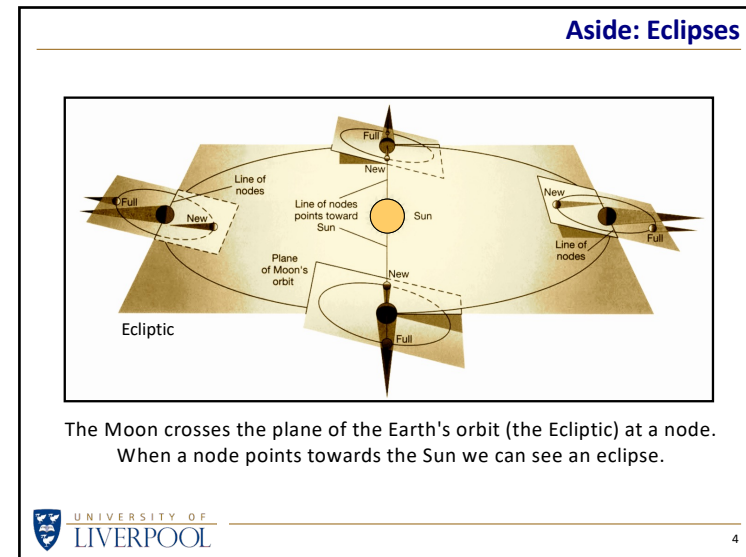
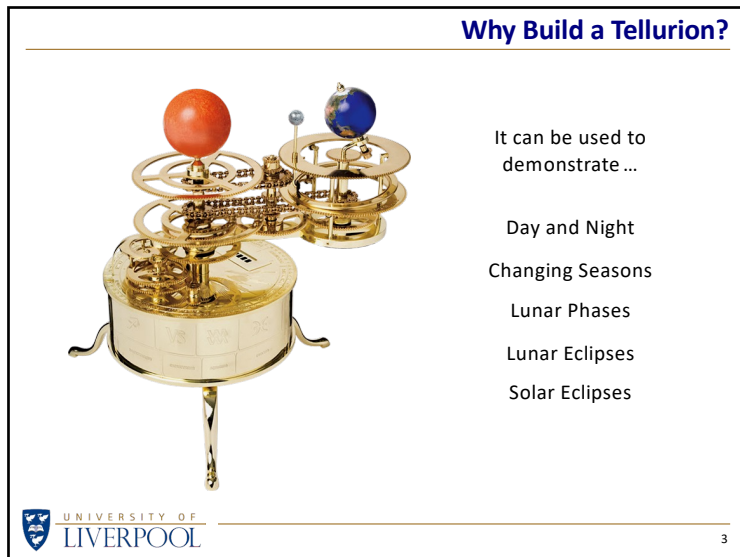
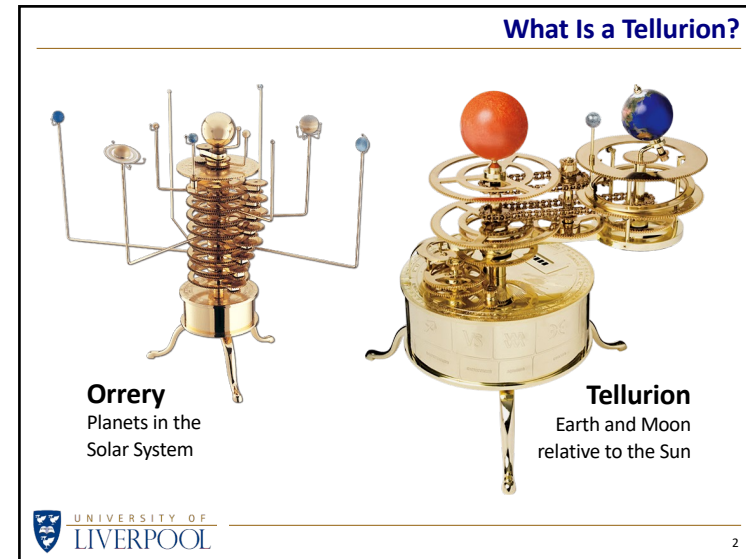
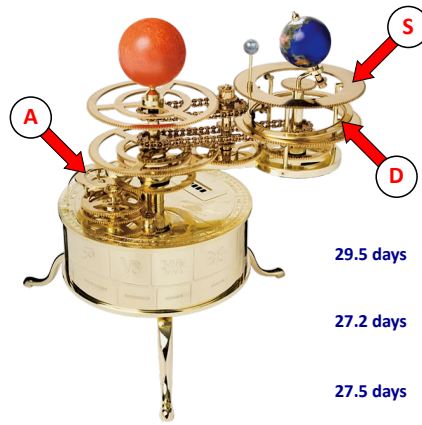


