



# Model 941 Small Animal Stereotaxic Instruments

## Model 941 Small Animal Stereotaxic Instruments:

Model 941, designed in 2016(1394) as the first stereotaxic instrument by Toos Bio-Research Co(ZKT), is an easy-to-use instrument that facilitates proper alignment of small animals for the stereotaxic placement of electrodes, micropipettes, cannula and other devices.

The process in which the instrument is built and assembled assures that the researcher will be able to make accurate placements. Precise alignment of the slides assures smooth movements resulting in correct use of the atlases.

The instrument consists of a rugged "U" frame to which is affixed a three-dimensional Electrode Manipulator. A Standard Electrode Holder with corner clamp is included.

Manipulator X, Y, Z Adjustment: Metric scale, 80 mm travel, calibrated 1 mm/rev, 0.1 mm resolution in linear, 0.04 mm resolution in rotational Vernier scale.

Angle adjustment: Fully universal joint calibrated on two planes for access from any angle. Vertical alignment pin can be removed for angled settings from 0° - 90° either side of vertical, 1° increments.

Rotation Adjustment: Manipulator swivel base can be rotated up to 360°. Manipulator X/Z axis can be repositioned at 5 or 10° increments.

The stereotaxic frame is mounted to a 400 mm L x 250 mm W base plate and is elevated to bring ear bar height to 57 mm. Ear bar slots on the "U" frame have 0.1 mm Vernier scale for ease in centering the animal.

Ear bar zero to posterior end of base plate is 180 mm.

A Rat Adaptor features include a nose and tooth bar assembly offering various stereotaxic adjustments.

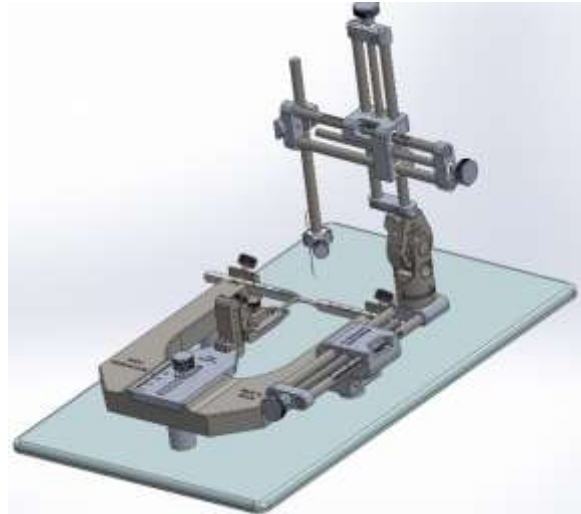
Dorsal/Ventral adjustment dial: Calibrated in 100 micron increments, 1 mm per revolution.

**Dorsal/Ventral adjustment:** 30 mm

**Dorsal:** 10 mm above ear bar zero

**Ventral:** 20 mm below ear bar zero

**Adaptor Plate A/P adjustment:** 44 mm.



**Ear Bars:** 25° Tip Rat Ear Bars (6.3 mm square with 50 mm of calibration).

## Model 941 Dual Small Animal Stereotaxic

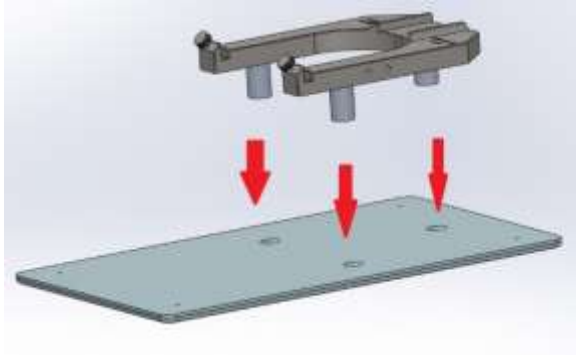
**Our instruments were designed for versatility. Any standard accessory that is not required can be omitted and the appropriate accessories can be added for your specific research.**

### Features:

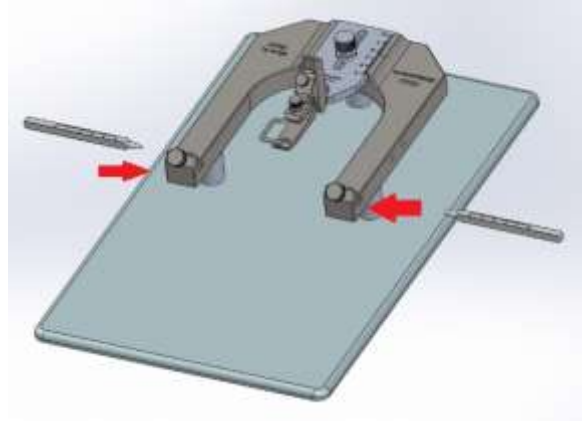
- ❖ Quality, versatility and ability to perform are guaranteed by Toos BioResearch(ZKT) Co.
- ❖ All parts in this instrument are manufactured by high quality and rustproof materials( AISI 304 Stainless steel and Aluminium Alloy).
- ❖ Combines student level operating simplicity with research quality and accuracy.
- ❖ Permits accurate and reliable stereotaxic placement.
- ❖ Modular accessories allow for expansion of instrument capabilities.
- ❖ Adaptable for use with a wide variety of small animals.

