 lb  
(701 kg) bucket, 165 lb (75 kg)  
operator, full fuel and standard  
equipment ..... 44,002 lb (19 959 kg)

# LIFT CAPACITIES

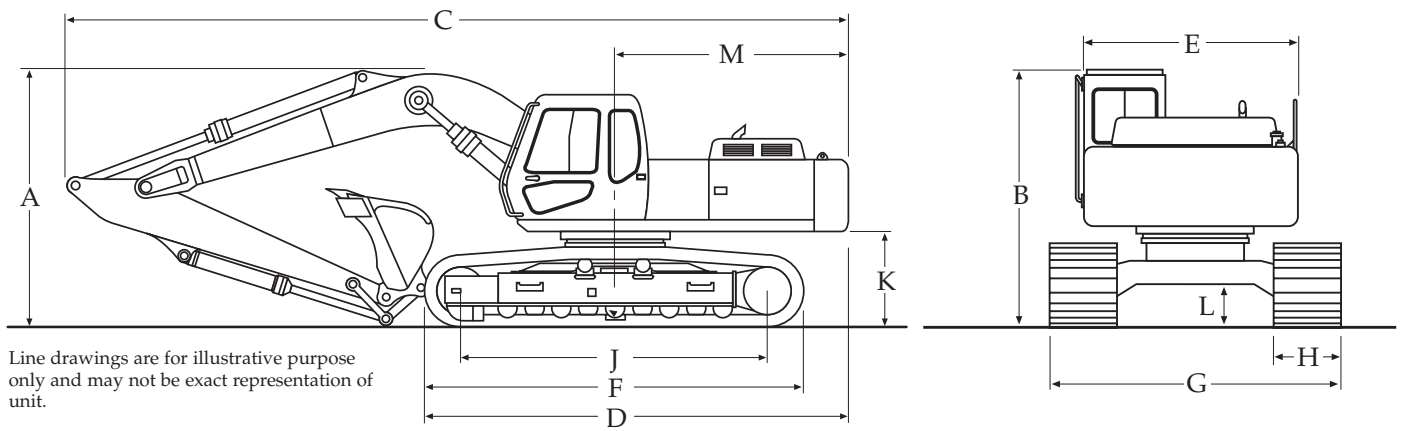
**9'10" (3.0 m) Arm** Lift capacities calculated using a 1,546 lb (701 kg) bucket, 8,796 lb (3990 kg) counterweight operating in "Fine" Mode

Load (Lift Point) Height	10' (3.05 m)		15' (4.57 m)		20' (6.1 m)		25' (7.62 m)		MAXIMUM REACH		
	END	SIDE	END	SIDE	END	SIDE	END	SIDE	@	END	SIDE
+20' (6.1 m)									24'7"	6,017 lb*	6,017 lb*
+15' (4.57 m)					10,425 lb*	9,680 lb (4391 kg)	9,708 lb*	6,541 lb (2967 kg)	26'10"	6,039 lb*	5,702 lb (2586 kg)
+10' (3.05 m)	23,316 lb*	23,316 lb*	15,350 lb*	14,436 lb (6548 kg)	12,335 lb*	9,117 lb (4135 kg)	9,978 lb (4526 kg)	6,281 lb (2849 kg)	28'1"	6,338 lb*	5,096 lb*
+5' (1.52 m)	18,672 lb*	18,672 lb*	19,493 lb*	13,199 lb (5987 kg)	13,839 lb (6277 kg)	8,531 lb (3870 kg)	9,657 lb (4380 kg)	5,987 lb (2716 kg)	28'4"	6,948 lb*	4,841 lb (2196 kg)
Ground- line	18,731 lb*	18,731 lb*	21,442 lb (9726 kg)	12,409 lb (5629 kg)	13,333 lb (6048 kg)	8,083 lb (3666 kg)	9,396 lb (4262 kg)	5,749 lb (2608 kg)	27'9"	8,006 lb (3631 kg)	4,886 lb (2216 kg)
-5' (-1.52 m)	25,175 lb*	23,776 lb (10 785 kg)	21,065 lb (9555 kg)	12,095 lb (5486 kg)	13,070 lb (5928 kg)	7,851 lb (3561 kg)	9,274 lb (4207 kg)	5,638 lb (2557 kg)	26'1"	8,691 lb (3942 kg)	5,288 lb (2399 kg)
-10' (-3.05 m)	32,996 lb*	24,096 lb (10 930 kg)	21,111 lb (9576 kg)	12,133 lb (5503 kg)	13,077 lb (5932 kg)	7,856 lb (3563 kg)			23'4"	10,341 lb (4691 kg)	6,293 lb (2854 kg)
-15' (-4.57 m)	27,685 lb*	24,838 lb (11 266 kg)	19,256 lb*	12,510 lb (5674 kg)					18'11"	14,618 lb*	8,861 lb (4019 kg)

