

y/General

Setting up the UNIMAT CNC please consider the following

When connecting two metal parts e.g. machine beds, stabilizing plates etc. can be tightened

metal nut clamps two synthetic parts, (e.g. adjust the sledge movement, adjusting motor l,...) then screw it down very gently.

Connecting plastic parts with a metal screw/nut, then screw down very gently e.g. Allen screw in the tailstock housing. The same if the metal screw will be screwed into a plastic part e.g. jig-sawing.

ly of the CNC turning machine

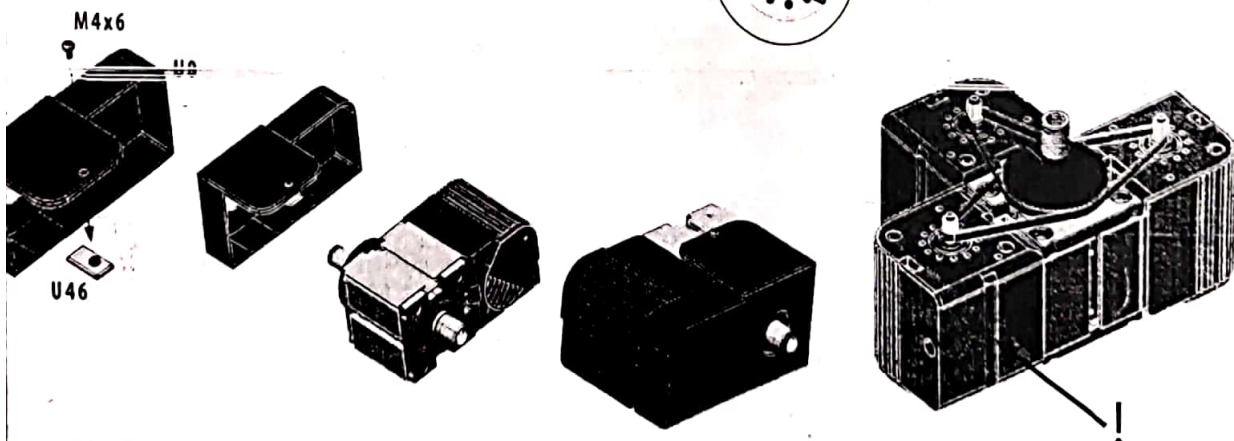
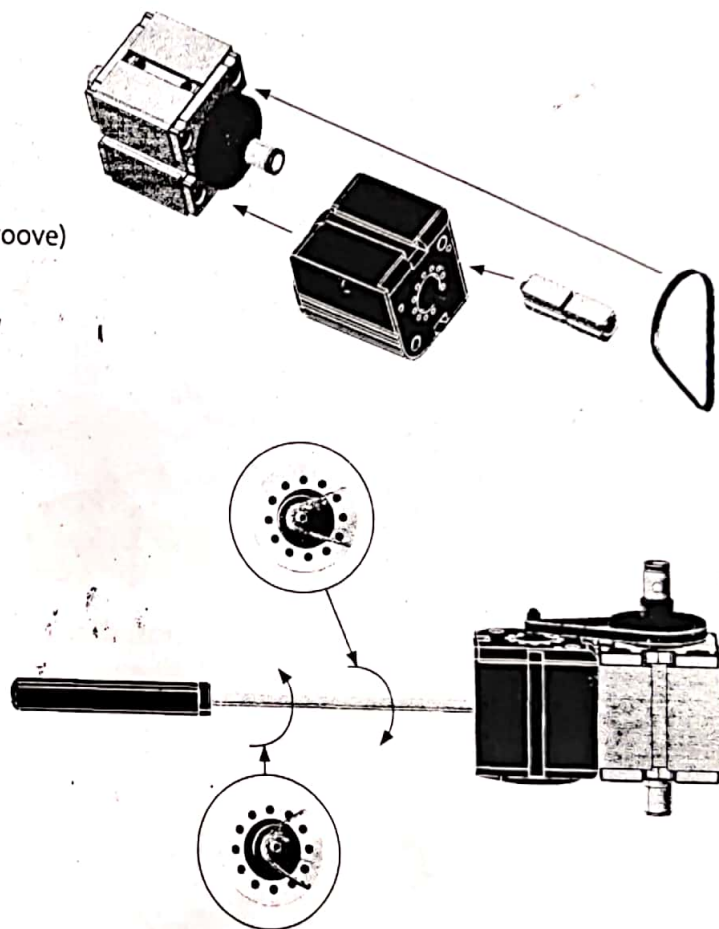
HEADSTOCK Unit M1

connection piece (U66) into the T-slots (groove) between motor (U4ML) and headstock (U2ML).

headstock (U2ML) across and fix the screw in the connection piece (U66)

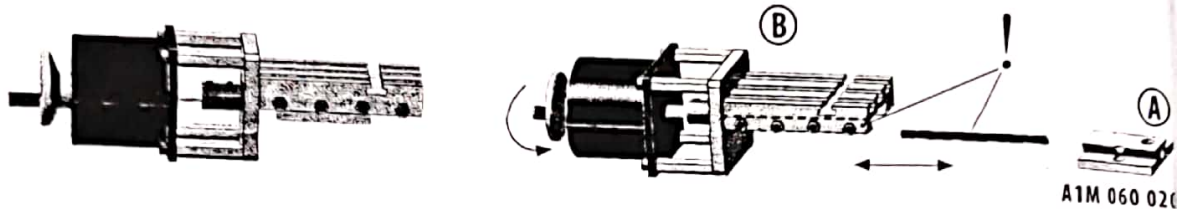
Setting the drive belt (U57):
Loosen U57 with screwdriver. Loosen U57, start motor. Tighten U57 until motor revolutions slightly reduce and belt U57 is properly tightened.

Fixing the drive belt cover (U0).
Be sure that the belt will not slip inside the cover. **Note: fix U0 after Unimat is completely assembled!**

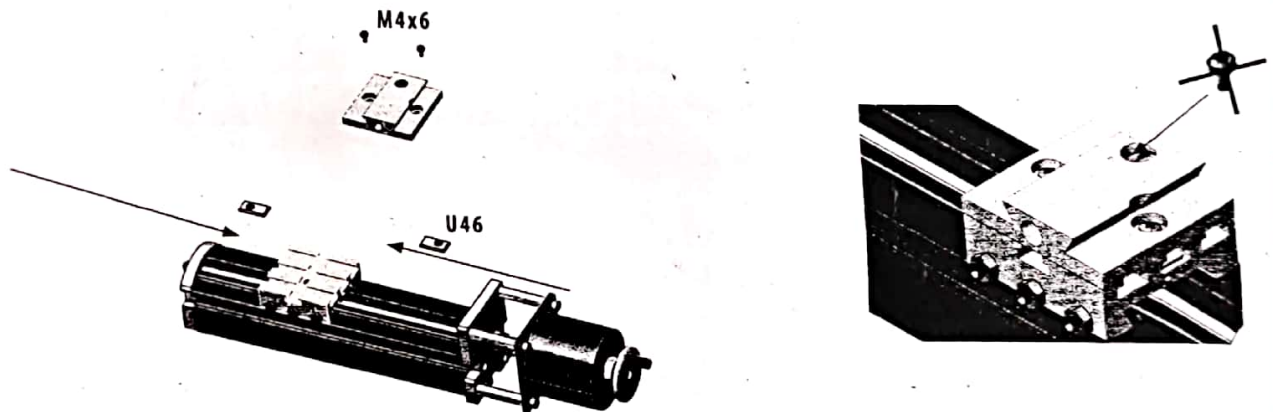


Large slide module M2D

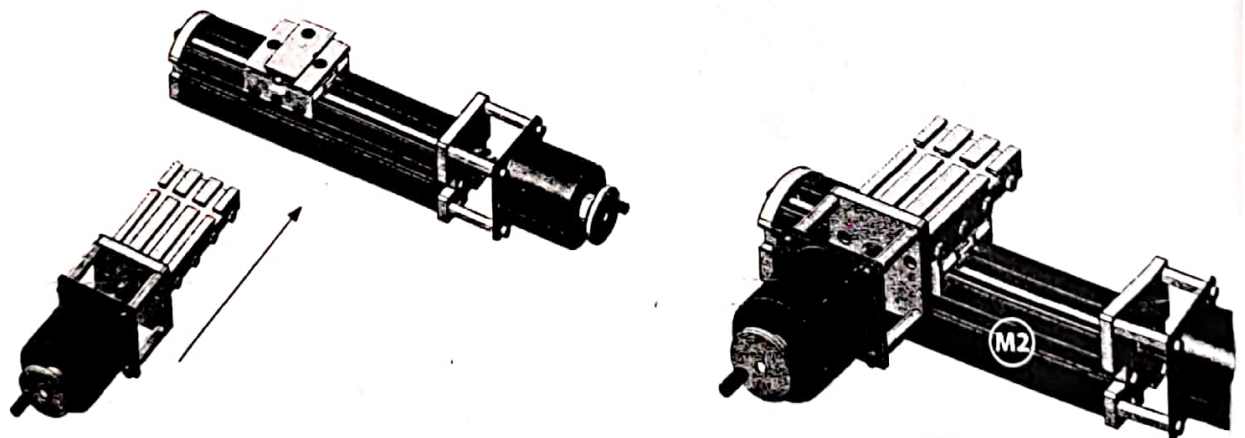
