

RFO COPY

TYPE NAME/ADDRESS HERE

State of West Virginia Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

Request for BEQNUMBER Quotation

VET012166

1

ADDRESS CORRESPONDENCE TO ATTENTION OF

ARA LYLE 304-558-2544

DIVISION OF VETERANS AFFAIRS ATTENTION: C. PRATHER SUITE 101 1321 PLAZA EAST CHARLESTON, WV

25301-1400

558-3661

SHIP VIA FREIGHT TERMS DATE PRINTED TERMS OF SALE F.O.B. 05/03/2012 BID OPENING DATE: 06/06/2012 BID OPENING TIME 01:30PM AMOUNT LINE QUANTITY UOP ITEM NUMBER UNIT PRICE 0001 S **\$20-33** \$ 129,868 1 MINI-TRACK & SKID STEER LOADER & BACKHOE W/ATTACH THE WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, WV DIVISION OF VETERANS ASSISTANCE, IS \$OLICITING BIDS TO PROVIDE ONE (1) MINITARACK LOADER, (1) ONE SKID-STEER LOADER AND 1) ONE BACKHOE, ALL WITH ATTACHMENTS, FOR THE WV VETERANS CEMETERY LOCATED IN DUNBAR, PER THE ATTACHED SPECIFICATIONS. INOUIRIES: WRITTEN QUESTIONS WILL BE ACCEPTED UNTIL CLOSE OF BUSINESS ON (5/21/2012) QUESTIONS MAY BE SENT VIA ΨSPS, FAX, COURIER OR E-MAIL. IN ORDER TO ASSURE NO VENDOR RECEIVES AN UNFAIR ADVANTAGE, NO SUBSTANTIVE QUESTIONS WILL BE ANSWERED ORALLY. IF POSSIBLE, E-MAIL QUESTIONS ARE PREFERRED. ADDRESS INQUIRIES TO: TARA LYLE DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION 019 WASHINGTON STREET, EAST CHARLESTON, WV 25305 HAX: 304-558-4115 RMAIL: TARA L LYIE@WV GOV SEE REVERSE SIDE FOR TERMS AND CONDITIONS SIGNATURE TELEPHONE TITLE FEIN ADDRESS CHANGES TO BE NOTED ABOVE 55-0352447

## GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

- 1. Awards will be made in the best interest of the State of West Virginia.
- 2. The State may accept or reject in part, or in whole, any bid.

3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division

and have paid the required \$125 fee.

- 4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.
- 5. Payment may only be made after the delivery and acceptance of goods or services.
- 6. Interest may be paid for late payment in accordance with the West Virginia Code.
- 7. Vendor preference will be granted upon written request in accordance with the West Virginia Code.
- 8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
- 10. The laws of the State of West Virginia and the Legislative Rules of the Purchasing Division shall govern the purchasing process.
- 11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
- 12. BANKRUPTCY: In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
- 13. HIPAA BUSINESS ASSOCIATE ADDENDUM: The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at www.state.wv.us/admin/purchase/vrc/hipaa.html and is hereby made part of the agreement provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
- 14. CONFIDENTIALITY: The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf.
- 15. LICENSING: Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.
- 16. ANTITRUST: In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or Fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

#### INSTRUCTIONS TO BIDDERS

- 1. Use the quotation forms provided by the Purchasing Division, Complete all sections of the quotation form.
- 2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as EQUAL to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.

3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.

- 4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130
- 5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6).



VENDOR

RFQ COPY

TYPE NAME/ADDRESS HERE

State of West Virginia Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

## Request for Guotation VET012166

PAGE 2

ADDRESS CORRESPONDENCE TO ATTENTION OF

TARA LYLE 304-558-2544

DIVISION OF VETERANS AFFAIRS ATTENTION: C. PRATHER SUITE 101 1321 PLAZA EAST

CHARLESTON, WV 25301-1400 558-3661

DATE PRINTED	TERMS OF SALE	AIV 9IH¢	F,O,B;	FREIGHT TERMS
05/03/2012				
BID OPENING DATE: 0	6/06/2012	BTD OPI	ENING TIME 01	:30PM
LINE QUAY	NTITY UOP OAT.	ITEM NUMBER	UNIT PRICE	AMOUNT
RIGHT T NOTICE SUPPLIE	O CANCEL THIS CO TO THE VENDOR IF D ARE OF AN INFE	TOR OF PURCHASING NTRACT IMMEDIATELY THE COMMODITIES ARIOR QUALITY OR DOT THE BID AND CONT	Y UPON WRITTEN AND/OR SERVICES O NOT CONFORM	
FOR BAN CONTRAC	KRUPTOY PROTECTI	NT THE VENDOR/CONTON, THE STATE MAY AND TERMINATE SUC	DEEM THE	
THE ACC INTENDE FARTICU ALTERNA LITERAT INFORMA REJECTI TO WAIV IN ACCO	EPTABLE LEVEL OF D TO REFLECT A FLAR BRAND OR VENTES SHOULD SO STURE AND SPECIFIC TION FOR ANY ALTON OF THE BID.  E MINOR IRREGULARDANCE WITH SECT	CATIONS NAMED HERE QUALITY ONLY AND REFERENCE OR FAVOR DOR, VENDORS WHO ATE AND INCLUDE PERITORS, FAILURE TO SERVE SERVES THE STATE RESERVES RITIES IN BIDS OR ION 148-1-4(F) OF LES AND REGULATION	ARE NOT R ANY ARE BIDDING ERTINENT TO PROVIDE DUNDS FOR S THE RIGHT SPECIFICATIONS THE WEST	
(1) HE THE BID THE BID THE BID THE BID	OR SHE IS AUTHOR OR ANY DOCUMENT DER, (2) THAT HE DER IN A CONTRAC DER HAS PROPERLY	THIS BID IS CERTIFIZED BY THE BIDDER SELATED THERETO OR SHE IS AUTHORITUAL RELATIONSHIP, REGISTERED WITH A RE REGISTRATION.	R TO EXECUTE ON BEHALF OF IZED TO BIND , AND (3) THAT	
		FERENCE CERTIFICATEEN REPLACED BY IN		
TERO TON		VERSE SIDE FOR TERMS AND CONDI	TIONS	L
SIGNATURE		TELEPHONE	DATE	. 1 . 1 . 3
TITLE / Police / C	FEIN		The state of the first and the state of the	6/4/12
SALES REP.	55-635	52647	ADDRESS CHANGES	3 TO BE NOTED ABOVE



DATE PRINTED

State of West Virginia Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

TERMS OF SALE

Request for Guotation VET012166

F,O.B,

PAGE 3

FREIGHTTERMS

ADDRESS CORRESPONDENCE TO ATTENTION OF:

TARA LYLE 304-558-2544

RFQ COPY TYPE NAME/ADDRESS HERE DIVISION OF VETERANS AFFAIRS ATTENTION: C. PRATHER SUITE 101 1321 PLAZA EAST CHARLESTON, WV 25301-1400 558-3661

SHIP VIA

05/03								
BID OPENING DAT	1 0070072			BID C	PENING '		01;30PM	
LINE	QUANTITY	UOP	AT. NO.	ITEM NUMBER	UNI	TPRICE		AMOUNT
	HTTP://WWW.ST		.us/ oti	ADMIN/PURCHASE/V CE	RC/VENPI	REF, PDF		
	A SIGNED BID	MUST BE	ទ នប	BMITTED TO:				
	PURCHASI BUILDING 2019 WAS	NG DIVI 15 HINGTON	SIC ISI	NISTRATION N REET, EAST 305-0130		9	3	
				THIS INFORMATION MAY NOT BE CONS		FACE O	F	
-	EUYER:			-TL/32				
	RFQ. NO.:			-VET012166			-	ja .
	BID OPENING D	ATE:		-06/06/2012				
	BID OPENING T	IME:		-1:30 PM				
	PLEASE PROVID TO CONTACT YO	U REGAR	DIN		IS NECES	SSARY		
		(304)	57.	6404				8
(	_L		EE REV	/ERSE SIDE FOR TERMS AND CO	NOITIONS			
SIGNATURE	27 Com			TELEPHONE	543-54	06	ATE 6/6	112
TITLE	REP. FI	5.5 -	035	2647			IGES TO BE N	THE STATE OF



RFQ COPY

State of West Virginia Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

## Request for BEONUMBER VETO12166

PAGE

ADDRESS CORRESPONDENCE TO ATTENTION OF

TARA LYLE 304-558-2544

DIVISION OF VETERANS AFFAIRS ATTENTION: C. PRATHER SUITE 101 1321 PLAZA EAST CHARLESTON, WV

TYPE NAME/ADDRESS HERE NEW DOK 25301-1400 558-3661 DATE PRINTED TERMS OF SALE FREIGHT TERMS SHIP VIA F.O.B.

05/03/2 BID OPENING DATE:	2012				
BID OPENING DATE:	06/06/2	012	BID O	PENING TIME 01	30PM
LINE	QUANTITY	UOP CAT.	ITEM NUMBER	UNIT PRICE	AMOUNT
C	ONTACT PERSO		PRINT CLEARLY):		
*	**** THIS	IS THE END	OF RFQ VET0121	66 ***** TOTAL:	#129,868
					**
SIGNATURE	3 0-	SEE AE	VERSE SIDE FOR TERMS AND CON TELEPHONE (304)	IDITIONS DATE	6/6/12
TITLE	REP.	5S-035			TO BE NOTED ABOVE

#### VET012166

The WV Department of Veteran's Assistance is soliciting bids for a mini-track loader with attachments, a skid-steer loader with attachments and a backhoe with attachments for the Donel Kinnard Memorial State Veterans Cemetery in Dunbar, WV.

The equipment must be manufactured for commercial use. All items must be new. Damaged or defective items must be replaced at no additional expense to the WV Department of Veterans Assistance.

If bidding "or equal" brands, Vendors should attach manufacturer's literature documenting that it meets the requirements stated in the specifications. If vendors are bidding equivalent products, product literature should be included with your bid.

All items are to be FOB Destination. Freight or delivery prices should be included in the bid price. Items to be delivered to the Donel Kinnard Memorial State Veterans Cemetery located at 130 Academy Drive Dunbar, WV 25064. Delivery should occur 30 days after the purchase order issued to the successful vendor.

The contract may be awarded to one or multiple vendors, depending what is in the best interest of the State, with the lowest bid meeting all of the specifications with the most complete bid. An authorized signature must be in the bid.

See additional specifications.

VVV-36 (Rev. 01/01/07)

N-36(Rev.01/01/07) STATE OF WEST VIRGINIA		Page	of	Pages Requisition / P.O. No.: VET012166	
PURCHASE CONT		File:		Acct. No.:	
/endor:	P.O. Date:	1 '	ing Unit: ns Assistan	ice	

