24 GDS Helpsheet

World Leaders in Computer Controlled Testing Systems for Geotechnical Engineers and Geologists

Hardware

VIS Axial Loading System

Changing Firmware

1. Introduction

We at GDS impart the performance characteristics to the VIS by programming a chip that plugs onto the main printed circuit board. This piece of "hardware" is called an "EPROM" (Erasable Programmable Read Only Memory) and the "software" that is programmed into it is called "firmware".

From time to time we update the firmware with our latest developments and so there may be occasions when we advise you to fit a particular firmware enhancement. The procedure for changing the firmware is given below.

2. Changing Firmware

1. Ensure VIS is powered off and the ac power lead is removed.

2. Remove the four corner screws retaining the top plate.

3. With the assistance of a colleague gently raise the top edge of the control panel by approximately 100mm. Reach down inside and unplug the short ribbon cable from the keyboard. Hinge the panel about its' bottom edge and pull the top edge towards you. You should now have access to the printed circuit board (PCB).

4. Remove the EPROM (IC32) located as shown on the PCB plan below by using a small screwdriver gently to lever each end of IC32 in turn until the chip can be lifted out easily.
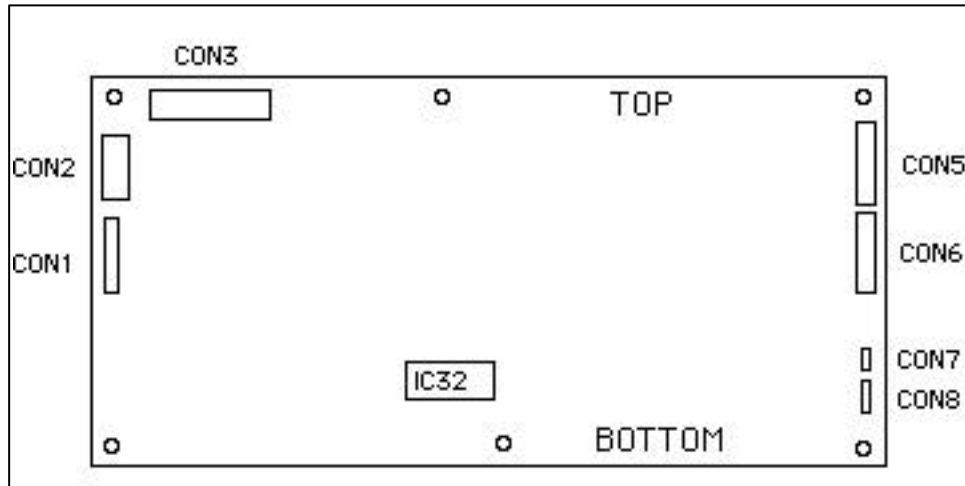
Fig.1 PCB plan

5.   Insert the replacement EPROM into the socket for IC32 with the pin1 cutout aligned with the screen printed outline (i.e. to the left), making sure that no legs are left out or bent under.

WARNING: We recommend that the above procedure is carried out by someone who is familiar with handling electronic components. The procedure may be helped with the use of IC inserters and extractors.