1. Cross-slide module with intermediate piece (for Z-axis) M2B: take off cross-slide guide (A1M 060 020M) from the cross-slide body (U3CNC) by turning the hand wheel until it is released

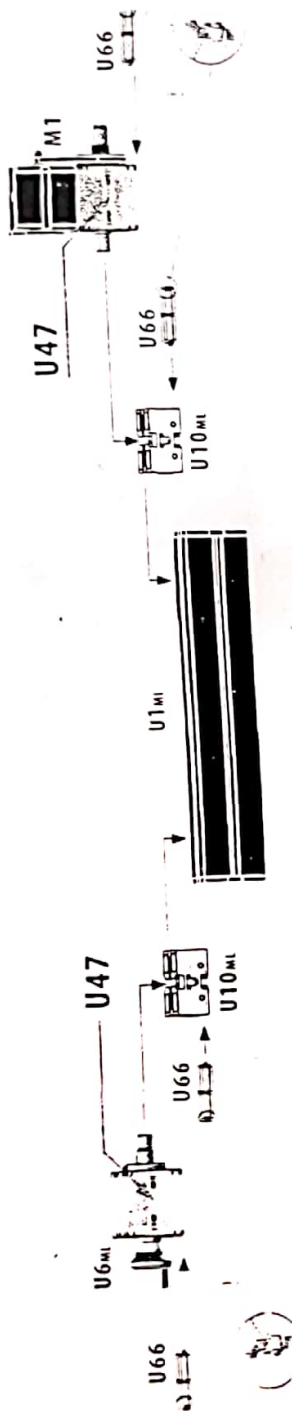


2. Fix the cross-slide guide (A1M 060 020M) to the saddle of the longitudinal slide (U9GNC) with 3 screws (U38) and 3 clamping plates (U46).

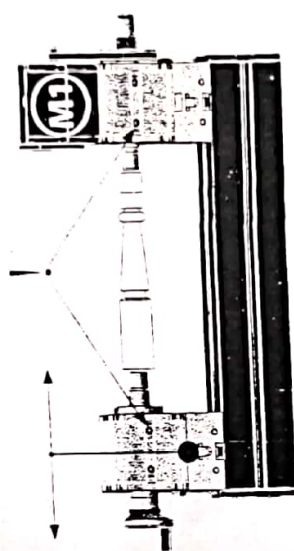


3. Slide modul (M2A) assembly: Slide cross-slide body (U3CNC) over cross-slide guide (A1M 060 020M). Watch the proper position of the gibs between the two parts.





