

Technical product knowledge

OKA dual battery systems

Subject:

Late XT and LT vehicles fitted with dual batteries.

by John Wheeler, Service Manager

It is often not fully appreciated what the option of the dual battery system aims to achieve.

The following explanation may give a better understanding.

1. The Standard Specification of a single battery has the high CCA type fitted to the left side of the vehicle.
2. In dual battery specification, the prime purpose is to dedicate one of the two batteries to supplying charge for the starter motor to crank the engine.

The separation of the batteries is achieved via the following system:

- a) The original high CCA battery is transferred to the right side of the vehicle to become the "Dedicated Starting Battery".

- b) A Deep Cycle type battery is then fitted to the left side to provide a power source for everything else on the vehicle that requires electrical power.

- c) The two batteries are isolated from each other via an isolator switch plus a wiring circuit and relay.

This allows both batteries to be charged on a continuous basis whilst the engine is running, but prevents the Dedicated Starting Battery from being discharged by anything other than starting the engine.

- d) There is a contingent facility, via the isolator switch should one or the

other totally fail or be damaged.

In the event of any requirement, bizarre or peculiar, the switch allows the by-passing of the isolation condition to connect the batteries in parallel.

This Dual Battery System is the most

common being introduced during production in mid 1994.

There is however, a different dual battery specification with a different function that was installed on earlier vehicles. We will deal with this system in a later issue.

