LIUGONG NORTH AMERICA

# 909E CR

EXCAVATOR

| ENGINE | OPERATING WEIGHT | GROSS POWER | BUCKET CAPACITY | MAX. DIGGING DEPTH |
|---|---|---|---|---|
| Yanmar 4TNV98C | 19,180 lb (8,700 kg) | 62 hp (46.2 kW) | 0.37 yd³ (0.28 m³) | 14 ft 11 in (4,540 mm) |




XTRACARE+ WARRANTY

# SPECIFICATIONS

## ENGINE

Yanmar Tier 4 Final, 3.3 liter, inline 4-cylinder water-cooled, direct injection, DOC + DPF, high pressure common rail diesel engine.

| | |
|---|---|
| Emissions rating | EPA Tier 4 Final |
| Make | Yanmar |
| Model | 4TNV98C |
| Aspiration | Natural |
| Cooling fan drive | Direct |
| Displacement | 202 in³ (3.3 L) |
| Gross power | 62 hp (46.2 kW) @ 2,200 rpm |
| Peak torque | 178 lb·ft (241 N·m) 1,430 rpm |
| Cylinders | 4 |
| Bore × Stroke | 3.86 x 4.33 in (98 × 110 mm) |

## HYDRAULIC SYSTEM

**Main Pump**

| | |
|---|---|
| Type | Variable displacement piston pump |
| Maximum flow | 50 gal/min (189 L/min) |

**Relief Valve Setting**

| | |
|---|---|
| Implement | 4,061 psi (28 MPa) |
| Travel circuit | 4,554 psi (31.4 MPa) |
| Slew circuit | 4,061 psi (28 MPa) |
| Pilot circuit | 566 psi (3.9 MPa) |

**Hydraulic Cylinders**

| | |
|---|---|
| Boom Cylinder Bore × Stroke | 4.33 in x 34.61 in (110 mm x 879 mm) |
| Arm Cylinder Bore × Stroke | 3.94 in x 34.13 in (100 mm x 867 mm) |
| Bucket Cylinder Bore × Stroke | 3.54 in x 27.95 in (90 mm x 710 mm) |

## SERVICE CAPACITIES

| | |
|---|---|
| Fuel tank | 30.6 gal (116 L) |
| Engine oil | 3.1 gal (11.6 L) |
| Final drive (each) | 0.29 gal (1.08 L) |
| Swing drive | 0.42 gal (1.6 L) |

## SERVICE CAPACITIES (CONTINUED)

| | |
|---|---|
| Cooling system | 3.8 gal (14.5 L) |
| Hydraulic reservoir | 19.0 gal (72 L) |
| Hydraulic system total | 29.1 gal (110 L) |

## UNDERCARRIAGE

| | |
|---|---|
| Track shoe each side | 39 |
| Link pitch | 6.1 in (154 mm) |
| Steel track street pads | 18 in (450 mm) |
| Bottom rollers each side | 6 |
| Top rollers each side | 1 |

## SWING SYSTEM

Planetary gear reduction driven by high torque axial piston motor, with oil disk brake. Swing parking brake resets within five seconds after swing pilot controls return to neutral.

| | |
|---|---|
| Swing speed | 10.5 rpm |
| Swing torque | 15,489 lb-ft (21,000 N-m) |

## DRIVE & BRAKES

2-speed axial piston motors with oil disk brakes. Steering controlled by two detachable hand levers with pedals.

| | |
|---|---|
| Travel speed | High: 3 mph (4.8 km/h)<br>Low: 1.5 mph (2.4 km/h) |
| Gradeability | 35° / 70% |
| Max. drawbar pull | 16,861 lbf (75 kN) |

## ELECTRIC SYSTEM

| | |
|---|---|
| System voltage | 12V |
| Battery | 12V (one) |
| Alternator | 12V - 80A |
| Starter motor | 12V - 4 hp (12V - 3 kW ) |

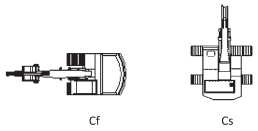
## SOUND PERFORMANCE

| | |
|---|---|
| Interior sound level (ISO 6396) | 73 dB(A) |
| Exterior sound level (ISO 6395) | 98 dB(A) |

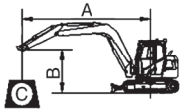
# SPECIFICATIONS

## STANDARD 909ECR WITH 18 IN (450MM) SHOES, 6 FT 11 IN (2.1 M) ARM

A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side




Conditions:
Boom length: 11 ft 1 in (3.37 m)
Arm length: 6 ft 11 in (2.1 m)
Counterweight: 3,637 LB (1,650 kg)
Shoes: 18 in (450 mm)
Bucket: SAE 0.37 $yd^3$ (0.28 $m^3$) 487 lb (221 kg)




1. *Indicates the load is limited by hydraulic capacity rather then the tipping capacity.
2. The below loads are in compliance with the ISO 10567 hydraulic rating standard. They do not exceed 87% of the hydraulic lifting capacity of 75% tipping load.
3. Rating at bucket lift hook.

