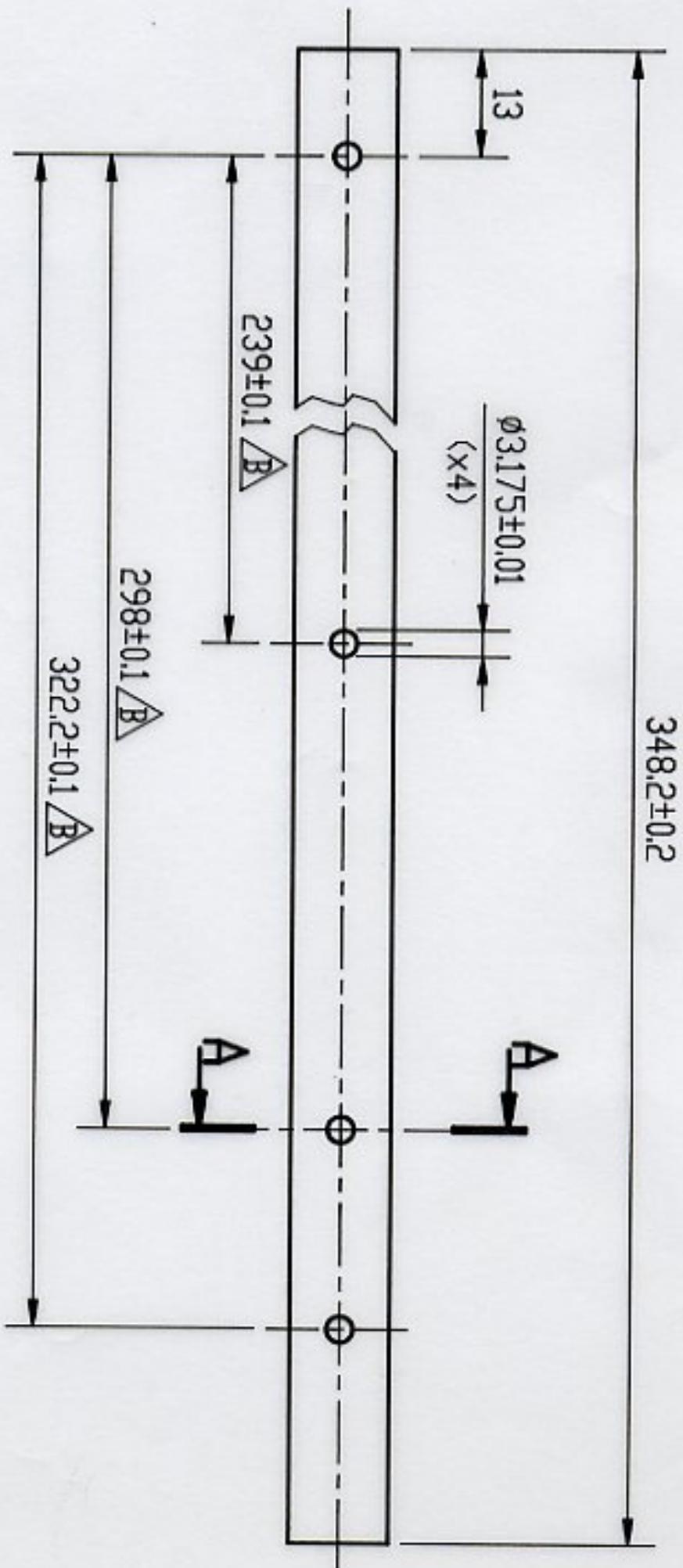




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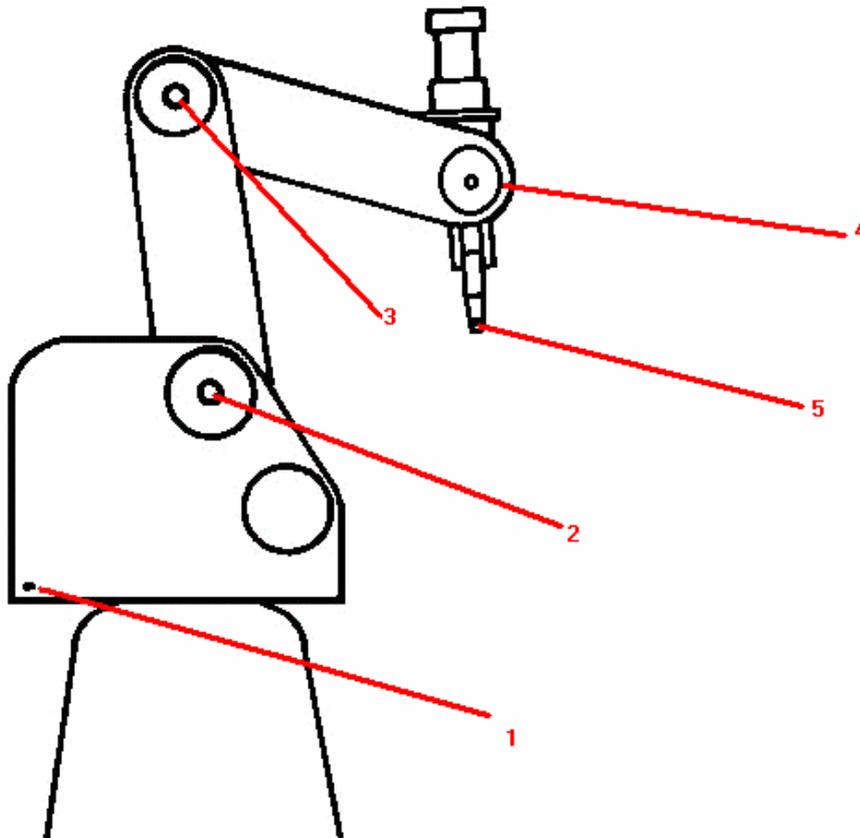
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ESHED ROBOTEC

