Technical Bulletin #11 Changing Acetal Block to Aluminium, on underside of Balance/Scale

Early IDS machines were fitted with Acetal blocks, the Acetal block is located on the underside of the Balance assembly. Over a period of time, the two allen screws that secure the block have been known to work loose from their thread. This causes a fault condition whereby the Balance carriage assembly is not able to move to the extend position fully (to the left) and therefore does not make contact with the micro-switch stop. The Acetal block should now be replaced with its Aluminium equivalent.

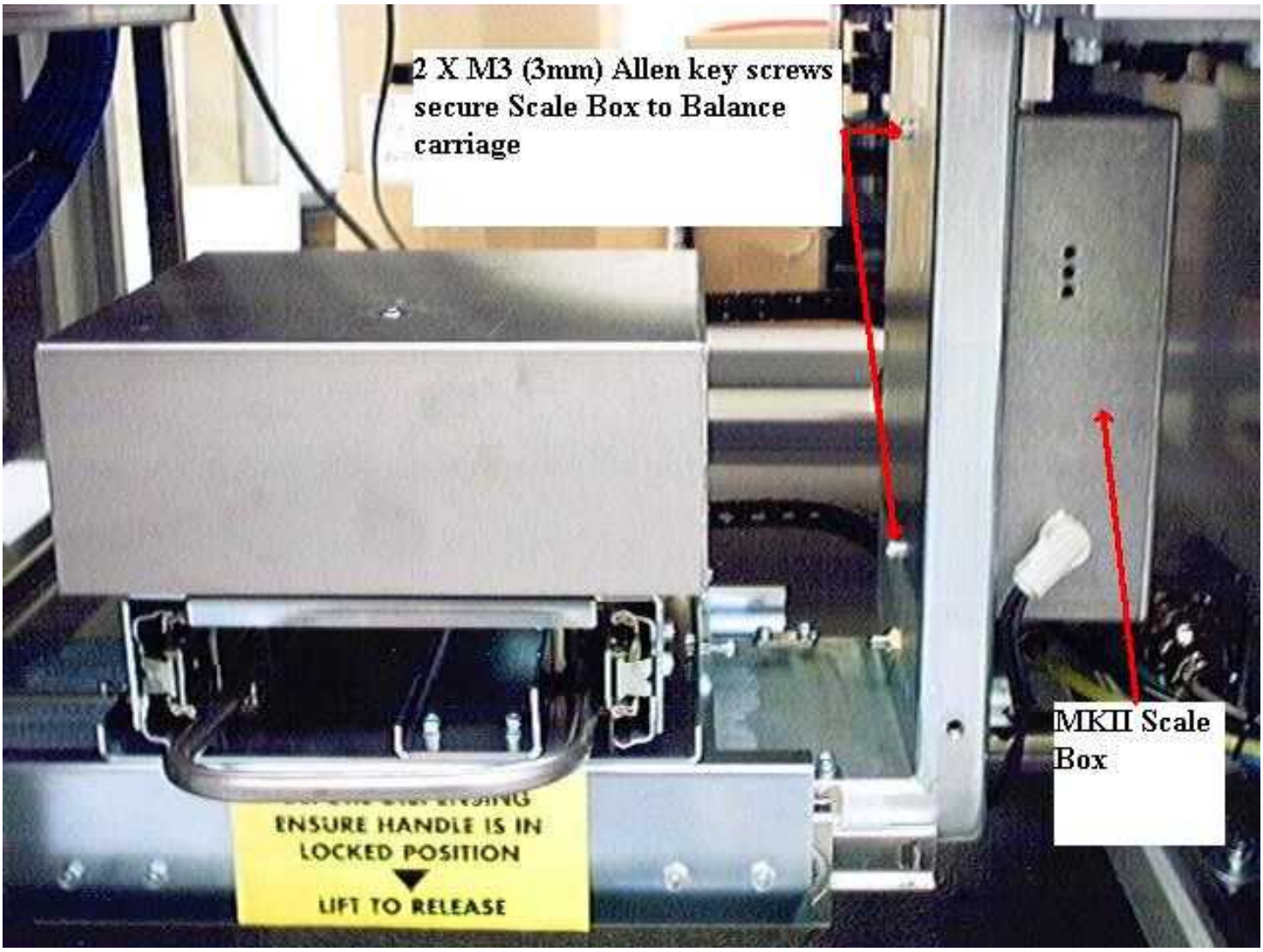
Acetal = Black Resin/plastic

Warning!

