J6801B-01

S E R V I C E N O T E

Supersedes:
None

J6801B Distributed Network Analyzer

Serial Numbers: SG46230615/ SG46241004

Network Time Protocol synchronization does not function as clock-master correctly on affected units.

To Be Performed By: Agilent-Qualified Personnel

Parts Required:

P/N	Description	Qty.
1821-0080	IC INTERFACE CONTROLLER-TIMER	1
Metcal Solder Station tip SMTC-113		1

Verification will require a PC running Windows XP SP2 and Network Analyzer software version 5.50 or newer with two NIC cards installed and a connection to the internet.

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

MODIFICATION RECOMMENDED

ACTION CATEGORY:	[[]] IMMEDIATELY X ON SPECIFIED FAILURE [[]] AGREEABLE TIME	STANDARDS LABOR: 1.0 Hours		
LOCATION CATEGORY:	[[]] CUSTOMER INSTALLABLE [[]] ON-SITE X SERVICE CENTER	SERVICE X RETURN INVENTORY: [[]] SCRAP [[]] SEE TEXT	USED PARTS:	X RETURN [[]] SCRAP [[]] SEE TEXT
AVAILABILITY: PRODUCT'S SUPPORT LIFE		NO CHARGE AVAILABLE UNTIL: April 2010		
AUTHOR: DM		PRODUCT LINE: 2J		
ADDITIONAL INFORMATION:				

© AGILENT TECHNOLOGIES, INC. 2008
PRINTED IN U.S.A.

