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## Odyssey Battery General Application Guide

Your Odyssey battery retailer has the obligation to ensure that the Odyssey battery you purchase is a battery suitable for the intended application and that charging information is explained to you, if applicable. For applications outside this general guide please call Tas Battery Clinic on [03] 633 44 634.

Warranty periods are documented. Warranty provisions are for manufacturing faults and defects, not batteries that are just discharged, overcharged or sulphated. Sulphation information is available from Tas Battery Clinic.

Note 1..The PHCA on all Odyssey batteries is the current available down to 10 volts, during a typical 5 second start time.

Note 2 ..With competition race applications that do not have a charging system, ensure that the battery is charged to 100% capacity immediately after each day's racing. Even if the charging system has an alternator, measure the voltage of the battery 24 hours after the last use and if the battery voltage is not 12.80 volts or more, the battery has to be bought to 100% capacity with a 'voltage regulated' switch mode charger. Charging information is available, call Tas Battery Clinic.

Note 3 .. To charge a 'Dry Cell' Odyssey battery to 100% capacity, a 'switch mode'..'voltage regulated charger must be used. Charging with 'un-restricted voltage', conventional chargers will over charge a 'Dry Cell' Odyssey battery.

Note 4 ...If the battery is not recharged to full voltage it will lose capacity and will eventually fail on start. The battery has not 'failed', but it has been kept in a 'low voltage,' 'undercharged' condition. A battery that is not receiving a full charge or not recharged to full voltage will eventually lose the capacity to start the vehicle or fail to provide long duration current draws ie. In auxillary power supply applications (fridges, lights etc). This battery condition is called sulphation.

A 'Sulphation Information' sheet is available from Tas Battery Clinic.

PC310...Sized especially to service most Super Bike applications. Honda, Kawasaki, Suzuki, Yamaha, Triumph and MV Augusta. Various models of these makes but not all in some examples. It will also fit earlier models of various makes of motorcycles e.g., Honda, Suzuki, Kawasaki, Triumph etc. (some equipment adjustment may be necessary).

- The PC310 is 138 mm Long, 86 mm Wide and 101 mm High and weighs 2.7 kg, (5.9 lb).
- Basic CCA rating..100 amps. ● 5 second Pulse Hot Cranking Amps (PHCA) to the starter motor is 310 amps.
- This battery is fitted with female receptacle terminals with 4 mm s/steel bolts.
- The sealed 'Dry Cell' non-spillable design prevents acid damage to expensive paint, chrome and upholstery.
- An ideal industrial, farm or any small (low to medium compression) engine start battery, for engines up to 1000cc.
- The PC310 is suitable for Rotax go-kart engine start. Note, in applications that do not have a charging system (total loss), to ensure maximum service life and 100% capacity (voltage) recharge, a 'voltage restricted' switch mode charger must be purchased with this battery. Using 'un-restricted voltage' conventional chargers will overcharge an Odyssey battery.
- The PC310 has a Deep Cycle capability of 400 cycles down to 80% of the total capacity of 12.84 volts ie; down to a voltage of approx; 11.80 volts.

- A 2 year full replacement warranty for motorcycle, ATV and general small engine start applications apply.
- Go-karts have an 18 month warranty dated from the factory's bar code date strip, from manufacturer's faults & defects, not just discharged, over charged or over-cycled (as in 'total loss' charging systems, see Note 2 ).
- Note: a metal jacket is not fitted therefore, it is NOT suitable for high-heat environments e.g., Harley Davidson's. The PC310 is not covered by a factory warranty if fitted into high compression, hard cranking, high heat applications, e.g., Harley Davidson's. (go to the PC545, PC535 & PC680 for Harley Davidson applications).
- The PC310 is not suitable for any road vehicle fitments and is not covered by a factory warranty in such applications.

(See Notes: 1, 2, 3 & 4)

PC535 ...Is suitable only for low temperature battery locations. The PC 535 is not fitted with a metal jacket.