**7'10" (2.40 m) Arm** Lift capacities calculated using a 1,546 lb (701 kg) bucket, 8,796 lb (3990 kg) counterweight operating in "Fine" Mode

Load (Lift Point) Height	10' (3.05 m)		15' (4.57 m)		20' (6.1 m)		25' (7.62 m)		MAXIMUM REACH		
	END	SIDE	END	SIDE	END	SIDE	END	SIDE	@	END	SIDE
+20' (6.1 m)					10,560 lb*	9,789 lb (4440 kg)			22'4"	9,280 lb*	7,979 lb (3619 kg)
+15' (4.57 m)					11,597 lb*	9,450 lb (4286 kg)			24'11"	9,287 lb*	6,437 lb (2920 kg)
+10' (3.05 m)	27,743 lb*	26,658 lb (12 092 kg)	17,163 lb*	14,005 lb (6352 kg)	13,389 lb*	8,927 lb (4049 kg)	9,855 lb (4470 kg)	6,174 lb (2800 kg)	26'2"	9,117 lb (4135 kg)	5,693 lb (2582 kg)
+5' (1.52 m)			20,914 lb*	12,911 lb (5856 kg)	13,691 lb (6210 kg)	8,407 lb (3813 kg)	9,590 lb (4350 kg)	5,931 lb (2690 kg)	26'6"	8,751 lb (3969 kg)	5,401 lb (2450 kg)
Ground- line	16,991 lb*	16,991 lb*	21,326 lb (9673 kg)	12,323 lb (5589 kg)	13,282 lb (6024 kg)	8,045 lb (3649 kg)	9,396 lb (4262 kg)	5,754 lb (2610 kg)	25'10"	8,959 lb (4064 kg)	5,488 lb (2489 kg)
-5' (-1.52 m)	27,681 lb*	24,102 lb (10 932 kg)	21,141 lb (9589 kg)	12,169 lb (5520 kg)	13,122 lb (5952 kg)	7,903 lb (3585 kg)			24'1"	9,901 lb (4491 kg)	6,043 lb (2741 kg)
-10' (-3.05 m)	30,864 lb*	24,554 lb (11 137 kg)	21,337 lb (9678 kg)	12,332 lb (5593 kg)	13,253 lb (6011 kg)	8,019 lb (3637 kg)			21'0"	12,279 lb (5569 kg)	7,472 lb (3389 kg)
-15' (-4.57 m)	24,132 lb*	24,132 lb*	16,958 lb*	12,886 lb (5845 kg)					15'11"	15,745 lb*	11,752 lb (5330 kg)