		Veterans Assistance			
Quantity	Doscription	Unit	Price	Amount	
1	cold weather assist standard.	v plug	BID		
	WORKING RANGE: Angle of departure to be appx 23 degrees Ground clearance must be 4.5 inches Turning radius with standard bucket appx 55 inches Track tread width appx 7 inches Width over tracks appx 36 inches Width over bucket appx 36 inches PERFORMANCE:				
	Tipping load - SAE rated appx 1700 lbs Forward speed appx 3.5 mph Reverse speed appx 1.5 mph Parking brake Reverse stop panel  DRIVE SYSTEM:				
	Transmission shall be a direct drive of hydrostatic motor undercarriage drive sprocket  HYDRAULIC SYSTEM: Pump Type - gear type capable of providing 12 gpm for lift arm and attachment operation. System pressure at the quick couplers shall be appx 290 Standard auxiliary hydraulics. Shall include flush face st couplers. Standard continuous flow shutoff lever	bucket, 10 psi			
	configuration. Includes lift (with float detent), tilt and from auxiliary hydraulic spools.  Double-acting cylinders. Tilt cylinders shall have cushion feature on dump.  Standard hydraulic oil cooler  Cylinders shall meet the following minimum specification  Lift - 2 cylinders, bore diameter 2.25", rod diameter 1. stroke14.16"	ning s: 25",			
		Quantity  Description  MINI-TRACK LOADER, Bobcat MT55, or equal ENGINE: 3 cylinder, liquid cooled diesel, appx. 25 hp Must meet EPA Tier IV Emission Standards Spark arrestor muffler, dual element air cleaner and glov cold weather assist standard. Engine coolant shall include propylene glycol anti-freeze freeze protection to -34 degrees 12 volt battery with minimum of 530 cold-cranking amps 40 amp alternator 12 volt starter Glow plug starting aid  WORKING RANGE: Angle of departure to be appx 23 degrees Ground clearance must be 4.5 inches Turning radius with standard bucket appx 55 inches Track tread width appx 7 inches Width over tracks appx 36 inches Width over tracks appx 36 inches  PERFORMANCE: Rated operating capacity - SAE appx 550 lbs Tipping load - SAE rated appx 1700 lbs Forward speed appx 3.5 mph Reverse speed appx 3.5 mph Reverse speed appx 1.5 mph Parking brake Reverse stop panel  DRIVE SYSTEM: Fully hydrostatic rubber track drive Transmission shall be a direct drive of hydrostatic motor undercarriage drive sprocket  HYDRAULIC SYSTEM: Pump Type - gear type capable of providing 12 gpm for lift arm and attachment operation. System pressure at the quick couplers shall be appx 290 Standard auxiliary hydraulics. Shall include flush face st couplers. Standard continuous flow shutoff lever Control valve -three spool, open center, series parallel configuration. Includes lift (with float detent), tilt and fron auxililary hydraulic spools. Double-acting cylinders. Tilt cylinders shall have cushior feature on dump. Standard hydraulic oil cooler Cylinders shall meet the following minimum specification Lift - 2 cylinders, bore diameter 2.25", rod diameter 1. stroke14.16" Tilt - 1 cylinider, bore diameter 3", rod diameter 1.25",	Quantity Description Unit  MINI-TRACK LOADER, Bobcat MT55, or equal ENGINE: 3 cylinder, liquid cooled diesel, appx. 25 hp Must meet EPA Tier IV Emission Standards Spark arrestor muffler, dual element air cleaner and glow plug cold weather assist standard. Engine coolant shall include propylene glycol anti-freeze with freeze protection to -34 degrees 12 volt battery with minimum of 530 cold-cranking amps 40 amp alternator 12 volt starter Glow plug starting ald  WORKING RANGE: Angle of departure to be appx 23 degrees Ground clearance must be 4.5 inches Turning radius with standard bucket appx 55 inches Track tread width appx 7 inches Width over bucket appx 36 inches Width over bucket appx 36 inches PERFORMANCE: Rated operating capacity - SAE appx 550 ibs Tipping load - SAE rated appx 1700 lbs Forward speed appx 3.5 mph Reverse speed appx 1.5 mph Parking brake Reverse stop panel  DRIVE SYSTEM: Fully hydrostatic rubber track drive Transmission shall be a direct drive of hydrostatic motor to main undercarriage drive sprocket  HYDRAULIC SYSTEM: Pump Type - gear type capable of providing 12 gpm for bucket, lift arm and attachment operation. System pressure at the quick couplers shall be appx 2900 psi Standard auxiliary hydraulics. Shall include flush face style quick couplers. Standard continuous flow shutoff lever Control valve -three spool, open center, series parallel configuration. Includes lift (with float detent), tilt and front auxiliary hydraulic spools. Double-acting cylinders. Tilt cylinders shall have cushioning feature on dump. Standard hydraulic oli cooler Cylinders shall meet the following minimum specifications: Lift - 2 cylinders, bore diameter 3", rod diameter 1.25", stroke	Quantity  Doscription  Unit Price  MINI-TRACK LOADER, Bobcat MT55, or equal ENGINE: 3 cylinder, Ilquid cooled diesel, appx. 25 hp Must meet EPA Tier IV Emission Standards Spark arrostor muffler, dual element air cleaner and glow plug cold weather assist standard. Engine coolant shall include propylene glycol anti-freeze with freeze protection to -34 degrees 12 volt battery with minimum of 530 cold-cranking amps 40 amp alternator 12 volt starter glow plug starting aid  WORKING RANGE: Angle of departure to be appx 23 degrees Ground clearance must be 4.5 inches Turning radius with standard bucket appx 55 inches Track tread width appx 7 inches Width over bucket appx 36 inches Width over bucket appx 36 inches  PERFORMANCE: Rated operating capacity - SAE appx 550 lbs Tipping load - SAE rated appx 1700 lbs Forward speed appx 3.5 mph Reverse speed appx 3.5 mph Reverse speed appx 1.5 mph Parking brake Reverse stop panol  DRIVE SYSTEM: Fully hydrostatic rubber track drive Transmission shell be a direct drive of hydrostatic motor to main undercarriage drive sprocket  HYDRAULIC SYSTEM: Pump Type - gear type capable of providing 12 gpm for bucket, lift arm and attachment operation. System pressure at the quick couplers shall be appx 2900 psi Standard auxiliary hydraulics. Shall include flush face style quick couplers. Standard continuous flow shutoff lever Control valve -three spool, open center, series parallel configuration. Includes lift (with float detent), lift and front auxiliary hydraulic spools. Double-acting cylinders. Tilt cylinders shall have cushioning feature on dump. Standard includes lift (with float detent), lift and front auxiliary hydraulic spools. Double-acting cylinders, Tilt cylinders shall have cushioning feature on dump. Standard in pet the following minimum specifications: Lift - 2 cylinders, bore diameter 2.25", rod diameter 1.25", stroke14.16" Tilt - 1 cylinder, bore diameter 3", rod diameter 1.25", stroke14.16"	

#### S

#### P

WW-36 (Rev. 01/01/07) STATE OF WEST VIRGINIA	Page of Pages Requisition / P.O. No.: VET012166			
PURCHASE CONTINUAT	TION SHEET	File;	Arct No.:	
Vendor:	P,O. Date:	Spending Unit: Veterans Assistance	: ө	

		· · · · · · · · · · · · · · · · · · ·	Veterans Assistance			
Itom No.	Quantity	Description		Unit Price	Amount	
		CONTROLS: Vehicle Steering - Direction and speed controlled by one multi-function handle Hydraulic Functions - lift and tilt functions controlled by or lever. (Front auxiliary hydraulics (standard equipment) or by fore/aft movement of hand lever Engine speed - controlled by hand lever throttle Engine starting and shutdown functions shall be controlled electrically with the key switch.	ne hand ontrolled			
		Fuel tank capacity 7 gal. minimum				
		INSTRUMENTATION: Loader conditions shall be monitored by a combination o and warning lights in the operator's line of sight that mon following functions: Engine coolant temperature Engine oil pressure Hourmeter Hydraulic Oil temperature System voltate Fuel level				
		Must have easy access to all lift arm greasepoints Rod end of the tilt cylinder shall have a replaceable bush Standard safety equipment	ing			
		Altachments: Standard ride on platform Standard 36" bucket		No 620		
2	1	SKID-STEER LOADER, Bobcat Model S185, or equal ENGINE: Liquid cooled 4 cylinder engine Emissions Tier (EPA) Interim Tier 4 Diesel engine 61 hp minimum	CAT 246 C	#33,017		
		Appx 24 gal fuel tank				
		HYDRAULIC SYSTEM: System relief quick couplers, 330 psi Auxillary standard flow appx 16.9 gpm Auxiliary high flow appx 26.4 gpm Hydraulic oil cooler shall be standard equipment Lift circuit port relief valve shall be standard equipment PERFORMANCE: Rated operating capacity 1850 lbs Tipping load appx 4076 lbs				

WV-36 (Rev. 01/01/07)

#### STATE OF WEST VIRGINIA

### PURCHASE CONTINUATION SHEET

Page	_ of	Pages	Regulsition / P.O. No.: VET012166	
File:		Accl. No.:	1	
Spendir	ng Unit:	-	***************************************	

Vendor:			ns Assistance	
Item No.	Quantity	Description	Unit Prico	Amount
		Turning radius 78" minimum Wheelbase 40" minimum Adjustable seat Back-up alarm BICS System Cab enclosure Cab heater Lift-arm support Seat belt Hydraulic Bucket Positioning Spark arrestor muffler Front and rear windshield wipers Dome light standard Front and rear operating lights Appx 24 gal fuel tank capacity  DRIVE SYSTEM: Shall have a fully hydrostatic four-wheel drive Transmission shall be infinitely variable tandem hydrostatic piston pumps, driving two fully reversing hydrostatic drive mi Hydrostatic piston pumps shall be belt driven and shall not require any adjustments Final drive chains shall be pre-stressed #80 HSOC endless chain (no master link) Two chains per each side of the loader with no idler sprocke shall not require periodic adjustments Axle seals shall be protected by the wheel hub and shall not need greasing Parking brake shall be a positive engagement wedge and lo Tires: 10-16.5, 8 PR, Standard duty tires  OPERATOR CONTROLS: Loader direction, steering and travel speed shall be controlled two independent steering levers Loader lift and tilt functions shall be controlled by separate fo pedals Engine speed shall be controlled by a finger operated rocke switch on control panel Engine starting and shutdown functions shall be controlled electrically with a key switch.  ATTACHMENTS: All attachments shall be mounted on a quick-change mechan that allows for changes by experienced operator in two minu A single control unit shall be provided which will control all attachments	otors roller ot and ver be ed by pot later	

VV-36 (Rev. 01/01/07)

#### STATE OF WEST VIRGINIA

### **PURCHASE CONTINUATION SHEET**

Page	of	Pages	Requisition / P.O. No.: VET012166
File:		Acct. No.	:
opendin		<u> </u>	

Vendor:	P.O. Date:	Veteran	s Assislance	
Item No. Quar	tity Description		Unit Price	Amoun
	ATTACHMENTS REQUESTED; Pallet fork Auger, 24" Auger, 36" Grapple, 55" with general purpose bud Sweeper, 72" with gutter brush Brush saw, 28" diameter minimum Rotary Cutter, 72" standard flow Chipper 9" feeder opening Reversible tool steel blades Discharge chute with adjustable de Snowblower 72" minimum width 14" minimum auger diameter 270 degree chute rotation Hydraulic deflector control	ket	737 1838 735 2319 3780 100 1284 11284 3728	
3 1	BACKHOE, John Deere Model 310J, of 72 hp 4.5L diesel engine minimum Altitude compensating turbocharged et MFWD & Powershift 4-speed transmis 19.5L-24" 10PR rear tires 12-16.5" 8PR front tires Cab with dual doors Mechanical suspension fabric seat Single battery Extendible dipperstick w/5 function hydratic stabilizers W/cam lock reversible pads Loader with RTD W/2 function hydrauli 1000 lb front counterweight Multi brand quick coupler Hydrostatic power and emergency stee Power assisted, hydraulic wet disc brais self-equalizing Standard Backhoe controls Standard Loader controls Standard Loader controls Appx 41 gal fuel tank  ATTACHMENTS:  36" Bellhole & Cemetery Bucket 2 year warranty required	ngine sion raulics and standard cs ring ces, self-adjusting and	41310	

em#	Description	Estimated Quantity	Unit Price	Extended Amount				
1	Mini-Track Loader, bobcat MT55, or equal	1	No Bid	_				
O TOP S	Attachments per specifications for Mini-Track Loader							
	Standard Ride on Platform for Mini-Track Loader or equal	1	No Bid					
	Standard 36" Bucket for Mini-Track Loader or equal	1	No Bid					
2	Skid-Steer Loader, Bobcat Model S185, or equal CAT 246 C	1	433017	\$33,017				
N.O.	Attachments per specifications for Mini-Track Loader							
	Pallet Fork or equal FFC 48"PF	1	Lel 4	せつつつ				
	Auger 24" or equal X1475 drive w/24" bit	1	# 1838	# 1838				
	Auger 36" or equal 36" bit (uses drive above)	1	<b>4</b> 735	<b>4</b> 735				
	Grapple 55" with general purpose bucket or equal FSG 66"	1	\$ 2319	#2319				
	Sweeper 72" with gutter brush or equal 60" happer w/qutter b	Xish 1	<i>₫</i> 3780	#3780				
	Brush saw 28" or equal	1	No Bid					
	Rotary Cutter 72" standard flow or equal Bradco 72" RC	1	\$2159	#2159				
	Chipper 9" feeder opening - per the specifications ECSKINE	1	\$11,286	#11,286				
	Snowblower per the specifications FFC 84	1	4 3728	<b>43728</b>				
3	Backhoe, John Deere Model 310J, or equal CAT 416 E	1	\$68,969	\$ 68,969				
	Attachments per specifications for Mini-Track Loader							
	36" Bellhole and cemetery bucket or equal Wes K- Brau	1	4 1310	\$1310				
	Failure to use this form may result in disqualification		GRAND TOTAL:	s 129,868				
	Bidder / Vendor Information:			,				
	Name: CECIL I. WALKER MACHY	JERY Co.						
	Address: P.O. Box 2427							
	CHARLESTON, WY 25329							
	Phone#: (304) 949 - 6400							
	Email Address: mconner @ walker - cat.	com						
	Authorized Signature:							