ADJUSTING THE HOME POSITION OF MECHANICAL ARMS ER3II, ERV, ERV+ ,ER4PC USING THE HOME JIG

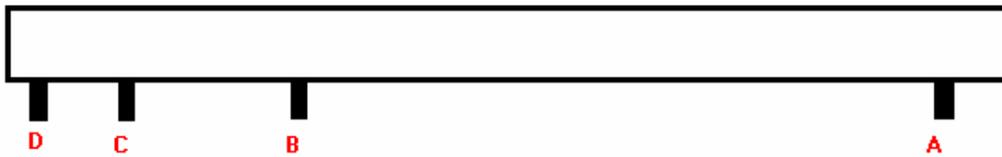
Homing points on arm.



Positions 1 and 5 are Allen screws.
Positions 2,3 and 4 are screws in the middle of the homing cams.

ESHED ROBOTEC

Home jig.



For this procedure you will need:
Inch Allen wrench 5/32
Small Philips screwdriver.

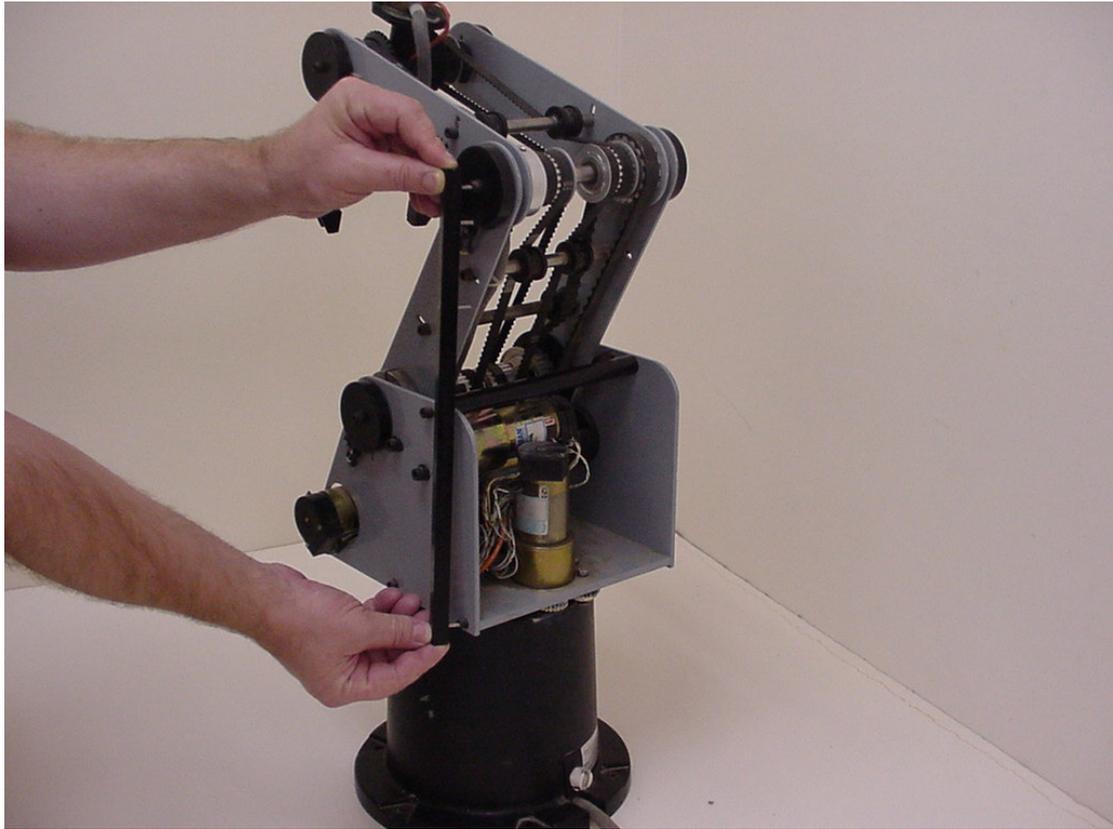
Read the following instructions before starting the procedure

