

LOADCELL ADJUSTMENT.

General:

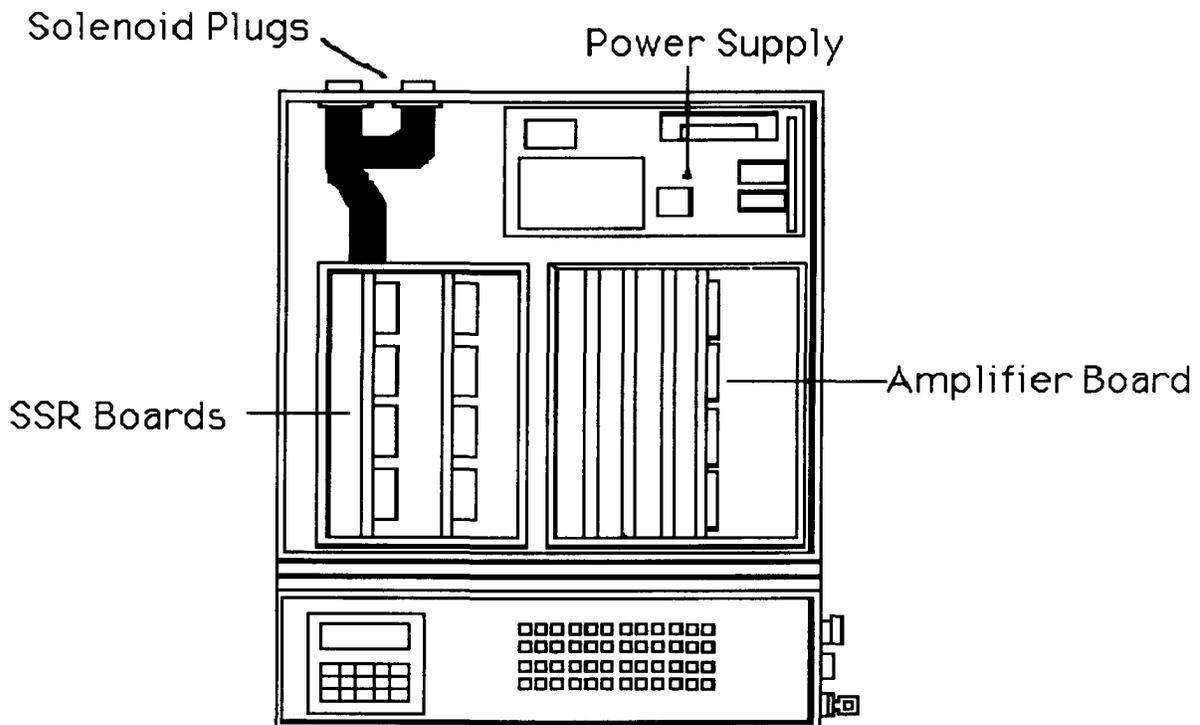
Loadcells are delicate precision instruments. Experience has shown them to be reliable once fitted to the grader, however risk of permanent damage is high if the units are roughly or incorrectly handled during fitting.

Under no circumstances should an upward or twisting motion be applied to the rails on top of the loadcell.

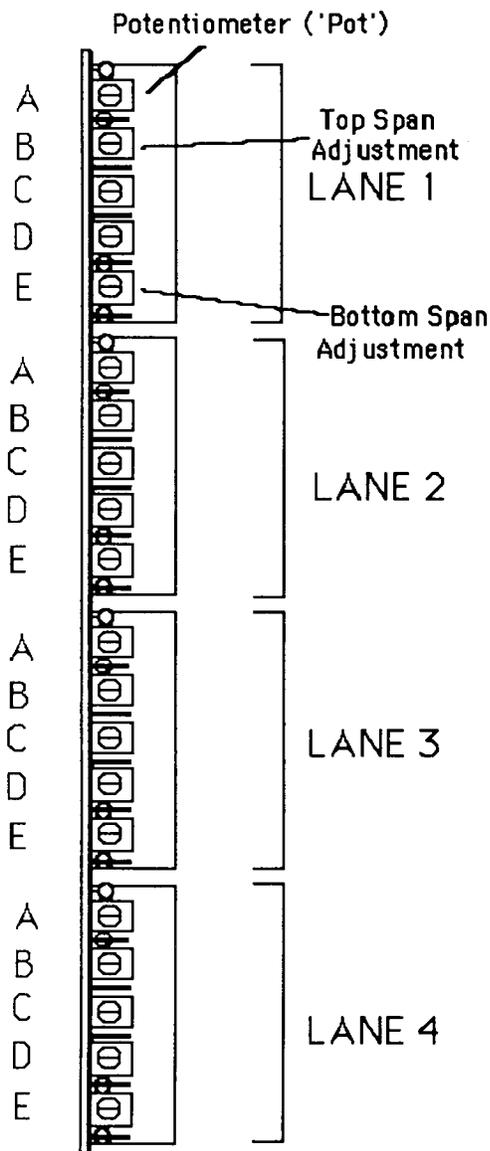
Calibrating the Loadcell:

This is necessary if a loadcell is changed or if the current loadcell has drifted out of range.

1. Remove the lid of the computer unit. The system should be laid out as below



2. Now locate the Amplifier Board. This is the right most board in the computer. The loadcell wires run to plugs in this board below the 2" square black chips which are the amplifiers.



3. Identify the Lane you wish to adjust. The Board is set out as shown with Lane 1 being towards the back of the computer and Lane 4 at the front. Each lane has 5 'Pots' or adjustment screws, labelled A to E.

4. Program the computer to display static weights by keying in....

D B E (lane number) E

...where lane number is the lane to be adjusted.

Note: Looking down the grader from the singulator, Lane 1 is always the Left-most lane.

5. With no weight on the loadcells (i.e. lift the cups off as if zeroing), adjust Pot E for the lane with a small screwdriver until the display reads 100. This sets up the Rail weight of the loadcell.

6. Now take a known weight between 200 and 400 grams (e.g. an apple whose weight was measured on another lane or a set of electronic scales.)

7. Place the weight on the top of the loadcell and adjust Pot B so that the display reads the known weight + the 100 grams rail weight.

8. Repeat steps 5 to 7 until the readings for both steps remain the same. Several repetitions may be required.