

Ring Power®



Ring Power Corporation

500 World Commerce Parkway

St. Augustine, FL 32092

Prepared For:
Florida Sheriff's Association

8/5/2020

Item #90: (1) NEW CATERPILLAR 303E CR HYDRAULIC EXCAVATOR

CONTRACT DETAILS

Florida Sheriff's Association

Bid # FSA20-EQU18.0

Item #90: Group: Hydraulic Mini Excavator - 7,105 LB and Options

Contract Dates: October 1, 2020 through September 30, 2023

BID SPECIFICATION:

1. WEIGHT: a. 7,105 minimum capacity weight with canopy 2. ENGINE/CAB: a. Diesel engine, minimum 23 net horse power b. Rollover and falling object protective structures c. Gauges or warning indicators for fuel level, engine oil, hydraulic oil and coolant. 3. TRAVEL SYSTEM: a. Minimum high speed travel 2.3 MPH b. Minimum gradeability, 20 degrees c. 11" wide rubber belt tracks 4. HYDRAULIC SYSTEM: a. Gear type hydraulic pump b. Digging depth 9' minimum c. Auxiliary hydraulic circuit and controls plummed to the end of stick with disconnect to allow the use of hydro-mechanical work tools d. Backfill blade e. Hydraulic motor-driven swing system 5. ELECTRICAL SYSTEM: a. 12 volt electrical system b. 40 amp alternator c. Sealed electrical connector d. Work lights

BASE MACHINE

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
540-4557	STICK, STD, W/ THUMB BRACKET
540-4555	HYDRAULICS, W/O 2ND AUX, STD
574-1446	PRODUCT LINK, CELLULAR PL243
200-4682	COUNTERWEIGHT, STANDARD
576-6980	HOOD, REAR, SOLID

449-0414	INSTRUCTIONS, ANSI
464-9903	BUCKET-HD, 20", 3.3 FT3, 3T
421-8926	SERIALIZED TECHNICAL MEDIA KIT

Ring Power Corporation



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 in³

*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*

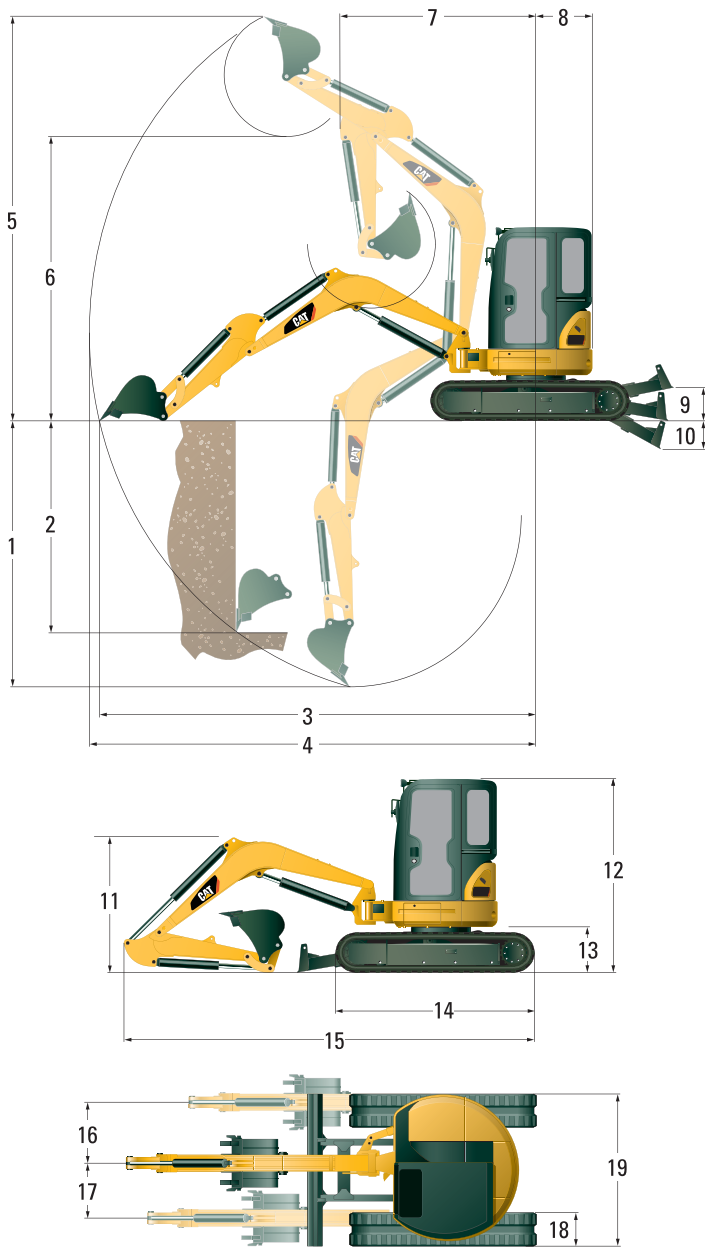
Lift Point Radius		3000 mm (9'8")		4000 mm (13'1")	
		Front	Side	Front	Side
Blade Down	kg	1170	540	740	340
	(lb)	(2,580)	(1,191)	(1,632)	(750)
Blade Up	kg	650	490	410	300
	(lb)	(1,433)	(1,080)	(904)	(662)