- Home the robot if you can. If not move it manually to a position similar to the above drawing.
- The Homing micro-switches are located on the left hand side of the robot. The homing cams press against the micro-switch and that is how the robot reaches the home position.
- The cams that we will move are only the ones next to the micro-switches. The cams on the other side of the robot are for cosmetics only.
- Axis 1- BASE home position should not be changed as the micro-switch is in a prefixed position.

ESHED ROBOTEC

HOMING OF AXIS 2 - SHOLDER

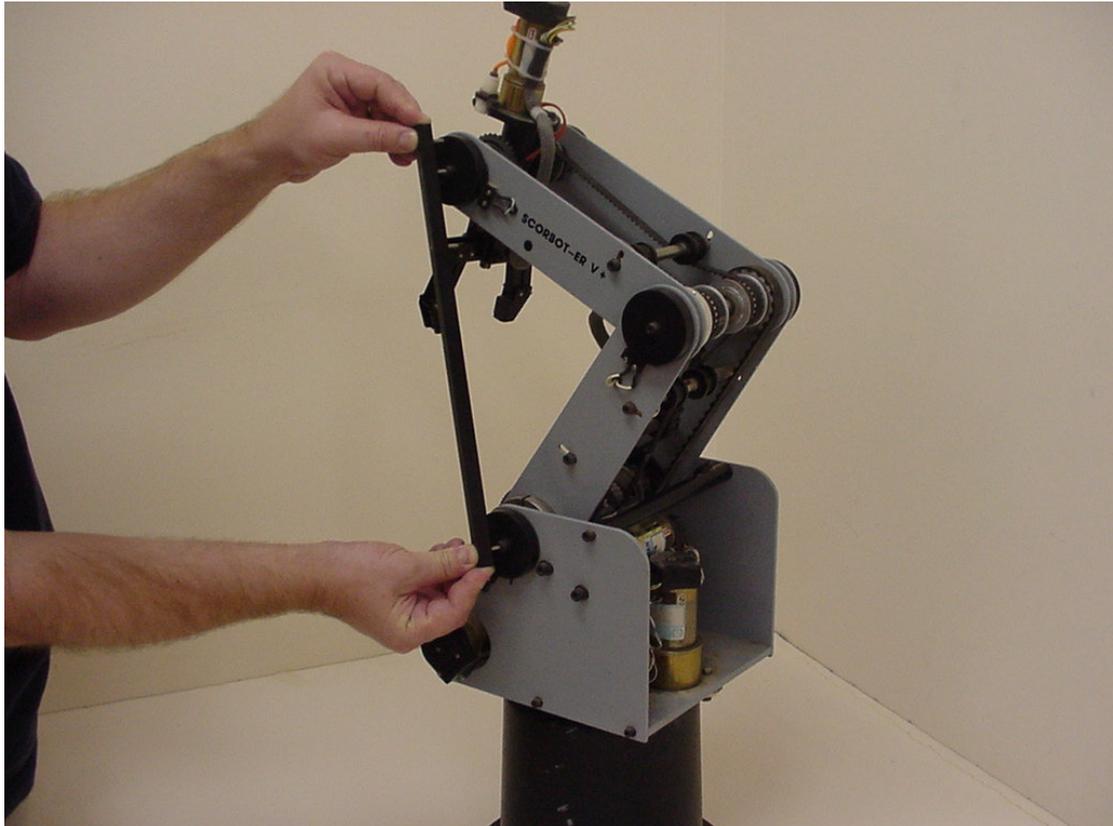
1. Place **Pin A** of the jig in **screw cap 1**.
2. Change the speed in the software to a very slow speed.
3. Move axis 2 slowly so that **pin D** will be placed in **screw cap 3**.
4. Look at the position of the **cam 2**. It should be just touching the micro-switch. The micro-switch should not be pushed in.
5. Using the Allen wrench, unscrew the screw that tightens **cam 2** and move it so that it is just touching the micro-switch. (you can hear the switch clicking when it changes state to not pushed).
6. Tighten the screw and run the home procedure from the software.
7. Repeat from step 1 until the jig fits smoothly in the screw cap.



