OptiMate4 — Charging programme

LED COLOUR | ACTION | JUDGMENT OR CRITERION | BATTERY VOLTAGE = Vb

POWER ON

THE CIRCUIT CHECKS THE BATTERY'S INITIAL VOLTAGE

- BATTERY VOLTAGE Vb > 2V → TEST DETERMINES CORRECT CHARGE CYCLE FOR BATTERY.
- BATTERY VOLTAGE Vb < 2V → NO OUTPUT. SEE www.optimate4.com

FLASH

TEST DETERMINES CORRECT CHARGE CYCLE FOR BATTERY.

- BATTERY JUDGED SULFATED → RECOVERY MODE
- BATTERY NOT SULFATED → 0,8A CONSTANT CURRENT CHARGE

DESULFATE

RECOVERY MODE, MAX 2 HOURS. VOLTAGE LIMIT 16V & LOW CURRENT DURING 1st RECOVERY ATTEMPT.

- BATTERY NOT RECOVERING → TURBO RECOVERY
- VOLTAGE FALLS AS BATTERY RECOVERS → 0,8A CONSTANT CURRENT CHARGE

3 LEDs IN THE CENTRE OF THE LED PANEL DISPLAY CHARGE AMPS

DESULFATE

TURBO RECOVERY MAX 2 HOURS. VOLTAGE LIMIT RAISED TO 22V FOR TURBO RECOVERY ATTEMPT. → 0,8A CONSTANT CURRENT CHARGE, UNTIL Vb HAS RISEN TO 14,3V

CHARGE

0,8A CONSTANT CURRENT CHARGE, UNTIL Vb HAS RISEN TO 14,3V

48 HOUR TIME LIMIT FOR THIS OSCILLATORY CYCLE

VERIFY

CHARGE VERIFICATION. VOLTAGE & CURRENT LIMITED FOR 30 MINUTES - CIRCUIT CHECKS ACTUAL VOLTAGE TO VERIFY GOOD CHARGE

- CHARGE NOT ADEQUATE → TURBO RECOVERY
- CHARGE LEVEL ADEQUATE → BATTERY VOLTAGE RETENTION TEST

FLASHING

BATTERY VOLTAGE RETENTION TEST. NO CHARGE FOR 30 MINUTES

Vb < 12,0V	12,2< Vb<12,4V	12,2< Vb<12,4V	12,4< Vb<12,6V	Vb >12,6V
REPLACE THE BATTERY, OR IF ON VEHICLE, REMOVE IT & RECONNECT TO OPTIMATE.	WITH FILLER CAPS : BATTERY NEEDS TO BE REPLACED SOON SEALED MF/ AGM : READ BOX TO LEFT.	FILLER CAPS : MARGINAL STATE. SEALED MF/ AGM : BATTERY NEEDS TO BE REPLACED READ RED LED BOX	WITH FILLER CAPS : BATTERY STILL OK. SEALED MF/ AGM : BATTERY WILL NEED TO BE REPLACED SOON.	FILLER CAPS : GOOD STATE. MF/ AGM /GEL: BATTERY OK.

STEADY

FLOAT CHARGE MODE. VOLTAGE LIMITED AT 13,6V. THE BATTERY CAN DRAW UP TO 200mA (or 800mA if Vb<13,3V) TO MAINTAIN IT AGAINST LOADS OR SMALL LOSSES FOR 30 MINUTES, THEN THE NEXT VOLTAGE RETENTION TEST FOLLOWS. TEST & MAINTENANCE PERIODS ALTERNATE EACH 30 MINUTES UNTIL DISCONNECTION

THE TEST LED INDICATION CAN ADVERSELY CHANGE DURING TESTS & RESETS AT THE END OF EACH TEST PERIOD.