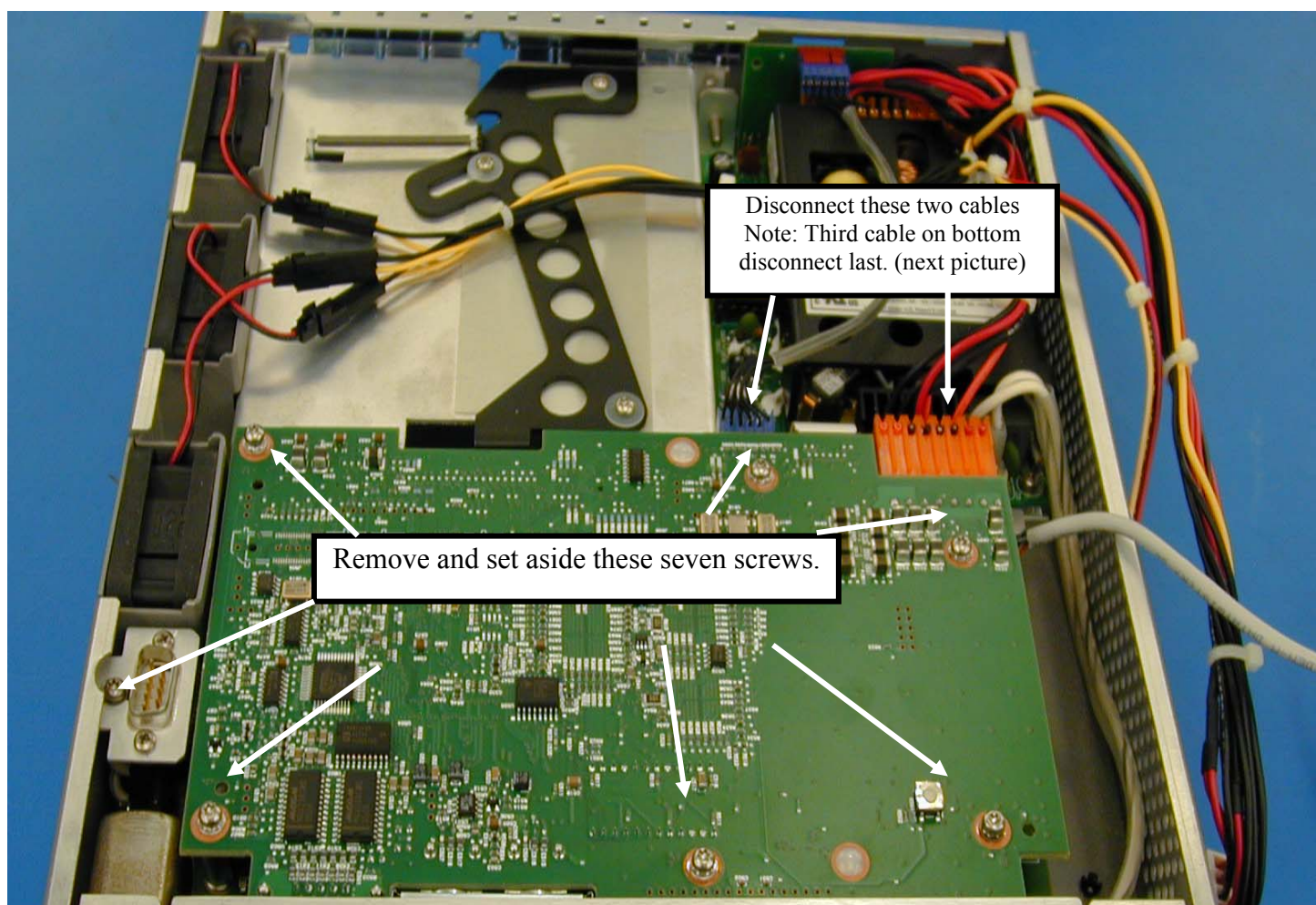**Agilent Technologies**

April 29, 2008

Situation:
Using one of the affected units as a clock master in a daisy-chained group of J6801B's will cause the slave units to fail with the message, "Clock not set by master" and will be unable to synchronize the time stamps of collected data.
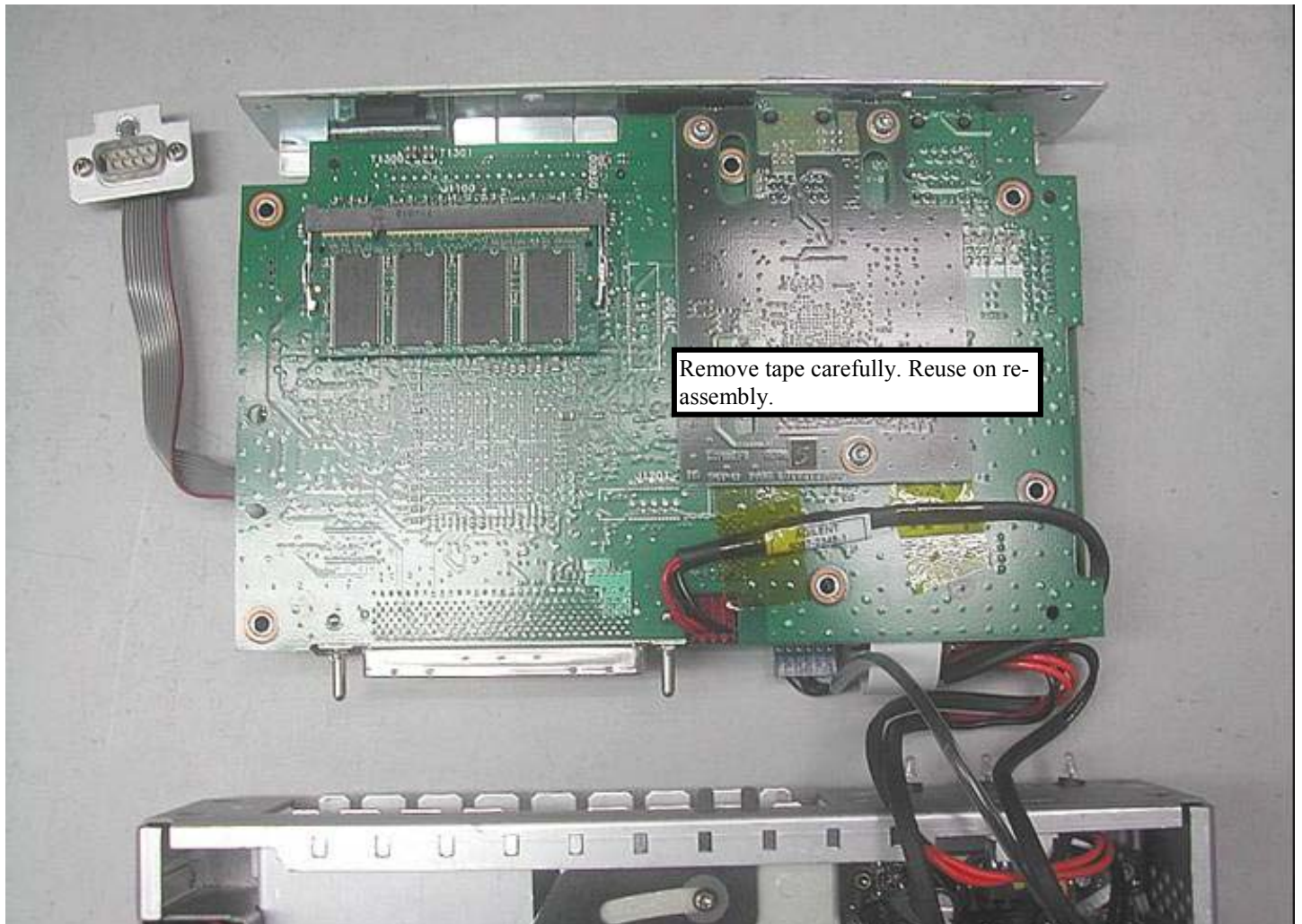

