

Applies to:

Monte Carlo Scooters (Code: MS020), Rio Scooters (Codes: MS011 – MS016),
Monami and Vitesse scooter (Codes: MS030 and MS031)
Apollo (after 09/03) (Code: AP010).

Diagnostics

Below is a break down of the flash sequence giving an indication of the area which is at fault. If there is a fault present the controller will initially go through a short burst of beeps indicating it is about to diagnose a fault. There will then follow a series of beeps between 2 and 10 which are replicated by the status LED on the tiller head. The flashes will be spaced between short pauses then there will be a longer pause before the series starts again. Please be aware that 1 flash (low battery voltage) will be reported by the end user as constant flashing. The scooter simply requires recharging or replacement batteries. The status LED will continue flashing until the fault is rectified and the keyswitch has been cycled. Be conscious that if the batteries have been removed from the operating system and are being reinstalled the controller will often bring up an 8 flash fault. This is simply due to battery initiation and is not a fault, simply cycle the keyswitch and the scooter will be ready for operation.



1 Flash • _ • _ • _	The battery requires charging or there is a bad connection to the battery.
2 Flash •• _ •• _ •• _	There is a bad connection to the motor. Check all connections between the motor and controller.
3 Flash ••• _ ••• _ ••• _	The motor has experienced a short circuit to a battery connection. Check all connections between the motor and batteries.
4 Flash •••• _ •••• _	Not Used
5 Flash ••••• _ ••••• _	Not Used
6 Flash •••••• _ •••••• _	Inhibit circuit has become active not permitting drive. Likely to be caused by charger being connected or a fault within the controller or wiring.
7 Flash ••••••• _ ••••••• _	A throttle fault has been indicated. Ensure throttle is in neutral before switching on the scooter. Throttle may require calibration.
8 Flash •••••••• _ •••••••• _	A controller fault has been indicated. Make sure all connections are secure. Also cycle keyswitch as this fault can be initiated by a break in circuit during keyswitch initiation.
9 Flash ••••••••• _ ••••••~••••••••• _	There is a fault within the electromagnetic brake circuit. Check all brake and motor connections. Make sure controller connections are secure and that the scooter is not in the freewheel mode.
10 Flash •••••••••• _ •••••••••• _	An excessive voltage has been applied to the controller. This is very often caused by a poor battery connection. Check all connections from the batteries to the controller.