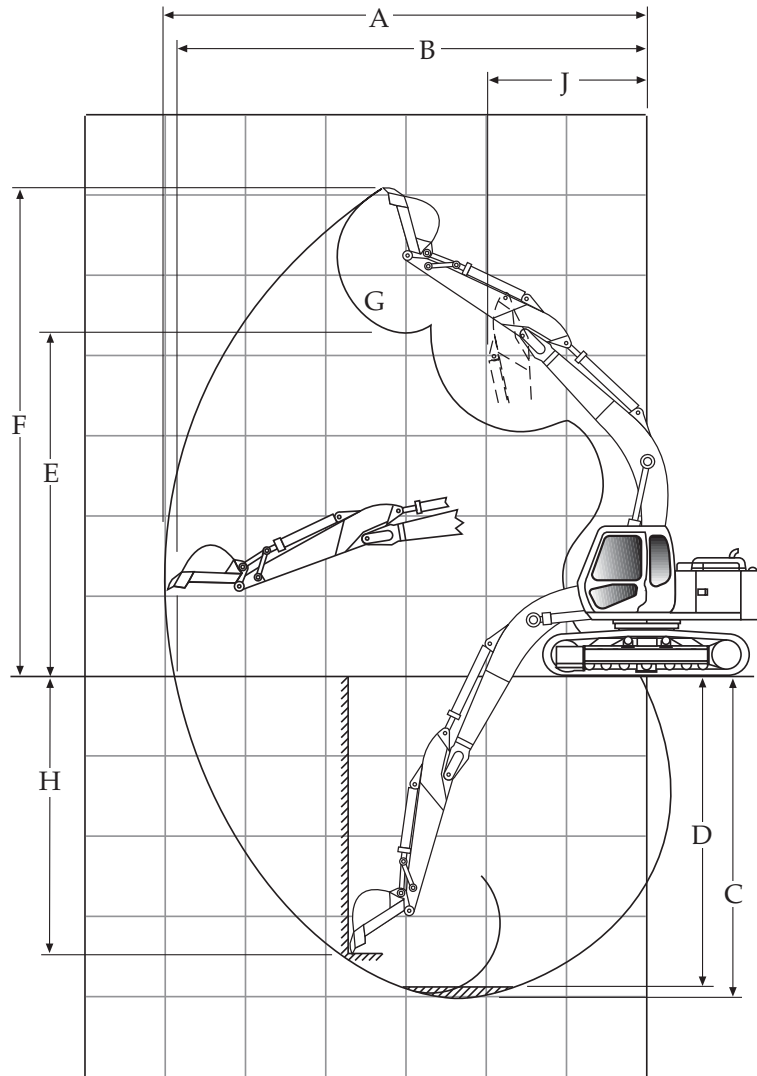
NOTE: \*Lift capacities do not exceed 75% of the minimum tipping load or 87% of the hydraulic lift capacity. Capacities that are marked with an asterisk are hydraulic limited.



## DIMENSIONS

	9'10" (3.0 m) Arm	7'10" (2.39 m) Arm
A. Overall height .....	9'7" (2.92 m)	10'1" (3.07 m)
B. Cab height .....	9'5" (2.88 m)	9'5" (2.88 m)
C. Overall length.....	31'1" (9.47 m)	31'4" (9.55 m)
D. w/o attachment .....	16'6" (5.03 m)	16'6" (5.03 m)
E. Width of upperstructure .....	9'2" (2.79 m)	9'2" (2.79 m)
F. Track overall length.....	14'8" (4.47 m)	14'8" (4.47 m)
G. Track overall width w/31.5" (800 mm) shoes.....	10'6" (3.20 m)	10'6" (3.20 m)
H. Track shoe width .....	31.5" (800 mm)	31.5" (800 mm)
J. Center to center (idler to sprocket) .....	12'0" (3.66 m)	12'0" (3.66 m)
K. Upperstructure ground clearance .....	3'5" (1.04 m)	3'5" (1.04 m)
L. Minimum ground clearance .....	18" (457 mm)	18" (457 mm)
M. Tail swing radius.....	9'3" (2.82 m)	9'3" (2.82 m)
Working weight* .....	44,002 lb (19 959 kg)	43,868 lb (19 898 kg)
Ground pressure .....	4.5 psi (31 kPa)	4.5 psi (31 kPa)

\*With 31.5" (800 mm) track shoe, 1,546 lb (701 kg) bucket, 165 lb (75 kg) operator, full fuel and standard equipment.



## PERFORMANCE SPECS

	9'10" (3.0 m) Arm	7'10" (2.39 m) Arm
A. Maximum dig radius .....	32'8" (9.96 m).....	30'10" (9.40 m)
B. Dig radius at groundline .....	32'1" (9.78 m).....	30'3" (9.22 m)
C. Maximum dig depth .....	22'0" (6.71 m).....	20'1" (6.12 m)
D. Dig depth – 8" (2.44 m) level bottom .....	21'5" (6.53 m).....	19'7" (5.97 m)
E. Dump height.....	22'5" (6.83 m).....	21'7" (6.58 m)
F. Overall reach height .....	31'8" (9.65 m).....	30'9" (9.37 m)
G. Bucket rotation .....	183° .....	183°
H. Vertical straight wall dig depth .....	22'0" (6.71 m).....	18'0" (5.49 m)
J. Minimum swing radius.....	11'11" (3.63 m).....	12'0" (3.66 m)
Arm digging force		
Standard .....	21,424 lb (95.3 kN).....	25,853 lb (115 kN)
Power Boost .....	23,380 lb (104 kN) .....	28,236 lb (125.6 kN)
Bucket digging force		
Standard .....	28,533 lb (126.9 kN) .....	28,533 lb (126.9 kN)
Power Boost .....	30,994 lb (137.9 kN) .....	30,994 lb (137.9 kN)