Rev. 09/08

### State of West Virginia

## VENDOR PREFERENCE CERTIFICATE

Certification and application\* is hereby made for Preference in accordance with West Virginia Code, §5A-3-37. (Does not apply to construction contracts). West Virginia Code, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the West Virginia Code. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

_	1.	Application is made for 2.5% resident vendor pr Bidder is an individual resident vendor and has reside	reference for the reason checked: ed continuously in West Virginia for four (4) years immediately preced-
	<u> </u>	business continuously in West Virginia for four (4) ye ownership interest of Bidder is held by another indivi- maintained its headquarters or principal place of business and the detection of this certification; or	sident vendor and has maintained its headquarters or principal place of ears immediately preceding the date of this certification; or 80% of the dual, partnership, association or corporation resident vendor who has usiness continuously in West Virginia for four (4) years immediately
		Bidder is a nonresident vendor which has an affiliate of and which has maintained its headquarters or princi years immediately preceding the date of this certific	
2020	2.	working on the project being bid are residents of Wei immediately preceding submission of this bid; or,	ng the life of the contract, on average at least 75% of the employees st Virginia who have resided in the state continuously for the two years
12	3.	affiliate or subsidiary which maintains its headquar minimum of one hundred state residents who certif employees or Bidder's affiliate's or subsidiary's em continuously for the two years immediately precedi	Im of one hundred state residents of is a nomesident vertical with an iters or principal place of business within West Virginia employing a ies that, during the life of the contract, on average at least 75% of the ployees are residents of West Virginia who have resided in the state ng submission of this bid; or,
	4.	Application is made for 5% resident vendor pre Bidder meets either the requirement of both subdivi	sference for the reason checked: slons (1) and (2) or subdivision (1) and (3) as stated above; or,
	5.	Application is made for 3.5% resident vendor p Bidder is an individual resident vendor who is a vetera and has resided in West Virginia continuously for submitted; or,	preference who is a veteran for the reason checked: an of the United States armed forces, the reserves or the National Guard the four years immediately preceding the date on which the bid is
	6.	Bidder is a resident vendor who is a veteran of the purposes of producing or distributing the commodition continuously over the entire term of the project, on residents of West Virginia who have resided in the	preference who is a veteran for the reason checked: United States armed forces, the reserves or the National Guard, if, for es or completing the project which is the subject of the vendor's bid and average at least seventy-five percent of the vendor's employees are state continuously for the two immediately preceding years.
	require agains or dedu	ments for such preference, the Secretary may order t such Bidder in an amount not to exceed 5% of the b acted from any unpaid balance on the contract or pure	s that a Bidder receiving preference has failed to continue to meet the the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty id amount and that such penalty will be paid to the contracting agency chase order.
	authori the req deeme	zes the Department of Revenue to disclose to the Dire uired business taxes, provided that such information d by the Tax Commissioner to be confidential.	any reasonably requested information to the Purchasing Division and ctor of Purchasing appropriate information verifying that Bidder has paid a does not contain the amounts of taxes paid nor any other information
	and ac	source in all reenacter and that it a contract is it	Code, §61-5-3), Bidder hereby certifies that this certificate is true seued to Bidder and if anything contained within this certificate of the Purchasing Division in writing immediately.
		C.I. WALKER MACHINERY Co.	Signed: Maux 2 Com
		6/6/12	TILLO: SALES RETRESENTATION

\*Check any combination of preference consideration(s) Indicated above, which you are entitled to receive.

RFQ No. VET Old 166

## STATE OF WEST VIRGINIA Purchasing Division

### **PURCHASING AFFIDAVIT**

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

#### **DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

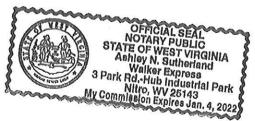
"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more countles or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

#### WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: C.I. WALKER MACHIA	-enr Co.
Authorized Signature:	Date:
State of West Virginia	
County of Kanawha , to-wit:	
Taken, subscribed, and sworn to before me this 10 day	of <u>June</u> , 2012.
My Commission expires January 4	, 20 <u>2</u> 2
AFFIX SEAL HERE	NOTARY PUBLIC AShley N. Sitherland
A TITLE OF THE PARTY OF THE PAR	





>mzoor

RFQ COPY

TYPE NAME/ADDRESS HERE

State of West Virginia Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

#### Request for Quotation

÷	ME	טאו ג	MOC	n.	- 22
	VE	ΤN	12	16	6

11.	PAGE	::::::::::::::::::::::::::::::::::::::
	1	

ADDRESS CORRESPON	DENCE TO ATTENTION OF:

TARA LYLE 304-558-2544

SHIP TO

DIVISION OF VETERANS AFFAIRS ATTENTION: C. PRATHER SUITE 101 1321 PLAZA EAST CHARLESTON, WV 25301-1400 558-3661

DATE PRINTED TERMS OF SALE SHIP VIA FREIGHT TERMS F.O.B. 05/22/2012 BID OPENING DATE: 06/06/2012 BID OPENING TIME 01:30PM CAT, QUANTITY UOP ITEM NUMBER UNIT PRICE LINE AMOUNT ADDENDUM NO. 1 QUESTIONS AND ANSWERS ATTACHED. ADDENDUM ACKNOWLEDGEMENT IS ATTACHED. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALIFICATION OF YOUR BID. END OF ADDENDUM NO. 1 0001 LS 020-33 MINI-TRACK & SKID-STEER LOADER & BACKHOE W/ATTACH THIS IS THE END OF RFQ VETO12166 \*\*\*\*\* TOTAL: \*\*\*\*\* SEE REVERSE SIDE FOR TERMS AND CONDITIONS SIGNATURE TELEPHONE DATE ADDRESS CHANGES TO BE NOTED ABOVE

#### **GENERAL TERMS & CONDITIONS** REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

- 1. Awards will be made in the best interest of the State of West Virginia.
- 2. The State may accept or reject in part, or in whole, any bid.

3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division

and have paid the required \$125 fee.

- 4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes yold and of no effect after June 30.
- 5. Payment may only be made after the delivery and acceptance of goods or services.
- 6. Interest may be paid for late payment in accordance with the West Virginia Code.
- 7. Vendor preference will be granted upon written request in accordance with the West Virginia Code.
- 8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
- 10. The laws of the State of West Virginia and the Legislative Rules of the Purchasing Division shall govern the purchasing process.
- 11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the partles.
- 12. BANKRUPTCY: In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
- 13, HIPAA BUSINESS ASSOCIATE ADDENDUM: The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at www.state.wv.us/admin/purchase/vro/hipan.html and is hereby made part of the agreement provided that the Agency meets the definition of a Cover Entity (45 CFR §160,103) and will be disclosing Protected Health Information (45 CFR §160,103) to the vendor.
- 14. CONFIDENTIALITY: The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf.
- 16. LICENSING: Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable verify that the vendor is licensed and in good standing with the above entities. the director or spending unit to
- 16. ANTITRUST: In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia, Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or Fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

#### INSTRUCTIONS TO BIDDERS

- 1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.
- 2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as EQUAL to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.

3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.

4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Fallure of the bidder to deliver the quotations on time will result in bid disquallifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130 5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division,

is strictly prohibited (W.Va. C.S.R. §148-1-6.6).

### VET012166 Addendum No. 1

Q1: Air Conditioning is not listed for the cab. Do they want A/C?

A1: No

Q2: Is this a Two Wheel Drive or Four Wheel Drive?

A2: Four wheel drive

Q3: Multi Brand Coupler. Is this for the Front Loader or the Backhoe?

A3: Front Loader We have a backhoe coupler, but not a front loader coupler.

Q4: Is Loader or backhoe auxiliary hydraulics required to run attachments?

A4: Yes

The bid opening remains 06/06/2012 at 1:30 pm.

An authorized signature must be on the bid.

No additional questions will be accepted on this RFQ.

EXHIBIT 10

REQUISITION NO .: .. YET OIZI 66

### ADDENDUM ACKNOWLEDGEMENT

I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.

PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.
ADDENDUM NO.'S:
NO. 1
NO. 2
NO. 3
NO. 4
NO. 5
I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS. VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.
C.I. WALKER MACHERY Co.
DATE

REV. 11/96

# CAT®

# 246C 262C Series 2

Skid Steer Loaders



	246C	262C Series 2	
Cat® C3.4 DIT Diesel Engine			
Net Power (SAE J1349)	54 kW (73 hp)	54 kW (73 hp)	
Weights			
Operating Weight	3393 kg (7,480 lb)	3614 kg (7,968 lb)	
Operating Specifications			
Rated Operating Capacity	975 kg (2,150 lb)	1225 kg (2,700 lb)	

#### **Features**

#### Sealed and Pressurized Cab

Sealed and pressurized cab option provides a cleaner and quieter operating environment.

#### **Seat Mounted Adjustable Controls**

Ergonomic seat mounted adjustable controls and available air ride seat can be adjusted to meet your personal preference.

#### **High Performance Power Train**

Increased horsepower and higher torque deliver outstanding performance.

#### High Flow XPS Hydraulic System

High flow XPS hydraulic system available on all models for applications demanding maximum hydraulic work tool performance.

#### **More Work Tools**

The broad range of performance matched Cat Work Tools make the Cat Skid Steer Loader the most versatile machine on the job site.

#### Contents

Operator Station
Power Train
Lift Linkages4
Hydraulics5
Work Tools
Serviceability7
Customer Support7
Specifications8
Standard and Optional Equipment11



Cat® Skid Steer Loaders lead the industry in operator comfort, performance and versatility. Inside the spacious operator station, feel the superior comfort of a sealed and pressurized cab. Adjustable seat mounted controls and an available air ride seat keep you comfortable throughout the work day. Increased rated operating capacities, higher horsepower and improved drawbar performance help you get more done and increase your bottom line.

# **Operator Station**

Superior comfort to keep you productive throughout the work day.

#### **Superior Comfort**

Comfort and ease of operation have been designed into every aspect of the operator station. The wide, spacious interior and uncluttered floor provide a comfortable work environment with excellent head, shoulder and leg room to keep productivity high and help reduce fatigue.

#### Sealed and Pressurized Cab

Operators spend long hours in the machine. The optional sealed and pressurized cab keeps dust out and clean air in for greater operator comfort. Reduced sound levels within the cab also help reduce fatigue.

#### **Seat Mounted Joystick Controls**

Ergonomic, seat mounted joystick controls enable a wide range of comfortable operating positions for operators of any size. The seat and controls are independently adjustable to meet the specific needs of the operator.

#### **Advanced Machine Information and Control System**

The optional Advanced Machine Information and Control System (AMICS) provides easy to read analog gauges for hydraulic oil and engine coolant temperature. The electronic display provides additional operating information such as engine speed, job clock and diagnostic service codes. This display also provides the user interface for the optional AccuGrade<sup>TM</sup> Grade Control System. The Selectable Work Speed Control, Selectable Implement Control and Selectable Hystat Response Control modes allow the operator to "dial in" his machine to maximize production.

#### **Additional Features for Maximum Comfort**

- Air ride seat available for an unparalleled level of comfort in a skid steer loader.
- · Easy to read instrument panels.
- Optional air conditioner and heater for greater comfort in extreme conditions.
- Optional Selectable Pattern Control which allows the operator to select the control pattern they are most familiar with for greater productivity.





## **Power Train**

### Aggressive performance with fuel efficiency.

#### Cat Engine

The high performance power train provides high engine horsepower and torque. The machines feature the Cat C3.4 DIT engine – a rugged, reliable engine that meets U.S. EPA Tier 4 Interim/EU Stage IIIA emission requirements.

#### **Hand and Foot Throttles**

Hand and foot throttles allow the operator to match engine speed to the task. The hand throttle is ideal for jobs requiring constant engine speed such as cold planing, trenching or snow blowing. The foot throttle lets the operator vary engine speed and minimize fuel consumption for other tasks such as load and carry, truck loading, grading and dozing.

#### **Electronic Torque Management**

The Electronic Torque Management system maximizes power to the ground and prevents the engine from stalling in tough digging and dozing applications for maximum productivity. The system allows part throttle operation which provides smoother machine operation and reduces fuel consumption.

#### Selectable Work Speed Control

The optional Selectable Work Speed Control lets you select the ground speed that is best suited for the application. This feature is useful in operations such as trenching and cold planing that require precise machine control at relatively slow and constant speeds.

#### Selectable Hystat Response Control

The optional Selectable Hystat Response Control lets the operator select one of three modes to match the machine's drive response to the operator's preference, skill level and application requirements.





# Lift Linkages

Built for tough working conditions.

#### **Choice of Lift Designs**

Two types of lifting arrangements are available – vertical lift (path #1 above) and radial lift (path #2) – to meet your specific application needs.