- Basic CCA rating..200 amps. ● 5 second Pulse Hot Crank Amps (PHCA) to the starter motor is 535 amps. (Note 1)
  - Replaces NY14 & YB16 applications for Harley Davidson Dyna series and Sportsters. ie, side box battery location.
  - A competent industrial, farm & small engine start battery for engines up to 1500cc. e.g., ride on lawn mowers, pumps, ultra-light aviation and small engined (1500cc max) competition vehicles (battery location inside the cabin or rear mount).
  - Some makes but not all models of ATV's and Jet Ski's. Call Tas Battery Clinic for specific application fitments.
- A 2 year full replacement warranty applies for motorcycle and general applications. A metal jacket is not fitted to this battery and is not suitable for high heat environments ie, direct exposure to engine and exhaust heat. As an example, Harley Davidson (under seat) hot engine oil tank location. The PC535 is not warranted in these high heat applications.
- Aviation warranty is 18 months from the manufacturers bar code date strip.
  - PC535 is not suitable for any road vehicle application and is not covered by a factory warranty in such applications.  
(See Notes 1, 2, 3 & 4 to ensure long battery service life)

PC545...Is suitable for high temperature battery locations. The PC 545 is fitted with a metal jacket.

- Basic CCA rating..185 amps. ● 5 second Pulse Crank Amps (PHCA) to the starter motor is 545 amps.(Note 1)
  - The PC545 is 178 mm long, 86 mm wide, 131 mm high.
  - This battery services most models of Harley Davidson's ( under seat) battery locations.
  - Ensure that the Harley Davidson factory charging rate is achieved and that the voltage regulator is functioning to the manufacturer's specifications. Establish that there are no 'parasitic current drains' evident (voltage loss, see Note. 4)
  - Fits into certain Japanese and European motorcycle makes but not all models. Call Tas Battery Clinic for specific application fitments.
  - Some makes but not all models of ATV's and Jet ski's. Call Tas Battery Clinic for specific application fitments.
  - The PC545 is a multi use dependable, small engine start battery ie, industrial, farm and pump applications.
  - This battery can be used in small engined competition vehicles and ultra light aviation (up to 1.5 litres and a max, 10.5 -1 compression ratio) e.g., Formula V, Formula Ford, road racing/hill climb specials, speedway midgets, etc.
  - The PC545 has been a reliable Rotax go kart engine start battery since its release.
  - Note; in all applications that do not have a charging system, for maximum service life and 100% capacity (voltage) recharge, a 'voltage restricted' switch mode charger must be purchased with this battery. Using 'un-restricted voltage' conventional chargers will overcharge an Odyssey 'Dry Cell' battery, voiding warranty.
- A 2 year full replacement warranty for motorcycle and other small engine start applications applies.
- Go-karts and small engined aviation applications have an 18 month warranty dated from the factory's bar code date strip, from manufacturers faults and defects (not just discharged, overcharged or over cycled).
  - The PC545 is not suitable for any road vehicle application and is not covered by a factory warranty in such applications.  
(See Notes 1, 2, 3 & 4 to ensure long battery service life)

PC625...Is suitable only for low temperature battery locations. The PC625 is not fitted with a metal jacket.

- Basic CCA rating..265 amps. ● 5 second Pulse Hot Crank Amps (PHCA) to the starter motor is 625 amps.
  - fits most model jet skis and certain ATV applications. Tas Battery Clinic has a detailed application guide.
  - Note. When used for water sports applications, be aware of constant current draw on most models. Either disconnect the battery leads at the end of the last usage OR connect a 'voltage regulated'.. switch mode charger.
  - Ensure that the battery is at 100% capacity (12.80 volts or more) after the last use ie, at the end of the season. If the battery is at full charge and has no current draw, an Odyssey battery is able to hold charge for up 18 months (at 25C and up to 12 months at 35 C). Batteries that are drawn down in voltage ('Parasitic Current Drain') and not maintained at full voltage, will lose capacity and may fail on start. Batteries that are discharged in voltage and left in that discharged condition are not covered by a factory warranty. This 'low voltage' condition is called 'Sulphation' and renders the battery, any battery, regardless of size or type, unserviceable eventually. (See Note. 4)
- A 'Sulphation Information' sheet is available from Tas Battery Clinic.
- suitable for medium engined (2000cc max. engine capacity) competition, open wheel or race/rally vehicles etc, for in- cabin battery location engine start or instrument power.
  - Ride on mowers, industrial and farm pump engine start.

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- Certain makes of motorcycles but not all models.
- Custom, high compression motorcycles that require a harder cranking battery. Ensure that the battery is not surrounded by the hot (under seat) oil tank if fitted to Harley Davidson's.
- certain Ultra- light aircraft up to 2000 cc engine capacity applications. Ensure that the aircraft's charging system is at the manufactures specifications after each use. Monitor voltage before engine start up, voltage must be 12,80 volts or more. If the voltage is not 12.80 volts or more, a 'switch mode' charger must be connected between usage to replace voltage not replaced by the on-board equipment charging system while in use or to replace parasitic current draws while inactive.