! The clamping plate (U47) with two holes must face the same side (already fixed in U2 and U6ML)



THE COOL EDUCATION

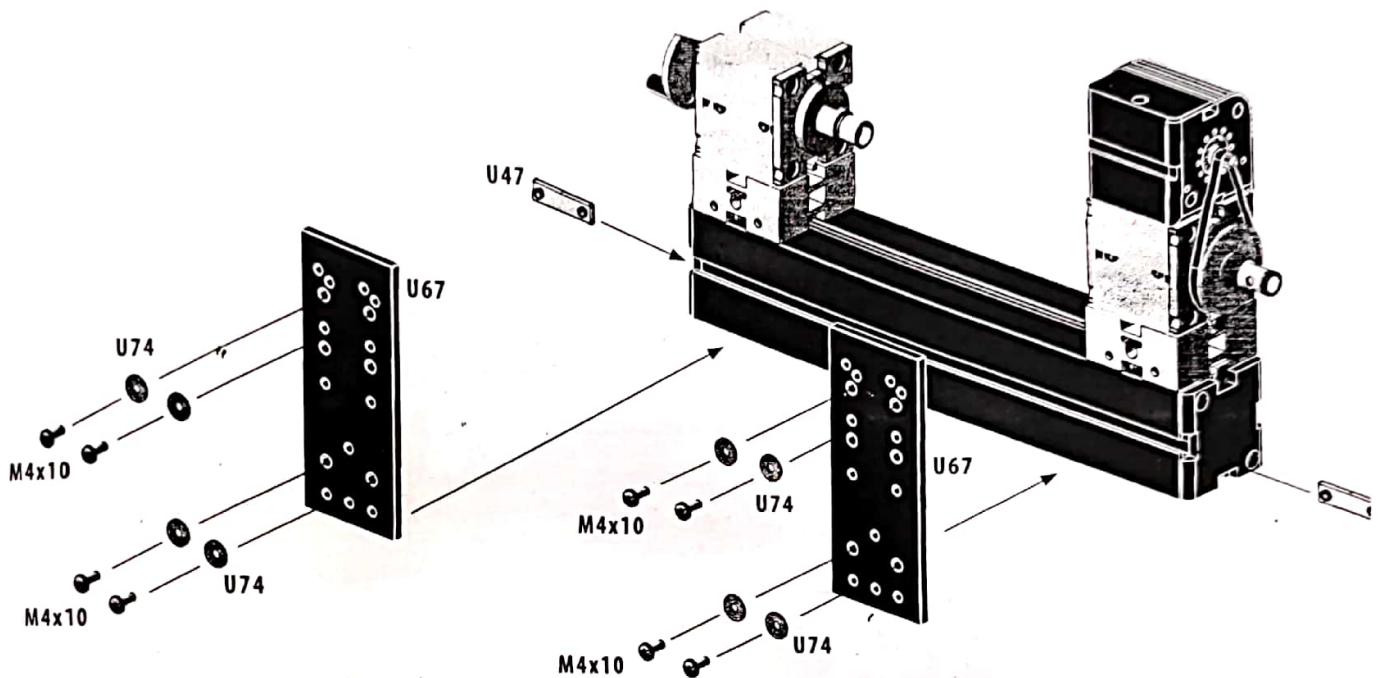
CNC_2-7

part list and setup of CNC turning machine

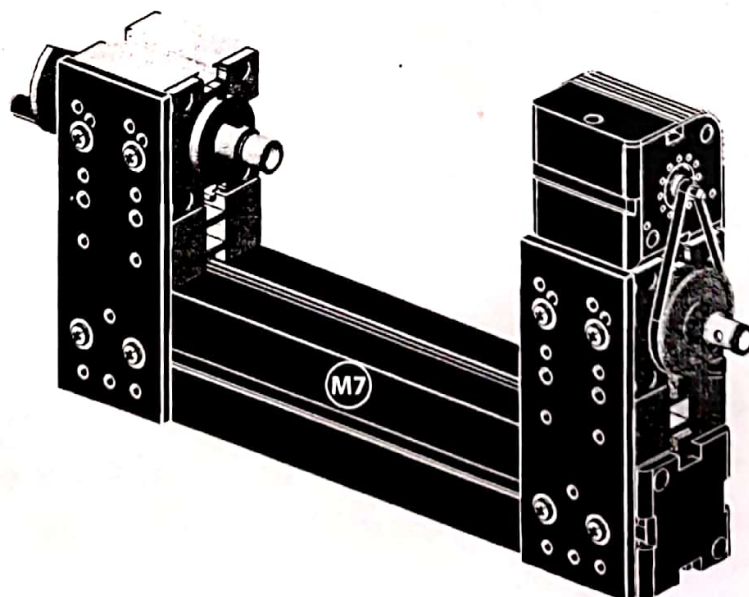
4.3

www.youtube.com/thecooltoo

Fix tailstock (U6ML) and motor-headstock unit (M1A) by means of two stabilizing plates (U67). Use screws U31 and plain washer U74. Slide two clamping plates with two holes (U47) into the T-slot of the machine bed (U1ML)



