

# ODYSSEY™

THE EXTREME BATTERY



A GUIDE TO THE ODYSSEY RANGE OF BATTERIES

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THE ODYSSEY™ BATTERY INGENUOUSLY USES ABSORBED GLASS MAT (AGM) TECHNOLOGY TO OFFER, IN ONE BOX, THE CHARACTERISTICS OF TWO SEPARATE BATTERIES. IT CAN DEEP CYCLE AS WELL AS PROVIDE ENORMOUS CRANKING POWER - IT IS ALMOST AS IF A CHAMPION LONG DISTANCE RUNNER AND A WORLD CLASS SPRINTER ARE ONE AND THE SAME PERSON.

These batteries are capable of providing engine cranking pulses in excess of 2250A for 5 seconds as well as 400 charge/discharge cycles to 80% depth of discharge (DOD). A typical starting, lighting and ignition (SLI) battery can do one or the other, but not both. It is either a sprinter or a long distance runner; ODYSSEY batteries will do both — provide short duration high amperage pulse or low rate long duration drains.

## GUARANTEED LONGER SERVICE LIFE

With an eight to twelve year design life (float) and a three to ten year service life, ODYSSEY saves you time and money because you do not have to replace the battery as often. ODYSSEY is warranted against factory defects for two full years in powersports or three full years in automotive, commercial and heavy-duty marine applications.

## SUPERIOR CRANKING AND FAST CHARGE CAPABILITY

The 5 second cranking power of ODYSSEY batteries is double to triple that of equally sized conventional batteries, even when the temperature is as low as -40°C (-40°F). Also, with simple constant voltage charging (alternator or independent charger), there is no limitation on the inrush current, so the user is assured of fast charge recovery.

## MOUNTING FLEXIBILITY

The ODYSSEY battery may be installed in any orientation (except inverted) without sacrificing any performance attributes. There is no fear of any acid spillage as ODYSSEY recycles the internal gas during operation or charging. The sealed design of the ODYSSEY battery eliminates the need for an acid vent tube; eliminating the fear of acid burns or damage to expensive chrome or paint.

## SUPERIOR VIBRATION RESISTANCE

ODYSSEY batteries are of military grade and have endured rigorous tests that demonstrate their overall ruggedness and exceptional tolerance of mechanical abuse.

## READY OUT OF THE BOX

ODYSSEY batteries are shipped fully charged. If ODYSSEY'S voltage is 12.65V or greater simply install the battery in your vehicle and you are ready to go! If below 12.65V, boost charge following the instructions in the ODYSSEY Owner's Manual and/or Technical Manual. Putting a boost on the battery will not hurt it, even if its voltage reads higher than 12.65V.

## WORRY-FREE SHIPPING

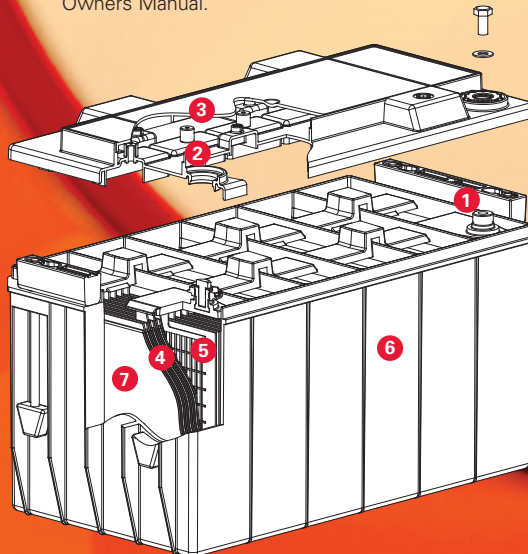
Owing to the drycell design, the US Department of Transportation (USDOT) has classified the ODYSSEY battery as a nonspillable, so it may be shipped worry-free by Express Service or by air.

## LONGER STORAGE LIFE

Unlike conventional batteries that need to be recharged every six to twelve weeks the ODYSSEY battery, when fully charged, can be stored for up to 2 years at 25°C (77°F). Simply recharge and ODYSSEY is returned to full power. At lower temperatures, storage times will be even longer.

## DEEP DISCHARGE RECOVERY











Should ODYSSEY become deeply discharged, simply recharge following instructions in the ODYSSEY Owners Manual.