# Building a Tellurion



# Building a Tellurion

## How It Works




Three different types of lunar month are built in to the mechanism...

<b>29.5 days</b>	<b>Synodic</b> <i>New Moon to New Moon</i>
<b>27.2 days</b>	<b>Draconic</b> <i>Node to Node</i>
<b>27.5 days</b>	<b>Anomalistic</b> <i>Perigee to Perigee</i>

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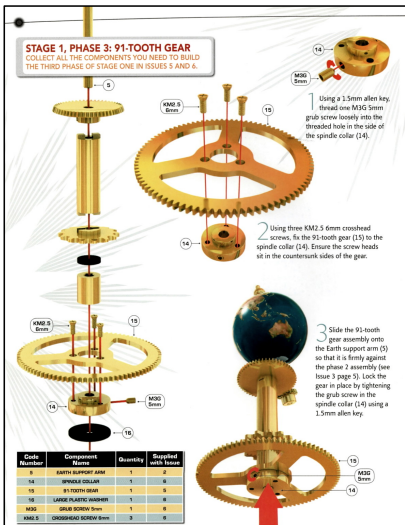
## Collect the 52 Parts



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## Instructions



**STAGE 1, PHASE 3: 91-TOOTH GEAR**  
COLLECT ALL THE COMPONENTS YOU NEED TO BUILD THE THIRD PHASE OF STAGE ONE IN ISSUES 5 AND 6.

Using a 3.5mm allen key, thread one M3x5mm grub screw loosely into the threaded hole in the side of the spindle collar (14).

Using three M2x3.6mm crosshead screws, fix the 91-tooth gear (13) to the spindle collar (14). Ensure the screw heads sit in the countersink of the gear.

Slide the 91-tooth gear assembly onto the Earth support arm (5) so that it is firmly against the phase 2 assembly (see issue 3 page 5). Lock the gear in place by tightening the grub screw in the spindle collar (14) using a 1.5mm allen key.

Part Number	Component Name	Quantity	Suggested Unit Price
5	EARTH SUPPORT ARM	1	£
13	91-TOOTH GEAR	1	£
14	SPINDLE COLLAR	1	£
15	GRUB SCREW	1	£
16	CROSS-HEAD SCREW	1	£

Which part has which number and comes with which magazine?

How do these parts fit together?

Exploded view of this assembly

Finished view of this assembly

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## Find the 52 Parts

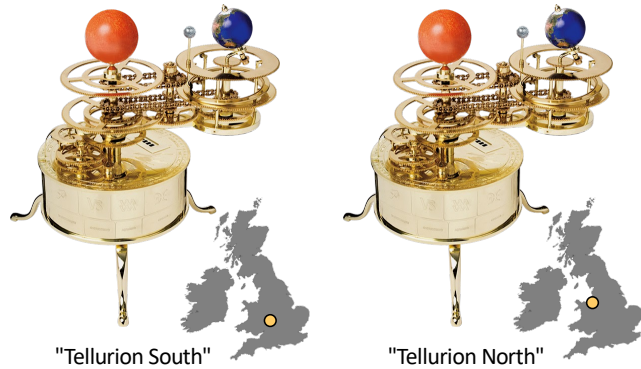


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# Building a Tellurion

## Duplication of Parts Led To ...



## Beware!



For some, collecting parts and building orreries and tellurions can be addictive (or maybe an obsession).

