# Cat® Batteries



# Cat® Batteries—Greater Starting Power—Lower Maintenance—Longer Life

Cat® Premium High Output (PHO) batteries are used in all Caterpillar® Machines and Engine Gen-Sets. They are designed to meet stringent Caterpillar design specifications, which provide industry leading cold cranking amp (CCA) capability and maximum vibration resistance.

Maintenance Free or low maintenance designs are available in wet and dry configurations.

General Service Line batteries are available in Maintenance Free or low maintenance designs and in wet or dry configurations. Wide selections of BCI group sizes are available for automotive, light truck, bus, industrial, agricultural, marine, recreational and valve regulated (VRLA-AGM & Gel) applications.



#### **World's Toughest Batteries**



#### **Premium High Output—Maximum Vibration Resistance**

- Vibration Resistance...five times the Industry Standard
- Exclusive "flat top" BCI group 4D & 8D batteries are Maintenance Free and have the industries highest cold cranking amps (CCA)
- Popular BCI group 31 Maintenance Free batteries with industry leading cold cranking amps...up to 1000 (CCA), for electric power, machine or on-highway truck and bus applications. Deep cycle models are available for truck, marine or recreational usage

## **Specifications for Cat Premium High Output Batteries-Available Worldwide**

												<u>No</u>	minal Weight
BCI		Cold Cranking	Reserve		Amp Hr.		Add Water Maintenance		<b>BCI Overall Dimensions</b>				Nominal Acid to Fill
Group Size	Part No.	Amps"	Capacity Minutes'	Volts	Capacity @ 20 Hrs.	Construction	Check Hours	Length In (mm)	Width In (mm)	Height In (mm)	Wet Lb (kg)	Dry Lb (kg)	Ot (liter)
8D	153-5720	1500	465	12	210	С	MF	20.47 (520)	10.8 (275)	9.76 (248)	132 (60)	-	-
8D	101-4000	1400	400	12	190	LAC+	1000	20.7 (526.5)	10.96 (278)	9.76 (248)	132 (60)	86 (39)	18.0 (17.0)
4D	153-5710	1400	425	12	200	С	MF	20.47 (520)	8.58 (218)	9.76 (248)	119 (54)	_	-
4D	153-5700	1125	305	12	145	С	MF	20.47 (520)	8.58 (218)	9.76 (248)	101 (46)	_	-
4D	9X-9730	1300	400	12	190	LAC+	1000	20.75 (527)	8.58 (218)	9.76 (248)	119 (54)	81 (37)	14.8 (14.0)
4D	9X-9720	1000	275	12	140	LAC+	1000	20.75 (527)	8.58 (218)	9.76 (248)	101 (46)	59 (27)	15.9 (15.0)
31	175-4390	1000	180	12	90	C/S	MFA	12.9 (328.4)	6.74 (171.2)	9.29 (236)	60 (27)	-	-
31	175-4370	825	190	12	100	C/S**	MFA	12.9 (328.4)	6.74 (171.2)	9.29 (236)	60 (27)	-	-
31	175-4360	710	185	12	100	C/S***	MFA	12.9 (328.4)	6.74 (171.2)	9.29 (236)	60 (27)	-	-
31	250-0480	710	185	12	100	C/SDT***	MF	12.9 (328.4)	6.74 (171.2)	9.29 (236)	60 (27)	-	-
31	115-2422	1000	170	12	90	C SAE	MFA	12.9 (328.4)	6.74 (171.2)	9.46 (240.3)	60 (27)	-	-
31	115-2421	950	170	12	90	C SAE +	MFA	12.9 (328.4)	6.74 (171.2)	9.46 (240.3)	60 (27)	44 (20)	6.6 (6.2)
31	9X-3404	950	165	12	100	C SAE	MF	13 (330.2)	6.77 (172)	9.46 (240.3)	58 (26)	_	-
31	3T-5760	750	165	12	100	C SAE	MF	13 (330.2)	6.77 (172)	9.46 (240.3)	55 (25)	_	-
24	153-5656	650	110	12	52	SC	MF	10.98 (278.9)	6.85 (174)	9.0 (229.1)	39 (18)	-	-
65	230-6368	880	140	12	80	SC	MF	11.9 (303.4)	7.5 (190.8)	7.5 (191.4)	45.5 (21)	-	-
74	153-5660	650	110	12	52	SC*	MF	10.98 (278.9)	7.0 (178.2)	8.15 (206.9)	39 (18)	-	-
58	175-4280	500	70	12	35	SC	MF	9.96 (253.1)	7.2 (182.5)	6.9 (176)	31 (14)	-	_
2	153-5690	765	210	6	90	LAC+	1000	10.24 (260)	6.8 (173)	8.72 (221.6)	37 (17)	22 (10)	4.8 (4.5)

