

# Limb reconstruction and lengthening

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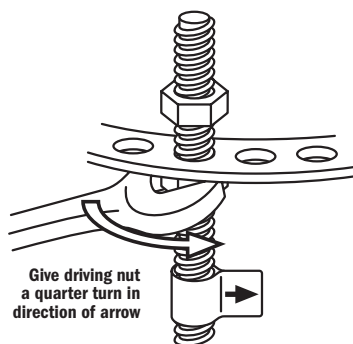


Figure 3

## Lengthening your frame

### Turns/distractions

Distractions or turnings usually begin between Day 5 and Day 7 after application of the fixator. The rate of distraction is usually 1mm per day, divided into 4 turns of 1/4mm per turn.

Distraction orders include the direction of the turns and the number of turns per day.

### Ilizarov frame with driving nuts (figure 1)

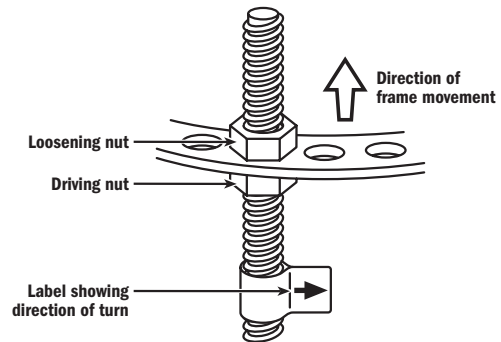


Figure 1

With a 10mm spanner, loosen one loosening nut. This procedure is performed on one rod at a time. (figure 2) Use your fingers to further loosen the loosening nut.

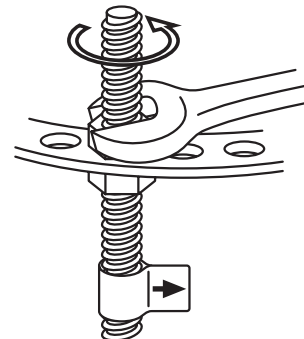


Figure 2

Affix your 2nd 10 mm spanner to the corresponding driving nut. (figure 3)

Turn the driving nut in the direction of the arrow a quarter turn.

Continue to hold one spanner on the driving nut to maintain the new position whilst tightening the loosening nut with the other spanner. Check for tightness. (figure 4)

Repeat this for each rod needing distraction.

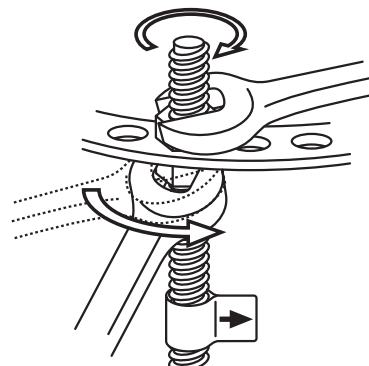


Figure 4

## Ilizarov frame with a clicker (figure 5)

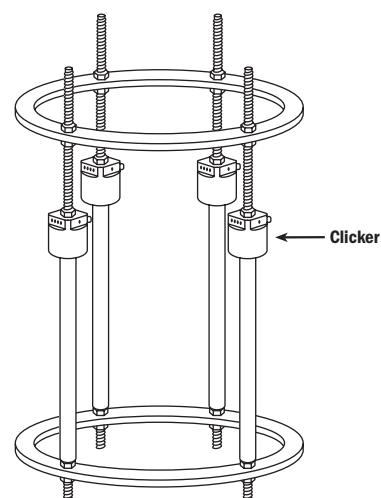


Figure 5

Press in the holding button and begin the turn. Release the button whilst beginning the turn. Turn the clicker in the direction of the arrow. The clicker will lock into place after a 1/4 turn. (fig 6)

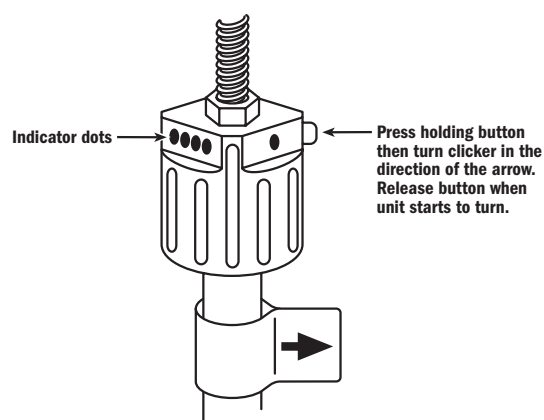


Figure 6

Note that there are small dots on each surface of the clicker. These are marked with one, two, three and four dots.

When distracting, each turn should go from 1 to 2, to 3 to 4, 4 to 1 etc.

## Orthofix external fixator (figure 7)

Place the short end of the Allen key in the opening at the end of the compressor/distractor bar.

The long end of the Allen key should be in the 12 o'clock position.

The Allen key is then turned for a 1/4 turn, or 90°, in the direction of the arrow. (figure 8)

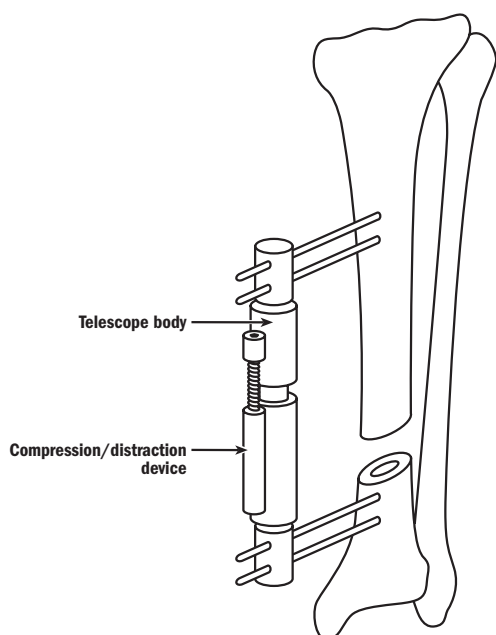


Figure 7

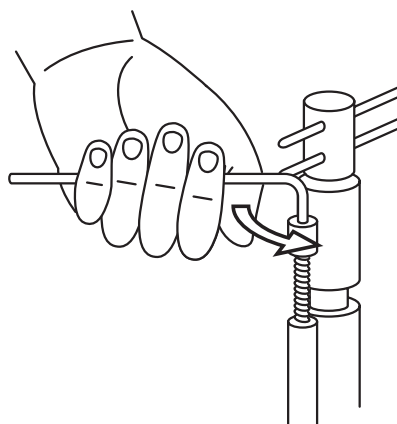


Figure 8

# Turn chart: Ilizarov external fixator

Turns/distraction usually begins between Day 5 and Day 7 after application of the fixator.  
The rate of distraction is 1mm per day, divided into 4 turns of 1/4 mm per turn.

Right/left – tick box when turn is done

	Date:				Date:				Date:				Date:			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Monday																
Tuesday																
Wednesday																
Thursday																
Friday																
Saturday																
Sunday																

Right/left – tick box when turn is done

	Date:				Date:				Date:				Date:			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Monday																
Tuesday																
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