#### **Vertical Lift**

The 262C Series 2 features the vertical lift design which provides extended reach and lift height for quick and easy truck loading and material placement. The lift height is 3233 mm (127 in) on the 262C Series 2.

#### **Radial Lift**

The 246C, with its radial lift design, delivers excellent digging performance and superior mid-lift reach.

# **Hydraulics**

Exceptional lift, breakout and power to meet your needs.



#### **High Performance Hydraulic System**

Maximum power and reliability are built into the Cat Skid Steer Loader hydraulic system. In addition to providing power to the wheels, this system also powers the loader lift and tilt functions, powers the auxiliary circuit to drive work tools and drives the engine cooling fan. The hydraulic system features:

- Increased lift and tilt breakout forces allowing you to move more material and get more done.
- Continuous demand fan for improved fuel efficiency, increased horsepower, reduced sound levels and improved cold weather performance.
- Cat ToughGuard<sup>TM</sup> hoses for increased reliability and durability.
- High capacity hydraulic tank and side-by-side cooling package keep components cool for maximum durability.

#### Two Speed Option

Two speed is available as an option to increase cycle times and get the job done faster.



#### **High Flow XPS**

High flow XPS hydraulic system is available on all models for greater machine versatility. Maximum performance can be maintained regardless of the work tool speed or conditions with this load sensing, pressure compensating system. Cat cooling systems are sized to allow the operator to continuously power high flow work tools in conditions that cause competitive machines to overheat.



#### Selectable Implement Control

The Selectable Implement Control option with three levels of control gives the operator the ability to adjust the responsiveness and speed of the lift and tilt functions for more precise implement control.



#### **Speed Sensitive Ride Control**

The optional Speed Sensitive Ride Control system delivers a smoother ride on uneven terrain for superior comfort. It allows for both higher speed operation and better material retention for increased productivity. The system automatically turns off when digging or placing a load for maximum performance and control.

## **Work Tools**

Do more jobs with one machine using Cat® Work Tools.

#### The Right Tool for the Job

Designed and built for optimum performance and durability, Cat Work Tools deliver high productivity in a variety of applications to maximize versatility:

- Augers
- Backhoes
- · Blades (angle, dozer)
- Buckets (general purpose, high capacity, dirt, utility, light material, multi purpose, industrial grapple, utility grapple)
- · Brooms (angle, pickup, utility)
- · Brushcutters
- · Cold Planers
- Forks (pallet, industrial grapple, utility grapple, utility)
- · Hydraulic Hammers
- · Landscape Tillers
- · Landscape Rakes
- · Material Handling Arm
- Mulchers
- · Power Box Rakes
- · Shear
- · Snow Blowers
- Stump Grinders
- · Trenchers
- · Vibratory Compactors
- · Wheel Saws

#### **Quick Couplers**

Work tools can be changed quickly and easily with the Cat Skid Steer Loader's quick coupler system. The standard quick coupler features manual engagement and disengagement of work tools using two high leverage handles. The optional hydraulic quick coupler allows the operator to quickly change tools without leaving the cab.

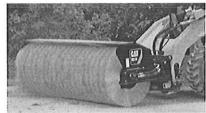
#### AccuGrade™ Grade Control System for Skid Steer, Multi Terrain and Compact Track Loaders

Common to AccuGrade systems for Track-Type Tractors and Motor Graders, this deeply integrated solution automates the machine's electrohydraulic controls to achieve a consistent grade across the work site, improve accuracy and increase productivity, ultimately lowering operating and material costs.











# **Serviceability**

### Simplified service and maintenance save you time and money.



#### **Easy Service**

Convenient service features make maintenance easy, reducing your downtime:

- Rear door opens 90 degrees for easy access to both sides of the engine.
- Cooling package tilts up to provide excellent access to the engine compartment.
- Cab tilts rearward for easy access to all hydraulic pumps, motors, valves, lines and hydraulic tank.
- · Daily maintenance points are easily accessible.
- · Wires are color coded and numbered for easy identification.
- S•O•S<sup>SM</sup> oil sampling valves are standard to allow regular monitoring of the engine and hydraulic oil quality.

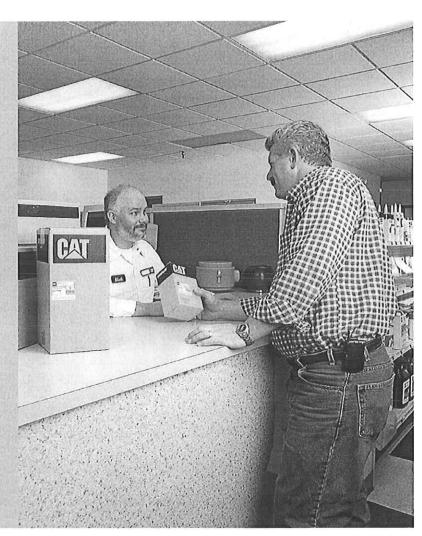
# **Customer Support**

# Unmatched support makes the difference.

#### Superior Dealer Service

Your Cat dealer is ready to assist you with your purchase decision and everything after.

- Make detailed comparisons of the machines you are considering before you buy – with estimates of component life, preventative maintenance and the true cost of production.
- Customize the machine that is right for you using the Build and Quote application on your dealer's website or www.cat.com.
- Financing packages are flexible to meet your needs.
- Repair option programs guarantee the cost of repairs up front,
- · Nearly all parts are available at the dealer parts counter.
- Operator training can improve your operator's techniques and boost your profits.
- Your Cat dealer can evaluate the cost involved in repairing, rebuilding and replacing your machine so you can make the right choice.



## 246C and 262C Series 2 Skid Steer Loaders Specifications

Engine		
Engine Model	Cat C3.4 DIT	
Net Power (SAE J13	349)	
246C	54 kW	73 hp
262C Series 2	54 kW	73 hp
Gross Power (SAE	J1995)	
246C	55 kW	74 hp
262C Series 2	55 kW	74 hp
Displacement	3.3 L	201 in <sup>3</sup>
Stroke	120 mm	4.7 in
Bore	94 mm	3.7 in

Weights		
Operating Weight	erating Weight	
246C	3393 kg	7,480 lb
262C Series 2	3614 kg	7,968 lb

<b>Operating Speci</b>	fications	
Rated Operating Capac	eity	
246C	975 kg	2,150 lb
262C Series 2	1225 kg	2,700 lb
Rated Operating Capac with Optional Counter		
246C only – Internal Counterweight increases ROC by	91 kg	200 lb
246C only – External Counterweight increases ROC by	91 kg	200 lb
262C Series 2	1336 kg	2,945 lb
Tipping Load		
246C	1950 kg	4,300 lb
262C Series 2	2449 kg	5,400 lb
Breakout Force, Tilt C	ylinder	
246C	3324 kg	7,328 lb
262C Series 2	3318 kg	7,315 lb

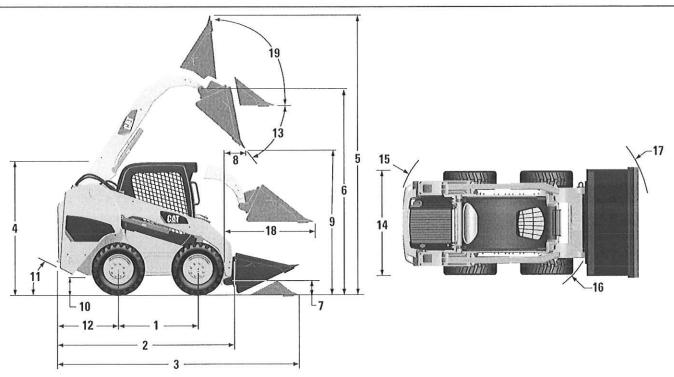
Hydraulic System			
Hydraulic Flow	Standard		
Loader Hydraulic Pressure	23 000 kPa	3,335 psi	
Loader Hydraulic Flow	84 L/min	22 gal/ min	
Hydraulic Power	31.9 kW	42.8 hp	
Hydraulic Flow	High Flow XPS		
Max. Loader Hydraulic Pressure	28 000 kPa	4,061 psi	
Max. Loader Hydraulic Flow	125 L/min	33 gal/ min	

Cab	
ROPS	SAE J1040 MAY94, ISO 3471:1994
FOPS	SAE J1043 SEPT87, ISO 3449:1992 Level I
FOPS Level II	SAE J231 JAN81, ISO 3449:1992 Level II

Power Train			
Travel Speed (Forward or Reverse)	12.5 km/h	7.7 mph	
Travel Speed – 2-Speed Option (Forward or Reverse)	19.3 km/h	12.0 mph	

Service Refill Capacities			
Chain box, each side	10 L	2.6 gal	
Cooling System	14 L	3.7 gal	
Engine Crankcase	10 L	2.6 gal	
Fuel Tank	98 L	26 gal	
Hydraulic System	57 L	15 gal	
Hydraulic Tank	42 L	11 gal	

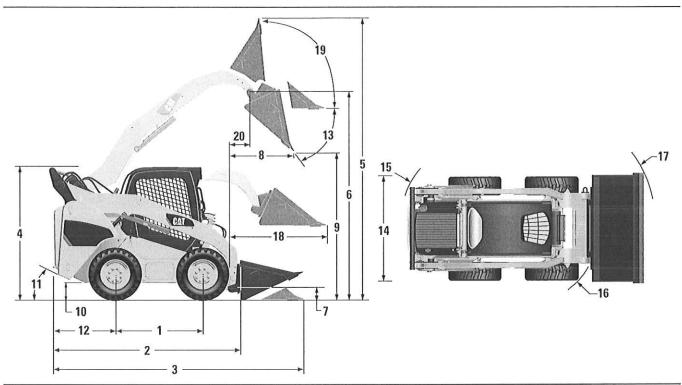
### **Dimensions**



	246	С
1 Wheelbase	1240 mm	48.8 in
2 Length w/o Bucket	2979 mm	117.2 in
3 Length w/Bucket on Ground	3692 mm	145.3 in
4 Height to Top of Cab	2104 mm	82.8 in
5 Max. Overall Height	3998 mm	157.4 in
6 Bucket Pin Height at Max. Lift	3122 mm	122.9 in
7 Bucket Pin Height at Carry Position	200 mm	7.8 in
8 Reach at Max. Lift and Dump	600 mm	23.6 in
9 Clearance at Max. Lift and Dump	2425 mm	95.4 in
10 Ground Clearance	225 mm	8.8 in
11 Departure Angle	26	0
12 Bumper Overhang Behind Rear Axle	1089 mm	42.8 in
13 Maximum Dump Angle	40	٥
14 Vehicle Width over Tires	1676 mm	66.0 in
15 Turning Radius from Center – Machine Rear	1730 mm	68.1 in
16 Turning Radius from Center – Coupler	1386 mm	54.6 in
17 Turning Radius from Center – Bucket	2167 mm	85.3 in
18 Max. Reach w/Arms Parallel to Ground	1388 mm	54.6 in
19 Rack Back Angle at Max. Height	85	o

## 246C and 262C Series 2 Skid Steer Loaders Specifications

### **Dimensions**



	262C Series 2		
1 Wheelbase	1240 mm	48.8 in	
2 Length w/o Bucket	2979 mm	117.3 in	
3 Length w/Bucket on Ground	3692 mm	145.4 in	
4 Height to Top of Cab	2104 mm	82.8 in	
5 Max. Overall Height	4075 mm	160.4 in	
6 Bucket Pin Height at Max. Lift	3233 mm	127.3 in	
7 Bucket Pin Height at Carry Position	200 mm	7.8 in	
8 Reach at Max. Lift and Dump	781 mm	30.7 in	
9 Clearance at Max. Lift and Dump	2450 mm	96.4 in	
10 Ground Clearance	225 mm	8.8 in	
11 Departure Angle	26	0	
12 Bumper Overhang Behind Rear Axle	1089 mm	42.8 in	
13 Maximum Dump Angle	50	o	
14 Vehicle Width over Tires	1676 mm	66.0 in	
15 Turning Radius from Center – Machine Rear	1730 mm	68.1 in	
16 Turning Radius from Center – Coupler	1386 mm	54.6 in	
17 Turning Radius from Center – Bucket	2167 mm	85.3 in	
18 Max. Reach w/Arms Parallel to Ground	1283 mm	50,5 in	
19 Rack Back Angle at Max. Height	85	0	
20 Bucket Pin Reach at Max. Lift	373 mm	14.7 in	

### 246C and 262C Series 2 Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

#### **ELECTRICAL**

12 volt Electrical System 90 ampere Alternator

Ignition Key Start/Stop Switch

Lights: Gauge backlighting, two rear tail lights, two rear halogen working lights, two adjustable front halogen lights, dome light

Backup Alarm

Heavy Duty Battery, 880 CCA

#### OPERATOR ENVIRONMENT

Gauges: Fuel level, hour meter

Operator Warning System Indicators: Air filter restriction, alternator output, armrest raised/operator out of seat, engine coolant temperature, engine oil pressure, glow plug activation, hydraulic filter restriction, hydraulic oil temperature, parking brake engaged

Vinyl seat, mechanical suspension

Fold-in Ergonomic Contoured Armrest

Control Interlock System, when operator leaves seat or armrest raised: Hydraulic system disables, hydrostatic transmission disables, parking brake engages

ROPS Cab, Open, Tilt Up

FOPS, Level I

Top and Rear Windows

Headliner, Deluxe

Floor Mat

Interior Rear View Mirror

12 volt Electric Socket

Horn

#### POWER TRAIN

Cat C3.4 DIT Diesel Engine (meets U.S. EPA Tier 4 Interim/EU Stage IIIA emission standards)

Air Cleaner, Dual Element, Radial Seal S•O•S<sup>SM</sup> Sampling Valve, Hydraulic Oil

Filters, Spin-on, Hydraulic

Filters, Bayonet-type, Fuel and Water Separator

Tilt Up Radiator/Hydraulic Oil Cooler Spring Applied, Hydraulically Released, Parking Brake

Hydrostatic Transmission

Four Wheel Chain Drive

Electrical Outlet, Beacon

Belly Pan Cleanout

#### **OTHER**

Engine Enclosure, Lockable
Extended Life Antifreeze, -37° C (-34° F)
Machine Tie Down Points (4)
Support, Lift Arm
Hydraulic Oil Level Sight Gauge
Radiator Coolant Level Sight Gauge
Radiator, Expansion Bottle
Cat ToughGuard<sup>1M</sup> Hose
Auxiliary, Hydraulics, Continuous Flow
Heavy Duty, Flat Faced Quick Disconnects
Split D-Ring to Route Work Tool Hoses
Along Side of Left Lift Arm

MANDATORY EQUIPMENT

Hydraulics, Standard or High Flow XPS Quick Coupler, Mechanical or Hydraulic Seat Belt, 50 mm (2 in) or 75 mm (3 in)

#### Comfort Package

(must select one of the following):

- Open ROPS (C1): Suspension Seat (no heater or door)
- Enclosed ROPS with Heat (C2): Cup Holder, Radio Ready, Seat (choice of Suspension or Air Ride), Heater and Defroster, Side Windows, Door (either Glass or Polycarbonate)
- Enclosed ROPS with A/C (C3): Features of C2 Package plus Air Conditioner

Performance Package (must select one of the following):

- Performance Package 1: One Speed
- Performance Package 2: One Speed, Self Level
- Performance Package 3: Two Speed, Self Level
- Performance Package 4: Two Speed, Self Level, Ride Control, Advanced Machine Information and Control System (AMICS)

## 246C and 262C Series 2 Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

Counterweight
Beacon, Rotating
Engine Block Heater – 120V
Oil, Hydraulic, Cold Operation
Paint, Custom
AM/FM/Weather Band Radio with CD Player
and Auxiliary Input Jack

### 246C and 262C Series 2 Skid Steer Loaders

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

© 2012 Caterpillar Inc. All rights reserved

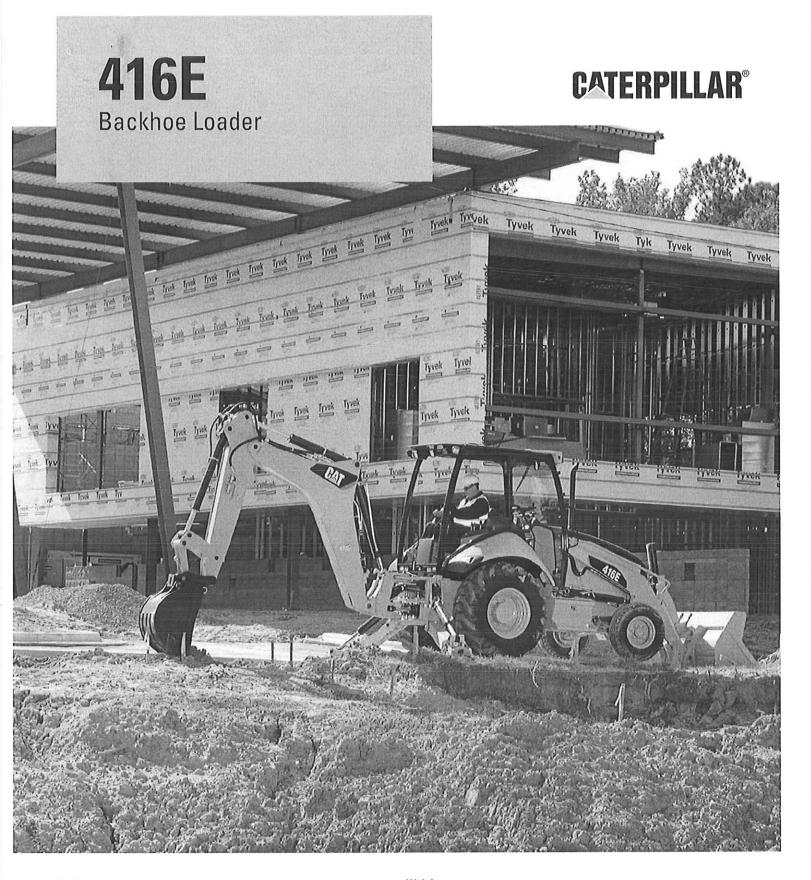
Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEHQ6577 (05-2012)

Replaces AEHQ5968-01





Engine			Weights		
Engine Model	Cat® C4.4	DITA	Operating Weight - Nominal	6750 kg	14,881 lb
Gross Power @ 2,200 rpm - SAE J1995	71 kW	96 hp	Operating Weight – Maximum	10 200 kg	22,466 lb
Net Power @ 2,200 rpm - SAE J1349	65 kW	87 hp	Backhoe		
Net Peak Power @ 2,000 rpm - SAE J1349	66 kW	89 hp	Dig Depth – Standard	4360 mm	14 ft 4 in
			Dig Depth – Extended	5456 mm	17 ft 11 in

#### 416E Features

#### World-Class Cab

Standard air suspension seat, ergonomic controls layout and more visibility make you feel comfortable – for a safer, more productive work day.

#### Load-Sensing Hydraulics

Variable displacement piston pump and flow sharing hydraulic valves provide smooth control and optimized fuel efficiency.

#### **Improved Power Train**

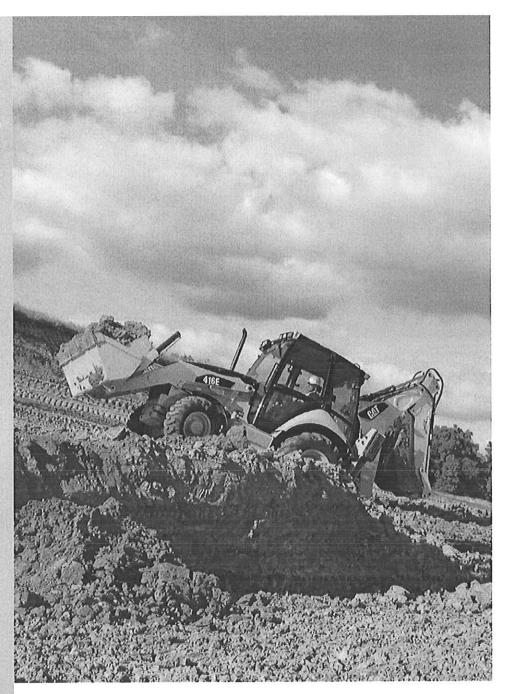
Top travel speed of 40 km/h/25 mph so you can get on and off the site faster.

#### **Optional Features**

Ride Control and AccuGrade™ can improve operator comfort and productivity.



Operator Station	3
Hydraulics	4
Ride Control	4
Power Train	5
Backhoe	6
Loader	6
Technology Products	7
Work Tools	8
Serviceability	9
Customer Support	9
416E Backhoe Loader Specifications	10
416E Standard Equipment	18
416E Optional Equipment	19



The 416E lets you get more done with less effort in a more comfortable operator station, with a serviceable extendible stick design and increased performance.





# **Operator Station**

Comfort, visibility and style.

Experience a whole new level of comfort with the spacious E-Series operator station. The ergonomic, automotive style enhances the operator environment. A narrow front dash provides excellent visibility to the front bucket. Reduced vibration keeps operator fatigue low. In-cab storage compartment and lockable tool and battery box provides ample space for tools and belongings. The operator station also features an easy-to-read gauge cluster.

#### **Air Suspension Seat**

The standard air suspension seat is adjustable for a greater operating range and more comfortable ride. A switch allows the seat to be tailored to support differing body weights. Adjustable seat height accommodates all operators.

#### Improved Air Conditioning

The improved air conditioning system features enhanced air distribution and performance for a more comfortable work environment. A nearly 20% increase in air flow over the D-Series combined with improved louver locations provide superior operator comfort.

#### **Backhoe Controls**

Two mechanical control patterns are available: two lever excavator, and two lever backhoe.

#### Configurations

The 416E operator station is available in 5 options – ROPS Canopy, ROPS Canopy Plus, Utility Cab, Utility Cab Plus and Utility Cab Plus with Air Conditioning. See Standard and Optional Equipment for details.

# **Hydraulics**

Load-sensing system matches power to demand.



The 416E has a load-sensing, closed center hydraulic system, which closely matches power and flow to the demand needed by the implements. So whether you're in full trenching mode, or delicately digging around services, you are in control. In applications such as production trenching, speed is important and the system will match the flow needed to get the job done quickly and efficiently. The load-sensing hydraulic system also delivers:

- · A cooler hydraulic system
- · Better fuel efficiency
- · Quieter operation
- · Reduced wear on components

Cat XT<sup>TM</sup>-3 ES ToughGuard<sup>TM</sup> hoses combined with Cat couplings and O-ring face seal fittings provide a leak-free system. The 416E also features new flow-sharing hydraulic valves, ensuring proportional flow of oil to all hydraulic cylinders, providing greater control and improving multifunction performance.

## **Ride Control**

Delivers even greater operator comfort.

The optional Ride Control System smoothes the ride in all conditions, including load and carry, highway roading, or simply moving around the job site. It reduces machine loping, providing a smooth and stable ride for increased operator comfort and reduced operator fatigue. The Ride Control option improves material retention in the loader bucket for increased productivity and a cleaner job site. The system is easily engaged by an On/Off switch on the front console.



## **Power Train**

Built for performance, power, reliability and fuel efficiency.

#### Cat Engine

The 416E features the Cat® C4.4 DITA (Direct Injection Turbocharged Aftercooled) engine and meets all U.S. EPA Tier 3/EU Stage IIIa emissions requirements. Horsepower and torque rise deliver strong loading and roading performance.

- The water separator service indicator ensures the operator is alerted when service is necessary.
- Dry-type axial seal air cleaner with automatic, integrated dust ejection system for more efficient pre-separation.
   Both air cleaner and precleaner functions are incorporated into a single unit mounted under the hood.

#### **Transmission**

The Cat standard power shuttle transmission provides four speeds forward and reverse. Hydraulically shifted clutches allow on-the-go direction and travel speed shifts.

- Hydraulic proportional control valves smooth speed and directional shifts.
- Four Wheel Drive (4WD) option improves mobility and loader performance in poor underfoot and can be activated on-the-go.
- Maximum roading speed of 40 km/h (25 mph) for faster travel between job sites.
- Cat Rear Axles are designed specifically for demanding backhoe loader applications. Axles feature outboard planetary gear sets for easy serviceability and brake design improvements for longer service life.

#### **Brake Mode Selector**

The brake mode selector switch has three positions: two wheel drive, two wheel drive with all wheel braking and four wheel drive. Two wheel drive with all wheel braking provides better tire life while roading and engages the front axle when brakes are applied for improved braking performance.





## **Backhoe**

### Designed for high performance and easy service.

The E-Series backhoe delivers industry-leading digging forces. Serrated edges on the stick provide improved material clamping for clearing and demolition applications. The single pin bucket linkage contributes to best-in-class rotation of 205 degrees for all applications.

#### E-Stick Design

The optional extendible stick (E-stick) increases reach and dig depth by approximately 1.2 meters (4 feet). The new design delivers increased life and easy in-field adjustment with common hand tools.

#### **Curved Boom**

The excavator-style boom is built for optimum performance and durability. The curved design provides additional clearance over obstacles while digging a trench or truck loading. The narrow boom enhances the viewing area to the bucket and trench throughout the entire operating range.