#### **Construction Notes:**

LAC = Low Maintenance, Hybrid Construction C=Calcium Lead Alloy Grid Design MF=Maintenance Free

MFA=Maintenance Free with Accessible Vent Caps

- S = Stud Terminals
- + = Shipped Dry Only
- \* = Side Terminals
- \*\* = Starting and Deep Cycle Battery
- \*\*\* = Deep Cycle and Starting Battery
- " = For 30 seconds at  $0^{\circ}$  F (-18° C)
- ' = Minimum of 25 amp output at 80° F (27° C)
- SAE = Uses SAE Posts

SDT = Dual, Top mounted Terminals, Stud and SAE Post,

Marine Deep Cycle/Starting Battery

SC=Silver (Ag) Calcium Alloy Grids for resistance to high underhood temperatures

#### Rugged Design-Built Tough-Reliable Starting

- Positive and negative plates are anchored to container bottom and locked at the top of celnelement for maximum vibration resistance.
- Heavy-duty forged terminal post bushings provide maximum strength and resistance to acid seepage.
- Hefty full-frame grids, no sharp edges, optimum acid/paste combination provides better charge acceptance after deep discharge.
- Manifold vented cover with built-in Flame Arrestor...a safety feature that directs corrosive gases away from the battery and hold-downs.
- Thick, robust container resists rugged treatment typical of heavy-duty commercial use. Embossed part number & descriptors for easy serviceability.



**Wet Batteries** 

#### **Premium Batteries for a Wide Range of Applications**

Ideal for Automotive, Light Truck, Bus, Marine, Industrial, Agricultural, Stationary Power and Recreational Usage.

- Maintenance Free and low maintenance... accessible or sealed
- Deep Cycle and Valve Regulated (VRLA) Gelled or Absorbed Glass Mat (AGM) batteries
- Hefty full frame grids, no sharp edges. Optimum acid/paste combination provides better charge acceptance after deep discharge
- Silver (Ag) Calcium Grids for high temperature automotive usage
- Commercial batteries have Anchor Lock elements for vibration resistance
- Flame Arrestor Safety Vents to direct corrosive gases away from the battery and hold-downs