**Blade Up**

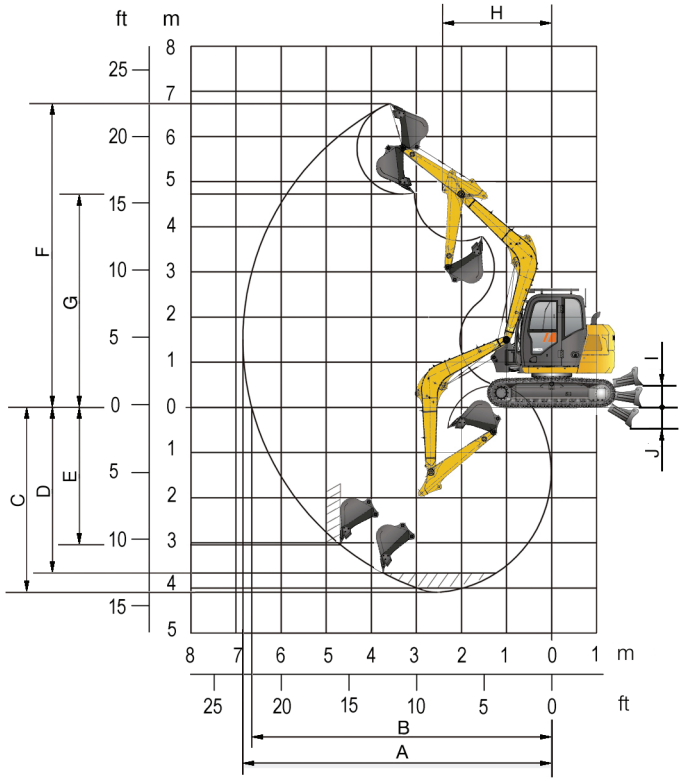
A Reach: ft (m)

| B: Height ft (m) | | 6 ft 7 in (2 m) | | 9 ft 10 in (3 m) | | 13 ft 1 in (4 m) | | 16 ft 5 in (5 m) | | 19 ft 8 in (6 m) | | MAX REACH | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | Distance |
| 13 ft 1 in<br>4 m | lb<br>kg | | | | | *3,109<br>*1,410 | *3,109<br>*1,410 | 2,426<br>1,100 | 2,778<br>1,260 | | | 1,962<br>890 | 2,271<br>1,030 | 18 ft 4 in<br>5.6 m |
| 9 ft 10 in<br>3 m | lb<br>kg | | | | | 3,440<br>1,560 | 3,969<br>1,800 | 2,359<br>1,070 | 2,712<br>1,230 | 1,698<br>770 | 1,985<br>900 | 1,698<br>770 | 1,962<br>890 | 19 ft 8 in<br>6 m |
| 6 ft 7 in<br>2 m | lb<br>kg | | | 5,094<br>2,310 | 5,976<br>2,710 | 3,219<br>1,460 | 3,726<br>1,690 | 2,249<br>1,020 | 2,602<br>1,180 | 1,808<br>820 | 1,940<br>880 | 1,566<br>710 | 1,830<br>830 | 20 ft 4 in<br>6.2 m |
| 3 ft 3 in<br>1 m | lb<br>kg | | | 4,608<br>2,090 | 5,468<br>2,480 | 2,999<br>1,360 | 3,506<br>1,590 | 2,448<br>1,110 | 2,492<br>1,130 | 1,610<br>730 | 1,874<br>850 | 1,521<br>690 | 1,786<br>810 | 20 ft 4 in<br>6.2 m |
| 0 ft<br>0 m | lb<br>kg | | 12,238<br>5,550 | 4,432<br>2,010 | 5,292<br>2,400 | 2,844<br>1,290 | 3,352<br>1,520 | 2,051<br>930 | 2,403<br>1,090 | 1,566<br>710 | 1,852<br>840 | 1,566<br>710 | 1,830<br>830 | 19 ft 8 in<br>6 m |
| -3 ft 3 in<br>-1 m | lb<br>kg | | 12,326<br>5,590 | 4,410<br>2,000 | 5,270<br>2,390 | 2,800<br>1,270 | 3,308<br>1,500 | 2,029<br>920 | 2,381<br>1,080 | | | 1,742<br>790 | 2,029<br>920 | 18 ft 4 in<br>5.6 m |
| -6 ft 7 in<br>-2 m | lb<br>kg | | 12,546<br>5,690 | 4,476<br>2,030 | 5,336<br>2,420 | 2,822<br>1,280 | 3,330<br>1,510 | | | | | 2,117<br>960 | 2,492<br>1,130 | 16 ft 1 in<br>4.9 m |
| -9 ft 10 iin<br>-3 m | lb<br>kg | | 12,965<br>5,880 | 4,675<br>2,120 | 5,535<br>2,510 | | | | | | | 3,396<br>1,540 | 3,947<br>1,790 | 12 ft 0 in<br>3.7 m |