Modul M7A assembled

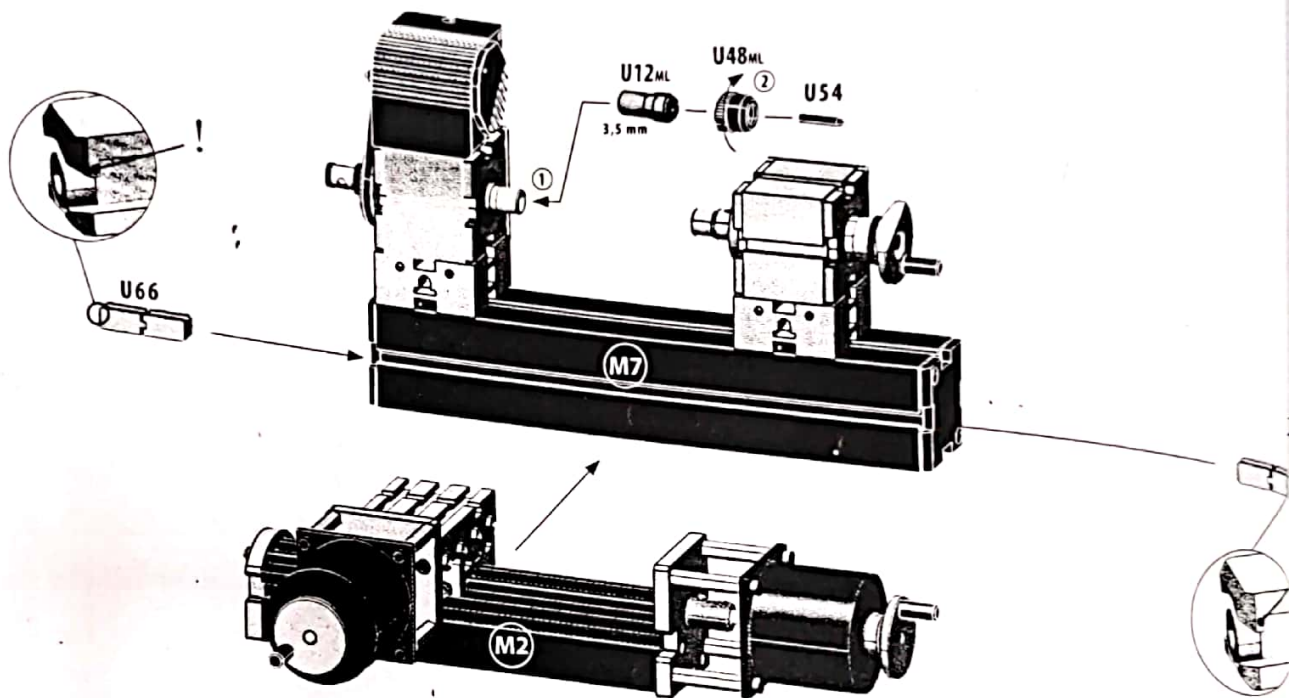


Part list and setup of CNC turning machine

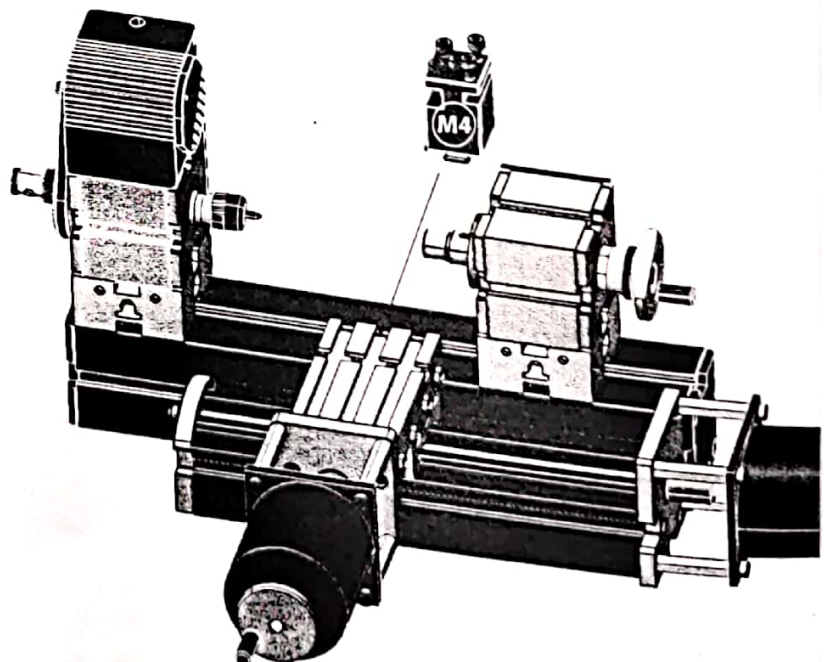
4.3
www.youtube.com/thecoolto

Assembly of slide module (M2)

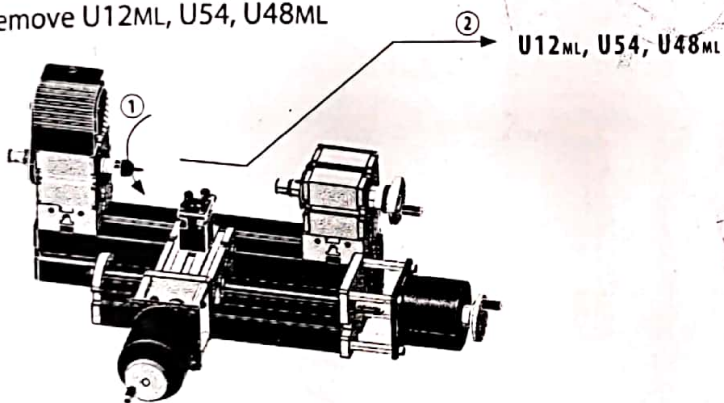
1. Insert the 3.5 mm collet (U12ML) into the collet holder (U48ML) and the center punch (U54) into the collet. Finally insert all into the countershaft spindle