NOTE: PLEASE ENSURE THAT THE **"EMERGENCY STOP SWITCH"** HAS BEEN **DEPRESSED /ENABLED** ON THE IDS, BEFORE ATTEMPTING TO CARRY OUT ANY WORK ON THE IDS!

1. Open the front door of the IDS
2. Figure 1. Shows location of Scale Box

Figure 1. Shows Scale Box location on IDS10K



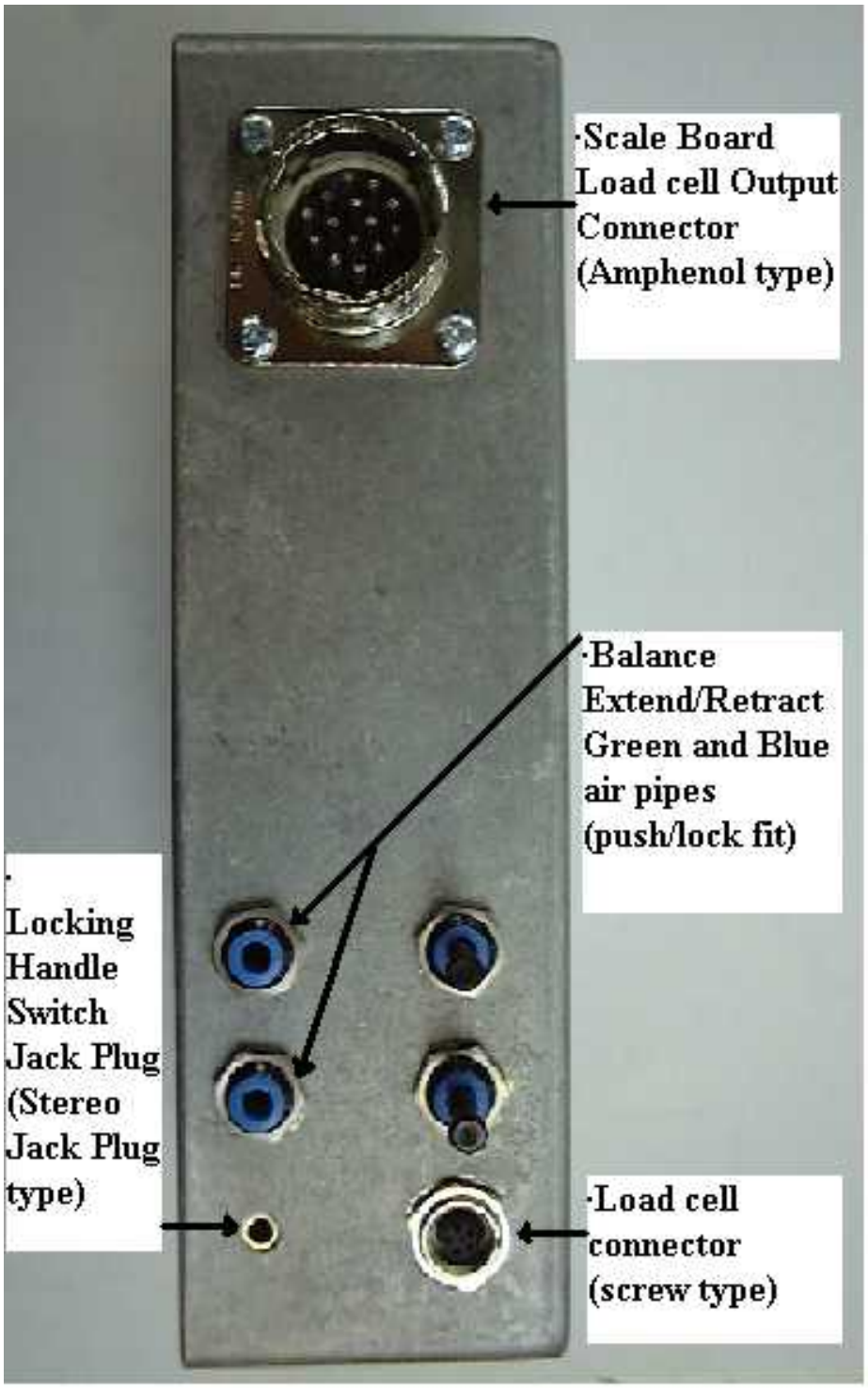
3. Remove ONLY the following connectors from the Scale Box