AAGLI	Dallelle	•			•		,			
BCI		Cold	Reserve		Amp Hr.		BC	I Overall Dimensions		Nominal Weight
Group Size	Part No.	Cranking Amps"	Capacity Minutes'	Volts	Capacity @ 20 Hrs.	Construction	Length In (mm)	Width In (mm)	Height In (mm)	Wet Lb (kg)
Truck/	'Agricultu	ral/Industi	rial							
1	8C-3617	650	180	6	100	C/MF	9.0 (229)	6.9 (175)	8.8 (224)	33.5 (15)
2	8C-3629	780	215	6	90	LA	10.4 (264)	6.9 (175)	8.8 (224)	36.5 (17)
3EE	8C-3620	400	95	12	54	LA	19.3 (490)	4.3 (109)	9.0 (229)	43 (20)
3EH	8C-3632	875	250	6	115	LA	19.3 (490)	4.3 (109)	10.0 (254)	47.5 (22)
4	8C-3633	1000	270	6	125	C/MF	12.5 (318)	6.9 (175)	9.5 (241)	47 (21)
4D	8C-3623	900	260	12	115	LA	20.8 (508)	8.5 (216)	10.1 (257)	97 (44)
4DLT	8C-3622	860	250	12	100	LA	20.0 (508)	8.2 (208)	8.2 (208)	79 (36)
7D	8C-3635	950	350	6	156	LA	15.8 (401)	7.0 (178)	9.2 (234)	59.5 (27)
8D	8C-3624	1300	430	12	190	LA	20.7 (526)	11.0 (279)	10.0 (254)	130 (59)
24F	3T-5858	650	120	12	55	SC/MF	10.6 (269)	6.8 (173)	9.0 (229)	40 (18)
27	8C-3601	675	120	12	65	SC/MF	12.0 (305)	6.7 (170)	9.0 (229)	45.5 (21)
27F	8C-3602	675	120	12	65	SC/MF	12.4 (315)	6.7 (170)	9.0 (229)	45.5 (21)
30H	8C-3627	850	180	12	100	C/MF	13.0 (330)	6.8 (173)	9.5 (241)	57.5 (26)
31	8C-3628	800	170	12	80	C/MF/S	13.0 (330)	6.8 (173)	9.5 (241)	54.5 (25)
Bus-S	pecial Te	rminal								
8D	250-0473	1450	450	12	190	C/MFA/TB	20.7 (526)	11.0 (279)	10.0 (254)	134 (61)
	_	ht Truck &	SUV							
22F	3T-5859	425	65	12	35	SC/MF	9.4 (239)	6.8 (173)	8.3 (211)	29.5 (13)
24	3T-5857	650	120	12	55	SC/MF	10.2 (259)	6.8 (173)	9.0 (229)	38.5 (17)
26	8C-3600	540	80	12	45	SC/MF	8.8 (224)	6.8 (173)	8.0 (203)	24.5 (11)
41	8C-3605	660	110	12	64	SC/MF	11.5 (292)	6.9 (175)	6.9 (175)	37 (17)
42	250-0490	475	70	12	40	SC/MF	9.5 (241)	6.9 (175)	6.9 (175)	29 (13)
55/56/62	8C-3611	585	95	12	52	SC/MF/DT	8.8 (224)	6.0 (152)	8.5 (216)	33 (15)
58	8C-3612	580	55	12	53	SC/MF	10.0 (254)	7.2 (183)	6.9 (175)	31.5 (14)
75	7X-6100	720	100	12	60	SC/MF *	9.0 (229)	7.0 (178)	7.3 (185)	34.5 (16)
75/86	250-0489	540	85	12	47	SC/MF/DT	9.7 (248)	7 (178)	8.1 (206) !	32 (15)
Autom	notive/Ligh	ht Truck &	SIIV Sav	ora Sai	vice/High	Tomnoratur	a Silvar I as	d Alloy Techr	nology	
25	250-0488	600	90	12	45	ST/MF	9.1 (230)	6.8 (175)	8.8 (225)	31 (14)
	250-0400	000	- 00	10	15	OT/MI	0.1 (200)	0.0 (175)	0.0 (223)	01 (14)

Construction Notes:

35

34/78

LA = Low Maintenance, Low Antimony Grids LAC = Low Maintenance, Hybrid Construction C = Calcium Lead Alloy Grid Design

250-0487

250-0486

250-0484

600

690

650

90

100

MF = Maintenance Free

SC= Silver (Ag) Calcium Alloy Grids-for resistance \* = Side Terminals to high underhood temperatures MFA-Maintenance Free, Calcium Grids

45

60

Accessible Vent Caps

12

12

12

ST= Silver (Ag) Calcium Alloy Heavy Duty Grids

S = Stud Terminals

ST/MF

ST/MF

ST/MF/DT

DT= Dual Terminal

TB = Transit Bus one piece end Terminal.

9.1 (230)

10.7 (273)

12 (304)

Right end of Battery.

1/2"-13 Steel positive stud 3/8"-16 Steel negative stud " = For 30 seconds at  $0^{\circ}$  F (-18° C)

8.8 (225)

8 (203) !

7.6 (194)

' = Minimum of 25 amp output at 80° F (27° C) ! For height with removable adapter.