# STANDARD EQUIPMENT

## OPERATOR'S COMPARTMENT

Cab with Isomount® system  
 Adjustable deluxe seat with  
 3" (76 mm) retractable seat belt  
 Vandal cover  
 Front window safety glass  
 Climate Control System  
 AM/FM Radio w/ auto tuner  
 Roof hatch, skylight  
 Sliding Lexan® windows  
 Windshield wiper w/washer

## ENGINE

Case 6TAA-5904 turbocharged diesel  
 Federal emission certified  
 Warm up mode  
 Selectable one touch or auto  
 accelerator/decelerator

## ELECTRICAL

Batteries (2)  
 Electronic Systems Monitor

## HYDRAULICS

ISO pattern pilot controls  
 3 Position mode selector:  
 H, S, F  
 Auto Power Boost  
 2 Variable flow piston pumps  
 Auxiliary attachment mode  
 Auto pump destroke  
 Auxiliary hydraulic valve  
 Arm and boom holding valve  
 Selectable cushion control  
 for boom and arm  
 Controlled free swing  
 Ultra Clean filtration system

## UNDERCARRIAGE

Shoes: 31.5" (800 mm) 3-bar,  
 49 per side  
 Track length: 14'8" (4.47 m)  
 Track gauge: 7'10" (2.39 m)

## TRACK DRIVE

2-speed hydrostatic travel  
 Disc-type parking brakes

## UPPERSTRUCTURE

Boom: 18'6" (5.64 m) one piece  
 Free swing control  
 Hammer adaptable, no reinforcing  
 required  
 Swing brake

## OTHER

Counterweight: 8,796 lb (3990 kg)  
 Single key vandal lockup

# OPTIONAL EQUIPMENT

## UPPERSTRUCTURE

Arm: 9'10" or 7'10"  
 (3.0 m or 2.39 m)

## HYDRAULICS

Auxiliary hydraulics  
 Single acting, one pump  
 Double acting, single or dual pump  
 (includes heavy-duty bucket  
 linkage)  
 Double acting general purpose  
 for use with thumb kit

## OTHER

Load holding control devices  
 Cylinder mounted  
 Case/JRB Slide-Loc® Hydraulic  
 Coupler

## BUCKETS

### Application

### Width

### SAE Heaped Capacity

General purpose.....	24" thru 48" (0.61 m thru 1.22 m).....	0.62 yd <sup>3</sup> thru 1.50 yd <sup>3</sup> (0.47 m <sup>3</sup> thru 1.15 m <sup>3</sup> )
Heavy-duty.....	24" thru 48" (0.61 m thru 1.22 m).....	0.62 yd <sup>3</sup> thru 1.50 yd <sup>3</sup> (0.47 m <sup>3</sup> thru 1.15 m <sup>3</sup> )
Heavy-duty cast lip .....	24" thru 39" (0.61 m thru 0.99 m).....	0.50 yd <sup>3</sup> thru .88 yd <sup>3</sup> (0.38 m <sup>3</sup> thru 0.67 m <sup>3</sup> )
Extreme-duty.....	24" thru 42" (0.61 m thru 1.07 m).....	0.50 yd <sup>3</sup> thru 1.125 yd <sup>3</sup> (0.38 m <sup>3</sup> thru 0.86 m <sup>3</sup> )
Ditch.....	60" or 66" (1.52 m or 1.68 m).....	1.00 yd <sup>3</sup> or 1.12 yd <sup>3</sup> (0.76 m <sup>3</sup> or 0.86 m <sup>3</sup> )

**This page intentionally left blank.**

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

Form No. CE 264-01-02  
Replaces Form No. - CE 264-02-01



IMPORTANT: Case Corporation reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Case Corporation does not warrant the safety or reliability of attachments from other manufacturers.

Visit Case Corporation on the Web at:  
<http://www.casece.com>  
Printed in U.S.A.

CX210 Page 6 of 6

\*Slide-Loc is a registered trademark of JRB Company, Inc.

\*\*Lexan is a registered trademark of the General Electric Co.

© 2002 CASE CORPORATION.  
All Rights Reserved.

**CASE CONSTRUCTION EQUIPMENT  
CONTACT INFORMATION**

**NORTH AMERICA/MEXICO  
700 STATE STREET  
RACINE, WISCONSIN 53404**