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



Hardware

2Hz MINIDYN

Modification to Cell Top to Prevent Backlash in Cyclic Loading

1. Introduction

Small movements can occur in the load cell ram during cyclic loading about zero load. This is a mechanical problem which has a mechanical solution.

2. Modification

Please refer to the following drawing of the cell top showing the load cell ram adjustment mechanism. The mechanical modification is as follows:

- 1. remove part (B).
- 2. machine 0.5mm from the base of part (B).

Now when you tighten screws (A) it will lock the knurled nut against part (C). This means that when moving the ram you will need to loosen screws (A) by half a turn to allow the knurled nut (D) to rotate. After selecting a new position for the ram you should then lock screws (A) down.

You should also be aware that in operation the lock nut (E) on the ram should be tightly locked against the knurled nut (D) to prevent the ram screw from moving in the thread with reversal of load.