- A 2 year full replacement warranty is applicable for Jet ski's, ATV's and motorcycles.
- Aviation warranty is 18 months from the factory bar code date strip.
- The PC625 is not suitable for any road vehicle application and is not covered by a factory warranty in such applications.  
(See Notes 1, 2, 3 & 4 to ensure long battery service life )

PC680...is suitable for high temperature battery locations. The PC680 is fitted with a metal jacket.

- Basic CCA rating..220 amps.
- 5 second Pulse Crank Amps (PHCA) to the starter motor is 680 amps.
- Some makes but not all models of motorcycles e.g., Ducati, BMW, Yamaha, Moto Guzzi, Kawasaki, Honda, Laverda, Suzuki and Harley Davidson.
- Suitable for any rotary, 4, 6 and 8 cylinder road or competition vehicles up to 5.00 litres engine capacity (with maximum engine compression ratios of 11.00 to 1.00). ENGINE START APPLICATIONS ONLY ie, with minimum power consuming accessories ie, vehicles that are not fitted with security alarms or tracking devices, large amp sound systems, air conditioning etc. e.g., basic street machines, custom constructed vehicles, hot rods, kit cars etc, the PC680 is suitable with out the need for a 'switch mode' charger connected to the battery when not being driven. That is, no Parasitic Current Draws and that no high amp security current demands are evident while the vehicle/equipment is not in use.
- Owners of road vehicles (max. 3.00 litre engine capacity) with PC680's fitted, that do have a constant current draws ie, security (alarms or satellite tracking units), significant amp draw sound systems, engine management computers, digital radio memories etc, and the vehicle is not driven a substantial distance every day, must have a 'voltage regulated'... 'switch mode' charger connected to the battery, at all times when the vehicle is not being driven. (See Note. 4)
- Any road vehicle with numerous high current consuming accessories especially extensive high amp draw sound systems etc, are too demanding, capacity wise for the 16 amp hour PC680. These vehicles require at a minimum, the reserve capacity of the 28 amp hour PC925, or ideally the PC1200 at 44 amp hour, to ensure adequate capacity to supply these high amp draws and to ensure long battery service life (battery may have to be relocated).
- V8 competition race cars should be fitted with the PC925 (with 28 amp hour capacity) to ensure adequate capacity.
- Used in good quality engine jump start packs. (The PC680 is fitted to road side emergency service vehicle start packs).
- The PC680 is able to be CAA certified for ultra-light, helicopter and other examples of general aviation applications.
- The PC680 is not suitable for any diesel engine start applications and is not warranted for such use.

- PC680's have a 3 year full replacement warranty from manufacturers faults and defects in automotive applications.
- PC680's that are fitted to motorcycles, ATV's and Jet ski's have a 2 year full replacement warranty.
- Aviation warranty is 18 months from the manufacturers bar code date strip.  
( See Notes 1, 2, 3 & 4)

PC925...is suitable for high heat environments. The PC925 is fitted with a metal jacket.

- Basic CCA rating..380 amps.
- 5 second Pulse Hot Crank Amps (PHCA) to the starter motor is 925 amps.
- Very competent general duty road, performance and track vehicle battery up to 6.00 litres engine capacity with a maximum 13-1 engine compression ratio. Call Tas Battery Clinic for application advice above this specification.
- Any road vehicles with a constant current draw ie, security (alarms or satellite tracking units), engine management and digital memories etc, that are not driven a substantial distance every day, must have this battery connected to a 'voltage regulated'...'switch mode' charger at all times when the vehicle is not being driven. ( See Notes. 3 & 4)
- 'Total Loss'...competition vehicles not fitted with a charging system ( Note. 2)
- Excellent Light truck and 4X4 diesel engine start up to a maximum 3.0 litre engine capacity.
- Some makes but not all models of certain motorcycles e.g., Harley Davidson, Moto Guzzi and BMW. (Note. 4)
- The PC925 is able to be CAA certified for helicopter and other examples of general aviation applications.

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- PC925's have a 3 year full replacement warranty from manufacturers faults and defects in automotive applications.
- PC925's that are fitted to motorcycles, ATV's and Jet ski's have a 2 year full replacement warranty.
- Aviation warranty is 18 months from the manufacturers bar code date strip.  
( See Notes 1, 2, 3 & 4 )

PC1200 ... is suitable for high heat applications. The PC1200 is fitted with a metal jacket.

