

FSA20-EQU18.0, ITEM# 90
EXCAVATOR: Mini Hydraulic Excavator - 7,105 LB
303E SHERIFF'S CONTRACT WORKSHEET

586-7899	303E CR HEXMN CFG 1.2
449-0425	303E CR MINI HYD EXCAVATOR
449-0430	CANOPY, TOPS
448-8288	CONTROL, PATTERN CHANGER
448-8290	DRAIN, STANDARD
449-0428	BLADE, STRAIGHT
449-0429	LINKAGE, BUCKET W/LIFTING EYE
416-6065	ENGINE, HIGH AMBIENT
308-2831	TRACK, 300MM(12"), RUBBER BELT
444-9934	ALARM, TRAVEL
540-4550	STICK, LONG, W/THUMB BRACKET
540-4556	HYDRAULICS, W/O 2ND AUX, LONG
574-1445	PRODUCT LINK, CELLULAR PL243
509-7000	INSTRUCTIONS, ANSI PL
296-1626	COUNTERWEIGHT, EXTRA
576-6980	HOOD, REAR, SOLID
449-0414	INSTRUCTIONS, ANSI
421-8926	SERIALIZED TECHNICAL MEDIA KIT

303E CR MINI HYDRAULIC EXCAVATOR
SAGAMI, JAPAN

Ship Weight
lbs

LIST PRICE
AT DEALER

Standard Equipment:

POWERTRAIN

C1.3 <19kW mechanical engine
Automatic two speed travel
B5 fuel/ bio fuel compatible
Mechanical throttle
Load sensing hydraulic system

ELECTRICAL

12 volt electrical system
40 ampere alternator
Beacon socket
Boom work light
Warning horn

OPERATOR ENVIRONMENT

100% pilot control ergonomic joysticks
Cup holder
Basic diagnostics monitor
-Fuel level
-Engine coolant temperature
-Hour meter
-Engine oil pressure
-Air cleaner, alternator and
glow plugs service interval
Hydraulic neutral lockout system

OTHER STANDARD EQUIPMENT

1-way and 2-way (combined function))
Accumulator
Auxiliary hydraulic lines
Adjustable auxiliary relief
Auxiliary line quick disconnects
Caterpillar corporate "one key" system
Compact radius design package
Dozer blade with float function
Heavy duty counterweight
High ambient cooling package
Hydraulic oil cooler
Load sensing hydraulics
Roll over protective structure (ROPS)
(ISO 12117-2)
Swing boom design
Swivel guard
Thumb ready stick
Tip over protective structure (TOPS)
(ISO 12117)
Top guard - ISO 10262 (level 1)



Cat[®] 303E CR

MINI HYDRAULIC EXCAVATOR

FEATURES:

The Cat[®] 303E CR Mini Hydraulic Excavator delivers high performance, durability and versatility in a compact design to help you work in a variety of applications. The 303E CR features the following:

- **Comfortable operator station** includes an air suspension seat, 76 mm (3 in) retractable seat belt, and a monitor display including fuel gauges and general diagnostics.
- **Key safety features come standard** including ROPS, TOPS and Top Guard Level 1 certification, as well as a travel alarm and the Cat interlock system.
- **With a width of 1550 mm (60 in) and weight of 3048 kg (6,721 lb)**, the 303E CR offers a robust compact radius design with excellent performance and stability.
- **Compact Radius Design** lets you work within confined areas. The radius of the upper body stays within the undercarriage so the operator can concentrate on the work being done without having to worry about the back of the machine.
- **High dig forces, fast cycle times and 200 degree bucket rotation angle** deliver the productivity that you demand.
- **Standard features including dozer blade float and automatic two speed** contribute to ease of machine operation and productivity.
- **Cat dealers offer you unmatched customer support** with excellent equipment management services, equipment maintenance and fast parts availability, resulting in optimized performance, reliability and profit.

Specifications

Engine

Engine Model	Cat C1.3*	
Rated Net Power @ 2,400 rpm ISO 9249/EEC 80/1269	17.5 kW	23.5 hp
Gross Power ISO 14396	18.5 kW	24.8 hp
Bore	78 mm	3.1 in
Stroke	88 mm	3.5 in
Displacement	1.3 L	77 in ³

*Engine meets U.S. EPA Tier 4 Final/EU Stage V emission standards.

