Changing

COBOTTA

Specification from

Standard to

Electric Hand

Attention

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Contents

1.1 Overview of Changing from Standard to Electric Hand Specification

Power up the COBOTTA Robot and connect your PC that has Virtual TP installed.

Remove the Camera if the COBOTTA has one.

Remove the Standard Flange and secure the Electric Hand.

Edit parameters to enable the Electric Gripper.

If the COBOTTA had a camera, reinstall and perform a camera calibration.

4

## 1.2 Powering up the COBOTTA and connecting your PC.

Caution- Before you begin-

- Turn off power to peripheral devices (equipment connected to the COBOTTA.
- WINCAPS III with Virtual TP must be installed on the PC.
- Set your static IP address within your PC to match the COBOTTA.
  Example: COBOTTA IP **192.168.0.1**   PC IP **192.168.0.2**

Step 1.   Connect the Power Supply Cable, Emergency Stop Switch, and your I/O Connector to the COBOTTA.
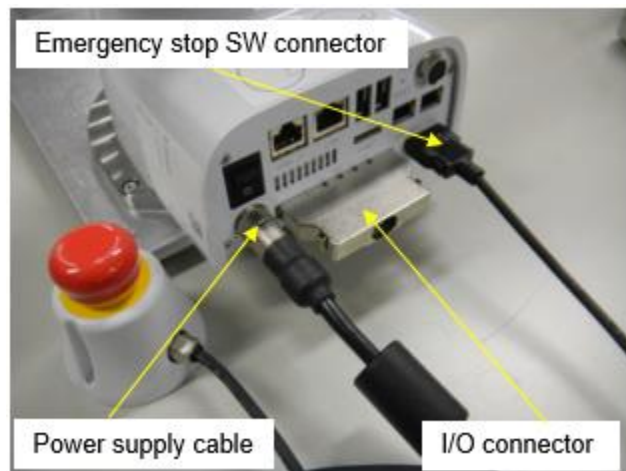
Step 2. Connect to the COBOTTA with your PC using the LAN cable. This PC needs to have Virtual TP installed.

LAN cable
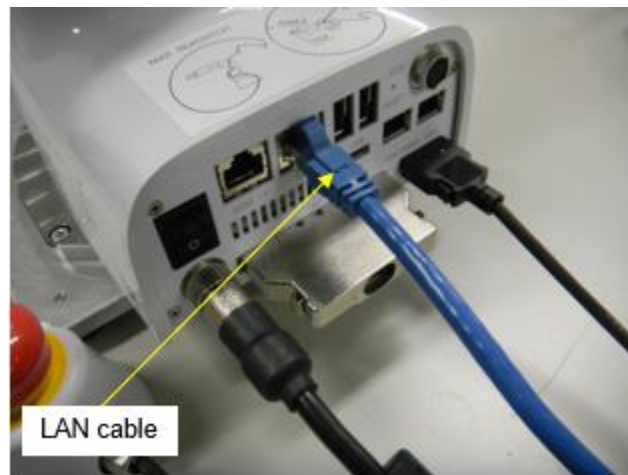
Step 3. Select **Maintainer** from the Virtual TP User Levels and use **5593589** as the password. Then choose **OK**.

Enter password: 5593589.

1.3 Removing the Camera from the COBOTTA.

*Anytime the camera is removed from the COBOTTA it must be recalibrated to the

COBOTTA using a special calibration jig, if you do not have this jig contact Denso Robotics at 1-888-4ROBOTX for part numbers or instructions for sending the robot in for Calibration.

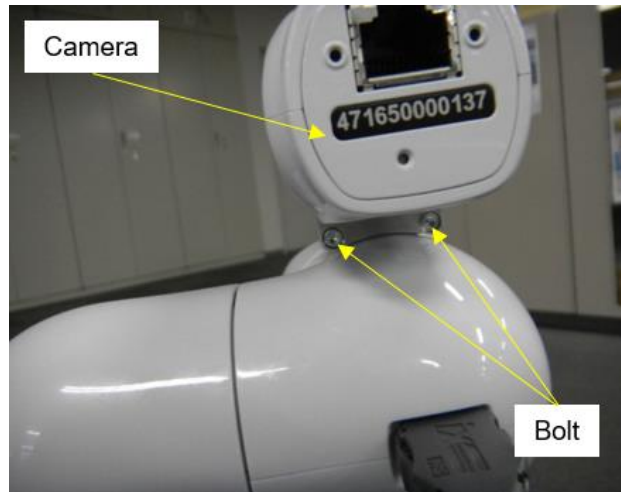*If your COBOTTA does not have a camera installed please move on to section 1.4 of this manual.

