No Connection to PMAC Clipper Repair

NOTE: Completely shut down saw and PC before making any changes.

Original Configuration:
- Incoming Internet to the Ethernet Port on PC
- PMAC Clipper Card Connected with USB Cable to USB Port on PC

Note: Use caution when adding or removing connections to PMAC Clipper Card as connections may break under too much force.

New Configuration:
- Incoming Internet Connected with Ethernet/USB Conversion Cable to USB Port on PC
- PMAC Clipper Card Connected with Cross Over Cable to Ethernet Port on PC

Requirements:
- Ethernet Crossover cable (standard Ethernet cable will not work!)
- USB to Ethernet adapter w/driver disk -or- internal Ethernet card
  (since we will be taking over the existing Ethernet port on the PC)
- Internet access at the saw (if possible, simplifies installing adapter)
Step – by – Step:
Please follow the steps in the order they are listed to switch PMAC to Ethernet communication. If any errors are encountered, please shut down the saw and PC, wait 3 minutes, restart, and try again.

If saw is or will be connected to the plant's network:
1. Make sure saw is connected to the internet, otherwise copy the USB to Ethernet adapter driver to the PC.
2. Connect USB to Ethernet adapter to PC (use a blue USB3 port if the adapter is designed for USB3).
3. If the PC is connected to the internet, allow the driver to install automatically (look for status notifications at the bottom-right of the screen). Otherwise, install the driver you copied in step 1.

After USB to Ethernet adapter is installed (if saw will be networked):
1. Close all applications.
2. Remove plant's network cable from PC, and plug into USB Ethernet adapter (if applicable).
3. Unplug USB cable connection from PMAC Clipper and PC.
4. Connect Ethernet Crossover cable between PC's built-in Ethernet port and PMAC Clipper's Ethernet port.
5. On the screen, open "START -> All Programs -> PEWIN32Pro -> Configure Ethernet 2.0 for PMAC" (you may type 'ethernet' in the Start menu on Windows 7+ to find it more easily).
6. In the "Ethernet Configuration" screen, under "H/W Type", select "PC/104 (ACC2P)"
7. In the "Ethernet Configuration" screen, under "Protocol", select "TCP"
8. You will receive an error about writing to the EEPROM, click "OK".
9. When asked to set up the registry for Pcomm32, select "Yes".
10. When asked for "Card Instance", enter "0" if necessary, and click "OK".
11. On the confirmation dialog, click "OK".
12. In the "Ethernet Configuration" screen, verify the IP Address shows "192.6.94.5", and click "Store IP".
13. You will receive an error about writing to the EEPROM, click "OK".
14. When asked to set up the registry for Pcomm32, select "Yes".
15. When asked for Card Instance, enter "0" if necessary, and select "OK".
16. On the confirmation dialog, verify the IP address is correct (192.6.94.5), and select "OK".
17. Click Done in the "Ethernet Configuration" screen.

PC Ethernet Port setup:
1. Open Network Adapter connection settings:
   a. Right-click the network icon in the system tray and select "Open Network and Sharing Center".
   b. In the left column, click Change adapter settings.
   c. Double-click the PC's built-in network adapter (i.e. "Local area connection #1", NOT the USB to Ethernet adapter!)
   d. Click Properties.
2. Under "This connection uses the following items", double-click "Internet Protocol Version 4 (TCP/IPv4)"
3. On the "General" tab, choose "Use the following IP address".
4. In IP address, enter "192.6.94.1" (NOTE: do NOT enter 192.6.94.5 here!)
5. Click Subnet Mask, it should autofill with "255.255.255.0"; enter this number if necessary.
6. Leave the other entries blank.
7. Click "OK", "OK", "Close", and close out of all screens.

PEWIN32Pro setup:
1. Open PEWIN32Pro (either from the Desktop or from the Start menu).
2. Under the "Setup" menu, choose "Force All Windows to Device Number".
3. If necessary, click "PMAC 00" in the list to select it.
4. Click "Remove", and click "OK" when you are asked "Are you sure you want to remove the device?"
5. If necessary, click "PMAC 00" in the list to select it.
6. Click "Insert".
7. Choose the device named "PMAC ETH0 - IP:192.6.94.5" and click "OK".
8. Verify "PMAC 00" reads "ETH0 - IP:192.6.94.5"
9. Click "Test" and verify that "The PMAC was successfully detected"
   (if not, verify your Ethernet cable is Crossover, and is plugged in all the way).
10. Click "OK", and "OK", and exit PEWIN32Pro.

You have now completed the Ethernet PMAC changeover!