and tighten the collet holder. Now the cross table element (M2) can be mounted to module M7 using two connection pieces (U66).
Note, that the stopper nose of the connection pieces should be on the side of the module M2!



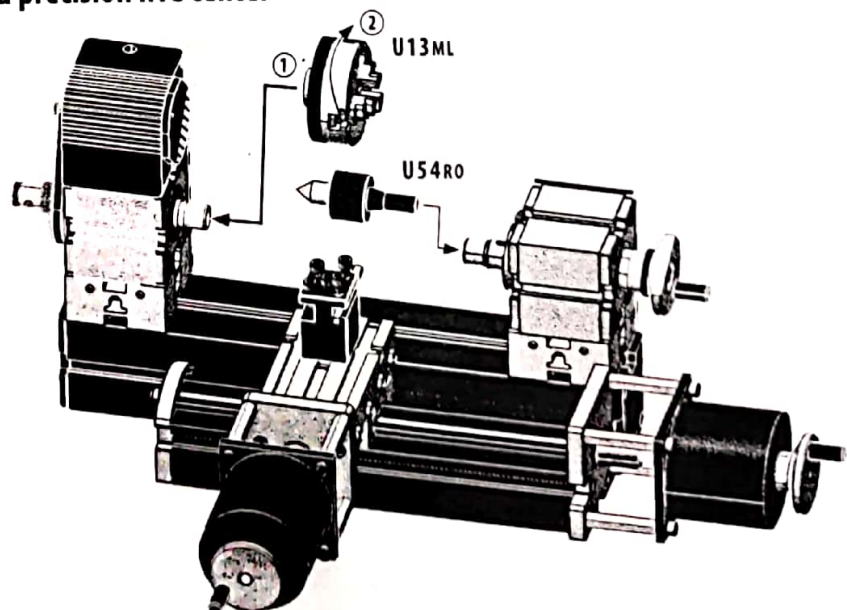
2. Fix 2-position tool post (M4) onto slide module (M2A).
 - Slide T-slot nut (U46) into the T-slot of the cross-slide, then fix screw (U70)