Solution/Action:
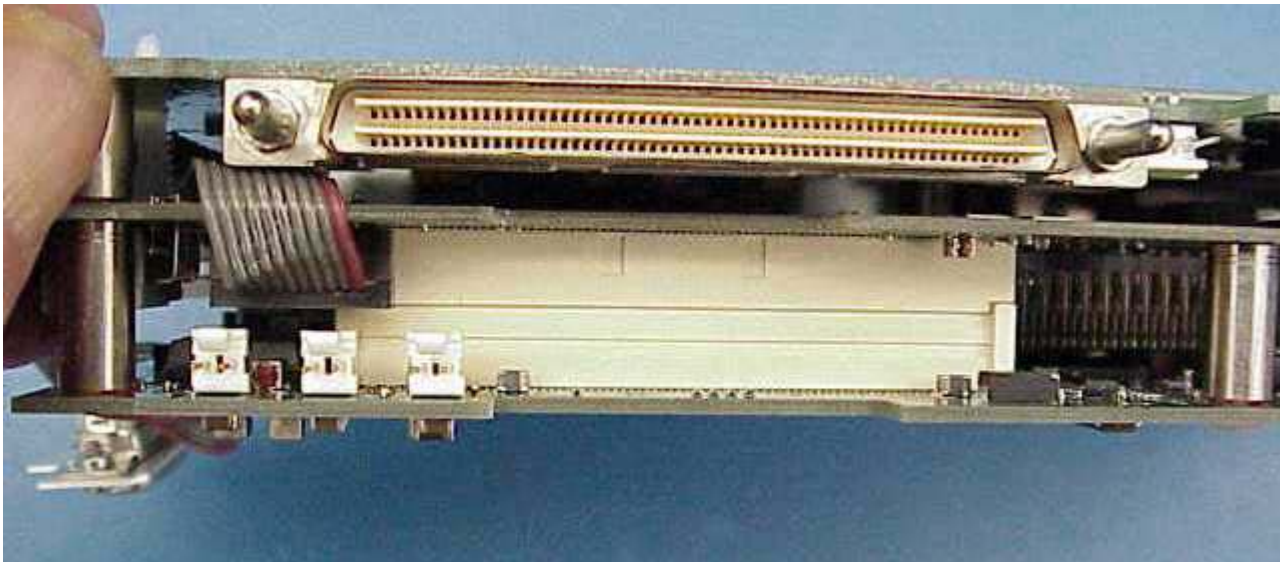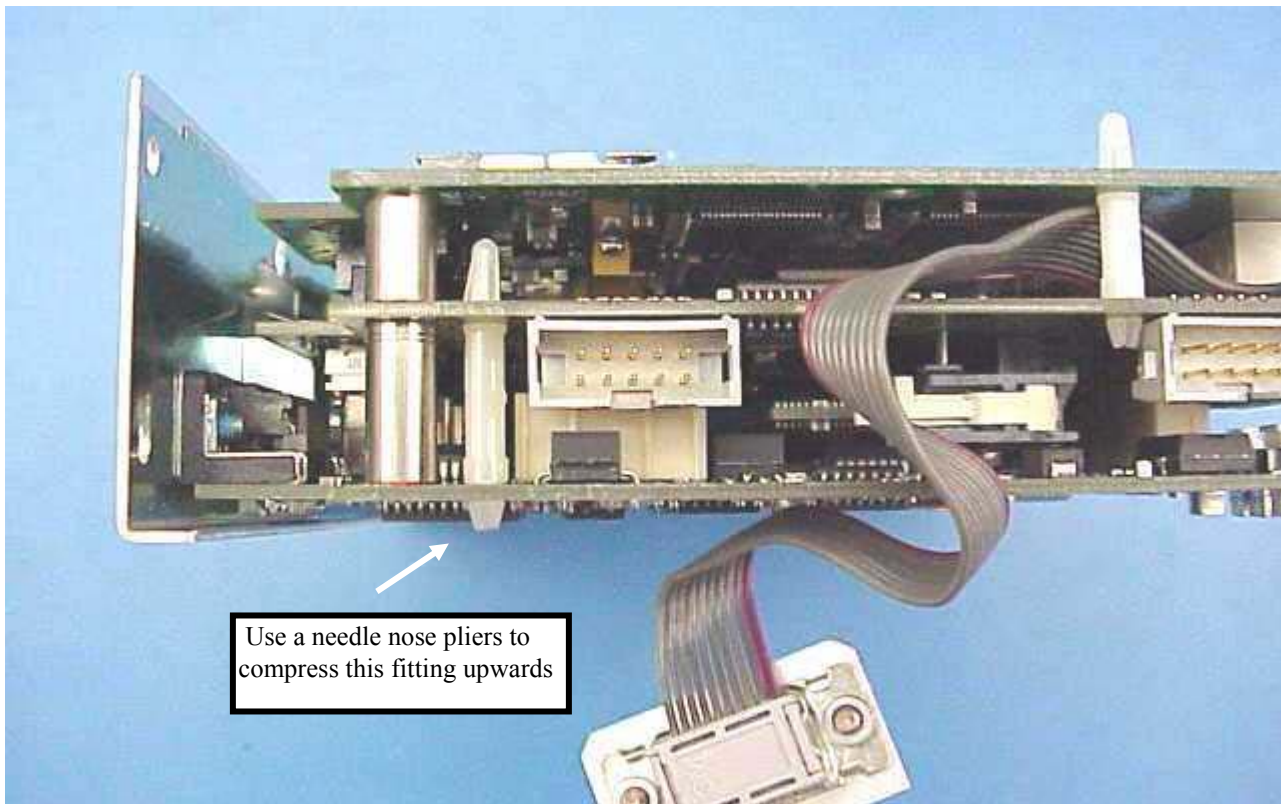#1 Remove the front and rear panels as well as the top cover.
For complete instructions in how to do this please refer to:
http://nstd.corporate.agilent.com/servicecenter/Brickstuff/Assembly-Disassembly1.doc

