Adjusting Scale factor in the G306A Touch Panel

Run the machine under normal set-up conditions cutting a fixed length, I suggest a length similar to production lengths…say 500mm.

Measure the cut pieces produced which could be different to the HMI entered length, for instance 490mm

This can be termed as entered length = 500mm, Actual length = 490mm

To adjust the machine so the entered length is equal to the actual length follow steps listed below.
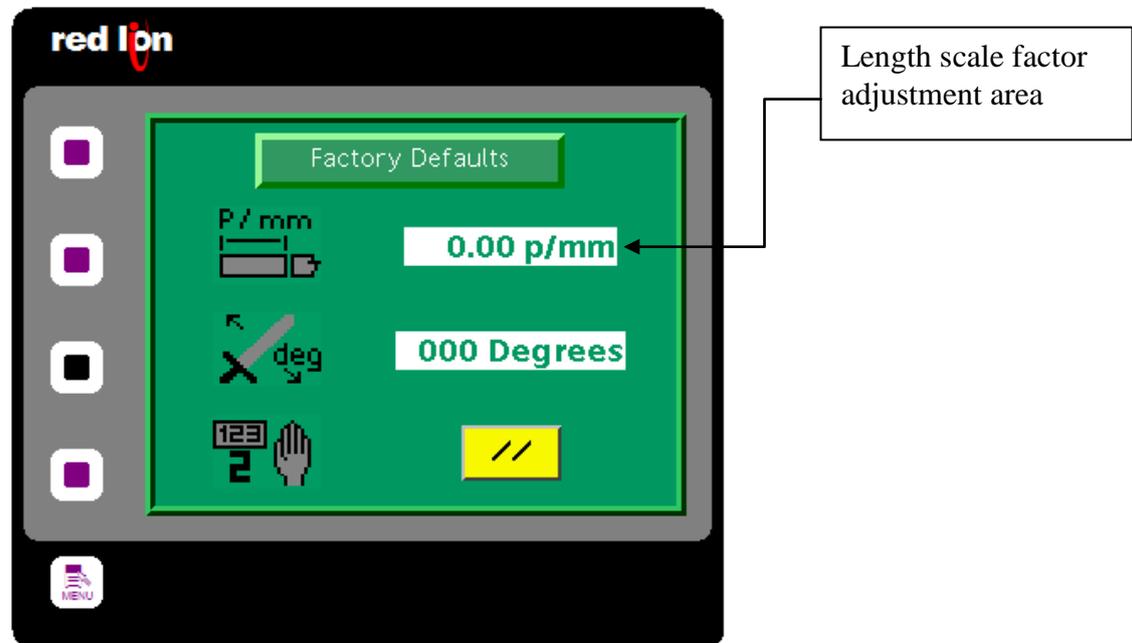
From the menu screen select Setup (maintenance) as shown below.

PRESS BUTTON TO ENTER SET-UP
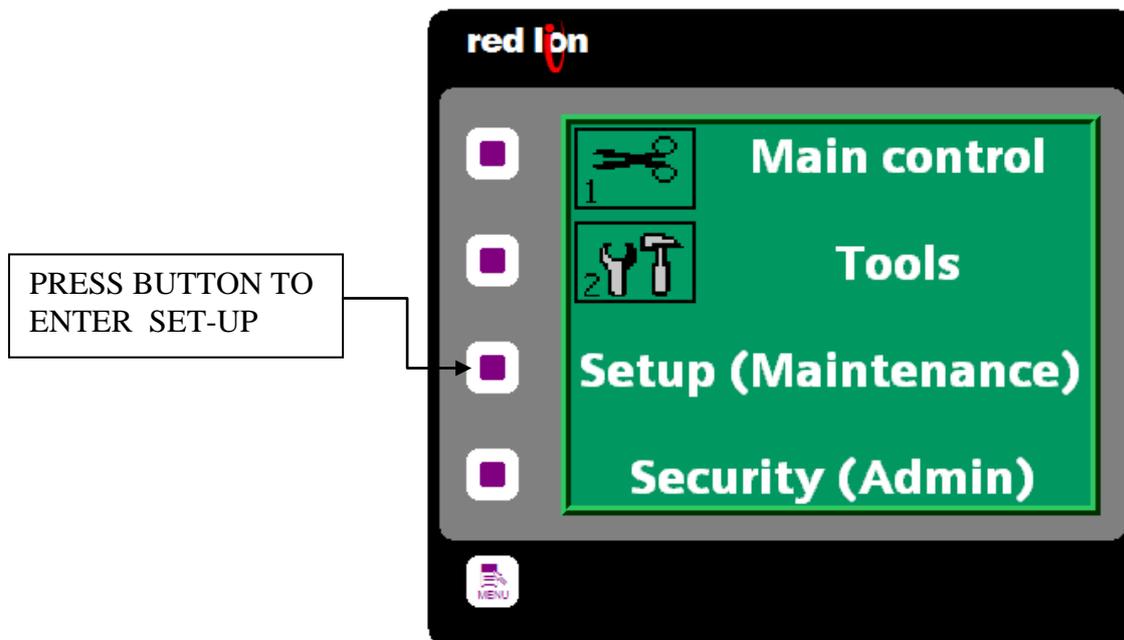
Press the left hand button and the screen will request a password.

Enter User = admin and press enter, then password = 2706 and press enter again to allow access to Setup screen

The screen below is displayed

Length scale factor adjustment area

The factory scale factor setting for your machine is 57.50. P/mm stands for encoder pulses per mm of belt travel.

If the value is increased the actual cut length will reduce. Likewise, if the value is decreased the actual cut length will increase.

The process is not very scientific, more trial and error. I suggest initially a larger value is entered, say 67.50 to check the direction of adjustment is correct then a smaller value as the correct scale factor value is found.

During the process ensure the belt nip distance remains constant using the orange counter mounted below the overhead hand wheel. Nip pressure fluctuation can be an issue during scale factor adjustments as it is in a production environment.

The scale factor needs to be adjusted to what is thought to be the correct setting then the machine run to check the actual length cut is equal to the entered value. Keep adjusting the value until the best setting is achieved.

Run the machine and test reliability.