#### **Thumbs**

Thumb mounting provisions are standard on every Cat Backhoe Loader for added machine versatility. Hydraulic thumbs are available factory-installed. Mechanical thumbs are available through your Cat Dealer.







## Loader

# Strong lift and breakout.

#### Single Tilt

The standard single tilt loader linkage on the 416E features strong lift and breakout forces for solid performance in backfilling and truck loading applications. The 416E is equipped with either a general purpose or multi-purpose pin-on bucket to meet your specific needs.

#### Return-to-Dig

The return-to-dig system reduces loading cycle times by bringing the loader bucket back to the dig position with an easy pull of the lever. By the time the loader bucket is at ground level, the bucket is angled correctly for the next load or cut.

# **Technology Products**

Advanced technologies improve productivity and simplify serviceability.

#### AccuGrade™ System

The AccuGrade system for backhoe loaders improves digging accuracy and site safety by eliminating the need for manual grade measuring. Both the Site and Laser Reference Systems save time and money in a variety of digging and trenching applications.

#### Site Reference System

The Site Reference System allows the operator to excavate to pre-determined coordinates. The intuitive software and controls allow the operator to set target grades.

An in-cab display allows the operator to enter slope and dig depth parameters. Easy to read grade indicator and elevation display delivers all system information to the cab for easy viewing by the operator. System includes rugged components built to withstand the harshest environments:

- · In-cab display
- · Cylinder position sensors
- Swing position sensor
- Inclinometer
- Wiring harnesses

#### Laser Reference System

The Laser Reference System works with laser transmitters to accurately grade or excavate to a site plan without the use of grade stakes. The Laser System includes all the components of the Site Reference System with the addition of the following:

- Laser receiver
- · Electric mast and mount
- · Laser wiring harness

Note: Laser transmitter and tripod sold separately

#### **Product Link**

Product Link uses GPS technology to provide machine data, including service hours, location, events and diagnostic information, to you through a web-based application or e-mail/pager notification.







## **Work Tools**

Do more jobs with one machine.













#### **Backhoe Work Tools**

A large selection of backhoe tools – including a new hydraulic thumb – gives you the flexibility to serve more customers, more profitably.

- Standard Duty, Heavy Duty, Heavy Duty Rock, Pin Lock, Soil Excavation, Coral and Ditch Cleaning Buckets
- · Cold Planer
- Hydraulic Hammer
- Auger
- Ripper
- Mechanical and Hydraulic Thumbs
- Quick Coupler
- · Vibratory Plate Compactor

#### **Loader Work Tools**

The loader tool line includes the following:

- General Purpose Bucket
- · Multi Purpose Bucket
- · Side Dump Bucket
- Light Material Bucket
- Loader Forks

#### The right bucket makes all the difference

To get top performance from your Cat backhoe loader, be sure your machine is equipped with the proper bucket and tips. The soil excavation bucket provides the best productivity in most conditions.

#### DRS 230 (Diagonal Retention System)

Heavy-duty bucket teeth are attached with diagonal pins rather than horizontal pins for easy exchange.

## **Serviceability**

Easy access and minimal maintenance requirements maximize uptime.



Convenient service features make maintenance easy, reducing your downtime.

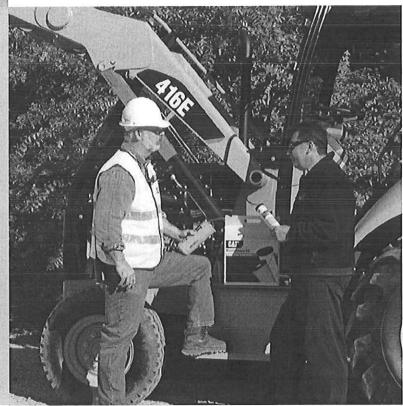
- Tilt-up hood provides convenient access to all engine check points.
- · Fill caps are color-coded for quick identification.
- S•O•S<sup>SM</sup>, Coolant Sampling and Technical Analysis help you avoid unscheduled repairs.
- Caterpillar is committed to providing you with a safe work environment. For more information please visit SAFETY.CAT.COM<sup>TM</sup>.

## **Customer Support**

Makes the difference.

Your Cat dealer is ready to assist you with your purchase decision and everything after.

- · Financing packages are flexible to meet your needs.
- Your Cat dealer can evaluate the cost to repair, rebuild and replace your machine, so you can make the right choice.
- Nearly all parts are available at your Cat dealer parts counter.
- See your dealer's website or www.cat.com to customize the machine that is right for you using the Build and Quote applications. Also find information on other Cat products, dealer services and industry solutions.



Engine Model (Standard)	Cat* C4.4	DITA
Gross Power – SAE J1995	71 kW	96 hp
Gross Power – ISO 14396	70 kW	94 hp
Net Power - SAE J1349	65 kW	87 hp
Net Power - ISO 9249	66 kW	88 hp
Net Power – EEC 80/1269	66 kW	88 hp
Net Peak Power @ 2,000 rpm - SAE J1349	66 kW	89 hp
Net Peak Power @ 2,000 rpm - ISO 9249	67 kW	90 hp
Net Peak Power @ 2,000 rpm – EEC 80/1269	67 kW	90 hp
Bore	105 mm	4.13 in
Stroke	127 mm	5 in
Displacement	4.4 L	268 in <sup>3</sup>
Net Torque Rise @ 1,400 rpm – Standard	35%	
Net Peak Torque @ 1,400 rpm - Standard	384 N·m	283 lb ft

• Engine meets all U.S. EPA Tier 3/ EU Stage IIIa emissions requirements.

- SAE J1349

- The net power ratings apply at 2,200 rpm when tested under the specified conditions for the specified standard.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- Based on standard air conditions of 25° C (77° F) and 99 kPa (29.32 in) in dry barometer.
- Used 35° API gravity fuel having an LHV of 42 780 kJ/kg (18,390 BTU/lb) when used at 30° C (89° F) (reference a fuel density of 838.9 g/L [7.001 lb/gal]).
- No derating required up to 3000 m (9,843 ft).
- Net torque rise meets SAE J1349.
- Net peak power ratings apply at conditions specified above.

Weights				
Operating Weight  Nominal	6750 kg	14,881 lb		
Operating Weight  – Maximum	10 200 kg	22,466 lb		
Cab, ROPS/FOPS	260 kg	573 lb		
Ride Control	25 kg	55 lb		
Air Conditioning	39 kg	86 lb		
Four Wheel Drive	155 kg	342 lb		
Extendible Stick (no weights)	299 kg	659 lb		
Counterweights (Option 1)	116 kg	255 lb		
Counterweights (Option 2)	231 kg	510 lb		
Counterweights (Option 3)	488 kg	1,075 lb		

 Total gross machine weight not to exceed 10 200 kg (22,466 lb).

Backhoe		
Dig Depth  – Standard	4360 mm	14 ft 4 in
E-Stick Retracted	4402 mm	14 ft 5 in
E-Stick Extended	5456 mm	17 ft 11 in
Reach from Swing Pivot – Standard	5618 mm	18 ft 5 in
E-Stick Retracted	5657 mm	18 ft 7 in
E-Stick Extended	6666 mm	21 ft 10 in
Bucket Rotation	205 Degree	es
Bucket Dig Force  – Standard	52.2 kN	11,749 lb
E-Stick Retracted	51.5 kN	11,491 lb
E-Stick Extended	51.5 kN	11,491 lb
Stick Dig Force  – Standard	32 kN	7,200 lb
E-Stick Retracted	32 kN	7,200 lb
E-Stick Extended	23.5 kN	5,250 lb
Stick Lift @ 2440 mm (8 ft) – Standard	2275 kg	5,005 lb
E-Stick Retracted	2063 kg	4,539 lb
E-Stick Extended	1290 kg	2,839 lb
Loading Height  – Standard	3643 mm	11 ft 11 in
E-Stick Retracted	3600 mm	11 ft 9 in
E-Stick Extended	4170 mm	13 ft 7 in
Loading Reach  – Standard	1837 mm	6 ft 0 in
E-Stick Retracted	1923 mm	6 ft 2 in
E-Stick Extended	2836 mm	9 ft 1 in

Loader		
Bucket Capacity  – General Purpose	0.76 m³	1 yd³
Bucket Width – General Purpose	2262 mm	7 ft 5 in
Dump Height @ Max Angle – Single Tilt	2651 mm	8 ft 8 in
Dump Reach @ Max Angle – Single Tilt	772 mm	2 ft 6 in
Dig Depth – Single Tilt	106 mm	4 in
Lift Capacity @ Full Height – Single Tilt	2803 kg	6,180 lb
Bucket Breakout Force – Single Tilt	44.6 kN	10,036 lb

Closed center, load sensing			
132 L/min	34.8 gal/mir		
22 700 kPa	3,300 psi		
20 700 kPa 3,000 psi			
Variable-flow, axial piston			
Front wheel			
Hydrostatic, HMU			
65 mm	2.6 in		
120 mm	4.7 in		
36 mm	1.4 in		
65 mm	2.6 in		
120 mm	4.7 in		
36 mm	1.4 in		
	sensing 132 L/min 22 700 kPa 20 700 kPa Variable-fle piston Front whee Hydrostati 65 mm 120 mm 36 mm		

Power Train		
Power-Shuttle, Forward 1st	6 km/h	3.7 mph
Forward 2nd	9.6 km/h	5.9 mph
Forward 3rd	20 km/h	12 mph
Forward 4th	40 km/h	25 mph
Power-Shuttle, Reverse 1st	6 km/h	3.7 mph
Reverse 2nd	9.6 km/h	5.9 mph
Reverse 3rd	20 km/h	12 mph
Reverse 4th	40 km/h	25 mph

- Conveniently placed, hand operated lever provides instant direction changes between forward and reverse through power hydraulic clutches.
- Torque converter free-wheel clutch allows the converter stator to free-wheel during high speed, low torque conditions such as roading.
- Single-stage, 2.63:1 stall ratio.
- Travel speeds of two wheel drive backhoe loader at full throttle when equipped with 19.5 × 24 rear tires.

## Operating Specifications - Backhoe Turning Circle: 8.18 m 26 ft 10 in outside, front wheels

10.97 m

36 ft

outside, widest loading bucket

Turning Circle:

ISO 5010.2WD, 4WD (inner wheel not braked).

Service Refills		
Cooling System	20.5 L	5.4 gal
Fuel Tank	170 L	45 gal
Engine Oil w/Filter	7.6 L	2 gal
Transmission-Torque Converter, 2WD, Power Shuttle	18.5 L	4.9 gal
Transmission-Torque Converter, 4WD, Power Shuttle	18.5 L	4.9 gal
Rear Axle	16.5 L	4.4 gal
Rear Axle, Planetaries	1.7 L	0.4 gal
Front Axle, 4WD	11 L	2.9 gal
Front Axle, Planetaries	0.7 L	0.2 gal
Hydraulic System	90 L	23.8 gal
Hydraulic Tank	38 L	10 gal

Standards	
Brakes	SAE J/ISO 3450, ISO 3450 1996
Cab – ROPS	SAE J1040 May 1994/ ISO 3741 1994
Cab – FOPS	SAE J/ISO 3449 APR98 LEVEL II and ISO 3449: 1992 LEVEL II
Cab – Sound	ANSI/SAE J1166 Oct 98 is 80 dB (A)
Exterior Sound	SAE J88 JUN86 is 76 dB (A)

Axle Ratings		
Front Axle, 2WD, Static	22 964 kg	50,582 lb
Dynamic	9186 kg	20,233 lb
Front Axle, 4WD, Static	22 964 kg	50,582 lb
Dynamic	9186 kg	20,233 lb
Rear Axle, Static	22 964 kg	50,582 lb
Dynamic	9186 kg	20,233 lb
Axle Oscillation	10 Degrees	3

 4WD and 2WD axles are pendulum mounted and permanently sealed and lubricated, requiring no daily maintenance. Also features double-acting steering cylinder with 52° steering angle for increased maneuverability.

#### **Engine Features**

- Three-ring pistons made of lightweight, silicon/aluminum alloy for strength and maximum thermal conductivity.
- Forged chrome/molybdenum-steel crankshaft with salt bath nitrocarburized pins and journals.
- Front and rear crankshaft oil seals are "lip" type Viton and PTFE designs featuring an integral dust lip.
- For durability, inlet valves are nitrided, martensitic chrome silicon steel, while exhaust valves are nitrided, austenitic chrome manganese-nickel steel.
- Cylinder block is high strength, cast iron alloy of deep skirt, monobloc design for increased strength and long life.
- Cylinder head is high strength, cast iron alloy construction with extra duty wall and deck thickness. Intake and exhaust ports are precision cast to promote optimum gas flow.
- Direct injection fuel system provides accurate fuel delivery and efficiency.
- Dry-type axial seal air cleaner with integral precleaner, automatic dust ejection system, and filter condition indicator.
- Direct electric, 12-volt starting and charging system with 880 CCA Group 31 maintenance free battery.
- Standard glow plug starting aid system for efficient cold weather starting.
- High contact ratio/gear train, peripheral fixed isolation top cover and open deck block design reduce bare engine noise.
- Higher low end torque for better engine/ machine performance.