- Basic CCA rating..550 amps. ● 5 second Pulse Crank Amps to the starter motor is 1200 amps. Reserve capacity 78 min's.
- Excellent application for serious performance vehicles, both street and track. With 1200 Pulse Crank Amps (PHCA) to the starter motor, high compression PETROL engine start up to 8 litres is possible.
- Medium- heavy duty diesel engine start up to 4.5 litres , supplies exceptional cranking power.
- 24 volt ( 2 X 12 volt PC1200's) engine start, under all temperature extremes, for medium-heavy duty 4X4, motor homes, trucks, earth moving and farm equipment etc.
- Audio. The PC1200 is suitable for limited draw audio systems. See the PC1500, 1700 and 2150 for high amp systems.
- Marine. At only 44 amp hour the PC1200 does not have enough reserve capacity for electric motor trolling applications.  
Go to the PC2150 for these high amp, extended time period current draw trolling marine use. ( See Notes; 2, 3 & 4 )

- For Auxiliary power requirements in 4X4, caravans and camper trailers the PC1200 at 44 amp hour, is the minimum capacity battery recommended for reserve deep cycle requirements ie, winching, fridges and lighting etc. The PC1500DT at 65 amp/hr, PC1700 and PC1700/Group65 both at 68 amp/hr and the PC2150 at 98 amp/hr, offer additional storage capacity for exceptional value and long battery service life and would be the optimum choice for all your auxiliary needs.
- Taxi. The PC1200 (and PC1500) offer extended service in extreme high heat taxi applications that cannot be matched by any other battery product. A 12 month warranty from the manufacturers bar code date strip applies to taxi applications.
- PC1200's have a 3 year full replacement warranty from manufacturers faults and defects in automotive applications, or 400 discharges down to 80% capacity, whichever occurs first.  
(See Notes 1,2, 3 & 4 )

PC1500DT/ Group34/78 ... is suitable for high heat applications. Does not have a metal jacket but is manufactured with a resilient ribbed, high impact and oil resistant polypropylene black battery case. Rated. 65 amp hours.

- Basic CCA rating..825 amps. ● 5 second Pulse Crank Amps to the starter motor..1500 amps. Reserve capacity 125 min's.
- The PC1500 Dual Terminal has tin plated solid brass SAE automotive terminals and side receptacle 3/8-16UNC-2B female terminals. The Positive Terminal is positioned on the LEFT front side of the battery case.
- Battery case dimensions. Length..256 mm (10 inches). Width..172 mm (6.75 inches). Height to top of terminals..200 mm.
- The PC1500DT has a hold down foot mount built into the battery case, making it a direct fit replacement battery for most N50Z and N50ZZ's in medium to large motor vehicles, 4WD's, Light Trucks, motor homes and all U.S. GM vehicles.
- PC1500DT's have a 3 year full replacement warranty from manufacturers faults and defects in automotive applications.

PC1700 & PC1700/Group78 (both 68 amp hour)...PC2150 (98 amp hour)...PC2250 (120 amp hour).

- PC1700, PC1700/Group78...Basic CCA rating..875 amps. ● 5 second Pulse Crank Amps to the starter motor..1700 amps.
- The PC1700/Group78 has a hold down foot mount incorporated into the metal jacket, with a full length lifting handle.
- PC2150..Basic CCA rating..1090 amps. ● 5 second Pulse Crank Amps to the starter motor..2150 amps. Reserve. 200 mins.
- PC2250 ..Basic CCA rating..1225 amps. ● 5 second Pulse Crank Amps..2250 amps. Reserve capacity 240 mins.
- PC1700, PC1700/Group78, PC2150 & PC2250 have a 3 year full replacement warranty. (See Notes 1, 3 & 4)

- All the premium Odyssey Battery Products above offer *EXTREME* heavy duty service for any application.
- 12 and 24 volt (2 X 12 volt Odyssey's) offer both a superior high cranking performance as well as long duration reserve power current draws, for all...Automotive, 4WD's, Campers, Motor homes, Trucking, Earth Moving, Farming, Audio and Marine ( the PC2150 is the minimum amp hour battery recommended for marine applications. See Notes. 1, 3 & 4)
- For a Premium choice for your next obsolete battery failure replacement, the ruggedness of 'Pure Lead..Dry Cell' Absorbed Glass Matt design and the true deep cycle ability Odyssey Batteries offer, provide exceptional value and long service life.
- Odyssey Batteries are manufactured in the U.S.A. and Europe and are of Military Specification Grade.

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