Rear side of the Scale Box, from top to the bottom

- Scale Board Load cell Output Connector (Amphenol type)
- Balance Extend/Retract Green and Blue air pipes (push/lock fit)

NOTE: The Loadcell and Stereo Jack Plug connector can be left connected

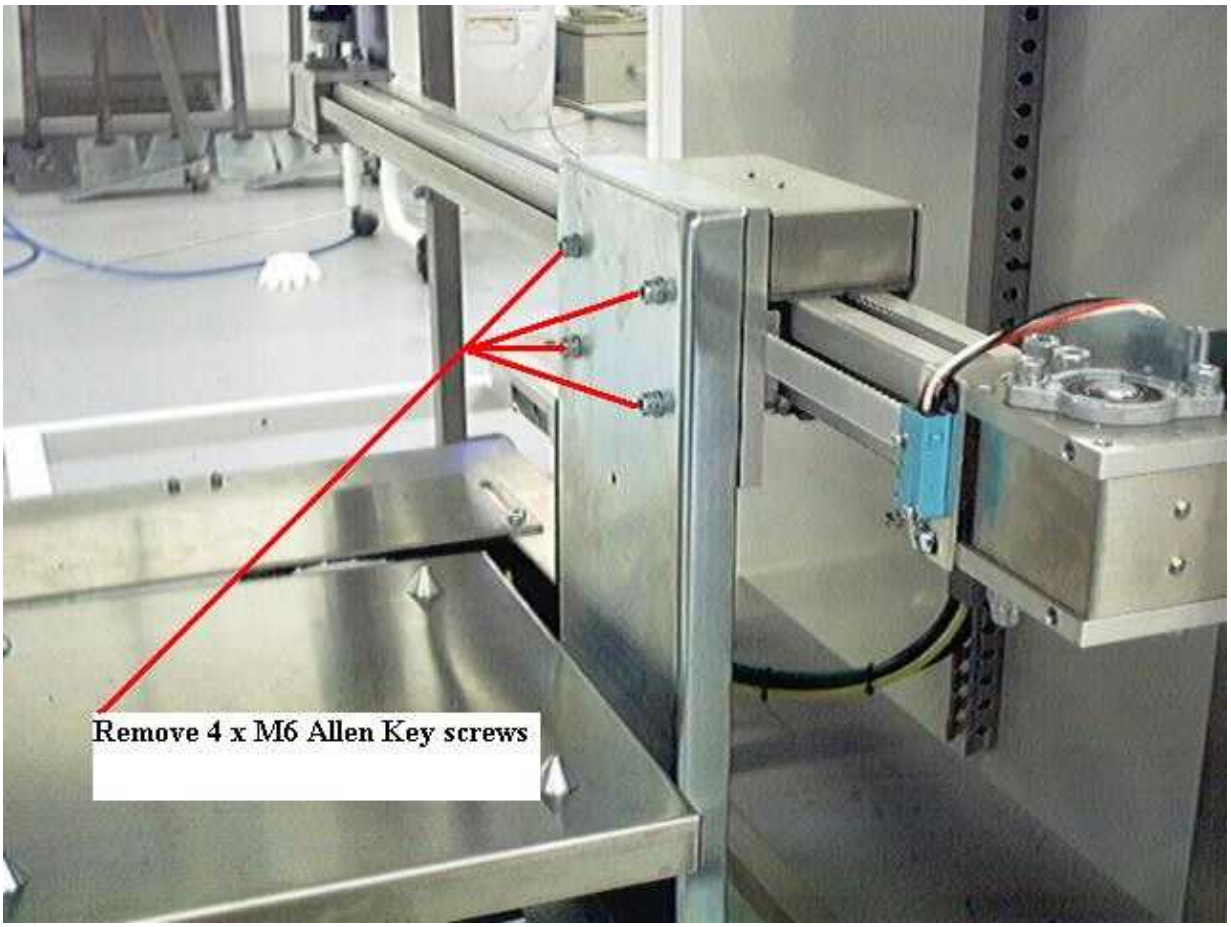
Figure 2. shows the rear of the Scale Box and connections