#### **Tires**

Choices listed as combination of front/rear tires:

- 11L-16 (12 ply) F-3/19.5L-24 (12 ply) R4 ATU
- 12.5/80-18 NHS (12 ply) 1-3 Super Traction/19.5L-24 (12 ply) R4 ATU
- 12.5/80-18 NHS (12 ply) 1-3 Super Traction/21L-24 (16 ply) R4 ATU
- · 340/80R 18 XMCL/500/70R 24 XMCL
- 340/80R 18 XMCL/19.5L-R24 (12 ply) R4 ATU

#### **Brakes**

#### Features:

- Brakes meet the following standards: SAE J1473 and ISO 3450 requirements.
- Self-adjusting, completely enclosed and sealed.
- Foot operated brake pedals can be interlocked for roading.
- Parking/secondary brakes are independent of the service brake system. Parking brake is mechanically applied through an adjustable hand lever located on the right console.

**Counterweights**Minimum Counterweight Recommendations

Standard Stick			
Loader Bucket	Power Train	kg	lb
GP	2WD	231	510
GP	4WD	116	255
MP	2WD/4WD	no coun	terweight

Extendible Stick				
Loader Bucket	Power Train	kg	lb	
GP	2WD/4WD	488	1,075	
GP	2WD	231	510	
MP	4WD	116	255	

#### **Backhoe Buckets**

With weld on adapters and pin-on teeth

andard l	Duty					
Width		Rated C	Rated Capacity		ight	No. of
mm	in	L	ft³	kg	lb	Teeth
305	12	78	2.8	97	213	3
457	18	118	4.2	115	253	4
610	24	175	6.2	132	290	5
762	30	233	8.2	147	323	5
914	36	292	10.3	165	363	6

leavy Dut	у					
Width		Rated C	Rated Capacity		ight	No. of
mm	in	L	ft³	kg	lb	Teeth
305	12	78	2.8	105	231	3
406	16	105	3.7	128	282	3
457	18	118	4.2	129	284	4
610	24	175	6.2	151	332	5
762	30	233	8.2	167	367	5
914	36	292	10.3	189	416	6

oil Excav	ation					
Wie	dth	Rated Capacity		We	Weight	
mm	in	L	ft³	kg	lb	No. of Teeth
457	18	181	6.4	153	336	4
610	24	241	8.5	179	395	5
762	30	320	11.3	197	434	5
914	36	380	13.4	223	491	6

leavy Dut	y Rock						
Width		Rated Capacity		We	Weight		
mm	in	L.	ft³	kg	lb	Teeth	
305	12	70	2.5	120	265	3	
457	18	127	4.5	150	331	4	
610	24	198	7.0	175	386	5	
762	30	255	9.5	195	430	5	
914	36	311	11.5	210	463	6	

oral						
Wi	dth	Rated C	Rated Capacity		Weight	
mm	in	L	ft³	kg	lb	Teeth
305	12	60	2.1	134	295	4
457	18	100	3.5	155	341	6
610	24	140	4.9	182	402	8
762	30	190	6.7	210	463	10

#### **Machine Dimensions**

			Single	-Tilt Loader		
		al Purpose m³/1.0 yd³)	General Purpose (0.96 m³/1.25 yd³)		Multi Purpose (1.0 m³/1.3 yd³)	
	mm	ft/in	mm	ft/in	mm	ft/in
1) Overall transport length	7233	23 ft 9 in	7321	24 ft 0 in	7285	23 ft 11 in
Overall length (loader on ground)	7180	23 ft 7 in	7293	23 ft 11 in	7209	23 ft 8 in
(2) Overall transport height (standard stick)	3577	11 ft 9 in	3577	11 ft 9 in	3577	11 ft 9 in
Overall transport height (extendible stick)	3631	11 ft 11 in	3631	11 ft 11 in	3631	11 ft 11 in
Overall width	2322	7 ft 7 in	2322	7 ft 7 in	2322	7 ft 7 in
(3) Height to top of cab/canopy	2819	9 ft 3 in	2819	9 ft 3 in	2819	9 ft 3 in
(4) Height to top of exhaust stack	2754	9 ft 0 in	2754	9 ft 0 in	2754	9 ft 0 in
Height to loader hinge pin (transport)	365	1 ft 2 in	365	1 ft 2 in	417	1 ft 4 in
Ground clearance (minimum)	320	1 ft 1 in	320	1 ft 1 in	320	1 ft 1 in
(5) Rear axle centerline to front grill	2704	8 ft 10 in	2704	8 ft 10 in	2704	8 ft 10 in
Front wheel tread gauge	1880	6 ft 2 in	1880	6 ft 2 in	1880	6 ft 2 in
Rear wheel tread gauge	1727	5 ft 8 in	1727	5 ft 8 in	1727	5 ft 8 in
(6) Wheelbase 2WD/4WD	2200	7 ft 3 in	2200	7 ft 3 in	2200	7 ft 3 in

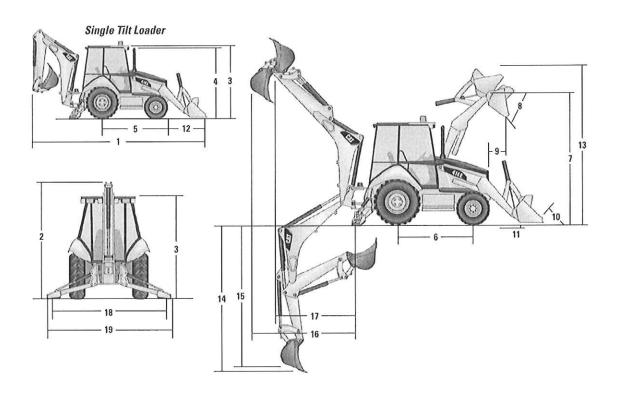
#### **Loader Bucket Dimensions and Performance**

			Single-	Tilt Loader		
		General Purpose (0.76 m³/1.0 yd³)		l Purpose ³/1.25 yd³)	Multi Purpose (1.0 m³/1.3 yd³)	
Capacity (SAE rated)	0.76 m <sup>3</sup>	1.0 yd3	0.96 m <sup>3</sup>	1.25 yd <sup>3</sup>	1.0 m <sup>3</sup>	1.3 yd <sup>3</sup>
Width	2262 mm	7 ft 5 in	2262 mm	7 ft 5 in	2279 mm	7 ft 6 in
Lift capacity at maximum height	2547 kg	5,615 lb	2427 kg	5,351 lb	2225 kg	4,905 lb
Breakout force	40.9 kN	9,185 lb	38.1 kN	8,565 lb	37.2 kN	8,363 lb
(7) Maximum hinge pin height	3296 mm	10 ft 10 in	3296 mm	10 ft 10 in	3296 mm	10 ft 10 in
(8) Dump angle at full height	4	14°	4	14°		14°
Dump height at maximum angle	2651 mm	8 ft 8 in	2573 mm	8 ft 5 in	2624 mm	8 ft 7 in
(9) Dump reach at maximum angle	772 mm	2 ft 6 in	853 mm	2 ft 10 in	761 mm	2 ft 6 in
10) Maximum bucket rollback at ground level	:	39°		39°		40°
11) Digging depth	106 mm	4 in	106 mm	4 in	133 mm	5 in
Maximum grading angle	1	10°	1	07°	1	10°
Width of dozer cutting edge	1	N/A	1	√A	2262 mm	7 ft 5 in
12) Grill to bucket cutting edge, carry position	1428 mm	4 ft 8 in	1516 mm	5 ft 0 in	1480 mm	4 ft 10 in
13) Maximum operating height	4063 mm	13 ft 4 in	4196 mm	13 ft 9 in	4244 mm	13 ft 11 in
Jaw opening maximum	1	N/A	1	V/A	790 mm	2 ft 7 in
Bucket jaw clamping force	1	N/A	1	N/A	50.6 kN	11,385 lb
Weight (does not include teeth or forks)	384 kg	847 lb	451 kg	994 lb	745 kg	1,642 lb

## **Backhoe Dimensions and Performance**

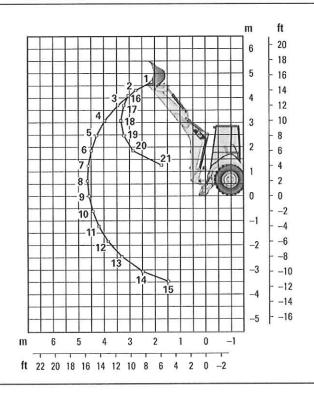
	Standa	rd Stick	Extendible St	ick Retracted	Extendible S	tick Extended
(14) Digging depth, SAE (max.)	4360 mm	14 ft 4 in	4402 mm	14 ft 5 in	5456 mm	17 ft 11 in
(15) Digging depth, 610 mm (2 ft) flat bottom	4321 mm	14 ft 2 in	4363 mm	14 ft 4 in	5420 mm	17 ft 10 in
Reach from rear axle centerline at ground line	6721 mm	22 ft 1 in	6760 mm	22 ft 2 in	7769 mm	25 ft 6 in
(16) Reach from swing pivot at ground line	5618 mm	18 ft 5 in	5657 mm	18 ft 7 in	6666 mm	21 ft 10 in
Maximum operating height	5523 mm	18 ft 1 in	5555 mm	18 ft 3 in	6302 mm	20 ft 8 in
Loading height	3636 mm	11 ft 11 in	3577 mm	11 ft 9 in	4145 mm	13 ft 7 in
(17) Loading reach	1768 mm	5 ft 10 in	1868 mm	6 ft 2 in	2771 mm	9 ft 1 in
Swing arc	18	80°	18	0°	18	30°
Bucket rotation	20	)5°	20	)5°	20	)5°
(18) Stabilizer spread, operating position (center)	3310 mm	10 ft 10 in	3310 mm	10 ft 10 in	3310 mm	10 ft 10 in
(19) Stabilizer spread, operating position (outside)	3770 mm	12 ft 4 in	3770 mm	12 ft 4 in	3770 mm	12 ft 4 in
Stabilizer spread, transport position	2322 mm	7 ft 7 in	2322 mm	7 ft 7 in	2322 mm	7 ft 7 in
Bucket dig force	51.8 kN	11,655 lb	51.1 kN	11,491 lb	51.1 kN	11,491 lb
Stick dig force	31,8 kN	7,151 lb	31.8 kN	7,151 lb	23.4 kN	5,250 lb

Dimensions and performance specifications shown are for machines equipped with 12.5/80-18 SGL front tires, 19.5L-24 IT525 rear tires, ROPS canopy, standard stick with 610 mm (24 inch) standard-duty bucket, and  $0.76 \text{ m}^3$  (1.0 yd³) loader bucket and standard equipment unless otherwise specified.

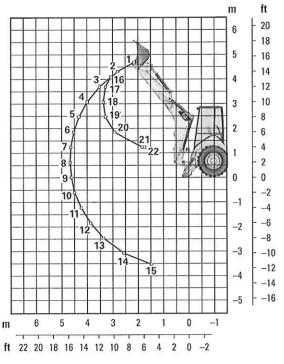


#### **Backhoe Lift Capacity**

Boom Lifting	kg	lb
	1 1262	2,776
	2 1378	3,031
	<b>3</b> 1394	3,066
6	4 1356	2,984
	5 1306	2,873
	6 1253	2,757
20	7 1202	2,643
	8 1153	2,536
	9 1107	2,436
1	0 1065	2,344
1	1 1028	2,261
1	2 995	2,190
1	<b>3</b> 972	2,138
1	4 973	2,141
1	5 1081	2,377
Stick Lifting	kg	lb
1	6 1297	2,853
1	7 1827	4,020
1	8 2195	4,828
1	9 2275	5,005
2	0 2645	5,818
2	1 5285	11,627



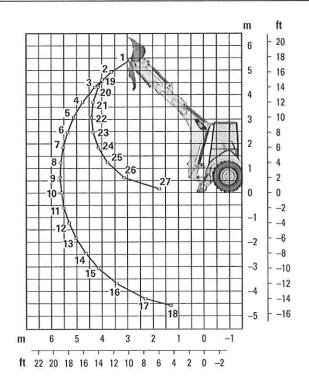
Cat 416E Extendible Stick Boom Lifting	kg	lb
	1 1084	2,385
	2 1186	2,608
	3 1190	2,618
	1149	2,527
Į	5 1096	2,412
(	6 1042	2,291
	988	2,174
(	938	2,063
	890	1,958
10	846	1,860
11	805	1,771
12	2 768	1,690
13	738	1,623
14	722	1,589
1!	788	1,734
Stick Lifting	kg	lb
10	1155	2,541
17	1672	3,679
18	B 1992	4,382
19	9 2063	4,539
20	2395	5,269
2	1 4688	10,313
22	2 5059	11,129



Lift capacities are over-end values. Machine equipped with 4WD, OROPS, 0.76 m³ (1.0 yd³) general purpose bucket, and 116 kg (255 lb) counterweight. Extendible stick includes 488 kg (1,075 lb) counterweight.