## CONSTRUCTION

- 1 High Conductivity terminals
- 2 High integrity terminal seal
- 3 Self-regulating relief valve
- 4 Rugged high performance positive plates
- 5 Balanced negative plates
- 6 Tough flame retardant cell containers (flame retardant material not applicable to PC535, PC625 and PC2150 models)
- 7 Glass mat separators

## ODYSSEY PROVIDES THE POWER FOR EVERY PURPOSE

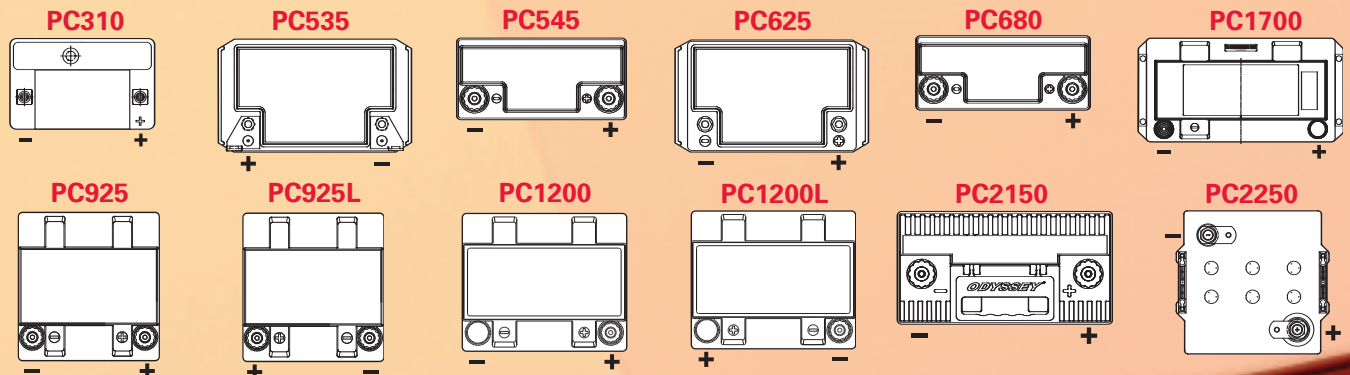
MODEL	Voltage	PHCA** (5 Sec)	CCA*	HCA	MCA	Nominal Capacity		Reserve Capacity Minutes	Length inches (mm)	Width inches (mm)	Height inches (mm)	Weight lbs (kg)	Terminal	Torque Specs in-lbs	Internal Resistance (mΩ)	Short Circuit Current (Nm max)
						(20 Hr Rate - Ah)	(10 Hr Rate - Ah)									
<b>PC310</b> 	12	310	100	200	155	8	7	9	5.43 (138.0)	3.39 (86.0)	3.98 (101.0)	5.9 (2.7)	M4 Bolt	8.9 (1.0)	27.1	455A
<b>PC535</b> 	12	535	200	300	265	14.8	13	21	6.70 (170.2)	3.90 (99.1)	6.125 (155.6)	12.0 (5.4)	M6 Bolt	40 (4.5)	8	1000A
<b>PC545</b> 	12	545	185	300	240	14	12	18	7.00 (177.8)	3.37 (85.6)	5.17 (131.3)	12.6 (5.7)	M6 Bolt†	50 (5.6)	10	1200A
<b>PC625</b> 	12	625	265	440	350	18	17	27	6.70 (170.2)	3.90 (99.1)	6.89 (175.0)	13.2 (6.0)	M6 Stud	40 (4.5)	7	1800A
<b>PC680</b> 	12	680	220	370	300	17	16	24	7.27 (184.7)	3.11 (79.0)	6.67 (169.4)	15.4 (7.0)	M6 Bolt† or SAE 3/8" Receptacle	50 (5.6)	7	1800A
<b>PC925</b> 	12	925	380	625	500	28	27	52	6.64 (168.6)	7.05 (179.0)	5.04 (128.0)	26.0 (11.8)	M6 Bolt† or SAE 3/8" Receptacle	60 (6.8)	5	2400A
<b>PC1200</b> 	12	1200	550	860	725	44	40	78	7.87 (199.9)	6.66 (169.1)	6.80 (172.7)	38.2 (17.4)	M6 Bolt† or SAE 3/8" Receptacle	60 (6.8)	4.5	2600A
<b>PC1700</b> 	12	1700	875	1325	1175	68	65	142	13.02 (330.7)	6.62 (168.2)	6.93 (176.0)	60.9 (27.6)	M6 Bolt,† SS 5/16" Stud or SAE 3/8" Receptacle	60 (6.8)	3.5	3500A
<b>PC2150</b> 	12	2150	1090	1545	1370	100	92	200	13.00 (330.2)	6.80 (172.7)	9.41 (239.0)	75.0 (34.1)	3/8" Stud/ SAE	150-200 (16.9-22.6)	2.2	5000A
<b>PC2250</b> 	12	2250	1225	1730	1550	126	114	240	11.26 (286.0)	10.59 (269.0)	8.19 (208.0)	86.0 (39.0)	Dual SAE/DIN Terminal and 3/8" Stud	100 (11.0) For 3/8" Stud only	2.1	5000A