ESHED ROBOTEC

HOMING OF AXIS 3 – ELBOW

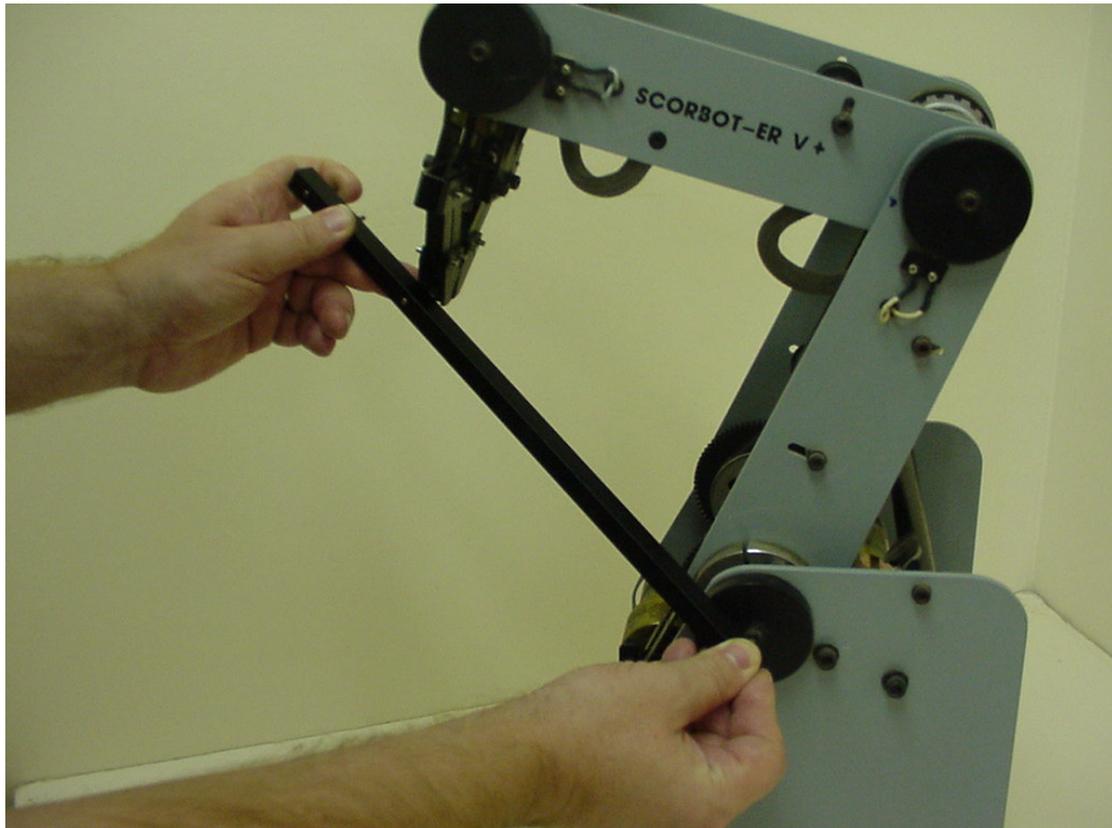
1. Place **Pin A** of the jig in **screw cap 2**.
2. Move axis 3 slowly so that **pin C** will be placed in **screw cap 4**.
3. Look at the position of the **cam 3**. It should be just touching the micro-switch. The micro-switch should not be pushed in.
4. Using the Allen wrench, unscrew the screw that tightens **cam 3** and move it so that it is just touching the micro-switch (you can hear the switch clicking when it changes state to not pushed).
5. Tighten the screw and run the home procedure from the software.
6. Repeat from step 1 until the jig fits smoothly in the screw cap.



ESHED ROBOTEC

HOMING OF AXIS 4 – PICH

1. Close the Gripper.
2. Place **Pin A** of the jig in **screw cap 2**.
3. Move axis 4 slowly so that **pin B** will be placed in **screw cap 5**.
4. Look at the position of the **cam 3**. It should be just touching the micro-switch. The micro-switch should not be pushed in.
5. Using the Allen wrench, unscrew the screw that tightens **cam 4** and move it so that it is just touching the micro-switch (you can hear the switch clicking when it changes state to not pushed).
6. Tighten the screw and run the home procedure from the software.
7. Repeat from step 1 until the jig fits smoothly in the screw cap.



ESHED ROBOTEC

HOMING OF AXIS 5 – ROLL

1. Open the gripper.
2. Move the axis 2 and 3 until the gripper is close to the base plate of the arm.
3. The distance between the 2 fingers to the base plate should be the same.
4. Move the robot to approximately the home position.
5. Move the pitch until the gripper is facing up.
6. Using the screwdriver loosen the 2 Philips screws slightly and move the micro-switch to the side that the gripper finger was closest to the base plate.
7. Tighten the screws and home the robot
8. Repeat from step 1