4. With the Scale Box umbilically disconnected from the IDS and the pot locator plate removed, it is now possible to remove the whole Balance / Scale assembly from within the IDS

5. Remove the 4 x M6 Allen key screws on right hand side of the Balance /Scale carriage as shown

Figure 3 shows location of Allen Key screws to be removed



NOTE: The Balance/Scale assembly is HEAVY and may require additional assistance to remove from the IDS. Be careful when lifting, and always observe Kinetic Handling procedures when lifting heavy objects!

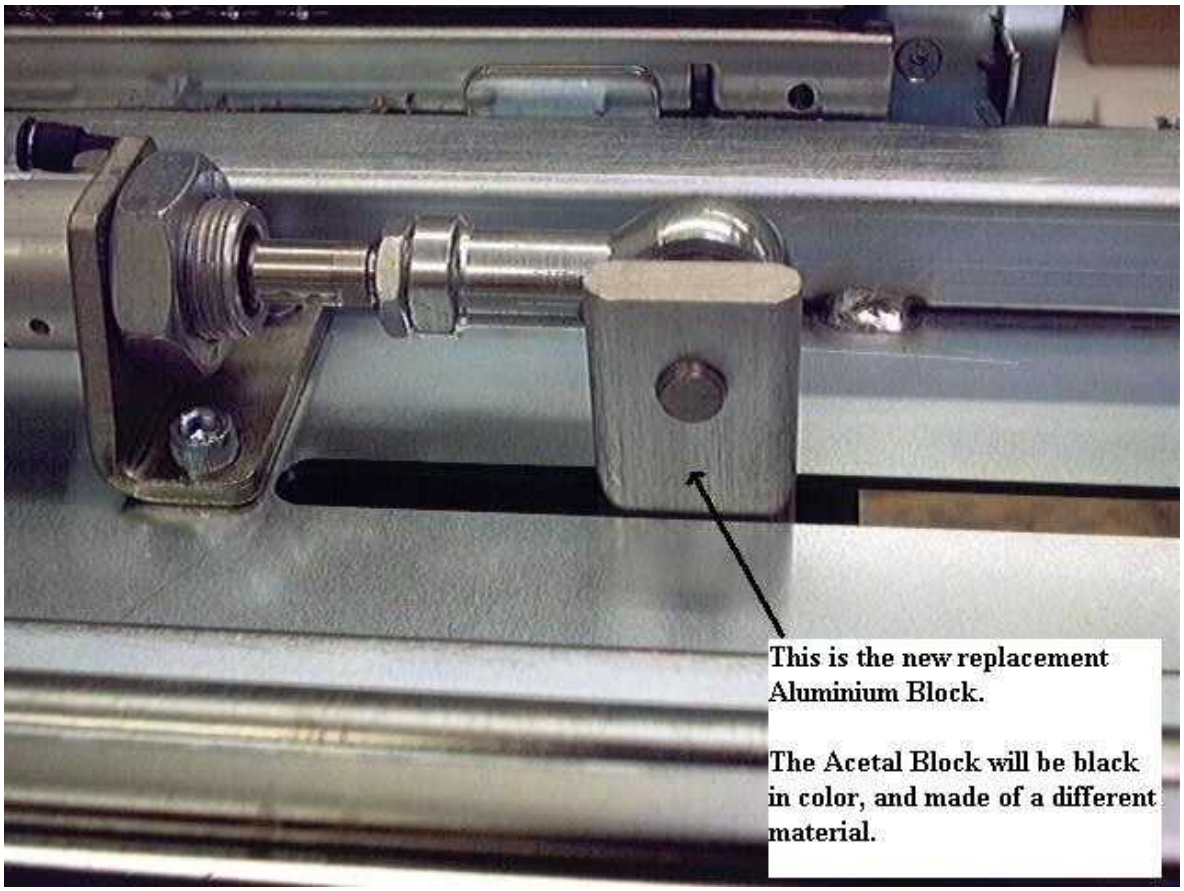
6. Lift the Balance/Scale assembly off the carriageway on the right hand side whilst supporting the left hand side, then turn the Balance/Scale assembly 90 Degrees clockwise and remove the Balance/Scale assembly out of the front door of the IDS.