31 (14)

39 (18)

39 (18)

add 7/8" (22 mm)

6.8 (175)

6.8 (175)

7.3 (187)

2

#### Cat® General Service Batteries—Available Worldwide (cont.)

#### Wet Batteries Continued

BCI Group Size	Part No.	Cold Cranking Amps"	Reserve Capacity Minutes'	Volts	Amp Hr. Capacity @ 20 Hrs.	Construction	<u>BCI</u> Length In (mm)	Overall Dimensions Width In (mm)	Height In (mm)	Nominal Weight Wet Lb (kg)
Marine	e-Deep Cy	ycle Capab	ility							
24M	8C-3638	650	120	12	55	SC/MF/DT/~	10.8 (274)	6.8 (173)	9.4 (239)	40 (18)
27M	8C-3639	625	150	12	80	@/S/DT	12.5 (318)	6.8 (173)	9.4 (239)	49 (22)
Lawn 8	& Garden									
U1	8C-3636	260	32	12	25	C/MF	7.8 (198)	5.1 (130)	7.3 (185)	16.5 (7
Golf Ca	art/Scisso	75 amps @ 80° F 115 mins.	ifts	6	215	@ 0P	10.3 (262)	7.1 (180)	10.9 (277)	63 (29)
Duel T	orminal B	) ottorios								<u> </u>
	erminal B									
24/24F/74	127-0824	930	130	12	63	SC/MF/DT	10.9 (277)	7.0 (178)	9.0 (229)	45 (20)
34/78	127-0826	875	120	12	66	SC/MF/DT	10.8 (274)	6.9 (175)	8.0 (203) !	41 (19)
75/86	250-0489	540	85	12	47	SC/MF/DT	9.7 (248)	7 (178)	8.1 (206) !	32 (15)
34/78	250-0486	690	100	12	60	ST/MF/DT	10.7 (273)	6.8 (175)	8 (203) !	39 (18)

•	Batterie		_				BCI C	verall Dimens	<u>ions</u>	<u>Nominal</u>	Weight	
BCI	Group	Cold	Reserve Cranking	Capacity	Amp Hr.	Capacity		Length	Width	Height	Wet Lb	Nominal Dry Lb
Acid to Size		Amps"	Minutes'	Volts	@ 20 Hrs.	Construction	In (mm)	In (mm)	In (mm)	(kg)	(kg)	Qt (liter)
Truc	k/Agricult	tural/Ind	ustrial									
1	8T-9734	650	180	6	100	C/MF +	9.0 (229)	6.9 (175)	8.8 (224)	33.5 (15)	17.5 (8)	4.5 (4.3)
3D	8T-9730	1400	675	6	320	LA +	20.4 (518)	8.7 (221)	10.0 (254)	120 (54)	84 (38)	11.0 (10.4)
7D	8T-9731	950	350	12	156	LA +	15.7 (399)	7.0 (178)	9.1 (231)	59.5 (27)	34 (15)	7.5 (7.1)
24F	9X-1382	650	120	12	50	SC/MF+	10.6 (269)	6.8 (173)	9.0 (229)	40 (18)	26 (12)	6.0 (5.7
26	145-4517	540	80	12	48	SC/MF+	8.8 (224)	6.8 (173)	8.0 (203)	29.5 (13)	23 (10)	3.5 (3.3)
26R	145-4518	540	80	12	48	SC/MF+	8.8 (224)	6.8 (173)	8.0 (203)	29.5 (13)	23 (10)	3.5 (3.3)
27	3E-8925	675	120	12	55	SC/MF +	12.0 (305)	6.7 (170)	9.0 (229)	45.5 (21)	29.5 (13)	6.5 (6.2)
Auto	motive/Li	ght Truc	k									
22F	9X-1384	425	65	12	32	SC/MF+	9.4 (239)	6.8 (173)	8.3 (211)	29.5 (13)	18 (8)	4.5 (4.3)
24	9X-1383	650	120	12	50	SC/MF+	10.2 (259)	6.8 (173)	9.0 (229)	40 (18)	26 (12)	6.0 (5.7)

#### **Construction Notes:**

LA = Low Maintenance, Low Antimony Grids LAC = Low Maintenance, Hybrid Construction

C = Calcium Lead Alloy Grid Design

MF = Maintenance Free

MFA= Maintenance Free, Calcium Grids, Accessible Vent Caps

ST= Silver (Ag) Calcium Alloy Heavy Duty Grids

SC= Silver (Ag) Calcium Alloy Grids-for resistance to high underhood temperatures