*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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AEHQ7318-03 (06-2019)
Replaces AEHQ7318-02
(Americas North and South,
EAME, ANZ)



Effective with sales to the first user on or after January 1, 2018

CATERPILLAR LIMITED WARRANTY

Designated Machines with 24 Months/2000 Hour Warranty

USA & Canada

Caterpillar Inc. or any of its subsidiaries ("Caterpillar") warrants the following new products sold by it in the USA or Canada to be free from defects in material and workmanship:

- Compact Construction Equipment including Compact Track & Multi Terrain Loaders, Mini Hydraulic Excavators, and Skid Steer Loaders sold in USA or Canada.
- Attachments/work tools installed on such machines prior to delivery (unless covered by the Cat® Work Tool warranty statement or another manufacturer's warranty). Hammer tool points and compacting plates used on hydraulic hammers are not warranted.

Additional warranties are applicable against breakage for certain Cat Ground Engaging Tools and for wear on all landfill compactor tips. Refer to the applicable warranty statements for coverage detail.

This warranty does not apply to:

- Cat Batteries
- Mobil-trac belts, rubber tracks used on multi terrain loaders, compact track loaders, and mini hydraulic excavators
- Cat Work Tools

These products are covered by other Caterpillar warranties. This warranty is subject to the following:

Warranty Period

For new machines sold in the USA or Canada the warranty period is 24-months/2000 hours, starting from date of delivery to the first user.

Note:

- For hydraulic line's quick connect/disconnect components sold on compact wheel loaders, mini hydraulic excavators, skid steer loaders, multi terrain loaders, and compact track loader machines, the warranty period is 50 hours starting from the date of delivery to the first user.

Caterpillar Responsibilities

If a defect in material or workmanship is found during the warranty period, Caterpillar will, during normal working hours and at a place of business of a Cat dealer or other source approved by Caterpillar

- Provide (at Caterpillar's choice) new, remanufactured, or Caterpillar approved repaired parts or assembled components needed to correct the defect.

Note: New, remanufactured, or Caterpillar approved replacement parts provided under the terms of this warranty are warranted for the remainder of the warranty period applicable to the product in which installed as if such parts were original components of that product. Items replaced under this warranty become the property of Caterpillar.

- Replace lubricating oil, filters, antifreeze, and other service items made unusable by the defect.
- Provide reasonable and customary labor needed to correct the defect.

User Responsibilities

The user is responsible for:

- Providing proof of delivery date to the first user.
- Labor costs, except as stated under "Caterpillar Responsibilities."

- Transportation costs, except as stated under "Caterpillar Responsibilities."
- Premium or overtime labor costs.
- Parts shipping charges in excess of those that are considered usual and customary.
- Local taxes, if applicable.
- Costs to investigate complaints, unless the problem is caused by a defect in Caterpillar material or workmanship.
- Giving timely notice of a warrantable failure and promptly making the product available for repair.
- Performance of the required maintenance (including use of proper fuel, oil, lubricants, and coolant) and items replaced due to normal wear and tear.
- Allowing Caterpillar access to all electronically stored data.

Limitations

Caterpillar is not responsible for:

- Failures resulting from any use or installation that Caterpillar judges improper.
- Failures resulting from attachments, accessory items, and parts not sold or approved by Caterpillar.
- Failures resulting from abuse, neglect, and/or improper storage or repair.
- Failures resulting from user's delay in making the product available after being notified of a potential product problem.
- Failures resulting from unauthorized repair or adjustments, and unauthorized fuel setting changes.

continued...

This warranty covers every major component of the products. Claims under this warranty should be submitted to a place of business of a Cat dealer or other source approved by Caterpillar. For further information concerning either the location to submit claims or Caterpillar as the issuer of this warranty, write Caterpillar Inc., 100 N. E. Adams St., Peoria, IL USA 61629, telephone 1 (309) 675-1000, or go to URL www.cat.com, Find Your Dealer

Caterpillar's obligations under this Limited Warranty are subject to, and shall not apply in contravention of, the laws, rules, regulations, directives, ordinances, orders, or statutes of the United States, or of any other applicable jurisdiction, without recourse or liability with respect to Caterpillar.

A) For products operating outside of Australia, Fiji, Nauru, New Caledonia, New Zealand, Papua New Guinea, the Solomon Islands, and Tahiti, the following is applicable:

NEITHER THE FOREGOING EXPRESS WARRANTY NOR ANY OTHER WARRANTY BY CATERPILLAR, EXPRESS OR IMPLIED, IS APPLICABLE TO ANY ITEM CATERPILLAR SELLS THAT IS WARRANTED DIRECTLY TO THE USER BY ITS MANUFACTURER.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EXCEPT CATERPILLAR EMISSION-RELATED COMPONENTS WARRANTY FOR NEW ENGINES, WHERE APPLICABLE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISION OF MATERIAL AND SERVICES, AS SPECIFIED HEREIN.