#### **Backhoe Lift Capacity**

Boom Lifting		kg	lb
	1	597	1,313
	2	729	1,605
	3	780	1,715
	4	725	1,596
	5	681	1,498
	6	659	1,449
	7	653	1,437
	8	663	1,458
	9	687	1,512
	10	672	1,478
	11	651	1,432
	12	632	1,390
	13	616	1,354
	14	604	1,328
	15	600	1,319
	16	613	1,348
	17	704	1,550
	18	1071	2,355
tick Lifting		kg	lb
	19	543	1,195
	20	724	1,593
	21	973	2,141
	22	1146	2,522
	23	1290	2,839
	24	1442	3,172
	25	1653	3,637
	26	2160	4,751
	27	5031	11,069



Lift capacities are over-end values. Machine equipped with 4WD, OROPS, 0.76 m³ (1.0 yd³) general purpose bucket, and 116 kg (255 lb) counterweight. Extendible stick includes 488 kg (1,075 lb) counterweight.

## **416E Standard Equipment**

Standard equipment may vary. Consult your Caterpillar dealer for details.

Air cleaner

Alarm, back-up

Backhoe position footrests

Backhoe controls, 2-lever mechanical

backhoe pattern

Battery, maintenance-free, 880 CCA

Battery disconnect switch

Boom transport lock

Brace, lift cylinder

Brake, secondary parking

Brakes, oil disc, dual pedals, interlocking

Bucket level indicator

Canopy, ROPS/FOPS

Coat hook

Coolant/Antifreeze, extended life

Counterweight, bumper

Differential lock

Dome light (cab only)

Engine, Cat® C4.4 DITA

(Direct Injection Turbocharged

and Aftercooled)

Engine enclosure

Face seals, O-ring

Fan, suction and guard

Fast reversing shuttle, all gears

Fenders, rear

Filters, spin-on: fuel, engine oil,

transmission oil, water separator,

hydraulic fluid

Flashing hazard/signal lights

Floor mat

Gauges: coolant temperature, fuel level,

tachometer, hour meter, torque converter

oil temperature

Ground level fuel fill

High ambient cooling package

Hydraulic hose, XTTM-3 ES

Hydraulic oil cooler

Indicators: air cleaner service, water

separator service, brake on, engine coolant, hydraulic oil level sight gauge,

oil pressure

Instrument panel lights

Key start/stop system

Lights, working (2 front, 2 rear)

Loader, self-leveling, return-to-dig

and transmission disconnect switch

Lunch box holder

Mirror, rear view

Open circuit breather

Power receptacle, 12V, internal

and external

Power steering, hydrostatic

Rubber impact strips on radiator guard

Seat belt, retractable (51 mm/2 in)

Stabilizer shoes, grouser type

Seat, air suspension with armrest

Stabilizer controls, cable operated

Starting system, glow plugs

Storage compartment, internal

Stop and tail lights

Swing transport lock

Tilt steering wheel

Tires, see page 12

Toolbox, external, lockable

Torque converter

Throttles, hand and foot

Transmission, four speed, syncromesh

Transmission neutralizer switch

Transport tie-downs

Warning horn, electric

## **416E Optional Equipment**

Optional equipment may vary. Consult your Caterpillar dealer for details.

	kg	lb
AccuGrade™ Site	19	42
Reference System for		
Backhoe Loaders		
AccuGrade Laser	48	105
Reference System for		
Backhoe Loaders		
Attachments, backhoe		
Mechanical Quick		
Coupler		
D and E-Series	75	165
buckets		
C-Series buckets	75	165
D, E and Deere	75	165
buckets		
D, E and Case buckets	80	176
Hydraulic thumb	139-157	306-345
Attachments,		
front loader		
General purpose		
buckets		
0.76 m <sup>3</sup> (1.0 yd <sup>3</sup> )	385	847
0.96 m³ (1.25 yd³)	452	994
Multi purpose buckets		
1.0 m³ (1.3 yd³)	714	1,571
1.0 m³ (1.3 yd³)	884	1,945
w/ forks		
Axle, front		
Four wheel drive with	155	341
driveshaft guard		

	kg	lb
Backhoe Controls		
Excavator pattern	0	0
Battery, additional, 880 CCA	25	55
Cab, utility	210	462
Cab, utility plus	220	484
Cab, utility plus with A/C	258	568
Canopy Plus, ROPS	15	33
Coolant, additional protection, –50° C (–58° F)	0	0
Counterweights		
116 kg (255 lb)	116	255
231 kg (510 lb)	231	510
488 kg (1,075 lb)	488	1,075
Cutting edge, bolt-on, two piece	70	154
Fenders, 4WD, front	12	26
Fenders, rear extensions	1	2
Guards		
Boom protection plate	18	39
Stabilizer, rock	31	68
Hydraulic valves, loader (3rd valve for MP)	27	59
Hydraulic valves, backhoe		
5th Function	5	11
6th Function	5	11

	kg	lb
Hydraulic lines		
Combo, Std Stick	27	59
Combo, E-Stick	27	59
One-way, E-Stick	22	48
Lights: Working,	0	0
additional (2 front, 2 rear)		
Product Link	4	9
Ride Control	22	48
Rotating beacon		
Magnetic mount	5	11
Seat belt, 75 mm (3 in)	0	0
Stabilizers, available		
with guards		
Street	37	81
Reversible	38	84
Sticks		
Extendible	299	659
Teeth, loader bucket	45	99
Vandalism protection		
Gauge cover	1	2
Padlocks	1	2
Hood lock	0	0

#### 416E Backhoe Loader

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

© 2008 Caterpillar Inc. All rights reserved

Materials and specifications are subject to change without notice. Featured machines in may include additional equipment. See your Caterpillar dealer for available options.

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the POWER EDGE trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEHQ6025 (12-2008) Replaces AEHQ5684-02





#### PREMIER

Our most comprehensive coverage includes powertrain and hydraulic components, as well as additional electrical and structural components. Powertrain components produce, transmit or control engine horsepower for moving the machine.

Hydraulic components are associated with steering and implement control.

#### Learn more:

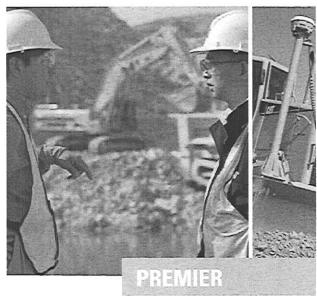
Contact your local Cat dealer today or visit

www.cat.com/epp

The information contained herein is provided solely for general information purposes only and is not intended to be a solicitation or an offer to sell any product or service, nor is the information a complete description of all the terms, conditions and exclusions applicable to the products and services described. For complete descriptions of the terms, conditions and exclusions of the Equipment Protection Plan, or other products and services, please contact your Cat dealer. The products and services referred to herein may not be available in all jurisdictions.

# THE RIGHT MACHINE THE RIGHT PLAN

### **Cat® Equipment Protection Plan**





AEXQ0502

©2009 Caterpillar All Rights Reserved Printed in USA **CATERPILLAR®** 

TODAY'S WORK, TOMORROW'S WORLD."

CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

**CATERPILLAR®** 

## CONTROL YOUR COSTS MINIMIZE YOUR RISKS

This plan safeguards your investments in new and Cat Certified Used\* machines beyond the standard warranty period. It includes all parts and labor to protect you against failures caused by defects in materials and workmanship. With the Premier Equipment Protection Plan, you can increase the predictability of service and maintenance costsand reduce unplanned downtime.

\*Product availability varies by region.





- · Perform necessary inspections to confirm eligibility
- . Install parts approved by Caterpillar on covered repairs
- · Validate your enrollment in the program





#### WHAT YOU DO

- Operate equipment according to the Cat Operation & Maintenance Manual (OMM)
- · Have recommended preventive maintenance performed at intervals specified in the OMM
- · Upon request, provide proof of preventive maintenance compliance (receipts, copies of work orders, invoices)
- · Promptly provide the machine for repair in the event of a covered failure

#### COVERED COMPONENTS

Engine - Internal Components Oil Cooler Radiator Exhaust / Muffler Manifolds Fan Motor Water Pump Fuel Injection Pumps Lift / Transfer Pump Senders / Solenoids / Sensors Thermostat Flywheel & Torque Converter Engine Oil Filter Mount Turbocharger Starter Alternator AC Compressor / Condenser Electronic Control Modules Governor / Speed Controls & Linkages Fuel Lines Fuel Tank & Assoc. Parts Water Piping Oil Hoses / Lines (non-hydrostatic) Cylinder Block Piston Piston Rings Piston & Connecting Rod

Crankshaft, Main Bearings & Rod

Camshaft & Camshaft Bearings Timing / Accessory Gears Timing Chain / Belt

Inlet / Exhaust Valve

Valve Cover & Base

Rocker Arm

Push Rod

Valve Spring & Guide

Rocker Shaft Assembly

Balancer Fuel Pump / Governor Drive Oil Pump Oil Pan Group Fan & Fan Drive

Transmissions Transmission Oil Lines Hydraulic Controls Transmission Oil Filter Base Transmission Gears Final Drives / Planetary Drive Shafts Transfer Case Wet Brake Assemblies Hydrostatic Pumps & **Drive Motors** Linkage / lines Connected to Hystat Pump Drive (pilot/eh) Control Valves Senders / Sensors Powertrain Transmission Lines / Hoses Transmission Oil Tank Drive Train Oil Lines Bevel and Transfer Case

Axles

Axle Seals Final Drive & Wheel Final Drive Case / Bore Final Drive Chain Final Drive Gears Axle Shaft Drive Axle Oil Pump Universal Joint Countershaft Transmission

Steering Clutch Steering Clutch & Brake Control Valve Steering Gear & Valve Power Steering Logic Module Steering Linkage Steering Column Steering Console Tie Rod

Hydraulic / Steering Hoses & Lines Hydraulic Cylinders Hydraulic Valves & Controls Hydraulic Accumulators Hydraulic Oil Coolers Hoses and Lines Hydraulic Quick Couplers & Swivels Hydraulic Oil Filter Mount Hydraulic Oil Temperature Sensor Hydraulic Oil Filter Base Hydraulic Tanks

Automatic Grade Control Axle Spring Bogie Suspension Cross Slope Control Equalizer Bar Equalizer Bar Center Pin Support Equalizer Bar Support Stabilizer Suspension Control Suspension Control Valve Suspension Cylinder

Brake Master Cylinder Vacuum Pump Wheel Cylinder Brake Caliper, Head Assembly Control Valves Brake Lines Accumulator

Gauges / Indicators / Instruments Wiring harnesses Switches Relays / Circuit breakers Generator Alternator / Generator Battery Charger Main Power Relay Start Switch Fuse / Circuit Breaker Panel Circuit Board

Chassis / Implement Frames Weldment Carbody Main Frame

Track Roller Frame Track Adjuster Recoil Spring

#### **FXCHUSIONS**

If a component is not listed, it may not be included in the plan. Other exclusions include:

- > Improper or abusive use of the machine
- > Lubricating oil, antifreeze, filters, consumables and other maintenance items replaced during the covered component repair, unless such items are rendered unusable by a covered component failure
- > Failures caused by normal wear-out
- > Freight charges for parts shipments
- > Travel time and mileage involved in getting to a job site
- > Hauling costs and / or retrieval costs
- > Overtime labor costs
- > Repair costs resulting from the failure of any non-covered components
- > Downtime loss
- > Equipment rental charges
- > Any incidental / consequential damages or costs incurred as a result of a covered component failure.
- > Modifications unless approved by Caterpillar

Examples of covered and excluded components or items are listed here. The actual dealer contract will govern. For a complete list of included components and more information on Cat Equipment Protection Plans, contact your local Cat dealer.