Weights*

Operating Weight with Canopy		
Standard Stick	3048 kg	6,721 lb
Long Stick	3090 kg	6,813 lb
Standard Stick, Optional Counterweight	3314 kg	7,307 lb
Long Stick, Optional Counterweight	3356 kg	7,400 lb
Operating Weight with Cab		
Standard Stick	3267 kg	7,204 lb
Long Stick	3309 kg	7,296 lb
Standard Stick, Optional Counterweight	3533 kg	7,790 lb
Long Stick, Optional Counterweight	3575 kg	7,883 lb

*Weight includes counterweight, rubber tracks, bucket, operator, full fuel and auxiliary lines.

Travel System

Travel Speed – High	4.5 km/h	2.8 mph
Travel Speed – Low	2.4 km/h	1.5 mph
Max Traction Force – High Speed	15.2 kN	3,417 lb
Max Traction Force – Low Speed	30.9 kN	6,947 lb
Ground Pressure with Canopy		
Standard Stick	30.4 kPa	4.4 psi
Long Stick	30.8 kPa	4.5 psi
Standard Stick, Optional Counterweight	33.0 kPa	4.8 psi
Long Stick, Optional Counterweight	33.5 kPa	4.9 psi
Ground Pressure with Cab		
Standard Stick	32.6 kPa	4.7 psi
Long Stick	33.0 kPa	4.8 psi
Standard Stick, Optional Counterweight	35.2 kPa	5.1 psi
Long Stick, Optional Counterweight	35.6 kPa	5.2 psi
Gradeability (Continuous Operation)	20 degrees	
Gradeability (< 10 minutes Operation)	30 degrees	



303E CR Mini Hydraulic Excavator

Service Refill Capacities

Cooling System	4.7 L	1.2 gal
Engine Oil	5.7 L	1.5 gal
Fuel Tank	45 L	11.6 gal
Hydraulic Tank	47 L	12.4 gal
Hydraulic System	65 L	17.2 gal

Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow at 2,400 rpm	88 L/min	23.1 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	181 bar	2,625 psi
Auxiliary Circuit – Primary (186 bar/2,697 psi)	60 L/min	15.9 gal/min
Auxiliary Circuit – Secondary (174 bar/2,523 psi)	27 L/min	7.1 gal/min
Digging Force – Stick (Standard)	16.6 kN	3,732 lbf
Digging Force – Stick (Long)	14.8 kN	3,327 lbf
Digging Force – Bucket	28.4 kN	6,384 lbf

Operating Specifications

Stick Length – Standard	1260 mm	50 in
Stick Length – Long	1560 mm	61 in
Machine Overhang	0 mm	0 in
Machine Overhang with Extra Counterweight	115 mm	5 in

Swing System

Machine Swing Speed	9 rpm
Boom Swing – Left*	80°
Boom Swing – Right	50°

*Automatic swing brake, spring applied, hydraulic release.

Blade

Width	1550 mm	60 in
Height	335 mm	13 in
Dig Depth	472 mm	19 in
Lift Height	402 mm	16 in

Undercarriage

Number of Carrier Rollers	1
Number of Track Rollers	4
Track Roller Type	Center Flange

Certification – Cab and Canopy

Roll Over Protective Structure (ROPS)	ISO 12117-2:2008
Tip Over Protective Structure (TOPS)	ISO 12117:1997
Top Guard	ISO 10262:1998 (Level I)