Step 1. Change the posture of the COBOTTA to a similar posture as pictured below, then turn the power to the COBOTTA to **Off.**

Step 2. Remove the cable that connects the Camera to the COBOTTA.

Connector
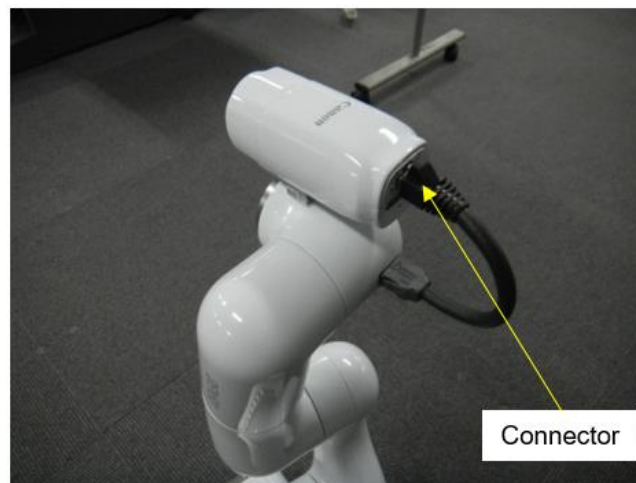
Step 3. Remove the (2) M3 bolts that secure the camera to the COBOTTA.

## 1.4 Removing the Standard Flange and Installing the Electric Gripper.

Step 1. Turn the power to the COBOTTA **ON.** Change the posture of the COBOTTA to the posture seen below then power **OFF** the COBOTTA.
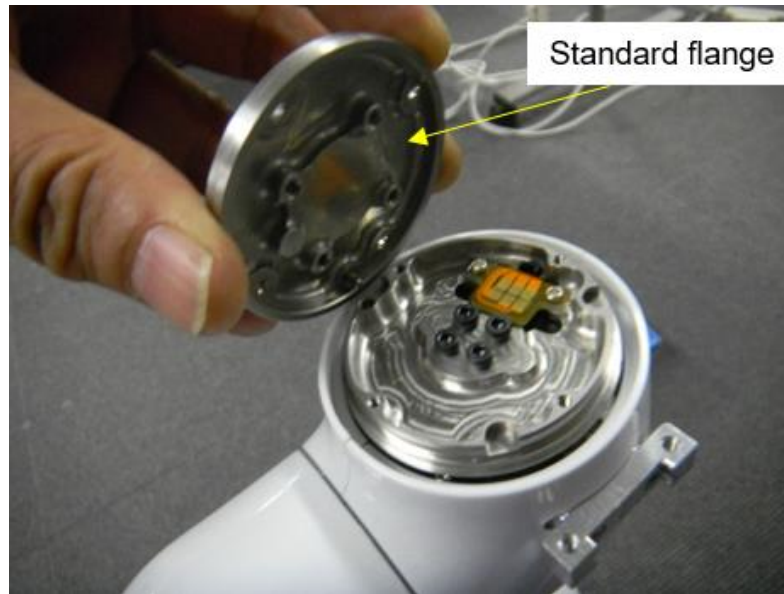
Step 2. Move the 6th axis near or close to the middle operating motion space range. (A safe area away from the positive of negative hard stop of J6.
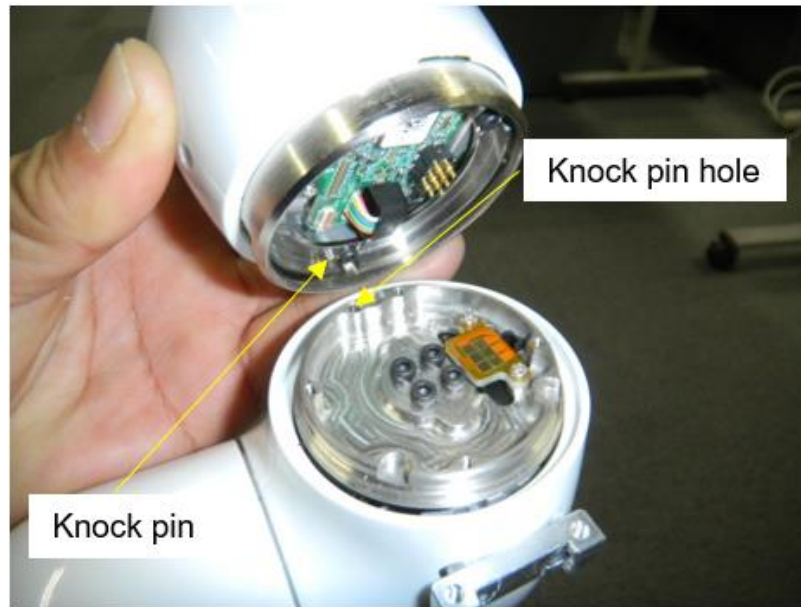