7. Place the Balance/Scale assembly on a flat surface allowing access to the underside.

8. Locate the Acetal block as shown in figure 4

Figure 4 shows the underside of the Balance/Scale assembly and the location of the Block

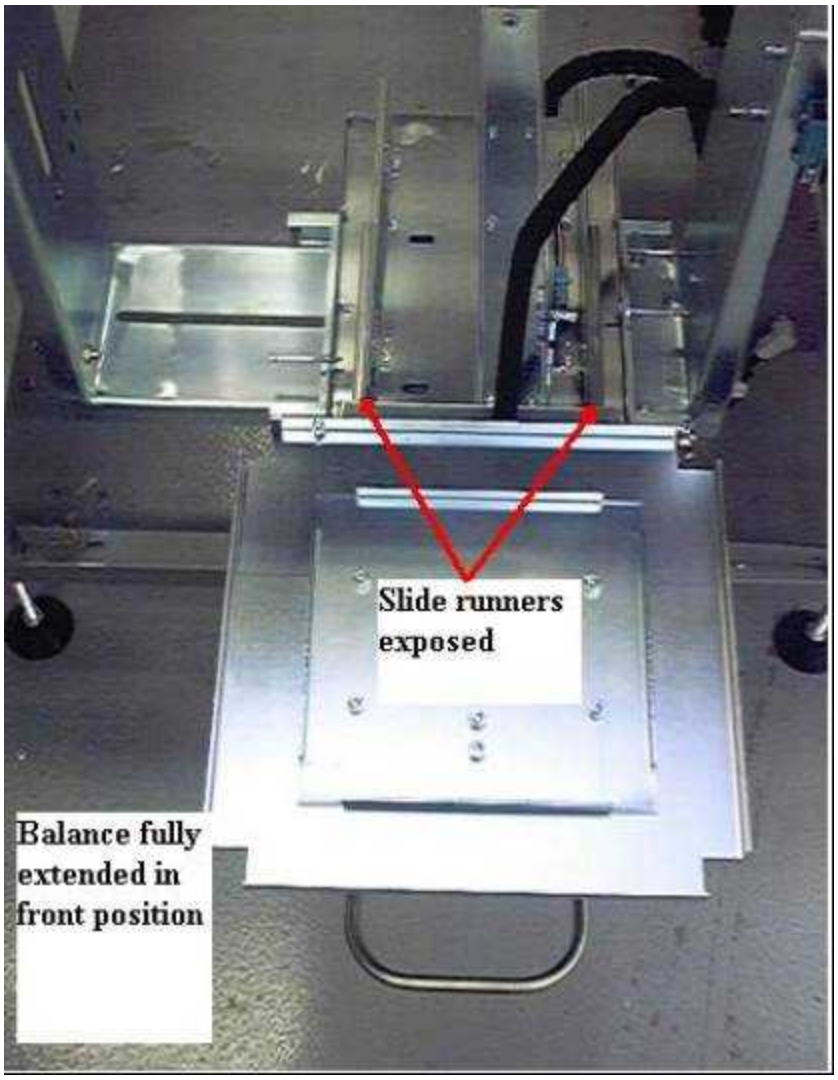
(the example shows the new Aluminium Block already in place)



9. The Acetal Block is held in place by 2 x M4 Allen Key screws. It is also secured to the Pneumatic actuator ball joint by a M10 screw thread with a slotted head.