Disconnect these two cables
Note: Third cable on bottom disconnect last. (next picture)

Remove and set aside these seven screws.

Remove tape carefully. Reuse on re-assembly.

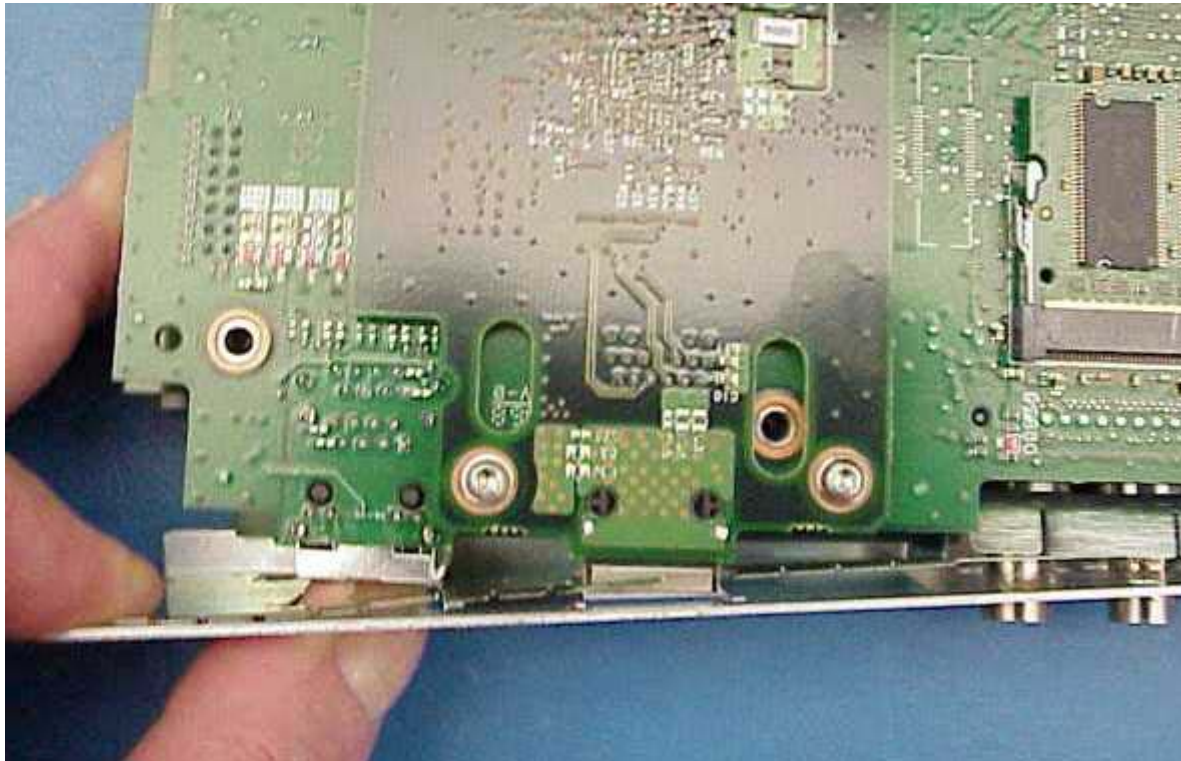Use a needle nose pliers to
compress this fitting upwards

#2 Separate the board-stack at this connector.