Step 3. Remove the (4) bolts that secure the **Standard Flange**.


9
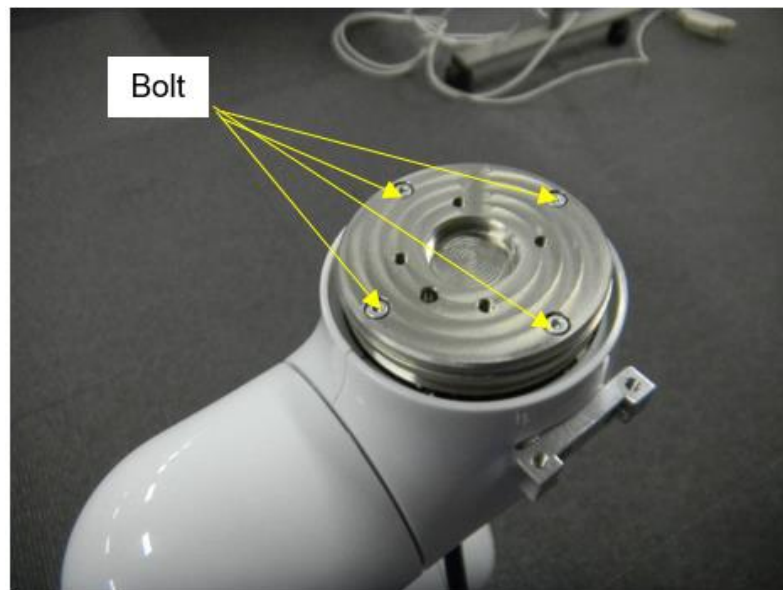
Step 4. Gently remove the **Standard Flange.**

Standard flange

Step 5. Carefully attach the Electric Gripper Hand making sure the **Knock Pin** and the **Knock Pin Hole** are aligned.

Knock pin hole

Knock pin

Step 6. Secure the Electric Gripper using the special spanner wrench
(**Part # 998997-1840**) and rotating in the direction shown below. (Do not
overtighten). Make sure that J6 is not against the mechanical + or – hard stop
when you are tightening.
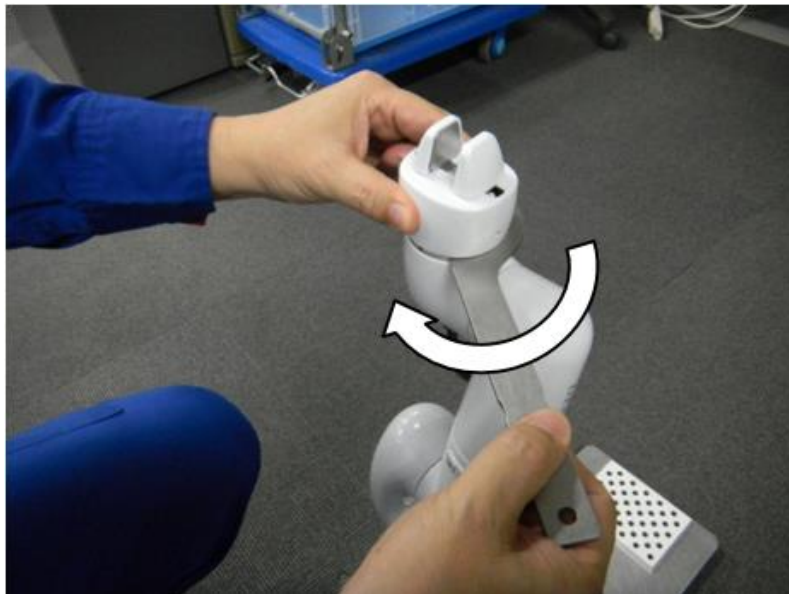
1.5 Editing Parameters to Enable the Electric Gripper

Step 1. Turn on the power to the COBOTTA and connect to it using the Virtual

Teaching Pendant Logged in as **Maintainer** using password **5593589.**

Step 2. Perform the following key strokes using the Virtual Teach Pendant to Enable the Electric Gripper.