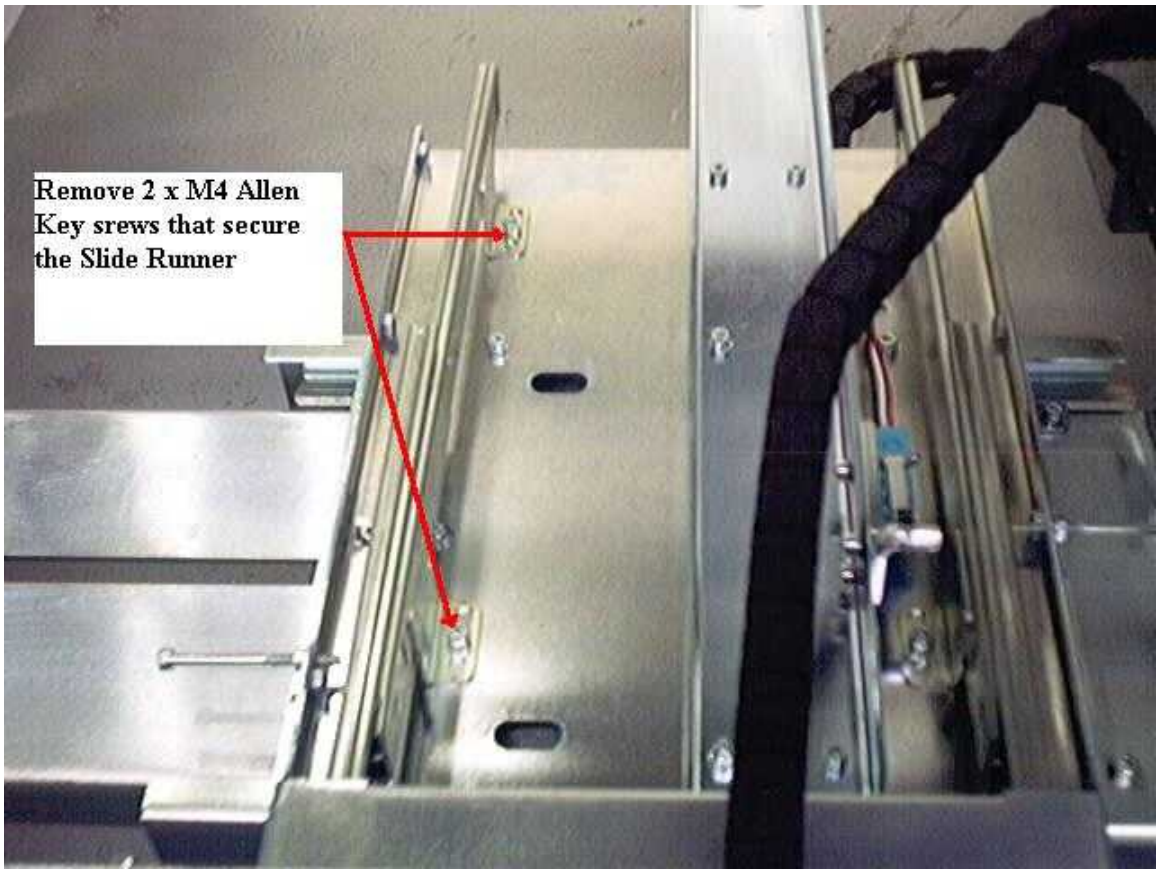
10. To remove the 2 x M4 Allen Key screws, turn the Balance/Scale assembly to the upright position. Extend the Balance/Scale fully forward so that the slide runners are exposed see figure 5

Figure 5 shows the Balance/Scale assembly fully extended to forward position exposing the slide runners.