#3 Carefully pry the sheet-metal away from the RJ connectors on the board-stack until they completely clear the RFI gasket.
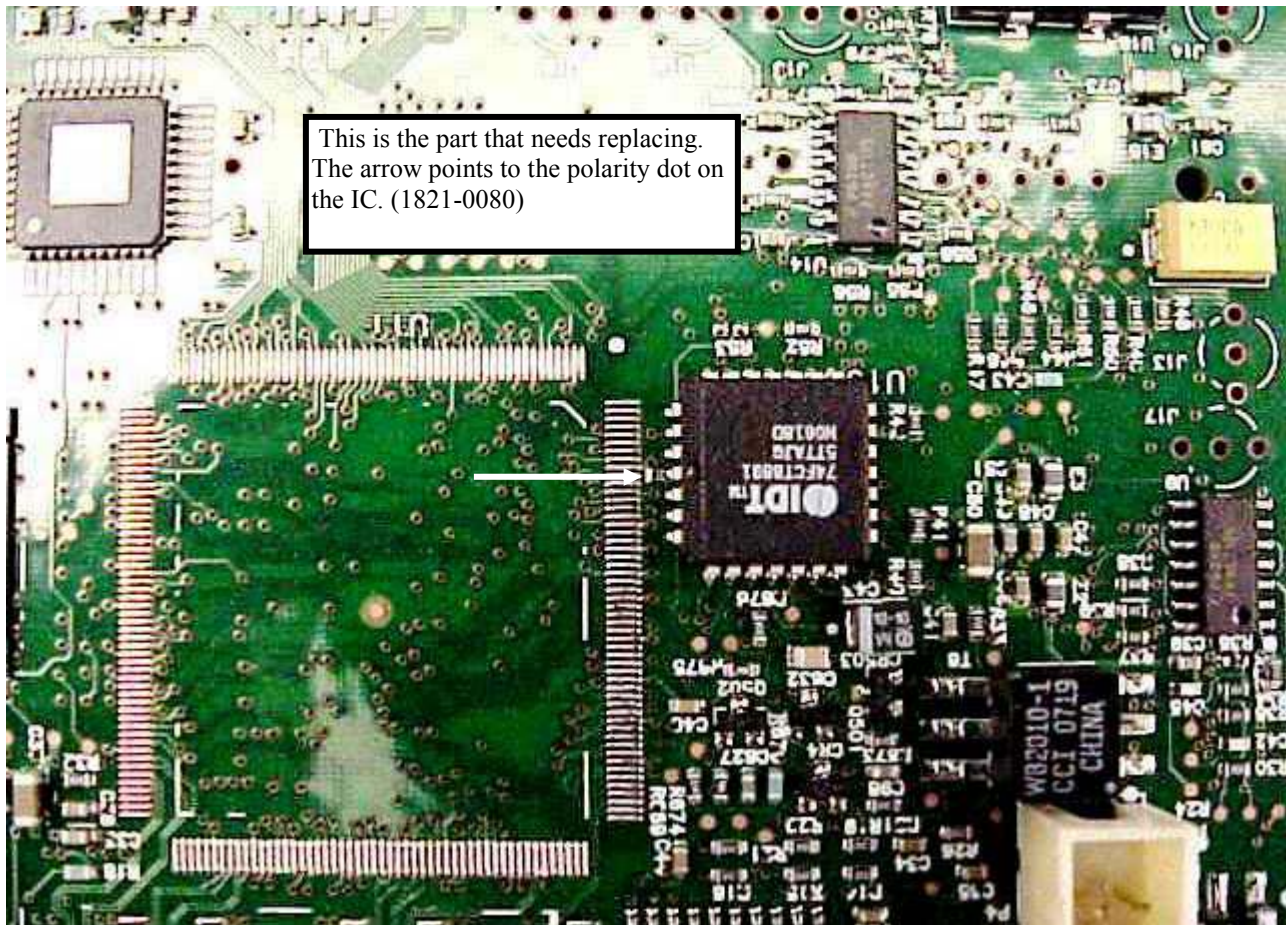

