scil Vet abc HGB Photometer Adjustment

|	Reagent Pack Empty	Change Pack
START UP FAILED HGB REFERENCE FAILED	Pack not properly installed	Red caps are still on or pack is in backwards
	Pollution in WBC chamber	Perform 100% concentrated cleaning
	Adjustment of the photometer needed	Check photometer adjustment (see directions below)

Tools Needed:

- 2.5 mm allen wrench
- Potentiometer trimmer or small flat head screwdriver

If Start Up is still failing for HGB Reference Fail after checking the steps above, please follow these steps to check the photometer:

Check the hemoglobin photometer calibration using the following menu screens starting at the MAIN MENU:

- Press 4) SERVICE (enter).
- Press 8) TECHNICIAN (enter).
- At the "PASSWORD?" prompt enter the numbers 421 and then press ENTER.
- Press 2) ADJUSTMENT (enter).
- Press 1) CAL PHOTOMETER (enter).

The analyzer will run for about 30 seconds and then a number will be displayed. This number must be at 237 or 238.
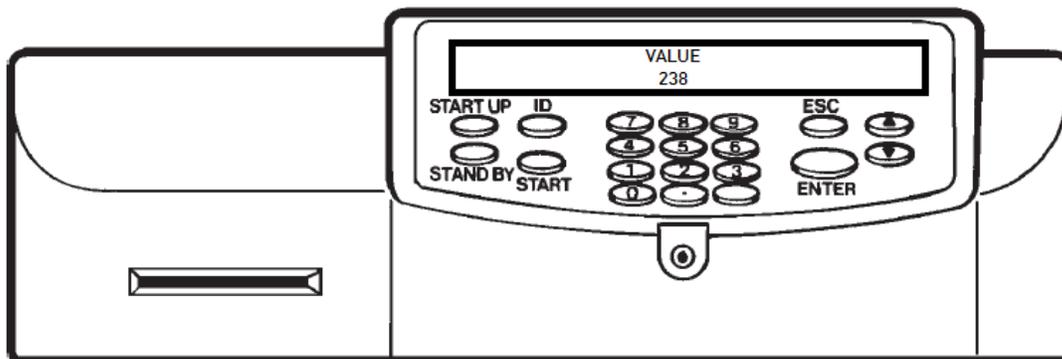
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If not, the following adjustments must be made:

1. Unscrew the 5 cover fixation screws. There is one below the door latch, two on the back of the instrument at the far right top and bottom and two at the top of the reagent compartment. (SEE ARROWS). Remove the three screws of the analyzer indicated in the picture on the right, and then loosen the final two noted in the picture to the left just enough to remove the cover panel. **DO NOT** completely unscrew the two screws above the reagent compartment as they are easily dropped into the interior of the analyzer. **Do not** remove reagent pack during this adjustment.
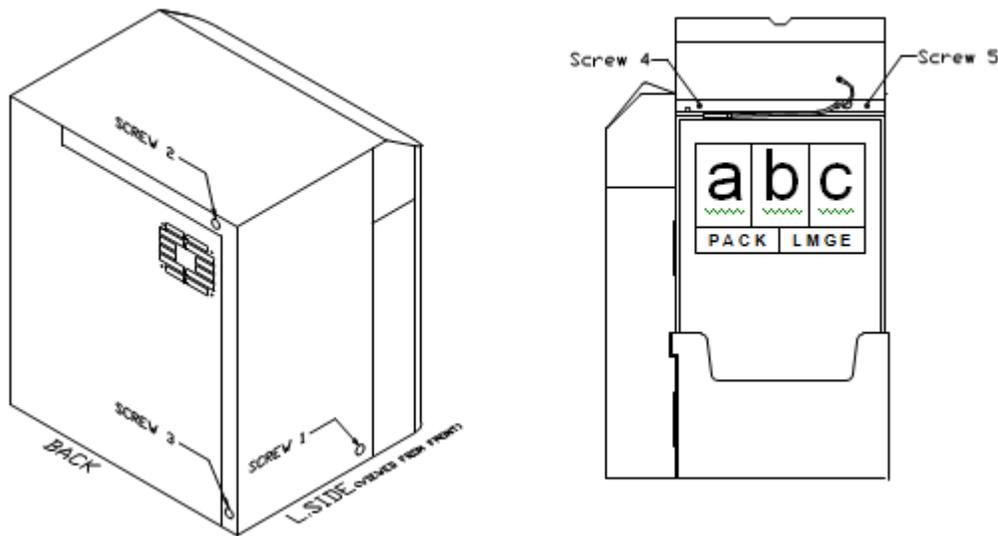
2. Once the screws are removed, face the front of the unit. Place your left hand on the left side of the unit and slowly push the top cover back and away from the unit. Lift top cover to completely remove.
3. Locate the circuit board. (diagram of circuit board on last page of this instruction)

    In the upper right corner there is a black plug with a gray cable that has four wires coming out of it. Slightly to the left and below the plug is a silver screw. Below that is a black box, and below that a colored box seated horizontally with a small brass screw in the right corner. That is potentiometer R97. (A diagram showing the location of R97 is included at the end of this installation guide to

further assist you.) R97 is also typed on the circuit board just to the right of the correct potentiometer.

Once you have located R97, run the CAL PHOTOMETER procedure again by pressing ENTER on 1) CAL PHOTOMETER.   While the number is displayed on the screen, turn the screw on the potentiometer with a small flat head screwdriver or a potentiometer trimmer. Turn the screw clockwise to increase or counter-clockwise to decrease the number until either 237 or 238 is displayed. It may take several revolutions of the screw to reach the correct number. In some cases the number on the screen will disappear before 237 or 238 is reached. If this occurs you can simply press Enter on 1) Cal Photometer again until you are finished.

4. After adjusting the photometer, run a STARTUP cycle by pressing the STARTUP key on the face of the analyzer followed by the ENTER key. This ensures no material is in the system and determines the hemoglobin blank level.
5. Once START UP passes the printer will generate a report stating STARTUP PASSED. If STARTUP does not pass, the analyzer will repeat the cycle automatically up to 2 more times until it does pass.

RESULTS

```
DATE:02/11/2005
ID   :
SEQ.#   :    1
STARTUP PASSED

WBC  :    0.0    10³/mm³         MCV :     0    fl
RBC  :    0.00   10⁶/mm³         MCH :    0.0   pg
HGB  :    0.0    g/dl            MCHC:    0.0   g/dl
HCT  :    0.0    %               RDW :    0.0   %
PLT  :      0    10³/mm³         MPV :    0.0   fl
```

6. Once STARTUP passes please put the cover back on the unit following the instruction above in reverse order.
    PLEASE NOTE: Do not tighten screws above the reagent pack until last or the cover will not align properly.

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CIRCUIT BOARD DIAGRAM

Gold box with 2 black cables

Vertical blue-gray boxes

Round blue posts

J38 J39

GR RBC GB WBC

J21

TP31 GND TP30 GND TP29 GND

J11 Tpt SENSOR

PLT PULSE PROCESS

R97

TP18 TP26 R89 R86

THRESHOLD 180mV ÷3 R82 TP16

TP14 TP25 R80

R16

J17 NO

GAIN R87 TP15

TP4

THRESHOLD 400mV ÷5 R75 TP13

RBC PULSE PROCESS

GAIN R81 TP11

WBC PULSE PROCESS

J22

E2 RTS/CTS

RS232

J13

DRAIN SENSOR

TP6 R6 LED

J25 RESET

TP12 TP17 TP8

E3

ADDRESS SELECTOR

E1

LCD KEYBOARD J5

J14 NU

R12

PRINTER J31