## Instruction of assembly:

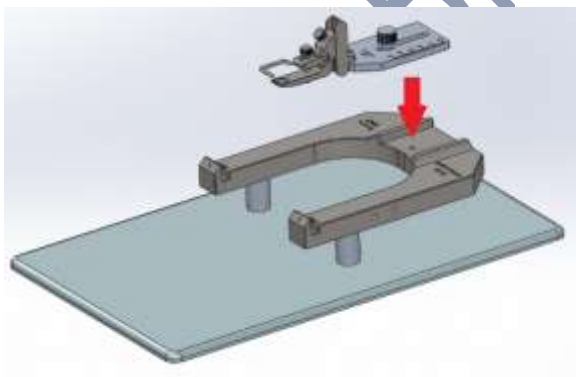
1- As shown below for first step, this parts must be assembled through the following:



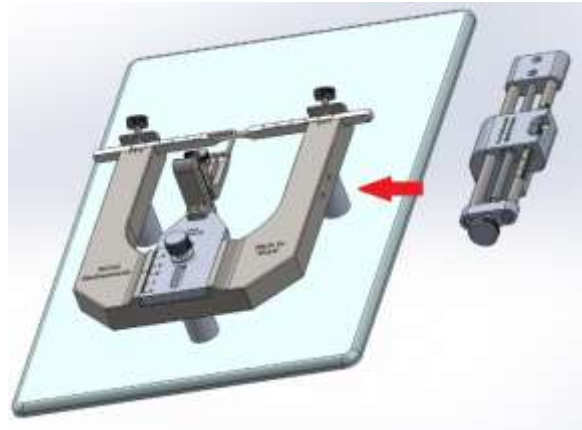
3- For third step, as shown below, following parts must be assembled:



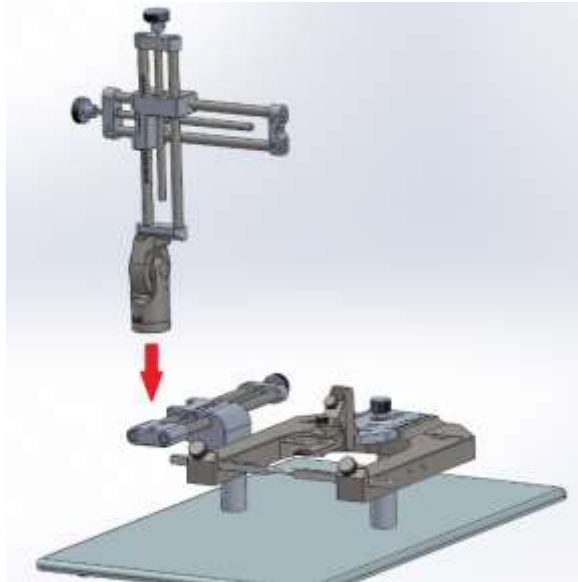
2- After that, for second step, following parts must be assembled:



4- Fourth step, shown below:



5- For this step, following assembly must be done:



## Maintenance condition:

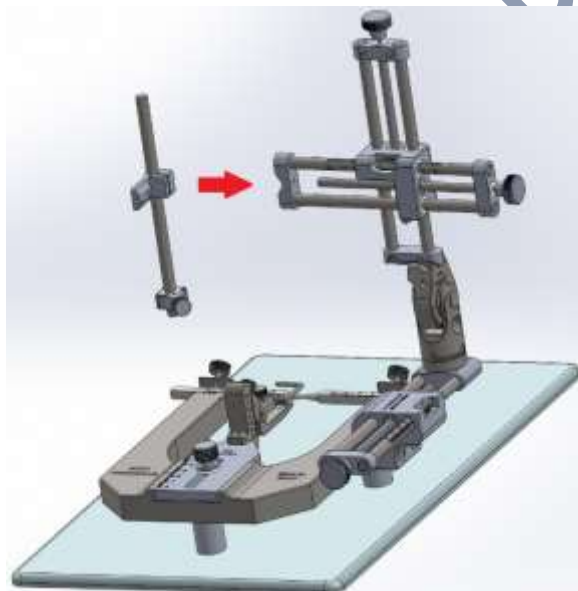
- Do not use in temperature higher than 60 ° C
- For cleaning, use cloth soaked in alcohol
- Do not scratch with sharp objects on it

## Stress Analysis test:

Material properties:

Property	Value	Units
Elastic Modulus	1.9e+011	N/m <sup>2</sup>
Poisson's Ratio	0.29	N/A
Shear Modulus	7.5e+010	N/m <sup>2</sup>
Mass Density	8000	kg/m <sup>3</sup>
Tensile Strength	517017000	N/m <sup>2</sup>
Compressive Strength		N/m <sup>2</sup>
Yield Strength	206807000	N/m <sup>2</sup>

6- Finally, for last step:



For 10N tensile force:

