Server Remove/Replace

September 23, 2011

Server Remove/Replace

• Refer to the PR2 Overview document for additional information.

1. Move the spine of the robot all the way up, turn the robot off, and remove the front bottom panel and front bellows

• Refer to Doc2 for instructions on how to remove the front bottom panel
• Refer to Doc9 for instructions on how to remove the front bellows

2. Remove the 3 screws that secure the server to the base using a 3mm bit with the T-handle driver (Fig. 1 for the left server, Fig. 2 for the right server)
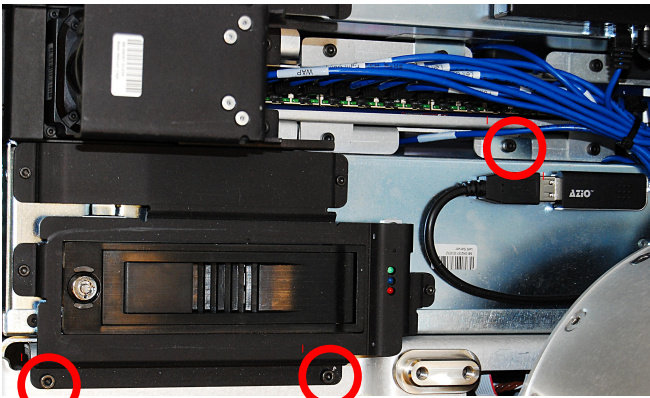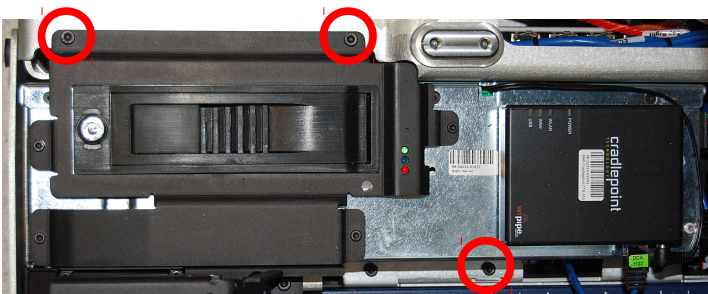

Fig. 1 Left Server

Fig. 2 Right Server

3. Slowly and carefully lift the server up out of the base and disconnect all cables from the back of the server

4. Install the replacement server

5. Reconnect all cables to the server. Look at the labels on the cables and (Fig. 3 for left server, Fig. 4 for right server) below
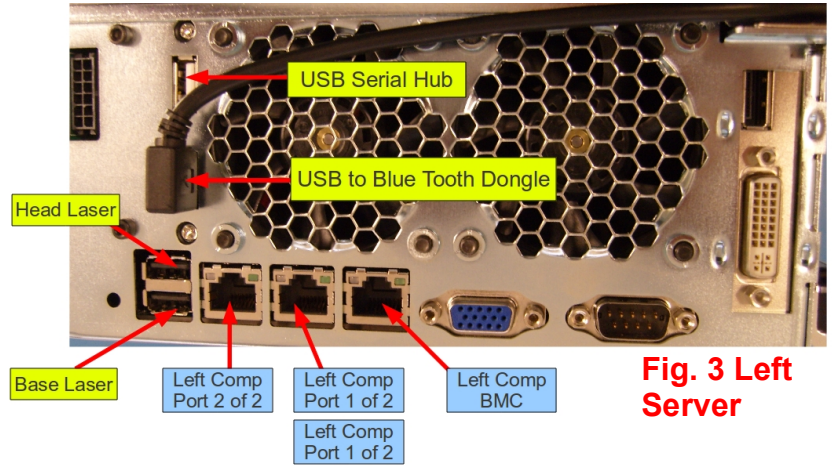

USB Serial Hub
USB to Blue Tooth Dongle
Head Laser
Base Laser
Left Comp Port 2 of 2
Left Comp Port 1 of 2
Left Comp Port 1 of 2
Left Comp BMC

Fig. 3 Left Server

12 volts in
USB Head Aux
Ethernet Right Comp Port 3 of 4
Ethernet Right Comp Port 4 of 4
BMC Right Comp
Ethernet WAN
USB Speaker
USB IMU
Ethernet Right Comp Port 1 of 4
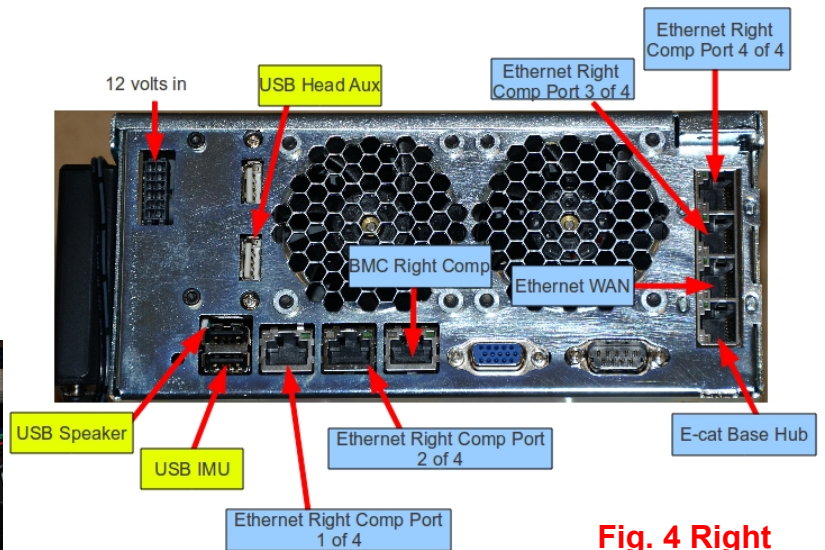Ethernet Right Comp Port 2 of 4
E-cat Base Hub

Fig. 4 Right Server

6. Reinstall the server into the base of the robot using loctite 248 and a torque of 3.17 N-M

7. Reinstall the front bellow (refer back to Doc9) and reinstall the bottom panel onto the robot (refer back to Doc2)