Lift Capacities at Ground Level*

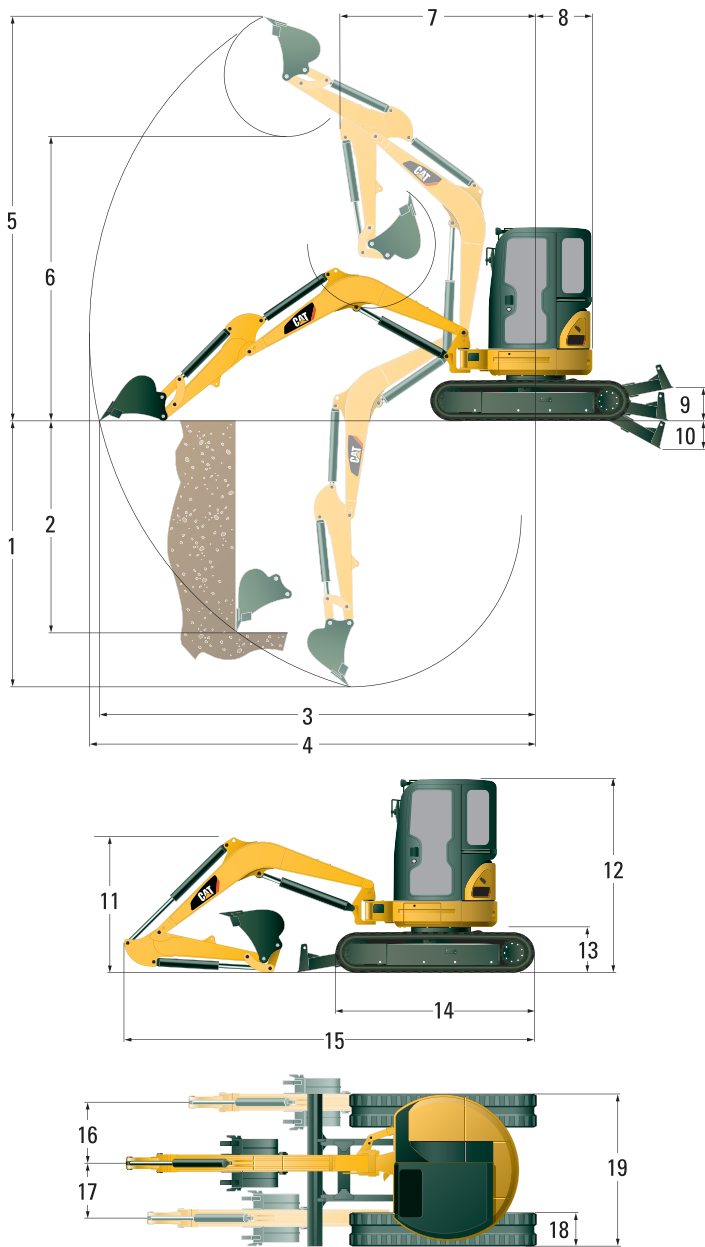
Lift Point Radius		3000 mm (9'8")		4000 mm (13'1")	
		Front	Side	Front	Side
Blade Down	kg	1170	540	740	340
	(lb)	(2,580)	(1,191)	(1,632)	(750)
Blade Up	kg	650	490	410	300
	(lb)	(1,433)	(1,080)	(904)	(662)

*The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart. Lifting capacities are for machine with cab, optional counterweight and standard stick.

303E CR Mini Hydraulic Excavator

Dimensions (All dimensions are approximate.)

	Standard Stick		Long Stick	
	mm	in	mm	in
1 Dig Depth	2750	108	2980	117
2 Vertical Wall	1960	77	1750	69
3 Maximum Reach at Ground Level	4810	189	4910	193
4 Maximum Reach	4950	195	5040	198
5 Maximum Dig Height	4530	178	4250	167
6 Maximum Dump Clearance	3150	124	2970	117
7 Boom In Reach	2110	83	2000	79
8 Tail Swing	775	31	775	31
Tail Swing with Extra Counterweight	890	35	890	35
9 Maximum Blade Height	402	16	400	16
10 Maximum Blade Depth	472	19	470	19
11 Boom Height in Shipping Position	1590	63	1600	63
12 Overall Shipping Height	2500	98	2500	98
13 Swing Bearing Height	565	22	565	22
14 Overall Undercarriage Length	2080	82	2080	82
15 Overall Shipping Length	4470	176	5030	198
16 Boom Swing Right	825	32	825	32
17 Boom Swing Left	610	24	610	24
18 Track Belt/Shoe Width	300	12	300	12
19 Overall Track Width	1550	60	1550	61



303E CR Mini Hydraulic Excavator

STANDARD EQUIPMENT

- 1-way and 2-way (combined function) auxiliary hydraulic lines
- Adjustable armrests
- Alternator
- Automatic swing park brake
- Automatic two speed travel
- Auxiliary line quick disconnects
- Boom cylinder guard
- Cab mounted work light
- Canopy with Top Guard ISO 10262:1998 (Level 1), ROPS ISO 12117-2:2008 and TOPS ISO 12117:1997
- Coat hook
- Cup holder
- Control pattern changer
- Dozer blade with float function
- Foot travel pedals
- Gauges or indicators for fuel level engine coolant temperature, hour meter, engine oil pressure, air cleaner, alternator and glow plugs, service interval
- Horn
- Hydraulic oil cooler
- Lifting eye on bucket linkage (standard equipment for all regions except Europe)
- Lockable storage box
- Low maintenance linkage pin joints
- Maintenance free battery
- Product Link™
- Rubber track
- Retractable seatbelt
- Standard stick
- Suspension seat, vinyl covered
- “Thumb ready” sticks
- Travel alarm (optional in Europe)

OPTIONAL EQUIPMENT

- Beacon socket for canopy machines
- Boom mounted light
- Cab, Top Guard ISO 10262:1998 (Level 1), ROPS ISO 12117-2:2008 and TOPS ISO 12117:1997
- High back suspension seat, fabric covered
- Mechanical quick coupler
- Mirrors for cab and canopy
- Steel track

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

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