

BATTERY CHARGER OPERATION

OPERATION

- **PLUG THE CORD FROM THE CHARGER INTO A 110 VOLT OUTLET**
 - Batteries should now start charging.
- A test is run on the battery voltage to decide if the charging process should be started or not. If the battery is not connected to the battery charger, the display will show the word "bat". The word will stay on, even if the test is failed (for instance, reversed polarities or incorrect battery connection). If the test is passed, the display will show the battery voltage for approximately 5 seconds and the battery will begin to be charged. The charging cycle progress will be shown by red, yellow, and green LED indicators. At the end of the charge, when the green indicator is on, unplug the cord from the socket and operate the machine.
- **NOTE: THE MACHINE WILL NOT POWER ON IF THE CHARGER IS STILL PLUGGED IN TO THE 110 VOLT OUTLET.**

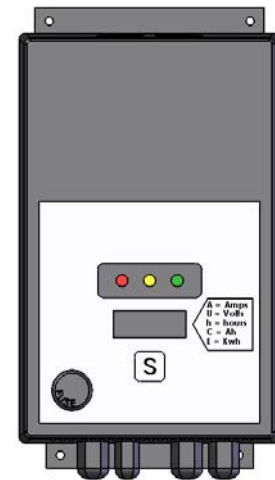
INDICATOR LIGHTS

- Red indicator shows that the charging cycle has started.
- Yellow indicator shows that the final phase of the charging cycle has started.
- Green indicator shows that the charging cycle has finished.

DISPLAY

Press button "S" (for Selection) to display:

- A = the charging current,
- U = the battery voltage,
- h = the charging time,
- C = the charging ampere-hours [Ah],
- E = the energy used [KWh].



CAUTION - CHARGER SETTINGS MUST BE CHANGED IF BATTERY TYPE IS CHANGED (SEE NEXT PAGE FOR SETTINGS)

THIS BATTERY CHARGER IS FACTORY SET FOR THE TYPE OF BATTERIES THAT CAME WITH YOUR MACHINE. IF YOU SWITCH BATTERY TYPES (FOR EXAMPLE GO FROM AGM TYPE BATTERIES TO STANDARD WET CELL BATTERIES), THEN THE BATTERY CHARGER MUST BE REPROGRAMMED. SEE NEXT PAGE "HOW TO SET THE CHARGER FOR DIFFERENT SIZES AND TYPES OF BATTERIES" FOR INSTRUCTION.

GENERAL INFORMATION AND WARNINGS

- **READ SAFETY INSTRUCTIONS ON PAGES 4 AND 5**
- This is a state-of-the-art electronic high frequency automatic battery charger with microprocessor.
- It is suitable for any battery type, if the charger has the proper settings. (Call manufacturer of machine on how to set the charger for different batteries than were supplied with your machine)..
- Never disconnect the battery while charging, since this could cause sparks.
- Never use the equipment in the rain, in areas used for washing, or in wet or damp areas.
- Use battery chargers only in well ventilated areas.

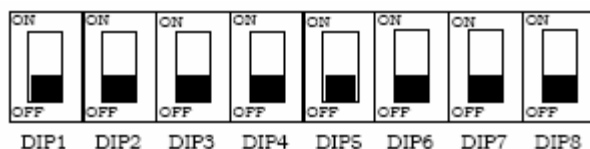
FOR LEAD ACID BATTERIES:

- Control the water level after each charging process. (See "Battery Maintenance" page).
- Refill with distilled water only.
- Caution! The gases generated during charging are explosive. Do not smoke in the vicinity of the batteries. When working with cables and electrical equipment, avoid open flames and sparks.
- Attention: Use protective glasses and gloves during battery maintenance. Battery acid causes injuries. In case of contact with battery acid, wash the affected parts with a lot of fresh water and consult a doctor if necessary.

HOW TO SET THE CHARGER FOR DIFFERENT SIZES AND TYPES OF BATTERIES



THE INFORMATION THAT FOLLOWS IS PROVIDED SHOULD YOU EVER CHANGE THE TYPE OR SIZE OF BATTERIES IN YOUR MACHINE. CONSULT WITH THE EQUIPMENT MANUFACTURER BEFORE YOU MAKE ANY CHANGES TO THE CHARGER SETTINGS. DAMAGE COULD OCCUR TO THE BATTERIES AND MORE SERIOUS, IF THE BATTERIES ARE CHARGED TO THE INCORRECT AMPERAGE OR VOLTAGE, THE BATTERIES COULD EXPLODE.



UP IS ON

DOWN IS OFF

DIP SWITCHES ARE LOCATED UNDER LABEL

DIP 1, DIP 2, DIP 3, AND DIP 4 ARE FOR SELECTING THE CHARGING CURVE

DIP 1	DIP 2	DIP 3	DIP 4	CHARGING CURVE
OFF	ON	ON	ON	WET BATTERIES
OFF	ON	OFF	ON	AGM BATTERIES
PLEASE CONSULT EQUIPMENT MANUFACTURER BEFORE CHANGING				

DIP 5 AND DIP 6 ARE CONTROL THE CHARGING CURRENT

DIP 5	DIP 6	AMPERAGE
ON	ON	15 A
OFF	ON	20 A
ON	OFF	25 A
OFF	OFF	30 A

DIP 7 AND DIP 8 CONTROL THE BATTERY CHARGING VOLTAGE

DIP 7	DIP 8	VOLTAGE
ON	ON	12 V
OFF	ON	24 V
ON	OFF	36 V
OFF	OFF	48 V