#4 Once the RJ connectors are clear of the sheet-metal rotate this top board away from you and place on the work surface. You should be presented with the view on the next page.
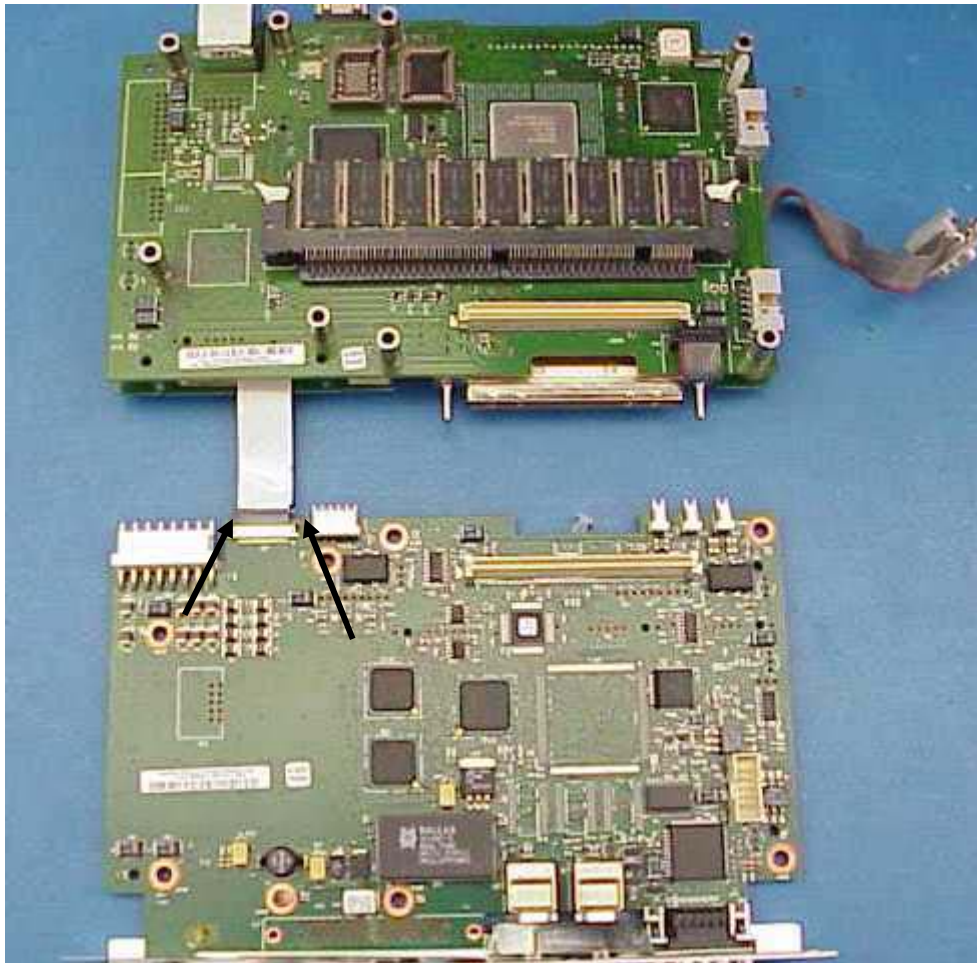
#5 Use caution when disconnecting the ribbon cable from the bottom board by gently pressing the tabs of the brown connector away from you. (See arrows)

This is the part that needs replacing. The arrow points to the polarity dot on the IC. (1821-0080)

#6 After replacing the part, re-assemble the board-stack per the documentation from the URL at the beginning of this service note. Then re-assemble the board-stack into the J6801B chassis insuring all three cables are correctly connected.

#7 Testing the unit comes next. This will requires a PC with at least two NIC cards installed, with one of them having a live internet connection. The scond NIC will be used to create a measurement connection between the units under test.

Connect 3 DNAs in a daisy chain, Sync Out to Sync in on each of the units.(1 Master, 2 Slaves).

Connect PC to Sync In on the first DNA , and then using a LAN cable connect the Sync Out on the first unit to the Sync In on the second DNA, Repeat to connect all the Units under test to the chain.

| Control PC | Unit 1 | Unit 2 | Unit 3 |
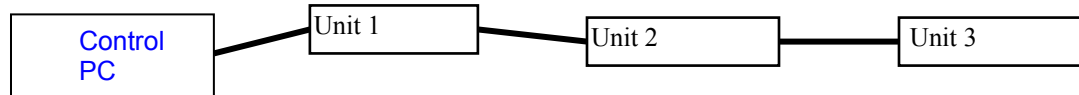
Complete the following process three times, so that each UUT will act as Clock Master (Unit 1), middle unit (Unit 2) and end unit (Unit 3).
   Important: Power down all three units when changing positions.