\* = Side Terminals

S = Stud Terminals

DT=Dual Terminal

OP = Offset Post with Horizontal Hole Stainless Steel 5/16" Bolt & Hex Nut

- " = For 30 seconds at  $0^{\circ}$  F (-18° C)
- ' = Minimum of 25 amp output at 80° F (27° C)

! For height with removable adapter, add 7/8" (22 mm)

- @ = Deep Cycle-Antimony Grids
- ~ = Marine Starting
- + = Shipped Dry Only
- # = Wing Nut for 8C-3638 & 8C-3639 is Part # 3B-0723

#### Gelled (GEL) Electrolyte, Marine/Recreational, Deep Cycle Capability

BCI	Cold Reserve A		Amp Hr.		<u>BCI</u>	Nominal Weight				
Group		Cranking	Capacity		Capacity		Length	Width	Height	Wet Lb
Size	Part No.	Amps"	Minutes'	Volts	@20 Hrs.	Construction	In (mm)	In (mm)	In (mm)	(kg)
4D	152-8006	970	375	12	183	MF-G/VRLA	20.8 (528)	8.5 (216)	10 (254)	129.8 (59)
8D	152-7242	1150	475	12	225	MF-G/VRLA	20.8 (528)	11.1 (282)	10 (254)	160.8 (73)

Marine Cranking Amps (MCA) = cold cranking Amps divided by 0.8

MF-G/VRLA = Maintenance Free Gel Battery. Sealed, Valve-Regulated Lead Acid (VRLA) battery with gelled electrolyte.

Starting/Deep Cycle Marine or Recreational Use Battery. Could be used for Gen-Sets or UPS type applications requiring a sealed battery.

VRLA batteries use recombination reaction to prevent the escape of hydrogen and oxygen gases normally lost in a flooded lead acid battery. They are non-spillable, never need watering and should never be opened.

" = For 30 seconds at 0° F (-18° C)

= Minimum of 25 amp output at 80° F (27° C)

Important: Alternator and charger instructions:

For 12-volt Gel Batteries charge to 13.8 volts but no more than 14.1 volts at 68° F (20° C)

## Absorbed Glass Mat (AGM) Batteries, Designed for High-rate Uninterruptible Power Supplies (UPS) or Standby Applications

<b>Discharg</b>	e Ratings
Power	Discharg
Watts	Rating in
per Cell	Amperes

		For 15 mins. to 1.67 V.P.C. @ 77° F (25° C)	For 15 mins. to end voltage	Amp Hour @ 20 hour rate				<b>BCI Overall Dimensions</b>				Nominal Weight		
BCI Group Size	Part No.		of 1.67 V.P.C. @ 77 ° F (25° C)	to 1.75 volts per cell @ 77 ° F (25° C)	Normal Voltage	Construction	Terminal	Length In (mm)	Width In (mm)	Terminal Height In (mm)	Container Height In (mm)	Wet Lb (kg)		
U1	250-0474	116	62	1.63	12	MF-AGM/VRLA	1	7.71 (196)	5.18 (132)	7.18 (182)	6.18 (157)	24 (11)		
45	250-0475	156	84.3	2.75	12	MF-AGM/VRLA	2	8.84 (225)	5.31 (135)	8.7 (221)	8.14 (207)	38.5 (18)		
24	250-0476	262	140	3.95	12	MF-AGM/VRLA	2	10.2 (259)	6.8 (173)	9.14 (232)	8.12 (206)	53 (24)		
27	250-0477	304	165	4.61	12	MF-AGM/VRLA	2	12.72 (323)	6.8 (173)	8.68 (220)	8.12 (206)	63 (29)		
31	250-0478	350	186	5.25	12	MF-AGM/VRLA	3	12.93 (329)	6.75 (171)	8.75 (222)	8.58 (218)	69 (31)		
31(A)	250-0479	475	261	6.66	12	MF-AGM/VRLA	3	13.5 (342)	6.77 (172)	11.25 (286)	11.08 (281)	98 (45)		
4D(H)	250-0483	624	338	9.91	12	MF-AGM/VRLA	4	21.73 (552)	8.82 (210)	9.34 (237)	8.74 (22)	129 (59)		

MF-AGM/VRLA = Maintenance Free-Absorbed Glass Mat (AGM) Battery. Battery has Flame Arrestor and is low-pressure self sealing Housed in flame-retardant polypropylene (rated 28 LOI) 12-Volt Monoblocks.

