41 GDS Helpsheet

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

Hardware

VIS Axial Loading System - Mark II

Changing the Load Cell Range

1. Introduction

The firmware of the VIS machine can be given a different load-cell range by entering the values shown in the following example for the 25 kN load-cell.

```
RESET                ! FUNCTION ?
0                    ! SYSFUN = ?
0                    ! INVALID -          PRESS RESET
0                    ! INVALID -          PRESS R_SET
742503  <-           ! INVALID -          PRESS RESET
3                    ! S_ A         O          N
1 <-                 ! S1 A_               O          N
16384 <-             ! S1 A16384    O000016   N_
4_                   ! S1 A16384    O000016   N4    (4 MEANS 25 kN)
<-                   ! S_ A         O          N
RESET                ! FUNCTION ?
```

NOTES:

    <- means press Enter

    ! indicates the start of a comment. Do not enter the ! or anything past it

When the load-cell is changed the following actions must occur.

1. Turn off the electrical supply to the machine.
2. Disconnect the load-cell from the RFM and the RFM from the m/c.
3. Remove the RFM.
4. Disconnect the load-cell from the load-cell cable.
5. With another person supporting the weight of the load- cell remove the six stainless steel screws which pass through the black top-plate and which hold the load-cell in place. DO NOT unscrew the 12 black screws which connect the grey load-cell to the silver load-cell backing plate because this will invalidate the load-cell calibration. See below:-
6. Put the new load-cell in place and screw in the six stainless steel screws.
7. Select the RFM which matches the load-cell and re-make all of the electrical connections.
8. Turn the machines electrical supply back on.
9. Enter the new load-cell range parameter into the firmware as describes above for the 25 kN load-cell. For the 100kN load-cell you can turn the machine off then on again or press RESET 9. PLEASE NOTE that every time the machine is switched off or a power-on reset (RESET 9) is performed you must enter the load-cell range parameter again.
10. Check the calibration of the system is correct using the proving ring.