Remove U12ML, U54, U48ML



x 3 jaw chuck (U13ML) onto headstock and precision live center (U54R0) onto tailstock.



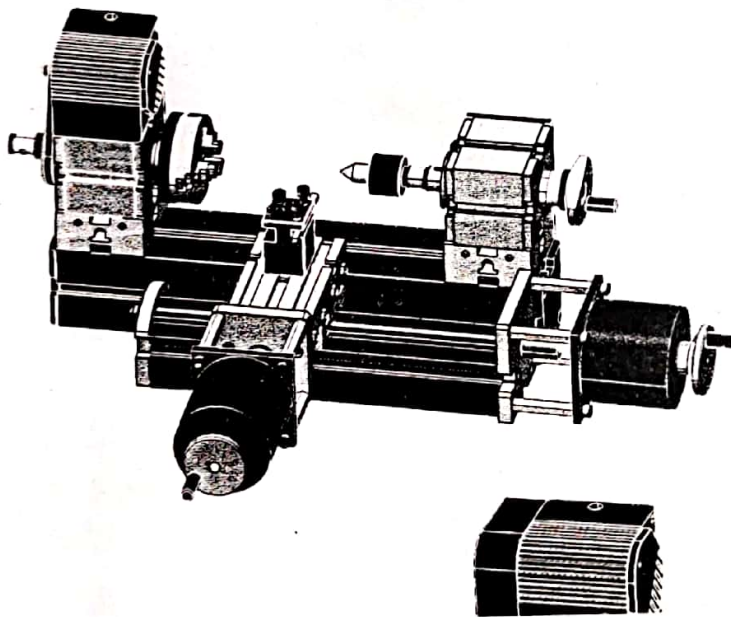
Part list and setup of CNC turning machine

4.3

www.youtube.com/thecoolto

Fix the drive belt cover (U0)

Take a look at "MOTOR-HEADSTOCK Unit M1"