(A) = Battery is 2.5 in. (63.5 mm) taller and .57 in (13mm) longer than standard Group 31.

(H) = Battery has handles.

Sealed Valve-Regulated Lead Acid (VRLA) with electrolyte absorbed in separators consisting of a sponge-like mass of matted glass fibers. Preferred for high-rate performance in uninterruptible power supply (UPS) or standby applications.

VPC = Volts per Cell.

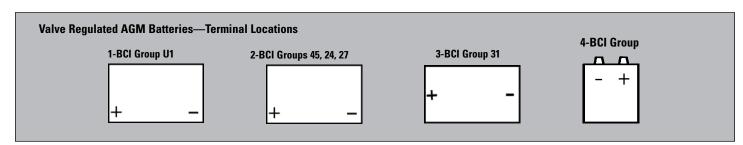
WPC = Watts per Cell. Ratings conform to IEEE-485 Standards.

VRLA batteries use recombination reaction to prevent the escape of hydrogen and oxygen gases normally lost in a flooded lead. acid battery. They are non-spillable, never need watering and should never be opened.

UL Recognized Component

AGM batteries have a longer production lead time than regular lead-acid type batteries

Important: Alternator and charger instructions: for 12-volt AGM Batteries charge to 14.4 volts but no more than 14.6 volts at 68°F (20° C)

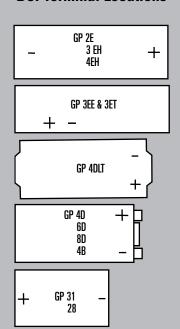


#### Terminals

VRLA batteries are a UL Recognized Component and are I.C.C.O., I.M.D.E., I.A.T.A., and D.O.T. Air Transportable Approved.

- 1 = Lead terminal. L shaped. Terminals have square holes.
- 2 = Lead terminal with brass inserts. 1/4-20 x .25 Deep Female Thread.
- 3 = Lead terminal with brass inserts. Centerline terminals. 1/4-20 x .25 Deep Female Thread.
- 4 = End terminals with brass inserts. 1/4-20 (UNC) Female Thread. Ratings conform to IEEE-485 Standards.

#### **BCI Terminal Locations**



GP21R, 22R, 22F, 22HF, 22NF, 24F, 24F, 24F, 26R, 27F, 27R, 33, 34R, 35, 36R, 47.



Side Terminal GP70, 71, 72, 73, 74 75, 76, 77, 78, 101 +

GP21, 24, 24H, 25, 26, 27, 27H, 29H, 30H, 34,50, 51, 52, 57, 58, 59, 65, 86, U1, 12T, 24T

U2(L TERMINAL)

Transit Bus Terminal for 8D Part # 250-0473
One piece end terminal.
Right end of Battery.
1/2" - 13 Steel Positive Stud
3/8" - 16 Steel Negative Stud

## Cat Premium High Output Batteries — Built Tough to Exceed Demanding Performance Test Requirements:

#### 100 hour Vibration Testing – Five Times the Industry Standard

- Battery must be able to withstand vibration forces without suffering mechanical damage, loss of capacity, loss of electrolyte or without developing internal/external leaks
- $\bullet$  Battery must pass a high rate discharge test after the vibration testing

#### Five 72-hour Deep Discharge/Recharge Test Cycles

• Battery must recover to 25 charging amps within 20 minutes and meet Industry Electrical Performance Standards

#### **30 Day Complete Discharge Test**

• Battery must recover to 25 charging amps within 60 minutes and meet Industry Electrical Performance Standards after recharging

#### **SAE J2185 Life Cycle Test**

 Battery subject to deeper discharge and charge cycles at extreme temperatures not normally encountered in starting a machine or vehicle

#### **Cold Soak Test**

• Battery cold soaked at sub-freezing temperatures and then tested by starting an equally cold engine

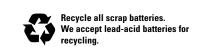


#### **Battery Accessories**

Group 31—Charging Posts for Stud Terminals—Part # 4C-5637
Screw-in Charging Posts for Side Terminals—Part # 4C-5638
Wing Nut—Part # 2B-9498 for Part #'s 175-4390/175-4370/175-4360/8C-3628
Wing Nut—Part # 3B-0723 for Part #'s 8C-3638 and 8C-3639
Digital Battery Analyzer—Part # 177-2330
Battery Load Tester—Part # 4C-4911
Booster Cable 12' (3.66 m)—Part # 4C-4933
Booster Cable 20' (6.00 m)—Part # 4C-4937
Heavy Duty Commercial Fast Charger (110V)—Part # 4C-4921

Note: Ratings and Part Numbers are subject to change without notice.