1.   Double-click on the NTP Server.exe file C:\ Program Files\Agilent\XPI\Utilities.
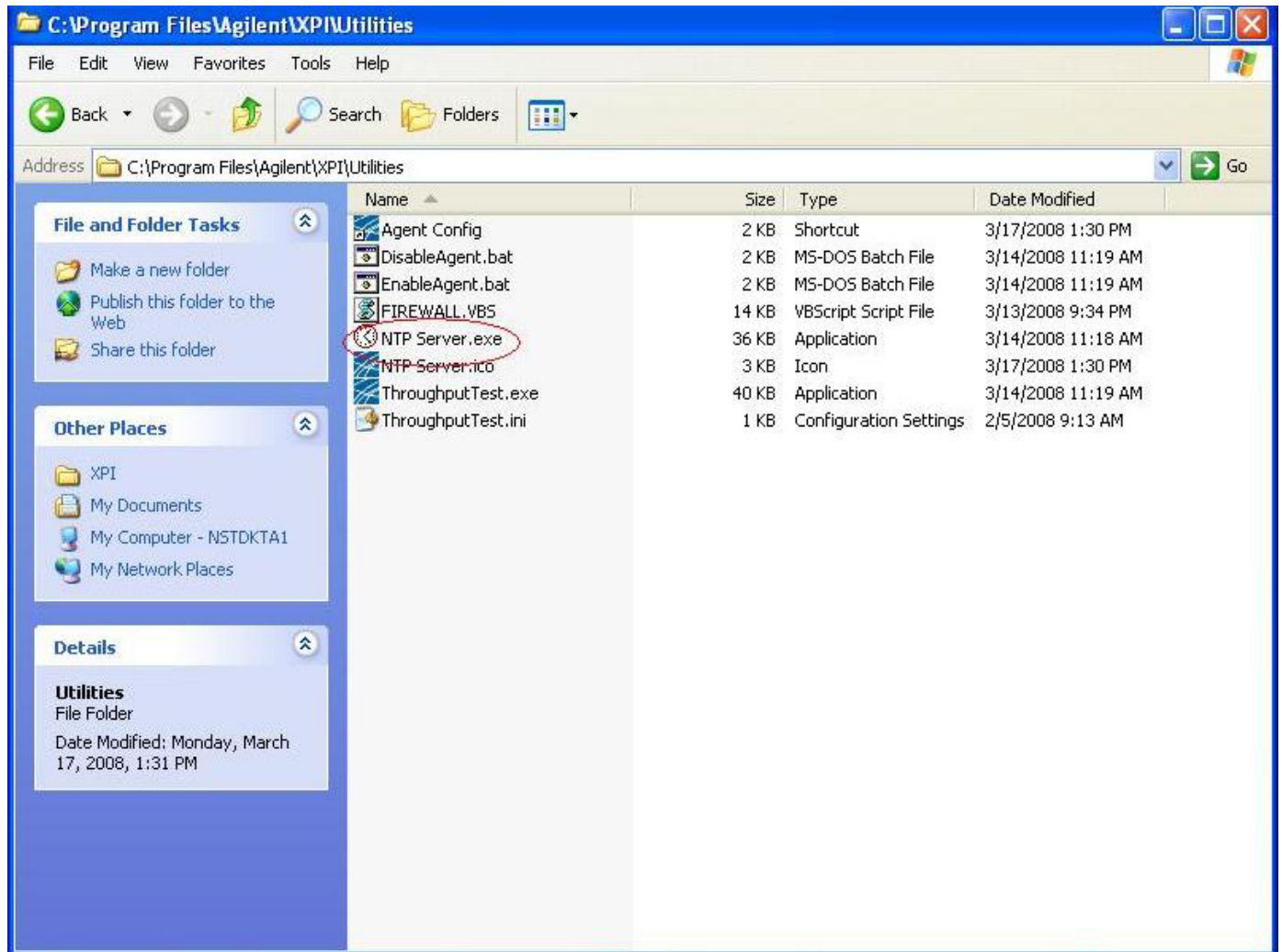
2.   Set the NTP Server values as shown

