

Structure

The SCORBOT-ER IX is a vertical articulated robot, with five revolute joints. With gripper attached, the robot has six degrees of freedom. This design permits the end effector to be positioned and oriented arbitrarily within a large work space.

Figures 2-1 and 2-2 identify the joints and links of the mechanical arm.

Each joint is driven by a permanent magnet DC motor via a Harmonic Drive gear transmission and timing belt.

The movements of the joints are described in the following table:

Axis No.	Joint Name	Motion	Motor No.
1	Base	Rotates the body.	1
2	Shoulder	Raises and lowers the upper arm.	2
3	Elbow	Raises and lowers the forearm.	3
4	Wrist Pitch	Raises and lowers the end effector.	4
5	Wrist Roll	Rotates the end effector.	5

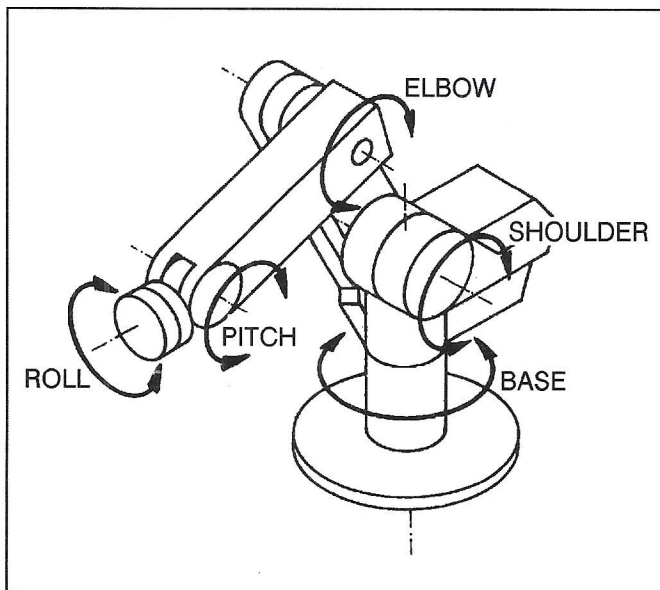


Figure 2-1: SCORBOT-ER IX Joints

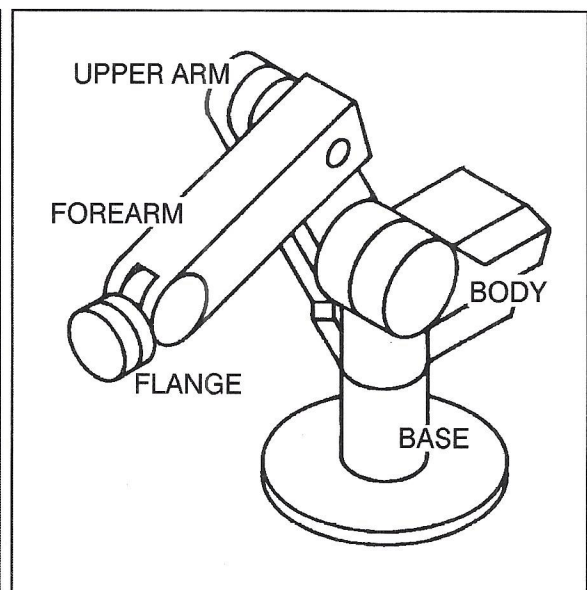
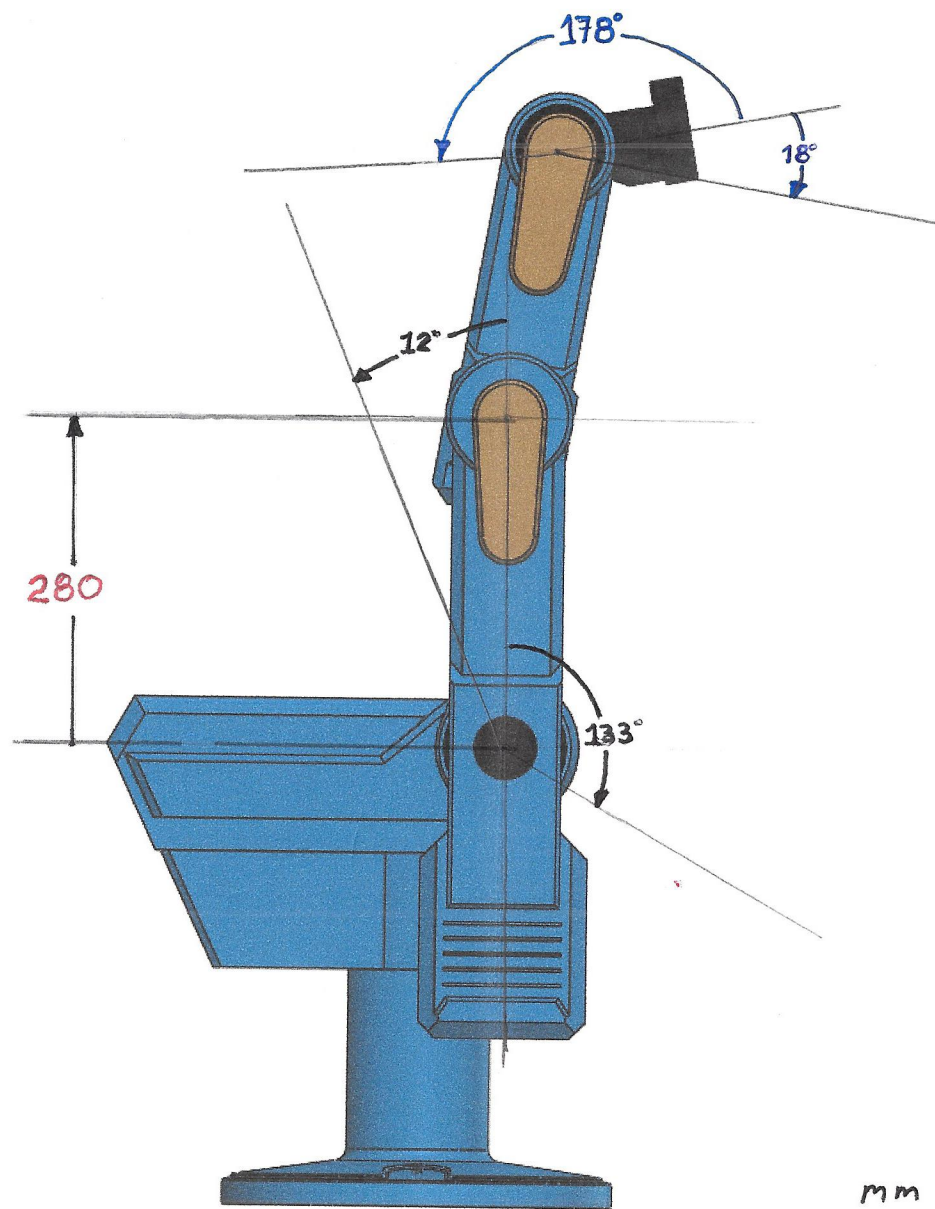
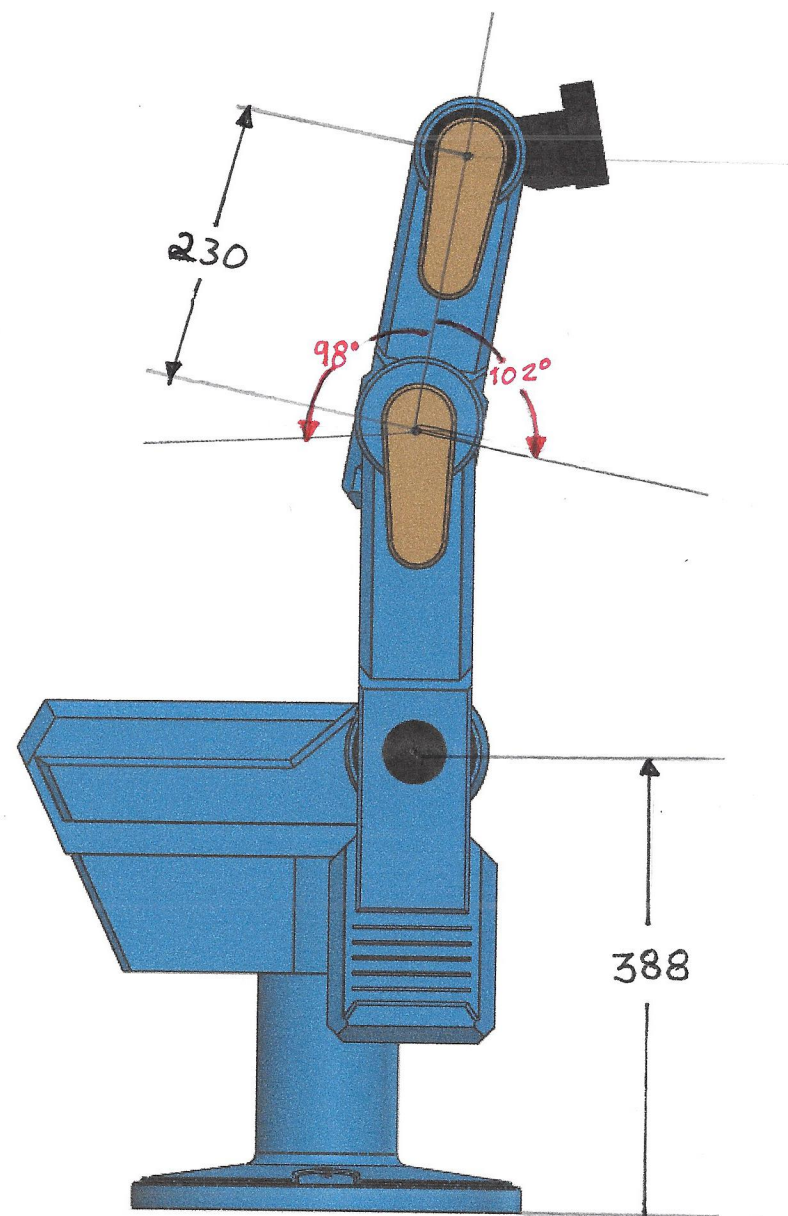
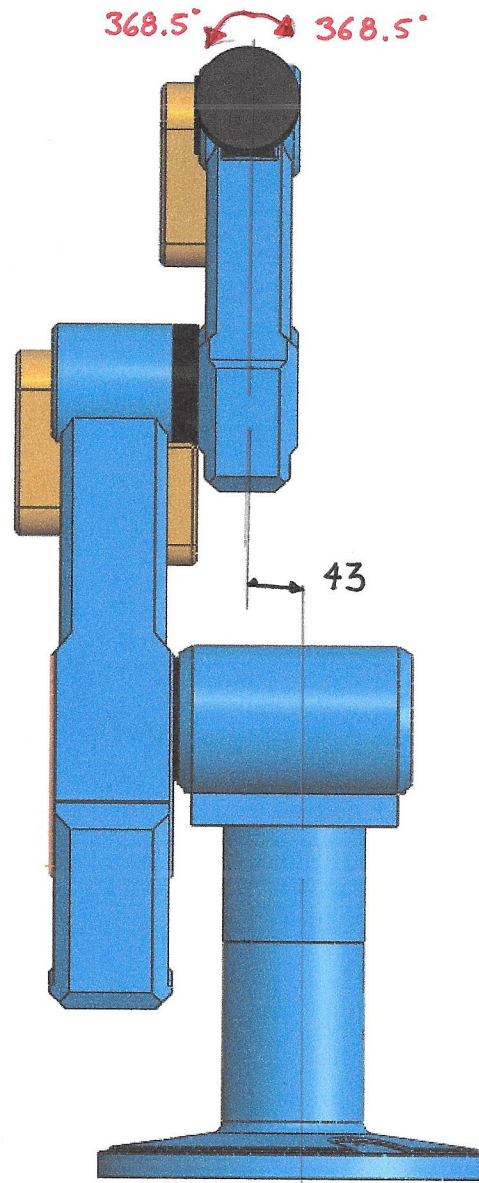


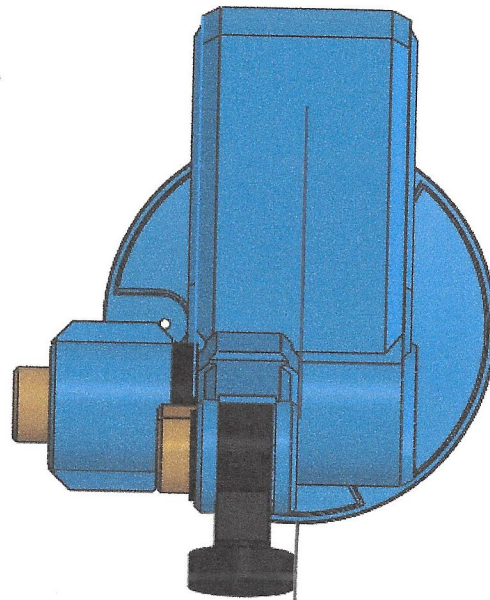
Figure 2-2: SCORBOT-ER IX Links



mm







POSITION:
HOME

115°
BASE

155°