

STARTING

Connect the charger to the net (check the charger label) and to the battery (the charger switches on after battery connection only): a few seconds later the charge begins automatically. The microprocessor on the electronic card resets the charger and shows the set charge cycle (see PAN.1). To change the cycle, open the charger and move the jumper on the electronic card.

“IU” CHARGE CYCLE

The charge begins in “I-phase” (constant current) to let battery voltage increase (see PAN.2a). When the battery voltage reaches V_u (see charger label) the electronic card activates “U-phase”. In case the battery voltage doesn’t reach V_u by 10 hours, the chargers will STOP. During “U-phase” V_u (battery voltage) keeps constant, while the output current of the chargers decreases down to small values. “U-phase” lasts 5 hours, after that the chargers STOPs (battery totally recharged)

“IUoU” CHARGE CYCLE

The charge begins in “I-phase” (constant current) to let battery voltage increase (see PAN.2b). When the battery voltage reaches V_u (see charger label) the electronic card activates “U-phase”. During “U-phase” V_u (battery voltage) keeps constant while the output current of the charger decreases up to 1/3 of the nominal value. At that time begins “oU-phase”: constant value of battery voltage (V_{ou} - lower level than V_u) and decreasing output current. In IUoU charge cycle there are no timers. The battery is substantially recharged before “oU-phase” begins, however in this case it’s necessary to push STOP before disconnecting the battery from the charger

“IUla” CHARGE CYCLE

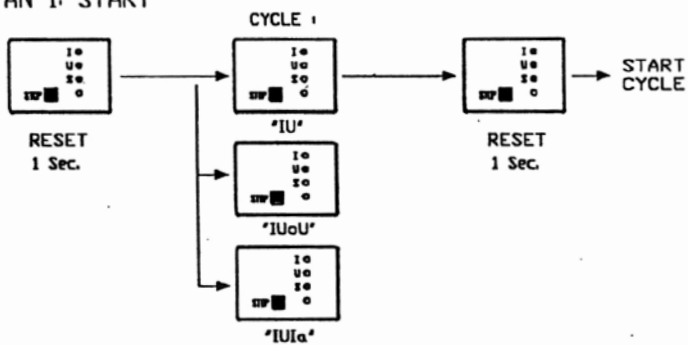
The charge begins in “I-phase” (constant current) to let battery voltage increase (see PAN.2c). When the battery voltage reaches V_u (see charger label) the electronic card activates “U-phase”. In case the battery voltage doesn’t reach V_u by 10 hours, the chargers will STOP. During “U-phase” V_u (battery voltage) keeps constant, while the output current of the chargers decreases down to 3-4% of the nominal value (“U-phase” lasts maximum 5 hours). At that time the card activates “la-phase”: output current keeps constant at 3-4% of the nominal value while the battery voltage increases. “la-phase” lasts 4 hours

SPECIAL FUNCTIONS

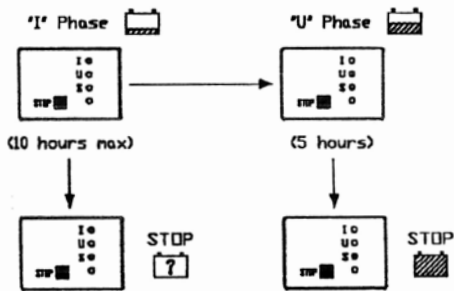
There are electronic protections against battery overvoltage, over-current and inside overtemperature: in these cases the microprocessor stops the charge (see drawing n°3 and n°5). If it happens it’s necessary to disconnect the battery for 1 minute before starting again, anyway in these cases it’s better to call a technician. In case there are no LEDs switched on, have a look on the following points: battery connection, net connection, fuses (see drawing n°4). In case it’s necessary to stop the charge before the right time, push STOP for 4 seconds before disconnecting the battery

MICRO-CONTROL FUNCTIONS

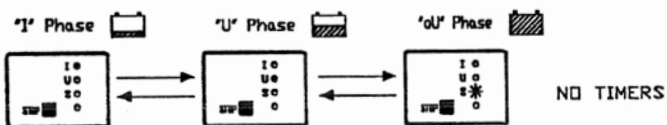
PAN 1: START



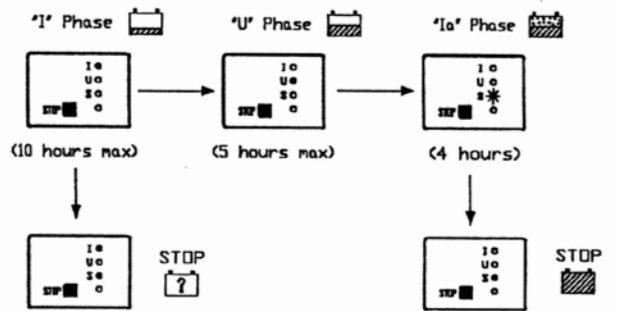
PAN 2a: IU Cycle



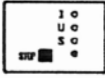


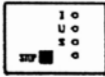



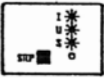

PAN 2b: IUoU Cycle



PAN 2c: IUla Cycle



Special Functions

- 3)  Overflow  or  Vbat or Tmax
- 4)   or  or 
- 5)  Overflow Tmax
- 6)  Manual STOP
For 4 seconds

Led : OFF ON FLASH

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