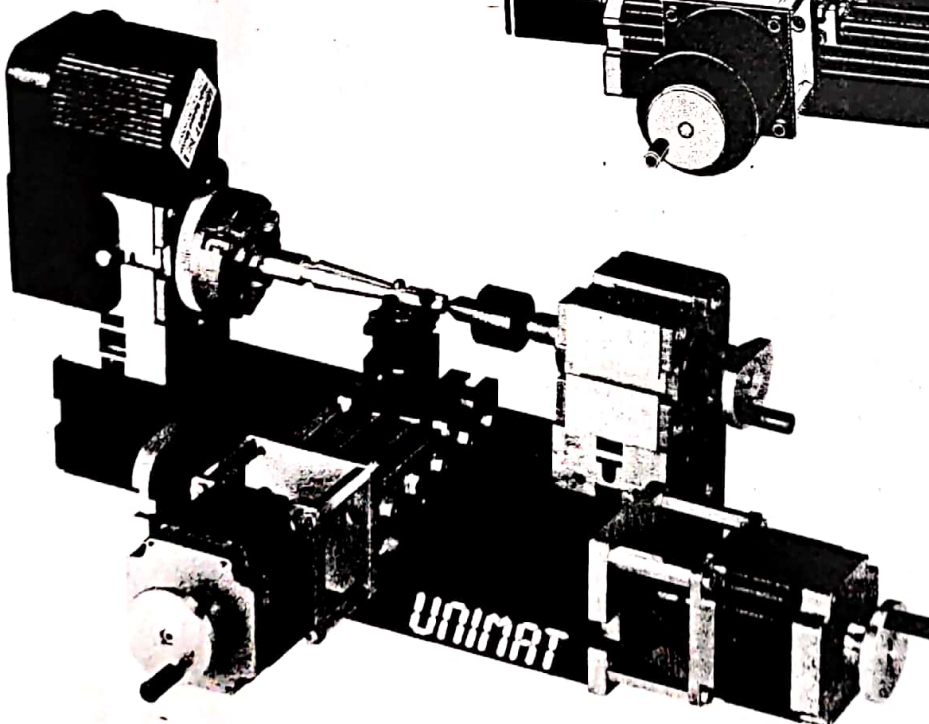
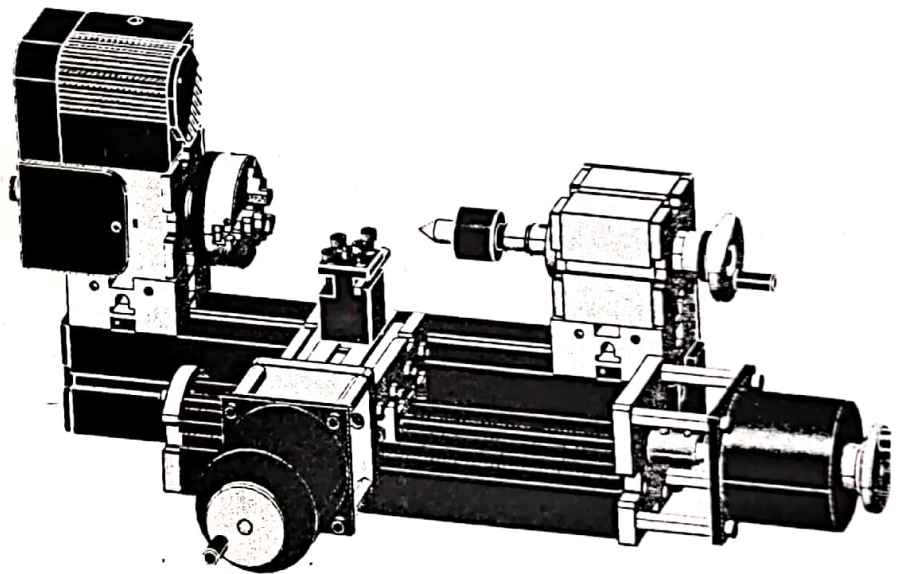
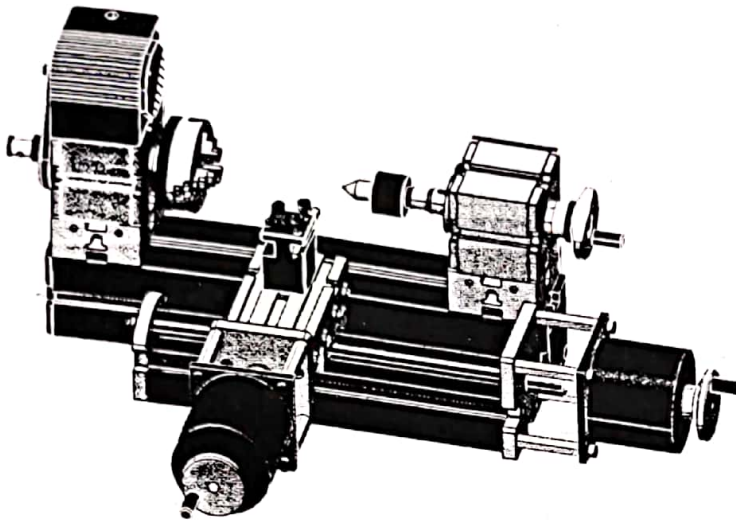
Part list and setup of CNC turning machine

4.3.

www.youtube.com/thecooltoolC

Fix the drive belt cover (U0)

Take a look at "MOTOR-HEADSTOCK Unit M1"



Part list and setup of CNC turning machine

www.youtube.com/thecool

Fix the Unimat machine to the mounting plate

- Fix U46 (slot nut) with screw 4 x 12 to the mounting plate (do not tighten)
- Stick the 4 slip stoppers to the side of the screw heads
- Slide U46 into the T-slot of the machine bed
- Now tighten the screws