Heavy Duty Commercial Fast Charger (220V)—Part # 4C-4910





#### **Marine Commercial Vessels**

Maintenance Free 4D, 8D and Group 31 Batteries. General Service Line Line valve regulated (VRLA) Gel batteries. High Marine Cranking Amps (MCA) and Deep Cycling capabilities.



#### **Automotive-Truck-Bus & RV**

A wide selection of popular BCI group sizes. Maintenance Free, Severe Service and Deep Cycle models. Application Specific Group 31 Truck Batteries.



#### **Commercial & Recreational**

A wide selection of premium batteries in most BCI group sizes for light commercial, recreational, agricultural and industrial applications.



#### **Marine Pleasure Craft**

Premium High Output BCI Group 31, Dual Terminal Deep Cycle Batteries. General Service Line BCI group 24M, 27M and 8V sizes.



#### **Electric Power Generation**

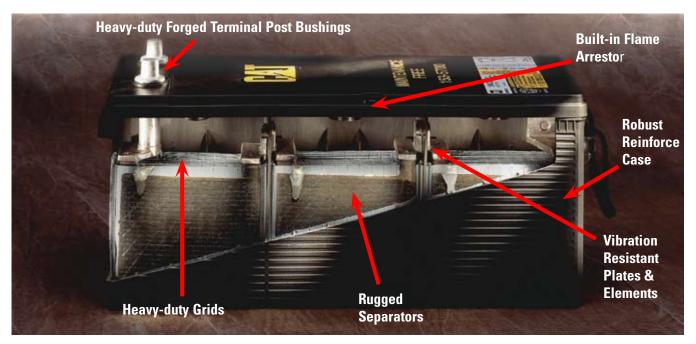
Premium High Output Maintenance Free and Accessible batteries in BCI group 4D, 8D, & 31 sizes. High Cold Cranking Amp (CCA) Capability. General Service Line valve regulated (VRLA) GM batteries for UPS or stationary power applications.



#### **Construction & Mining**

Premium High Output Maintenance Free batteries. BCI group 4D, 8D and 31 Sizes. Industry leading cold cranking amps (CCA) and maximum vibration resistance.

### **Cat® Batteries**



#### **Robust Components = Long Life + Reliable Starts**

- Heavy-duty forged terminal post bushings provide maximum strength and resistance to acid seepage that causes corrosion and black posts. Thicker internal terminal posts provide lower electrical resistance and higher cold cranking amp output.
- Rugged microporous polyethylene envelope separators protect against "shorts" and vibration damage. Deep Cycle batteries utilize double insulated Glass mat separators for longer cycling life.
- Maintenance Free batteries utilize calcium lead alloy on both positive and negative plates that reduces gassing and water consumption. Automotive batteries have Silver (Ag) Calcium Alloy Grids for resistance to high underhood temperatures.
- Heavy-duty, full frame battery grids with no sharp edges. An optimum acid/paste combination provides better charge acceptance after a deep discharge.
- Positive and Negative plates are anchored to the container bottom and the cell element is locked at the top for maximum vibration resistance. Straps are thicker, heavier and cast (not welded) into the plates.
- Manifold vented cover with built-in Flame Arrestor...a safety feature that directs corrosive gases away from the battery and hold-downs.
- Robust reinforced case provides extra strength in all temperature extremes. Brickwork design on sides reduces chance of
  punctures and case flexing. Embossed part number and descriptors for easy serviceability.

#### CAT® DEALERS DEFINE WORLD-CLASS PRODUCT SUPPORT.

We offer you the right parts and service solutions, when and where you need them.

The Cat Dealer network of highly trained experts can help you maximize your equipment investment.