**Blade Down**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 ft 1 in<br>4 m | lb<br>kg | | | | | *3,109<br>*1,410 | *3,109<br>*1,410 | *3,440<br>*1,560 | 2,778<br>1,260 | | | *3,682<br>*1,670 | 2,271<br>1,030 | 18 ft 4 in<br>5.6 m |
| 9 ft 10 in<br>3 m | lb<br>kg | | | | | *3,991<br>*1,810 | 3,969<br>1,800 | *3,815<br>*1,730 | 2,712<br>1,230 | *3,815<br>*1,730 | 1,985<br>900 | *3,815<br>*1,730 | 1,962<br>890 | 19 ft 8 in<br>6 m |
| 6 ft 7 in<br>2 m | lb<br>kg | | | *7,784<br>*3,530 | 5,976<br>2,710 | *5,336<br>*2,420 | 3,726<br>1,690 | *4,432<br>*2,010 | 2,602<br>1,180 | *3,771<br>*1,710 | 1,940<br>880 | *4,013<br>*1,820 | 1,830<br>830 | 20 ft 4 in<br>6.2 m |
| 3 ft 3 in<br>1 m | lb<br>kg | | | *10,650<br>*4,830 | 5,468<br>2,480 | *6,659<br>*3,020 | 3,506<br>1,590 | *4,608<br>*2,090 | 2,492<br>1,130 | *4,344<br>*1,970 | 1,874<br>850 | *4,234<br>*1,920 | 1,786<br>810 | 20 ft 4 in<br>6.2 m |
| 0 ft<br>0 m | lb<br>kg | | 12,238<br>5,550 | *11,664<br>*5,290 | 5,292<br>2,400 | *7,012<br>*3,180 | 3,352<br>1,520 | *5,579<br>*2,530 | 2,403<br>1,090 | *4,454<br>*2,020 | 1,852<br>840 | *4,498<br>*2,040 | 1,830<br>830 | 19 ft 8 in<br>6 m |
| -3 ft 3 in<br>-1 m | lb<br>kg | | 12,326<br>5,590 | *11,510<br>*5,220 | 5,270<br>2,390 | *7,695<br>*3,490 | 3,308<br>1,500 | *5,689<br>*2,580 | 2,381<br>1,080 | | | *4,829<br>*2,190 | 2,029<br>920 | 18 ft 4 in<br>5.6 m |
| -6 ft 7 in<br>-2 m | lb<br>kg | | 12,546<br>5,690 | *10,430<br>*4,730 | 5,336<br>2,420 | *7,144<br>*3,240 | 3,330<br>1,510 | | | | | *5,226<br>*2,370 | 2,492<br>1,130 | 16 ft 1 in<br>4.9 m |
| -9 ft 10 iin<br>-3 m | lb<br>kg | | 12,965<br>5,880 | *7,762<br>*3,520 | 5,535<br>2,510 | | | | | | | *5,755<br>*2,610 | 3,947<br>1,790 | 12 ft 0 in<br>3.7 m |

# SPECIFICATIONS




## WORKING RANGES

| Description | Standard Arm | Optional Arm |
|---|---|---|
| Boom | 11 ft 1 in (3.37 m) | |
| Arm options | 6 ft 11 in (2.1 m) | 5 ft 5 in (1.65 m) |
| A Max. digging reach | 23 ft 10 in (7,264 mm) | 22 ft 6 in (6,847 mm) |
| B Max. digging reach at ground level | 23 ft 3 in (7,082 mm) | 21 ft 10 in (6,651 mm) |
| C Max. digging depth | 14 ft 11 in (4,540 mm) | 13 ft 5 in (4,093 mm) |
| D Max. digging depth 2.4m (8 ft) level bottom | 13 ft 8 in (4,163 mm) | 12 ft 0 in (3,670 mm) |
| E Max. vertical wall digging depth Max. | 13 ft 0 in (3,963 mm) | 10 ft 0 in (3,043 mm) |
| F Max. digging height | 21 ft 5 in (6,625 mm) | 22 ft 1 in (6,724 mm) |
| G Max. dumping height | 15 ft 0 in (4,577 mm) | 15 ft 6 in (4,725 mm) |
| H Min. swing radius | 7 ft 11 in (2,421 mm) | 7 ft 11 in (2,421 mm) |
| I Dozer up | 1 ft 7 in (470 mm) | 1 ft 7 in (470 mm) |
| J Dozer down | 1 ft 8 in (510 mm) | 1 ft 8 in (510 mm) |
| Bucket digging force (ISO) | 14,163 lbf (63 kN) | |
| Arm digging force (ISO) | 8,318 lbf (37 kN) | 9,667 lbf (43 kN) |
| Bucket capacity | 0.37 $yd^3$ (0.28 $m^3$) | |
| Bucket tip radius | 3 ft 4 in (1,020 mm) | |

LGNA-SS-909ECR-20200908-ENG-US

EXCLUSIVELY FOR DEALER

LiuGong NORTH AMERICA

**LiuGong Construction Machinery N.A., LLC.**
22220 Merchants Way - Suite 100
Katy, TX 77449
USA
T: 281-579-8882 F: 281-579-8388
www.liugongna.com

Specifications and designs are subject to change without notice.
Machines shown may include optional equipment.