\* Cold Start Performance S.A.E J537 JUNE 82    \*\*Pulse Current    † Can be fitted with brass automotive terminal

All batteries available with metal jackets, except PC310, PC535, PC625 and PC2250

Operating temperature range: -40°C (-40°F) to 45°C (113°F) • -30°C (-22°F) to 40°C (104°F) for PC2250 • -40°C (-40°F) to 80°C (176°F) with metal jackets on all other sizes

### TERMINAL LAYOUTS



Drawing sizes are for terminal position reference only; diagrams are not proportionate to each other.

# ODYSSEY™

## THE EXTREME BATTERY

### ODYSSEY TECHNOLOGY COMPARISON

	ODYSSEY	CONVENTIONAL
<b>DESIGN LIFE</b>	8-12 years (Float) @ 25°C (77°F)	5 years
<b>SERVICE LIFE</b>	3 to 10 years	1 to 5 years
<b>ELECTROLYTE</b>	Drycell ("starved electrolyte") no external leakage or corrosion	Most are acid flooded (causing acid burns and spills); some wet sealed or "gelled"
<b>STORAGE LIFE</b>	2 years before needing charge @ 25°C (77°F)	6-12 weeks before needing charge
<b>SHIPPING</b>	Air transportable; classified non-spillable (less expensive)	Ground transport; classified as hazardous material (more expensive)
<b>END OF LIFE</b>	Battery slowly loses power at end of life; no catastrophic failure	Immediate and catastrophic loss of power (can leave you stranded)

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#### WARRANTY: LIMITED 2-YEAR AND 3-YEAR FULL REPLACEMENT

EnerSys Energy Products Inc. (seller), warrants its ODYSSEY batteries to be free of defects in material and workmanship. This warranty is effective for 2 years in powersports applications and 3 years in automotive/commercial/industrial applications from the date of purchase with original receipt; 2 and 3 years respectively from manufacturer's shipping date if no original receipt is available; or within 400 cycles to 80% depth of discharge, whichever occurs first. Within the warranty period, the battery will be replaced free of charge if adjustment is necessary due to defect in material or workmanship (not merely discharged). Simply return the battery to any authorized ODYSSEY dealer with the original receipt for a replacement. This warranty may vary from country to country; contact your appropriate sales region for confirmation.

#### GENERAL PROVISIONS

A. Seller has no obligation under the limited warranty set forth above in the event the battery is damaged or destroyed as a result of:

- Willful abuse or neglect or if the top decorative cover has been removed.
- Natural forces such as wind, lightning, hail; damage due to fire, collision, explosion, vandalism, theft, penetration or opening of the battery case in any manner.
- Overcharging, undercharging, charging or installing in reverse polarity, improper maintenance, allowing the battery to be deeply discharged via a parasitic load or mishandling of the battery such as but not limited to using the terminals for lifting or carrying the battery.
- Failure to properly install the battery or lack of metal jacket for high temperature or vibration applications.
- Normal deterioration in the electrical qualities or the acceleration of such deterioration due to conditions that accelerate such deterioration.
- If the battery is used for any application that requires higher cranking power or a greater reserve rating than the battery is designed to deliver or the battery capacity is less than the battery capacity specified by the vehicle manufacturer or the battery is otherwise used in applications for which it was not designed.

B. To obtain warranty service:

1. Return battery to any authorized ODYSSEY wholesaler or dealer.
2. If the battery is determined to be defective for material or workmanship under terms of the warranty, it will be replaced.

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