

# Adjustment of tripod column for XL-80 laser systems

## Overview

The Universal Tripod has several mechanisms to reduce column rotation that may occur when extending or retracting the main column.

In Figure 1 below, the yellow line indicates how you would expect the top of a perfect tripod to move as the column extends and the red line is an exaggerated example of rotation.

This application note details how to perform this adjustment.

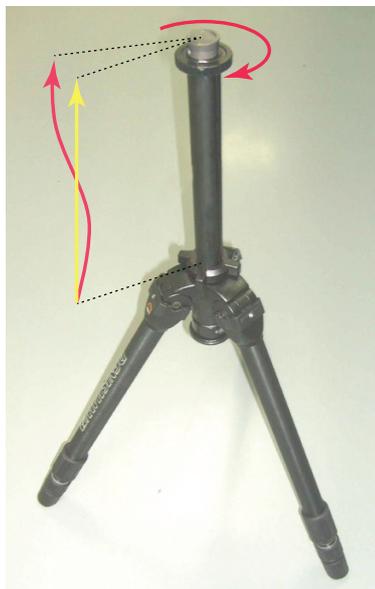


Figure 1

## Adjustment controls

The universal tripod has 3 mechanisms for reducing column rotation.

On the main column there are two adjustment nuts indicated by A and B in Figure 2. These can both be used to adjust the tension of the centre column.

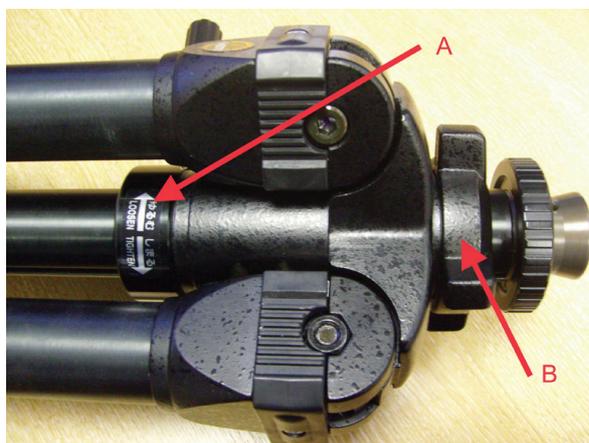


Figure 2

The third mechanism for adjusting the column tension is via a brass guide pin fitted against the main column indicated by C in figure 3.

This guide pin runs in a groove in the side of the main column. By inserting a 2mm diameter Allen key into the central hole (D), the tension of the guide pin can be adjusted.

### Adjustment procedure

To do this:

1. Release the adjustment nuts A and B in figure 2
2. Insert an Allen key into screw recess D in figure 3 and carefully tighten the screw
3. Turn the elevation control handle to check the tightness of the centre column. The correct tension is achieved when a very slight resistance is felt when elevating the column.  
**CAUTION:** Overtightening the mechanism can cause failure of the column elevation mechanism.
4. Re-tighten the adjustment nuts A and B

**Note:** The two holes either side of recess D contain grub screws to hold the guide pin in place. DO NOT REMOVE THESE.

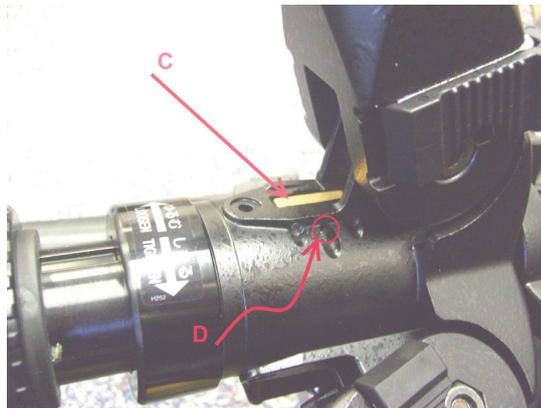


Figure 3

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