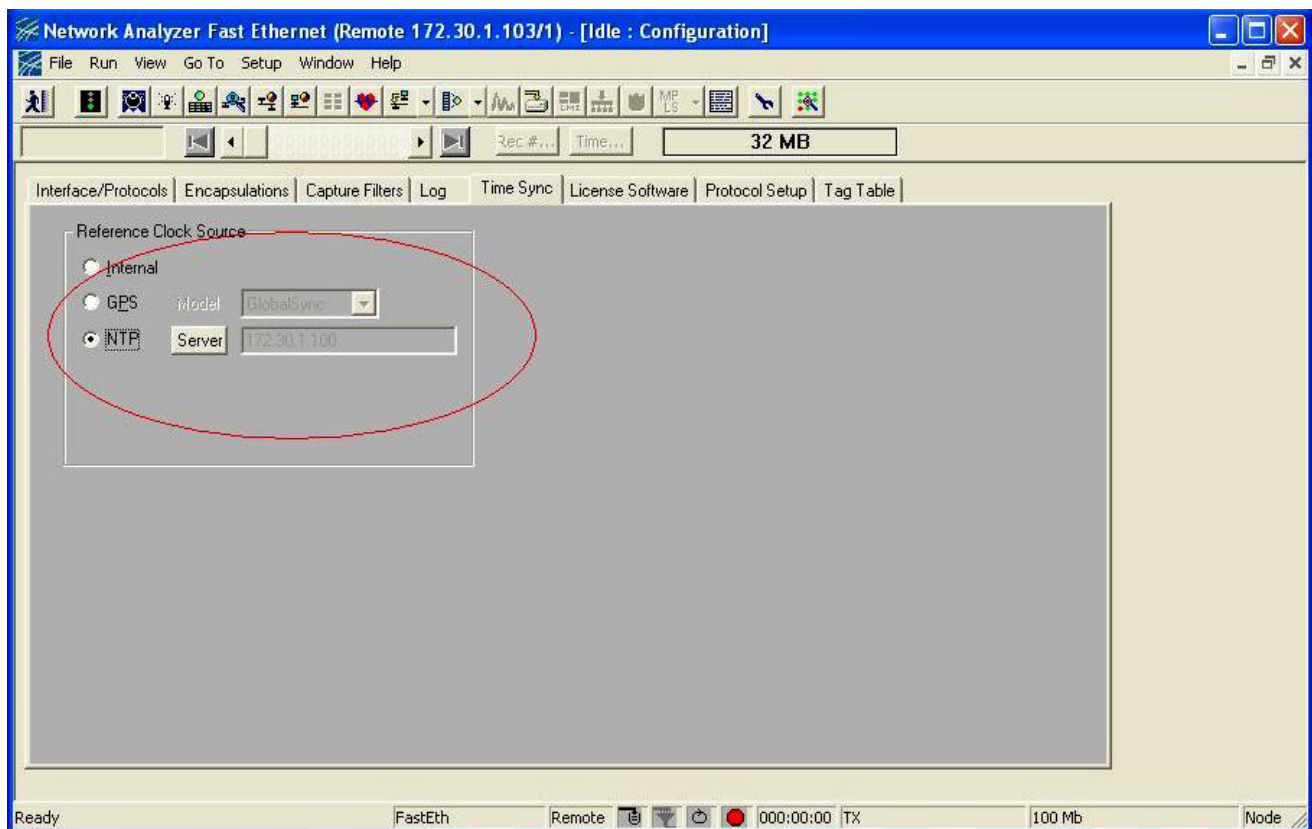3. Open NA and connect to the Master DNA(first unit in chain) and set the Reference Clock Source to NTP. Set the IP address = to the second NIC card address (172.30.1.100 for compatibility). Leave the NA window open. Open another instance of NA Hardware Select LIM.

4. The Master clock in the LIM Select window should be set to NTP. Verify there are no time sync errors shown for either slave unit. Errors would be found in the Precision column.

Select Network Analyzer LIM

Detected Analyzers

Version	Ctrl&Sync	GigE RTSM	MTU	In Use By	From	MU Server IP	Clock	Clock Server	Precision	Serial # / Model
.102.002	130.29.112.56						Internal			US42020270 (J6801A)
.100.041	130.29.113.162						Internal			US LPR 2 009 (J6801A)
.100.012	130.29.113.218	Disabled	1500				Internal(M)			USSJLPR01-003 (J680...
.600.011	130.29.113.238	Disabled	1500				Internal			TM4457MDNA (J6804A)
.100.041	130.29.113.61			bw4234	130.29.115.49		Internal			SG42111046 (J6801A)
.600.007	130.29.113.64	Disabled	1500				Internal			USLPR1-03 (J6804A)
.100.041	130.29.113.67	Disabled	1500	bw4234	130.29.115.49		Internal			SG42111074 (J6801A)
.600.007	130.29.113.83			jkronba	130.29.115.68		Internal			mg4364bserial (J6801A)
.101.004	130.29.113.99						Ctrl&Sync	130.29.113.218		SB4450MX (J6802A)
.100.041	130.29.114.161						Internal			US42020164 (J6801A)
.600.008	172.30.1.103	172.30.10.103	1500	mf4698	172.30.1.100		NTP(M)	172.30.1.100	43 ms	LPR2-00001 (J6801B)
.600.007	172.30.1.110						Ctrl&Sync	172.30.1.103		USLPR1-0010 (J6801A)
.600.008	172.30.1.111	172.30.10.113	1500	mf4698	172.30.1.100		Ctrl&Sync	172.30.1.103		USLPR2-030 (J6801B)

Current Software Version: 6.00.600.008
NOTE: If the software and firmware versions do not match, you will be prompted to synchronize the firmware with the software.   Firmware Update

Analyzer IP   [172.30.1.111 ▼]   Refresh   Multi-User Servers...   Connect   Offline   Exit

Additional notes,
You may be required to change the IP address of the units under test, depending upon the history of the units being repaired. It may be simpler to change the IP address of the second NIC to suit.
See the online help