## Full Set of 52 Parts



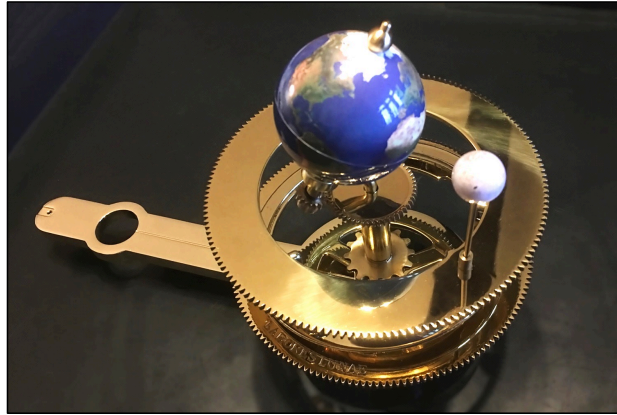
## Earth



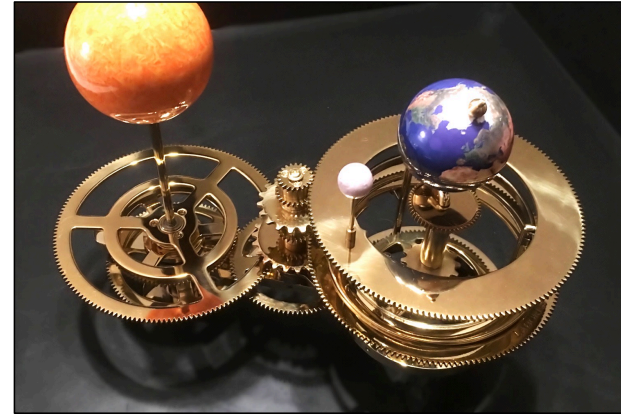


# Building a Tellurion

Earth + Moon



Sun + Earth + Moon



Hints and Tips



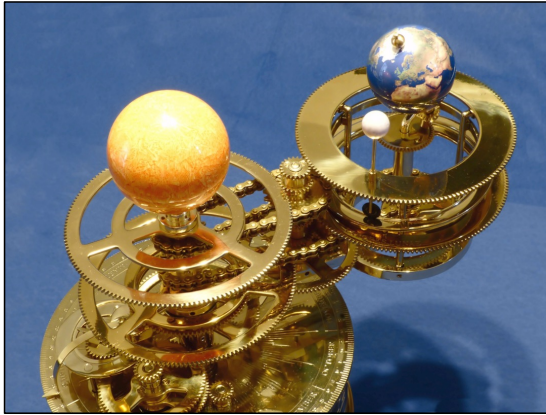
10 Hours Later



The tellurion took about 10 hours to build and a few hours to fine tune.

# Building a Tellurion

## Tellurion Build Complete



## Building a Tellurion



## Eagle Moss

General information from Eagle Moss distributor

<https://en-gb.eagle-moss.com/our-other-collections/eagle-moss-classics/build-model-earth-moon-sun-orbiter>

Back issues and parts for orrery and tellurion

<https://shop.eagle-moss.com/solar-system>

Partworkcollectables

<https://partworkcollectables.co.uk/Eagle-moss-Build-A-Model-Solar-System>  
<https://partworkcollectables.co.uk/Eagle-moss-Build-A-Model-Earth-Moon-Sun-Orbiter>

Back issues and parts also available from

Amazon / eBay / Facebook

## Building a Tellurion

[www.liverpool.ac.uk/~sdb/Talks](http://www.liverpool.ac.uk/~sdb/Talks)

Dr Steve Barrett

NU3A 10 Jul 2023