CATERPILLAR IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

CATERPILLAR EXCLUDES ALL LIABILITY FOR OR ARISING FROM ANY NEGLIGENCE ON ITS PART OR ON THE PART OF ANY OF ITS EMPLOYEES, AGENTS, OR REPRESENTATIVES IN RESPECT OF THE MANUFACTURE OR SUPPLY OF GOODS OR THE PROVISION OF SERVICES RELATING TO THE GOODS.

IF OTHERWISE APPLICABLE, THE VIENNA CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS IS EXCLUDED IN ITS ENTIRETY.

B) For products operating in Australia, Fiji, Nauru, New Caledonia, New Zealand, Papua New Guinea, the Solomon Islands, and Tahiti, the following is applicable:

THIS WARRANTY IS IN ADDITION TO WARRANTIES AND CONDITIONS IMPLIED BY STATUTE AND OTHER STATUTORY RIGHTS AND OBLIGATIONS THAT BY ANY APPLICABLE LAW CANNOT BE EXCLUDED, RESTRICTED OR MODIFIED ("MANDATORY RIGHTS"). ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED (BY STATUTE OR OTHERWISE), ARE EXCLUDED. WITHOUT LIMITING THE FOREGOING PROVISIONS OF THIS PARAGRAPH, WHERE A PRODUCT IS SUPPLIED FOR BUSINESS PURPOSES, THE CONSUMER GUARANTEES UNDER THE CONSUMER GUARANTEES ACT 1993 (NZ) WILL NOT APPLY.

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IF OTHERWISE APPLICABLE, THE VIENNA CONVENTION (CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS) IS EXCLUDED IN ITS ENTIRETY.

C) For products supplied in Australia:

IF THE PRODUCTS TO WHICH THIS WARRANTY APPLIES ARE:

- I. PRODUCTS OF A KIND ORDINARILY ACQUIRED FOR PERSONAL, DOMESTIC OR HOUSEHOLD USE OR CONSUMPTION; OR**
- II. PRODUCTS THAT COST AUD 40,000 OR LESS,**

WHERE THOSE PRODUCTS WERE NOT ACQUIRED FOR THE PURPOSE OF RE-SUPPLY OR FOR THE PURPOSE OF USING THEM UP OR TRANSFORMING THEM IN THE COURSE OF PRODUCTION OR MANUFACTURE OR IN THE COURSE OF REPAIRING OTHER GOODS OR FIXTURES, THEN THIS SECTION C APPLIES.

THE FOLLOWING MANDATORY TEXT IS INCLUDED PURSUANT TO THE AUSTRALIAN CONSUMER LAW AND INCLUDES REFERENCES TO RIGHTS THE USER MAY HAVE AGAINST THE DIRECT SUPPLIER OF THE PRODUCTS: OUR GOODS COME WITH GUARANTEES THAT CANNOT BE EXCLUDED UNDER THE AUSTRALIAN CONSUMER LAW. YOU ARE ENTITLED TO A REPLACEMENT OR REFUND FOR A MAJOR FAILURE AND COMPENSATION FOR ANY OTHER REASONABLY FORESEEABLE LOSS OR DAMAGE. YOU ARE ALSO ENTITLED TO HAVE THE GOODS REPAIRED OR REPLACED IF THE GOODS FAIL TO BE OF ACCEPTABLE QUALITY AND THE FAILURE DOES NOT AMOUNT TO A MAJOR FAILURE. THE INCLUSION OF THIS TEXT DOES NOT CONSTITUTE ANY REPRESENTATION OR ACCEPTANCE BY CATERPILLAR OF LIABILITY TO THE USER OR ANY OTHER PERSON IN ADDITION TO THAT WHICH CATERPILLAR MAY HAVE UNDER THE AUSTRALIAN CONSUMER LAW.

TO THE EXTENT THE PRODUCTS FALL WITHIN THIS SECTION C BUT ARE NOT OF A KIND ORDINARILY ACQUIRED FOR PERSONAL, DOMESTIC OR HOUSEHOLD USE OR CONSUMPTION, CATERPILLAR LIMITS ITS LIABILITY TO THE EXTENT IT IS PERMITTED TO DO SO UNDER THE AUSTRALIAN CONSUMER LAW TO, AT ITS OPTION, THE REPAIR OR REPLACEMENT OF THE PRODUCTS, THE SUPPLY OF EQUIVALENT PRODUCTS, OR THE PAYMENT OF THE COST OF SUCH REPAIR OR REPLACEMENT OR THE ACQUISITION OF EQUIVALENT PRODUCTS.

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