11. Remove the 2 x M4 Allen Key screws that secure the Right hand side Slide runner as shown in figure 6

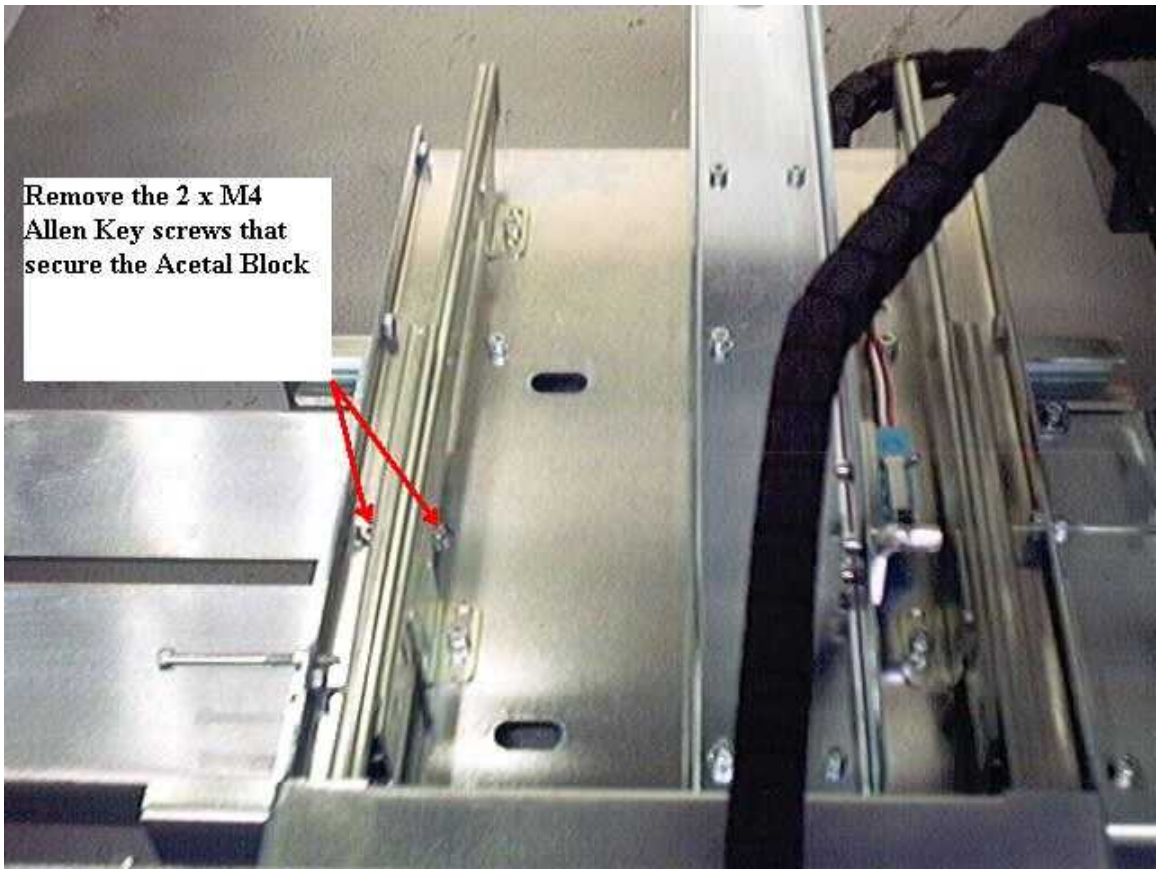
Figure 6 shows the location of the 2 x M4 Allen Key screws that secure the Right hand side Slide Runner



12. Now slide the Right hand side Slide Runner fully forward so that it locates underneath the fully extended position of the Balance/Scale.

13. The 2 x M4 Allen Key screws that secure the Acetal Block are now fully exposed, (see figure 7) and can now be removed.

Figure 7 shows the location of the 2 x M4 Allen Key screws that secure the Acetal Block



14. To fit the new Aluminium Block. Please repeat this procedure but in the reverse order