"SHIFT" → "Servo Hand" → "Aux"→ Select 57th row → "Edit" →
Select " **1** : Electric gripper" → "OK" → "OK" → "OK"

When you see the **Each Axis Initialization Error** Turn the COBOTTA power **Off** wait at least 6 seconds then power back **On**. If your COBOTTA does not have a Camera to install the work is complete, if you have to install your Camera please continue following the instructions below.
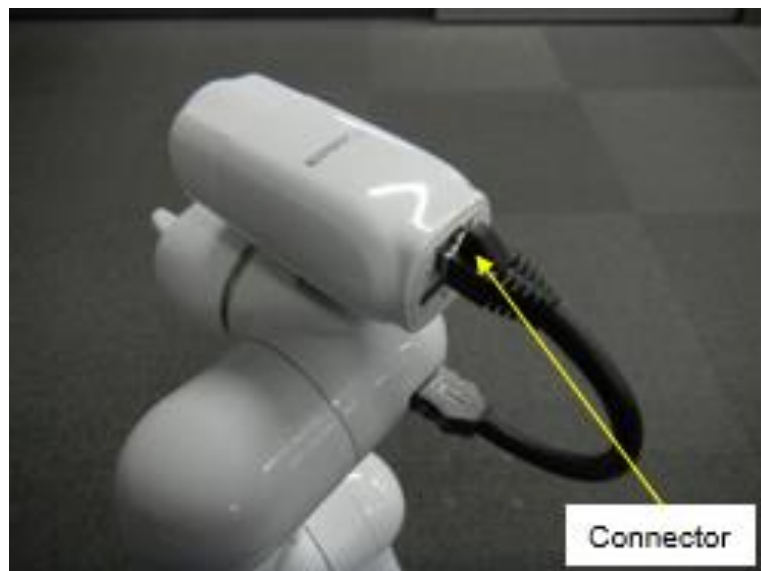
1.6 Reinstalling the Camera.

Step 1. Re-posture the COBOTTA as shown in the picture below then turn the power to the COBOTTA **"Off"**.

Step 2. Attach the Camera to the COBOTTA using the (2) M2.5X10 bolts, tightening torque is = 0.6Nm
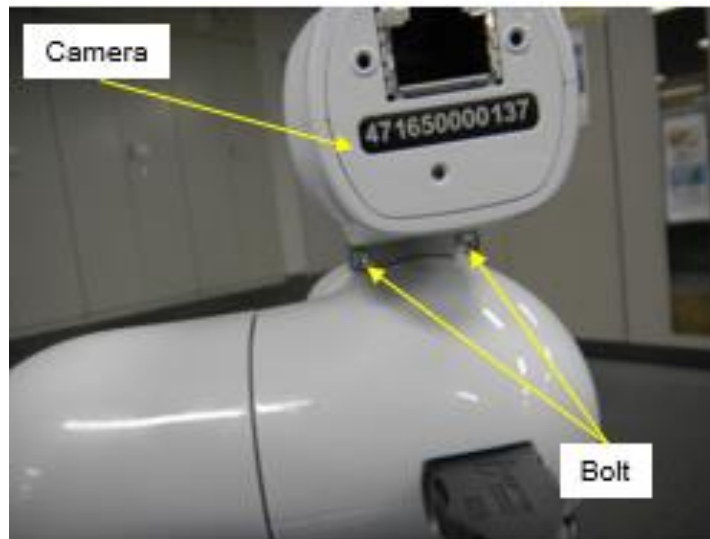
Step 3. Connect the cable from the Camera to the COBOTTA as pictured below.

Step 4. Using the **COBOTTA Camera Calibration Manual**, perform the camera calibration procedure.